CITY OF FLORENCE

VOLUME II:
Technical Appendix

OCTOBER 2023

City of Florence, Oregon

Transportation System Plan Update

Prepared for:

The City of Florence

Prepared by:

KITTELSON & ASSOCIATES

Kittelson & Associates, Inc.
851 SW 6th Avenue, Suite 600
(503) 228-5230

October 2023

TECHNICAL APPENDIX

Appendix A – Tech Memo #1: Plans and Policy Review

Appendix B – Tech Memo #2: Goals, Objectives, and Evaluation Criteria

Appendix C – Tech Memo #3A: Inventory

Appendix D – Tech Memo #3B: Traffic Operations

Appendix E – Tech Memo #4: Future Conditions

Appendix F – Tech Memo #5: Alternatives Analysis

Appendix G – Tech Memo #6: Preferred Alternatives

Appendix H – Analysis Methodologies and Assumptions

Appendix I – Validation Count Summary

Appendix J – Implementing Ordinances and Findings

APPENDIX A: TECH MEMO #1: PLANS AND POLICY REVIEW

TECH MEMO #1: PLANS AND POLICY FRAMEWORK

Date: March 29, 2023

To: Wendy Farley-Campbell, Shirley Gray, Erin Reynolds, Mike Miller, City of Florence
Michael Duncan, Oregon Department of Transportation

From: Darci Rudzinski, Clinton "CJ" Doxsee, and Brandon Crawford, MIG | APG

Project: City of Florence Transportation System Plan Update

Subject: Final Tech Memo #1: Plans and Policy Framework

Overview

This memorandum presents a review of existing plans, regulations, and policies that affect transportation planning in the City of Florence. The review explains the relationship between the documents and the current long-range planning process, identifying key issues that will factor into the Transportation System Plan (TSP) update. Of particular note are plans and policies that have been adopted or updated since the adoption of the City's 2012 TSP.

Some documents included in this review establish transportation-related standards, targets, and guidelines in which the TSP update must be coordinated and consistent with; others contain transportation improvements that will need to be factored into the future demand modeling and otherwise reflected in the draft TSP. Local policy and regulatory requirements described in this review – such as the Florence Zoning Ordinance – may be subject to recommended amendments in order to implement the recommendations of the updated TSP. This memorandum helps set the stage for those potential amendments, which will be prepared as part of project implementation (Task 7).

The following documents were reviewed:

State Plans

OREGON TRANSPORTATION PLAN (2006)

The Oregon Transportation Plan (OTP) is the state's long-range multi-modal transportation plan that addresses the future transportation needs of the State of Oregon through the year 2030. The primary function of the OTP is to establish goals, policies, strategies, and initiatives that are translated into a series of modal plans, such as the Oregon Highway Plan and Oregon Bicycle and Pedestrian Plan. The OTP considers all modes of Oregon's transportation system, including Oregon's airports, bicycle and pedestrian facilities, highways and roadways, pipelines, ports and waterway facilities, public transportation, and railroads. It assesses state, regional, and local public and private transportation facilities. In addition, the OTP provides the framework for prioritizing transportation improvements based on varied future revenue conditions, but it does not identify specific projects for development.

The OTP provides broad policy guidance and sets seven overarching goals for the state.[1] Through these goals and associated policies and strategies, the OTP emphasizes:

- Maintaining and maximizing the assets in place.
- Optimizing the performance of the existing system through technology.
- Integrating transportation, land use, economic development, and the environment.
- Integrating the transportation system across jurisdictions, ownerships, and modes.
- Creating sustainable funding.
- Investing in strategic capacity enhancements.

The Implementation Framework section of the OTP describes the implementation process and how state multimodal, modal/topic plans, regional and local TSPs and master plans will further refine the OTP's broad policies and investment levels. Local TSPs can further OTP implementation by defining standards, instituting performance measures, and requiring that operational strategies be developed.

The last chapter of the OTP provides implementation and investment frameworks and key initiatives to be consulted in developing TSP projects and implementation measures.

> **Project Relevance:** The OTP's key initiatives will guide the TSP update, specifically in the areas of system management, maximizing performance of the existing transportation system using technology and creative design solutions, pursuing sustainable funding

[1] The seven goals are Goal 1 – Mobility and Accessibility; Goal 2 – Management of the System; Goal 3 – Economic Vitality; Goal 4 – Sustainability; Goal 5 – Safety and Security; Goal 6 – Funding the Transportation System; and Goal 7 – Coordination, Communication, and Cooperation.

sources, and investing strategically in capacity projects. Consistent with a central OTP policy, the TSP update will seek to maximize the performance of the existing local transportation system by the use of technology and system management before considering larger and costlier additions to the system.

OREGON HIGHWAY PLAN (1999, LAST AMENDED IN 2015)

The Oregon Highway Plan (OHP) is a modal plan of the OTP that guides planning, operations, and financing for ODOT's Highway Division. Policies in the OHP emphasize the efficient management of the highway system to increase safety and to extend highway capacity, partnerships with other agencies and local governments, and the use of new techniques to improve road safety and capacity. These policies also link land use and transportation, set standards for highway performance and access management, and emphasize the relationship between state highways and local road, bicycle, pedestrian, transit, rail, and air systems.

The following policies are relevant to the TSP update process.

Policy 1A: State Highway Classification System

The OHP classifies the state highway system into four levels of importance: Interstate, Statewide, Regional, and District. ODOT uses this classification system to guide management and investment decisions regarding state highway facilities. The system guides the development of the facility plans, as well as ODOT's review of local plan and zoning amendments, highway project selection, design and development, and facility management decisions including road approach permits.

Highway 126 (OR 126) and the Oregon Coast Highway (US 101) are classified as statewide highways in the state classification system. The purpose and management objectives of these highways are provided in Policy 1A, as summarized below.

- **Statewide Highways** (OR 126 and US 101) typically provide inter-urban and inter-regional mobility and provide connections to larger urban areas, ports, and major recreation areas that are not directly served by Interstate Highways. A secondary function is to provide connections for intra-urban and intra-regional trips. The management objective is to provide safe and efficient, high-speed, continuous-flow operation. In constrained and urban areas, interruptions to flow should be minimal.

Policy 1B: Land Use and Transportation

Policy 1B addresses the relationship between highways and development on either side of the highway. It emphasizes development patterns that maintain state highways for regional and intercity mobility and supports compact development patterns that are less dependent on state highways. As a Statewide Highway, accessibility and mobility along US 101 should be balanced.

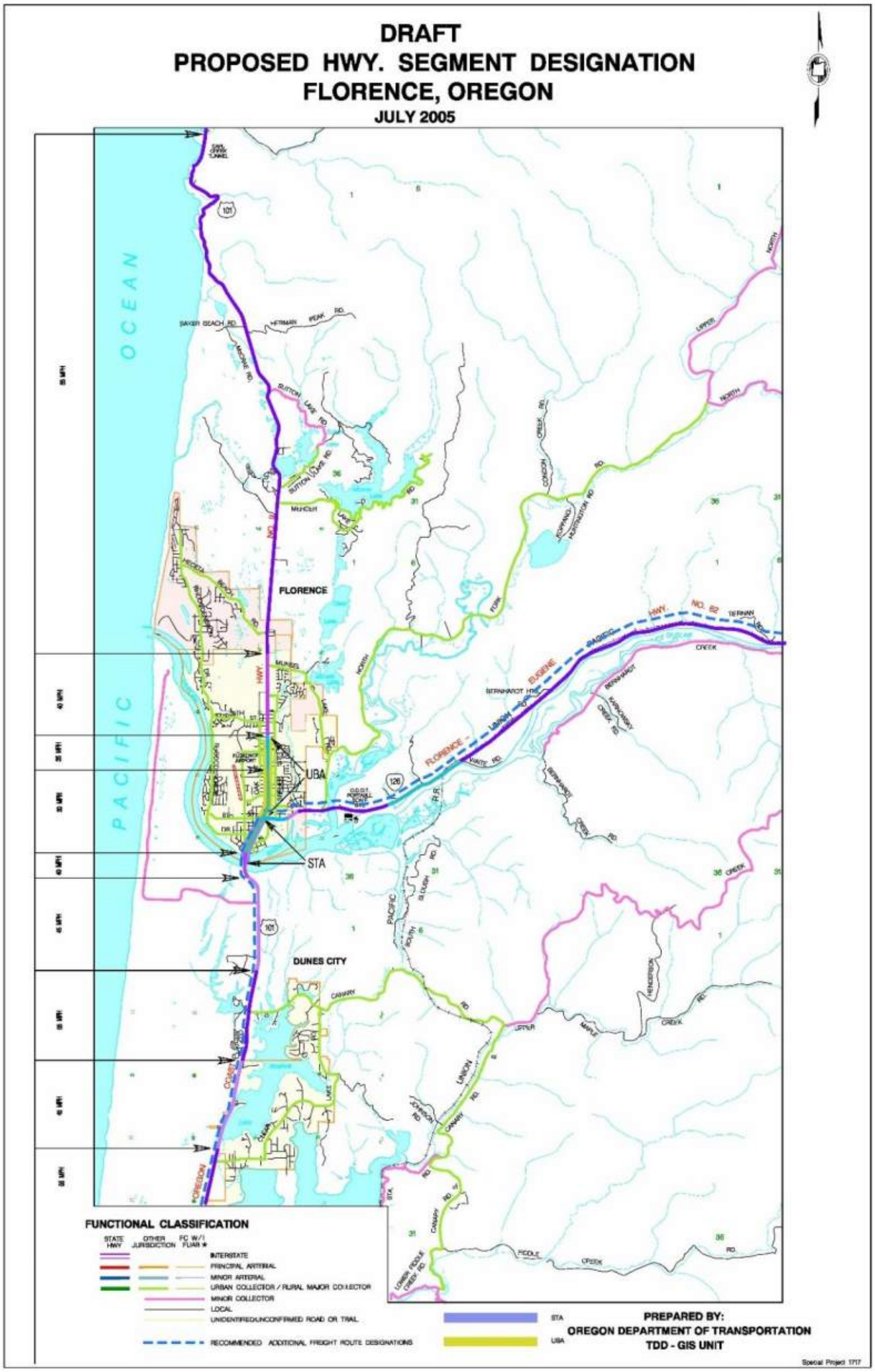
Highway 126 is considered a non-designated Urban Highway within the City's urban growth boundary (UGB),[2] where the objective is to efficiently move through traffic while also meeting the access needs of nearby properties. Access to and from properties that abut an urban segment must be consistent with the Access Management Rule set forth in OAR 734-051.

[2] Highway 126 does not have Special Transportation Area, Urban Business Area, or Commercial Area designations in Florence. These special designations allow for deviations from state standards related to highway cross-sections, parking, and access in recognition of historic settlement patterns and the use of the highway as part of a jurisdiction's local roadway system.

US 101 has a Special Transportation Area (STA)[3] and Urban Business Area (UBA) segment designation in Florence (see Figure 1). Per Appendix D of the OHP, the STA highway segment in Florence (MP 190.23 – 190.84) is also a designated freight route, and therefore it is a Category 2 STA. Category 2 STAs and UBAs need managements plans that are coordinated between ODOT and Florence, and they must be designated by the Oregon Transportation Commission. ODOT standards must be applied to the Category 2 STA segment. The Highway Design Manual (HDM) standards for UBAs will be used in areas with posted speeds less than or equal to 35 mph except where an STA has been designated.

[3] As explained in the 2005 ODOT staff report supporting the designations and amending the OHP: *In Florence, the proposed freight route designation on US 101 south of the OR 126 intersection creates a potential inconsistency with local plans that have been developed over several years with the support and participation of ODOT. Designating this highway section as an STA recognizes the local planning effort and supports a balance between freight needs and local interests. An STA is proposed south of the intersection of US 101 and OR 126, from 8th Street south to the Siuslaw River Bridge, to help implement local planning for improved pedestrian access and traditional downtown redevelopment and infill. … a UBA is proposed north of the intersection of US 101 and OR 126, from 10th Street north to 30th Street, consistent with the existing commercial development in the area and low posted speeds. This part of US 101 is not proposed as a freight route, but the UBA designation is included here because the local process preceding this designation and all related correspondence have included both segments. No management plan is required because the posted speeds are at 35 mph or below. The formality of designation is requested in respect to the preliminary work done by the city and the Region.*

Figure 1. Special Transportation Designations



Policy 1C: State Highway Freight System

The primary purpose of the State Highway Freight System is to facilitate efficient and reliable interstate, intrastate, and regional truck movement through a designated freight system. This freight system, which is made up of the Interstate Highways and select Statewide, Regional, and District Highways, includes routes that carry significant tonnage of freight by truck and serve as the primary interstate and intrastate highway freight connection to ports, intermodal terminals, and urban areas. Highways included in this designation have higher highway mobility standards than other statewide highways. Highway 126 and US 101 south of Highway 126 are designated Freight Routes in Florence.

Policy 1F: Highway Mobility Standards Access Management Policy

Policy 1F sets mobility standards for ensuring a reliable and acceptable level of mobility on the state highway system. The standards are used to assess system needs as part of long-range, comprehensive planning for transportation projects, during development review, and to demonstrate compliance with the Transportation Planning Rule.

Significant amendments to Policy 1F were adopted in 2011 to address concerns that state transportation policy and requirements have led to unintended consequences and inhibited economic development. Policy 1F now provides a clearer policy framework for considering measures other than v/c ratios for evaluating mobility performance.

Table 1 presents mobility targets for the state facilities in the TSP study area. Highway 126 and US 101 are classified as Statewide Highways within the Florence UGB.[4] US 101 is also designated as a UBA from 30th Street to Highway 126, an STA from Highway 126 to Bay Street, and a Freight Route from Highway 126 to the south city limits. Conversely, Highway 126 is not designated as an STA or a UBA; however, it is a Freight Route.

[4] US 101 south of Highway 126 is a Freight Route through Florence, to the California border.

Table 1: V/C Ratio Targets Outside the Portland Metropolitan Region

VOLUME TO CAPACITY RATIO TARGETS OUTSIDE METRO[17A, B, C, D]							
Highway Category	**Inside Urban Growth Boundary**					**Outside Urban Growth Boundary**	
	STA[E]	**MPO**	**Non-MPO Outside of STAs where non-freeway posted speed <= 35 mph, or a Designated UBA**	**Non-MPO outside of STAs where non-freeway speed > 35 mph but < 45 mph**	**Non-MPO where non-freeway speed limit >= 45 mph**	**Unincorporated Communities[F]**	**Rural Lands**
Interstate Highways	N/A	0.85	N/A	N/A	0.80	0.70	0.70
Statewide Expressways	N/A	0.85	0.85	0.80	0.80	0.70	0.70
Freight Route on a Statewide Highway	0.90	0.85	0.85	0.80	0.80	0.70	0.70
Statewide (not a Freight Route)	0.95	0.90	0.90	0.85	0.80	0.75	0.70
Freight Route on a regional or District Highway	0.95	0.90	0.90	0.85	0.85	0.75	0.70
Expressway on a Regional or District Highway	N/A	0.90	N/A	0.85	0.85	0.75	0.70
Regional Highways	1.0	0.95	0.90	0.85	0.85	0.75	0.70
District/Local Interest Roads	1.0	0.95	0.95	0.90	0.90	0.80	0.75

[A] Unless the Oregon Transportation Commission has adopted an alternative mobility target for the impacted facility, the mobility targets in Tables 6 are considered standards for purposes of determining compliance with OAR 660-012, the Transportation Planning Rule.

[B] For the purposes of this policy, the peak hour shall be the 30th highest annual hour. This approximates weekday peak hour traffic in larger urban areas. Alternatives to the 30th highest annual hour may be considered and established through alternative mobility target processes.

[C] Highway design requirements are addressed in the Highway Design Manual (HDM).

[D] See Action 1F.1 for additional technical details.

[E] Interstates and Expressways shall not be identified as Special Transportation Areas.

[F] For unincorporated communities inside MPO boundaries, MPO mobility targets shall apply.

Policy 1G: Major Improvements

This policy requires maintaining performance and improving safety on the highway system by improving efficiency and management on the existing roadway network before adding capacity. The state's highest priority is to preserve the functionality of the existing highway system. Tools that are employed to improve the function of the state highway system include access management, transportation demand management, traffic operations modifications, and changes to local land use designations or development regulations.

After existing system preservation, the second priority is to make minor improvements to existing highway facilities, such making improvements to the local street network to minimize local trips on the state facility.

The third priority is to make major roadway improvements such as adding lanes to increase capacity on existing roadways. As part of this TSP process, ODOT will work with the City and other stakeholders to determine appropriate strategies and tools that can be implemented at the local level that are consistent with this policy.

Policy 2B: Off-System Improvements

This policy recognizes that the state may provide financial assistance to local jurisdictions to make improvements to local transportation systems if the improvements would provide a cost-effective means of improving the operations of the state highway system. As part of this TSP update process, ODOT will work with the City and project stakeholders to identify improvements to the local road system that support the planned land use designations in the study area and that will help preserve capacity and ensure the long-term efficient and effective operation of high functional class facilities.

Policy 2F: Traffic Safety

This policy emphasizes the state's efforts to improve safety of all users of the highway system. Action 2F.4 addresses the development and implementation of the Safety Management System to target resources to sites with the most significant safety issues. The TSP update process will include citywide crash analysis to identify sites with a history of fatal and serious injury crashes and identify potential countermeasures to reduce crashes.

Policy 3A: Classification and Spacing Standards

This policy seeks to manage the location, spacing, and type of road intersections on state highways in a manner that ensures the safe and efficient operation of state highways consistent with their highway classification.

Action 3A.2 calls for spacing standards to be established for state highways based on highway classification, type of area, and posted speed. Tables in OHP Appendix C present access spacing standards which consider urban and rural highway classification, traffic volumes, speed, safety, and operational needs. The access management spacing standards established in the OHP are implemented by OAR 734, Division 51, addressed later in this report. The TSP update process will include an analysis of how existing spacing on ODOT facilities compares to these standards.

Policy 4A: Efficiency of Freight Movement

Policy 4A emphasizes the need to maintain and improve the efficiency of freight movement on the state highway system. It seeks to balance the needs of long distance and through freight movements with local transportation needs on highway facilities in both urban and rural areas. In Florence, Highway 126 and portions of US 101 are designated Freight Routes.

Policy 4B: Alternative Passenger Modes

Policy 4B encourages the development of alternative passenger services and systems as part of broader corridor strategies to help preserve the performance and function of the state highway system. The Rhody Express provides public transportation service in Florence. Improving safety, access, and mobility for pedestrians and bicyclists and enhanced connections to transit are objectives of this update process.

Policy 4D: Transportation Demand Management

This policy supports the efficient use of the state transportation system through investment in transportation demand management (TDM) strategies. Action 4D.1 calls for reducing peak period single-occupancy vehicle travel and to move traffic demand out of the peak period to improve the flow of traffic on state highways. The TSP update process will explore TDM strategies that may be appropriate for Florence, including requirements for new development and incentives for employers that can reduce vehicle trips.

> **Project Relevance:** OHP policies provide guidance related to the accessibility, mobility, and function of state highways. The TSP planning process will consider policies in the OHP to guide proposed improvements, modifications, or local policies that could affect any of the state facilities in the City. The TSP is being developed in coordination with ODOT so that projects, policies, and regulations proposed as part of the TSP will be consistent with the standards and targets established in the OHP related to safety, access, and mobility.

OREGON BICYCLE AND PEDESTRIAN PLAN (2016)

The intent of the Oregon Bicycle and Pedestrian Plan (OBPP) is to create a policy foundation that supports decision-making for walking and biking investments, strategies, and programs that help to develop an interconnected, robust, efficient, and safe transportation system. The OBPP establishes the role of walking and biking as essential modes of travel within the context of the entire transportation system and recognizes the benefit of these modes to the people and places in Oregon.

The OBPP provides direction for what needs to be achieved, including 20 policies and associated strategies designed to help develop, sustain, and improve walking and biking networks. It identifies nine goals based upon the broader goals of the OTP that reflect statewide values and desired accomplishments relating to walking and biking:

- Goal 1: Safety
- Goal 2: Accessibility and Connectivity
- Goal 3: Mobility and Efficiency
- Goal 4: Community and Economic Vitality
- Goal 5: Equity
- Goal 6: Health
- Goal 7: Sustainability
- Goal 8: Strategic Investment
- Goal 9: Coordination, Cooperation, and Collaboration

The OBPP also provides background information related to state and federal law, funding opportunities, and implementation strategies proposed by ODOT to improve bicycle and pedestrian transportation. It outlines the role that local jurisdictions play in the implementation of the Plan, including the development of local pedestrian and bicycle plans as stand-alone documents within TSPs.

The Oregon Bicycle and Pedestrian Design Guide is the technical element of the plan that guides the design and management of bicycle and pedestrian facilities on state-owned facilities. It is an appendix to the HDM and provides best practices and design guidelines for bicycle and pedestrian facilities.

> **Project Relevance:** The policies and design guidance in the OBPP apply to state highway facilities in Florence. State policy and design guidance will be considered in evaluating and planning for the TSP's local street standards and bicycle and pedestrian system elements. Through this TSP update, the City will work with regional and state agencies to help identify gaps in the regional walking and biking network and prioritize projects accordingly.

OREGON RAIL PLAN (2020)

The Oregon State Rail Plan is a state modal plan under the OTP that addresses long-term freight and passenger rail planning in Oregon. The plan provides a comprehensive assessment of the state's rail planning, freight rail, and passenger rail systems. It identifies specific policies concerning rail in the state, establishes a system of integration between freight and passenger elements into the land use and transportation planning process, and calls for cooperation between state, regional, and local jurisdictions in planning for rail.

There are currently no rail lines that pass through Florence. The Coos Bay Rail Line (CBR) is the nearest rail line to the City. The railroad is located outside of the City's UGB to the east and south (approximately 1.5 miles); it runs along Highway 126 and splits south before the highway reaches Florence. The CBR Line is classified as a Non-Class I freight line and provides no passenger service.

> **Project Relevance:** The TSP will consider the needs of the freight and modal connections to the rail system near the City's UGB while developing recommended policies and projects related to improving safety, mobility, and freight efficiency.

OREGON FREIGHT PLAN (2017)

The Oregon Freight Plan (OFP) is the modal plan that guides the movement of goods and commodities on the State highway system. Its purpose statement identifies the intent to "improve freight connections to local, Native America, state, regional, national and global markets in order to increase trade-related jobs and income for workers and businesses." The objectives of the plan include prioritizing and facilitating investments in freight facilities (including rail, marine, air, and pipeline infrastructure) and adopting strategies to maintain and improve the freight transportation system.

The plan defines a statewide strategic freight network. US 101 and Highway 126 are designated as strategic corridors among the Western Corridor Freight Facilities in the OFP. The following policy and strategic direction provided in the OFP prioritizes preservation of strategic corridors as well as improvements to the supply chain achieved through coordination of freight and system management planning.

- Strategy 1.2: Support freight access to the Strategic Freight System. This includes proactively protecting and preserving corridors designated as strategic.
- Action 1.2.1. Preserve freight facilities included as part of the Strategic Freight System from changes that would significantly reduce the ability of these facilities to operate as

efficient components of the freight system unless alternate facilities are identified or a safety-related need arises.

- Strategy 2.4: Coordinate freight improvements and system management plans on corridors comprising the Strategic Freight System with the intent to improve supply chain performance.

The OFP is currently undergoing an update, with amendments anticipated for adoption in 2023.

> **Project Relevance:** Maintaining and enhancing efficiency of the truck freight system in the study area will be an objective of the updated TSP. The project advisory committee will include members that represent freight interests.

OREGON PUBLIC TRANSPORTATION PLAN (2018)

The Oregon Public Transportation Plan (OPTP) provides guidance for ODOT and public transportation agencies regarding the development of public transportation systems. The OPTP is intended to establish a common foundation for local, regional, and state agencies by addressing the following:

- Vision and goals for public transportation
- Policy and strategy framework to inform decision making
- Possible priorities under different levels of funding for public transportation
- Opportunities and challenges in investment and implementation
- Positioning public transportation as a key part of Oregon's transportation system

The vision stated in the OPTP is:

> *In 2045, public transportation is an integral, interconnected component of Oregon's transportation system that makes Oregon's diverse cities, towns, and communities work. Because public transportation is convenient, affordable, and efficient, it helps further the state's quality of life and economic vitality and contributes to the health and safety of all residents, while reducing greenhouse gas emissions.*

The OPTP establishes and is organized into the following 10 goal areas:

1. Mobility – Public Transportation User Experience
2. Accessibility and Connectivity – Getting from Here to There
3. Community Livability and Economic Vitality
4. Equity
5. Health
6. Safety and Security
7. Environmental Sustainability
8. Land Use

9. Strategic Investment
10. Communications, Collaboration and Coordination

While the OPTP does not recommend specific projects or investments, new efforts in planning for transit came with the passage of HB 2017 (Keep Oregon Moving Act) and the establishment of a new dedicated source of funding for expanding public transportation service in Oregon.[5] The Statewide Transportation Improvement Fund (STIF) provides the impetus for coordinating how needed infrastructure is prioritized. STIF funds are continuously appropriated to finance investments and improvements in public transportation services and may be used for public transportation purposes that support the effective planning, deployment, operation, and administration of STIF-funded public transportation programs. STIF funds may be also used as the local match for state and federal funds that also provide public transportation service.[6] As of July 2023, STIF will be merged into the Special Transportation Fund (STF) program, a formula program that provides funding to transit districts across the state.

The Rhody Express provides public transit service in Florence. It runs from 10:00 am to 6:00 pm Monday through Friday. It includes two routes – the North Loop and the South Loop. Both routes have a service frequency of every hour, completing their respective routes seven times a day. Additionally, Coos County Area Transit runs the Florence Express between Coos Bay, Reedsport, and Florence with two daily runs (7:30 am to 11:15 am and 3:30 pm to 7:15 pm) Monday through Saturday.

> **Project Relevance:** The TSP will consider the needs of the transit system in Florence while developing recommended policies and projects related to improving transit service. In addition, project advisory committees include a representative of ODOT Transit, Lane Transit District, and the transit division of Lane Council of Governments who will advise on transit needs and improvements.

OREGON TRANSPORTATION SAFETY ACTION PLAN (2021)

An element of the OTP, the Oregon Transportation Safety Action Plan (TSAP) provides long-term goals, policies and strategies and near-term actions to eliminate deaths and life-changing injuries. The TSAP addresses all modes on all public roads in Oregon. Over the long term, the goals of the TSAP are:

- Safety Culture – Transform public attitudes to recognize all transportation system users have responsibility for other people's safety in addition to their own; transport organizational transportation safety culture among employees and agency partners to integrate safety considerations into all responsibilities.
- Infrastructure – Develop and improve infrastructure to eliminate fatalities and serious injuries for users of all modes.
- Healthy, Livable Communities – Plan, design, and implement safe systems. Support enforcement and emergency medical services to improve the safety and livability of communities, including improved health outcomes.

[5] https://www.oregon.gov/ODOT/Pages/HB2017.aspx
[6] https://secure.sos.state.or.us/oard/viewSingleRule.action?ruleVrsnRsn=245662

- Technology – Plan, prepare for, and implement technologies (existing and new) that can affect transportation safety for all users.
- Collaborate and Communicate – Create and support a collaborative environment for transportation system providers and public and private stakeholders to work together to eliminate fatalities and serious injury crashes.
- Strategic Investments – target safety funding for effective engineering, emergency response, law enforcement, and education priorities.

The plan provides an overview of how the TSAP is intended to be used and the roles and responsibilities of various transportation agencies and levels of government. It identifies actions that jurisdictions can take to increase transportation safety, such as adopting a Safe Communities Program, which is a collaborative partnership with the National Highway Traffic Safety Administration, ODOT, and other local partners to promote safety. Safe Routes to School is another popular local initiated program that may be supported by grant funding that targets safety improvements to encourage walking and biking to school.

The TSAP provides near-term actions for improving safety that can be used by all jurisdictions responsible for maintaining and improving transportation systems. Actions a city can undertake to accomplish the plan's goals include:

- Evaluate local spot-specific and systemic safety needs; develop plans and programs to address needs.
- Collaborate with the state, MPO, and stakeholder partners to educate the public about tribal, county and city transportation safety-related behavioral issues.
- Integrate safety programming, planning, and policy into local planning.
- Develop coalitions with enforcement and EMS providers to target and improve specific community needs.
- Use the TSAP as a resource for local goals, policies, strategies, and actions.

Updated TSAP Chapter 6 addresses near-term implementation focus areas for achieving the plan's goals, policies, and strategies. Organized by "Emphasis Area," actions jurisdictions can undertake are listed below.

Speeding Actions

- Establish target speeds consistent with facility design, safety goals, context, users, and land use. Apply the Blueprint for Urban Design in urban contexts.

Intersection Actions

- Implement hot spot and systemic intersection safety improvements consistent with the updated Intersection Safety Implementation Plan
- Implement intersection design treatments to reduce conflicts between all users, increase awareness, and improve compliance.

- Implement access management on high-volume roads and/or around intersections to reduce the number and severity of crashes.
- Improve visibility of vehicles and pedestrians and bicycles along corridors and at intersections with lighting and unobstructed sightlines.

Roadway Departure

- Design and implement cost-effective hotspot and systemic roadway departure improvements addressing risk factors associated with lane departure and run-off-road crashes on state and local facilities.

Pedestrian and Bicyclist Actions

- Prioritize safety investments on identified high crash and high-risk pedestrian locations per NCHRP 20-44(13) methodology, including transit corridors, school areas, multilane roads, urban state highways, and other high-risk areas.
- Design for appropriate road capacity to reduce crosswalk length and crosswalk conflicts and utilize proven safety countermeasures such as road reconfigurations where appropriate.
- Design and construct corridors and facilities for pedestrians and bicyclists consistent with the Blueprint for Urban Design, based on land use and provide appropriate, safe pedestrian crossings along corridors to accommodate pedestrian needs.
- Prioritize multimodal safety investments in areas with a high concentration of historically-underserved communities, such as low income and BIPOC communities.

Project Relevance: The TSAP will be used as a resource while updating the TSP, in particular when developing local goals, policies, and strategies to improve safety in Florence and prioritizing projects related to enhancing multi-modal safety. The City's planning project includes a safety goal that will inform the development of the TSP update, including the identification of transportation improvements that improve safety for all road users.

OREGON TRANSPORTATION OPTIONS PLAN (2015)

The Oregon Transportation Options Plan (OTOP) is a topic plan that establishes policies, strategies, and programs that promote efficient use of existing transportation system investments, thereby reducing reliance on the single-occupancy vehicle and facilitating more transportation by walking, biking, taking transit, and ridesharing.

Adoption of this plan established a statewide vision for transportation options (TO) in Oregon to provide travelers of all ages and abilities with options on how to access goods, services, and opportunities across the state. TO strategies and programs do not address capital infrastructure investments, but rather provide information and resources to allow people to bike, walk, take transit, drive, share rides, and telecommute.

Project Relevance: The updated TSP will draw on program and strategy ideas in the OTOP as appropriate in order to enhance opportunities for non-motorized transportation modes and transit in Florence.

ACCESS MANAGEMENT RULE (OAR 734-051) (2014)[7]

Oregon Administrative Rule (OAR) 734-051 defines the State's role in managing access to highway facilities in order to maintain functional use and safety and to preserve public investment. OHP Policy 3A and OAR 734-051 set access spacing standards for driveways and approaches to the state highway system. The presumption is that existing driveways with access to state highways have written permission from ODOT as required by ORS 734. Access spacing standards are based on state highway classification and differ depending on posted speed and average daily traffic volume.

> **Project Relevance:** Analysis for the TSP update and final project recommendations will need to reflect state requirements for state facilities; the updated TSP will comply with, or move in the direction of compliance for meeting, access management standards on US 101 and Highway 126. Implementation measures that will be developed for the TSP update may entail amendments to city code to ensure local development requirements are consistent with state access management requirements as well as reflect the draft TSP recommendations related to safety and access management.

ORS 366.215 (FREIGHT ROUTES – VEHICLE CARRYING CAPACITY)

State statutes dictate that the Oregon Transportation Commission may not permanently reduce the "vehicle-carrying capacity" of an identified Freight Route (Reduction Review Route) unless safety or access considerations require the reduction, or a local government requests an exemption and the Commission determines it is in the best interest of the state and freight movement is not unreasonably impeded.

Examples of permanent structures that can result in a reduction in vehicle-carrying capacity could include, but are not limited to, bridge structures, traffic signals, signposts, stationary bollards, curbs, bulb-outs, trees, raised or depressed medians, pedestrian refuge islands, traffic separators, roundabouts, streetlights, and overhead wiring. Street markings such as bike lane striping or on-street parking are not considered a reduction of vehicle-carrying capacity.

> **Project Relevance:** Highway 126 and US 101 south of Highway 126 are listed on TransGIS as Reduction Review Routes. Planning documents that propose features that could be a reduction of vehicle-carrying capacity must be in compliance with the statute. Where necessary for safety or access considerations, the TSP may identify a need to obtain approval for proposed future actions by following the ORS 366.215 Review Process.

ODOT HIGHWAY DESIGN MANUAL (2023)

The Highway Design Manual (HDM) provides ODOT with uniform standards and procedures for planning studies and project development for the state's roadways. It is intended to provide guidance for the design of all projects on the State's highways.[8] It generally agrees with AASHTO's Policy on Geometric Design of Highways and Streets (2018) but anticipates that sound

---

[7] Amendments to OAR 734-051 were adopted in early 2014 based on passage of Senate Bill 1024 (2010, Senate Bill 264 (2011, and Senate Bill 408 (2014). The amendments were intended to allow more consideration for economic development when developing and implementing access management rules and involved changes to how ODOT deals with approach road spacing, highway improvement requirements with development, and traffic impact analyses requirements for approach road permits.

[8] National Highway System or Federal-aid projects on roadways that are under the jurisdiction of cities or counties will typically use the 2018 AASHTO design standards or ODOT 3R design standards. Use of the 2023 Highway Design Manual is required on all projects with the Plans, Specifications, and Estimates (PS&E) milestone on and after January 1, 2023.

engineering judgment will continue to be a vital part of applying the design criteria to individual projects. The flexibility contained in the 2023 HDM supports the use of Performance-based Practical Design concepts and Context Sensitive Design practices.

State and local planners use the manual to determine design requirements as they relate to the state highways in TSPs, Corridor Plans, and Refinement Plans. Some projects under ODOT roadway jurisdiction traverse across local agency boundaries; for such facilities, local agencies may have adopted design standards and guidelines that differ from ODOT design standards. Although the appropriate ODOT design standards are to be applied on ODOT roadway jurisdiction facilities, local agency publications and design practices can also provide additional guidance, concepts, and strategies related to roadway design. When determining the appropriate design standard for use in project development, work types can be divided into the categories listed in Table 2. Funding may come from a number of funding programs, but it is the type of work that determines the design standard to use.

Table 2. Potential Applicable Design Standards

	Roadway Project Types			
Work Type	**1R** *Resurfacing*	**3R** *Resurfacing, Restoration, and Rehabilitation*	**4R** *Resurfacing, Restoration, Rehabilitation, and Reconstruction*	**AASHTO**
Modernization			✓	
Preservation: *Resurfacing*	✓	✓		
Preservation: *Interstate Maintenance*	✓	✓		
Safety Improvements		✓		
Operations		✓	✓	
Maintenance	✓	✓	✓	
Misc./Special Programs: *Grant Project*			✓	✓
Misc./Special Programs: *Project Development Permit Projects*		✓	✓	
Misc./Special Programs: *Emergency/Natural Disaster*		[9] ✓		
Local Programs			[10] ✓	✓

The HDM includes mobility standards related to project development and design that are applicable to all modernization projects, except for development review projects (see Table 3). The v/c ratios in the HDM are different than those shown in the Oregon Highway Plan (OHP). The v/c ratio values in the OHP are used to assist in the planning phase to identify future system

[9] Emergency/Natural Disaster projects may not be required to comply with all 3R design standards, as the main goal of these projects is to reopen compromised sections of highway, and projects are often designed to, at a minimum, meet design standards of the pre-emergency condition. However, it is important that permanent repairs should incorporate current design standards that do not materially change the function or character of the facility.
[10] On or along the state highway.

deficiencies; the HDM v/c ratio values provide a mobility solution that corrects those previously identified deficiencies and provides the best investment for the State over a 20-year design life.

Table 3. 20-Year Design Mobility Standards (Volume/Capacity [V/C] Ratio

Highway Category	**Land Use Type/Speed Limits**					
	Inside Urban Growth Boundary				Outside Urban Growth Boundary	
	STAs	MPO	Non-MPO outside of STAs where non-freeway speed limit <45 mph	Non-MPO where non-freeway speed limit >=45	Unincorporated Communities	Rural Lands
Interstate Highways and Statewide (NHS) Expressways	N/A	0.75	0.70	0.65	0.60	0.60
Statewide (NHS) Freight Routes	0.85	0.75	0.70	0.70	0.60	0.60
Statewide (NHS) Non-Freight Routes and Regional or District Expressways	0.90	0.80	0.75	0.70	0.60	0.60
Regional Highways	0.95	0.85	0.75	0.75	0.70	0.65
District/Local Interest Roads	0.95	0.85	0.80	0.75	0.75	0.70

Originally developed in 2020 as a standalone document, the Blueprint for Urban Design, or BUD, has now been incorporated into the HDM. The HDM now includes the six urban contexts that were established to provide design flexibility. The key concepts introduced by the BUD are that urban design:

- includes urban context in addition to the existing highway classification;
- highlights and provides flexibility;
- introduces performance concepts with Practical Design as Performance-Based, Practical Design;

- starts at the highest level of protection for pedestrians, bicyclists, and other users of the pedestrian and transition cross-section realms[11]; and
- provides a focused design documentation process.

Urban contexts as defined in the HDM are based on existing and future land use characteristics, development patterns, roadway classification and connectivity, along with overall community goals and aspirations. The HDM describes ODOT's Urban Design Initiative, which provides principles and guidance that can be used for both planners and engineers in order "to allow flexibility to meet the modal needs of the users in urban communities."

> **Project Relevance:** The ODOT HDM and Blueprint provide design standards and guidance applicable to US 101 and Highway 126. Proposed improvements on these state facilities as part of the Florence TSP update will be informed by the HDM.

ODOT ANALYSIS PROCEDURES MANUAL (2020)

The Analysis Procedures Manual (APM) provides the current methodologies, practices, and procedures for conducting long term analysis of ODOT plans and projects. The APM is generally based on methodologies found in the Highway Capacity Manual (HCM). However, there are many locations in the APM, either because of limitations in the HCM or because of ODOT policies, where the APM recommends different methodologies. Unless otherwise specified in the APM, traffic analyses shall use the current edition of the HCM in effect at the start of the analysis.

> **Project Relevance:** The Florence TSP update will use APM methodology to forecast future transportation growth rates and analyze safety at study intersections and to assess the quality of the pedestrian network and the quality of the bicycle facility inventory (using Bicycle Level of Traffic Stress methodology).

STATEWIDE PLANNING GOALS

The foundation of Oregon's statewide land use planning program is a set of 19 Statewide Planning Goals.[12] The goals express the state's policies on land use and other related topics, such as citizen involvement, housing, and natural resources. Oregon's statewide goals are achieved through local comprehensive planning, including the development and implementation of TSPs.

All of the Statewide Planning Goals have an influence on transportation planning, either directly or indirectly. However only certain Goals directly apply to transportation planning at a local level; the Goals listed in Table 4 are most relevant to the Florence TSP process.

[11] Cross-section Realms are described in HDM Section 107.
[12] https://www.oregon.gov/lcd/op/pages/goals.aspx

Table 4: Relevant Statewide Planning Goals to the TSP

Statewide Planning Goal	Relevancy to the TSP Process
Goal 1: Citizen Involvement	Establishes citizen involvement as the primary goal of the land use planning process in Oregon. The Florence TSP process is guided by a robust Public Involvement and Communications Plan that includes public involvement goals, identified affected and interested stakeholder and target audiences, and critical factors that will gauge success. In addition, this project will be guided by a Stakeholder Transportation Advisory Committee that will inform the Florence TSP process throughout the course of the project.
Goal 2: Land Use Planning	Establishes a process and policy framework for all decisions and actions related to uses of land; ensures that such decisions and actions are premised on an adequate factual base. Existing and future transportation needs will be based on inventories of existing conditions in Technical Memorandums #3, including existing and planned land uses, as well as improving efficient multi-modal connections to housing, public services, employment areas, and recreational opportunities.
Goal 5: Natural Resources, Scenic and Historic Areas, and Open Spaces	Existing natural resources and environmental features influence the siting, construction, and cost of transportation improvements. Technical Memorandum #3 will provide inventories of these resources as well as illustrate and describe areas within the city that may pose barriers to providing transportation access or improvements.
Goal 7: Natural Hazards	The risk of natural hazards affects site selection and alignment decisions and facility design standards. Transportation improvement projects in the cities should avoid natural hazard areas, such as floodplains, to the extent feasible.
Goal 9: Economic Development	Addresses the need for a variety of economic opportunities in support of the health, welfare, and prosperity of Oregon's citizens. The TSP process should be coordinated with current and planned economic development activities.
Goal 10: Housing	Cities are required to anticipate ongoing needs for housing, and to provide adequate infrastructure to serve residential uses. Transportation facilities and project prioritization will be based, in part, on the demands generated by current and projected housing needs.
Goal 11: Public Facilities and Services	Local governments are required to provide adequate public facilities, including transportation facilities, in a timely and efficient manner. The TSP project update project will coordinate with or consider the provision of other public facilities consistent with adopted plans.
Goal 12: Transportation	Requires multi-modal transportation plans that: • Are based on factual inventories, • Minimize adverse social, environmental, economic, and energy impacts, • Meet the needs of the transportation disadvantaged, • Facilitate the flow of goods and services, and • Are consistent with related local and regional plans. Goal 12 is implemented through the Transportation Planning Rule (OAR 660, Division 12).
Goal 13: Energy Conservation	Land uses must be managed and controlled to maximize the conservation of all forms of energy based upon sound economic principles. In transportation planning, this includes consideration of travel distances and mode share.
Goal 14: Urbanization	Requires land within the Urban Growth Boundary to "provide an orderly and efficient transition from rural to urban land use." Findings of feasibility regarding providing adequate transportation and other public facilities is required for expansion of UGBs.

Statewide Planning Goal	Relevancy to the TSP Process
Goal 16: Estuarine Resources	Requires individual estuary plans to designate appropriate uses for different areas within each estuary based on biological and physical characteristics and features. Proposed estuarine alterations must be reviewed to ensure that they are consistent with overall management objectives and that adverse impacts are minimized.
Goal 17: Coastal Shorelands	The management of shoreland areas and resources must be conducted in a manner that is compatible with the characteristics of the adjacent coastal waters. Goal 17 requirements are implemented primarily through local comprehensive plans and zoning.
Goal 18: Beaches and Dunes	Local governments are required to inventory beaches and dunes and describe the stability, movement, groundwater resources, hazards, and values of the beach, dune, and interdune areas. Local governments must then apply appropriate beach and dune policies for use in these areas.

Project Relevance: The TSP update analysis will ensure consistency with the Statewide Planning Goals listed above. The TSP adoption findings will describe how each of the relevant goals are satisfied by the Florence TSP.

STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM (2021-2024)

The State Transportation Improvement Program (STIP) is the four-year programming and funding document for transportation projects and programs on state and regional transportation systems, including federal land and Indian reservation road systems, interstate, state, and regional highways, bridges, and public transit. It includes improvements that have approved state and federal funding and that are expected to be undertaken during the upcoming four-year period. Prior to inclusion in the STIP, projects and programs undergo a selection process managed by ODOT Regions or ODOT central offices, a process that is held every two years in order to update the STIP.

The 2021-2024 STIP includes the following trail project in Florence:

- Suislaw estuary trail phase 1 – Project number: 22539. This project will construct a new trail starting at the Highway 126 bridge over Munsel Creek and end in the City's Old Town district.

Additionally, there is a pedestrian- and bicycle-focused project that is currently in design:

- OR126/US101: Spruce St – Suislaw Riv connect Bay Street – Project number 20239. This project will provide bicycle improvements, pedestrian-scaled lighting, and sidewalk improvements along US 101 between Bay Street and Highway 126, as well as on Highway 126 to Spruce Street.

Project Relevance: The TSP update analysis will take into account projects that are programmed in the STIP. An expected outcome of this planning process is proposed recommendations to amend the STIP to include projects from the updated TSP. Projects recommended in the updated TSP may be eligible for funding through the ODOT Enhance program, which awards funding through a competitive application process.

OREGON STATEWIDE TRANSPORTATION STRATEGY (2013)

The Statewide Transportation Strategy (STS) is a state-level scenario planning effort that examines all aspects of the transportation system, including the movement of people and goods, and identifies a combination of strategies to reduce greenhouse gas, or GHG emissions. The STS identifies a variety of effective GHG emissions reduction strategies in transportation systems, vehicle and fuel technologies, and urban land use patterns. The STS, itself, is neither directive nor regulatory, but rather points to promising approaches for further consideration by policymakers at the national, state, regional, and local levels. The STS contains several distinct strategies, each with potential actions that would help achieve the strategy. Strategies that have a bearing on transportation planning in Florence and the objectives of this planning process include:

- Strategy 3 – Operations and Technology. Enhance fuel efficiency and system investments, and reduce emissions by fully optimizing the transportation system through operations and technology. The street network can be optimized through deployment of intelligent transportation system (ITS) technology to enhance fuel efficiency.
- Strategy 7 – Transportation Demand Management. This strategy supports and implements technologies and programs that manage demand and make it easier for people to choose transportation options.
- Strategy 8 – Intercity Passenger Growth Improvements. This strategy promotes investment in intercity passenger public transportation infrastructure and operations to provide more transportation options that are performance and cost competitive.
- Strategy 10 – Bicycle and Pedestrian Network Growth. This strategy encourages local trips, totaling twenty miles or less round-trip, to shift from single-occupant vehicles to bicycling, walking, or other zero emission modes.
- Strategy 13 – Compact, Mixed-Use Development. This strategy promotes compact, mixed-use development to reduce travel distances, facilitate use of zero or low energy modes and transit, and enhance transportation options.

  Project Relevance: The TSP planning process will consider the strategies identified in the STS and will ultimately articulate the City of Florence's commitment to reducing GHG emissions in the development of plan recommendations.

TRANSPORTATION PLANNING RULE (OAR 660-012) (LAST UPDATED 2022)

The Transportation Planning Rule (TPR), OAR 660-012, implements Statewide Planning Goal 12: Transportation. The TPR contains numerous requirements governing transportation planning and project development, including the required elements of a TSP. In addition to guiding local plan development, the TPR requires each local government to amend its land use regulations (e.g., development code) to implement its TSP (OAR 660-012-0045). It also requires local government to adopt land use or subdivision ordinance regulations consistent with applicable federal and state requirements "to protect transportation facilities, corridors and sites for their identified functions."

Local compliance with TPR Section -0045 provisions is achieved through a variety of measures, including access control requirements, standards to protect future operations of roads, and notice and coordinated review procedures for land use applications. Local development codes should also include a process to apply conditions of approval to development proposals, and regulations ensuring that amendments to land use designations, densities, and design standards are consistent with the functions, capacities, and performance standards of facilities identified in the TSP.

Section -0060 allows a local government to exempt a zone change from the "significant effect" determination if the proposed zoning is consistent with the comprehensive plan map designation and the TSP. Local governments may amend a functional plan, comprehensive plan, or land use regulation without applying mobility standards (volume-to-capacity or v/c, for example) if the subject area is within a designated multi-modal mixed-use area (MMA).

In July 2022 the Land Conservation and Development Commission adopted Climate-Friendly and Equitable Communities (CFEC) rules in response to Governor Kate Brown's Executive Order 20-04.[13] The rules amended the TPR and are intended to reduce Vehicle Miles Traveled (VMT) and promote more environmentally friendly mobility options. Outside of Portland Metro, the CFEC rules apply to jurisdictions with populations over 5,000 and within one of the other seven metropolitan areas. These jurisdictions must reduce or eliminate their minimum parking standards, adopt electric-vehicle parking and charging station standards, establish Climate-Friendly Areas,[14] and update their local TSP to comply with the new TPR regulations.[15]

> **Project Relevance:** The TPR directs local TSP development and requires specific transportation elements be implemented in the local development ordinance. Local requirements such as access management, coordinated land use review procedures, and transportation facility standards and requirements – consistent with TPR Sections -0045 and -0060 – are meant to protect road operations, enhance safety, and provide for multi-modal access and mobility. Implementation measures that will be developed with the TSP update may entail proposed amendments to the City's Zoning and Subdivision ordinances to ensure consistency with TPR requirements as well as to reflect draft TSP recommendations. Although Florence is not subject to the CFEC rules, the TSP may consider some of the strategies and requirements in the TPR that will help achieve Florence's climate goals.

OREGON ROADWAY DEPARTURE IMPLEMENTATION PLAN (2017)

Roadway Departures (RwD) are defined by the Federal Highway Administration as a highway accident that "occurs after a vehicle crosses an edge line or a center line, or otherwise leaves the traveled way." The Oregon Roadway Departure Implementation Plan identifies RwD safety measures. It also identifies the locations, deployment levels, and expected safety benefits of systemic implementation of RwD countermeasures.

> **Project Relevance:** To the extent that the crash data for US 101 or Highway 126 in Florence reveals a significant number of RwD accidents, RwD countermeasures will be considered for Florence TSP Safety projects. In addition, RwD prevention safety policies

---

[13] Issued on March 10, 2020, Executive Order 20-04 directs state agencies to reduce climate pollution.

[14] As defined by the Department of Land Conservation and Development, a climate-friendly area is an area where residents, workers, and visitors can meet most of their daily needs without having to drive. They are urban mixed-use areas that contain, or are planned to contain, a greater mix and supply of housing, jobs, businesses, and services. These areas are served, or planned to be served, by high quality pedestrian, bicycle, and transit infrastructure to provide frequent, comfortable, and convenient connections to key destinations within the city and region.

[15] The new TPR sections are found in OAR 660-012-0330(3) through (8) and address: neighborhood circulation, mixed use and commercial districts, slow streets for neighborhoods, auto-oriented land uses, low car districts, and protection of transportation facilities.

and goals may be considered if crash data reveals a high percentage of RwD-related incidents.

OREGON INTERSECTION SAFETY IMPLEMENTATION PLAN (2012)

Oregon's Transportation Safety Action Plan (TSAP) includes an overall goal of reducing the roadway fatality rate, and the Oregon Intersection Safety Action Plan seeks to advance this goal by offering a systematic approach of cost-effective countermeasures for moderate- to high-crash intersections. The Plan provides a comprehensive analysis of intersection types and their historic crash patterns and suggests a suite of countermeasures that may be appropriate for the various intersection types.

Project Relevance: The Florence TSP should evaluate the countermeasures presented int the Oregon Intersection Safety Action Plan and their applicability for moderate- and high-crash intersections in Florence. Appropriate countermeasures may be considered for TSP intersection and safety projects.

OREGON BICYCLE AND PEDESTRIAN SAFETY IMPLEMENTATION PLAN (2014)

The Oregon Bicycle and Pedestrian Safety Implementation Plan includes a systematic analysis of bicycle and pedestrian safety of Oregon's highway network. This analysis includes a comprehensive review and evaluation of bicycle and pedestrian crash data across Oregon. Based on the results of the bicycle and pedestrian crash analysis, the Plan provides a countermeasure selection process for high-risk locations for bicycle and pedestrian crashes. The Plan's analysis and results are intended to update the Oregon Highway Safety Improvement Plan (HSIP) project selection process for bicycle and pedestrian safety projects.

Project Relevance: The Florence TSP process will consider the methods and results from the Oregon Bicycle and Pedestrian Implementation Plan when evaluating bicycle and pedestrian safety issues in Florence. The TSP will also consider the countermeasures provided from the Plan to help determine the appropriate improvements and interventions for bicycle and pedestrian safety projects.

OREGON COAST BIKE ROUTE PLAN (2022)

The Oregon Coast Bike Route (OCBR) Plan identifies opportunities for improvements to US 101 and other facilities that will benefit people traveling along the Oregon Coast, including recreational and multi-day trip users as well as residents and those making short trips.

The Plan shows US 101 as the existing primary route through Florence. The Plan also shows Heceta Beach Road and Rhododendron Drive as new alternative route options that offer lower traffic volumes and travel speeds than US 101. The Plan identifies two critical needs and corresponding short- and long-term solutions in the city, including:

- **21 Florence:** The bike lane ends when it reaches downtown Florence, causing a higher level of stress for people biking. At this location, the highway is 4 to 5 lanes wide with on street parking and many access points.
  - **Short-term Solutions:** Provide signs leading into Florence that remind people to share the road with people biking and reconfigure road to provide bike lanes consistent with the 2019 ReVision Florence Improvements.

  - **Long-term Solutions:** Evaluate opportunities to calm traffic and improve comfort for people biking in Florence.

- **22 Florence (Siuslaw River Bridge):** With 2 lanes and no shoulder or bike lane, this bridge and its approach is a barrier for people biking. It is approximately 1,800 feet long, which takes about 1 minute and 40 seconds to cross at 12 mph. This major bridge is unlikely to include space for biking unless it is completely reconstructed.

  - **Short-term Solutions:** Provide signs leading to the bridge that remind people to share the road with people biking, provide flashing beacon lights to indicate when people are biking on the bridge, consider advisory speed signs when the flashing beacons are activated, and improve the approach on north end of the bridge with new pavement.

  - **Long-term Solutions:** Coordinate with the Oregon Coast Trail to potentially build a separate bike and pedestrian bridge.

Programs and services to support and promote the OCBR include the following: route maintenance; camping and bike stations; wayfinding; route planning tools; bike parking; transit and shuttle connections; interpretive opportunities; and speed and safety enforcement and education (including ODOT's Safety Education Campaign). The plan recommends a variety of partnerships that could include ODOT, local jurisdictions, Oregon Parks and Recreation Department (OPRD), economic development organizations, and private businesses to implement these programs and services. The plan also outlines 14 potential funding sources for infrastructure, program, and services funding.

> **Project Relevance:** The Florence TSP process will consider the findings and recommendations in the OCBR when evaluating bicycle and pedestrian needs in Florence and consider the potential funding sources identified in the Plan.

OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION (2021)

The Oregon Standard Specifications for Construction provide the construction and design guidelines for all ODOT construction projects. ODOT contractors must follow practices that are consistent with the specifications included in the Specifications manual.

> **Project Relevance:** Planned projects that involve facilities under ODOT or the City of Florence's[16] jurisdiction will ultimately need to construct pursuant to the applicable design specifications included in the Oregon Standard Specifications for Construction. The required specifications for a specific improvement may also help determine project timelines and cost estimates.

TSP GUIDELINES (2020)

The TSP Guidelines were created to assist local jurisdictions in the preparation and update of city and county Transportation System Plans and Regional Transportation System Plans (RTSPs). The guidelines have helped cities, counties, and metropolitan planning organizations develop plans that meet local needs and comply with state regulation and policy direction, including applicable elements of the TPR, the OTP, and associated mode and topic plans, such as

[16] The City of Florence also includes additional standard details that are specifically applicable to the City.

meeting the OHP's Mobility Policy 1F. The TSP Guidelines have been periodically updated to reflect various State modal plan updates; an update is planned for 2023 that will address the most recent TPR updates.

> **Project Relevance:** The Florence TSP process will reflect the phases and steps that are outlined in the Transportation System Plan Guidelines. As needed, the TSP planning process will also account for any revisions to the Guidelines that are intended to incorporate any TPR amendments or other modal plan updates that occur during this project.

Regional Plans

LANE COUNTY COMPREHENSIVE LAND USE PLAN UPDATE (2009)

The Lane County Rural Comprehensive Plan applies to all unincorporated lands within the County and guides planning outside of the Urban Growth Boundaries of incorporated cities in the County. The goals and policies in the Plan align with Oregon's Statewide Planning Goals. For example, Goal 12 of the Plan is Transportation, which includes policies to ensure that the transportation system in unincorporated portions of the County is coordinated with County land use planning. In this way this local plan functions as the implementation mechanism for the State's land use planning program in Lane County.

> **Project Relevance:** Transportation forecasting will be based on the population figures that are coordinated between Lane County and the City. City transportation policy should be consistent with County policy, in particular in areas related to population, urbanization, land use and housing, and transportation. One of the outcomes of this TSP update will be updated City policies that support the recommendations and implementation of the updated TSP; to the extent these policies intersect with County needs and objectives, an outcome of this project may be recommended County policy amendments.

LANE COUNTY TRANSPORTATION SYSTEM PLAN (2018)

The Lane County TSP was last updated in 2018. The TSP includes 12 goals that are categorized between *Guiding Principles, System Design,* and *Implementation*, as shown in Figure 2.

Figure 2: Lane County TSP Goals

The TSP includes a number of projects throughout the County with associated cost estimates. Projects were identified through a Roadway Health Tool, an evaluation criteria score, and community and stakeholder input. The selected projects were placed into four categories:

- Currently funded – projects that are not constructed but have secured funding
- Financially constrained – transportation solutions that are reasonably expected to receive funding by 2036
- Illustrative Projects – projects not likely to receive funding within the project timeline horizon, but have County and ODOT support
- Bridge projects – bridges identified in the County that are in need of repair and are either structurally deficient or functionally obsolete

Of the hundreds of projects identified for the County, five identify the City of Florence as an agency partner or would be located within the Florence UGB. These projects include:

- US 101 from 15th Street to Redwood Street (Currently Funded Project #73) – Construct pedestrian crossings with flashing beacons at three locations in Florence.[17]
- Rhododendron Drive from Florence City Limits to Heceta Beach Road (Financially Constrained #119) – Construct to local road standards and an off-street multi-use path facility.[18]
- Heceta Beach Road from US 101 to Rhododendron Drive (Illustrative Project #63) – Construct bike lanes along the entire length of Heceta Beach Road.[19]
- US 101/Munsel Lake Road Intersection (Illustrative Project #74) – Install traffic signal when warranted.
- Munsel Lake Road from US 101 to North Fork Siuslaw Road (Illustrative Project #107) – Construct to major collector standards with two 11' travel lanes and 6' shoulders on both sides. Integrate systemic safety measures.

  Project Relevance: The Florence TSP will ensure that updated goals and policies do not conflict with the goals and policies of the Lane County TSP. Moreover, relevant TSP projects will be coordinated with the County and projects identified from the County TSP that are in Florence will be revisited and updated accordingly.

LANE COUNTY PARKS AND OPEN SPACE MASTER PLAN (2018)

The Lane County Parks and Open Space Master Plan provides guidance for managing the approximately 4,364 park acres across the County. The Plan process identified three core priorities that informed identification of needed improvements and investments:

- An accessible water-based system

[17] This project has been completed since the 2018 Lane County Transportation System Plan was adopted.
[18] This area has transferred to the City of Florence's jurisdiction since the 2018 Lane County Transportation System Plan was adopted. The City is a co-sponsor for a Community Paths Grant to complete a refinement plan for a portion of Rhododendron Drive
[19] IBID

- Nature based recreation
- Connected trail-based recreation

Based on the community priorities, several goals, policies, and recommendations were developed to guide plan implementation. In addition, the Plan provides a series of recommended parks improvements and strategic partnerships that includes an investment strategy for the planning horizon.

Project Relevance: Trails and active transportation elements of the Florence TSP will plan for connections to parks and recreational opportunities, including the County facilities within the City – Harbor Vista County Campground and Park and Heceta Beach County Park. The TSP update process will consider goals, policies, and projects that can support access to parks, trails, and regional natural amenities that are in the Florence UGB, such as river and beach access at Harbor Vista, as well as connections to recreational opportunities in the County. The TSP update will be an opportunity to ensure that access to County and regional parks is coordinated between Florence and Lane County.

LANE COUNTY BICYCLE MASTER PLAN (2022)

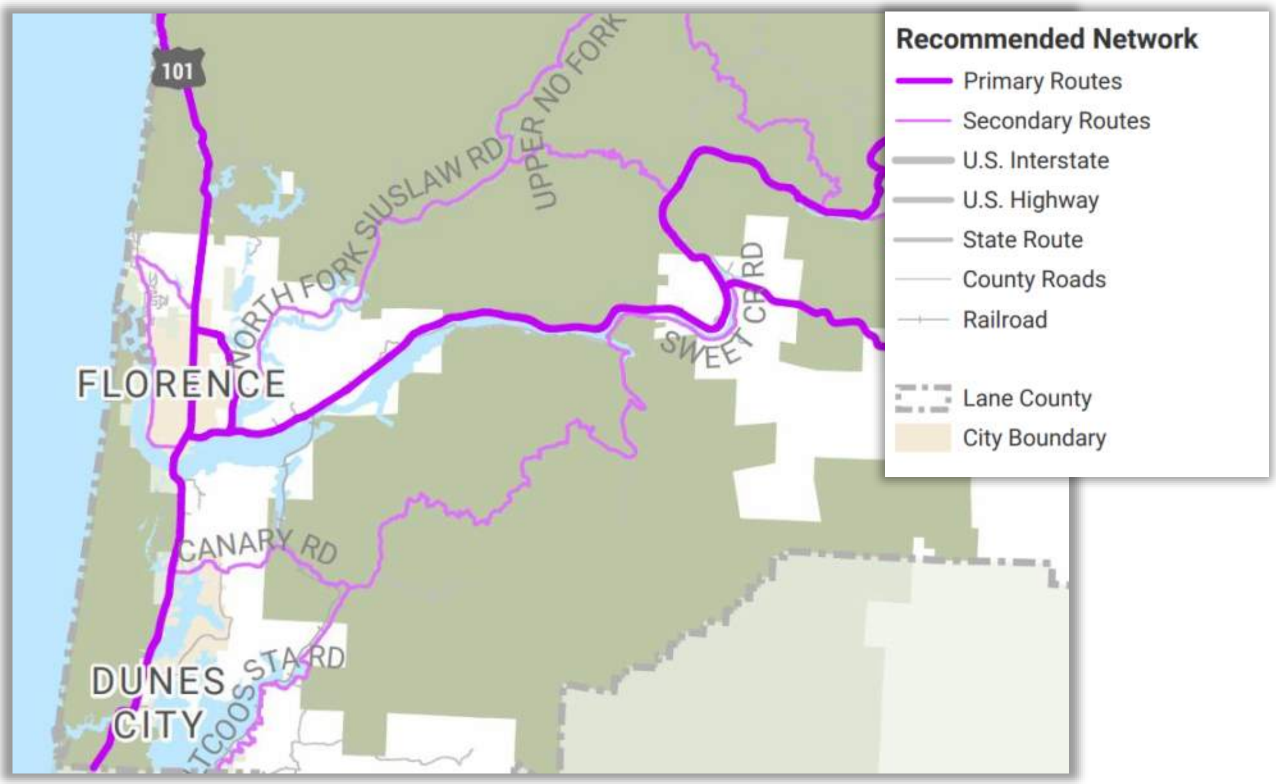
The Lane County Bicycle Master Plan is an amendment to the County's Transportation System Plan and that focuses on prioritizing limited resources towards improving bicycle connectivity and safety in rural County areas.

The Bicycle Master Plan identifies recommended bicycle network routes in parts of Florence. Together, with the routes identified throughout the County, provide access to high-demand destinations. The Plan identifies Primary Routes and Secondary Routes.

- Primary routes provide the most direct, paved bicycle routes between jurisdictions, populated areas, and other major destinations. Where possible, the Plan gives facility recommendations that provide the highest degree of physical separation between vehicle traffic and bicyclists.
- Secondary routes are lower-stress alternatives to primary routes and may also provide less direct, unpaved, and/or recreational experiences.

Figure 3 shows the Primary and Secondary Routes for the Florence area.

Figure 3: Lane County Bicycle Master Plan Bicycle Network



Project Relevance: The Lane County Bicycle Master Plan identifies primary and secondary routes in Florence and provides general recommendations for facility improvements depending on the network classification. The Florence TSP update will be consistent with policy direction provided in the Bicycle Master Plan.

LANE COUNTY CLIMATE ACTION PLAN

The Lane County Climate Action Plan is part of a multi-stage effort from the County towards identifying sources of and mitigating impacts from greenhouse gases (GHG) emissions. The plan follows high impact practices that are recognized for having the biggest reduction in GHG emissions. It identifies strategies where the County can act, support, or convene.

The Strategies in the Climate Action Plan are organized into broad categories, one of which is transportation. The transportation strategies, in order of their emission mitigation potential, include, the use of electric vehicles, renewable R99 diesel, mass transit, and active commutes or telecommutes.

Relevant Lane County strategies that are applicable to the Florence TSP update include:

- Encourage utilities and cities to continue to support electrification of transportation using incentives and waiving fees for charging infrastructure.
- Work with Travel Lane County, cities, utilities, and other organizations to ensure that destination charging is available throughout Lane County.

- Convene cities and transit providers to ensure that county-wide needs are being met.
- Support cities when they apply for grants and state and federal funding to expand active transportation infrastructure.
- Encourage cities to adopt land use policies that reduce the need for single-occupancy vehicle trips including developing 20-minute neighborhoods, transit-oriented development, and looking at ways to improve infrastructure for transit service.
- Ensure that cities throughout Lane County work towards expanding active transportation and telecommuting processes.

Project Relevance: The Climate Action Plan provides direction to Lane County for reducing GHG emissions. This includes supporting and encouraging local cities like Florence with efforts to also reduce GHG emissions. The Florence TSP update will consider and incorporate as appropriate the direction provided in the Climate Action Plan.

THE CONFEDERATED TRIBE OF THE COOS, LOWER UMPQUA, AND SIUSLAW INDIANS COORDINATED TRIBAL TRANSIT PLAN

The Confederated Tribes of the Coos, Lower Umpqua, and Siuslaw Indians ("Tribe") provide tribal transit service within the Tribe's service area within Coos, Douglas, Lane, Curry, and Lincoln counties. The Confederated Tribes Coordinated Tribal Transit Plan ("Plan") will guide the development and operations of the Confederated Tribes Tribal transit program. The Plan's primary objectives are to coordinate an accessible transit system for the community with a specific focus on the elderly, disabled and low income, as well as to promote collaboration between the Tribe and other local transit systems and communities. The Plan identifies service and programming gaps and provides implementation options to address the various gaps. Those implementation options include:

1. Expand the existing Community Health Representative (CHR) service in the Health and Human Services Department to include transit coordination
2. Purchase and operate 1 bus and provide training to CHR
3. Update Tribal transit policy and procedures to include all Tribal members
4. Evaluate the program after 1 year and determine what modifications are needed and report on ridership and on success of negotiations with existing service providers
5. Determine whether to operate the service through ODOT or through the Federal Transit Authority or both.
6. Develop Bike/Ped facilities where appropriate and feasible

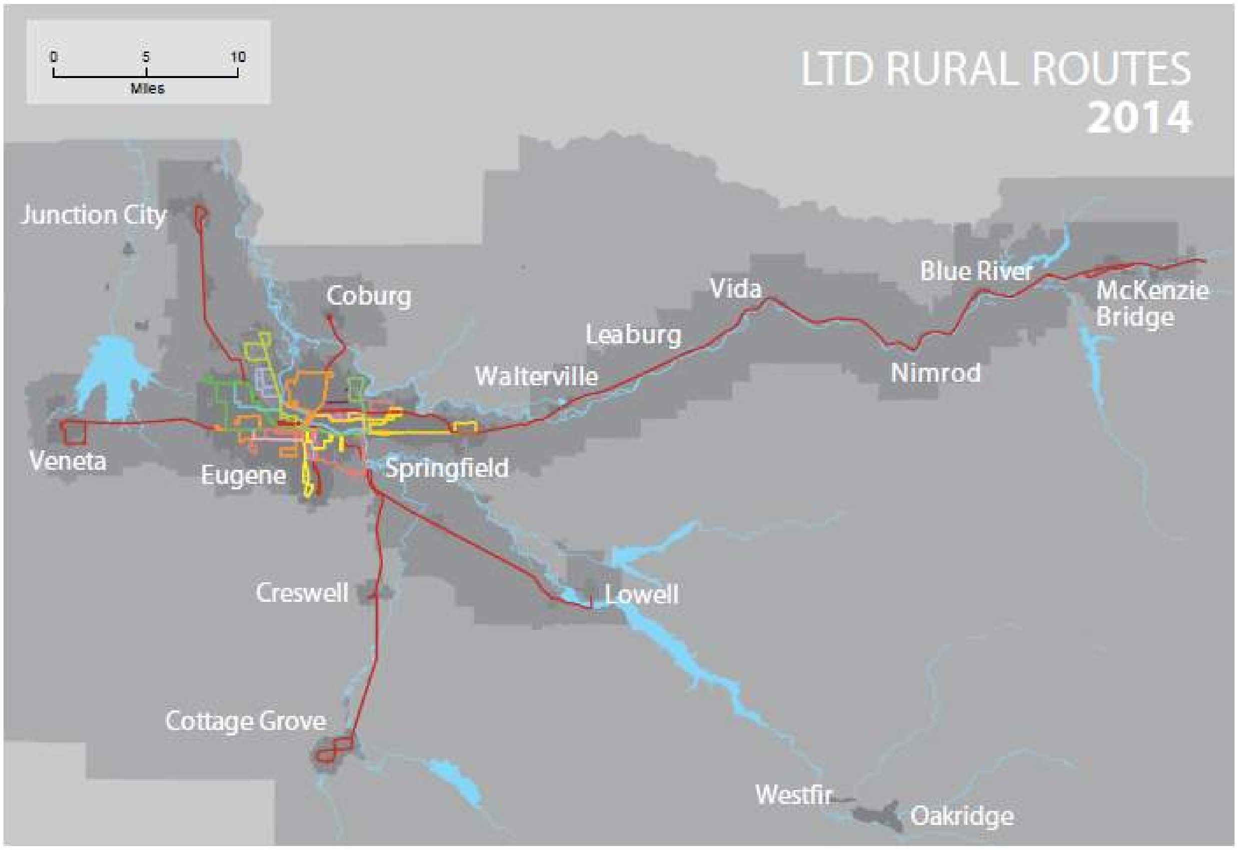
Project Relevance: The Tribe provides free bus service between the Three Rivers Casino and Hotel in Florence and Springfield, Eugene, Veneta, and Mapleton on Mondays, Thursdays, Fridays, and Saturdays. The Plan's Recommended Tribal Transit Program includes an option to expand weekend service to the Florence area. The TSP should coordinate with the Tribe and explore project options to support Tribal transit service to the community.

LANE TRANSIT DISTRICT (LTD) LONG RANGE TRANSIT PLAN

The Long-Range Transit Plan (LRTP) affords LTD the opportunity to develop a framework that establishes goals, policies, and strategies to meet the long-term (20-year) transit service needs of the community.

LinkLane offers daily bus service between Eugene and Florence, with stops in Veneta, Mapleton and at Three Rivers Casino, as well as Monday through Saturday service between Florence and Yachats. The Rhody Express provides transportation around Florence and is part of the Lane Transit District.[20] The most recent update to the LRTP does not include the Rhody Express.

Figure 4: Lane Transit District Bus Route Map[21]



Project Relevance: The TSP update will reflect the current transit service within Florence and will identify needed transit-related improvements within the City and/or needed future planning studies.

---

[20] Lane Transit District, Rhody Express: https://www.ltd.org/system-map/route_901/

[21] The Lane Transit District Bus Route map reflects service at the time the Lane Transit District Long Range Transit Plan was adopted. Lane Transit District has added a pilot bus service program between Florence and Eugene since the plan's adoption.

Local Plans

FLORENCE REALIZATION 2020 COMPREHENSIVE PLAN

The Florence Realization 2020 Comprehensive Plan ("Plan") establishes a land use planning and policy framework to guide community planning decisions. The City's TSP implements Chapter 12 of the Plan – Transportation. Chapter 12 includes 13 goals and a number of policies, many of which direct that the City's TSP be consistent with and coordinated with other State, County, and City plans and policies.

Several other Plan chapters and their associated goals and policies involve transportation, such as the need for transportation facilities and services to coordinate with and adequately serve the City's land uses (Chapter 2). Plan objectives include promoting a transportation system that supports energy conservation and pollution reduction (Chapters 13 and 8, respectively), among several other Plan elements.

> **Project Relevance:** The TSP update process will evaluate existing transportation goals and policies as to whether they are still applicable and accurately reflect existing and future community needs. In addition to updated goals and policies, implementation of the TSP may prompt other policy-level changes in areas related to transportation, including providing public facilities, economic development, and land use.

TRANSPORTATION SYSTEM PLAN

The current Florence TSP was adopted in 2012 and is intended to guide the management and implementation of the transportation facilities, policies, and programs within the urban area over the next 25 years. The adopted TSP followed a similar process to the one that will be used for this TSP update and included review of relevant plans and policies, robust community involvement, an inventory of transportation facilities, and a resulting set of transportation projects.

TSP Goals and Policies were incorporated into Chapter 12 of the Florence Realization Comprehensive Plan. TSP project categories were identified for local, collector and arterial roads, intersections, multi-use paths and trails, transit services and improvements, and pedestrian facilities. The TSP includes cost-estimates and outlines potential funding sources for implementation. As shown in Appendix B and C of the TSP, a set of City Code and Comprehensive Plan amendments were also adopted to comply with the Statewide Transportation Planning Rule (TPR) and to support implementation of the identified TSP projects and other community goals and objectives identified through the TSP process.

> **Project Relevance:** The TSP update process will consider the goals, objectives, policies, standards, and recommended projects from the 2012 TSP to determine what needs to be retained and carried forward or changed for inclusion in the updated TSP. This planning process will update recommended transportation improvement projects for all modes, based on existing and projected needs. Updated data, stakeholder and community involvement, and evaluation criteria will be used in making these recommendations.

FLORENCE ZONING ORDINANCE

Florence City Code Title 10 is the City's Zoning Ordinance. The Zoning Ordinance implements the land use policies in the Florence Comprehensive Plan; it regulates uses within the City and establishes standards for development. The operation, maintenance, and repair of existing transportation facilities and construction of new transportation facilities identified in the TSP are permitted in all zones without land use review (FCC 10-2-12). Key development standards are summarized below.

Pedestrian and Bicycle Design Standards and Access and Circulation

Chapter 36 – Public Facilities – includes requirements and standards for pedestrian and bicycle facility design and installation. FCC 10-36-2-5 – Right-of-Way and Street Sections – includes improvement, installation, and design standards for sidewalks and bicycle lanes. Pedestrian access and circulation are addressed in FCC 10-35-3, which includes requirements for new developments to install sidewalks along street frontages. This Section also includes standards and requirements for walkway/multi-use path design, and access and circulation standards for site layouts and design. The City also requires site circulation plans to accommodate pedestrian and bicycle connections through large sites and connections to other, adjacent sites (FCC 10-35-2-9).

Block Standards

The Public Facilities Chapter includes requirements for block length and perimeter (FCC 10-36-2-10). Blocks in residential and commercial zones must be between 100 feet and 600 feet in length, and the perimeter cannot exceed 1,400 feet.

Access Management and Connectivity

Requirements and standards for driveway and access spacing standards, intersection separation, driveway design, joint and cross access, and vision clearance are all included in Chapter 35 – Access and Circulation. In addition, the City has provisions for multi-use path connections to allow mid-block connectivity and connections between cul-de-sacs and adjacent development or streets/paths (FCC 10-36-2).

Vehicle and Bicycle Parking

Off-street parking standards in Chapter 3 include provisions for shared parking and bicycle parking. Requirements specify the number of parking spaces required as well as basic design elements for bicycle parking. Chapter 3 also includes vehicle parking design standards, loading area standards and requirements, and provisions to allow off-street parking reductions, including proximity to transit service.

Transit Facilities

FCC 10-35-4 requires development other than single-family and duplexes to provide a direct pedestrian route to nearby transit stops as a part of the site circulation plan. In addition, this Section includes transit facility improvement standards, such as transit stop shelters and lighting.

Traffic Study Requirements

The Zoning Ordinance includes threshold criteria for when a Traffic Impact Study (TIS) will be required as part of a development application (FCC 10-1-1-4-E) and the requirements for the TIS (FCC 10-35-2-5). City code language authorizes the City to condition approval as necessary to meet the operational and safety standards of the existing and planned the transportation system.

> **Project Relevance:** Amendments to the Florence Zoning Ordinance will be considered as part of the implementation phase of the TSP update project. Proposed amendments will address consistency with the TPR and will implement recommendations in the updated

TSP. Consistency will need to be ensured between requirements in Title 10 and the updated TSP.

HOUSING NEEDS AND ECONOMIC OPPORTUNITIES ANALYSES (2017)

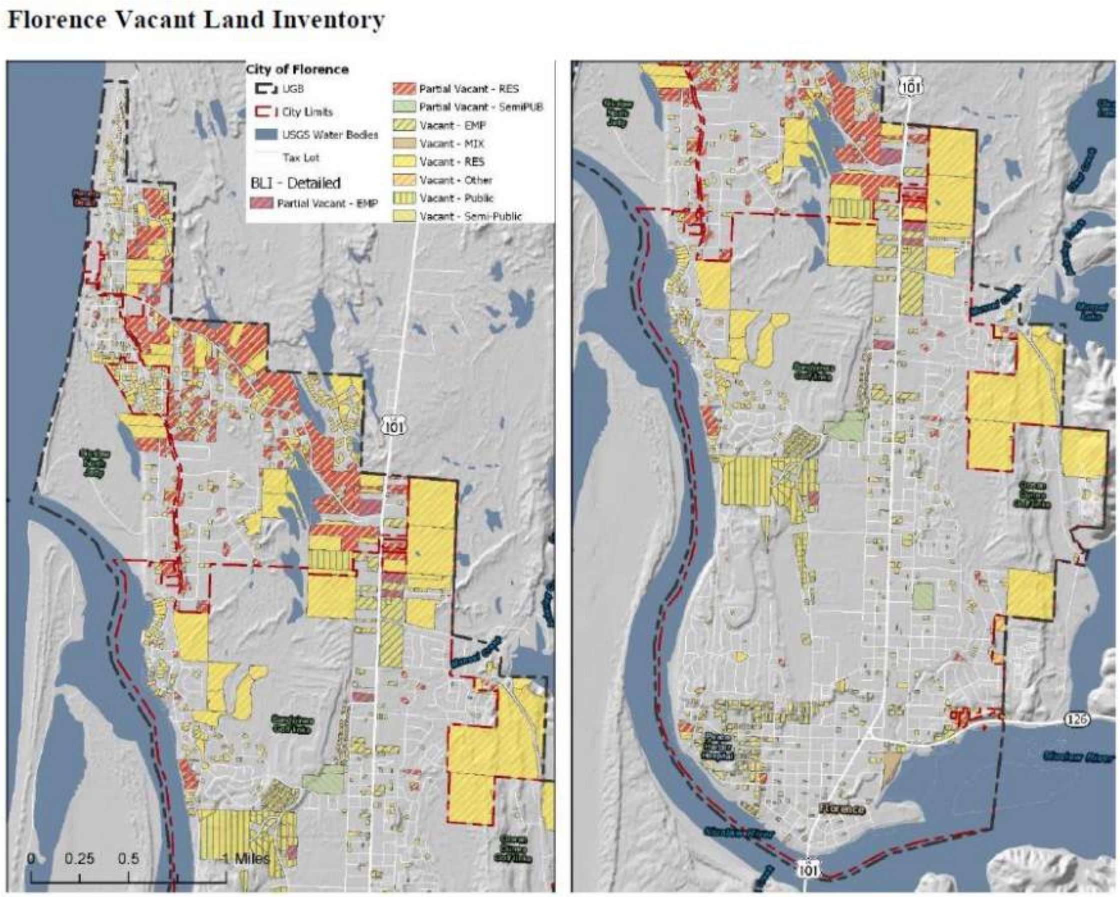
The Florence Housing Needs Analysis and Economic Opportunities Analysis determines the City's Urban Growth Boundary (UGB) land needs for housing and employment on a 20-year planning horizon. The housing and employment needs are based on population growth forecasts for the City and County as well as employment growth forecasts. The Housing Needs Analysis also includes a Buildable Lands Inventory (BLI) to determine the amount of vacant and redevelopable land that is available for housing and jobs growth.

The population within the Florence UGB is expected to grow to about 12,500 by 2037 according to the analysis completed in 2017.[22] Based on projected population growth and other housing and market trends, the analysis estimates a need for 1,624 dwelling units over the next 20 years, including 764 owner-occupied units, 597 rental units, and 263 short-term rental units. In addition, the Analysis estimates a need for 858 single-family detached homes, 145 manufactured units, 265 townhome/duplex units, and 357 multi-family units. To accommodate needed housing needs, the City will need approximately 231 buildable acres of residential land. The BLI findings estimated approximately 1,200 buildable acres within the Florence UGB, which is sufficient to accommodate the residential land needs within the UGB.

The Economic Opportunities Analysis estimates employment growth of 1,286 new jobs over the 20-year planning horizon. It estimates a need of about 55 acres of buildable land to accommodate the projected job growth and notes that the total estimated 1,200 acres of buildable land within the City's UGB is enough to accommodate employment needs in addition to the forecasted housing needs. The results of the Buildable Lands Inventory are illustrated in the Figure 5.

[22] Note, the more recent PSU population projections summarized below indicate the population to reach 13,350 by the year 2040.

Figure 5: Florence Buildable Lands Inventory Results (2017)



The analysis informed a number of recommended housing goals, objectives, and policies for adoption into the City's Comprehensive Plan. Similarly, the analysis supported recommendations for new Comprehensive Plan economic development goals, objectives, and policies.

> **Project Relevance:** Housing and job growth explored in the 2017 analysis identified where future growth is expected to occur and confirmed that future growth can be accommodated within the City's current UGB. Transportation demand modeling conducted as part of the TSP update will help determine transportation facility and service needs, and ultimately project identification, to serve future residents and access existing and future jobs. Updated TSP goals and policies and implementing code amendments will need to be consistent with the Comprehensive Plan Housing and Employment elements.

POPULATION PROJECTIONS

The Portland State University (PSU) Population Research Center provides population forecasts for every Oregon city. The most recent PSU population estimate for the Florence UGB was conducted in 2021. The estimates are based on historic population patterns and demographic trends, economic, market, and housing trends, and other more localized and regional conditions that affect population trends. The current population estimate for the UGB is 11,182, and the estimated population within City limits is approximately 9,600. The UGB is expected to grow to approximately 13,350 by 2040 and continue to increase to about 16,214 people by 2060. The UGB population is expected to grow by about 19% over the next 20 years, and by about 45% over the next 40 years, which translates to an annual growth rate of around 1% per year. This growth rate is slightly lower than the City's growth rate over the last 20 years, as the City's population has grown by about 32% since 2000 (population 7,263), which is about 1.6% annual growth.

> **Project Relevance:** Similar to housing and job growth projections, the City's population projections will inform anticipated travel demand. Travel demand forecasts in turn will help with identification for needed facility improvements and TSP projects to accommodate projected growth.

CURRENT AND PAST BUDGET FOR TRANSPORTATION

The Florence 2021-2023 Biennium Budget outlines the City's financial plan, July 2021 to June 2023. The City adopted a total budget of $71,880,100 for the biennium, an increase of approximately 20% as compared to the 2019-2021 Biennium.

Transportation-related funds include special revenue funds for maintenance and construction of streets, sidewalks, bike paths, trails, lighting, airport-related funds, and public works facilities maintenance and improvements. Budget goals and work plan items for transportation include the completion of a Safe Routes to School project,[23] construction and realignment of multi-use paths along sections Rhododendron Drive, TSP update support, and several other street/road maintenance and repair projects. Revenue forecasts for streets/transportation project a total of 7% increase from the previous year. The total budget for transportation and streets is about $9.1 million, which has increased by about 5% from the previous Biennium. The full budget summary for streets is shown in Figure 6.

[23] The Safe Routes to School project has been completed since the 2021-2023 Biennium Budget was adopted.

Figure 6: Budget Summary for Streets/Transportation

Budget:

	2016-17 Actual	2017-19 Actual	2019-21 Budget	2019-21 BTD	2021-23 Proposed	2021-23 Approved	2021-23 Adopted
Beginning fund balance	411,722	-	194,600	561,987	129,200	129,200	129,200
Current year resources							
Intergovernmental	1,879,158	1,240,219	2,542,000	1,496,127	5,134,500	5,134,500	5,134,500
Franchise fees	50,250	129,409	163,000	172,809	188,000	188,000	188,000
Charges for services	333,764	809,924	870,000	923,701	976,100	976,100	976,100
Miscellaneous	9,167	50,901	4,200	12,322	4,800	4,800	4,800
Transfers	-	228,000	480,000	471,667	180,000	180,000	180,000
Debt proceeds	500,000	-	4,500,000	-	2,500,000	2,500,000	2,500,000
Total current year resources	2,772,339	2,458,453	8,559,200	3,076,625	8,983,400	8,983,400	8,983,400
Total resources	3,184,061	2,458,453	8,753,800	3,638,612	9,112,600	9,112,600	9,112,600
Expenditures							
Personnel	67,546	145,050	171,600	146,948	139,400	139,400	139,400
Materials and services	261,173	550,189	1,345,500	1,240,680	1,390,300	1,390,300	1,390,300
Capital outlay	2,778,174	376,245	6,440,000	1,823,567	6,062,700	6,062,700	6,062,700
Transfers	267,800	662,000	520,600	339,941	773,900	773,900	773,900
Debt service	115,251	156,986	-	-	-	-	-
Total expenditures	3,489,943	1,890,470	8,477,700	3,551,137	8,366,300	8,366,300	8,366,300
Other requirements							
Contingency	-	-	276,100	-	746,300	746,300	746,300
Total other requirements	-	-	276,100	-	746,300	746,300	746,300
Total expenditures and other requirements	3,489,943	1,890,470	8,753,800	3,551,137	9,112,600	9,112,600	9,112,600

In addition to the Streets/Transportation funding, $180,000 from SDC revenues are being transferred to the Street Fund to finance portions of Rhododendron Drive from Wildwinds to 35th Street improvements. The total airport budget is about $1.1 million, which is about double the budget from the previous Biennium. Staffing resources for transportation-related projects/programs include funds for the Community Development (Planning) Department ($1.1 million) and the Public Works Department ($3.8 million).

> **Project Relevance:** The transportation projects included in the Florence 2021-2023 Biennium Budget will help inform TSP project identification and costs. Near-term projects planned in the updated TSP will be consistent with the transportation projects and funding from the City's Budget.

WATER SYSTEM MASTER PLAN UPDATE (2011)

The Water System Master Plan Update (WSMP) provides the City with information and guidance for management and protection of the municipal water system within its water service boundary. The WSMP also provides design specifications for water system facilities and planning-level cost estimates, both of which are intended to support planning and budgeting for future water system improvements. The WSMP is on a 20-year planning horizon, and the service area is entirely within City limits.

Project Relevance: Needed TSP projects identified as part of this update project should be located and designed to ensure there are no challenges or conflicts with City water utilities and facilities. The TSP project team will need to coordinate with the City's Public Works Department to help ensure that conflicts between transportation projects and the water system are avoided, as well as to identify opportunities to time major capital projects for cost effectiveness and to minimize disruptions.

WASTEWATER COLLECTION SYSTEM MASTER PLAN (2013)

The Wastewater Collection System Master Plan ("Plan") was most recently updated in 2013. The Plan update was intended to evaluate the City's wastewater collection system and plan and budget for wastewater system improvements, particularly in areas where the City is likely to expand within the current district boundary. The Plan includes recommended improvements to existing wastewater facility deficiencies as well as future facility and system expansions. Identified improvements and repairs were incorporated into the City's Capital Improvement Program (CIP).

Project Relevance: As with other capital projects, identified TSP projects will need to be planned in such a way that conflicts between transportation projects and the wastewater system are avoided, and where possible, coordinated with wastewater facility improvements where certain locations and alignments overlap.

STORMWATER MANAGEMENT PLAN (2000 AND UPDATED DECEMBER 2018) AND STORMWATER DESIGN MANUAL (2011)

The City's Stormwater Management Plan (SWMP) provides recommendations to minimize flooding, improve water quality, and protect the region's aquifer and natural resources. The recommendations inform the City CIP, which includes stormwater collection rates and fees that help fund stormwater facility improvements and construction. In addition, the SWMP recommended stormwater development standards and criteria to be incorporated into the City's Development Code.

The City's Stormwater Design Manual (SWDM) builds upon the SWMP by providing design specifications for stormwater facilities, with a particular focus on Best Management Practices (BMP) "Green Street" elements and other green infrastructure practices. The SWDM also provides recommended Code updates, specifically to the City Stormwater Code (Title 9, Chapter 5). The SWDM is largely modeled off of the Portland Stormwater Management Plan, with some customization for Florence to account for unique aspects of the region's hydrology, geology, and other specific community needs.

Project Relevance: The stormwater improvements identified in the CIP will need to coordinate with TSP projects that are incorporated into the CIP. Specifically, identified TSP projects will need to ensure there are no challenges or conflicts with City stormwater facilities. The TSP project team will need to coordinate with the City's Public Works Department to help ensure that conflicts between transportation projects and the stormwater system are avoided. In addition, certain TSP projects may be coordinated with stormwater facility improvements, particularly where a stormwater facility and transportation facility share the same right-of-way. TSP policies and projects can also support stormwater management policies and goals by promoting Green Streets and other stormwater BMPs in the design and construction of certain transportation facilities.

Finally, any transportation-related City Code amendments recommended to implement the updated TSP will need to be consistent with stormwater Code standards and requirements.

PARKS AND RECREATION MASTER PLAN (2011)

The Florence Parks and Recreation Master Plan ("Plan") implements the community's goals for parks and recreation in the Florence UGB on a 20-year horizon (2011-2030). The Plan also provides technical and policy analyses for parks that are incorporated into the Comprehensive Plan and CIP. Plan objectives include:

- Establish local guidelines for park planning and development
- Recommend locations for future parks, trails, and open space
- Identify funding options and strategies for parks and parks programming
- Update parks and trails Level of Service
- Propose parks/open space Comprehensive Plan policies and new projects to improve existing parks facilities or develop new facilities.

The Plan includes goals, objectives, and strategies to support trails and bicycle/pedestrian connectivity and access. Specifically, Goal 1 – Provide an Interconnected Trail System – includes objectives to adopt a trail development plan, develop bike lanes and multi-use paths identified in the TSP, adopt bike/pedestrian facility design standards, and develop a trails system that provides access to various community services and destinations. In addition, Goal 4 – Recreation Facility Development – includes strategies to improve and connect nature trails, such as providing interpretive signage, improving access between nature trails and parks, and coordinate with other agencies to incorporate interpretive/educational signage along trails in natural areas.

The Plan includes an assessment of community needs based on extensive engagement activities. Community members indicated that trail development was the most needed recreation resource, including more trail connectivity, improved access to open spaces for non-motorized users, and nature interpretation and signage in open spaces along the trail network.

The Plan also includes an inventory of the existing and planned trails, as shown in Figure 7. The Plan further documents the characteristics and general description of the Munsel Creek Bike Path, 12th Steet Path, Ivy Street Path, and 29th Street Path. A brief description of trails on privately owned land is also provided, specifically for trails in Florentine Estates and Park Village Southern Open Space.

Figure 7: Florence Parks and Trails Classification

Table 3.2—City Owned Park and Open Space Inventory				
	Park	**Type**	**Dev. Acres or Linear Miles**	**Undev Acres or Linear Miles**
17	Munsel Creek Bike Path	Trail	.53	--
18	Ivy St. Path	Trail	--	.17
19	12th St. Path	Trail	--	.56
20	29th St. Trail	Trail	.29	--
	Linear / Mileage Total	**4 sites**	**.82**	**.73**

Plan recommendations include a list of priorities for each park and trail, as shown in Figure 8. In addition to these priorities, the Plan recommends the City provide a Paths and Trails brochure and develop a Comprehensive Trail Plan (both High Priority). A number of funding sources are also listed to support these recommendations, including State Bicycle Funds, Recreation Trail Grants, and other local financing strategies.

Figure 8: Trail Recommendation Priorities

Site Facility	Project Description	Priority		
		Low	Medium	High
Munsel Creek Path	Research ways to discourage vandalism and transients	■		
	Add More benches	■		
	Waste receptacles (needs to be bear proof)	■		
	Extend path south to Gallaghers Park	■		
	Extend path north through Munsel Greenway Park to Munsel Lake Boat Ramp area (need to acquire right-of-way)			■
	Overlay/repave path			■
	Develop more access points		■	
	Improve natural light access & safety by thinning the overhead tree canopy			■
	Add mileage markers		■	
	Add interpretive signage for native vegetation	■		
	Replace Spruce St bench and Bones' bench		■	

29th St. Path	Overlay path, bank stabilization, reconstruct			
	Redesign & construct 29th and Spruce St. pedestrian barrier (connection to sidewalk)			
	Signage to Munsel Greenway Park			
12th St. Path	Complete the project from Rhody to Munsel Creek Bike Path			
	Add trail amenities such as petwaste stations (at trail heads), benches, and signage			
Rhododendron Dr. Multi-Use path	Segments as funding and development partnership(s) are available			
Munsel Greenway Connection	Extend Munsel Greenway trail north to Munsel Lake Rd.			
Estuary Trail	Planning, land acquisition, development			
Three Mile Prairie	Acquire west & east access, signage, wayfinding, parking, restrooms – partner with County			
Munsel Creek Spruce St. Trail head area	Research potential of adjacent land west of Spruce St. for courtyard or other recreational use for neighboring underserved senior housing facilities (Area 8)			
Trail System	Develop various trails both connector and in parkland as grant opportunities and other funding sources are secured (Oak Street corridor)			

Project Relevance: The TSP will revisit the recommended trail/pathway and parks access-related improvement projects and assess necessary additional improvements to meet future needs. In addition, TSP goals and policies will need to reflect or be consistent with relevant Parks Plan goals and policies (e.g., trails improvements and parks access policies). The updated TSP will also evaluate funding strategies for TSP projects, including those that are parks or trails related.

DOGAMI FLORENCE TSUNAMI EVACUATION MAPPING ANALYSIS

In 2018, the Oregon Department of Geology and Mineral Industries (DOGAMI) analyzed pedestrian tsunami evacuation routes along Coastal Lane County.[24] The analysis modeled a variety of factors, including the tsunami hazard zone, local elevation gradients, road and trail/pedestrian network, land cover and land use, and average walking speeds to determine the shortest paths to safety (in walking time) in the event of a tsunami. The results of this analysis were used to inform subsequent tsunami evacuation planning, routing, and mapping efforts, as illustrated in the Figure 9 below.

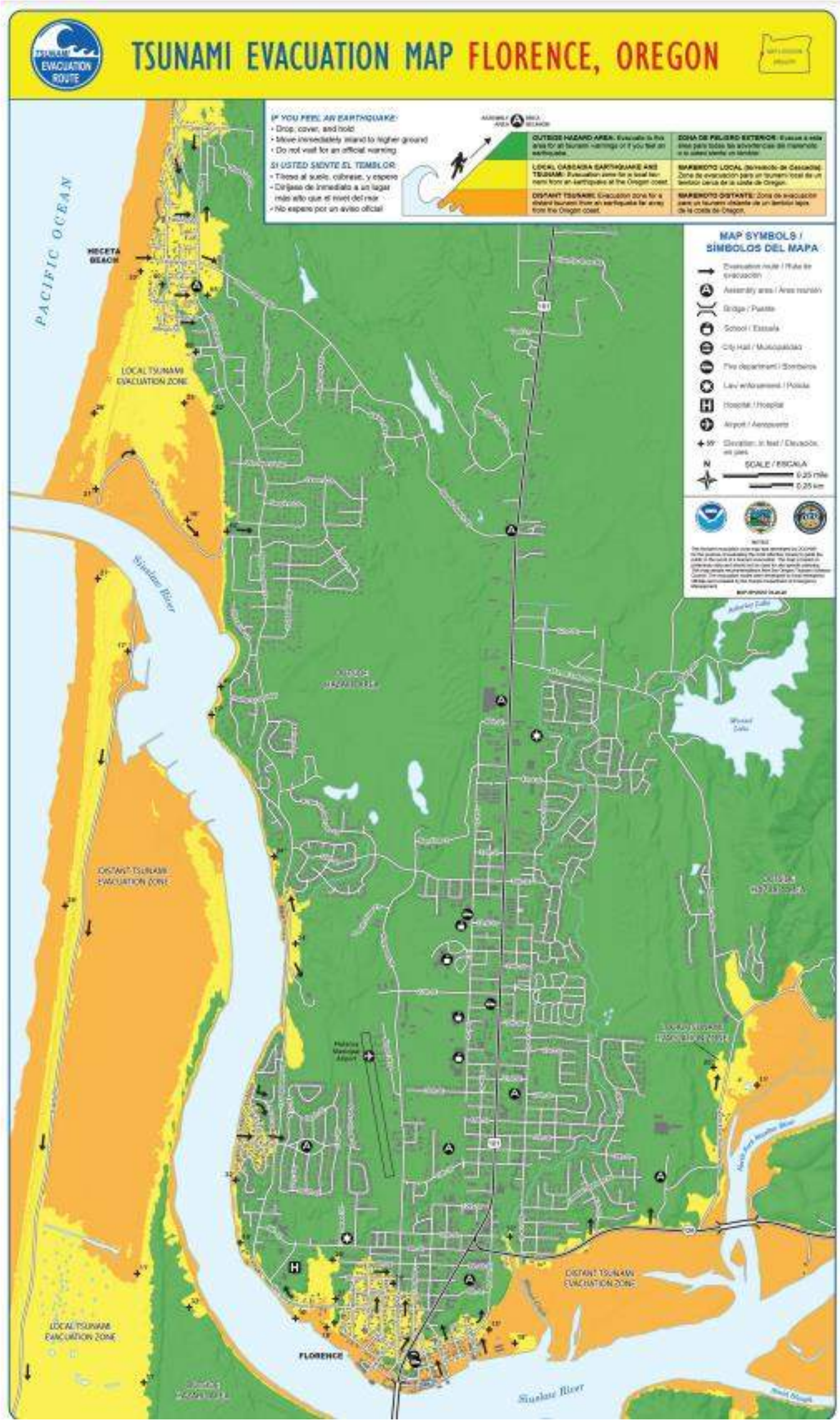
Researchers with Oregon State University and the University of Alabama developed a methodology for siting locations for tsunami vertical evacuation shelters.[25] Similar to the DOGAMI analysis, the travel time is the primary factor in determining the optimal locations for a tsunami

[24] Florence Tsunami Evacuation Mapping Analysis: https://www.ci.florence.or.us/planning/florence-tsunami-evacuation-analysis-mapping-project

[25] Park, Sangki, et al. "Method to determine the locations of tsunami vertical evacuation shelters." *Natural hazards* 63.2 (2012): 891-908.

shelter. Therefore, transportation facilities play a crucial role in supporting safe and timely evacuation for residents to escape tsunami hazard areas.

Figure 9: Florence Tsunami Evacuation Map

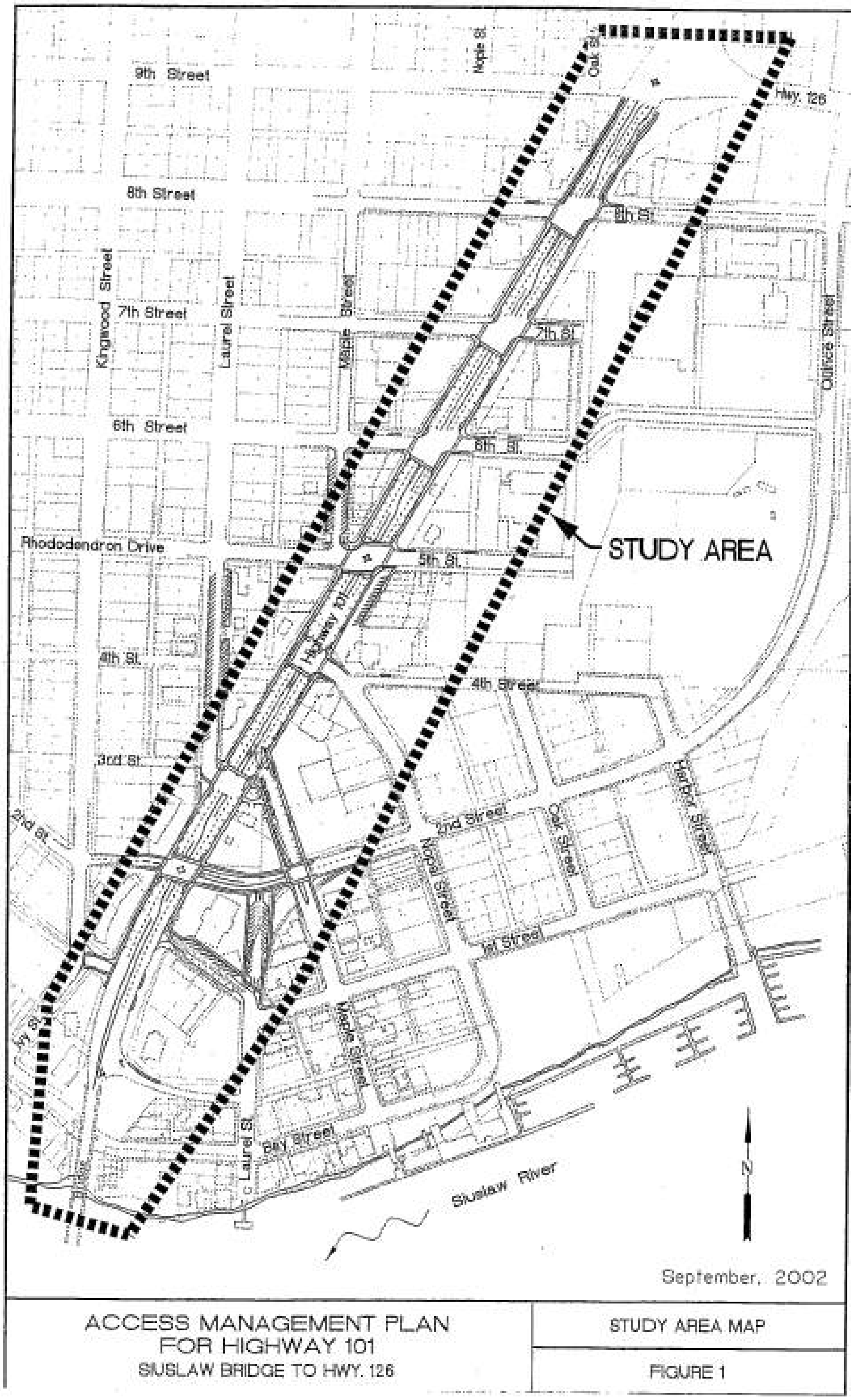


Project Relevance: The TSP process will consider tsunami evacuation routes and gathering/shelter locations in developing the future transportation system and prioritizing projects. TSP projects that are located on or near evacuation routes should consider improvements that can help facilitate safe and efficient mobility to higher elevations and shelter areas. Further, identified TSP projects should avoid any types of improvements that risk functioning as physical barriers or a hindrance to evacuation routes and processes.

HIGHWAY 101 ACCESS MANAGEMENT PLAN (2002)

The Highway 101 Access Management Plan ("Plan") identifies access control measures and management strategies to maintain safe and efficient operation of the portion of Highway 101 in Downtown Florence. Specifically, the access management measures apply to the north end of the Siuslaw River Bridge to the Highway 126 and 9th Street intersection, and it includes one block on each side of the corridor, as shown in Figure 10.

Figure 10: Access Management Plan Study Area



The Plan notes that the State Highway access spacing standards are impractical for the current conditions of the study area section. OAR 734-051-0360 encourages cities and jurisdictions to develop access management plans in areas where highway segments are unable to meet the State's access spacing standards due to current land use patterns and existing driveway and intersection locations.

The Plan identifies seven access management strategies to improve the operations and safety of the Downtown Florence section of Highway 101. Those strategies include the following:

- Driveway removal, shared driveways, and relocation of driveways
- Parking improvements
- Curb extensions
- Pedestrian refuge islands
- Intersection approach realignment
- Signalization
- Improvements to connections to parallel routes

  Project Relevance: Recommended local transportation projects and access management-related goals and policies should support and be consistent with ODOT's access management objectives along US 101. The TSP update will evaluate the safety and efficiency of the access management strategies and spacing in Downtown Florence and throughout the rest of the City.

FLORENCE COMMUNITY TRANSIT PLAN (2002)

The Community Transit Plan (CTP) provided a ten-year plan for the development of future public transportation services. The CTP profiles transportation providers that existed at the time the plan was developed including:

- Porter Stage Lines – commercial inter-city fixed bus route from Eugene to Florence on Highway 126, and Florence to Coos Bay on Highway 101
- Greyhound Bus Lines – commercial inter-city fixed bus routes on Highway 101. There is one Greyhound Bus stop in Florence.
- Several specialized social/medical service providers, including Friends of Florence, Senior Companion Program, and Rural Escort Program, among others. These services are mostly door-to-door and intended for seniors or people with special needs.

Based on analysis of existing conditions, robust community engagement, and a detailed transit needs assessment, the CTP outlines several long-term goals, including establishment of a combination transit service (dial-a-ride plus fixed route), tourist shuttles, public transit service to Eugene, regional transit connections to the north, south, and east of Florence, and potential formation of an independent transit district. Many of the regional services would supplement or fill gaps from the existing region routes at the time.

The CTP also identifies potential funding sources, which includes grant funding from the Federal Transit Administration, the Nonurbanized Area Formula Transit Grants, ODOT Funding, local funding sources, and several other sources. The Plan further outlines proposed routes, schedules and service logistics, operating budgets, and projected revenue.

Since the adoption of the CTP, the City of Florence and Lane Transit District have partnered to establish a local public transportation provider – the Rhody Express.[26] As discussed in the State Transit Plan review, the Rhody Express has two fixed routes that serve North and South Florence. The 2012 Florence TSP update amended some of CTP goals and policies to reflect current conditions and future needs, including a specific goal to expand the Rhody Express services.

> **Project Relevance:** The updated TSP's transit element will reflect existing local and regional transit services such as the Rhody Express, Yachats Connector, the Link Lane to Eugene, and Pacific Crest Bus Lines. In addition, the TSP will update the public transportation/transit-related goals and policies to reflect existing transit services and current and expected future community and regional transit needs. The TSP will also identify the need for new transit improvement projects, service improvements, programming, and funding sources, which may ultimately lead to a recommendation to update the CTP.

AIRPORT MASTER PLAN UPDATE (2010)

The Florence Airport Master Plan (AMP) and Airport Layout Plan (ALP) was created in cooperation with the Federal Aviation Administration (FAA) in 2010. The AMP includes the following:

- An assessment of existing facilities and activities
- A forecast of airport activity measures for a 20-year planning horizon
- Current and future facility requirements to meet local/regional needs and to conform to FAA design standards
- Updates to the Airport Layout Plan, airspace plan, and land-use plan for the airport[27]
- An Airport Capital Improvement Program that prioritizes improvements and estimates project costs

> **Project Relevance:** The City of Florence Municipal Airport is part of the City's transportation system; updated TSP goals and policies will be consistent with the AMP. The TSP project list may include the projects from the AMP that have not been completed, or improvements to roadways accessing the airport. Airport officials may need to be consulted on whether any pending AMP projects need to be updated, including updated project costs.

DOWNTOWN IMPLEMENTATION PLAN (1999)

The purpose of the Florence Downtown Implementation Plan ("Plan") is to revitalize downtown and surrounding areas as the primary cultural, tourist, commercial, and community core for

[26] Rhody Express: https://www.ci.florence.or.us/boardsandcommissions/new-rhody-express-route

[27] Note that the 2019 Florence Airport Property Plan is the latest airport layout plan that shows all the property associated with the airport: https://www.ci.florence.or.us/airport/florence-airport-property-plan-exhibit.

Florence. Many of the goals, objectives, and priorities of the Plan include main street and streetscape improvements for the Highway 101 Corridor through Downtown Florence. These include the following:

- Improvements to make the area more pedestrian friendly
- Access improvements to Old Town
- A parallel route to Highway 101 on 2nd and Quince
- A downtown Green to serve as the gateway and center of a new main street on Highway 101

Some of the specific priority improvements identified to meet the goals of the Plan include striping for on-street parking, acquiring and improving nearby parking lots, establishing an estuary trail to connect the Boardwalk and Munsel Creek Bike Path, and increasing sidewalk width and lighting to improve the pedestrian experience in downtown. The Plan goes into further detail on specific improvements, design treatments and elements, funding sources, and the timeline for the specific Plan goals and priorities.

> **Project Relevance:** The TSP will consider Plan priorities and the need for identified projects and improvements. TSP goals and policies will be consistent with the Plan and TSP projects may include updated versions of Plan projects that have not been completed.

WETLAND AND RIPARIAN INVENTORY (2013)

The City of Florence Local Wetland Inventory (LWI) is an update to the 1996 Local Wetland and Riparian Inventory. The inventory includes identification, mapping, and habitat and water quality evaluations for wetlands and riparian resources in the UGB and surrounding areas. The LWI follows State guidelines for inventorying wetlands and aquatic resources, and it serves as the basis for establishing State Planning Goal protected resources, including Goal 5 for significant natural resources and Goal 17 for coastal resources.

> **Project Relevance:** Local and State policies and regulations for protecting aquatic resources identified in the LWI will influence transportation project location, selection, and design. TSP projects will need to account for any potential impacts to wetlands, riparian areas, or estuary resources, which may include measures to avoid the natural resource areas or mitigate unavoidable impacts and detailing associated costs.

APPENDIX B: TECH MEMO #2: GOALS, OBJECTIVES, AND EVALUATION CRITERIA

TECH MEMO #2: GOALS, OBJECTIVES, AND EVALUATION CRITERIA

Date:	March 29, 2023
To:	Wendy Farley-Campbell, Shirley Gray, Erin Reynolds, Mike Miller, City of Florence Michael Duncan, Oregon Department of Transportation
From:	Russ Doubleday, Matt Bell, and Susan Wright, PE, PMP, Kittelson & Associates, Inc.
Project:	City of Florence Transportation System Plan Update
Subject:	Final Tech Memo #2: Goals, Objectives, and Evaluation Criteria

Table of Contents

Introduction

This memorandum presents the goals, objectives, and evaluation criteria that will be used to guide development of the Florence Transportation System Plan (TSP) update. The goals and objectives will help ensure key issues are addressed throughout the planning process while the evaluation criteria will be used to select and prioritize preferred transportation system improvements for the TSP. The goals, objectives, and evaluation criteria will also 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.

Background

The Florence Realization 2020 Comprehensive Plan, updated in July 2018, includes 13 goals and 34 policies, as listed below. A review of these goals and policies highlight a focus on land use and transportation planning integration, multimodal facilities and access, environmental and cultural recognition, and emergency preparedness. The 2012 Florence TSP created these goals and policies, and they were incorporated into the Comprehensive Plan.

The City's current transportation goals and policies are included in Attachment A.

Proposed Goals and Objectives

The proposed goals and objectives for the Florence TSP update are described below. According to the Comprehensive Plan, goals are statements of intent that outline the type of community and environment that the city seeks. Stated goals may seem unachievable, but goals are meant to indicate a path for ongoing efforts. Also according to the Comprehensive Plan, objectives are more specific targets for achieving goals.[1]

The proposed TSP goals and objectives are based on a review of the existing Comprehensive Plan goals and policies and discussions with City staff about the important issues prevalent in the community and transportation system.

GOAL 1: CREATING A SAFE TRANSPORTATION SYSTEM FOR ALL

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

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

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

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

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

[1] While some Comprehensive Plan elements include objectives, as well as goals and policies, Chapter 12: Transportation does not. TSP objectives can be incorporated into the Comprehensive Plan as part of the implementation phase of this project. Existing transportation policies can also be examined for retention or updating at this later project phase.

- Objective 2F: Balance the City's strong tourism economy with the transportation related impacts from visitors

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

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

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

GOAL 4: MINIMIZING ENVIRONMENTAL IMPACTS

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

- Objective 4A: Minimize the impacts on natural and cultural resources when constructing transportation facilities
- Objective 4B: Set policies that encourage the use of low-emission transportation modes
- Objective 4C: Select alternatives which balance the requirements of other goals with the need to minimize air, water, light, and noise pollution
- Objective 4D: Construct transportation facilities that minimize impacts on natural resources such as streams, wetlands, and wildlife corridors

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

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

- Objective 5A: Design and construct new transportation facilities that add resilience to the network
- Objective 5B: Locate new transportation facilities outside the tsunami inundation zones where feasible

- Objective 5C: Develop transportation facilities that both enhance community livability and serve as tsunami evacuation routes
- Objective 5D: Coordinate evacuation route and signage planning in conjunction with existing or proposed transportation system plan pedestrian and bicycle route planning efforts
- Objective 5E: Design streets to efficiently and safely accommodate emergency service vehicles

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

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

- Objective 6A: Ensure consistency with local plans including the Comprehensive Plan, state plans, transit plans, and the plans of neighboring jurisdictions
- Objective 6B: Ensure consistency with statewide planning documents such as the Transportation Planning Rule, Oregon Transportation Plan, Oregon Highway Plan, and ODOT modal plans
- Objective 6C: Partner with local, county, and state agencies to invest in a transportation network that meets everyone's needs
- Objective 6D: Meet the goals and policies laid out in the City's other planning efforts, including the Housing Implementation Plan Project

Evaluation Criteria

The proposed evaluation criteria are based on the proposed goals and objectives. A qualitative process using the evaluation criteria will be used to evaluate potential alternatives and prioritize projects developed through the TSP update. The rating method used to evaluate the alternatives 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)

At this level of screening, the criteria will not be weighted; the ratings will be used to inform discussions about the benefits and tradeoffs of each alternative. Table 1 presents the evaluation criteria that will be used to qualitatively evaluate the alternatives developed through the TSP update.

Table 1: Florence TSP Evaluation Criteria

Objective	Evaluation Criteria	Evaluation Score
	Goal 1 – Creating a Safe Transportation System for All	
Objective 1A	Address known safety issues at locations with a history of fatal or severe injury crashes	(-2 to +2)
Objective 1B	Provide safe pedestrian crossings on state highways and at additional locations off state highways	(-2 to +2)
Objective 1C	Support roadway improvements that provide safe access for all users, regardless of age, ability, or mode of transportation	(-2 to +2)
	Goal 2 – Building Facilities that Support Economic Development & are Cost-Effective	
Objective 2A	Provide convenient access for motor vehicles, transit, bicycles and pedestrians to major activity centers	(-2 to +2)
Objective 2B	Design streets, bikeways and walkways to meet the needs of pedestrians and cyclists to promote convenient circulation	(-2 to +2)
Objective 2C	Provide the efficient movement of goods, services, and people	(-2 to +2)
Objective 2D	Preserve the function of both US 101 and US 126 for regional traffic while building transportation connections between the City and these highways	(-2 to +2)
Objective 2E	Minimize negative impacts to existing and future neighborhoods, and to developable and developed commercial and industrial sites	(-2 to +2)
Objective 2F	Balance the City's strong tourism economy with the transportation related impacts from visitors	(-2 to +2)
	Goal 3 – Meeting the Wide-Ranging Transportation Needs of All Users	
Objective 3A	Create a non-motorized network that has a high degree of comfort (i.e. minimal Level of Traffic Stress)	(-2 to +2)
Objective 3B	Close key gaps in the pedestrian or non-motorized system, creating short, easy, and accessible loops within the network	(-2 to +2)
Objective 3C	Provide pedestrian or non-motorized connectivity to schools, business districts, transit stops and corridors, and/or parks – including bicycle parking	(-2 to +2)
Objective 3D	Promote demand management programs to reduce single occupancy vehicle trips	(-2 to +2)
Objective 3E	Support comfortable and reliable transit service for transit stops and corridors	(-2 to +2)
	Goal 4 – Minimizing Environmental Impacts & Promoting Equitable Outcomes	
Objective 4A	Minimize the impacts on natural and cultural resources when constructing transportation facilities	(-2 to +2)

Objective 4B	Set policies that encourage the use of low-emission transportation modes	(-2 to +2)
Objective 4C	Select alternatives which balance the requirements of other goals with the need to minimize air, water, and noise pollution	(-2 to +2)
Objective 4D	Construct transportation facilities that minimize impacts on natural resources such as streams, wetlands, and wildlife corridors	(-2 to +2)
	Goal 5 – Adding Resiliency to the Network & Planning for Emergencies	
Objective 5A	Design and construct new transportation facilities that add resilience to the network	(-2 to +2)
Objective 5B	Locate new transportation facilities outside the tsunami inundation zones where feasible	(-2 to +2)
Objective 5C	Develop transportation facilities that both enhance community livability and serve as tsunami evacuation routes	(-2 to +2)
Objective 5D	Coordinate evacuation route and signage planning in conjunction with existing or proposed transportation system plan pedestrian and bicycle route planning efforts	(-2 to +2)
Objective 5E	Design streets to efficiently and safely accommodate emergency service vehicles	(-2 to +2)
	Goal 6 – Coordinating with Local, Regional, & State Partners	
Objective 6A	Ensure consistency with local plans including the Comprehensive Plan, state plans, and the plans of neighboring jurisdictions	(-2 to +2)
Objective 6B	Ensure consistency with the statewide Transportation Planning Rule	(-2 to +2)
Objective 6C	Partner with local, county, and state agencies to invest in a transportation network that meets everyone's needs	(-2 to +2)
Objective 6D	Meet the goals and policies laid out in the City's other planning efforts, including the Housing Implementation Plan Project	(-2 to +2)

ATTACHMENT A: CITY OF FLORENCE EXISTING GOALS AND POLICIES

Existing Goals

1. To create a safe transportation system.
2. To operate transportation facilities at a level of service that is cost-effective and appropriate for the area served.
3. To develop systematic annual maintenance plans for city streets, bike, pedestrian and air facilities.
4. To create a transportation network to support existing and proposed land uses.
5. To meet the needs of land development while protecting public safety, transportation operations and mobility of all transportation modes.
6. To provide a balanced transportation system that provides options for meeting the travel needs of all modes of transportation.
7. To enhance the quality of life for citizens and visitors by providing adequate access to residences, employers, services, social and recreational opportunities.
8. To minimize transportation-related energy consumption by using energy efficient modes of transportation for movement of goods, services and people where possible.
9. To provide economic health and diversity through the efficient and effective movement of goods, services and people.
10. To minimize the impacts on natural and cultural resources when constructing transportation facilities and encouraging use of non-polluting transportation alternatives.
11. To choose transportation facilities which balance the requirements of other transportation goals with the need to minimize air, water and noise pollution.
12. To provide for adequate parking facilities in conjunction with other transportation facilities, as appropriate.
13. To collaborate and coordinate with state, county and other agencies during long range planning efforts, development review, design and construction of transportation projects.

Existing Policies

1. Provide safe transportation all seasons of the year through street standards that require lane widths, curvature and grades appropriate to all weather conditions.
2. To protect public safety, property owners shall maintain vision clearance in accordance with City standards and the City shall enforce vision clearance requirements.
3. The City shall continue to work with ODOT to provide safe pedestrian crossings of state highways, and to cooperate in the location of additional crosswalks in safe locations.
    - The City shall utilize the mobility standards in the Oregon Highway Plan for the state highways. Elsewhere within the city, the minimum operating standards at intersections are as follows:
        - LOS “D” is considered acceptable at signalized all-way stop controlled intersections if the V/C (volume/capacity) ratio is not higher than 1.0 for the sum of critical movements.
        - LOS “E” is considered acceptable for the poorest operating approach at two-way stop intersections. LOS “F” is allowed in situations where a traffic signal is not warranted.
    - Where a facility is maintained by the County, the more restrictive of the City or County standards apply.

4. The City shall develop systematic annual maintenance plans for streets, bike, pedestrian, and air facilities.
5. The City shall continue to pursue grant and loan funds to supplement local transportation facility funds.
6. The City shall continue to require new development to pay its share of costs of development of, or improvements to, transportation facilities which will serve the proposed development.
7. Development within a City right-of-way, including but not limited to excavation, clearing, grading, utility placement, culvert placement or replacement, other stormwater facilities, and construction or reconstruction of road or driveway approaches, is allowed only upon approval of a city permit.
8. The City shall protect the function of existing and planned transportation systems as identified in the TSP through application of appropriate land use and access management techniques.
    - o Pursuant to the State Transportation Planning rule, any land use decisions which significantly affect a transportation facility shall ensure that allowed land uses are consistent with the function, capacity, level of service of the facility.
9. Land development shall not encroach within setbacks required for future expansion of transportation facilities. At the time of land development or land division, the City shall require dedication of adequate right-of-way or easements consistent with the adopted TSP in order to achieve connectivity; maintain adequate street widths, bikeways and walkways; and to accommodate transit facilities.
    - o New development and redevelopment shall accommodate on-site traffic circulation on the site. For new development and redevelopment, “backing out” maneuvers onto all streets shall be avoided for uses other than single-family and duplex homes. “Backing out” maneuvers shall also be avoided for new single-family and duplexes accessing arterial and collector streets.
10. Access to and from off-street parking areas shall be designed to prevent backing onto a public street (other than an alley), except for single-family duplex dwellings are exempt.
    - o ODOT has authority to manage access to the state highway system. Where property abuts a state highway or is served by a private approach on a state highway, the City will work with ODOT to ensure coordinated and consistent application of applicable State and City policies.
11. The City shall provide an inter-connected trail system as directed in Comprehensive Plan Chapter 8 policy and shown in the TSP Project Maps.
    - o The City shall consider the potential to establish or maintain bikeways and/or walkways or provide access to coastal waters (ocean, estuary, and lakes) prior to vacating any public easement or right-of-way.
12. Convenient access for motor vehicles, transit, bicycles and pedestrians shall be provided to major activity centers, including public buildings and schools, the hospital, shopping areas, parks, and places of employment.
13. Streets, bikeways and walkways shall be designed to meet the needs of pedestrians and cyclists to promote safe and convenient bicycle and pedestrian circulation within the community. To promote bicycling and walking, marked bicycle lanes and sidewalks are required on all arterial and collector streets (other than those collectors identified as scenic drives) when those streets are newly constructed, reconstructed, or widened to provide additional vehicular capacity. For collector streets that are identified as scenic

drives, provision shall be made to adequately accommodate bicycles and pedestrians when those streets are newly constructed, reconstructed, or widened to provide additional vehicular capacity.
   - Development shall provide adequate on-site circulation for vehicles, buses, bicycles, and pedestrians and shall provide off-site transportation improvements necessary to ensure that the incremental demands placed on the transportation system by the development are met.

14. Streets shall be designed to efficiently and safely accommodate emergency service vehicles.
    - In partnership with the School District, the City shall work toward a safe and convenient transportation system that accommodates school buses; children walking to and waiting at a bus stop; and children walking and riding their bicycles to school.
    - The City shall accommodate local freight traffic accessing the industrial areas along Kingwood Avenue via 9th, 27th, and 35th Streets by maintaining adequate clear street widths (unimpeded by parking or overhanging signs/trees), adequate turning radii, and visibility.
15. The North, South and East Gateways shall be pursued as soon as funding can be obtained.
16. The placement of streets shall minimize negative impacts on residential neighborhoods.
17. City shall cooperate with ODOT to implement the Access Management Plan for US 101 in Downtown Florence and elements of the Florence Downtown Implementation Plan that pertain to US 101.
18. The City shall encourage demand management programs such as park-and-ride facilities and vanpools to reduce single occupancy vehicle trips, especially to and from Eugene.
19. The City shall promote the use of telecommunications, transit and rail facilities as energy efficient alternatives to vehicular transport.
20. The City shall coordinate with the Port of Siuslaw regarding transportation projects that may affect facilities which are operated by the Port or which affect the Port's operations.
21. The City shall continue to pursue the cooperative effort of coastal cities and counties to bring a natural gas pipeline north on the coast to Florence and other communities.
22. Design and construction of transportation facilities shall be responsive to topography and should minimize impacts on natural resources such as streams, wetlands and wildlife corridors.
23. All transportation improvements shall be consistent with the requirements for stormwater in Chapter 11 of the Comprehensive Plan.
24. As the use of the airport increases, and night operations become a reality, the City shall work with neighboring residential uses to minimize issues of noise and vibration.
25. The City shall require that noise sensitive land uses (including uses involving sleeping, schools, hospitals, libraries) proposed in the airport noise impact boundary, as shown in Figure 8-1 of the Florence Municipal Airport – Airport Master Plan Update Final Report, provide a noise-abatement strategy to achieve indoor noise level equal to or less than 55 Day-Night Average Noise Level (DNL).
    - The City shall protect current and future viability of the airport and compatibility of land uses through the Public Airport Safety and Compatibility Overlay Zone

and coordination with the Oregon Department of Aviation and the Federal Aviation Administration.

26. On-site parking for motor vehicles and bicycles is required except in Downtown Districts where some motor vehicle parking can be provided on the street.
27. Bicycle parking facilities shall be provided as part of new development at places of employment, businesses, multi-family residential developments and at public buildings.
28. The City shall notify ODOT of all project proposals and development applications adjacent to state highways or served by a private vehicular approach on a state highway. The City should notify Lane County of all project proposals and development applications adjacent to county roads.
29. The City shall notify ODOT and Lane County of all major development proposals which will generate more than 50 trips during an average peak hour, or more than 500 daily trips, or which require a traffic study.
30. The City shall notify ODOT, DLCD and Lane County of any proposed changes or amendments to this Transportation System Plan.
31. The City shall develop multi-use paths that both enhance community livability and serve as tsunami evacuation routes.
32. The City shall coordinate evacuation route and signage planning in conjunction with existing or proposed transportation system plan pedestrian and bicycle route planning efforts.
33. The City shall locate new transportation facilities outside the tsunami inundation zones where feasible.
34. The City shall where feasible design and construct new transportation facilities to withstand a Cascadia event earthquake and be resistant to the associated tsunami.

APPENDIX C: TECH MEMO #3A: INVENTORY

TECH MEMO #3A: TRANSPORTATION SYSTEM INVENTORY

Date: April 2, 2023

To: Wendy Farley-Campbell, Shirley Gray, Erin Reynolds, and Mike Miller, City of Florence
Michael Duncan, Oregon Department of Transportation

From: Russ Doubleday, Matt Bell, Susan Wright, PE, PMP, Kittelson & Associates, Inc.

Project: City of Florence Transportation System Plan Update

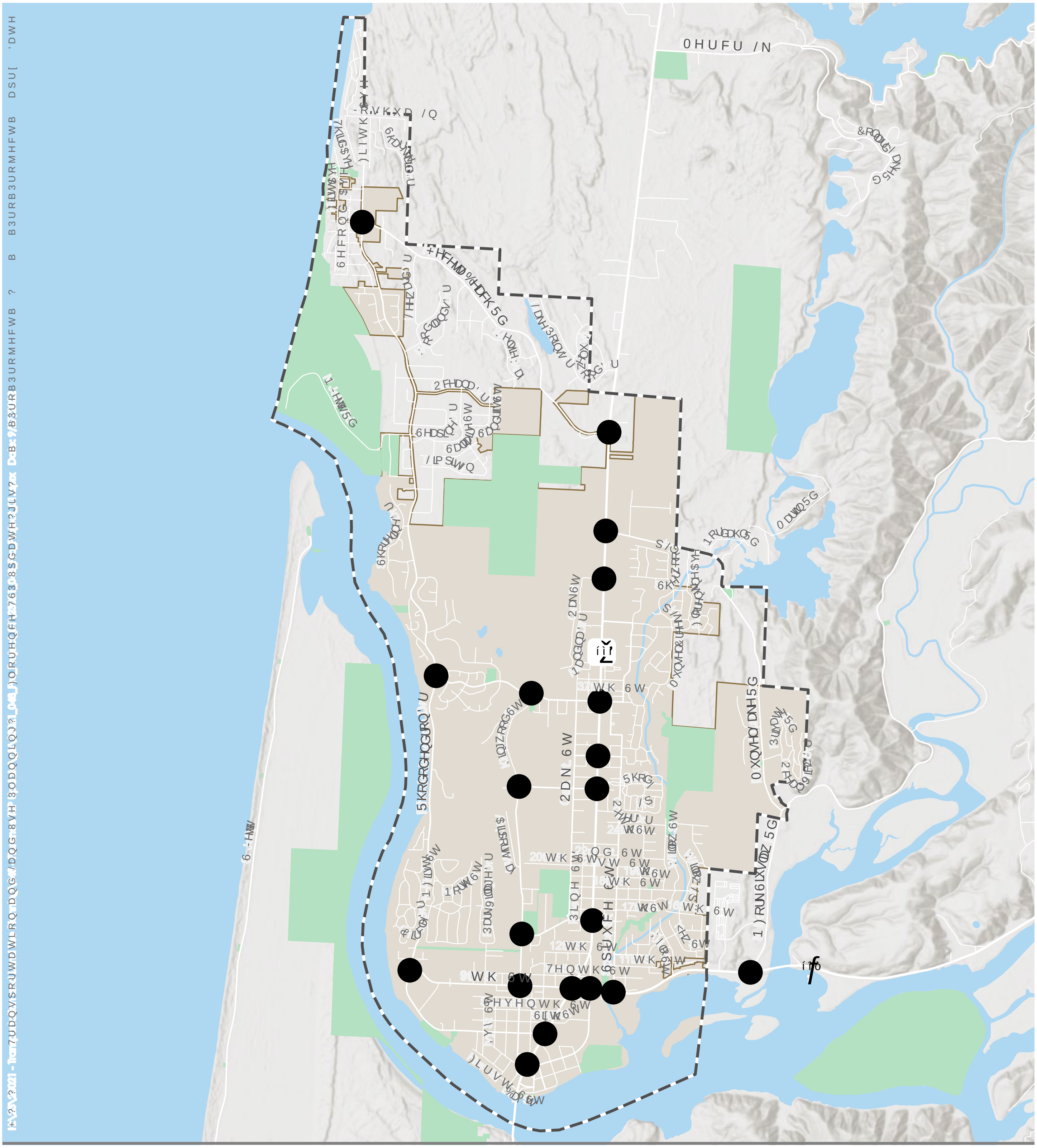
Subject: Draft Tech Memo #3A: Transportation System Inventory

Table of Contents

Introduction

This memorandum provides an inventory of existing transportation facilities and services within Florence. The information provided in this memorandum will serve as the foundation for identifying existing gaps and deficiencies in the transportation system and for evaluating existing and projected future traffic conditions for the Florence Transportation System Plan (TSP) update. *Attachment A* contains the existing land use and population inventory for Florence. The activity center information in *Attachment A* supports the modal system descriptions provided below.

Figure 1 illustrates the study area for the Florence TSP update. The study area consists of all areas within the Florence city limits and Urban Growth Boundary (UGB), although the OR 126/N Fork Siuslaw Road intersection is located outside both the city limits and the UGB. All state and local facilities within the city limits and UGB are addressed in the TSP. The Oregon Transportation Planning Rule (TPR) indicates that the study of roadways and intersections is generally limited to those with the highest classifications (collectors and arterials). However, local street issues, such as street connectivity and safety, are also discussed where appropriate.



6WXG\ ,QWHUVHFWLRQV

3DUNV

:DWHU

&LW\ %RXQGDU\

8UEDQ *URZWK %RXQGDU\

0LOHV

)LJXUH

6WXG\ ,QWHUVH
)ORUHQFH 2U

KITTELSON & ASSOCIATES

Roadway System Inventory

The roadway system within Florence serves the majority of trips across all travel modes. In addition to motor vehicles, pedestrians, cyclists, transit riders, and others use the roadway system to travel to and from essential destinations and neighboring cities. This section describes the existing Florence roadway system.

The roadway system within Florence was inventoried based on Geographic Information System (GIS) data obtained from Oregon Department of Transportation (ODOT) TransGIS database, as well as a review of recent aerial imagery. The inventory was supplemented by information provided in the 2012 Florence TSP and by information provided by the City and ODOT.

JURISDICTION

Streets within Florence are owned and operated by three jurisdictions: ODOT, Lane County (County), and the City of Florence (City). Each jurisdiction is responsible for determining the functional classification of the streets, defining major design and multimodal features, and approving construction and access permits. Coordination is required among the jurisdictions to ensure that the streets are planned, operated, maintained, and improved to safely meet public needs. Figure 2 illustrates the jurisdiction of streets within Florence. The following summarizes information on the ODOT, County, and City facilities within Florence.

ODOT Facilities

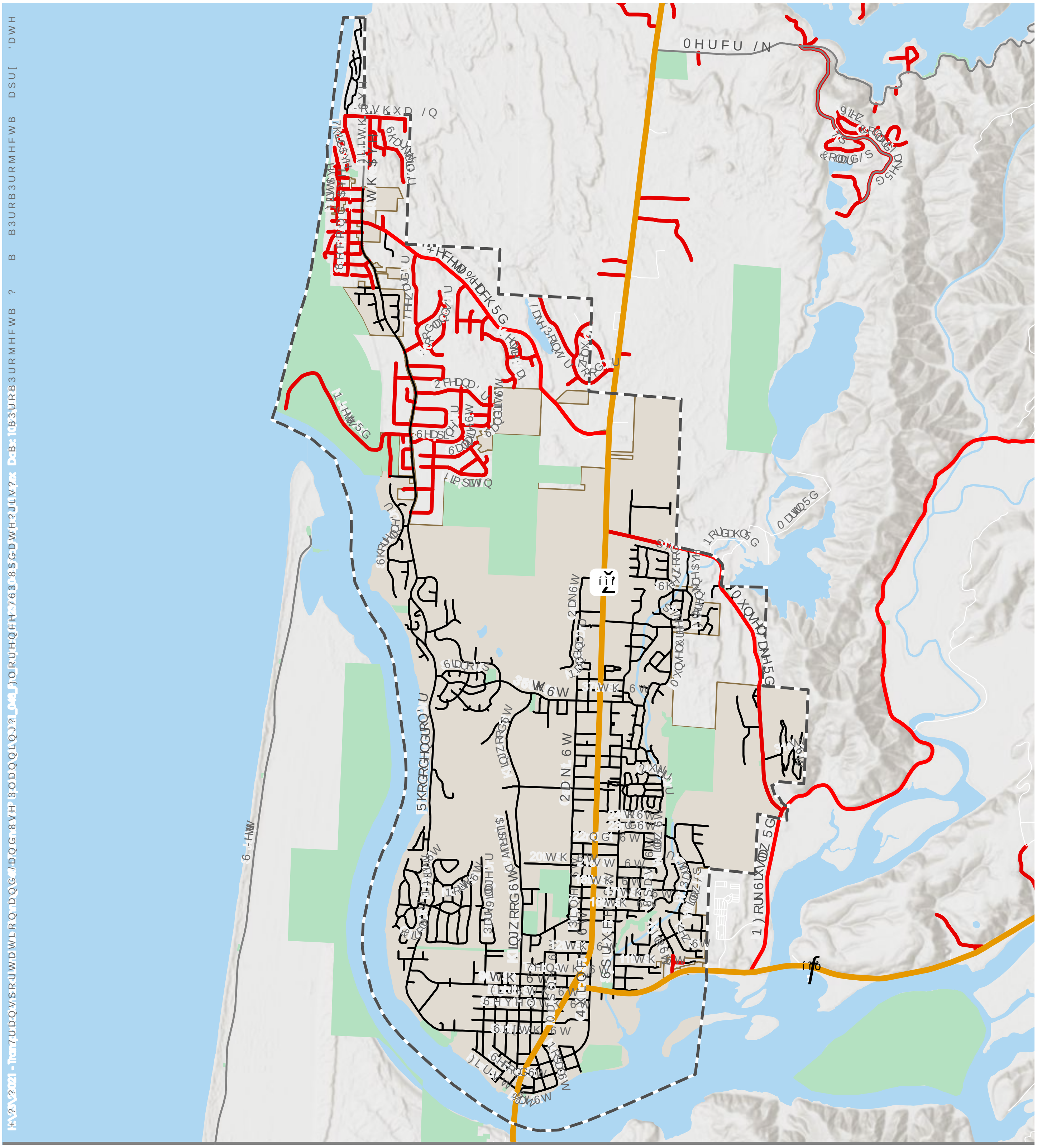
ODOT owns and operates two state highways within Florence: US 101 and OR 126. US 101 is the main north-south route through Florence and connects with OR 126 and other major City and County facilities. US 101 continues to the north and south along the Oregon coastline and connects Florence with Washington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

County Facilities

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

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

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



2'27
/DQH &RXQW\
&LW\ RI)ORUHQF
3DUNV
:DWHU
&LW\ %RXQGDU\
8UEDQ *URZWK %RXQGDU\

0LOHV

)LJXUH

5RDGZD\ -XULVGL
)ORUHQFH 2U

KITTELSON & ASSOCIATES

City Facilities

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

- 2nd Street
- 4th Avenue (Heceta Beach Rd-Falcon St)
- 9th Street
- 15th Street
- 21st Street
- 26th Street
- 27th Street
- 32nd Street
- 35th Street
- 42nd Street
- 43rd Street
- 46th Street
- Bay Street
- Maple Street
- Kingwood Street
- Oak Street
- Quince Street
- Redwood Street
- Rhododendron Drive
- Spruce Street

Additional information related to the ODOT, County, and City facilities within Florence is provided throughout the remaining sections of this memorandum.

FUNCTIONAL CLASSIFICATION

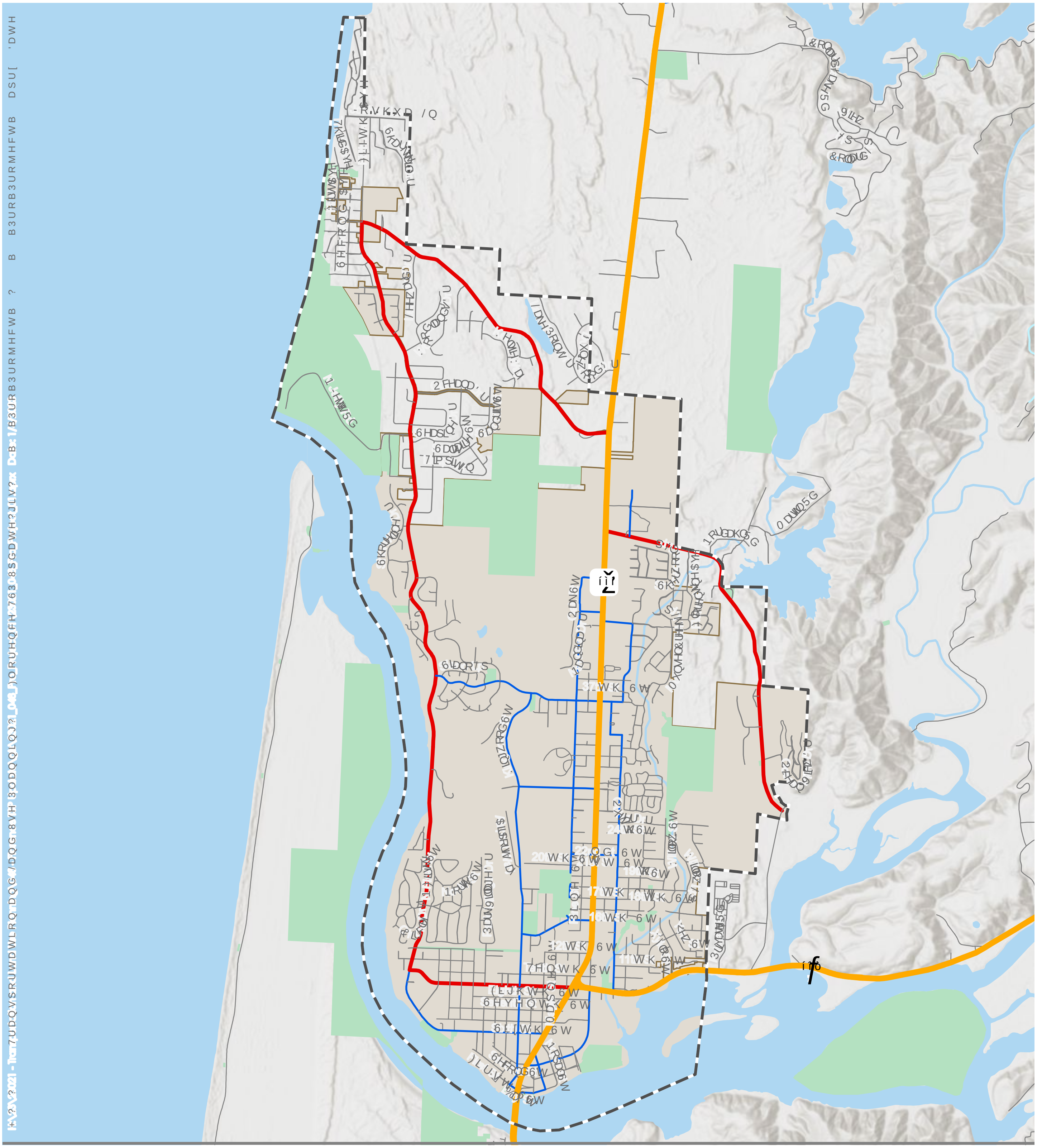
A roadway's functional classification determines its role in the transportation system, as well as its width, right-of-way dedications, driveway (access) spacing requirements, and types of pedestrian and bicycle facilities provided. Figure 3 illustrates the functional classification of streets within Florence. The functional classification is typically established by a local jurisdiction (city or county) based on the following hierarchy:

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

ODOT Highway Classification

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

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



+LJKZD\ 0DMRU $UWHULDO

0LQRU $UWHULDO 3DUNV

&ROOHFWRU 8UEDQ *URZWK %RXQGDU\

/RFDO 5RDG &LW\ %RXQGDU\

0LOHV

)LJXUH

)XQFWLRQDO &ODV
)ORUHQFH 2UH

KITTELSON
& ASSOCIATES

Table 1 below shows the functional classification of all arterials and collectors in Florence and how these streets are classified at the federal, state, county, and local levels.

Table 1: Functional Classification Comparison of Collector and Higher Streets by Jurisdiction

Roadway	Federal	State	County	City
ODOT				
US 101	Urban Principal Arterial	Statewide Highway	State Highway	Highway/ Major Arterial
OR 126	Urban Principal Arterial	Statewide Highway	State Highway	Highway/ Major Arterial
Lane County				
Heceta Beach Rd	Urban Collector	--	Urban Major Collector	Minor Arterial
Munsel Lake Rd	Urban Collector	--	Urban Major Collector	Minor Arterial
N Fork Siuslaw Rd	Urban Collector	--	Rural Major Collector	Local
City of Florence				
4th Ave (Heceta Beach Rd to Joshua Ln)	Urban Collector	--	Urban Local	Local
9th St (Rhododendron Dr to US 101)	Urban Collector	--	--	Minor Arterial
Rhododendron Dr (Heceta Beach Rd to City Limits)	Urban Collector	--	Rural Major Collector	Minor Arterial
Rhododendron Dr (City Limits to 9th St)	Urban Collector	--	Other Roads	Minor Arterial
2nd St (US 101 to Maple St)	--	--	--	Collector
2nd St (Maple St to Quince St)	Urban Collector	--	--	Collector
21st St (Oak St to Spruce St)	--	--	--	Collector
27th St (Kingwood St to US 101)	Urban Collector	--	--	Collector
30th St (Oak St to Spruce St)	Urban Collector	--	--	Local
32nd St (Redwood St to Spruce St)	Urban Collector	--	--	Collector
35th St (Rhododendron Dr to Spruce St)	Urban Collector	--	--	Collector
42nd St (US 101 to Spruce St)	Urban Collector	--	Other Roads	Collector
43rd St (Oak St to US 101)	--	--	--	Collector
46th St (Oak St to US 101)	--	--	--	Collector
Airport Rd (Kingwood St to Oak St)	Urban Collector	--	Other Roads	Collector
15th St (Oak St to US 101)	Urban Collector	--	Other Roads	Collector
15th St (US 101 to Spruce St)	Urban Collector	--	--	Local
Bay Street (Kingwood St to Maple St)	--	--	-	Collector
Kingwood St (Bay St to Old Town Way)	--	--	--	Collector
Kingwood St (Old Town Way to 27th St)	Urban Collector			Collector
Kingwood St (27th St to 35th St)	--	--	--	Collector
Maple St (US 101 to Bay St)	Urban Collector	--	--	Collector
Oak St (15th St to 35th St)	Urban Collector	--	--	Collector
Oak St (35th St to 46th St)	--	--	--	Collector

Quince St (2nd St to OR 126)	Urban Collector	--	--	Collector
Quince St (OR 126 to US 101)	Urban Collector	--	--	Local
Redwood St (32nd St to 35th St)	Urban Collector	--	--	Collector
Rhododendron Dr (9th St to US 101)	Urban Collector	--	Other Roads	Collector
Spruce St (OR 126 to 32nd St and 35th St to 42nd St)	Urban Collector	--	--	Collector
20th St (East Terminus to US 101)	--	--	Other Roads	Local
30th St (Oak St to Spruce St)	Urban Collector	--	--	Local
Laurel Street-Old Town Way (US 101 to Maple St)	Urban Collector	--	--	Local

Special Transportation Areas and Urban Business Areas

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

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

ROADWAY CHARACTERISTICS

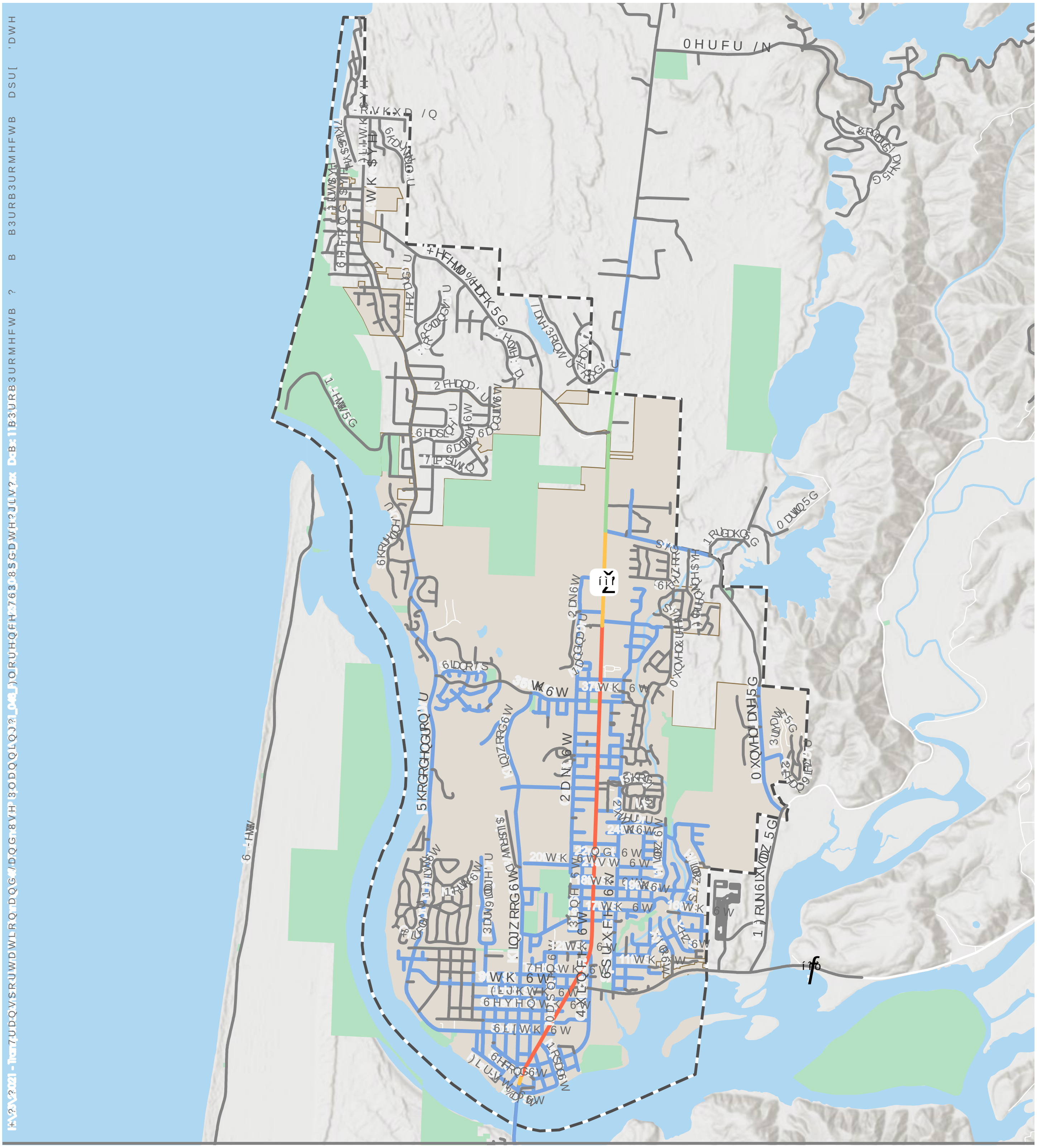
State Highway Approach Permits

State highway approach permits along US 101 and OR 126 are discussed in *Tech Memo 3B: Existing Conditions Analysis*.

Number and Width of Travel Lanes

Most streets in Florence are two-lane roadways, as shown in Figure 4. US 101, which varies from two to five lanes through the city, is the major exception to this rule. Numerous streets in Florence are missing data for the number of lanes, but these are all presumed to be two lanes based on the location and nature of these streets.

Lane width data is available for state highways. US 101 11-12 foot lanes between the Siuslaw River Bridge and OR 126, 12-foot lanes north to 42nd Street, and 12-14 foot lanes north of 42nd Street. OR 126 has 12-foot lanes west of the Three Rivers Casino turnoff and 14-foot lanes east of the Three Rivers Casino turnoff.



1XPEHU RI 7UDYHO /DQHV

3DUNV

8QNQRZQ

6WUHDPV

/DQHV

:DWHU

/DQHV

8UEDQ *URZWK %RXQGDU\

/DQHV

&LW\ %RXQGDU\

/DQHV

0LOHV

KITTELSON & ASSOCIATES

)LJXUH

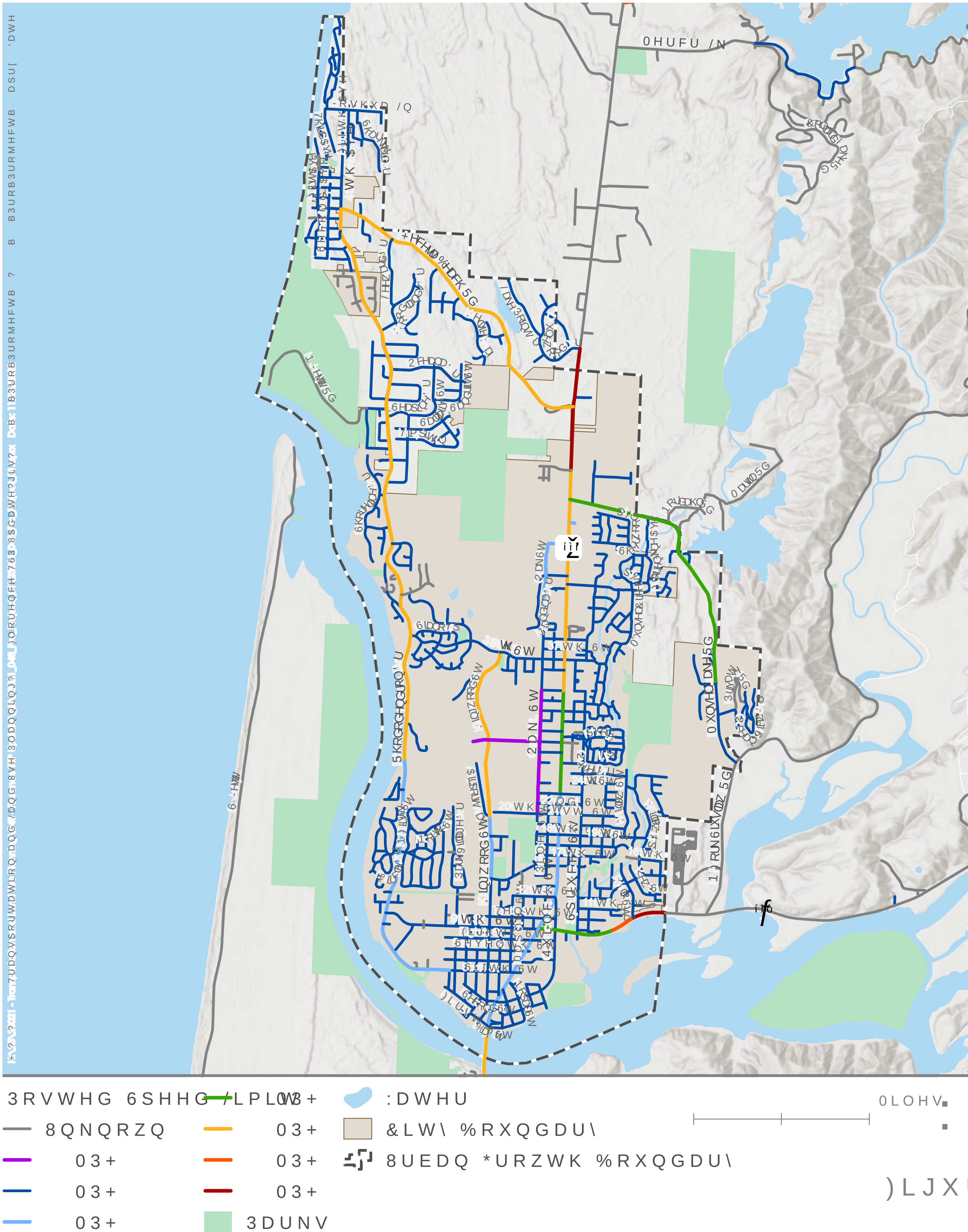
1XPEHU RI 7UDYHO

)ORUHQFH 2U

Posted Speed Limits

Figure 5 shows posted speed limits on all streets in Florence. The default posted speed limit is 25 miles per hour (MPH) and is the speed limit on most streets. There are a few streets where speed limits are different:

- **US 101**: From south to north, the posted speed limit on the Siuslaw River Bridge is 40 MPH before dropping to 30 MPH at the Bay Street overpass and through downtown Florence. At 22nd Street, the posted speed limit is 35 MPH, at 32nd street the posted speed is 40 MPH, before rising to 55 MPH north of Munsel Lake Road at 53rd Street.
- **OR 126**: OR 126 has a 35 MPH posted speed limit from US 101 past Tamarack Street, a 45 MPH speed limit to Xylo Street, and a 55 MPH speed limit east of Xylo Street.
- **Rhododendron Drive**: Rhododendron Drive has a 25 MPH posted speed limit in downtown Florence. Heading west out of downtown, the speed limit increases to 30 MPH at Greenwood Street and continues at that speed as the road turns north. The road has a 40 MPH posted speed limit between Wild Winds Street and New Hope Lane and continues to Heceta Beach Road .
- **Kingwood Street**: Similar to Rhododendron Drive, Kingwood Street has a 25 MPH posted speed limit in downtown Florence, between US 101 and 15th Street/Airport Road. The street becomes a 30 MPH facility heading north to Airport Way, and then has a 40 MPH posted speed limit north of Airport Way to 35th Street.
- **Heceta Beach Road**: Heceta Beach Road has a 40 MPH posted speed limit between US 101 and 4th Avenue.
- **Munsel Lake Road**: Munsel Lake Road has 35 MPH posted speed limit between US 101 and Ocean Dunes Drive, while the remaining roadway segment to N Fork Siuslaw Road is a 25 MPH facility.
- **Oak Street**: Oak Street from 20th Street to 32nd Street has a 25 MPH posted speed limit (except during school days between 7am and 5pm which it becomes 20 MPH). All three public schools in Florence – Siuslaw Elementary School, Siuslaw Middle School, and Siuslaw High School – as well as Lane Community College, are located on the west side of this segment of Oak Street. Oak Street has a 25 MPH posted speed limit between 32nd Street and 38th Loop before increasing to a 30 MPH speed limit north of 38th Loop to US 101.
- **27th Street**: 27th Street from Oak Street to its western terminus is has a 25 MPH posted speed limit (see note above regarding Oak Street – 27th is posted as 25 MPH except during school days, when the speed limit is 20 MPH).



)LJXUH

3RVWHG 6SHHG
)ORUHQFH 2U

KITTELSON & ASSOCIATES

Pavement Type and Condition

Pavement type and condition information along US 101 and OR 126 was obtained from the ODOT TransGIS database. Pavement type on both facilities is Asphalt Concrete Unknown. Pavement condition on US 101 is *fair* from 10th Street to the north and *good* from 10th Street to the south. Pavement condition on OR 126 is *fair* from US 101 to the east.

The City recently completed an assessment of pavement conditions along City streets. The study provides a qualitative (e.g., very good, good, fair, poor) rating system for pavement conditions similar to ODOT. Information from the study will be available soon.

Geometry for Study Intersections

The geometry of the study intersections included in the TSP update are discussed in *Tech Memo 3B: Existing Conditions Analysis*.

Traffic Control

There are four signalized intersections in Florence, and all of them are located on ODOT facilities and are managed by ODOT. The signals are located at:

- US 101/Rhododendron Drive
- US 101/OR 126-9th Street
- US 101/21st Street
- US 101/35th Street

Across the rest of the city and at the TSP study intersections, most intersections are two-way stop-control, where the higher volume or higher classification street can travel freely through the intersection and the lower volume or lower classification street has a stop sign. The Kingwood Street/Rhododendron Drive intersection is all-way stop-control, meaning that each intersection approach has to stop. Figure 6 shows the type of traffic control at intersections across Florence.

Right-of-Way

Right-of-way refers to the overall width of roadway jurisdiction that typically expands beyond the physical roadway section and provides space for future roadway improvements, such as roadway widening, added bicycle or pedestrian facilities, etc. Right-of-way data is not readily available for State and City facilities; however, the City has indicated that there is generally 60-feet of right-of-way available along City streets.

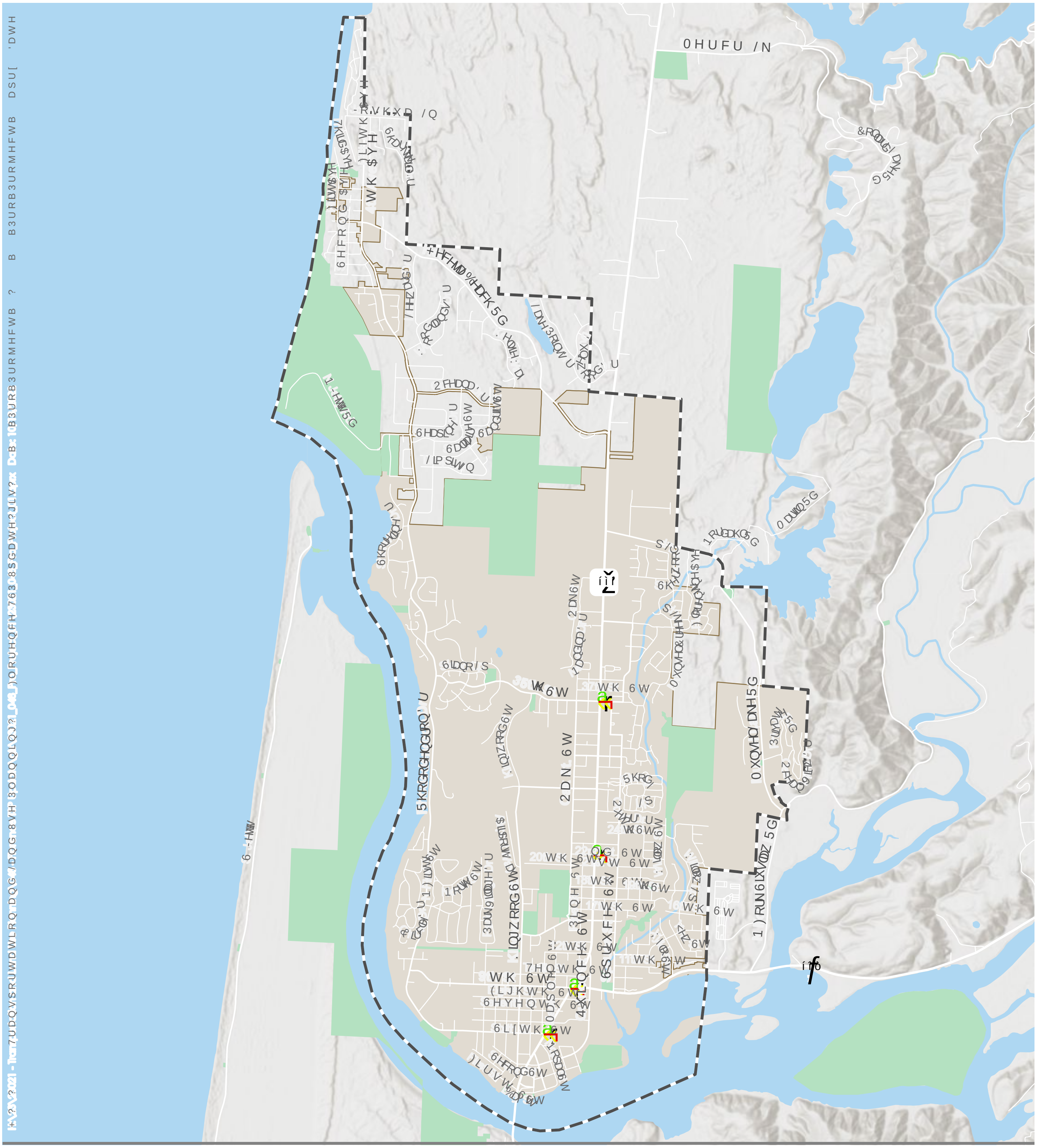
Pavement Width

Pavement width data in Florence is shown in Figure 7. Many streets, including US 101, OR 126, and Heceta Beach Road, did not have right-of-way data that was readily available.

Much of downtown Florence has streets that are either 32 feet wide or are 40 feet wide. Further north, the streets near US 101 to the north of OR 126 are often 32 feet wide. Rhododendron Drive along the Siuslaw River on the west side of Florence, is 28 feet wide.

On-Street Parking

On-street parking is allowed on one or two sides of most collector and local streets throughout the City as well as on one or two sides of most arterials within the downtown commercial and mixed use areas. On-street parking is generally restricted where right-of-way is limited, or where physical constraints limit its use.



7UDIILF &RQWURO

6LJQDOL]HG

$OO :D\ 6WRS &RQWURO

7ZR :D\ 6WRS &RQWURO

3DUNV

6WUHDPV

:DWHU

&LW\ %RXQGDU\

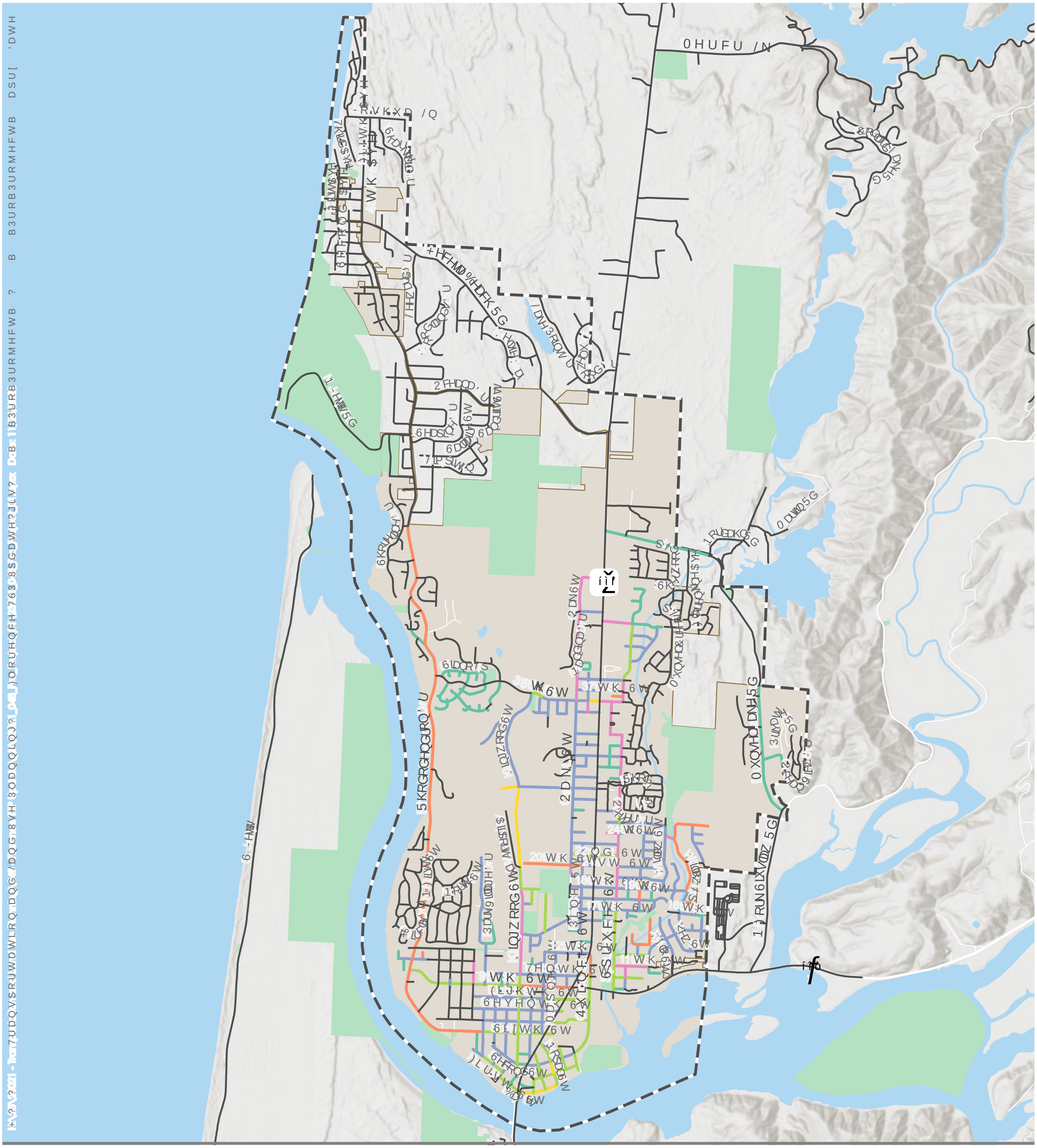
8UEDQ *URZWK %RXQGDU\

0LOHV

KITTELSON & ASSOCIATES

)LJXUH

7UDIILF &RQWURO
)ORUHQFH 2U



5RDGZD\ :LGWK
8QNQRZQ
)HHW
)HHW
)HHW
)HHW
)HHW
)HHW
3DUNV
6WUHDPV
:DWHU
8UEDQ *URZWK %RXQGDU\
&LW\ %RXQGDU\
0LOHV

)LJXUH

5LJKW RI :D\ :L
)ORUHQFH 2UH

KITTELSON & ASSOCIATES

The City in coordination with ODOT completed a parking study in Florence in June 2021. The study includes an inventory and assessment of parking conditions in the greater historic downtown area, including the commercial, mixed-use, and special event areas located immediately north of the downtown straddling both sides of US 101. Additional information on the study, including key findings is available in *Tech Memo 3B: Existing Conditions Analysis*.

Park and Ride Locations

There are no park and ride locations within Florence. A discussion of public transportation routes, stops, and other inventory items are discussed in the Public Transportation section below.

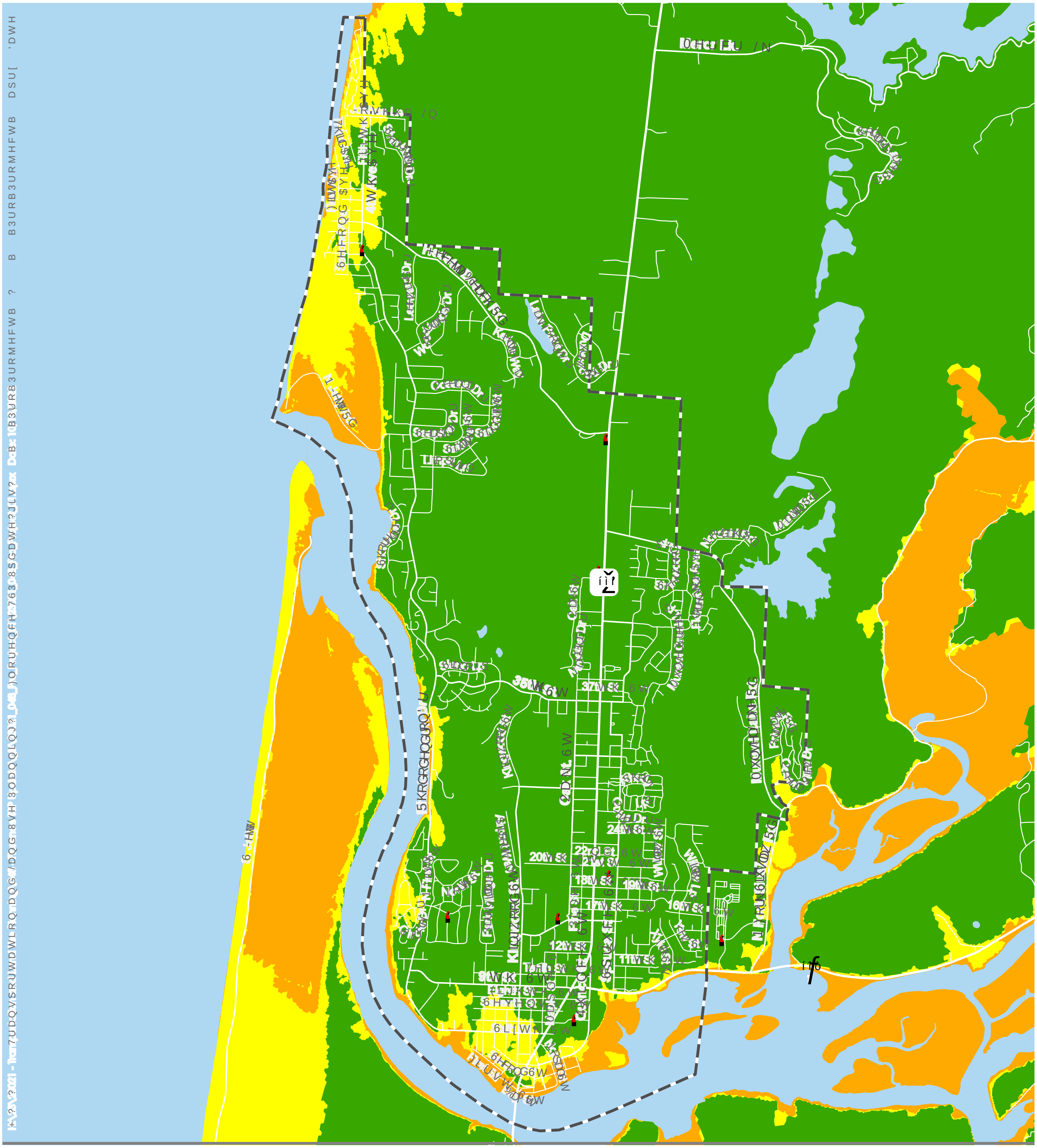
Accessibility to Destinations

Accessibility to key destinations within Florence are described below:

- **Downtown Florence** – The city's downtown destinations are generally accessible by car with on- and off-street parking, but vehicles may become a hindrance in and around Bay Street during peak summer periods with lots of tourists. Areas further from the Siuslaw River, such as City Hall and the Siuslaw Public Library are also accessible by car due to being close to US 101.
- **Schools and Parks** – The three schools that make up the Siuslaw School District are located two blocks from US 101 on Oak Street, all in a row between 20th Street and 30th Street (with Lane Community College-Florence located at Oak Street and 32nd Street). These schools are generally well-connected for vehicles, although there is no connection to US 101 between 22nd and 26th Street. Similarly, Miller Park has a parking lot at Oak Street and 20th Street that is accessible from US 101 and from Kingwood Street, but other access points are more suitable for walking and biking modes.
- **Grocery Stores** – There are four grocery stores in Florence – Safeway, Grocery Outlet, Bi-Mart, and Fred Meyer. All four stores are located on US 101 and are accessible by car. However, only the Grocery Outlet, which is between 19th Street and 21st Street, has access to a traffic signal for left-turning vehicles into and out of the store.
- **Casino** – The Three Rivers Casino is accessible from a private driveway on OR 126 as well as Qa'aich Road to N Fork Siuslaw Road. This connection, in particular, provides access from US 101 in the north for Florence, funneling traffic away from the US 101/OR 126 intersection.
- **Pacific Ocean** – The Pacific Ocean beaches are most easily accessible by car of all transportation modes. Within Florence, N Jetty Road connects from Rhododendron to a parking lot at the mouth of the Siuslaw River. Further north in Heceta Beach, as well as across the Siuslaw River at South Jetty Dunes, there are vehicle accesses to reach the Pacific beaches.

Evacuation Routes

As a coastal city, Florence may experience a tsunami event from a future Cascadia Subduction Zone earthquake. The Oregon Department of Geology and Mineral Industries (DOGAMI) has created evacuation zone maps for the entire Oregon coast. These maps show evacuation areas for a distant tsunami event (in orange), evacuation areas for a local tsunami event (in yellow), and areas that are outside of the evacuation zone (in green). The map for Florence is shown in Figure 8.



7VXQDPL (YDFXDWLRQ 0DS

'LVWDQW 7VXQDPL (YDFXDWLRQ =RQH

/RFDO 7VXQDPL (YDFXDWLRQ =RQH

2XWVLGH +D]DUG $UHD

$VVHPEO\ $UHDV

3DUNV

:DWHU

&LW\ %RXQGDU\

8UEDQ *URZWK %RXQGDU\

0LOHV

)LJXUH

(YDFXDWLRQ 5R

)ORUHQFH 2U

KITTELSON & ASSOCIATES

There are eight assembly areas in and around Florence in the event of a tsunami. These assembly areas (also shown in Figure 8) are:

- Florence Events Center (715 Quince Street)
- Greentrees Clubhouse (1600 Rhododendron Drive)
- Miller Park (1901 Oak Street)
- Grocery Outlet/Florence Cinemas (2066 US 101)
- Three Rivers Casino (5647 OR 126)
- Fred Meyer (4701 US 101)
- Heceta Beach Road and US 101
- Rhododendron Drive (south of Heceta Beach Road)

Intelligent Transportation System Facilities

ODOT maintains a camera at the US 101/OR 126 intersection in Florence as part of its TripCheck.com website for monitoring statewide traffic conditions. There are no other Intelligent Transportation System (ITS) facilities within the City.

In the nearby community of Cushman to the east of Florence on OR 126, ODOT maintains another traffic camera, as well as a weather station, both for statewide travel information as part of the TripCheck.com website. ODOT also maintains two cameras at the tunnel at Cape Creek approximately 12 miles north of Florence on US 101, as well as two cameras north of Gardner approximately 17 miles south of Florence on US 101 and a northbound variable message board in Gardner approximately 19 miles south of Florence on US 101.

Freight Routes

The OHP identifies all interstate highways and certain Statewide, Regional, and District Highways as freight routes. These routes are intended to facilitate efficient and reliable interstate, intrastate, and regional truck movement through a designated freight route system.

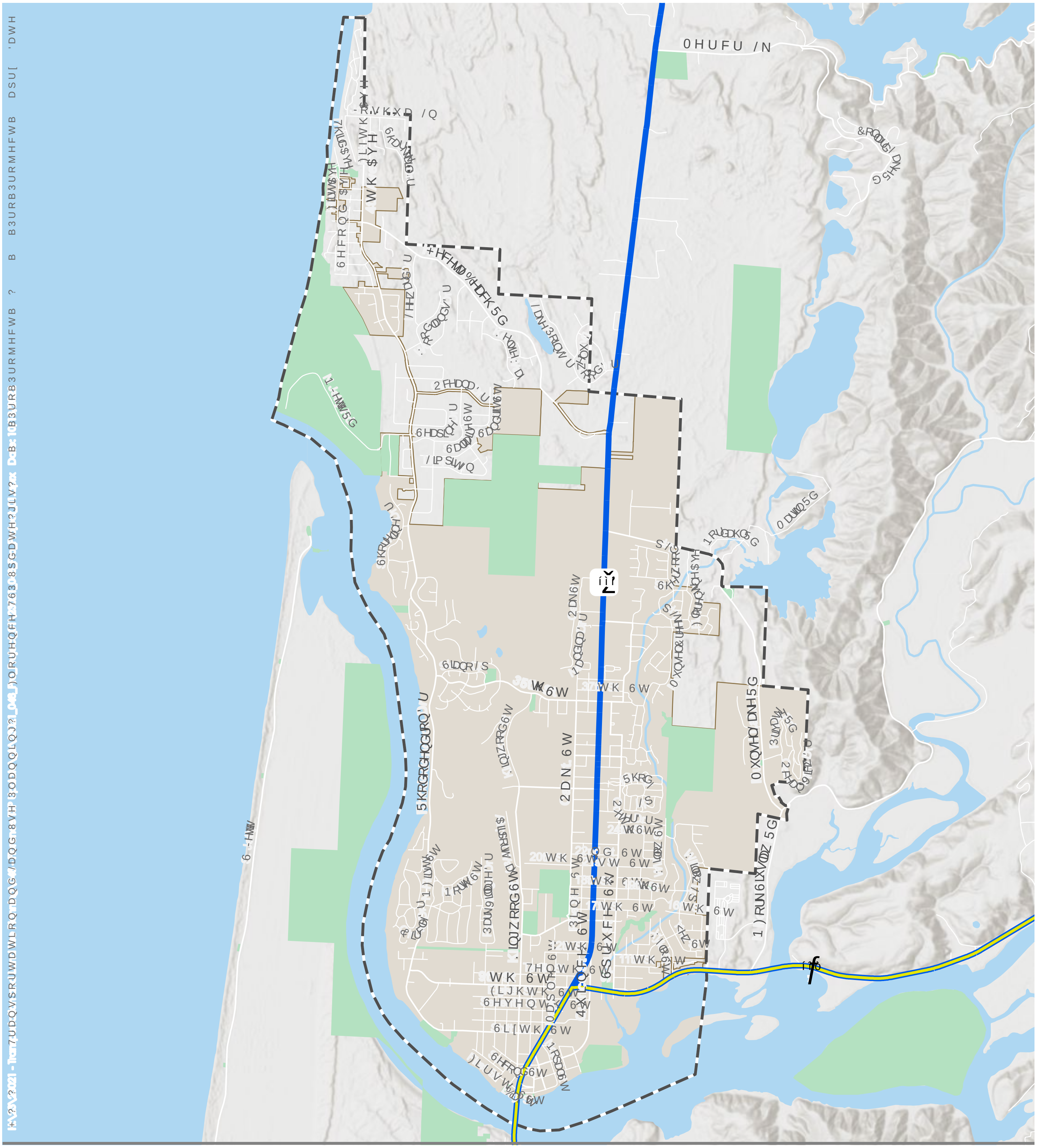
Both US 101 and OR 126 are designated as Statewide highways, described in more detail under the Functional Classification section above. The OHP designates US 101, south of OR 126, and OR 126, east of US 101, as freight routes. Figure 9 shows the freight route network in Florence.

National Highway System

The National Highway System (NHS) is a network of highways, including interstate highways, that serve strategic economic, defense, and transportation facilities, such as airports, ports, rail or truck terminals, railway stations, and pipeline terminals. Both US 101 and OR 126 are part of the NHS network.

ADA Accessible Public Sidewalk Impediments

The Americans with Disabilities Act (ADA), signed into federal law in 1990, prohibits discrimination based on one’s disability status. From a transportation perspective, this often involves the construction and installation of sidewalks, curb ramps with a small grade, and push buttons for crossing the street. ODOT’s TransGIS database maintains data on the location and condition of curb ramps and push buttons along state facilities.



)UHLJKW 1HWZRUN — 6WUHDPV

6WDWHZLGH +LJKZD\ — :DWHU

2+3)UHLJKW 5RXWH — &LW\ %RXQGDU\

3DUNV — 8UEDQ *URZWK %RXQGDU\

0LOHV

)LJXUH

KITTELSON & ASSOCIATES

)UHLJKW 1HW
)ORUHQFH 2U

ODOT recently completed a curb ramp upgrade project along US 101 from 10th Street north of Munsel Lake Road. The majority of intersections have ADA-compliant curb ramps along this stretch of US 101. Exceptions include 21st Street and 35th Street, which will be completed as part of the signal improvements at these intersections. On OR 126, the curb ramps are graded as being in poor condition in all but one location, not including the intersection with US 101.

A qualitative assessment of sidewalks was conducted in the downtown area to examine sidewalk impediments. Bay Street, the city's commercial and historic core, is also the busiest part of the city with the highest street parking utilization in downtown. Several restaurants have outdoor seating, there are sporadic power poles and street lighting poles, and the parking areas have poles that provide parking restriction information. If more than one of these impediments occur together, ADA accessibility may be limited. Beyond Bay Street, the sidewalk impediments decrease in number but the presence of sidewalks also decrease, such as on Laurel Street and Nopal Street. And outside of the immediate downtown area on Bay Street, the number of driveway aprons increase for personal residences, parking lots, and businesses.

EXISTING GAPS AND DEFICIENCIES

The following provides a summary of the existing gaps and deficiencies in the roadway system:

- There are several inconsistencies in how various jurisdictions classify streets within Florence. These include Rhododendron Drive, Munsel Lake Road, and N Fork Siuslaw Road.
- The City's recently completed assessment of pavement conditions will likely yield some streets with poor pavement conditions.
- There are no formal park and ride facilities in Florence. One potential location where all transit lines meet – the Grocery Outlet – could be a suitable location.
- In the event of a tsunami, there are limited evacuation routes from Rhododendron Drive to the east. Existing routes now include 9th Street, 35th Street, and Heceta Beach Road.
- Several curb ramps on OR 126 facilities are in poor condition, or do not exist at all. Additionally, there are narrow sidewalks in Old Town Florence with numerous sidewalk impediments.

Community Identified Needs

Additional needs identified by members of the project advisory committee and participants in the open house are summarized below. The project team will continue to assess these needs through subsequent phases of the TSP update.

- Need an additional turn lane at the Rhododendron Drive/Jetty Road intersection
- Need pull-outs for slow moving vehicles on Rhododendron Drive
- Need to slow traffic at the north city limits
- Need traffic signals on US 101 at Heceta Beach Road and Munsel Lake Road
- Need all-way stop-control at the Oak Street/35th Street and the Kingwood Street/9th Street intersections
- Need to reconfigure the Oak Street/Spruce Street intersection

- Need to slow traffic along Spruce Street and Oak Street.
- Need to slow traffic at the Oak Street/35th Street and US 101/Munsel Lake Road intersections.
- Need to address general operational issues at the US 101/27th Street, Kingwood Street/9th Street, and OR 126/Spruce Street intersections
- Need to reconfigure Bay Street to provide better flow into Old Town (eliminate motor vehicle traffic, convert Bay Street to one-way with angle parking, etc.).
- Need path for trash and recycle trucks along 9th Street and Rhododendron Drive
- Need path for schools and public works vehicles along Kingwood Street and 27th Street
- Need path for port-bound vehicles along Quince Street and Harbor Street
- Need to address erosion issues along Rhododendron Drive

Pedestrian

PEDESTRIAN FACILITIES

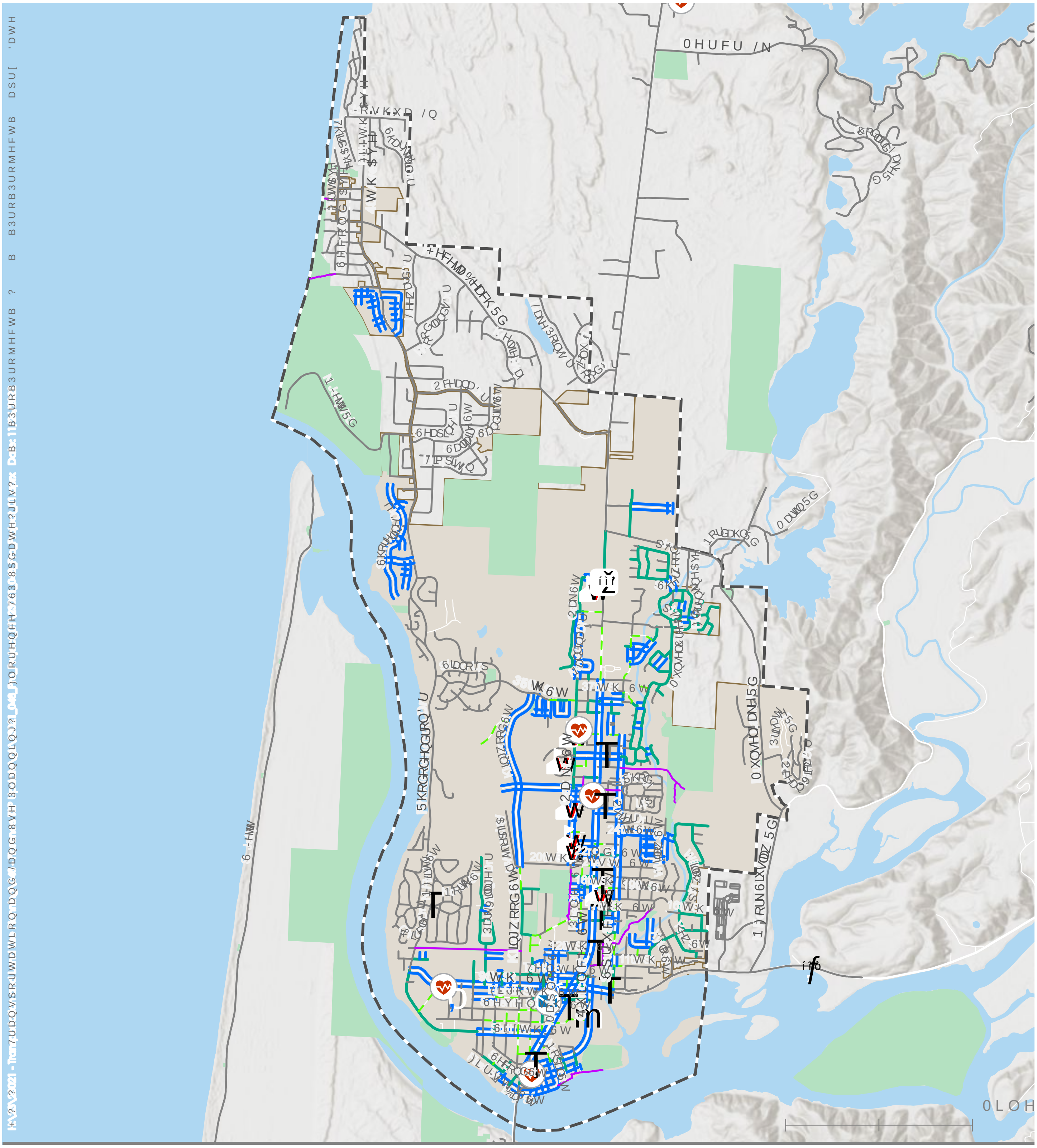
Pedestrian facilities serve a variety of needs, including:

- Relatively short trips (under a mile) to major pedestrian attractors, such as schools, parks, and public facilities;
- Recreational trips—for example, jogging or hiking—and circulation within parklands;
- Access to transit (generally trips under 1/2-mile to bus stops); and,
- Commute trips, where mixed-use development is provided and people have chosen to live near where they work.

Pedestrian facilities should be integrated with transit stops and effectively separate pedestrians from vehicular traffic. Furthermore, pedestrian facilities should provide continuous connections among neighborhoods, employment areas, and nearby pedestrian attractors. Pedestrian facilities usually refer to sidewalks or paths, but also include pedestrian crossings for high volume roadways. The existing pedestrian network serving Florence is shown in Figure 10.

Sidewalks

As shown in Figure 10, the presence of sidewalks in Florence varies based on location within the city. In general, the strongest sidewalk connectivity is in the downtown area, while US 101 and specific housing developments have complete sidewalk networks. Areas to the east of US 101 are more likely to include developments with a sidewalk along one side of the street, specifically off of Munsel Lake Road and immediately west of the Three Rivers Casino. Other areas, such as developments along Rhododendron Drive are less likely to have sidewalks at all. And through much of the city, there are partial sidewalks that comprise a section on a street segment but not the entire block length.



6LGHZDON RQ %RWK 6LGHV
6LGHZDON RQ 2QH 6LGH
3DUWLDO 6LGHZDON
1R 6LGHZDON
6KDUHG 8VH 3DWK
5HFWDQJXODU 5DSLG)ODVKLQJ %HDFRQ
+RVSLWDO
(PHUJHQF\ 6HUYLFH
(YHQWV &HQWHU
3RVW 2IILFH
/LEUDU\
6FKRROV
3DUNV
:DWHU
&LW\ %RXQGDU\
8UEDQ *URZWK %RXQGDU\

)LJXUH

3HGHVWULDQ)D
)ORUHQFH 2U

KITTELSON & ASSOCIATES

Shared-Use Paths and Trails

There are five areas where there are existing multi-use paths:

- A boardwalk along the Siuslaw River east of Bay Street
- The paved Oak Street path along the east side of Miller Park (between 15th and 20th Street)
- The paved Munsel Creek Bike Path from Quince Street to W Park Drive and 17th Street
- The paved path within Pine Street right-of-way between 27th Street and 28th Street
- A paved trail from Spruce Street to 29th Street with access to Munsel Greenway Park, with a companion path from US 101 and 27th Street to Spruce Street
- 12th Street shared-use path, an engineered wood fiber chip path between Kingwood Street and Rhododendron Drive
- An unpaved path from Meares Street to the Pacific Ocean
- An unpaved beach path from Blanco Street to the Pacific Ocean

Crosswalks

In the state of Oregon, all unsignalized intersections are considered legal cross walks and motor vehicles are required to yield the right of way to pedestrians to allow them to cross. However, compliance is not consistent and pedestrians may have difficulty crossing high volume roadways. Marked crosswalks with rectangular rapid flashing beacons (RRFBs) and median refuge islands can be found at the following locations:

- US 101 at 2nd Street
- US 101 north of 7th Street (midblock)
- US 101 at 12th Street
- US 101 north of 15th Street (midblock)
- US 101 north of 18th Street (midblock)
- US 101 at 30th Street
- US 101 north of 25th Street (midblock)
- OR 126 at Redwood Street (midblock)

Additionally, there is a marked crosswalks with an RRFB on Rhododendron Drive across Center Street that connects the two sides of the Greentrees development (which has no sidewalks).

PEDESTRIAN ACCESSIBILITY FOR DESTINATIONS

Pedestrian accessibility to key destinations within Florence are described below:

- **Downtown Florence** – The downtown area has the most complete sidewalk network and generally provides good pedestrian connectivity to destinations. The commercial core around Bay Street has a complete sidewalk network, the Siuslaw Public Library has a complete sidewalk network surrounding it, and Florence City Hall (on US 101 between 1st Street and 2nd Street) has a complete sidewalk network except on 1st Street.

- **Schools and Parks** – All three schools in the Siuslaw School District are located on Oak Street between 20th Street and 35th Street, as well as the Florence campus for Lane Community College. Oak Street has a complete sidewalk network south of 27th Street and has complete sidewalks on the west side of the road between 27th Street and 37th Street. While this sidewalk network is strong, several connecting east-west streets between Oak Street and US 101, as well as 35th Street, lack a complete sidewalk network for walking to or from school. The city recently completed a Safe Routes to School project that filled in missing sidewalk on 26th Street and 27th Street between US 101 and Oak Street. At Miller Park, Oak Street becomes a multi-use path with no vehicles, and the sidewalk network surrounding the park is considerably more complete.
- **Grocery Stores** - All grocery stores in Florence are located on US 101, but the sidewalk connectivity is different for each one. Safeway (between 6th Street and 8th Street) has a complete sidewalk with a planting strip that creates a buffer from bicycle and vehicular traffic. Grocery Outlet (between 18th Street and 21st Street) has a complete sidewalk network, but the sidewalk is curb tight. Bi-Mart (between 42nd Street and 46th Street) has no sidewalks on US 101. And Fred Meyer (between 46th Street and Munsel Lake Road) only has sidewalks on the west side of US 101 and no sidewalks north of Munsel Lake Road or south of 46th Street.
- **Casino** – There are no sidewalks that provide access to the Three Rivers Casino.
- **Pacific Ocean** – There are no oceanfront beaches that are accessible by foot along a sidewalk.

PEDESTRIAN GENERATORS AND ROUTES

Traffic counts conducted at the study intersections on June 3, 2021 include the total number of pedestrians that entered the intersection in 15-minute intervals. Table 2 summarizes the pedestrian crossing volume data for the overall count period (6:00 a.m. to 10:00 p.m.) as well as the pedestrian peak hour for each individual intersection.

As shown in Table 2, pedestrian volumes are heaviest in downtown and along US 101. The further that an intersection is located from downtown, the fewer pedestrians there are. The heaviest recorded pedestrian volumes are at US 101/Rhododendron Drive, where 219 pedestrians were recorded crossing the street on a single day, with more than 30 crossing the street during the evening peak hour.

Table 2. Pedestrian Crossing Volumes at Study Intersections

ID	Intersection	Pedestrian Peak Hour	Peak Hour Volumes	Daily Volumes (6:00AM-10:00PM)
1	US 101/Heceta Beach Rd	4:15-5:15 p.m.	3	9
2	US 101/Munsel Lake Rd	5:00-6:00 p.m.	8	31
3	US 101/46th St	9:15-10:15 a.m.	8	27
4	US 101/35th St	1:30-2:30 p.m.	11	52
5	US 101/30th St	7:15-8:15 p.m.	9	49
6	US 101/27th St	9:45-10:45 a.m.	8	47
7	US 101/15th St	12:15-1:15 p.m.	20	152

ID	Intersection	Pedestrian Peak Hour	Peak Hour Volumes	Daily Volumes (6:00AM-10:00PM)
8	US 101/OR 126	2:00-3:00 p.m.	25	151
9	US 101/Rhododendron Dr	4:00-5:00 p.m.	31	219
10	US 101/2nd St	3:15-4:15 p.m.	23	175
11	OR 126/Quince St	8:30-9:30 p.m.	11	48
12	OR 126/Spruce St	7:00-8:00 p.m.	6	21
13	OR 126/North Fork Siuslaw Rd	N/A	0	0
14	Rhododendron Dr/35th St	2:15-3:15 p.m.	2	7
15	Rhododendron Dr/9th St	12:00-1:00 p.m.	6	25
16	Rhododendron Dr/Heceta Beach Rd	10:45-11:45 a.m.	12	60
17	Kingwood St/35th St	3:45-4:45 p.m.	3	14
18	Kingwood St/27th St	8:30-9:30 a.m.	8	26
19	Kingwood St/15th St	4:15-5:15 p.m.	5	27
20	Kingwood St/9th St	4:30-5:30 p.m.	11	76

EXISTING GAPS AND DEFICIENCIES

Adequate pedestrian facilities, such as continuous sidewalks, marked crossings, and ADA-compliant ramps, should be provided to allow for convenient and safe travel between neighborhoods, activity centers, and essential destinations. The following provides a summary of the existing gaps and deficiencies in the pedestrian system:

- There are several pedestrian ramps throughout the city that are not ADA-compliant and should be brought into compliance.
- There are several major (and minor) intersections that do not provide marked pedestrian crossings.
- There are several arterial and collector streets that currently have sidewalk gaps along one or two sides of the roadway. These streets include:
  - US 101, north of 37th Street
  - OR 126, east of Spruce Street
  - Heceta Beach Road, west of US 101
  - Rhododendron Drive, north of 9th Street
  - Munsel Lake Road
  - 35th Street, west of US 101

While a lack of sidewalks on any street inside of city limits represents a deficiency, the focus for completing the sidewalk network should be prioritized around major pedestrian destinations. These include:

- Filling in the sidewalk network in downtown Florence, specifically south of 9th Street.

- Providing connections to Oak Street to increase the sidewalk network around the Siuslaw School District schools and Lane Community College – Florence.
- Extending the sidewalk network on US 101 to Munsel Lake Road to provide a complete sidewalk network for all grocery stores in Florence.
- Improving the sidewalk network to major job locations (such as Three Rivers Casino) and to major recreation areas (such as the beaches and to all parks in Florence).

Community Identified Needs

Additional needs identified by members of the project advisory committee and participants in the open house are summarized below. The project team will continue to assess these needs through subsequent phases of the TSP update.

- There is a need for pedestrian facilities along US 101 near Fred Meyer, the Community Baptist Church, and south of Munsel Lake Road
- There is a need for pedestrian facilities along Rhododendron Drive south of 35th Street
- There is a need for pedestrian facilities that connect to the Three Rivers Casino.
- There is a need for potential pathways near Munsel Creek, the Siuslaw River Estuary, through Miller Park, and between Kingwood Street and Rhododendron Drive
- There is a need for pedestrian crossing facilities at the following intersections:
  - US 101/9th Street
  - Golf Course/35th Street
  - Myeena Loop/35th Street
  - Rhododendron Drive/35th Street
  - US 101/Heceta Beach Road
  - Rhododendron Drive/Seapine Drive
  - Rhododendron Drive/Fawn Ridge Lane
  - Heceta Beach Road/Leeward Drive
- There is a need for enhanced crossings along US 101 between Heceta Beach Road and Munsel Lake Road and near Bay Street
- Additional concerns include sidewalk width and condition, crosswalk location and conditions, lighting levels,

Bicycle

Similar to pedestrian facilities, bicycle facilities (dedicated bicycle lanes in the paved roadway, multi-use paths shared with pedestrians, etc.) serve a variety of trips. These include:

- Trips to major attractors, such as schools, parks and open spaces, retail centers, and public facilities

- Commute trips, where changing and showering facilities are provided at the workplace
- Recreational trips
- Access to transit, where bicycle storage facilities are available at the stop, or where space is available on bus-mounted bicycle racks.

As this list suggests, supporting bicycling as a viable alternative to the automobile requires more than simply providing bicycle lanes. Support facilities, such as secure parking and worksite changing/showering facilities, are also needed before many potential users will consider the bicycle trip as a practical alternative.

BICYCLE FACILITIES

As shown in Figure 11, the city has bike lanes, sharrows, and multi-use paths. These facilities are described in greater detail below.

Bike Lanes – State Facilities

Both state highways have on-street bike lanes through all of Florence, except on the US 101 bridge over the Siuslaw River. The bike lanes on US 101 appear to be 5-6 feet wide, while the bike lanes on OR 126 appear to be 6-9 feet wide. US 101 is part of the Oregon Coast Bike Route, running the whole length of US 101 from California to Washington. On OR 126 in particular, the bike lane width varies based on the presence of on-street parking. The eastbound bike lanes between Quince Street and Redwood Street are considerably wider (approximately 9 feet) than the eastbound bike lane on the previous block (approximately 6 feet).

State standards for bicycle facilities are provided in the *Blueprint for Urban Design* (BUD), which has been recently incorporated into the state's *Highway Design Manual*. The BUD identifies six urban contexts, recognizing that different modal types should be prioritized depending on the context. Within the urban context, vehicular volume and posted speed help identify a menu of bikeway treatments that create low-stress conditions for users.

US 101 and OR 126 include two different urban contexts: Traditional Downtown/Central Business District and Commercial Corridor. Under both urban contexts, with the vehicular volumes and posted speed limits, the most appropriate treatments fall within separated facilities or buffered bike lanes, which are not present along either highway. With the presence of an alternative route, 5-6 foot bike lanes are acceptable. As described below, there are parallel routes for US 101 but not for OR 126.

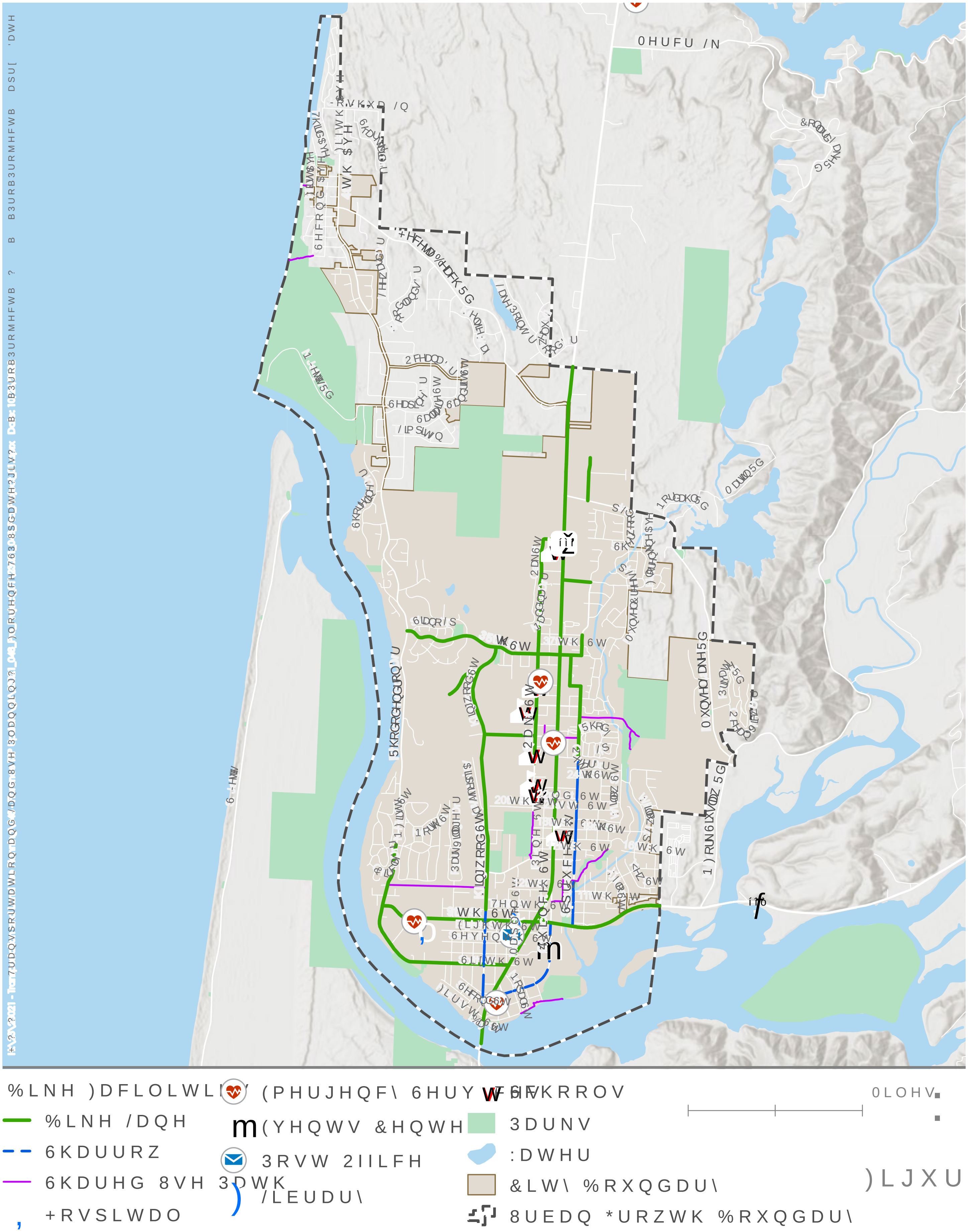
Bike Lanes – City Facilities

Bike lanes on City facilities are 5-6 feet wide, depending on the street. Facilities with 6-foot bike lanes include 6th Street, 9th Street, 27th Street, 35th Street, Kingwood Street, Rhododendron Drive between 9th Street and Hwy 101, Spruce Street, and Oak Street.

The existing TSP says that the local bicycle system should be consistent with the state's *Bicycle Facility Master Plan*, which has been updated to the *Oregon Bicycle and Pedestrian Plan* from 2016. This states that minimum bike lane widths are 6 feet and that anything less should be considered a gap in the network inventory.

Shared Roadways

There are three streets that have shared bikeway ("sharrow") markings, indicating that bicycles and vehicles should share the travel lane. Legally, bicycles can always utilize the full travel lane, but sharrow markings are designed to alert drivers to the presence of bicycles.



)LJXUH

%LNH)DFLO
)ORUHQFH 2U

Sharrows are located on Spruce Street (from OR 126 to 25th Street), Kingwood Street (from US 101 to 10th Street), and Quince Street (from US 101 to OR 126).

Shared-Use Paths

There are five areas where there are existing multi-use paths:

- A boardwalk along the Siuslaw River east of Bay Street
- The paved Oak Street path along the east side of Miller Park (between 15th and 20th Street)
- The paved Munsel Creek Bike Path from Quince Street to W Park Drive and 17th Street
- The paved path within Pine Street right-of-way between 27th Street and 28th Street
- A paved trail from Spruce Street to 29th Street with access to Munsel Greenway Park, with a companion path from US 101 and 27th Street to Spruce Street
- 12th Street shared-use path, an engineered wood fiber chip path between Kingwood Street and Rhododendron Drive
- An unpaved path from Meares Street to the Pacific Ocean
- An unpaved beach path from Blanco Street to the Pacific Ocean

BICYCLE ACCESSIBILITY FOR DESTINATIONS

Accessibility to key destinations within Florence are described below:

- **Downtown Florence** – The closer that a destination is to the downtown core of the city south of OR 126, the better the bicycle accessibility. The downtown area has the highest density of bicycle infrastructure of any part of the city, as well as a complete street grid. Downtown destinations include City Hall, Siuslaw Public Library, and the Bay Street commercial district and riverfront area.
- **Schools and Parks** – All three schools in the Siuslaw School District are located on Oak Street between 20th Street and 35th Street, as well as the Florence campus for Lane Community College. There are bike lanes on Oak Street to 25th Street, covering all schools except for Siuslaw Elementary School. These schools are more challenging for bicyclists to reach from the east side of US 101, unless they're able to cross at the RRFB at 25th Street, 30th Street, or at a signalized intersection. Miller Park, located south of Oak Street along the multi-use path and at 15th Street, has a safe bike path immediately next to the park but lacks a connection to reach the path.
- **Grocery Stores** – All grocery stores in Florence are located on US 101, which has a complete bike lane network. However, these bike lanes may not be low-stress facilities for all users given the vehicle volumes and speeds, as well as the need to cross US 101 to either access or depart the store.
- **Casino** – the Three Rivers Casino off OR 126 has bike lanes that may not be low-stress facilities for all users, and there are limited locations for people to cross the highway.
- **Pacific Ocean** – The primary beach accesses are on either side of the mouth of the Siuslaw River. There are no beach accesses in or around Florence that have low-stress bicycle accesses.

BICYCLE GENERATORS AND ROUTES

Traffic counts conducted at the study intersections on June 3, 2021 include the total number of bicyclists that entered the intersection in 15-minute intervals. Table 3 summarizes the bicycle crossing volume data for the overall count period (6:00 a.m. to 10:00 p.m.) as well as the pedestrian peak hour for each individual intersection.

Unlike the pedestrian volumes shown in Table 2, bicyclist volumes are reasonably steady across all of Florence. The two notable locations are at the OR 126/North Fork Siuslaw Road intersection, where very few bicyclists were recorded, and at the US 101/30th Street intersection, where approximately two times as many bicyclists were counted than at any other study intersection. The 13 peak hour bicyclists here included eight northbound riders and five southbound riders. While these counts were collected while school was fully remote due to the COVID-19 pandemic, we may expect to see a bump of bicyclists at this intersection during the mid-afternoon period when school is released.

Table 3. Bicycle Volumes at Study Intersections

ID	Intersection	Bicycle Peak Hour	Peak Hour Volumes	Daily Volumes (6:00AM-10:00PM)
1	US 101/Heceta Beach Rd	10:30-11:30 a.m.	9	21
2	US 101/Munsel Lake Rd	4:15-5:15 p.m.	5	17
3	US 101/46th St	4:15-5:15 p.m.	8	31
4	US 101/35th St	4:15-5:15 p.m.	8	33
5	US 101/30th St	2:00-3:00 p.m.	13	64
6	US 101/27th St	2:30-3:30 p.m.	7	32
7	US 101/15th St	5:15-6:15 p.m.	9	28
8	US 101/OR 126	10:45-11:45 a.m.	7	21
9	US 101/Rhododendron Dr	10:30-11:30 a.m.	7	27
10	US 101/2nd St	5:45-6:45 p.m.	7	27
11	OR 126/Quince St	10:15-11:15 a.m.	6	31
12	OR 126/Spruce St	8:15-9:15 p.m.	6	30
13	OR 126/North Fork Siuslaw Rd	various	1	5
14	Rhododendron Dr/35th St	6:00-7:00 p.m.	6	26
15	Rhododendron Dr/9th St	2:15-3:15 p.m.	6	21
16	Rhododendron Dr/Heceta Beach Rd	11:00 a.m.-12:00 p.m.	5	16
17	Kingwood St/35th St	10:45-11:45 a.m.	4	24
18	Kingwood St/27th St	12:15-1:15 p.m.	4	19
19	Kingwood St/15th St	12:00-1:00 p.m.	7	26
20	Kingwood St/9th St	10:45-11:45 a.m.	5	33

EXISTING GAPS AND DEFICIENCIES

Streets with no bicycle facilities or intermittent bicycle facilities force cyclists to share the travel lane with motor vehicles or use the shoulder if available. In many cases, this is not a desirable option for cyclists due to narrow lane widths or uneven pavement conditions. Adequate bicycle facilities should be provided to allow for safe travel between neighborhoods and essential destinations. The following provides a summary of the existing gaps and deficiencies in the bicycle system:

- There are several arterial and collector streets that currently have gaps in the bike lanes along one or two sides of the roadway. These streets include:
  - Heceta Beach Road from Rhododendron Drive to US 101
  - Munsel Lake Road from US 101 to N Fork Siuslaw Road
  - Rhododendron Drive from Wildwoods Street to Heceta Beach Road
  - Oak Street from 20th Street to Siuslaw Middle School Driveway
  - Spruce Street from OR 126 to 25th Street (currently has sharrows)
  - Spruce Street from 37th Street to 42nd Street
  - 15th Street from Kingwood Street to US 101

In addition, the *Blueprint for Urban Design* lays out a series of steps for determining the most appropriate bicycle facility for a given state facility. The purpose of the BUD is create bike facilities that are responsive to local land use contexts and roadway characteristics over establishing more rigid rules for what is and is not allowed. Given the land use and transportation characteristics on both US 101 and OR 126, however, a standard bike lane is not sufficient without a parallel low-stress facility. US 101 has a parallel facility between 9th Street and 46th Street, but none to the north or south of this segment. OR 126 has no parallel facility.

Additional gaps and deficiencies in the bicycle network will be identified through discussions with the project advisory committee and the general public, as well as the Florence Planning Commission and City Council.

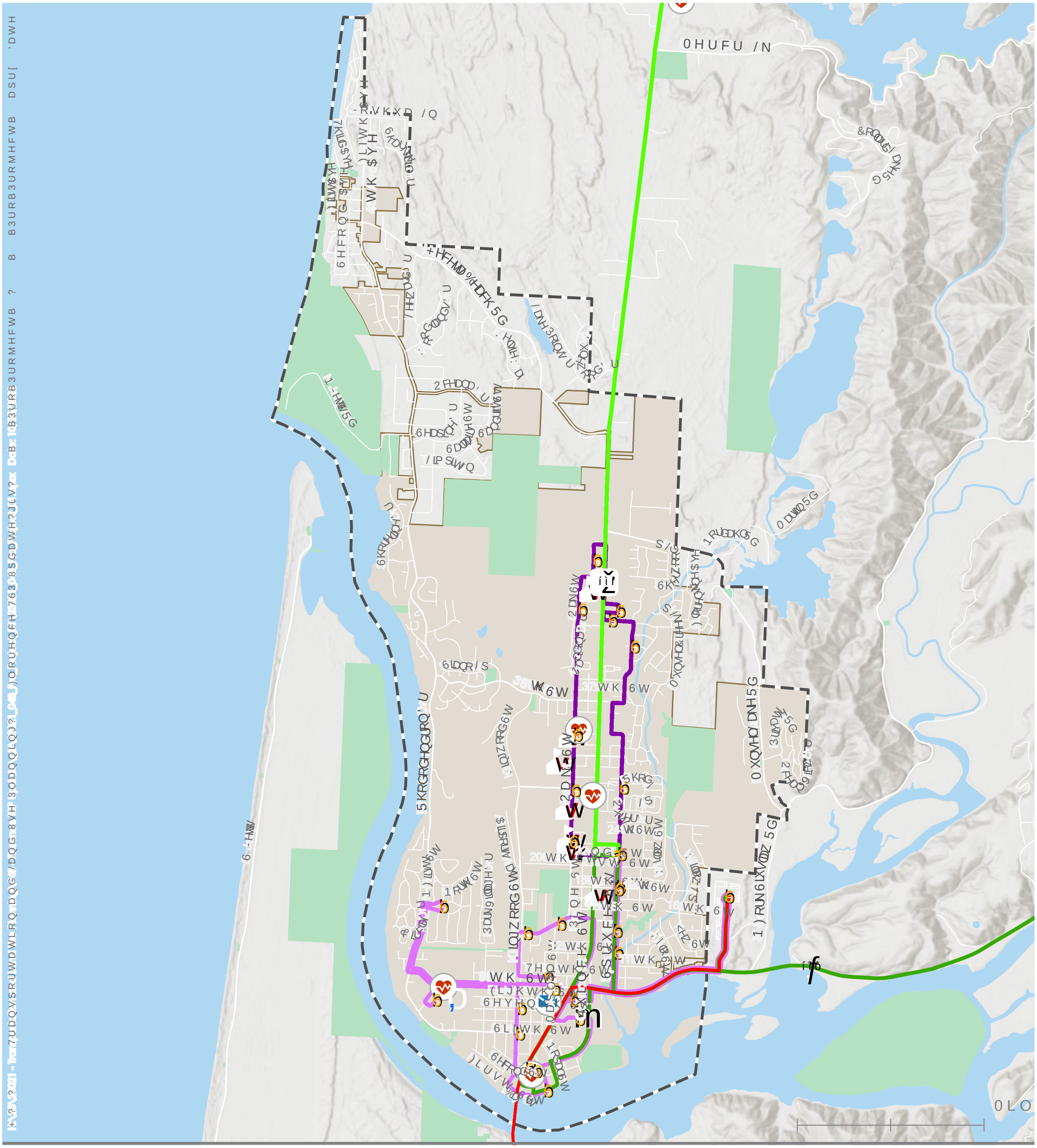
Community Identified Needs

Additional needs identified by members of the project advisory committee and participants in the open house are summarized below. The project team will continue to assess these needs through subsequent phases of the TSP update.

- Need to improve bike facilities across Siuslaw River Bridge and along Oak Street, Rhododendron Drive, Bay Street
- Need bike facilities that connect Spruce Street to Casino Access road

Public Transportation

Three different transit operators – Rhody Express, Link Lane, and Coos County Area Transit – operate a total of five bus routes in Florence. These routes are a mixture of local and intercity service, providing connections to other transit services outside of the city. All transit routes and stops are shown in Figure 12.



&&$7)ORUHQFH ([SUHVV
(XJHQH)ORUHQFH &RQQHFWRU
)ORUHQFH <DFKDWV &RQQHFWRU
5KRG\ ([SUHVV 1RUWK /RRS
5KRG\ ([SUHVV 6RXWK /RRS
7UDQVLW 6WRSV

+RVSLWDO
(PHUJHQF\ 6HUYLFHV
(YHQWV &HQWHU
3RVW 2IILFH
/LEUDU\

6FKRROV
3DUNV
:DWHU
&LW\ %RXQGDU\
8UEDQ *URZWK %RXQGDU\

)LJXUH

KITTELSON & ASSOCIATES

3XEOLF 7UDQVSRUWDW
)ORUHQFH 2U

TRANSIT SERVICE AND FACILITIES

Local Service

The Rhody Express, a joint partnership between the City of Florence and Lane County and operated by River Cities Taxi, provides two local fixed-route transit lines in the city: a North Loop and a South Loop. Service is provided on weekdays only from 10am-6pm on both routes. The North Loop serves areas north of 21st Street, along US 101, Spruce Street, and Oak Street, between the Grocery Outlet and Fred Meyer. The South Loop serves areas south of 21st Street, along Spruce Street, US 101, 9th Street, Rhododendron Drive, Kingwood Street, and Quince Street, circulating between Grocery Outlet, Safeway/Dunes Village Center, Peace Health Campus, the Old Town District, and Three Rivers Casino. Fares are $1 for a single trip and $2 for a day pass. Each loop operates on 60-minute headways, as shown in the schedule in Table 4.

Table 4. Rhody Express Schedule

Rhody Express – North Loop Departure Times			
Florence Food Share	**Bi-Mart**	**Fred Meyer**	**Grocery Outlet**
10:38 AM	10:45 AM	10:47 AM	10:58 AM
11:38 AM	11:45 AM	11:47 AM	11:58 AM
12:38 PM	12:45 PM	12:47 PM	12:58 PM
1:38 PM	1:45 PM	1:47 PM	1:58 PM
2:38 PM	2:45 PM	2:47 PM	2:58 PM
3:38 PM	3:45 PM	3:47 PM	3:58 PM
4:38 PM	4:45 PM	4:47 PM	4:58 PM
5:38 PM	5:45 PM	5:47 PM	5:58 PM

Rhody Express – South Loop Departure Times							
Grocery Outlet	**Dollar Tree**	**Library**	**Hospital**	**Old Town**	**Safeway**	**Casino**	**Food Share**
10:00 AM	10:05 AM	10:10 AM	10:17 AM	10:23 AM	10:28 AM	10:33 AM	10:38 AM
11:00 AM	11:05 AM	11:10 AM	11:17 AM	11:23 PM	11:28 AM	11:33 AM	11:38 AM
12:00 PM	12:05 PM	12:10 PM	12:17 PM	12:23 PM	12:28 PM	12:33 PM	12:38 PM
1:00 PM	1:05 PM	1:10 PM	1:17 PM	1:23 PM	1:28 PM	1:33 PM	1:38 PM
2:00 PM	2:05 PM	2:10 PM	2:17 PM	2:23 PM	2:28 PM	2:33 PM	2:38 PM
3:00 PM	3:05 PM	3:10 PM	3:17 PM	3:23 PM	3:28 PM	3:33 PM	3:38 PM
4:00 PM	4:05 PM	4:10 PM	4:17 PM	4:23 PM	4:28 PM	4:33 PM	4:38 PM
5:00 PM	5:05 PM	5:10 PM	5:17 PM	5:23 PM	5:28 PM	5:33 PM	5:38 PM

Intercity Service

Link Lane, a transit service operated by the Lane Council of Governments, runs two intercity bus routes that both terminate in Florence. The Eugene-Florence Connector provides bus service between Florence and Eugene along OR 126, with stops in Veneta and Mapleton. The Eugene-Florence Connector runs twice a day and operates seven days a week. Stops in Florence are located at Three Rivers Casino, in Old Town Florence (at the Bay Street/Laurel Street intersection), and at the Grocery Outlet, which provides a transfer to both Rhody Express routes. A one-way ticket between Florence and Eugene is $5, and a one-way ticket between Florence and Mapleton is $1.

The Florence-Yachats Connector provides bus service between Florence and Yachats along US 101. The Florence-Yachats Connector runs four times a day and operates Monday through Saturday. The only stop in Florence is located at the Grocery Outlet, which connects to both Rhody Express routes, as well as the Eugene-Florence Connector. A one-way ticket is $2.50, and all day service is $5. The Link Lane transit schedule is shown in Table 5.

Table 5. Link Lane Intercity Transit Schedule

Eugene-Florence Connector Departure Times						
Eugene Amtrak	Downtown Eugene	Veneta	Mapleton	Three Rivers Casino	Old Town Florence	Grocery Outlet
7:25 AM	7:32 AM	7:59 AM	8:39 AM	8:59 AM	9:16 AM	9:23 AM
11:05 AM	10:57 AM	10:30 AM	9:50 AM	9:32 AM	--	9:26 AM
3:30 PM	3:37 PM	4:04 PM	4:44 PM	5:04 PM	5:21 PM	5:28 PM
7:09 PM	7:02 PM	6:35 PM	5:55 PM	5:37 PM	--	5:31 PM

Florence-Yachats Connector Departure Times				
Grocery Outlet Florence	Washburne State Park	Yachats	Washburne State Park	Grocery Outlet Florence
7:30 AM	8:00 AM	8:30 AM	8:50 AM	9:20 AM
10:30 AM	11:00 AM	11:30 AM	11:50 AM	12:20 PM
2:45 PM	3:15 PM	3:45 PM	4:05 PM	4:35 PM
5:35 PM	6:05 PM	6:35 PM	6:55 PM	7:25 PM

Additionally, Coos County Area Transit (CCAT) operates the Florence Express, intercity bus service between North Bend and Florence along US 101, with stops in Lakeside, Winchester Bay, Reedsport, and Gardiner. The Florence Express runs twice a day and runs Monday to Saturday. Reservations are strongly encouraged, and passengers may request route deviations. Stops in Florence are located at the Grocery Outlet (which connects to all other transit service in Florence) and Three Rivers Casino. Fares are zone-based, meaning that longer trips will cost more money. A one-way ticket between Florence and Coos Bay is $12. Table 6 includes the Florence Express schedule with selected stops.

Table 6. Florence Express Intercity Transit Schedule

Florence Express Departure Times						
North Bend	Lakeside	Winchester Bay	Reedsport	Gardiner	Grocery Outlet	Three Rivers Casino
7:30 AM	8:04 AM	8:14 AM	8:30 AM	8:38 AM	9:10 AM	9:20 AM
11:21 AM	10:48 AM	10:36 AM	10:22 AM	10:10 AM	9:38 AM	9:30 AM
3:30 PM	4:04 PM	4:14 PM	4:30 PM	4:38 PM	5:10 PM	5:20 PM
7:21 PM	6:48 PM	6:36 PM	6:22 PM	6:10 PM	5:38 PM	5:30 PM

TRANSIT CONNECTIVITY

The two intercity transit providers – Link Lane and CCAT, provide access to communities to the north, south, and east of Florence, including Eugene, Coos Bay, and Yachats. In these three communities, transit passengers can connect directly to the following transit providers:

Lane Transit District

Lane Transit District (LTD) is the primary transit provider for the Eugene/Springfield metropolitan area. LTD operates 28 bus routes, including one bus rapid transit line and six regional routes to destinations across Lane County, such as McKenzie Bridge, Junction City, and Cottage Grove.

CCAT

CCAT is the transit provider for Coos County and the Coos Bay/North Bend area. In addition to local bus service and the intercity route to Florence, CCAT provides bus service to Roseburg, and to Coquille and Myrtle Point.

Lincoln County Transit

Lincoln County Transit provides service to Newport, Lincoln City, and Yachats with Lincoln County, as well as a joint partnership with Benton Area Transit to provide daily intercity service between Newport, Corvallis, and Albany.

Pacific Crest Lines

Pacific Crest Lines operates daily service between Bend and Eugene. The once-a-day service arrives from Bend at 9:45 AM and the Greyhound station in Springfield and terminates at the Eugene Amtrak station at 10:10 AM. Service then returns to Bend, departing the Amtrak station at 11:10 AM and from the Greyhound station at 11:20 AM.

Amtrak

The Eugene Amtrak station connects to *Cascades* service (running from Vancouver, B.C. to Eugene via Seattle and Portland) and to *Coast Starlight* service (running from Seattle to Los Angeles via Portland, Sacramento, and San Jose). Additional details and schedules for Amtrak service in Eugene are covered in more detail in the Rail inventory section below.

Oregon POINT

Oregon POINT bus service, operated by Amtrak, operates four daily routes, includes Cascades service between Portland and Eugene. Additional details and schedules for POINT service in Eugene are covered in more detail in the Rail inventory section below.

ADDITIONAL TRANSIT SERVICES

On-Demand/Door-to-Door Transit Services

River Cities Taxi, located at 1699 Pine Street in Florence, provides door-to-door taxi services in Florence and destinations beyond seven days a week from 7:00 AM to 3:00 AM. The company operates five vehicles and has wheelchair accessible vans. River Cities Taxi also partners with LTD's RideSource paratransit service to fulfill rides within Florence.

Paratransit Services

Rhody Express offers dial-a-ride services for people who live within three-quarters of a mile of Rhody Express service and have a disability that prevents them from riding the bus. For people who qualify, Rhody Express offers paratransit services within Florence. Rides can be coordinated through LTD's RideSource paratransit program.

EXISTING GAPS AND DEFICIENCIES

Local and intercity bus service provides connections within Florence, as well as to Eugene, Coos Bay, and Yachats. For intercity service, however, service is primarily focused on the morning and evening peak hours. Both the Eugene-Florence Connector and the Florence Express intercity routes provide service during the 9:00 AM hour and the 5:00 PM hour with nothing during the middle of the day. While the Florence-Yachats Connector does provide midday service, Yachats is a community of approximately 1,000 people with limited employment opportunities. Additional service to Eugene and to Coos Bay, areas with considerably larger populations than Florence, would provide better transportation access to jobs, medical care, education, and recreation opportunities.

Community Identified Needs

Additional needs identified by members of the project advisory committee and participants in the open house are summarized below. The project team will continue to assess these needs through subsequent phases of the TSP update.

- Provide transit shelters at more stops
- Provide additional amenities (shelters, benches, trash cans, etc.) at the Grocery Outlet, Safeway, Florence Event Center, and US 101/OR 126 stops
- Increase service frequency along US 101 at Munsel Lake Road
- Provide transit service along Rhododendron Drive and Heceta Beach Road
- Provide stops along Rhododendron Drive at Exploding Whale Park, N Jetty Road, Woodlands Drive, Shelter Cove Way, 35th Street, Driftwood Shores Resort
- Provide a stop for the Eugene airport
- Provide more publicity on connection to Eugene and Yachats
- Provide more publicity/discussion on value of public transportation options

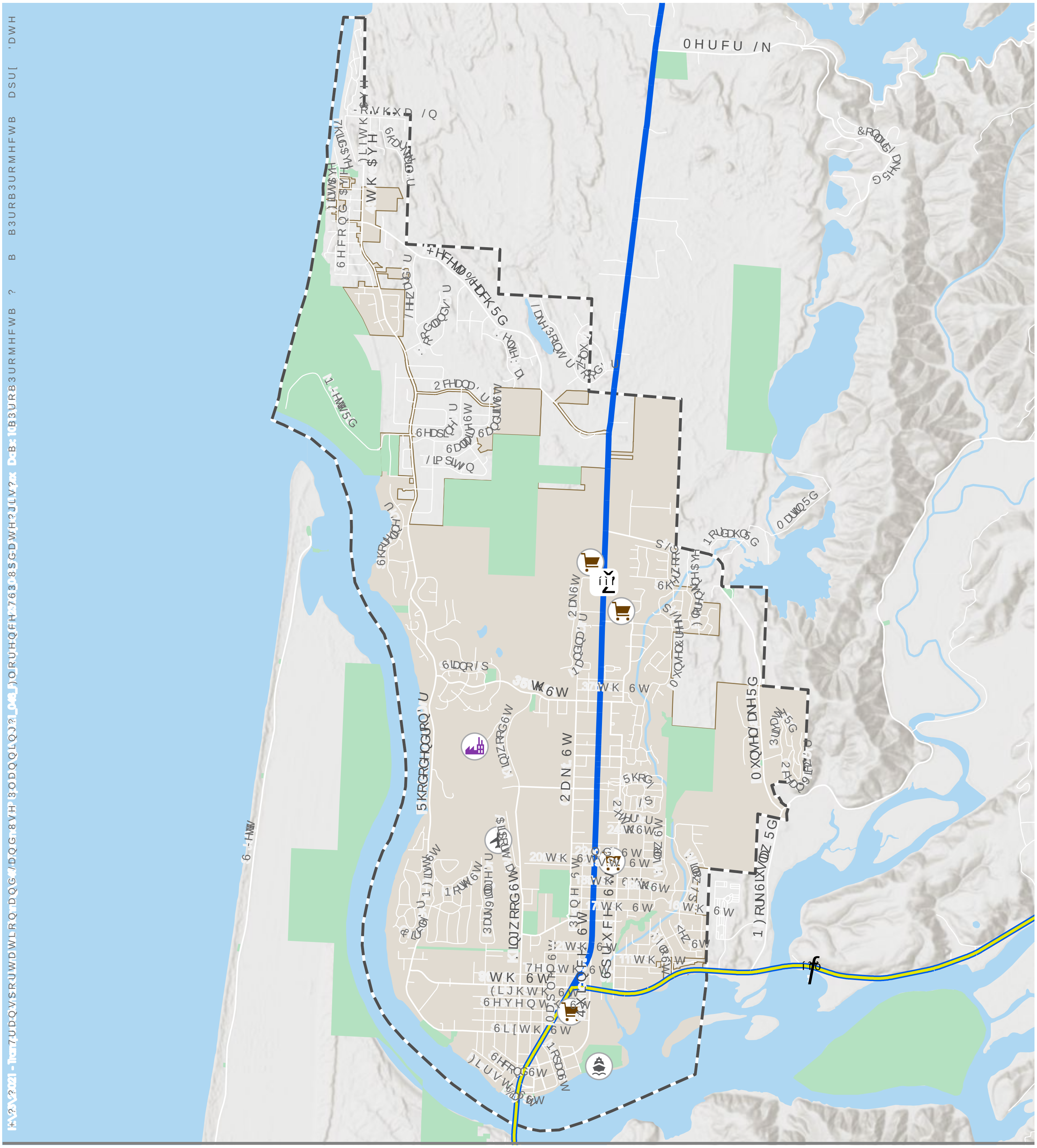
Freight Generators

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

FREIGHT GENERATORS

There are several freight generators within Florence, shown in Figure 13 below. These include:

- **Port of Siuslaw:** The Port of Siuslaw, located off of 1st Street immediately to the east of Old Town Florence, is a publicly-chartered special district with commercial and sport boat moorages.
- **Florence Municipal Airport:** The airport, which serves twin-engine aircraft and small jets, averages approximately 134 aircraft operations per week and is home to 25 aircraft.



$LUSRUW
*URFHU\ 6WRUH
,QGXVWULDO 3DUN
3RUW
6WDWHZLGH +LJKZD\
2+3)UHLJKW 5RXWH
6WUHDPV
3DUNV
&LW\ %RXQGDU\
8UEDQ *URZWK %RXQGDU\
0LOHV

)LJXUH

)UHLJKW *HQHU
)ORUHQFH 2U

KITTELSON
& ASSOCIATES

- **Florence Industrial Park:** The Florence Industrial Park, located off Pacific View Drive, is a partially developed industrial area currently owned by the Port of Siuslaw. Currently, there are two industrial businesses located there: a motor vehicle hydraulics and pump cylinders company, and a machine shop.
- **Grocery stores (Safeway, Grocery Outlet, Bi-Mart, and Fred Meyer):** These four grocery stores are all located along US 101.

CONNECTING ROADS

The Port of Siuslaw, located on Harbor Street, connects with Quince Street, a wide, two-lane road with approximately 20-foot lanes. Quince Street provides a direct connection to US 101 and OR 126, both of which are freight routes.

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

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

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

MAJOR COMMODITIES

Historically, the largest commodities at the Port of Siuslaw have been fishing and timber, with agricultural products and quarried rock products being other major commodities to travel through Florence (although not necessarily through the Port). In addition to these commodities, recreation and tourism are major drivers of the Port in the 21st century.

INTERMODAL FACILITIES

Intermodal connectors are roadways that provide the “last-mile” connection between the NHS network and major intermodal freight facilities, such as ports, airports, and rail yards. There are no intermodal connectors within 50 miles of Florence. The closest intermodal connections are located in Portland and Eugene, although an intermodal facility is being proposed in Millersburg.

Rail

RAIL FACILITIES

There are no rail facilities within the Florence UGB. There is currently no active freight rail running through Florence and the nearest passenger rail is located in Eugene/Springfield. The Coos Bay Rail Link, a 134-mile rail line which runs between Eugene and Coos Bay and is operated by the Port of Coos Bay, crosses the Siuslaw River approximately 2.5 miles east of Florence.

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

Table 7. Weekday Bus and Train Schedule at Eugene Amtrak Station

Service	Type	Direction	Arrival Time	Departure Time
Cascades POINT	Bus	Southbound	12:30 AM	--
Cascades	Train	Northbound	--	5:30 AM
Cascades POINT	Bus	Northbound	--	8:15 AM
Cascades POINT	Bus	Southbound	9:35 AM	--
Cascades POINT	Bus	Northbound	--	11:45 AM
Coast Starlight	Train	Northbound	--	12:37 PM
Cascades POINT	Bus	Northbound	--	1:10 PM
Cascades	Train	Southbound	1:50 PM	--
Cascades POINT	Bus	Southbound	2:50 PM	--
Cascades	Train	Northbound	--	4:30 PM
Coast Starlight	Train	Southbound	5:08 PM	--
Cascade POINT	Bus	Southbound	--	6:00 PM
Cascade POINT	Bus	Southbound	7:50 PM	--
Cascades	Train	Southbound	8:40 PM	--

Air Transport

AIR FACILITIES

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

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

2010 Airport Plan

The City of Florence adopted an Airport Master Plan Update in February 2010, and this plan created a punch list of investments for upgrading the airport. Table 8 below describes these projects and whether they have been completed.

Table 8. Florence Municipal Airport Master Plan Update Project List

Project	Description	Complete?
Runway and Taxiway Extension (Phase 1)	Construct the 400-foot north runway extension with a 200-foot displaced threshold for obstruction clearance.	No
Runway and Taxiway Extension (Phase 2)	Eliminate the 200-foot displaced threshold for Runway 15 by removing approximately 87,100 cubic yards of material from the sand dune.	No
Runway and Taxiway Extension (Phase 3)	Remove approximately 116,200 cubic yards of additional material from the sand dune.	No
Non-precision Instrument Approach	The development of an instrument approach is recommended for Runway 15/33.	No
Terminal Apron Reconfiguration & Expansion	The main apron will be reconfigured and expanded southward to increase current aircraft parking capacity, improve aircraft circulation within the apron, and meet FAA design standards.	Yes
North Landside Development Area	The preferred alternative includes space reserved for development of additional conventional hangars, T-hangars and aircraft apron. As currently planned, the north landside area provides storage capacity for approximately 60 additional aircraft.	No
Parallel Taxiway Lighting	The parallel taxiway will be equipped with blue edge lighting or reflective edge markers.	Yes

Surface Water Plan

The Siuslaw River is a navigable waterway that connects Florence to other inland communities as well as the Pacific Ocean. For 16.5 miles, the Siuslaw River is an officially designated federal waterway and is maintained as a navigation project by the US Army Corps of Engineers with local sponsorship by the Port of Siuslaw. The remainder of the approximately 720 square mile Siuslaw river drainage basin falls within the district boundary of the Port of Siuslaw. Approximately five miles of the lower Siuslaw River system flows through the City of Florence.

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

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

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

FACILITIES

The Port operates marine, industrial, commercial, and recreational facilities. As of 2013, these included:

Marine Facilities

- A 51-slip commercial and 53-slip recreational marina (dredged in 2008)
- A 22,000 square foot commercial wharf renovated in 2013
- A two-ton hoist located on the wharf
- A commercial forklift and workboat
- A three-lane public boat launch with 160' of transient vessel dock
- A 240' of concrete boarding float installed in 2011
- A 10,000-gallon capacity (4,000-gallon gas and 6,000-gallon diesel) marine fueling station
- 500' of riverfront bulkhead underlying the boardwalk
- 758' of concrete transient vessel dock installed in 2009

Industrial Land

- Pacific View Industrial Park, a 38-acre site located three miles northwest of the Port

Commercial Facilities

- The 0.71-acre Boardwalk property, comprised of a 28,000 square foot open grass space, the 585' boardwalk, and adjacent 199 space parking lot
- Two leased restaurant buildings located on the wharf (6,000 square feet and 5,000 square feet)
- A 1,200 square foot leased retail building directly across the street from the wharf
- A 5,000 square foot leased retail/commercial building near the RV campground entrance

Recreation Facilities

- A 103-site waterfront RV Campground, with a new 9,500 square foot, 12-site hiker-biker camp completed in 2013
- A 1,800 square foot district office building that also houses the campground and marina office, and a rentable 450 square foot conference room
- A 1,920 square foot maintenance shop
- A 1,900 square foot warehouse building
- The Port also owns and maintains two small pocket parks in Old Town, Anchor Park and Mariner's Plaza, as well as a 100 square foot building which is used by the US Coast Guard Auxiliary and Oregon Department of Fish & Wildlife and is located adjacent to the boat launch.

FUNDING

The Port's current budget document shows $2,479,489 in resources (revenues) and $1,225,007 in requirements (expenditures) for the 2021-22 fiscal year and projects $3,565,593 in resources and $2,080,177 in requirements for the upcoming 2022-23 fiscal year.

OPERATIONAL CONCERNS

The Port's operational concerns, according to its *Strategic Business Plan*, are more tied to finance than to waterway operations. The Port's timber wharf, constructed in 1966, underwent major repairs to address structural deficiencies and to add an estimated 30 years to its service life. This repair work cost $1.8 million. While current commercial leases are helping cover this cost, a total wharf replacement was estimated to cost $6 million and would be beyond what the Port currently makes from its commercial leases. As the plan noted at the time, "many Oregon port marinas charge rates that are sufficient to cover operations and maintenance costs, but few charge enough to cover facility replacement." The plan found that market was likely not strong enough to support increased moorage fees to cover operating and capital costs, which puts the Port in a financially precarious position.

PROJECTS

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

Bulkhead Repair

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

Replace Debris and Shear Booms at Marina

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

Assessing Feasibility of Decommissioning Mapleton Facility

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

Investigate Feasibility of Enhancing Commercial Fishing Opportunities

As of 2013, the Port was struggling to maintain commercial fishing operations. There were 10 active commercial boats catching albacore tuna and Dungeness crab, and projections at the time expected commercial fishing growth to remain flat. The Port sought to develop a sustainable business model to help grow the local commercial fishing industry and drive up market prices.

Complete Siuslaw Estuary Trail

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

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

Funding Inventory

This section summarizes information on transportation funding in Florence. This information provides context for evaluating projects and defining priorities that will allow Florence to use all funding opportunities and maximize current resources to preserve and improve the transportation system.

Transportation revenue in Florence primarily consists of state revenue from the state gas tax and local revenue from a transportation system development charge (SDC). Increases in state revenues will depend primarily on gas consumption, although the city can expect increased transit funding to support the Rhody Express.

STATE TRANSPORTATION REVENUES

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.

ODOT's Statewide Transportation Improvement Fund (STIF), created out of HB 2017, funds public transportation improvements across the state. Formula funding is distributed based on a combination of population and payroll. Funding for Lane County (all transit services except Lane Transit District) is projected in Table 9 below. This includes money for the Rhody Express and for Link Lane.

Table 9. Projected STIF Funding Allocation for Transit Services in Lane County (Excluding LTD)

Qualified Entity	FY 2024	FY 2025	FY 2026	FY 2027
Lane County (outside of LTD)	$582,633	$613,571	$640,230	$671,536

LOCAL TRANSPORTATION REVENUES

Table 10 below provides the city's street fund budget revenues for the three most recent fiscal years. In addition to a beginning balance, there are five types of revenues, as outlined below:

- **Franchise Fees**: Solid waste processing
- **Intergovernmental**: Intergovernmental revenues include the transfer of funds from one government entity to the City of Florence. Typically, this has involved federal government grants (such as grant funding from the American Rescue Plan and from the CARES Act related to the COVID-19 pandemic) and state government formula funding and grants (such as state highway apportionment funding and safe routes to school funding).
- **Charges for Services**: In 2009, the City Council passed a street light fee that is charged as part of the city's utility bills. This fee covers the cost of electricity to power street lighting. This was later transitioned into a street maintenance fee in 2012 with Ordinance 2, Series 2012 and Resolution 12, Series 2012. This fee is for the electrical costs associated with the public street light illumination and of the maintenance of the existing roadways. Monthly fees are collected from both residential and non-residential customers. Other services here include the city's plan review process and off-site inspection work.
- **Miscellaneous Income**: Miscellaneous funds are identified as interest income and as "other income."
- **Transfers**: Transfers are coming from the city's transportation system development charges, described in more detail below.

Table 10. City of Florence Historic Street Fund Revenues

Revenue Types	FY 2019-20	FY 2020-21	FY 2021-22
Beginning Balance	$383,404	$215,854	($80,600)
Franchise Fees	$82,642	$115,576	$123,440
Intergovernmental	$603,688	$1,030,064	$1,689,824
Charges for Services	$497,956	$468,539	$478,571
Miscellaneous	$4,900	$149,552	$58,925
Transfers	$380,000	$100,000	$90,000
Total	**$1,952,590**	**$2,079,585**	**$2,360,160**

Table 11 below provides the city's street fund budget expenditures for the three most recent fiscal years. There are three types of revenues, as outlined below:

- **Personnel**: These expenditures relate to employee salaries as well as benefits, such as Social Security, medical insurance costs, and workers compensation.
- **Materials & Services**: This category covers a number of items, the largest of which include Public Works administrative services, utilities, traffic control devices, and contractual services.
- **Capital Outlay**: These costs are tied to construction projects, such as street preservation and multi-modal improvements (such as sidewalk construction and adding bike lanes).
- **Transfers**: This accounts for funds going to debt service.

Table 11. City of Florence Historic Street Fund Expenditures

Revenue Types	FY 2019-20	FY 2020-21	FY 2021-22
Personnel	$83,944	$63,004	$21,500
Materials & Services	$631,406	$674,847	$500,820
Capital Outlay	$847,986	$1,012,313	$1,301,183
Transfers	$173,400	--	$409,508
Total	$1,736,736	$1,750,164	$2,233,011

As these two tables show, revenues are exceeding expenditures, and both revenues and expenditures have been rising over the past three fiscal years. Two of these three years are fully within the COVID-19 pandemic, which may lead to higher grant funding from the federal government than would typically be expected.

TRANSPORTATION SYSTEM DEVELOPMENT CHARGES

The primary local revenue source is from Transportation SDCs. Transportation SDCs are fees assessed on developments for impacts to the transportation infrastructure. All revenue is dedicated to transportation capital improvement projects designed to accommodate growth. The City can offer SDC credits to developers that provide public improvements beyond the required street frontage, including those that can be constructed by the private sector at a lower cost. For example, SDC credits might be given for providing off-site improvements, such as sidewalks and bike lanes that connect the site to nearby transit stops. Florence uses the revenue from SDCs on eligible projects that cannot be funded by other means.

Attachments

A. Population and Land Use Inventory

ATTACHMENT A: POPULATION AND LAND USE INVENTORY

TECH MEMO #3A: TRANSPORTATION INVENTORY – ATTACHMENT A

Date:	April 2, 2023
To:	Wendy Farley-Campbell, Shirley Gray, Erin Reynolds, and Mike Miller, City of Florence Michael Duncan, Oregon Department of Transportation
From:	Darci Rudzinski and Brandon Crawford, MIG
Project:	City of Florence Transportation System Plan Update
Subject:	Final Tech Memo #3A: Transportation System Inventory – Attachment A

Lands and Population Inventory

This memorandum presents land and population inventory information for areas within the Florence urban growth boundary (UGB). This information will be used to support efforts to update the Florence Transportation System Plan (TSP).

BUILDABLE LANDS INVENTORY

A buildable lands inventory was produced to identify the number of properties and acres that have development potential within the Florence UGB. This type of land use inventory will also help inform and identify transportation policy and/or infrastructure needs for the TSP. The study area included all tax lots in the Florence UGB. County tax assessor data was used to identify and classify properties into the following categories:

- **Undeveloped:** Land with an improvement value less than or equal to $10,000 and at least 5,000 square feet in size.
- **Underdeveloped:** Land with a land value to improvement value ratio of 2:1 and greater than ½ acre in size.
- **Undevelopable:** Properties (or portions of properties) that are in natural resource zoning categories, which include Open Space, Natural Estuary, and Conservation Estuary zones. Undevelopable Properties also include parks and open space, regardless of zone.
- **Developed:** All other land that does not fall under one of the categories above.

As shown in Table 1 and Table 2, the City has a substantial amount of land and properties that may accommodate further development. An estimated 1,164 properties and roughly 1,694 acres are considered developable (this includes "undeveloped" and "underdeveloped" properties. Most development potential is in residential zones, representing over half of the undeveloped properties and most of the undeveloped acreage in the UGB. Furthermore, most undeveloped properties appear to be located further from the City center and closer to the City limits and UGB. Due to the comparatively high volume of vacant (i.e., undeveloped) properties that are in residential zones, the City can assume most future development will be residential. Figure 1 illustrates the buildable lands inventory for Florence.

Figure 1: Florence Buildable Lands Inventory

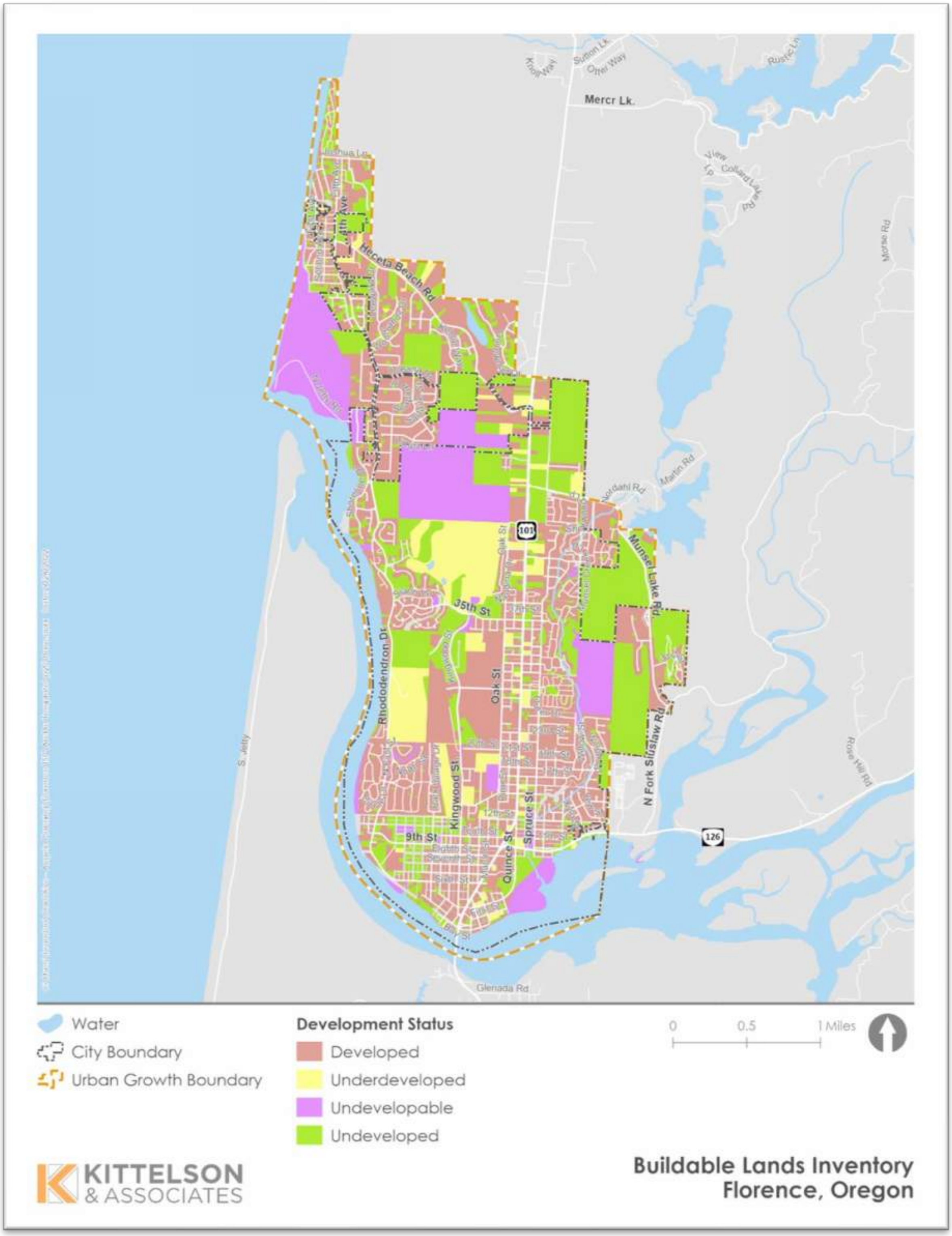


Table 1: Development Status of Properties in the Florence UGB by Land Use Type

Land Use Type	Undeveloped	Underdeveloped	Developed	Undevelopable	Total
Commercial	310	40	4	916	1,270
Industrial	62	4	7	62	135
Natural Resource	0	0	53	0	53
Residential	729	19	18	5,384	6,150
Total	1,101	63	83	6,362	7,609

Table 2 Development Status Acreage in the Florence UGB by Land Use Type

Land Use Type	Undeveloped	Underdeveloped	Developed	Undevelopable	Total
Commercial	173.3	58.9	3.9	230.7	466.8
Industrial	113.2	134.5	44.6	114.5	406.8
Natural Resource and Farm	0	0	1,319.4	0	1,319.4
Residential	1,005.6	209.5	25.3	1,580.7	2,821.1
Grand Total	1,292.1	402.9	1,393.2	1,925.9	5,014.1

ZONING & COMPREHENSIVE PLAN DESIGNATIONS

The City has a wide range of zoning and comprehensive plan designations, as shown in Figure 2 and Figure 3. As depicted in both figures, most of the City's residential land is zoned for low- and medium- density residential. Most of the low-density residential is located toward the fringes of the City limits and UGB, whereas higher densities are concentrated toward the urban core, particularly along US 101. In addition, commercial zones are also largely located along US 101 and near high-density residential. Industrial zones and comprehensive plan designations are concentrated to the west of US 101, between high density and natural resource zones. Table 3 lists of the City's zoning designations with a brief description of and purpose of each district.

Table 3: Florence Zoning Designation Descriptions

Zone	Zone Purpose
Low Density Residential (LDR)	The Low Density Residential District is intended to provide a quality environment for low density, urban residential uses and other Planned Unit Development as determined to be necessary and/or desirable. This zone allows single-family detached dwellings and manufactured dwellings.
Medium Density Residential (MDR)	The Medium Density Residential District is intended to provide a quality environment for medium density, urban residential uses and other compatible land uses determined to be necessary and/or desirable. This zone allows single-family attached dwellings, duplexes, and manufactured homes.
Mobile Home/Manufactured Home Residential (RMH)	The Mobile Home/Manufactured Home Residential District is intended to provide mobile home/manufactured home owners and owners of other pre-manufactured homes an alternative to renting space in a mobile home/manufactured home park. It is further the intent of this District to

	establish areas within the City for permanent installations of mobile homes/manufactured homes, primarily for resident owners, and to establish certain design features enabling mobile homes/manufactured homes to blend with conventional housing.
High Density Residential (HDR)	The High Density Residential District is intended to provide a quality environment for high density, urban residential uses together with other compatible land uses determined to be necessary and/or desirable. This zone allows every housing type allowed in the city, and permits single-family detached as a conditional use and multifamily (5+ units) through site plan review.
Neighborhood Commercial District (NC)	The Neighborhood Commercial District is intended to enhance the livability of residential areas by providing for small neighborhood businesses to serve the frequently recurring needs of residents. In general, Neighborhood Commercial is intended to be a small scale, neighborhood shopping center with more than one business, although a single, multi-purpose convenience store would also qualify. Neighborhood Commercial is not intended to be combined with a residence or to be located in a converted residence or garage.
Commercial District (C)	The Commercial District is intended to preserve and enhance areas within which a wide range of retail sales and businesses will occur.
Highway District (H)	The Highway District includes the area adjacent to US 101 and OR 126. Highway frontage is recognized as an item of major concern that needs individual attention in order to serve the public interest and deal with its special nature and character.
Old Town District	The Old Town District is intended to provide an area for pedestrian oriented, mixed land uses. Areas A and B are located near or along the waterfront and comprise the historic old town with generally smaller scale structures than Area C. The Old Town District is also intended to encourage restoration, revitalization, and preservation of the District.
Marine District	The Marine District is primarily intended to provide for water dependent commercial, recreational, and industrial uses. In addition, this District provides for certain water related uses which are most appropriately located near a water dependent use or in areas near the estuary. Such water related uses may not be directly dependent upon access to a water body, but do provide or use goods or services that are directly associated with water dependent uses.
Natural Estuary District (NE)	The purpose of the Natural Estuary District (NE) is to assure the protection of significant fish and wildlife habitats and continued biological productivity of the estuary and to accommodate the uses which are consistent with these objectives. The boundaries of the NE District are determined by the natural estuarine features. The NE District includes all major tracts of salt marsh, tide flats, eelgrass and algae beds.

Conservation Estuary (CE)	The purpose of the Conservation Estuary District (CE) is to provide for the long-term use of the estuary's renewable resources in ways which do not require major alteration of the estuary. Providing for recreational and aesthetic uses of the estuarine resources as well as maintenance and restoration of biological productivity are primary objectives in this District. The boundaries of the CE District are defined by natural features.
Development Estuary (DE)	The primary purpose of the Development Estuary District (DE) is to provide for navigational needs and public, commercial, and industrial water-dependent uses which require an estuarine location. Uses which are not water dependent which do not damage the overall integrity or estuarine resources and values should be considered, provided they do not conflict with the primary purpose of the District. The DE District is designed to apply to navigation channels, sub-tidal areas for in-water disposal of dredged material, major navigational appurtenances, deep water areas adjacent to the shoreline and areas of minimal biological significance needed for uses requiring alteration of the estuary.
Limited Industrial	The Limited Industrial District is intended to provide areas for manufacturing, assembly, packaging, warehousing, and related activities that do not create a significant detrimental impact on adjacent districts.
Airport Development (AD)	The purpose of the Airport Development Zone is to encourage and support the continued operation and vitality of the Florence Municipal Airport by allowing certain airport-related commercial and recreational uses in accordance with state law.
Open Space (OS)	The Open Space District is intended to protect urban open space buffers, park and recreation lands, natural resource lands, and lands reserved for later development. This District is intended to be used in conjunction with the Comprehensive Plan. Where, for example, the Plan designates an area for urban development, the application of this District would be interim; when the land becomes available for development, a rezoning could be considered. Where this Open Space District is consistent with the Plan's land use designation, it is intended that this District would preserve such land permanently in open space use.
Waterfront/Marine (WF/M)	The Waterfront/Marine District is intended to allow a mix of water-dependent, water related, and water-oriented uses along the Siuslaw River Estuary. The WF/M zone, while allowing up to 50% of the zone to be used for non-water-dependent or non-water related uses, will continue to be the community's center for water-dependent and water-related activities and will continue to provide access for such uses to the Siuslaw River Estuary in Florence.
Professional Office/Institutional	The Professional Office/Institutional Zoning District provides for the establishment of offices, medical, and other institutional uses, limited accessory services for worker's convenience and public space. A medium to

	high density residential option is available when such can be achieved through innovative design and include significant natural resource protection.
Pacific View Business Park	The Pacific View Business Park District is intended to provide areas for offices, service businesses, light industrial and manufacturing, and research and development facilities with the goal of providing businesses and industries that provide family-wage year-round employment.
Coast Village	The Coast Village District is intended to provide a quality environment for residential uses and other compatible land uses within the Coast Village development. Coast Village began as a campground and has evolved into a residential community that accommodates permanent and seasonal residents; it is a unique residential community that allows a blend of recreational vehicles and conventional single-family homes, surrounded by greenbelt buffers between each lot to maintain a park-like setting.
North Commercial	The North Commercial District is intended to provide opportunities for commercial uses of a larger scale within planned commercial developments. Uses are intended to serve the traveling public and the needs of residents for major retail shopping opportunities. This district, while recognizing pre-existing development on existing parcels, encourages consolidation of parcels to promote planned commercial developments and discourages uses that require substantial outdoor display or storage.
Service Industrial	The purpose of this District is to provide an area within the City for large-lot industrial uses, particularly those associated with construction and development, while providing a visually pleasing north entrance into Florence, and maintaining through traffic flow on Highway 101.

Figure 2: City of Florence Zoning Designations

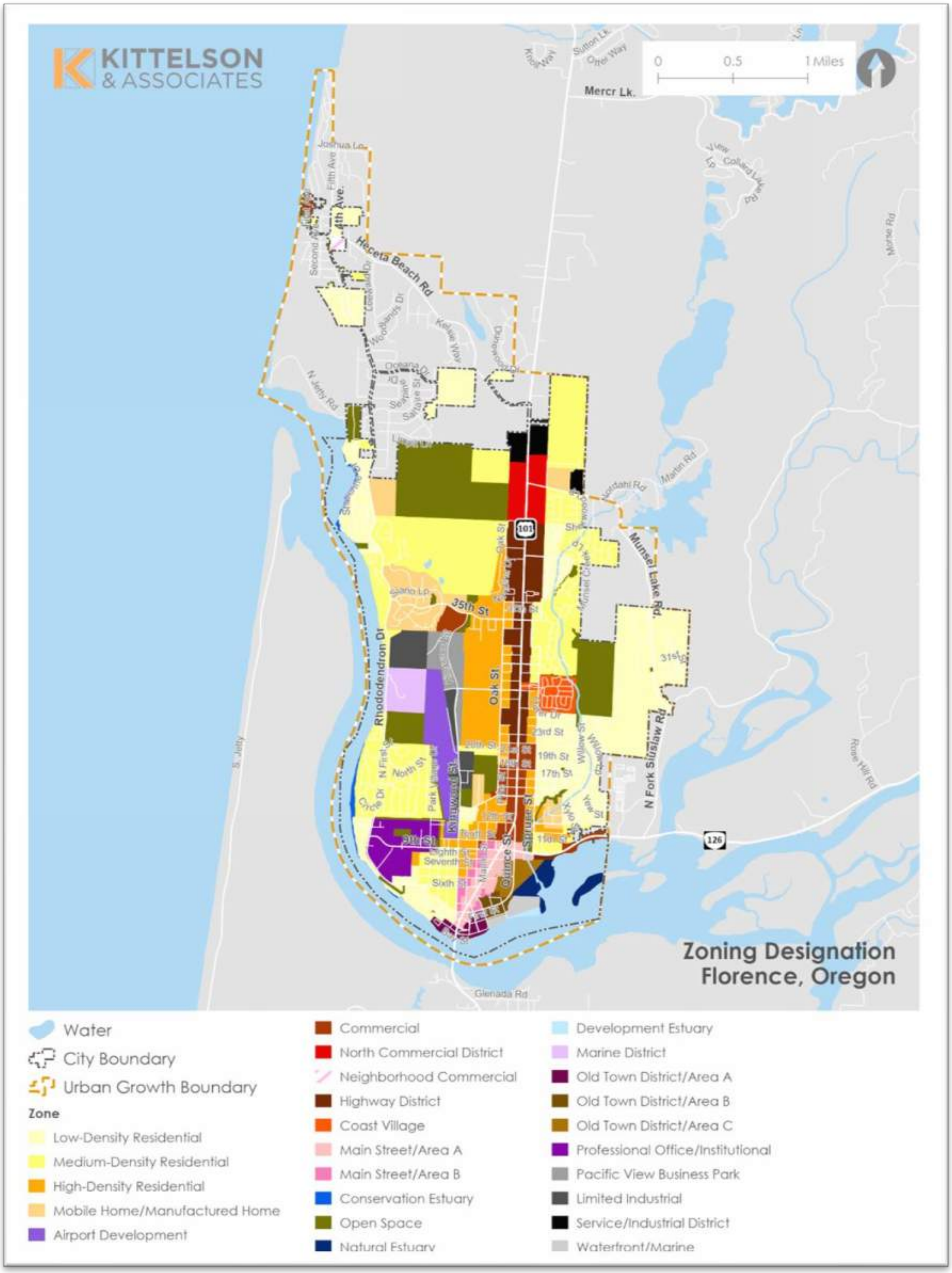
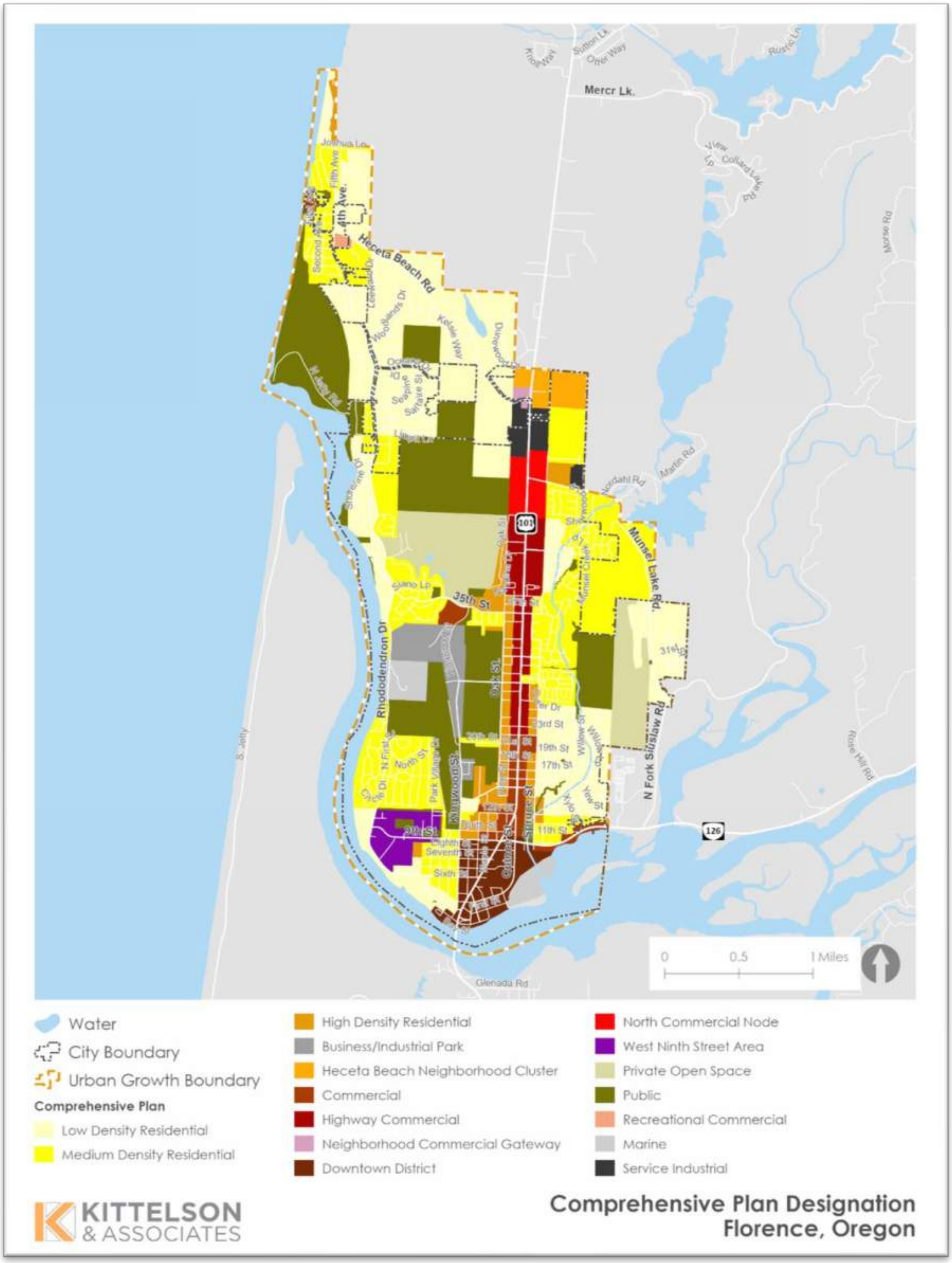


Figure 3: Comprehensive Plan Designation in the Florence Urban Growth Boundary



NATURAL RESOURCES AND HAZARDS

Existing natural resources and environmental features influence the siting, construction, and cost of transportation improvements. As depicted in Figures 4 through 8, the City's natural resource and hazard areas are largely concentrated along the Siuslaw River and estuary area that makes up the southern border of the UGB. Most of the resource and hazard constraints are overlapping wetlands, floodplains, and tsunami evacuation areas.[1,2] The City does not have many landslide risks or steep slopes.[3] Most wetlands that are located outside of the floodplain or tsunami area are within parks or dedicated open spaces.[4]

ACTIVITY CENTERS

Connecting residents and workers to services they use on a daily basis can be accomplished by well-considered land use planning. Activity centers where the transportation network should support multi-modal and accessible public transportation are shown in Figure 9. Key activity centers in the City of Florence include:

- Suislaw Public Library
- Florence Post Office
- Florence Events Center
- Florence schools and education facilities
- Florence Hospital and emergency services
- Florence public parks

As shown in Figure 9, most of the activity centers in the city are concentrated around US 101 through the center of town. Most of the city's commercial and retail services are located along US 101 as well, which serves as the city's commercial corridor. Other activity centers are near the southern end of town around the junction of 9th Steet and US 101, including the Florence Events Center and the library.

[1] Oregon Flood Zones: https://spatialdata.oregonexplorer.info/geoportal/details;id=ff1020590e3e4f8b96a02fba8ed85e1a
[2] Tsunami Evacuation Zones: https://spatialdata.oregonexplorer.info/geoportal/details;id=2a536e89e9ea4b20ac3ac424a44c92d2
[3] Oregon Department of Geology and Mineral Industries: https://spatialdata.oregonexplorer.info/geoportal/details;id=f20fe1f6573248c5b6c580c2f1738cae
[4] Oregon Wetlands Database: https://spatialdata.oregonexplorer.info/geoportal/details;id=51b33a5392404b8f83be5a36b5d25e72

Figure 4: All Natural Resources and Environmental Hazards/Constraints

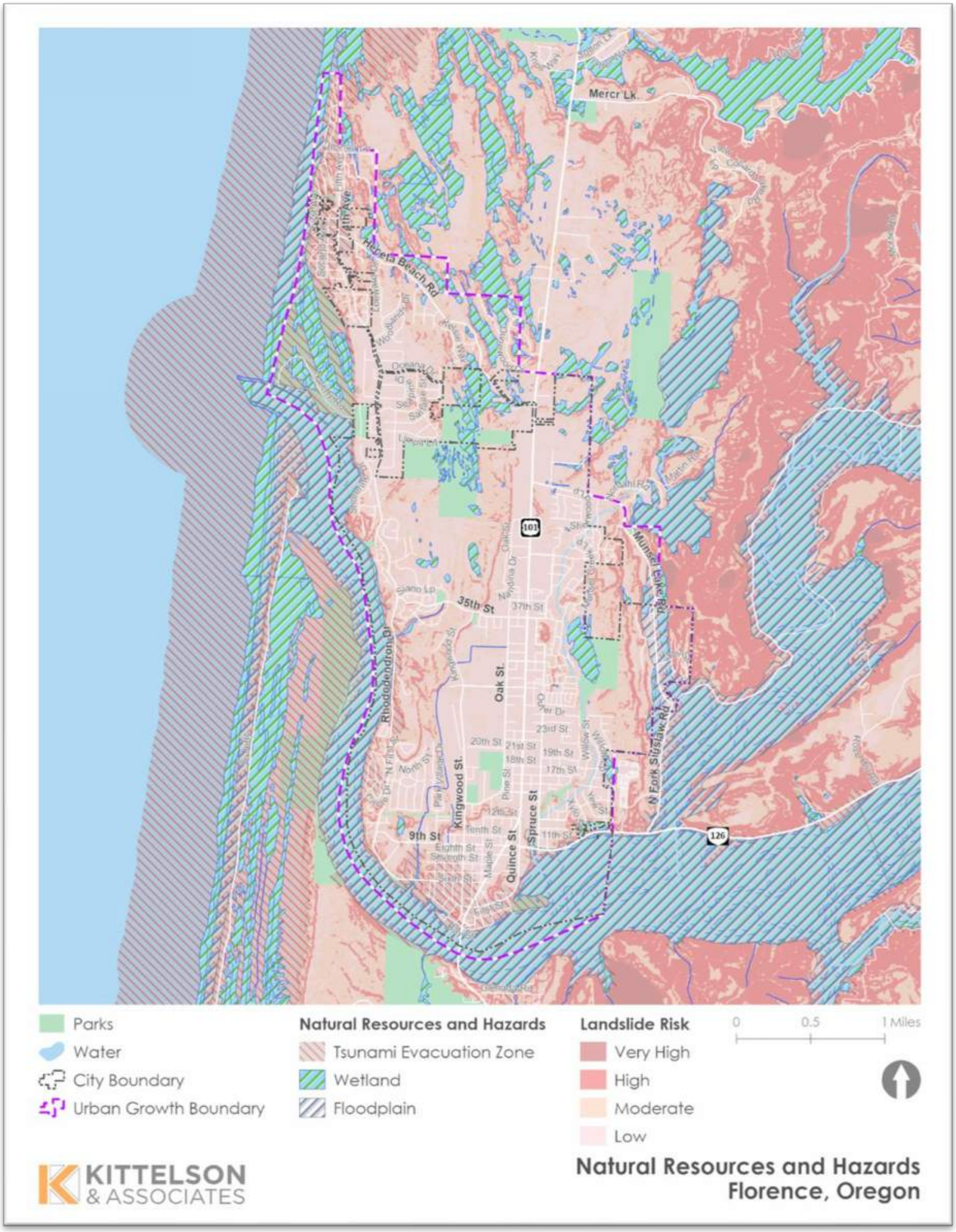


Figure 5: 100-Year Floodplains in Florence

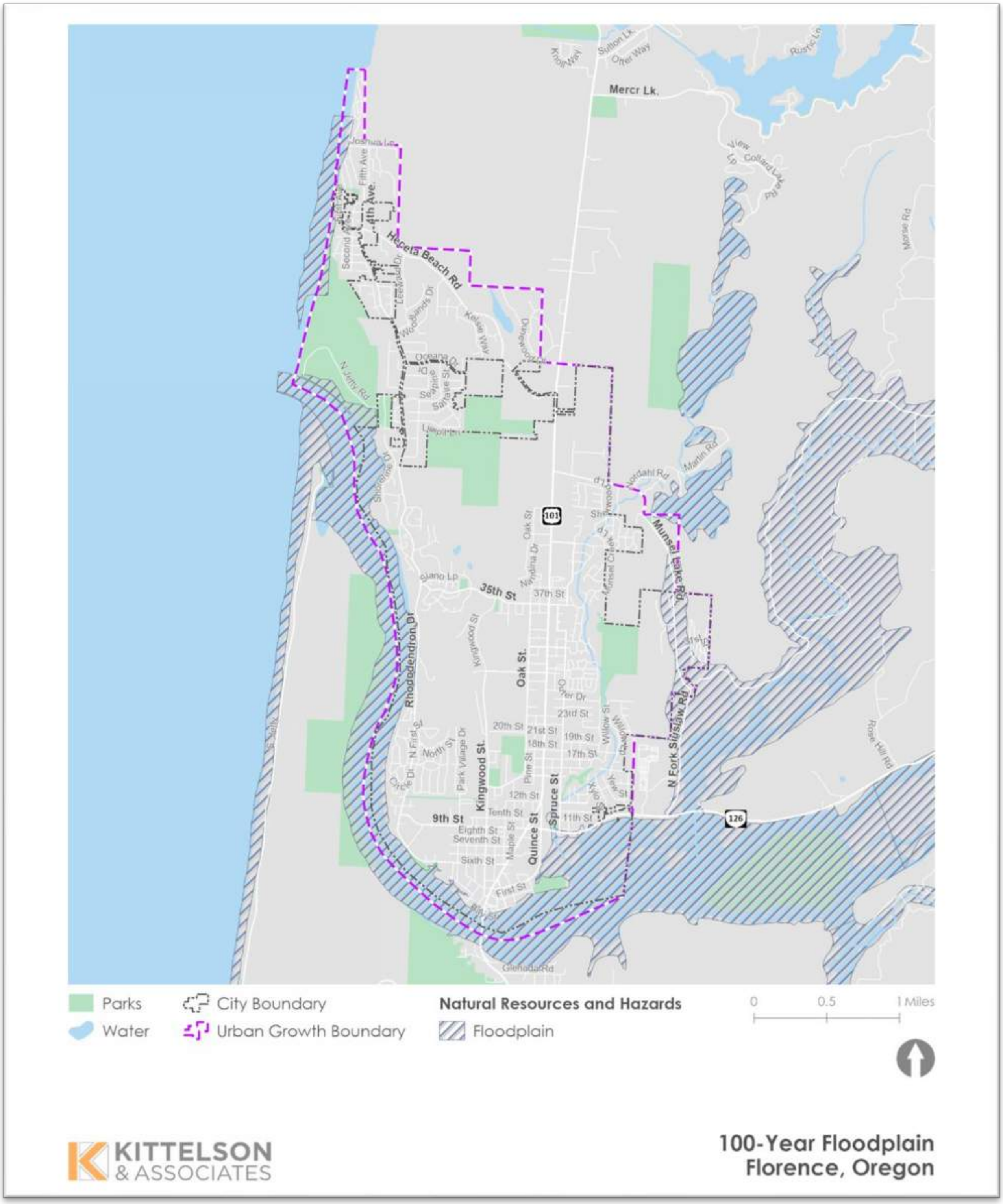


Figure 6: Wetlands in Florence

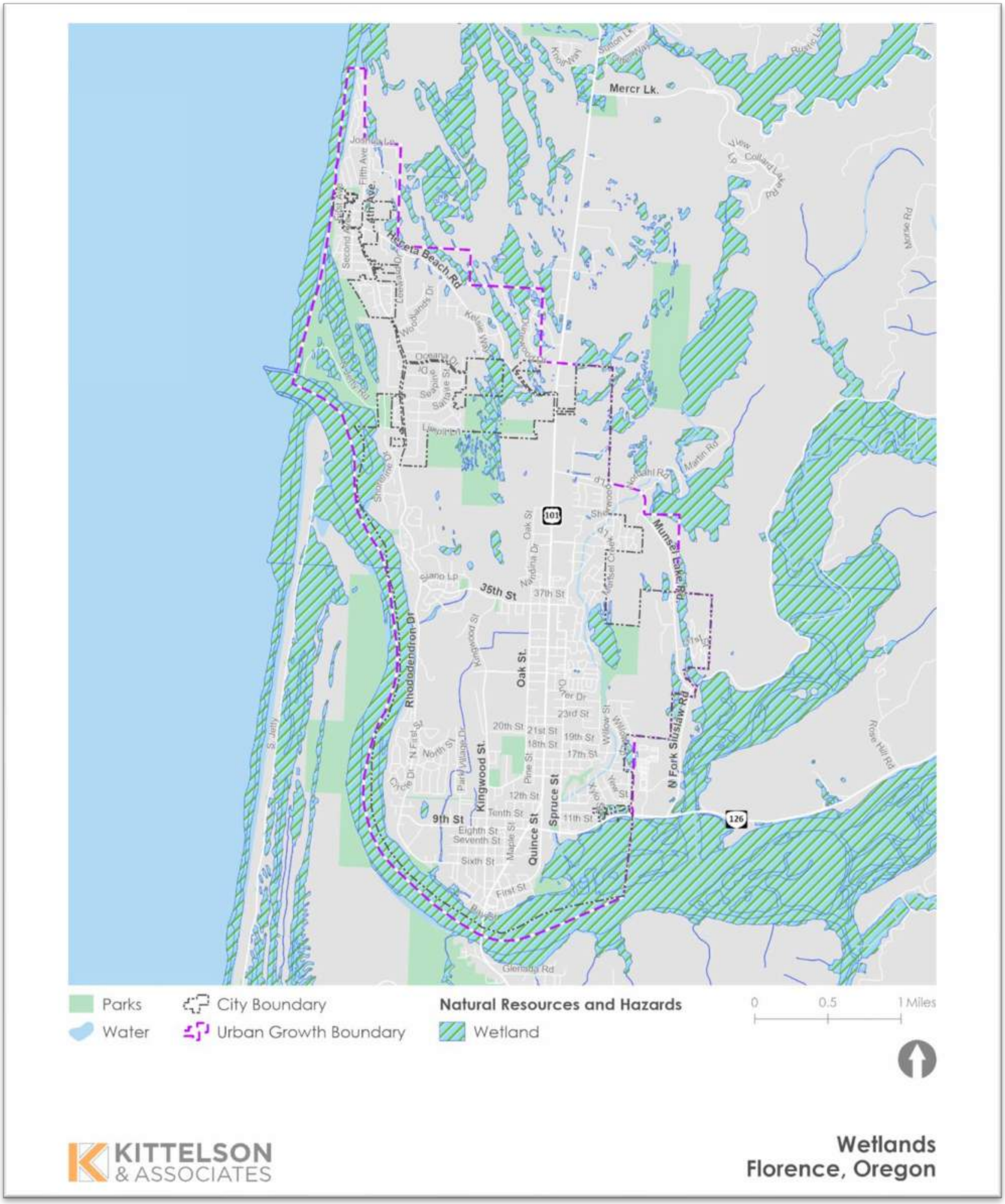


Figure 7: Tsunami Evacuation Areas in Florence

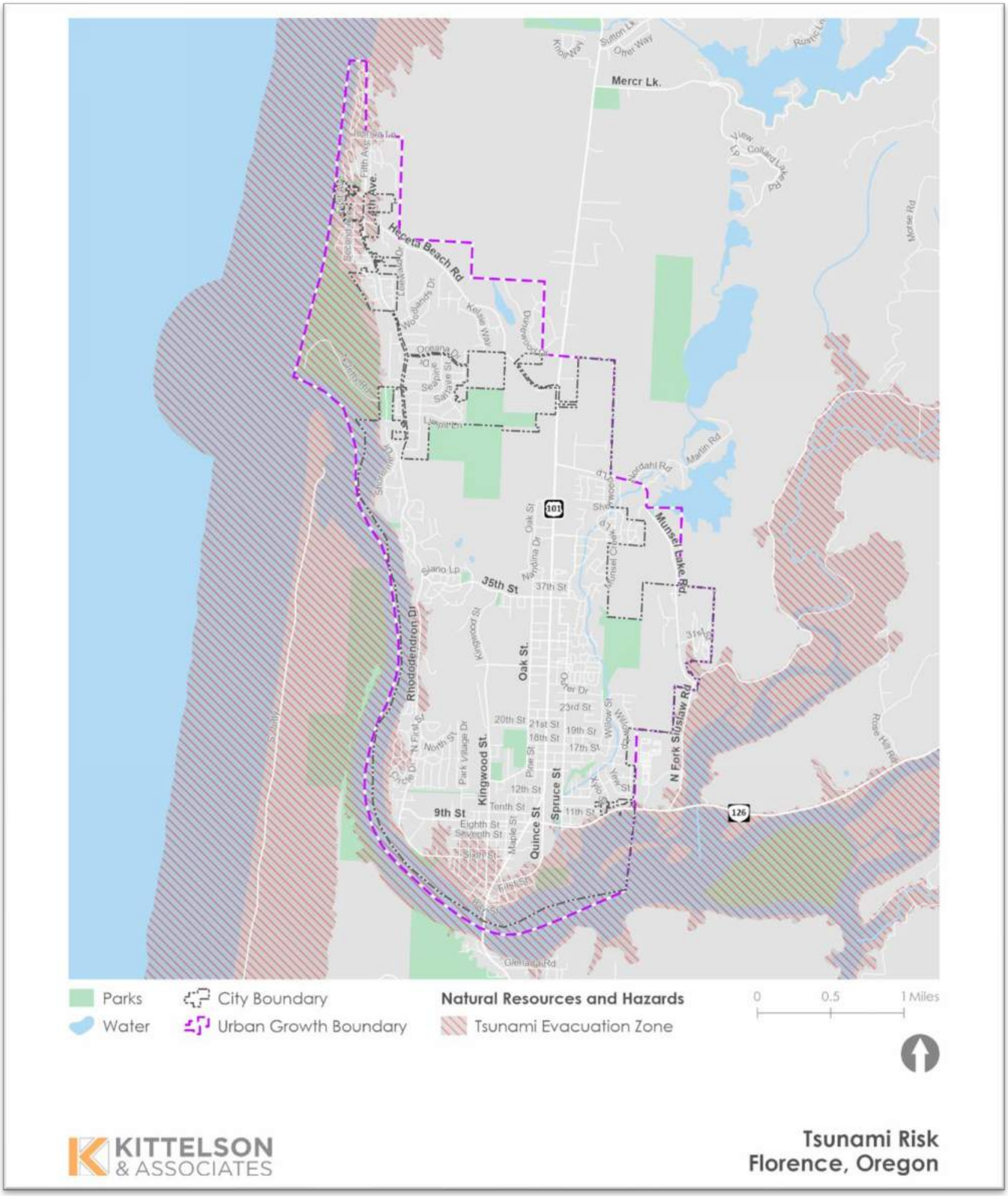


Figure 8: Landslide Hazard Areas in Florence

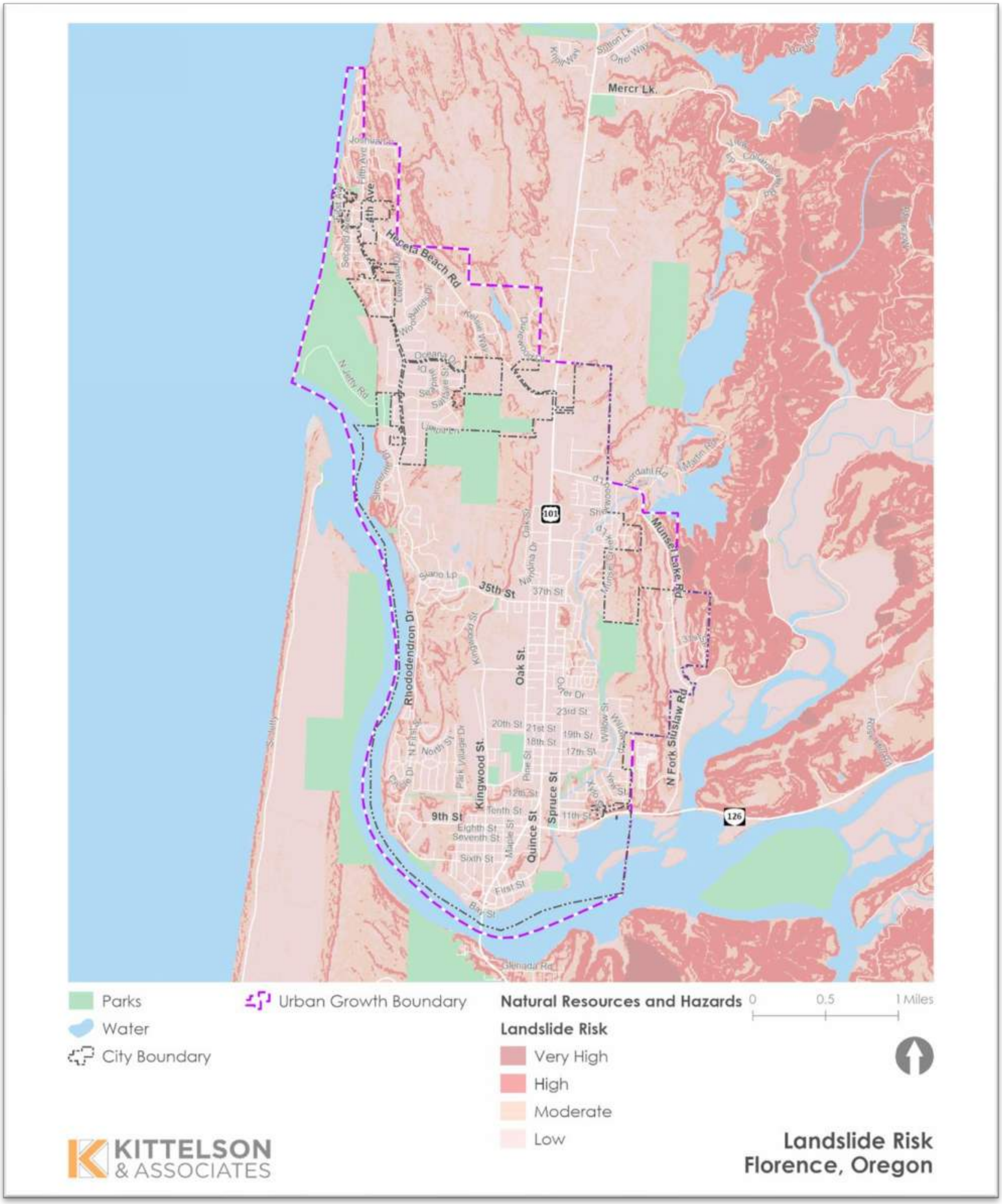
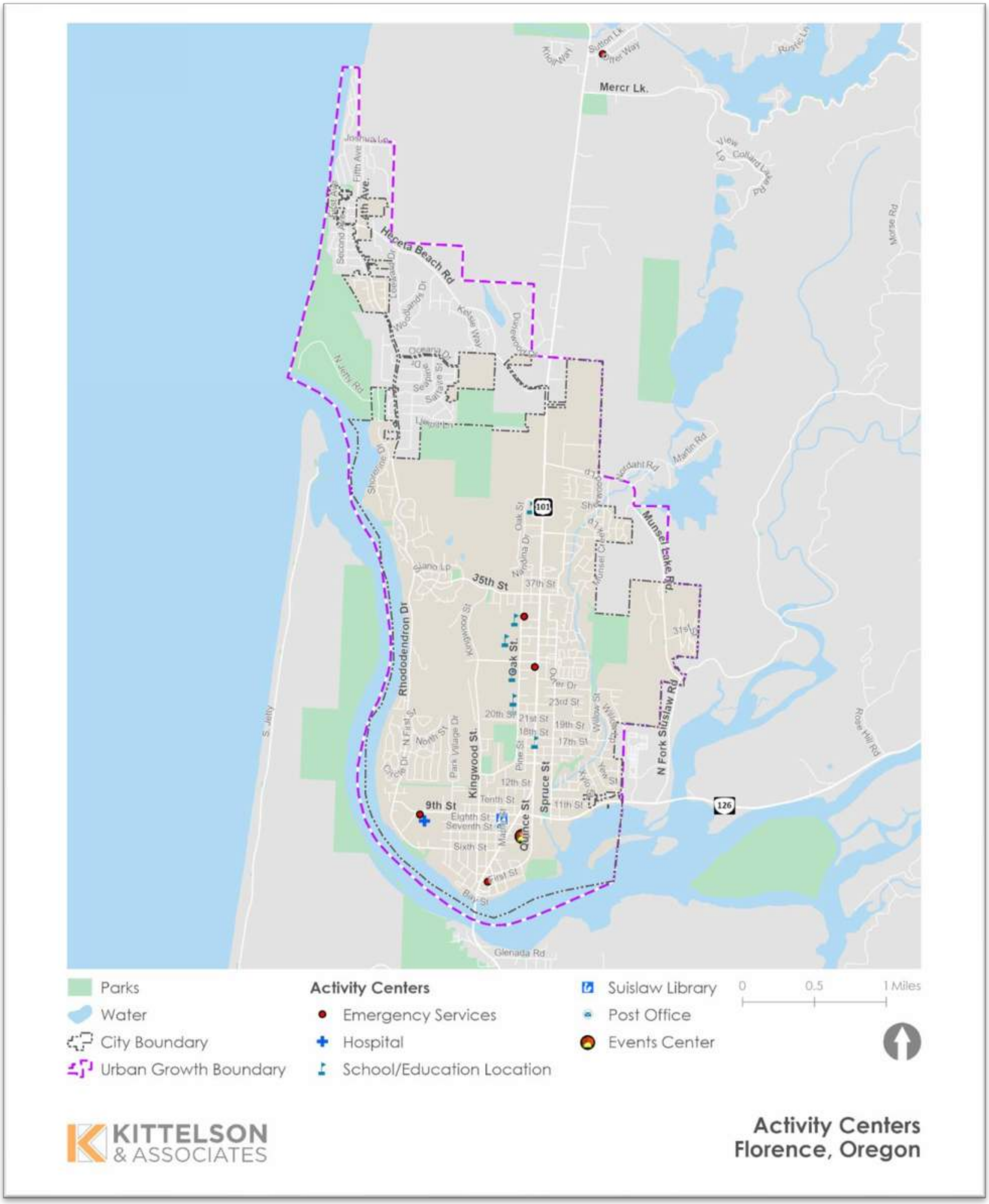


Figure 9: Activity Centers



GENERAL POPULATION

Florence is located on the Oregon Coast in Lane County, bound by the Pacific Ocean to the west and the Oregon Coast Range and Siuslaw National Forest to the east. As of the 2020 census, Florence is home to an estimated 9,396 residents, and the Portland State University Population Research Center (PRC) estimates the City's 2020 population within the UGB at 11,182 residents.

Table 4 compares Florence's 10-year population growth with Lane County and Oregon. Since 2010, Florence has experienced population growth at twice the rate of the rest of Lane County, and the City's growth is roughly on pace with the rest of Oregon. Overall, Florence grew by about 11% since 2010, which represents an estimated 930 people.

Table 4: Florence Population Growth

Geography	2010 Population	2020 Population	2010-2020 Change	
			Number	*Percent*
State of Oregon	*3,831,074*	*4,237,256*	*406,182*	*10.6%*
Lane County	*351,715*	*370,192*	*18,477*	*5.2%*
Florence	8,466	9,396	930	11.0%

Source: 2010 US Census, 2020 US Census

The PRC develops long-term coordinated population forecasts for Oregon's UGBs on a routine basis. PRC forecasted population figures for Florence and Lane County are provided in Table 5. The PSU PRC population methodology addresses places within a UGB individually; forecasts for areas outside UGBs are consolidated into a single forecast. Florence is forecasted to grow at a slower rate than the rest of Lane County in the next 10 years, however the City is expected to grow at a faster rate than the County over the next 20 years.

Table 5. Florence Population Forecasts (*% growth)*

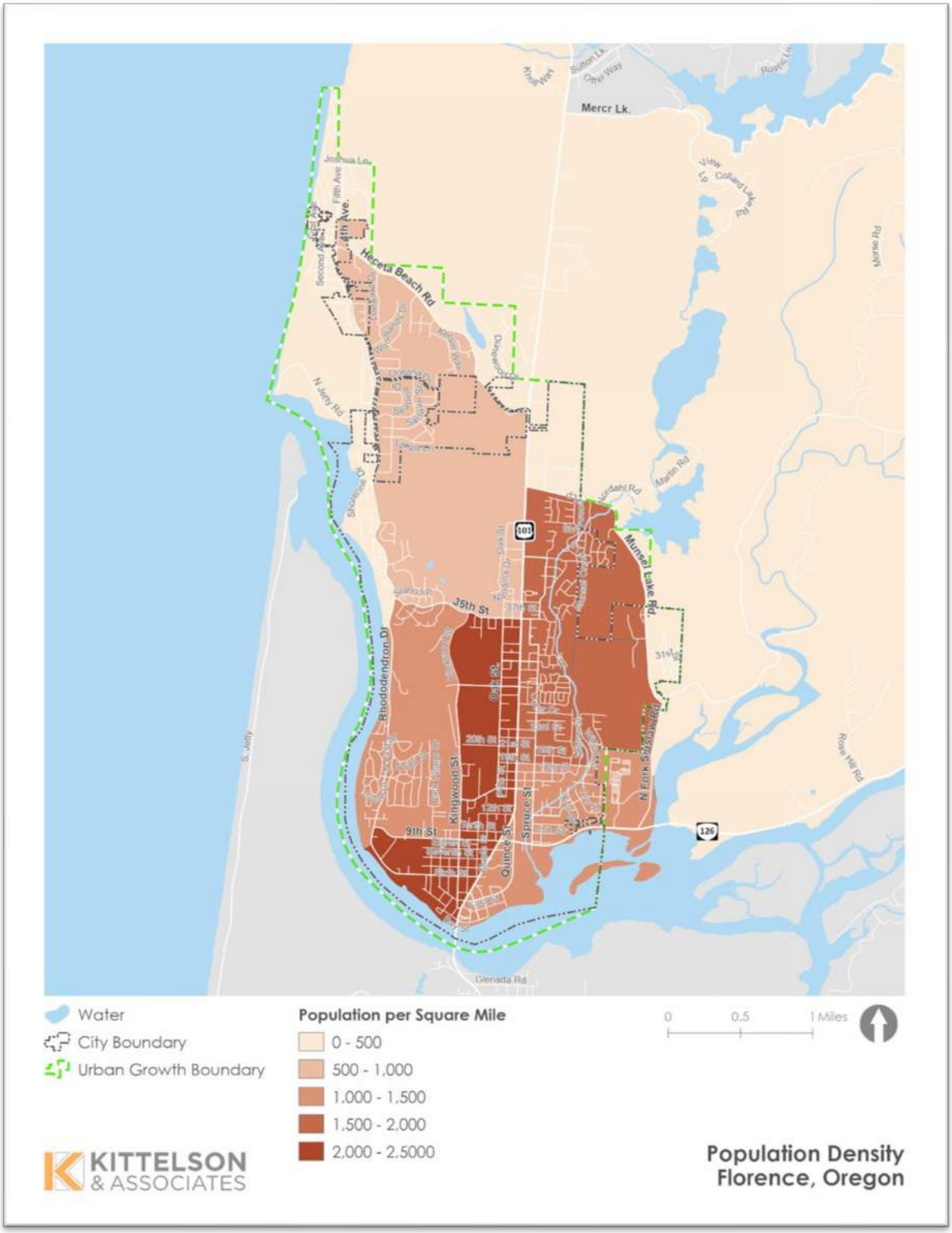
	2010	2020	2030	2040
Lane County	*351,715*	*370,192 (5.2%)*	*412,045 (11.3%)*	*434,846 (5.5%)*
Florence UGB	10,327	11,182 (7.6%)	11,904 (6.5%)	13,304 (11.8%)

Source: PSU Population Research Center

Figure 10 shows the population density (people per square mile) of Florence by block group.[5] Population density is generally higher in the southern half of the City, and density tapers off to the north. Further, population is more highly concentrated near US 101 and the City center.

[5] Census Block Groups are the smallest demographic unit for which 5-year American Communities Survey (ACS) data are available. While they provide valuable information for this planning process, they do not necessarily coincide with jurisdictional boundaries for the communities of Lane County.

Figure 10: Florence Population Density (People per Square Mile) by Block Group



TITLE VI AND ENVIRONMENTAL JUSTICE POPULATIONS

This section provides an analysis of existing Title VI and Environmental Justice (EJ) populations. Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d-1) states that "no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." In combination with subsequent federal nondiscrimination statutes, agencies receiving federal financial aid are prohibited from discriminating based on race, color, national origin, age, economic status, disability, or sex (gender).

Title VI populations include individuals who identify as minorities (both racial and ethnic), low-income, disabled, elderly (65+), and youth/children (under 18).[6] These populations are identified because their access to an automobile or their ability to drive an automobile may be limited or non-existent. While this may also be the case for individuals in the general population, there is a greater possibility that access to transit is more crucial for those within the identified populations. Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, culture, education, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Understanding the profile of Title VI and EJ populations in Florence will help the City adopt TSP policies and identify projects to mitigate and minimize adverse environmental and health effects that the transportation system imposes on these groups.

Table 6 summarizes the Title VI and EJ populations in Florence and the State of Oregon as a whole. The following sections include detailed demographic summaries for age, income, race/ethnicity, and people with disabilities in Florence, and compares these figures with corresponding demographics for the rest of Lane County and Oregon.

Table 6: Florence Title VI and Environmental Justice Populations

	Florence	*State of Oregon*
Population[7]	9,396	*4,237,256*
Percent youth (under 18 years old)[8]	10%	*21%*
Percent seniors (65 years or older)[4]	45%	*18%*
Percent minority populations[7]	15%	*28%*
Percent Hispanic or Latino/a/x[7]	6%	*14%*
Percent of households below poverty line[9]	33%	*29%*
Percent of Renters Housing Burdened[10]	54%	*51%*

[6] Other relevant federal statutes include the Federal-Aid Highway Act, the Rehabilitation Act of 1973, the Age Discrimination Act of 1975, the Civil Rights Restoration Act of 1987, the Americans with Disabilities Act of 1990 (ADA), Executive Order 12898 Federal Actions to Address Environmental Justice in Minority Populations, and Executive Order 13166 Improving Access to Services for Persons with Limited English Proficiency. (FTA. 2015. Title VI of the Civil Rights Act of 1964, available at http://www.fta.dot.gov/civilrights/12328.html).

[7] 2020 US Decennial Census

[8] 2020 5-Year American Community Survey Estimates Detailed Tables, Table B01001

[9] 2020 5-Year American Community Survey Estimates Detailed Tables, Table C17002

[10] 2020 5-Year American Community Survey Estimates Detailed Tables: Table DP04

Percent with disability[11]	25%	*14%*
Percent Limited English Proficiency[12]	0.6%	*2.4%*

Source: 2020 US Census; 2020 American Community Survey

Age

Figure 11 and Figure 12 illustrate the proportion of youth (people under age 18) and seniors (people older than 65) by block group within Florence. Florence has a lower percentage of persons under 18 than the statewide and county average. The density of persons under 18 is highest in the central block groups that border US 101 to the west, which is where each of the city's schools are located. Conversely, Florence has a significantly higher percentage of seniors as compared to the statewide average. Nearly half of the total population is aged 65 and older. The density of seniors highest in the northeastern and southwestern areas of the city. Table 7 summarizes the youth and senior populations in Florence.

Table 7: Youth and Senior Populations for Florence

	Total Population	Youth (Under 18)		Seniors (65 and Older)	
		Population	Percent	Population	Percent
Oregon	4,176,346	867,076	21%	734,932	18%
Lane County	377,749	69,406	18%	72,919	19%
Florence	9,037	926	10%	4,030	45%

Source: Table B01001, 2020 5-year American Community Survey Estimates Detailed Tables

Race and Ethnicity

Information on race and ethnicity includes a combination of Hispanic or Latino origins as well as race at the Census Block geographic levels. Origin can be viewed as the heritage, nationality group, lineage, or country of birth of the person or the person's parents or ancestors before their arrival in the United States. People who identify their origin as Hispanic or Latino may be any race. Race is based on racial classifications issued by the Office of Management and Budget (white, black or African American, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and Some Other Race). Respondents can select two or more races.

Figure 13 illustrates the percentage of non-white residents, or minority populations, by Census block in Florence. In the U.S. Census Bureau's American Community Survey (ACS) [13], minority populations include non-white racial groups as well as people identifying as Hispanic or Latino. Overall, Florence has a lower percentage of households with minority populations and people of color than the rest of Oregon and Lane County. Minority populations are relatively more concentrated in the south-central region of the city along US 101. Table 8 summarizes the race and ethnicity data for Florence.

---

[11] 2020 5-Year American Community Survey Estimates Detailed Tables, Table DP02

[12] 2020 5-Year American Community Survey Estimates Detailed Tables: Table S1602

[13] Because the ACS is based on a sample, they have a margin of error. The margin of error, combined with the ACS estimate, provides a range of values within which the actual value may fall. As such, demographic information using ACS data should be considered carefully.

Figure 11: Percentage of Youth (under 18 years old) by Block Group

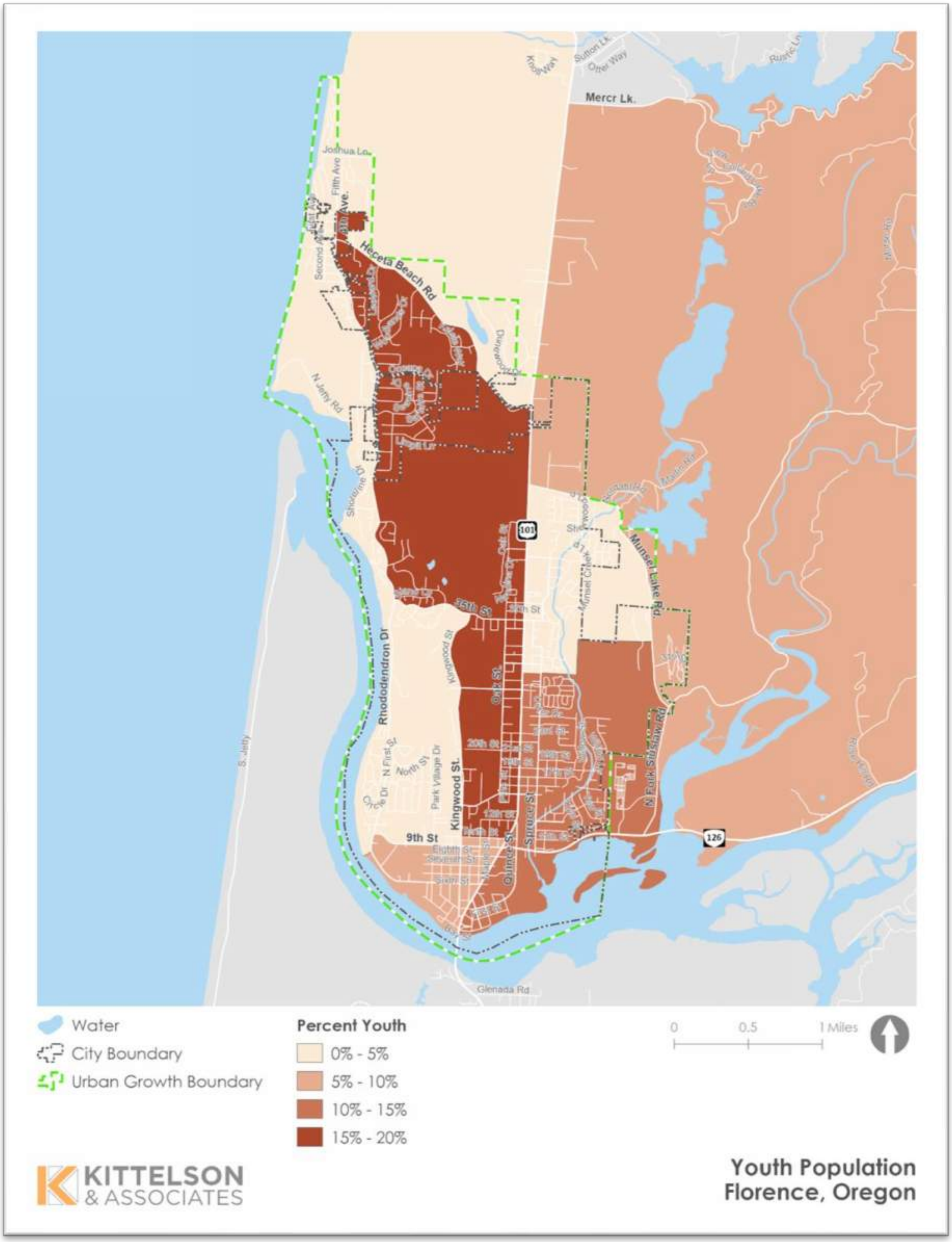


Figure 12: Percentage of Seniors (age 65 and older) by Block Group

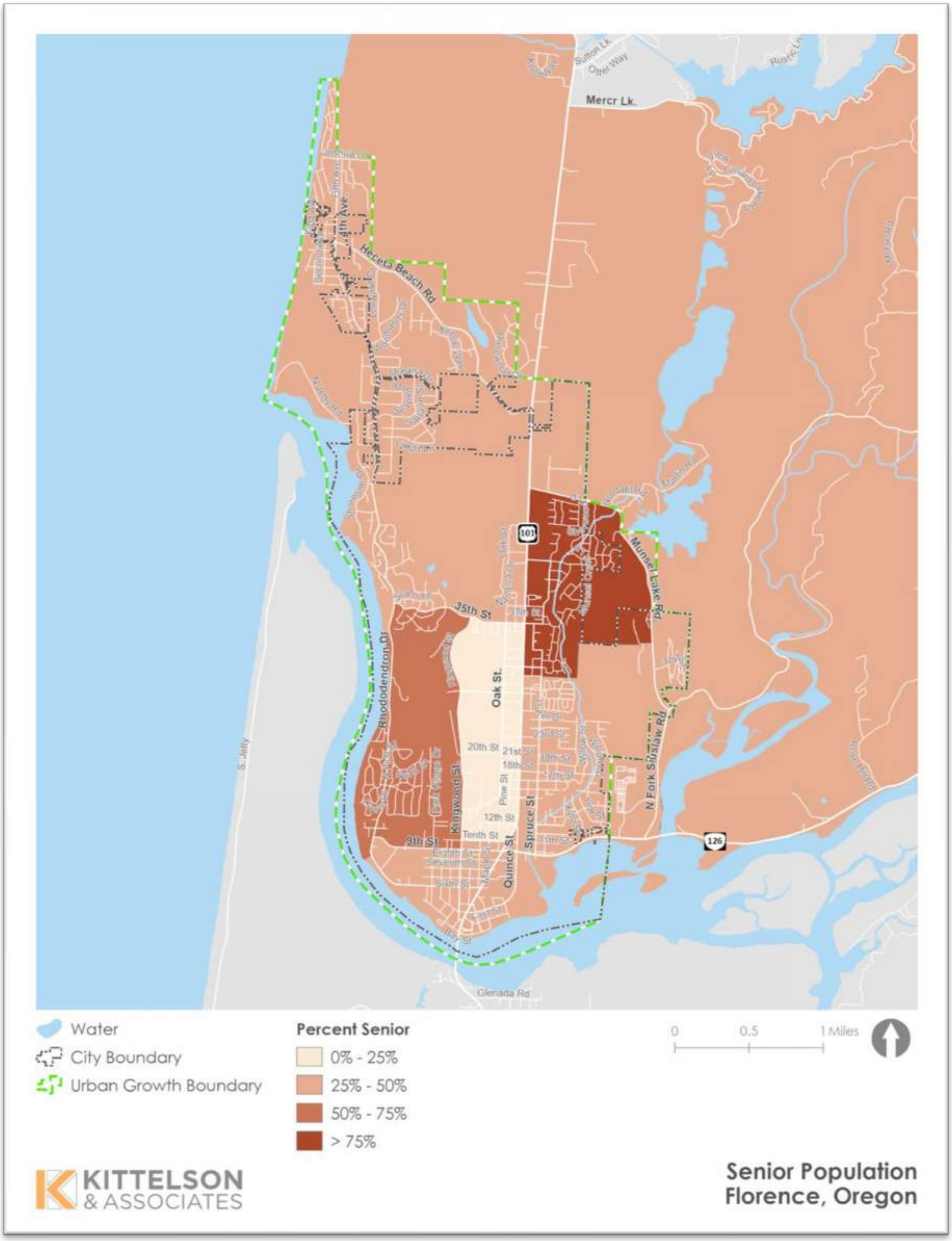


Figure 13: Minority Population by Block Group

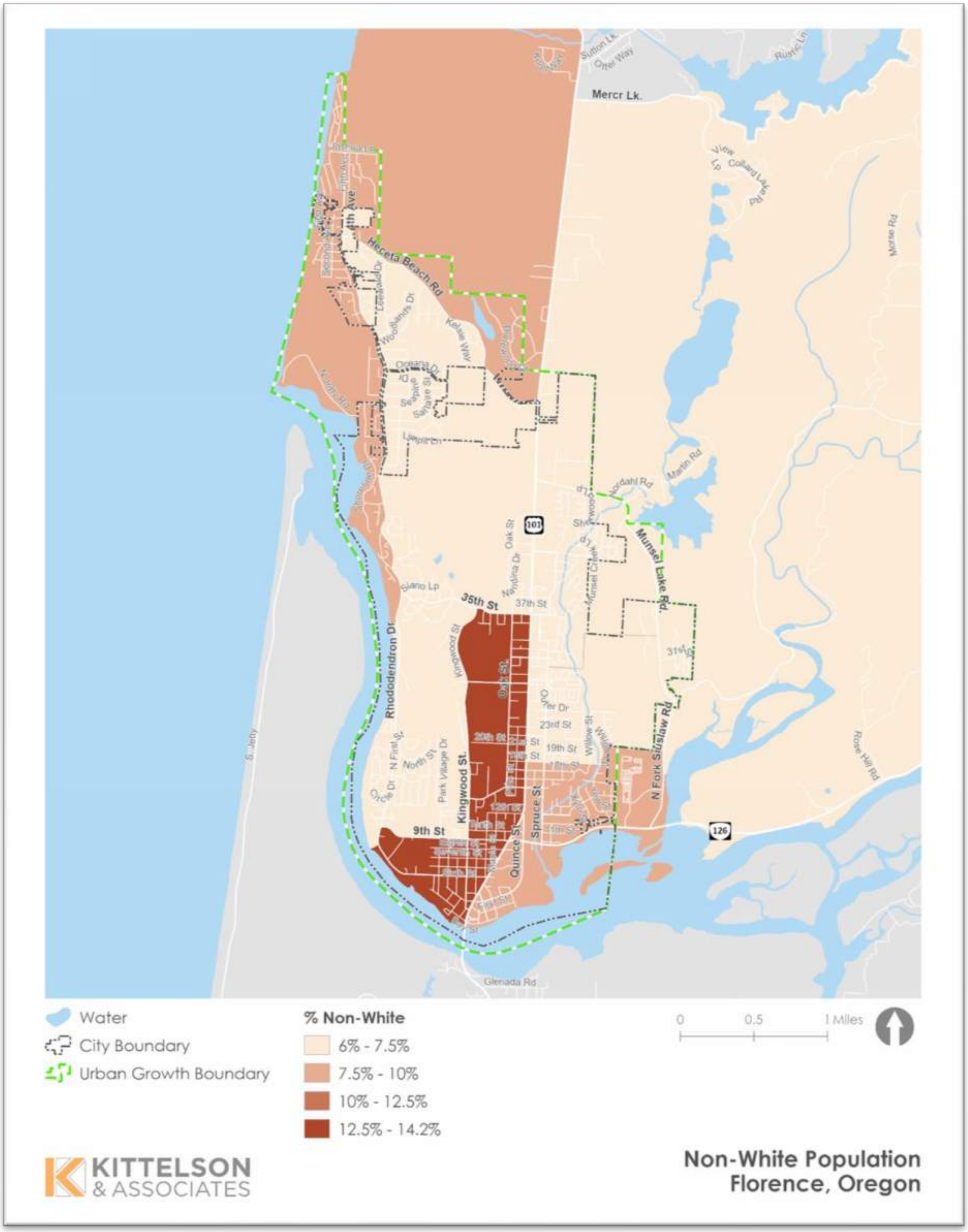


Table 8: Race & Ethnicity for Florence

	Total Population	Hispanic or Latino/a/x	White	Black or African American	Native American and Alaska Native	Asian	Native Hawaiian or Pacific Island	Other	Two or More Races
State	4,237,256	14%	72%	2%	1%	5%	0.4%	0.5%	6%
Lane County	382,971	10%	78%	1.1%	1%	2.5%	0.2%	0.6%	7%
Florence	9,396	6%	85%	0.4%	0.9%	1%	0.2%	0.5%	5%

Source: 2020 Decennial Census

Household Income

The federal poverty threshold is calculated by the size of the household and is adjusted annually. In 2021 the threshold for an individual is $12,880 in annual earnings, and $26,500 for a household of four.[14] The US Census Bureau measures poverty by looking at the ratio between a household's income in the last 12 months and the household's poverty threshold, called the Ratio of Income to Poverty. Households with an Income to Poverty Ratio below 1 are eligible for federal assistance programs; however, households with a ratio between 1 and 2 still experience the impacts of poverty and may be eligible for other benefits, such as the Supplemental Nutrition Assistance Program (SNAP, formerly known as Food Stamps). Figure 14 displays the percentage of the population in Florence with a Poverty to Income Ratio below 2. In Florence, poverty rates are most highly concentrated in the eastern and southern census block groups. Table 9 summarizes the ratio of income to poverty in Florence.

Table 9: Ratio of Income to Poverty

	Total Population	Population Below Poverty Threshold of 2	Percent
Oregon	**4,237,256**	1,248,819	29%
Lane County	370,192	132,231	36%
Florence	9,396	3,103	33%

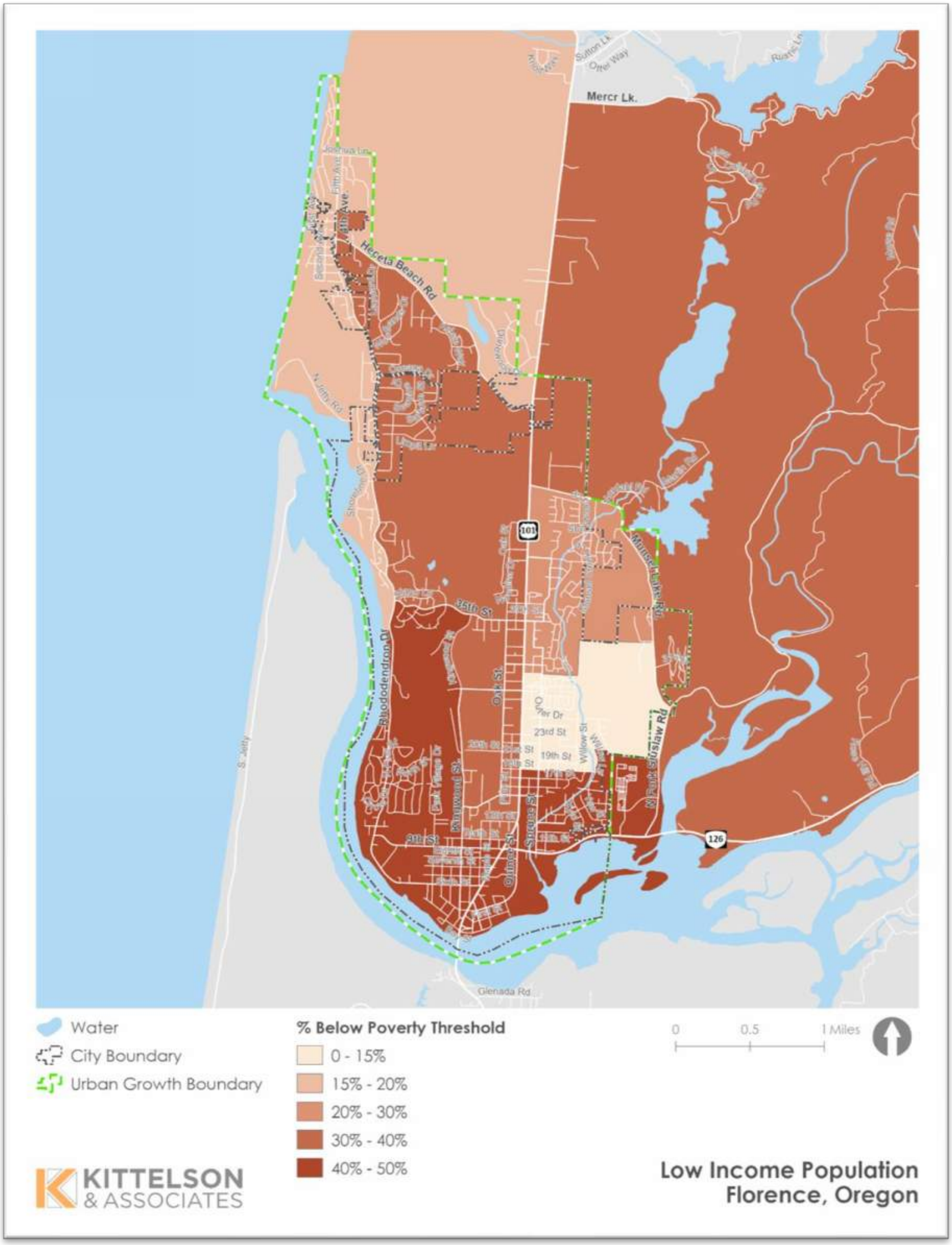
Source: Table C17002, 2020 5-year American Community Survey Estimates Detailed Tables

Populations with a Disability

Information on disabled population was gathered from ACS data through the SNAP. Disability status is a self-reported variable within the data source. Disability within ACS data is limited to four basic areas of functioning: hearing, vision, cognition, and ambulation. It is further supplemented by Katz Activities of Daily Living (ADL) and Lawton Instrumental Activities of Daily Living (IADL) scales which relate to difficulty with bathing, dressing, and performing errands.

[14] https://www.healthcare.gov/glossary/federal-poverty-level-fpl/

Figure 14: Low Income Population Measured by Income to Poverty Ratio by Block Group



Florence has a higher percentage of persons living with a disability than Oregon and Lane County, with approximately one-quarter of the population living with a disability, as shown in Table 10.

Table 10: Population with a Disability for Florence

	Total Population	Persons with a Disability	Percent Population with a Disability
Oregon	4,237,256	592,689	14%
Lane County	382,971	63,413	17%
Florence	9,396	2,327	25%

Source: Table DP02, 2020 5-year American Community Survey Estimates Date Profile

Language

Information on limited English proficient households for Florence is from the "Household Language by Household Limited English-Speaking Status" category from the 2020 ACS. As shown in Table 11, a very small number of Florence households speak a language other than English as their primary language; less than 1 percent compared to 2.4 percent for the State and 1.2 percent for Lane County.

Table 11: Limited English Speaking Households

	Total Households	Limited English	
		Households	Percent
Oregon	1,642,579	39,527	2.4%
Lane County	154,516	1,862	1.2%
Florence	4,649	29	0.6%

Source: Table S1602, 2020 5-year American Community Survey Estimates Detailed Tables

COST OF HOUSING

The US Department of Housing and Urban Development (HUD) defines a cost burdened household as those "who pay more than 30 percent of their income for housing" and in turn have difficulty being able to afford other basic necessities.[15] Florence has a high percentage of renter households that are cost burdened at slightly over half of the City's renters, which is roughly consistent with the rest of Oregon, as shown in Table 12.

Table 12: Gross Rent as a Percentage of Household Income (Housing Cost Burdened)

	Total Households Paying Rent	Cost Burden	
		Households	Percent
Oregon	576,599	291535	51%
Lane County	59,477	31,885	43%
Florence	1,554	846	54%

Source: Table DP04, 2020 5-year American Community Survey Estimates Detailed Tables

[15] HUD User: https://www.huduser.gov/portal/pdredge/pdr_edge_featd_article_092214.html#:~:text=HUD%20defines%20cost%2Dburdened%20families,of%20one's%20income%20on%20rent.

APPENDIX D: TECH MEMO #3B: TRAFFIC OPERATIONS

TECH MEMO #3B: EXISTING CONDITIONS ANALYSIS

Date:	April 2, 2023
To:	Wendy Farley-Campbell, Shirley Gray, Erin Reynolds, and Mike Miller, City of Florence Michael Duncan, Oregon Department of Transportation
From:	Michael Ruiz-Leon, Matt Bell, Susan Wright, PE, PMP, Kittelson & Associates, Inc.
Project:	City of Florence Transportation System Plan Update
Subject:	Draft Tech Memo #3B: Existing Conditions Analysis

Table of Contents

Introduction

This memorandum summarizes information related to existing transportation system conditions in the City of Florence for the Florence Transportation system Plan (TSP) update. This memorandum includes information on traffic counts conducted at the study intersections and the results of the intersection operations analysis, non-automobile analysis, crash analysis, access management analysis, and environmental analysis. The information provided in this memorandum addresses the requirements identified in Oregon Administrative Rule 660-012-020 (Elements of a Transportation System Plan) for providing a general assessment of existing transportation facilities and services. The information provided in this memorandum will serve as the basis for developing and evaluating transportation system alternatives and identifying improvement projects for the Florence TSP update.

Traffic Counts

The study intersections for the Florence TSP update were determined by the City of Florence (City) in coordination with the Oregon Department of Transportation (ODOT). There are 20 study intersections located along state and local facilities, including three signalized intersections

(intersections 4, 8, and 9) and seventeen unsignalized intersections. Figure 1 illustrates the location of the study intersections. Figure 2 illustrates the current lane configurations and traffic control devices at the study intersections.

STATE FACILITIES

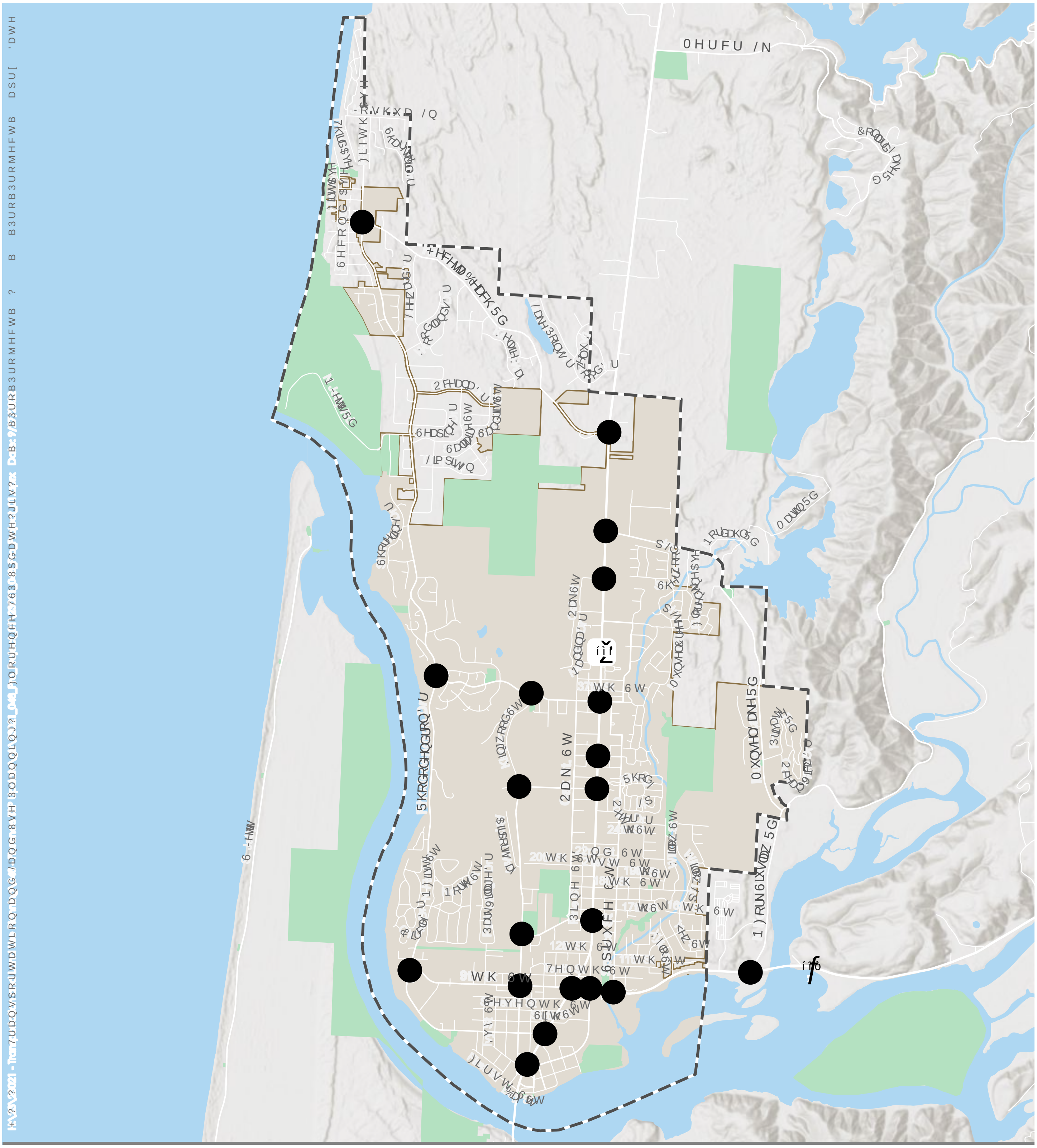
1. US 101/Heceta Beach Road
2. US 101/Munsel Lake Road
3. US 101/46th Street
4. US 101/35th Street (Signal)
5. US 101/30th Street
6. US 101/27th Street
7. US 101/15th Street
8. US 101/OR 126 (Signal)
9. US 101/Rhododendron Drive (Signal)
10. US 101/2nd Street
11. OR 126/Quince Street
12. OR 126/Spruce Street
13. OR 126/North Fork Siuslaw Road

LOCAL FACILITIES

1. Rhododendron Drive/35th Street
2. Rhododendron Drive/9th Street
3. Rhododendron Drive/Heceta Beach Road
4. Kingwood Street/35th Street
5. Kingwood Street/27th Street
6. Kingwood Street/15th Street
7. Kingwood Street/9th Street

Turning movement counts were conducted at the study intersections in June 2021. The counts were conducted on a typical mid-week day when local schools were in session but in a remote learning environment. All the counts were conducted over a 16-hour period (6:00 AM to 10:00 PM) and include the total number of pedestrians, bicyclists, and motor vehicles that entered the study intersections in 15-minute intervals.

The *Analysis Methodology and Assumptions Memorandum* includes information related to the peak hour development, seasonal adjustment factors, and historical factors used to develop traffic volumes for the traffic operations analysis. Per the memorandum, a system-wide peak hour of 4:00 to 5:00 PM was selected as a basis for the analysis; seasonal adjustment factors of 1.20 and 1.14 were applied to the counts on US 101 and OR 126 to reflect the peak season and a historical factor of 1.015 was applied to all the counts to reflect 2022 traffic conditions. An additional adjustment factor of 1.06 was applied to all the counts to account for potential changes in traffic volumes related to the COVID-19 pandemic. The traffic volumes were also balanced as appropriate. Figure 3 summarizes the traffic volumes developed at the study intersections for the traffic operations analysis.



6WXG\ ,QWHUVHFWLRQV

3DUNV

:DWHU

&LW\ %RXQGDU\

8UEDQ *URZWK %RXQGDU\

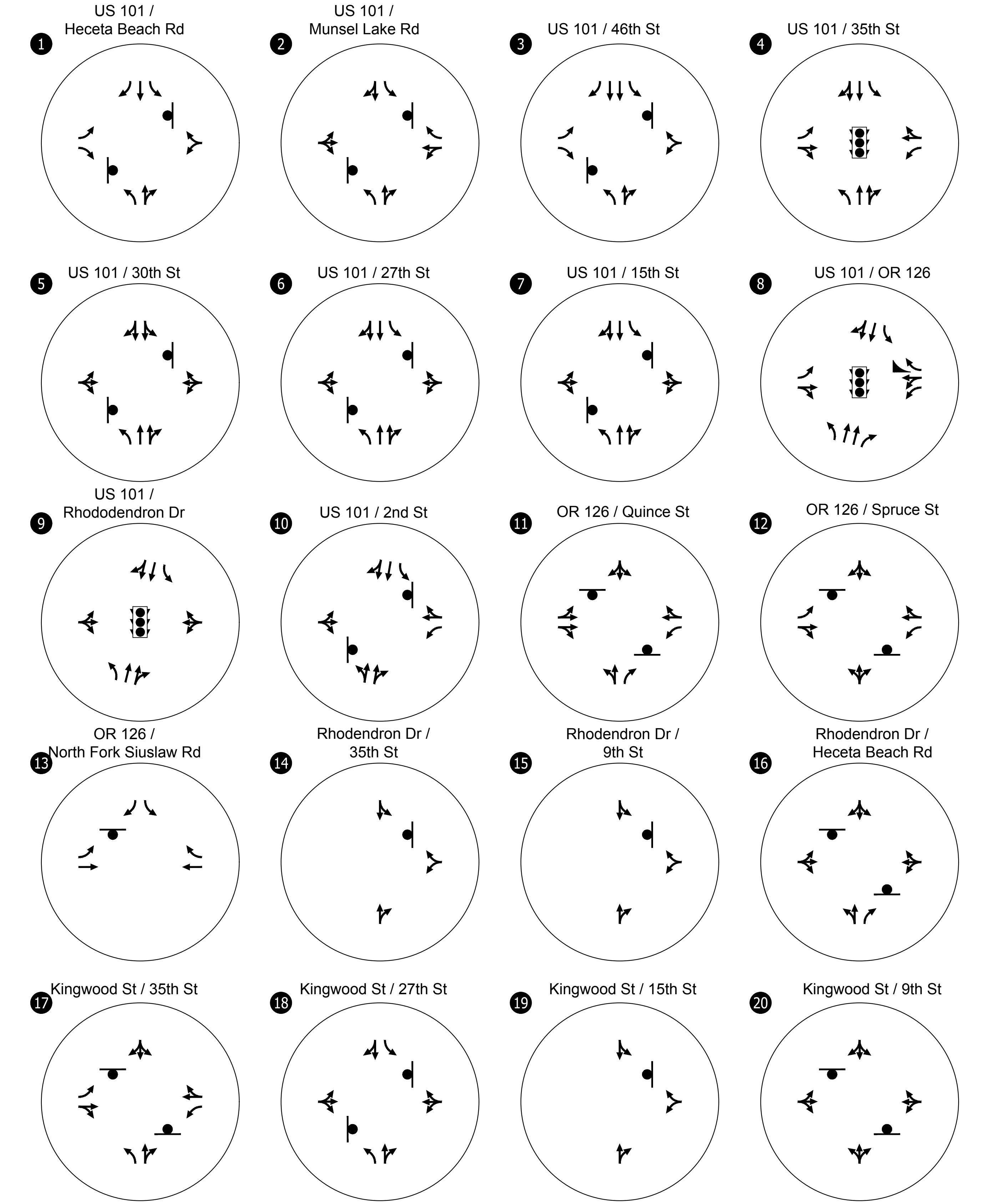
0LOHV

)LJXUH

6WXG\ ,QWHUVH

)ORUHQFH 2U

KITTELSON & ASSOCIATES



- STOP SIGN

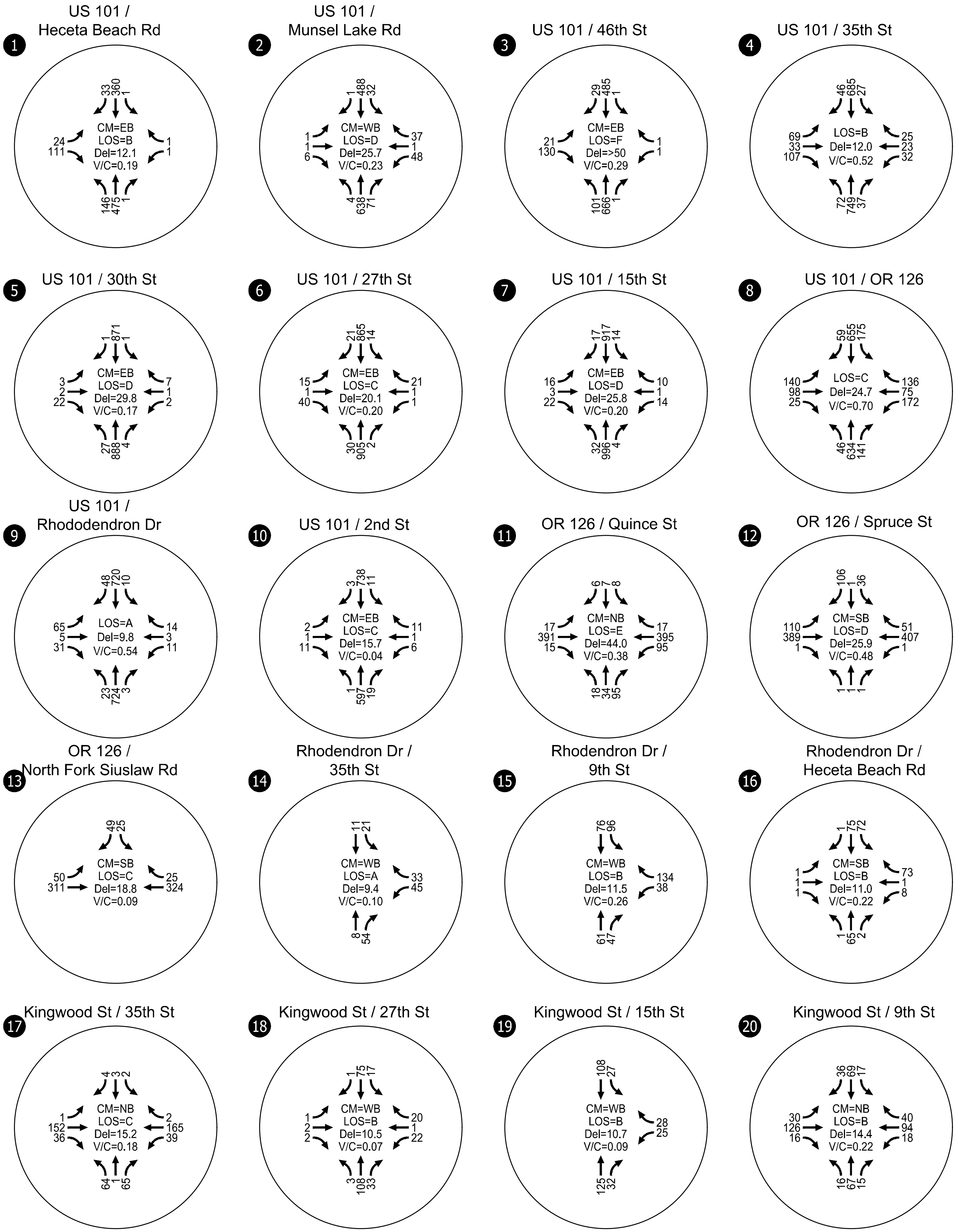
- TRAFFIC SIGNAL

Existing Lane Configurations & Traffic Control Devices Florence, OR

Figure 2

C:\Users\mruiz-leon\appdata\local\temp\AcPublish_39480\Florence TSP Figures.dwg Oct 14, 2022 - 10:56am - mruiz-leon Layout Tab: ELC & TCD

KITTELSON & ASSOCIATES



Existing Traffic Conditions
Weekday PM Peak Hour
Florence, OR

Figure 3

KITTELSON & ASSOCIATES

H:\23\23021 - Transportation and Land Use Planning\048 - Florence TSP Update\Task 3_Inventory and Existing Conditions\draft to PMT\analysis\Florence TSP Figures.dwg Dec 07, 2022 - 7:48am - mruiz-leon Layout Tab: EX

Motorized Vehicle Transportation Analysis

The motorized vehicle transportation analysis identifies how the study intersections operate under existing traffic conditions during the weekday PM peak hour. The weekday PM peak hour was selected as a basis for the analysis given that it generally represents the most critical time period throughout the day.

INTERSECTION OPERATIONS ANALYSIS

The intersection operations analysis was conducted using Synchro 11, which is a software tool designed to assist with operations analyses in accordance with Highway Capacity Manual (HCM) methodologies. The analysis results include level-of-service (LOS), delay (del), and volume-to-capacity (v/c) ratios at all intersections, regardless of jurisdiction. The LOS, del, and v/c ratios are reported for the overall intersection at signalized intersections and the critical movement at unsignalized intersections in accordance with the methodologies outlined in ODOT's Analysis Procedures Manual (APM).

Table 1 and Figure 3 summarize the results of the intersection operations analysis and compares the results to the applicable mobility standards and targets which were presented in the *Analysis Methodology and Assumptions Memorandum*. *Attachment A contains the existing traffic conditions worksheets.*

Table 1: Intersection Operations, Weekday PM Peak Hour

Map ID	Intersection	Control Type	Mobility Standard/Target[1]	Intersection Operations			
				CM	LOS	Del	v/c
1	US 101/Heceta Beach Road	TWSC	V/C = 0.80/0.90	EB	B	12.1	0.19
2	US 101/Munsel Lake Road	TWSC	V/C = 0.85/0.90	WB	D	25.7	0.23
3	US 101/46th Street	TWSC	V/C = 0.85/0.90	EB	F	70.5	0.29
4	US 101/35th Street	Signal	V/C = 0.85	-	B	12.0	0.52
5	US 101/30th Street	TWSC	V/C = 0.90/0.95	EB	D	29.8	0.17
6	US 101/27th Street	TWSC	V/C = 0.90/0.95	EB	C	20.1	0.20
7	US 101/15th Street	TWSC	V/C = 0.90/0.95	EB	D	25.8	0.20
8	US 101/OR 126	Signal	V/C = 0.85	-	C	24.7	0.70
9	US 101/Rhododendron Drive	Signal	V/C = 0.90	-	A	9.8	0.54
10	US 101/2nd Street	TWSC	V/C = 0.90/1.0	EB	C	15.7	0.04
11	OR 126/Quince Street	TWSC	V/C = 0.85/0.95	NB	E	44.0	0.38
12	OR 126/Spruce Street	TWSC	V/C = 0.85/0.95	SB	D	25.9	0.48
13	OR 126/North Fork Siuslaw Road	TWSC	V/C = 0.70/0.75	SB	C	18.8	0.09
14	Rhododendron Drive/35th Street	TWSC	LOS D	WB	A	9.4	0.10
15	Rhododendron Drive/9th Street	TWSC	LOS D	WB	B	11.5	0.26
16	Rhododendron Drive/Heceta Beach Road	TWSC	LOS D	SB	B	11.0	0.22
17	Kingwood Street/35th Street	TWSC	LOS D	NB	C	15.2	0.18
18	Kingwood Street/27th Street	TWSC	LOS D	WB	B	10.5	0.07
19	Kingwood Street/15th Street	TWSC	LOS D	WB	B	10.7	0.09
20	Kingwood Street/9th Street	TWSC	LOS D	NB	B	14.4	0.22

Note: TWSC = Two-way stop-control; CM = Critical movement; LOS = Intersection Level of Service (Signal), CM Level of Service (TWSC, AWSC); Del = Intersection average vehicle delay (Signal), CM vehicle delay (TWSC, AWSC); v/c = Intersection v/c (Signal), CM v/c (TWSC, AWSC).
[1]State Highway V/C Ratio/Side-Street V/C Ratio

As shown in Table 1 and Figure 3, all study intersections currently operate acceptably during the weekday PM peak hour. *Attachment B includes the intersection operations analysis worksheets.*

QUEUEING ANALYSIS

A queuing analysis was conducted at the signalized study intersections using Synchro 11. Table 2 summarizes the 95th percentile queues during the weekday PM peak hour and indicates if existing storage can accommodate the queues. The vehicle queue and storage lengths were rounded up to the nearest 25-feet. The storage lengths reflect the striped storage for each movement at the intersections. *Attachment C contains the queuing analysis worksheets.*

Table 2: Queuing Summary, Weekday PM Peak Hour

Map ID	Intersection	Movement	Storage Length (feet)	95th Percentile Queue (feet)	Adequate?
4	US 101/35th Street	EBL	125	75	Yes
		WBL	150	50	Yes
		NBL	150	25	Yes
		SBL	100	<25	Yes
8	US 101/OR 126	EBL	100	225	**No**
		WBL	400	200	Yes
		NBL	125	100	Yes
		SBL	150	300	**No**
9	US 101/Rhododendron Drive	NBL	125	<25	Yes
		SBL	125	<25	Yes

Note: EB = Eastbound, WB = Westbound, NB = Northbound, SB = Southbound, L = Left

As shown in Table 2, the striped storage lengths at the signalized study intersections are currently adequate for the 95th percentile queues with the exception of the eastbound left-turn queue and the southbound left-turn queue at the US 101/OR 126 intersection. The eastbound left-turn queue exceeds striped storage, and while additional storage is provided in the taper area for the left-turn lane, a 95th percentile queue may partially block the through traffic lane. The southbound left-turn queue exceeds striped storage but additional storage is provided in the two-way left-turn lane.

Non-Automobile Transportation Analysis

The non-automobile transportation analysis was conducted in accordance with the methodologies identified in Chapter 14 of ODOT's APM. Per the APM, Bicycle Level of Traffic Stress, Pedestrian Level of Traffic Stress, and Transit Qualitative Multimodal Assessment are appropriate analysis methodologies for TSP updates.

TRANSIT QUALITATIVE MULTIMODAL ASSESSMENT

A transit qualitative multimodal assessment was conducted in accordance with the methodology described in ODOT's APM. Transit factors that should be considered are frequency and on-time reliability, schedule speed/travel times, transit stop amenities, and connecting pedestrian/bicycle network. This methodology applies a rating system similar to that used for pavement conditions; excellent, good, fair, and poor. Table 3 outlines the methodology used for conducting a transit qualitative multimodal assessment within Florence.

Table 3: Transit Qualitative Multimodal Assessment Methodology – For Small City Service

Category	Excellent	Good	Fair	Poor
Frequency	12 daily round trips	8-10 daily round trips	5-7 daily round trips	4 or fewer daily round trips
Schedule Speed/ Travel Times	<20% slower than driving	20% to 40% slower than driving	40% to 60% slower than driving	>60% slower than driving
Transit Stop Amenities	Shelter with bench and sign	Bench with sign	Sign with waiting area	No sign and/or no waiting area
Connecting Pedestrian/ Bicycle Network	Wide shoulders or bike lanes and sidewalks with frequent crossing	Standard shoulders or bike lanes and sidewalks with crossings	Substandard shoulders or bike lanes and sidewalks with no crossing	No shoulders, bike lanes, or sidewalks and no crossings
ADA Accessibility	All stops are ADA-compliant and have adjacent parking prohibited	85-99% of stops are ADA-compliant and have adjacent parking prohibited	70-84% of stops are ADA-compliant and have adjacent parking prohibited	Less the 70% of stops are ADA-compliant and have adjacent parking prohibited

Frequency

From the user's perspective, *frequency* determines how many times an hour a user has access to transit service, assuming that service is provided within acceptable walking distance and at the times the user wishes to travel. Frequency also helps determine the convenience of transit service to riders and is one component of overall transit trip time (helping to determine the wait time at a stop).

Rhody Express is the primary service provider in the city and operates two local fixed-route services. The North Loop and South Loop operate weekdays from 10:00 AM to 6:00 PM on 60-minute headways (8 round trips). Therefore, the frequency rating for the North and South Loops is good. Per the APM, on-time reliability is typically evaluated along with frequency. River Cities Taxi, who operates the Rhody Express currently does not track on-time reliability. Staff at River Cities Taxi have indicated there is no known reported issue of on-time reliability of Rhody Express.

Schedule Speed/Travel Times

Schedule speed and travel time refer to the time it takes to complete a transit route in full and the length of time between stops. The Rhody Express North and South Loops serve 11 stops in 58 minutes. The same route driven in a single-occupancy vehicle take approximately 39 minutes. Therefore, the schedule speed/travel speed rating for the North and South Loops is good.

Transit Stop Amenities

Amenities at transit stops, such as benches and shelters, enhance a transit route and make it more user-friendly. Steps that can make this mode as comfortable and accommodating as possible may help encourage ridership. Rhody Express provides 30 transit stops in Florence. Most stops have a sign and pole designating the stop location, eight stops have a bench and shelter, although seven of these shelters are in poor condition and need to be replaced. Therefore, the transit stop amenities rating for the North and South Loops is Fair.

Connecting Pedestrian/Bicycle Network

Pedestrian facilities are provided adjacent to most stops in Florence while designated bicycle facilities are not. However, most stops are located on low-speed roadways where mixed traffic may support cyclists. Therefore, the connecting pedestrian/bicycle network rating for the North and South Loop is fair.

ADA Accessibility

Few of the pedestrian facilities near stops are ADA accessible. In addition, parking is allowed near most stops serving Florence; adjacent parking can block buses from reaching the curb space, impacting the ability of passengers to board and alight from the vehicle. Therefore, the ADA accessibility rating for the North and South Loop is poor.

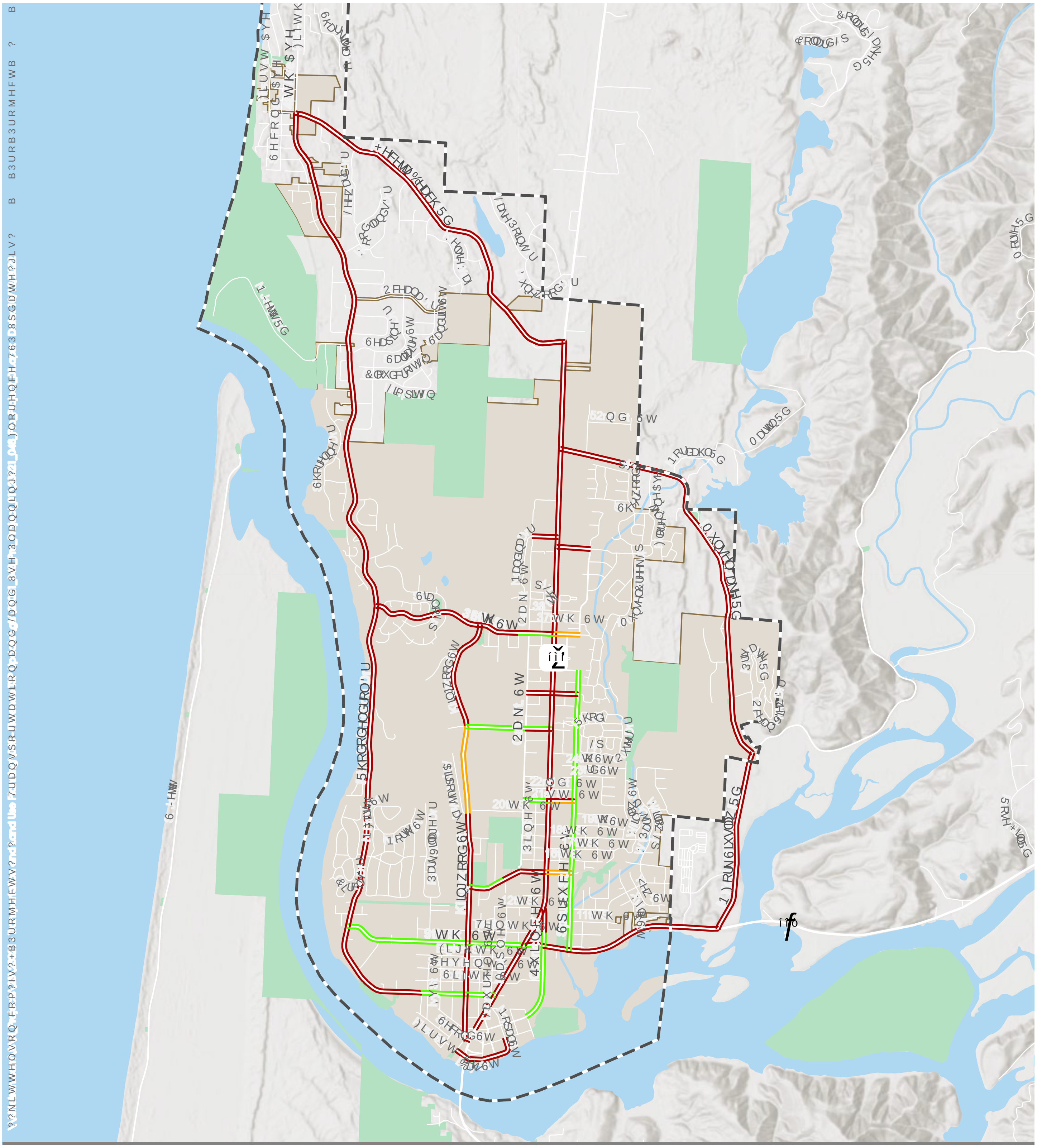
PEDESTRIAN LEVEL OF TRAFFIC STRESS

Pedestrian level of traffic stress (PLTS) is a perception-based analysis methodology that is used to evaluate the adequacy of streets to accommodate pedestrians in urban and rural environments. As applied by ODOT, this methodology classifies four levels of traffic stress that a pedestrian can experience on the street, ranging from PLTS 1 (little traffic stress) to PLTS 4 (high traffic stress). A street or street segment that is rated PLTS 1 generally has low traffic volumes and travel speeds and has a sidewalk that is separated from vehicle traffic. These segments are generally suitable for all pedestrians, including children. A street or street segment that is rated PLTS 4 generally has high traffic volumes and travel speeds and curb-tight sidewalks that are perceived as unsafe by most adults. Segments rated PLTS 4 also include those with no sidewalks or other pedestrian facilities. Per the APM, PLTS 2 is considered a reasonable target for most streets due to its acceptability with most pedestrians.

The PLTS score is determined based on four criteria, including sidewalk condition, physical buffer type, total buffering width, and general land use. All four criteria are scored from 1 to 4 and the highest score determines the overall score for the road segment. Table 4 summarizes the results of the PLTS analysis. Figure 4 illustrates the results of the PLTS analysis for the arterial and collector streets in Florence. It is important to note that while some segments are shown as PLTS 3 or 4, they may have shorter segments with lower PLTS scores.

As shown in Figure 4, several arterial and collector streets in Florence have segments that are rated PLTS 3 and PLTS 4. The segments rated PLTS 3 may have curb-tight sidewalks on roadways with speeds of 30 mph or higher. In order for these segments to be rated PLTS 2, a buffer would need to be installed between the sidewalk and vehicle travel lane. Other segments rated PLTS 3 may have narrow sidewalks. In order for these segments to be rated PLTS 2, the sidewalks would need to be widened to at least five feet wide. Other segments may be located adjacent to industrial land uses, such as those along US 101, OR 126, and northern parts of Kingwood Street. Per the APM, these segments are automatically rated PLTS 3 or 4 given the auto-oriented nature of these land uses. For these segments, the priority is filling gaps instead of reaching PLTS 2.

The majority of segments rated PLTS 4 have no sidewalks or other pedestrian facilities. In order for these segments to be rated PLTS 2, sidewalks with appropriate sidewalk and buffer widths would need to be installed along the full length of the roadway. *Attachment D* contains detailed information on the PLTS analysis results.



3/76 6FRU

3DUNV

3/76

:DWHU

3/76

&LW\ %RXQGDU\

3/76

8UEDQ *URZWK %RXQGDU\

0LOHV

)LJXUH

3HGHVWULDQ /HYH
)ORUHQFH 2U

KITTELSON & ASSOCIATES

Table 4: Pedestrian Level of Traffic Stress (PLTS) Analysis Results

Street	From	To	Side	PLTS Criteria				PLTS
				Sidewalk Condition	Physical Buffer Width	Total Buffer Width	General Land Use	
US 101	Heceta Beach Rd	Munsel Lake Rd	West	4	4	2	3	4
	Heceta Beach Rd	Munsel Lake Rd	East	4	4	2	3	4
	Munsel Lake Rd	46th St	West	1	4	4	3	4
	Munsel Lake Rd	46th St	East	4	4	4	3	4
	46th St	37th St	West	4	4	4	3	4
	46th St	37th St	East	4	4	4	3	4
	37th St	31st St	West	1	4	4	3	4
	37th St	31st St	East	1	4	4	3	4
	31st St	27th St	West	1	4	4	3	4
	31st St	27th St	East	1	4	4	3	4
	27th St	22nd St	West	1	4	4	3	4
	27th St	22nd St	East	1	4	4	3	4
	22nd St	OR 126	West	1	4	4	3	4
	22nd St	OR 126	East	1	4	4	3	4
	OR 126	Rhododendron Dr	West	1	4	4	1	4
	OR 126	Rhododendron Dr	East	1	4	4	1	4
	Rhododendron Dr	2nd Street	West	4	4	4	1	4
	Rhododendron Dr	2nd Street	East	1	4	4	1	4
OR 126	US 101	Quince Street	North	1	4	4	1	4
	US 101	Quince Street	South	1	2	1	1	2
	Quince Street	Redwood St	North	1	4	2	3	4
	Quince Street	Redwood St	South	1	4	1	3	4
	Redwood St	Spruce St	North	1	4	2	3	4
	Redwood St	Spruce St	South	1	4	2	3	4
	Spruce St	Xylo St	North	4	4	2	3	4
	Spruce St	Xylo St	South	4	4	2	3	4
	Xylo St	N Fork Siuslaw Rd	North	4	4	2	3	4
	Xylo St	N Fork Siuslaw Rd	South	4	4	2	2	4
9th St	Rhododendron Dr	US 101	North	1	2	2	1	2
	Rhododendron Dr	US 101	South	1	2	2	1	2
Rhododendron Dr	Heceta Beach Rd	Lighthouse Wy	West	4	4	2	1	4
	Heceta Beach Rd	Lighthouse Wy	East	4	4	2	1	4
	Lighthouse Wy	New Hope Ln	West	4	4	2	1	4
	Lighthouse Wy	New Hope Ln	East	4	4	2	1	4

	New Hope Ln	Greenwood St	West	4	4	2	1	4
	New Hope Ln	Greenwood St	East	4	4	2	1	4
	Greenwood St	US 101	North	1	2	1	1	2
	Greenwood St	US 101	South	1	2	2	1	2
Munsel Lake Rd	US 101	Ocean Dunes Dr	North	4	4	2	1	4
	US 101	Ocean Dunes Dr	South	4	4	2	1	4
	Ocean Dunes Dr	N Fork Rd	West	4	2	2	1	4
	Ocean Dunes Dr	N Fork Rd	East	4	2	2	1	4
N Fork Siuslaw Rd	Munsel Lake Rd	OR 126	West	4	2	2	1	4
	Munsel Lake Rd	OR 126	East	4	2	2	1	4
Heceta Beach Rd	US 101	Rhododendron Dr	North	4	4	2	1	4
	US 101	Rhododendron Dr	South	4	4	2	1	4
Kingwood St	35 St	27th St	West	2	4	2	1	4
	35 St	27th St	East	2	4	2	1	4
	27th St	Airport Ln	West	1	2	1	3	3
	27th St	Airport Ln	East	1	2	1	3	3
	Airport Ln	17th Pl	West	2	4	2	3	4
	Airport Ln	17th Pl	East	4	4	2	3	4
	17th Pl	15th St	West	4	4	2	3	4
	17th Pl	15th St	East	1	4	2	3	4
	15th St	10th St	West	4	2	2	1	4
	15th St	10th St	East	4	2	2	1	4
	10th St	US 101	West	4	2	2	1	4
	10th St	US 101	East	4	2	2	1	4
Quince St	US 101	10th St	West	4	2	2	1	4
	US 101	10th St	East	4	2	2	1	4
	10th St	Harbor St	West	1	2	2	1	2
	10th St	Harbor St	East	1	2	2	1	2
Spruce St	32nd St	30th Way	West	1	2	2	1	2
	32nd St	30th Way	East	1	2	2	1	2
	30th Way	25th St	West	1	2	2	1	2
	30th Way	25th St	East	1	2	2	1	2
	25th St	17th St	West	1	2	2	1	2
	25th St	17th St	East	1	2	2	1	2
	17th St	15th St	West	1	2	2	1	2
	17th St	15th St	East	2	2	2	1	2
	15th St	OR 126	West	1	2	2	1	2
	15th St	OR 126	East	1	2	2	1	2
Bay St	Kingwood St	1st St	North	1	4	2	1	4
	Kingwood St	1st St	South	1	4	2	1	4

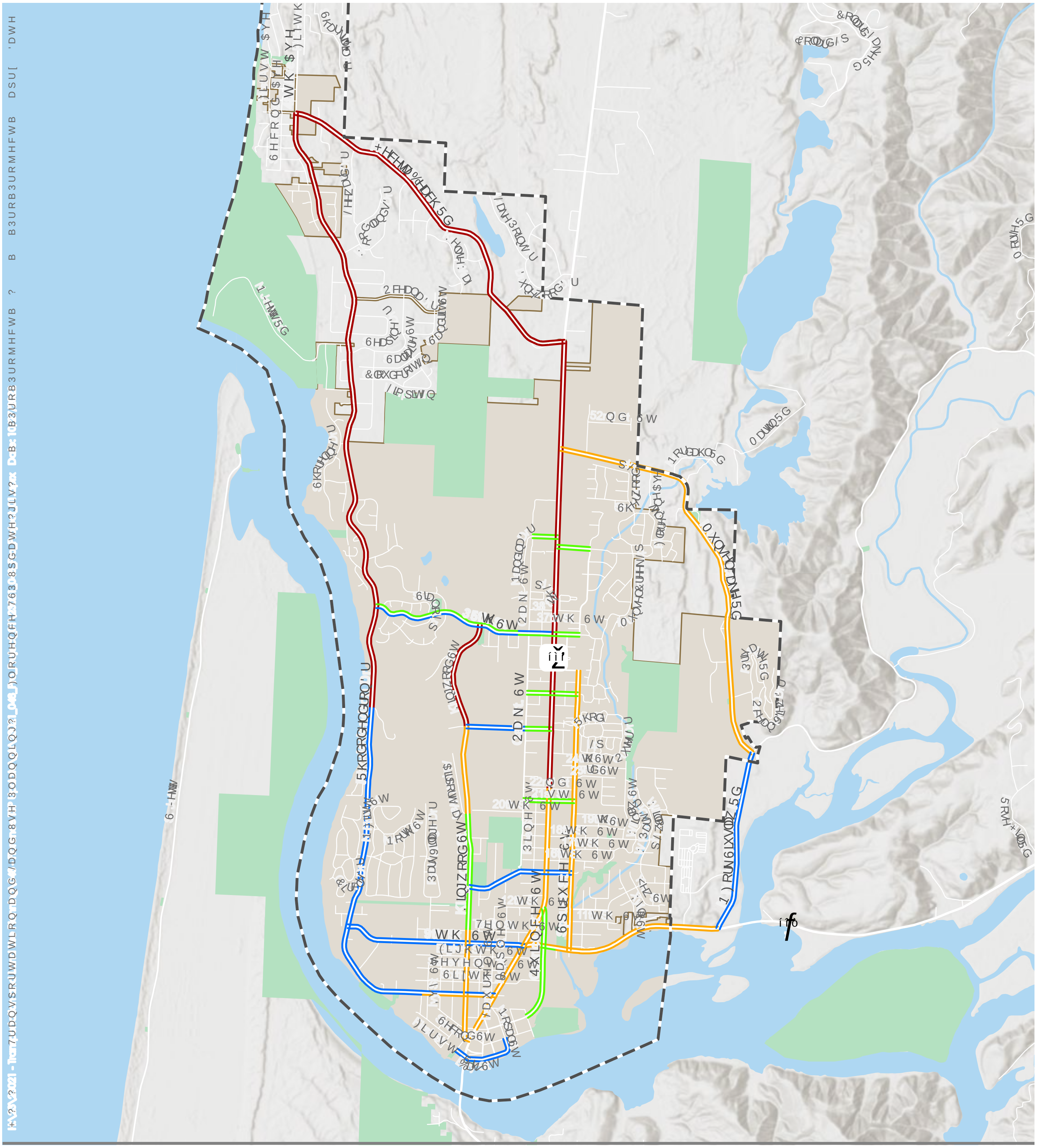
Airport Rd/15th St	Kingwood St	Nopal St	North	1	2	2	1	2
	Kingwood St	Nopal St	South	4	2	2	1	4
	Nopal St	US 101	North	4	2	2	1	4
	Nopal St	US 101	South	4	2	2	1	4
	US 101	Spruce St	North	1	2	2	3	3
	US 101	Spruce St	South	1	2	2	3	3
21st St	Oak St	US 101	North	1	2	2	1	2
	Oak St	US 101	South	1	2	2	1	2
	US 101	Spruce St	North	4	2	2	3	4
	US 101	Spruce St	South	1	2	2	3	3
27th St	Kingwood St	Oak St	North	1	2	2	1	2
	Kingwood St	Oak St	South	1	2	2	1	2
	Oak St	US 101	North	1	2	2	1	2
	Oak St	US 101	South	4	2	2	1	4
30th St	Oak St	Spruce St	North	4	2	2	3	4
	Oak St	Spruce St	South	4	2	2	3	4
35th St	Rhododendron Dr	Myrtle Loop	North	4	2	2	1	4
	Rhododendron Dr	Myrtle Loop	South	4	2	2	1	4
	Myrtle Loop	US 101	North	4	2	2	1	4
	Myrtle Loop	US 101	South	1	2	2	1	2
	US 101	Spruce St	North	1	2	2	3	3
	US 101	Spruce St	South	1	2	2	3	3
42nd St/43rd St	Oak St	US 101	North	4	2	2	3	4
	Oak St	US 101	South	4	2	2	3	4
	US 101	Spruce St	North	4	2	2	3	4
	US 101	Spruce St	South	4	2	2	3	4

BICYCLE LEVEL OF TRAFFIC STRESS

Similar to PLTS, Bicycle level of traffic stress (BLTS) is a perception-based analysis methodology that is used to evaluate the adequacy of streets to accommodate cyclists in urban and rural environments. As applied by ODOT, this methodology classifies four levels of traffic stress that a cyclist can experience on the street, ranging from BLTS 1 (little traffic stress) to BLTS 4 (high traffic stress). A street or street segment that is rated BLTS 1 generally has low traffic volumes and travel speeds and is suitable for all cyclists, including children. A street or street segment that is rated BLTS 4 generally has high traffic volumes and travel speeds and is perceived as unsafe by most adults. Per the APM, BLTS 2 is considered a reasonable target for streets due to its acceptability with most cyclists.

The BLTS score is determined based on the speed of the street, the number of travel lanes per direction, the presence and width of an on-street bike lane and/or adjacent parking lane, and several other factors. Table 5 summarizes the results of the BLTS analysis. Figure 5 illustrates the results of the BLTS analysis for the arterial and collector streets in Florence. It is important to note that while some segments are shown as BLTS 3 or 4, they may have shorter segments with lower BLTS scores.

As shown in Figure 5, several arterial and collector streets in Florence have segments that are rated BLTS 3 and BLTS 4. The segments rated BLTS 3 or BLTS 4 may have bike lanes that are too narrow for roadway conditions (e.g., high speeds and/or high volumes). In order for these segments to be rated BLTS 2, the bike lanes would need to be widened to seven feet. Other segments rated BLTS 3 may not have bike lanes and may be considered mixed traffic (shoulder bikeways or no bicycle facilities present). In order for these segments to be rated BLTS 2, the shoulder would need to be restriped as a bike lane with appropriate width or traffic volumes would need to be below 2,500 ADT and the posted speed would need to be 25 mph. It should also be noted that a majority of the segments evaluated as mixed traffic that were rated BLTS 2 could include signage and/or striping to remind motorists to share the road. The signing and striping can also provide important wayfinding for cyclists to inform them of the preferred bicycle route.



%/76 6FRU

%/76

%/76

%/76

%/76

3DUNV

:DWHU

&LW\ %RXQGDU\

8UEDQ *URZWK %RXQGDU\

0LOHV

)LJXUH

%LF\FOH /HYHO R

)ORUHQFH 2U

KITTELSON & ASSOCIATES

Table 5: Bicycle Level of Traffic Stress (BLTS) Analysis Results

Street	From	To	Side	Facility Type	ADT	BLTS Criteria					
						Speed (mph)	Lanes per Direction	Bicycle Facility Width (feet)	Parking	Frequent Blockage	BLTS
US 101	Heceta Beach Rd	Munsel Lake Rd	West	Bike Lane	-	55	1	8	None	No	3
	Heceta Beach Rd	Munsel Lake Rd	East	Bike Lane	-	55	1	8	None	No	3
	Munsel Lake Rd	46th St	West	Bike Lane	-	40	2	7	None	No	4
	Munsel Lake Rd	46th St	East	Bike Lane	-	40	2	7	None	No	4
	46th St	37th St	West	Bike Lane	-	40	2	6	None	No	4
	46th St	37th St	East	Bike Lane	-	40	2	6	None	No	4
	37th St	31st St	West	Bike Lane	-	40	2	5	None	No	4
	37th St	31st St	East	Bike Lane	-	40	2	5	None	No	4
	31st St	27th St	West	Bike Lane	-	40	2	6	None	No	4
	31st St	27th St	East	Bike Lane	-	40	2	6	None	No	4
	27th St	22nd St	West	Bike Lane	-	40	2	6	None	No	4
	27th St	22nd St	East	Bike Lane	-	40	2	6	None	No	4
	22nd St	OR 126	West	Bike Lane	-	30	2	6	None	No	3
	22nd St	OR 126	East	Bike Lane	-	30	2	6	None	No	3
	OR 126	Rhododendron Dr	West	Bike Lane	-	30	2	6	None	No	3
	OR 126	Rhododendron Dr	East	Bike Lane	-	30	2	6	None	No	3
	Rhododendron Dr	2nd Street	West	Bike Lane	-	30	2	6	None	No	3
	Rhododendron Dr	2nd Street	East	Bike Lane	-	30	2	6	None	No	3
OR 126	US 101	Quince Street	North	Bike Lane	-	35	2	5	None	No	3
	US 101	Quince Street	South	Bike Lane	-	35	2	5	Yes	No	3
	Quince Street	Redwood St	North	Bike Lane	-	35	1	5	None	No	3
	Quince Street	Redwood St	South	Bike Lane	-	35	1	8	Yes	No	2
	Redwood St	Spruce St	North	Bike Lane	-	35	1	5	None	No	3
	Redwood St	Spruce St	South	Bike Lane	-	35	1	6	None	No	3
	Spruce St	Xylo St	North	Bike Lane	-	35	1	5	None	No	3
	Spruce St	Xylo St	South	Bike Lane	-	35	1	6	None	No	3
	Xylo St	N Fork Siuslaw Rd	North	Bike Lane	-	35	1	5	None	No	3
	Xylo St	N Fork Siuslaw Rd	South	Bike Lane	-	35	1	6	None	No	3
9th St	Rhododendron Dr	US 101	North	Bike Lane	-	25	1	6	None	No	1
	Rhododendron Dr	US 101	South	Bike Lane	-	25	1	6	None	No	1
Rhododendron Dr	Heceta Beach Rd	Lighthouse Wy	West	Shoulder	-	40	1	3	None	No	4
	Heceta Beach Rd	Lighthouse Wy	East	Shoulder	-	40	1	3	None	No	4
	Lighthouse Wy	New Hope Ln	West	Shoulder	-	40	1	3	None	No	4
	Lighthouse Wy	New Hope Ln	East	Shoulder	-	40	1	3	None	No	4

	New Hope Ln	Greenwood St	West	Bike Lane	-	30	1	7	None	No	1
	New Hope Ln	Greenwood St	East	Bike Lane	-	30	1	7	None	No	1
	Greenwood St	US 101	North	Bike Lane	-	25	1	6	Yes	No	1
	Greenwood St	US 101	South	Bike Lane	-	25	1	6	None	No	1
	US 101	Ocean Dunes Dr	North	Mixed Traffic	>3,000	35	1	0	None	No	3
Munsel Lake Rd	US 101	Ocean Dunes Dr	South	Mixed Traffic	>3,000	35	1	0	None	No	3
	Ocean Dunes Dr	N Fork Rd	West	Mixed Traffic	>3,000	25	1	0	None	No	3
	Ocean Dunes Dr	N Fork Rd	East	Mixed Traffic	>3,000	25	1	0	None	No	3
N Fork Siuslaw Rd	Munsel Lake Rd	OR 126	West	Shoulder	-	25	1	3	None	No	2
	Munsel Lake Rd	OR 126	East	Shoulder	-	25	1	5	None	No	2
Heceta Beach Rd	US 101	Rhododendron Dr	North	Shoulder	-	40	1	4	None	No	4
	US 101	Rhododendron Dr	South	Shoulder	-	40	1	4	None	No	4
	35th St	27th St	West	Bike Lane	-	40	1	6	None	No	4
	35th St	27th St	East	Bike Lane	-	40	1	6	None	No	4
	27th St	Airport Ln	West	Bike Lane	-	40	1	6	Yes	No	2
	27th St	Airport Ln	East	Bike Lane	-	40	1	6	Yes	No	2
	Airport Ln	17th Pl	West	Bike Lane	-	30	1	6	None	No	1
	Airport Ln	17th Pl	East	Bike Lane	-	30	1	6	None	No	1
Kingwood St	17th Pl	15th St	West	Bike Lane	-	30	1	6	None	No	1
	17th Pl	15th St	East	Bike Lane	-	30	1	6	None	No	1
	15th St	10th St	West	Bike Lane	-	25	1	6	None	No	1
	15th St	10th St	East	Bike Lane	-	25	1	6	None	No	1
	10th St	Bay St	West	Mixed Traffic	1,500-≤3,000	25	1	0	None	No	3
	10th St	Bay St	East	Mixed Traffic	1,500-≤3,000	25	1	0	None	No	3
Quince St	US 101	Harbor St	West	Mixed Traffic	1,500-≤3,000	25	1	0	None	No	3
	US 101	Harbor St	East	Mixed Traffic	1,500-≤3,000	25	1	0	None	No	3
	32nd St	30th Way	West	Bike Lane	-	25	1	6	None	No	1
	32nd St	30th Way	East	Bike Lane	-	25	1	6	None	No	1
	30th Way	25th St	West	Bike Lane	-	25	1	6	None	No	1
	30th Way	25th St	East	Bike Lane	-	25	1	6	None	No	1
Spruce St	25th St	17th St	West	Mixed Traffic	>3,000	25	1	0	Yes	No	3
	25th St	17th St	East	Mixed Traffic	>3,000	25	1	0	Yes	No	3
	17th St	15th St	West	Mixed Traffic	>3,000	25	1	0	Yes	No	3
	17th St	15th St	East	Mixed Traffic	>3,000	25	1	0	Yes	No	3
	15th St	OR 126	West	Mixed Traffic	>3,000	25	1	0	Yes	No	3
	15th St	OR 126	East	Mixed Traffic	>3,000	25	1	0	Yes	No	3

Bay St	Kingwood St	1st St	North	Mixed Traffic	≤750	25	1	0	Yes	No	1
	Kingwood St	1st St	South	Mixed Traffic	≤750	25	1	0	Yes	No	1
Airport Rd/15th St	Kingwood St	Nopal St	North	Mixed Traffic	750 - ≤1,500	25	1	0	Yes	No	2
	Kingwood St	Nopal St	South	Mixed Traffic	750 - ≤1,500	25	1	0	Yes	No	2
	Nopal St	US 101	North	Mixed Traffic	750 - ≤1,500	25	1	0	Yes	No	2
	Nopal St	US 101	South	Mixed Traffic	750 - ≤1,500	25	1	0	Yes	No	2
	US 101	Spruce St	North	Mixed Traffic	750 - ≤1,500	25	1	0	Yes	No	2
	US 101	Spruce St	South	Mixed Traffic	750 - ≤1,500	25	1	0	Yes	No	2
21st St	Oak St	US 101	North	Mixed Traffic	750 - ≤1,500	25	1	0	Yes	No	2
	Oak St	US 101	South	Mixed Traffic	750 - ≤1,500	25	1	0	Yes	No	2
	US 101	Spruce St	North	Mixed Traffic	≤750	25	1	0	Yes	No	1
	US 101	Spruce St	South	Mixed Traffic	≤750	25	1	0	Yes	No	1
27th St	Kingwood St	Oak St	North	Bike Lane	-	25	1	6	None	No	1
	Kingwood St	Oak St	South	Bike Lane	-	25	1	6	None	No	1
	Oak St	US 101	North	Mixed Traffic	750 - ≤1,500	25	1	0	Yes	No	2
	Oak St	US 101	South	Mixed Traffic	750 - ≤1,500	25	1	0	Yes	No	2
30th St	Oak St	Spruce St	North	Mixed Traffic	≤750	25	1	0	Yes	No	1
	Oak St	Spruce St	South	Mixed Traffic	≤750	25	1	0	Yes	No	1
35th St	Rhododendron Dr	Myrtle Loop	North	Bike Lane	-	25	1	6	None	No	1
	Rhododendron Dr	Myrtle Loop	South	Bike Lane	-	25	1	6	None	No	1
	Myrtle Loop	US 101	North	Bike Lane	-	25	1	6	None	No	1
	Myrtle Loop	US 101	South	Bike Lane	-	25	1	6	Yes	No	1
	US 101	Spruce St	North	Bike Lane	-	25	1	5	None	No	2
	US 101	Spruce St	South	Bike Lane	-	25	1	5	None	No	2
42nd St/43rd St	Oak St	US 101	North	Mixed Traffic	750 - ≤1,500	25	1	0	None	No	2
	Oak St	US 101	South	Mixed Traffic	750 - ≤1,500	25	1	0	None	No	2
	US 101	Spruce St	North	Bike Lane	-	25	1	5	None	No	2
	US 101	Spruce St	South	Bike Lane	-	25	1	5	None	No	2

Crash Analysis

Crash data was obtained from ODOT's Crash Data Portal. The data includes the total number, type, and severity of crashes that occurred throughout the study area for the five-year period from January 1, 2016 through December 31, 2020. Based on the data, a total of 338 crashes were reported in Florence over the five-year period, of which 17 resulted in a fatal/serious injuries, 127 resulted in moderate/minor injuries, and 194 resulted in property-damage-only (PDO). The following summarizes the results of the intersection crash analysis based on the five years of crash data.

INTERSECTION CRASH ANALYSIS

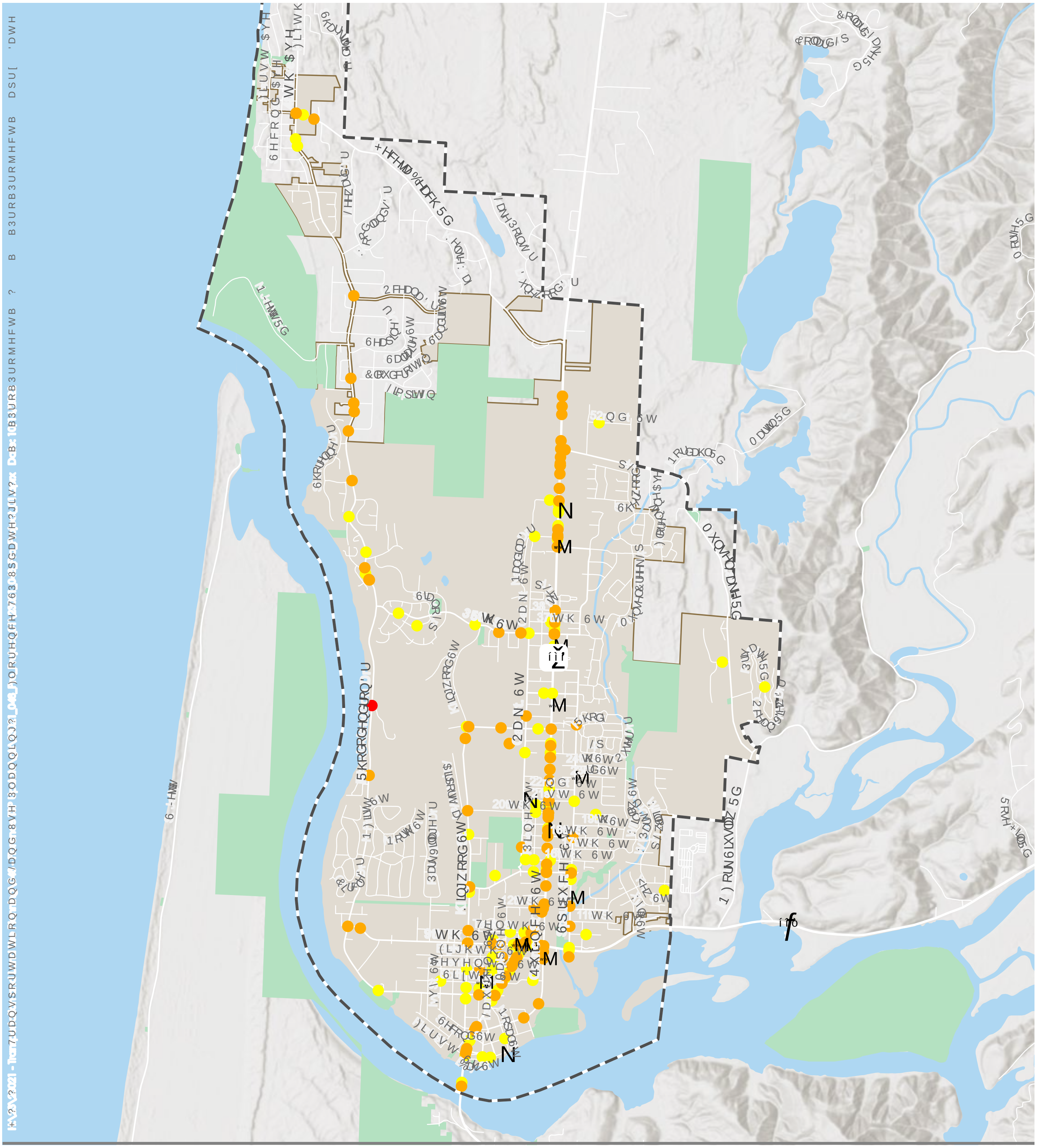
The intersection crash analysis includes an evaluation of intersection crash rates, critical crash rates, and excess proportion of specific crash types. The intersection crash analysis identifies the study intersections where existing safety issues may exist and may require mitigation. Based on the data, 87 of the 338 reported crashes occurred at the study intersections. Table 6 summarizes the collision type and crash severity for all reported crashes at the study intersections.

Table 6: Intersection Crash History (January 1, 2016 through December 31, 2020)

		Collision Type					Crash Severity			
Map ID	Intersection	Angle	Turn	Rear	Ped/Bike	Other	Fatal/Severe	Injury	PDO	Total
1	US 101/Heceta Beach Road		5					2	3	5
2	US 101/Munsel Lake Road		4	1				1	4	5
3	US 101/46th Street		3				1	1	1	3
4	US 101/35th Street	4	5	1		2		8	4	12
5	US 101/30th Street		1						1	1
6	US 101/27th Street		1					1		1
7	US 101/15th Street		3	3		1		2	5	7
8	US 101/OR 126	3	3	8	1		1	3	11	15
9	US 101/Rhododendron Drive		2	4				2	4	6
10	US 101/2nd Street		2	1		1	1	1	2	4
11	OR 126/Quince Street	5	4	1		1	1	4	6	11
12	OR 126/Spruce Street		1	1					2	2
13	OR 126/North Fork Siuslaw Road		1					1		1
14	Rhododendron Drive/35th Street									0
15	Rhododendron Drive/9th Street					1			1	1
16	Rhododendron Drive/Heceta Beach Road	3					2	1		3
17	Kingwood Street/35th Street									0
18	Kingwood Street/27th Street					2			2	2
19	Kingwood Street/15th Street		3					1	2	3
20	Kingwood Street/9th Street	5						1	4	5

Note: Fatal includes fatal and incapacitating injuries; Injury includes non-incapacitating injuries and possible injuries/complaint of pain; PDO includes Property Damage Only.

Figure 6 illustrates the crash data throughout the city by severity and indicates if the crashes involve pedestrians or bicyclists.



●)DWDO &UDVK
● 3URSHUW\ 'DPDJH 2QO\ &UDVK
0LOHV
)DWDO &UDVK %LNH
3DUNV
,QMXU\ &UDVK
:DWHU
,QMXU\ &UDVK 3HG
&LW\ %RXQGDU\
,QMXU\ &UDVK %LNH
8UEDQ *URZWK %RXQGDU\

)LJXUH 6

5HSRUWHG &UDVKHV
)ORUHQFH 2U

KITTELSON & ASSOCIATES

Intersection Crash Rates

Intersection crash rates were developed for the study intersections based on the total number of crashes reported at the intersections over the five-year period and the total entering volume, or million entering vehicles (MEV). Intersection crash rates were compared to 90th percentile crash rates developed by ODOT and documented in Table 4-1 of the ODOT APM. Table 7 summarizes the total number of crashes reported at the study intersections over the five-year period, the intersection crash rates, and the corresponding 90th percentile crash rates as identified in the APM.

Table 7: Intersection Crash Rates vs. ODOT 90th Percentile Rates

Map ID	Intersection	Total Crashes	Intersection Crash Rate	90th Percentile Rate	Exceed 90th Percentile Rate?
1	US 101/Heceta Beach Road	5	0.24	0.408	No
2	US 101/Munsel Lake Road	5	0.21	0.408	No
3	US 101/46th Street	3	0.11	0.408	No
4	US 101/35th Street	12	0.35	0.860	No
5	US 101/30th Street	1	0.03	0.408	No
6	US 101/27th Street	1	0.03	0.408	No
7	US 101/15th Street	7	0.19	0.408	No
8	US 101/OR 126	15	0.35	0.860	No
9	US 101/Rhododendron Drive	6	0.20	0.860	No
10	US 101/2nd Street	4	0.16	0.408	No
11	OR 126/Quince Street	11	0.55	0.408	**Yes**
12	OR 126/Spruce Street	2	0.10	0.408	No
13	OR 126/North Fork Siuslaw Road	1	0.07	0.475	No
14	Rhododendron Drive/35th Street	0	0.00	0.293	No
15	Rhododendron Drive/9th Street	1	0.12	0.293	No
16	Rhododendron Drive/Heceta Beach Road	3	0.56	0.408	**Yes**
17	Kingwood Street/35th Street	0	0.00	0.408	No
18	Kingwood Street/27th Street	2	0.39	0.408	No
19	Kingwood Street/15th Street	3	0.48	0.293	**Yes**
20	Kingwood Street/9th Street	5	0.50	0.408	**Yes**

As shown in Table 7, the intersection crash rates at four study intersections currently exceed the corresponding 90th percentile crash rates. *Attachment E contains the intersection crash rate analysis worksheet.*

Critical Crash Rates

Critical crash rates were developed for the study intersections with sufficient reference populations based on the total number of crashes reported at the intersections over the five-year period, the intersection type, and the total entering volume or average annual daily traffic (AADT). This method is only applicable where at least 5-10 intersections are available with similar characteristics (e.g., traffic control and legs/approaches). Otherwise, the critical crash rate defaults to the 90th percentile crash rates outlined in Table 8. Critical crash rates were calculated for the study intersections using ODOT's Critical Crash Rate Calculator tool. Table 8 summarizes the total number of crashes reported at the study intersections over the five-year period, the intersection crash rates, and the corresponding critical crash rates.

Table 8: Intersection Crash Rates vs. Critical Crash Rates

Map ID	Intersection	Total Crashes	Intersection Crash Rate	Critical Crash Rate	Exceed Critical Crash Rate?
1	US 101/Heceta Beach Road	5	0.24	0.36	Under
2	US 101/Munsel Lake Road	5	0.21	0.34	Under
3	US 101/46th Street	3	0.11	0.34	Under
4	US 101/35th Street	12	0.35	N/A	N/A
5	US 101/30th Street	1	0.03	0.32	Under
6	US 101/27th Street	1	0.03	0.31	Under
7	US 101/15th Street	7	0.19	0.31	Under
8	US 101/OR 126	15	0.35	N/A	N/A
9	US 101/Rhododendron Drive	6	0.20	N/A	N/A
10	US 101/2nd Street	4	0.16	0.34	Under
11	OR 126/Quince Street	11	0.55	0.36	**Over**
12	OR 126/Spruce Street	2	0.10	0.36	Under
13	OR 126/North Fork Siuslaw Road	1	0.07	N/A	N/A
14	Rhododendron Drive/35th Street	0	0.00	N/A	N/A
15	Rhododendron Drive/9th Street	1	0.12	N/A	N/A
16	Rhododendron Drive/Heceta Beach Road	3	0.56	0.57	Under
17	Kingwood Street/35th Street	0	0.00	0.45	Under
18	Kingwood Street/27th Street	2	0.39	0.58	Under
19	Kingwood Street/15th Street	3	0.48	N/A	N/A
20	Kingwood Street/9th Street	5	0.50	0.45	**Over**

As shown in Table 8, the intersection crash rates at two study intersections currently exceed their corresponding critical crash rates. *Attachment E contains the critical crash rate analysis worksheet.*

Excess Proportion of Specific Crash Types

The Excess Proportion of Specific Crash Types analysis method quantifies the extent to which a specific crash type is overrepresented at an intersection when compared to the average representation within a reference population (five or more intersections with the same configuration). The analysis method does not consider the overall frequency or rate of crashes, instead it considers only the types of crashes observed. It is useful for identifying locations that may benefit from targeted countermeasures. This method is best used in conjunction with the Critical Crash Rate analysis described above, as the two methods have complementary strengths and weaknesses.

Table 9 summarizes the intersections with a high probability (over 90 percent) that the long-term expected proportion of specific crash types will be greater than the long-term expected proportion of the specific crash types when compared to other intersections in the reference population. The table shows the study intersection, intersection type/reference population, the collision type in excess, the probability of future occurrences, and the proportion of benefit or the likelihood that the intersection will benefit from a countermeasure targeted at the specific crash type. *Attachment E contains the excess proportion of specific crash types analysis worksheet.*

Table 9: Excess Proportions of Specific Crash Types

Map ID	Intersection	Intersection Type/Reference Population	Collision Type in Excess	Probability of Future Occurrence	Proportion of Benefit
1	US 101/Heceta Beach Road	4ST	Turn	100%	0.51
2	US 101/Munsel Lake Road	4ST	Turn	94%	0.31
3	US 101/46th Street	4ST	Turn	98%	0.51
8	US 101/OR 126	4SG	Rear	100%	0.14
9	US 101/Rhododendron Drive	4SG	Rear	100%	0.27
11	OR 126/Quince Street	4ST	Angle	91%	0.19
16	Rhododendron Drive/Heceta Beach Road	4ST	Angle	100%	0.73
20	Kingwood Street/9th Street	4ST	Angle	100%	0.73

Note: 4ST = Four-way stop control intersection, 4SG = Four-way signalized intersection

SAFETY PRIORITY INDEX SYSTEM

The Safety Priority Index System (SPIS) was developed by ODOT to identify sites along state and local roads where potential safety issues warrant further investigation. The SPIS compares the total number of crashes reported on city streets, county roads, and state highways and generates a list of sites (intersections and roadway segments) with calculated SPIS scores. The scores are based on crash frequency, crash rate, and crash severity. SPIS sites with scores in the top five percent are investigated by ODOT staff and reported to the Federal Highway Administration (FHWA). Per the most recent SPIS list (2020), there are no sites within Florence in the top five or ten percent of SPIS sites; however, there is one site in the top 15 percent. The site is located along US 101 between 20th and 21st Street. Given that it is in the top 15 percent, no additional data is available for the site.

Community Identified Needs

Additional needs identified by members of the project advisory committee and participants in the open house are summarized below. The project team will continue to assess these needs through subsequent phases of the TSP update.

- US 101/Heceta Beach Road
- US 101/Fred Meyer Driveway – dangerous crossing for pedestrians
- US 101/Grocery Outlet
- US 101/OR 126 – dangerous crossing for bicyclists
- OR 126/Spruce Street – a recent fatal crash occurred at this intersection
- Rhododendron Drive/Heceta Beach Road
- Rhododendron Drive/Jetty Road
- Rhododendron Drive/35th Street
- Kingwood/35th Street
- Oak Street/21st Street
- Spruce Street/16th Street – dangerous crossing for bicyclists

Access Spacing Analysis

ODOT and the City of Florence have adopted access spacing standards for study area roadways. This analysis identifies ODOT's access spacing standards, as defined in Oregon Administrative Rule (OAR) 734 Division 51, and the City's access spacing standards as defined in Title 10, Chapter 36 of the Florence City Code (FCC 10-36-2-13). This analysis also identifies the average access spacing along ODOT and City streets and highlights segments that do not meet their applicable standards.

ODOT ACCESS SPACING STANDARDS

Access spacing standards for approaches to state highways are based on the classification of the highway and differ depending on posted speed and AADT. Within Florence, US 101 and OR 126 are classified as statewide highways with speeds that range from 30 to 55 mph, and all AADTs are above 5,000 vehicles. Table 10 summarizes ODOT's current access spacing standards for US 101 and OR 126.

Table 10: ODOT Access Spacing Standards

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

US 101 and OR 126 were divided into segments for the access spacing analysis. The segments generally reflect the functional classification of intersecting roadways and posted speeds. Table 11 summarizes the posted speeds, segment lengths, the total number of intersections located along the segments, and the average intersection spacing. As shown, average intersection spacing generally exceeds ODOT's access spacing standards. It should be noted that there may be intersections that meet the standards within each segment while the overall segment exceeds the standards.

Table 11: ODOT Access Spacing Analysis

Roadway Segment	Posted Speed (mph)	Segment Length (ft)	Intersections	Average Intersection Spacing (ft)
US 101				
UGB to Heceta Beach Road	55	1,253	1	626
UGB to Munsel Lake Road	55	2,791	1	1,395
Munsel Lake Road to 42nd Street	40	2,551	3	638
42nd Street to 35th Street	40	2,272	4	454
35th Street to 30th Street	40	1,552	3	517
30th Street to 27th Street	35	932	2	466
27th Street to 15th Street	30/35	3,717	9	372
15th Street to OR 126	30	2,027	3	507
OR 126 to Rhododendron Drive	30	1,511	3	378
Rhododendron Drive to Old Town Way	30	1,590	6	227
Old Town Way to UGB	30/40	1,062	1	531
OR 126				
US 101 to City Limits	35	2,158	4	540

City Limits to Xylo Street	45	838	0	838
Xylo Street to UGB	55	985	0	985
UGB to North Fork Road	55	339	0	339

CITY ACCESS SPACING STANDARDS

The City's access spacing standards are determined by functional classification and posted speed and apply to driveways and intersections. Table 12 summarizes the City's access spacing standards.

Table 12: City Access Spacing Standards

Functional Classification	Minimum Spacing Between Intersections (ft)
Local Street	125
Collector Street	250
Arterial Street	250

Table 13 summarizes access spacing information for arterials and select collectors in Florence, including posted speeds, segment lengths, the total number of intersections located along the segments, and the average intersection spacing. As shown, average intersection spacing generally meets the City's access spacing standards. It should be noted that there may be intersections that exceed the standards within each segment while the overall segment meet the standards.

Table 13: City Access Spacing Analysis

Roadway Segment	Posted Speed (mph)	Segment Length (ft)	Intersections	Average Intersection Spacing (ft)
Rhododendron Drive				
Heceta Beach Road to 35th Street	40	13,474	29	449
35th Street to 9th Street	40	8,441	5	1,407
9th Street to Kingwood Street	40	4,305	8	478
Kingwood Street to US 101	40	757	2	252
4th Avenue				
Joshua Lane to Heceta Beach Road	25	2,984	4	597
Heceta Beach Road				
Rhododendron Drive to US 101	40	9,931	8	1,103
Munsel Lake Road				
US 101 to N Fork Siuslaw Road	35	10,899	9	1,090
Kingwood Street				
35th Street to 27th Street	40	2947	1	1473
27th Street to 15th Street	40	4187	3	1047
15th Street to 9th Street	40	1465	1	733
9th Street t Rhododendron Drive	40	1336	4	267
35th Street				
Rhododendron Drive to Kingwood Street	25	2902	5	484
Kingwood Street to Oak Street	25	1318	4	264
Oak Street to US 101	25	665	1	333
9th Street				
Rhododendron Drive to Kingwood Street	25	3237	7	405
Kingwood Street to US 101	25	1468	3	367

STATE HIGHWAY APPROACH PERMITS

The state highway approach permit information was obtained from ODOT. Table 14 shows the number of approach permits recorded along US 101 and OR 126 in Florence.

Table 14: State Highway Approach Permits

Roadway Segment	Number of Public Approach Permits	Number of Private Approach Permits
US 101		
UGB to 35th Street		
35th Street to OR 126		
OR 126 to UGB		
OR 126		
US 101 to UGB		

Note: Highway approach information was not available for US 101 or OR 126 at the time this memo was finalized.

Parking Analysis

The City in coordination with ODOT completed a parking study in Florence in June 2021. The study includes an inventory and assessment of parking conditions in the greater historic downtown area, including the commercial, mixed-use, and special event areas located immediately north of the downtown straddling both sides of US 101. The study provides an inventory of the current parking supply and an assessment of the current parking demand on a typical weekday and weekend day during the peak summer months. The information provided in the study will be used to facilitate future decision-making regarding potential parking policies and strategies, particularly as growth and demand for parking in and around the greater historic downtown area increases. The following summarizes key findings from the study. *The full study is included in Attachment F.*

KEY FINDINGS

On-Street Parking Supply

- There are 933 on-street parking stalls within the study area.
- Most stalls (805) have no time restrictions, which allow unlimited parking.
- The remaining stalls consist of 10-minute (5), 30-minute (3), and 3-hour (120) stalls.
- All stalls are provided free of charge.
- Of the 145 block faces within the study area, 108 allow parking and 37 do not.

On-Street Parking Demand

- Overall on-street parking demand is relatively low throughout study period (7:00 AM to 7:00 PM) on the weekday and weekend day.
- Overall peak occupancy rates are 30.4% at 1:00 PM on the weekday and 33.8% at 1:00 PM on the weekend day.
    - Occupancy rates in the 3-hour stalls are significantly higher than the overall rates: 90.6% at 2:00 PM on the weekday and 95.3% at 1:00 PM on the weekend day.
- Of the 108 block faces that allow parking, 13 were constrained (>85%) during the peak hour on the weekday and 21 were constrained on the weekend.

  - Most of the constrained block faces are located along Bay and First Streets between Nopal and US 101.

Off-Street Parking Supply

- There are a variety of land uses within the historic downtown area that provide off-street parking.
- These uses provide a total of 2,529 off-street parking stalls across 116 lots.
  - 56 of the 116 lots were selected to represent the off-street supply in the survey

Off-Street Parking Demand

- Overall off-street parking demand is relatively low throughout study period (7:00 AM to 7:00 PM) on the weekday and weekend day.
- Overall peak occupancy rates are 33.9% at 2:00 PM on the weekday and 34.9% at 1:00 PM on the weekend day.
  - Occupancy rates in the off-street stalls that support restaurant uses are significantly higher than the overall rates: 97.3% at 12:00 PM on the weekday and 97.1% at 6:00 PM on the weekend day.
- Six of the 56 lots that were surveyed are constrained (>85%) on the weekday and eight are constrained on the weekend day.
  - These constrained lots are relatively small and have little impact to off-street system.
- Unlike the on-street system, most of the off-street stalls have higher occupancy rates on the weekday rather than the weekend day.

Conclusions

- Florence provides a good balance for residents and tourists, mixing tourism destinations with everyday needs.
- Though the entire parking system is far from constrained, the on- and off-street systems near Bay Street are highly utilized.
- However, on-street and off-street parking is generally available nearby (within a couple blocks).
- Some basic parking management strategies can help redirect demand into areas with surplus parking, while freeing up more convenient, centrally locates stalls for higher turnover users.

Environmental Analysis

Title VI and Environmental Justice (EJ) population information is provided in *Tech Memo 3A: Transportation Inventory*. The information will be used to identifying transportation system improvements that will provide the most benefits to identified populations. Six population groups are considered for transportation impact susceptibility, representing those who may rely more heavily on public infrastructure or transit for access to day-to-day needs and jobs. They include minority groups, low-income populations, populations under 17 or over 64 years of age, low-English proficiency households, and people with disabilities. See *Tech Memo 3A: Transportation Inventory* for additional information.

Attachments

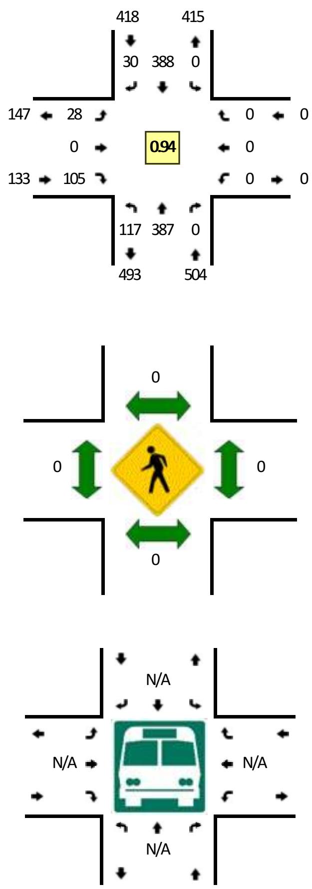
A. Traffic Counts Worksheets
B. Existing Traffic Conditions Worksheets
C. Queuing Analysis Worksheets
D. Detailed Pedestrian Level of Traffic Stress Results
E. ODOT Crash Data
F. Crash Analysis Worksheets
G. Parking Study

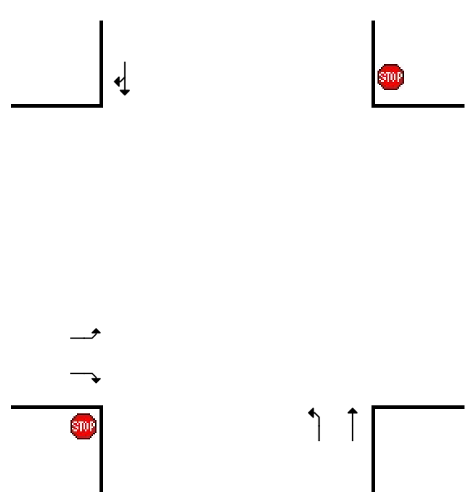
ATTACHMENT A:
TRAFFIC COUNTS WORKSHEETS

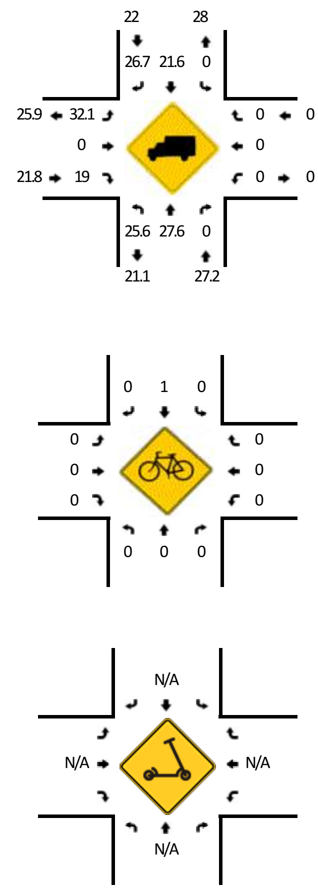
Type of peak hour being reported: Intersection Peak   Method for determining peak hour: Total Entering Volume

LOCATION: US 101 -- Heceta Beach Rd   **QC JOB #:** 15890301
CITY/STATE: Florence, OR   **DATE:** Thu, Jun 3 2021

Peak-Hour: 1:45 PM -- 2:45 PM
Peak 15-Min: 2:00 PM -- 2:15 PM







15-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				Heceta Beach Rd (Eastbound)				Heceta Beach Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	4	0	0	0	14	0	0	0	0	2	0	0	0	0	0	20	
6:15 AM	5	9	0	0	0	17	0	0	1	0	4	0	0	0	0	0	36	
6:30 AM	3	11	0	0	0	20	1	0	1	0	9	0	0	0	0	0	45	
6:45 AM	4	20	0	0	0	33	2	0	1	0	10	0	0	0	0	0	70	171
7:00 AM	8	17	0	0	0	30	1	0	2	0	14	0	0	0	0	0	72	223
7:15 AM	13	27	0	0	0	45	5	0	1	0	17	0	0	0	0	0	108	295
7:30 AM	11	34	0	0	0	55	0	0	0	0	14	0	0	0	0	0	114	364
7:45 AM	11	43	0	0	0	80	2	0	3	0	19	0	0	0	0	0	158	452
8:00 AM	10	40	0	0	0	64	1	0	1	0	19	0	0	0	0	0	135	515
8:15 AM	14	43	0	0	0	58	1	0	1	0	16	0	0	0	0	0	133	540
8:30 AM	11	59	0	0	0	69	2	0	2	0	17	0	0	0	0	0	160	586
8:45 AM	17	36	0	0	0	56	5	0	6	0	24	0	0	0	0	0	144	572
9:00 AM	17	50	0	0	0	58	2	0	6	0	16	0	0	0	0	0	149	586
9:15 AM	12	57	0	0	0	70	1	0	11	0	19	0	0	0	0	0	170	623
9:30 AM	13	57	0	0	0	81	5	0	7	0	28	0	0	0	0	0	191	654
9:45 AM	24	73	0	0	0	74	3	0	5	0	26	0	0	0	0	0	205	715
10:00 AM	14	54	0	0	0	58	3	0	2	0	19	0	0	0	0	0	150	716
10:15 AM	23	73	0	0	0	81	3	0	7	0	29	0	0	0	0	0	216	762
10:30 AM	20	68	0	0	0	51	2	0	1	0	30	0	0	0	0	0	172	743
10:45 AM	19	75	0	0	0	93	9	0	11	0	30	0	0	0	0	0	237	775
11:00 AM	26	89	0	0	0	88	6	0	11	0	27	0	0	0	0	0	247	872
11:15 AM	19	92	0	0	0	93	4	0	3	0	42	0	0	0	0	0	253	909
11:30 AM	21	90	0	0	0	94	6	0	8	0	26	0	0	0	0	0	245	982
11:45 AM	24	81	0	0	0	110	4	0	7	0	24	0	0	0	0	0	250	995
12:00 PM	24	90	0	0	0	72	4	0	12	0	37	0	0	0	0	0	239	987
12:15 PM	29	92	0	0	0	90	8	0	7	0	20	0	0	0	0	0	246	980
12:30 PM	25	97	0	0	0	97	11	0	2	0	29	0	0	0	0	0	261	996
12:45 PM	35	91	0	0	0	94	9	0	12	0	33	0	0	0	0	0	274	1020
1:00 PM	40	84	0	0	0	89	7	0	3	0	23	0	0	0	0	0	246	1027
1:15 PM	29	81	0	0	0	82	3	0	9	0	25	0	0	0	0	0	229	1010
1:30 PM	29	98	0	0	0	82	8	0	9	0	32	0	0	0	0	0	258	1007
1:45 PM	21	96	0	0	0	91	1	0	10	0	33	0	0	0	0	0	252	985
2:00 PM	30	103	0	0	0	104	11	0	6	0	27	0	0	0	0	0	281	1020
2:15 PM	25	103	0	0	0	92	8	0	11	0	24	0	0	0	0	0	263	1054
2:30 PM	41	85	0	0	0	101	10	0	1	0	21	0	0	0	0	0	259	1055
2:45 PM	29	93	0	0	0	79	4	0	10	0	23	0	0	0	0	0	238	1041
3:00 PM	23	102	0	0	0	76	5	0	11	0	29	0	0	0	0	0	246	1006
3:15 PM	22	92	0	0	0	79	7	0	2	0	21	0	0	0	0	0	223	966

15-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				Heceta Beach Rd (Eastbound)				Heceta Beach Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	32	98	0	0	0	78	8	0	4	0	19	0	0	0	0	0	239	946
3:45 PM	32	90	0	0	0	92	10	0	5	0	23	0	0	0	0	0	252	960
4:00 PM	36	87	0	0	0	81	8	0	6	0	33	0	0	0	0	0	251	965
4:15 PM	40	93	0	0	0	64	6	0	4	0	27	0	0	0	0	0	234	976
4:30 PM	31	102	0	0	0	77	10	0	7	0	29	0	0	0	0	0	256	993
4:45 PM	31	91	0	0	0	61	7	0	6	0	16	0	0	0	0	0	212	953
5:00 PM	38	98	0	0	0	69	5	0	10	0	18	0	0	0	0	0	238	940
5:15 PM	26	75	0	0	0	55	3	0	6	0	20	0	0	0	0	0	185	891
5:30 PM	24	74	0	0	0	71	4	0	3	0	19	0	0	0	0	0	195	830
5:45 PM	20	65	0	0	0	52	6	0	1	0	17	0	0	0	0	0	161	779
6:00 PM	16	80	0	0	0	51	2	0	5	0	16	0	0	0	0	0	170	711
6:15 PM	17	53	0	0	0	41	9	0	4	0	19	0	0	0	0	0	143	669
6:30 PM	29	69	0	0	0	50	4	0	3	0	19	0	0	0	0	0	174	648
6:45 PM	20	40	0	0	0	52	5	0	4	0	19	0	0	0	0	0	140	627
7:00 PM	18	34	0	0	0	34	2	0	3	0	9	0	0	0	0	0	100	557
7:15 PM	9	39	0	0	0	30	4	0	3	0	14	0	0	0	0	0	99	513
7:30 PM	23	43	0	0	0	31	1	0	4	0	16	0	0	0	0	0	118	457
7:45 PM	12	34	0	0	0	38	4	0	3	0	12	0	0	0	0	0	103	420
8:00 PM	18	21	0	0	0	37	1	0	2	0	6	0	0	0	0	0	85	405
8:15 PM	12	24	0	0	0	44	0	0	3	0	11	0	0	0	0	0	94	400
8:30 PM	13	13	0	0	0	19	2	0	1	0	6	0	0	0	0	0	54	336
8:45 PM	10	39	0	0	0	22	5	0	2	0	17	0	0	0	0	0	95	328
9:00 PM	8	21	0	0	0	24	0	0	0	0	9	0	0	0	0	0	62	305
9:15 PM	11	10	0	0	0	18	1	0	2	0	9	0	0	0	0	0	51	262
9:30 PM	7	15	0	0	0	13	0	0	1	0	4	0	0	0	0	0	40	248
9:45 PM	6	23	0	0	0	10	3	0	2	0	4	0	0	0	0	0	48	201

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	120	412	0	0	0	416	44	0	24	0	108	0	0	0	0	0	1124
Heavy Trucks	40	116	0		0	80	16		8	0	12		0	0	0		272
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	4	0		0	0	0		0	0	0		4
Scooters																	

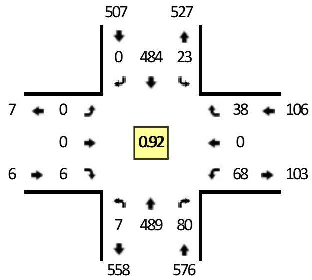
Comments:

Report generated on 7/24/2022 12:23 AM

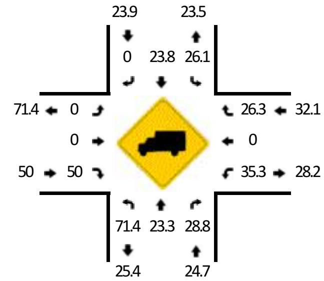
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

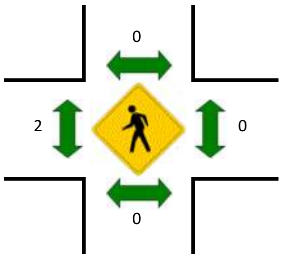
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

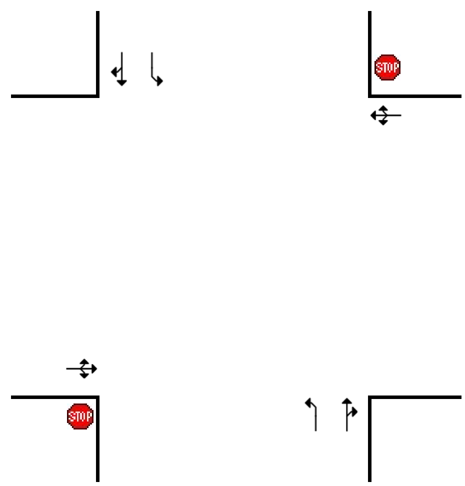
LOCATION: US 101 -- Munsel Lake Rd | **QC JOB #:** 15890302
CITY/STATE: Florence, OR | **DATE:** Thu, Jun 3 2021

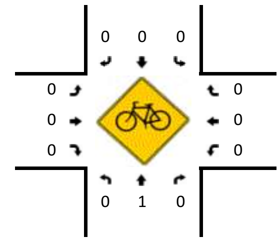


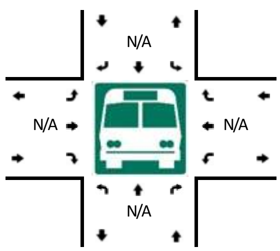
Peak-Hour: 12:15 PM -- 1:15 PM
Peak 15-Min: 12:45 PM -- 1:00 PM

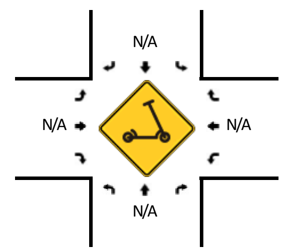












15-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				Munsel Lake Rd (Eastbound)				Munsel Lake Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	4	1	0	2	16	0	0	0	0	0	0	2	0	0	0	25	
6:15 AM	0	13	1	0	2	20	0	0	0	0	0	0	4	0	1	0	41	
6:30 AM	0	17	2	0	4	31	0	0	0	0	0	0	7	0	0	0	61	
6:45 AM	0	22	6	0	3	43	0	0	0	0	0	0	4	0	2	0	80	207
7:00 AM	0	23	9	0	6	45	0	0	0	0	0	0	10	0	2	0	95	277
7:15 AM	0	31	4	0	6	56	0	0	0	0	0	0	12	0	8	0	117	353
7:30 AM	0	45	7	0	9	67	1	0	0	0	1	0	23	0	8	0	161	453
7:45 AM	0	50	7	0	6	84	0	0	0	0	0	0	13	0	7	0	167	540
8:00 AM	0	57	11	0	5	78	0	0	0	0	0	0	14	0	4	0	169	614
8:15 AM	0	53	12	0	8	81	1	0	0	0	0	0	10	0	3	0	168	665
8:30 AM	0	67	7	0	12	80	0	0	0	0	1	0	9	0	3	0	179	683
8:45 AM	1	49	13	0	8	69	1	0	1	0	0	0	11	0	7	0	160	676
9:00 AM	0	61	6	0	5	74	0	0	1	0	0	0	10	0	9	0	166	673
9:15 AM	0	66	21	0	10	88	0	0	0	0	0	0	10	0	8	0	203	708
9:30 AM	0	76	15	0	7	106	0	0	0	0	0	0	13	0	3	0	220	749
9:45 AM	0	73	21	0	14	89	0	0	0	0	0	0	14	0	8	0	219	808
10:00 AM	1	76	18	0	9	79	1	0	0	0	1	0	11	1	5	0	202	844
10:15 AM	1	83	18	0	6	109	1	0	1	0	0	0	7	0	9	0	235	876
10:30 AM	0	93	10	0	5	81	0	0	0	0	1	0	9	0	9	0	208	864
10:45 AM	0	109	14	0	9	119	0	0	0	0	0	0	10	0	5	0	266	911
11:00 AM	1	103	12	0	9	111	0	0	0	0	1	0	13	0	8	0	258	967
11:15 AM	1	114	19	0	10	130	1	0	0	0	0	0	20	0	6	0	301	1033
11:30 AM	1	101	8	0	8	112	1	0	1	0	1	0	19	0	4	0	256	1081
11:45 AM	1	110	15	0	13	129	0	0	0	2	0	0	10	0	7	0	287	1102
12:00 PM	0	113	16	0	13	114	0	0	0	0	1	0	14	0	9	0	280	1124
12:15 PM	1	125	22	0	5	114	0	0	0	0	0	0	14	0	6	0	287	1110
12:30 PM	2	117	18	0	6	131	0	0	0	0	1	0	19	0	9	0	303	1157
12:45 PM	3	124	20	0	6	132	0	0	0	0	4	0	20	0	14	0	323	1193
1:00 PM	1	123	20	0	6	107	0	0	0	0	1	0	15	0	9	0	282	1195
1:15 PM	1	124	21	0	12	100	1	0	0	0	3	0	15	0	7	0	284	1192
1:30 PM	1	121	26	0	8	119	2	0	0	0	3	0	17	0	9	0	306	1195
1:45 PM	1	103	17	0	15	111	1	0	0	0	1	0	12	0	17	0	278	1150
2:00 PM	0	122	19	0	10	127	0	0	0	0	1	0	17	1	11	0	308	1176
2:15 PM	0	130	17	0	7	116	0	0	0	0	1	0	17	0	7	0	295	1187
2:30 PM	1	129	11	0	6	124	4	0	0	0	2	0	17	0	11	0	305	1186
2:45 PM	3	126	20	0	6	106	1	0	0	0	4	0	11	0	5	0	282	1190
3:00 PM	1	126	15	0	9	103	0	0	1	0	2	0	17	0	6	0	280	1162
3:15 PM	0	109	9	0	4	102	0	0	0	0	0	0	15	0	6	0	245	1112

15-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				Munsel Lake Rd (Eastbound)				Munsel Lake Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	0	133	15	0	9	91	0	0	0	0	1	0	17	1	8	0	275	1082
3:45 PM	2	119	20	0	10	114	0	0	0	0	2	0	12	0	7	0	286	1086
4:00 PM	3	126	21	0	7	112	0	0	0	0	3	0	8	0	8	0	288	1094
4:15 PM	0	131	18	0	6	90	0	0	0	0	3	0	14	0	6	0	268	1117
4:30 PM	1	129	12	0	11	107	0	0	0	0	0	0	10	0	11	0	281	1123
4:45 PM	0	116	16	0	6	74	1	0	0	0	0	0	13	0	10	0	236	1073
5:00 PM	0	129	18	0	7	86	0	0	1	0	1	0	9	0	11	0	262	1047
5:15 PM	0	93	18	0	4	77	0	0	0	0	0	0	7	0	7	0	206	985
5:30 PM	0	105	18	0	5	88	0	0	0	0	1	0	4	0	7	0	228	932
5:45 PM	2	78	10	0	5	65	0	0	0	0	1	0	7	0	8	0	176	872
6:00 PM	1	83	9	0	2	72	0	0	1	0	1	0	4	0	5	0	178	788
6:15 PM	0	74	8	0	3	64	0	0	0	0	0	0	9	0	8	0	166	748
6:30 PM	1	89	8	0	5	70	0	0	0	0	1	0	8	0	5	0	187	707
6:45 PM	0	67	10	0	6	70	0	0	0	0	0	0	7	0	5	0	165	696
7:00 PM	0	45	8	0	4	38	1	0	0	0	0	0	5	0	4	0	105	623
7:15 PM	0	52	6	0	4	54	0	0	0	0	0	0	2	0	4	0	122	579
7:30 PM	0	59	4	0	2	47	0	0	0	0	1	0	2	1	11	0	127	519
7:45 PM	0	51	6	0	4	44	0	0	0	0	0	0	3	0	4	0	112	466
8:00 PM	0	28	9	0	6	44	0	0	0	0	1	0	7	0	7	0	102	463
8:15 PM	0	37	3	0	7	50	0	0	0	0	0	0	2	0	2	0	101	442
8:30 PM	0	24	5	0	2	25	0	0	0	0	0	0	2	0	4	0	62	377
8:45 PM	0	46	5	0	3	38	0	0	0	0	0	0	4	0	4	0	100	365
9:00 PM	0	22	1	0	2	32	0	0	0	0	1	0	2	0	3	0	63	326
9:15 PM	0	25	3	0	2	26	0	0	0	0	0	0	1	0	3	0	60	285
9:30 PM	1	22	5	0	1	16	0	0	1	0	0	0	1	0	1	0	48	271
9:45 PM	0	22	4	0	4	12	0	0	0	0	0	0	0	0	3	0	45	216

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	12	496	80	0	24	528	0	0	0	0	16	0	80	0	56	0	1292
Heavy Trucks	12	136	24		12	104	0		0	0	8		36	0	12		344
Buses																	
Pedestrians		0				0				4				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

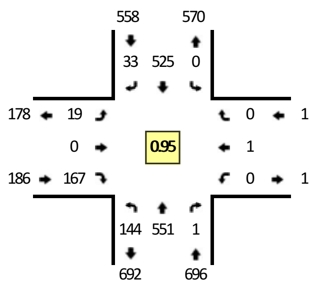
Comments:

Report generated on 7/24/2022 12:23 AM

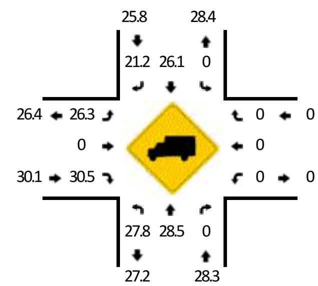
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

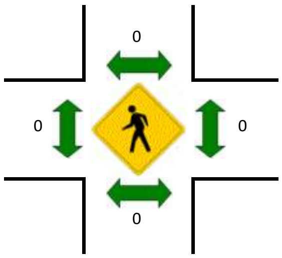
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

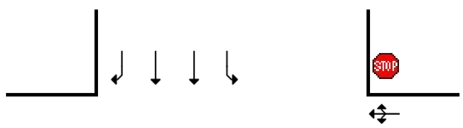
LOCATION: US 101 -- 46th St | **QC JOB #:** 15890303
CITY/STATE: Florence, OR | **DATE:** Thu, Jun 3 2021

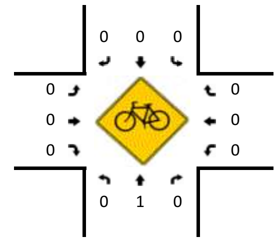


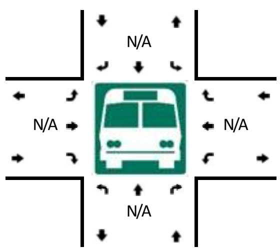
Peak-Hour: 12:00 PM -- 1:00 PM
Peak 15-Min: 12:45 PM -- 1:00 PM

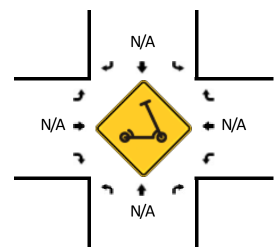












15-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				46th St (Eastbound)				46th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	1	11	0	0	0	15	1	0	0	0	2	0	0	0	0	0	30	
6:15 AM	5	18	0	0	0	19	1	0	0	0	0	0	0	0	0	0	43	
6:30 AM	2	20	0	0	0	32	1	0	0	0	4	0	0	0	0	0	59	
6:45 AM	4	27	0	0	0	42	3	0	0	0	5	0	0	0	0	0	81	213
7:00 AM	8	34	0	0	0	42	0	0	0	0	7	0	0	0	0	0	91	274
7:15 AM	5	35	0	0	0	48	6	0	1	0	11	0	0	0	0	0	106	337
7:30 AM	10	45	0	0	1	75	3	0	1	0	9	0	1	0	0	0	145	423
7:45 AM	7	56	1	0	0	89	5	0	2	0	11	0	0	0	0	0	171	513
8:00 AM	13	63	0	0	0	84	4	0	4	0	15	0	0	0	0	0	183	605
8:15 AM	9	61	0	0	0	66	3	0	8	0	14	0	0	0	1	0	162	661
8:30 AM	11	64	1	0	0	85	3	0	2	0	18	0	0	0	0	0	184	700
8:45 AM	18	70	0	0	0	80	3	0	1	0	20	0	0	0	0	0	192	721
9:00 AM	19	65	0	0	0	68	2	0	2	0	18	0	0	0	0	0	174	712
9:15 AM	15	76	1	0	0	97	5	0	6	0	25	0	0	0	0	0	225	775
9:30 AM	22	85	0	0	1	112	3	0	3	0	31	0	0	0	0	0	257	848
9:45 AM	33	85	0	0	0	83	3	0	4	0	18	0	1	0	0	0	227	883
10:00 AM	28	82	0	0	0	95	2	0	4	0	23	0	0	0	0	0	234	943
10:15 AM	26	102	0	0	0	105	0	0	3	0	31	0	0	0	0	0	267	985
10:30 AM	40	103	1	0	0	92	2	0	1	0	28	0	1	0	0	0	268	996
10:45 AM	35	121	1	0	0	118	5	0	4	0	34	0	0	0	0	0	318	1087
11:00 AM	35	119	0	0	0	103	6	0	6	0	34	0	1	0	0	0	304	1157
11:15 AM	36	118	0	0	0	133	11	0	5	0	38	0	0	0	0	0	341	1231
11:30 AM	37	114	0	0	0	125	2	0	10	0	30	0	0	0	0	0	318	1281
11:45 AM	26	117	1	0	0	126	4	0	3	0	45	0	0	0	0	0	322	1285
12:00 PM	36	126	0	0	0	115	6	0	6	0	45	0	0	1	0	0	335	1316
12:15 PM	35	146	0	0	0	120	10	0	5	0	40	0	0	0	0	0	356	1331
12:30 PM	41	137	0	0	0	139	7	0	4	0	42	0	0	0	0	0	370	1383
12:45 PM	32	142	1	0	0	151	10	0	4	0	40	0	0	0	0	0	380	1441
1:00 PM	34	124	1	0	0	113	6	0	5	0	36	0	0	0	0	0	319	1425
1:15 PM	30	131	0	0	0	117	5	0	12	0	36	0	0	0	1	0	332	1401
1:30 PM	33	138	0	0	0	116	7	0	2	0	27	0	0	0	0	0	323	1354
1:45 PM	32	123	1	0	0	119	9	0	4	0	39	0	0	0	1	0	328	1302
2:00 PM	26	129	0	0	0	125	4	0	8	0	33	0	0	1	0	0	326	1309
2:15 PM	34	140	0	0	0	120	8	0	8	0	27	0	0	0	0	0	337	1314
2:30 PM	34	135	0	0	0	131	5	0	4	0	31	0	0	0	0	0	340	1331
2:45 PM	32	130	1	0	0	107	6	0	8	0	29	0	0	0	0	0	313	1316
3:00 PM	37	126	0	0	0	108	5	0	4	0	37	0	0	0	0	0	317	1307
3:15 PM	32	116	0	0	0	105	4	0	8	0	37	0	0	0	0	0	302	1272

15-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				46th St (Eastbound)				46th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	39	133	0	0	0	109	2	0	5	0	43	0	0	0	0	0	331	1263
3:45 PM	33	118	0	0	0	112	5	0	10	0	27	0	0	0	0	0	305	1255
4:00 PM	20	142	0	0	0	102	11	0	4	0	27	0	0	0	0	0	306	1244
4:15 PM	24	130	0	0	0	93	7	0	4	0	36	0	0	0	0	0	294	1236
4:30 PM	28	128	0	0	0	104	7	0	6	0	29	0	0	0	0	0	302	1207
4:45 PM	23	123	0	0	0	83	2	0	6	1	31	0	0	0	1	0	270	1172
5:00 PM	20	123	0	0	0	85	3	0	2	0	28	0	0	0	0	0	261	1127
5:15 PM	16	114	0	0	0	67	4	0	4	0	23	0	0	0	0	0	228	1061
5:30 PM	30	98	0	0	0	85	4	0	5	0	37	0	0	0	0	0	259	1018
5:45 PM	26	93	0	0	0	64	4	0	3	0	31	0	1	0	0	0	222	970
6:00 PM	14	82	0	0	0	73	2	0	3	0	17	0	0	0	0	0	191	900
6:15 PM	18	75	0	0	1	57	1	0	1	0	23	0	0	0	0	0	176	848
6:30 PM	24	89	0	0	0	63	3	0	1	0	19	0	1	0	0	0	200	789
6:45 PM	14	67	0	0	0	62	2	0	2	0	22	0	0	0	0	0	169	736
7:00 PM	13	48	0	0	0	45	2	0	2	0	18	0	0	0	0	0	128	673
7:15 PM	11	44	0	0	0	42	7	0	5	0	12	0	0	0	0	0	121	618
7:30 PM	13	54	0	0	0	39	5	0	6	0	23	0	0	0	0	0	140	558
7:45 PM	9	49	0	0	0	42	5	0	0	0	18	0	0	0	0	0	123	512
8:00 PM	8	36	0	0	0	44	1	0	2	0	24	0	0	0	0	0	115	499
8:15 PM	13	37	0	0	0	40	3	0	3	0	12	0	0	0	0	0	108	486
8:30 PM	11	25	0	0	0	31	3	0	0	0	14	0	0	0	0	0	84	430
8:45 PM	9	42	0	0	0	35	0	0	1	0	11	0	0	0	0	0	98	405
9:00 PM	10	24	0	0	0	39	1	0	1	0	10	0	0	0	0	0	85	375
9:15 PM	5	26	0	0	0	26	1	0	0	0	8	0	0	0	0	0	66	333
9:30 PM	5	16	0	0	0	12	2	0	1	0	5	0	0	0	0	0	41	290
9:45 PM	1	26	0	0	0	15	0	0	2	0	6	0	0	0	0	0	50	242

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	128	568	4	0	0	604	40	0	16	0	160	0	0	0	0	0	1520
Heavy Trucks	36	140	0		0	192	12		8	0	40		0	0	0		428
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

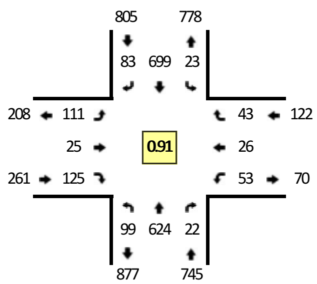
Report generated on 7/24/2022 12:23 AM

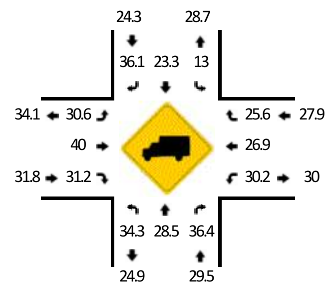
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

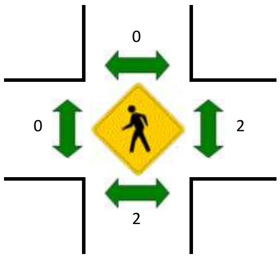
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

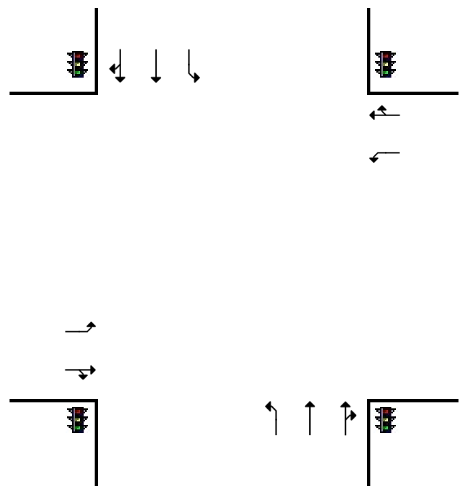
LOCATION: US 101 -- 35th St | **QC JOB #:** 15890304
CITY/STATE: Florence, OR | **DATE:** Thu, Jun 3 2021

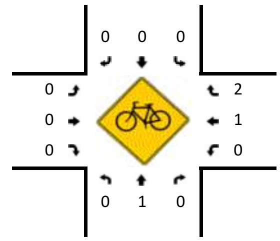
Peak-Hour: 12:00 PM -- 1:00 PM
Peak 15-Min: 12:45 PM -- 1:00 PM

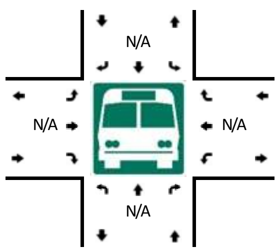


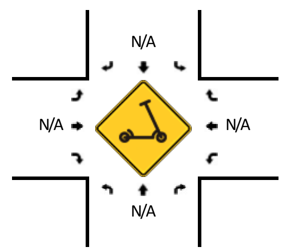












15-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				35th St (Eastbound)				35th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	1	13	0	0	0	17	2	0	0	0	5	0	1	0	0	0	39	
6:15 AM	4	21	0	0	0	17	1	0	0	0	6	0	0	1	1	0	51	
6:30 AM	4	26	0	0	0	35	3	0	3	0	6	0	1	2	2	0	82	
6:45 AM	6	32	0	0	0	48	4	0	5	0	14	0	4	2	0	0	115	287
7:00 AM	7	41	1	0	1	40	4	0	4	0	13	0	5	2	0	0	118	366
7:15 AM	6	42	2	0	2	50	8	0	6	0	11	0	0	3	0	0	130	445
7:30 AM	6	57	4	0	1	84	9	0	9	2	11	0	6	2	3	0	194	557
7:45 AM	14	85	1	0	3	85	14	0	8	4	24	0	6	9	6	0	259	701
8:00 AM	13	77	0	0	1	92	15	0	12	6	22	0	7	2	3	0	250	833
8:15 AM	17	63	3	0	1	80	9	0	8	4	17	0	5	6	3	0	216	919
8:30 AM	11	82	4	0	4	96	12	0	18	4	19	0	9	4	2	0	265	990
8:45 AM	8	83	7	0	3	94	6	0	11	5	34	0	5	7	8	0	271	1002
9:00 AM	13	91	5	0	4	82	7	0	11	3	17	0	10	3	2	0	248	1000
9:15 AM	14	110	7	0	4	122	14	0	14	3	19	0	5	5	2	0	319	1103
9:30 AM	16	118	6	0	3	140	14	0	19	2	17	0	11	7	4	0	357	1195
9:45 AM	18	98	3	0	2	119	12	0	25	4	23	0	7	7	7	0	325	1249
10:00 AM	10	129	3	0	2	131	7	0	14	2	17	0	4	2	6	0	327	1328
10:15 AM	11	114	6	0	9	132	17	0	18	5	25	0	6	3	5	0	351	1360
10:30 AM	9	139	9	0	4	121	12	0	10	1	33	0	4	8	5	0	355	1358
10:45 AM	9	143	3	0	4	139	10	0	24	8	36	0	16	7	13	0	412	1445
11:00 AM	21	145	10	0	10	140	9	0	29	4	27	0	10	8	7	0	420	1538
11:15 AM	14	155	6	0	6	162	13	0	18	7	27	0	9	6	5	0	428	1615
11:30 AM	22	133	6	0	7	161	15	0	25	11	21	0	9	6	8	0	424	1684
11:45 AM	19	160	9	0	4	157	17	0	22	9	40	0	15	3	8	0	463	1735
12:00 PM	28	152	8	0	5	156	22	0	29	9	33	0	8	4	11	0	465	1780
12:15 PM	21	161	4	0	4	162	16	0	30	4	26	0	10	6	10	0	454	1806
12:30 PM	24	135	3	0	4	178	21	0	35	6	41	0	10	12	13	0	482	1864
12:45 PM	26	176	7	0	10	203	24	0	17	6	25	0	25	4	9	0	532	1933
1:00 PM	26	163	4	0	4	157	6	0	18	6	27	0	19	3	15	0	448	1916
1:15 PM	20	153	5	0	5	161	17	0	20	7	25	0	8	11	4	0	436	1898
1:30 PM	20	175	8	0	4	145	18	0	23	7	23	0	15	0	5	0	443	1859
1:45 PM	26	133	7	0	12	189	6	0	19	6	26	0	5	4	12	0	445	1772
2:00 PM	14	150	8	0	3	166	13	0	20	6	25	0	5	9	15	0	434	1758
2:15 PM	19	163	11	0	7	148	15	0	12	5	25	0	10	3	14	0	432	1754
2:30 PM	19	154	4	0	9	159	10	0	16	7	26	0	10	11	11	0	436	1747
2:45 PM	27	154	7	0	5	146	10	0	21	8	17	0	12	7	11	0	425	1727
3:00 PM	18	151	13	0	9	145	7	0	30	10	20	0	7	15	12	0	437	1730
3:15 PM	17	142	7	0	2	156	16	0	18	7	15	0	8	11	10	0	409	1707

15-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				35th St (Eastbound)				35th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	24	143	4	0	11	131	15	0	32	6	25	0	7	5	14	0	417	1688
3:45 PM	16	134	4	0	6	132	9	0	26	7	20	0	8	8	9	0	379	1642
4:00 PM	18	159	13	0	4	143	12	0	18	9	32	0	9	6	4	0	427	1632
4:15 PM	17	144	6	0	7	135	9	0	18	6	28	0	3	4	7	0	384	1607
4:30 PM	12	145	11	0	10	135	12	0	16	9	26	0	8	5	5	0	394	1584
4:45 PM	21	141	5	0	4	125	10	0	13	7	15	0	10	7	8	0	366	1571
5:00 PM	31	132	7	0	9	118	2	0	22	9	18	0	9	5	5	0	367	1511
5:15 PM	19	120	7	0	3	108	8	0	17	7	17	0	6	5	5	0	322	1449
5:30 PM	22	117	2	0	1	122	8	0	11	3	13	0	5	4	6	0	314	1369
5:45 PM	21	106	3	0	6	103	11	0	12	8	9	0	4	1	9	0	293	1296
6:00 PM	21	93	5	0	2	97	9	0	13	4	8	0	2	7	2	0	263	1192
6:15 PM	13	82	4	0	2	70	12	0	9	5	20	0	3	11	6	0	237	1107
6:30 PM	16	109	5	0	3	83	9	0	9	6	9	0	0	1	6	0	256	1049
6:45 PM	12	77	2	0	2	82	8	0	8	2	9	0	2	2	2	0	208	964
7:00 PM	10	63	1	0	4	73	1	0	3	0	5	0	4	2	4	0	170	871
7:15 PM	5	67	2	0	2	58	4	0	5	3	9	0	1	0	2	0	158	792
7:30 PM	7	56	4	0	4	65	6	0	4	3	9	0	3	2	1	0	164	700
7:45 PM	8	48	1	0	3	58	5	0	2	2	11	0	0	4	4	0	146	638
8:00 PM	5	45	1	0	3	64	3	0	7	1	4	0	1	1	0	0	135	603
8:15 PM	8	51	1	0	2	46	3	0	3	2	11	0	1	5	0	0	133	578
8:30 PM	8	36	1	0	2	51	3	0	0	0	2	0	2	1	0	0	106	520
8:45 PM	8	53	0	0	2	41	1	0	3	3	6	0	3	0	1	0	121	495
9:00 PM	9	31	1	0	2	42	5	0	4	0	8	0	1	1	1	0	105	465
9:15 PM	8	27	2	0	0	34	3	0	2	3	5	0	2	2	1	0	89	421
9:30 PM	7	27	0	0	0	18	1	0	1	0	5	0	0	0	0	0	59	374
9:45 PM	4	29	0	0	0	22	0	0	1	1	1	0	0	0	0	0	58	311

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	104	704	28	0	40	812	96	0	68	24	100	0	100	16	36	0	2128
Heavy Trucks	40	172	12		8	192	32		24	12	24		24	4	12		556
Buses																	
Pedestrians		4				0				0				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	8		8
Scooters																	

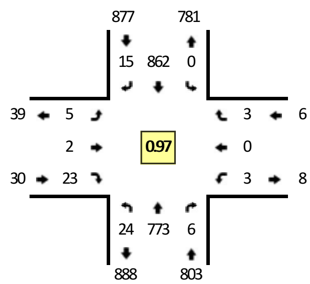
Comments:

Report generated on 7/24/2022 12:23 AM

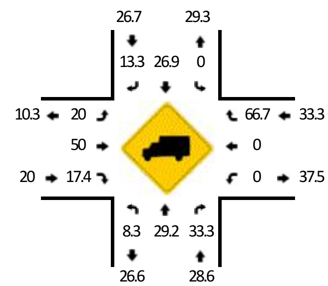
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

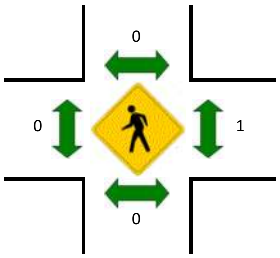
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

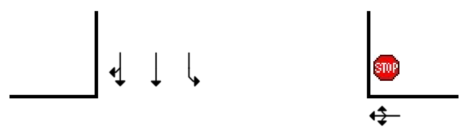
LOCATION: US 101 -- 30th St | **QC JOB #:** 15890305
CITY/STATE: Florence, OR | **DATE:** Thu, Jun 3 2021

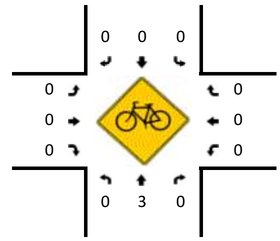


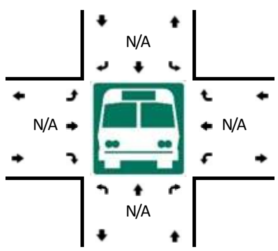
Peak-Hour: 12:00 PM -- 1:00 PM
Peak 15-Min: 12:45 PM -- 1:00 PM

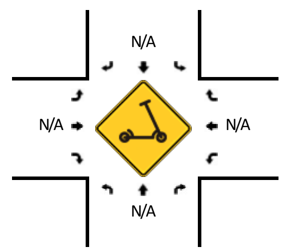












15-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				30th St (Eastbound)				30th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	21	0	0	0	24	0	0	0	0	0	0	0	0	0	0	45	
6:15 AM	0	27	0	0	0	27	0	0	0	0	0	0	0	0	0	0	54	
6:30 AM	0	34	0	0	0	42	0	0	0	0	2	0	1	0	1	0	80	
6:45 AM	1	41	0	0	0	65	0	0	0	0	1	0	0	0	1	0	109	288
7:00 AM	3	48	0	0	0	60	0	0	0	0	0	0	1	0	1	0	113	356
7:15 AM	3	53	0	0	0	63	2	0	0	0	3	0	0	0	0	0	124	426
7:30 AM	4	73	1	0	2	93	5	0	0	0	0	0	0	0	1	0	179	525
7:45 AM	3	107	0	0	0	111	4	0	0	0	3	0	3	0	0	0	231	647
8:00 AM	23	87	0	0	0	125	7	0	1	2	6	0	0	1	1	0	253	787
8:15 AM	3	89	0	0	0	104	3	0	1	0	7	0	1	0	0	0	208	871
8:30 AM	2	103	0	0	0	123	0	0	0	0	1	0	1	0	1	0	231	923
8:45 AM	5	103	3	0	1	126	0	0	0	0	2	0	0	0	0	0	240	932
9:00 AM	3	120	0	0	0	121	2	0	3	0	3	0	1	0	1	0	254	933
9:15 AM	1	133	2	0	0	142	2	0	0	2	1	0	0	1	0	0	284	1009
9:30 AM	3	130	1	0	0	167	1	0	1	0	3	0	1	0	5	0	312	1090
9:45 AM	3	130	1	0	0	162	0	0	0	3	3	0	4	0	1	0	307	1157
10:00 AM	3	144	0	0	0	145	0	0	0	0	3	0	0	0	2	0	297	1200
10:15 AM	3	137	1	0	0	177	4	0	1	0	4	0	1	0	0	0	328	1244
10:30 AM	4	163	2	0	0	164	0	0	0	0	4	0	0	0	3	0	340	1272
10:45 AM	2	173	0	0	1	201	0	0	0	0	4	0	2	0	1	0	384	1349
11:00 AM	4	173	3	0	0	183	3	0	0	0	5	0	1	0	1	0	373	1425
11:15 AM	9	176	0	0	1	200	3	0	2	0	9	0	1	0	3	0	404	1501
11:30 AM	10	179	2	0	0	182	3	0	1	0	30	0	0	0	0	0	407	1568
11:45 AM	5	177	0	0	0	223	0	0	0	2	8	0	0	0	0	0	415	1599
12:00 PM	12	205	1	0	0	206	3	0	1	0	4	0	1	0	0	0	433	1659
12:15 PM	1	184	3	0	0	200	2	0	3	0	6	0	1	0	0	0	400	1655
12:30 PM	5	178	1	0	0	240	7	0	1	2	7	0	0	0	0	0	441	1689
12:45 PM	6	206	1	0	0	216	3	0	0	0	6	0	1	0	3	0	442	1716
1:00 PM	5	190	0	0	0	212	0	0	1	0	2	0	0	0	1	0	411	1694
1:15 PM	6	176	0	0	0	201	2	0	0	0	8	0	1	0	1	0	395	1689
1:30 PM	6	208	1	0	0	180	3	0	2	0	7	0	0	0	1	0	408	1656
1:45 PM	3	177	0	0	1	198	2	0	0	0	7	0	0	0	3	0	391	1605
2:00 PM	4	173	1	0	1	204	2	0	3	0	6	0	1	0	1	0	396	1590
2:15 PM	6	200	1	0	0	182	2	0	0	0	9	0	0	0	1	0	401	1596
2:30 PM	1	178	1	0	0	196	3	0	0	0	3	0	3	0	1	0	386	1574
2:45 PM	2	193	1	0	0	180	1	0	0	2	8	0	0	1	2	0	390	1573
3:00 PM	5	189	4	0	0	176	7	0	0	0	6	0	0	0	0	0	387	1564
3:15 PM	5	172	0	0	1	174	2	0	1	0	10	0	1	1	2	0	369	1532

15-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				30th St (Eastbound)				30th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	5	168	3	0	0	171	4	0	1	0	4	0	0	0	1	0	357	1503
3:45 PM	1	172	0	0	1	164	1	0	0	0	10	0	1	0	1	0	351	1464
4:00 PM	1	193	0	0	0	192	1	0	0	0	8	0	0	0	1	0	396	1473
4:15 PM	7	170	3	0	0	167	0	0	0	0	4	0	0	0	2	0	353	1457
4:30 PM	10	166	1	0	0	174	0	0	1	0	6	0	0	0	2	0	360	1460
4:45 PM	7	169	0	0	0	152	0	0	2	2	3	0	2	0	2	0	339	1448
5:00 PM	6	175	2	0	1	153	1	0	0	0	6	0	0	0	2	0	346	1398
5:15 PM	3	147	2	0	0	131	2	0	1	0	5	0	1	0	1	0	293	1338
5:30 PM	4	138	2	0	0	138	0	0	2	0	5	0	0	0	0	0	289	1267
5:45 PM	4	136	2	0	0	119	2	0	2	0	1	0	2	0	1	0	269	1197
6:00 PM	2	117	0	0	1	117	0	0	0	0	2	0	0	0	2	0	241	1092
6:15 PM	1	99	0	0	0	99	0	0	0	0	3	0	1	0	0	0	203	1002
6:30 PM	3	135	0	0	0	91	1	0	0	0	0	0	0	0	1	0	231	944
6:45 PM	1	88	1	0	0	95	2	0	0	0	4	0	0	0	1	0	192	867
7:00 PM	2	76	1	0	0	81	2	0	0	0	1	0	0	0	1	0	164	790
7:15 PM	3	83	0	0	0	75	3	0	1	0	0	0	1	0	1	0	167	754
7:30 PM	3	70	0	0	0	71	0	0	1	0	4	0	0	0	0	0	149	672
7:45 PM	0	56	0	0	0	77	0	0	1	0	1	0	0	0	0	0	135	615
8:00 PM	1	60	1	0	0	73	0	0	0	0	0	0	0	0	0	0	135	586
8:15 PM	1	57	1	0	0	55	0	0	0	0	1	0	0	0	0	0	115	534
8:30 PM	0	46	1	0	0	53	0	0	0	0	1	0	0	0	1	0	102	487
8:45 PM	2	61	1	0	0	53	0	0	0	0	0	0	0	0	0	0	117	469
9:00 PM	2	47	1	0	0	51	0	0	0	0	0	0	0	0	0	0	101	435
9:15 PM	0	36	0	0	0	43	0	0	0	0	1	0	0	0	0	0	80	400
9:30 PM	2	34	1	0	0	26	0	0	1	0	0	0	0	0	0	0	64	362
9:45 PM	2	35	0	0	0	20	0	0	0	0	2	0	0	0	0	0	59	304

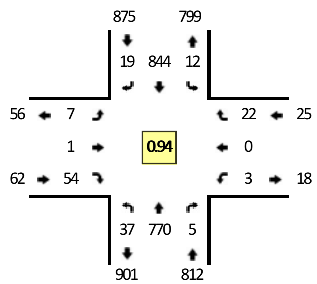
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	24	824	4	0	0	864	12	0	0	0	24	0	4	0	12	0	1768
Heavy Trucks	0	196	4		0	236	4		0	0	4		0	0	8		452
Buses																	
Pedestrians		0				0				0				4			4
Bicycles	0	8	0		0	0	0		0	0	0		0	0	0		8
Scooters																	

Comments:

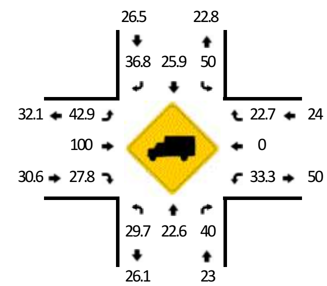
Report generated on 7/24/2022 12:23 AM

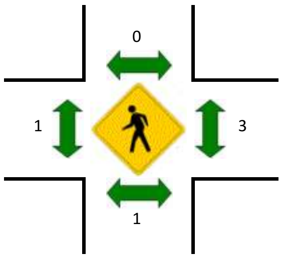
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

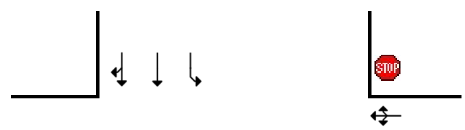
LOCATION: US 101 -- 27th St | **QC JOB #:** 15890306
CITY/STATE: Florence, OR | **DATE:** Thu, Jun 3 2021

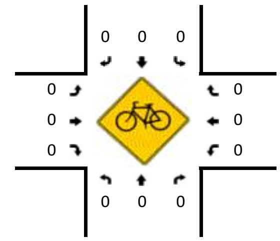


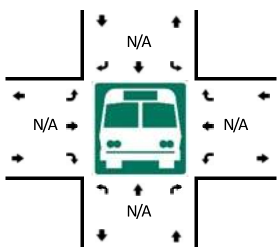
Peak-Hour: 12:30 PM -- 1:30 PM
Peak 15-Min: 12:45 PM -- 1:00 PM

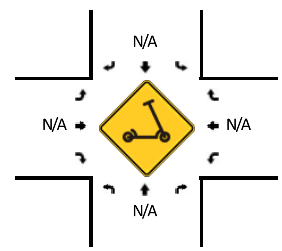












15-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				27th St (Eastbound)				27th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	1	23	0	0	0	24	1	0	0	0	1	0	0	0	0	0	50	
6:15 AM	1	26	0	0	0	22	1	0	0	0	2	0	0	0	0	0	52	
6:30 AM	1	29	0	0	0	39	1	0	0	0	0	0	0	0	0	0	70	
6:45 AM	5	41	0	0	0	58	5	0	0	0	1	0	0	0	0	0	110	282
7:00 AM	6	46	0	0	0	63	4	0	2	0	3	0	0	0	1	0	125	357
7:15 AM	8	52	0	0	0	56	2	0	2	0	1	0	0	0	0	0	121	426
7:30 AM	8	75	2	0	0	84	2	0	1	0	4	0	1	0	1	0	178	534
7:45 AM	9	108	0	0	0	115	2	0	0	0	10	0	0	0	1	0	245	669
8:00 AM	12	98	1	0	1	110	6	0	5	0	7	0	1	0	0	0	241	785
8:15 AM	6	94	0	0	0	113	6	0	4	0	7	0	0	0	0	0	230	894
8:30 AM	6	106	0	0	1	105	6	0	1	0	5	0	1	0	0	0	231	947
8:45 AM	5	104	0	0	2	126	7	0	4	0	8	0	0	0	0	0	256	958
9:00 AM	6	111	1	0	1	117	4	0	3	0	6	0	1	0	2	0	252	969
9:15 AM	4	132	0	0	3	138	7	0	1	0	6	0	0	0	3	0	294	1033
9:30 AM	11	130	0	0	0	142	11	0	3	0	15	0	0	0	2	0	314	1116
9:45 AM	12	132	0	0	4	143	7	0	1	0	4	0	0	0	3	0	306	1166
10:00 AM	3	151	0	0	0	163	3	0	2	0	7	0	0	0	0	0	329	1243
10:15 AM	7	138	1	0	0	158	5	0	2	0	5	0	1	0	5	0	322	1271
10:30 AM	5	150	1	0	2	152	4	0	3	0	5	0	2	0	7	0	331	1288
10:45 AM	8	153	1	0	4	187	1	0	3	1	11	0	1	1	6	0	377	1359
11:00 AM	14	186	2	0	5	176	4	0	2	0	14	0	1	0	8	0	412	1442
11:15 AM	9	177	0	0	0	198	5	0	2	0	8	0	2	0	5	0	406	1526
11:30 AM	9	179	0	0	1	205	11	0	4	1	24	0	1	0	9	0	444	1639
11:45 AM	7	183	2	0	5	220	6	0	4	1	11	0	1	0	8	0	448	1710
12:00 PM	7	196	1	0	4	195	5	0	3	0	14	0	3	0	9	0	437	1735
12:15 PM	9	175	0	0	2	204	5	0	2	0	10	0	1	0	7	0	415	1744
12:30 PM	10	191	2	0	0	207	5	0	3	0	14	0	0	0	6	0	438	1738
12:45 PM	7	211	0	0	4	221	7	0	1	0	13	0	2	0	8	0	474	1764
1:00 PM	11	177	1	0	5	221	4	0	1	1	18	0	1	0	4	0	444	1771
1:15 PM	9	191	2	0	3	195	3	0	2	0	9	0	0	0	4	0	418	1774
1:30 PM	10	212	0	0	5	184	1	0	1	0	7	0	3	0	8	0	431	1767
1:45 PM	12	188	1	0	1	176	8	0	3	0	10	0	2	0	7	0	408	1701
2:00 PM	4	176	0	0	3	204	3	0	1	1	13	0	0	0	5	0	410	1667
2:15 PM	3	193	2	0	1	185	6	0	3	1	9	0	1	0	6	0	410	1659
2:30 PM	17	173	2	0	2	181	7	0	3	0	12	0	1	0	9	0	407	1635
2:45 PM	6	207	1	0	7	189	4	0	2	0	13	0	4	0	3	0	436	1663
3:00 PM	3	187	0	0	2	180	4	0	4	0	19	0	1	0	4	0	404	1657
3:15 PM	3	181	0	0	3	188	5	0	3	0	15	0	1	0	6	0	405	1652

15-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				27th St (Eastbound)				27th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	5	175	0	0	3	164	5	0	7	0	12	0	2	0	7	0	380	1625
3:45 PM	5	155	1	0	1	169	4	0	1	0	11	0	0	1	8	0	356	1545
4:00 PM	5	183	1	0	4	180	4	0	4	0	12	0	0	0	6	0	399	1540
4:15 PM	6	172	0	0	5	158	4	0	5	0	7	0	0	0	4	0	361	1496
4:30 PM	13	185	1	0	2	180	8	0	2	0	10	0	1	0	4	0	406	1522
4:45 PM	4	172	0	0	2	162	4	0	3	0	9	0	0	0	6	0	362	1528
5:00 PM	6	188	1	0	5	153	2	0	2	0	10	0	1	0	5	0	373	1502
5:15 PM	5	139	1	0	0	133	1	0	3	0	9	0	1	0	4	0	296	1437
5:30 PM	8	149	1	0	5	129	4	0	6	0	3	0	0	0	4	0	309	1340
5:45 PM	5	135	0	0	0	139	6	0	3	0	7	0	0	0	2	0	297	1275
6:00 PM	6	127	0	0	2	119	3	0	1	0	9	0	0	0	5	0	272	1174
6:15 PM	3	97	1	0	1	106	1	0	3	0	4	0	0	0	5	0	221	1099
6:30 PM	4	124	0	0	1	85	4	0	1	0	8	0	0	0	2	0	229	1019
6:45 PM	1	107	0	0	3	90	5	0	3	0	4	0	0	1	3	0	217	939
7:00 PM	1	94	0	0	0	85	4	0	4	0	6	0	0	0	0	0	194	861
7:15 PM	3	73	1	0	0	76	0	0	0	0	5	0	0	0	2	0	160	800
7:30 PM	1	82	0	0	0	78	1	0	2	0	2	0	1	0	0	0	167	738
7:45 PM	3	58	0	0	0	77	1	0	1	0	2	0	1	0	0	0	143	664
8:00 PM	4	59	0	0	0	75	2	0	0	0	1	0	0	0	0	0	141	611
8:15 PM	0	62	0	0	0	54	0	0	1	0	6	0	0	0	0	0	123	574
8:30 PM	4	51	0	0	0	64	0	0	1	0	0	0	0	0	0	0	120	527
8:45 PM	0	68	0	0	0	53	1	0	1	0	2	0	0	0	0	0	125	509
9:00 PM	1	57	0	0	0	52	1	0	0	0	0	0	0	0	0	0	111	479
9:15 PM	0	38	0	0	0	52	0	0	0	0	1	0	0	0	0	0	91	447
9:30 PM	0	40	0	0	0	27	0	0	0	0	3	0	0	0	0	0	70	397
9:45 PM	0	38	0	0	0	28	1	0	1	0	1	0	0	0	1	0	70	342

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	28	844	0	0	16	884	28	0	4	0	52	0	8	0	32	0	1896
Heavy Trucks	12	180	0		4	248	12		4	0	20		4	0	0		484
Buses																	
Pedestrians		0				0				0				4			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

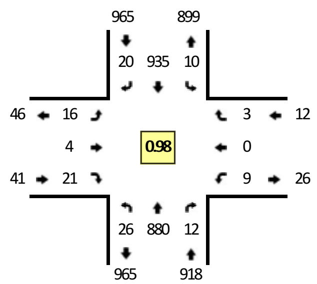
Comments:

Report generated on 7/24/2022 12:23 AM

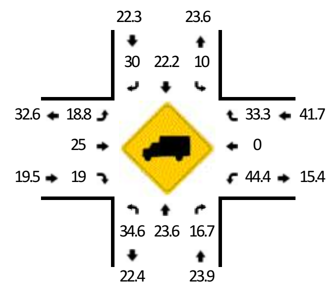
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

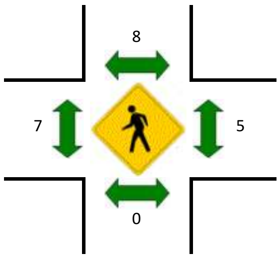
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

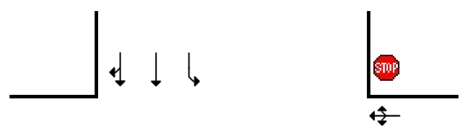
LOCATION: US 101 -- 15th St | **QC JOB #:** 15890307
CITY/STATE: Florence, OR | **DATE:** Thu, Jun 3 2021

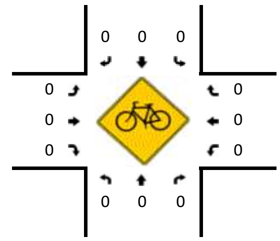


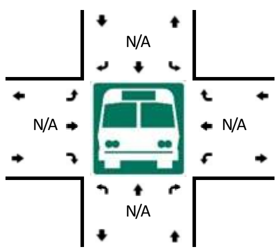
Peak-Hour: 12:15 PM -- 1:15 PM
Peak 15-Min: 12:15 PM -- 12:30 PM

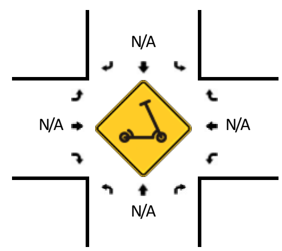












15-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				15th St (Eastbound)				15th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	2	27	0	0	1	26	1	0	1	0	0	0	0	0	1	0	59	
6:15 AM	1	37	0	0	0	29	1	0	2	0	1	0	1	0	1	0	73	
6:30 AM	2	37	0	0	3	47	1	0	1	1	1	0	0	2	0	0	95	
6:45 AM	1	61	0	0	1	73	0	0	1	0	2	0	0	0	0	0	139	366
7:00 AM	2	49	1	0	2	68	3	0	4	0	0	0	0	0	1	0	130	437
7:15 AM	1	81	1	0	2	70	3	0	1	0	4	0	2	1	2	0	168	532
7:30 AM	5	89	0	0	3	94	2	0	1	0	1	0	0	0	2	0	197	634
7:45 AM	3	132	2	0	2	107	3	0	3	2	3	0	1	2	3	0	263	758
8:00 AM	1	128	0	0	1	117	6	0	3	1	2	0	0	0	4	0	263	891
8:15 AM	2	118	2	0	2	122	3	0	1	0	2	0	0	0	1	0	253	976
8:30 AM	2	113	1	0	3	106	3	0	2	0	1	0	0	0	1	0	232	1011
8:45 AM	2	106	1	0	1	127	3	0	3	0	3	0	1	0	0	0	247	995
9:00 AM	3	147	3	0	1	146	1	0	1	0	3	0	0	0	0	0	305	1037
9:15 AM	6	151	0	0	3	143	4	0	4	1	4	0	1	0	4	0	321	1105
9:30 AM	2	157	0	0	3	173	2	0	2	0	4	0	2	0	3	0	348	1221
9:45 AM	7	155	1	0	5	151	8	0	2	0	4	0	3	0	1	0	337	1311
10:00 AM	5	170	1	0	5	176	7	0	5	2	3	0	1	0	1	0	376	1382
10:15 AM	4	151	0	0	0	157	6	0	2	1	5	0	2	3	4	0	335	1396
10:30 AM	3	196	1	0	0	166	3	0	1	0	5	0	0	0	0	0	375	1423
10:45 AM	5	186	3	0	3	191	7	0	4	0	9	0	0	0	6	0	414	1500
11:00 AM	4	201	1	0	3	187	5	0	0	0	10	0	1	1	4	0	417	1541
11:15 AM	3	180	3	0	2	215	4	0	2	1	6	0	1	0	1	0	418	1624
11:30 AM	2	203	3	0	6	208	4	0	4	0	6	0	3	0	1	0	440	1689
11:45 AM	9	195	4	0	3	232	4	0	2	1	10	0	0	0	6	0	466	1741
12:00 PM	7	204	2	0	7	225	3	0	6	0	6	0	0	0	6	0	466	1790
12:15 PM	7	221	3	0	0	245	4	0	3	2	6	0	1	0	0	0	492	1864
12:30 PM	10	224	5	0	2	217	5	0	4	1	6	0	3	0	1	0	478	1902
12:45 PM	3	223	3	0	2	228	3	0	4	0	6	0	2	0	0	0	474	1910
1:00 PM	6	212	1	0	6	245	8	0	5	1	3	0	3	0	2	0	492	1936
1:15 PM	2	215	4	0	5	213	5	0	5	1	3	0	1	0	3	0	457	1901
1:30 PM	0	202	5	0	2	216	5	0	3	1	5	0	0	0	3	0	442	1865
1:45 PM	3	208	7	0	4	196	5	0	2	0	6	0	1	0	3	0	435	1826
2:00 PM	10	202	2	0	1	228	3	0	1	1	10	0	2	0	5	0	465	1799
2:15 PM	5	238	1	0	6	190	6	0	4	0	5	0	1	2	2	0	460	1802
2:30 PM	4	211	1	0	3	178	2	0	4	1	9	0	0	4	1	0	418	1778
2:45 PM	2	207	2	0	5	224	6	0	0	0	8	0	0	0	1	0	455	1798
3:00 PM	6	243	1	0	3	203	10	0	1	1	7	0	4	0	1	0	480	1813
3:15 PM	8	198	0	0	0	206	6	0	6	1	9	0	2	0	2	0	438	1791

15-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				15th St (Eastbound)				15th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	7	172	4	0	3	205	5	0	6	0	7	0	4	1	3	0	417	1790
3:45 PM	7	184	1	0	2	177	8	0	5	0	14	0	2	1	0	0	401	1736
4:00 PM	8	202	1	0	4	190	4	0	4	2	7	0	1	0	2	0	425	1681
4:15 PM	9	197	0	0	4	201	2	0	4	0	8	0	2	0	2	0	429	1672
4:30 PM	7	183	2	0	4	178	8	0	4	0	1	0	5	0	2	0	394	1649
4:45 PM	6	201	1	0	1	152	2	0	3	1	5	0	5	1	3	0	381	1629
5:00 PM	5	196	6	0	1	179	4	0	3	0	5	0	1	0	2	0	402	1606
5:15 PM	8	171	1	0	5	160	5	0	3	0	4	0	0	0	1	0	358	1535
5:30 PM	4	148	1	0	2	139	6	0	2	0	7	0	0	0	3	0	312	1453
5:45 PM	5	142	2	0	6	144	6	0	5	2	6	0	1	0	1	0	320	1392
6:00 PM	1	113	0	0	2	122	3	0	2	2	7	0	0	0	0	0	252	1242
6:15 PM	2	118	5	0	1	136	4	0	3	0	3	0	0	0	2	0	274	1158
6:30 PM	3	120	1	0	3	109	4	0	5	0	0	0	1	0	1	0	247	1093
6:45 PM	1	88	1	0	8	123	3	0	2	0	5	0	0	0	1	0	232	1005
7:00 PM	4	92	2	0	1	85	0	0	1	0	0	0	1	0	2	0	188	941
7:15 PM	4	89	0	0	3	78	5	0	2	0	1	0	1	0	1	0	184	851
7:30 PM	1	79	0	0	3	89	3	0	0	0	4	0	1	0	1	0	181	785
7:45 PM	3	83	0	0	2	75	3	0	1	0	2	0	0	0	0	0	169	722
8:00 PM	5	65	0	0	1	66	1	0	1	0	2	0	2	1	3	0	147	681
8:15 PM	0	66	0	0	1	73	0	0	2	1	4	0	0	1	0	0	148	645
8:30 PM	0	53	0	0	3	57	2	0	0	1	1	0	0	1	3	0	121	585
8:45 PM	4	59	1	0	2	57	0	0	1	0	4	0	0	0	2	0	130	546
9:00 PM	2	61	0	0	3	55	2	0	1	0	4	0	1	0	0	0	129	528
9:15 PM	1	46	1	0	1	43	4	0	1	0	0	0	1	1	0	0	99	479
9:30 PM	1	49	0	0	0	35	0	0	1	0	1	0	0	0	0	0	87	445
9:45 PM	0	39	1	0	1	30	0	0	0	0	0	0	0	0	0	0	71	386

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	28	884	12	0	0	980	16	0	12	8	24	0	4	0	0	0	1968
Heavy Trucks	12	232	0		0	212	8		0	0	4		0	0	0		468
Buses																	
Pedestrians		0				4				8				0			12
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

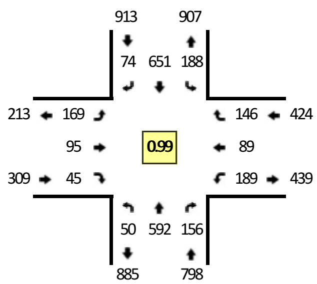
Comments:

Report generated on 7/24/2022 12:23 AM

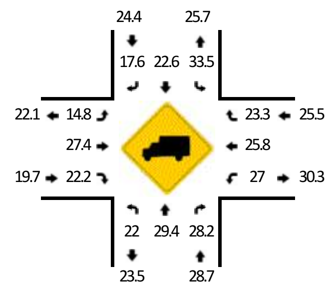
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

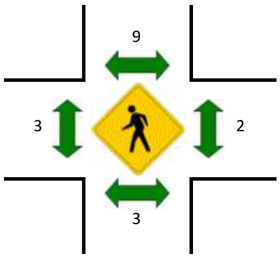
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

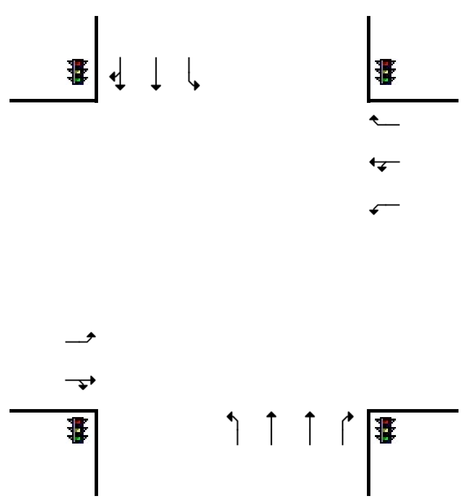
LOCATION: US 101 -- OR 126 | **QC JOB #:** 15890308
CITY/STATE: Florence, OR | **DATE:** Thu, Jun 3 2021

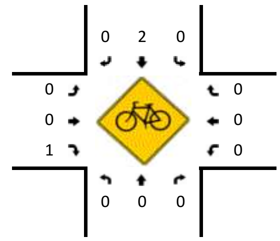


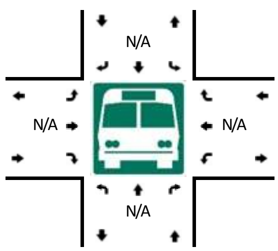
Peak-Hour: 12:15 PM -- 1:15 PM
Peak 15-Min: 1:00 PM -- 1:15 PM

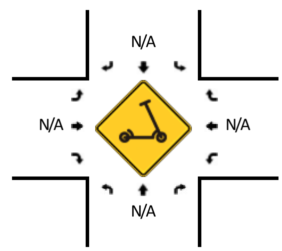












15-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				OR 126 (Eastbound)				OR 126 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	1	14	7	0	7	18	2	0	2	7	1	0	5	4	13	0	81	
6:15 AM	3	19	12	0	7	8	12	0	7	6	0	0	8	5	10	0	97	
6:30 AM	5	33	11	0	3	27	9	0	3	6	2	0	11	4	7	0	121	
6:45 AM	5	39	9	0	14	43	20	0	7	6	5	0	14	20	22	0	204	503
7:00 AM	2	26	19	0	18	40	12	0	14	6	5	0	10	10	12	0	174	596
7:15 AM	3	53	18	0	18	38	18	0	4	6	4	0	27	11	17	0	217	716
7:30 AM	2	64	16	0	15	60	9	0	21	10	2	0	21	15	22	0	257	852
7:45 AM	8	86	23	0	18	63	12	0	23	13	4	0	25	26	19	0	320	968
8:00 AM	5	78	15	0	29	67	12	0	16	9	4	0	21	17	34	0	307	1101
8:15 AM	5	75	27	0	29	84	15	0	15	12	6	0	28	14	27	0	337	1221
8:30 AM	4	66	25	0	25	69	12	0	22	2	2	0	27	18	20	0	292	1256
8:45 AM	4	70	30	0	25	87	13	0	15	16	6	0	30	16	28	0	340	1276
9:00 AM	8	102	26	0	31	88	16	0	29	16	13	0	22	12	33	0	396	1365
9:15 AM	5	111	24	0	30	96	16	0	23	14	11	0	25	9	23	0	387	1415
9:30 AM	6	97	21	0	26	105	17	0	20	17	11	0	29	21	20	0	390	1513
9:45 AM	10	98	29	0	45	103	16	0	33	21	8	0	29	15	27	0	434	1607
10:00 AM	11	108	35	0	33	114	21	0	37	23	10	0	33	15	34	0	474	1685
10:15 AM	11	94	26	0	32	103	15	0	35	11	4	0	36	17	31	0	415	1713
10:30 AM	13	118	29	0	29	126	14	0	32	18	13	0	47	17	19	0	475	1798
10:45 AM	12	123	39	0	36	115	19	0	37	33	5	0	31	20	29	0	499	1863
11:00 AM	8	120	28	0	46	137	22	0	40	26	10	0	41	16	33	0	527	1916
11:15 AM	13	105	38	0	33	136	18	0	39	29	14	0	49	17	31	0	522	2023
11:30 AM	12	130	45	0	35	153	14	0	45	23	6	0	39	15	31	0	548	2096
11:45 AM	10	128	37	0	40	170	27	0	42	29	9	0	50	13	46	0	601	2198
12:00 PM	4	134	42	0	41	159	27	0	50	29	11	0	32	9	20	0	558	2229
12:15 PM	9	148	41	0	60	162	20	0	39	23	7	0	45	23	42	0	619	2326
12:30 PM	12	137	40	0	43	152	17	0	47	23	14	0	51	21	38	0	595	2373
12:45 PM	13	153	35	0	44	163	12	0	41	24	11	0	57	25	32	0	610	2382
1:00 PM	16	154	40	0	41	174	25	0	42	25	13	0	36	20	34	0	620	2444
1:15 PM	13	141	29	0	36	150	14	0	29	30	12	0	45	17	33	0	549	2374
1:30 PM	4	139	40	0	44	162	18	0	22	15	13	0	41	18	36	0	552	2331
1:45 PM	9	130	39	0	36	134	16	0	33	28	13	0	47	15	37	0	537	2258
2:00 PM	13	131	32	0	42	152	16	0	47	21	11	0	41	14	26	0	546	2184
2:15 PM	10	163	37	0	37	141	18	0	38	26	6	0	70	21	41	0	608	2243
2:30 PM	9	129	40	0	28	126	12	0	32	28	14	0	61	21	45	0	545	2236
2:45 PM	17	140	44	0	42	159	9	0	32	28	4	0	52	17	29	0	573	2272
3:00 PM	9	144	41	0	35	149	7	0	55	28	7	0	42	20	40	0	577	2303
3:15 PM	12	119	29	0	32	166	21	0	34	26	9	0	49	20	30	0	547	2242

15-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				OR 126 (Eastbound)				OR 126 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	7	101	34	0	51	136	14	0	30	37	1	0	45	17	25	0	498	2195
3:45 PM	9	128	34	0	40	143	13	0	27	18	6	0	45	15	32	0	510	2132
4:00 PM	8	126	37	0	30	138	13	0	40	26	4	0	60	12	30	0	524	2079
4:15 PM	9	140	29	0	54	148	17	0	31	18	1	0	21	12	28	0	508	2040
4:30 PM	12	109	30	0	41	116	14	0	28	26	11	0	34	17	36	0	474	2016
4:45 PM	14	123	37	0	40	113	12	0	33	22	8	0	47	21	34	0	504	2010
5:00 PM	15	122	34	0	40	134	12	0	34	19	13	0	29	15	29	0	496	1982
5:15 PM	5	118	28	0	31	115	9	0	23	16	8	0	40	15	34	0	442	1916
5:30 PM	0	92	38	0	39	109	9	0	16	10	6	0	34	17	23	0	393	1835
5:45 PM	10	80	33	0	42	103	6	0	23	17	7	0	41	10	30	0	402	1733
6:00 PM	5	83	32	0	28	92	8	0	11	13	9	0	33	15	22	0	351	1588
6:15 PM	5	84	30	0	21	85	10	0	13	7	6	0	30	12	22	0	325	1471
6:30 PM	8	70	23	0	31	64	5	0	20	8	7	0	31	7	26	0	300	1378
6:45 PM	4	57	24	0	22	94	6	0	9	11	5	0	31	12	17	0	292	1268
7:00 PM	9	59	23	0	17	60	10	0	11	11	5	0	17	6	17	0	245	1162
7:15 PM	7	62	22	0	19	52	6	0	8	7	2	0	23	12	12	0	232	1069
7:30 PM	6	58	14	0	17	68	6	0	5	12	0	0	28	9	10	0	233	1002
7:45 PM	4	51	14	0	12	55	9	0	8	6	5	0	16	6	21	0	207	917
8:00 PM	4	47	20	0	21	50	9	0	7	7	4	0	12	5	17	0	203	875
8:15 PM	0	40	12	0	16	53	8	0	5	4	0	0	13	4	10	0	165	808
8:30 PM	0	30	16	0	15	47	4	0	10	6	2	0	19	8	9	0	166	741
8:45 PM	3	38	7	0	10	47	2	0	12	6	5	0	25	7	11	0	173	707
9:00 PM	2	40	9	0	5	45	6	0	6	6	1	0	14	6	12	0	152	656
9:15 PM	2	35	14	0	6	27	5	0	3	5	0	0	12	8	7	0	124	615
9:30 PM	0	35	6	0	6	29	3	0	3	3	1	0	10	5	8	0	109	558
9:45 PM	2	27	14	0	7	21	4	0	2	6	2	0	6	2	8	0	101	486

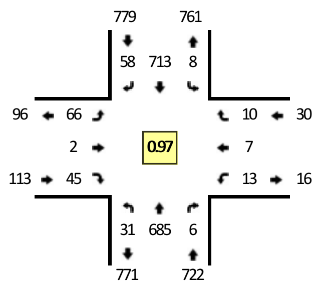
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	64	616	160	0	164	696	100	0	168	100	52	0	144	80	136	0	2480
Heavy Trucks	12	176	48		44	120	8		20	24	12		44	32	16		556
Buses																	
Pedestrians		0				16				0				4			20
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

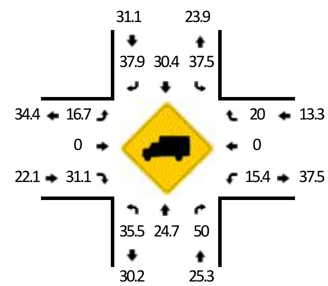
Report generated on 7/24/2022 12:23 AM

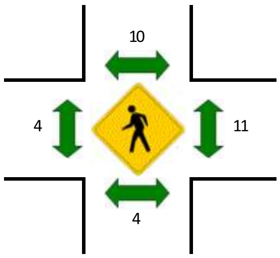
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

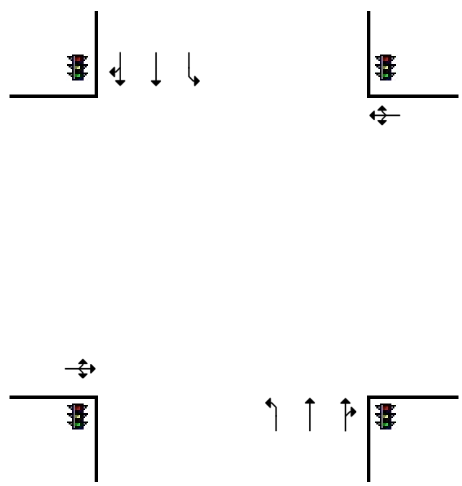
LOCATION: US 101 -- Rhododendron Dr **QC JOB #:** 15890309
CITY/STATE: Florence, OR **DATE:** Thu, Jun 3 2021

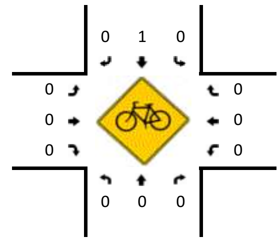


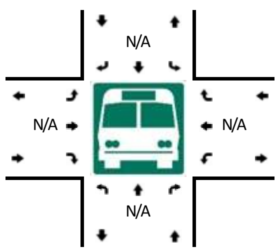
Peak-Hour: 12:30 PM -- 1:30 PM
Peak 15-Min: 12:45 PM -- 1:00 PM

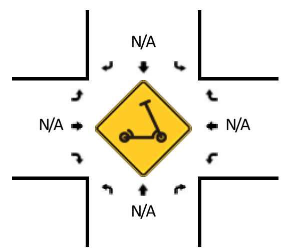












15-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				Rhododendron Dr (Eastbound)				Rhododendron Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	21	0	0	0	24	2	0	1	0	1	0	0	0	0	0	49	
6:15 AM	2	34	0	0	0	18	2	0	2	0	2	0	0	0	0	0	60	
6:30 AM	4	48	0	0	1	24	2	0	1	2	1	0	0	0	0	0	83	
6:45 AM	1	60	0	0	0	48	1	0	1	0	1	0	0	1	0	0	113	305
7:00 AM	3	38	0	0	0	48	1	0	3	0	1	0	1	0	0	0	95	351
7:15 AM	1	79	2	0	0	48	3	0	6	0	2	0	0	0	1	0	142	433
7:30 AM	3	82	0	0	1	53	12	0	10	1	4	0	0	0	2	0	168	518
7:45 AM	5	101	0	0	1	60	7	0	11	0	5	0	0	1	1	0	192	597
8:00 AM	3	93	0	0	2	68	5	0	8	0	5	0	0	1	2	0	187	689
8:15 AM	4	104	2	0	0	95	10	0	9	0	6	0	0	1	1	0	232	779
8:30 AM	7	87	1	0	0	73	6	0	12	0	9	0	2	0	1	0	198	809
8:45 AM	3	101	2	0	1	96	7	0	9	0	6	0	2	0	2	0	229	846
9:00 AM	8	110	1	0	1	81	7	0	14	0	5	0	1	2	1	0	231	890
9:15 AM	4	122	0	0	2	96	7	0	16	0	5	0	1	0	5	0	258	916
9:30 AM	3	107	2	0	2	114	13	0	11	0	4	0	1	2	1	0	260	978
9:45 AM	5	132	4	0	1	100	15	0	10	0	10	0	1	1	2	0	281	1030
10:00 AM	4	121	0	0	0	111	6	0	16	1	10	0	1	3	5	0	278	1077
10:15 AM	5	132	0	0	2	109	17	0	9	3	7	0	3	1	5	0	293	1112
10:30 AM	6	133	1	0	3	129	8	0	15	0	5	0	3	4	1	0	308	1160
10:45 AM	7	151	0	0	1	126	16	0	13	2	7	0	3	0	1	0	327	1206
11:00 AM	3	131	2	0	1	139	12	0	15	1	12	0	2	2	2	0	322	1250
11:15 AM	8	150	1	0	1	144	15	0	15	0	10	0	3	1	1	0	349	1306
11:30 AM	0	151	2	0	2	151	10	0	17	0	10	0	1	1	3	0	348	1346
11:45 AM	9	150	1	0	3	170	11	0	14	2	13	0	3	3	1	0	380	1399
12:00 PM	8	147	3	0	5	147	14	0	20	1	13	0	5	0	3	0	366	1443
12:15 PM	8	179	1	0	2	129	8	0	15	0	8	0	4	3	5	0	362	1456
12:30 PM	10	155	3	0	2	197	15	0	22	1	9	0	4	2	1	0	421	1529
12:45 PM	5	195	1	0	2	177	15	0	5	1	16	0	3	0	4	0	424	1573
1:00 PM	9	185	1	0	3	165	18	0	19	0	10	0	3	2	4	0	419	1626
1:15 PM	7	150	1	0	1	174	10	0	20	0	10	0	3	3	1	0	380	1644
1:30 PM	10	160	1	0	3	162	14	0	23	2	11	0	4	3	1	0	394	1617
1:45 PM	7	154	1	0	4	146	13	0	19	1	7	0	3	0	4	0	359	1552
2:00 PM	10	180	2	0	3	139	11	0	17	0	10	0	9	3	1	0	385	1518
2:15 PM	12	165	2	0	1	155	16	0	12	1	5	0	3	0	1	0	373	1511
2:30 PM	8	176	1	0	0	159	15	0	17	0	6	0	1	3	3	0	389	1506
2:45 PM	3	202	2	0	3	177	15	0	12	2	9	0	2	4	3	0	434	1581
3:00 PM	6	173	0	0	1	169	14	0	11	0	8	0	2	5	3	0	392	1588
3:15 PM	6	131	3	0	3	170	19	0	24	0	4	0	5	0	0	0	365	1580

15-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				Rhododendron Dr (Eastbound)				Rhododendron Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	7	136	1	0	7	162	9	0	9	0	10	0	7	1	5	0	354	1545
3:45 PM	8	174	0	0	0	149	4	0	20	1	13	0	3	1	4	0	377	1488
4:00 PM	9	136	0	0	4	156	14	0	22	2	6	0	4	0	5	0	358	1454
4:15 PM	5	137	2	0	3	129	6	0	12	2	9	0	3	1	2	0	311	1400
4:30 PM	6	136	1	0	1	135	12	0	14	0	8	0	2	1	2	0	318	1364
4:45 PM	2	160	0	0	1	146	13	0	13	1	6	0	1	1	4	0	348	1335
5:00 PM	7	153	3	0	2	155	9	0	13	0	1	0	5	0	2	0	350	1327
5:15 PM	6	126	2	0	3	131	5	0	11	0	3	0	3	0	1	0	291	1307
5:30 PM	6	123	0	0	0	144	8	0	8	0	3	0	2	2	0	0	296	1285
5:45 PM	6	111	0	0	3	129	8	0	9	1	2	0	5	1	1	0	276	1213
6:00 PM	2	114	1	0	2	127	4	0	4	1	5	0	2	0	0	0	262	1125
6:15 PM	8	101	1	0	0	109	4	0	9	0	7	0	5	1	0	0	245	1079
6:30 PM	0	92	1	0	1	90	3	0	5	1	4	0	1	0	1	0	199	982
6:45 PM	0	95	0	0	0	118	1	0	10	0	5	0	1	1	2	0	233	939
7:00 PM	0	74	1	0	2	83	4	0	6	0	3	0	1	0	0	0	174	851
7:15 PM	2	95	1	0	0	65	2	0	3	0	3	0	1	0	0	0	172	778
7:30 PM	1	73	0	0	0	89	4	0	0	0	1	0	0	0	0	0	168	747
7:45 PM	0	65	2	0	2	56	2	0	8	0	0	0	2	0	0	0	137	651
8:00 PM	2	60	0	0	2	65	6	0	2	0	2	0	1	0	1	0	141	618
8:15 PM	4	31	1	0	1	60	4	0	3	0	4	0	2	0	0	0	110	556
8:30 PM	1	45	0	0	0	61	7	0	5	0	2	0	1	0	0	0	122	510
8:45 PM	4	32	0	0	0	60	7	0	3	1	2	0	0	0	0	0	109	482
9:00 PM	2	42	0	0	0	53	1	0	2	0	0	0	0	0	0	0	100	441
9:15 PM	2	45	1	0	1	30	1	0	3	0	0	0	0	0	1	0	84	415
9:30 PM	1	35	1	0	0	36	0	0	2	0	2	0	0	1	1	0	79	372
9:45 PM	1	33	0	0	1	26	2	0	2	0	1	0	2	0	1	0	69	332

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	20	780	4	0	8	708	60	0	20	4	64	0	12	0	16	0	1696
Heavy Trucks	4	184	4		4	244	24		0	0	16		0	0	0		480
Buses																	
Pedestrians		0				16				0				12			28
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

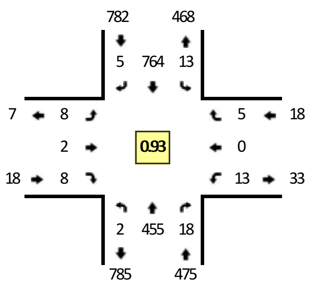
Report generated on 7/24/2022 12:23 AM

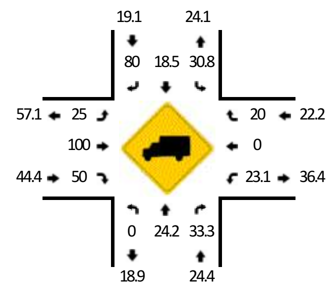
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

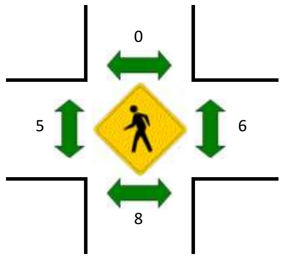
LOCATION: US 101 -- 2nd St
CITY/STATE: Florence, OR

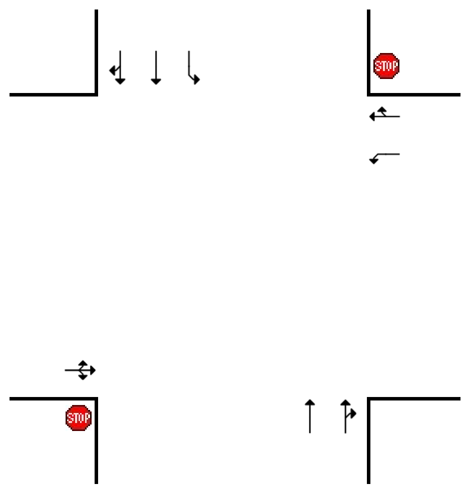
QC JOB #: 15890310
DATE: Thu, Jun 3 2021

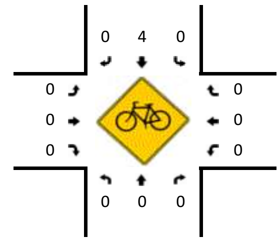
Peak-Hour: 3:00 PM -- 4:00 PM
Peak 15-Min: 3:45 PM -- 4:00 PM

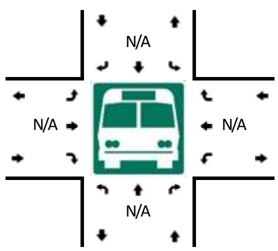


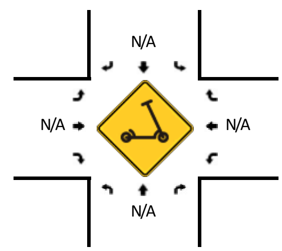












15-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				2nd St (Eastbound)				2nd St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	19	0	0	0	24	1	0	0	1	1	0	0	0	0	0	46	
6:15 AM	0	31	0	0	0	18	0	0	0	0	1	0	0	0	0	0	50	
6:30 AM	0	48	1	0	0	25	0	0	2	0	0	0	0	0	0	0	76	
6:45 AM	0	63	0	0	0	45	0	0	0	1	2	0	0	0	0	0	111	283
7:00 AM	0	39	2	0	0	43	3	0	1	0	0	0	1	0	1	0	90	327
7:15 AM	0	75	2	0	0	46	0	0	2	0	0	0	0	0	1	0	126	403
7:30 AM	0	83	0	0	0	50	1	0	0	0	0	0	0	0	1	0	135	462
7:45 AM	0	106	0	0	0	63	1	0	3	0	2	0	1	0	1	0	177	528
8:00 AM	0	90	0	0	0	63	0	0	1	0	0	0	1	0	1	0	156	594
8:15 AM	0	108	1	0	0	75	0	0	0	0	0	0	0	0	0	0	184	652
8:30 AM	1	84	1	0	0	66	0	0	2	0	0	0	0	1	0	0	155	672
8:45 AM	1	95	0	0	0	78	1	0	1	0	2	0	3	0	0	0	181	676
9:00 AM	0	96	0	0	1	76	1	0	0	0	1	0	1	0	3	0	179	699
9:15 AM	0	112	3	0	3	82	2	0	0	1	2	0	3	0	2	0	210	725
9:30 AM	0	96	4	0	1	94	2	0	2	0	0	0	0	1	1	0	201	771
9:45 AM	0	115	3	0	3	90	3	0	1	0	1	0	2	0	1	0	219	809
10:00 AM	0	102	0	0	1	99	3	0	2	0	1	0	1	0	0	0	209	839
10:15 AM	0	113	3	0	1	91	3	0	0	0	1	0	0	0	0	0	212	841
10:30 AM	0	115	10	0	2	118	2	0	1	0	3	0	0	0	1	0	252	892
10:45 AM	0	134	5	0	1	100	1	0	0	0	0	0	1	0	1	0	243	916
11:00 AM	0	114	4	0	1	128	0	0	1	0	2	0	3	0	2	0	255	962
11:15 AM	0	135	3	0	2	120	2	0	1	1	0	0	1	0	2	0	267	1017
11:30 AM	0	116	4	0	2	129	0	0	3	0	1	0	1	0	1	0	257	1022
11:45 AM	1	121	1	0	6	144	5	0	0	0	1	0	2	0	1	0	282	1061
12:00 PM	2	118	2	0	2	130	4	0	2	1	1	0	3	4	1	0	270	1076
12:15 PM	0	171	6	0	9	144	3	0	1	0	3	0	3	0	0	0	340	1149
12:30 PM	0	134	5	0	6	156	1	0	1	1	1	0	7	0	2	0	314	1206
12:45 PM	0	155	1	0	4	157	0	0	1	0	0	0	3	0	4	0	325	1249
1:00 PM	0	133	1	0	3	147	4	0	2	0	1	0	2	1	2	0	296	1275
1:15 PM	0	123	7	0	4	157	3	0	3	0	0	0	1	0	1	0	299	1234
1:30 PM	0	127	4	0	3	152	2	0	1	0	6	0	7	0	5	0	307	1227
1:45 PM	0	121	4	0	2	128	0	0	1	0	2	0	9	1	1	0	269	1171
2:00 PM	0	143	6	0	1	152	1	0	2	1	0	0	4	1	2	0	313	1188
2:15 PM	0	154	3	0	3	143	5	0	2	0	2	0	9	0	1	0	322	1211
2:30 PM	0	127	2	0	5	149	0	0	1	1	3	0	4	0	1	0	293	1197
2:45 PM	0	160	4	0	6	160	4	0	2	0	0	0	6	1	2	0	345	1273
3:00 PM	1	118	4	0	1	197	2	0	3	2	2	0	0	0	1	0	331	1291
3:15 PM	1	108	3	0	3	179	0	0	3	0	2	0	6	0	0	0	305	1274
3:30 PM	0	101	5	0	5	196	1	0	0	0	0	0	3	0	0	0	311	1292

15-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				2nd St (Eastbound)				2nd St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:45 PM	0	128	6	0	4	192	2	0	2	0	4	0	4	0	4	0	346	1293
4:00 PM	0	110	4	0	1	160	0	0	0	0	3	0	0	0	2	0	280	1242
4:15 PM	0	119	4	0	4	134	1	0	1	0	3	0	3	0	2	0	271	1208
4:30 PM	0	118	7	0	2	142	0	0	0	0	3	0	1	0	2	0	275	1172
4:45 PM	0	122	3	0	3	144	2	0	1	0	1	0	2	0	4	0	282	1108
5:00 PM	1	112	4	0	4	149	0	0	1	0	4	0	2	0	5	0	282	1110
5:15 PM	0	102	1	0	3	148	3	0	4	0	2	0	3	0	0	0	266	1105
5:30 PM	0	91	3	0	2	148	3	0	1	0	1	0	6	0	0	0	255	1085
5:45 PM	1	90	1	0	2	134	1	0	1	0	3	0	1	0	1	0	235	1038
6:00 PM	0	85	0	0	4	129	0	0	0	0	2	0	3	0	1	0	224	980
6:15 PM	0	86	2	0	2	106	1	0	6	0	2	0	3	0	0	0	208	922
6:30 PM	0	65	2	0	3	89	0	0	1	0	0	0	3	0	0	0	163	830
6:45 PM	0	63	2	0	0	123	1	0	0	0	0	0	5	0	1	0	195	790
7:00 PM	0	63	0	0	1	73	2	0	0	0	3	0	1	0	0	0	143	709
7:15 PM	0	63	2	0	1	56	2	0	0	0	2	0	1	0	1	0	128	629
7:30 PM	0	58	0	0	0	91	1	0	2	0	0	0	2	0	0	0	154	620
7:45 PM	0	36	1	0	1	54	1	0	1	0	0	0	2	0	0	0	96	521
8:00 PM	0	43	1	0	0	81	1	0	1	0	1	0	3	0	0	0	131	509
8:15 PM	0	41	1	0	0	68	2	0	0	0	0	0	3	0	1	0	116	497
8:30 PM	0	42	0	0	0	75	0	0	0	0	0	0	0	0	0	0	117	460
8:45 PM	0	27	0	0	0	67	2	0	0	0	1	0	1	0	0	0	98	462
9:00 PM	0	38	0	0	0	45	1	0	0	0	1	0	1	0	0	0	86	417
9:15 PM	0	36	0	0	0	48	0	0	2	0	0	0	2	0	0	0	88	389
9:30 PM	0	32	0	0	0	34	0	0	0	0	2	0	0	0	1	0	69	341
9:45 PM	0	23	1	0	0	30	0	0	1	0	0	0	0	0	0	0	55	298

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	512	24	0	16	768	8	0	8	0	16	0	16	0	16	0	1384
Heavy Trucks	0	128	4		8	124	8		4	0	8		4	0	4		292
Buses																	
Pedestrians		0				0				8				0			8
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

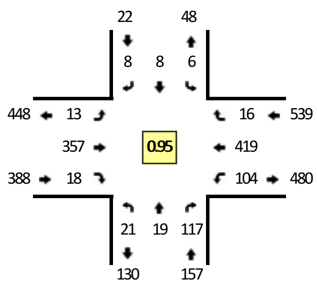
Report generated on 7/24/2022 12:23 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak — Method for determining peak hour: Total Entering Volume

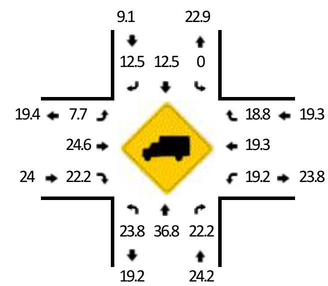
LOCATION: Quince St -- OR 126 — **QC JOB #:** 15890311

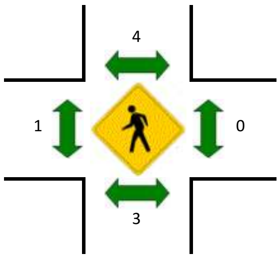
CITY/STATE: Florence, OR — **DATE:** Thu, Jun 3 2021

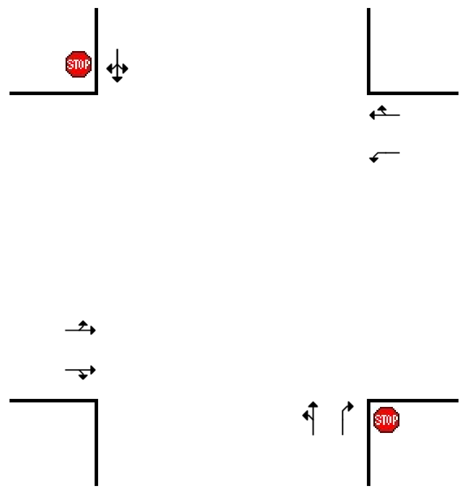


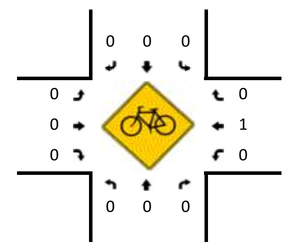
Peak-Hour: 2:15 PM -- 3:15 PM

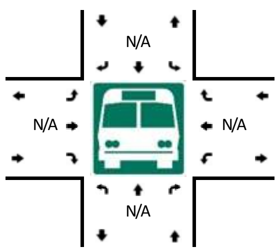
Peak 15-Min: 2:30 PM -- 2:45 PM

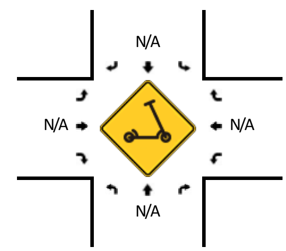












15-Min Count Period Beginning At	Quince St (Northbound)				Quince St (Southbound)				OR 126 (Eastbound)				OR 126 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	2	1	3	0	0	0	0	0	0	19	1	0	1	20	0	0	47	
6:15 AM	0	1	1	0	2	0	1	0	0	25	0	0	4	22	1	0	57	
6:30 AM	2	3	2	0	2	1	0	0	0	18	2	0	2	20	3	0	55	
6:45 AM	1	1	1	0	2	1	0	0	0	27	1	0	3	54	3	0	94	253
7:00 AM	1	1	2	0	0	0	2	0	0	42	1	0	3	32	2	0	86	292
7:15 AM	2	0	4	0	1	0	0	0	1	40	1	0	4	53	3	0	109	344
7:30 AM	0	1	11	0	1	0	1	0	1	35	3	0	10	55	1	0	119	408
7:45 AM	1	4	12	0	3	1	0	0	1	52	1	0	13	72	9	0	169	483
8:00 AM	1	3	11	0	1	2	3	0	0	45	3	0	17	62	4	0	152	549
8:15 AM	3	2	12	0	1	0	2	0	2	62	0	0	8	65	5	0	162	602
8:30 AM	4	3	12	0	1	1	1	0	3	40	0	0	21	57	5	0	148	631
8:45 AM	3	2	6	0	3	3	1	0	2	66	2	0	9	69	7	0	173	635
9:00 AM	1	4	6	0	2	3	2	0	5	62	3	0	14	58	2	0	162	645
9:15 AM	2	5	14	0	1	1	0	0	3	61	3	0	21	56	6	0	173	656
9:30 AM	3	2	14	0	0	3	3	0	4	43	5	0	15	66	8	0	166	674
9:45 AM	7	3	19	0	1	1	1	0	4	83	2	0	25	61	7	0	214	715
10:00 AM	4	5	18	0	3	0	3	0	1	83	3	0	23	79	2	0	224	777
10:15 AM	7	3	13	0	1	2	2	0	4	58	2	0	27	69	0	0	188	792
10:30 AM	4	3	16	0	2	1	1	0	4	60	5	0	13	78	2	0	189	815
10:45 AM	5	3	14	0	0	0	3	0	4	87	3	0	18	76	4	0	217	818
11:00 AM	5	3	23	0	2	2	1	0	7	70	14	0	33	89	7	0	256	850
11:15 AM	7	4	23	0	2	3	2	0	4	73	6	0	26	82	3	0	235	897
11:30 AM	5	1	25	0	4	2	0	0	9	84	7	0	29	77	6	0	249	957
11:45 AM	4	5	21	0	0	2	3	0	9	86	4	0	33	104	6	0	277	1017
12:00 PM	3	2	29	0	1	0	1	0	3	90	3	0	22	67	2	0	223	984
12:15 PM	7	1	24	0	2	3	4	0	8	104	5	0	26	86	4	0	274	1023
12:30 PM	15	3	20	0	0	2	5	0	3	81	6	0	32	92	7	0	266	1040
12:45 PM	3	3	14	0	4	4	2	0	9	83	7	0	35	106	9	0	279	1042
1:00 PM	7	5	29	0	2	3	3	0	2	87	5	0	41	78	1	0	263	1082
1:15 PM	7	3	31	0	0	2	0	0	4	75	3	0	25	93	5	0	248	1056
1:30 PM	6	5	18	0	0	1	2	0	2	85	4	0	34	79	2	0	238	1028
1:45 PM	9	2	35	0	4	0	1	0	4	91	4	0	21	96	3	0	270	1019
2:00 PM	6	5	22	0	1	2	1	0	4	77	4	0	23	82	2	0	229	985
2:15 PM	5	2	39	0	1	3	2	0	4	84	1	0	23	113	3	0	280	1017
2:30 PM	6	7	27	0	1	4	2	0	2	88	5	0	22	126	2	0	292	1071
2:45 PM	2	5	26	0	2	1	2	0	6	96	6	0	36	99	5	0	286	1087
3:00 PM	8	5	25	0	2	0	2	0	1	89	6	0	23	81	6	0	248	1106
3:15 PM	6	2	25	0	1	3	1	0	5	71	6	0	27	96	6	0	249	1075

15-Min Count Period Beginning At	Quince St (Northbound)				Quince St (Southbound)				OR 126 (Eastbound)				OR 126 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	3	4	23	0	5	0	2	0	4	106	4	0	15	80	9	0	255	1038
3:45 PM	4	2	19	0	1	1	0	0	6	83	4	0	19	93	3	0	235	987
4:00 PM	2	6	27	0	2	3	1	0	6	77	4	0	15	91	3	0	237	976
4:15 PM	6	9	18	0	2	0	3	0	4	82	8	0	27	60	3	0	222	949
4:30 PM	4	8	21	0	3	1	2	0	4	84	1	0	21	80	7	0	236	930
4:45 PM	5	9	24	0	1	3	0	0	2	81	1	0	27	96	3	0	252	947
5:00 PM	4	5	25	0	2	1	0	0	3	77	5	0	17	64	8	0	211	921
5:15 PM	6	4	21	0	0	2	3	0	5	69	4	0	24	82	6	0	226	925
5:30 PM	2	2	20	0	6	0	0	0	1	80	3	0	20	72	6	0	212	901
5:45 PM	8	3	25	0	0	0	2	0	1	81	3	0	15	70	2	0	210	859
6:00 PM	3	3	23	0	0	0	2	0	0	66	3	0	21	67	0	0	188	836
6:15 PM	6	4	10	0	0	1	1	0	1	52	0	0	11	50	3	0	139	749
6:30 PM	6	2	14	0	1	0	1	0	3	50	4	0	11	61	3	0	156	693
6:45 PM	6	1	19	0	2	1	0	0	0	51	1	0	8	51	1	0	141	624
7:00 PM	3	1	12	0	0	1	0	0	1	49	1	0	10	38	3	0	119	555
7:15 PM	1	2	10	0	1	2	0	0	1	44	2	0	9	43	1	0	116	532
7:30 PM	1	0	12	0	0	0	2	0	1	40	1	0	12	43	5	0	117	493
7:45 PM	0	0	10	0	3	0	2	0	0	30	1	0	11	39	0	0	96	448
8:00 PM	3	1	6	0	0	1	0	0	0	40	4	0	4	34	0	0	93	422
8:15 PM	2	0	7	0	2	1	0	0	1	28	2	0	7	25	2	0	77	383
8:30 PM	0	2	8	0	0	1	0	0	0	35	0	0	5	34	2	0	87	353
8:45 PM	0	5	6	0	3	1	0	0	2	21	1	0	8	45	1	0	93	350
9:00 PM	1	0	5	0	1	1	0	0	0	18	2	0	4	28	0	0	60	317
9:15 PM	0	0	3	0	0	0	0	0	0	23	0	0	3	30	1	0	60	300
9:30 PM	1	1	3	0	0	0	0	0	0	13	2	0	6	21	0	0	47	260
9:45 PM	0	1	3	0	0	0	0	0	1	25	2	0	4	15	3	0	54	221

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	24	28	108	0	4	16	8	0	8	352	20	0	88	504	8	0	1168
Heavy Trucks	0	16	20		0	4	0		0	84	0		12	124	0		260
Buses																	
Pedestrians		12				0				0				0			12
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

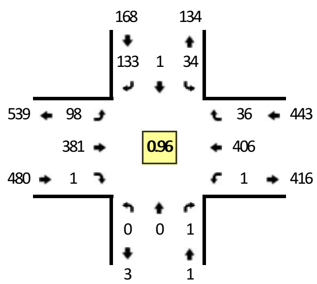
Comments:

Report generated on 7/24/2022 12:23 AM

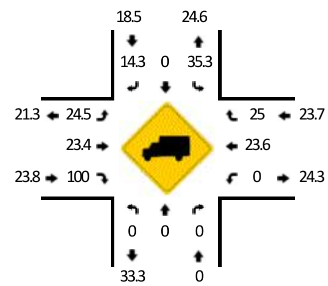
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

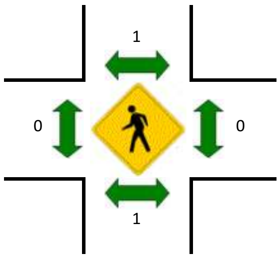
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

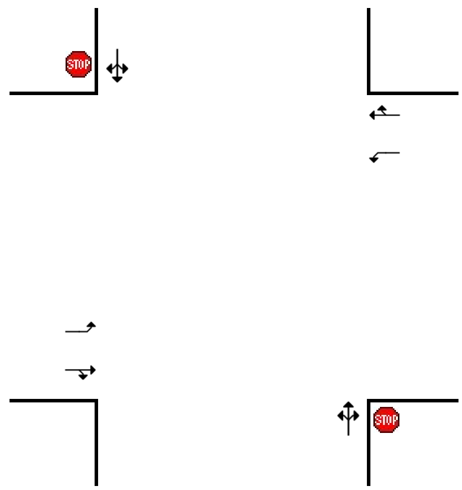
LOCATION: Spruce St -- OR 126 | **QC JOB #:** 15890312
CITY/STATE: Florence, OR | **DATE:** Thu, Jun 3 2021

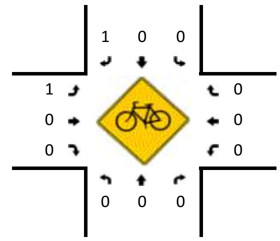


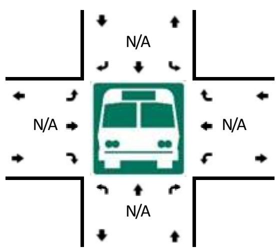
Peak-Hour: 2:15 PM -- 3:15 PM
Peak 15-Min: 2:30 PM -- 2:45 PM

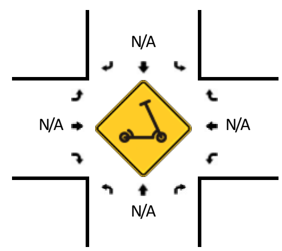












15-Min Count Period Beginning At	Spruce St (Northbound)				Spruce St (Southbound)				OR 126 (Eastbound)				OR 126 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	0	0	0	4	1	1	0	4	18	0	0	0	20	3	0	51	
6:15 AM	0	0	0	0	4	0	3	0	1	26	0	0	0	24	0	0	58	
6:30 AM	0	0	0	0	4	0	5	0	3	20	0	0	0	20	0	0	52	
6:45 AM	0	0	0	0	7	0	12	0	1	26	0	0	0	47	3	0	96	257
7:00 AM	0	0	0	0	2	0	10	0	3	43	0	0	0	28	1	0	87	293
7:15 AM	0	0	0	0	6	0	8	0	6	35	0	0	0	51	4	0	110	345
7:30 AM	0	0	0	0	5	0	17	0	8	42	0	0	0	50	4	0	126	419
7:45 AM	0	0	0	0	7	0	24	0	17	49	0	0	0	69	5	0	171	494
8:00 AM	0	0	0	0	8	0	22	0	5	49	0	0	1	63	5	0	153	560
8:15 AM	0	0	0	0	5	0	21	0	11	62	0	0	0	57	7	0	163	613
8:30 AM	0	0	0	0	9	0	27	0	11	43	0	0	0	56	6	0	152	639
8:45 AM	0	0	0	0	4	0	30	0	11	62	0	0	0	57	8	0	172	640
9:00 AM	0	0	0	0	4	0	21	0	10	60	0	0	0	55	4	0	154	641
9:15 AM	0	0	0	0	3	0	25	0	18	55	0	0	0	58	10	0	169	647
9:30 AM	0	0	0	0	8	0	26	0	13	46	0	0	0	64	4	0	161	656
9:45 AM	0	0	0	0	9	0	34	0	17	81	0	0	0	58	5	0	204	688
10:00 AM	1	0	0	0	11	1	27	0	28	73	0	0	0	78	3	0	222	756
10:15 AM	0	0	0	0	6	0	33	0	17	62	0	0	0	62	2	0	182	769
10:30 AM	0	0	0	0	2	0	28	0	15	62	0	0	0	66	12	0	185	793
10:45 AM	0	0	0	0	11	0	23	0	21	75	1	0	1	75	8	0	215	804
11:00 AM	0	0	0	0	8	0	31	0	25	63	0	0	0	99	8	0	234	816
11:15 AM	0	0	0	0	12	0	40	0	30	69	0	0	0	70	11	0	232	866
11:30 AM	0	0	0	0	5	0	38	0	33	80	1	0	0	78	7	0	242	923
11:45 AM	0	0	0	0	10	0	42	0	25	82	0	0	0	102	10	0	271	979
12:00 PM	0	0	0	0	9	0	24	0	29	92	1	0	0	68	8	0	231	976
12:15 PM	2	0	2	0	8	0	28	0	19	109	0	0	1	87	6	0	262	1006
12:30 PM	0	0	0	0	12	0	35	0	33	73	1	0	0	94	5	0	253	1017
12:45 PM	0	0	0	0	6	0	52	0	16	91	1	0	0	99	14	0	279	1025
1:00 PM	0	0	0	0	10	0	31	0	29	87	1	0	0	87	4	0	249	1043
1:15 PM	0	0	0	0	4	0	35	0	27	79	0	0	0	86	10	0	241	1022
1:30 PM	0	0	1	0	9	0	30	0	26	77	1	0	0	87	6	0	237	1006
1:45 PM	0	0	1	0	7	1	28	0	35	96	1	0	0	89	7	0	265	992
2:00 PM	0	0	0	0	17	0	28	0	20	76	0	0	0	79	8	0	228	971
2:15 PM	0	0	0	0	8	0	38	0	30	96	0	0	0	104	7	0	283	1013
2:30 PM	0	0	0	0	10	0	29	0	22	92	0	0	0	120	12	0	285	1061
2:45 PM	0	0	0	0	7	0	31	0	25	96	0	0	0	106	9	0	274	1070
3:00 PM	0	0	1	0	9	1	35	0	21	97	1	0	1	76	8	0	250	1092
3:15 PM	1	0	0	0	7	0	26	0	23	70	2	0	0	102	8	0	239	1048

15-Min Count Period Beginning At	Spruce St (Northbound)				Spruce St (Southbound)				OR 126 (Eastbound)				OR 126 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	0	0	1	0	5	0	22	0	37	103	1	0	0	78	9	0	256	1019
3:45 PM	0	0	0	0	9	0	24	0	24	75	0	0	0	93	10	0	235	980
4:00 PM	0	0	0	0	11	0	22	0	32	80	0	0	0	88	10	0	243	973
4:15 PM	0	0	0	0	6	0	23	0	26	76	0	0	0	67	11	0	209	943
4:30 PM	0	0	0	0	9	0	24	0	18	85	0	0	0	83	14	0	233	920
4:45 PM	0	0	0	0	8	0	31	0	28	81	0	0	0	99	13	0	260	945
5:00 PM	0	0	0	0	4	0	15	0	25	77	0	0	0	73	7	0	201	903
5:15 PM	0	0	0	0	8	0	26	0	19	69	0	0	0	88	6	0	216	910
5:30 PM	0	0	0	0	12	0	19	0	23	82	0	0	0	81	8	0	225	902
5:45 PM	0	0	0	0	6	0	11	0	23	77	1	0	0	75	11	0	204	846
6:00 PM	0	0	0	0	3	0	15	0	21	74	0	0	0	67	4	0	184	829
6:15 PM	0	0	0	0	7	0	16	0	14	52	0	0	0	52	5	0	146	759
6:30 PM	0	0	0	0	5	0	13	0	10	57	0	0	0	62	5	0	152	686
6:45 PM	0	0	0	0	5	0	12	0	13	58	0	0	0	48	9	0	145	627
7:00 PM	0	0	0	0	5	0	9	0	13	45	0	0	0	43	2	0	117	560
7:15 PM	0	0	0	0	2	0	11	0	12	46	0	0	0	42	8	0	121	535
7:30 PM	0	0	0	0	1	0	18	0	12	38	0	0	0	41	4	0	114	497
7:45 PM	0	0	0	0	4	0	10	0	9	36	0	0	0	41	5	0	105	457
8:00 PM	0	0	0	0	4	0	4	0	9	35	1	0	0	35	4	0	92	432
8:15 PM	0	0	0	0	1	0	1	0	7	29	1	0	0	31	1	0	71	382
8:30 PM	0	0	0	0	1	0	8	0	13	32	0	0	0	36	0	0	90	358
8:45 PM	0	0	0	0	3	0	9	0	5	24	0	0	0	45	4	0	90	343
9:00 PM	0	0	0	0	1	0	8	0	7	18	0	0	0	23	3	0	60	311
9:15 PM	0	0	0	0	1	0	7	0	6	19	0	0	0	26	5	0	64	304
9:30 PM	0	0	0	0	2	0	5	0	4	13	0	0	0	22	1	0	47	261
9:45 PM	0	0	0	0	2	0	4	0	9	19	0	0	0	19	1	0	54	225

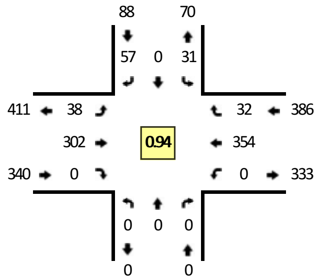
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	40	0	116	0	88	368	0	0	0	480	48	0	1140
Heavy Trucks	0	0	0		12	0	16		20	92	0		0	108	12		260
Buses																	
Pedestrians		4				4				0				0			8
Bicycles	0	0	0		0	0	4		4	0	0		0	0	0		8
Scooters																	

Comments:

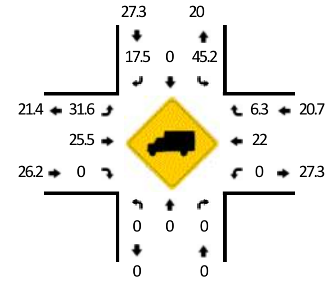
Report generated on 7/24/2022 12:23 AM

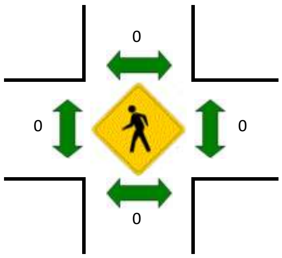
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

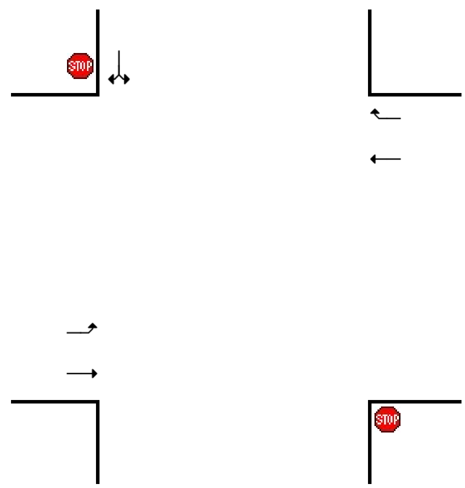
LOCATION: N Fork Rd -- OR 126 | **QC JOB #:** 15890313
CITY/STATE: Florence, OR | **DATE:** Thu, Jun 3 2021

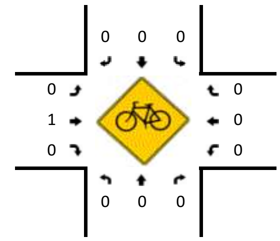


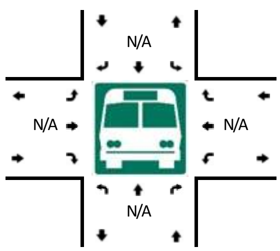
Peak-Hour: 2:15 PM -- 3:15 PM
Peak 15-Min: 2:15 PM -- 2:30 PM

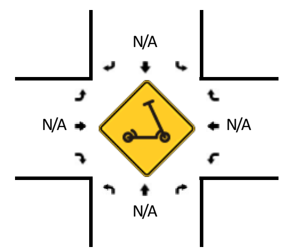












15-Min Count Period Beginning At	N Fork Rd (Northbound)				N Fork Rd (Southbound)				OR 126 (Eastbound)				OR 126 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	0	0	0	1	0	4	0	1	16	0	0	0	15	0	0	37	
6:15 AM	0	0	0	0	1	0	1	0	3	22	0	0	0	22	0	0	49	
6:30 AM	0	0	0	0	4	0	10	0	1	17	0	0	0	18	0	0	50	
6:45 AM	0	0	0	0	5	0	11	0	5	19	0	0	0	29	2	0	71	207
7:00 AM	0	0	0	0	3	0	2	0	2	30	0	0	0	25	2	0	64	234
7:15 AM	0	0	0	0	9	0	13	0	3	32	0	0	0	38	8	0	103	288
7:30 AM	0	0	0	0	3	0	16	0	6	28	0	0	0	36	5	0	94	332
7:45 AM	0	0	0	0	2	0	27	0	7	31	0	0	0	48	6	0	121	382
8:00 AM	0	0	0	0	4	0	16	0	9	39	0	0	0	51	6	0	125	443
8:15 AM	0	0	0	0	5	0	6	0	6	47	0	0	0	55	4	0	123	463
8:30 AM	0	0	0	0	6	0	10	0	2	37	0	0	0	50	7	0	112	481
8:45 AM	0	0	0	0	6	0	9	0	7	49	0	0	0	50	3	0	124	484
9:00 AM	0	0	0	0	5	0	7	0	6	46	0	0	0	47	6	0	117	476
9:15 AM	0	0	0	0	7	0	9	0	5	41	0	0	0	42	3	0	107	460
9:30 AM	0	0	0	0	8	0	7	0	7	39	0	0	0	55	4	0	120	468
9:45 AM	0	0	0	0	4	0	10	0	11	59	0	0	0	64	4	0	152	496
10:00 AM	0	0	0	0	8	0	10	0	11	61	0	0	0	49	3	0	142	521
10:15 AM	0	0	0	0	8	0	7	0	7	51	0	0	0	47	3	0	123	537
10:30 AM	0	0	0	0	2	0	9	0	5	47	0	0	0	58	3	0	124	541
10:45 AM	0	0	0	0	4	0	15	0	4	66	0	0	0	54	4	0	147	536
11:00 AM	0	0	0	0	4	0	9	0	4	48	0	0	0	83	8	0	156	550
11:15 AM	0	0	0	0	6	0	5	0	6	60	0	0	0	63	12	0	152	579
11:30 AM	0	0	0	0	4	0	17	0	9	59	0	0	0	70	8	0	167	622
11:45 AM	0	0	0	0	5	0	13	0	16	60	0	0	0	80	7	0	181	656
12:00 PM	0	0	0	0	7	0	18	0	17	66	0	0	0	55	7	0	170	670
12:15 PM	0	0	0	0	5	0	11	0	17	86	0	0	0	77	6	0	202	720
12:30 PM	0	0	0	0	9	0	11	0	11	54	0	0	0	75	6	0	166	719
12:45 PM	0	0	0	0	3	0	14	0	10	63	0	0	0	72	9	0	171	709
1:00 PM	0	0	0	0	4	0	13	0	9	71	0	0	0	74	6	0	177	716
1:15 PM	0	0	0	0	6	0	15	0	3	62	0	0	0	71	9	0	166	680
1:30 PM	0	0	0	0	12	0	14	0	8	64	0	0	0	65	6	0	169	683
1:45 PM	0	0	0	0	6	0	9	0	17	67	0	0	0	67	11	0	177	689
2:00 PM	0	0	0	0	12	0	8	0	10	72	0	0	0	61	5	0	168	680
2:15 PM	0	0	0	0	6	0	19	0	13	80	0	0	0	91	8	0	217	731
2:30 PM	0	0	0	0	10	0	11	0	10	75	0	0	0	96	12	0	214	776
2:45 PM	0	0	0	0	9	0	15	0	7	81	0	0	0	92	8	0	212	811
3:00 PM	0	0	0	0	6	0	12	0	8	66	0	0	0	75	4	0	171	814
3:15 PM	0	0	0	0	9	0	6	0	12	53	0	0	0	86	8	0	174	771

15-Min Count Period Beginning At	N Fork Rd (Northbound)				N Fork Rd (Southbound)				OR 126 (Eastbound)				OR 126 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	0	0	0	0	5	0	11	0	23	77	0	0	0	69	8	0	193	750
3:45 PM	0	0	0	0	3	0	7	0	10	66	0	0	0	75	10	0	171	709
4:00 PM	0	0	0	0	7	0	11	0	10	70	0	0	0	72	3	0	173	711
4:15 PM	0	0	0	0	5	0	9	0	13	66	0	0	0	54	7	0	154	691
4:30 PM	0	0	0	0	7	0	16	0	15	60	0	0	0	60	3	0	161	659
4:45 PM	0	0	0	0	5	0	10	0	9	61	0	0	0	82	11	0	178	666
5:00 PM	0	0	0	0	8	0	9	0	15	63	0	0	0	70	2	0	167	660
5:15 PM	0	0	0	0	8	0	11	0	14	57	0	0	0	67	8	0	165	671
5:30 PM	0	0	0	0	8	0	9	0	14	66	0	0	0	70	6	0	173	683
5:45 PM	0	0	0	0	4	0	7	0	9	58	0	0	0	69	6	0	153	658
6:00 PM	0	0	0	0	6	0	9	0	7	52	0	0	0	54	9	0	137	628
6:15 PM	0	0	0	0	2	0	2	0	14	37	0	0	0	45	9	0	109	572
6:30 PM	0	0	0	0	1	0	5	0	9	45	0	0	0	52	3	0	115	514
6:45 PM	0	0	0	0	3	0	4	0	14	40	0	0	0	51	5	0	117	478
7:00 PM	0	0	0	0	5	0	5	0	3	42	0	0	0	33	5	0	93	434
7:15 PM	0	0	0	0	3	0	4	0	3	39	0	0	0	34	2	0	85	410
7:30 PM	0	0	0	0	1	0	3	0	7	30	0	0	0	41	6	0	88	383
7:45 PM	0	0	0	0	5	0	3	0	3	30	0	0	0	31	2	0	74	340
8:00 PM	0	0	0	0	2	0	5	0	4	32	0	0	0	23	3	0	69	316
8:15 PM	0	0	0	0	3	0	3	0	3	17	0	0	0	18	1	0	45	276
8:30 PM	0	0	0	0	4	0	3	0	6	18	0	0	0	24	2	0	57	245
8:45 PM	0	0	0	0	0	0	2	0	7	16	0	0	0	21	1	0	47	218
9:00 PM	0	0	0	0	3	0	2	0	4	16	0	0	0	20	2	0	47	196
9:15 PM	0	0	0	0	0	0	2	0	0	14	0	0	0	16	0	0	32	183
9:30 PM	0	0	0	0	2	0	3	0	2	9	0	0	0	7	0	0	23	149
9:45 PM	0	0	0	0	2	0	0	0	4	13	0	0	0	16	5	0	40	142

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	24	0	76	0	52	320	0	0	0	364	32	0	868
Heavy Trucks	0	0	0		16	0	16		24	64	0		0	84	0		204
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	4	0		0	0	0		4
Scooters																	

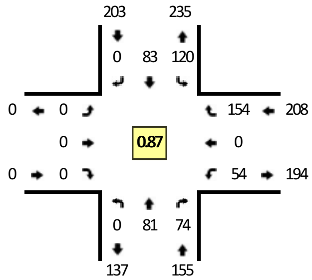
Comments:

Report generated on 7/24/2022 12:24 AM

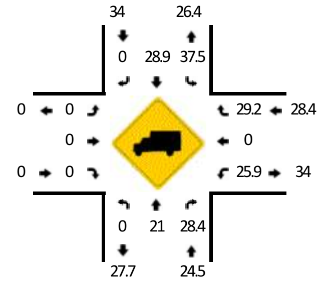
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

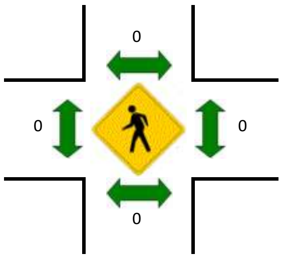
LOCATION: Rhododendron Dr -- 35th St
CITY/STATE: Florence, OR

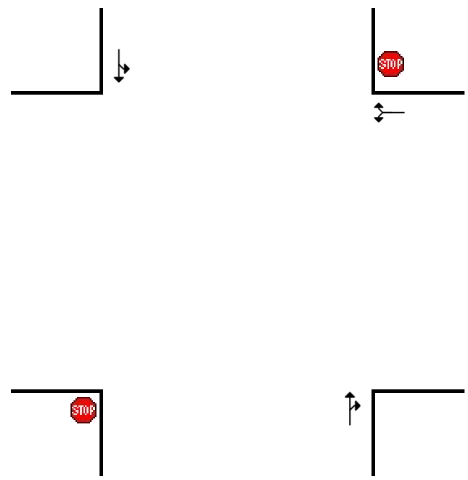
QC JOB #: 15890314
DATE: Thu, Jun 3 2021

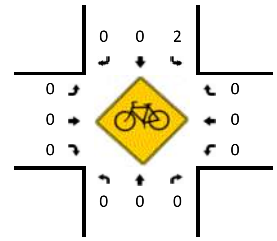


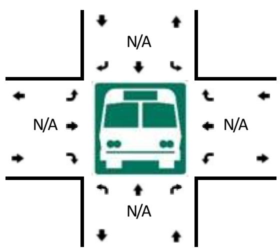
Peak-Hour: 11:30 AM -- 12:30 PM
Peak 15-Min: 11:45 AM -- 12:00 PM

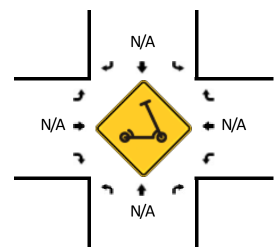












15-Min Count Period Beginning At	Rhododendron Dr (Northbound)				Rhododendron Dr (Southbound)				35th St (Eastbound)				35th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	2	0	0	1	3	0	0	0	0	0	0	4	0	3	0	13	
6:15 AM	0	0	2	0	4	5	0	0	0	0	0	0	1	0	4	0	16	
6:30 AM	0	2	2	0	11	12	0	0	0	0	0	0	4	0	4	0	35	
6:45 AM	0	6	3	0	9	10	0	0	0	0	0	0	4	0	8	0	40	104
7:00 AM	0	3	1	0	15	8	0	0	0	0	0	0	1	0	8	0	36	127
7:15 AM	0	3	1	0	11	10	0	0	0	0	0	0	3	0	7	0	35	146
7:30 AM	0	7	2	0	17	12	0	0	0	0	0	0	5	0	18	0	61	172
7:45 AM	0	15	10	0	33	23	0	0	0	0	0	0	2	0	14	0	97	229
8:00 AM	0	5	4	0	25	14	0	0	0	0	0	0	11	0	15	0	74	267
8:15 AM	0	12	8	0	21	10	0	0	0	0	0	0	3	0	23	0	77	309
8:30 AM	0	5	5	0	23	20	0	0	0	0	0	0	7	0	15	0	75	323
8:45 AM	0	6	12	0	34	16	0	0	0	0	0	0	9	0	18	0	95	321
9:00 AM	0	7	13	0	20	16	0	0	0	0	0	0	4	0	20	0	80	327
9:15 AM	0	15	11	0	24	8	0	0	0	0	0	0	10	0	24	0	92	342
9:30 AM	0	12	12	0	14	14	0	0	0	0	0	0	11	0	20	0	83	350
9:45 AM	0	8	12	0	17	26	0	0	0	0	0	0	7	0	28	0	98	353
10:00 AM	0	15	10	0	19	19	0	0	0	0	0	0	10	0	23	0	96	369
10:15 AM	0	11	8	0	31	10	0	0	0	0	0	0	13	0	24	0	97	374
10:30 AM	0	19	12	0	25	16	0	0	0	0	0	0	19	0	18	0	109	400
10:45 AM	0	13	16	0	34	25	0	0	0	0	0	0	7	0	22	0	117	419
11:00 AM	0	17	13	0	37	25	0	0	0	0	0	0	10	0	27	0	129	452
11:15 AM	0	15	11	0	30	16	0	0	0	0	0	0	13	0	25	0	110	465
11:30 AM	0	17	15	0	24	19	0	0	0	0	0	0	10	0	44	0	129	485
11:45 AM	0	23	22	0	43	23	0	0	0	0	0	0	14	0	37	0	162	530
12:00 PM	0	21	19	0	31	21	0	0	0	0	0	0	16	0	38	0	146	547
12:15 PM	0	20	18	0	22	20	0	0	0	0	0	0	14	0	35	0	129	566
12:30 PM	0	16	10	0	30	27	0	0	0	0	0	0	15	0	27	0	125	562
12:45 PM	0	13	15	0	30	19	0	0	0	0	0	0	19	0	31	0	127	527
1:00 PM	0	17	21	0	24	27	0	0	0	0	0	0	17	0	46	0	152	533
1:15 PM	0	17	13	0	34	20	0	0	0	0	0	0	14	0	28	0	126	530
1:30 PM	0	15	15	0	19	28	0	0	0	0	0	0	13	0	32	0	122	527
1:45 PM	0	14	14	0	26	17	0	0	0	0	0	0	9	0	27	0	107	507
2:00 PM	0	19	14	0	29	24	0	0	0	0	0	0	10	0	36	0	132	487
2:15 PM	0	12	11	0	19	24	0	0	0	0	0	0	13	0	29	0	108	469
2:30 PM	0	14	12	0	21	31	0	0	0	0	0	0	8	0	26	0	112	459
2:45 PM	0	20	14	0	25	16	0	0	0	0	0	0	10	0	40	0	125	477
3:00 PM	0	21	13	0	34	31	0	0	0	0	0	0	10	0	25	0	134	479
3:15 PM	0	18	16	0	19	25	0	0	0	0	0	0	19	0	44	0	141	512

15-Min Count Period Beginning At	Rhododendron Dr (Northbound)				Rhododendron Dr (Southbound)				35th St (Eastbound)				35th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	0	15	14	0	22	12	0	0	0	0	0	0	10	0	33	0	106	506
3:45 PM	0	25	18	0	23	19	0	0	0	0	0	0	10	0	29	0	124	505
4:00 PM	0	19	9	0	31	21	0	0	0	0	0	0	9	0	20	0	109	480
4:15 PM	0	15	14	0	24	22	0	0	0	0	0	0	7	0	38	0	120	459
4:30 PM	0	9	12	0	20	15	0	0	0	0	0	0	9	0	25	0	90	443
4:45 PM	0	15	9	0	16	14	0	0	0	0	0	0	11	0	43	0	108	427
5:00 PM	0	27	9	0	20	16	0	0	0	0	0	0	5	0	33	0	110	428
5:15 PM	0	17	7	0	12	10	0	0	0	0	0	0	3	0	27	0	76	384
5:30 PM	0	13	9	0	15	15	0	0	0	0	0	0	9	0	24	0	85	379
5:45 PM	0	14	7	0	17	12	0	0	0	0	0	0	6	0	22	0	78	349
6:00 PM	0	20	9	0	16	12	0	0	0	0	0	0	4	0	25	0	86	325
6:15 PM	0	13	8	0	17	9	0	0	0	0	0	0	7	0	21	0	75	324
6:30 PM	0	10	1	0	15	7	0	0	0	0	0	0	8	0	23	0	64	303
6:45 PM	0	10	4	0	5	9	0	0	0	0	0	0	3	0	17	0	48	273
7:00 PM	0	2	4	0	6	4	0	0	0	0	0	0	3	0	16	0	35	222
7:15 PM	0	10	2	0	5	7	0	0	0	0	0	0	3	0	9	0	36	183
7:30 PM	0	7	0	0	9	5	0	0	0	0	0	0	1	0	12	0	34	153
7:45 PM	0	8	0	0	5	7	0	0	0	0	0	0	1	0	13	0	34	139
8:00 PM	0	4	1	0	3	7	0	0	0	0	0	0	0	0	5	0	20	124
8:15 PM	0	7	2	0	5	0	0	0	0	0	0	0	1	0	5	0	20	108
8:30 PM	0	7	3	0	3	7	0	0	0	0	0	0	0	0	8	0	28	102
8:45 PM	0	9	4	0	4	6	0	0	0	0	0	0	2	0	7	0	32	100
9:00 PM	0	3	3	0	6	8	0	0	0	0	0	0	2	0	6	0	28	108
9:15 PM	0	10	0	0	3	2	0	0	0	0	0	0	0	0	7	0	22	110
9:30 PM	0	4	0	0	3	7	0	0	0	0	0	0	2	0	5	0	21	103
9:45 PM	0	3	1	0	4	3	0	0	0	0	0	0	1	0	4	0	16	87

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	92	88	0	172	92	0	0	0	0	0	0	56	0	148	0	648
Heavy Trucks	0	20	24		52	12	0		0	0	0		12	0	40		160
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

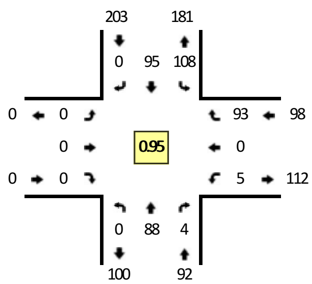
Comments:

Report generated on 8/1/2022 5:06 PM

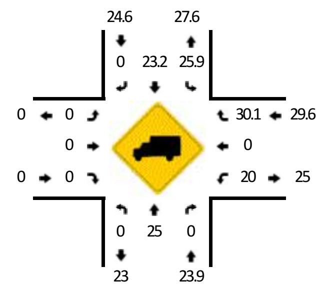
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

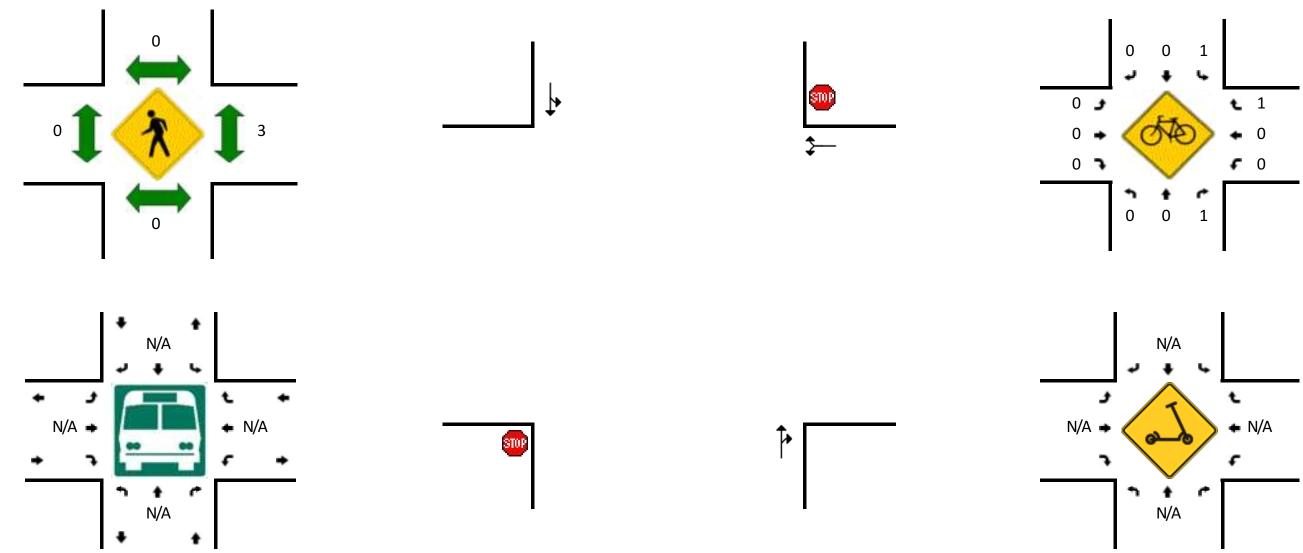
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

LOCATION: Rhododendron Dr -- 9th St | **QC JOB #:** 15890315
CITY/STATE: Florence, OR | **DATE:** Thu, Jun 3 2021



Peak-Hour: 12:30 PM -- 1:30 PM
Peak 15-Min: 12:30 PM -- 12:45 PM





15-Min Count Period Beginning At	Rhododendron Dr (Northbound)				Rhododendron Dr (Southbound)				9th St (Eastbound)				9th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	0	1	0	9	3	0	0	0	0	0	0	0	0	3	0	16	
6:15 AM	0	1	0	0	8	5	0	0	0	0	0	0	0	0	1	0	15	
6:30 AM	0	1	0	0	10	5	0	0	0	0	0	0	0	0	5	0	21	
6:45 AM	0	3	0	0	9	8	0	0	0	0	0	0	1	0	7	0	28	80
7:00 AM	0	4	0	0	8	6	0	0	0	0	0	0	0	0	3	0	21	85
7:15 AM	0	3	1	0	10	9	0	0	0	0	0	0	0	0	4	0	27	97
7:30 AM	0	5	2	0	10	10	0	0	0	0	0	0	0	0	6	0	33	109
7:45 AM	0	16	2	0	27	10	0	0	0	0	0	0	1	0	7	0	63	144
8:00 AM	0	7	1	0	18	11	0	0	0	0	0	0	0	0	3	0	40	163
8:15 AM	0	6	2	0	7	12	0	0	0	0	0	0	0	0	14	0	41	177
8:30 AM	0	2	1	0	11	9	0	0	0	0	0	0	1	0	9	0	33	177
8:45 AM	0	8	0	0	26	11	0	0	0	0	0	0	2	0	7	0	54	168
9:00 AM	0	7	1	0	14	13	0	0	0	0	0	0	0	0	14	0	49	177
9:15 AM	0	10	1	0	14	10	0	0	0	0	0	0	1	0	18	0	54	190
9:30 AM	0	10	1	0	17	12	0	0	0	0	0	0	1	0	13	0	54	211
9:45 AM	0	4	2	0	28	15	0	0	0	0	0	0	3	0	12	0	64	221
10:00 AM	0	19	2	0	20	21	0	0	0	0	0	0	4	0	21	0	87	259
10:15 AM	0	14	1	0	22	12	0	0	0	0	0	0	2	0	17	0	68	273
10:30 AM	0	17	3	0	15	21	0	0	0	0	0	0	0	0	19	0	75	294
10:45 AM	0	16	0	0	32	17	0	0	0	0	0	0	0	0	15	0	80	310
11:00 AM	0	12	0	0	26	24	0	0	0	0	0	0	2	0	28	0	92	315
11:15 AM	0	15	0	0	23	15	0	0	0	0	0	0	2	0	19	0	74	321
11:30 AM	0	13	1	0	16	26	0	0	0	0	0	0	1	0	21	0	78	324
11:45 AM	0	24	2	0	29	22	0	0	0	0	0	0	0	0	18	0	95	339
12:00 PM	0	27	0	0	15	15	0	0	0	0	0	0	1	0	27	0	85	332
12:15 PM	0	19	0	0	21	20	0	0	0	0	0	0	2	0	23	0	85	343
12:30 PM	0	24	2	0	27	23	0	0	0	0	0	0	0	0	27	0	103	368
12:45 PM	0	15	0	0	24	26	0	0	0	0	0	0	3	0	21	0	89	362
1:00 PM	0	27	0	0	27	26	0	0	0	0	0	0	2	0	19	0	101	378
1:15 PM	0	22	2	0	30	20	0	0	0	0	0	0	0	0	26	0	100	393
1:30 PM	0	16	2	0	24	23	0	0	0	0	0	0	1	0	22	0	88	378
1:45 PM	0	15	3	0	27	21	0	0	0	0	0	0	0	0	16	0	82	371
2:00 PM	0	21	1	0	20	16	0	0	0	0	0	0	1	0	22	0	81	351
2:15 PM	0	17	2	0	19	21	0	0	0	0	0	0	5	0	26	0	90	341
2:30 PM	0	26	0	0	19	20	0	0	0	1	0	0	0	0	22	0	88	341
2:45 PM	0	26	2	0	36	14	0	0	0	0	0	0	8	0	20	0	106	365
3:00 PM	1	16	1	0	21	21	0	0	0	0	0	0	0	0	24	0	84	368
3:15 PM	0	18	1	0	23	17	0	0	0	0	0	0	0	0	24	0	83	361

15-Min Count Period Beginning At	Rhododendron Dr (Northbound)				Rhododendron Dr (Southbound)				9th St (Eastbound)				9th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	0	15	0	0	10	18	0	0	0	0	0	0	2	0	21	0	66	339
3:45 PM	0	18	1	0	11	18	0	0	0	0	0	0	0	0	15	0	63	296
4:00 PM	0	20	1	0	22	22	0	0	0	0	0	0	2	0	11	0	78	290
4:15 PM	0	18	0	0	17	17	0	0	0	0	0	0	2	0	21	0	75	282
4:30 PM	0	13	1	0	14	12	0	0	0	0	0	0	2	0	16	0	58	274
4:45 PM	0	10	0	0	15	20	0	0	0	0	0	0	2	0	21	0	68	279
5:00 PM	0	22	0	0	10	10	0	0	0	0	0	0	2	0	26	0	70	271
5:15 PM	0	10	0	0	15	9	0	0	0	0	0	0	0	0	19	0	53	249
5:30 PM	0	17	1	0	14	11	0	0	0	0	0	0	1	0	11	0	55	246
5:45 PM	0	7	1	0	11	7	0	0	0	0	0	0	2	0	13	0	41	219
6:00 PM	0	11	1	0	8	11	0	0	0	0	0	0	1	0	21	0	53	202
6:15 PM	0	15	0	0	4	12	0	0	0	0	0	0	2	0	14	0	47	196
6:30 PM	0	10	2	0	9	6	0	0	0	0	0	0	0	0	9	0	36	177
6:45 PM	0	6	2	0	8	10	0	0	0	0	0	0	0	0	9	0	35	171
7:00 PM	0	6	0	0	3	4	0	0	0	0	0	0	0	0	8	0	21	139
7:15 PM	0	6	1	0	5	7	0	0	0	0	0	0	0	0	10	0	29	121
7:30 PM	0	6	0	0	4	5	0	0	0	0	0	0	0	0	8	0	23	108
7:45 PM	0	4	0	0	6	3	0	0	0	0	0	0	0	0	7	0	20	93
8:00 PM	0	2	0	0	2	3	0	0	0	0	0	0	1	0	6	0	14	86
8:15 PM	0	9	0	0	2	4	0	0	0	0	0	0	0	0	6	0	21	78
8:30 PM	0	6	1	0	3	2	0	0	0	0	0	0	0	0	4	0	16	71
8:45 PM	0	10	0	0	8	3	0	0	0	0	0	0	1	0	5	0	27	78
9:00 PM	0	4	0	0	4	5	0	0	0	0	0	0	1	0	3	0	17	81
9:15 PM	0	7	0	0	4	5	0	0	0	0	0	0	0	0	10	0	26	86
9:30 PM	0	5	0	0	5	2	0	0	0	0	0	0	0	0	1	0	13	83
9:45 PM	0	8	0	0	3	2	0	0	0	0	0	0	0	0	5	0	18	74

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	96	8	0	108	92	0	0	0	0	0	0	0	0	108	0	412
Heavy Trucks	0	24	0		16	20	0		0	0	0		0	0	32		92
Buses																	
Pedestrians		0				0				0				8			8
Bicycles	0	0	0		0	0	0		0	0	0		0	0	4		4
Scooters																	

Comments:

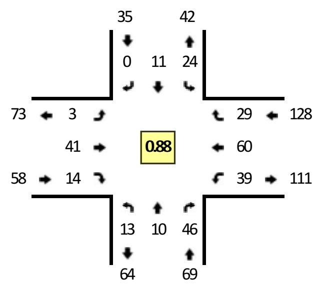
Report generated on 8/1/2022 5:06 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

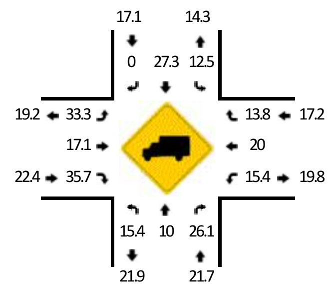
LOCATION: 4th Ave/Rhododendron Dr -- Kiwanda St/Heceta Beach Rd | **QC JOB #:** 15890316

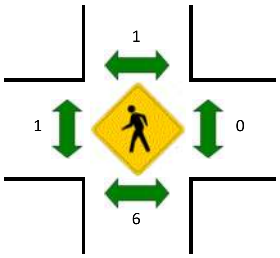
CITY/STATE: Heceta Beach, OR | **DATE:** Thu, Jun 3 2021

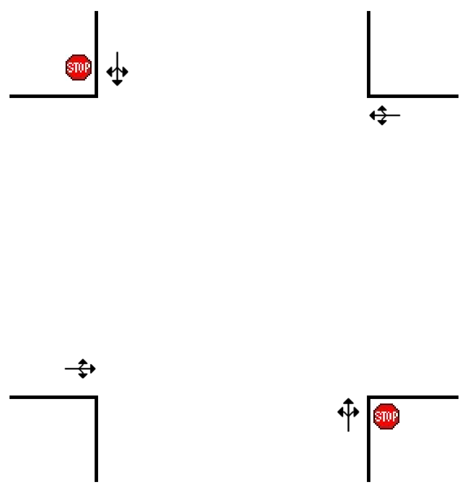


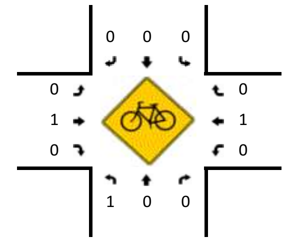
Peak-Hour: 3:45 PM -- 4:45 PM

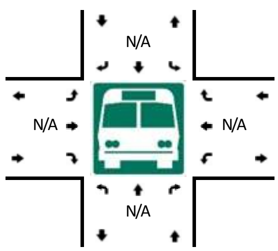
Peak 15-Min: 4:30 PM -- 4:45 PM

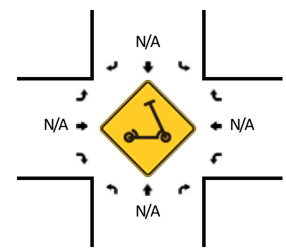












15-Min Count Period Beginning At	4th Ave/Rhododendron Dr (Northbound)				4th Ave/Rhododendron Dr (Southbound)				Kiwanda St/Heceta Beach Rd (Eastbound)				Kiwanda St/Heceta Beach Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	0	0	0	1	0	0	0	0	1	0	0	1	0	0	0	3	
6:15 AM	1	0	3	0	0	0	0	0	0	2	0	0	1	1	1	0	9	
6:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	1	3	0	0	5	
6:45 AM	0	0	3	0	2	0	0	0	0	1	2	0	2	3	0	0	13	30
7:00 AM	0	1	6	0	4	0	0	0	0	1	0	0	2	1	1	0	16	43
7:15 AM	0	0	3	0	2	2	0	0	0	2	0	0	3	9	3	0	24	58
7:30 AM	2	0	3	0	1	1	0	0	0	4	1	0	4	3	1	0	20	73
7:45 AM	5	0	4	0	1	6	0	0	0	5	5	0	6	6	1	0	39	99
8:00 AM	2	1	4	0	1	0	0	0	0	6	2	0	2	7	2	0	27	110
8:15 AM	1	0	6	0	4	2	0	0	0	5	3	0	2	4	4	0	31	117
8:30 AM	1	2	6	0	2	5	0	0	0	7	2	0	3	3	1	0	32	129
8:45 AM	2	2	6	0	2	2	1	0	1	5	1	0	5	4	1	0	32	122
9:00 AM	1	2	5	0	2	3	0	0	0	5	1	0	4	7	2	0	32	127
9:15 AM	4	2	11	0	3	0	0	0	0	8	1	0	6	7	1	0	43	139
9:30 AM	3	0	8	0	4	4	1	0	0	10	2	0	2	6	3	0	43	150
9:45 AM	0	4	8	0	7	4	0	0	1	9	2	0	9	6	3	0	53	171
10:00 AM	5	1	12	0	5	1	1	0	2	6	0	0	6	6	4	0	49	188
10:15 AM	7	3	10	0	6	1	1	0	0	15	6	0	5	11	3	0	68	213
10:30 AM	3	0	7	0	6	2	0	0	0	12	3	0	7	9	1	0	50	220
10:45 AM	1	7	8	0	7	6	0	0	0	11	4	0	5	8	6	0	63	230
11:00 AM	4	1	7	0	6	6	0	0	0	15	5	0	6	5	5	0	60	241
11:15 AM	4	1	14	0	6	4	0	0	0	10	4	0	8	9	9	0	69	242
11:30 AM	0	5	10	0	3	0	1	0	0	7	5	0	11	7	2	0	51	243
11:45 AM	5	3	15	0	2	3	0	0	0	12	5	0	8	11	4	0	68	248
12:00 PM	5	3	17	0	11	3	0	0	1	13	3	0	11	7	2	0	76	264
12:15 PM	2	2	9	0	4	4	0	0	1	7	1	0	11	9	5	0	55	250
12:30 PM	3	3	13	0	5	3	0	0	0	7	2	0	10	11	4	0	61	260
12:45 PM	3	2	17	0	5	2	0	0	0	7	4	0	10	17	4	0	71	263
1:00 PM	5	1	5	0	3	4	0	0	0	9	2	0	15	10	4	0	58	245
1:15 PM	2	2	6	0	5	2	1	0	0	12	1	0	10	10	6	0	57	247
1:30 PM	6	2	12	0	5	4	0	0	0	19	5	0	10	17	9	0	89	275
1:45 PM	5	1	13	0	7	2	0	0	0	9	3	0	2	6	3	0	51	255
2:00 PM	0	2	8	0	6	3	1	0	0	9	3	0	15	5	3	0	55	252
2:15 PM	2	2	19	0	4	0	1	0	0	8	2	0	11	12	2	0	63	258
2:30 PM	6	3	9	0	5	1	0	0	0	7	4	0	9	21	9	0	74	243
2:45 PM	3	3	8	0	6	4	0	0	0	9	6	0	6	11	7	0	63	255
3:00 PM	4	2	11	0	4	5	0	0	1	8	3	0	13	8	5	0	64	264
3:15 PM	2	7	7	0	1	3	0	0	0	9	3	0	5	5	6	0	48	249
3:30 PM	3	4	12	0	5	5	1	0	0	5	2	0	15	12	5	0	69	244

15-Min Count Period Beginning At	4th Ave/Rhododendron Dr (Northbound)				4th Ave/Rhododendron Dr (Southbound)				Kiwanda St/Heceta Beach Rd (Eastbound)				Kiwanda St/Heceta Beach Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:45 PM	5	4	9	0	7	3	0	0	0	10	7	0	10	16	6	0	77	258
4:00 PM	2	2	14	0	8	2	0	0	2	13	2	0	9	12	7	0	73	267
4:15 PM	1	2	12	0	3	3	0	0	0	5	3	0	6	15	8	0	58	277
4:30 PM	5	2	11	0	6	3	0	0	1	13	2	0	14	17	8	0	82	290
4:45 PM	6	2	14	0	3	2	1	0	1	6	1	0	13	8	8	0	65	278
5:00 PM	5	4	11	0	2	0	1	0	0	11	3	0	14	11	6	0	68	273
5:15 PM	3	0	8	0	2	3	0	0	0	7	1	0	4	4	6	0	38	253
5:30 PM	0	2	7	0	4	1	0	0	1	5	1	0	9	4	2	0	36	207
5:45 PM	3	4	5	0	3	3	0	0	0	7	1	0	9	10	4	0	49	191
6:00 PM	2	0	6	0	3	1	0	0	0	7	4	0	5	7	1	0	36	159
6:15 PM	1	1	12	0	2	3	0	0	0	6	0	0	8	6	4	0	43	164
6:30 PM	3	1	7	0	4	1	1	0	0	7	0	0	12	7	6	0	49	177
6:45 PM	2	2	9	0	1	1	0	0	0	0	0	0	5	10	8	0	38	166
7:00 PM	1	0	1	0	1	0	0	0	0	4	0	0	7	4	4	0	22	152
7:15 PM	1	3	6	0	3	4	0	0	1	5	2	0	3	3	2	0	33	142
7:30 PM	4	2	3	0	3	0	0	0	0	7	1	0	2	7	3	0	32	125
7:45 PM	2	1	5	0	3	0	0	0	0	3	2	0	4	7	3	0	30	117
8:00 PM	0	0	5	0	1	0	1	0	0	3	0	0	3	6	4	0	23	118
8:15 PM	2	0	2	0	6	0	0	0	0	6	0	0	1	3	2	0	22	107
8:30 PM	1	1	3	0	3	0	0	0	0	2	1	0	4	9	3	0	27	102
8:45 PM	0	1	3	0	2	2	0	0	0	5	0	0	2	4	4	0	23	95
9:00 PM	1	0	2	0	0	2	0	0	0	5	2	0	3	6	0	0	21	93
9:15 PM	0	1	6	0	1	0	0	0	0	2	1	0	1	2	2	0	16	87
9:30 PM	0	2	3	0	0	0	0	0	0	0	1	0	2	4	3	0	15	75
9:45 PM	1	1	3	0	2	0	0	0	0	0	1	0	3	1	2	0	14	66

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	20	8	44	0	24	12	0	0	4	52	8	0	56	68	32	0	328
Heavy Trucks	0	4	4		0	4	0		0	4	4		8	12	4		44
Buses																	
Pedestrians		4				4				4				0			12
Bicycles	4	0	0		0	0	0		0	0	0		0	0	0		4
Scooters																	

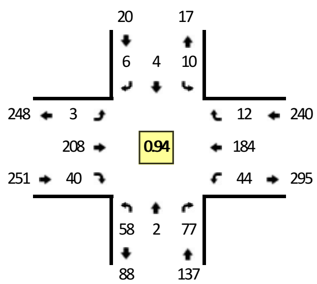
Comments:

Report generated on 8/1/2022 5:06 PM

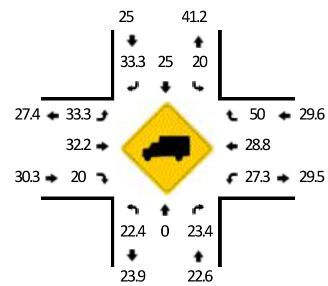
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

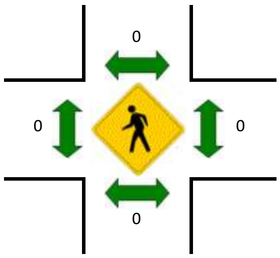
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

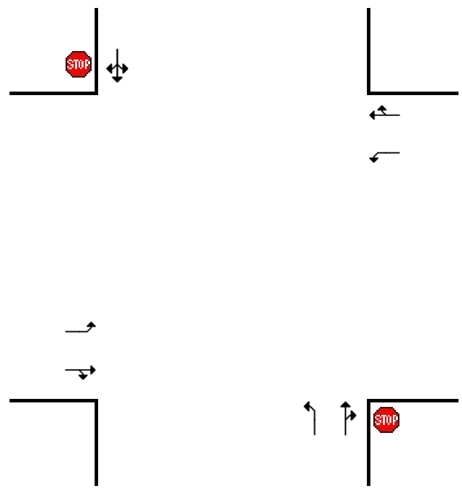
LOCATION: Kingwood St -- 35th St | **QC JOB #:** 15890317
CITY/STATE: Florence, OR | **DATE:** Thu, Jun 3 2021

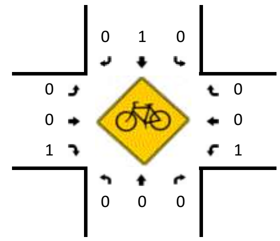


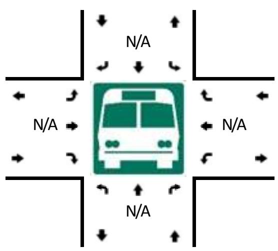
Peak-Hour: 11:45 AM -- 12:45 PM
Peak 15-Min: 11:45 AM -- 12:00 PM

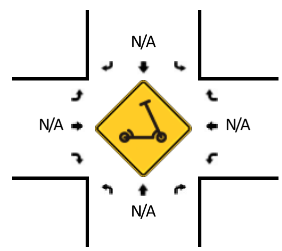












15-Min Count Period Beginning At	Kingwood St (Northbound)				Kingwood St (Southbound)				35th St (Eastbound)				35th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	1	0	0	0	0	0	0	0	0	5	1	0	2	4	0	0	13	
6:15 AM	1	0	2	0	0	0	0	0	0	6	3	0	2	5	0	0	19	
6:30 AM	1	1	1	0	0	0	0	0	0	9	9	0	4	7	1	0	33	
6:45 AM	3	0	5	0	0	0	0	0	0	16	3	0	5	11	1	0	44	109
7:00 AM	1	0	4	0	0	0	0	0	1	15	2	0	2	11	2	0	38	134
7:15 AM	2	0	5	0	0	0	0	0	0	17	9	0	6	15	1	0	55	170
7:30 AM	3	0	8	0	0	0	0	0	1	17	6	0	8	17	1	0	61	198
7:45 AM	4	0	7	0	0	0	1	0	1	41	13	0	22	21	2	0	112	266
8:00 AM	11	0	10	0	0	1	1	0	3	27	11	0	5	21	4	0	94	322
8:15 AM	8	0	10	0	0	0	0	0	0	33	8	0	6	26	2	0	93	360
8:30 AM	6	0	8	0	2	0	1	0	1	35	11	0	11	23	2	0	100	399
8:45 AM	7	0	12	0	0	0	0	0	1	45	13	0	12	24	0	0	114	401
9:00 AM	10	0	17	0	1	0	0	0	2	30	8	0	7	22	1	0	98	405
9:15 AM	9	0	14	0	0	0	0	0	2	33	9	0	10	30	5	0	112	424
9:30 AM	9	0	19	0	0	1	0	0	0	31	8	0	7	30	4	0	109	433
9:45 AM	9	0	15	0	1	0	1	0	0	29	9	0	6	31	1	0	102	421
10:00 AM	10	0	11	0	2	1	3	0	0	33	1	0	6	24	1	0	92	415
10:15 AM	8	1	14	0	0	0	1	0	0	39	7	0	11	30	0	0	111	414
10:30 AM	10	1	11	0	1	0	0	0	0	45	3	0	8	36	1	0	116	421
10:45 AM	6	0	23	0	0	1	0	0	0	57	9	0	4	22	0	0	122	441
11:00 AM	10	0	11	0	0	0	0	0	1	46	10	0	8	43	1	0	130	479
11:15 AM	8	0	14	0	2	0	0	0	0	45	7	0	8	36	5	0	125	493
11:30 AM	15	1	13	0	2	0	0	0	0	27	10	0	11	53	3	0	135	512
11:45 AM	18	0	18	0	5	3	1	0	1	63	13	0	11	39	1	0	173	563
12:00 PM	17	2	22	0	0	0	1	0	1	50	6	0	10	53	2	0	164	597
12:15 PM	15	0	13	0	3	1	3	0	1	47	10	0	11	50	4	0	158	630
12:30 PM	8	0	24	0	2	0	1	0	0	48	11	0	12	42	5	0	153	648
12:45 PM	13	1	12	0	4	3	1	0	0	49	15	0	13	50	3	0	164	639
1:00 PM	24	0	16	0	6	0	1	0	0	43	11	0	7	53	3	0	164	639
1:15 PM	14	0	7	0	3	0	1	0	0	37	13	0	20	41	1	0	137	618
1:30 PM	8	0	17	0	0	0	0	0	0	39	5	0	9	37	2	0	117	582
1:45 PM	9	0	14	0	1	1	0	0	1	38	16	0	6	41	3	0	130	548
2:00 PM	9	0	17	0	2	1	0	0	1	41	8	0	15	47	1	0	142	526
2:15 PM	16	0	12	0	1	1	0	0	0	32	5	0	9	39	1	0	116	505
2:30 PM	11	0	13	0	2	1	0	0	1	35	15	0	10	38	0	0	126	514
2:45 PM	17	1	20	0	2	2	1	0	0	36	13	0	13	43	1	0	149	533
3:00 PM	7	1	20	0	0	0	0	0	0	46	8	0	16	44	1	0	143	534
3:15 PM	9	0	14	0	2	0	0	0	1	30	7	0	11	53	1	0	128	546

15-Min Count Period Beginning At	Kingwood St (Northbound)				Kingwood St (Southbound)				35th St (Eastbound)				35th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	18	2	22	0	1	1	1	0	0	42	8	0	6	45	0	0	146	566
3:45 PM	10	2	19	0	3	3	1	0	0	39	9	0	17	32	2	0	137	554
4:00 PM	11	0	14	0	2	0	0	0	0	38	11	0	13	34	0	0	123	534
4:15 PM	15	0	20	0	0	3	1	0	0	43	8	0	11	45	2	0	148	554
4:30 PM	12	1	15	0	0	0	1	0	0	34	6	0	9	38	0	0	116	524
4:45 PM	22	0	12	0	0	0	2	0	0	28	9	0	4	39	0	0	116	503
5:00 PM	18	1	22	0	1	0	0	0	0	28	0	0	8	37	1	0	116	496
5:15 PM	8	0	17	0	4	0	0	0	0	23	7	0	3	39	1	0	102	450
5:30 PM	11	0	5	0	1	1	1	0	0	20	5	0	1	35	0	0	80	414
5:45 PM	7	0	6	0	2	2	0	0	0	24	5	0	3	33	0	0	82	380
6:00 PM	8	0	10	0	0	0	0	0	0	21	2	0	5	35	0	0	81	345
6:15 PM	5	0	7	0	0	1	0	0	0	30	5	0	5	31	2	0	86	329
6:30 PM	5	1	9	0	0	0	0	0	0	19	6	0	4	36	0	0	80	329
6:45 PM	10	0	3	0	1	0	0	0	0	13	2	0	6	22	0	0	57	304
7:00 PM	7	0	7	0	0	0	0	0	0	10	1	0	5	18	0	0	48	271
7:15 PM	4	0	6	0	0	0	0	0	0	8	2	0	1	14	0	0	35	220
7:30 PM	4	1	5	0	1	0	0	0	0	11	0	0	2	17	0	0	41	181
7:45 PM	3	1	4	0	0	0	0	0	0	8	3	0	2	15	0	0	36	160
8:00 PM	6	0	3	0	0	0	0	0	0	9	1	0	2	10	0	0	31	143
8:15 PM	3	0	6	0	1	0	0	0	0	11	2	0	3	10	1	0	37	145
8:30 PM	1	0	0	0	0	0	0	0	0	4	3	0	4	9	0	0	21	125
8:45 PM	0	0	4	0	0	0	0	0	0	9	2	0	0	7	0	0	22	111
9:00 PM	4	0	3	0	0	0	0	0	0	11	4	0	4	15	0	0	41	121
9:15 PM	2	1	3	0	0	0	0	0	0	5	1	0	4	11	0	0	27	111
9:30 PM	1	0	2	0	0	0	1	0	0	4	0	0	0	11	0	0	19	109
9:45 PM	3	0	0	0	0	0	0	0	0	4	0	0	1	4	0	0	12	99

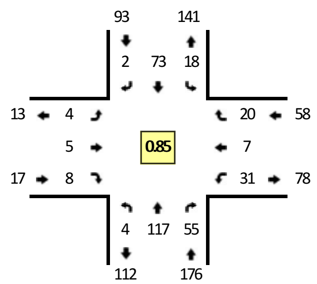
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	72	0	72	0	20	12	4	0	4	252	52	0	44	156	4	0	692
Heavy Trucks	12	0	16		0	0	4		0	80	16		12	40	0		180
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

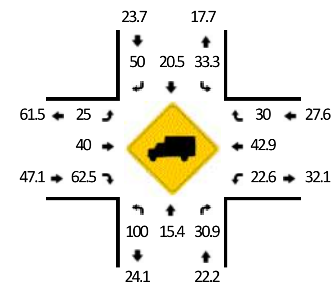
Report generated on 8/1/2022 5:06 PM

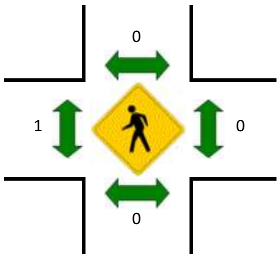
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

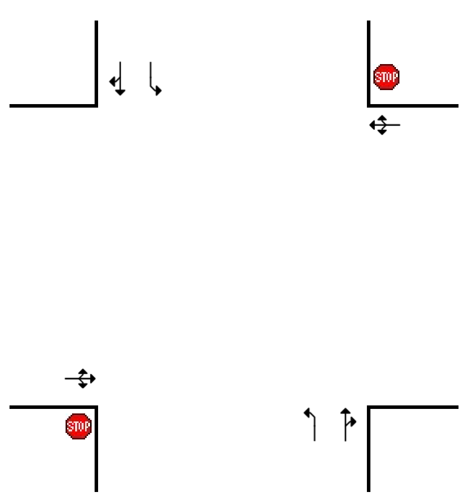
LOCATION: Kingwood St -- 27th St **QC JOB #:** 15890318
CITY/STATE: Florence, OR **DATE:** Thu, Jun 3 2021

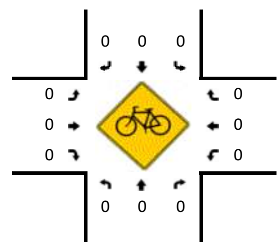


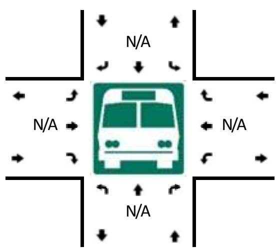
Peak-Hour: 2:45 PM -- 3:45 PM
Peak 15-Min: 2:45 PM -- 3:00 PM

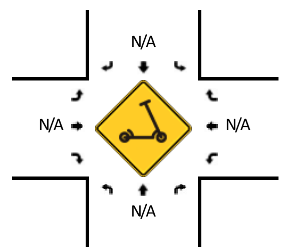












15-Min Count Period Beginning At	Kingwood St (Northbound)				Kingwood St (Southbound)				27th St (Eastbound)				27th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	1	0	0	0	2	0	0	0	1	1	0	2	0	0	0	7	
6:15 AM	0	3	0	0	0	5	0	0	0	1	0	0	2	1	1	0	13	
6:30 AM	2	2	0	0	0	8	1	0	0	0	0	0	4	2	0	0	19	
6:45 AM	2	6	0	0	1	7	1	0	0	0	1	0	1	4	2	0	25	64
7:00 AM	0	5	3	0	0	9	0	0	0	1	0	0	2	0	1	0	21	78
7:15 AM	0	7	3	0	5	9	0	0	0	2	3	0	5	1	1	0	36	101
7:30 AM	1	10	8	0	1	10	0	0	1	0	2	0	4	1	1	0	39	121
7:45 AM	2	16	14	0	7	22	4	0	0	1	2	0	10	4	2	0	84	180
8:00 AM	1	10	19	0	5	16	0	0	1	2	0	0	21	2	10	0	87	246
8:15 AM	1	17	5	0	5	9	0	0	0	0	2	0	9	2	4	0	54	264
8:30 AM	2	13	2	0	3	19	0	0	0	0	0	0	4	0	1	0	44	269
8:45 AM	1	19	10	0	2	20	0	0	0	0	3	0	5	3	2	0	65	250
9:00 AM	2	25	8	0	4	13	0	0	0	2	0	0	4	1	2	0	61	224
9:15 AM	1	21	8	0	3	17	0	0	2	3	3	0	6	1	2	0	67	237
9:30 AM	0	25	15	0	6	13	1	0	0	1	0	0	12	4	4	0	81	274
9:45 AM	0	21	8	0	2	13	0	0	0	0	2	0	14	2	6	0	68	277
10:00 AM	1	18	7	0	2	6	0	0	1	2	0	0	4	0	3	0	44	260
10:15 AM	0	21	4	0	2	16	1	0	1	0	2	0	3	1	1	0	52	245
10:30 AM	1	18	9	0	2	9	1	0	0	0	2	0	8	0	2	0	52	216
10:45 AM	0	23	2	0	2	14	0	0	3	0	0	0	6	0	8	0	58	206
11:00 AM	0	18	5	0	1	11	1	0	1	0	1	0	5	0	2	0	45	207
11:15 AM	0	19	23	0	1	13	0	0	0	0	1	0	3	0	5	0	65	220
11:30 AM	0	22	16	0	7	16	2	0	1	0	1	0	13	1	6	0	85	253
11:45 AM	7	29	8	0	6	23	0	0	0	0	1	0	5	2	9	0	90	285
12:00 PM	0	32	13	0	2	16	1	0	3	3	2	0	8	1	4	0	85	325
12:15 PM	0	27	11	0	1	18	1	0	0	2	0	0	7	3	2	0	72	332
12:30 PM	1	27	11	0	2	17	0	0	0	4	3	0	7	4	3	0	79	326
12:45 PM	1	24	11	0	4	25	1	0	0	5	1	0	5	3	7	0	87	323
1:00 PM	1	26	9	0	3	15	2	0	0	2	0	0	9	1	12	0	80	318
1:15 PM	1	15	13	0	1	28	0	0	0	2	2	0	6	1	6	0	75	321
1:30 PM	0	23	7	0	1	12	2	0	0	1	0	0	6	0	3	0	55	297
1:45 PM	0	24	11	0	3	21	1	0	2	1	1	0	6	0	2	0	72	282
2:00 PM	2	25	4	0	2	22	0	0	1	0	1	0	4	1	3	0	65	267
2:15 PM	0	23	15	0	1	13	1	0	0	3	1	0	7	1	2	0	67	259
2:30 PM	2	21	14	0	6	15	1	0	0	1	1	0	5	2	5	0	73	277
2:45 PM	0	32	18	0	9	21	1	0	1	1	2	0	11	0	5	0	101	306
3:00 PM	2	26	16	0	3	23	1	0	1	0	0	0	4	0	4	0	80	321
3:15 PM	1	22	9	0	1	18	0	0	0	0	1	0	6	6	2	0	66	320

15-Min Count Period Beginning At	Kingwood St (Northbound)				Kingwood St (Southbound)				27th St (Eastbound)				27th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	1	37	12	0	5	11	0	0	2	4	5	0	10	1	9	0	97	344
3:45 PM	0	20	5	0	3	22	0	0	1	2	0	0	3	0	5	0	61	304
4:00 PM	1	20	8	0	6	16	1	0	0	1	0	0	5	0	5	0	63	287
4:15 PM	0	32	6	0	5	25	0	0	0	0	2	0	5	0	1	0	76	297
4:30 PM	1	22	8	0	4	14	0	0	0	0	0	0	6	0	7	0	62	262
4:45 PM	1	28	9	0	1	16	0	0	1	1	0	0	5	0	6	0	68	269
5:00 PM	0	35	12	0	2	8	0	0	0	2	0	0	5	2	4	0	70	276
5:15 PM	0	22	3	0	3	6	0	0	0	0	0	0	4	2	4	0	44	244
5:30 PM	0	12	7	0	4	6	0	0	0	0	0	0	3	2	7	0	41	223
5:45 PM	0	9	1	0	1	9	0	0	0	0	0	0	2	0	2	0	24	179
6:00 PM	0	15	2	0	1	5	0	0	0	3	0	0	2	0	3	0	31	140
6:15 PM	1	11	1	0	0	12	0	0	0	0	0	0	0	0	0	0	25	121
6:30 PM	0	11	4	0	1	11	0	0	1	1	0	0	2	2	1	0	34	114
6:45 PM	0	8	7	0	1	7	0	0	0	1	1	0	1	0	6	0	32	122
7:00 PM	0	11	2	0	1	6	0	0	0	1	0	0	2	1	2	0	26	117
7:15 PM	0	10	3	0	0	1	0	0	0	0	1	0	1	0	1	0	17	109
7:30 PM	0	9	4	0	0	2	0	0	0	0	0	0	1	0	0	0	16	91
7:45 PM	0	7	0	0	0	4	0	0	0	0	0	0	2	0	1	0	14	73
8:00 PM	0	7	2	0	0	4	0	0	0	0	0	0	2	0	1	0	16	63
8:15 PM	0	9	2	0	0	5	0	0	0	0	0	0	1	0	0	0	17	63
8:30 PM	0	1	2	0	1	7	0	0	0	0	0	0	2	0	0	0	13	60
8:45 PM	0	4	0	0	0	6	0	0	0	0	0	0	2	0	0	0	12	58
9:00 PM	0	6	0	0	1	7	0	0	0	0	0	0	2	0	0	0	16	58
9:15 PM	0	4	1	0	0	4	0	0	0	0	0	0	1	0	2	0	12	53
9:30 PM	0	3	1	0	1	0	0	0	0	0	0	0	0	0	0	0	5	45
9:45 PM	0	2	1	0	0	0	0	0	0	0	0	0	3	0	1	0	7	40

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	128	72	0	36	84	4	0	4	4	8	0	44	0	20	0	404
Heavy Trucks	0	24	32		20	16	4		0	4	8		0	0	8		116
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

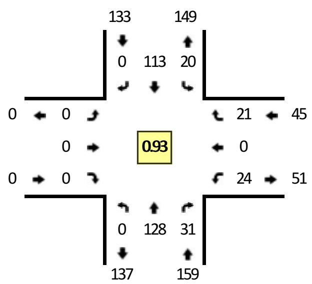
Comments:

Report generated on 8/1/2022 5:06 PM

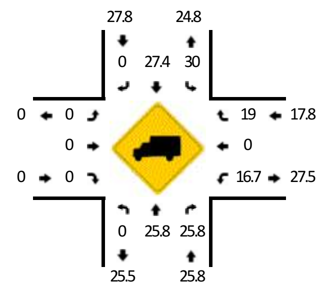
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

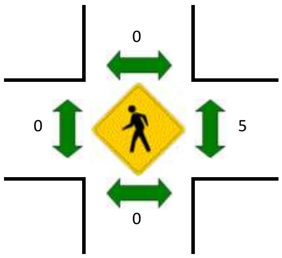
Type of peak hour being reported: Intersection Peak　　Method for determining peak hour: Total Entering Volume

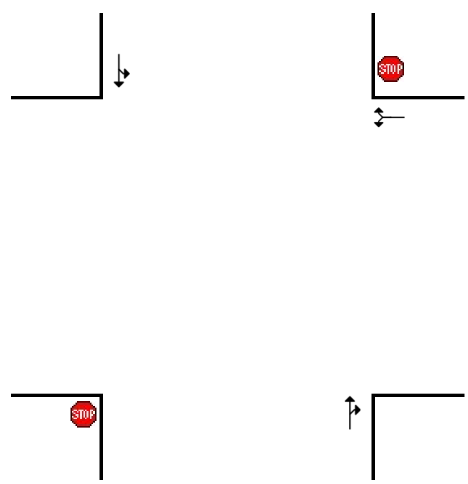
LOCATION: Kingwood St -- 15th St　　**QC JOB #:** 15890319
CITY/STATE: Florence, OR　　**DATE:** Thu, Jun 3 2021

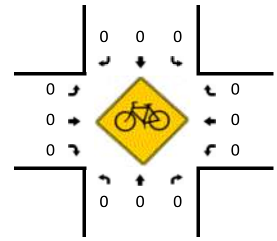


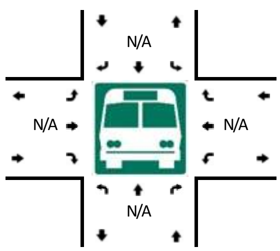
Peak-Hour: 4:15 PM -- 5:15 PM
Peak 15-Min: 4:15 PM -- 4:30 PM

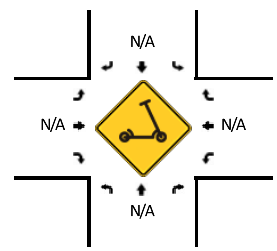












15-Min Count Period Beginning At	Kingwood St (Northbound)				Kingwood St (Southbound)				15th St (Eastbound)				15th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	2	0	0	1	5	0	0	0	0	0	0	1	0	3	0	12	
6:15 AM	0	6	0	0	0	6	0	0	0	0	0	0	0	0	1	0	13	
6:30 AM	0	9	1	0	1	6	0	0	0	0	0	0	3	0	2	0	22	
6:45 AM	0	9	3	0	0	12	0	0	0	0	0	0	3	0	2	0	29	76
7:00 AM	0	10	1	0	4	9	0	0	0	0	0	0	2	0	1	0	27	91
7:15 AM	0	14	4	0	0	9	0	0	0	0	0	0	1	0	3	0	31	109
7:30 AM	0	15	6	0	1	12	0	0	0	0	0	0	3	0	7	0	44	131
7:45 AM	0	35	6	0	8	22	0	0	0	0	0	0	4	0	9	0	84	186
8:00 AM	0	24	5	0	5	19	0	0	0	0	0	0	1	0	8	0	62	221
8:15 AM	0	18	2	0	4	17	0	0	0	0	0	0	3	0	6	0	50	240
8:30 AM	0	15	3	0	4	18	0	0	0	0	0	0	2	0	5	0	47	243
8:45 AM	0	22	4	0	2	19	0	0	0	0	0	0	4	0	4	0	55	214
9:00 AM	0	27	7	0	2	14	0	0	0	0	0	0	2	0	3	0	55	207
9:15 AM	0	26	5	0	2	16	0	0	0	0	0	0	4	0	13	0	66	223
9:30 AM	0	28	9	0	5	23	0	0	0	0	0	0	5	0	5	0	75	251
9:45 AM	0	24	11	0	5	20	0	0	0	0	0	0	7	0	7	0	74	270
10:00 AM	0	29	7	0	4	10	0	0	0	0	0	0	8	0	5	0	63	278
10:15 AM	0	27	6	0	4	22	0	0	0	0	0	0	3	0	3	0	65	277
10:30 AM	0	23	7	0	5	17	0	0	0	0	0	0	6	0	3	0	61	263
10:45 AM	0	22	5	0	3	16	0	0	0	0	0	0	4	0	7	0	57	246
11:00 AM	0	15	6	0	3	18	0	0	0	0	0	0	7	0	5	0	54	237
11:15 AM	0	38	7	0	3	16	0	0	0	0	0	0	2	0	6	0	72	244
11:30 AM	0	24	9	0	3	28	0	0	0	0	0	0	4	0	5	0	73	256
11:45 AM	0	31	7	0	7	17	0	0	0	0	0	0	11	0	9	0	82	281
12:00 PM	0	37	6	0	4	22	0	0	0	0	0	0	9	0	6	0	84	311
12:15 PM	0	30	4	0	7	16	0	0	0	0	0	0	5	0	9	0	71	310
12:30 PM	0	37	8	0	3	18	0	0	0	0	0	0	8	0	5	0	79	316
12:45 PM	0	25	9	0	9	26	0	0	0	0	0	0	6	0	4	0	79	313
1:00 PM	0	22	14	0	4	21	0	0	0	0	0	0	6	0	11	0	78	307
1:15 PM	0	26	7	0	3	26	0	0	0	0	0	0	8	0	6	0	76	312
1:30 PM	0	31	9	0	1	20	0	0	0	0	0	0	5	0	3	0	69	302
1:45 PM	0	24	8	0	4	23	0	0	0	0	0	0	7	0	12	0	78	301
2:00 PM	0	28	5	0	4	23	0	0	0	0	0	0	6	0	8	0	74	297
2:15 PM	0	31	4	0	7	24	0	0	0	0	0	0	5	0	3	0	74	295
2:30 PM	0	36	8	0	1	17	0	0	0	0	0	0	6	0	6	0	74	300
2:45 PM	0	29	5	0	2	23	0	0	0	0	0	0	5	0	9	0	73	295
3:00 PM	0	36	2	0	7	16	0	0	0	0	0	0	8	0	5	0	74	295
3:15 PM	0	28	8	0	3	16	0	0	0	0	0	0	6	0	6	0	67	288
3:30 PM	0	25	9	0	9	18	0	0	0	0	0	0	3	0	8	0	72	286

15-Min Count Period Beginning At	Kingwood St (Northbound)				Kingwood St (Southbound)				15th St (Eastbound)				15th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:45 PM	0	22	11	0	4	23	0	0	0	0	0	0	3	0	8	0	71	284
4:00 PM	0	25	6	0	8	18	0	0	0	0	0	0	8	0	9	0	74	284
4:15 PM	0	35	9	0	6	31	0	0	0	0	0	0	5	0	5	0	91	308
4:30 PM	0	33	8	0	6	24	0	0	0	0	0	0	7	0	7	0	85	321
4:45 PM	0	25	7	0	5	29	0	0	0	0	0	0	4	0	5	0	75	325
5:00 PM	0	35	7	0	3	29	0	0	0	0	0	0	8	0	4	0	86	337
5:15 PM	0	19	6	0	2	10	0	0	0	0	0	0	5	0	3	0	45	291
5:30 PM	0	18	6	0	3	8	0	0	0	0	0	0	4	0	1	0	40	246
5:45 PM	0	11	5	0	3	12	0	0	0	0	0	0	4	0	2	0	37	208
6:00 PM	0	14	6	0	7	12	0	0	0	0	0	0	4	0	2	0	45	167
6:15 PM	0	15	4	0	0	15	0	0	0	0	0	0	5	0	1	0	40	162
6:30 PM	0	9	1	0	2	13	0	0	0	0	0	0	2	0	2	0	29	151
6:45 PM	0	13	3	0	1	8	0	0	0	0	0	0	5	0	2	0	32	146
7:00 PM	0	10	3	0	3	6	0	0	0	0	0	0	2	0	1	0	25	126
7:15 PM	0	5	5	0	0	4	0	0	0	0	0	0	2	0	2	0	18	104
7:30 PM	0	10	0	0	1	2	0	0	0	0	0	0	1	0	3	0	17	92
7:45 PM	0	7	2	0	0	9	0	0	0	0	0	0	0	0	2	0	20	80
8:00 PM	0	8	5	0	2	5	0	0	0	0	0	0	2	0	3	0	25	80
8:15 PM	0	9	5	0	1	4	0	0	0	0	0	0	1	0	0	0	20	82
8:30 PM	0	1	3	0	2	2	0	0	0	0	0	0	5	0	1	0	14	79
8:45 PM	0	3	1	0	4	5	0	0	0	0	0	0	4	0	1	0	18	77
9:00 PM	0	8	1	0	1	5	0	0	0	0	0	0	3	0	1	0	19	71
9:15 PM	0	4	2	0	1	3	0	0	0	0	0	0	3	0	0	0	13	64
9:30 PM	0	4	3	0	3	2	0	0	0	0	0	0	1	0	3	0	16	66
9:45 PM	0	4	1	0	0	5	0	0	0	0	0	0	0	0	0	0	10	58

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	140	36	0	24	124	0	0	0	0	0	0	20	0	20	0	364
Heavy Trucks	0	20	8		4	32	0		0	0	0		4	0	0		68
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

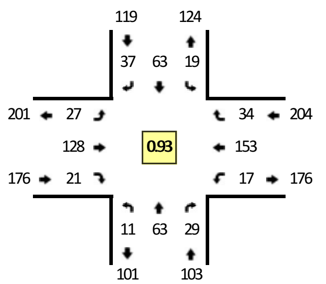
Comments:

Report generated on 8/1/2022 5:06 PM

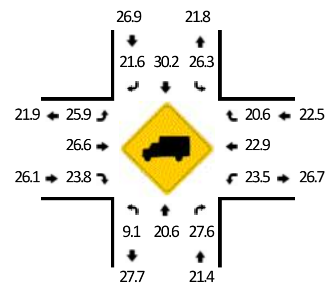
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

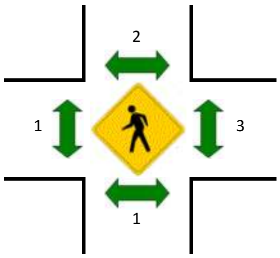
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

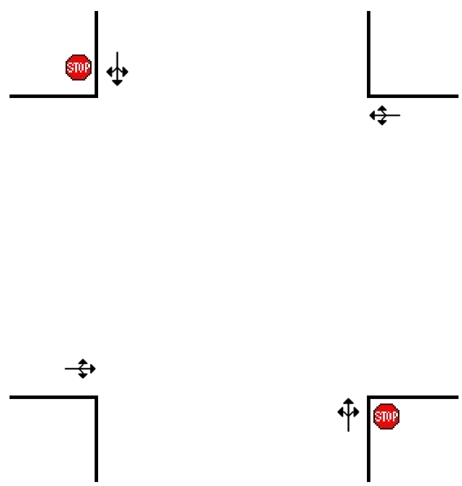
LOCATION: Kingwood St -- 9th St | **QC JOB #:** 15890320
CITY/STATE: Florence, OR | **DATE:** Thu, Jun 3 2021

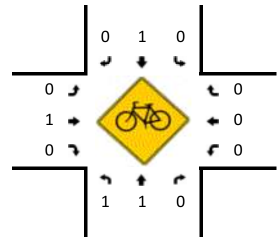


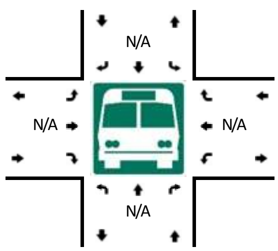
Peak-Hour: 12:30 PM -- 1:30 PM
Peak 15-Min: 1:00 PM -- 1:15 PM

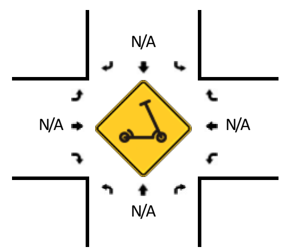












15-Min Count Period Beginning At	Kingwood St (Northbound)				Kingwood St (Southbound)				9th St (Eastbound)				9th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	0	0	0	0	2	2	0	1	9	0	0	0	4	0	0	18	
6:15 AM	0	3	1	0	2	1	2	0	1	10	0	0	0	18	1	0	39	
6:30 AM	0	8	2	0	1	1	8	0	0	10	1	0	0	16	3	0	50	
6:45 AM	3	5	1	0	4	4	5	0	2	10	0	0	0	42	4	0	80	187
7:00 AM	0	4	2	0	4	3	5	0	2	15	0	0	1	18	6	0	60	229
7:15 AM	2	11	1	0	4	3	5	0	2	12	0	0	0	23	2	0	65	255
7:30 AM	3	9	3	0	2	1	8	0	10	17	4	0	1	21	4	0	83	288
7:45 AM	4	10	4	0	6	8	17	0	12	24	6	0	5	26	10	0	132	340
8:00 AM	0	15	3	0	2	12	6	0	5	18	5	0	9	22	6	0	103	383
8:15 AM	2	8	0	0	5	11	8	0	4	17	4	0	4	24	9	0	96	414
8:30 AM	3	11	2	0	2	12	6	0	3	14	1	0	2	26	2	0	84	415
8:45 AM	2	10	4	0	4	13	8	0	5	25	3	0	1	24	6	0	105	388
9:00 AM	3	15	4	0	6	6	2	0	8	26	7	0	2	27	4	0	110	395
9:15 AM	6	11	6	0	4	12	6	0	11	19	3	0	1	24	6	0	109	408
9:30 AM	5	15	4	0	9	14	4	0	12	25	6	0	2	36	7	0	139	463
9:45 AM	4	15	5	0	1	14	10	0	6	37	6	0	1	26	4	0	129	487
10:00 AM	6	15	14	0	5	8	10	0	8	37	5	0	3	27	12	0	150	527
10:15 AM	4	14	4	0	3	10	9	0	4	26	7	0	3	29	8	0	121	539
10:30 AM	2	12	5	0	2	12	5	0	7	35	5	0	5	28	9	0	127	527
10:45 AM	3	13	0	0	5	12	5	0	5	42	4	0	5	33	6	0	133	531
11:00 AM	2	6	7	0	4	10	4	0	6	46	2	0	4	35	8	0	134	515
11:15 AM	3	17	8	0	6	8	6	0	11	36	5	0	5	26	10	0	141	535
11:30 AM	4	13	8	0	7	13	9	0	11	38	1	0	6	25	6	0	141	549
11:45 AM	1	13	7	0	6	12	10	0	12	37	8	0	6	31	5	0	148	564
12:00 PM	2	13	9	0	4	14	9	0	8	36	2	0	3	18	13	0	131	561
12:15 PM	5	16	9	0	7	13	2	0	6	29	3	0	4	36	7	0	137	557
12:30 PM	3	17	6	0	4	11	9	0	7	26	5	0	2	35	9	0	134	550
12:45 PM	5	16	8	0	4	19	8	0	4	39	6	0	3	42	7	0	161	563
1:00 PM	2	16	9	0	5	20	12	0	11	30	3	0	5	43	6	0	162	594
1:15 PM	1	14	6	0	6	13	8	0	5	33	7	0	7	33	12	0	145	602
1:30 PM	5	16	7	0	3	11	13	0	7	22	4	0	5	24	13	0	130	598
1:45 PM	3	17	7	0	9	10	6	0	6	38	5	0	6	35	3	0	145	582
2:00 PM	0	16	6	0	5	19	9	0	2	40	6	0	2	25	7	0	137	557
2:15 PM	3	22	9	0	6	14	9	0	4	34	2	0	2	38	10	0	153	565
2:30 PM	6	21	10	0	2	14	6	0	8	32	0	0	3	29	9	0	140	575
2:45 PM	2	18	8	0	2	17	7	0	6	30	8	0	2	26	7	0	133	563
3:00 PM	9	20	5	0	3	10	9	0	10	46	8	0	6	22	8	0	156	582
3:15 PM	3	12	10	0	8	10	8	0	5	27	5	0	6	36	8	0	138	567

15-Min Count Period Beginning At	Kingwood St (Northbound)				Kingwood St (Southbound)				9th St (Eastbound)				9th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	2	15	12	0	8	14	7	0	12	33	2	0	3	27	6	0	141	568
3:45 PM	2	21	5	0	4	17	3	0	5	16	3	0	2	27	5	0	110	545
4:00 PM	3	15	2	0	0	9	9	0	5	37	3	0	4	19	6	0	112	501
4:15 PM	3	17	1	0	5	22	4	0	10	25	4	0	3	20	11	0	125	488
4:30 PM	3	15	6	0	5	13	10	0	9	31	4	0	6	19	15	0	136	483
4:45 PM	6	16	5	0	6	21	11	0	4	26	4	0	4	31	6	0	140	513
5:00 PM	3	19	7	0	5	10	7	0	11	34	6	0	3	29	8	0	142	543
5:15 PM	1	15	5	0	4	9	2	0	7	27	3	0	4	19	3	0	99	517
5:30 PM	4	11	4	0	1	9	7	0	7	23	4	0	5	15	3	0	93	474
5:45 PM	1	9	5	0	3	8	2	0	7	22	0	0	4	19	0	0	80	414
6:00 PM	5	11	6	0	3	10	1	0	4	18	2	0	5	18	5	0	88	360
6:15 PM	0	8	6	0	2	10	5	0	2	13	4	0	3	17	6	0	76	337
6:30 PM	2	7	6	0	1	13	3	0	1	14	2	0	2	13	0	0	64	308
6:45 PM	1	7	2	0	3	6	4	0	0	13	2	0	2	17	1	0	58	286
7:00 PM	0	7	1	0	3	2	4	0	2	11	0	0	1	14	2	0	47	245
7:15 PM	1	4	3	0	1	1	5	0	2	9	1	0	4	21	3	0	55	224
7:30 PM	3	2	3	0	1	0	1	0	2	13	0	0	2	13	3	0	43	203
7:45 PM	0	4	0	0	2	5	1	0	1	11	1	0	1	11	2	0	39	184
8:00 PM	2	8	1	0	0	3	0	0	2	9	2	0	0	7	1	0	35	172
8:15 PM	2	5	4	0	0	2	3	0	3	1	0	0	1	6	0	0	27	144
8:30 PM	1	1	7	0	1	4	3	0	3	3	1	0	1	7	1	0	33	134
8:45 PM	2	3	1	0	3	2	2	0	1	10	0	0	2	8	0	0	34	129
9:00 PM	0	4	2	0	2	3	3	0	0	9	0	0	2	10	2	0	37	131
9:15 PM	0	5	2	0	1	4	0	0	1	4	0	0	0	11	3	0	31	135
9:30 PM	1	5	1	0	0	4	0	0	1	5	0	0	1	6	0	0	24	126
9:45 PM	1	2	1	0	2	0	2	0	0	3	0	0	0	5	1	0	17	109

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	8	64	36	0	20	80	48	0	44	120	12	0	20	172	24	0	648
Heavy Trucks	4	16	8		4	20	8		16	20	4		4	52	8		164
Buses																	
Pedestrians		0				8				0				0			8
Bicycles	4	0	0		0	0	0		0	0	0		0	0	0		4
Scooters																	

Comments:

Report generated on 8/1/2022 5:06 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

ATTACHMENT B: EXISTING TRAFFIC CONDITIONS WORKSHEETS

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	0	111	0	0	0	146	475	0	0	360	33
Future Volume (Veh/h)	24	0	111	0	0	0	146	475	0	0	360	33
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	26	0	119	0	0	0	157	511	0	0	387	35
Pedestrians		2										
Lane Width (ft)		12.0										
Walking Speed (ft/s)		3.5										
Percent Blockage		0										
Right turn flare (veh)			5									
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1214	1214	389	1272	1249	511	424			511		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1214	1214	389	1272	1249	511	424			511		
tC, single (s)	7.5	6.5	6.4	7.1	6.5	6.2	4.3			4.1		
tC, 2 stage (s)												
tF (s)	3.9	4.0	3.5	3.5	4.0	3.3	2.4			2.2		
p0 queue free %	78	100	81	100	100	100	85			100		
cM capacity (veh/h)	118	155	622	104	148	567	1048			1065		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	145	0	157	511	0	387	35
Volume Left	26	0	157	0	0	0	0
Volume Right	119	0	0	0	0	0	35
cSH	657	1700	1048	1700	1700	1700	1700
Volume to Capacity	0.22	0.00	0.15	0.30	0.00	0.23	0.02
Queue Length 95th (ft)	21	0	13	0	0	0	0
Control Delay (s)	17.9	0.0	9.0	0.0	0.0	0.0	0.0
Lane LOS	C	A	A				
Approach Delay (s)	17.9	0.0	2.1		0.0		
Approach LOS	C	A					

Intersection Summary			
Average Delay	3.2		
Intersection Capacity Utilization	41.7%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	24	0	111	0	0	0	146	475	0	0	360	33
Future Vol, veh/h	24	0	111	0	0	0	146	475	0	0	360	33
Conflicting Peds, #/hr	0	0	0	0	0	0	2	0	0	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	125	-	-	-	100	-	-	100	-	100
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	39	0	19	0	0	0	19	28	0	0	20	23
Mvmt Flow	26	0	119	0	0	0	157	511	0	0	387	35

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1214	-	389	1289	1249	511	424	0	0	511	0	0
Stage 1	389	-	-	825	825	-	-	-	-	-	-	-
Stage 2	825	-	-	464	424	-	-	-	-	-	-	-
Critical Hdwy	7.49	-	6.39	7.1	6.5	6.2	4.29	-	-	4.1	-	-
Critical Hdwy Stg 1	6.49	-	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.49	-	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.851	-	3.471	3.5	4	3.3	2.371	-	-	2.2	-	-
Pot Cap-1 Maneuver	134	0	624	142	175	567	1050	-	-	1065	-	-
Stage 1	567	0	-	370	390	-	-	-	-	-	-	-
Stage 2	318	0	-	582	590	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	118	-	623	102	148	567	1048	-	-	1065	-	-
Mov Cap-2 Maneuver	206	-	-	102	148	-	-	-	-	-	-	-
Stage 1	481	-	-	315	332	-	-	-	-	-	-	-
Stage 2	270	-	-	470	589	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.4	0	2.1	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1048	-	-	206	623	-	1065	-	-
HCM Lane V/C Ratio	0.15	-	-	0.125	0.192	-	-	-	-
HCM Control Delay (s)	9	-	-	25	12.1	0	0	-	-
HCM Lane LOS	A	-	-	D	B	A	A	-	-
HCM 95th %tile Q(veh)	0.5	-	-	0.4	0.7	-	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	6	48	0	37	4	638	71	32	488	1
Future Volume (Veh/h)	0	0	6	48	0	37	4	638	71	32	488	1
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	0	0	6	52	0	40	4	686	76	34	525	1
Pedestrians		1										
Lane Width (ft)		12.0										
Walking Speed (ft/s)		3.5										
Percent Blockage		0										
Right turn flare (veh)						1						
Median type								TWLTL			None	
Median storage veh)								2				
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1308	1364	526	1331	1327	724	527			762		
vC1, stage 1 conf vol	594	594		732	732							
vC2, stage 2 conf vol	714	770		599	595							
vCu, unblocked vol	1308	1364	526	1331	1327	724	527			762		
tC, single (s)	7.1	6.5	6.5	7.4	6.5	6.4	4.8			4.5		
tC, 2 stage (s)	6.1	5.5		6.4	5.5							
tF (s)	3.5	4.0	3.6	3.8	4.0	3.5	2.9			2.6		
p0 queue free %	100	100	99	82	100	90	99			95		
cM capacity (veh/h)	293	315	495	285	338	393	754			693		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	6	92	4	762	34	526
Volume Left	0	52	4	0	34	0
Volume Right	6	40	0	76	0	1
cSH	495	505	754	1700	693	1700
Volume to Capacity	0.01	0.18	0.01	0.45	0.05	0.31
Queue Length 95th (ft)	1	16	0	0	4	0
Control Delay (s)	12.4	18.1	9.8	0.0	10.5	0.0
Lane LOS	B	C	A		B	
Approach Delay (s)	12.4	18.1	0.1		0.6	
Approach LOS	B	C				

Intersection Summary			
Average Delay	1.5		
Intersection Capacity Utilization	54.6%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	6	48	0	37	4	638	71	32	488	1
Future Vol, veh/h	0	0	6	48	0	37	4	638	71	32	488	1
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	25	100	-	-	100	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	33	33	0	23	75	19	27	43	25	0
Mvmt Flow	0	0	6	52	0	40	4	686	76	34	525	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1347	1365	527	1329	1327	724	527	0	0	762	0	0
Stage 1	595	595	-	732	732	-	-	-	-	-	-	-
Stage 2	752	770	-	597	595	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.53	7.43	6.5	6.43	4.85	-	-	4.53	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.43	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.43	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.597	3.797	4	3.507	2.875	-	-	2.587	-	-
Pot Cap-1 Maneuver	129	149	495	114	157	393	754	-	-	693	-	-
Stage 1	494	496	-	368	430	-	-	-	-	-	-	-
Stage 2	405	413	-	440	496	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	111	141	495	108	148	393	753	-	-	693	-	-
Mov Cap-2 Maneuver	227	254	-	225	271	-	-	-	-	-	-	-
Stage 1	491	471	-	366	428	-	-	-	-	-	-	-
Stage 2	362	411	-	413	471	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.4	21.1	0.1	0.6
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	753	-	-	495	225	393	693	-	-
HCM Lane V/C Ratio	0.006	-	-	0.013	0.229	0.101	0.05	-	-
HCM Control Delay (s)	9.8	-	-	12.4	25.7	15.2	10.5	-	-
HCM Lane LOS	A	-	-	B	D	C	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.9	0.3	0.2	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	1	130	0	0	1	101	666	0	0	485	29
Future Volume (Veh/h)	21	1	130	0	0	1	101	666	0	0	485	29
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	22	1	135	0	0	1	105	694	0	0	505	30
Pedestrians		2										
Lane Width (ft)		12.0										
Walking Speed (ft/s)		3.5										
Percent Blockage		0										
Right turn flare (veh)												
Median type								None			TWLTL	
Median storage veh)											2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1427	1426	270	1292	1441	694	537			694		
vC1, stage 1 conf vol	522	522		904	904							
vC2, stage 2 conf vol	905	904		388	537							
vCu, unblocked vol	1427	1426	270	1292	1441	694	537			694		
tC, single (s)	8.2	6.5	7.2	7.5	6.5	6.9	4.4			4.1		
tC, 2 stage (s)	7.2	5.5		6.5	5.5							
tF (s)	3.9	4.0	3.5	3.5	4.0	3.3	2.4			2.2		
p0 queue free %	89	100	80	100	100	100	89			100		
cM capacity (veh/h)	191	285	684	229	270	390	928			911		

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	158	0	1	105	694	0	337	198
Volume Left	22	0	0	105	0	0	0	0
Volume Right	135	0	1	0	0	0	0	30
cSH	500	1700	390	928	1700	1700	1700	1700
Volume to Capacity	0.32	0.00	0.00	0.11	0.41	0.00	0.20	0.12
Queue Length 95th (ft)	34	0	0	10	0	0	0	0
Control Delay (s)	15.5	0.0	14.3	9.4	0.0	0.0	0.0	0.0
Lane LOS	C	A	B	A				
Approach Delay (s)	15.5	14.3		1.2		0.0		
Approach LOS	C	B						

Intersection Summary			
Average Delay	2.3		
Intersection Capacity Utilization	57.6%	ICU Level of Service	B
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	1	130	0	0	1	101	666	0	0	485	29
Future Vol, veh/h	21	1	130	0	0	1	101	666	0	0	485	29
Conflicting Peds, #/hr	0	0	0	0	0	0	2	0	0	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	0	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	35	0	17	0	0	0	17	22	0	0	26	26
Mvmt Flow	22	1	135	0	0	1	105	694	0	0	505	30
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1427	1426	270	1157	-	694	537	0	0	694	0	0
Stage 1	522	522	-	904	-	-	-	-	-	-	-	-
Stage 2	905	904	-	253	-	-	-	-	-	-	-	-
Critical Hdwy	7.825	6.5	7.155	7.3	-	6.2	4.355	-	-	4.1	-	-
Critical Hdwy Stg 1	7.025	5.5	-	6.1	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.625	5.5	-	6.5	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.8325	4	3.4615	3.5	-	3.3	2.3615	-	-	2.2	-	-
Pot Cap-1 Maneuver	82	137	690	164	0	446	945	-	-	911	-	-
Stage 1	442	534	-	334	0	-	-	-	-	-	-	-
Stage 2	277	358	-	735	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	75	122	689	120	-	446	943	-	-	911	-	-
Mov Cap-2 Maneuver	75	122	-	120	-	-	-	-	-	-	-	-
Stage 1	392	533	-	297	-	-	-	-	-	-	-	-
Stage 2	246	318	-	589	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	26.9	13.1	1.2	0
HCM LOS	D	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	943	-	-	319	-	446	911	-	-
HCM Lane V/C Ratio	0.112	-	-	0.496	-	0.002	-	-	-
HCM Control Delay (s)	9.3	-	-	26.9	0	13.1	0	-	-
HCM Lane LOS	A	-	-	D	A	B	A	-	-
HCM 95th %tile Q(veh)	0.4	-	-	2.6	-	0	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	69	33	107	32	23	25	72	749	37	27	685	46
Future Volume (vph)	69	33	107	32	23	25	72	749	37	27	685	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	5.0		4.5	5.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.89		1.00	0.92		1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1444	1312		1262	1424		1456	2954		1671	2852	
Flt Permitted	0.72	1.00		0.66	1.00		0.28	1.00		0.33	1.00	
Satd. Flow (perm)	1099	1312		877	1424		432	2954		573	2852	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	75	36	116	35	25	27	78	814	40	29	745	50
RTOR Reduction (vph)	0	98	0	0	23	0	0	3	0	0	4	0
Lane Group Flow (vph)	75	54	0	35	29	0	78	851	0	29	791	0
Confl. Peds. (#/hr)							1		1	1		1
Confl. Bikes (#/hr)						1						2
Heavy Vehicles (%)	25%	16%	32%	43%	32%	12%	24%	21%	26%	8%	25%	28%
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)	9.1	9.1		9.1	9.1		37.7	32.7		31.9	29.8	
Effective Green, g (s)	9.1	9.1		9.1	9.1		37.7	32.7		31.9	29.8	
Actuated g/C Ratio	0.16	0.16		0.16	0.16		0.65	0.56		0.55	0.51	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	5.0		4.5	5.0	
Vehicle Extension (s)	2.5	2.5		2.5	2.5		2.5	5.0		2.5	5.0	
Lane Grp Cap (vph)	172	206		137	223		369	1668		355	1467	
v/s Ratio Prot		0.04			0.02		c0.02	c0.29		0.00	0.28	
v/s Ratio Perm	c0.07			0.04			0.12			0.04		
v/c Ratio	0.44	0.26		0.26	0.13		0.21	0.51		0.08	0.54	
Uniform Delay, d1	22.1	21.5		21.4	21.0		4.1	7.7		5.9	9.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.3	0.5		0.7	0.2		0.2	0.5		0.1	0.7	
Delay (s)	23.4	22.0		22.1	21.2		4.3	8.2		6.0	10.1	
Level of Service	C	C		C	C		A	A		A	B	
Approach Delay (s)		22.4			21.6			7.9			10.0	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	10.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	57.9	Sum of lost time (s)	14.0
Intersection Capacity Utilization	54.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Signalized Intersection Summary
4: US 101 & 35th Street

10/06/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	33	107	32	23	25	72	749	37	27	685	46
Future Volume (veh/h)	69	33	107	32	23	25	72	749	37	27	685	46
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1530	1663	1426	1263	1426	1722	1544	1589	1515	1781	1530	1485
Adj Flow Rate, veh/h	75	36	116	35	25	27	78	814	40	29	745	50
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	25	16	32	43	32	12	24	21	26	8	25	28
Cap, veh/h	302	62	198	213	110	119	391	1510	74	392	1350	91
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.05	0.52	0.52	0.03	0.49	0.49
Sat Flow, veh/h	1106	346	1116	834	619	669	1471	2928	144	1697	2759	185
Grp Volume(v), veh/h	75	0	152	35	0	52	78	420	434	29	392	403
Grp Sat Flow(s),veh/h/ln	1106	0	1462	834	0	1288	1471	1509	1563	1697	1453	1491
Q Serve(g_s), s	3.1	0.0	4.8	2.0	0.0	1.7	1.3	9.3	9.3	0.4	9.4	9.5
Cycle Q Clear(g_c), s	4.8	0.0	4.8	6.8	0.0	1.7	1.3	9.3	9.3	0.4	9.4	9.5
Prop In Lane	1.00		0.76	1.00		0.52	1.00		0.09	1.00		0.12
Lane Grp Cap(c), veh/h	302	0	260	213	0	229	391	779	806	392	711	730
V/C Ratio(X)	0.25	0.00	0.58	0.16	0.00	0.23	0.20	0.54	0.54	0.07	0.55	0.55
Avail Cap(c_a), veh/h	548	0	584	398	0	515	901	1810	1874	1025	1742	1788
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.7	0.0	18.9	22.0	0.0	17.6	6.6	8.1	8.1	6.6	8.9	8.9
Incr Delay (d2), s/veh	0.3	0.0	1.5	0.3	0.0	0.4	0.2	1.2	1.2	0.1	1.4	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	1.6	0.4	0.0	0.5	0.3	2.5	2.6	0.1	2.5	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.0	0.0	20.4	22.3	0.0	18.0	6.8	9.4	9.3	6.7	10.4	10.3
LnGrp LOS	C	A	C	C	A	B	A	A	A	A	B	B
Approach Vol, veh/h		227			87			932			824	
Approach Delay, s/veh		20.3			19.7			9.1			10.2	
Approach LOS		C			B			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	29.5		13.4	5.8	30.8		13.4				
Change Period (Y+Rc), s	4.5	5.0		4.5	4.5	5.0		4.5				
Max Green Setting (Gmax), s	20.0	60.0		20.0	20.0	60.0		20.0				
Max Q Clear Time (g_c+I1), s	3.3	11.5		8.8	2.4	11.3		6.8				
Green Ext Time (p_c), s	0.1	13.0		0.2	0.0	14.3		0.8				

Intersection Summary			
HCM 6th Ctrl Delay			11.2
HCM 6th LOS			B

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	2	22	2	0	7	27	888	4	0	871	1
Future Volume (Veh/h)	3	2	22	2	0	7	27	888	4	0	871	1
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	2	24	2	0	8	29	965	4	0	947	1
Pedestrians		1			2							
Lane Width (ft)		12.0			12.0							
Walking Speed (ft/s)		3.5			3.5							
Percent Blockage		0			0							
Right turn flare (veh)												
Median type								TWLTL			TWLTL	
Median storage veh)								2			2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1497	1978	475	1526	1976	486	949			971		
vC1, stage 1 conf vol	948	948		1027	1027							
vC2, stage 2 conf vol	548	1029		498	949							
vCu, unblocked vol	1497	1978	475	1526	1976	486	949			971		
tC, single (s)	8.2	7.5	7.3	7.5	6.5	7.2	4.2			4.1		
tC, 2 stage (s)	7.2	6.5		6.5	5.5							
tF (s)	3.8	4.5	3.5	3.5	4.0	3.4	2.2			2.2		
p0 queue free %	98	99	95	99	100	98	96			100		
cM capacity (veh/h)	198	159	492	219	219	495	706			717		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	29	10	29	643	326	474	474
Volume Left	3	2	29	0	0	0	0
Volume Right	24	8	0	0	4	0	1
cSH	379	395	706	1700	1700	717	1700
Volume to Capacity	0.08	0.03	0.04	0.38	0.19	0.00	0.28
Queue Length 95th (ft)	6	2	3	0	0	0	0
Control Delay (s)	15.3	14.3	10.3	0.0	0.0	0.0	0.0
Lane LOS	C	B	B				
Approach Delay (s)	15.3	14.3	0.3			0.0	
Approach LOS	C	B					

Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	34.7%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	2	22	2	0	7	27	888	4	0	871	1
Future Vol, veh/h	3	2	22	2	0	7	27	888	4	0	871	1
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	2	2	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	250	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	33	50	19	0	0	14	4	23	50	0	26	0
Mvmt Flow	3	2	24	2	0	8	29	965	4	0	947	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1490	1978	475	1502	1976	487	949	0	0	971	0	0
Stage 1	949	949	-	1027	1027	-	-	-	-	-	-	-
Stage 2	541	1029	-	475	949	-	-	-	-	-	-	-
Critical Hdwy	8.16	7.5	7.28	7.5	6.5	7.18	4.18	-	-	4.1	-	-
Critical Hdwy Stg 1	7.16	6.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.16	6.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.83	4.5	3.49	3.5	4	3.44	2.24	-	-	2.2	-	-
Pot Cap-1 Maneuver	64	35	493	86	63	496	707	-	-	718	-	-
Stage 1	226	246	-	255	314	-	-	-	-	-	-	-
Stage 2	422	222	-	545	342	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	61	33	493	75	60	495	706	-	-	717	-	-
Mov Cap-2 Maneuver	61	33	-	75	60	-	-	-	-	-	-	-
Stage 1	217	246	-	244	300	-	-	-	-	-	-	-
Stage 2	398	212	-	514	342	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	29.7	22	0.3	0
HCM LOS	D	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	706	-	-	175	221	717	-	-
HCM Lane V/C Ratio	0.042	-	-	0.168	0.044	-	-	-
HCM Control Delay (s)	10.3	-	-	29.7	22	0	-	-
HCM Lane LOS	B	-	-	D	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.6	0.1	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	0	40	1	0	21	30	905	2	14	865	21
Future Volume (Veh/h)	15	0	40	1	0	21	30	905	2	14	865	21
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	16	0	43	1	0	22	32	963	2	15	920	22
Pedestrians		1			1							
Lane Width (ft)		12.0			12.0							
Walking Speed (ft/s)		3.5			3.5							
Percent Blockage		0			0							
Right turn flare (veh)												
Median type								None			TWLTL	
Median storage veh)											2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1530	1992	472	1562	2002	484	943			966		
vC1, stage 1 conf vol	962	962		1029	1029							
vC2, stage 2 conf vol	568	1030		533	973							
vCu, unblocked vol	1530	1992	472	1562	2002	484	943			966		
tC, single (s)	7.9	6.5	7.5	7.5	6.5	7.4	4.5			4.9		
tC, 2 stage (s)	6.9	5.5		6.5	5.5							
tF (s)	3.7	4.0	3.6	3.5	4.0	3.5	2.4			2.6		
p0 queue free %	92	100	91	100	100	95	95			97		
cM capacity (veh/h)	200	215	464	210	210	471	631			524		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	59	23	32	642	323	15	613	329
Volume Left	16	1	32	0	0	15	0	0
Volume Right	43	22	0	0	2	0	0	22
cSH	342	447	631	1700	1700	524	1700	1700
Volume to Capacity	0.17	0.05	0.05	0.38	0.19	0.03	0.36	0.19
Queue Length 95th (ft)	15	4	4	0	0	2	0	0
Control Delay (s)	17.7	13.5	11.0	0.0	0.0	12.1	0.0	0.0
Lane LOS	C	B	B			B		
Approach Delay (s)	17.7	13.5	0.4			0.2		
Approach LOS	C	B						

Intersection Summary			
Average Delay	0.9		
Intersection Capacity Utilization	41.3%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	0	40	1	0	21	30	905	2	14	865	21
Future Vol, veh/h	15	0	40	1	0	21	30	905	2	14	865	21
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	1	1	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	21	0	32	0	0	25	18	17	0	38	24	40
Mvmt Flow	16	0	43	1	0	22	32	963	2	15	920	22

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1508	1992	472	1519	2002	484	943	0	0	966	0	0
Stage 1	962	962	-	1029	1029	-	-	-	-	-	-	-
Stage 2	546	1030	-	490	973	-	-	-	-	-	-	-
Critical Hdwy	7.92	6.5	7.54	7.5	6.5	7.4	4.46	-	-	4.86	-	-
Critical Hdwy Stg 1	6.92	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.92	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.71	4	3.62	3.5	4	3.55	2.38	-	-	2.58	-	-
Pot Cap-1 Maneuver	69	61	465	83	60	472	632	-	-	525	-	-
Stage 1	241	337	-	254	314	-	-	-	-	-	-	-
Stage 2	444	313	-	534	333	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	62	56	465	71	55	472	631	-	-	525	-	-
Mov Cap-2 Maneuver	157	164	-	171	159	-	-	-	-	-	-	-
Stage 1	228	327	-	241	298	-	-	-	-	-	-	-
Stage 2	402	297	-	471	323	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	19.7	13.7	0.4	0.2
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	631	-	-	303	437	525	-	-
HCM Lane V/C Ratio	0.051	-	-	0.193	0.054	0.028	-	-
HCM Control Delay (s)	11	-	-	19.7	13.7	12.1	-	-
HCM Lane LOS	B	-	-	C	B	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.7	0.2	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	3	22	14	1	10	32	996	4	14	917	17
Future Volume (Veh/h)	16	3	22	14	1	10	32	996	4	14	917	17
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	17	3	23	15	1	11	34	1048	4	15	965	18
Pedestrians		2			3						4	
Lane Width (ft)		12.0			12.0						12.0	
Walking Speed (ft/s)		3.5			3.5						3.5	
Percent Blockage		0			0						0	
Right turn flare (veh)												
Median type								TWLTL			None	
Median storage veh)								2				
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1614	2129	494	1658	2136	533	985			1055		
vC1, stage 1 conf vol	1006	1006		1121	1121							
vC2, stage 2 conf vol	608	1123		537	1015							
vCu, unblocked vol	1614	2129	494	1658	2136	533	985			1055		
tC, single (s)	7.9	7.8	7.1	8.4	6.5	8.0	4.6			4.4		
tC, 2 stage (s)	6.9	6.8		7.4	5.5							
tF (s)	3.7	4.7	3.4	4.0	4.0	3.9	2.5			2.4		
p0 queue free %	91	97	95	89	99	97	94			97		
cM capacity (veh/h)	188	115	500	133	191	371	562			582		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	43	27	34	699	353	15	643	340
Volume Left	17	15	34	0	0	15	0	0
Volume Right	23	11	0	0	4	0	0	18
cSH	265	183	562	1700	1700	582	1700	1700
Volume to Capacity	0.16	0.15	0.06	0.41	0.21	0.03	0.38	0.20
Queue Length 95th (ft)	14	13	5	0	0	2	0	0
Control Delay (s)	21.2	28.0	11.8	0.0	0.0	11.3	0.0	0.0
Lane LOS	C	D	B			B		
Approach Delay (s)	21.2	28.0	0.4			0.2		
Approach LOS	C	D						

Intersection Summary			
Average Delay	1.0		
Intersection Capacity Utilization	38.9%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	3	22	14	1	10	32	996	4	14	917	17
Future Vol, veh/h	16	3	22	14	1	10	32	996	4	14	917	17
Conflicting Peds, #/hr	4	0	0	0	0	4	2	0	3	3	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	20	67	10	46	0	56	27	20	25	15	21	19
Mvmt Flow	17	3	23	15	1	11	34	1048	4	15	965	18

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1603	2129	494	1635	2136	533	985	0	0	1055	0	0
Stage 1	1006	1006	-	1121	1121	-	-	-	-	-	-	-
Stage 2	597	1123	-	514	1015	-	-	-	-	-	-	-
Critical Hdwy	7.9	7.84	7.1	8.42	6.5	8.02	4.64	-	-	4.4	-	-
Critical Hdwy Stg 1	6.9	6.84	-	7.42	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.9	6.84	-	7.42	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.7	4.67	3.4	3.96	4	3.86	2.47	-	-	2.35	-	-
Pot Cap-1 Maneuver	59	22	500	43	50	373	563	-	-	584	-	-
Stage 1	227	204	-	157	284	-	-	-	-	-	-	-
Stage 2	415	173	-	413	318	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	53	20	499	37	46	371	562	-	-	582	-	-
Mov Cap-2 Maneuver	144	86	-	108	144	-	-	-	-	-	-	-
Stage 1	213	198	-	147	266	-	-	-	-	-	-	-
Stage 2	376	162	-	378	309	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	25.8	33.4	0.4	0.2
HCM LOS	D	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	562	-	-	216	153	582	-	-
HCM Lane V/C Ratio	0.06	-	-	0.2	0.172	0.025	-	-
HCM Control Delay (s)	11.8	-	-	25.8	33.4	11.3	-	-
HCM Lane LOS	B	-	-	D	D	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.7	0.6	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	98	25	172	75	136	46	634	141	175	655	59
Future Volume (vph)	140	98	25	172	75	136	46	634	141	175	655	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lane Util. Factor	1.00	1.00		0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	0.98	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1567	1508		1306	1430	1327	1410	2983	1188	1399	2932	
Flt Permitted	0.66	1.00		0.67	0.83	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1089	1508		928	1212	1327	1410	2983	1188	1399	2932	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	146	102	26	179	78	142	48	660	147	182	682	61
RTOR Reduction (vph)	0	7	0	0	0	108	0	0	53	0	5	0
Lane Group Flow (vph)	146	121	0	122	135	34	48	660	94	182	738	0
Confl. Peds. (#/hr)	3		4	4		3	2		4	4		2
Confl. Bikes (#/hr)												1
Heavy Vehicles (%)	15%	22%	21%	31%	18%	20%	28%	21%	34%	29%	22%	14%
Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4		4			6			
Actuated Green, G (s)	16.9	16.9		16.9	16.9	16.9	4.4	26.1	26.1	14.7	36.4	
Effective Green, g (s)	16.9	16.9		16.9	16.9	16.9	4.4	26.1	26.1	14.7	36.4	
Actuated g/C Ratio	0.24	0.24		0.24	0.24	0.24	0.06	0.37	0.37	0.21	0.51	
Clearance Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Vehicle Extension (s)	2.5	2.5		2.5	2.5	2.5	1.5	2.0	2.0	1.5	2.0	
Lane Grp Cap (vph)	258	357		220	287	314	87	1093	435	288	1498	
v/s Ratio Prot		0.08					0.03	c0.22		c0.13	0.25	
v/s Ratio Perm	c0.13			0.13	0.11	0.03			0.08			
v/c Ratio	0.57	0.34		0.55	0.47	0.11	0.55	0.60	0.22	0.63	0.49	
Uniform Delay, d1	23.9	22.5		23.8	23.3	21.2	32.4	18.3	15.5	25.8	11.4	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.3	0.4		2.4	0.9	0.1	4.2	0.7	0.1	3.3	0.1	
Delay (s)	26.2	22.9		26.3	24.2	21.4	36.7	19.0	15.6	29.1	11.5	
Level of Service	C	C		C	C	C	D	B	B	C	B	
Approach Delay (s)		24.7			23.8			19.4			14.9	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM 2000 Control Delay	19.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	71.2	Sum of lost time (s)	13.5
Intersection Capacity Utilization	62.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology does not support turning movements with shared & exclusive lanes.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	5	31	11	3	14	23	724	3	10	720	48
Future Volume (vph)	65	5	31	11	3	14	23	724	3	10	720	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5		4.5	5.0		4.5	5.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.96			0.93		1.00	1.00		1.00	0.99	
Flt Protected		0.97			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1390			1433		1467	2959		1622	2777	
Flt Permitted		0.79			0.86		0.30	1.00		0.35	1.00	
Satd. Flow (perm)		1128			1256		465	2959		591	2777	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	70	5	33	12	3	15	25	778	3	11	774	52
RTOR Reduction (vph)	0	13	0	0	13	0	0	0	0	0	4	0
Lane Group Flow (vph)	0	95	0	0	17	0	25	781	0	11	822	0
Confl. Peds. (#/hr)	13		2	2		13	2		14	14		2
Confl. Bikes (#/hr)												1
Heavy Vehicles (%)	21%	40%	34%	40%	0%	8%	23%	22%	0%	11%	29%	22%
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		8.5			8.5		34.3	32.5		32.3	31.5	
Effective Green, g (s)		8.5			8.5		34.3	32.5		32.3	31.5	
Actuated g/C Ratio		0.15			0.15		0.61	0.58		0.58	0.56	
Clearance Time (s)		4.5			4.5		4.5	5.0		4.5	5.0	
Vehicle Extension (s)		2.5			2.5		2.5	4.5		2.5	4.5	
Lane Grp Cap (vph)		171			191		318	1723		356	1567	
v/s Ratio Prot							c0.00	0.26		0.00	c0.30	
v/s Ratio Perm		c0.08			0.01		0.05			0.02		
v/c Ratio		0.56			0.09		0.08	0.45		0.03	0.52	
Uniform Delay, d1		21.9			20.3		4.3	6.6		5.0	7.5	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		3.1			0.1		0.1	0.3		0.0	0.5	
Delay (s)		25.0			20.5		4.4	6.9		5.0	8.0	
Level of Service		C			C		A	A		A	A	
Approach Delay (s)		25.0			20.5			6.9			8.0	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	8.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	55.8	Sum of lost time (s)	14.0
Intersection Capacity Utilization	41.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	5	31	11	3	14	23	724	3	10	720	48
Future Volume (veh/h)	65	5	31	11	3	14	23	724	3	10	720	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.98	0.98		0.98	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1589	1307	1396	1307	1900	1781	1559	1574	1900	1737	1470	1574
Adj Flow Rate, veh/h	70	5	33	12	3	15	25	778	3	11	774	52
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	21	40	34	40	0	8	23	22	0	11	29	22
Cap, veh/h	222	26	53	181	66	140	357	1591	6	401	1347	90
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.02	0.52	0.52	0.01	0.51	0.51
Sat Flow, veh/h	562	155	316	437	392	829	1485	3055	12	1654	2650	178
Grp Volume(v), veh/h	108	0	0	30	0	0	25	381	400	11	408	418
Grp Sat Flow(s),veh/h/ln	1033	0	0	1657	0	0	1485	1495	1572	1654	1397	1431
Q Serve(g_s), s	3.4	0.0	0.0	0.0	0.0	0.0	0.4	7.7	7.7	0.2	9.5	9.5
Cycle Q Clear(g_c), s	4.4	0.0	0.0	0.7	0.0	0.0	0.4	7.7	7.7	0.2	9.5	9.5
Prop In Lane	0.65		0.31	0.40		0.50	1.00		0.01	1.00		0.12
Lane Grp Cap(c), veh/h	301	0	0	388	0	0	357	779	819	401	710	728
V/C Ratio(X)	0.36	0.00	0.00	0.08	0.00	0.00	0.07	0.49	0.49	0.03	0.57	0.57
Avail Cap(c_a), veh/h	559	0	0	776	0	0	955	2392	2514	1088	2234	2289
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.9	0.0	0.0	16.5	0.0	0.0	6.2	7.2	7.2	6.0	8.0	8.0
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.1	0.0	0.0	0.1	0.8	0.8	0.0	1.3	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.0	0.2	0.0	0.0	0.1	1.9	2.0	0.0	2.3	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.5	0.0	0.0	16.5	0.0	0.0	6.3	8.0	8.0	6.0	9.3	9.2
LnGrp LOS	B	A	A	B	A	A	A	A	A	A	A	A
Approach Vol, veh/h		108			30			806			837	
Approach Delay, s/veh		18.5			16.5			8.0			9.2	
Approach LOS		B			B			A			A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.6	28.8		12.4	5.0	29.4		12.4				
Change Period (Y+Rc), s	4.5	5.0		4.5	4.5	5.0		4.5				
Max Green Setting (Gmax), s	20.0	75.0		20.0	20.0	75.0		20.0				
Max Q Clear Time (g_c+I1), s	2.4	11.5		2.7	2.2	9.7		6.4				
Green Ext Time (p_c), s	0.0	12.3		0.1	0.0	11.2		0.4				
Intersection Summary												
HCM 6th Ctrl Delay			9.3									
HCM 6th LOS			A									

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	0	11	6	0	11	0	597	19	11	738	3
Future Volume (Veh/h)	2	0	11	6	0	11	0	597	19	11	738	3
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Hourly flow rate (vph)	2	0	11	6	0	11	0	609	19	11	753	3
Pedestrians		1			5			6				
Lane Width (ft)		12.0			12.0			12.0				
Walking Speed (ft/s)		3.5			3.5			3.5				
Percent Blockage		0			0			1				
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											1011	
pX, platoon unblocked												
vC, conflicting volume	1093	1410	385	1039	1402	319	757			633		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1093	1410	385	1039	1402	319	757			633		
tC, single (s)	7.5	6.5	7.5	7.8	6.5	7.1	4.1			4.9		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.6	3.7	4.0	3.4	2.2			2.6		
p0 queue free %	99	100	98	96	100	98	100			98		
cM capacity (veh/h)	166	137	537	158	138	651	862			725		

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	13	6	11	304	324	11	502	254
Volume Left	2	6	0	0	0	11	0	0
Volume Right	11	0	11	0	19	0	0	3
cSH	399	158	651	862	1700	725	1700	1700
Volume to Capacity	0.03	0.04	0.02	0.00	0.19	0.02	0.30	0.15
Queue Length 95th (ft)	3	3	1	0	0	1	0	0
Control Delay (s)	14.3	28.7	10.6	0.0	0.0	10.0	0.0	0.0
Lane LOS	B	D	B			B		
Approach Delay (s)	14.3	17.0		0.0		0.1		
Approach LOS	B	C						

Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	32.3%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	11	6	0	11	0	597	19	11	738	3
Future Vol, veh/h	2	0	11	6	0	11	0	597	19	11	738	3
Conflicting Peds, #/hr	0	0	6	6	0	0	1	0	5	5	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	100	-	-	-	-	-	300	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	0	30	17	0	10	0	26	33	40	22	33
Mvmt Flow	2	0	11	6	0	11	0	609	19	11	753	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1083	1411	385	1029	1403	319	757	0	0	633	0	0
Stage 1	778	778	-	624	624	-	-	-	-	-	-	-
Stage 2	305	633	-	405	779	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	7.5	7.84	6.5	7.1	4.1	-	-	4.9	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.84	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.84	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.6	3.67	4	3.4	2.2	-	-	2.6	-	-
Pot Cap-1 Maneuver	174	140	540	168	141	654	863	-	-	729	-	-
Stage 1	360	410	-	405	481	-	-	-	-	-	-	-
Stage 2	685	476	-	555	409	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	169	137	536	161	138	651	862	-	-	726	-	-
Mov Cap-2 Maneuver	169	137	-	161	138	-	-	-	-	-	-	-
Stage 1	360	403	-	403	479	-	-	-	-	-	-	-
Stage 2	673	474	-	532	402	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.3	16.8	0	0.1
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	862	-	-	402	161	651	726	-	-
HCM Lane V/C Ratio	-	-	-	0.033	0.038	0.017	0.015	-	-
HCM Control Delay (s)	0	-	-	14.3	28.2	10.6	10	-	-
HCM Lane LOS	A	-	-	B	D	B	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0.1	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	391	15	95	395	17	18	34	95	8	7	6
Future Volume (Veh/h)	17	391	15	95	395	17	18	34	95	8	7	6
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	18	416	16	101	420	18	19	36	101	9	7	6
Pedestrians		3										
Lane Width (ft)		12.0										
Walking Speed (ft/s)		3.5										
Percent Blockage		0										
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		528										
pX, platoon unblocked												
vC, conflicting volume	438			432			1094	1100	216	994	1099	432
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	438			432			1094	1100	216	994	1099	432
tC, single (s)	4.5			4.5			8.2	7.1	7.4	8.3	7.1	7.2
tC, 2 stage (s)												
tF (s)	2.4			2.4			3.9	4.3	3.6	3.9	4.3	3.5
p0 queue free %	98			90			83	77	86	91	95	99
cM capacity (veh/h)	1006			1012			114	154	717	100	153	531

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1
Volume Total	226	224	101	438	55	101	22
Volume Left	18	0	101	0	19	0	9
Volume Right	0	16	0	18	0	101	6
cSH	1006	1700	1012	1700	137	717	149
Volume to Capacity	0.02	0.13	0.10	0.26	0.40	0.14	0.15
Queue Length 95th (ft)	1	0	8	0	43	12	13
Control Delay (s)	0.9	0.0	9.0	0.0	47.7	10.8	33.2
Lane LOS	A		A		E	B	D
Approach Delay (s)	0.4		1.7		23.8		33.2
Approach LOS					C		D

Intersection Summary			
Average Delay	4.8		
Intersection Capacity Utilization	52.0%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	391	15	95	395	17	18	34	95	8	7	6
Future Vol, veh/h	17	391	15	95	395	17	18	34	95	8	7	6
Conflicting Peds, #/hr	0	0	0	0	0	0	3	0	0	0	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	150	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	19	28	14	19	25	31	35	28	27	38	29	17
Mvmt Flow	18	416	16	101	420	18	19	36	101	9	7	6

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	438	0	0	432	0	0	1101	1100	216	893	1099	432
Stage 1	-	-	-	-	-	-	460	460	-	631	631	-
Stage 2	-	-	-	-	-	-	641	640	-	262	468	-
Critical Hdwy	4.385	-	-	4.385	-	-	7.825	6.92	7.305	7.87	6.935	6.455
Critical Hdwy Stg 1	-	-	-	-	-	-	7.025	5.92	-	6.67	5.935	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.625	5.92	-	7.07	5.935	-
Follow-up Hdwy	2.3805	-	-	2.3805	-	-	3.8325	4.266	3.5565	3.861	4.2755	3.4615
Pot Cap-1 Maneuver	1022	-	-	1027	-	-	146	182	725	206	182	586
Stage 1	-	-	-	-	-	-	484	514	-	399	423	-
Stage 2	-	-	-	-	-	-	398	420	-	639	507	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1022	-	-	1027	-	-	126	160	725	133	160	584
Mov Cap-2 Maneuver	-	-	-	-	-	-	126	160	-	133	160	-
Stage 1	-	-	-	-	-	-	473	502	-	390	382	-
Stage 2	-	-	-	-	-	-	347	379	-	499	495	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	1.7	22.5	27.3
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	146	725	1022	-	-	1027	-	-	184
HCM Lane V/C Ratio	0.379	0.139	0.018	-	-	0.098	-	-	0.121
HCM Control Delay (s)	44	10.8	8.6	0.1	-	8.9	-	-	27.3
HCM Lane LOS	E	B	A	A	-	A	-	-	D
HCM 95th %tile Q(veh)	1.6	0.5	0.1	-	-	0.3	-	-	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	389	0	0	407	51	0	0	0	36	0	106
Future Volume (Veh/h)	110	389	0	0	407	51	0	0	0	36	0	106
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	120	423	0	0	442	55	0	0	0	39	0	115
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		1168										
pX, platoon unblocked												
vC, conflicting volume	497			423			1220	1160	423	1132	1132	470
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	497			423			1220	1160	423	1132	1132	470
tC, single (s)	4.3			4.1			7.1	6.5	6.2	7.3	6.5	6.4
tC, 2 stage (s)												
tF (s)	2.4			2.2			3.5	4.0	3.3	3.7	4.0	3.5
p0 queue free %	88			100			100	100	100	74	100	79
cM capacity (veh/h)	967			1147			114	173	635	150	179	557

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	120	423	0	497	0	154
Volume Left	120	0	0	0	0	39
Volume Right	0	0	0	55	0	115
cSH	967	1700	1700	1700	1700	330
Volume to Capacity	0.12	0.25	0.00	0.29	0.00	0.47
Queue Length 95th (ft)	11	0	0	0	0	59
Control Delay (s)	9.3	0.0	0.0	0.0	0.0	25.1
Lane LOS	A				A	D
Approach Delay (s)	2.0		0.0		0.0	25.1
Approach LOS					A	D

Intersection Summary			
Average Delay	4.2		
Intersection Capacity Utilization	49.1%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	110	389	0	0	407	51	0	0	0	36	0	106
Future Vol, veh/h	110	389	0	0	407	51	0	0	0	36	0	106
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	50	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	23	30	0	0	26	19	0	0	0	21	0	21
Mvmt Flow	120	423	0	0	442	55	0	0	0	39	0	115

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	497	0	0	423	0	0	1190	1160	423	1133	1133	470
Stage 1	-	-	-	-	-	-	663	663	-	470	470	-
Stage 2	-	-	-	-	-	-	527	497	-	663	663	-
Critical Hdwy	4.33	-	-	4.1	-	-	7.1	6.5	6.2	7.31	6.5	6.41
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.31	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.31	5.5	-
Follow-up Hdwy	2.407	-	-	2.2	-	-	3.5	4	3.3	3.689	4	3.489
Pot Cap-1 Maneuver	967	-	-	1147	-	-	166	197	635	165	205	556
Stage 1	-	-	-	-	-	-	454	462	-	540	563	-
Stage 2	-	-	-	-	-	-	538	548	-	421	462	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	967	-	-	1147	-	-	119	173	635	149	180	556
Mov Cap-2 Maneuver	-	-	-	-	-	-	119	173	-	149	180	-
Stage 1	-	-	-	-	-	-	398	405	-	473	563	-
Stage 2	-	-	-	-	-	-	427	548	-	369	405	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2	0	0	25.3
HCM LOS			A	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	967	-	-	1147	-	-	329
HCM Lane V/C Ratio	-	0.124	-	-	-	-	-	0.469
HCM Control Delay (s)	0	9.2	-	-	0	-	-	25.3
HCM Lane LOS	A	A	-	-	A	-	-	D
HCM 95th %tile Q(veh)	-	0.4	-	-	0	-	-	2.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	50	311	324	25	25	49
Future Volume (Veh/h)	50	311	324	25	25	49
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	53	331	345	27	27	52
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						1
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	372				782	345
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	372				782	345
tC, single (s)	4.5				6.9	6.4
tC, 2 stage (s)						
tF (s)	2.5				4.0	3.5
p0 queue free %	95				91	92
cM capacity (veh/h)	1014				287	651

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	53	331	345	27	79
Volume Left	53	0	0	0	27
Volume Right	0	0	0	27	52
cSH	1014	1700	1700	1700	841
Volume to Capacity	0.05	0.19	0.20	0.02	0.09
Queue Length 95th (ft)	4	0	0	0	8
Control Delay (s)	8.7	0.0	0.0	0.0	13.7
Lane LOS	A				B
Approach Delay (s)	1.2		0.0		13.7
Approach LOS					B

Intersection Summary			
Average Delay	1.8		
Intersection Capacity Utilization	33.7%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection						
Int Delay, s/veh	1.8					

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	50	311	324	25	25	49
Future Vol, veh/h	50	311	324	25	25	49
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	375	-	-	200	0	25
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	38	28	20	0	50	24
Mvmt Flow	53	331	345	27	27	52

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	372	0	-	0	782	345
Stage 1	-	-	-	-	345	-
Stage 2	-	-	-	-	437	-
Critical Hdwy	4.48	-	-	-	6.9	6.44
Critical Hdwy Stg 1	-	-	-	-	5.9	-
Critical Hdwy Stg 2	-	-	-	-	5.9	-
Follow-up Hdwy	2.542	-	-	-	3.95	3.516
Pot Cap-1 Maneuver	1014	-	-	-	303	651
Stage 1	-	-	-	-	622	-
Stage 2	-	-	-	-	561	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1014	-	-	-	287	651
Mov Cap-2 Maneuver	-	-	-	-	287	-
Stage 1	-	-	-	-	590	-
Stage 2	-	-	-	-	561	-

Approach	EB	WB	SB
HCM Control Delay, s	1.2	0	13.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1014	-	-	-	287	651
HCM Lane V/C Ratio	0.052	-	-	-	0.093	0.08
HCM Control Delay (s)	8.7	-	-	-	18.8	11
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0.2	-	-	-	0.3	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	45	33	8	54	21	11
Future Volume (Veh/h)	45	33	8	54	21	11
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	53	39	9	64	25	13
Pedestrians			4			2
Lane Width (ft)			12.0			12.0
Walking Speed (ft/s)			3.5			3.5
Percent Blockage			0			0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	108	43			73	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	108	43			73	
tC, single (s)	6.5	6.3			4.2	
tC, 2 stage (s)						
tF (s)	3.6	3.4			2.3	
p0 queue free %	94	96			98	
cM capacity (veh/h)	843	1003			1477	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	92	73	38
Volume Left	53	0	25
Volume Right	39	64	0
cSH	904	1700	1477
Volume to Capacity	0.10	0.04	0.02
Queue Length 95th (ft)	8	0	1
Control Delay (s)	9.4	0.0	5.0
Lane LOS	A		A
Approach Delay (s)	9.4	0.0	5.0
Approach LOS	A		

Intersection Summary			
Average Delay	5.2		
Intersection Capacity Utilization	20.2%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection						
Int Delay, s/veh	5.2					

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	45	33	8	54	21	11
Future Vol, veh/h	45	33	8	54	21	11
Conflicting Peds, #/hr	4	2	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	14	10	12	31	10	40
Mvmt Flow	53	39	9	64	25	13

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	108	43	0	0	73	0
Stage 1	41	-	-	-	-	-
Stage 2	67	-	-	-	-	-
Critical Hdwy	6.54	6.3	-	-	4.2	-
Critical Hdwy Stg 1	5.54	-	-	-	-	-
Critical Hdwy Stg 2	5.54	-	-	-	-	-
Follow-up Hdwy	3.626	3.39	-	-	2.29	-
Pot Cap-1 Maneuver	861	1005	-	-	1477	-
Stage 1	952	-	-	-	-	-
Stage 2	926	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	843	1003	-	-	1477	-
Mov Cap-2 Maneuver	843	-	-	-	-	-
Stage 1	952	-	-	-	-	-
Stage 2	907	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.4	0	4.9
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	904	1477	-
HCM Lane V/C Ratio	-	-	0.102	0.017	-
HCM Control Delay (s)	-	-	9.4	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	38	134	61	47	96	76
Future Volume (Veh/h)	38	134	61	47	96	76
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	43	151	69	53	108	85
Pedestrians						2
Lane Width (ft)						12.0
Walking Speed (ft/s)						3.5
Percent Blockage						0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	396	98			122	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	396	98			122	
tC, single (s)	6.8	6.5			4.4	
tC, 2 stage (s)						
tF (s)	3.9	3.6			2.5	
p0 queue free %	91	83			92	
cM capacity (veh/h)	490	878			1294	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	194	122	193
Volume Left	43	0	108
Volume Right	151	53	0
cSH	747	1700	1294
Volume to Capacity	0.26	0.07	0.08
Queue Length 95th (ft)	26	0	7
Control Delay (s)	11.5	0.0	4.8
Lane LOS	B		A
Approach Delay (s)	11.5	0.0	4.8
Approach LOS	B		

Intersection Summary			
Average Delay	6.2		
Intersection Capacity Utilization	33.4%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection						
Int Delay, s/veh	6.1					

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	38	134	61	47	96	76
Future Vol, veh/h	38	134	61	47	96	76
Conflicting Peds, #/hr	0	2	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	44	33	22	32	33	19
Mvmt Flow	43	151	69	53	108	85

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	397	98	0	0	122	0
Stage 1	96	-	-	-	-	-
Stage 2	301	-	-	-	-	-
Critical Hdwy	6.84	6.53	-	-	4.43	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.896	3.597	-	-	2.497	-
Pot Cap-1 Maneuver	535	880	-	-	1294	-
Stage 1	833	-	-	-	-	-
Stage 2	664	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	488	878	-	-	1294	-
Mov Cap-2 Maneuver	488	-	-	-	-	-
Stage 1	833	-	-	-	-	-
Stage 2	606	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.5	0	4.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	746	1294	-
HCM Lane V/C Ratio	-	-	0.259	0.083	-
HCM Control Delay (s)	-	-	11.5	8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1	0.3	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	8	0	73	0	65	2	72	75	0
Future Volume (Veh/h)	0	0	0	8	0	73	0	65	2	72	75	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	0	0	0	9	0	82	0	73	2	81	84	0
Pedestrians					5							
Lane Width (ft)					12.0							
Walking Speed (ft/s)					3.5							
Percent Blockage					0							
Right turn flare (veh)									1			
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	82			0			101	100	5	102	59	41
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	82			0			101	100	5	102	59	41
tC, single (s)	4.1			4.2			7.1	6.7	6.2	7.3	6.8	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.3			3.5	4.1	3.3	3.7	4.3	3.3
p0 queue free %	100			99			100	90	100	89	89	100
cM capacity (veh/h)	1528			1560			808	762	1079	760	776	1036

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	0	91	75	165
Volume Left	0	9	0	81
Volume Right	0	82	2	0
cSH	1700	1560	783	768
Volume to Capacity	0.00	0.01	0.10	0.21
Queue Length 95th (ft)	0	0	8	20
Control Delay (s)	0.0	0.8	10.2	11.0
Lane LOS		A	B	B
Approach Delay (s)	0.0	0.8	10.2	11.0
Approach LOS			B	B

Intersection Summary			
Average Delay	8.0		
Intersection Capacity Utilization	26.2%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	7.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	8	0	73	0	65	2	72	75	0
Future Vol, veh/h	0	0	0	8	0	73	0	65	2	72	75	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	5	5	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	25	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	0	0	0	12	0	22	0	15	0	24	30	0
Mvmt Flow	0	0	0	9	0	82	0	73	2	81	84	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	82	0	0	1	0	0	102	101	6	103	60	41
Stage 1	-	-	-	-	-	-	1	1	-	59	59	-
Stage 2	-	-	-	-	-	-	101	100	-	44	1	-
Critical Hdwy	4.1	-	-	4.22	-	-	7.1	6.65	6.2	7.34	6.8	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.65	-	6.34	5.8	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.65	-	6.34	5.8	-
Follow-up Hdwy	2.2	-	-	2.308	-	-	3.5	4.135	3.3	3.716	4.27	3.3
Pot Cap-1 Maneuver	1528	-	-	1558	-	-	884	765	1083	828	780	1036
Stage 1	-	-	-	-	-	-	1027	870	-	900	794	-
Stage 2	-	-	-	-	-	-	910	788	-	917	842	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1528	-	-	1558	-	-	807	760	1078	758	775	1036
Mov Cap-2 Maneuver	-	-	-	-	-	-	807	760	-	758	775	-
Stage 1	-	-	-	-	-	-	1027	870	-	900	789	-
Stage 2	-	-	-	-	-	-	808	783	-	834	842	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.7	10.1	11
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	760	1078	1528	-	-	1558	-	-	767
HCM Lane V/C Ratio	0.096	0.002	-	-	-	0.006	-	-	0.215
HCM Control Delay (s)	10.2	8.3	0	-	-	7.3	0	-	11
HCM Lane LOS	B	A	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	0	-	-	0	-	-	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	152	36	39	165	2	64	1	65	2	3	4
Future Volume (Veh/h)	0	152	36	39	165	2	64	1	65	2	3	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	0	179	42	46	194	2	75	1	76	2	4	5
Pedestrians		1						1				
Lane Width (ft)		12.0						12.0				
Walking Speed (ft/s)		3.5						3.5				
Percent Blockage		0						0				
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	196			222			495	489	201	542	509	196
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	196			222			495	489	201	542	509	196
tC, single (s)	4.1			4.3			7.3	6.5	6.5	8.1	7.5	6.7
tC, 2 stage (s)												
tF (s)	2.2			2.3			3.7	4.0	3.6	4.4	4.9	3.8
p0 queue free %	100			96			83	100	90	99	99	99
cM capacity (veh/h)	1389			1267			429	464	777	289	340	736

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1
Volume Total	0	221	46	196	75	77	11
Volume Left	0	0	46	0	75	0	2
Volume Right	0	42	0	2	0	76	5
cSH	1700	1700	1267	1700	429	771	431
Volume to Capacity	0.00	0.13	0.04	0.12	0.17	0.10	0.03
Queue Length 95th (ft)	0	0	3	0	16	8	2
Control Delay (s)	0.0	0.0	7.9	0.0	15.2	10.2	13.6
Lane LOS			A		C	B	B
Approach Delay (s)	0.0		1.5		12.6		13.6
Approach LOS					B		B

Intersection Summary			
Average Delay	3.9		
Intersection Capacity Utilization	33.9%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	152	36	39	165	2	64	1	65	2	3	4
Future Vol, veh/h	0	152	36	39	165	2	64	1	65	2	3	4
Conflicting Peds, #/hr	0	0	1	1	0	0	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	125	-	-	50	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	39	21	16	28	50	25	0	28	100	100	50
Mvmt Flow	0	179	42	46	194	2	75	1	76	2	4	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	196	0	0	222	0	0	494	489	201	526	509	196
Stage 1	-	-	-	-	-	-	201	201	-	287	287	-
Stage 2	-	-	-	-	-	-	293	288	-	239	222	-
Critical Hdwy	4.1	-	-	4.26	-	-	7.35	6.5	6.48	8.1	7.5	6.7
Critical Hdwy Stg 1	-	-	-	-	-	-	6.35	5.5	-	7.1	6.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.35	5.5	-	7.1	6.5	-
Follow-up Hdwy	2.2	-	-	2.344	-	-	3.725	4	3.552	4.4	4.9	3.75
Pot Cap-1 Maneuver	1389	-	-	1268	-	-	450	482	778	340	353	737
Stage 1	-	-	-	-	-	-	751	739	-	551	529	-
Stage 2	-	-	-	-	-	-	668	677	-	589	570	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1389	-	-	1267	-	-	431	464	777	298	340	736
Mov Cap-2 Maneuver	-	-	-	-	-	-	431	464	-	298	340	-
Stage 1	-	-	-	-	-	-	750	738	-	551	510	-
Stage 2	-	-	-	-	-	-	635	653	-	530	569	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	1.5	12.6	13.6
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	431	769	1389	-	-	1267	-	-	429
HCM Lane V/C Ratio	0.175	0.101	-	-	-	0.036	-	-	0.025
HCM Control Delay (s)	15.1	10.2	0	-	-	7.9	-	-	13.6
HCM Lane LOS	C	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.6	0.3	0	-	-	0.1	-	-	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	2	2	22	0	20	3	108	33	17	75	1
Future Volume (Veh/h)	1	2	2	22	0	20	3	108	33	17	75	1
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	1	2	2	25	0	23	3	123	38	19	85	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	276	290	86	274	272	142	86			161		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	276	290	86	274	272	142	86			161		
tC, single (s)	7.1	6.5	6.7	7.5	6.5	6.3	4.4			4.3		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.8	3.8	4.0	3.4	2.5			2.4		
p0 queue free %	100	100	100	96	100	97	100			99		
cM capacity (veh/h)	655	613	856	601	627	882	1336			1290		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	5	48	3	161	19	86
Volume Left	1	25	3	0	19	0
Volume Right	2	23	0	38	0	1
cSH	701	709	1336	1700	1290	1700
Volume to Capacity	0.01	0.07	0.00	0.09	0.01	0.05
Queue Length 95th (ft)	1	5	0	0	1	0
Control Delay (s)	10.2	10.4	7.7	0.0	7.8	0.0
Lane LOS	B	B	A		A	
Approach Delay (s)	10.2	10.4	0.1		1.4	
Approach LOS	B	B				

Intersection Summary			
Average Delay	2.2		
Intersection Capacity Utilization	26.2%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	2	2	22	0	20	3	108	33	17	75	1
Future Vol, veh/h	1	2	2	22	0	20	3	108	33	17	75	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	125	-	-	130	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	50	38	0	11	33	15	29	25	13	100
Mvmt Flow	1	2	2	25	0	23	3	123	38	19	85	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	284	291	86	274	272	142	86	0	0	161	0	0
Stage 1	124	124	-	148	148	-	-	-	-	-	-	-
Stage 2	160	167	-	126	124	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.7	7.48	6.5	6.31	4.43	-	-	4.35	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.48	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.48	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.75	3.842	4	3.399	2.497	-	-	2.425	-	-
Pot Cap-1 Maneuver	672	623	855	612	638	882	1336	-	-	1290	-	-
Stage 1	885	797	-	776	779	-	-	-	-	-	-	-
Stage 2	847	764	-	798	797	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	646	612	855	601	627	882	1336	-	-	1290	-	-
Mov Cap-2 Maneuver	646	612	-	601	627	-	-	-	-	-	-	-
Stage 1	883	785	-	774	777	-	-	-	-	-	-	-
Stage 2	823	762	-	782	785	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.2	10.5	0.2	1.4
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1336	-	-	699	708	1290	-	-
HCM Lane V/C Ratio	0.003	-	-	0.008	0.067	0.015	-	-
HCM Control Delay (s)	7.7	-	-	10.2	10.5	7.8	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0	-	-

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	25	28	125	32	27	108
Future Volume (Veh/h)	25	28	125	32	27	108
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	28	31	140	36	30	121
Pedestrians	2					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	0					
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	341	160			178	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	341	160			178	
tC, single (s)	6.6	6.6			4.4	
tC, 2 stage (s)						
tF (s)	3.7	3.6			2.5	
p0 queue free %	95	96			98	
cM capacity (veh/h)	602	798			1253	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	59	176	151
Volume Left	28	0	30
Volume Right	31	36	0
cSH	691	1700	1253
Volume to Capacity	0.09	0.10	0.02
Queue Length 95th (ft)	7	0	2
Control Delay (s)	10.7	0.0	1.7
Lane LOS	B		A
Approach Delay (s)	10.7	0.0	1.7
Approach LOS	B		

Intersection Summary			
Average Delay	2.3		
Intersection Capacity Utilization	29.4%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	2.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	25	28	125	32	27	108
Future Vol, veh/h	25	28	125	32	27	108
Conflicting Peds, #/hr	0	0	0	2	2	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	21	38	26	30	28	23
Mvmt Flow	28	31	140	36	30	121

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	341	160	0	0	178	0
Stage 1	160	-	-	-	-	-
Stage 2	181	-	-	-	-	-
Critical Hdwy	6.61	6.58	-	-	4.38	-
Critical Hdwy Stg 1	5.61	-	-	-	-	-
Critical Hdwy Stg 2	5.61	-	-	-	-	-
Follow-up Hdwy	3.689	3.642	-	-	2.452	-
Pot Cap-1 Maneuver	618	799	-	-	1255	-
Stage 1	825	-	-	-	-	-
Stage 2	806	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	601	797	-	-	1253	-
Mov Cap-2 Maneuver	601	-	-	-	-	-
Stage 1	823	-	-	-	-	-
Stage 2	785	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.7	0	1.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	691	1253	-
HCM Lane V/C Ratio	-	-	0.086	0.024	-
HCM Control Delay (s)	-	-	10.7	7.9	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	126	16	18	94	40	16	67	15	17	69	36
Future Volume (Veh/h)	30	126	16	18	94	40	16	67	15	17	69	36
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	33	140	18	20	104	44	18	74	17	19	77	40
Pedestrians					3			2			1	
Lane Width (ft)					12.0			12.0			12.0	
Walking Speed (ft/s)					3.5			3.5			3.5	
Percent Blockage					0			0			0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	149			160			462	406	154	439	393	127
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	149			160			462	406	154	439	393	127
tC, single (s)	4.3			4.3			7.4	6.7	6.4	7.5	6.8	6.3
tC, 2 stage (s)												
tF (s)	2.4			2.4			3.8	4.2	3.5	3.8	4.2	3.4
p0 queue free %	98			98			95	85	98	95	84	96
cM capacity (veh/h)	1323			1293			375	480	840	393	487	896

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	191	168	109	136
Volume Left	33	20	18	19
Volume Right	18	44	17	40
cSH	1323	1293	490	542
Volume to Capacity	0.02	0.02	0.22	0.25
Queue Length 95th (ft)	2	1	21	25
Control Delay (s)	1.5	1.0	14.4	13.9
Lane LOS	A	A	B	B
Approach Delay (s)	1.5	1.0	14.4	13.9
Approach LOS			B	B

Intersection Summary			
Average Delay	6.5		
Intersection Capacity Utilization	29.5%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	6.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	126	16	18	94	40	16	67	15	17	69	36
Future Vol, veh/h	30	126	16	18	94	40	16	67	15	17	69	36
Conflicting Peds, #/hr	1	0	2	2	0	1	0	0	3	3	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	21	19	13	24	25	39	33	24	21	38	25	12
Mvmt Flow	33	140	18	20	104	44	18	74	17	19	77	40

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	149	0	0	160	0	0	442	406	154	431	393	127
Stage 1	-	-	-	-	-	-	217	217	-	167	167	-
Stage 2	-	-	-	-	-	-	225	189	-	264	226	-
Critical Hdwy	4.31	-	-	4.34	-	-	7.43	6.74	6.41	7.48	6.75	6.32
Critical Hdwy Stg 1	-	-	-	-	-	-	6.43	5.74	-	6.48	5.75	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.43	5.74	-	6.48	5.75	-
Follow-up Hdwy	2.389	-	-	2.416	-	-	3.797	4.216	3.489	3.842	4.225	3.408
Pot Cap-1 Maneuver	1324	-	-	1296	-	-	476	502	844	477	509	897
Stage 1	-	-	-	-	-	-	720	684	-	757	719	-
Stage 2	-	-	-	-	-	-	713	704	-	669	676	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1323	-	-	1294	-	-	386	479	840	397	486	896
Mov Cap-2 Maneuver	-	-	-	-	-	-	386	479	-	397	486	-
Stage 1	-	-	-	-	-	-	699	664	-	736	706	-
Stage 2	-	-	-	-	-	-	597	691	-	565	656	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.4	0.9	14.4	13.8
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	492	1323	-	-	1294	-	-	542
HCM Lane V/C Ratio	0.221	0.025	-	-	0.015	-	-	0.25
HCM Control Delay (s)	14.4	7.8	0	-	7.8	0	-	13.8
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.8	0.1	-	-	0	-	-	1

ATTACHMENT C: QUEUING ANALYSIS WORKSHEETS

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	75	152	35	52	78	854	29	795
v/c Ratio	0.41	0.48	0.24	0.20	0.20	0.49	0.06	0.55
Control Delay	29.9	14.1	26.6	15.8	4.8	9.2	4.1	12.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.9	14.1	26.6	15.8	4.8	9.2	4.1	12.4
Queue Length 50th (ft)	21	10	10	7	7	53	2	91
Queue Length 95th (ft)	66	61	37	36	22	174	10	169
Internal Link Dist (ft)		1885		563		1469		3402
Turn Bay Length (ft)	125		150		150		100	
Base Capacity (vph)	408	560	325	546	668	2862	790	2764
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.27	0.11	0.10	0.12	0.30	0.04	0.29

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	146	128	122	135	142	48	660	147	182	743
v/c Ratio	0.56	0.35	0.55	0.46	0.33	0.33	0.66	0.33	0.62	0.49
Control Delay	35.7	26.4	37.0	31.7	7.6	43.0	25.0	12.5	38.9	14.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.7	26.4	37.0	31.7	7.6	43.0	25.0	12.5	38.9	14.4
Queue Length 50th (ft)	52	40	45	49	0	18	116	18	67	108
Queue Length 95th (ft)	147	115	134	138	46	69	257	80	183	231
Internal Link Dist (ft)		1368		448			1440			1918
Turn Bay Length (ft)	100		400			125		75	150	
Base Capacity (vph)	603	841	514	672	798	447	2510	1010	665	2650
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.15	0.24	0.20	0.18	0.11	0.26	0.15	0.27	0.28

Intersection Summary

Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	108	30	25	781	11	826
v/c Ratio	0.46	0.12	0.06	0.40	0.02	0.47
Control Delay	25.4	15.5	4.6	7.6	4.4	9.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.4	15.5	4.6	7.6	4.4	9.8
Queue Length 50th (ft)	20	3	2	51	1	56
Queue Length 95th (ft)	80	26	11	163	6	183
Internal Link Dist (ft)	2474	252		931		1440
Turn Bay Length (ft)			125		125	
Base Capacity (vph)	475	529	729	2957	826	2778
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.06	0.03	0.26	0.01	0.30

Intersection Summary

ATTACHMENT D:
DETAILED PEDESTRIAN LEVEL OF TRAFFIC STRESS RESULTS

Detailed Pedestrian Level of Traffic Stress (PLTS) Analysis Results

Street	From	To	Side	PLTS Criteria									PLTS
				Speed (mph)	Total Number of Lanes	Bicycle Facility Width (feet)	Parking Width (feet)	Sidewalk Condition	Sidewalk Width (feet)	Buffer Type	Illumination?	Land Use	
US 101	Heceta Beach Rd	Munsel Lake Rd	West	55	3	8	0	No Sidewalk	0	No Buffer	No	Service Industrial	4
	Heceta Beach Rd	Munsel Lake Rd	East	55	3	8	0	No Sidewalk	0	No Buffer	No	Service Industrial	4
	Munsel Lake Rd	46th St	West	40	4	7	0	Fair	6	No Buffer	No	North Commercial	4
	Munsel Lake Rd	46th St	East	40	4	7	0	No Sidewalk	0	No Buffer	No	North Commercial	4
	46th St	37th St	West	40	5	6	0	No Sidewalk	0	No Buffer	Yes	Highway Commercial	4
	46th St	37th St	East	40	5	6	0	No Sidewalk	0	No Buffer	No	Highway Commercial	4
	37th St	31st St	West	40	5	5	0	Fair	6	No Buffer	Yes	Highway Commercial	4
	37th St	31st St	East	40	5	5	0	Fair	6	No Buffer	No	Highway Commercial	4
	31st St	27th St	West	40	5	6	0	Fair	6	No Buffer	Yes	Highway Commercial	4
	31st St	27th St	East	40	5	6	0	Fair	6	No Buffer	No	Highway Commercial	4
	27th St	22nd St	West	40	5	6	0	Fair	6	No Buffer	Yes	Highway Commercial	4
	27th St	22nd St	East	40	5	6	0	Fair	6	No Buffer	Yes	Highway Commercial	4
	22nd St	OR 126	West	30	5	6	0	Fair	6	No Buffer	Yes	Commercial	4
	22nd St	OR 126	East	30	5	6	0	Fair	6	No Buffer	Yes	Commercial	4
	OR 126	Rhododendron Dr	West	30	5	6	0	Fair	6	No Buffer	Yes	Mainstreet Commercial	4
	OR 126	Rhododendron Dr	East	30	5	6	0	Fair	6	No Buffer	Yes	Mainstreet Commercial	4
	Rhododendron Dr	2nd Street	West	30	5	0	0	No Sidewalk	0	No Buffer	Yes	Mainstreet Commercial	4
	Rhododendron Dr	2nd Street	East	30	5	0	0	Fair	8	No Buffer	Yes	Mainstreet Commercial	4

Street	From	To	Side	PLTS Criteria									PLTS
				Speed (mph)	Total Number of Lanes	Bicycle Facility Width (feet)	Parking Width (feet)	Sidewalk Condition	Sidewalk Width (feet)	Buffer Type	Illumination?	Land Use	
OR 126	US 101	Quince Street	North	35	4	5	0	Fair	7	No Buffer	Yes	Mainstreet Commercial	4
	US 101	Quince Street	South	35	4	5	0	Fair	6	Landscaped	Yes	Mainstreet Commercial	2
	Quince Street	Redwood St	North	35	3	5	0	Fair	8	No Buffer	Yes	Highway Commercial	4
	Quince Street	Redwood St	South	35	3	8	11	Fair	8	No Buffer	Yes	Highway Commercial	4
	Redwood St	Spruce St	North	35	3	5	0	Fair	7	No Buffer	Yes	Commercial	4
	Redwood St	Spruce St	South	35	3	6	0	Fair	8	No Buffer	Yes	Commercial	4
	Spruce St	Xylo St	North	35	2	5	0	No Sidewalk	0	No Buffer	No	Commercial	4
	Spruce St	Xylo St	South	35	2	6	0	No Sidewalk	0	No Buffer	Yes	Commercial	4
	Xylo St	N Fork Siuslaw Rd	North	35	2	5	0	No Sidewalk	0	No Buffer	No	Rural	4
	Xylo St	N Fork Siuslaw Rd	South	35	2	6	0	No Sidewalk	0	No Buffer	Yes	Rural	4
9th St	Rhododendron Dr	US 101	North	25	2	5	0	Fair	7	No Buffer	Yes	Residential	2
	Rhododendron Dr	US 101	South	25	2	5	0	Fair	7	No Buffer	No	Residential	2
Rhododendron Dr	Heceta Beach Rd	Lighthouse Wy	West	45	2	4	0	No Sidewalk	0	No Buffer	No	Residential	4
	Heceta Beach Rd	Lighthouse Wy	East	45	2	3	0	No Sidewalk	0	No Buffer	No	Residential	4
	Lighthouse Wy	New Hope Ln	West	40	2	5	0	No Sidewalk	0	No Buffer	Yes	Residential	4
	Lighthouse Wy	New Hope Ln	East	40	2	5	0	No Sidewalk	0	No Buffer	No	Residential	4
	New Hope Ln	Greenwood St	West	30	2	7	0	No Sidewalk	0	No Buffer	Yes	Residential	4
	New Hope Ln	Greenwood St	East	30	2	7	0	No Sidewalk	0	No Buffer	Yes	Residential	4
	Greenwood St	US 101	North	25	2	6	7	Fair	8	No Buffer	Yes	Residential	2
	Greenwood St	US 101	South	25	2	6	0	Fair	7	No Buffer	Yes	Residential	2

Street	From	To	Side	PLTS Criteria									PLTS
				Speed (mph)	Total Number of Lanes	Bicycle Facility Width (feet)	Parking Width (feet)	Sidewalk Condition	Sidewalk Width (feet)	Buffer Type	Illumination?	Land Use	
Munsel Lake Rd	US 101	Ocean Dunes Dr	North	35	2	0	0	No Sidewalk	0	No Buffer	No	Medium Density Residential	4
	US 101	Ocean Dunes Dr	South	35	2	0	0	No Sidewalk	0	No Buffer	No	Medium Density Residential	4
	Ocean Dunes Dr	N Fork Rd	West	25	2	0	0	No Sidewalk	0	No Buffer	Yes	Medium Density Residential	4
	Ocean Dunes Dr	N Fork Rd	East	25	2	0	0	No Sidewalk	0	No Buffer	No	Medium Density Residential	4
N Fork Siuslaw Rd	Munsel Lake Rd	OR 126	West	25	2	3	0	No Sidewalk	0	No Buffer	No	Low Density Residential	4
	Munsel Lake Rd	OR 126	East	25	2	5	0	No Sidewalk	0	No Buffer	No	Low Density Residential	4
Heceta Beach Rd	US 101	Rhododendron Dr	North	40	2	4	0	No Sidewalk	0	No Buffer	No	Low Density Residential	4
	US 101	Rhododendron Dr	South	40	2	4	0	No Sidewalk	0	No Buffer	No	Low Density Residential	4
Kingwood St	35 St	27th St	West	40	2	5	0	Fair	5	No Buffer	Yes	Pacific View Business Park	4
	35 St	27th St	East	40	2	5	0	Fair	5	No Buffer	Yes	Pacific View Business Park	4
	27th St	Airport Ln	West	40	2	5	5	Fair	6	Landscaped	No	Commercial	3
	27th St	Airport Ln	East	40	2	5	5	Fair	6	Landscaped	Yes	Commercial	3
	Airport Ln	17th Pl	West	30	2	5	0	Fair	5	No Buffer	Yes	Commercial	4
	Airport Ln	17th Pl	East	30	2	5	0	No Sidewalk	0	No Buffer	No	Commercial	4
	17th Pl	15th St	West	30	2	5	0	No Sidewalk	0	No Buffer	No	Commercial	4
	17th Pl	15th St	East	30	2	5	0	Fair	7	No Buffer	No	Commercial	4
	15th St	10th St	West	25	2	5	0	No Sidewalk	0	No Buffer	No	Medium Density Residential	4
	15th St	10th St	East	25	2	5	0	No Sidewalk	0	No Buffer	No	Medium Density Residential	4
	10th St	US 101	West	25	2	0	5	No Sidewalk	0	No Buffer	No	Medium Density Residential	4
	10th St	US 101	East	25	2	0	0	No Sidewalk	0	No Buffer	Yes	Medium Density Residential	4

Street	From	To	Side	PLTS Criteria									PLTS
				Speed (mph)	Total Number of Lanes	Bicycle Facility Width (feet)	Parking Width (feet)	Sidewalk Condition	Sidewalk Width (feet)	Buffer Type	Illumination?	Land Use	
Quince St	US 101	10th St	West	25	2	0	0	No Sidewalk	0	No Buffer	No	Mixed-Use	4
	US 101	10th St	East	25	2	0	0	No Sidewalk	0	No Buffer	No	Mixed-Use	4
	10th St	Harbor St	West	25	2	0	0	Fair	10	No Buffer	Yes	Mixed-Use	2
	10th St	Harbor St	East	25	2	0	0	Fair	6	No Buffer	No	Mixed-Use	2
Spruce St	32nd St	30th Way	West	25	2	5	0	Fair	7	No Buffer	Yes	Low Density Residential	2
	32nd St	30th Way	East	25	2	5	0	Fair	7	No Buffer	Yes	Low Density Residential	2
	30th Way	25th St	West	25	2	5	0	Fair	6	No Buffer	No	High Density Residential	2
	30th Way	25th St	East	25	2	5	0	Fair	6	No Buffer	No	High Density Residential	2
	25th St	17th St	West	25	2	0	0	Fair	6	No Buffer	No	High Density Residential	2
	25th St	17th St	East	25	2	0	0	Fair	6	No Buffer	Yes	High Density Residential	2
	17th St	15th St	West	25	2	0	0	Fair	6	No Buffer	No	High Density Residential	2
	17th St	15th St	East	25	2	0	0	Fair	0	No Buffer	Yes	High Density Residential	2
	15th St	OR 126	West	25	2	0	0	Fair	6	No Buffer	No	High Density Residential	2
	15th St	OR 126	East	25	2	0	0	Fair	6	No Buffer	Yes	High Density Residential	2
Bay St	Kingwood St	1st St	North	25	2	0	0	Fair	6		Yes	Mainstreet Commercial	4
	Kingwood St	1st St	South	25	2	0	0	Fair	6		Yes	Mainstreet Commercial	4
Airport Rd/15th St	Kingwood St	Nopal St	North	25	2		0	Fair	6	No Buffer	Yes	Medium Density Residential	2
	Kingwood St	Nopal St	South	25	2		0	No Sidewalk	0	No Buffer	No	Medium Density Residential	4
	Nopal St	US 101	North	25	2	0	6	No Sidewalk	0	No Buffer	Yes	High Density Residential	4

Street	From	To	Side	PLTS Criteria									PLTS
				Speed (mph)	Total Number of Lanes	Bicycle Facility Width (feet)	Parking Width (feet)	Sidewalk Condition	Sidewalk Width (feet)	Buffer Type	Illumination?	Land Use	
	Nopal St	US 101	South	25	2	0	6	No Sidewalk	0	No Buffer	No	High Density Residential	4
	US 101	Spruce St	North	25	2	0	6	Good	6	No Buffer	Yes	Commercial	3
	US 101	Spruce St	South	25	2	0	6	Fair	6	No Buffer	No	Commercial	3
21st St	Oak St	US 101	North	25	2	0	6	Fair	6	No Buffer	No	High Density Residential	2
	Oak St	US 101	South	25	2	0	6	Fair	6	No Buffer	Yes	High Density Residential	2
	US 101	Spruce St	North	25	2	0	6	No Sidewalk	0	No Buffer	No	Commercial	4
	US 101	Spruce St	South	25	2	0	6	Fair	6	No Buffer	Yes	Commercial	3
27th St	Kingwood St	Oak St	North	20	2	6	0	Fair	6	No Buffer	Yes	High Density Residential	2
	Kingwood St	Oak St	South	20	2	6	0	Fair	6	No Buffer	Yes	High Density Residential	2
	Oak St	US 101	North	25	2	0	6	Fair	6	No Buffer	No	High Density Residential	2
	Oak St	US 101	South	25	2	0	6	No Sidewalk	0	No Buffer	No	High Density Residential	4
30th St	Oak St	Spruce St	North	25	2	0	6	No Sidewalk	6	No Buffer	Yes	Commercial	4
	Oak St	Spruce St	South	25	2	0	6	No Sidewalk	6	No Buffer	No	Commercial	4
35th St	Rhododendron Dr	Myrtle Loop	North	25	2	6	0	No Sidewalk	0	No Buffer	No	Medium Density Residential	4
	Rhododendron Dr	Myrtle Loop	South	25	2	6	0	No Sidewalk	0	No Buffer	No	Medium Density Residential	4
	Myrtle Loop	US 101	North	25	2	6	0	No Sidewalk	0	No Buffer	No	High Density Residential	4
	Myrtle Loop	US 101	South	25	2	6	0	Fair	6	No Buffer	Yes	High Density Residential	2
	US 101	Spruce St	North	25	2	4	0	Fair	6	No Buffer	No	Commercial	3
	US 101	Spruce St	South	25	2	4	0	Fair	6	No Buffer	No	Commercial	3
	Oak St	US 101	North	25	2	0	0	No Sidewalk	0	No Buffer	No	Commercial	4

Street	From	To	Side	PLTS Criteria									PLTS
				Speed (mph)	Total Number of Lanes	Bicycle Facility Width (feet)	Parking Width (feet)	Sidewalk Condition	Sidewalk Width (feet)	Buffer Type	Illumination?	Land Use	
42nd St/43rd St	Oak St	US 101	South	25	2	0	0	No Sidewalk	0	No Buffer	No	Commercial	4
	US 101	Spruce St	North	25	2	5	0	No Sidewalk	0	No Buffer	Yes	Commercial	4
	US 101	Spruce St	South	25	2	5	0	No Sidewalk	0	No Buffer	No	Commercial	4

ATTACHMENT E:
ODOT CRASH DATA

OREGON DEPARTMENT OF TRANSPORTATION - POLICY, DATA AND ANALYSIS DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
CRASH SUMMARIES BY YEAR BY COLLISION TYPE

Intersectional Crashes at Kingwood St & 9th St in Florence, OR.
January 1, 2016 through December 31, 2020

COLLISION TYPE	FATAL CRASHES	NON-FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER-SECTION	INTER-SECTION RELATED	OFF-ROAD
YEAR: 2020														
ANGLE	0	0	1	1	0	0	0	1	0	1	0	1	0	0
2020 TOTAL	0	0	1	1	0	0	0	1	0	1	0	1	0	0
YEAR: 2019														
ANGLE	0	0	2	2	0	0	0	1	1	2	0	2	0	0
2019 TOTAL	0	0	2	2	0	0	0	1	1	2	0	2	0	0
YEAR: 2017														
ANGLE	0	1	0	1	0	5	0	1	0	1	0	1	0	0
2017 TOTAL	0	1	0	1	0	5	0	1	0	1	0	1	0	0
YEAR: 2016														
ANGLE	0	0	1	1	0	0	0	1	0	1	0	1	0	0
2016 TOTAL	0	0	1	1	0	0	0	1	0	1	0	1	0	0
FINAL TOTAL	0	1	4	5	0	5	0	4	1	5	0	5	0	0

Disclaimers: *Effective 2016,* ***collection of "Property Damage Only" (PDO) crash data elements was reduced for vehicles and participants.*** *Age, Gender, License, Error and other elements are no longer available for PDO crash reporting. Please keep this in mind when comparing 2016 PDO crash data to prior years.*

A higher number of crashes may be reported as of 2011 compared to prior years. This does not necessarily reflect an increase in annual crashes. The higher numbers may result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics. For all disclaimers, see https://www.oregon.gov/ODOT/Data/documents/Crash_Data_Disclaimers.pdf.

TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT

URBAN NON-SYSTEM CRASH LISTING

CITY OF FLORENCE, LANE COUNTY

Intersectional Crashes at Kingwood St & 9th St in Florence, OR.

January 1, 2016 through December 31, 2020

SER# INVEST UNLOC?	SPEED	ALC	DRUG / MJ	SCHL	WORK	DATE DAY/TIME LAT/LONG	FC DISTNC	CITY STREET FIRST STREET SECOND STREET INTERSECTION SEQ #	RD CHAR DIRECT LOCTN	INT-TYP (MEDIAN) LEGS (#LANES)	INT-REL TRAF-CONTL	OFF-RD RNDBT DRVWY	WTHR SURF LIGHT	CRASH TYP COLL TYP SVRTY	V#	SPCL USE TRLR QTY OWNER	MOVE FROM TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
01920	N	N	N			05/31/2016	17	KINGWOOD ST	INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE 9	STRGHT											02
NO RPT			N			Tue 3P	0	9TH ST	CN		STOP SIGN	N	DRY	ANGL		N/A	E W									000		00
No						43 58 28.68 -124 6 31.29		1	01	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	U	UNK		000	000		00
																							UNK					
															02	NONE 9	STRGHT											
																N/A	N S									000		00
																PSNGR CAR		01	DRVR	NONE	00	U	UNK		000	000		00
																							UNK					
02035	N	N	N			06/12/2017	17	KINGWOOD ST	INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE 0	STRGHT										013	02
NO RPT			N			Mon 7P	0	9TH ST	CN		STOP SIGN	N	DRY	ANGL		PRVTE	S N									000		00
No						43 58 28.68 -124 6 31.29		1	02	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	80	M	OTH-Y		028	000		02
																							N-RES					
																		02	PSNG	INJC	74	F			000	000		00
															02	NONE 1	STRGHT											
																PRVTE	E W									000	013	00
																PSNGR CAR		01	DRVR	INJC	56	M	OR-Y		000	000		00
																							OR<25					
																		02	PSNG	INJC	34	M			000	000		00
															03	NONE 0	STOP											
																PRVTE	N S									022		00
																PSNGR CAR		01	DRVR	INJC	65	M	OTH-Y		000	000		00
																							OR<25					
																		02	PSNG	INJC	51	F			000	000		00
02929	N	N	N			09/22/2019	17	KINGWOOD ST	INTER	CROSS	N	N	RAIN	ANGL-OTH	01	NONE 9	STRGHT											02
NONE			N			Sun 12P	0	9TH ST	CN		STOP SIGN	N	WET	ANGL		N/A	E W									000		00
No						43 58 28.69 -124 6 31.28		1	02	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	U	UNK		000	000		00
																							UNK					
															02	NONE 9	STRGHT											
																N/A	S N									000		00
																PSNGR CAR		01	DRVR	NONE	00	U	UNK		000	000		00
																							UNK					
00450	N	N	N			02/10/2020	17	KINGWOOD ST	INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE 9	STRGHT											02
CITY			N			Mon 11A	0	9TH ST	CN		STOP SIGN	N	DRY	ANGL		N/A	S N									015		00
No						43 58 28.68 -124 6 31.29		1	02	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	U	UNK		000	000		00
																							UNK					
															02	NONE 9	STRGHT											
																N/A	E W									000		00
																PSNGR CAR		01	DRVR	NONE	00	U	UNK		000	000		00
																							UNK					

OREGON DEPARTMENT OF TRANSPORTATION - POLICY, DATA AND ANALYSIS DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
URBAN NON-SYSTEM CRASH LISTING

CITY OF FLORENCE, LANE COUNTY

Intersectional Crashes at Kingwood St & 9th St in Florence, OR.
January 1, 2016 through December 31, 2020

SER# INVEST UNLOC?	SPEED / ALC / DRUG/MJ / SCHL / WORK (S P E E D, E A L C, D R U G / M J, S C H L, W O R K)	DATE DAY/TIME *LAT/LONG*	FC DISTNC	CITY STREET FIRST STREET SECOND STREET INTERSECTION SEQ #	RD CHAR DIRECT LOCTN	INT-TYP (MEDIAN) LEGS (#LANES)	INT-REL TRAF- CONTL	OFF-RD RNDBT DRVWY	WTHR SURF LIGHT	CRASH TYP COLL TYP SVRTY	V#	SPCL USE TRLR QTY OWNER	MOVE FROM TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN EVENT	CAUSE
03302	N N N	10/23/2019	17	KINGWOOD ST	INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE 9	STRGHT										02
NONE	N	Wed 1P	0	9TH ST	CN		UNKNOWN	N	DRY	ANGL		N/A	W E									000	00
No	*43 58 28.68*	*-124 6 31.29*		1	03	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	U	UNK		000	000	00
																			UNK				
											02	NONE 9	STRGHT										
												N/A	N S									000	00
												PSNGR CAR		01	DRVR	NONE	00	U	UNK		000	000	00
																			UNK				

OREGON DEPARTMENT OF TRANSPORTATION - POLICY, DATA AND ANALYSIS DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
CRASH SUMMARIES BY YEAR BY COLLISION TYPE

Intersectional Crashes at Kingwood St & Airport Rd (15th St) in Florence, OR.
January 1, 2016 through December 31, 2020

COLLISION TYPE	FATAL CRASHES	NON-FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER-SECTION	INTER-SECTION RELATED	OFF-ROAD
YEAR: 2020														
TURNING MOVEMENTS	0	0	1	1	0	0	0	1	0	1	0	1	0	0
2020 TOTAL	0	0	1	1	0	0	0	1	0	1	0	1	0	0
YEAR: 2019														
TURNING MOVEMENTS	0	0	1	1	0	0	0	1	0	1	0	1	0	0
2019 TOTAL	0	0	1	1	0	0	0	1	0	1	0	1	0	0
YEAR: 2017														
TURNING MOVEMENTS	0	1	0	1	0	1	0	0	1	1	0	1	0	0
2017 TOTAL	0	1	0	1	0	1	0	0	1	1	0	1	0	0
FINAL TOTAL	0	1	2	3	0	1	0	2	1	3	0	3	0	0

Disclaimers: *Effective 2016,* ***collection of "Property Damage Only" (PDO) crash data elements was reduced for vehicles and participants.*** *Age, Gender, License, Error and other elements are no longer available for PDO crash reporting. Please keep this in mind when comparing 2016 PDO crash data to prior years.*

A higher number of crashes may be reported as of 2011 compared to prior years. This does not necessarily reflect an increase in annual crashes. The higher numbers may result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics. For all disclaimers, see https://www.oregon.gov/ODOT/Data/documents/Crash_Data_Disclaimers.pdf.

CITY OF FLORENCE, LANE COUNTY

Intersectional Crashes at Kingwood St & Airport Rd (15th St) in Florence, OR.
January 1, 2016 through December 31, 2020

SER# INVEST UNLOC?	SPED	ALC	DRUG / MJ	SCHL	WORK	DATE DAY/TIME LAT/LONG	FC DISTNC	CITY STREET FIRST STREET SECOND STREET INTERSECTION SEQ #	RD CHAR DIRECT LOCTN	INT-TYP (MEDIAN) LEGS (#LANES)	INT-REL TRAF- CONTL	OFF-RD RNDBT DRVWY	WTHR SURF LIGHT	CRASH TYP COLL TYP SVRTY	V#	SPCL USE TRLR QTY OWNER	MOVE FROM TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
04513	N	N	N			12/05/2017	17	AIRPORT RD	INTER	3-LEG	N	N	CLR	ANGL-STP	01	NONE 0	TURN-R										012	10
NONE			N			Tue 9A	0	KINGWOOD ST	E		STOP SIGN	N	WET	TURN		PRVTE	S E									000	012	00
No						43 58 43.15 -124 6 31.47		1	06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	35	M	OR-Y		017	000		10
																							OR<25					
															02	NONE 0	STOP											
																PRVTE	E W									012		00
																PSNGR CAR		01	DRVR	INJC	57	M	OR-Y		000	000		00
																							OR<25					
03531	N	N	N	N	N	11/11/2019	17	AIRPORT RD	INTER	3-LEG	N	N	CLR	ANGL-OTH	01	NONE 9	TURN-L											02
CITY			N			Mon 1P	0	KINGWOOD ST	CN		STOP SIGN	N	DRY	TURN		N/A	E S									015		00
No						43 58 43.15 -124 6 31.47		1	01	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	U	UNK		000	000		00
																							UNK					
															02	NONE 9	STRGHT											
																N/A	N S									000		00
																PSNGR CAR		01	DRVR	NONE	00	U	UNK		000	000		00
																							UNK					
00485	N	N	N			02/12/2020	17	AIRPORT RD	INTER	3-LEG	N	N	CLR	ANGL-OTH	01	NONE 9	TURN-L											02
NONE			N			Wed 3P	0	KINGWOOD ST	CN		STOP SIGN	N	DRY	TURN		N/A	E S									015		00
No						43 58 43.15 -124 6 31.47		1	01	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	U	UNK		000	000		00
																							UNK					
															02	NONE 9	STRGHT											
																N/A	N S									000		00
																PSNGR CAR		01	DRVR	NONE	00	U	UNK		000	000		00
																							UNK					

OREGON DEPARTMENT OF TRANSPORTATION - POLICY, DATA AND ANALYSIS DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
CRASH SUMMARIES BY YEAR BY COLLISION TYPE

Intersectional Crashes at Kingwood St & 27th St in Florence, OR.
January 1, 2016 through December 31, 2020

COLLISION TYPE	FATAL CRASHES	NON-FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER-SECTION	INTER-SECTION RELATED	OFF-ROAD
YEAR: 2018														
FIXED / OTHER OBJECT	0	0	2	2	0	0	0	2	0	2	0	2	0	2
2018 TOTAL	0	0	2	2	0	0	0	2	0	2	0	2	0	2
FINAL TOTAL	0	0	2	2	0	0	0	2	0	2	0	2	0	2

Disclaimers: *Effective 2016,* ***collection of “Property Damage Only” (PDO) crash data elements was reduced for vehicles and participants.*** *Age, Gender, License, Error and other elements are no longer available for PDO crash reporting. Please keep this in mind when comparing 2016 PDO crash data to prior years.*

A higher number of crashes may be reported as of 2011 compared to prior years. This does not necessarily reflect an increase in annual crashes. The higher numbers may result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics. For all disclaimers, see https://www.oregon.gov/ODOT/Data/documents/Crash_Data_Disclaimers.pdf.

CITY OF FLORENCE, LANE COUNTY

Intersectional Crashes at Kingwood St & 27th St in Florence, OR.
January 1, 2016 through December 31, 2020

SER# INVEST UNLOC?	SPED	ALC	DRUG / MJ	SCHL	WORK	DATE DAY/TIME LAT/LONG	FC DISTNC	CITY STREET FIRST STREET SECOND STREET INTERSECTION SEQ #	RD CHAR DIRECT LOCTN	INT-TYP (MEDIAN) LEGS (#LANES)	INT-REL TRAF- CONTL	OFF-RD RNDBT DRVWY	WTHR SURF LIGHT	CRASH TYP COLL TYP SVRTY	V#	SPCL USE TRLR QTY OWNER	MOVE FROM TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
01120	N	N	N			04/20/2018	17	NW KINGWOOD ST	INTER	CROSS	N	Y	CLR	FIX OBJ	01	NONE 9	STRGHT										062	10
NO RPT			N			Fri 1P	0	NW 27TH ST	N		STOP SIGN	N	DRY	FIX		N/A	N S									000		00
No						*43 59 24.26 -124 6 34.99*		1	06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	U	UNK		000	000		00
																							UNK					
01316	N	N	N			04/20/2018	17	NW KINGWOOD ST	INTER	CROSS	N	Y	CLR	FIX OBJ	01	NONE 9	STRGHT										062	10
NONE			N			Fri 1P	0	NW 27TH ST	S		STOP SIGN	N	DRY	FIX		N/A	N S									000		00
No						*43 59 24.26 -124 6 35.00*		1	04	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	U	UNK		000	000		00
																							UNK					

TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT

CRASH SUMMARIES BY YEAR BY COLLISION TYPE

Intersectional Crashes at Kingwood St & 35th St in Florence, OR.

January 1, 2016 through December 31, 2020

COLLISION TYPE	FATAL CRASHES	NON-FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER-SECTION	INTER-SECTION RELATED	OFF-ROAD
YEAR:														
TOTAL														
FINAL TOTAL														

Disclaimers: *Effective 2016,* ***collection of "Property Damage Only" (PDO) crash data elements was reduced for vehicles and participants.*** *Age, Gender, License, Error and other elements are no longer available for PDO crash reporting. Please keep this in mind when comparing 2016 PDO crash data to prior years.*

A higher number of crashes may be reported as of 2011 compared to prior years. This does not necessarily reflect an increase in annual crashes. The higher numbers may result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics. For all disclaimers, see https://www.oregon.gov/ODOT/Data/documents/Crash_Data_Disclaimers.pdf.

TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
CRASH SUMMARIES BY YEAR BY COLLISION TYPE

Intersectional Crashes at OR-126, Florence-Eugene Hwy (#062) & North Fork Siuslaw Rd in Lane County, OR.
January 1, 2016 through December 31, 2020

COLLISION TYPE	FATAL CRASHES	NON-FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER-SECTION	INTER-SECTION RELATED	OFF-ROAD
YEAR: 2017														
TURNING MOVEMENTS	0	1	0	1	0	1	0	0	1	1	0	1	0	0
2017 TOTAL	0	1	0	1	0	1	0	0	1	1	0	1	0	0
FINAL TOTAL	0	1	0	1	0	1	0	0	1	1	0	1	0	0

Disclaimers: *Effective 2016,* ***collection of "Property Damage Only" (PDO) crash data elements was reduced for vehicles and participants.*** *Age, Gender, License, Error and other elements are no longer available for PDO crash reporting. Please keep this in mind when comparing 2016 PDO crash data to prior years.*

A higher number of crashes may be reported as of 2011 compared to prior years. This does not necessarily reflect an increase in annual crashes. The higher numbers may result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics. For all disclaimers, see https://www.oregon.gov/ODOT/Data/documents/Crash_Data_Disclaimers.pdf.

TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT

CONTINUOUS SYSTEM CRASH LISTING

062 FLORENCE-EUGENE

Intersectional Crashes at OR-126, Florence-Eugene Hwy (#062) & North Fork Siuslaw Rd in Lane County, OR.

January 1, 2016 through December 31, 2020

SER# INVEST UNLOC?	SPEED	ALC	DRUG/MJ	SCHL	WORK	DATE DAY/TIME *LAT/LONG*	COUNTY CITY URBAN AREA	RD# FC CMPT/MLG MILEPNT LRS	CONN # FIRST STREET SECOND STREET INTERSECTION SEQ#	RD CHAR DIRECT LOCTN	INT-TYP (MEDIAN) LEGS (#LANES)	INT-REL TRAF- CNTL	OFFRD RNDBT DRVWY	WTHR SURF LIGHT	CRASH TYP COLL TYP SVRTY	V#	SPCL USE TRLR QTY OWNER VEH TYPE	MOVE FROM TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
04128	N	N	N	N	N	11/10/2017	LANE	1 14		INTER	3-LEG	N	N	RAIN	ANGL-OTH	01	NONE 0	TURN-R											08
STATE			N			Fri 10A		MN 0		N		STOP SIGN	N	WET	TURN		PRVTE	E N									000		00
							FLORENCE UA	1.00		06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	42	F	OR-Y		001	017		08
No						*43 58 35.19 -124*	*5 2.51*	006200100S00																OR<25					
																02	NONE 0	STRGHT											
																	PRVTE	N S									006		00
																	PSNGR CAR		01	DRVR	INJC	39	F	OR-Y		000	000		00
																								OR<25					

TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT

CRASH SUMMARIES BY YEAR BY COLLISION TYPE

Intersectional Crashes at OR-126, Florence-Eugene Hwy (#062) & Quince St in Florence, OR.

January 1, 2016 through December 31, 2020

COLLISION TYPE	FATAL CRASHES	NON-FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER-SECTION	INTER-SECTION RELATED	OFF-ROAD
YEAR: 2020														
TURNING MOVEMENTS	0	1	0	1	0	1	0	1	0	1	0	1	0	0
2020 TOTAL	0	1	0	1	0	1	0	1	0	1	0	1	0	0
YEAR: 2019														
ANGLE	0	1	0	1	0	1	0	1	0	1	0	1	0	0
REAR-END	0	0	1	1	0	0	0	1	0	0	1	1	0	0
2019 TOTAL	0	1	1	2	0	1	0	2	0	1	1	2	0	0
YEAR: 2018														
ANGLE	0	1	1	2	0	1	0	1	1	2	0	2	0	0
BACKING	0	0	1	1	0	0	0	1	0	1	0	1	0	0
TURNING MOVEMENTS	0	1	1	2	0	1	0	2	0	2	0	2	0	0
2018 TOTAL	0	2	3	5	0	2	0	4	1	5	0	5	0	0
YEAR: 2017														
ANGLE	0	1	1	2	0	1	0	1	1	2	0	2	0	0
REAR-END	0	0	1	1	0	0	0	1	0	1	0	1	0	0
TURNING MOVEMENTS	0	0	1	1	0	0	0	0	1	1	0	1	0	0
2017 TOTAL	0	1	3	4	0	1	0	2	2	4	0	4	0	0
FINAL TOTAL	0	5	7	12	0	5	0	9	3	11	1	12	0	0

Disclaimers: *Effective 2016,* ***collection of "Property Damage Only" (PDO) crash data elements was reduced for vehicles and participants.*** *Age, Gender, License, Error and other elements are no longer available for PDO crash reporting. Please keep this in mind when comparing 2016 PDO crash data to prior years.*

A higher number of crashes may be reported as of 2011 compared to prior years. This does not necessarily reflect an increase in annual crashes. The higher numbers may result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics. For all disclaimers, see https://www.oregon.gov/ODOT/Data/documents/Crash_Data_Disclaimers.pdf.

062 FLORENCE-EUGENE

Intersectional Crashes at OR-126, Florence-Eugene Hwy (#062) & Quince St in Florence, OR.
January 1, 2016 through December 31, 2020

```
           D
           R
       S   U
       P   G S W                                  RD#  FC    CONN #                            INT-TYP                                          SPCL USE
SER#   E A / C O  DATE        COUNTY              CMPT/MLG  FIRST  STREET        RD CHAR  (MEDIAN)  INT-REL  OFFRD  WTHR   CRASH TYP      TRLR QTY   MOVE                           A  S
INVEST E L M H R  DAY/TIME    CITY                MILEPNT   SECOND STREET        DIRECT    LEGS     TRAF-    RNDBT  SURF   COLL TYP       OWNER      FROM       PRTC  INJ       G  E  LICNS  PED
UNLOC? D C J L K  LAT/LONG    URBAN AREA          LRS       INTERSECTION SEQ#    LOCTN    (#LANES)  CNTL     DRVWY  LIGHT  SVRTY     V#  VEH TYPE   TO    P#  TYPE  SVRTY     E  X  RES    LOC   ERROR        ACTN  EVENT   CAUSE

01312  N N N N N  05/04/2019  LANE                1    14                          INTER     CROSS    N               N  CLR   S-1STOP   01  NONE    9  STRGHT                                                                     29
CITY       N      Sat    8P   FLORENCE            MN    0   FLORENCE-EUGENE HY   S                  STOP SIGN       N  DRY   REAR           N/A        S  N                                                        000            00
                              FLORENCE UA          0.11     QUINCE ST            06           0                     N  DUSK  PDO            PSNGR CAR         01  DRVR  NONE   00  U  UNK          000          000            00
No      43 58  28.80 -124   6   4.25              006200100S00               1                                                                                                   UNK

                                                                                                                                          02  NONE    9  STOP
                                                                                                                                              N/A        S  N                                                        011            00
                                                                                                                                              PSNGR CAR         01  DRVR  NONE   00  U  UNK          000          000            00
                                                                                                                                                                                   UNK

01134  N N N      04/05/2017  LANE                1    14                          INTER     CROSS    N               N  CLR   ANGL-OTH  01  NONE    9  STRGHT                                                                     02
NONE       N      Wed    4P   FLORENCE            MN    0   FLORENCE-EUGENE HY   CN                 STOP SIGN       N  DRY   ANGL           N/A        S  N                                                        000            00
                              FLORENCE UA          0.11     QUINCE ST            02           0                     N  DAY   PDO            PSNGR CAR         01  DRVR  NONE   00  U  UNK          000          000            00
No      43 58  28.80 -124   6   4.25              006200100S00               1                                                                                                   UNK

                                                                                                                                          02  NONE    9  STRGHT
                                                                                                                                              N/A        E  W                                                        000            00
                                                                                                                                              PSNGR CAR         01  DRVR  NONE   00  U  UNK          000          000            00
                                                                                                                                                                                   UNK

01050  N N N      04/15/2018  LANE                1    14                          INTER     CROSS    N               N  RAIN  ANGL-OTH  01  NONE    0  STRGHT                                                                     02
CITY       N      Sun   12P   FLORENCE            MN    0   FLORENCE-EUGENE HY   CN                 STOP SIGN       N  WET   ANGL           PRVTE      E  W                                                        000            00
                              FLORENCE UA          0.11     QUINCE ST            02           0                     N  DAY   INJ            PSNGR CAR         01  DRVR  INJC   54  M  OR-Y         000          000            00
No      43 58  28.80 -124   6   4.25              006200100S00               1                                                                                                   OR<25

                                                                                                                                          02  NONE    0  STRGHT
                                                                                                                                              PRVTE      S  N                                                        015            00
                                                                                                                                              PSNGR CAR         01  DRVR  NONE   76  M  OTH-Y        028          000            02
                                                                                                                                                                                   N-RES

03177  N N N N N  12/24/2020  LANE                1    14                          INTER     CROSS    N               N  CLR   ANGL-OTH  01  NONE       TURN-L                                                                     02
CITY       N      Thu    1P   FLORENCE            MN    0   FLORENCE-EUGENE HY   CN                 STOP SIGN       N  DRY   TURN           PRVTE      S  W                                                        000            00
                              FLORENCE UA          0.11     QUINCE ST            02           0                     N  DAY   INJ            PSNGR CAR         01  DRVR  NONE   67  M  OR-Y         028          000            02
No      43 58  28.81 -124   6   4.25              006200100S00               1                                                                                                   OR<25

                                                                                                                                          02  NONE       TURN-L
                                                                                                                                              PRVTE      E  S                                                        000            00
                                                                                                                                              PSNGR CAR         01  DRVR  INJC   71  F  OR-Y         000          000            00
                                                                                                                                                                                   OR<25

00507  N N N N N  02/10/2017  LANE                1    14                          INTER     CROSS    N               N  RAIN  O-1 L-TURN 01 NONE    9  STRGHT                                                                     02
NONE       N      Fri    5P   FLORENCE            MN    0   FLORENCE-EUGENE HY   CN                 NONE            N  WET   TURN           N/A        W  E                                                        000            00
                              FLORENCE UA          0.11     QUINCE ST            03           0                     N  DAY   PDO            PSNGR CAR         01  DRVR  NONE   00  U  UNK          000          000            00
No      43 58  28.80 -124   6   4.25              006200100S00               1                                                                                                   UNK
```

062 FLORENCE-EUGENE   Intersectional Crashes at OR-126, Florence-Eugene Hwy (#062) & Quince St in Florence, OR.
January 1, 2016 through December 31, 2020

```
          D
          R
      S   U
      P   G S W                                 RD#  FC    CONN #                              INT-TYP                                              SPCL USE
SER#    E A / C O  DATE          COUNTY          CMPT/MLG  FIRST  STREET        RD CHAR  (MEDIAN)  INT-REL  OFFRD  WTHR  CRASH TYP    TRLR QTY  MOVE                       A  S
INVEST  E L M H R  DAY/TIME      CITY            MILEPNT   SECOND STREET        DIRECT     LEGS    TRAF-    RNDBT  SURF  COLL TYP      OWNER     FROM       PRTC  INJ      G  E  LICNS  PED
UNLOC?  D C J L K  LAT/LONG      URBAN AREA      LRS       INTERSECTION SEQ#    LOCTN    (#LANES)  CNTL     DRVWY  LIGHT SVRTY    V# VEH TYPE    TO     P# TYPE  SVRTY    E  X  RES    LOC  ERROR     ACTN  EVENT    CAUSE

                                                                                                                                  02 NONE    9 TURN-L
                                                                                                                                     N/A       E  S                                                       000              00
                                                                                                                                     PSNGR CAR         01 DRVR NONE  00 U UNK          000              000              00
                                                                                                                                                                          UNK

03356  N N N N N 09/17/2017 LANE            1    14                         INTER     CROSS  N          N RAIN  ANGL-OTH   01 NONE    0 TURN-L                                                              02
CITY       N     Sun     2P FLORENCE        MN    0   FLORENCE-EUGENE HY   CN                STOP SIGN  N WET   ANGL          PRVTE      S  W                                                       015              00
                            FLORENCE UA      0.11    QUINCE ST             04          0                N DAY   INJ           PSNGR CAR         01 DRVR NONE  26 F OTH-Y        028              000              02
No     43 58  28.80 -124  6   4.25          006200100S00              1                                                                                             N-RES

                                                                                                                                  02 NONE    0 STRGHT
                                                                                                                                     PRVTE     W  E                                                       000              00
                                                                                                                                     PSNGR CAR         01 DRVR INJC  60 M OR-Y         000              000              00
                                                                                                                                                                          OR<25

00574  N N N   Y 02/26/2018 LANE            1    14                         INTER     CROSS  N          N CLR   ANGL-STP   01 NONE    9 BACK                                                                08
NONE       N     Mon     1P FLORENCE        MN    0   FLORENCE-EUGENE HY   CN                STOP SIGN  N DRY   BACK          N/A        S  E                                                       000              00
                            FLORENCE UA      0.11    QUINCE ST             04          0                N DAY   PDO           PSNGR CAR         01 DRVR NONE  00 U UNK          000              000              00
No     43 58  28.80 -124  6   4.25          006200100S00              1                                                                                             UNK

                                                                                                                                  02 NONE    9 STOP
                                                                                                                                     N/A       E  W                                                       011              00
                                                                                                                                     PSNGR CAR         01 DRVR NONE  00 U UNK          000              000              00
                                                                                                                                                                          UNK

01064  N N N     04/16/2018 LANE            1    14                         INTER     CROSS  N          N CLD   ANGL-OTH   01 NONE    9 STRGHT                                                              02
CITY       N     Mon    12P FLORENCE        MN    0   FLORENCE-EUGENE HY   CN                STOP SIGN  N DRY   TURN          N/A        W  E                                                       000              00
                            FLORENCE UA      0.11    QUINCE ST             04          0                N DAY   PDO           PSNGR CAR         01 DRVR NONE  00 U UNK          000              000              00
No     43 58  28.80 -124  6   4.25          006200100S00              1                                                                                             UNK

                                                                                                                                  02 NONE    9 TURN-L
                                                                                                                                     N/A       S  W                                                       015              00
                                                                                                                                     PSNGR CAR         01 DRVR NONE  00 U UNK          000              000              00
                                                                                                                                                                          UNK

01150  N N N N N 04/23/2018 LANE            1    14                         INTER     CROSS  N          N CLR   ANGL-OTH   01 NONE    0 TURN-L                                                    001       02
STATE      N     Mon     2P FLORENCE        MN    0   OREGON COAST HY      CN                STOP SIGN  N DRY   TURN          PRVTE      S  W                                                       015              00
                            FLORENCE UA      0.11    QUINCE ST             04          0                N DAY   INJ           PSNGR CAR         01 DRVR NONE  74 M OR-Y         028              000              02
No     43 58  28.80 -124  6   4.25          006200100S00              1                                                                                             OR<25

                                                                                                                                  02 NONE    0 STRGHT
                                                                                                                                     PRVTE     W  E                                                       000              00
                                                                                                                                     MTRCYCLE          01 DRVR INJA  66 M OR-Y         000              000  001         00
                                                                                                                                                                          OR<25
```

062 FLORENCE-EUGENE

Intersectional Crashes at OR-126, Florence-Eugene Hwy (#062) & Quince St in Florence, OR.
January 1, 2016 through December 31, 2020

SER# / INVEST / UNLOC?	S P E E D / A L C / D R U G / M J / G H L / S C R / W O K	DATE / DAY/TIME / LAT/LONG	COUNTY / CITY / URBAN AREA	RD# FC / CMPT/MLG / MILEPNT / LRS	CONN # / FIRST STREET / SECOND STREET / INTERSECTION SEQ#	RD CHAR / DIRECT / LOCTN	INT-TYP / (MEDIAN) / LEGS / (#LANES)	INT-REL / TRAF- / CNTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / VEH TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN EVENT	CAUSE
02281	N N N	07/30/2018	LANE	1 14		INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE 9	STRGHT										04
CITY	N	Mon 2P	FLORENCE	MN 0	FLORENCE-EUGENE HY	CN		STOP SIGN	N	DRY	ANGL		N/A	S N									000	00
			FLORENCE UA	0.11	QUINCE ST	04	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	U	UNK		000	000	00
No		43 58 28.81 -124 6 4.27		006200100S00	1															UNK				
												02	NONE 9	STRGHT										
													N/A	W E									000	00
													PSNGR CAR		01	DRVR	NONE	00	U	UNK		000	000	00
																				UNK				
02552	N N N N N	08/23/2019	LANE	1 14		INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE	STRGHT										02
CITY	N	Fri 2P	FLORENCE	MN 0	FLORENCE-EUGENE HY	CN		STOP SIGN	N	DRY	ANGL		UNKN	W E									000	00
			FLORENCE UA	0.11	QUINCE ST	04	0		N	DAY	INJ		PSNGR CAR		01	DRVR	INJC	89	F	OR-Y		000	000	00
No		43 58 28.80 -124 6 4.25		006200100S00	1															OR<25				
												02	NONE	STRGHT										
													PRVTE	S N									015	00
													PSNGR CAR		01	DRVR	NONE	17	F	OR-Y		028	000	02
																				OR<25				

CITY OF FLORENCE, LANE COUNTY

Intersectional Crashes at OR-126, Florence-Eugene Hwy (#062) & Quince St in Florence, OR.
January 1, 2016 through December 31, 2020

SER# INVEST UNLOC?	SPE EL D / A L C	DRUG / MJ	S C H L	W O R K	DATE DAY/TIME LAT/LONG	FC DISTNC	CITY STREET FIRST STREET SECOND STREET INTERSECTION SEQ #	RD CHAR DIRECT LOCTN	INT-TYP (MEDIAN) LEGS (#LANES)	INT-REL TRAF-CONTL	OFF-RD RNDBT DRVWY	WTHR SURF LIGHT	CRASH TYP COLL TYP SVRTY	V#	SPCL USE TRLR QTY OWNER	MOVE FROM TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
01354	N N	N			04/21/2017	17	FLORENCE-EUGENE HY	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 9	STRGHT											29
NONE		N			Fri 4P	0	QUINCE ST	S		STOP SIGN	N	DRY	REAR		N/A	S N									000		00
No					*43 58 28.80 -124 6 4.25*		1	06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	U	UNK UNK		000	000		00
														02	NONE 9	STOP											
															N/A	S N									011		00
															PSNGR CAR		01	DRVR	NONE	00	U	UNK UNK		000	000		00

OREGON DEPARTMENT OF TRANSPORTATION - POLICY, DATA AND ANALYSIS DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
CRASH SUMMARIES BY YEAR BY COLLISION TYPE

Intersectional Crashes at OR-126, Florence-Eugene Hwy (#062) & Spruce St in Florence, OR.
January 1, 2016 through December 31, 2020

COLLISION TYPE	FATAL CRASHES	NON-FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER-SECTION	INTER-SECTION RELATED	OFF-ROAD
YEAR: 2017														
TURNING MOVEMENTS	0	0	1	1	0	0	0	1	0	1	0	1	0	0
2017 TOTAL	0	0	1	1	0	0	0	1	0	1	0	1	0	0
YEAR: 2016														
REAR-END	0	0	1	1	0	0	0	1	0	1	0	1	0	0
2016 TOTAL	0	0	1	1	0	0	0	1	0	1	0	1	0	0
FINAL TOTAL	0	0	2	2	0	0	0	2	0	2	0	2	0	0

Disclaimers: *Effective 2016,* ***collection of "Property Damage Only" (PDO) crash data elements was reduced for vehicles and participants.*** *Age, Gender, License, Error and other elements are no longer available for PDO crash reporting. Please keep this in mind when comparing 2016 PDO crash data to prior years.*

A higher number of crashes may be reported as of 2011 compared to prior years. This does not necessarily reflect an increase in annual crashes. The higher numbers may result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics. For all disclaimers, see https://www.oregon.gov/ODOT/Data/documents/Crash_Data_Disclaimers.pdf.

TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT

CONTINUOUS SYSTEM CRASH LISTING

062 FLORENCE-EUGENE

Intersectional Crashes at OR-126, Florence-Eugene Hwy (#062) & Spruce St in Florence, OR.

January 1, 2016 through December 31, 2020

```
              D
              R
         S    U
         P   G S W                                 RD#  FC    CONN #                                INT-TYP                                              SPCL USE
SER#     E A / C O  DATE          COUNTY           CMPT/MLG   FIRST  STREET          RD CHAR    (MEDIAN)  INT-REL  OFFRD  WTHR   CRASH TYP       TRLR QTY     MOVE                            A   S
INVEST   E L M H R  DAY/TIME      CITY             MILEPNT    SECOND STREET          DIRECT      LEGS     TRAF-    RNDBT  SURF   COLL TYP        OWNER        FROM         PRTC  INJ         G   E  LICNS  PED
UNLOC?   D C J L K  LAT/LONG      URBAN AREA       LRS        INTERSECTION SEQ#      LOCTN     (#LANES)   CNTL     DRVWY  LIGHT  SVRTY       V#  VEH TYPE     TO       P#  TYPE  SVRTY       E   X  RES    LOC  ERROR        ACTN  EVENT     CAUSE

01653    N N N      05/09/2016    LANE             1    14                           INTER       CROSS    N           N   CLR    S-1STOP     01  NONE     9   STRGHT                                                                         29
NONE       N        Mon     10A   FLORENCE         MN    0    FLORENCE-EUGENE HY     E                    STOP SIGN   N   DRY    REAR            N/A          W  E                                                           000             00
                                  FLORENCE UA        0.24     SPRUCE ST              05            0                  N   DAY    PDO             PSNGR CAR             01  DRVR  NONE       00   U  UNK           000          000             00
No        43 58   28.02 -124      5  55.15         006200100S00                1                                                                                                             UNK
                                                                                                                                             02  NONE     9   STOP
                                                                                                                                                 N/A          W  E                                                           011             00
                                                                                                                                                 PSNGR CAR             01  DRVR  NONE       00   U  UNK           000          000             00
                                                                                                                                                                                                 UNK

02334    N N N N N  07/03/2017    LANE             1    14                           INTER       CROSS    N           N   CLR    O-1 L-TURN  01  NONE     9   TURN-L                                                                         02
CITY       N        Mon      1P   FLORENCE         MN    0    FLORENCE-EUGENE HY     CN                   STOP SIGN   N   DRY    TURN            N/A          W  N                                                           000             00
                                  FLORENCE UA        0.24     SPRUCE ST              02            0                  N   DAY    PDO             PSNGR CAR             01  DRVR  NONE       00   U  UNK           000          000             00
No        43 58   28.02 -124      5  55.15         006200100S00                1                                                                                                             UNK
                                                                                                                                             02  NONE     9   STRGHT
                                                                                                                                                 N/A          E  W                                                           000             00
                                                                                                                                                 MTRCYCLE              01  DRVR  NONE       00   U  UNK           000          000             00
                                                                                                                                                                                                 UNK
```

TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT

CRASH SUMMARIES BY YEAR BY COLLISION TYPE

Intersectional Crashes at Rhododendron Dr & 9th St in Florence, OR.
January 1, 2016 through December 31, 2020

COLLISION TYPE	FATAL CRASHES	NON-FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER-SECTION	INTER-SECTION RELATED	OFF-ROAD
YEAR: 2016														
FIXED / OTHER OBJECT	0	0	1	1	0	0	0	0	1	0	1	1	0	1
2016 TOTAL	0	0	1	1	0	0	0	0	1	0	1	1	0	1
FINAL TOTAL	0	0	1	1	0	0	0	0	1	0	1	1	0	1

Disclaimers: *Effective 2016,* ***collection of "Property Damage Only" (PDO) crash data elements was reduced for vehicles and participants.*** *Age, Gender, License, Error and other elements are no longer available for PDO crash reporting. Please keep this in mind when comparing 2016 PDO crash data to prior years.*

A higher number of crashes may be reported as of 2011 compared to prior years. This does not necessarily reflect an increase in annual crashes. The higher numbers may result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics. For all disclaimers, see https://www.oregon.gov/ODOT/Data/documents/Crash_Data_Disclaimers.pdf.

CITY OF FLORENCE, LANE COUNTY

Intersectional Crashes at Rhododendron Dr & 9th St in Florence, OR.
January 1, 2016 through December 31, 2020

SER# INVEST UNLOC?	SPEED	ALC	DRUG/MJ	SCHL	WORK	DATE DAY/TIME *LAT/LONG*	FC DISTNC	CITY STREET FIRST STREET SECOND STREET INTERSECTION SEQ #	RD CHAR DIRECT LOCTN	INT-TYP (MEDIAN) LEGS (#LANES)	INT-REL TRAF- CONTL	OFF-RD RNDBT DRVWY	WTHR SURF LIGHT	CRASH TYP COLL TYP SVRTY	V#	SPCL USE TRLR QTY OWNER	MOVE FROM TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
00660	N	N	N	N	N	02/19/2016	17	RHODODENDRON DR	INTER	3-LEG	N	Y	RAIN	FIX OBJ	01	NONE 9	STRGHT										040,100	16
NONE			N			Fri 5A	0	9TH ST	S		NONE	N	WET	FIX		N/A	N S									000		00
No						*43 58 31.68 -124 7 14.13*		1	05	0		N	DARK	PDO		PSNGR CAR		01	DRVR	NONE	00	U	UNK		000	000		00
																							UNK					

OREGON DEPARTMENT OF TRANSPORTATION - POLICY, DATA AND ANALYSIS DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
CRASH SUMMARIES BY YEAR BY COLLISION TYPE

Intersectional Crashes at Rhododendron Dr & 35th St in Florence, OR.
January 1, 2016 through December 31, 2020

COLLISION TYPE	FATAL CRASHES	NON-FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER-SECTION	INTER-SECTION RELATED	OFF-ROAD
YEAR:														
TOTAL														
FINAL TOTAL														

Disclaimers: *Effective 2016,* ***collection of "Property Damage Only" (PDO) crash data elements was reduced for vehicles and participants.*** *Age, Gender, License, Error and other elements are no longer available for PDO crash reporting. Please keep this in mind when comparing 2016 PDO crash data to prior years.*

A higher number of crashes may be reported as of 2011 compared to prior years. This does not necessarily reflect an increase in annual crashes. The higher numbers may result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics. For all disclaimers, see https://www.oregon.gov/ODOT/Data/documents/Crash_Data_Disclaimers.pdf.

OREGON DEPARTMENT OF TRANSPORTATION - POLICY, DATA AND ANALYSIS DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
CRASH SUMMARIES BY YEAR BY COLLISION TYPE

Intersectional Crashes at Rhododendron Dr / 4th Ave & Heceta Beach Rd / Kiwanda St in Florence, OR.
January 1, 2016 through December 31, 2020

COLLISION TYPE	FATAL CRASHES	NON-FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER-SECTION	INTER-SECTION RELATED	OFF-ROAD
YEAR: 2020														
ANGLE	0	1	0	1	0	3	0	1	0	1	0	1	0	0
2020 TOTAL	0	1	0	1	0	3	0	1	0	1	0	1	0	0
YEAR: 2018														
ANGLE	0	1	0	1	0	4	0	1	0	1	0	1	0	0
2018 TOTAL	0	1	0	1	0	4	0	1	0	1	0	1	0	0
YEAR: 2016														
ANGLE	0	1	0	1	0	1	0	1	0	1	0	1	0	0
2016 TOTAL	0	1	0	1	0	1	0	1	0	1	0	1	0	0
FINAL TOTAL	0	3	0	3	0	8	0	3	0	3	0	3	0	0

Disclaimers: *Effective 2016,* ***collection of "Property Damage Only" (PDO) crash data elements was reduced for vehicles and participants.*** *Age, Gender, License, Error and other elements are no longer available for PDO crash reporting. Please keep this in mind when comparing 2016 PDO crash data to prior years.*

A higher number of crashes may be reported as of 2011 compared to prior years. This does not necessarily reflect an increase in annual crashes. The higher numbers may result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics. For all disclaimers, see https://www.oregon.gov/ODOT/Data/documents/Crash_Data_Disclaimers.pdf.

CITY OF FLORENCE, LANE COUNTY

Intersectional Crashes at Rhododendron Dr / 4th Ave & Heceta Beach Rd / Kiwanda St in Florence, OR.
January 1, 2016 through December 31, 2020

SER# INVEST UNLOC?	SPED EALC DRUG/MJ SCHL WORK	DATE DAY/TIME *LAT/LONG*	FC DISTNC	CITY STREET FIRST STREET SECOND STREET INTERSECTION SEQ #	RD CHAR DIRECT LOCTN	INT-TYP (MEDIAN) LEGS (#LANES)	INT-REL TRAF-CONTL	OFF-RD RNDBT DRVWY	WTHR SURF LIGHT	CRASH TYP COLL TYP SVRTY	V#	SPCL USE TRLR QTY OWNER	MOVE FROM TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
02533	N N N N N	10/16/2020	17	HECETA BEACH RD	INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE 0	STRGHT											27,03
CITY	N	Fri 10A	0	4TH ST	CN		STOP SIGN	N	DRY	ANGL		PRVTE	S N									000		00
No	*44 1 59.82*	*-124 7 45.05*		1	02	0		N	DAY	INJ		PSNGR CAR		01	DRVR	INJB	75	F	OR-Y OR<25		016,021	038		27,03
											02	NONE 0	STRGHT											
												PRVTE	E W									000		00
												PSNGR CAR		01	DRVR	INJA	62	M	OTH-Y N-RES		000	000		00
														02	PSNG	INJA	66	F			000	000		00
02397	N N N N N	07/04/2016	17	HECETA BEACH RD	INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE 0	STRGHT											02
CITY	N	Mon 2P	0	RHODODENDRON DR	CN		STOP SIGN	N	DRY	ANGL		PRVTE	S N									000		00
No	*44 1 59.82*	*-124 7 45.05*		1	04	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	73	F	OR-Y OR<25		000	000		00
														02	PSNG	NO<5	01	F			000	000		00
														03	PSNG	INJC	52	F			000	000		00
											02	NONE 0	STRGHT											
												PRVTE	W E									015		00
												PSNGR CAR		01	DRVR	NONE	72	F	OR-Y OR>25		028	000		02
02836	N N N N N	09/12/2018	17	HECETA BEACH RD	INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE 0	STRGHT											27,02
STATE	N	Wed 1P	0	RHODODENDRON DR	CN		STOP SIGN	N	DRY	ANGL		PRVTE	W E									000		00
No	*44 1 59.82*	*-124 7 45.05*		1	04	0		N	DAY	INJ		PSNGR CAR		01	DRVR	INJB	19	F	OR-Y OR<25		000	000		00
														02	PSNG	INJB	18	M			000	000		00
														03	PSNG	INJA	24	M			000	000		00
											02	NONE 0	STRGHT											
												PRVTE	S N									015		00
												PSNGR CAR		01	DRVR	INJB	50	F	OR-Y OR<25		016,028	038		27,02

OREGON DEPARTMENT OF TRANSPORTATION - POLICY, DATA AND ANALYSIS DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
CRASH SUMMARIES BY YEAR BY COLLISION TYPE

Intersectional Crashes at US-101, Oregon Coast Hwy (#009) & 2nd St in Florence, OR.
January 1, 2016 through December 31, 2020

COLLISION TYPE	FATAL CRASHES	NON-FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER-SECTION	INTER-SECTION RELATED	OFF-ROAD
YEAR: 2020														
TURNING MOVEMENTS	0	0	1	1	0	0	0	1	0	1	0	1	0	0
2020 TOTAL	0	0	1	1	0	0	0	1	0	1	0	1	0	0
YEAR: 2017														
FIXED / OTHER OBJECT	0	0	1	1	0	0	0	1	0	0	1	1	0	1
2017 TOTAL	0	0	1	1	0	0	0	1	0	0	1	1	0	1
YEAR: 2016														
REAR-END	0	1	0	1	0	1	0	1	0	1	0	1	0	0
TURNING MOVEMENTS	0	1	0	1	0	1	0	1	0	1	0	1	0	0
2016 TOTAL	0	2	0	2	0	2	0	2	0	2	0	2	0	0
FINAL TOTAL	0	2	2	4	0	2	0	4	0	3	1	4	0	1

Disclaimers: *Effective 2016,* ***collection of "Property Damage Only" (PDO) crash data elements was reduced for vehicles and participants.*** *Age, Gender, License, Error and other elements are no longer available for PDO crash reporting. Please keep this in mind when comparing 2016 PDO crash data to prior years.*

A higher number of crashes may be reported as of 2011 compared to prior years. This does not necessarily reflect an increase in annual crashes. The higher numbers may result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics. For all disclaimers, see https://www.oregon.gov/ODOT/Data/documents/Crash_Data_Disclaimers.pdf.

TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
CONTINUOUS SYSTEM CRASH LISTING

009 OREGON COAST

Intersectional Crashes at US-101, Oregon Coast Hwy (#009) & 2nd St in Florence, OR.
January 1, 2016 through December 31, 2020

```
          D
          R
      S   U
      P   G S W                                RD#  FC   CONN #                                 INT-TYP                                      SPCL USE
SER#   E A / C O  DATE        COUNTY            CMPT/MLG  FIRST  STREET         RD CHAR  (MEDIAN) INT-REL  OFFRD WTHR  CRASH TYP     TRLR QTY   MOVE                    A  S
INVEST E L M H R  DAY/TIME    CITY              MILEPNT   SECOND STREET         DIRECT     LEGS  TRAF-   RNDBT SURF  COLL TYP      OWNER      FROM       PRTC INJ     G  E  LICNS PED
UNLOC? D C J L K  LAT/LONG    URBAN AREA        LRS       INTERSECTION SEQ#     LOCTN   (#LANES) CNTL    DRVWY LIGHT SVRTY     V# VEH TYPE    TO     P# TYPE SVRTY  E  X  RES   LOC ERROR        ACTN EVENT       CAUSE

02966  N N N      08/11/2016  LANE              1    14                         INTER      CROSS  N            N CLR  S-1STOP    01 NONE        STRGHT                                                   004,013     07,29
NONE       N      Thu    12P  FLORENCE          MN    0   OREGON COAST HY       NE                UNKNOWN      N DRY  REAR          PRVTE       NE SW                                              007                 00
                              FLORENCE UA       190.70    2ND ST                06           0                 N DAY  INJ          PSNGR CAR           01 DRVR NONE  61  F  OTH-Y     026        000                 07,29
No     43 58    6.82 -124   6  27.21            000900100S00              1                                                                                        N-RES

                                                                                                                                  02 NONE        STOP
                                                                                                                                     PRVTE       NE SW                                              011  013            00
                                                                                                                                  PSNGR CAR           01 DRVR NONE  65  M  OR-Y      000        000                 00
                                                                                                                                                                       OR<25

                                                                                                                                  03 NONE        STOP
                                                                                                                                     PRVTE       NE SW                                              011  004            00
                                                                                                                                  PSNGR CAR           01 DRVR INJC  26  F  OR-Y      000        000                 00
                                                                                                                                                                       OR<25

03543  N N N N N  10/04/2017  LANE              1    14                         INTER      CROSS  N            Y CLR  FIX OBJ    01 NONE     9  STRGHT                                                   050,052,123 27
CITY       N      Wed     5A  FLORENCE          MN    0   OREGON COAST HY       SW                SP PED SIG   N DRY  FIX           N/A         UN UN                                              001                 00
                              FLORENCE UA       190.70    2ND ST                06           0                 N DLIT PDO          PSNGR CAR           01 DRVR NONE  00  U  UNK       000        000                 00
No     43 58    6.82 -124   6  27.21            000900100S00              1                                                                                        UNK

01087  N N N N N  03/27/2016  LANE              1    14                         INTER      CROSS  N            N CLR  ANGL-OTH   01 NONE     0  STRGHT                                                               04
NO RPT     N      Sun    10A  FLORENCE          MN    0   OREGON COAST HY       CN                TRF SIGNAL   N DRY  TURN          PRVTE       NE SW                                              000                 00
                              FLORENCE UA       190.70    2ND ST                03           0                 N DAY  INJ          PSNGR CAR           01 DRVR NONE  41  M  OR-Y      000        000                 00
No     43 58    6.82 -124   6  27.21            000900100S00              1                                                                                        OR>25

                                                                                                                                  02 NONE     0  TURN-L
                                                                                                                                     PRVTE       W  NE                                              000                 00
                                                                                                                                  PSNGR CAR           01 DRVR INJA  72  M  OR-Y      016,020    000                 04
                                                                                                                                                                       OR<25

02055  N N N N N  08/26/2020  LANE              1    14                         INTER      CROSS  N            N CLR  O-1 L-TURN 01 NONE     9  TURN-L                                                               02,27
CITY       N      Wed    12P  FLORENCE          MN    0   OREGON COAST HY       CN                TRF SIGNAL   N DRY  TURN          N/A         E  SW                                              000                 00
                              FLORENCE UA       190.70    2ND ST                03           0                 N DAY  PDO          PSNGR CAR           01 DRVR NONE  00  U  UNK       000        000                 00
No     43 58    6.82 -124   6  27.21            000900100S00              1                                                                                        UNK

                                                                                                                                  02 NONE     9  STRGHT
                                                                                                                                     N/A         W  E                                               000                 00
                                                                                                                                  PSNGR CAR           01 DRVR NONE  00  U  UNK       000        000                 00
                                                                                                                                                                       UNK
```

TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT

CRASH SUMMARIES BY YEAR BY COLLISION TYPE

Intersectional Crashes on US-101, Oregon Coast Hwy (#009) & 10th St. Includes Crashes at Intersection with NB Turn Lane from OR-126.
January 1, 2016 through December 31, 2020

COLLISION TYPE	FATAL CRASHES	NON-FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER-SECTION	INTER-SECTION RELATED	OFF-ROAD
YEAR: 2019														
TURNING MOVEMENTS	0	1	0	1	0	1	0	1	0	1	0	1	0	0
2019 TOTAL	0	1	0	1	0	1	0	1	0	1	0	1	0	0
FINAL TOTAL	0	1	0	1	0	1	0	1	0	1	0	1	0	0

Disclaimers: *Effective 2016,* ***collection of "Property Damage Only" (PDO) crash data elements was reduced for vehicles and participants.*** *Age, Gender, License, Error and other elements are no longer available for PDO crash reporting. Please keep this in mind when comparing 2016 PDO crash data to prior years.*

A higher number of crashes may be reported as of 2011 compared to prior years. This does not necessarily reflect an increase in annual crashes. The higher numbers may result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics. For all disclaimers, see https://www.oregon.gov/ODOT/Data/documents/Crash_Data_Disclaimers.pdf.

009 OREGON COAST

Intersectional Crashes on US-101, Oregon Coast Hwy (#009) & 10th St. Includes Crashes at Intersection with NB Turn Lane from OR-126.
January 1, 2016 through December 31, 2020

```
                D
                R
          S     U
          P     G S W                                     RD#  FC   CONN #                            INT-TYP                                          SPCL USE
SER#      E A / C O DATE          COUNTY                  CMPT/MLG  FIRST  STREET     RD CHAR  (MEDIAN) INT-REL  OFFRD WTHR  CRASH TYP         TRLR QTY  MOVE                         A  S
INVEST    E L M H R DAY/TIME      CITY                    MILEPNT   SECOND STREET     DIRECT       LEGS TRAF-    RNDBT SURF  COLL TYP          OWNER     FROM       PRTC INJ          G  E  LICNS PED
UNLOC?    D C J L K LAT/LONG      URBAN AREA              LRS       INTERSECTION SEQ# LOCTN    (#LANES) CNTL     DRVWY LIGHT SVRTY         V#  VEH TYPE  TO      P# TYPE SVRTY      E  X  RES   LOC ERROR      ACTN EVENT    CAUSE

00827     N N N N Y 03/18/2019    LANE                    1    14                     INTER       CROSS N            N CLR  S-1TURN        01  NONE      STRGHT                                                             08,06
CITY        N     Mon      2P     FLORENCE                MN    0   OREGON COAST HY   CN                STOP SIGN    N DRY  TURN                PRVTE     NE SW                                               000           00
                                  FLORENCE UA             190.16    10TH ST           01           0                 N DAY  INJ                 PSNGR CAR          01 DRVR NONE    57 M  OR-Y        071        000           06
No          43 58  32.02 -124  6   8.88                   000900100S00              1                                                                                              OR<25

                                                                                                                                           02  NONE      TURN-L
                                                                                                                                               PRVTE     NE E                                                000           00
                                                                                                                                               PSNGR CAR          01 DRVR INJB    68 M  OR-Y        006        000           08
                                                                                                                                                                                       OR<25
```

OREGON DEPARTMENT OF TRANSPORTATION - POLICY, DATA AND ANALYSIS DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
CRASH SUMMARIES BY YEAR BY COLLISION TYPE

Intersectional Crashes at US-101, Oregon Coast Hwy (#009) & 15th St in Florence, OR.
January 1, 2016 through December 31, 2020

COLLISION TYPE	FATAL CRASHES	NON-FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER-SECTION	INTER-SECTION RELATED	OFF-ROAD
YEAR: 2019														
TURNING MOVEMENTS	0	1	0	1	0	2	0	1	0	1	0	1	0	0
2019 TOTAL	0	1	0	1	0	2	0	1	0	1	0	1	0	0
YEAR: 2018														
REAR-END	0	1	0	1	0	2	0	0	1	1	0	1	0	0
TURNING MOVEMENTS	0	0	1	1	0	0	0	1	0	0	1	1	0	0
2018 TOTAL	0	1	1	2	0	2	0	1	1	1	1	2	0	0
YEAR: 2016														
REAR-END	0	0	2	2	0	0	0	2	0	2	0	2	0	0
SIDESWIPE - OVERTAKING	0	0	1	1	0	0	0	1	0	1	0	1	0	0
TURNING MOVEMENTS	0	0	1	1	0	0	0	1	0	0	1	1	0	0
2016 TOTAL	0	0	4	4	0	0	0	4	0	3	1	4	0	0
FINAL TOTAL	0	2	5	7	0	4	0	6	1	5	2	7	0	0

Disclaimers: *Effective 2016,* ***collection of "Property Damage Only" (PDO) crash data elements was reduced for vehicles and participants.*** *Age, Gender, License, Error and other elements are no longer available for PDO crash reporting. Please keep this in mind when comparing 2016 PDO crash data to prior years.*

A higher number of crashes may be reported as of 2011 compared to prior years. This does not necessarily reflect an increase in annual crashes. The higher numbers may result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics. For all disclaimers, see https://www.oregon.gov/ODOT/Data/documents/Crash_Data_Disclaimers.pdf.

009 OREGON COAST

Intersectional Crashes at US-101, Oregon Coast Hwy (#009) & 15th St in Florence, OR.
January 1, 2016 through December 31, 2020

```
                D
                R
          S     U
          P   G S W                                  RD#  FC    CONN #                          INT-TYP                                         SPCL USE
SER#      E A / C O  DATE          COUNTY            CMPT/MLG   FIRST  STREET       RD CHAR    (MEDIAN)  INT-REL  OFFRD WTHR   CRASH TYP       TRLR QTY   MOVE                            A  S
INVEST    E L M H R  DAY/TIME      CITY              MILEPNT    SECOND STREET       DIRECT       LEGS    TRAF-    RNDBT SURF   COLL TYP        OWNER      FROM        PRTC  INJ         G  E  LICNS  PED
UNLOC?    D C J L K  LAT/LONG      URBAN AREA        LRS        INTERSECTION SEQ#   LOCTN      (#LANES)  CNTL     DRVWY LIGHT  SVRTY       V#  VEH TYPE   TO      P#  TYPE  SVRTY       E  X  RES    LOC  ERROR        ACTN  EVENT    CAUSE

01573     N N N      05/04/2016    LANE              1    14                        INTER      CROSS     N            N CLR   S-1STOP     01  NONE    9  STRGHT                                                                           29
NONE        N        Wed      6P   FLORENCE          MN    0    OREGON COAST HY     N                    STOP SIGN    N DRY   REAR            N/A        N  S                                                          000                00
                                   FLORENCE UA       189.85     15TH ST             06            0                 N DAY   PDO             PSNGR CAR          01  DRVR  NONE    00  U  UNK         000          000                00
No           43 58   47.75 -124    6    4.38         000900100S00             1                                                                                                     UNK

                                                                                                                                        02  NONE    9  STOP
                                                                                                                                            N/A        N  S                                                          011                00
                                                                                                                                            PSNGR CAR          01  DRVR  NONE    00  U  UNK         000          000                00
                                                                                                                                                                                    UNK

02597     N N N      07/18/2016    LANE              1    14                        INTER      CROSS     N            N CLR   S-1STOP     01  NONE    9  STRGHT                                                                           29
NO RPT      N        Mon      1P   FLORENCE          MN    0    OREGON COAST HY     N                    STOP SIGN    N DRY   REAR            N/A        N  S                                                          000                00
                                   FLORENCE UA       189.85     15TH ST             06            0                 N DAY   PDO             PSNGR CAR          01  DRVR  NONE    00  U  UNK         000          000                00
No           43 58   47.75 -124    6    4.38         000900100S00             1                                                                                                     UNK

                                                                                                                                        02  NONE    9  STOP
                                                                                                                                            N/A        N  S                                                          011                00
                                                                                                                                            PSNGR CAR          01  DRVR  NONE    00  U  UNK         000          000                00
                                                                                                                                                                                    UNK

02967     N N N      08/11/2016    LANE              1    14                        INTER      CROSS     N            N CLR   S-1STOP     01  NONE    9  STRGHT                                                                           02
CITY        N        Thu      1P   FLORENCE          MN    0    OREGON COAST HY     N                    STOP SIGN    N DRY   SS-O            N/A        N  S                                                          000                00
                                   FLORENCE UA       189.85     15TH ST             06            0                 N DAY   PDO             PSNGR CAR          01  DRVR  NONE    00  U  UNK         000          000                00
No           43 58   47.75 -124    6    4.38         000900100S00             1                                                                                                     UNK

                                                                                                                                        02  NONE    9  STOP
                                                                                                                                            N/A        N  S                                                          011                00
                                                                                                                                            PSNGR CAR          01  DRVR  NONE    00  U  UNK         000          000                00
                                                                                                                                                                                    UNK

01248     N N N N N  05/03/2018    LANE              1    14                        INTER      CROSS     N            N CLD   S-1TURN     01  NONE    0  STRGHT                                                                           29
CITY        N        Thu      6A   FLORENCE          MN    0    OREGON COAST HY     N                    NONE         N WET   REAR            PRVTE      N  S                                                          000                00
                                   FLORENCE UA       189.85     15TH ST             06            0                 N DAY   INJ             PSNGR CAR          01  DRVR  INJC    42  F  OR-Y        042          000                29
No           43 58   47.75 -124    6    4.38         000900100S00             1                                                                                                     OR<25

                                                                                                                                        02  NONE    0  TURN-R
                                                                                                                                            PRVTE      N  W                                                          000                00
                                                                                                                                            PSNGR CAR          01  DRVR  INJC    31  M  OR-Y        000          000                00
                                                                                                                                                                                    OR<25

03778     N N N      11/19/2018    LANE              1    14                        INTER      CROSS     N            N CLR   ANGL-OTH    01  NONE    9  STRGHT                                                                           02
NO RPT      N        Mon      5P   FLORENCE          MN    0    OREGON COAST HY     CN                   STOP SIGN    N DRY   TURN            N/A        N  S                                                          000                00
                                   FLORENCE UA       189.85     15TH ST             01            0                 N DARK  PDO             PSNGR CAR          01  DRVR  NONE    00  U  UNK         000          000                00
No           43 58   47.75 -124    6    4.38         000900100S00             1                                                                                                     UNK
```

```
009 OREGON COAST                                  Intersectional Crashes at US-101, Oregon Coast Hwy (#009) & 15th St in Florence, OR.
          D                                                      January 1, 2016 through December 31, 2020
          R
      S   U
      P   G S W                      RD#  FC   CONN #                         INT-TYP                                      SPCL USE
SER#   E A / C O  DATE       COUNTY          CMPT/MLG  FIRST  STREET      RD CHAR  (MEDIAN)  INT-REL  OFFRD  WTHR  CRASH TYP   TRLR QTY  MOVE                  A  S
INVEST E L M H R  DAY/TIME   CITY            MILEPNT   SECOND STREET      DIRECT     LEGS    TRAF-    RNDBT  SURF  COLL TYP    OWNER     FROM      PRTC INJ    G  E  LICNS  PED
UNLOC? D C J L K  LAT/LONG   URBAN AREA      LRS       INTERSECTION SEQ#  LOCTN   (#LANES)   CNTL     DRVWY  LIGHT SVRTY    V# VEH TYPE  TO    P# TYPE SVRTY E  X  RES    LOC  ERROR     ACTN EVENT    CAUSE
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
                                                                                                                   02 NONE    9 TURN-L
                                                                                                                      N/A       W  N                                           015              00

                                                                                                                     PSNGR CAR          01 DRVR NONE  00 U UNK      000        000              00
                                                                                                                                                           UNK

00161  N N N      01/14/2019 LANE            1    14                      INTER    CROSS  N            N CLR  ANGL-OTH   01 NONE      TURN-L                                                    02
CITY       N      Mon     4P FLORENCE        MN    0   OREGON COAST HY    CN              STOP SIGN    N DRY  TURN          PRVTE      E  S                                         015              00
                             FLORENCE UA     189.85    15TH ST            02          0                N DAY  INJ          PSNGR CAR          01 DRVR NONE  81 M OR-Y     028        000              02
No      43 58  47.77 -124  6   4.40          000900100S00             1                                                                                OR<25

                                                                                                                   02 NONE      STRGHT
                                                                                                                      PRVTE     N  S                                           000              00
                                                                                                                     PSNGR CAR          01 DRVR INJC  39 F OR-Y     000        000              00
                                                                                                                                                           OR>25
                                                                                                                                        02 PSNG INJC  48 F          000        000              00

00157  N N N N N 01/10/2016 LANE            1    14                      INTER    CROSS  N            N CLR  ANGL-OTH   01 NONE    9 STRGHT                                                    03
CITY       N      Sun     7P FLORENCE        MN    0   OREGON COAST HY    CN              TRF SIGNAL   N DRY  TURN          N/A        W  E                                         000              00
                             FLORENCE UA     189.85    15TH ST            04          0                N DLIT PDO          PSNGR CAR          01 DRVR NONE  00 U UNK      000        000              00
No      43 58  47.75 -124  6   4.38          000900100S00             1                                                                                UNK

                                                                                                                   02 NONE    9 TURN-L
                                                                                                                      N/A       S  W                                           000              00
                                                                                                                     PSNGR CAR          01 DRVR NONE  00 U UNK      000        000              00
                                                                                                                                                           UNK
```

CRASH SUMMARIES BY YEAR BY COLLISION TYPE

Intersectional Crashes at US-101, Oregon Coast Hwy (#009) & 27th St in Florence, OR.
January 1, 2016 through December 31, 2020

COLLISION TYPE	FATAL CRASHES	NON-FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER-SECTION	INTER-SECTION RELATED	OFF-ROAD
YEAR: 2018														
TURNING MOVEMENTS	0	1	0	1	0	1	1	1	0	1	0	1	0	0
2018 TOTAL	0	1	0	1	0	1	1	1	0	1	0	1	0	0
FINAL TOTAL	0	1	0	1	0	1	1	1	0	1	0	1	0	0

Disclaimers: *Effective 2016,* ***collection of "Property Damage Only" (PDO) crash data elements was reduced for vehicles and participants.*** *Age, Gender, License, Error and other elements are no longer available for PDO crash reporting. Please keep this in mind when comparing 2016 PDO crash data to prior years.*

A higher number of crashes may be reported as of 2011 compared to prior years. This does not necessarily reflect an increase in annual crashes. The higher numbers may result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics. For all disclaimers, see https://www.oregon.gov/ODOT/Data/documents/Crash_Data_Disclaimers.pdf.

```
009 OREGON COAST                    Intersectional Crashes at US-101, Oregon Coast Hwy (#009) & 27th St in Florence, OR.
         D                                          January 1, 2016 through December 31, 2020
         R
      S  U
      P  G S W                           RD#  FC   CONN #                          INT-TYP                                      SPCL USE
SER#   E A / C O  DATE       COUNTY      CMPT/MLG  FIRST  STREET       RD CHAR  (MEDIAN) INT-REL  OFFRD WTHR  CRASH TYP      TRLR QTY  MOVE                 A  S
INVEST E L M H R  DAY/TIME   CITY        MILEPNT   SECOND STREET       DIRECT     LEGS   TRAF-    RNDBT SURF  COLL TYP       OWNER     FROM      PRTC INJ   G  E  LICNS PED
UNLOC? D C J L K  LAT/LONG   URBAN AREA  LRS       INTERSECTION SEQ#   LOCTN   (#LANES) CNTL     DRVWY LIGHT SVRTY     V# VEH TYPE  TO    P# TYPE SVRTY  E  X  RES   LOC ERROR    ACTN EVENT    CAUSE

02320  N N N     07/31/2018 LANE         1    14                       INTER    3-LEG  N              N CLR  ANGL-OTH   01 NONE    1 TURN-R                                                       02
NONE     N     Tue    7P  FLORENCE       MN    0   OREGON COAST HY     CN              STOP SIGN      N DRY  TURN          PRVTE     W  S                                           000            00
                          FLORENCE UA    189.14    27TH ST             03         0                   N DAY  INJ           SEMI TOW        01 DRVR NONE  54  M  OR-Y       028      000            02
No     43 59  24.56 -124  6   4.86       000900100S00              1                                                                             OR>25

                                                                                                                    02 NONE    0 STRGHT
                                                                                                                       PRVTE     N  S                                           000            00
                                                                                                                       PSNGR CAR       01 DRVR INJC  64  F  OR-Y       000      000            00
                                                                                                                                                             OR<25
```

OREGON DEPARTMENT OF TRANSPORTATION - POLICY, DATA AND ANALYSIS DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
CRASH SUMMARIES BY YEAR BY COLLISION TYPE

Intersectional Crashes at US-101, Oregon Coast Hwy (#009) & 30th St in Florence, OR.
January 1, 2016 through December 31, 2020

COLLISION TYPE	FATAL CRASHES	NON-FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER-SECTION	INTER-SECTION RELATED	OFF-ROAD
YEAR: 2017														
TURNING MOVEMENTS	0	0	1	1	0	0	1	1	0	1	0	1	0	0
2017 TOTAL	0	0	1	1	0	0	1	1	0	1	0	1	0	0
FINAL TOTAL	0	0	1	1	0	0	1	1	0	1	0	1	0	0

Disclaimers: *Effective 2016,* ***collection of "Property Damage Only" (PDO) crash data elements was reduced for vehicles and participants.*** *Age, Gender, License, Error and other elements are no longer available for PDO crash reporting. Please keep this in mind when comparing 2016 PDO crash data to prior years.*

A higher number of crashes may be reported as of 2011 compared to prior years. This does not necessarily reflect an increase in annual crashes. The higher numbers may result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics. For all disclaimers, see https://www.oregon.gov/ODOT/Data/documents/Crash_Data_Disclaimers.pdf.

009 OREGON COAST

Intersectional Crashes at US-101, Oregon Coast Hwy (#009) & 30th St in Florence, OR.
January 1, 2016 through December 31, 2020

SER# INVEST UNLOC?	S P E E D	A L C	D R U G / M J	S C H L	W O R K	DATE DAY/TIME *LAT/LONG*	COUNTY CITY URBAN AREA	RD# FC CMPT/MLG MILEPNT LRS	CONN # FIRST STREET SECOND STREET INTERSECTION SEQ#	RD CHAR DIRECT LOCTN	INT-TYP (MEDIAN) LEGS (#LANES)	INT-REL TRAF- CNTL	OFFRD RNDBT DRVWY	WTHR SURF LIGHT	CRASH TYP COLL TYP SVRTY	V#	SPCL USE TRLR QTY OWNER VEH TYPE	MOVE FROM TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
01730	N	N	N			05/19/2017	LANE	1 14		INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE 9	TURN-L											02
NO RPT			N			Fri 9A	FLORENCE	MN 0	OREGON COAST HY	CN		STOP SIGN	N	DRY	TURN		N/A	W N									015		00
							FLORENCE UA	188.97	30TH ST	04	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	U	UNK		000	000		00
No						*43 59 33.73 -124 6 4.99*		000900100S00	1															UNK					
																02	NONE 9	STRGHT											
																	N/A	S N									000		00
																	SEMI TOW		01	DRVR	NONE	00	U	UNK		000	000		00
																								UNK					

OREGON DEPARTMENT OF TRANSPORTATION - POLICY, DATA AND ANALYSIS DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
CRASH SUMMARIES BY YEAR BY COLLISION TYPE

Intersectional Crashes at US-101, Oregon Coast Hwy (#009) & 35th St in Florence, OR.
January 1, 2016 through December 31, 2020

COLLISION TYPE	FATAL CRASHES	NON-FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER-SECTION	INTER-SECTION RELATED	OFF-ROAD
YEAR: 2020														
ANGLE	0	1	0	1	0	3	0	1	0	1	0	1	0	0
REAR-END	0	0	1	1	0	0	0	1	0	0	1	1	0	0
2020 TOTAL	0	1	1	2	0	3	0	2	0	1	1	2	0	0
YEAR: 2019														
FIXED / OTHER OBJECT	0	0	1	1	0	0	0	0	1	0	1	1	0	0
2019 TOTAL	0	0	1	1	0	0	0	0	1	0	1	1	0	0
YEAR: 2018														
ANGLE	0	1	1	2	0	1	0	1	1	1	1	2	0	0
TURNING MOVEMENTS	0	2	0	2	0	3	0	2	0	2	0	2	0	0
2018 TOTAL	0	3	1	4	0	4	0	3	1	3	1	4	0	0
YEAR: 2017														
FIXED / OTHER OBJECT	0	0	1	1	0	0	0	1	0	1	0	1	0	1
TURNING MOVEMENTS	0	1	0	1	0	5	0	1	0	1	0	1	0	0
2017 TOTAL	0	1	1	2	0	5	0	2	0	2	0	2	0	1
YEAR: 2016														
ANGLE	0	1	0	1	0	1	0	1	0	1	0	1	0	0
TURNING MOVEMENTS	0	2	0	2	0	5	0	2	0	2	0	2	0	0
2016 TOTAL	0	3	0	3	0	6	0	3	0	3	0	3	0	0
FINAL TOTAL	0	8	4	12	0	18	0	10	2	9	3	12	0	1

Disclaimers: *Effective 2016,* ***collection of "Property Damage Only" (PDO) crash data elements was reduced for vehicles and participants.*** *Age, Gender, License, Error and other elements are no longer available for PDO crash reporting. Please keep this in mind when comparing 2016 PDO crash data to prior years.*

A higher number of crashes may be reported as of 2011 compared to prior years. This does not necessarily reflect an increase in annual crashes. The higher numbers may result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics. For all disclaimers, see https://www.oregon.gov/ODOT/Data/documents/Crash_Data_Disclaimers.pdf.

009 OREGON COAST

Intersectional Crashes at US-101, Oregon Coast Hwy (#009) & 35th St in Florence, OR.
January 1, 2016 through December 31, 2020

SER# INVEST UNLOC?	S P E E D	A L C	D R U G / M J	S C H L	W O R K	DATE DAY/TIME *LAT/LONG*	COUNTY CITY URBAN AREA	RD# FC CMPT/MLG MILEPNT LRS	CONN # FIRST STREET SECOND STREET INTERSECTION SEQ#	RD CHAR DIRECT LOCTN	INT-TYP (MEDIAN) LEGS (#LANES)	INT-REL TRAF- CNTL	OFFRD RNDBT DRVWY	WTHR SURF LIGHT	CRASH TYP COLL TYP SVRTY	V#	SPCL USE TRLR QTY OWNER VEH TYPE	MOVE FROM TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
02884	Y	N	N	N	N	08/12/2017	LANE	1 14		INTER	CROSS	N	Y	CLR	FIX OBJ	01	NONE 9	TURN-L										062	01
CITY			N			Sat 12P	FLORENCE	MN 0	OREGON COAST HY	E		TRF SIGNAL	N	DRY	FIX		N/A	N E									000		00
							FLORENCE UA	188.68	35TH ST	05	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	U	UNK		000	000		00
No						*43 59 48.99 -124 6 5.19*		000900100S00	1															UNK					
01023	N	N	N			04/07/2019	LANE	1 14		INTER	CROSS	N	N	RAIN	FIX OBJ	01	NONE 9	STOP										054	12
NONE			N			Sun 2A	FLORENCE	MN 0	OREGON COAST HY	S		TRF SIGNAL	N	WET	FIX		N/A	S N									011		00
							FLORENCE UA	188.68	35TH ST	06	0		N	DARK	PDO		PSNGR CAR		01	DRVR	NONE	00	U	UNK		000	000		00
No						*43 59 49.00 -124 6 5.20*		000900100S00	1															UNK					
00479	N	N	N	N	N	02/05/2016	LANE	1 14		INTER	CROSS	N	N	CLR	O-1 L-TURN	01	NONE 0	STRGHT											02
NO RPT			N			Fri 12P	FLORENCE	MN 0	OREGON COAST HY	CN		TRF SIGNAL	N	DRY	TURN		PRVTE	N S									000		00
							FLORENCE UA	188.68	35TH ST	01	0		N	DAY	INJ		PSNGR CAR		01	DRVR	INJC	54	F	OR-Y		000	000		00
No						*43 59 48.99 -124 6 5.19*		000900100S00	1															OR>25					
																			02	PSNG	INJC	61	M			000	000		00
																02	NONE 0	TURN-L											
																	PRVTE	S W									000		00
																	PSNGR CAR		01	DRVR	INJC	93	M	OR-Y		004,028	000		02
																								OR<25					
																			02	PSNG	INJC	95	F			000	000		00
02544	N	N	N			07/13/2016	LANE	1 14		INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE 0	STRGHT											04
STATE			N			Wed 2P	FLORENCE	MN 0	OREGON COAST HY	CN		TRF SIGNAL	N	DRY	ANGL		PRVTE	N S									000		00
							FLORENCE UA	188.68	35TH ST	01	0		N	DAY	INJ		PSNGR CAR		01	DRVR	INJC	71	M	OR-Y		020	000		04
No						*43 59 48.99 -124 6 5.19*		000900100S00	1															OR<25					
																02	NONE 0	STRGHT											
																	PRVTE	E W									000		00
																	PSNGR CAR		01	DRVR	NONE	62	F	OR-Y		000	000		00
																								OR<25					
01567	N	N	N	N	N	05/07/2017	LANE	1 14		INTER	CROSS	N	N	CLR	O-1 L-TURN	01	NONE 0	TURN-L											02
COUNTY			N			Sun 2P	FLORENCE	MN 0	OREGON COAST HY	CN		TRF SIGNAL	N	DRY	TURN		PRVTE	S W									000		00
							FLORENCE UA	188.68	35TH ST	01	0		N	DAY	INJ		PSNGR CAR		01	DRVR	INJC	46	M	SUSP		004,028	000		02
No						*43 59 48.99 -124 6 5.19*		000900100S00	1															N-RES					
																			02	PSNG	INJC	63	M			000	000		00
																			03	PSNG	INJC	03	F			000	000		00
																02	NONE 0	STRGHT											
																	PRVTE	N S									000		00
																	PSNGR CAR		01	DRVR	INJB	24	F	OR-Y		000	000		00
																								OR>25					
																			02	PSNG	INJB	01	F			000	000		00

009 OREGON COAST

Intersectional Crashes at US-101, Oregon Coast Hwy (#009) & 35th St in Florence, OR.
January 1, 2016 through December 31, 2020

```
            D
            R
        S   U
        P   G S W                                   RD#  FC   CONN #                        INT-TYP                                   SPCL USE
SER#    E A / C O  DATE          COUNTY             CMPT/MLG  FIRST  STREET        RD CHAR  (MEDIAN)  INT-REL  OFFRD WTHR  CRASH TYP    TRLR QTY  MOVE                     A  S
INVEST  E L M H R  DAY/TIME      CITY               MILEPNT   SECOND STREET        DIRECT     LEGS    TRAF-    RNDBT SURF  COLL TYP     OWNER     FROM        PRTC INJ     G  E  LICNS PED
UNLOC?  D C J L K  LAT/LONG      URBAN AREA         LRS       INTERSECTION SEQ#    LOCTN    (#LANES)  CNTL     DRVWY LIGHT SVRTY    V# VEH TYPE   TO     P#  TYPE SVRTY  E  X  RES   LOC  ERROR      ACTN EVENT    CAUSE

00963   N N N      04/07/2018 LANE               1    14                           INTER     CROSS    N        N RAIN  ANGL-OTH  01 NONE    0 STRGHT                                                                   04
NO RPT    N        Sat     4P FLORENCE           MN    0   OREGON COAST HY         CN                 TRF SIGNAL  N WET   ANGL         PRVTE      N  S                                                     000           00
                                 FLORENCE UA        188.68    35TH ST              01          0               N DAY   INJ          PSNGR CAR           01 DRVR NONE  44 M OTH-Y      020        000           04
No       43 59  48.99 -124   6   5.19             000900100S00               1                                                                                       N-RES
                                                                                                                             02 NONE    0 STRGHT
                                                                                                                                PRVTE      E  W                                                     000           00
                                                                                                                                PSNGR CAR           01 DRVR INJC  75 M OR-Y       000        000           00
                                                                                                                                                                     OR<25

01323   N N N      05/10/2018 LANE               1    14                           INTER     CROSS    N        N CLR   O-1 L-TURN 01 NONE    0 STRGHT                                                                  02
NO RPT    N        Thu     3P FLORENCE           MN    0   OREGON COAST HY         CN                 TRF SIGNAL  N DRY   TURN         PRVTE      N  S                                                     000           00
                                 FLORENCE UA        188.68    35TH ST              01          0               N DAY   INJ          PSNGR CAR           01 DRVR INJB  16 F OR-Y       000        000           00
No       43 59  48.99 -124   6   5.19             000900100S00               1                                                                                       OR<25
                                                                                                                             02 NONE    0 TURN-L
                                                                                                                                PRVTE      S  W                                                     000           00
                                                                                                                                PSNGR CAR           01 DRVR INJC  83 F OR-Y       028,004    000           02
                                                                                                                                                                     OR<25
                                                                                                                             03 NONE    0 STOP
                                                                                                                                PRVTE      W  E                                                     022           00
                                                                                                                                PSNGR CAR           01 DRVR NONE  40 F OR-Y       000        000           00
                                                                                                                                                                     OR<25

01865   N N N N N  05/26/2016 LANE               1    14                           INTER     CROSS    N        N CLR   O-1 L-TURN 01 NONE    0 TURN-L                                                                  02
NO RPT    N        Thu    10A FLORENCE           MN    0   OREGON COAST HY         CN                 TRF SIGNAL  N DRY   TURN         PRVTE      W  N                                                     000           00
                                 FLORENCE UA        188.68    35TH ST              02          0               N DAY   INJ          PSNGR CAR           01 DRVR NONE  25 F OR-Y       004,028    000           02
No       43 59  48.99 -124   6   5.19             000900100S00               1                                                                                       OR<25
                                                                                                                             02 NONE    0 STRGHT
                                                                                                                                PRVTE      E  W                                                     000           00
                                                                                                                                PSNGR CAR           01 DRVR INJC  69 F OR-Y       000        000           00
                                                                                                                                                                     OR<25

01092   N N N      04/18/2018 LANE               1    14                           INTER     CROSS    N        N CLR   ANGL-OTH  01 NONE    9 STRGHT                                                                   04,27
CITY      N        Wed     7P FLORENCE           MN    0   OREGON COAST HY         CN                 TRF SIGNAL  N DRY   ANGL         N/A        N  S                                                     000           00
                                 FLORENCE UA        188.68    35TH ST              03          0               N DUSK  PDO          PSNGR CAR           01 DRVR NONE  00 U UNK        000        000           00
No       43 59  49.03 -124   6   5.18             000900100S00               1                                                                                       UNK
                                                                                                                             02 NONE    9 STRGHT
                                                                                                                                N/A        W  E                                                     000           00
                                                                                                                                PSNGR CAR           01 DRVR NONE  00 U UNK        000        000           00
                                                                                                                                                                     UNK
```

009 OREGON COAST

Intersectional Crashes at US-101, Oregon Coast Hwy (#009) & 35th St in Florence, OR.
January 1, 2016 through December 31, 2020

SER# / INVEST / UNLOC?	S P E A / D C (D R U G / C J, S W H L, W O R K)	DATE / DAY/TIME / LAT/LONG	COUNTY / CITY / URBAN AREA	RD# FC / CMPT/MLG / MILEPNT / LRS	CONN # / FIRST STREET / SECOND STREET / INTERSECTION SEQ#	RD CHAR / DIRECT / LOCTN	INT-TYP (MEDIAN) LEGS (#LANES)	INT-REL / TRAF- CNTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE TRLR QTY / OWNER / VEH TYPE	MOVE FROM TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
01733	N N N N N	07/26/2020	LANE	1 14		INTER	CROSS	N	N	CLR	S-STRGHT	01	NONE 9	STRGHT											29
CITY	N	Sun 9P	FLORENCE	MN 0	OREGON COAST HY	CN		TRF SIGNAL	N	DRY	REAR		N/A	N S									000		00
			FLORENCE UA	188.68	35TH ST	03	0		N	DLIT	PDO		PSNGR CAR		01	DRVR	NONE	00	U	UNK		000	000		00
No		43 59 49.01 -124 6 5.20		000900100S00	1															UNK					
												02	NONE 9	STRGHT											
													N/A	N S									000		00
													PSNGR CAR		01	DRVR	NONE	00	U	UNK		000	000		00
																				UNK					
02744	N N N	09/05/2018	LANE	1 14		INTER	CROSS	N	N	CLR	O-1 L-TURN	01	NONE 0	STRGHT											02
NO RPT	N	Wed 2P	FLORENCE	MN 0	OREGON COAST HY	CN		TRF SIGNAL	N	DRY	TURN		PRVTE	S N									000		00
			FLORENCE UA	188.68	35TH ST	04	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	74	M	OR-Y		000	000		00
No		43 59 48.99 -124 6 5.19		000900100S00	1															OR<25					
												02	NONE 0	TURN-L											
													PRVTE	N E									000		00
													PSNGR CAR		01	DRVR	INJC	87	F	OR-Y		028,004	000		02
																				OR<25					
00981	N N N N N	04/13/2020	LANE	1 14		INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE	STRGHT										013	04
CITY	N	Mon 2P	FLORENCE	MN 0	OREGON COAST HY	CN		TRF SIGNAL	N	DRY	ANGL		PRVTE	S N									000		00
			FLORENCE UA	188.68	35TH ST	04	0		N	DAY	INJ		PSNGR CAR		01	DRVR	INJC	67	F	OR-Y		020	000		04
No		43 59 48.98 -124 6 5.20		000900100S00	1															OR<25					
												02	NONE	STRGHT											
													PRVTE	W E									000	013	00
													PSNGR CAR		01	DRVR	INJB	69	M	OR-Y		000	000		00
																				OR<25					
												03	NONE	STOP											
													PRVTE	N S									022		00
													MTRCYCLE		01	DRVR	INJB	69	M	OR-Y		000	022		00
																				OR<25					

OREGON DEPARTMENT OF TRANSPORTATION - POLICY, DATA AND ANALYSIS DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
CRASH SUMMARIES BY YEAR BY COLLISION TYPE

Intersectional Crashes at US-101, Oregon Coast Hwy (#009) & 46th St in Florence, OR.
January 1, 2016 through December 31, 2020

COLLISION TYPE	FATAL CRASHES	NON-FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER-SECTION	INTER-SECTION RELATED	OFF-ROAD
YEAR: 2019														
TURNING MOVEMENTS	0	1	0	1	0	1	0	1	0	1	0	1	0	0
2019 TOTAL	0	1	0	1	0	1	0	1	0	1	0	1	0	0
YEAR: 2017														
TURNING MOVEMENTS	0	0	1	1	0	0	0	1	0	0	1	1	0	0
2017 TOTAL	0	0	1	1	0	0	0	1	0	0	1	1	0	0
YEAR: 2016														
TURNING MOVEMENTS	0	1	0	1	0	3	0	1	0	1	0	1	0	0
2016 TOTAL	0	1	0	1	0	3	0	1	0	1	0	1	0	0
FINAL TOTAL	0	2	1	3	0	4	0	3	0	2	1	3	0	0

Disclaimers: *Effective 2016,* ***collection of "Property Damage Only" (PDO) crash data elements was reduced for vehicles and participants.*** *Age, Gender, License, Error and other elements are no longer available for PDO crash reporting. Please keep this in mind when comparing 2016 PDO crash data to prior years.*

A higher number of crashes may be reported as of 2011 compared to prior years. This does not necessarily reflect an increase in annual crashes. The higher numbers may result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics. For all disclaimers, see https://www.oregon.gov/ODOT/Data/documents/Crash_Data_Disclaimers.pdf.

009 OREGON COAST

Intersectional Crashes at US-101, Oregon Coast Hwy (#009) & 46th St in Florence, OR.
January 1, 2016 through December 31, 2020

```
             D
             R
          S  U
          P  G S W                                   RD#  FC   CONN #                              INT-TYP                                          SPCL USE
SER#      E A / C O  DATE       COUNTY               CMPT/MLG  FIRST  STREET       RD CHAR  (MEDIAN)  INT-REL  OFFRD WTHR  CRASH TYP      TRLR QTY  MOVE                         A  S
INVEST    E L M H R  DAY/TIME   CITY                 MILEPNT   SECOND STREET       DIRECT     LEGS    TRAF-    RNDBT SURF  COLL TYP       OWNER     FROM          PRTC  INJ     G  E  LICNS  PED
UNLOC?    D C J L K  LAT/LONG   URBAN AREA           LRS       INTERSECTION SEQ#   LOCTN    (#LANES)  CNTL     DRVWY LIGHT SVRTY      V#  VEH TYPE  TO       P#   TYPE  SVRTY   E  X  RES    LOC  ERROR      ACTN  EVENT    CAUSE

01545     N N N N N  05/01/2016 LANE                 1    14                       INTER      3-LEG   N          N CLR ANGL-OTH     01  NONE   0  TURN-L                                                                    02
NO RPT      N        Sun    5P  FLORENCE             MN    0   N 46TH ST           N                  NONE       N DRY TURN              PRVTE     E  S                                                      018            00
                                FLORENCE UA          188.01    OREGON COAST HY     06           0                Y DAY INJ               PSNGR CAR          01   DRVR  INJB   78 F  OR-Y        028,007    000            02
No          44  0  23.23 -124   6    5.62            000900100S00               1                                                                                         OR<25

                                                                                                                                    02  NONE   0  STRGHT
                                                                                                                                        PRVTE     N  S                                                      000            00
                                                                                                                                        PSNGR CAR          01   DRVR  INJC   61 M  OR-Y        000        000            00
                                                                                                                                                                                  OR>25
                                                                                                                                                           02   PSNG  INJC   13 F              000        000            00

02206     N N N      06/25/2017 LANE                 1    14                       INTER      3-LEG   N          N CLR O-1 L-TURN   01  NONE   9  STRGHT                                                                    02
NO RPT      N        Sun    9P  FLORENCE             MN    0   N 46TH ST           CN                 STOP SIGN  N DRY TURN              N/A       N  S                                                      000            00
                                FLORENCE UA          188.01    OREGON COAST HY     01           0                N DARK PDO              PSNGR CAR          01   DRVR  NONE   00 U  UNK         000        000            00
No          44  0  23.23 -124   6    5.62            000900100S00               1                                                                                         UNK

                                                                                                                                    02  NONE   9  TURN-L
                                                                                                                                        N/A       S  W                                                      000            00
                                                                                                                                        PSNGR CAR          01   DRVR  NONE   00 U  UNK         000        000            00
                                                                                                                                                                                  UNK

02366     N N N N N  08/06/2019 LANE                 1    14                       INTER      3-LEG   N          N CLR ANGL-OTH     01  NONE   0  TURN-L                                                              082   02,40
CITY        N        Tue    1P  FLORENCE             MN    0   N 46TH ST           CN                 STOP SIGN  N DRY TURN              PRVTE     W  N                                                      000            00
                                FLORENCE UA          188.01    OREGON COAST HY     04           0                N DAY INJ               PSNGR CAR          01   DRVR  NONE   57 M  OR-Y        028        000   082      02,40
No          44  0  23.23 -124   6    5.61            000900100S00               1                                                                                         OR<25

                                                                                                                                    02  NONE   0  STRGHT
                                                                                                                                        PRVTE     S  N                                                      000            00
                                                                                                                                        PSNGR CAR          01   DRVR  INJA   76 M  OR-Y        000        000            00
                                                                                                                                                                                  OR<25
```

OREGON DEPARTMENT OF TRANSPORTATION - POLICY, DATA AND ANALYSIS DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
CRASH SUMMARIES BY YEAR BY COLLISION TYPE

Intersectional Crashes at US-101, Oregon Coast Hwy (#009) & Heceta Beach Rd in Lane County, OR.
January 1, 2016 through December 31, 2020

COLLISION TYPE	FATAL CRASHES	NON-FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER-SECTION	INTER-SECTION RELATED	OFF-ROAD
YEAR: 2020														
TURNING MOVEMENTS	0	1	2	3	0	1	0	3	0	2	1	3	0	0
2020 TOTAL	0	1	2	3	0	1	0	3	0	2	1	3	0	0
YEAR: 2018														
TURNING MOVEMENTS	0	0	1	1	0	0	0	1	0	0	1	1	0	0
2018 TOTAL	0	0	1	1	0	0	0	1	0	0	1	1	0	0
YEAR: 2017														
TURNING MOVEMENTS	0	1	0	1	0	1	0	0	1	1	0	1	0	0
2017 TOTAL	0	1	0	1	0	1	0	0	1	1	0	1	0	0
FINAL TOTAL	0	2	3	5	0	2	0	4	1	3	2	5	0	0

Disclaimers: *Effective 2016,* ***collection of "Property Damage Only" (PDO) crash data elements was reduced for vehicles and participants.*** *Age, Gender, License, Error and other elements are no longer available for PDO crash reporting. Please keep this in mind when comparing 2016 PDO crash data to prior years.*

A higher number of crashes may be reported as of 2011 compared to prior years. This does not necessarily reflect an increase in annual crashes. The higher numbers may result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics. For all disclaimers, see https://www.oregon.gov/ODOT/Data/documents/Crash_Data_Disclaimers.pdf.

TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT

CONTINUOUS SYSTEM CRASH LISTING

009 OREGON COAST

Intersectional Crashes at US-101, Oregon Coast Hwy (#009) & Heceta Beach Rd in Lane County, OR.

January 1, 2016 through December 31, 2020

```
              D
              R
       S      U
       P    G S W                                       RD#  FC    CONN #                                 INT-TYP                                                 SPCL USE
SER#   E A / C O  DATE        COUNTY                    CMPT/MLG  FIRST  STREET           RD CHAR  (MEDIAN) INT-REL  OFFRD WTHR   CRASH TYP       TRLR QTY  MOVE                      A  S
INVEST E L M H R  DAY/TIME    CITY                      MILEPNT   SECOND STREET           DIRECT      LEGS  TRAF-    RNDBT SURF   COLL TYP        OWNER     FROM         PRTC  INJ    G  E  LICNS  PED
UNLOC? D C J L K  LAT/LONG    URBAN AREA                LRS       INTERSECTION SEQ#       LOCTN   (#LANES)  CNTL     DRVWY LIGHT  SVRTY       V#  VEH TYPE  TO        P#  TYPE  SVRTY  E  X  RES    LOC  ERROR        ACTN  EVENT      CAUSE
00704  N Y N N N  02/27/2017  LANE                      1    14                           INTER    3-LEG    N           N CLD   ANGL-OTH    01  NONE   0  STRGHT                                                                    33,02
STATE      N      Mon   4P                              MN    0                           N                 STOP SIGN   N WET   TURN            PRVTE     N  S                                                    000               00
                              FLORENCE UA               187.23                            06         0                  N DAY   INJ             PSNGR CAR           01  DRVR  INJC   27  F  OR-Y        000          000               00
No      44  1   4.18 -124     6   6.09                  000900100S00                                                                                                           OR>25
                                                                                                                                                                01  PSNG  NO<5   02  M              000          000               00
                                                                                                                                              02  NONE   0  TURN-L
                                                                                                                                                  PRVTE     W  N                                                    015               00
                                                                                                                                                  PSNGR CAR           01  DRVR  NONE   68  M  OR-Y        051,028      000               33,02
                                                                                                                                                                                         OR<25
03791  N N N      11/20/2018  LANE                      1    14                           INTER    3-LEG    N           N CLR   ANGL-STP    01  NONE   9  TURN-L                                                                    08
NONE       N      Tue   6P                              MN    0                           W                 STOP SIGN   N DRY   TURN            N/A       S  W                                                    000               00
                              FLORENCE UA               187.23                            06         0                  N DARK  PDO             PSNGR CAR           01  DRVR  NONE   00  U  UNK         000          000               00
No      44  1   4.18 -124     6   6.09                  000900100S00                                                                                                           UNK
                                                                                                                                              02  NONE   9  STOP
                                                                                                                                                  N/A       W  E                                                    011               00
                                                                                                                                                  PSNGR CAR           01  DRVR  NONE   00  U  UNK         000          000               00
                                                                                                                                                                                         UNK
00838  N N N N N  03/16/2020  LANE                      1    14                           INTER    3-LEG    N           N CLR   ANGL-STP    01  NONE      TURN-L                                                                    40,08
CITY       N      Mon   7P                              MN    0                           W                 STOP SIGN   N DRY   TURN            PRVTE     S  W                                                    000               00
                              FLORENCE UA               187.23                            06         0                  N DUSK  INJ             PSNGR CAR           01  DRVR  NONE   52  F  OR-Y        007          026               40,08
No      44  1   4.17 -124     6   6.07                  000900100S00                                                                                                           OR<25
                                                                                                                                              02  NONE      STOP
                                                                                                                                                  PRVTE     W  E                                                    012               00
                                                                                                                                                  PSNGR CAR           01  DRVR  NONE   63  F  OR-Y        000          000               00
                                                                                                                                                                                         OR<25
                                                                                                                                                                02  PSNG  INJB   37  M              000          000               00
01689  N N N N N  07/21/2020  LANE                      1    14                           INTER    3-LEG    N           N CLR   O-1 L-TURN  01  NONE   9  STRGHT                                                                    02
STATE      N      Tue   8P                              MN    0                           CN                STOP SIGN   N DRY   TURN            N/A       N  S                                                    000               00
                              FLORENCE UA               187.23                            01         0                  N DAY   PDO             PSNGR CAR           01  DRVR  NONE   00  U  UNK         000          000               00
No      44  1   4.19 -124     6   6.07                  000900100S00                                                                                                           UNK
                                                                                                                                              02  NONE   9  TURN-L
                                                                                                                                                  N/A       S  W                                                    000               00
                                                                                                                                                  PSNGR CAR           01  DRVR  NONE   00  U  UNK         000          000               00
                                                                                                                                                                                         UNK
01772  N N N N N  07/31/2020  LANE                      1    14                           INTER    3-LEG    N           N CLR   O-1 L-TURN  01  NONE   9  TURN-L                                                                    02
STATE      N      Fri   10A                             MN    0                           CN                STOP SIGN   N DRY   TURN            N/A       W  N                                                    000               00
                              FLORENCE UA               187.23                            02         0                  Y DAY   PDO             PSNGR CAR           01  DRVR  NONE   00  U  UNK         000          000               00
No      44  1   4.19 -124     6   6.09                  000900100S00                                                                                                           UNK
```

009 OREGON COAST

Intersectional Crashes at US-101, Oregon Coast Hwy (#009) & Heceta Beach Rd in Lane County, OR.
January 1, 2016 through December 31, 2020

SER# INVEST UNLOC?	S P E E D	D R U G / M J	A L C	S C H L	W O R K	DATE DAY/TIME *LAT/LONG*	COUNTY CITY URBAN AREA	RD# FC CMPT/MLG MILEPNT LRS	CONN # FIRST STREET SECOND STREET INTERSECTION SEQ#	RD CHAR DIRECT LOCTN	INT-TYP (MEDIAN) LEGS (#LANES)	INT-REL TRAF- CNTL	OFFRD RNDBT DRVWY	WTHR SURF LIGHT	CRASH TYP COLL TYP SVRTY	V#	SPCL USE TRLR QTY OWNER VEH TYPE	MOVE FROM TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN EVENT	CAUSE
																02	NONE 9 N/A	STRGHT E W									018	00
																	PSNGR CAR		01	DRVR	NONE	00	U	UNK UNK		000	000	00

CRASH SUMMARIES BY YEAR BY COLLISION TYPE

Intersectional Crashes at US-101, Oregon Coast Hwy (#009) & Munsel Lake Rd in Lane County, OR.
January 1, 2016 through December 31, 2020

COLLISION TYPE	FATAL CRASHES	NON-FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER-SECTION	INTER-SECTION RELATED	OFF-ROAD
YEAR: 2018														
REAR-END	0	0	1	1	0	0	0	0	1	1	0	1	0	0
TURNING MOVEMENTS	0	0	1	1	0	0	0	1	0	1	0	1	0	0
2018 TOTAL	0	0	2	2	0	0	0	1	1	2	0	2	0	0
YEAR: 2017														
TURNING MOVEMENTS	0	1	2	3	0	1	0	2	1	3	0	3	0	0
2017 TOTAL	0	1	2	3	0	1	0	2	1	3	0	3	0	0
FINAL TOTAL	0	1	4	5	0	1	0	3	2	5	0	5	0	0

Disclaimers: *Effective 2016,* ***collection of "Property Damage Only" (PDO) crash data elements was reduced for vehicles and participants.*** *Age, Gender, License, Error and other elements are no longer available for PDO crash reporting. Please keep this in mind when comparing 2016 PDO crash data to prior years.*

A higher number of crashes may be reported as of 2011 compared to prior years. This does not necessarily reflect an increase in annual crashes. The higher numbers may result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics. For all disclaimers, see https://www.oregon.gov/ODOT/Data/documents/Crash_Data_Disclaimers.pdf.

TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT

CONTINUOUS SYSTEM CRASH LISTING

009 OREGON COAST

Intersectional Crashes at US-101, Oregon Coast Hwy (#009) & Munsel Lake Rd in Lane County, OR.

January 1, 2016 through December 31, 2020

```
           D
           R
       S   U
       P   G S W                                        RD#  FC    CONN #                               INT-TYP                                                 SPCL USE
SER#   E A / C O  DATE          COUNTY                  CMPT/MLG  FIRST  STREET          RD CHAR   (MEDIAN)  INT-REL  OFFRD WTHR   CRASH TYP    TRLR QTY   MOVE                         A  S
INVEST E L M H R  DAY/TIME      CITY                    MILEPNT   SECOND STREET          DIRECT      LEGS   TRAF-    RNDBT SURF   COLL TYP     OWNER      FROM          PRTC INJ       G  E  LICNS PED
UNLOC? D C J L K  LAT/LONG      URBAN AREA              LRS       INTERSECTION SEQ#      LOCTN     (#LANES) CNTL     DRVWY LIGHT  SVRTY     V# VEH TYPE   TO       P# TYPE SVRTY    E  X  RES    LOC ERROR            ACTN EVENT           CAUSE

00593  N N N N N 02/28/2018  LANE                   1    14                           INTER      3-LEG   N            N RAIN  S-1STOP    01 NONE    9 STRGHT                                                                          02,07,27
CITY       N      Wed    11A  FLORENCE               MN    0   N MUNSEL LAKE RD        UN                 STOP SIGN    N WET   REAR          N/A      E  W                                                           000                 00
                              FLORENCE UA            187.76   OREGON COAST HY         06          0                   N DAY   PDO           PSNGR CAR          01 DRVR NONE   00  U  UNK         000           000                 00
No     44  0  36.60 -124   6    5.74                 000900100S00              1                 (02)                                                                          UNK
                                                                                                                                         02 NONE    9 STOP
                                                                                                                                            N/A      E  W                                                           013                 00
                                                                                                                                            PSNGR CAR          01 DRVR NONE   00  U  UNK         000           000                 00
                                                                                                                                                                                   UNK

03774  N N N      10/18/2017  LANE                   1    14                           INTER      3-LEG   N            N RAIN  ANGL-OTH   01 NONE    9 TURN-L                                                                          02
STATE      N      Wed     1P  FLORENCE               MN    0   N MUNSEL LAKE RD        CN                 STOP SIGN    N WET   TURN          N/A      E  S                                                           015                 00
                              FLORENCE UA            187.76   OREGON COAST HY         01          0                   N DAY   PDO           PSNGR CAR          01 DRVR NONE   00  U  UNK         000           000                 00
No     44  0  36.60 -124   6    5.74                 000900100S00              1                                                                                               UNK
                                                                                                                                         02 NONE    9 TURN-L
                                                                                                                                            N/A      N  E                                                           000                 00
                                                                                                                                            PSNGR CAR          01 DRVR NONE   00  U  UNK         000           000                 00
                                                                                                                                                                                   UNK

03357  N N N N N 09/20/2017  LANE                   1    14                           INTER      3-LEG   N            N CLR   ANGL-OTH   01 NONE    0 STRGHT                                                                          02
CITY       N      Wed     2P  FLORENCE               MN    0   N MUNSEL LAKE RD        CN                 STOP SIGN    N DRY   TURN          PRVTE    S  N                                                           000                 00
                              FLORENCE UA            187.76   OREGON COAST HY         02          0                   N DAY   INJ           PSNGR CAR          01 DRVR INJC   50  F  OR-Y        000           000                 00
No     44  0  36.60 -124   6    5.74                 000900100S00              1                                                                                               OR<25
                                                                                                                                         02 NONE    0 TURN-L
                                                                                                                                            PRVTE    E  S                                                           015                 00
                                                                                                                                            PSNGR CAR          01 DRVR NONE   24  M  OR-Y        000           000                 00
                                                                                                                                                                                   OR<25

03659  N N N N N 10/11/2017  LANE                   1    14                           INTER      3-LEG   N            N CLR   ANGL-OTH   01 NONE    9 STRGHT                                                                          02
CITY       N      Wed     1P  FLORENCE               MN    0   N MUNSEL LAKE RD        CN                 STOP SIGN    N DRY   TURN          N/A      E  W                                                           015                 00
                              FLORENCE UA            187.76   OREGON COAST HY         02          0                   N DAY   PDO           PSNGR CAR          01 DRVR NONE   00  U  UNK         000           000                 00
No     44  0  36.60 -124   6    5.74                 000900100S00              1                                                                                               UNK
                                                                                                                                         02 NONE    9 STRGHT
                                                                                                                                            N/A      S  N                                                           000                 00
                                                                                                                                            MOTRHOME           01 DRVR NONE   00  U  UNK         000           000                 00
                                                                                                                                                                                   UNK

01176  N N N      04/25/2018  LANE                   1    14                           INTER      3-LEG   N            N CLR   ANGL-OTH   01 NONE    9 TURN-L                                                                          02
NO RPT     N      Wed     1P  FLORENCE               MN    0   OREGON COAST HY         CN                 STOP SIGN    N DRY   TURN          N/A      E  S                                                           015                 00
                              FLORENCE UA            187.76   N MUNSEL LAKE RD        02          0                   N DAY   PDO           PSNGR CAR          01 DRVR NONE   00  U  UNK         000           000                 00
No     44  0  36.61 -124   6    5.72                 000900100S00              1                                                                                               UNK
```

009 OREGON COAST

Intersectional Crashes at US-101, Oregon Coast Hwy (#009) & Munsel Lake Rd in Lane County, OR.
January 1, 2016 through December 31, 2020

SER# INVEST UNLOC?	S P E E D	A L C	D R U G / M J	S C H L	W O R K	DATE DAY/TIME LAT/LONG	COUNTY CITY URBAN AREA	RD# FC CMPT/MLG MILEPNT LRS	CONN # FIRST STREET SECOND STREET INTERSECTION SEQ#	RD CHAR DIRECT LOCTN	INT-TYP (MEDIAN) LEGS (#LANES)	INT-REL TRAF- CNTL	OFFRD RNDBT DRVWY	WTHR SURF LIGHT	CRASH TYP COLL TYP SVRTY	V#	SPCL USE TRLR QTY OWNER VEH TYPE	MOVE FROM TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN	EVENT	CAUSE
																02	NONE 9 N/A	TURN-L N E									000		00
																	PSNGR CAR		01	DRVR	NONE	00	U	UNK UNK		000	000		00

TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
CRASH SUMMARIES BY YEAR BY COLLISION TYPE

Intersectional Crashes on US-101, Oregon Coast Hwy (#009) & OR-126, Florence-Eugene Hwy (#062) / 9th St, in Florence, OR.
January 1, 2016 through December 31, 2020

COLLISION TYPE	FATAL CRASHES	NON-FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER-SECTION	INTER-SECTION RELATED	OFF-ROAD
YEAR: 2020														
REAR-END	0	0	3	3	0	0	0	2	1	3	0	3	0	0
TURNING MOVEMENTS	1	0	0	1	1	0	1	1	0	1	0	1	0	0
2020 TOTAL	1	0	3	4	1	0	1	3	1	4	0	4	0	0
YEAR: 2019														
ANGLE	0	1	0	1	0	6	1	1	0	1	0	1	0	0
2019 TOTAL	0	1	0	1	0	6	1	1	0	1	0	1	0	0
YEAR: 2018														
REAR-END	0	0	2	2	0	0	0	2	0	2	0	2	0	0
TURNING MOVEMENTS	0	0	1	1	0	0	0	0	0	1	0	1	0	0
2018 TOTAL	0	0	3	3	0	0	0	2	0	3	0	3	0	0
YEAR: 2017														
ANGLE	0	0	1	1	0	0	0	0	1	1	0	1	0	0
REAR-END	0	1	0	1	0	1	0	1	0	1	0	1	0	0
2017 TOTAL	0	1	1	2	0	1	0	1	1	2	0	2	0	0
YEAR: 2016														
ANGLE	0	1	0	1	0	2	0	1	0	1	0	1	0	0
REAR-END	0	0	3	3	0	0	0	2	0	3	0	3	0	0
TURNING MOVEMENTS	0	0	2	2	0	0	0	0	2	0	2	2	0	0
2016 TOTAL	0	1	5	6	0	2	0	3	2	4	2	6	0	0
FINAL TOTAL	1	3	12	16	1	9	2	10	4	14	2	16	0	0

Disclaimers: *Effective 2016,* ***collection of "Property Damage Only" (PDO) crash data elements was reduced for vehicles and participants.*** *Age, Gender, License, Error and other elements are no longer available for PDO crash reporting. Please keep this in mind when comparing 2016 PDO crash data to prior years.*

A higher number of crashes may be reported as of 2011 compared to prior years. This does not necessarily reflect an increase in annual crashes. The higher numbers may result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics. For all disclaimers, see https://www.oregon.gov/ODOT/Data/documents/Crash_Data_Disclaimers.pdf.

009 OREGON COAST Intersectional Crashes on US-101, Oregon Coast Hwy (#009) & OR-126, Florence-Eugene Hwy (#062) / 9th St, in Florence, OR.
January 1, 2016 through December 31, 2020

```
          D
          R
      S   U
      P   G S W                                      RD#  FC    CONN #                             INT-TYP                                     SPCL USE
SER#  E A / C O  DATE          COUNTY               CMPT/MLG  FIRST  STREET       RD CHAR  (MEDIAN)  INT-REL  OFFRD WTHR  CRASH TYP    TRLR QTY  MOVE                    A  S
INVEST E L M H R  DAY/TIME     CITY                 MILEPNT   SECOND STREET        DIRECT     LEGS   TRAF-    RNDBT SURF  COLL TYP     OWNER     FROM        PRTC INJ     G  E  LICNS PED
UNLOC? D C J L K  LAT/LONG     URBAN AREA           LRS       INTERSECTION SEQ#    LOCTN   (#LANES)  CNTL     DRVWY LIGHT SVRTY     V# VEH TYPE  TO       P# TYPE SVRTY  E  X  RES   LOC ERROR   ACTN EVENT   CAUSE

03087  N N N N N 08/19/2016 LANE                1    14                            INTER     CROSS  N            N CLR   S-STRGHT  01 NONE   9 STRGHT                                                      29
TRIBAL    N      Fri   11A  FLORENCE            MN    0   OREGON COAST HY          NE               TRF SIGNAL   N DRY   REAR         N/A      SW NE                                         000           00
                            FLORENCE UA         190.21    8TH ST                   06           0                N DAY   PDO          PSNGR CAR          01 DRVR NONE  00 U UNK       000     000           00
No      43 58  29.60 -124   6  10.67            000900100S00              1                                                                                       UNK

                                                                                                                             02 NONE   9 STRGHT
                                                                                                                                N/A      SW NE                                         006           00
                                                                                                                                PSNGR CAR          01 DRVR NONE  00 U UNK       000     000           00
                                                                                                                                                                  UNK

03773  N N N     10/18/2017 LANE                1    14                            INTER     CROSS  N            N RAIN ANGL-OTH  01 NONE   9 STRGHT                                                      02
NONE      N      Wed   10A  FLORENCE            MN    0   OREGON COAST HY          CN               STOP SIGN    N WET   ANGL         N/A      NE SW                                         000           00
                            FLORENCE UA         190.21    8TH ST                   01           0                N DAY   PDO          PSNGR CAR          01 DRVR NONE  00 U UNK       000     000           00
No      43 58  29.60 -124   6  10.67            000900100S00              1                                                                                       UNK

                                                                                                                             02 NONE   9 STRGHT
                                                                                                                                N/A      E  W                                          000           00
                                                                                                                                PSNGR CAR          01 DRVR NONE  00 U UNK       000     000           00
                                                                                                                                                                  UNK

04007  N N N     10/22/2016 LANE                1    14                            INTER     CROSS  N            N CLR   ANGL-OTH  01 NONE   0 STRGHT                                                      02
NO RPT    N      Sat    4P  FLORENCE            MN    0   OREGON COAST HY          CN               STOP SIGN    N DRY   ANGL         PRVTE    W  E                                          000           00
                            FLORENCE UA         190.21    8TH ST                   04           0                N DAY   INJ          PSNGR CAR          01 DRVR NONE  85 M OR-Y      028     000           02
No      43 58  29.60 -124   6  10.67            000900100S00              1                                                                                       OR<25

                                                                                                                             02 NONE   0 STRGHT
                                                                                                                                PRVTE    S  N                                          000           00
                                                                                                                                PSNGR CAR          01 DRVR INJB  18 F OR-Y      000     000           00
                                                                                                                                                                  OR<25
                                                                                                                                                   02 PSNG INJB  18 F           000     000           00

01780  N N N     06/18/2018 LANE                1    14                            INTER     CROSS  N            N CLR   S-1STOP   01 NONE   9 STRGHT                                                      32
CITY      N      Mon    7P  FLORENCE            MN    0   FLORENCE-EUGENE HY       UN               TRF SIGNAL   N DRY   REAR         N/A      UN UN                                         000           00
                            FLORENCE UA         190.23    OREGON COAST HY          00           0                N DAY   PDO          PSNGR CAR          01 DRVR NONE  00 U UNK       000     000           00
No      43 58  28.58 -124   6  11.25            000900100S00              1                                                                                       UNK

                                                                                                                             02 NONE   9 STOP
                                                                                                                                N/A      UN UN                                         011           00
                                                                                                                                PSNGR CAR          01 DRVR NONE  00 U UNK       000     000           00
                                                                                                                                                                  UNK

02879  N N N N N 09/15/2018 LANE                1    14                            INTER     CROSS  N            N CLR   S-1STOP   01 NONE   9 STRGHT                                            004       27
CITY      N      Sat    6P  FLORENCE            MN    0   OREGON COAST HY          N                TRF SIGNAL   N DRY   REAR         N/A      N  S                                          000           00
                            FLORENCE UA         190.23    FLORENCE-EUGENE HY       06           0                N DAY   PDO          PSNGR CAR          01 DRVR NONE  00 U UNK       000     000           00
No      43 58  28.58 -124   6  11.25            000900100S00              1                                                                                       UNK
```

009 OREGON COAST
Intersectional Crashes on US-101, Oregon Coast Hwy (#009) & OR-126, Florence-Eugene Hwy (#062) / 9th St, in Florence, OR.
January 1, 2016 through December 31, 2020

```
          D
          R
      S   U
      P   G S W                                RD#  FC   CONN #                                 INT-TYP                                        SPCL USE
SER#  E A / C O  DATE       COUNTY             CMPT/MLG  FIRST  STREET       RD CHAR  (MEDIAN) INT-REL  OFFRD WTHR  CRASH TYP    TRLR QTY  MOVE                    A  S
INVEST E L M H R DAY/TIME   CITY               MILEPNT   SECOND STREET       DIRECT    LEGS    TRAF-    RNDBT SURF  COLL TYP     OWNER     FROM       PRTC INJ     G  E  LICNS PED
UNLOC? D C J L K LAT/LONG   URBAN AREA         LRS       INTERSECTION SEQ#   LOCTN    (#LANES) CNTL     DRVWY LIGHT SVRTY     V# VEH TYPE  TO     P# TYPE SVRTY  E  X  RES   LOC ERROR    ACTN EVENT    CAUSE

                                                                                                                           02 NONE    9 STOP
                                                                                                                              N/A       N  S                                                011           00
                                                                                                                              PSNGR CAR         01 DRVR NONE  00 U UNK       000          000           00
                                                                                                                                                                   UNK

02056  N N N     08/26/2020 LANE               1    14                       INTER     CROSS   N        N CLR  S-1STOP     01 NONE    9 STRGHT                                                               29
NONE       N     Wed    5P  FLORENCE           MN    0   FLORENCE-EUGENE HY  N                 TRF SIGNAL N DRY  REAR         N/A       N  S                                                000           00
                            FLORENCE UA        190.23    OREGON COAST HY     06         0               N DAY  PDO            PSNGR CAR         01 DRVR NONE  00 U UNK       000          000           00
No     43 58  28.60 -124  6  11.26             000900100S00              1                                                                                         UNK

                                                                                                                           02 NONE    9 STOP
                                                                                                                              N/A       N  S                                                011           00
                                                                                                                              PSNGR CAR         01 DRVR NONE  00 U UNK       000          000           00
                                                                                                                                                                   UNK

01362  N N N N N 04/22/2017 LANE               1    14                       INTER     CROSS   N        N CLR  S-1STOP     01 NONE    0 STRGHT                                                               29
NONE       N     Sat    2P  FLORENCE           MN    0   OREGON COAST HY     NE                TRF SIGNAL N DRY  REAR         PRVTE     NE SW                                               000           00
                            FLORENCE UA        190.23    9TH ST              06         0               N DAY  INJ            PSNGR CAR         01 DRVR NONE  31 M OTH-Y     026          000           29
No     43 58  28.58 -124  6  11.25             000900100S00              1                                                                                         N-RES

                                                                                                                           02 NONE    0 STOP
                                                                                                                              PRVTE     NE SW                                               011           00
                                                                                                                              PSNGR CAR         01 DRVR INJC  83 M OR-Y      000          000           00
                                                                                                                                                                   OR<25

04856  N N N N N 12/19/2016 LANE               1    14                       INTER     CROSS   N        N RAIN S-OTHER     01 NONE    9 TURN-L                                                               08
STATE      N     Mon    4P  FLORENCE           MN    0   FLORENCE-EUGENE HY  S                 TRF SIGNAL N WET  TURN         N/A       E  S                                                000           00
                            FLORENCE UA        190.23    OREGON COAST HY     05         0               N DUSK PDO            PSNGR CAR         01 DRVR NONE  00 U UNK       000          000           00
No     43 58  28.58 -124  6  11.25             000900100S00              1                                                                                         UNK

                                                                                                                           02 NONE    9 TURN-L
                                                                                                                              N/A       E  S                                                000           00
                                                                                                                              PSNGR CAR         01 DRVR NONE  00 U UNK       000          000           00
                                                                                                                                                                   UNK

01225  N N N N N 04/06/2016 LANE               1    14                       INTER     CROSS   N        N CLR  S-STRGHT    01 NONE    9 STRGHT                                                               27,07
CITY       N     Wed    2P  FLORENCE           MN    0   FLORENCE-EUGENE HY  S                 TRF SIGNAL N DRY  REAR         N/A       S  N                                                000           00
                            FLORENCE UA        190.23    OREGON COAST HY     06         0               N DAY  PDO            PSNGR CAR         01 DRVR NONE  00 U UNK       000          000           00
No     43 58  28.58 -124  6  11.25             000900100S00              1                                                                                         UNK

                                                                                                                           02 NONE    9 STRGHT
                                                                                                                              N/A       S  N                                                006           00
                                                                                                                              PSNGR CAR         01 DRVR NONE  00 U UNK       000          000           00
                                                                                                                                                                   UNK
```

009 OREGON COAST   Intersectional Crashes on US-101, Oregon Coast Hwy (#009) & OR-126, Florence-Eugene Hwy (#062) / 9th St, in Florence, OR.
January 1, 2016 through December 31, 2020

```
          D
          R
      S   U
      P   G S W                                     RD#  FC   CONN #                                INT-TYP                                         SPCL USE
SER#  E A / C O  DATE       COUNTY                  CMPT/MLG  FIRST  STREET       RD CHAR   (MEDIAN)  INT-REL  OFFRD WTHR  CRASH TYP   TRLR QTY  MOVE                     A  S
INVEST E L M H R DAY/TIME   CITY                    MILEPNT   SECOND STREET       DIRECT      LEGS    TRAF-    RNDBT SURF  COLL TYP    OWNER     FROM      PRTC INJ      G  E  LICNS PED
UNLOC? D C J L K LAT/LONG   URBAN AREA              LRS       INTERSECTION SEQ#   LOCTN     (#LANES)  CNTL     DRVWY LIGHT SVRTY    V# VEH TYPE  TO     P# TYPE SVRTY  E  X  RES   LOC ERROR       ACTN EVENT    CAUSE

02416  N N N     07/05/2016 LANE                    1    14                       INTER      CROSS  N          N UNK  S-1STOP   01 NONE    9 STRGHT                                                                29
NONE       N     Tue   12P  FLORENCE                MN    0   FLORENCE-EUGENE HY  S                 TRF SIGNAL N UNK  REAR         N/A       S  N                                             000              00
                            FLORENCE UA             190.23    OREGON COAST HY     06            0              N DAY  PDO          PSNGR CAR         01 DRVR NONE  00 U UNK       000       000              00
No      43 58  28.58 -124   6  11.25                000900100S00             1                                                                                       UNK
                                                                                                                                02 NONE    9 STOP
                                                                                                                                   N/A       S  N                                             011              00
                                                                                                                                   PSNGR CAR         01 DRVR NONE  00 U UNK       000       000              00
                                                                                                                                                                      UNK

02244  N N N N N 09/18/2020 LANE                    1    14                       INTER      CROSS  N          N RAIN S-1STOP   01 NONE    9 STRGHT                                                                27,29
STATE      N     Fri   10A  FLORENCE                MN    0   FLORENCE-EUGENE HY  S                 TRF SIGNAL N WET  REAR         N/A       S  N                                             000              00
                            FLORENCE UA             190.23    OREGON COAST HY     06            0              N DAY  PDO          PSNGR CAR         01 DRVR NONE  00 U UNK       000       000              00
No      43 58  28.56 -124   6  11.27                000900100S00             1                                                                                       UNK
                                                                                                                                02 NONE    9 STOP
                                                                                                                                   N/A       S  N                                             011              00
                                                                                                                                   PSNGR CAR         01 DRVR NONE  00 U UNK       000       000              00
                                                                                                                                                                      UNK

05032  N N N     12/29/2016 LANE                    1    14                       INTER      CROSS  N          N RAIN S-1TURN   01 NONE    9 STRGHT                                                                14
NO RPT     N     Thu    4P  FLORENCE                MN    0   FLORENCE-EUGENE HY  CN                TRF SIGNAL N WET  TURN         N/A       E  W                                             000              00
                            FLORENCE UA             190.23    OREGON COAST HY     01            0              N DUSK PDO          PSNGR CAR         01 DRVR NONE  00 U UNK       000       000              00
No      43 58  28.58 -124   6  11.25                000900100S00             1                                                                                       UNK
                                                                                                                                02 NONE    9 TURN-L
                                                                                                                                   N/A       E  S                                             000              00
                                                                                                                                   PSNGR CAR         01 DRVR NONE  00 U UNK       000       000              00
                                                                                                                                                                      UNK

02213  N N N     07/25/2018 LANE                    1    14                       INTER      CROSS  N          N CLR  O-1 L-TURN 01 NONE   9 TURN-L                                                                04
NO RPT     N     Wed    1P  FLORENCE                MN    0   FLORENCE-EUGENE HY  CN                TRF SIGNAL N UNK  TURN         N/A       N  E                                             000              00
                            FLORENCE UA             190.23    OREGON COAST HY     01            0              N DAY  PDO          PSNGR CAR         01 DRVR NONE  00 U UNK       000       000              00
No      43 58  28.59 -124   6  11.27                000900100S00             1                                                                                       UNK
                                                                                                                                02 NONE    9 STRGHT
                                                                                                                                   N/A       S  N                                             000              00
                                                                                                                                   PSNGR CAR         01 DRVR NONE  00 U UNK       000       000              00
                                                                                                                                                                      UNK

03787  Y N N N Y 12/04/2019 LANE                    1    14                       INTER      CROSS  N          N CLR  ANGL-OTH  01 NONE    1 STRGHT                                                   013          33,32,04
CITY       N     Wed    1P  FLORENCE                MN    0   FLORENCE-EUGENE HY  CN                TRF SIGNAL N DRY  ANGL         RENTL     E  W                                             000  013         00
                            FLORENCE UA             190.23    OREGON COAST HY     02            0              N DAY  INJ          SEMI TOW          01 DRVR NONE  38 M SUSP      053,052,020 000              33,32,04
No      43 58  28.59 -124   6  11.25                000900100S00             1                                                                                       OR>25
```

009 OREGON COAST

Intersectional Crashes on US-101, Oregon Coast Hwy (#009) & OR-126, Florence-Eugene Hwy (#062) / 9th St, in Florence, OR.
January 1, 2016 through December 31, 2020

SER# / INVEST / UNLOC?	SPEC / DRUG / SPEED / ALC / C / MJH / WRK / O / R	DATE / DAY/TIME / *LAT/LONG*	COUNTY / CITY / URBAN AREA	RD# FC / CMPT/MLG / MILEPNT / LRS	CONN # / FIRST STREET / SECOND STREET / INTERSECTION SEQ#	RD CHAR / DIRECT / LOCTN	INT-TYP / (MEDIAN) / LEGS / (#LANES)	INT-REL / TRAF- / CNTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH TYP / COLL TYP / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / VEH TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	AGE	SEX	LICNS RES	PED LOC	ERROR	ACTN EVENT	CAUSE
												02	NONE	STRGHT										
													PRVTE	N S									000	00
													PSNGR CAR		01	DRVR	INJC	31	F	OR-Y		000	000	00
																				OR<25				
															02	PSNG	INJC	01	M			000	000	00
												03	NONE	STOP										
													PRVTE	W E									022	00
													PSNGR CAR		01	DRVR	INJB	80	F	OR-Y		000	022	00
																				OR<25				
												04	NONE	STOP										
													PRVTE	W E									022	00
													PSNGR CAR		01	DRVR	INJB	70	M	OTH-Y		000	022	00
																				OR<25				
															02	PSNG	INJC	01	F			000	022	00
												05	NONE	STOP										
													PRVTE	W E									022	00
													PSNGR CAR		01	DRVR	INJC	77	M	OR-Y		000	022	00
																				OR<25				
00678	N N Y N Y	03/17/2020	LANE	1 14		INTER	CROSS	N	N	CLR	BIKE	01	NONE 0	TURN-R										02
CITY	N	Tue 3P	FLORENCE	MN 0	FLORENCE-EUGENE HY	CN		TRF SIGNAL	N	DRY	TURN		PRVTE	S E									000	00
			FLORENCE UA	190.23	OREGON COAST HY	04	1		N	DAY	FAT		TRUCK		01	DRVR	NONE	63	M	OR-Y		000	000	00
No		*43 58 28.59 -124 6 11.25*		000900100S00	1															OR<25				
														STRGHT	01	BIKE	KILL	53	M		02	028	035	02
														S N										

062 FLORENCE-EUGENE

Intersectional Crashes on US-101, Oregon Coast Hwy (#009) & OR-126, Florence-Eugene Hwy (#062) / 9th St, in Florence, OR.
January 1, 2016 through December 31, 2020

```
              D
              R
        S     U
        P     G S W                           RD#  FC   CONN #                                  INT-TYP                                    SPCL USE
SER#    E A / C O  DATE         COUNTY        CMPT/MLG  FIRST  STREET      RD CHAR  (MEDIAN) INT-REL  OFFRD WTHR  CRASH TYP      TRLR QTY  MOVE                   A  S
INVEST  E L M H R  DAY/TIME     CITY          MILEPNT   SECOND STREET      DIRECT      LEGS  TRAF-    RNDBT SURF  COLL TYP       OWNER     FROM       PRTC INJ    G  E  LICNS PED
UNLOC?  D C J L K  LAT/LONG     URBAN AREA    LRS       INTERSECTION SEQ#  LOCTN   (#LANES)  CNTL     DRVWY LIGHT SVRTY      V# VEH TYPE  TO     P# TYPE SVRTY  E  X  RES   LOC ERROR      ACTN EVENT      CAUSE

02043   N N N      08/25/2020   LANE          1    14                      INTER     CROSS  N             N CLR  S-1STOP     01 NONE   9  STRGHT                                                         29
NONE        N      Tue      2P  FLORENCE      MN    0   FLORENCE-EUGENE HY E                TRF SIGNAL    N DRY  REAR           N/A       E  W                                          000             00
                                FLORENCE UA     0.02    OREGON COAST HY    06          0                  N DAY  PDO            PSNGR CAR       01 DRVR NONE   00 U  UNK       000         000             00
No      43 58  28.60 -124   6  11.24          006200100S00               1                                                                                     UNK

                                                                                                                             02 NONE   9  STOP
                                                                                                                                N/A       E  W                                          011             00
                                                                                                                                PSNGR CAR       01 DRVR NONE   00 U  UNK       000         000             00
                                                                                                                                                                     UNK
```

OREGON DEPARTMENT OF TRANSPORTATION - POLICY, DATA AND ANALYSIS DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
CRASH SUMMARIES BY YEAR BY COLLISION TYPE

Intersectional Crashes at US-101, Oregon Coast Hwy (#009) & Rhododendron Dr in Florence, OR.
January 1, 2016 through December 31, 2020

COLLISION TYPE	FATAL CRASHES	NON-FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER-SECTION	INTER-SECTION RELATED	OFF-ROAD
YEAR: 2020														
REAR-END	0	1	1	2	0	2	0	1	1	2	0	2	0	0
2020 TOTAL	0	1	1	2	0	2	0	1	1	2	0	2	0	0
YEAR: 2018														
REAR-END	0	1	0	1	0	2	0	0	1	1	0	1	0	0
TURNING MOVEMENTS	0	0	1	1	0	0	0	0	1	1	0	1	0	0
2018 TOTAL	0	1	1	2	0	2	0	0	2	2	0	2	0	0
YEAR: 2017														
REAR-END	0	0	1	1	0	0	0	1	0	0	1	1	0	0
TURNING MOVEMENTS	0	0	1	1	0	0	0	1	0	1	0	1	0	0
2017 TOTAL	0	0	2	2	0	0	0	2	0	1	1	2	0	0
FINAL TOTAL	0	2	4	6	0	4	0	3	3	5	1	6	0	0

Disclaimers: *Effective 2016,* ***collection of "Property Damage Only" (PDO) crash data elements was reduced for vehicles and participants.*** *Age, Gender, License, Error and other elements are no longer available for PDO crash reporting. Please keep this in mind when comparing 2016 PDO crash data to prior years.*

A higher number of crashes may be reported as of 2011 compared to prior years. This does not necessarily reflect an increase in annual crashes. The higher numbers may result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics. For all disclaimers, see https://www.oregon.gov/ODOT/Data/documents/Crash_Data_Disclaimers.pdf.

009 OREGON COAST

Intersectional Crashes at US-101, Oregon Coast Hwy (#009) & Rhododendron Dr in Florence, OR.
January 1, 2016 through December 31, 2020

```
                D
                R
          S     U
          P   G S W                                         RD#  FC   CONN #                                      INT-TYP                                          SPCL USE
SER#     E A / C O  DATE         COUNTY                     CMPT/MLG  FIRST  STREET         RD CHAR  (MEDIAN)  INT-REL  OFFRD WTHR   CRASH TYP     TRLR QTY    MOVE                          A  S
INVEST E L M H R  DAY/TIME     CITY                       MILEPNT   SECOND STREET          DIRECT      LEGS    TRAF-    RNDBT SURF   COLL TYP      OWNER       FROM          PRTC INJ        G  E  LICNS PED
UNLOC? D C J L K  LAT/LONG     URBAN AREA                 LRS       INTERSECTION SEQ#      LOCTN   (#LANES)  CNTL     DRVWY LIGHT  SVRTY     V# VEH TYPE    TO       P# TYPE SVRTY   E  X  RES   LOC  ERROR          ACTN EVENT      CAUSE
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
00374  N N N     01/30/2017 LANE                       1    14                               INTER       CROSS  N              N CLR   S-STRGHT   01 NONE   9 STRGHT                                                                        29
NO RPT     N     Mon     8A FLORENCE                   MN    0   OREGON COAST HY             NE                 TRF SIGNAL     N DRY   REAR          N/A      NE SW                                                         000                00
                            FLORENCE UA                190.53    RHODODENDRON DR             06            0                   Y DAWN  PDO          PSNGR CAR          01 DRVR NONE  00 U UNK        000          000                00
No     43 58  15.56 -124  6  20.84                    000900100S00               1                                                                                           UNK

                                                                                                                                          02 NONE   9 STRGHT
                                                                                                                                             N/A      NE SW                                                         006                00
                                                                                                                                            PSNGR CAR          01 DRVR NONE  00 U UNK        000          000                00
                                                                                                                                                                                 UNK

00197  N N N     01/22/2018 LANE                       1    14                               INTER       CROSS  N              N CLR   S-1STOP    01 NONE   0 STRGHT                                                                  013        29
NO RPT     N     Mon    10A FLORENCE                   MN    0   OREGON COAST HY             SW                 TRF SIGNAL     N WET   REAR          PRVTE    SW NE                                                         000                00
                            FLORENCE UA                190.53    RHODODENDRON DR             06            0                   N DAY   INJ          PSNGR CAR          01 DRVR NONE  57 M OR-Y       026          000                29
No     43 58  15.56 -124  6  20.84                    000900100S00               1                                                                                           OR<25

                                                                                                                                          02 NONE   0 STOP
                                                                                                                                             PRVTE    SW NE                                                         011  013           00
                                                                                                                                            PSNGR CAR          01 DRVR INJC  23 M OR-Y       000          000                00
                                                                                                                                                                                 OR<25

                                                                                                                                          03 NONE   0 STOP
                                                                                                                                             PRVTE    SW NE                                                         022  013           00
                                                                                                                                            PSNGR CAR          01 DRVR INJC  63 F OR-Y       000          000                00
                                                                                                                                                                                 OR<25

                                                                                                                                          04 NONE   0 STOP
                                                                                                                                             UNKN     SW NE                                                         022                00
                                                                                                                                            PSNGR CAR          01 DRVR NONE  00 M UNK        000          000                00
                                                                                                                                                                                 UNK

00010  Y N N N Y 01/02/2020 LANE                       1    14                               INTER       CROSS  N              N CLR   S-1STOP    01 NONE     STRGHT                                                                           07,30
CITY       N     Thu     4P FLORENCE                   MN    0   OREGON COAST HY             SW                 TRF SIGNAL     N DRY   REAR          PRVTE    SW NE                                                         000                00
                            FLORENCE UA                190.53    RHODODENDRON DR             06            0                   N DAY   INJ          PSNGR CAR          01 DRVR INJB  38 F SUSP       043,050      000                07,30
No     43 58  15.56 -124  6  20.84                    000900100S00               1                                                                                           OR>25

                                                                                                                                          02 NONE     STOP
                                                                                                                                             PRVTE    SW NE                                                         011                00
                                                                                                                                            PSNGR CAR          01 DRVR INJC  39 M OTH-Y      000          000                00
                                                                                                                                                                                 OR<25

00375  N N N     02/03/2020 LANE                       1    14                               INTER       CROSS  N              N UNK   S-1STOP    01 NONE   9 STRGHT                                                                        29
NONE       N     Mon     7A FLORENCE                   MN    0   OREGON COAST HY             SW                 TRF SIGNAL     N WET   REAR          N/A      SW NE                                                         000                00
                            FLORENCE UA                190.53    RHODODENDRON DR             06            0                   N DAY   PDO          PSNGR CAR          01 DRVR NONE  00 U UNK        000          000                00
No     43 58  15.56 -124  6  20.84                    000900100S00               1                                                                                           UNK
```

009 OREGON COAST

Intersectional Crashes at US-101, Oregon Coast Hwy (#009) & Rhododendron Dr in Florence, OR.
January 1, 2016 through December 31, 2020

```
          D
          R
      S   U
      P   G S W                                    RD#  FC   CONN #                           INT-TYP                                   SPCL USE
SER#  E A / C O  DATE        COUNTY               CMPT/MLG  FIRST  STREET      RD CHAR  (MEDIAN) INT-REL  OFFRD WTHR  CRASH TYP    TRLR QTY  MOVE                     A  S
INVEST E L M H R DAY/TIME    CITY                 MILEPNT   SECOND STREET      DIRECT     LEGS  TRAF-    RNDBT SURF  COLL TYP      OWNER     FROM       PRTC  INJ     G  E  LICNS PED
UNLOC? D C J L K LAT/LONG    URBAN AREA           LRS       INTERSECTION SEQ#  LOCTN   (#LANES) CNTL     DRVWY LIGHT SVRTY      V# VEH TYPE  TO     P# TYPE  SVRTY   E  X  RES   LOC ERROR        ACTN EVENT      CAUSE

                                                                                                                                 02 NONE    9 STOP
                                                                                                                                    N/A       SW NE                                                      011             00

                                                                                                                                   PSNGR CAR        01 DRVR NONE  00 U  UNK         000              000             00
                                                                                                                                                                        UNK

01623  N N N N N 05/11/2017 LANE                 1    14                         INTER      CROSS  N              N CLD   ANGL-OTH  01 NONE    9 STRGHT                                                                  04
STATE      N     Thu    8A  FLORENCE             MN    0    OREGON COAST HY      CN                TRF SIGNAL     N DRY   TURN         N/A       NE SW                                                      000             00
                            FLORENCE UA          190.53     RHODODENDRON DR      03            0                  N DAY   PDO         PSNGR CAR        01 DRVR NONE  00 U  UNK         000              000             00
No      43 58  15.56 -124   6  20.84             000900100S00                1                                                                                          UNK

                                                                                                                                 02 NONE    9 TURN-L
                                                                                                                                    N/A       W  NE                                                      000             00

                                                                                                                                   PSNGR CAR        01 DRVR NONE  00 U  UNK         000              000             00
                                                                                                                                                                        UNK

02465  N N N        08/13/2018 LANE              1    14                         INTER      CROSS  N              N FOG   ANGL-STP  01 NONE    9 STRGHT                                                                  14,10
NONE       N     Mon    7A  FLORENCE             MN    0    OREGON COAST HY      CN                TRF SIGNAL     N WET   TURN         N/A       N  S                                                       000             00
                            FLORENCE UA          190.53     RHODODENDRON DR      03            0                  N DAY   PDO         PSNGR CAR        01 DRVR NONE  00 U  UNK         000              000             00
No      43 58  15.57 -124   6  20.85             000900100S00                1                                                                                          UNK

                                                                                                                                 02 NONE    9 STOP
                                                                                                                                    N/A       E  S                                                       013             00

                                                                                                                                    UNKNOWN         01 DRVR NONE  00 U  UNK         000              000             00
                                                                                                                                                                        UNK
```

TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT

CRASH SUMMARIES BY YEAR BY COLLISION TYPE

Crashes on OR-126 NB Turn Lane from OR-126, Florence-Eugene Hwy (#062) to US-101/10thSt. Excludes Crashes at Intersections.
January 1, 2016 through December 31, 2020

COLLISION TYPE	FATAL CRASHES	NON-FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER-SECTION	INTER-SECTION RELATED	OFF-ROAD
YEAR:														
TOTAL														
FINAL TOTAL														

Disclaimers: *Effective 2016,* ***collection of "Property Damage Only" (PDO) crash data elements was reduced for vehicles and participants.*** *Age, Gender, License, Error and other elements are no longer available for PDO crash reporting. Please keep this in mind when comparing 2016 PDO crash data to prior years.*

A higher number of crashes may be reported as of 2011 compared to prior years. This does not necessarily reflect an increase in annual crashes. The higher numbers may result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics. For all disclaimers, see https://www.oregon.gov/ODOT/Data/documents/Crash_Data_Disclaimers.pdf.

ACTION CODE TRANSLATION LIST

ACTION CODE	SHORT DESCRIPTION	LONG DESCRIPTION
000	NONE	NO ACTION OR NON-WARRANTED
001	SKIDDED	SKIDDED
002	ON/OFF V	GETTING ON OR OFF STOPPED OR PARKED VEHICLE
003	LOAD OVR	OVERHANGING LOAD STRUCK ANOTHER VEHICLE, ETC.
006	SLOW DN	SLOWED DOWN
007	AVOIDING	AVOIDING MANEUVER
008	PAR PARK	PARALLEL PARKING
009	ANG PARK	ANGLE PARKING
010	INTERFERE	PASSENGER INTERFERING WITH DRIVER
011	STOPPED	STOPPED IN TRAFFIC NOT WAITING TO MAKE A LEFT TURN
012	STP/L TRN	STOPPED BECAUSE OF LEFT TURN SIGNAL OR WAITING, ETC.
013	STP TURN	STOPPED WHILE EXECUTING A TURN
014	EMR V PKD	EMERGENCY VEHICLE LEGALLY PARKED IN THE ROADWAY
015	GO A/STOP	PROCEED AFTER STOPPING FOR A STOP SIGN/FLASHING RED.
016	TRN A/RED	TURNED ON RED AFTER STOPPING
017	LOSTCTRL	LOST CONTROL OF VEHICLE
018	EXIT DWY	ENTERING STREET OR HIGHWAY FROM ALLEY OR DRIVEWAY
019	ENTR DWY	ENTERING ALLEY OR DRIVEWAY FROM STREET OR HIGHWAY
020	STR ENTR	BEFORE ENTERING ROADWAY, STRUCK PEDESTRIAN, ETC. ON SIDEWALK OR SHOULDER
021	NO DRVR	CAR RAN AWAY - NO DRIVER
022	PREV COL	STRUCK, OR WAS STRUCK BY, VEHICLE OR PEDESTRIAN IN PRIOR COLLISION BEFORE ACC. STABILIZED
023	STALLED	VEHICLE STALLED OR DISABLED
024	DRVR DEAD	DEAD BY UNASSOCIATED CAUSE
025	FATIGUE	FATIGUED, SLEEPY, ASLEEP
026	SUN	DRIVER BLINDED BY SUN
027	HDLGHTS	DRIVER BLINDED BY HEADLIGHTS
028	ILLNESS	PHYSICALLY ILL
029	THRU MED	VEHICLE CROSSED, PLUNGED OVER, OR THROUGH MEDIAN BARRIER
030	PURSUIT	PURSUING OR ATTEMPTING TO STOP A VEHICLE
031	PASSING	PASSING SITUATION
032	PRKOFFRD	VEHICLE PARKED BEYOND CURB OR SHOULDER
033	CROS MED	VEHICLE CROSSED EARTH OR GRASS MEDIAN
034	X N/SGNL	CROSSING AT INTERSECTION - NO TRAFFIC SIGNAL PRESENT
035	X W/ SGNL	CROSSING AT INTERSECTION - TRAFFIC SIGNAL PRESENT
036	DIAGONAL	CROSSING AT INTERSECTION - DIAGONALLY
037	BTWN INT	CROSSING BETWEEN INTERSECTIONS
038	DISTRACT	DRIVER'S ATTENTION DISTRACTED
039	W/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC
040	A/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC
041	W/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC
042	A/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC
043	PLAYINRD	PLAYING IN STREET OR ROAD
044	PUSH MV	PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER
045	WORK ON	WORKING IN ROADWAY OR ALONG SHOULDER
046	W/ TRAFIC	NON-MOTORIST WALKING, RUNNING, RIDING, ETC. WITH TRAFFIC
047	A/ TRAFIC	NON-MOTORIST WALKING, RUNNING, RIDING, ETC. FACING TRAFFIC
050	LAY ON RD	STANDING OR LYING IN ROADWAY
051	ENT OFFRD	ENTERING / STARTING IN TRAFFIC LANE FROM OFF ROAD
052	MERGING	MERGING

ACTION CODE TRANSLATION LIST

ACTION CODE	SHORT DESCRIPTION	LONG DESCRIPTION
055	SPRAY	BLINDED BY WATER SPRAY
088	OTHER	OTHER ACTION
099	UNK	UNKNOWN ACTION

CAUSE CODE TRANSLATION LIST

CAUSE CODE	SHORT DESCRIPTION	LONG DESCRIPTION
00	NO CODE	NO CAUSE ASSOCIATED AT THIS LEVEL
01	TOO-FAST	TOO FAST FOR CONDITIONS (NOT EXCEED POSTED SPEED
02	NO-YIELD	DID NOT YIELD RIGHT-OF-WAY
03	PAS-STOP	PASSED STOP SIGN OR RED FLASHER
04	DIS SIG	DISREGARDED TRAFFIC SIGNAL
05	LEFT-CTR	DROVE LEFT OF CENTER ON TWO-WAY ROAD; STRADDLING
06	IMP-OVER	IMPROPER OVERTAKING
07	TOO-CLOS	FOLLOWED TOO CLOSELY
08	IMP-TURN	MADE IMPROPER TURN
09	DRINKING	ALCOHOL OR DRUG INVOLVED
10	OTHR-IMP	OTHER IMPROPER DRIVING
11	MECH-DEF	MECHANICAL DEFECT
12	OTHER	OTHER (NOT IMPROPER DRIVING)
13	IMP LN C	IMPROPER CHANGE OF TRAFFIC LANES
14	DIS TCD	DISREGARDED OTHER TRAFFIC CONTROL DEVICE
15	WRNG WAY	WRONG WAY ON ONE-WAY ROAD; WRONG SIDE DIVIDED RO.
16	FATIGUE	DRIVER DROWSY/FATIGUED/SLEEPY
17	ILLNESS	PHYSICAL ILLNESS
18	IN RDWY	NON-MOTORIST ILLEGALLY IN ROADWAY
19	NT VISBL	NON-MOTORIST NOT VISIBLE; NON-REFLECTIVE CLOTHIN
20	IMP PKNG	VEHICLE IMPROPERLY PARKED
21	DEF STER	DEFECTIVE STEERING MECHANISM
22	DEF BRKE	INADEQUATE OR NO BRAKES
24	LOADSHFT	VEHICLE LOST LOAD OR LOAD SHIFTED
25	TIREFAIL	TIRE FAILURE
26	PHANTOM	PHANTOM / NON-CONTACT VEHICLE
27	INATTENT	INATTENTION
28	NM INATT	NON-MOTORIST INATTENTION
29	F AVOID	FAILED TO AVOID VEHICLE AHEAD
30	SPEED	DRIVING IN EXCESS OF POSTED SPEED
31	RACING	SPEED RACING (PER PAR)
32	CARELESS	CARELESS DRIVING (PER PAR)
33	RECKLESS	RECKLESS DRIVING (PER PAR)
34	AGGRESV	AGGRESSIVE DRIVING (PER PAR)
35	RD RAGE	ROAD RAGE (PER PAR)
40	VIEW OBS	VIEW OBSCURED
50	USED MDN	IMPROPER USE OF MEDIAN OR SHOULDER
51	FAIL LN	FAILED TO MAINTAIN LANE
52	OFF RD	RAN OFF ROAD

COLLISION TYPE CODE TRANSLATION LIST

COLL CODE	SHORT DESCRIPTION	LONG DESCRIPTION
&	OTH	MISCELLANEOUS
-	BACK	BACKING
0	PED	PEDESTRIAN
1	ANGL	ANGLE
2	HEAD	HEAD-ON
3	REAR	REAR-END
4	SS-M	SIDESWIPE - MEETING
5	SS-O	SIDESWIPE - OVERTAKING
6	TURN	TURNING MOVEMENT
7	PARK	PARKING MANEUVER
8	NCOL	NON-COLLISION
9	FIX	FIXED OBJECT OR OTHER OBJECT

CRASH TYPE CODE TRANSLATION LIST

CRASH TYPE	SHORT DESCRIPTION	LONG DESCRIPTION
&	OVERTURN	OVERTURNED
0	NON-COLL	OTHER NON-COLLISION
1	OTH RDWY	MOTOR VEHICLE ON OTHER ROADWAY
2	PRKD MV	PARKED MOTOR VEHICLE
3	PED	PEDESTRIAN
4	TRAIN	RAILWAY TRAIN
6	BIKE	PEDALCYCLIST
7	ANIMAL	ANIMAL
8	FIX OBJ	FIXED OBJECT
9	OTH OBJ	OTHER OBJECT
A	ANGL-STP	ENTERING AT ANGLE - ONE VEHICLE STOPPED
B	ANGL-OTH	ENTERING AT ANGLE - ALL OTHERS
C	S-STRGHT	FROM SAME DIRECTION - BOTH GOING STRAIGHT
D	S-1TURN	FROM SAME DIRECTION - ONE TURN, ONE STRAIGHT
E	S-1STOP	FROM SAME DIRECTION - ONE STOPPED
F	S-OTHER	FROM SAME DIRECTION-ALL OTHERS, INCLUDING PARKING
G	O-STRGHT	FROM OPPOSITE DIRECTION - BOTH GOING STRAIGHT
H	O-1 L-TURN	FROM OPPOSITE DIRECTION-ONE LEFT TURN,ONE STRAIGHT
I	O-1STOP	FROM OPPOSITE DIRECTION - ONE STOPPED
J	O-OTHER	FROM OPPOSITE DIRECTION-ALL OTHERS INCL. PARKING

DRIVER LICENSE CODE TRANSLATION LIST

LIC CODE	SHORT DESC	LONG DESCRIPTION
0	NONE	NOT LICENSED (HAD NEVER BEEN LICENSED)
1	OR-Y	VALID OREGON LICENSE
2	OTH-Y	VALID LICENSE, OTHER STATE OR COUNTRY
3	SUSP	SUSPENDED/REVOKED
4	EXP	EXPIRED
8	N-VAL	OTHER NON-VALID LICENSE
9	UNK	UNKNOWN IF DRIVER WAS LICENSED AT TIME OF CRASH

DRIVER RESIDENCE CODE TRANSLATION LIST

RES CODE	SHORT DESC	LONG DESCRIPTION
1	OR<25	OREGON RESIDENT WITHIN 25 MILE OF HOME
2	OR>25	OREGON RESIDENT 25 OR MORE MILES FROM HOME
3	OR-?	OREGON RESIDENT - UNKNOWN DISTANCE FROM HOME
4	N-RES	NON-RESIDENT
9	UNK	UNKNOWN IF OREGON RESIDENT

ERROR CODE TRANSLATION LIST

ERROR CODE	SHORT DESCRIPTION	FULL DESCRIPTION
000	NONE	NO ERROR
001	WIDE TRN	WIDE TURN
002	CUT CORN	CUT CORNER ON TURN
003	FAIL TRN	FAILED TO OBEY MANDATORY TRAFFIC TURN SIGNAL, SIGN OR LANE MARKINGS
004	L IN TRF	LEFT TURN IN FRONT OF ONCOMING TRAFFIC
005	L PROHIB	LEFT TURN WHERE PROHIBITED
006	FRM WRNG	TURNED FROM WRONG LANE
007	TO WRONG	TURNED INTO WRONG LANE
008	ILLEG U	U-TURNED ILLEGALLY
009	IMP STOP	IMPROPERLY STOPPED IN TRAFFIC LANE
010	IMP SIG	IMPROPER SIGNAL OR FAILURE TO SIGNAL
011	IMP BACK	BACKING IMPROPERLY (NOT PARKING)
012	IMP PARK	IMPROPERLY PARKED
013	UNPARK	IMPROPER START LEAVING PARKED POSITION
014	IMP STRT	IMPROPER START FROM STOPPED POSITION
015	IMP LGHT	IMPROPER OR NO LIGHTS (VEHICLE IN TRAFFIC)
016	INATTENT	INATTENTION (FAILURE TO DIM LIGHTS PRIOR TO 4/1/97)
017	UNSF VEH	DRIVING UNSAFE VEHICLE (NO OTHER ERROR APPARENT)
018	OTH PARK	ENTERING/EXITING PARKED POSITION W/ INSUFFICIENT CLEARANCE; OTHER IMPROPER PARKING MANEUVER
019	DIS DRIV	DISREGARDED OTHER DRIVER'S SIGNAL
020	DIS SGNL	DISREGARDED TRAFFIC SIGNAL
021	RAN STOP	DISREGARDED STOP SIGN OR FLASHING RED
022	DIS SIGN	DISREGARDED WARNING SIGN, FLARES OR FLASHING AMBER
023	DIS OFCR	DISREGARDED POLICE OFFICER OR FLAGMAN
024	DIS EMER	DISREGARDED SIREN OR WARNING OF EMERGENCY VEHICLE
025	DIS RR	DISREGARDED RR SIGNAL, RR SIGN, OR RR FLAGMAN
026	REAR-END	FAILED TO AVOID STOPPED OR PARKED VEHICLE AHEAD OTHER THAN SCHOOL BUS
027	BIKE ROW	DID NOT HAVE RIGHT-OF-WAY OVER PEDALCYCLIST
028	NO ROW	DID NOT HAVE RIGHT-OF-WAY
029	PED ROW	FAILED TO YIELD RIGHT-OF-WAY TO PEDESTRIAN
030	PAS CURV	PASSING ON A CURVE
031	PAS WRNG	PASSING ON THE WRONG SIDE
032	PAS TANG	PASSING ON STRAIGHT ROAD UNDER UNSAFE CONDITIONS
033	PAS X-WK	PASSED VEHICLE STOPPED AT CROSSWALK FOR PEDESTRIAN
034	PAS INTR	PASSING AT INTERSECTION
035	PAS HILL	PASSING ON CREST OF HILL
036	N/PAS ZN	PASSING IN "NO PASSING" ZONE
037	PAS TRAF	PASSING IN FRONT OF ONCOMING TRAFFIC
038	CUT-IN	CUTTING IN (TWO LANES - TWO WAY ONLY)
039	WRNGSIDE	DRIVING ON WRONG SIDE OF THE ROAD (2-WAY UNDIVIDED ROADWAYS)

ERROR CODE TRANSLATION LIST

ERROR CODE	SHORT DESCRIPTION	FULL DESCRIPTION
040	THRU MED	DRIVING THROUGH SAFETY ZONE OR OVER ISLAND
041	F/ST BUS	FAILED TO STOP FOR SCHOOL BUS
042	F/SLO MV	FAILED TO DECREASE SPEED FOR SLOWER MOVING VEHICLE
043	TOO CLOSE	FOLLOWING TOO CLOSELY (MUST BE ON OFFICER'S REPORT)
044	STRDL LN	STRADDLING OR DRIVING ON WRONG LANES
045	IMP CHG	IMPROPER CHANGE OF TRAFFIC LANES
046	WRNG WAY	WRONG WAY ON ONE-WAY ROADWAY; WRONG SIDE DIVIDED ROAD
047	BASCRULE	DRIVING TOO FAST FOR CONDITIONS (NOT EXCEEDING POSTED SPEED)
048	OPN DOOR	OPENED DOOR INTO ADJACENT TRAFFIC LANE
049	IMPEDING	IMPEDING TRAFFIC
050	SPEED	DRIVING IN EXCESS OF POSTED SPEED
051	RECKLESS	RECKLESS DRIVING (PER PAR)
052	CARELESS	CARELESS DRIVING (PER PAR)
053	RACING	SPEED RACING (PER PAR)
054	X N/SGNL	CROSSING AT INTERSECTION, NO TRAFFIC SIGNAL PRESENT
055	X W/SGNL	CROSSING AT INTERSECTION, TRAFFIC SIGNAL PRESENT
056	DIAGONAL	CROSSING AT INTERSECTION - DIAGONALLY
057	BTWN INT	CROSSING BETWEEN INTERSECTIONS
059	W/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER WITH TRAFFIC
060	A/TRAF-S	WALKING, RUNNING, RIDING, ETC., ON SHOULDER FACING TRAFFIC
061	W/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT WITH TRAFFIC
062	A/TRAF-P	WALKING, RUNNING, RIDING, ETC., ON PAVEMENT FACING TRAFFIC
063	PLAYINRD	PLAYING IN STREET OR ROAD
064	PUSH MV	PUSHING OR WORKING ON VEHICLE IN ROAD OR ON SHOULDER
065	WORK IN RD	WORKING IN ROADWAY OR ALONG SHOULDER
070	LAY ON RD	STANDING OR LYING IN ROADWAY
071	NM IMP USE	IMPROPER USE OF TRAFFIC LANE BY NON-MOTORIST
073	ELUDING	ELUDING / ATTEMPT TO ELUDE
079	F NEG CURV	FAILED TO NEGOTIATE A CURVE
080	FAIL LN	FAILED TO MAINTAIN LANE
081	OFF RD	RAN OFF ROAD
082	NO CLEAR	DRIVER MISJUDGED CLEARANCE
083	OVRSTEER	OVER-CORRECTING
084	NOT USED	CODE NOT IN USE
085	OVRLOAD	OVERLOADING OR IMPROPER LOADING OF VEHICLE WITH CARGO OR PASSENGERS
097	UNA DIS TC	UNABLE TO DETERMINE WHICH DRIVER DISREGARDED TRAFFIC CONTROL DEVICE

EVENT CODE TRANSLATION LIST

EVENT CODE	SHORT DESCRIPTION	LONG DESCRIPTION
001	FEL/JUMP	OCCUPANT FELL, JUMPED OR WAS EJECTED FROM MOVING VEHICLE
002	INTERFER	PASSENGER INTERFERED WITH DRIVER
003	BUG INTF	ANIMAL OR INSECT IN VEHICLE INTERFERED WITH DRIVER
004	INDRCT PED	PEDESTRIAN INDIRECTLY INVOLVED (NOT STRUCK)
005	SUB-PED	"SUB-PED": PEDESTRIAN INJURED SUBSEQUENT TO COLLISION, ETC.
006	INDRCT BIK	PEDALCYCLIST INDIRECTLY INVOLVED (NOT STRUCK)
007	HITCHIKR	HITCHHIKER (SOLICITING A RIDE)
008	PSNGR TOW	PASSENGER OR NON-MOTORIST BEING TOWED OR PUSHED ON CONVEYANCE
009	ON/OFF V	GETTING ON/OFF STOPPED/PARKED VEHICLE (OCCUPANTS ONLY; MUST HAVE PHYSICAL CONTACT W/ VEHI(
010	SUB OTRN	OVERTURNED AFTER FIRST HARMFUL EVENT
011	MV PUSHD	VEHICLE BEING PUSHED
012	MV TOWED	VEHICLE TOWED OR HAD BEEN TOWING ANOTHER VEHICLE
013	FORCED	VEHICLE FORCED BY IMPACT INTO ANOTHER VEHICLE, PEDALCYCLIST OR PEDESTRIAN
014	SET MOTN	VEHICLE SET IN MOTION BY NON-DRIVER (CHILD RELEASED BRAKES, ETC.)
015	RR ROW	AT OR ON RAILROAD RIGHT-OF-WAY (NOT LIGHT RAIL)
016	LT RL ROW	AT OR ON LIGHT-RAIL RIGHT-OF-WAY
017	RR HIT V	TRAIN STRUCK VEHICLE
018	V HIT RR	VEHICLE STRUCK TRAIN
019	HIT RR CAR	VEHICLE STRUCK RAILROAD CAR ON ROADWAY
020	JACKNIFE	JACKKNIFE; TRAILER OR TOWED VEHICLE STRUCK TOWING VEHICLE
021	TRL OTRN	TRAILER OR TOWED VEHICLE OVERTURNED
022	CN BROKE	TRAILER CONNECTION BROKE
023	DETACH TRL	DETACHED TRAILING OBJECT STRUCK OTHER VEHICLE, NON-MOTORIST, OR OBJECT
024	V DOOR OPN	VEHICLE DOOR OPENED INTO ADJACENT TRAFFIC LANE
025	WHEELOFF	WHEEL CAME OFF
026	HOOD UP	HOOD FLEW UP
028	LOAD SHIFT	LOST LOAD, LOAD MOVED OR SHIFTED
029	TIREFAIL	TIRE FAILURE
030	PET	PET: CAT, DOG AND SIMILAR
031	LVSTOCK	STOCK: COW, CALF, BULL, STEER, SHEEP, ETC.
032	HORSE	HORSE, MULE, OR DONKEY
033	HRSE&RID	HORSE AND RIDER
034	GAME	WILD ANIMAL, GAME (INCLUDES BIRDS; NOT DEER OR ELK)
035	DEER ELK	DEER OR ELK, WAPITI
036	ANML VEH	ANIMAL-DRAWN VEHICLE
037	CULVERT	CULVERT, OPEN LOW OR HIGH MANHOLE
038	ATENUATN	IMPACT ATTENUATOR
039	PK METER	PARKING METER
040	CURB	CURB (ALSO NARROW SIDEWALKS ON BRIDGES)
041	JIGGLE	JIGGLE BAR OR TRAFFIC SNAKE FOR CHANNELIZATION
042	GDRL END	LEADING EDGE OF GUARDRAIL
043	GARDRAIL	GUARD RAIL (NOT METAL MEDIAN BARRIER)
044	BARRIER	MEDIAN BARRIER (RAISED OR METAL)
045	WALL	RETAINING WALL OR TUNNEL WALL
046	BR RAIL	BRIDGE RAILING OR PARAPET (ON BRIDGE OR APPROACH)
047	BR ABUTMNT	BRIDGE ABUTMENT (INCLUDED "APPROACH END" THRU 2013)
048	BR COLMN	BRIDGE PILLAR OR COLUMN
049	BR GIRDR	BRIDGE GIRDER (HORIZONTAL BRIDGE STRUCTURE OVERHEAD)
050	ISLAND	TRAFFIC RAISED ISLAND
051	GORE	GORE
052	POLE UNK	POLE - TYPE UNKNOWN
053	POLE UTL	POLE - POWER OR TELEPHONE
054	ST LIGHT	POLE - STREET LIGHT ONLY
055	TRF SGNL	POLE - TRAFFIC SIGNAL AND PED SIGNAL ONLY
056	SGN BRDG	POLE - SIGN BRIDGE
057	STOPSIGN	STOP OR YIELD SIGN

EVENT CODE TRANSLATION LIST

EVENT CODE	SHORT DESCRIPTION	LONG DESCRIPTION
058	OTH SIGN	OTHER SIGN, INCLUDING STREET SIGNS
059	HYDRANT	HYDRANT
060	MARKER	DELINEATOR OR MARKER (REFLECTOR POSTS)
061	MAILBOX	MAILBOX
062	TREE	TREE, STUMP OR SHRUBS
063	VEG OHED	TREE BRANCH OR OTHER VEGETATION OVERHEAD, ETC.
064	WIRE/CBL	WIRE OR CABLE ACROSS OR OVER THE ROAD
065	TEMP SGN	TEMPORARY SIGN OR BARRICADE IN ROAD, ETC.
066	PERM SGN	PERMANENT SIGN OR BARRICADE IN/OFF ROAD
067	SLIDE	SLIDES, FALLEN OR FALLING ROCKS
068	FRGN OBJ	FOREIGN OBSTRUCTION/DEBRIS IN ROAD (NOT GRAVEL)
069	EQP WORK	EQUIPMENT WORKING IN/OFF ROAD
070	OTH EQP	OTHER EQUIPMENT IN OR OFF ROAD (INCLUDES PARKED TRAILER, BOAT)
071	MAIN EQP	WRECKER, STREET SWEEPER, SNOW PLOW OR SANDING EQUIPMENT
072	OTHER WALL	ROCK, BRICK OR OTHER SOLID WALL
073	IRRGL PVMT	OTHER BUMP (NOT SPEED BUMP), POTHOLE OR PAVEMENT IRREGULARITY (PER PAR)
074	OVERHD OBJ	OTHER OVERHEAD OBJECT (HIGHWAY SIGN, SIGNAL HEAD, ETC.); NOT BRIDGE
075	CAVE IN	BRIDGE OR ROAD CAVE IN
076	HI WATER	HIGH WATER
077	SNO BANK	SNOW BANK
078	LO-HI EDGE	LOW OR HIGH SHOULDER AT PAVEMENT EDGE
079	DITCH	CUT SLOPE OR DITCH EMBANKMENT
080	OBJ FRM MV	STRUCK BY ROCK OR OTHER OBJECT SET IN MOTION BY OTHER VEHICLE (INCL. LOST LOADS)
081	FLY-OBJ	STRUCK BY ROCK OR OTHER MOVING OR FLYING OBJECT (NOT SET IN MOTION BY VEHICLE)
082	VEH HID	VEHICLE OBSCURED VIEW
083	VEG HID	VEGETATION OBSCURED VIEW
084	BLDG HID	VIEW OBSCURED BY FENCE, SIGN, PHONE BOOTH, ETC.
085	WIND GUST	WIND GUST
086	IMMERSED	VEHICLE IMMERSED IN BODY OF WATER
087	FIRE/EXP	FIRE OR EXPLOSION
088	FENC/BLD	FENCE OR BUILDING, ETC.
089	OTHR CRASH	CRASH RELATED TO ANOTHER SEPARATE CRASH
090	TO 1 SIDE	TWO-WAY TRAFFIC ON DIVIDED ROADWAY ALL ROUTED TO ONE SIDE
091	BUILDING	BUILDING OR OTHER STRUCTURE
092	PHANTOM	OTHER (PHANTOM) NON-CONTACT VEHICLE
093	CELL PHONE	CELL PHONE (ON PAR OR DRIVER IN USE)
094	VIOL GDL	TEENAGE DRIVER IN VIOLATION OF GRADUATED LICENSE PGM
095	GUY WIRE	GUY WIRE
096	BERM	BERM (EARTHEN OR GRAVEL MOUND)
097	GRAVEL	GRAVEL IN ROADWAY
098	ABR EDGE	ABRUPT EDGE
099	CELL WTNSD	CELL PHONE USE WITNESSED BY OTHER PARTICIPANT
100	UNK FIXD	FIXED OBJECT, UNKNOWN TYPE.
101	OTHER OBJ	NON-FIXED OBJECT, OTHER OR UNKNOWN TYPE
102	TEXTING	TEXTING
103	WZ WORKER	WORK ZONE WORKER
104	ON VEHICLE	PASSENGER RIDING ON VEHICLE EXTERIOR
105	PEDAL PSGR	PASSENGER RIDING ON PEDALCYCLE
106	MAN WHLCHR	PEDESTRIAN IN NON-MOTORIZED WHEELCHAIR
107	MTR WHLCHR	PEDESTRIAN IN MOTORIZED WHEELCHAIR
108	OFFICER	LAW ENFORCEMENT / POLICE OFFICER
109	SUB-BIKE	"SUB-BIKE": PEDALCYCLIST INJURED SUBSEQUENT TO COLLISION, ETC.
110	N-MTR	NON-MOTORIST STRUCK VEHICLE
111	S CAR VS V	STREET CAR/TROLLEY (ON RAILS OR OVERHEAD WIRE SYSTEM) STRUCK VEHICLE
112	V VS S CAR	VEHICLE STRUCK STREET CAR/TROLLEY (ON RAILS OR OVERHEAD WIRE SYSTEM)
113	S CAR ROW	AT OR ON STREET CAR OR TROLLEY RIGHT-OF-WAY

EVENT CODE TRANSLATION LIST

EVENT CODE	SHORT DESCRIPTION	LONG DESCRIPTION
114	RR EQUIP	VEHICLE STRUCK RAILROAD EQUIPMENT (NOT TRAIN) ON TRACKS
115	DSTRCT GPS	DISTRACTED BY NAVIGATION SYSTEM OR GPS DEVICE
116	DSTRCT OTH	DISTRACTED BY OTHER ELECTRONIC DEVICE
117	RR GATE	RAIL CROSSING DROP-ARM GATE
118	EXPNSN JNT	EXPANSION JOINT
119	JERSEY BAR	JERSEY BARRIER
120	WIRE BAR	WIRE OR CABLE MEDIAN BARRIER
121	FENCE	FENCE
123	OBJ IN VEH	LOOSE OBJECT IN VEHICLE STRUCK OCCUPANT
124	SLIPPERY	SLIDING OR SWERVING DUE TO WET, ICY, SLIPPERY OR LOOSE SURFACE (NOT GRAVEL)
125	SHLDR	SHOULDER GAVE WAY
126	BOULDER	ROCK(S), BOULDER (NOT GRAVEL; NOT ROCK SLIDE)
127	LAND SLIDE	ROCK SLIDE OR LAND SLIDE
128	CURVE INV	CURVE PRESENT AT CRASH LOCATION
129	HILL INV	VERTICAL GRADE / HILL PRESENT AT CRASH LOCATION
130	CURVE HID	VIEW OBSCURED BY CURVE
131	HILL HID	VIEW OBSCURED BY VERTICAL GRADE / HILL
132	WINDOW HID	VIEW OBSCURED BY VEHICLE WINDOW CONDITIONS
133	SPRAY HID	VIEW OBSCURED BY WATER SPRAY
134	TORRENTIAL	TORRENTIAL RAIN (EXCEPTIONALLY HEAVY RAIN)
135	RAIL OCC	INJURED OCCUPANT OF RAILWAY TRAIN, LIGHT RAIL, STREET CAR OR CABLE CAR

FUNCTIONAL CLASSIFICATION TRANSLATION LIST

FUNC CLASS	DESCRIPTION
01	RURAL PRINCIPAL ARTERIAL - INTERSTATE
02	RURAL PRINCIPAL ARTERIAL - OTHER
06	RURAL MINOR ARTERIAL
07	RURAL MAJOR COLLECTOR
08	RURAL MINOR COLLECTOR
09	RURAL LOCAL
11	URBAN PRINCIPAL ARTERIAL - INTERSTATE
12	URBAN PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXP
14	URBAN PRINCIPAL ARTERIAL - OTHER
16	URBAN MINOR ARTERIAL
17	URBAN MAJOR COLLECTOR
18	URBAN MINOR COLLECTOR
19	URBAN LOCAL
78	UNKNOWN RURAL SYSTEM
79	UNKNOWN RURAL NON-SYSTEM
98	UNKNOWN URBAN SYSTEM
99	UNKNOWN URBAN NON-SYSTEM

HIGHWAY COMPONENT TRANSLATION LIST

CODE	DESCRIPTION
0	MAINLINE STATE HIGHWAY
1	COUPLET
3	FRONTAGE ROAD
6	CONNECTION
8	HIGHWAY - OTHER

INJURY SEVERITY CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
1	KILL	FATAL INJURY (K)
2	INJA	SUSPECTED SERIOUS INJURY (A)
3	INJB	SUSPECTED MINOR INJURY (B)
4	INJC	POSSIBLE INJURY (C)
5	PRI	DIED PRIOR TO CRASH
7	NO<5	NO INJURY - 0 TO 4 YEARS OF AGE
9	NONE	NO APPARENT INJURY (O)

LIGHT CONDITION CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	DAY	DAYLIGHT
2	DLIT	DARKNESS - WITH STREET LIGHTS
3	DARK	DARKNESS - NO STREET LIGHTS
4	DAWN	DAWN (TWILIGHT)
5	DUSK	DUSK (TWILIGHT)

MEDIAN TYPE CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	NONE	NO MEDIAN
1	RSDMD	SOLID MEDIAN BARRIER
2	DIVMD	EARTH, GRASS OR PAVED MEDIAN

MILEAGE TYPE CODE TRANSLATION LIST

CODE	LONG DESCRIPTION
0	REGULAR MILEAGE
T	TEMPORARY
Y	SPUR
Z	OVERLAPPING

MOVEMENT TYPE CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	STRGHT	STRAIGHT AHEAD
2	TURN-R	TURNING RIGHT
3	TURN-L	TURNING LEFT
4	U-TURN	MAKING A U-TURN
5	BACK	BACKING
6	STOP	STOPPED IN TRAFFIC
7	PRKD-P	PARKED - PROPERLY
8	PRKD-I	PARKED - IMPROPERLY
9	PARKNG	PARKING MANEUVER

NON-MOTORIST LOCATION CODE TRANSLATION LIST

CODE	LONG DESCRIPTION
00	AT INTERSECTION - NOT IN ROADWAY
01	AT INTERSECTION - INSIDE CROSSWALK
02	AT INTERSECTION - IN ROADWAY, OUTSIDE CROSSWALK
03	AT INTERSECTION - IN ROADWAY, XWALK AVAIL UNKNWN
04	NOT AT INTERSECTION - IN ROADWAY
05	NOT AT INTERSECTION - ON SHOULDER
06	NOT AT INTERSECTION - ON MEDIAN
07	NOT AT INTERSECTION - WITHIN TRAFFIC RIGHT-OF-WAY
08	NOT AT INTERSECTION - IN BIKE PATH OR PARKING LANE
09	NOT-AT INTERSECTION - ON SIDEWALK
10	OUTSIDE TRAFFICWAY BOUNDARIES
13	AT INTERSECTION - IN BIKE LANE
14	NOT AT INTERSECTION - IN BIKE LANE
15	NOT AT INTERSECTION - INSIDE MID-BLOCK CROSSWALK
16	NOT AT INTERSECTION - IN PARKING LANE
18	OTHER, NOT IN ROADWAY
99	UNKNOWN LOCATION

ROAD CHARACTER CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	INTER	INTERSECTION
2	ALLEY	DRIVEWAY OR ALLEY
3	STRGHT	STRAIGHT ROADWAY
4	TRANS	TRANSITION
5	CURVE	CURVE (HORIZONTAL CURVE)
6	OPENAC	OPEN ACCESS OR TURNOUT
7	GRADE	GRADE (VERTICAL CURVE)
8	BRIDGE	BRIDGE STRUCTURE
9	TUNNEL	TUNNEL

PARTICIPANT TYPE CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	OCC	UNKNOWN OCCUPANT TYPE
1	DRVR	DRIVER
2	PSNG	PASSENGER
3	PED	PEDESTRIAN
4	CONV	PEDESTRIAN USING A PEDESTRIAN CONVEYA
5	PTOW	PEDESTRIAN TOWING OR TRAILERING AN OB
6	BIKE	PEDALCYCLIST
7	BTOW	PEDALCYCLIST TOWING OR TRAILERING AN
8	PRKD	OCCUPANT OF A PARKED MOTOR VEHICLE
9	OTHR	OTHER TYPE OF NON-MOTORIST

TRAFFIC CONTROL DEVICE CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
000	NONE	NO CONTROL
001	TRF SIGNAL	TRAFFIC SIGNALS
002	FLASHBCN-R	FLASHING BEACON - RED (STOP)
003	FLASHBCN-A	FLASHING BEACON - AMBER (SLOW)
004	STOP SIGN	STOP SIGN
005	SLOW SIGN	SLOW SIGN
006	REG-SIGN	REGULATORY SIGN
007	YIELD	YIELD SIGN
008	WARNING	WARNING SIGN
009	CURVE	CURVE SIGN
010	SCHL X-ING	SCHOOL CROSSING SIGN OR SPECIAL SIGNAL
011	OFCR/FLAG	POLICE OFFICER, FLAGMAN - SCHOOL PATROL
012	BRDG-GATE	BRIDGE GATE - BARRIER
013	TEMP-BARR	TEMPORARY BARRIER
014	NO-PASS-ZN	NO PASSING ZONE
015	ONE-WAY	ONE-WAY STREET
016	CHANNEL	CHANNELIZATION
017	MEDIAN BAR	MEDIAN BARRIER
018	PILOT CAR	PILOT CAR
019	SP PED SIG	SPECIAL PEDESTRIAN SIGNAL
020	X-BUCK	CROSSBUCK
021	THR-GN-SIG	THROUGH GREEN ARROW OR SIGNAL
022	L-GRN-SIG	LEFT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL
023	R-GRN-SIG	RIGHT TURN GREEN ARROW, LANE MARKINGS, OR SIGNAL
024	WIGWAG	WIGWAG OR FLASHING LIGHTS W/O DROP-ARM GATE
025	X-BUCK WRN	CROSSBUCK AND ADVANCE WARNING
026	WW W/ GATE	FLASHING LIGHTS WITH DROP-ARM GATES
027	OVRHD SGNL	SUPPLEMENTAL OVERHEAD SIGNAL (RR XING ONLY)
028	SP RR STOP	SPECIAL RR STOP SIGN
029	ILUM GRD X	ILLUMINATED GRADE CROSSING
037	RAMP METER	METERED RAMPS
038	RUMBLE STR	RUMBLE STRIP
040	AUTO. FLAG	AUTOMATED FLAGGER ASSISTANCE DEVICE
090	L-TURN REF	LEFT TURN REFUGE (WHEN REFUGE IS INVOLVED)
091	R-TURN ALL	RIGHT TURN AT ALL TIMES SIGN, ETC.
092	EMR SGN/FL	EMERGENCY SIGNS OR FLARES
093	ACCEL LANE	ACCELERATION OR DECELERATION LANES
094	R-TURN PRO	RIGHT TURN PROHIBITED ON RED AFTER STOPPING
095	BUS STPSGN	BUS STOP SIGN AND RED LIGHTS

099	UNKNOWN	UNKNOWN OR NOT DEFINITE

VEHICLE TYPE CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
00	PDO	NOT COLLECTED FOR PDO CRASHES
01	PSNGR CAR	PASSENGER CAR, PICKUP, LIGHT DELIVERY, ETC.
02	BOBTAIL	TRUCK TRACTOR WITH NO TRAILERS (BOBTAIL)
03	FARM TRCTR	FARM TRACTOR OR SELF-PROPELLED FARM EQUIPMENT
04	SEMI TOW	TRUCK TRACTOR WITH TRAILER/MOBILE HOME IN TOW
05	TRUCK	TRUCK WITH NON-DETACHABLE BED, PANEL, ETC.
06	MOPED	MOPED, MINIBIKE, SEATED MOTOR SCOOTER, MOTOR BIKE
07	SCHL BUS	SCHOOL BUS (INCLUDES VAN)
08	OTH BUS	OTHER BUS
09	MTRCYCLE	MOTORCYCLE, DIRT BIKE
10	OTHER	OTHER: FORKLIFT, BACKHOE, ETC.
11	MOTRHOME	MOTORHOME
12	TROLLEY	MOTORIZED STREET CAR/TROLLEY (NO RAILS/WIRES)
13	ATV	ATV
14	MTRSCTR	MOTORIZED SCOOTER (STANDING)
15	SNOWMOBILE	SNOWMOBILE
99	UNKNOWN	UNKNOWN VEHICLE TYPE

WEATHER CONDITION CODE TRANSLATION LIST

CODE	SHORT DESC	LONG DESCRIPTION
0	UNK	UNKNOWN
1	CLR	CLEAR
2	CLD	CLOUDY
3	RAIN	RAIN
4	SLT	SLEET
5	FOG	FOG
6	SNOW	SNOW
7	DUST	DUST
8	SMOK	SMOKE
9	ASH	ASH

ATTACHMENT F:
CRASH ANALYSIS WORKSHEETS

General & Site Information	
Analyst:	MJB
Agency/Company:	KAI
Date:	10/14/2022
Project Name:	Florence TSP

Intersection Crash Data

Intersection	Intersection Type	Year					Total
1. US 101/Heceta Beach Road	Urban 4ST	5					5
2. US 101/Munsel Lake Road	Urban 4ST	5					5
3. US 101/46th Street	Urban 4ST	3					3
4. US 101/35th Street	Urban 4SG	12					12
5. US 101/30th Street	Urban 4ST	1					1
6. US 101/27th Street	Urban 4ST	1					1
7. US 101/15th Street	Urban 4ST	7					7
8. US 101/OR 126	Urban 4SG	15					15
9. US 101/Rhododendron Drive	Urban 4SG	6					6
10. US 101/2nd Street	Urban 4ST	4					4
11. OR 126/Quince Street	Urban 4ST	11					11
12. OR 126/Spruce Street	Urban 4ST	2					2
13. OR 126/North Fork Siuslaw Road	Rural 3ST	1					1
14. Rhododendron Drive/35th Street	Urban 3ST	0					0
15. Rhododendron Drive/9th Street	Urban 3ST	1					1
16. Rhododendron Drive/Heceta Beach Road	Urban 4ST	3					3
17. Kingwood Street/35th Street	Urban 4ST	0					0
18. Kingwood Street/27th Street	Urban 4ST	2					2
19. Kingwood Street/15th Street	Urban 3ST	3					3
20. Kingwood Street/9th Street	Urban 4ST	5					5
	Total	87	0	0	0	0	87

Intersection Population Type Crash Rate

Average Crash Rate per intersection type

Intersection Pop. Type	Sum of Crashes	Sum of 5-year MEV	Avg Crash Rate for Ref Pop.	INT in Pop
Rural 3SG	0	0		
Rural 3ST	1	14	0.0699	1
Rural 4SG	0	0		
Rural 4ST	0	0		
Urban 3ST	4	20	0.2009	3
Urban 3SG	0	0		
Urban 4ST	49	273	0.1796	13
Urban 4SG	33	108	0.3055	3

Critical Rate Calculation

Intersection	AADT Entering Intersection	5-year MEV	Crash Total	Intersection Population Type	Intersection Crash Rate	Reference Population Crash Rate	Critical Rate	Over Critical
1. US 101/Heceta Beach Road	11,490	21.0	5	Urban 4ST	0.24	0.18	0.36	Under
2. US 101/Munsel Lake Road	13,250	24.2	5	Urban 4ST	0.21	0.18	0.34	Under
3. US 101/46th Street	14,340	26.2	3	Urban 4ST	0.11	0.18	0.34	Under
4. US 101/35th Street	19,050	34.8	12	Urban 4SG	0.35	APM Exhibit 4-1		
5. US 101/30th Street	18,270	33.3	1	Urban 4ST	0.03	0.18	0.32	Under
6. US 101/27th Street	19,140	34.9	1	Urban 4ST	0.03	0.18	0.31	Under
7. US 101/15th Street	20,460	37.3	7	Urban 4ST	0.19	0.18	0.31	Under
8. US 101/OR 126	23,560	43.0	15	Urban 4SG	0.35	APM Exhibit 4-1		
9. US 101/Rhododendron Drive	16,570	30.2	6	Urban 4SG	0.20	APM Exhibit 4-1		
10. US 101/2nd Street	13,980	25.5	4	Urban 4ST	0.16	0.18	0.34	Under
11. OR 126/Quince Street	10,980	20.0	11	Urban 4ST	0.55	0.18	0.36	**Over**
12. OR 126/Spruce Street	10,990	20.1	2	Urban 4ST	0.10	0.18	0.36	Under
13. OR 126/North Fork Siuslaw Road	7,840	14.3	1	Rural 3ST	0.07	APM Exhibit 4-1		
14. Rhododendron Drive/35th Street	2,940	5.4	0	Urban 3ST	0.00	APM Exhibit 4-1		
15. Rhododendron Drive/9th Street	4,520	8.2	1	Urban 3ST	0.12	APM Exhibit 4-1		
16. Rhododendron Drive/Heceta Beach Road	2,950	5.4	3	Urban 4ST	0.56	0.18	0.57	Under
17. Kingwood Street/35th Street	5,330	9.7	0	Urban 4ST	0.00	0.18	0.45	Under
18. Kingwood Street/27th Street	2,840	5.2	2	Urban 4ST	0.39	0.18	0.58	Under
19. Kingwood Street/15th Street	3,450	6.3	3	Urban 3ST	0.48	APM Exhibit 4-1		
20. Kingwood Street/9th Street	5,440	9.9	5	Urban 4ST	0.50	0.18	0.45	**Over**

General & Site Information	
Analyst:	MJB
Agency/Company:	KAI
Date:	10/14/22
Project Name:	Florence TSP Update
Highway Number and Name:	US 101 OR 126
Mile Points:	9-Apr
Crash Years Pulled:	2016-2020

Intersection Population Type Crash Rate

Sample Alpha	Angle	Back	Bike	Fix	Head	NonCol	OTH	Park	Ped	SS-M	SS-O	Turn	Rear
3ST	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3SG	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4ST	0.181	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.018	N/A
4SG	5.748	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3.557	23.710
Sample Beta													
3ST	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3SG	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4ST	0.04020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.47473	N/A
4SG	15.80585	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7.67536	15.80675
Threshold Proportions													
3ST	0.000	0.000	0.000	0.200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.800	0.000
3SG	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4ST	0.265	0.020	0.000	0.061	0.000	0.000	0.000	0.000	0.000	0.020	0.000	0.490	0.143
4SG	0.212	0.000	0.030	0.061	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.303	0.394

Excess Proportion with a probability of greater than 0.9

					Type of Crash													743.3012987
Hwy	MP	Reference Pop	Street 1	Street 2	Angle	Back	Bike	Fix	Head	NonCol	OTH	Park	Ped	SS-M	SS-O	Turn	Rear	
1	0.00	4ST	1	2												0.51		
2	0.00	4ST	1	2												0.31		
3	0.00	4ST	1	2												0.51		
4	0.00	4SG	1	2														
5	0.00	4ST	1	2														
6	0.00	4ST	1	2														
7	0.00	4ST	1	2														
8	0.00	4SG	1	2													0.14	
9	0.00	4SG	1	2													0.27	
10	0.00	4ST	1	2														
11	0.00	4ST	1	2	0.19													
12	0.00	4ST	1	2														
13	0.00	3ST	1	2														
14	0.00	3ST	1	2														
15	0.00	3ST	1	2														
16	0.00	4ST	1	2	0.73													
17	0.00	4ST	1	2														
18	0.00	4ST	1	2														
19	0.00	3ST	1	2														
20	0.00	4ST	1	2	0.73													

Probability

					Type of Crash													371.6506494
Hwy	MP	Reference Pop	Street 1	Street 2	Angle	Back	Bike	Fix	Head	NonCol	OTH	Park	Ped	SS-M	SS-O	Turn	Rear	
1	0.00	4ST	1	2												1.00		
2	0.00	4ST	1	2												0.94		
3	0.00	4ST	1	2												0.98		
4	0.00	4SG	1	2	0.84											0.73		
5	0.00	4ST	1	2														
6	0.00	4ST	1	2														
7	0.00	4ST	1	2												0.46		
8	0.00	4SG	1	2	0.63											0.25	1.00	
9	0.00	4SG	1	2												0.54	1.00	
10	0.00	4ST	1	2												0.62		
11	0.00	4ST	1	2	0.91											0.26		
12	0.00	4ST	1	2														
13	0.00	3ST	1	2														
14	0.00	3ST	1	2														
15	0.00	3ST	1	2														
16	0.00	4ST	1	2	1.00													
17	0.00	4ST	1	2														
18	0.00	4ST	1	2														
19	0.00	3ST	1	2														
20	0.00	4ST	1	2	1.00													

Observed Proportions

					Type of Crash													185.8253247
Hwy	MP	Reference Pop	Street 1	Street 2	Angle	Back	Bike	Fix	Head	NonCol	OTH	Park	Ped	SS-M	SS-O	Turn	Rear	
1	0.00	4ST	1	2	0	0	0	0	0	0	0	0	0	0	0	1.00	0	1
2	0.00	4ST	1	2	0	0	0	0	0	0	0	0	0	0	0	0.80	0	0.8
3	0.00	4ST	1	2	0	0	0	0	0	0	0	0	0	0	0	1.00	0	1

4	0.00	4SG	1	2	0.33	0	0	0.17	0	0	0	0	0	0	0	0.42	0	0.916666667
5	0.00	4ST	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0.00	4ST	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0.00	4ST	1	2	0	0	0	0	0	0	0	0	0	0	0	0.43	0.43	0.857142857
8	0.00	4SG	1	2	0.20	0	0	0	0	0	0	0	0	0	0	0.20	0.53	0.933333333
9	0.00	4SG	1	2	0	0	0	0	0	0	0	0	0	0	0	0.33	0.67	1
10	0.00	4ST	1	2	0	0	0	0	0	0	0	0	0	0	0	0.50	0	0.5
11	0.00	4ST	1	2	0.45	0	0	0	0	0	0	0	0	0	0	0.36	0	0.818181818
12	0.00	4ST	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0.00	3ST	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0.00	3ST	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0.00	3ST	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0.00	4ST	1	2	1.00	0	0	0	0	0	0	0	0	0	0	0	0	1
17	0.00	4ST	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0.00	4ST	1	2	0	0	0	1.00	0	0	0	0	0	0	0	0	0	1
19	0.00	3ST	1	2	0	0	0	0	0	0	0	0	0	0	0	1.00	0	1
20	0.00	4ST	1	2	1.00	0	0	0	0	0	0	0	0	0	0	0	0	1
																		0
																		0

Intersection Crash Data																		
					Type of Crash													87
Hwy	MP	Reference Pop	Street 1	Street 2	Angle	Back	Bike	Fix	Head	NonCol	OTH	Park	Ped	SS-M	SS-O	Turn	Rear	Total
1	0.00	4ST	1	2												5		5
2	0.00	4ST	1	2												4	1	5
3	0.00	4ST	1	2												3		3
4	0.00	4SG	1	2	4			2								5	1	12
5	0.00	4ST	1	2												1		1
6	0.00	4ST	1	2												1		1
7	0.00	4ST	1	2										1		3	3	7
8	0.00	4SG	1	2	3		1									3	8	15
9	0.00	4SG	1	2												2	4	6
10	0.00	4ST	1	2				1								2	1	4
11	0.00	4ST	1	2	5	1										4	1	11
12	0.00	4ST	1	2												1	1	2
13	0.00	3ST	1	2												1		1
14	0.00	3ST	1	2														0
15	0.00	3ST	1	2				1										1
16	0.00	4ST	1	2	3													3
17	0.00	4ST	1	2														0
18	0.00	4ST	1	2				2										2
19	0.00	3ST	1	2												3		3
20	0.00	4ST	1	2	5													5

ATTACHMENT G: PARKING STUDY

City of Florence: Parking Data Collection Assessment Summary

June 25, 2021 (v1)

1.1 Introduction

The City of Florence is interested in creating an accurate inventory of its current parking supply and establishing a base level understanding of how the parking system functions in the greater Historic Downtown. Having a better sense of these dynamics will help facilitate future decision-making regarding parking, particularly as growth and demand for parking in and around the downtown increases.

The purpose of this report is to catalogue the on and off-street parking inventory and summarize survey findings from a recent data collection effort.

1.2 Study Area

Per input from the City of Florence, the 2021 study area boundaries were drawn to classify and evaluate the public and private parking supplies in the greater Historic Downtown. The area includes the Historic Downtown waterfront and a commercial, mixed use, and special event areas located immediately north of the downtown straddling both sides of Highway 101. **Figure A** provides an illustration of the study area.

1.3 Parking Inventory (Supply)

RWC senior staff inventoried all on-street parking within the study area on June 9, 2021. During the inventory, all on-street spaces were catalogued by block face and time limit designation (where applicable). On the same day, all off-street parking facilities were identified and evaluated for stall count, physical condition, and assessment of primary purpose (e.g., visitor, employee/office, hotel, or other type of parking). This included public and private parking lots.

Where physical stall markings were not in place, RWC used measuring wheels to estimate stall capacity. RWC uses a 23-foot standard to calculate stalls on blocks that were not marked or striped. RWC also accounts, in this type of measurement, for sight lines, turn radius for curb cuts, and things like fire hydrants to ensure that stall inventory estimates are both accurate and cognizant of actual operational functionality within a street's circulation system.

During the inventory, all 933 on-street spaces within the study area boundaries were catalogued by block face and time limit designation (when applicable), and 2,529 off-street parking stalls were identified and evaluated for stall count, land use type, and general condition. In total, 3,462 parking stalls make up the entire parking supply within the study boundary.

Figure A: 2021 Parking Study Area

1.4 Methodology – Data Collection

Data was collected on Thursday, June 10th and Saturday, June 12th, 2021. Hourly on- and off-street parking counts were collected each hour between 9:00 AM and 7:00 PM. These dates and data collection hours were selected in consultation with City staff and the ODOT project advisor. The two dates allow for a comparison between a "typical" weekday (Thursday) and weekend (Saturday). The data collection methodology for measuring parking occupancy was based on Oregon Transportation & Growth Management Program's guide on parking: [Parking Made Easy – A guide to Managing Parking in Your Community.]

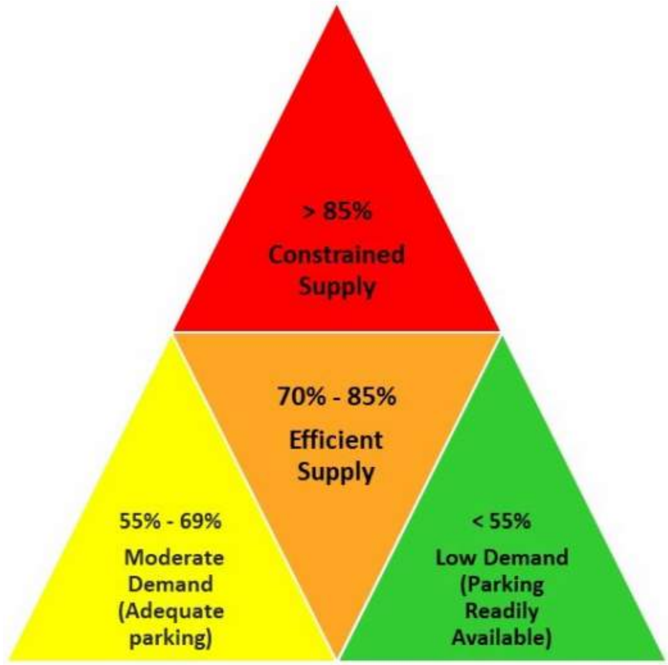
On-street

On-street parking occupancy simply entails counting each occupied parking stall on each block face in the study area (each hour, for 10 hours). For the on-street system, parking occupancy data was collected for all stalls within the study area, a 100% sample size.

Off-street

Similarly, off-street parking occupancy entails counting occupied parking stalls each hour of the survey day in a large number of off-street sites to compile a representative sample. Sample sites were selected for size, geographic distribution, and type of use. In the study area, occupancy data was collected at 56 of the 116 unique off-street lots identified, representing 1,755 of 2,529 off-street parking stalls, a 69% sample size.

1.5 Measuring Performance



Parking is constrained when 85% or more of the available supply is routinely occupied during the peak hour. In a constrained system, finding an available spot is difficult, especially for infrequent users such as customers and visitors. This can cause frustration and negatively affect perceptions of the downtown. Continued constraint can make it difficult to absorb and attract new growth, or to manage fluctuations in demand—for example, seasonal or event-based spikes.

Occupancy rates of 55% or less indicate that parking is readily available. While availability may be high, this may also indicate a volume of traffic inadequate to support active and vital businesses. Occupancy rates between these two thresholds indicate either moderate (55% to 69%) or efficient (70% to 85%) use.

An efficient supply of parking shows active use but little constraint that would create difficulty for users. Efficient use supports vital ground-level businesses and business growth, is attractive to potential new users, and can respond to routine fluctuations. RWC's analysis of parking in Florence uses these categories to evaluate the performance of the system.

1.6 Data Findings

On-Street Parking

Inventory

There are 933 total on-street parking stalls within the study area. Most stalls have no time restriction (805 stalls or 86.3% of all stalls), which allow unlimited—No Limit—parking (no signage). The remaining stalls consist of 10 Minute (5 stalls), 30 Minute (3 stalls), and 3 Hour (120 stalls) stalls. All stalls are provided free of charge (unmetered). The complete breakout of stalls by type is summarized in **Table 1**.

Table 1: On-street parking supply by stall type and restriction

Stall Type	Stalls	% Total
On-Street Supply	**933**	**100%**
10 Minutes	5	< 1%
30 Minutes	3	< 1%
3 Hours[1]	120	12.9%
No Limit	805	86.3%

Occupancy

The parking survey was conducted using occupancy counts, sorting data by parking stall type.[2] **Table 2** and **Figure B** provide comparative peak hour characteristics by stall type and an hour-by-hour look at the parking occupancy on both survey days within the study area, respectively.

As a combined supply, occupancies remain low throughout the operating day when using performance standards describe in **Section 1.5** above. However, 3 Hour stalls do have a significant peak occupancy rate of 90.6% during the weekday data collection and 95.3% during the weekend data collection (2:00 – 3:00 PM and 1:00 – 2:00 PM, respectively). These 120 stalls are constrained based on the same performance standards previously described.

The combined weekday peak hour reaches 30.4% at 1:00 PM whereas the weekend peak hour reaches 33.8% at 1:00 PM. Both days show a standard bell curve of activity, with use gradually reducing each hour beginning after noon into the late evening hours.

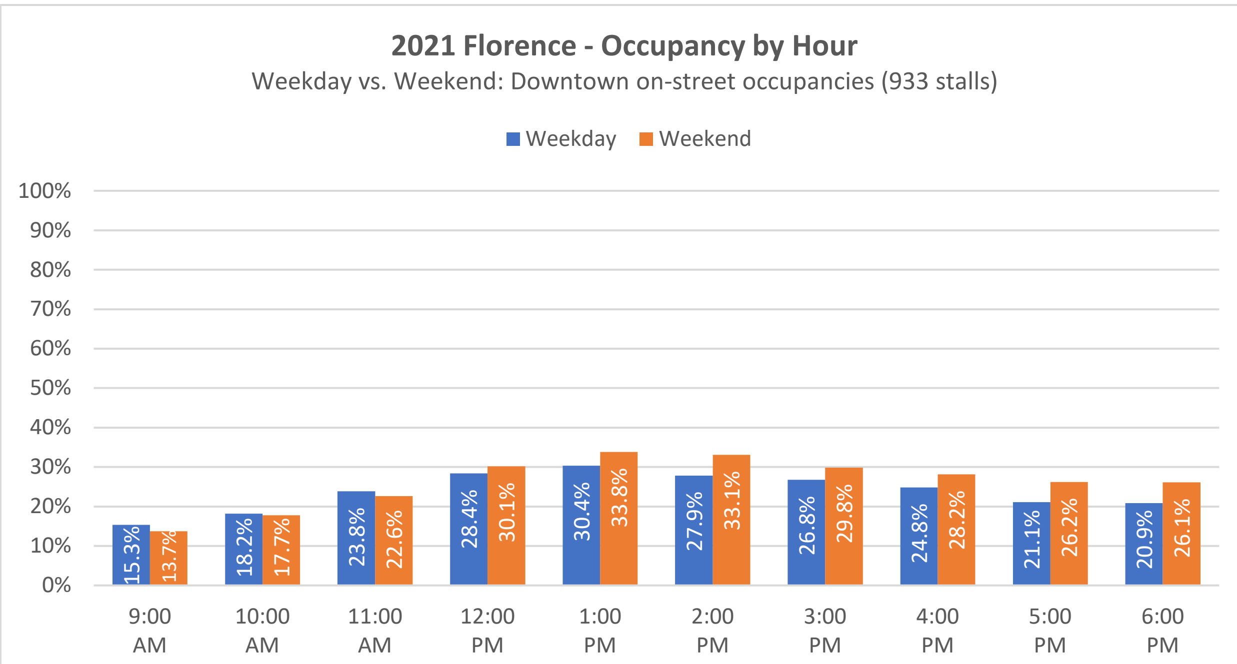
- **Peak Hour - Weekday:** At the weekday peak hour (1:00 PM), 293 vehicles are parked, leaving 640 stalls empty within the on-street system.
- **Peak Hour - Weekend:** At the weekend peak hour (1:00 PM), 325 vehicles are parked, leaving 608 stalls empty within the on-street system.

[1] Fourteen (14) of these stalls are currently blocked off for COVID seating purposes and are not included as "parkable" stalls for the occupancy study.
[2] For purposes of budget and expedited deliverables, the city and consultant team used this approach for gathering data in Florence. As such, license plate data was not collected, which reduces some of the reportable metrics.

*Table 2: On-street occupancy by stall type and restriction (**Weekday** vs. Weekend)*

Stall Type	Stalls	Peak Hour	Peak Occupancy	Empty Stalls	Vehicle Hours Parked
On-Street Supply	933	**1:00 PM – 2:00 PM** 1:00 PM - 2:00 PM	**30.4%** 33.8%	**640** 608	**2,183** 2,403
10 Minutes	5	**1:00 PM - 2:00 PM** -	**60.0%** -	**2** 5	**5** -
30 Minutes	3	**-** -	**-** -	**3** 3	**-** -
3 Hours	120	**2:00 PM - 3:00 PM** 1:00 PM - 2:00 PM	**90.6%** 95.3%	**10** 5	**747** 793
No Limit	805	**12:00 PM - 1:00 PM** 1:00 PM - 2:00 PM	**22.5%** 25.8%	**624** 597	**1,431** 1,601

Figure B: 2021 On-Street Occupancies (Hourly Comparison)



Though turnover data was not collected, total vehicle hours parking (VHP) was tracked. The number of hours where vehicles occupied parking stalls is slightly higher on weekends compared to weekdays. On weekdays, there are 2,220 VHP within the on-street system, on weekends there are 2,403 VHP; that translates to 8% more parking availability on weekdays.

This metric, when regularly monitored, can serve as a harbinger of the (motor-vehicle-generated) activity level within the study area. The higher the VHP, the stronger the demand for parking, and, by inference, the stronger the level of activity and/or economy in the study area (i.e., downtown).

Surplus & Deficits – Parking Occupancy Heat Maps (on-street)

Figures C and D visually summarize parking occupancies by block face using a "heat map" of the study area. A heat map uses color to display degrees of occupancy as measured against an industry standard of 85%; when occupancy exceeds that level, the system is considered constrained. Block faces marked in red indicate areas of constraint. Green represents areas of underutilized parking, while yellow and orange represent the middle ranges of occupancy. This industry standard for measurement was described in **Section 1.5,** above.

There are a total of 145 block faces within the identified study area. Of these block faces, 108 (74%) allow parking, the other 37 block faces (26%) do not allow on-street parking. These block faces are indicated on the maps **(Figures J** and **K)** in brown. As the maps show, there are a few areas, primarily around larger intersections, where on-street parking is not allowed.

Weekday

- As the weekday heat map illustrates (**Figure C**), 13 of 108 block faces (that allow parking) are constrained at the peak hour. This means 12% of the "parkable" block faces are constrained.
- All but one of the constrained block faces are clustered along Bay and First Streets between Nopal and Highway 101, centered in the Historic Downtown. In this area, users likely feel that parking may not be available.
- Despite the parking constraint in that concentrated area of downtown, there is, however, ample parking available within a short walking distance of the downtown core.
- Though COVID seating temporarily removed 14 on-street parking stalls from Bay Street, it also created more capacity for retail/restaurant activity in the center of downtown.

Weekend

- On the weekend (**Figure D**), 21 of the 108 parkable block faces are constrained at the peak hour (1:00 – 2:00 PM). At that time, 19% of block faces in the study area are considered constrained. A notable increase over the weekday peak.
- The block faces experiencing constraint during the weekend peak are similar to those on weekdays, though it extends further north on Maple and Nopal up to Second Street.
- Overall, the sense of constraint in this area of the downtown may be more pronounced on the weekend given the added constrained block faces and the proximity of available stalls, particularly for users parked along Bay Street.
- In addition, there are couple of block faces in the northern part of the study area that have peak hour constraint – on 8th Street behind True Value Hardware and on 10th Street just north of the Shell station (limited number of parking stalls). That said, ample parking is very available within a short distance.

Figure C: On-street parking occupancies by block face – Weekday peak hour

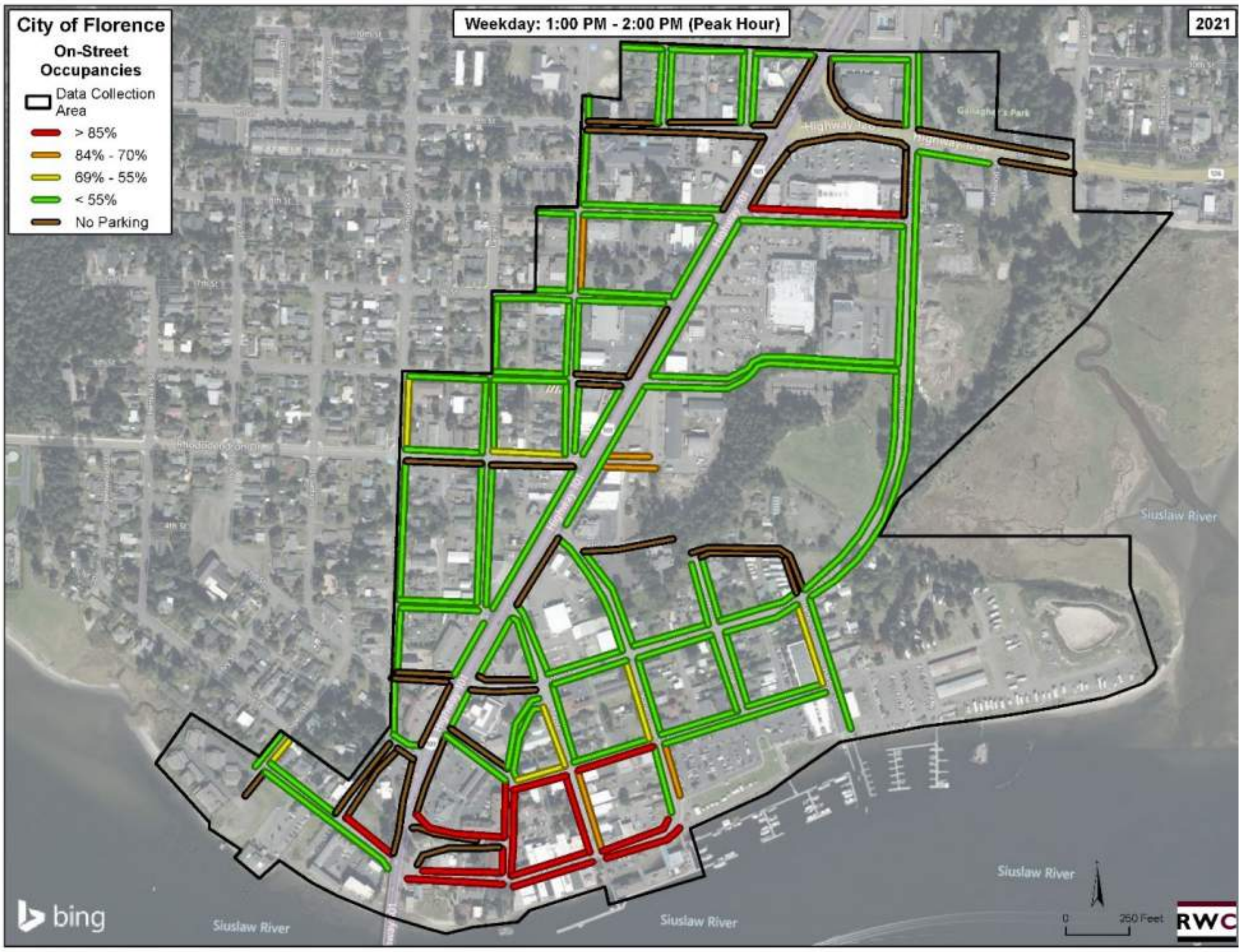
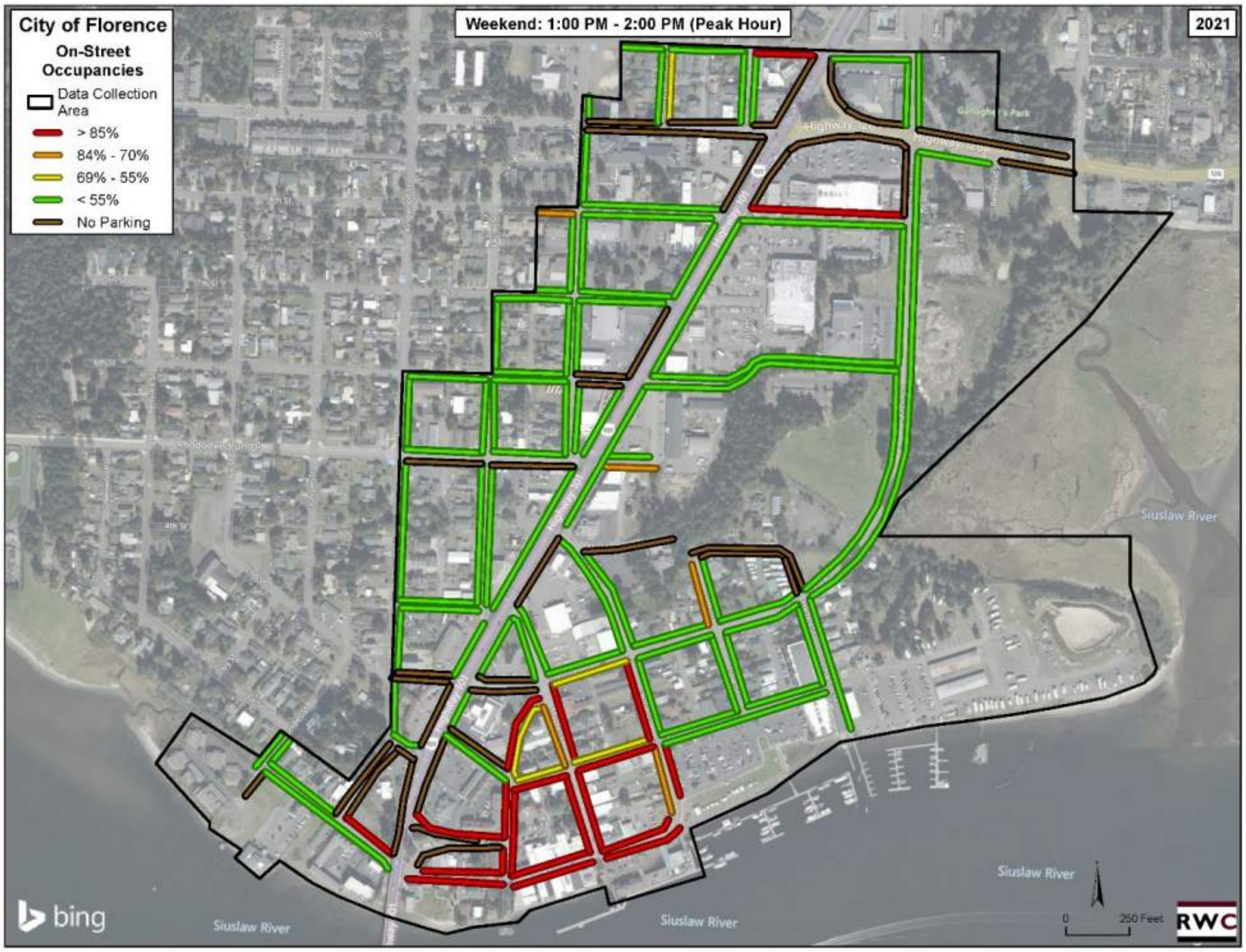


Figure D: On-street parking occupancies by block face – Weekend peak hour



Off-Street Parking

Inventory

The Downtown off-street system is comprised of a variety of land use types distributed across 116 sites. These are categorized as City (8 sites), Hotel (6), Institution (6), Mixed Use (10), Public (6), Residential (12), Restaurant (7), Retail (25), Service (33), and Undesignated (3). These sites total 2,529 parking stalls. This is summarized in **Table 3** and the location of these sites is illustrated in **Figure E. Appendix A** provides a detailed table of all sites that assigns a "Lot Number" to each facility, a descriptor, and other information regarding use type.

Table 3: Off-street parking supply by stall type (combined supply)

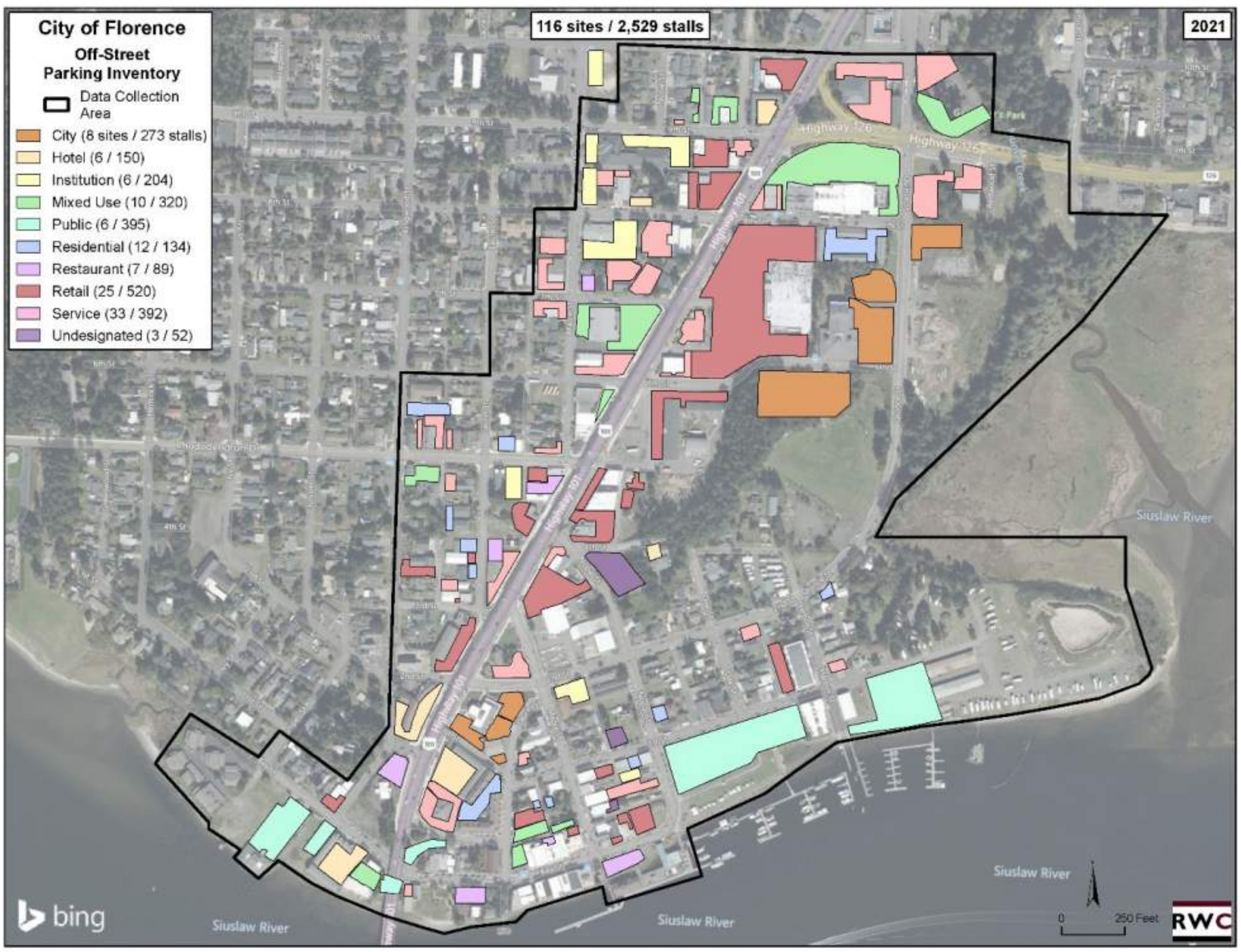
Use Type	Sites	Stalls	% Total
Off-Street Supply	**116**	**2,529**	**100%**
City	8	273	10.8%
Hotel	6	150	5.9%
Institution	6	204	8.1%
Mixed Use	10	320	12.7%
Public	6	395	15.6%

Residential	12	134	5.3%
Restaurant	7	89	3.5%
Retail	25	520	20.6%
Service	33	392	15.5%
Undesignated	3	52	2.1%

The largest facility is Safeway (Retail) with 253 stalls located along the east side of Highway 101 between 6th and 8th Street (Lot Number 30). The smallest sites (Lot Numbers 51 and 93) include one (1) stall each. There are 45 sites (38.8% of the total sites) consisting of fewer than ten (10) stalls, most of which are Service (13 sites). Of all the use types, the off-street supply consists mostly of Retail parking (20.6% of stalls), followed by Public parking (15.6% of stalls) and Service parking (15.5% of stalls).

The Institution sites (6 lots) consist of the 10th/Main – Church Lot, Siuslaw Library, US Post Office, Florence Evangelical Church, Museum, and Masonic Lodge Building (204 combined stalls). The ten (10) Mixed Use sites combine different neighboring land use types to share off-street parking (320 stalls).

*Figure E: Off-street parking supply by site and use type**



**The areas outlined in the Figure represent the parking areas for each land use, not the entire land use.*

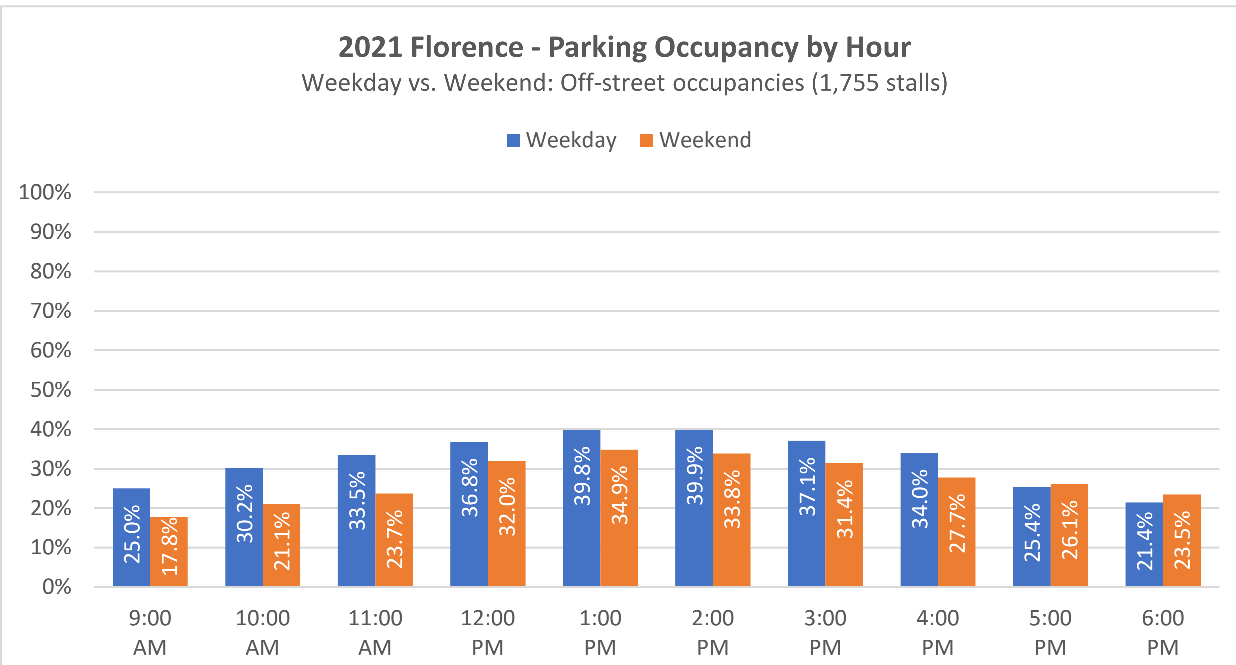
The project team selected a "sample" of the off-street supply to measure hourly occupancies. This approach was employed due to limited budgetary resources. Sites were chosen as a valid representative sample of both size, use type, and geographic distribution of parking lots located throughout all corners of the study area. The majority of event lots (parking dedicated to the support of a specific event venue) were purposely excluded from the sample because those facilities were not in use and would likely skew overall occupancy counts due to their relative size. Overall, 56 sites were sampled, representing 1,755 stalls, 69% of all off-street stalls within the study area.

Occupancy

Figure F provides a comparative hour-by-hour look at off-street parking occupancy on both survey days for the sampled stalls located within the study area.

- Off-street occupancies are low throughout the operating day on both days.
- The weekday peak hour reaches 39.9% at 2:00 PM.
- The weekend peak hour reaches nearly 34.9% at 1:00 PM.
- Both weekday and weekend hourly occupancy levels follow a traditional bell-shaped curve, building up to a midday peak and tapering off toward the end of the day.
- Unlike the on-street system, the majority of the hourly (off-street) counts are higher during the weekdays versus the weekend.

Figure F: 2021 Off-Street Occupancies (Hourly Comparison)



Occupancy and Utilization by Type of Facility

Table 4 summarizes peak hour occupancies and the number of empty stalls available at the peak hour by type of off-street facility. Per the table, the consultant designated off-street facilities by the type of user they might serve, ranging from "service" parking (with 19 sites and 257 stalls) to "restaurant" parking (with 2 sites and 35 stalls). In total, the consultant designated ten different categories of "use type."[3]

[3] Categories were established by the consultant using best information available at the sites (signage, relationship to building, etc.) and inputs from the project team. If more accurate information about sites becomes available, this table can be quickly updated.

As **Table 4** indicates:

- The overall peak occupancy for the combined off-street supply is between 2:00 PM and 3:00 PM (weekday) and 1:00 PM – 2:00 PM (weekend). The 5 percentage point difference between weekday and weekend occupancies might be attributed to a traditionally higher number of employees on site during the week and lower number on the weekends.
- For the combined supply, there are 1,055 and 1,143 empty stalls in the off-street supply, weekday, and weekends, respectively. This is a sizable supply of unused parking.
- The supply type with the highest peak occupancy (use) on both days (over 90%) were the restaurant lots. This is the only category of off-street parking that would be considered constrained, though the total number of stalls is just 35 (possibly buffered by available on-street supply).
- Facilities with the highest number of empty stalls at the peak hour on **weekday**/weekend are "retail" lots (**253**/260), and "public" lots (**224**/204).[4]

*Table 4: Off-street occupancy by use type (**Weekday** vs. Weekend)*

Use Type	Stalls	Peak Hour	Peak Occupancy	Empty Stalls	Vehicle hours Parked
Off-Street Supply Studied[5]	1,755	**2:00 PM - 3:00 PM** 1:00 PM - 2:00 PM	**39.9%** 34.9%	**1,055** 1,143	**5,670** 4,774
City	108	**10:00 AM - 11:00 AM** 2:00 PM - 4:00 PM	**18.5%** 10.2%	**88** 97	**136** 81
Hotel	39	**9:00 AM - 10:00 AM** 9:00 AM - 10:00 AM	**38.5%** 69.2%	**24** 12	**96** 141
Institution	108	**1:00 PM - 2:00 PM** 9:00 AM - 10:00 AM	**34.3%** 24.1%	**71** 82	**250** 195
Mixed Use	268	**2:00 PM - 3:00 PM** 12:00 PM - 1:00 PM	**53.0%** 41.8%	**126** 156	**1,072** 760
Public	395	**2:00 PM - 3:00 PM** 2:00 PM - 3:00 PM	**43.3%** 48.4%	**224** 204	**1,085** 1,108
Residential	77	**4:00 PM - 5:00 PM** 5:00 PM - 7:00 PM	**51.9%** 57.1%	**37** 33	**361** 376
Restaurant	35	**12:00 PM - 1:00 PM** 6:00 PM - 7:00 PM	**94.3%** 97.1%	**2** 1	**236** 238
Retail	434	**12:00 PM - 1:00 PM** 12:00 PM - 2:00 PM	**41.7%** 40.1%	**253** 260	**1,411** 1,423
Service	257	**2:00 PM - 3:00 PM** 1:00 PM - 3:00 PM	**42.0%** 17.5%	**149** 212	**918** 388
Undesignated	34	**multiple** 12:00 PM - 3:00 PM	**32.4%** 26.5%	**23** 25	**105** 64

[4] Future efforts to capture these empty stalls in the off-street supply will help maximize access (for longer-term stays) and integrate with the on-street system (catering to shorter-term visits).
[5] This accounts for 69.4% of the total off-street parking supply (2,529 stalls). An extrapolated peak occupancy for the total supply estimates approximately 1,520 and 1,647 available stalls on a Weekday and Weekend, respectively.

Surplus & Deficits – Parking Occupancy Heat Maps (off-street)

Figures G and H (next two pages) illustrate the off-street parking heat maps for the peak hours for both the weekday and weekend. Each site can be identified by its assigned lot number. The findings include:

Weekday

- Six (6) of 56 surveyed facilities are constrained above 85% occupancy on the weekday. This includes lots 82, 94, 111, 112, 113 and 114. Theses lots are comprised of a total of 103 stalls (6% of the total off-street supply).
- The level of constraint these lots put on the larger off-street system is minimal.
- There are numerous proximate sites to the six constrained sites that have available off-street parking within proximity to users looking for an off-street location to park.
- Four (4) of 56 surveyed facilities fall into the 70% - 84% range of occupancy at the peak hour. This includes lots 9, 28, 42, and 73. These lots are comprised of a total of 73 stalls (4% of the total off-street supply). The largest of these lots is Lot 42 (Sears/Peace Health) with 38 stalls.
- The remaining 46 lots (90% of supply) are moderate to low use at the peak hour based on industry performance standards described in **Section 1.5**.
- Overall, there is a significant amount of empty parking in the off-street supply commonly distributed throughout the study area.[6]

Weekend

- Eight (8) of 56 facilities are constrained above 85% occupancy on the weekend. This includes lots 15, 80, 86, 94, 110, 112, 113, and 114. Theses lots are comprised of a total of 140 stalls (8% of the total off-street supply). Five of the eight lots are at 100% occupancy at the peak hour.
- Despite the constraint in these eight lots, there are ample off-street opportunities proximate to these sites.
- One (1) of 56 surveyed facilities fall into the 70% - 84% range of occupancy at the peak hour. This includes lot 69. The lot has a total of 11 stalls (less than 1% of the total off-street supply).
- The remaining 47 lots (91% of supply) are moderate to low use at the peak hour.
- As with the weekday count, there is a significant amount of empty parking in the weekend off-street supply commonly distributed throughout the study area.[7]
- Efforts to encourage access into off-street lots should prioritize facilities located south of 2nd Street between Highway 101 and Harbor Street. This would facilitate access in an area that has the highest on-street constraints.[8]

[6] It is important to note that at the weekday peak hour, 1,055 stalls are empty within the off-street system at the combined peak hour. This does not assume that they are "available," as most of this supply is on privately owned parking sites. The data does show that there is opportunity to capture more off-street trips, possibly through a coordinated shared parking program.
[7] As noted with the weekday count, 1,143 stalls are empty within the off-street system at the combined peak hour. This does not assume that they are "available," as some of this supply is on privately owned parking sites. The data does show that there is opportunity to capture more off-street trips, possibly through a coordinated shared parking program.
[8] These efforts would also be beneficial for weekday access, where there are on-street constraints within this area, though less than the weekend survey day.

Figure G: Off-street parking occupancies by site – Weekday peak hour

Figure H: Off-street parking occupancies by site – Weekend peak hour

1.7 Field Notes

Located along Central Oregon coast approximately an hour west of Eugene, Florence is a wonderful and very walkable community, especially in the historic portion of the downtown. Lined with restaurants and shops, Florence combines tourist charm with a great sense of local, residential pride. Docks are full of local fishing and recreational boats set against the beautiful backdrop of the Oregon dunes. Bay Street, located in the historic old town, parallels the water, acting as the center point for local fare and fun. Highway 101 runs through the middle of town, perpendicular to Bay Street, providing higher speed travel and access to local and regional destinations north and south of the downtown. The photo montage below illustrates the variety of buildings and installations that help define this unique downtown.





On-Street

As noted above, the on-street parking in the Florence is primarily No Limit, unmetered parking with a smattering of 10 Minute, 30 Minute and 3 Hour signed stalls. No Limit, unregulated parking (86% of all stalls) is not common in downtown areas striving to prioritize and maximize customer and visitor trips to street-level businesses. However, given the overall low occupancy percentage, the demand largely does not warrant changes to how the on-street parking is currently being managed. The 'hot spot' of high on-street parking occupancy occurring along Bay Street does become constrained, yet parking can be found within a couple of blocks.

On-street parking stalls are well striped along Bay Street, and the adjacent streets which provides a customer-friendly, visual structure and efficiency to the overall stall format. Time-limits and areas of no parking are well signed within this area and throughout the Historic Downtown. As demand for on-street parking increases over time, expanding stall striping in commercially zoned areas should be evaluated.

Off-Street

Florence currently maintains six (6) public parking lots for visitor and employee use. The Port of Siuslaw lot (Lot #85) is the largest in the study area with 197 parking stalls, located just to the south of First Street and to the east of Nopal Street. The entry signage is prominent, alerting drivers to an off-street parking option. In general, the public lots appear to be well-maintained with clean stripping, posted time restrictions, and some basic landscaping. In the future, the city could benefit from a branded[9] public off-street system, with right-of-way signage directing visitors to public lots may helping limit visitor search/circling time looking for a safe, welcoming place to park. Based on early observations, the public off-street parking is highly accessible and well utilized, especially by visitors to the Historic Downtown.

The private lots in the downtown area are also largely well-maintained with striped lots with posted signage indicating the intended users. Overall, off-street parking conditions were well maintained with adequate on-site signage, however the adequacy of evening lighting was not easy to evaluate given the time of year and hours of inspection.

[9] Branding public lots with a simple, unique Florence-based logo will help visitors quickly identify parking facilities as available for public use. Having each public lot branded with that logo will help reinforce, in the minds of visitors, a system of instantly recognizable public parking facilities, welcoming them when they arrive regardless of where they are in Florence.

The following notes document observations and photos of three (3) off-street parking lots in the Historic Downtown, providing a description of the lot condition, signage and likely users for each.

Public Lot (Lot 85) – Historic Downtown

- **Condition**: All stalls well marked, pavement in good condition.
- **Users and Signage**: Overflow visitors, local customers, tourists patronizing the Bay Street area are the priority users. Onsite signage is present, however, additional branded signage as well as signage directing users to the lot may need to be improved. ADA stalls are well marked.
- **Occupancy**: The Port of Siuslaw lot peak occupancy was from 2:00-3:00PM on both the weekday (53.8%) and weekend (60%). Though experiencing relatively low occupancy, the public lot provides nearby off-street parking for visitors and tourists whose destination is the Bay Street area.



Public Parking (3 Hour) - (Lot 113) – Historic Downtown

- **Condition**: This public lot is well marked and generally in good condition with visible striping. The public use stalls abut well marked private off-street parking stalls within the lot. With a smaller public parking lot (Lot 110) across the street (under the bridge), off-street visitor parking for Bay Street is present. However, additional branded signage may be an improvement to visitors searching for a nearby parking stall.
- **Users and Signage**: There is small public parking signage for the lot, yet additional signage to indicate No Limit off-street public parking would be beneficial for visitors to the Downtown area.
- **Occupancy**: Just below Highway 101, the 21 stalls in Lot 113 experience a high peak occupancy on both the weekday and weekend. Visitors and tourists quickly find this off-street option in historic downtown.



Old Wharf Building - (Lot 94) – Historic Downtown

- **Condition**: This mixed-use lot is perfectly located among a number of different adjacent retail properties between Laurel Street to the west and Maple Street to the east. Though the traffic circulation is narrow, the stalls are well marked and well utilized.
- **Users and Signage**: Signage is prominent at the entry to the lot, indicating it is private (accessory) parking. Users of the lot are patrons of the adjacent retail businesses along Laurel, Maple and Bay Streets.
- **Occupancy**: Occupancy for this lot was high throughout the weekday and weekend, with constant usage from local visitors and tourists.

1.8 Summary

Florence provides a great balance for residents and tourists, mixing tourism destinations with everyday needs. That is certainly evident in the parking occupancy usage data, with peak hour occupancies constrained around Bay Street (tourism/visitor locations), but largely tapering off in the remainder of downtown (residential/employee use). Though the entire parking system is far from constrained (over 85%), the on and off-street systems along Bay Street are highly utilized. The appearance of constraint in this section of downtown is understandable, as such, it is likely users of the Historic Downtown may perceive a parking deficit or "problem." Nonetheless, parking is generally available in close proximity, within a couple of blocks on-street or within a nearby off-street lot. Some basic parking management strategies can help redirect demand into areas with surplus parking, while freeing up more convenient, centrally located stalls for higher turnover users.

Overall, the conditions of the on and off-street stalls are high with clear signage when applicable. The off-street public system could benefit from additional branded signage directing visitors and tourists quickly to an off-street option. When striping is present on-street, it provides clear guidance for the user and they appear to be well-spaced. As additional development and growth in the downtown occurs, Florence is well suited to absorb additional demand in a well-formatted on and off-street parking system.

Appendix A

Table 5: Off-street parking occupancies by lot[10]

Lot Number	Facility	Stalls	Peak Hour	Peak Occupancy	Stalls Available
Total Off-Street Supply (116 sites)		2,529	**2:00 PM - 3:00 PM** 1:00 PM - 2:00 PM	**39.9%** 34.9%	**1,520** 1,647
Off-Street Supply Studied (56 sites)		1,755	**2:00 PM - 3:00 PM** 1:00 PM - 2:00 PM	**39.9%** 34.9%	**1,055** 1,143
1	10th/Main - Church Lot (outside boundary)	65	- -	- -	- -
2	Hyak + Apartments (6 stalls/6 stalls)	12	- -	- -	- -
3	Barber Shop/New Concepts/Thai Cuisine	18	- -	- -	- -
4	KXCK Radio Station	2	- -	- -	- -
5	Shell	5	- -	- -	- -
6	Villa West Motel	19	- -	- -	- -
7	Central Lincoln	30	**9:00 AM - 10:00 AM** 9:00 AM - 7:00 PM	**66.7%** 16.7%	**10** 25
8	Central Lincoln (fleet fenced)	10	- -	- -	- -
9	Siuslaw Medical Center	11	**9:00 AM - 10:00 AM** 11:00 AM - 1:00 PM	**72.7%** 9.1%	**3** 10
10	Park Place	42	**2:00 PM - 3:00 PM** 1:00 PM - 3:00 PM	**38.1%** 16.7%	**26** 35
11	West Coast Real Estate	18	**10:00 AM - 11:00 AM** 10:00 AM - 5:00 PM	**38.9%** 11.1%	**11** 16
12	Premiere Landscaping	7	- -	- -	- -
13	Event Parking (gravel)	38	- -	- -	- -
14	Dune Village Center (120 front/ 6 in back)	126	**1:00 PM - 2:00 PM** 12:00 PM - 1:00 PM	**56.3%** 56.3%	**55** 55
15	Clauson's Wheelhouse	15	**12:00 PM - 1:00 PM** 10:00 AM - 11:00 AM	**93.3%** 93.3%	**1** 1
16	Siuslaw Library	53	**multiple** multiple	**20.8%** 5.7%	**42** 50
17	Options Counseling	11	**4:00 PM - 5:00 PM**	**27.3%**	**8**

[10] Facilities not collected on the study day are highlighted in red.

Lot Number	Facility	Stalls	Peak Hour	Peak Occupancy	Stalls Available
			-	-	11
18	7 Eleven	17	**multiple** 4:00 PM - 5:00 PM	**41.2%** 58.8%	**10** 7
19	Abel Insurance	10	**multiple** 1:00 PM - 5:00 PM	**40.0%** 10.0%	**6** 9
20	VP Fuels	3	- -	- -	- -
21	Bikes + Guitars	12	**multiple** multiple	**41.7%** 25.0%	**7** 9
22	Florence Hostel	6	- -	- -	- -
23	CenturyLink	6	- -	- -	- -
24	Cost Insurance Services	18	- -	- -	- -
25	La Pomodori Restorante	6	- -	- -	- -
26	US Post Office	37	**1:00 PM - 2:00 PM** 9:00 AM - 10:00 AM	**56.8%** 64.9%	**16** 13
27	Banner Bank	24	**9:00 AM - 12:00 PM** 3:00 PM - 6:00 PM	**37.5%** 4.2%	**15** 23
28	CPA/Cascasade Escrow	15	**10:00 AM - 11:00 AM** -	**73.3%** -	**4** 15
29	Oregon Urology	13	- -	- -	- -
30	Safeway	253	**12:00 PM - 1:00 PM** 12:00 PM - 1:00 PM	**49.4%** 41.5%	**128** 148
31	Timber Apartments	40	**4:00 PM - 6:00 PM** multiple	**57.5%** 57.5%	**17** 17
32	Event Center Parking	69	**10:00 AM - 11:00 AM** 9:00 AM - 7:00 PM	**8.7%** 1.4%	**63** 68
33	Gas station	2	- -	- -	- -
34	Event Center Parking (overflow - gravel)	17	- -	- -	- -
35	Old School Furniture & Saw Shop	37	**4:00 PM - 5:00 PM** 1:00 PM - 2:00 PM	**10.8%** 10.8%	**33** 33
36	Florence Event Center (gated)	110	- -	- -	- -
37	Umpqua Bank	18	**1:00 PM - 3:00 PM** multiple	**33.3%** 11.1%	**12** 16

Lot Number	Facility	Stalls	Peak Hour	Peak Occupancy	Stalls Available
38	Antique Mall/Good Stuff	17	**multiple** multiple	**52.9%** 58.8%	**8** 7
39	Buds 4 U	3	- -	- -	- -
40	Antique Mall (employee parking)	6	- -	- -	- -
41	The Shipping Shack	17	**3:00 PM - 4:00 PM** multiple	**64.7%** 47.1%	**6** 9
42	Sears/Peace Health Peace Harbor Medicine (33 front, 5 back)	38	**multiple** 2:00 PM - 4:00 PM	**84.2%** 7.9%	**6** 35
43	AIC Insurance	10	- -	- -	- -
44	Brian's Barbershop	9	**multiple** multiple	**55.6%** 33.3%	**4** 6
45	Wellness Center	11	**multiple** 3:00 PM - 4:00 PM	**36.4%** 18.2%	**7** 9
46	State Farm	7	**2:00 PM - 3:00 PM** -	**57.1%** -	**3** 7
47	Kinswood Apartments	14	- -	- -	- -
48	1335 Rhododendron	5	- -	- -	- -
49	Cottage Salon/Tattoo/Village Grooming	12	- -	- -	- -
50	Hanawalt & Ferguson Law Office (1 front, 7 back)	8	**4:00 PM - 5:00 PM** 11:00 AM - 12:00 PM	**50.0%** 12.5%	**4** 7
51	Antique Store	1	- -	- -	- -
52	357 Laurel St	4	- -	- -	- -
53	Dunesday Games	3	**4:00 PM - 5:00 PM** -	**33.3%** -	**2** 3
54	Duplex (residential) 391 Laurel St	8	- -	- -	- -
55	405 Laurel St	8	- -	- -	- -
56	Cafa - Anahis Beauty + Spa	9	**multiple** 2:00 PM - 3:00 PM	**22.2%** 11.1%	**7** 8
57	Farmers Insurance_Florence In Bloom	24	**12:00 PM - 1:00 PM** multiple	**37.5%** 16.7%	**15** 20
58	Goodmans Floor Coverings	12	-	-	-

Lot Number	Facility	Stalls	Peak Hour	Peak Occupancy	Stalls Available
			-	-	-
59	Hoberg Complete Auto Repair - 9 front, 4 back	13	- -	- -	- -
60	Los Compadres Taqueria	9	- -	- -	- -
61	Florence Evangelical Church (front & back)	26	- -	- -	- -
62	Coins & Stamps	7	- -	- -	- -
63	The Brown Hen	17	- -	- -	- -
64	423 Motorsports	10	- -	- -	- -
65	Gravel Lot	34	**multiple** 12:00 PM - 3:00 PM	**32.4%** 26.5%	**23** 25
66	Landmark Inn	12	- -	- -	- -
67	New Horizon	6	**multiple** 9:00 AM - 6:00 PM	**33.3%** 16.7%	**4** 5
68	Yamaha	24	**11:00 AM - 12:00 PM** 12:00 PM - 1:00 PM	**25.0%** 58.3%	**18** 10
69	Chamber of Commerce (public parking) Krab Kettle	11	**1:00 PM - 2:00 PM** 1:00 PM - 2:00 PM	**63.6%** 81.8%	**4** 2
70	The Sportsman - 17 front, 5 back (gravel)	22	**5:00 PM - 6:00 PM** 1:00 PM - 2:00 PM	**40.9%** 54.5%	**13** 10
71	Lighthouse Inn (27 front & 10 back)	37	- -	- -	- -
72	City Employee Parking	11	**9:00 AM - 12:00 PM** 10:00 AM - 6:00 PM	**54.5%** 9.1%	**5** 10
73	City Hall Parking	9	**9:00 AM - 12:00 PM** 9:00 AM - 7:00 PM	**77.8%** 55.6%	**2** 4
74	Firefighter parking only	5	**1:00 PM - 4:00 PM** 5:00 PM - 6:00 PM	**40.0%** 20.0%	**3** 4
75	City Hall	14	**multiple** 2:00 PM - 4:00 PM	**7.1%** 28.6%	**13** 10
76	Florence Playhouse	3	- -	- -	- -
77	Private property (no parking sign)	14	- -	- -	- -
78	Museum	18	**2:00 PM - 3:00 PM** 2:00 PM - 3:00 PM	**44.4%** 16.7%	**10** 15

Lot Number	Facility	Stalls	Peak Hour	Peak Occupancy	Stalls Available
79	216 Nopal St	5	- -	- -	- -
80	North Bay Condos	17	5:00 PM - 7:00 PM 1:00 PM - 2:00 PM	58.8% 88.2%	7 2
81	Bridge Port Landing Owners Assoc (reserved private)	10	- -	- -	- -
82	Port of Siuslaw Free Area - Day Use Only	79	multiple 4:00 PM - 5:00 PM	16.5% 11.4%	66 70
83	Sea Scout Base	4	- -	- -	- -
84	1738 Quince - multi-family residential	4	- -	- -	- -
85	Port of Siuslaw	197	2:00 PM - 3:00 PM 2:00 PM - 3:00 PM	53.8% 68.0%	91 63
86	Old Town Coffee	14	9:00 AM - 10:00 AM multiple	92.9% 121.4%	1 -3
87	Salt Water Taffy (employee parking)	3	- -	- -	- -
88	Backstreet Gallery	4	- -	- -	- -
89	Unidentified	4	- -	- -	- -
90	Siuslaw News (3 lots_1 site)	25	- -	- -	- -
91	1490 (1st/Nopal) Tenant parking only	4	- -	- -	- -
92	Masonic Lodge Building	5	- -	- -	- -
93	Joy of Quilting	1	- -	- -	- -
94	Old Wharf Building	30	1:00 PM - 3:00 PM multiple	90.0% 93.3%	3 2
95	Bodega Wine Parlor + Swee Magnolia Bakery	19	- -	- -	- -
96	Tenant Parking Only	3	- -	- -	- -
97	Alley Apartment tenant only	2	- -	- -	- -
98	Beach Comber	4	- -	- -	- -
99	About U Salon/Chicken Coop	4	-	-	-

Lot Number	Facility	Stalls	Peak Hour	Peak Occupancy	Stalls Available
			-	-	-
100	Wind Drift Gallery	7	- -	- -	- -
101	Old Town Inn	39	**9:00 AM - 10:00 AM** 9:00 AM - 10:00 AM	**38.5%** 69.2%	**24** 12
102	Coldwell Banker	33	**2:00 PM - 3:00 PM** 4:00 PM - 5:00 PM	**48.5%** 57.6%	**17** 14
103	Laurel Crossing	37	**multiple** 4:00 PM - 5:00 PM	**45.9%** 62.2%	**20** 14
104	Dairy Queen	18	- -	- -	- -
105	Thrift Shop	5	- -	- -	- -
106	Public Parking	77	**2:00 PM - 3:00 PM** 2:00 PM - 3:00 PM	**23.4%** 18.2%	**59** 63
107	Veterans Memorial Park	13	**5:00 PM - 6:00 PM** 2:00 PM - 3:00 PM	**69.2%** 61.5%	**4** 5
108	River House Inn	37	- -	- -	- -
109	1220 Condos + Coast Jewelry	18	- -	- -	- -
110	Public Parking (3 Hour)	8	**multiple** 1:00 PM - 3:00 PM	**87.5%** 100.0%	**1** 0
111	Travel Division	3	**10:00 AM - 7:00 PM** 9:00 AM - 7:00 PM	**100.0%** 33.3%	**0** 2
112	Waterfront North	18	**6:00 PM - 7:00 PM** 1:00 PM - 2:00 PM	**100.0%** 100.0%	**0** 0
113	Public Parking (3 Hour)	21	**multiple** 12:00 PM - 2:00 PM	**95.2%** 100.0%	**1** 0
114	Mo's	17	**12:00 PM - 1:00 PM** multiple	**94.1%** 100.0%	**1** 0
115	Mixed use/Antique Shop	8	**multiple** 2:00 PM - 3:00 PM	**50.0%** 62.5%	**4** 3
116	WAFP Bank	9	**multiple** -	**44.4%** -	**5** 9

APPENDIX E: TECH MEMO #4: FUTURE CONDITIONS

TECH MEMO #4: FUTURE LAND USE AND TRANSPORTATION CONDITIONS

Date: March 27, 2023

To: Wendy Farley-Campbell, Shirley Gray, Erin Reynolds, and Mike Miller, City of Florence
Michael Duncan, Oregon Department of Transportation

From: Russ Doubleday, Matt Bell, Susan Wright, PE, PMP, Kittelson & Associates, Inc.

Project: City of Florence Transportation System Plan Update

Subject: Final Tech Memo #4: Future Land Use and Transportation Conditions

Table of Contents

Introduction

This memorandum summarizes future (no-build) transportation system conditions in Florence for the Florence Transportation System Plan (TSP) update. The information provided in this memorandum is based on population and employment forecasts developed for Florence and corresponding growth in traffic volumes throughout the city. The future deficiencies identified in this memorandum will serve as the basis for developing transportation system alternatives and improvement projects for the TSP update.

Population and Employment Forecasts

Population and employment forecasts were developed for Florence based on state and local data and an assessment of the capacity for additional growth and development within the current Urban Growth Boundary (UGB). The following provides a summary of the forecast. *A detailed summary of the forecast is provided in Attachment A.*

POPULATION FORECAST

Historic and projected population information for Florence was obtained from the Portland State University (PSU) Population Research Center (PRC). The PRC generates coordinated forecasts for Oregon counties and cities every four years. The most recent coordinated population forecast for Lane County was released in 2020. The 2020 report includes historic and projected population estimates for Lane County and Florence.

According to the report, the base year (2020) population for Florence is 11,182 persons. The population is expected to have an annual average growth rate of 1.0 percent per year between 2020 and 2045. Therefore, the end year (2045) population for Florence is expected to be 14,040 persons.

The household forecast assumes Florence household size will remain the same as the 2020 average household size of 1.9 persons per household throughout the planning horizon. Households were estimated by dividing population by the average household size. There is an estimated 5,877 households in the base year (2020) and 7,359 households in the end year (2045). The difference between the base year and end year is 1,482 households.

EMPLOYMENT FORECAST

The most recent industry employment data available for Lane County is provided from the Oregon Employment Department Workforce and Economic Research Division industry employment forecast. This data provides a ten-year forecast defined by regions as opposed to cities and organizes employment forecasts by primary industry. The employment forecast analysis assumes that employment growth in Florence will follow similar employment trends as the Oregon Employment industry employment forecast.

The most current employment data available for Florence is provided by the US Census American Community Survey (ACS) 5-year estimates. This data provides employment information by North American Industry Classification System (NAICS) sector. This data is used as the basis for estimating employment growth.

The NAICS data shows that base year (2020) employment for Florence is 3,648 jobs. Employment is expected to increase by an additional 2,754 jobs between 2020 and 2045, with higher increases in leisure and hospitality, private educational and health services, and trade, transportation, and utilities. Therefore, the end year (2045) employment for Florence is expected to be 6,402 jobs.

Table 1 summarizes the population, households, and employment data for year 2020 and forecast year 2045 conditions. As shown, employment is expected to grow at a higher rate than the population and households over the 25-year period.

Table 1: Population, Household, and Employment Summary

Land Use	2020	2045	Change	Percent Change
Population	11,182	14,040	2,861	26%
Households	5,877	7,359	1,482	25%
Employment	3,648	6,402	2,754	75%

The population, households, and employment data shown in Table 1 was distributed throughout the city based on current zoning designations and an evaluation of developable and re-developable lands. Based on the evaluation, there is 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 1 and 2 illustrate the changes in households and employment by TAZ. The TAZs shown in Figures 1 and 2 were developed based on the current zoning designations and the location of major roadways and intersections throughout the city. The TAZs provide a convenient way of evaluating and summarizing the population and employment data for the city.

Planned Improvements

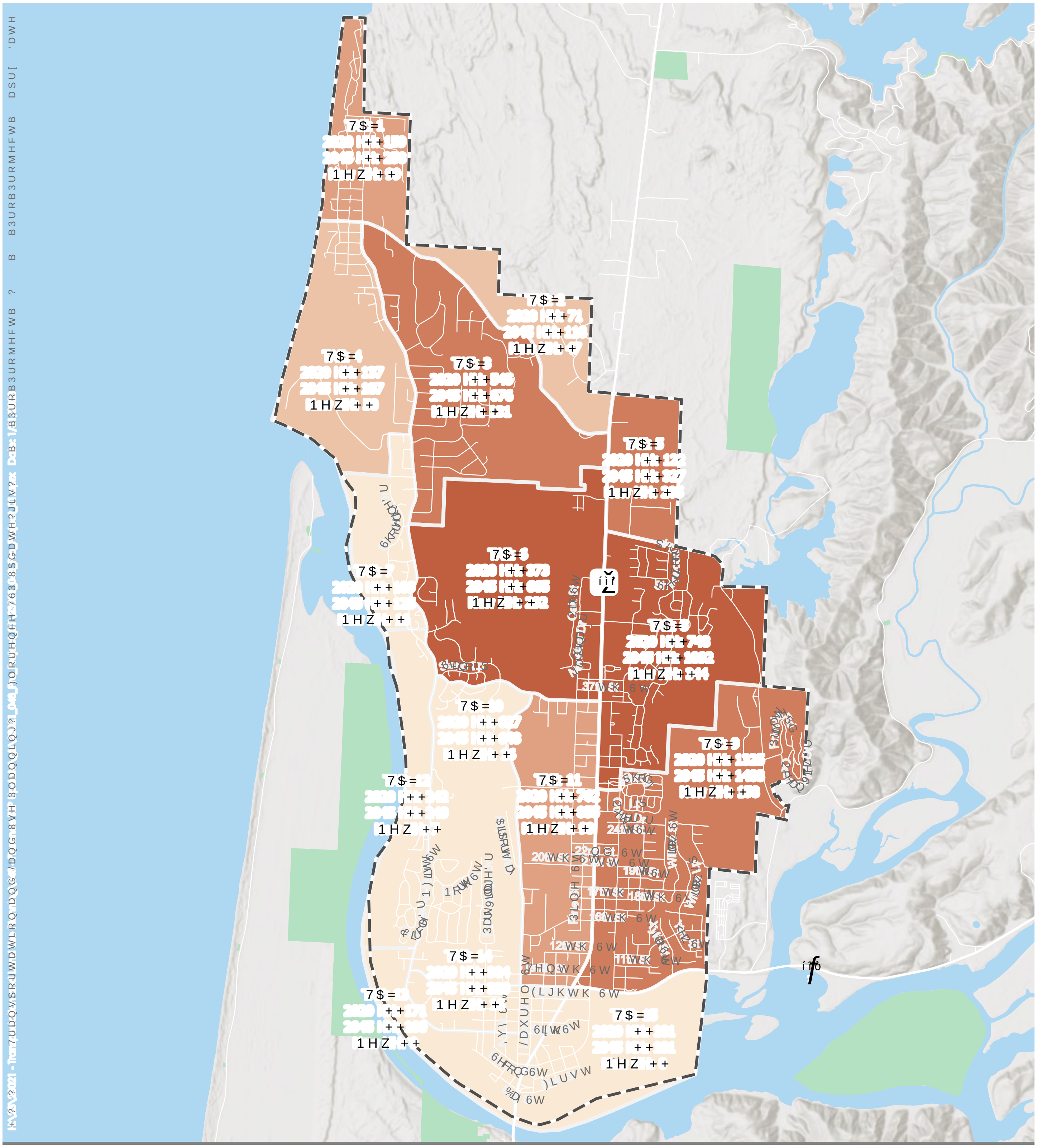
This section summarizes planned improvements identified in the Statewide Transportation Improvement Program (STIP) and the Florence Capital Improvement Program (CIP). One expected outcome of the Florence TSP update is the identification of projects for inclusion in updated/amended versions of the STIP and CIP.

STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM

The Statewide Transportation Improvement Program (STIP) is the Oregon Department of Transportation's (ODOT) capital improvement program for state and federally funded projects. The Oregon Transportation Commission (OTC) and ODOT develop the STIP in coordination with a wide range of stakeholders, including local jurisdictions and the public. The OTC allocates funding among the following categories:

- **Fix-it** programs fund projects that fix or preserve the state's transportation system, including bridges, pavement, culverts, traffic signals, and others.
- **Enhance it** programs fund projects that enhance or expand the transportation system, these are typically high-priority projects from state and local transportation plans, such as the Florence TSP.
- **Safety** programs reduce deaths and injuries on Oregon roads. This includes the All Roads Transportation Safety (ARTS) program, which includes projects on state highways and local roads.
- **Non-highway** programs fund bicycle and pedestrian projects and public transportation.
- **Local government** programs direct funding to local governments so they can fund projects.

The current STIP (2021-2024) include one project in Florence. Table 2 summarizes projects from the current STIP.



1HZ +RXVHKROGV

3DUNV

:DWHU

&LW\ %RXQGDU\

8UEDQ *URZWK %RXQGDU\

0LOHV

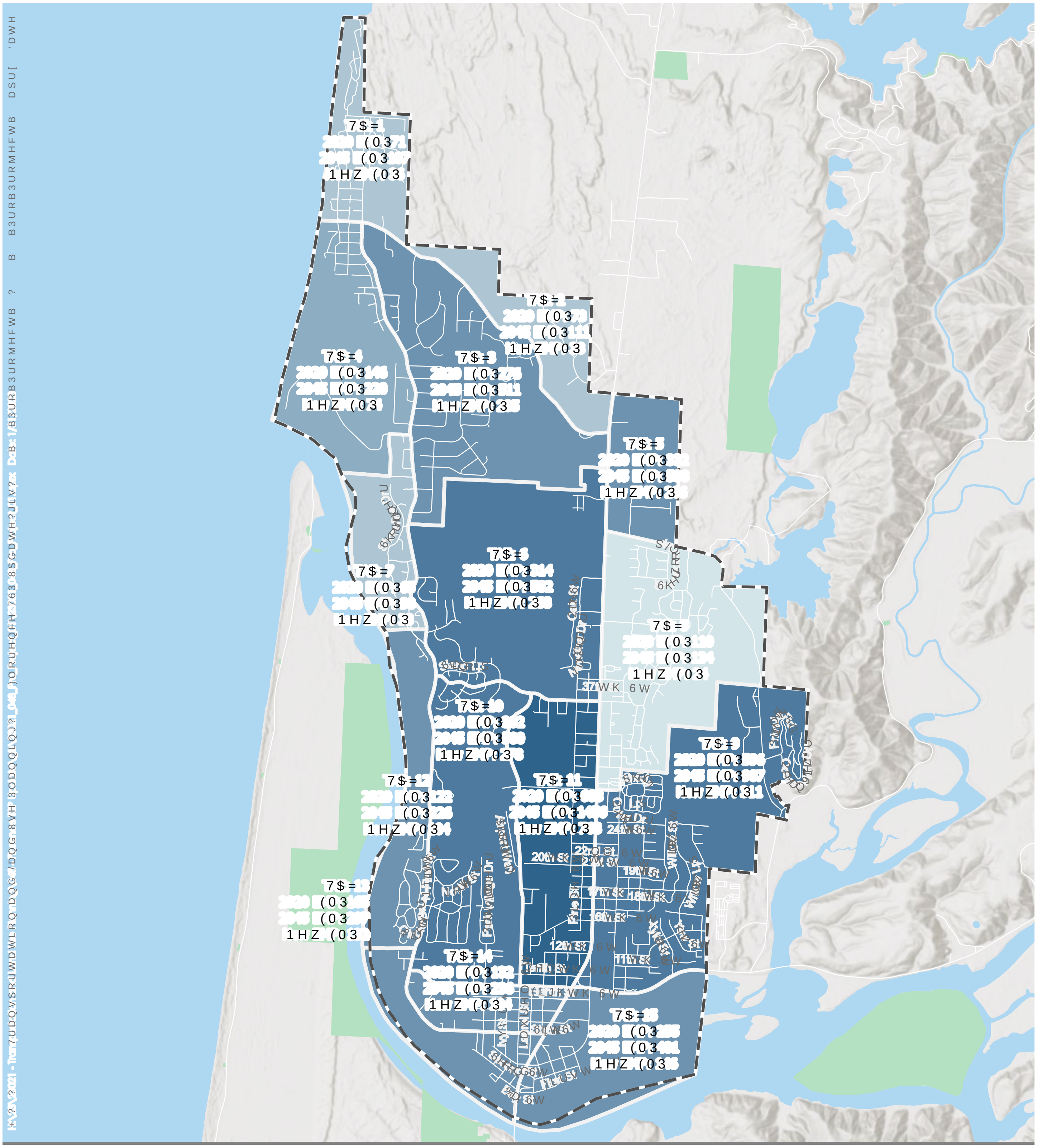
)LJXUH

+RXVHKROG *URZ

7UDQVSRUWDWLRQ $QDO

)ORUHQFH 2U

KITTELSON & ASSOCIATES



1HZ (PSOR\PHQW

3DUNV

:DWHU

&LW\ %RXQGDU\

8UEDQ *URZWK %RXQGDU\

0LOHV

)LJXUH

(PSOR\PHQW *URZ
7UDQVSRUWDWLRQ $QDO
)ORUHQFH 2U

KITTELSON & ASSOCIATES

Table 2: Statewide Transportation Improvement Program Projects for Florence

Key	Project Name	Description	Work Type	Status	Project Total
2018-2021 STIP					
22539	Siuslaw Estuary Trail Phase 1	Construct a new trailhead and approximately 1,600 feet of multi-use trail	SPPROG	Project Under Construction	$208,700

The project shown in Table 2 will be considered in the future (no-build) traffic conditions analysis and further evaluated in the alternatives analysis summarized in Tech Memo 5. However, it will have limited to no impact on overall capacity within the UGB.

FLORENCE CAPITAL IMPROVEMENT PLAN

The Florence Capital Improvement Plan (CIP) establishes, prioritizes, and ensures funding for projects to improve existing infrastructure or to pave the way for new development. Projects generally increase functionality, efficiency, and capacity of the infrastructure, increase capacity to meet the demands of growth, or provide community livability and enhancement.

The current CIP identifies projects for Fiscal Year (FY) 2022-2023 through the FY 2037-2038. Table 3 summarizes the characteristics of the projects, including estimated cost and funding source.

Table 3: Florence Capital Improvement Plan

Fiscal Year	Fund	Projects	Estimated Cost	Funding Source
FY 2023-2024	Development	Munsel Lake Road West Extension	$312,000	Development Contributions
FY 2026-2027	Rates	Quince Street Reconstruction	$750,000	Rates
FY 2026-2027	SDC and ODOT	US 101/27th Street Traffic Signal	$500,000	SDC and ODOT
FY 2027- 2028	Development	US 101/Munsel Lake Road Traffic Signal	$1,000,000	Development Contributions
FY 2029 – 2030	ODOT	US 101/Quince Street Realignment	$650,000	ODOT
FY 2030-2031	SDC	27th Street Widening (US 101 to Oak Street)	$200,000	SDC
FY 2030 – 2031	SDC and Development	Oak Street Extension (46th Street to North Property Line of Fred Meyer)	$1,000,000	SDC and Development Contributions
FY 2031 - 2032	Development	Oak Street Extension (Munsel Lake to Heceta Beach Road)	$2,216,800	Development Contributions
FY 2032 – 2033	SDC	Kingwood Street/9th Street Traffic Signal or Roundabout	$1,200,000	SDC
FY 2035-2036	SDC and ODOT	US 101/15th Street Traffic Signal	$500,000	SDC and ODOT
FY 2036- 2037	SDC, ODOT, and Development	US 101/46th Street Traffic Signal	$490,000	SDC, ODOT, and Development Contributions
FY 2037 – 2038	Development	Spruce Street Extension (52nd to Heceta Beach Road)	$3,500,000	Development Contributions

The projects shown in Table 3 will be considered in the future (no-build) traffic conditions analysis and further evaluated in the alternatives analysis summarized in Tech Memo #5.

Future Traffic Volumes

Future traffic volumes were developed for the study intersections based on the Zonal Cumulative Analysis methodology described in ODOT's Analysis Procedures Manual (APM). This type of analysis combines growth in regional traffic volumes with growth in local traffic volumes associated with household and employment growth in the city. The traffic volume projection process includes three major steps: trip generation, trip distribution, and trip assignment. The process accounts for the following four categories of vehicle trips:

- **External-External (through trips):** vehicles with an origin and destination outside the UGB. An example of an external-external trip is someone traveling from Yachats to Reedsport or Eugene.
- **External-Internal (inbound trips):** vehicles with an origin outside the UGB and a destination inside the UGB. An example of an external-internal trip is someone who works in Reedsport and returns home to Florence during the evening peak hour.
- **Internal-External (outbound trips):** vehicles with an origin inside the UGB and a destination outside the UGB. An example of an internal-external trip is someone who works in Florence and returns home to Yachats during the evening peak hour.
- **Internal-Internal (local trips):** vehicles with an origin and destination inside the UGB. An example of an internal-internal trip is someone who travels from their home to the grocery store without leaving the UGB.

Using these vehicle trip types, the basic steps for a zonal cumulative analysis are:

- Develop regional growth rates for highway traffic volumes;
- Identify where household and employment growth is likely to occur in the community;
- Develop estimates of the number of vehicle trips associated with household and employment growth, and;
- Allocate those trips across the city to various growth areas.

An overview of each of these steps is presented below.

REGIONAL TRAFFIC GROWTH

ODOT's Future Volume Tables were used to develop regional growth rates for US 101 and OR 126. Based on the tables, traffic volumes along US 101 are expected to increase by approximately 16.2 percent north of the City limits and traffic volumes along OR 126 are expected to increase by approximately 15.6 percent east of the City limits over the 20-year planning horizon. These growth rates were applied to existing traffic volumes along US 101 and OR 126 to estimate growth in regional traffic volumes.

HOUSEHOLD AND EMPLOYMENT GROWTH

Projected household and employment growth also contribute to future growth in traffic volumes. Growth estimates were developed based on the PRC's Coordinated Population Forecast for Lane County, the Census Bureau's ACS 5-year estimates, and the Oregon Employment

Department's employment forecast analysis. The distribution of new households and employment within the city was determined based on an evaluation of developable and re-developable lands as well as a review of existing land use, zoning designations, and development patterns. *Additional information on projected household and employment growth is provided earlier in this memo and in Attachment A.*

TRIP GENERATION

The projected household and employment growth can be equated to increases in local traffic volumes by calculating the trip generation of the future uses. Trip generation estimates were prepared based on information provided in the standard reference, *Trip Generation Manual, 11th Edition*, published by the Institute of Transportation Engineers (ITE). *Table B-1 in Attachment B summarizes the total trips by TAZ.*

TRANSPORTATION ANALYSIS ZONE

The trips associated with the projected household and employment growth were distributed throughout the city based on the type of trips (i.e. external-internal, internal-external, internal-internal) and the location of the TAZs developed for the project. *Additional information on the TAZs is provided earlier in this memo and in Attachment A.*

Intersection Operations Analysis

The intersection operations analysis was conducted using Synchro 11, which is a software tool designed to assist with operations analyses in accordance with Highway Capacity Manual (HCM) methodologies. The analysis results include level-of-service (LOS), delay, and volume-to-capacity (v/c) ratios at all intersections, regardless of jurisdiction. The LOS, delay, and v/c ratios are reported for the overall intersection at signalized intersections and the critical movement at unsignalized intersections.

Figure 3 illustrates the location of the study intersections. Table 4 and Figure 4 summarize the results of the intersection operations analysis and compares the results to the applicable mobility standards and targets which were presented in the *Analysis Methodology and Assumptions Memorandum*.

Table 4: Intersection Operations, Weekday PM Peak Hour

Map ID	Intersection	Control Type[1]	Mobility Standard/Target[2]	Intersection Operations[3]			
				CM	LOS	Del	v/c
1	US 101/Heceta Beach Road	TWSC	V/C = 0.80/0.90	EB	F	89.7	0.52
2	US 101/Munsel Lake Road	TWSC	V/C = 0.85/0.90	WB	**F**	**> 100**	**> 1.0**
3	US 101/46th Street	TWSC	V/C = 0.85/0.90	EB	F	76.1	0.60
4	US 101/35th Street	Signal	V/C = 0.85	-	B	19.1	0.71
5	US 101/30th Street	TWSC	V/C = 0.90/0.95	EB	E	48.7	0.26
6	US 101/27th Street	TWSC	V/C = 0.90/0.95	EB	C	24.3	0.24
7	US 101/15th Street	TWSC	V/C = 0.90/0.95	EB	E	49.8	0.45
8	US 101/OR 126	Signal	V/C = 0.85	-	C	34.1	0.80
9	US 101/Rhododendron Drive	Signal	V/C = 0.90	-	B	10.8	0.60
10	US 101/2nd Street	TWSC	V/C = 0.90/1.0	WB	E	37.2	0.07

11	OR 126/Quince Street	TWSC	V/C = 0.85/0.95	NB	F	> 100	0.71
12	OR 126/Spruce Street	TWSC	V/C = 0.85/0.95	SB	E	41.1	0.63
13	OR 126/North Fork Siuslaw Road	TWSC	V/C = 0.70/0.75	SB	D	25.4	0.15
14	Rhododendron Drive/35th Street	TWSC	LOS D	WB	B	13.4	0.36
15	Rhododendron Drive/9th Street	TWSC	LOS D	WB	C	18.6	0.55
16	Rhododendron Drive/Heceta Beach Road	TWSC	LOS D	SB	B	11.9	0.28
17	Kingwood Street/35th Street	TWSC	LOS D	NB	**E**	**40.1**	**0.55**
18	Kingwood Street/27th Street	TWSC	LOS D	WB	B	10.9	0.07
19	Kingwood Street/15th Street	TWSC	LOS D	WB	B	11.6	0.13
20	Kingwood Street/9th Street	TWSC	LOS D	SB	C	19.6	0.44

1. TWSC = Two-way stop-control
2. State Highway V/C Ratio/Side-Street V/C Ratio
CM = Critical movement.
LOS = Intersection Level of Service (Signal); CM Level of Service (TWSC, AWSC).
Delay = Intersection average vehicle delay (Signal); CM vehicle delay (TWSC, AWSC).
v/c = Intersection v/c (Signal); CM v/c (TWSC, AWSC).

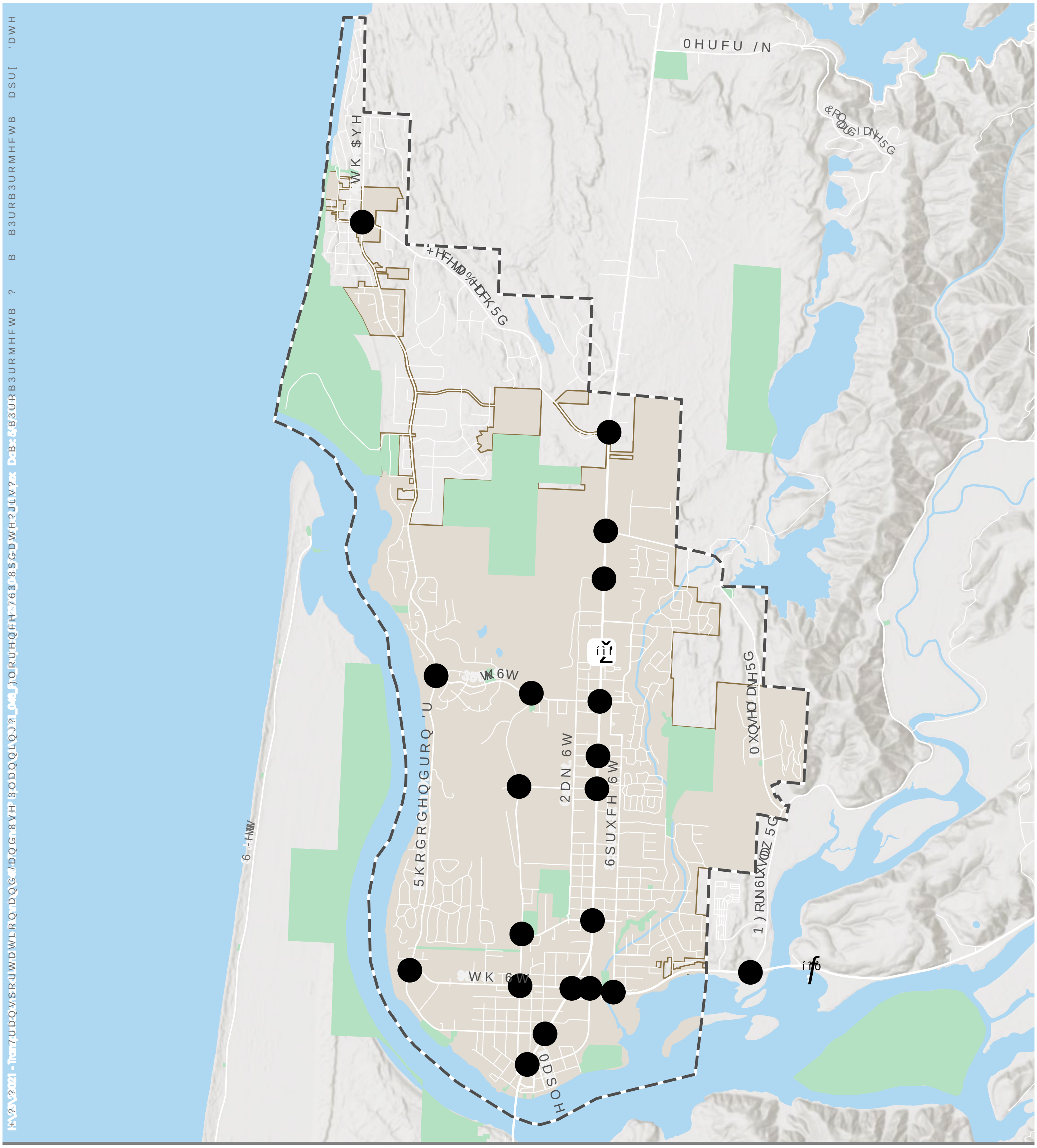
As shown in Table 4 and Figure 4, two intersections are forecast to exceed their applicable mobility targets in 2042 during the weekday PM peak hour. The intersections exceeding their applicable mobility standards and target include:

- **US 101/Munsel Lake Road** – The westbound approach to the intersection is forecast to operate at LOS F and above capacity (v/c > 1.0). This is primarily due to growth in TAZ 5,8, and 9 as well as growth in through traffic along US 101.
- **Kingwood Street/35th Street** – The northbound approach to the intersection is forecast to operate at LOS E. This is primarily due to growth in TAZs throughout the city. Many trips accessing the west side of Florence go through this intersection as 35th Street is a primary east-west connector.

Other intersections that may meet their applicable standards and target, but have relatively high level of delay include:

- **US 101/Heceta Beach Road** – the eastbound approach is forecast to operate at LOS F, but below capacity.
- **US 101/46th Street** – the eastbound approach is forecast to operate at LOS F, but below capacity.
- **OR 126/Quince Street** – the northbound approach is forecast to operate at LOS F, but below capacity.

All other study intersections are forecast to operate acceptably during the weekday PM peak hour with respect to their applicable mobility standards and targets. *Attachment C includes the intersection operations analysis worksheets.*



6WXG\ ,QWHUVHFWLRQV

3DUNV

:DWHU

&LW\ %RXQGDU\

8UEDQ *URZWK %RXQGDU\

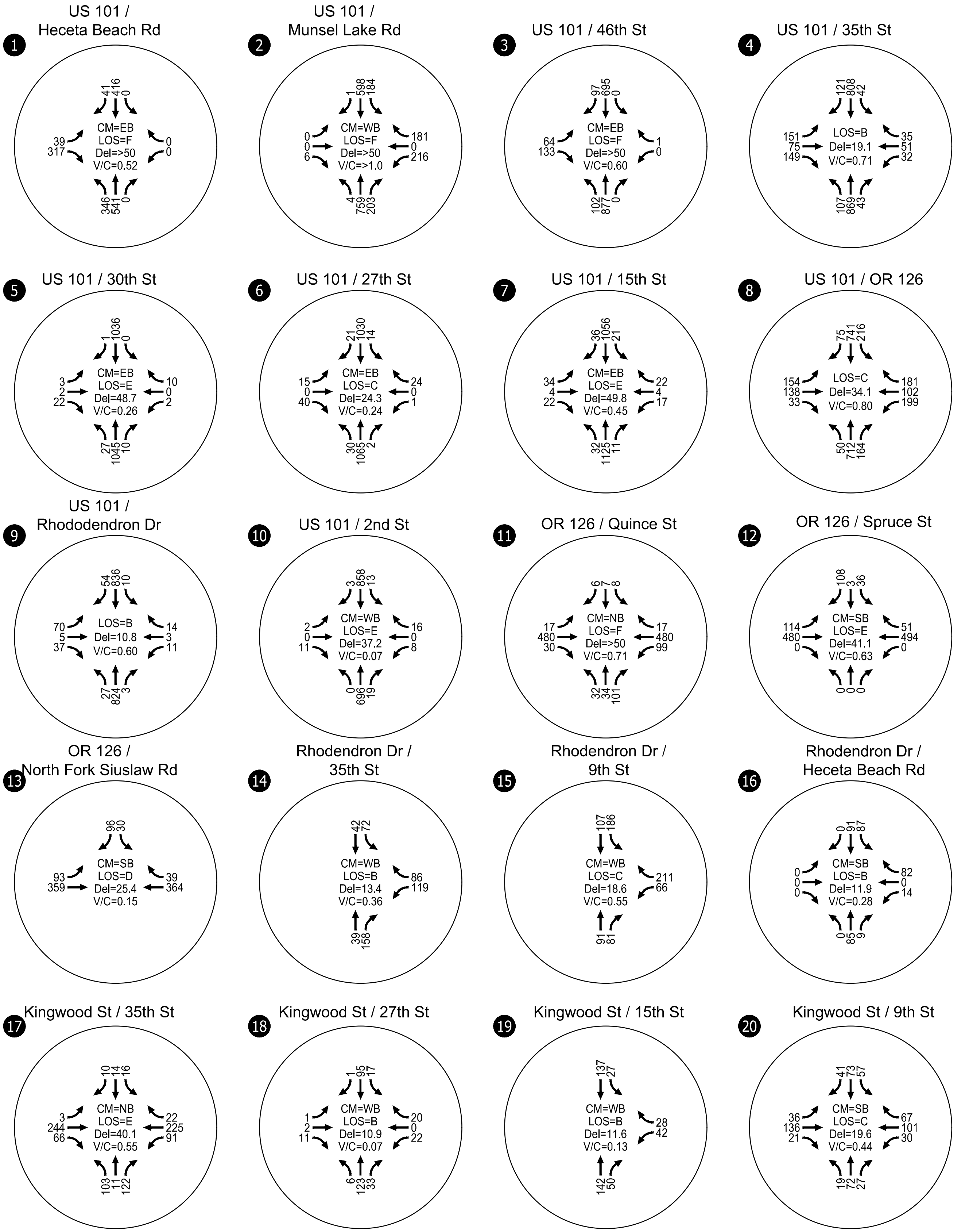
0LOHV

)LJXUH

6WXG\ ,QWHUVH

)ORUHQFH 2U

KITTELSON & ASSOCIATES



Year 2042 Traffic Conditions
Weekday PM Peak Hour
Florence, OR

Figure
4

H:\23\23021 - Transportation and Land Use Planning\048 - Florence TSP Update\Task 4_Future Conditions and Alternatives Development\analysis\Florence TSP Figures.dwg Jan 24, 2023 - 7:58am - mruiz-leon Layout Tab: 2045

QUEUEING ANALYSIS

A queuing analysis was conducted at the signalized study intersections using Synchro 11. Table 5 summarizes the 95th percentile queues during the weekday PM peak hour and indicates if existing storage can accommodate the queues. The vehicle queue and storage lengths were rounded up to the nearest 25-feet. The storage lengths reflect the striped storage for each movement.

Table 5: Queuing Summary, Weekday PM Peak Hour

Map ID	Intersection	Movement	Storage Length (feet)	95th Percentile Queue (feet)	Adequate?
4	US 101/35th Street	EBL	125	225	**No**
		WBL	150	50	Yes
		NBL	150	50	Yes
		SBL	100	<25	Yes
8	US 101/9th St-OR 126	EBL	100	250	**No**
		WBL	400	275	Yes
		NBL	125	125	Yes
		SBL	150	475	**No**
9	US 101/Rhododendron Drive	NBL	125	<25	Yes
		SBL	125	<25	Yes

EB = Eastbound, WB = Westbound, NB = Northbound, SB = Southbound, L = Left

As shown in Table 5, the striped storage lengths at the signalized study intersections are currently adequate for the 95th percentile queues except for the eastbound left-turn queue at the US 101/35th Street and the eastbound left-turn and southbound left-turn queue at the US 101/OR 126 intersections.

The storage length of the eastbound left-turn lane on 35th Street is restricted by pavement width between US 101 and Pine Street. The storage length of the eastbound left-turn lane on 9th Street is restricted by pavement width between US 101 and Nopal Street. The southbound left-turn lane on US 101 has additional two-left-turn storage from OR 126 to 10th Street. There is additional two-left-turn storage from 10th Street to 12th Street. *Attachment C contains the queuing analysis worksheets.*

Non-Automobile Transportation Analysis

TRANSIT QUALITATIVE MULTIMODAL ASSESSMENT

As described in *Technical Memorandum #3A: Existing Conditions Inventory,* public transit service in Florence is provided by Rhody Express, Link Lane, and Coos County Area Transit. These providers offer a mix of local and intercity bus service, and connections to other transit services outside of the city. The following summarizes planned updates to these services:

- **Rhody Express** recently updated the South Loop to provide service to the Three Rivers Casino. This update was considered in the existing conditions analysis and there are no other planned updates at this time.
- **Link Lane** is currently creating a Transit Development Plan (TDP) to better understand the transit needs between coastal communities and between these coastal communities and Eugene. While the project has yet to develop alternatives, it has discovered the

need to increase intercity service. As alternatives are developed to address this need, they will be incorporated into the Florence TSP Update.

- **Coos County Area Transit** completed a Transit Master Plan in 2021. The plan identifies updates to the service provided between Coos Bay and Florence. The plan calls for three runs four days a week (Monday through Friday), which is an update to existing service, which now operates two runs six days a week. Both existing service and planned service updates result in 12 runs per week, and fewer than four runs per day.

The transit qualitative multimodal assessment (QMA) uses several criteria to assess transit service for small cities, including service frequency, schedule speed/travel time, transit stop amenities, connecting pedestrian/bicycle network, and ADA accessibility. Given that Rhody Express does not have plans to update its service, potential updates to Link Lane service are still pending, and recent updates to Coos County do not measurably change the results of the analysis, the transit QMA results summarized in *Tech Memo 3B: Existing Conditions Analysis* remain the same under future (no-build) traffic conditions.

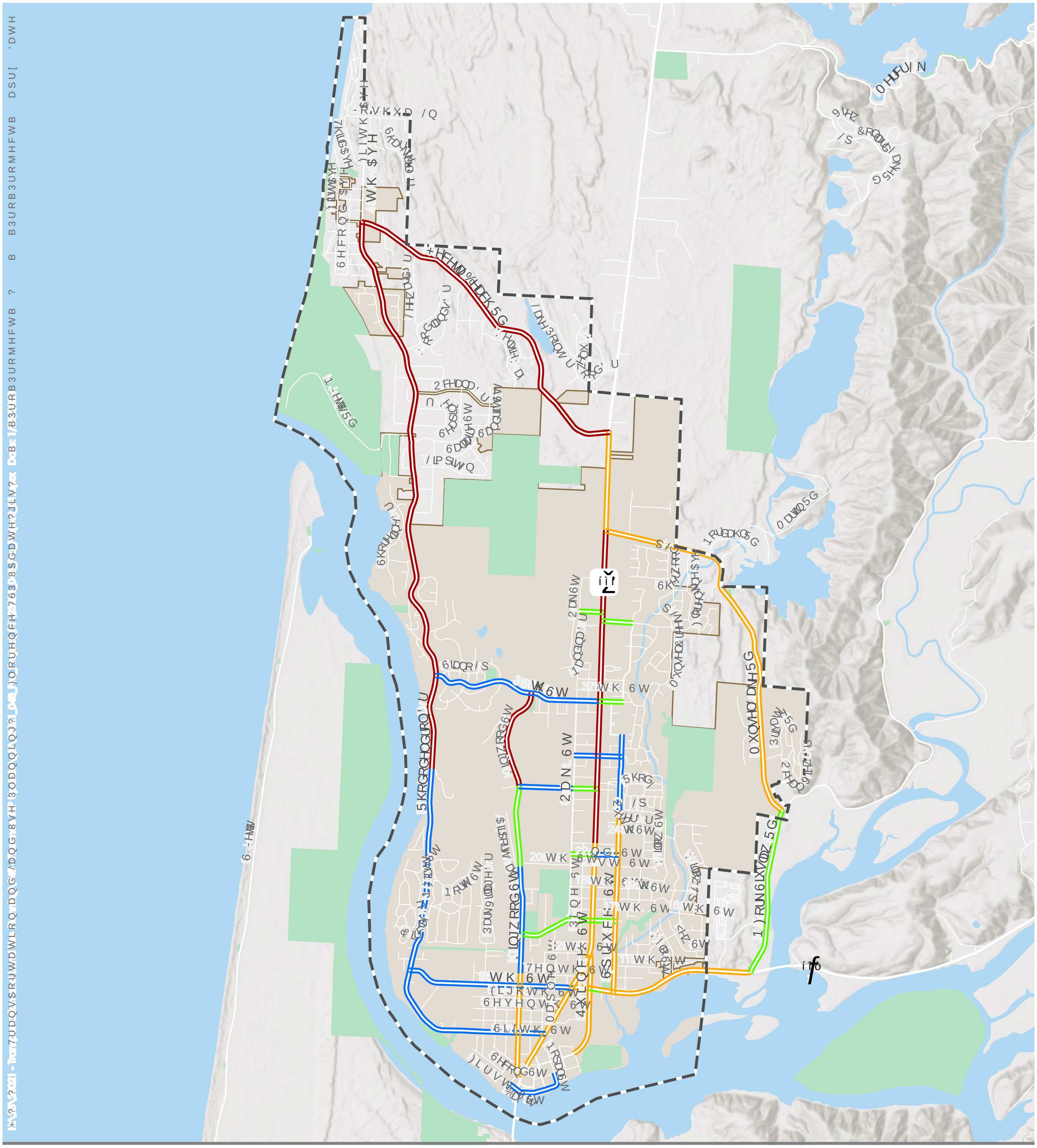
PEDESTRIAN LEVEL OF TRAFFIC STRESS

Pedestrian Level of Traffic Stress (PLTS) along roadway segments is determined based on sidewalk condition, physical buffer type, total buffering width, and general land use. Traffic volumes do not impact PLTS along roadway segments. Therefore, the forecast traffic volumes describe above are not expected to change the PLTS analysis results relative to existing conditions. In addition, none of the planned improvements identified in the STIP or the CIP are expected to change the factors that determine PLTS along roadway segments. Therefore, the PLTS analysis results summarized in *Tech Memo #3B: Existing Conditions Analysis* remain the same under future (no-build) traffic conditions.

BICYCLE LEVEL OF TRAFFIC STRESS

Bicycle Level of Traffic Stress (BLTS) along roadway segments is determined based on traffic volumes, travel speeds, the number of travel lanes per direction, the presence and width of on-street bicycle lanes and/or adjacent parking lanes, and several other factors. Given that increases in traffic volumes could impact BLTS on roadways with mixed traffic (e.g., shared lane pavement markings, no bicycle facilities), future traffic volumes were reviewed to determine if the increases result in changes in BLTS. Based on this review, there were several locations where traffic volumes increased; however, given the BLTS criteria the increases did not change the results of the analysis.

Table D-1 in Attachment D summarizes the BLTS analysis results under future (no-build) traffic conditions. Figure 5 illustrates the BLTS analysis results for arterial and collector streets. It is important to note that while some segments are shown as BLTS 3 or 4, they may have shorter segments with lower BLTS scores. As shown in Figure 5, several arterial and collector streets in Florence are forecast to have segments that are rated BLTS 3 or 4. These segments may have bike lanes that are too narrow for roadway conditions or may be shared roadways (i.e. *mixed traffic*) with relatively high traffic volumes.



%/76 6FRU

3DUNV

%/76

:DWHU

%/76

&LW\ %RXQGDU\

%/76

8UEDQ *URZWK %RXQGDU\

%/76

0LOHV

)LJXUH

)XWXUH %LF\FOH /HYH
)ORUHQFH 2U

KITTELSON & ASSOCIATES

Future Parking Conditions

The population and employment forecasts summarized above and in Attachment A indicate that there will be a 26% increase in population and a 75% increase in employment over the next 20 years. These increases will rely on the development or redevelopment of residential and commercial properties throughout the city. Depending on the location and type of these developments, and the amount of off-street parking they provide, the increases could have a significant impact on the on-street parking supply. Without changes to existing parking management policies and strategies, areas that are a challenge today will likely continue to be a challenge in the future and other challenges (e.g., high parking demand, unbalanced parking demand, neighborhood spillover, etc.) are likely to arise.

The population and employment forecasts show that most growth is expected to occur east of US 101 and north of OR 126. Based on the parking analysis summarized in *Tech Memo 3B: Existing Conditions*, on- and off-street parking in these areas is well below the *effective capacity* of the parking supply. [1] Therefore, these areas could accommodate increases in on-street parking demand and may not require additional management strategies.

The population and employment forecasts also show that growth is expected to occur in Old Town where the parking analysis shows that on- and off-street parking demand currently exceeds the *effective capacity* of the parking supply. Therefore, growth in Old Town could have a significant impact on the on-street parking supply, particularly if the growth does not include sufficient off-street parking or the growth impacts the off-street parking supply (e.g., redevelopment of an existing off-street parking facility as retail/commercial use). Under this scenario, the total number of streets in Old Town with occupancy levels that exceed effective capacity is likely to increase and spread to adjacent streets, including residential streets. Therefore, Old Town could benefit from additional management strategies.

Future Deficiencies

The future deficiencies identified in this memorandum are summarized below. These deficiencies will be combined with the gaps and deficiencies in Tech Memo #3B: Existing Conditions and addressed in Tech Memo #5: Alternatives Analysis.

- The US 101/Munsel Lake Road and Kingwood Street/35th Street intersections are forecast to exceed their applicable mobility targets in 2042 during the weekday PM peak hour.
- The US 101/Heceta Beach Road, US 101/46th Street, and OR 126/Quince Street intersections are forecast to operate at LOS F but below capacity during the weekday PM peak hour.

---

[1] A parking system is generally considered to be full or at its *effective capacity* when parking occupancies reach or exceed 85% during peak periods. In retail areas and downtowns, occupancies of 85% are generally used to represent effective capacity because they reflect times when motorists may have difficulty finding a place to park and may add to congestion by circling the area in search of parking.

- The US 101/35th Street and US 101/9th St-OR 126, intersections are forecast to have 95th percentile queues that exceed striped storage lengths.
- Service frequency and schedule speed/travel speed on the Rhody Express is expected to continue to be *good*, while transit stop amenities and connecting pedestrian/bicycle networks is expected to be *fair*, and ADA accessibility is expected to be *poor*.
- Pedestrian level of traffic stress on several arterial and collector streets is expected to continue to be relatively high and suitable for some adults.
- Bicycle level of traffic stress on several arterial and collector streets is expected to continue to be relatively high and suitable for some adults.
- The total number of streets where on-street parking demand exceeds the *effective capacity* of the parking supply is expected to increase within Old Town, particularly with redevelopment of and existing off-street parking lots.

Attachments

A. Population and Employment Forecast Methodology Memorandum

B. Trip Generation Estimate

C. Future Traffic Operations and Queuing Analysis Worksheets

D. Future BLTS Analysis Results

Attachment A Population and Employment Forecast Methodology Memorandum

ATTACHMENT A: POPULATION AND EMPLOYEMENT FORECASTS

Date: April 5, 2023

To: Wendy Farley-Campbell, Shirley Gray, Erin Reynolds, Mike Miller, City of Florence
Michael Duncan, Oregon Department of Transportation

From: Darci Rudzinski, Clinton "CJ" Doxsee, and Brandon Crawford, MIG | APG

Project: City of Florence Transportation System Plan Update

Project: Final Tech Memo #4, Attachment A: Population and Employment Forecasts

Population and Employment Forecasts

This memorandum documents the methodology and results of the population and employment forecasts conducted as part of the City of Florence Transportation System Plan (TSP) Update. This forecast ultimately provides the following:

- Number of dwelling units in each Transportation Analysis Zone (TAZ), current year (2020) and end year (2045).
- Square footage of employment uses, current year and end year.

The forecast analysis is based on the best available population, employment, and land use data for the City of Florence and Lane County. As such, please note that the estimates are generalized approximations based on the available population and employment information.

PROJECTED POPULATION GROWTH PATTERNS

As of the 2020 census, Florence is home to an estimated 9,396 residents, and the Portland State University Population Research Center (PRC) estimates the City's 2020 population within the Urban Growth Boundary (UGB) at 11,182 residents.

Table 1 compares Florence's 20-year population growth with Lane County. Since 2020, Florence has experienced population growth at a higher rate than the rest of Lane County. Overall, Florence grew by about 25% since 2000, which represents an estimated 2,253 people.

Table 1. Florence and Lane County Population Growth

				2000-2020 Change	
Geography	2000	2010	2020	Number	Percent
Lane County	322,959	351,715	381,365	58,406	18.1%
Florence UGB	8,929	10,327	11,182	2,253	25.2%

Source: PSU Population Research Center

The PRC develops long-term coordinated population forecasts for Oregon's UGBs on a routine basis. PRC forecasted population figures for Florence and Lane County are provided in Table 2.

The PSU PRC population methodology addresses places within an urban growth boundary (UGB) individually. Florence is forecasted to grow at a faster rate than the County over the next 20 years.

Table 2. Florence Population Forecasts (% growth)

Geography	2020	2045	2070	2020-2045 Change	
				Number	Percent
Lane County	381,365	443,747	490,588	62,382	16.4%
Florence UGB	11,182	14,040	17,840	2,858	25.6%

Source: PSU Population Research Center

Table 3 shows the persons per household for Florence, which experienced a slight increase of 0.07 person per household (PPH) between the 2010 and 2020 census. The assumption for 2045 is that this ratio will remain the same throughout the planning horizon at approximately 1.9 PPH. Dividing the population by this number results in an estimated 5,885 households in 2020 and 7,389 households in the year 2045. The difference between the Base Year and End Year is an **additional 1,505 households.**[1] This is the overall growth in housing units estimated for Florence during the planning period.

Table 3: Persons per Household Change (PPH)

Geography	2010	2020	2010-2020 Change
Lane County	2.35	2.39	0.04
Florence	1.86	1.93	0.07

Source: US Census Table DP02

An inventory of undeveloped and underdeveloped land was produced as part of Technical Memorandum #3: Existing Conditions. The undeveloped/underdeveloped land inventory is used as the basis for determining future residential capacity in Florence. This analysis uses Zoning and Comprehensive Plan designations within the UGB to estimate residential capacity. Because the City's residential zones have corresponding Comprehensive Plan designations (low, medium, and high density), allowed density for residential zones were used as a proxy to estimate capacity in UGB areas. Minimum and maximum residential density is provided in Chapter 10 of the Florence Zoning Code (Title 10). A summary of the minimum and maximum allowed densities for residential zones is provided in Table 4, and a brief description of each residential zone is provided in Table 5. In addition, Table 5 includes a description of housing unit type mix assumptions for each zone. The unit mix assumptions for each zone are based on the approximate current mix of housing types that have been developed in each residential zone. These assumptions are rough approximations based on current available property tax assessor data.

1 Note that the population and household forecasts used here deviate slightly from forecast estimates used for TAZs in later tables. The slight deviation is due to differences in sources. Table 2 figures are derived from PSU Population Research Center Estimates, while population and household estimates for Table 7 are based on Census Block counts.

Table 4: Residential Density Standards

City of Florence Zones	Minimum (DU/acre)	Maximum (DU/acre)
Low Density Residential (LDR)	-	5.8 DU/acre
Medium Density Residential (MDR)	-	12
Mobile/Manufactured Home Residential (RMH)	-	12
High Density Residential	12	25

Table 5: Florence Zoning Designation Descriptions[2]

Zone	Zone Purpose	Unit Mix Assumption
Low Density Residential (LDR)	The Low Density Residential District is intended to provide a quality environment for low density, urban residential uses and other Planned Unit Development as determined to be necessary and/or desirable. This zone allows single-family detached dwellings and manufactured dwellings.	Assume 5 DU/acre at 95% single-family and 10 DU/acre at 5% duplex. Although duplexes are not currently allowed in the low density zone, the City will likely adopt amendments to allow this housing type in the near-future (within ~1 year) to comply with HB 2001, and duplexes are not subject to maximum density requirements per the state rules for middle housing compliance. This is a conservative (high) estimate to test the performance of the transportation system assuming maximum development.
Medium Density Residential (MDR)	The Medium Density Residential District is intended to provide a quality environment for medium density, urban residential uses and other compatible land uses determined to be necessary and/or desirable. This zone allows single-family attached dwellings, duplexes, and manufactured homes.	Assume 12 DU/acre at 95% single-family and 12 DU/acre at 5% duplexes/single-family attached (townhomes). Based on the current unit mix in this zone approximately 95% of residential parcels are single-family detached, while the remaining roughly 5% are duplexes or single-family attached.
Mobile Home/ Manufactured Home Residential (RMH)	The Mobile Home/Manufactured Home Residential District is intended to provide mobile home/manufactured homeowners and owners of other pre-manufactured homes an alternative	Assume 12 DU/acre at 95% single-family and 12 DU/acre at 5% duplexes/single-family attached (townhomes). For the purposes of this zone, manufactured/mobile homes

[2] The City also allows residential development in the Coast Village District (Chapter 29). However, per the BLI analysis, this small residential zone is completely built out, and therefore was not included in the future capacity analysis.

Zone	Zone Purpose	Unit Mix Assumption
	to renting space in a mobile home/manufactured home park.	are considered the same as single-family detached. Based on the current unit mix in this zone approximately 95% of residential parcels are single-family detached, while the remaining roughly 5% are duplexes or single-family attached.
High Density Residential (HDR)	The High Density Residential District is intended to provide a quality environment for high density, urban residential uses together with other compatible land uses determined to be necessary and/or desirable. This zone allows every housing type allowed in the city and permits single-family detached as a conditional use and multifamily (5+ units) through site plan review.	Assume 65% multi-family (3+ units), 30% duplexes/single-family attached, and 5% single-family detached, all at 25 DU/acre.

For the purposes of calculating capacity, the gross acreage was reduced by 25% to allow for dedications and improvements. Site-specific environmental constraints (i.e., floodplains and wetlands) were not factored into the capacity analysis. Multiplying these assumed densities by the remaining buildable acres identified in the vacant inventory map provides the expected capacity of households remaining within the UGB. Table 6 shows the estimated buildable acres and unit capacity by zone, and Figure 1 shows buildable lots (undeveloped or underdeveloped) by TAZ.

Table 6: Residential Capacity Summary

Zone	Net Buildable Acres	Assumed Density	Unit Capacity	Unit Split
Low-Density Residential	284.28	5.8 DU/acre	1,651	95% Single-family 5% Duplex/SFA
Medium-Density Residential	247.91	12 DU/acre	2,959	95% Single-family 5% Duplex/SFA
High-Density Residential	38.50	25 DU/acre	962	5% Single-family 30% Duplex/SFA 65% Multi-family
Mobile Home/ Manufactured Home	42.93	12 DU/acre	513	95% Single-family 5% Duplex/SFA
TOTAL	613.63		6,085	

Figure 1 Buildable Residential Lots by TAZ in Florence

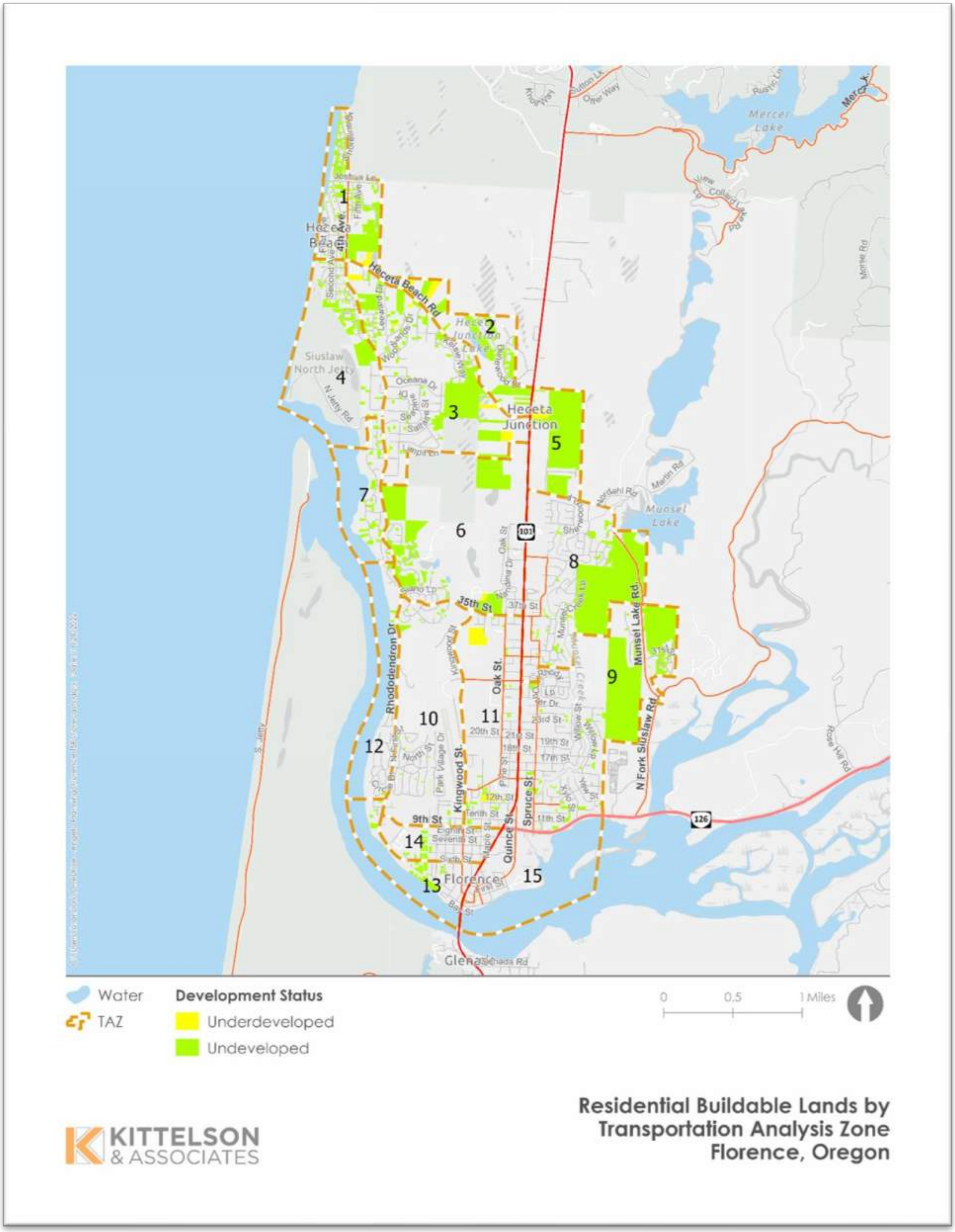


Table 7 shows the estimated population and number of households for all TAZs within the Florence UGB for 2020 and 2045. The populations for Census Blocks[3] that correspond with TAZs were used to estimate population growth within each TAZ by 2045. In addition, the average household size of 1.93 for 2020 was also assumed for 2045. Thus, the number of households for 2020 and 2045 was estimated by dividing the population estimate for each year by the 2020 average household size (1.93).

To account for housing capacity that is available to accommodate growth in Florence, the estimated city-wide population increase was redistributed among the TAZs based on the percentage of total housing capacity each TAZ contains. In other words, the projected population growth for each TAZ is proportionate to its housing capacity. As a result, TAZ 9, which currently has the highest population in the city, is projected to increase by about 300 people to a population of an estimated 2,862 people and is expected to remain the most populated TAZ. Meanwhile, TAZs 5, 6, and 8 are all expected to have the largest population increases. TAZ 5 is forecast to grow the most relative to its current population (it is projected to nearly triple) due to the TAZ's abundance of vacant residential land and capacity to accommodate growth. Table 8 shows each TAZ's estimated buildable land and housing capacity compared to their projected increase in number of households.

Table 7 also shows the assumed unit split for each TAZ. The unit split assumptions are based on the portion of residential zones in each TAZ. Most TAZs only have low-density or medium-density zoning designations and therefore reflect the unit split assumptions for those zones presented in Table 6. TAZ 11 mostly has high-density residential zoning, and therefore has the highest multi-family unit assumption (65%). A few TAZs have a small portion of high density residential (~5-10%), and therefore they are assumed to have a relatively small portion of multi-family housing (5%). Further, TAZs 14 and 15 have more even distributions of different residential zones (e.g., 50% high-density in TAZ 15), and therefore have a relatively more even mix of housing types compared to other TAZs.

Table 7: TAZ Population and Households

TAZ	2020 Population	2045 Population	Population Increase	2020 Households	2045 Households	Household Increase	Unit Split
1	307	497	190	159	258	98	95% Single-family 5% Duplex/SFA
2	138	229	91	71	118	47	95% Single-family 5% Duplex/SFA
3	1,051	1,305	254	545	676	131	95% Single-family 5% Duplex/SFA
4	265	361	96	137	187	50	95% Single-family 5% Duplex/SFA
5	236	630	394	122	327	204	95% Single-family 5% Duplex/SFA

[3] The 2020 population and households deviate from the estimates shown in Table 2 because the Census population estimates are slightly different from the PSU population estimates. The Census population estimates were used for the TAZ estimates because PSU only provides population estimates for the entire UGB, while Census block estimates can be extrapolated to the TAZ geography.

TAZ	2020 Population	2045 Population	Population Increase	2020 Households	2045 Households	Household Increase	Unit Split
6	720	1,283	563	373	665	292	90% Single-family 5% Duplex/SFA 5% Multi-family
7	210	242	32	109	125	16	95% Single-family 5% Duplex/SFA
8	1,444	2,108	664	748	1,092	344	95% Single-family 5% Duplex/SFA
9	2,557	2,862	305	1,325	1,483	158	90% Single-family 5% Duplex/SFA 5% Multi-family
10	1,210	1,241	31	627	643	16	90% Single-family 5% Duplex/SFA 5% Multi-family
11	1,470	1,650	180	762	855	93	5% Single-family 30% Duplex/SFA 65% Multi-family
12	467	481	14	242	249	7	95% Single-family 5% Duplex/SFA
13	330	347	17	171	180	9	95% Single-family 5% Duplex/SFA
14	587	618	31	304	320	16	50% Single-family 25% Duplex/SFA 25% Multi-family
15	350	350	--	181	181	-	25% Single-family 25% Duplex/SFA 50% Multi-family
TOTAL	11,342	14,204	2,861	5,877	7,359	1,482	

Figure 2 shows the location of Florence's projected 2045 population by TAZ.

Figure 2. Projected 2045 Florence Population by TAZ

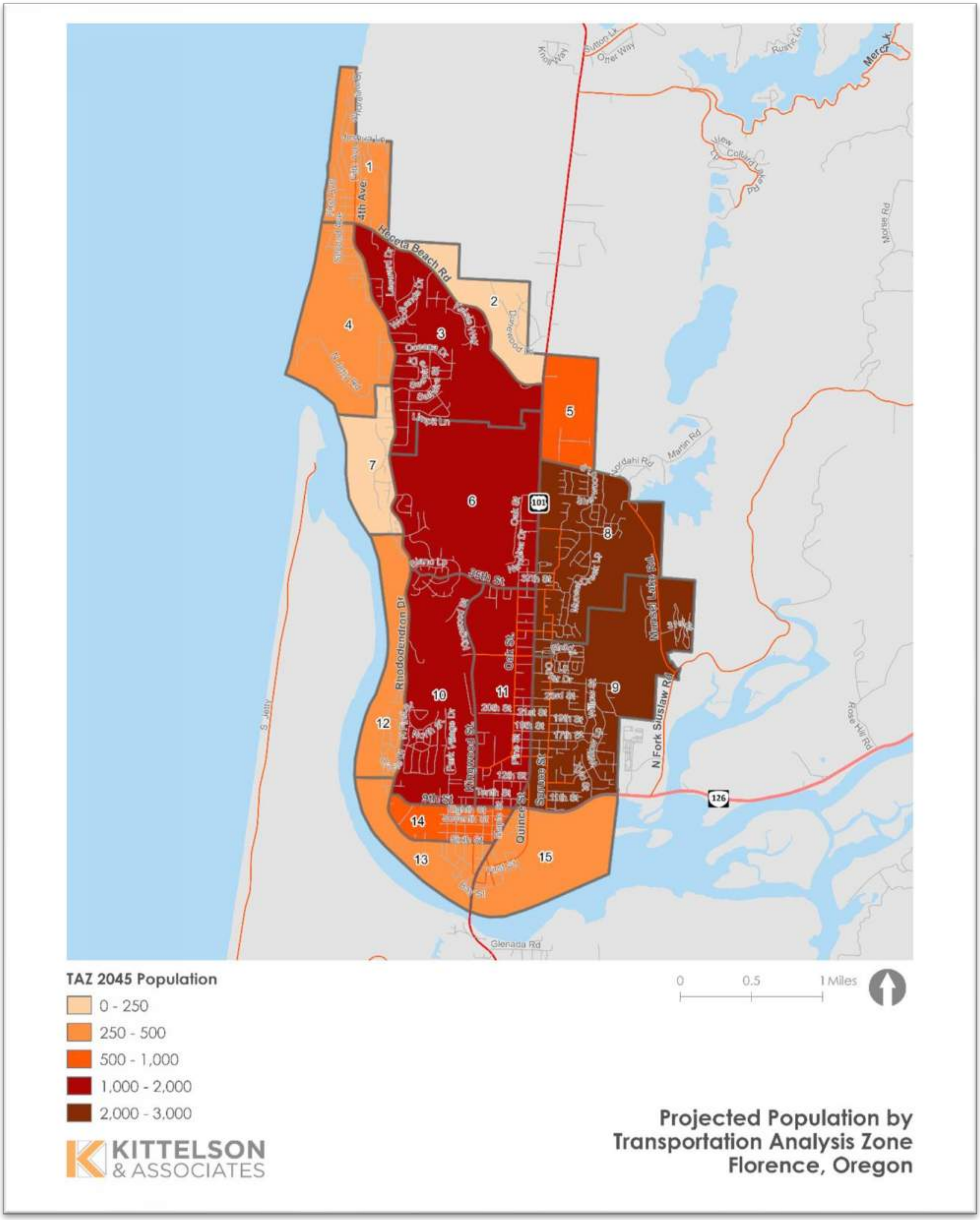
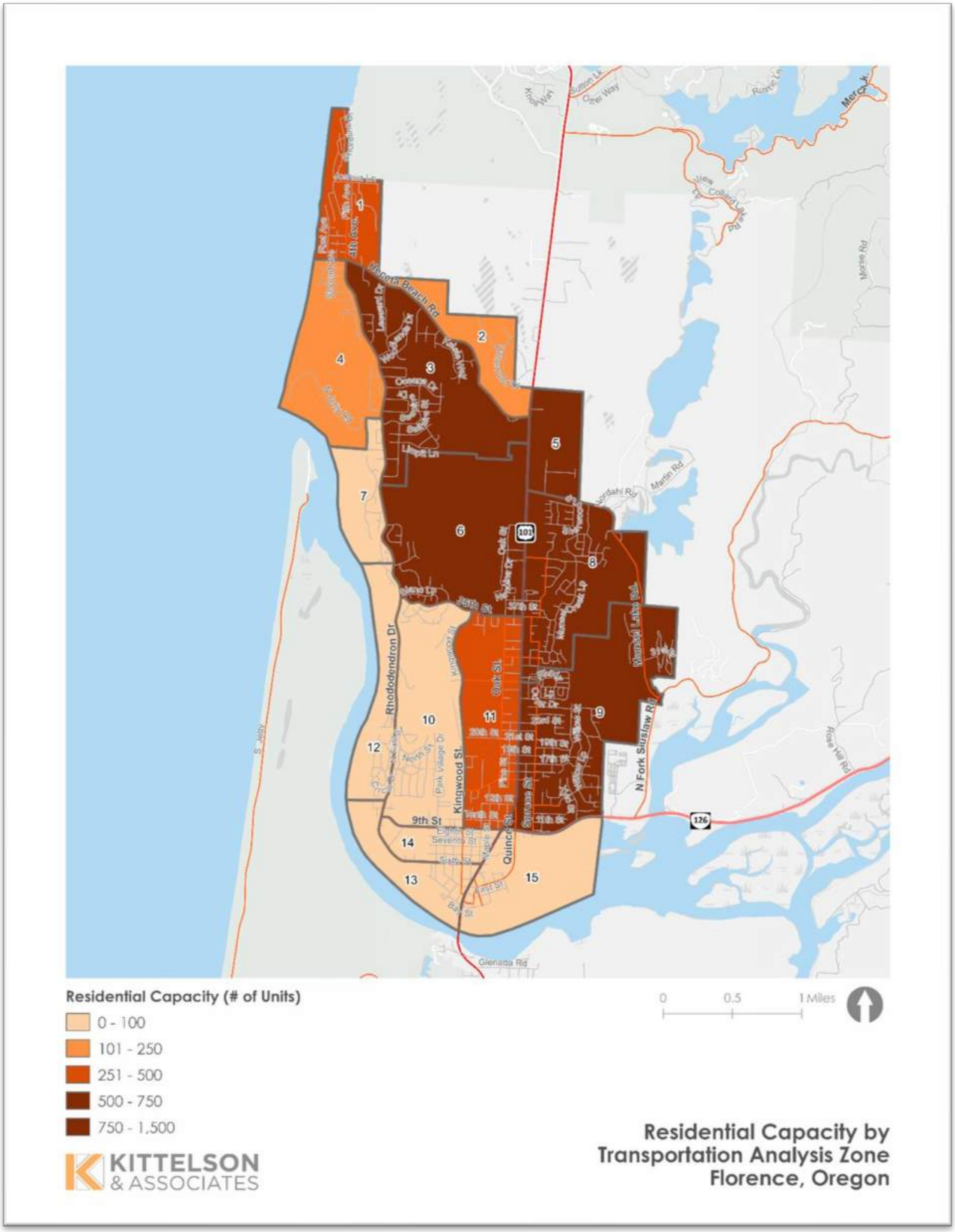


Table 8 shows the housing unit capacity and projected household increase by TAZ. Figure 3 shows the current housing capacity by TAZ. Based on current allowed density by residential zone and the City's supply of undeveloped and underdeveloped land, Florence's estimated current capacity to accommodate 6,085 units should be adequate to support an increase of approximately 1,500 households by 2045.

Table 8: TAZ Housing Capacity

TAZ	Net Buildable Acres	Housing Unit Capacity	Projected Household Increase	Single-family Detached	Duplex or Single-Family Attached	Multi-family
1	47.65	404	98	93	5	--
2	33.32	193	47	45	2	--
3	79.21	540	132	124	7	--
4	27.28	204	50	48	2	--
5	73.56	839	204	194	10	--
6	85.23	1,198	292	262	15	15
7	9.54	67	16	16	--	--
8	128.98	1,412	344	327	17	--
9	94.27	648	158	142	8	8
10	5.06	66	16	14	2	
11	16.19	382	93	5	28	60
12	2.50	29	7	7	--	--
13	5.97	37	9	9	--	--
14	4.86	66	16	8	4	4
15	--	--	--	--	--	--
TOTAL	613.63	6,085	1,482	1,294	100	87

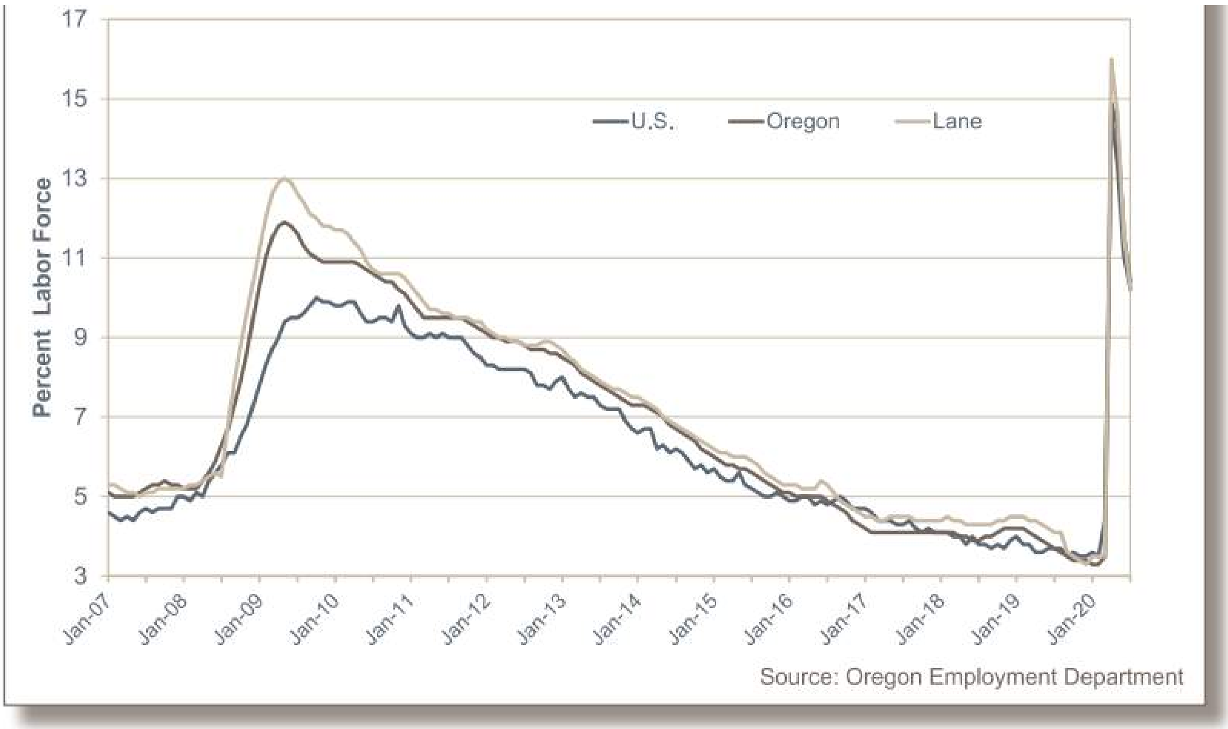
Figure 3. Current Housing Unit Capacity by TAZ



HISTORIC AND PROJECTED EMPLOYMENT GROWTH PATTERNS

This analysis evaluated historic and projected employment patterns in the Florence area to understand current and future transportation needs. The Oregon Employment Department (OED) publishes current employment trends specific to Lane County.[4] As shown Figure 4, unemployment rates in Oregon and Lane County spiked in 2020 because of the COVID-19 pandemic. Unemployment rates have been rapidly declining since the height of the pandemic, and if Lane County employment levels continue to increase, transportation needs within Florence may change.

Figure 4: Seasonally Adjusted Unemployment Rates, 2007 to Present – OED



PROJECTED EMPLOYMENT

The Oregon Employment Department Workforce and Economic Research Division publishes employment forecasts by industry. These ten-year forecasts are defined by regions (as opposed to counties or cities) and organize employment forecasts by primary industry. For Lane County, it is expected that the largest employment increases will occur in leisure and hospitality (44%) and accommodation and food services (44%). All industries are expected to experience an increase in employment except for federal government, as shown in the employment forecasts in Table 9.

[4] https://www.laneworkforce.org/wp-content/uploads/2020-State-of-the-Workforce.pdf

Table 9: Lane County Industry Employment Projections, 2020-2030[5]

Industry	2020	2030	Change	% Change
Total employment	162,100	186,000	23,900	15%
Total payroll employment	153,000	176,400	23,400	15%
Total private	126,100	147,300	21,200	17%
Natural resources and mining	2,500	2,600	100	4%
Mining and logging	800	800	0	0%
Construction	7,300	8,100	800	11%
Manufacturing	13,800	15,400	1,600	12%
Durable goods	8,900	9,900	1,000	11%
Wood product manufacturing	3,500	3,600	100	3%
Transportation equipment manufacturing	600	800	200	33%
Nondurable goods	4,900	5,500	600	12%
Trade, transportation, and utilities	28,500	31,700	3,200	11%
Wholesale trade	5,900	6,800	900	15%
Retail trade	19,300	21,000	1,700	9%
Transportation, warehousing, and utilities	3,300	3,900	600	18%
Information	2,000	2,100	100	5%
Financial activities	8,000	8,600	600	8%
Professional and business services	17,200	20,100	2,900	17%
Administrative and support services	7,500	9,000	1,500	20%
Private educational and health	28,000	33,100	5,100	18%
Private educational services	1,700	2,100	400	24%
Health care and social assistance	26,300	31,000	4,700	18%
Ambulatory health care services	20,300	24,100	3,800	19%
Leisure and hospitality	13,800	19,900	6,100	44%
Accommodation and food services	12,300	17,700	5,400	44%
Accommodation	1,300	2,100	800	62%
Food services and drinking places	11,000	15,600	4,600	42%
Other services	5,000	5,700	700	14%
Government	26,900	29,100	2,200	8%
Federal government	2,000	1,900	-100	-5%
State government	1,700	1,900	200	12%
Local government	23,200	25,300	2,100	9%
Local education	16,200	17,600	1,400	9%
Self-employment	9,100	9,600	500	5%

The most recent employment data by NAICS sector available for the City is provided from the American Community Survey (ACS) 5-year estimates of employment by industry, as shown in Table 10. This provides a general basis of comparison with the Oregon Employment

[5] Oregon Employment Department, Workforce and Economic Research Division

Department's employment forecast analysis. Florence employed 2,973 people in the year 2020. Over one-third of the jobs were related to education, health care, entertainment/recreation, or accommodation and food services.

Table 10: ACS Employment Estimates by Industry

Florence Jobs by Sector	2020
Civilian employed population 16 years and over	2,973
Agriculture, forestry, fishing and hunting, and mining	30
Construction	252
Manufacturing	193
Wholesale trade	9
Retail trade	392
Transportation and warehousing, and utilities	48
Information	25
Finance and insurance, and real estate and rental and leasing	149
Professional, scientific, and management, and administrative and waste management services	331
Educational services, and health care and social assistance	612
Arts, entertainment, and recreation, and accommodation and food services	696
Other services, except public administration	52
Public administration	184

Source: 2020 ACS 5-year Estimates, Table DP03

The following tables apply the State's growth forecast to employment and translates those employment figures to the amount of commercial and industrial building space needed using standard ratios of square feet per employee from the Urban Land Institute.

Table 11. Square Footage per Employee – Urban Land Institute

Employment Space Utilization							
	Commercial		Industrial				
				Avg. Space per Job			
Industry	Commercial Office Share	Avg. Space per Job	Industrial Share	Warehouse	General	Tech/ Flex	Weighted Avg.
Construction	2%	366	30%	0	400	117	517
Manufacturing	5%	366	95%	0	400	117	517
Wholesale Trade	5%	366	95%	1,350	0	47	1,397
Retail Trade	5%	366	0%	0	0	0	0
Transp. Warehouse. Util	30%	366	70%	2,000	0	0	2,000
Information	90%	366	10%	0	0	467	467

Employment Space Utilization							
	Commercial		Industrial				
				Avg. Space per Job			
Industry	Commercial Office Share	Avg. Space per Job	Industrial Share	Warehouse	General	Tech/ Flex	Weighted Avg.
Financial Activities	90%	366	0%	0	0	0	0
Professional & Business Services	90%	366	10%	0	0	467	467
Education & Health Services	40%	366	0%	0	0	0	0
Leisure & Hosp	25%	366	0%	0	0	0	0
Other Services	40%	366	60%	0	400	117	517
Government	85%	366	15%	675	0	234	909

The City of Florence is assumed to grow by an additional 1,862 jobs through the year 2045. This assumes that growth in Florence follows similar employment trends as forecasted in the State's Industry Employment Forecast. By applying the employment space utilization to the forecasted growth in employment, Florence is anticipated to increase its total office space by an additional 266,778 square feet and increase its total industrial space by an additional 122,855 square feet. The complete employment forecasts for each NAICS sector are shown in Table 12.

Table 12. Florence City-Wide Employment Forecasts

Jobs by NAICS Sector	2020 Jobs	2020 Commercial SF	2020 Industrial SF	2045 Jobs	2045 Commercial SF	2045 Industrial SF
Total, All	2,973	402,468	270,866	4,282	668,778	393,721
Agriculture, Forestry, Fishing, Hunting, and Mining	30	0	0	33	0	0
Construction	252	1,845	39,085	331	2,425	51,380
Manufacturing	193	3,532	94,792	287	5,252	140,966
Wholesale Trade	9	165	11,944	13	241	17,459
Retail Trade	392	7,174	-	488	8,930	-
Transportation, Warehousing, and Utilities	48	5,270	67,200	75	8,273	105,486
Information	25	8,235	1,168	28	9,329	1,323
Finance and Insurance	149	49,081	-	180	59,161	-
Professional, scientific, management, administrative, and Business Services	331	109,031	15,458	503	165,771	23,502

Jobs by NAICS Sector	2020 Jobs	2020 Commercial SF	2020 Industrial SF	2045 Jobs	2045 Commercial SF	2045 Industrial SF
Educational Services, health care, and social services	612	89,597	-	961	140,644	-
Arts, Entertainment, and Recreation, and accommodation and food services	696	63,684	-	2052	187,768	-
Other Services (excluding Public Administration)	52	7,613	16,130	74	10,777	22,835
Public Administration	184	57,242	25,088	226	70,208	30,771

Table 13 shows the estimated employment and industry square footage by TAZ. These figures include all employment estimates within the Florence UGB and are based on ACS Block Group employment estimates for 2020. Because these employment figures include UGB areas (i.e., areas outside the City limits and inside the UGB), the estimates are slightly higher than the City-wide estimates. In addition, the smallest geographic unit in which 2020 ACS employment data is available for Lane County is at the block group level. Block group boundaries do not perfectly align with the Florence TAZs, as several block groups extend beyond the UGB, thereby including employment figures outside of the study area. As a result, the employment estimates at the block group level will be slightly higher than the actual employment within the UGB.

Table 13. Forecasted Employment and Employment Square Footage by Transportation Analysis Zone

TAZ	2020 Employment	2045 Employment	2020 Square Footage	2045 Square Footage
1	71	107	14,047	20,766
2	73	111	14,531	21,482
3	276	511	89,715	139,056
4	146	220	28,945	42,790
5	332	538	90,311	133,087
6	314	582	102,114	158,274
7	65	98	12,889	19,054
8	110	134	15,163	18,498
9	596	907	171,860	254,298
10	302	580	51,722	88,054
11	688	1,456	130,290	228,605
12	122	226	21,453	35,587
13	165	297	26,022	43,851
14	132	236	20,618	34,692
15	255	401	53,329	78,795
TOTAL	3,648	6,402	843,008	1,316,890

Table 14 and Table15 further breakdown employment square footage by industry category by TAZ for 2020 and 2045. Office uses comprise the most square footage in most TAZs, and they are estimated to continue to be the most prominent employment type (in terms of area consumed) by 2045. TAZ 9 will continue to include most of the City's industrial employment activity.

Table 14. 2020 Estimated Employment Square Footage by Industry and TAZ

TAZ	Office	Institutional	FLEX	Gen. Industrial	Warehouse	Retail	*Total*
1	4,985	717	2,874	5,043	-	427	*14,047*
2	5,157	742	2,973	5,217	-	442	*14,531*
3	38,963	7,942	8,086	7,186	27,538	-	*89,715*
4	10,273	1,477	5,921	10,392	-	881	*28,945*
5	49,339	6,002	14,073	19,927	-	970	*90,311*
6	44,348	9,040	9,204	8,179	31,344	-	*102,114*
7	4,575	658	2,637	4,628	-	392	*12,889*
8	14,101	-	-	-	-	1,061	*15,163*
9	59,143	17,559	7,797	81,195	5,200	967	*171,860*
10	21,115	7,641	15,492	6,714	-	759	*51,722*
11	65,472	10,145	29,389	23,913	-	1,371	*130,290*
12	8,535	2,766	6,030	3,741	-	380	*21,453*
13	9,576	2,771	4,490	8,282	-	903	*26,022*
14	7,465	2,070	3,172	7,134	-	776	*20,618*
15	18,823	16,991	2,259	6,517	8,389	350	*53,329*
TOTAL	**361,870**	**86,522**	**114,396**	**198,069**	**72,470**	**9,681**	***843,008***

Table15.2045ForecastEstimatesforEmploymentSquareFootagebyIndustryandTAZ

TAZ	Office	Institutional	FLEX	Gen.Industrial	Warehouse	Retail	*Total*
1	6,589	1,125	5,177	7,342	-	532	*20,766*
2	6,817	1,164	5,356	7,595	-	550	*21,482*
3	50,602	12,467	22,532	10,227	43,228	-	*139,056*
4	13,578	2,319	10,668	15,128	-	1,096	*42,790*
5	66,192	9,422	27,496	28,769	-	1,207	*133,087*
6	57,595	14,191	25,646	11,640	49,202	-	*158,274*
7	6,046	1,033	4,751	6,737	-	488	*19,054*
8	17,177	-	-	-	-	1,321	*18,498*
9	83,041	27,563	15,989	118,339	8,162	1,204	*254,298*
10	29,741	11,994	36,171	9,204	-	945	*88,054*
11	89,962	15,926	86,650	34,360	-	1,706	*228,605*
12	11,894	4,342	13,623	5,256	-	474	*35,587*
13	13,782	4,350	12,625	11,970	-	1,124	*43,851*
14	10,782	3,250	9,354	10,340	-	967	*34,692*
15	23,290	26,672	6,662	8,568	13,168	436	*78,795*
TOTAL	**487,087**	**135,818**	**282,700**	**285,474**	**113,760**	**12,051**	***1,316,890***

Attachment B Trip Generation Estimate

Trip Generation Estimate

Trip generation estimates were prepared for the forecast household and employment growth based on information provided in the standard reference, *Trip Generation Manual, 11th Edition*, published by the Institute of Transportation Engineers (ITE). Table B-1 summarizes the total trips by Transportation Analysis Zone (TAZ).

Table B-1: Trip Generation Estimate – Net New Trips

	Households			Employment			Total		
TAZ	**Total**	**In**	**Out**	**Total**	**In**	**Out**	**Total**	**In**	**Out**
1	87	55	32	8	1	7	95	57	39
2	42	27	16	8	1	7	51	28	23
3	117	73	43	49	9	40	165	82	83
4	45	28	17	17	3	14	62	31	30
5	182	115	67	55	9	46	237	124	113
6	254	160	94	56	10	46	310	170	140
7	15	9	6	7	1	6	22	11	12
8	307	194	114	5	1	4	313	195	118
9	138	87	51	86	14	72	224	101	123
10	13	8	5	51	9	42	64	17	47
11	35	22	13	134	23	111	169	45	124
12	7	4	2	19	3	16	26	8	18
13	8	5	3	23	4	19	32	9	22
14	10	6	4	18	3	15	28	9	18
15	0	0	0	29	5	24	29	5	24
Total	1,261	794	466	566	98	468	1,827	892	935

Attachment C Future Traffic Operations and Queuing Analysis Worksheets

Intersection	
Int Delay, s/veh	8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	39	0	317	0	0	0	346	541	0	0	416	41
Future Vol, veh/h	39	0	317	0	0	0	346	541	0	0	416	41
Conflicting Peds, #/hr	0	0	0	0	0	0	2	0	0	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	125	-	-	-	100	-	-	100	-	100
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	39	0	19	0	0	0	19	28	0	0	20	23
Mvmt Flow	42	0	341	0	0	0	372	582	0	0	447	44

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1775	-	449	1966	1819	582	493	0	0	582	0	0
Stage 1	449	-	-	1326	1326	-	-	-	-	-	-	-
Stage 2	1326	-	-	640	493	-	-	-	-	-	-	-
Critical Hdwy	7.49	-	6.39	7.1	6.5	6.2	4.29	-	-	4.1	-	-
Critical Hdwy Stg 1	6.49	-	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.49	-	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.851	-	3.471	3.5	4	3.3	2.371	-	-	2.2	-	-
Pot Cap-1 Maneuver	52	0	576	48	79	517	988	-	-	1002	-	-
Stage 1	524	0	-	194	227	-	-	-	-	-	-	-
Stage 2	160	0	-	467	550	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 37	-	575	14	49	517	986	-	-	1002	-	-
Mov Cap-2 Maneuver	81	-	-	14	49	-	-	-	-	-	-	-
Stage 1	326	-	-	121	141	-	-	-	-	-	-	-
Stage 2	100	-	-	190	549	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	27.6	0	4.2	0
HCM LOS	D	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	986	-	-	81	575	-	1002	-	-
HCM Lane V/C Ratio	0.377	-	-	0.518	0.593	-	-	-	-
HCM Control Delay (s)	10.8	-	-	89.7	20	0	0	-	-
HCM Lane LOS	B	-	-	F	C	A	A	-	-
HCM 95th %tile Q(veh)	1.8	-	-	2.2	3.9	-	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	75.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	6	216	0	181	4	759	203	184	598	1
Future Vol, veh/h	0	0	6	216	0	181	4	759	203	184	598	1
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	25	100	-	-	100	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	33	33	0	23	75	19	27	43	25	0
Mvmt Flow	0	0	6	232	0	195	4	816	218	198	643	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2072	2083	645	1976	1974	925	645	0	0	1034	0	0
Stage 1	1041	1041	-	933	933	-	-	-	-	-	-	-
Stage 2	1031	1042	-	1043	1041	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.53	7.43	6.5	6.43	4.85	-	-	4.53	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.43	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.43	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.597	3.797	4	3.507	2.875	-	-	2.587	-	-
Pot Cap-1 Maneuver	40	54	421	~ 38	63	298	672	-	-	537	-	-
Stage 1	280	310	-	281	348	-	-	-	-	-	-	-
Stage 2	284	309	-	243	310	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	10	34	421	~ 27	40	298	671	-	-	537	-	-
Mov Cap-2 Maneuver	~ -161	78	-	~ 99	129	-	-	-	-	-	-	-
Stage 1	278	195	-	279	346	-	-	-	-	-	-	-
Stage 2	98	307	-	~ 151	195	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.7	$ 400.5	0	3.7
HCM LOS	B	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	671	-	-	421	99	298	537	-	-
HCM Lane V/C Ratio	0.006	-	-	0.015	2.346	0.653	0.368	-	-
HCM Control Delay (s)	10.4	-	-	13.7	$ 704.9	37.2	15.6	-	-
HCM Lane LOS	B	-	-	B	F	E	C	-	-
HCM 95th %tile Q(veh)	0	-	-	0	20.8	4.2	1.7	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	64	1	133	0	0	1	102	877	0	0	695	97
Future Vol, veh/h	64	1	133	0	0	1	102	877	0	0	695	97
Conflicting Peds, #/hr	0	0	0	0	0	0	2	0	0	0	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	-	-	-	100	-	-	100	-	200
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	35	0	17	0	0	0	17	22	0	0	26	26
Mvmt Flow	67	1	139	0	0	1	106	914	0	0	724	101

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1853	1852	364	1489	1953	914	827	0	0	914	0	0
Stage 1	726	726	-	1126	1126	-	-	-	-	-	-	-
Stage 2	1127	1126	-	363	827	-	-	-	-	-	-	-
Critical Hdwy	7.825	6.5	7.155	7.3	6.5	6.2	4.355	-	-	4.1	-	-
Critical Hdwy Stg 1	7.025	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.625	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.8325	4	3.4615	3.5	4	3.3	2.3615	-	-	2.2	-	-
Pot Cap-1 Maneuver	~ 38	75	598	95	65	334	726	-	-	754	-	-
Stage 1	327	433	-	251	282	-	-	-	-	-	-	-
Stage 2	203	282	-	634	389	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 34	64	597	65	55	334	725	-	-	754	-	-
Mov Cap-2 Maneuver	112	168	-	65	55	-	-	-	-	-	-	-
Stage 1	279	432	-	214	241	-	-	-	-	-	-	-
Stage 2	173	241	-	486	388	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	33.4	15.8	1.1	0
HCM LOS	D	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	725	-	-	112	597	334	754	-	-
HCM Lane V/C Ratio	0.147	-	-	0.595	0.232	0.003	-	-	-
HCM Control Delay (s)	10.8	-	-	76.1	12.8	15.8	0	-	-
HCM Lane LOS	B	-	-	F	B	C	A	-	-
HCM 95th %tile Q(veh)	0.5	-	-	2.9	0.9	0	0	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	151	75	149	32	51	35	107	869	43	42	808	121
Future Volume (vph)	151	75	149	32	51	35	107	869	43	42	808	121
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	5.0		4.5	5.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.90		1.00	0.94		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1330	1244		1163	1315		1341	2720		1539	2592	
Flt Permitted	0.70	1.00		0.44	1.00		0.18	1.00		0.25	1.00	
Satd. Flow (perm)	975	1244		540	1315		257	2720		397	2592	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	164	82	162	35	55	38	116	945	47	46	878	132
RTOR Reduction (vph)	0	58	0	0	20	0	0	3	0	0	11	0
Lane Group Flow (vph)	164	186	0	35	73	0	116	989	0	46	999	0
Confl. Peds. (#/hr)							1		1	1		1
Confl. Bikes (#/hr)						1						2
Heavy Vehicles (%)	25%	16%	32%	43%	32%	12%	24%	21%	26%	8%	25%	28%
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)	20.4	20.4		20.4	20.4		54.4	46.7		46.2	42.6	
Effective Green, g (s)	20.4	20.4		20.4	20.4		54.4	46.7		46.2	42.6	
Actuated g/C Ratio	0.24	0.24		0.24	0.24		0.64	0.55		0.55	0.50	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	5.0		4.5	5.0	
Vehicle Extension (s)	2.5	2.5		2.5	2.5		2.5	5.0		2.5	5.0	
Lane Grp Cap (vph)	234	299		130	316		263	1499		265	1303	
v/s Ratio Prot		0.15			0.06		c0.04	0.36		0.01	c0.39	
v/s Ratio Perm	c0.17			0.06			0.24			0.09		
v/c Ratio	0.70	0.62		0.27	0.23		0.44	0.66		0.17	0.77	
Uniform Delay, d1	29.4	28.7		26.1	25.9		8.3	13.4		9.3	17.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	8.5	3.5		0.8	0.3		0.9	1.4		0.2	3.3	
Delay (s)	37.8	32.2		26.9	26.1		9.1	14.8		9.5	20.3	
Level of Service	D	C		C	C		A	B		A	C	
Approach Delay (s)		34.5			26.3			14.2			19.8	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM 2000 Control Delay	20.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	84.7	Sum of lost time (s)	14.0
Intersection Capacity Utilization	69.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	151	75	149	32	51	35	107	869	43	42	808	121
Future Volume (veh/h)	151	75	149	32	51	35	107	869	43	42	808	121
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1409	1532	1313	1163	1313	1586	1422	1463	1395	1641	1409	1368
Adj Flow Rate, veh/h	164	82	162	35	55	38	116	945	47	46	878	132
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	25	16	32	43	32	12	24	21	26	8	25	28
Cap, veh/h	281	111	219	150	173	119	280	1482	74	307	1210	182
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.06	0.55	0.55	0.03	0.52	0.52
Sat Flow, veh/h	1066	460	908	767	716	495	1355	2695	134	1563	2325	350
Grp Volume(v), veh/h	164	0	244	35	0	93	116	487	505	46	505	505
Grp Sat Flow(s),veh/h/ln	1066	0	1368	767	0	1211	1355	1390	1439	1563	1338	1336
Q Serve(g_s), s	11.8	0.0	13.0	3.5	0.0	5.0	3.1	19.2	19.2	1.1	23.0	23.0
Cycle Q Clear(g_c), s	16.8	0.0	13.0	16.5	0.0	5.0	3.1	19.2	19.2	1.1	23.0	23.0
Prop In Lane	1.00		0.66	1.00		0.41	1.00		0.09	1.00		0.26
Lane Grp Cap(c), veh/h	281	0	330	150	0	292	280	764	791	307	696	695
V/C Ratio(X)	0.58	0.00	0.74	0.23	0.00	0.32	0.41	0.64	0.64	0.15	0.73	0.73
Avail Cap(c_a), veh/h	293	0	346	159	0	306	539	1055	1092	652	1015	1014
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.6	0.0	27.7	35.3	0.0	24.7	12.0	12.3	12.3	10.1	14.6	14.6
Incr Delay (d2), s/veh	2.3	0.0	7.4	0.6	0.0	0.5	0.7	1.9	1.8	0.2	3.1	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	4.8	0.7	0.0	1.4	0.9	5.7	5.9	0.3	6.8	6.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.9	0.0	35.1	35.9	0.0	25.1	12.8	14.2	14.2	10.3	17.7	17.7
LnGrp LOS	C	A	D	D	A	C	B	B	B	B	B	B
Approach Vol, veh/h		408			128			1108			1056	
Approach Delay, s/veh		34.6			28.1			14.1			17.4	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.4	46.2		23.6	7.0	48.5		23.6				
Change Period (Y+Rc), s	4.5	5.0		4.5	4.5	5.0		4.5				
Max Green Setting (Gmax), s	20.0	60.0		20.0	20.0	60.0		20.0				
Max Q Clear Time (g_c+I1), s	5.1	25.0		18.5	3.1	21.2		18.8				
Green Ext Time (p_c), s	0.2	16.1		0.1	0.1	16.3		0.3				

Intersection Summary		
HCM 6th Ctrl Delay		19.1
HCM 6th LOS		B

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	2	22	2	0	10	27	1045	10	0	1036	1
Future Vol, veh/h	3	2	22	2	0	10	27	1045	10	0	1036	1
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	2	2	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	250	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	33	50	19	0	0	14	4	23	50	0	26	0
Mvmt Flow	3	2	24	2	0	11	29	1136	11	0	1126	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1754	2335	565	1766	2330	576	1128	0	0	1149	0	0
Stage 1	1128	1128	-	1202	1202	-	-	-	-	-	-	-
Stage 2	626	1207	-	564	1128	-	-	-	-	-	-	-
Critical Hdwy	8.16	7.5	7.28	7.5	6.5	7.18	4.18	-	-	4.1	-	-
Critical Hdwy Stg 1	7.16	6.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.16	6.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.83	4.5	3.49	3.5	4	3.44	2.24	-	-	2.2	-	-
Pot Cap-1 Maneuver	39	19	427	54	38	431	604	-	-	615	-	-
Stage 1	171	195	-	199	260	-	-	-	-	-	-	-
Stage 2	371	175	-	483	282	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	37	18	427	44	36	430	603	-	-	614	-	-
Mov Cap-2 Maneuver	37	18	-	44	36	-	-	-	-	-	-	-
Stage 1	163	195	-	189	247	-	-	-	-	-	-	-
Stage 2	344	166	-	451	282	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	48.7	27.2	0.3	0
HCM LOS	E	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	603	-	-	111	175	614	-	-
HCM Lane V/C Ratio	0.049	-	-	0.264	0.075	-	-	-
HCM Control Delay (s)	11.3	-	-	48.7	27.2	0	-	-
HCM Lane LOS	B	-	-	E	D	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	1	0.2	0	-	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	0	40	1	0	24	30	1065	2	14	1030	21
Future Vol, veh/h	15	0	40	1	0	24	30	1065	2	14	1030	21
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	1	1	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	21	0	32	0	0	25	18	17	0	38	24	40
Mvmt Flow	16	0	43	1	0	26	32	1133	2	15	1096	22

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1769	2338	560	1777	2348	569	1119	0	0	1136	0	0
Stage 1	1138	1138	-	1199	1199	-	-	-	-	-	-	-
Stage 2	631	1200	-	578	1149	-	-	-	-	-	-	-
Critical Hdwy	7.92	6.5	7.54	7.5	6.5	7.4	4.46	-	-	4.86	-	-
Critical Hdwy Stg 1	6.92	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.92	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.71	4	3.62	3.5	4	3.55	2.38	-	-	2.58	-	-
Pot Cap-1 Maneuver	43	37	403	53	37	411	535	-	-	440	-	-
Stage 1	185	279	-	200	261	-	-	-	-	-	-	-
Stage 2	392	261	-	474	275	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	37	34	403	44	34	411	534	-	-	440	-	-
Mov Cap-2 Maneuver	119	129	-	132	125	-	-	-	-	-	-	-
Stage 1	174	269	-	188	245	-	-	-	-	-	-	-
Stage 2	346	245	-	409	265	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	24.3	15.2	0.3	0.2
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	534	-	-	244	379	440	-	-
HCM Lane V/C Ratio	0.06	-	-	0.24	0.07	0.034	-	-
HCM Control Delay (s)	12.2	-	-	24.3	15.2	13.5	-	-
HCM Lane LOS	B	-	-	C	C	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.9	0.2	0.1	-	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	34	4	22	17	4	22	32	1125	11	21	1056	36
Future Vol, veh/h	34	4	22	17	4	22	32	1125	11	21	1056	36
Conflicting Peds, #/hr	4	0	0	0	0	4	2	0	3	3	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	20	67	10	46	0	56	27	20	25	15	21	19
Mvmt Flow	36	4	23	18	4	23	34	1184	12	22	1112	38

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1843	2444	577	1863	2457	605	1152	0	0	1199	0	0
Stage 1	1177	1177	-	1261	1261	-	-	-	-	-	-	-
Stage 2	666	1267	-	602	1196	-	-	-	-	-	-	-
Critical Hdwy	7.9	7.84	7.1	8.42	6.5	8.02	4.64	-	-	4.4	-	-
Critical Hdwy Stg 1	6.9	6.84	-	7.42	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.9	6.84	-	7.42	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.7	4.67	3.4	3.96	4	3.86	2.47	-	-	2.35	-	-
Pot Cap-1 Maneuver	38	12	440	27	31	329	478	-	-	510	-	-
Stage 1	176	161	-	125	244	-	-	-	-	-	-	-
Stage 2	375	141	-	359	262	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 31	11	439	22	27	327	477	-	-	509	-	-
Mov Cap-2 Maneuver	109	63	-	83	113	-	-	-	-	-	-	-
Stage 1	163	154	-	116	226	-	-	-	-	-	-	-
Stage 2	316	131	-	316	250	-	-	-	-	-	-	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	49.8			42.5			0.4			0.2		
HCM LOS	E			E								

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	477	-	-	141	140	509	-	-
HCM Lane V/C Ratio	0.071	-	-	0.448	0.323	0.043	-	-
HCM Control Delay (s)	13.1	-	-	49.8	42.5	12.4	-	-
HCM Lane LOS	B	-	-	E	E	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-	2	1.3	0.1	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	154	138	33	199	102	181	50	712	164	216	741	75
Future Volume (vph)	154	138	33	199	102	181	50	712	164	216	741	75
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lane Util. Factor	1.00	1.00		0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	0.98	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1446	1391		1206	1336	1220	1299	2748	1097	1289	2697	
Flt Permitted	0.95	1.00		0.95	0.98	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1446	1391		1206	1336	1220	1299	2748	1097	1289	2697	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	160	144	34	207	106	189	52	742	171	225	772	78
RTOR Reduction (vph)	0	5	0	0	0	158	0	0	39	0	4	0
Lane Group Flow (vph)	160	173	0	153	160	31	52	742	132	225	846	0
Confl. Peds. (#/hr)	3		4	4		3	2		4	4		2
Confl. Bikes (#/hr)												1
Heavy Vehicles (%)	15%	22%	21%	31%	18%	20%	28%	21%	34%	29%	22%	14%
Turn Type	Split	NA		Split	NA	Perm	Prot	NA	pm+ov	Prot	NA	
Protected Phases	8	8		4	4		1	6	4	5	2	
Permitted Phases						4			6			
Actuated Green, G (s)	22.8	22.8		23.0	23.0	23.0	8.6	44.1	67.1	31.3	66.8	
Effective Green, g (s)	22.8	22.8		23.0	23.0	23.0	8.6	44.1	67.1	31.3	66.8	
Actuated g/C Ratio	0.16	0.16		0.17	0.17	0.17	0.06	0.32	0.48	0.22	0.48	
Clearance Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Vehicle Extension (s)	2.5	2.5		2.5	2.5	2.5	1.5	2.0	2.5	1.5	2.0	
Lane Grp Cap (vph)	236	227		199	220	201	80	870	564	289	1294	
v/s Ratio Prot	0.11	c0.12		c0.13	0.12		0.04	c0.27	0.04	c0.17	0.31	
v/s Ratio Perm						0.03			0.08			
v/c Ratio	0.68	0.76		0.77	0.73	0.16	0.65	0.85	0.23	0.78	0.65	
Uniform Delay, d1	54.7	55.6		55.6	55.1	49.8	63.8	44.5	21.0	50.7	27.4	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	6.8	13.4		15.6	10.7	0.3	13.5	7.8	0.2	11.4	0.9	
Delay (s)	61.6	69.1		71.2	65.8	50.0	77.3	52.3	21.2	62.1	28.4	
Level of Service	E	E		E	E	D	E	D	C	E	C	
Approach Delay (s)		65.5			61.5			48.2			35.4	
Approach LOS		E			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	47.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	139.2	Sum of lost time (s)	18.0
Intersection Capacity Utilization	72.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	154	138	33	199	102	181	50	712	164	216	741	75
Future Volume (veh/h)	154	138	33	199	102	181	50	712	164	216	741	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1545	1450	1463	1327	1504	1477	1368	1463	1286	1354	1450	1559
Adj Flow Rate, veh/h	160	144	34	156	177	0	52	742	171	225	772	78
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	15	22	21	31	18	20	28	21	34	29	22	14
Cap, veh/h	239	183	43	198	236		60	869	510	247	1155	117
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.00	0.05	0.31	0.31	0.19	0.46	0.46
Sat Flow, veh/h	1472	1132	267	1264	1504	1252	1303	2780	1086	1290	2519	254
Grp Volume(v), veh/h	160	0	178	156	177	0	52	742	171	225	422	428
Grp Sat Flow(s),veh/h/ln	1472	0	1399	1264	1504	1252	1303	1390	1086	1290	1377	1396
Q Serve(g_s), s	10.4	0.0	12.5	12.1	11.5	0.0	4.0	25.5	10.1	17.4	24.4	24.4
Cycle Q Clear(g_c), s	10.4	0.0	12.5	12.1	11.5	0.0	4.0	25.5	10.1	17.4	24.4	24.4
Prop In Lane	1.00		0.19	1.00		1.00	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	239	0	227	198	236		60	869	510	247	631	640
V/C Ratio(X)	0.67	0.00	0.78	0.79	0.75		0.87	0.85	0.34	0.91	0.67	0.67
Avail Cap(c_a), veh/h	505	0	480	434	516		256	1636	810	380	811	822
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.2	0.0	41.0	41.3	41.0	0.0	48.3	32.9	17.0	40.3	21.6	21.6
Incr Delay (d2), s/veh	2.4	0.0	4.4	5.1	3.5	0.0	13.1	1.0	0.1	13.8	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	0.0	4.5	4.0	4.4	0.0	1.5	8.5	3.4	6.4	7.7	7.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.6	0.0	45.4	46.4	44.6	0.0	61.5	33.8	17.2	54.1	22.2	22.2
LnGrp LOS	D	A	D	D	D		E	C	B	D	C	C
Approach Vol, veh/h		338			333	A		965			1075	
Approach Delay, s/veh		44.1			45.4			32.4			28.9	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.2	51.2		20.5	24.0	36.4		21.0
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	20.0	60.0		35.0	30.0	60.0		35.0
Max Q Clear Time (g_c+I1), s	6.0	26.4		14.1	19.4	27.5		14.5
Green Ext Time (p_c), s	0.0	4.0		1.1	0.2	4.3		1.1

Intersection Summary	
HCM 6th Ctrl Delay	34.1
HCM 6th LOS	C

Notes
User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	5	37	11	3	14	27	824	3	10	836	54
Future Volume (vph)	70	5	37	11	3	14	27	824	3	10	836	54
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)		4.5			4.5		4.5	5.0		4.5	5.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		0.99			1.00		1.00	1.00		1.00	1.00	
Frt		0.95			0.93		1.00	1.00		1.00	0.99	
Flt Protected		0.97			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1273			1319		1351	2725		1495	2559	
Flt Permitted		0.79			0.88		0.24	1.00		0.29	1.00	
Satd. Flow (perm)		1040			1190		347	2725		453	2559	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	75	5	40	12	3	15	29	886	3	11	899	58
RTOR Reduction (vph)	0	14	0	0	12	0	0	0	0	0	4	0
Lane Group Flow (vph)	0	106	0	0	18	0	29	889	0	11	953	0
Confl. Peds. (#/hr)	13		2	2		13	2		14	14		2
Confl. Bikes (#/hr)												1
Heavy Vehicles (%)	21%	40%	34%	40%	0%	8%	23%	22%	0%	11%	29%	22%
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		13.1			13.1		41.1	39.2		39.1	38.2	
Effective Green, g (s)		13.1			13.1		41.1	39.2		39.1	38.2	
Actuated g/C Ratio		0.19			0.19		0.61	0.58		0.58	0.57	
Clearance Time (s)		4.5			4.5		4.5	5.0		4.5	5.0	
Vehicle Extension (s)		2.5			2.5		2.5	4.5		2.5	4.5	
Lane Grp Cap (vph)		202			231		240	1589		277	1454	
v/s Ratio Prot							c0.00	0.33		0.00	c0.37	
v/s Ratio Perm		c0.10			0.02		0.07			0.02		
v/c Ratio		0.53			0.08		0.12	0.56		0.04	0.66	
Uniform Delay, d1		24.3			22.1		5.6	8.7		6.0	10.0	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		1.9			0.1		0.2	0.6		0.0	1.3	
Delay (s)		26.2			22.2		5.8	9.3		6.1	11.3	
Level of Service		C			C		A	A		A	B	
Approach Delay (s)		26.2			22.2			9.2			11.2	
Approach LOS		C			C			A			B	

Intersection Summary			
HCM 2000 Control Delay	11.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	67.2	Sum of lost time (s)	14.0
Intersection Capacity Utilization	47.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	5	37	11	3	14	27	824	3	10	836	54
Future Volume (veh/h)	70	5	37	11	3	14	27	824	3	10	836	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.98	0.99		0.98	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1463	1204	1286	1204	1750	1641	1436	1450	1750	1600	1354	1450
Adj Flow Rate, veh/h	75	5	40	12	3	15	29	886	3	11	899	58
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	21	40	34	40	0	8	23	22	0	11	29	22
Cap, veh/h	197	22	59	168	58	140	304	1604	5	357	1359	88
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.03	0.57	0.57	0.01	0.56	0.56
Sat Flow, veh/h	541	122	332	459	328	787	1368	2816	10	1524	2448	158
Grp Volume(v), veh/h	120	0	0	30	0	0	29	433	456	11	472	485
Grp Sat Flow(s),veh/h/ln	995	0	0	1573	0	0	1368	1377	1448	1524	1286	1319
Q Serve(g_s), s	5.3	0.0	0.0	0.0	0.0	0.0	0.5	11.5	11.5	0.2	15.0	15.0
Cycle Q Clear(g_c), s	6.5	0.0	0.0	0.9	0.0	0.0	0.5	11.5	11.5	0.2	15.0	15.0
Prop In Lane	0.62		0.33	0.40		0.50	1.00		0.01	1.00		0.12
Lane Grp Cap(c), veh/h	278	0	0	367	0	0	304	785	825	357	714	732
V/C Ratio(X)	0.43	0.00	0.00	0.08	0.00	0.00	0.10	0.55	0.55	0.03	0.66	0.66
Avail Cap(c_a), veh/h	440	0	0	606	0	0	740	1777	1868	864	1660	1702
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.2	0.0	0.0	20.0	0.0	0.0	7.3	7.9	7.9	6.5	9.1	9.1
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.1	0.0	0.0	0.1	1.0	1.0	0.0	1.8	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	0.0	0.3	0.0	0.0	0.1	2.8	2.9	0.0	3.6	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.0	0.0	0.0	20.1	0.0	0.0	7.4	8.9	8.8	6.5	10.9	10.8
LnGrp LOS	C	A	A	C	A	A	A	A	A	A	B	B
Approach Vol, veh/h		120			30			918			968	
Approach Delay, s/veh		23.0			20.1			8.8			10.8	
Approach LOS		C			C			A			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.0	37.3		14.9	5.2	38.1		14.9				
Change Period (Y+Rc), s	4.5	5.0		4.5	4.5	5.0		4.5				
Max Green Setting (Gmax), s	20.0	75.0		20.0	20.0	75.0		20.0				
Max Q Clear Time (g_c+I1), s	2.5	17.0		2.9	2.2	13.5		8.5				
Green Ext Time (p_c), s	0.0	15.3		0.1	0.0	13.5		0.4				

Intersection Summary			
HCM 6th Ctrl Delay			10.8
HCM 6th LOS			B

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	11	8	0	16	0	696	19	13	858	3
Future Vol, veh/h	2	0	11	8	0	16	0	696	19	13	858	3
Conflicting Peds, #/hr	0	0	6	6	0	0	1	0	5	5	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	100	-	-	-	-	-	300	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	0	30	17	0	10	0	26	33	40	22	33
Mvmt Flow	2	0	11	8	0	16	0	710	19	13	876	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1260	1639	447	1195	1631	370	880	0	0	734	0	0
Stage 1	905	905	-	725	725	-	-	-	-	-	-	-
Stage 2	355	734	-	470	906	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	7.5	7.84	6.5	7.1	4.1	-	-	4.9	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.84	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.84	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.6	3.67	4	3.4	2.2	-	-	2.6	-	-
Pot Cap-1 Maneuver	129	101	489	126	103	605	777	-	-	657	-	-
Stage 1	302	358	-	350	433	-	-	-	-	-	-	-
Stage 2	641	429	-	505	358	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	123	98	486	120	100	602	776	-	-	654	-	-
Mov Cap-2 Maneuver	123	98	-	120	100	-	-	-	-	-	-	-
Stage 1	302	350	-	348	431	-	-	-	-	-	-	-
Stage 2	624	427	-	481	350	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	16.2	19.8	0	0.2
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	776	-	-	334	120	602	654	-	-
HCM Lane V/C Ratio	-	-	-	0.04	0.068	0.027	0.02	-	-
HCM Control Delay (s)	0	-	-	16.2	37.2	11.1	10.6	-	-
HCM Lane LOS	A	-	-	C	E	B	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.2	0.1	0.1	-	-

Intersection	
Int Delay, s/veh	7.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	480	30	99	480	17	32	34	101	8	7	6
Future Vol, veh/h	17	480	30	99	480	17	32	34	101	8	7	6
Conflicting Peds, #/hr	0	0	0	0	0	0	3	0	0	0	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	150	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	19	28	14	19	25	31	35	28	27	38	29	17
Mvmt Flow	18	511	32	105	511	18	34	36	107	9	7	6

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	529	0	0	543	0	0	1303	1302	272	1040	1309	523
Stage 1	-	-	-	-	-	-	563	563	-	730	730	-
Stage 2	-	-	-	-	-	-	740	739	-	310	579	-
Critical Hdwy	4.385	-	-	4.385	-	-	7.825	6.92	7.305	7.87	6.935	6.455
Critical Hdwy Stg 1	-	-	-	-	-	-	7.025	5.92	-	6.67	5.935	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.625	5.92	-	7.07	5.935	-
Follow-up Hdwy	2.3805	-	-	2.3805	-	-	3.8325	4.266	3.5565	3.861	4.2755	3.4615
Pot Cap-1 Maneuver	941	-	-	929	-	-	102	136	665	159	133	518
Stage 1	-	-	-	-	-	-	416	458	-	348	378	-
Stage 2	-	-	-	-	-	-	348	376	-	596	448	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	941	-	-	929	-	-	85	117	665	91	115	517
Mov Cap-2 Maneuver	-	-	-	-	-	-	85	117	-	91	115	-
Stage 1	-	-	-	-	-	-	404	445	-	338	335	-
Stage 2	-	-	-	-	-	-	297	334	-	446	435	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	1.6	47.3	38
HCM LOS			E	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	99	665	941	-	-	929	-	-	131
HCM Lane V/C Ratio	0.709	0.162	0.019	-	-	0.113	-	-	0.171
HCM Control Delay (s)	102	11.5	8.9	0.1	-	9.4	-	-	38
HCM Lane LOS	F	B	A	A	-	A	-	-	E
HCM 95th %tile Q(veh)	3.6	0.6	0.1	-	-	0.4	-	-	0.6

Intersection	
Int Delay, s/veh	5.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	114	480	0	0	494	51	0	0	0	36	3	108
Future Vol, veh/h	114	480	0	0	494	51	0	0	0	36	3	108
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	50	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	23	30	0	0	26	19	0	0	0	21	0	21
Mvmt Flow	124	522	0	0	537	55	0	0	0	39	3	117

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	592	0	0	522	0	0	1395	1362	522	1335	1335	565
Stage 1	-	-	-	-	-	-	770	770	-	565	565	-
Stage 2	-	-	-	-	-	-	625	592	-	770	770	-
Critical Hdwy	4.33	-	-	4.1	-	-	7.1	6.5	6.2	7.31	6.5	6.41
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.31	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.31	5.5	-
Follow-up Hdwy	2.407	-	-	2.2	-	-	3.5	4	3.3	3.689	4	3.489
Pot Cap-1 Maneuver	889	-	-	1055	-	-	120	149	559	119	155	490
Stage 1	-	-	-	-	-	-	396	413	-	478	511	-
Stage 2	-	-	-	-	-	-	476	497	-	366	413	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	889	-	-	1055	-	-	80	128	559	106	133	490
Mov Cap-2 Maneuver	-	-	-	-	-	-	80	128	-	106	133	-
Stage 1	-	-	-	-	-	-	341	356	-	412	511	-
Stage 2	-	-	-	-	-	-	360	497	-	315	356	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.9	0	0	41.1
HCM LOS			A	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	889	-	-	1055	-	-	252
HCM Lane V/C Ratio	-	0.139	-	-	-	-	-	0.634
HCM Control Delay (s)	0	9.7	-	-	0	-	-	41.1
HCM Lane LOS	A	A	-	-	A	-	-	E
HCM 95th %tile Q(veh)	-	0.5	-	-	0	-	-	3.9

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	93	359	364	39	30	96
Future Vol, veh/h	93	359	364	39	30	96
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	375	-	-	200	0	25
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	38	28	20	0	50	24
Mvmt Flow	99	382	387	41	32	102

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	428	0	-	0	967	387
Stage 1	-	-	-	-	387	-
Stage 2	-	-	-	-	580	-
Critical Hdwy	4.48	-	-	-	6.9	6.44
Critical Hdwy Stg 1	-	-	-	-	5.9	-
Critical Hdwy Stg 2	-	-	-	-	5.9	-
Follow-up Hdwy	2.542	-	-	-	3.95	3.516
Pot Cap-1 Maneuver	963	-	-	-	232	615
Stage 1	-	-	-	-	593	-
Stage 2	-	-	-	-	476	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	963	-	-	-	208	615
Mov Cap-2 Maneuver	-	-	-	-	208	-
Stage 1	-	-	-	-	532	-
Stage 2	-	-	-	-	476	-

Approach	EB	WB	SB
HCM Control Delay, s	1.9	0	15.2
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	963	-	-	-	208	615
HCM Lane V/C Ratio	0.103	-	-	-	0.153	0.166
HCM Control Delay (s)	9.2	-	-	-	25.4	12
HCM Lane LOS	A	-	-	-	D	B
HCM 95th %tile Q(veh)	0.3	-	-	-	0.5	0.6

Intersection	
Int Delay, s/veh	6.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	119	86	39	158	72	42
Future Vol, veh/h	119	86	39	158	72	42
Conflicting Peds, #/hr	4	2	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	14	10	12	31	10	40
Mvmt Flow	140	101	46	186	85	49

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	362	141	0	0	232	0
Stage 1	139	-	-	-	-	-
Stage 2	223	-	-	-	-	-
Critical Hdwy	6.54	6.3	-	-	4.2	-
Critical Hdwy Stg 1	5.54	-	-	-	-	-
Critical Hdwy Stg 2	5.54	-	-	-	-	-
Follow-up Hdwy	3.626	3.39	-	-	2.29	-
Pot Cap-1 Maneuver	614	886	-	-	1290	-
Stage 1	859	-	-	-	-	-
Stage 2	786	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	570	884	-	-	1290	-
Mov Cap-2 Maneuver	570	-	-	-	-	-
Stage 1	859	-	-	-	-	-
Stage 2	729	-	-	-	-	-

Approach	WB		NB		SB	
HCM Control Delay, s	13.4		0		5	
HCM LOS	B					

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	670	1290	-
HCM Lane V/C Ratio	-	-	0.36	0.066	-
HCM Control Delay (s)	-	-	13.4	8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1.6	0.2	-

Intersection						
Int Delay, s/veh	9.1					

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	66	211	91	81	186	107
Future Vol, veh/h	66	211	91	81	186	107
Conflicting Peds, #/hr	0	2	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	44	33	22	32	33	19
Mvmt Flow	74	237	102	91	209	120

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	686	150	0	0	193	0
Stage 1	148	-	-	-	-	-
Stage 2	538	-	-	-	-	-
Critical Hdwy	6.84	6.53	-	-	4.43	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.896	3.597	-	-	2.497	-
Pot Cap-1 Maneuver	356	821	-	-	1215	-
Stage 1	787	-	-	-	-	-
Stage 2	509	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	290	819	-	-	1215	-
Mov Cap-2 Maneuver	290	-	-	-	-	-
Stage 1	787	-	-	-	-	-
Stage 2	415	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.6	0	5.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	571	1215	-
HCM Lane V/C Ratio	-	-	0.545	0.172	-
HCM Control Delay (s)	-	-	18.6	8.6	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	3.3	0.6	-

Intersection	
Int Delay, s/veh	8.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	14	0	82	0	85	9	87	91	0
Future Vol, veh/h	0	0	0	14	0	82	0	85	9	87	91	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	5	5	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	25	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	0	0	0	12	0	22	0	15	0	24	30	0
Mvmt Flow	0	0	0	16	0	92	0	96	10	98	102	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	92	0	0	1	0	0	130	125	6	137	79	46
Stage 1	-	-	-	-	-	-	1	1	-	78	78	-
Stage 2	-	-	-	-	-	-	129	124	-	59	1	-
Critical Hdwy	4.1	-	-	4.22	-	-	7.1	6.65	6.2	7.34	6.8	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.65	-	6.34	5.8	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.65	-	6.34	5.8	-
Follow-up Hdwy	2.2	-	-	2.308	-	-	3.5	4.135	3.3	3.716	4.27	3.3
Pot Cap-1 Maneuver	1515	-	-	1558	-	-	847	742	1083	786	761	1029
Stage 1	-	-	-	-	-	-	1027	870	-	879	778	-
Stage 2	-	-	-	-	-	-	880	769	-	900	842	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1515	-	-	1558	-	-	753	734	1078	692	753	1029
Mov Cap-2 Maneuver	-	-	-	-	-	-	753	734	-	692	753	-
Stage 1	-	-	-	-	-	-	1027	870	-	879	769	-
Stage 2	-	-	-	-	-	-	755	761	-	790	842	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	1.1	10.4	11.9
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	734	1078	1515	-	-	1558	-	-	722
HCM Lane V/C Ratio	0.13	0.009	-	-	-	0.01	-	-	0.277
HCM Control Delay (s)	10.6	8.4	0	-	-	7.3	0	-	11.9
HCM Lane LOS	B	A	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0.4	0	0	-	-	0	-	-	1.1

Intersection	
Int Delay, s/veh	8.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	244	66	91	225	22	103	11	122	16	14	10
Future Vol, veh/h	3	244	66	91	225	22	103	11	122	16	14	10
Conflicting Peds, #/hr	0	0	1	1	0	0	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	125	-	-	50	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	39	21	16	28	50	25	0	28	100	100	50
Mvmt Flow	4	287	78	107	265	26	121	13	144	19	16	12

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	291	0	0	366	0	0	842	840	327	905	866	279
Stage 1	-	-	-	-	-	-	335	335	-	492	492	-
Stage 2	-	-	-	-	-	-	507	505	-	413	374	-
Critical Hdwy	4.1	-	-	4.26	-	-	7.35	6.5	6.48	8.1	7.5	6.7
Critical Hdwy Stg 1	-	-	-	-	-	-	6.35	5.5	-	7.1	6.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.35	5.5	-	7.1	6.5	-
Follow-up Hdwy	2.2	-	-	2.344	-	-	3.725	4	3.552	4.4	4.9	3.75
Pot Cap-1 Maneuver	1282	-	-	1119	-	-	259	304	658	177	206	658
Stage 1	-	-	-	-	-	-	633	646	-	413	415	-
Stage 2	-	-	-	-	-	-	508	544	-	461	477	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1282	-	-	1118	-	-	219	274	657	123	185	657
Mov Cap-2 Maneuver	-	-	-	-	-	-	219	274	-	123	185	-
Stage 1	-	-	-	-	-	-	630	643	-	412	375	-
Stage 2	-	-	-	-	-	-	431	492	-	352	475	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	2.3	25	31.7
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	219	589	1282	-	-	1118	-	-	181
HCM Lane V/C Ratio	0.553	0.266	0.003	-	-	0.096	-	-	0.26
HCM Control Delay (s)	40.1	13.3	7.8	-	-	8.6	-	-	31.7
HCM Lane LOS	E	B	A	-	-	A	-	-	D
HCM 95th %tile Q(veh)	3	1.1	0	-	-	0.3	-	-	1

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	2	11	22	0	20	6	123	33	17	95	1
Future Vol, veh/h	1	2	11	22	0	20	6	123	33	17	95	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	125	-	-	130	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	50	38	0	11	33	15	29	25	13	100
Mvmt Flow	1	2	13	25	0	23	7	140	38	19	108	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	332	339	109	327	320	159	109	0	0	178	0	0
Stage 1	147	147	-	173	173	-	-	-	-	-	-	-
Stage 2	185	192	-	154	147	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.7	7.48	6.5	6.31	4.43	-	-	4.35	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.48	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.48	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.75	3.842	4	3.399	2.497	-	-	2.425	-	-
Pot Cap-1 Maneuver	625	586	829	563	600	863	1309	-	-	1270	-	-
Stage 1	860	779	-	752	760	-	-	-	-	-	-	-
Stage 2	821	745	-	770	779	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	599	574	829	544	588	863	1309	-	-	1270	-	-
Mov Cap-2 Maneuver	599	574	-	544	588	-	-	-	-	-	-	-
Stage 1	856	767	-	748	756	-	-	-	-	-	-	-
Stage 2	795	741	-	745	767	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.8	10.9	0.3	1.2
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1309	-	-	760	660	1270	-	-
HCM Lane V/C Ratio	0.005	-	-	0.021	0.072	0.015	-	-
HCM Control Delay (s)	7.8	-	-	9.8	10.9	7.9	-	-
HCM Lane LOS	A	-	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.2	0	-	-

Intersection						
Int Delay, s/veh	2.4					

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	42	28	142	50	27	137
Future Vol, veh/h	42	28	142	50	27	137
Conflicting Peds, #/hr	0	0	0	2	2	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	21	38	26	30	28	23
Mvmt Flow	47	31	160	56	30	154

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	404	190	0	0	218	0
Stage 1	190	-	-	-	-	-
Stage 2	214	-	-	-	-	-
Critical Hdwy	6.61	6.58	-	-	4.38	-
Critical Hdwy Stg 1	5.61	-	-	-	-	-
Critical Hdwy Stg 2	5.61	-	-	-	-	-
Follow-up Hdwy	3.689	3.642	-	-	2.452	-
Pot Cap-1 Maneuver	568	768	-	-	1212	-
Stage 1	799	-	-	-	-	-
Stage 2	779	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	552	767	-	-	1210	-
Mov Cap-2 Maneuver	552	-	-	-	-	-
Stage 1	797	-	-	-	-	-
Stage 2	758	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.6	0	1.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	622	1210	-
HCM Lane V/C Ratio	-	-	0.126	0.025	-
HCM Control Delay (s)	-	-	11.6	8.1	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0.1	-

Intersection												
Int Delay, s/veh	8.5											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣			✣	
Traffic Vol, veh/h	36	136	21	30	101	67	19	72	27	57	73	41
Future Vol, veh/h	36	136	21	30	101	67	19	72	27	57	73	41
Conflicting Peds, #/hr	1	0	2	2	0	1	0	0	3	3	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	21	19	13	24	25	39	33	24	21	38	25	12
Mvmt Flow	40	151	23	33	112	74	21	80	30	63	81	46

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	187	0	0	176	0	0	524	498	168	517	472	150
Stage 1	-	-	-	-	-	-	245	245	-	216	216	-
Stage 2	-	-	-	-	-	-	279	253	-	301	256	-
Critical Hdwy	4.31	-	-	4.34	-	-	7.43	6.74	6.41	7.48	6.75	6.32
Critical Hdwy Stg 1	-	-	-	-	-	-	6.43	5.74	-	6.48	5.75	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.43	5.74	-	6.48	5.75	-
Follow-up Hdwy	2.389	-	-	2.416	-	-	3.797	4.216	3.489	3.842	4.225	3.408
Pot Cap-1 Maneuver	1281	-	-	1278	-	-	418	444	829	416	458	871
Stage 1	-	-	-	-	-	-	695	665	-	711	683	-
Stage 2	-	-	-	-	-	-	665	659	-	637	655	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1280	-	-	1276	-	-	322	415	825	324	428	870
Mov Cap-2 Maneuver	-	-	-	-	-	-	322	415	-	324	428	-
Stage 1	-	-	-	-	-	-	669	640	-	685	663	-
Stage 2	-	-	-	-	-	-	537	639	-	517	631	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.5	1.2	16.4	19.6
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	445	1280	-	-	1276	-	-	434
HCM Lane V/C Ratio	0.295	0.031	-	-	0.026	-	-	0.438
HCM Control Delay (s)	16.4	7.9	0	-	7.9	0	-	19.6
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	1.2	0.1	-	-	0.1	-	-	2.2

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	164	244	35	93	116	992	46	1010
v/c Ratio	0.68	0.67	0.27	0.27	0.44	0.65	0.15	0.79
Control Delay	48.6	32.5	36.4	24.9	10.8	15.2	6.2	22.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.6	32.5	36.4	24.9	10.8	15.2	6.2	22.0
Queue Length 50th (ft)	76	77	15	27	20	193	8	210
Queue Length 95th (ft)	#218	#231	51	83	38	262	18	299
Internal Link Dist (ft)		1885		563		1469		3402
Turn Bay Length (ft)	125		150		150		100	
Base Capacity (vph)	240	363	132	342	431	2007	536	1915
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.67	0.27	0.27	0.27	0.49	0.09	0.53

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	160	178	153	160	189	52	742	171	225	850
v/c Ratio	0.68	0.76	0.77	0.72	0.53	0.57	0.87	0.31	0.78	0.65
Control Delay	72.1	77.7	83.0	76.9	12.9	92.3	58.5	11.9	73.1	34.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	72.1	77.7	83.0	76.9	12.9	92.3	58.5	11.9	73.1	34.0
Queue Length 50th (ft)	136	148	138	144	0	46	327	44	192	306
Queue Length 95th (ft)	259	281	270	276	79	111	503	102	#468	532
Internal Link Dist (ft)		1368		448			1440			1918
Turn Bay Length (ft)	100		400			125		75	150	
Base Capacity (vph)	380	370	317	351	459	195	1239	661	290	1431
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.48	0.48	0.46	0.41	0.27	0.60	0.26	0.78	0.59

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	120	30	29	889	11	957
v/c Ratio	0.53	0.12	0.09	0.53	0.03	0.64
Control Delay	31.7	18.2	5.3	9.6	4.9	12.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.7	18.2	5.3	9.6	4.9	12.9
Queue Length 50th (ft)	30	4	3	80	1	91
Queue Length 95th (ft)	105	29	13	223	7	262
Internal Link Dist (ft)	2474	252		931		1440
Turn Bay Length (ft)			125		125	
Base Capacity (vph)	354	402	557	2634	637	2475
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.07	0.05	0.34	0.02	0.39

Intersection Summary

Attachment D Future BLTS Analysis Results

Future BLTS Analysis Results

Table D-1 summarizes the BLTS analysis results under future (no-build) traffic conditions. It is important to note that while some segments are shown as BLTS 3 or 4, they may have shorter segments with lower BLTS scores. As shown, several arterial and collector streets in Florence are forecast to have segments that are rated BLTS 3 or 4. These segments may have bike lanes that are too narrow for roadway conditions or may be shared roadways (i.e., mixed traffic) with relatively high traffic volumes.

Table D1: Future Bicycle Level of Traffic Stress (BLTS) Analysis Results

Street	From	To	Side	Facility Type	ADT	BLTS Criteria					BLTS
						Speed (mph)	Lanes per Direction	Bicycle Facility Width (feet)	Parking	Frequent Blockage	
US 101	Heceta Beach Rd	Munsel Lake Rd	West	Bike Lane	-	55	1	8	None	No	3
	Heceta Beach Rd	Munsel Lake Rd	East	Bike Lane	-	55	1	8	None	No	3
	Munsel Lake Rd	46th St	West	Bike Lane	-	40	2	7	None	No	4
	Munsel Lake Rd	46th St	East	Bike Lane	-	40	2	7	None	No	4
	46th St	37th St	West	Bike Lane	-	40	2	6	None	No	4
	46th St	37th St	East	Bike Lane	-	40	2	6	None	No	4
	37th St	31st St	West	Bike Lane	-	40	2	5	None	No	4
	37th St	31st St	East	Bike Lane	-	40	2	5	None	No	4
	31st St	27th St	West	Bike Lane	-	40	2	6	None	No	4
	31st St	27th St	East	Bike Lane	-	40	2	6	None	No	4
	27th St	22nd St	West	Bike Lane	-	40	2	6	None	No	4
	27th St	22nd St	East	Bike Lane	-	40	2	6	None	No	4
	22nd St	OR 126	West	Bike Lane	-	30	2	6	None	No	3
	22nd St	OR 126	East	Bike Lane	-	30	2	6	None	No	3
	OR 126	Rhododendron Dr	West	Bike Lane	-	30	2	6	None	No	3
	OR 126	Rhododendron Dr	East	Bike Lane	-	30	2	6	None	No	3
	Rhododendron Dr	2nd Street	West	Bike Lane	-	30	2	6	None	No	3
	Rhododendron Dr	2nd Street	East	Bike Lane	-	30	2	6	None	No	3
OR 126	US 101	Quince Street	North	Bike Lane	-	35	2	5	None	No	3
	US 101	Quince Street	South	Bike Lane	-	35	2	5	Yes	No	3
	Quince Street	Redwood St	North	Bike Lane	-	35	1	5	None	No	3
	Quince Street	Redwood St	South	Bike Lane	-	35	1	8	Yes	No	2
	Redwood St	Spruce St	North	Bike Lane	-	35	1	5	None	No	3
	Redwood St	Spruce St	South	Bike Lane	-	35	1	6	None	No	3

Street	From	To	Side	Facility Type	ADT	BLTS Criteria					BLTS
						Speed (mph)	Lanes per Direction	Bicycle Facility Width (feet)	Parking	Frequent Blockage	
	Spruce St	Xylo St	North	Bike Lane	-	35	1	5	None	No	3
	Spruce St	Xylo St	South	Bike Lane	-	35	1	6	None	No	3
	Xylo St	N Fork Siuslaw Rd	North	Bike Lane	-	35	1	5	None	No	3
	Xylo St	N Fork Siuslaw Rd	South	Bike Lane	-	35	1	6	None	No	3
9th St	Rhododendron Dr	US 101	North	Bike Lane	-	25	1	6	None	No	1
	Rhododendron Dr	US 101	South	Bike Lane	-	25	1	6	None	No	1
Rhododendron Dr	Heceta Beach Rd	Lighthouse Wy	West	Shoulder	-	40	1	3	None	No	4
	Heceta Beach Rd	Lighthouse Wy	East	Shoulder	-	40	1	3	None	No	4
	Lighthouse Wy	New Hope Ln	West	Shoulder	-	40	1	3	None	No	4
	Lighthouse Wy	New Hope Ln	East	Shoulder	-	40	1	3	None	No	4
	New Hope Ln	Greenwood St	West	Bike Lane	-	30	1	7	None	No	1
	New Hope Ln	Greenwood St	East	Bike Lane	-	30	1	7	None	No	1
	Greenwood St	US 101	North	Bike Lane	-	25	1	6	Yes	No	1
	Greenwood St	US 101	South	Bike Lane	-	25	1	6	None	No	1
Munsel Lake Rd	US 101	Ocean Dunes Dr	North	Mixed Traffic	>3,000	35	1	0	None	No	3
	US 101	Ocean Dunes Dr	South	Mixed Traffic	>3,000	35	1	0	None	No	3
	Ocean Dunes Dr	N Fork Rd	West	Mixed Traffic	>3,000	25	1	0	None	No	3
	Ocean Dunes Dr	N Fork Rd	East	Mixed Traffic	>3,000	25	1	0	None	No	3
N Fork Siuslaw Rd	Munsel Lake Rd	OR 126	West	Shoulder	-	25	1	3	None	No	2
	Munsel Lake Rd	OR 126	East	Shoulder	-	25	1	5	None	No	2
Heceta Beach Rd	US 101	Rhododendron Dr	North	Shoulder	-	40	1	4	None	No	4
	US 101	Rhododendron Dr	South	Shoulder	-	40	1	4	None	No	4
Kingwood St	35th St	27th St	West	Bike Lane	-	40	1	6	None	No	4
	35th St	27th St	East	Bike Lane	-	40	1	6	None	No	4
	27th St	Airport Ln	West	Bike Lane	-	40	1	6	Yes	No	2
	27th St	Airport Ln	East	Bike Lane	-	40	1	6	Yes	No	2
	Airport Ln	17th Pl	West	Bike Lane	-	30	1	6	None	No	1
	Airport Ln	17th Pl	East	Bike Lane	-	30	1	6	None	No	1
	17th Pl	15th St	West	Bike Lane	-	30	1	6	None	No	1
	17th Pl	15th St	East	Bike Lane	-	30	1	6	None	No	1
	15th St	10th St	West	Bike Lane	-	25	1	6	None	No	1
	15th St	10th St	East	Bike Lane	-	25	1	6	None	No	1
	10th St	Bay St	West	Mixed Traffic	1,500-≤3,000	25	1	0	None	No	3
	10th St	Bay St	East	Mixed Traffic	1,500-≤3,000	25	1	0	None	No	3
Quince St	US 101	Harbor St	West	Mixed Traffic	>3,000	25	1	0	None	No	3

						BLTS Criteria					
Street	From	To	Side	Facility Type	ADT	Speed (mph)	Lanes per Direction	Bicycle Facility Width (feet)	Parking	Frequent Blockage	BLTS
	US 101	Harbor St	East	Mixed Traffic	>3,000	25	1	0	None	No	3
Spruce St	32nd St	30th Way	West	Bike Lane	-	25	1	6	None	No	1
	32nd St	30th Way	East	Bike Lane	-	25	1	6	None	No	1
	30th Way	25th St	West	Bike Lane	-	25	1	6	None	No	1
	30th Way	25th St	East	Bike Lane	-	25	1	6	None	No	1
	25th St	17th St	West	Mixed Traffic	>3,000	25	1	0	Yes	No	3
	25th St	17th St	East	Mixed Traffic	>3,000	25	1	0	Yes	No	3
	17th St	15th St	West	Mixed Traffic	>3,000	25	1	0	Yes	No	3
	17th St	15th St	East	Mixed Traffic	>3,000	25	1	0	Yes	No	3
	15th St	OR 126	West	Mixed Traffic	>3,000	25	1	0	Yes	No	3
	15th St	OR 126	East	Mixed Traffic	>3,000	25	1	0	Yes	No	3
Bay St	Kingwood St	1st St	North	Mixed Traffic	≤750	25	1	0	Yes	No	1
	Kingwood St	1st St	South	Mixed Traffic	≤750	25	1	0	Yes	No	1
Airport Rd/15th St	Kingwood St	Nopal St	North	Mixed Traffic	750 - ≤1,500	25	1	0	Yes	No	2
	Kingwood St	Nopal St	South	Mixed Traffic	750 - ≤1,500	25	1	0	Yes	No	2
	Nopal St	US 101	North	Mixed Traffic	750 - ≤1,500	25	1	0	Yes	No	2
	Nopal St	US 101	South	Mixed Traffic	750 - ≤1,500	25	1	0	Yes	No	2
	US 101	Spruce St	North	Mixed Traffic	750 - ≤1,500	25	1	0	Yes	No	2
	US 101	Spruce St	South	Mixed Traffic	750 - ≤1,500	25	1	0	Yes	No	2
21st St	Oak St	US 101	North	Mixed Traffic	750 - ≤1,500	25	1	0	Yes	No	2
	Oak St	US 101	South	Mixed Traffic	750 - ≤1,500	25	1	0	Yes	No	2
	US 101	Spruce St	North	Mixed Traffic	≤750	25	1	0	Yes	No	1
	US 101	Spruce St	South	Mixed Traffic	≤750	25	1	0	Yes	No	1
27th St	Kingwood St	Oak St	North	Bike Lane	-	25	1	6	None	No	1
	Kingwood St	Oak St	South	Bike Lane	-	25	1	6	None	No	1
	Oak St	US 101	North	Mixed Traffic	750 - ≤1,500	25	1	0	Yes	No	2
	Oak St	US 101	South	Mixed Traffic	750 - ≤1,500	25	1	0	Yes	No	2
30th St	Oak St	Spruce St	North	Mixed Traffic	≤750	25	1	0	Yes	No	1
	Oak St	Spruce St	South	Mixed Traffic	≤750	25	1	0	Yes	No	1
35th St	Rhododendron Dr	Myrtle Loop	North	Bike Lane	-	25	1	6	None	No	1
	Rhododendron Dr	Myrtle Loop	South	Bike Lane	-	25	1	6	None	No	1
	Myrtle Loop	US 101	North	Bike Lane	-	25	1	6	None	No	1
	Myrtle Loop	US 101	South	Bike Lane	-	25	1	6	Yes	No	1
	US 101	Spruce St	North	Bike Lane	-	25	1	5	None	No	2
	US 101	Spruce St	South	Bike Lane	-	25	1	5	None	No	2

Street	From	To	Side	Facility Type	ADT	BLTS Criteria					BLTS
						Speed (mph)	Lanes per Direction	Bicycle Facility Width (feet)	Parking	Frequent Blockage	
42nd St/43rd St	Oak St	US 101	North	Mixed Traffic	750 - ≤1,500	25	1	0	None	No	2
	Oak St	US 101	South	Mixed Traffic	750 - ≤1,500	25	1	0	None	No	2
	US 101	Spruce St	North	Bike Lane	-	25	1	5	None	No	2
	US 101	Spruce St	South	Bike Lane	-	25	1	5	None	No	2

APPENDIX F: TECH MEMO #5: ALTERNATIVES ANALYSIS

TECH MEMO #5: ALTERNATIVES ANALYSIS AND FUNDING PROGRAM

Date: March 27, 2023

To: Wendy Farley-Campbell, Shirley Gray, Erin Reynolds, and Mike Miller, City of Florence
Michael Duncan, Oregon Department of Transportation

From: Russ Doubleday, Michael Ruiz-Leon, Matt Bell, Susan Wright, PE, PMP, Kittelson & Associates, Inc.

Project: City of Florence Transportation System Plan Update

Subject: Final Tech Memo #5: Alternatives Analysis and Funding Program

Table of Contents

Introduction

This memorandum summarizes the alternatives analysis and funding program for the Florence Transportation System Plan (TSP) update. This memorandum identifies potential transportation system alternatives to address the existing gaps and deficiencies and future needs identified in previous memoranda. This memorandum also identifies existing and potential future funding sources the City can use to implement the TSP. The information provided in this memorandum will serve as the basis for selecting preferred alternatives and developing plans, policies, programs, and projects for the Florence TSP update.

Street System

Streets serve a majority of trips within Florence across all travel modes. In addition to motor vehicles, pedestrians, bicyclists, and public transit riders use the street system to access local and regional destinations. This section identifies alternatives to address existing gaps and deficiencies and future needs in the street system as well as alternatives that will facilitate improvements to the pedestrian, bicycle, and public transit systems.

FUNCTIONAL CLASSIFICATION

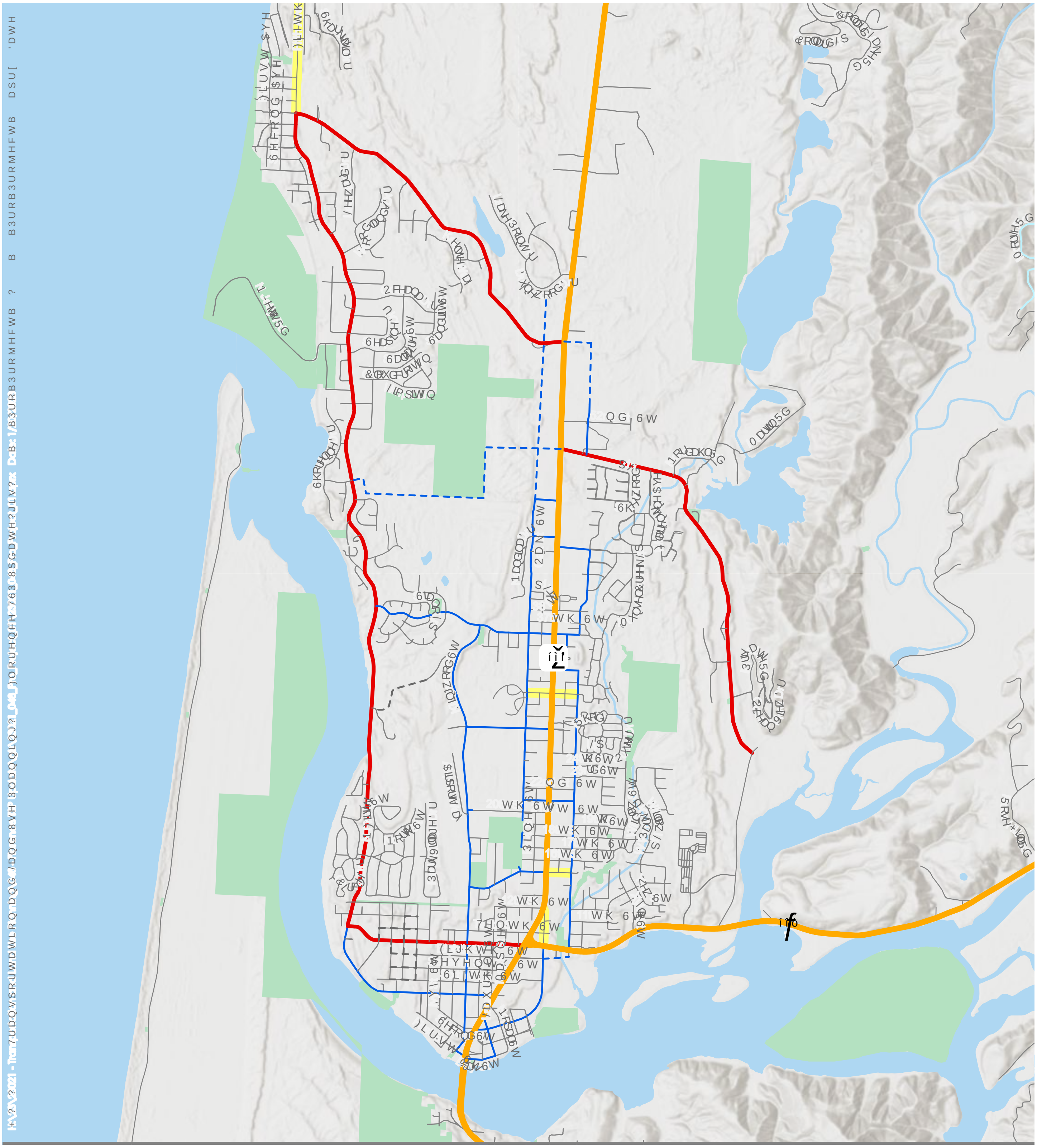
Functional classification designations align the design of a roadway with its intended function. Based on a review of the existing Florence functional classification system, there are several opportunities to better align the classifications with the intended use of the roadway as well as to better algin with state and local classifications. The functional classification opportunities are shown in Figure 1 and listed below.

- Designate 4th Ave (Heceta Beach Rd to Joshua Ln) from a local street to a collector
- Designate 15th Street (US 101 to Spruce Street) from a local street to a collector
- Designate 30th Street (Oak Street to Spruce Street) from a local street to a collector
- Designate Quince Street (OR 126 to US 101) from a local street to a collector

MAJOR STREET CONNECTIVITY

A review of the existing arterial and collector system indicates a need for new major street connections within Florence. The future street system needs to balance the benefits of providing a well-connected grid system with the connectivity challenges in the city due topographic and other natural constraints as well as existing development. Opportunities to extend existing major streets and to provide new major street connections are shown in Figure 1 and listed below. The major street extensions and connection shown in bold are identified in the current TSP.

- Extend Pacific View Drive to Rhododendron Drive
- Extend Munsel Lake Road to the Oak Street
- Extend Oak Street from Heceta Beach Road to Fred Meyers
- Extend Spruce Street to the Heceta Beach Road
- Extend Oak Street from Heceta Beach Road to the north city limits



)LJXUH

)XWXUH)XQFWLRQDO &ODVVLILFDWLRQ
)ORUHQFH 2U

- Extend Heceta Beach Road to the Spruce Street
- Extend Munsel Lake Road from Oak Street to Rhododendron Drive
- Extend 20th Street to Kingwood Street

INTERSECTION OPERATIONS

The intersection operations analysis summarized in *Tech Memo #4: Future (No-build) Conditions*, identifies two intersections that are projected to exceed their applicable mobility standards or targets within the planning horizon. The queuing analysis identifies two additional intersections where vehicle queues are projected to exceed the striped storage. This section summarizes the intersection treatments and alternatives considered to address intersection operations and queueing deficiencies at the study intersections. *Attachment A contains the intersection operations analysis worksheets for the alternatives.*

Intersection Treatments

The intersection treatments considered include geometric changes and changes to existing lane configurations and traffic control.

Turn Lane

Separate left and right-turn lanes, as well as two-way left-turn lanes (TWLT), can provide significant increases in the capacity of intersections to accommodate turn movements. They can also provide a safety benefit by creating separation between slowed or stopped vehicles waiting to turn left and through vehicles. The design of turn lanes is largely determined based on a traffic study that identifies the need for the turn lane and the storage length needed to accommodate vehicle queues. Turn lanes are commonly used at intersections where the turning volumes warrant the need for separation.

Traffic Signal

Traffic signals allow opposing streams of traffic to proceed through an intersection in alternating patterns. When used, traffic signals can effectively manage high traffic volumes and provide dedicated times in which pedestrians and bicyclists can cross roadways. Because they continuously draw from a power source and must be periodically re-timed, signals typically have higher maintenance costs than other types of intersection control. Signals can also provide a safety benefit where signal warrants are met, however, they may result in an increase in rear-end crashes compared to other solutions. Signals have a significant range in costs depending on the number of approaches, how many through and turn lanes at each approach, and, if it is in an urban or rural area.

Signal Timing/Phasing Optimization

Signal timing/phasing optimization refers to updating signal timing/phasing plans to better match prevailing traffic conditions. Timing optimization can be applied to existing systems or may include upgrading signal technology, such as signal communication infrastructure, signal controllers, or cabinets. Signal timing/phasing optimization can reduce travel times and be especially beneficial to improving travel time reliability. In high pedestrian or desired pedestrian areas, signal retiming/phasing optimization can facilitate pedestrian movements through intersections by increasing minimum green times to give pedestrians time to cross during each cycle. Signals can also facilitate bicycle movements with the inclusion of bicycle detectors.

Signal Upgrade

Signal upgrades often come at a higher cost than signal timing/phasing optimization and usually require further coordination between jurisdictions. However, signal upgrades provide the opportunity to incorporate advanced signal systems to further improve the efficiency of a transportation network. Strategies include coordinated signal operations across jurisdictions, centralized control of traffic signals, adaptive or active signal control, and transit or freight signal priority. These advanced signal systems can reduce delay, travel time and the number of stops for transit, freight, and other vehicles. In addition, these systems may help reduce vehicle emissions and improve travel time reliability.

Roundabout

Roundabouts are circular intersections where entering vehicles yield to vehicles already in the circle. They are designed to slow vehicle speeds to 20 to 30 mph or less before they enter the intersection, which promotes a more comfortable environment for pedestrians, bicyclists, and other non-motorized users. Roundabouts have fewer conflict-points and have been shown to reduce the severity of crashes, as compared to signalized intersections. Roundabouts can be more costly to design and install when compared to other intersection control types, but they have a lower operating and maintenance cost than traffic signals. Topography must be carefully evaluated in considering a roundabout, given that slope characteristics at an intersection may render a roundabout infeasible.

Intersection Alternatives

The intersection alternatives are summarized in Table 1. These alternatives are intended to address intersection operations and queueing deficiencies at the study intersections. Many of these alternatives will also address safety issues described later in this memorandum. The alternatives shown in **bold** are identified in the current TSP.

Table 1: Intersection Alternatives

Intersection	Considerations	Alternatives
	ODOT Intersections	
US 101/ Munsel Lake Rd	» The intersection is projected to exceed ODOT mobility targets under 2042 traffic conditions » The intersection is projected to meet MUTCD signal warrants	» **Install a traffic signal when warranted** » Reconfigure the intersection/modify the traffic control (e.g., traffic signal, roundabout)
US 101/ 35th St	» The eastbound left-turn queue is projected to exceed its available storage under 2042 traffic conditions	» Restripe the eastbound approach to maximize the available storage » Optimize the signal timing/phasing to address queuing
US 101/ 27th St	» The intersection is projected to meet ODOT mobility targets under 2042 traffic conditions » The current TSP identifies the need for a traffic signal	» Do nothing » **Install a traffic signal when warranted** » Reconfigure the intersection/modify the traffic control (e.g., traffic signal, roundabout)

US 101/ 15th St	» The intersection is projected to meet ODOT mobility targets under 2042 traffic conditions » The current TSP identifies the need for a traffic signal	» Do nothing » **Install a traffic signal when warranted** » Reconfigure the intersection/modify the traffic control (e.g., traffic signal, roundabout)
US 101/ OR 126	» The eastbound and southbound left-turn queues are projected to exceed their available storage under 2042 traffic conditions	» Restripe the eastbound and southbound approaches to maximize the available storage » Optimize the signal timing/phasing to address queuing
OR 126/ Quince Street	» The intersection is projected to meet ODOT mobility targets under 2042 traffic conditions » The current TSP identifies the need for turn movement restrictions	» Do nothing » **Implement turning movement restrictions (right-in/right-out)** » Implement turning movement restrictions (right-in/right-out/left-in) » Reconfigure the intersection/modify the traffic control (e.g., traffic signal, roundabout)
OR 126/ Spruce Street	» The intersection is projected to meet ODOT mobility targets under 2042 traffic conditions » The current TSP identifies the need for a traffic signal	» Do nothing » **Install a traffic signal when warranted** » Reconfigure the intersection/modify the traffic control (e.g., traffic signal, roundabout)
City Intersections		
9th St/ Kingwood St	» The intersection is projected to meet City mobility standards under 2042 traffic conditions » The current TSP identifies the need for a traffic signal	» Do nothing » **Install a traffic signal when warranted** » Reconfigure the intersection/modify the traffic control (e.g., all-way stop-control, traffic signal, mini roundabout)
35th/ Kingwood St	» The intersection is projected to exceed City mobility standards under 2042 traffic conditions	» Reconfigure the intersection/modify traffic control (e.g., all-way stop-control, traffic signal, mini roundabout)
35th St/Oak St	» Public input indicates that the intersection currently has congestion issues, particularly during the school peak period	» Reconfigure the intersection/modify the traffic control (e.g., all-way stop-control, traffic signal, mini roundabout)

Access Management and Spacing

The term "access management" is commonly used to describe the practice of managing the number, placement, and movements of intersections and driveways that provide access to adjacent land uses. Access management policies can be an important tool to improve transportation system efficiency by limiting the number of opportunities for turning movements on to or off of certain streets. In addition, well deployed access management strategies can help manage travel demand by improving travel conditions for pedestrian and bicycles. Eliminating the number of access points on roadways allows for continuous sidewalk and bicycle facilities and reduces the number of potential interruptions and conflict points between pedestrians, bicyclists, and cars. Access management can be extremely difficult to implement once properties have been developed along a corridor. Cooperation among and involvement of relevant government agencies, business owners, land developers and the public is necessary to establish an access management plan that benefits all roadway users and businesses.

ACCESS MANAGEMENT ALTERNATIVES

The TSP should identify access management strategies that help to preserve transportation system investments and guard against deteriorations in safety and increased congestion. The City's approach to access management should balance the need for land use activities and property parcels to be served with appropriate access while preserving safe and efficient movement of traffic. The access management alternatives considered for Florence include:

- Update the city-wide access spacing standards to include spacing between driveways,
- Define a variance process for when the standard cannot be met, and
- Establish an approach for access consolidation over time to move in the direction of the access spacing standards at each opportunity.

Access Spacing Standards

As indicated in *Tech Memo 3B: Existing Conditions Analysis*, ODOT and the City have adopted access spacing standards for study area roadways. ODOT's access spacing standards are defined in Oregon Administrative Rule (OAR) 734 Division 51 and apply to access points along US 101 and OR 126. The City's access spacing standards are defined in Title 10 of the Florence City Code. Table 1 summarizes the City's access spacing standards.

Table 2: City Access Spacing Standards

Functional Classification	Minimum Spacing Between Intersections (ft)[1]	Minimum Spacing between Intersections and Driveways (ft)[2]
Alley	N/A	15
Local Street	125	25
Collector Street	250	30
Arterial Street	250	50

As shown in Table 1, the City's access spacing standards are currently determined by functional classification and include spacing between intersections and between intersections and driveways. The standards could be updated to also include spacing between driveways. Table 2 summarizes potential modifications to the City's access spacing standards.

[1] Per Florence City Code Section 10-36-2-13: Street Alignment, Radii

[2] Per Florence City Code Section 10-35-2-7: Intersection Separation; Backing onto Public Streets

Table 3: City Access Spacing Standards

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

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 landowner to work in cooperation with adjacent landowners 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-over easements are provided consistent with the standards,
- The site plan incorporates a unified access and circulation system consistent with the standards,
- The landowner enters into an 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 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 site.
- 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 can 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 1 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 4. As illustrated in the exhibit and supporting table, by using these guidelines, all driveways along the highways/streets can eventually move in the overall direction of the access spacing standards as development and redevelopment occur.

Exhibit 1: Cross Over Easement

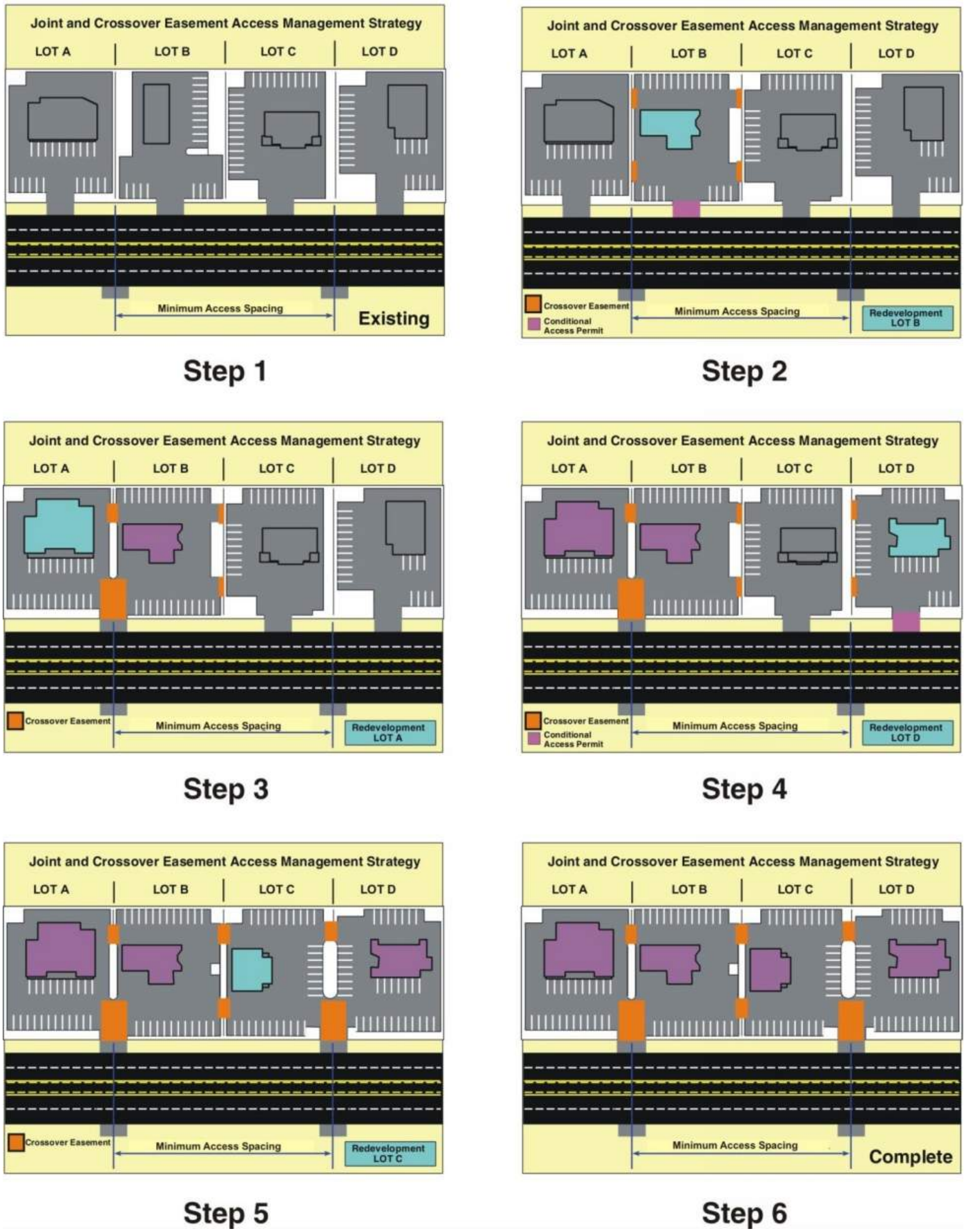


Table 4: Example of Crossover Easement/Indenture/Consolidation

Step	Process
1	EXISTING – Currently Lots A, B, C, and D have site-access driveways that neither meet the access spacing standard 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.

Pedestrian Connectivity

This section provides an overview of pedestrian facilities that could be implemented within Florence to improve access and circulation for pedestrians. This section also identifies the pedestrian alternatives developed to address gaps and deficiencies in pedestrian connectivity along arterial and collector streets.

PEDESTRIAN FACILITIES

Pedestrian facilities are the elements of the transportation system that enable people to walk and roll safely and efficiently between residential neighborhoods and schools, parks, recreational areas, retail/commercial centers, and transit stops. These include facilities for pedestrian movement along roadways (e.g., sidewalks, shared-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.

Sidewalks

Sidewalks are the primary building block of the pedestrian system. They provide an important means of mobility for walkers as well as people with disabilities, families with strollers, and others who may not be able to travel on an unimproved surface. Sidewalks are usually 6-feet wide and constructed from concrete. They are also frequently separated from the roadway by planting strips, on-street parking, and/or on-street bike lanes or other bike facilities (see below). Sidewalks are widely used in urban and suburban areas. Ideally, sidewalks could be provided on both sides of the roadway; however, some areas with physical or right-of-way constraints may require that a sidewalk be located on only one side.

Crosswalks

Crosswalks enable people to safely cross streets, railroad tracks, and other transportation facilities. Planning for appropriate crosswalks requires the community to balance vehicular mobility needs with providing crossing locations along the desired routes of pedestrians. Enhanced crosswalk treatments include geometric features such as curb extensions and raised median islands with pedestrian refuges as well as signing and striping, flashing beacons, signals, countdown heads, and leading pedestrian intervals. Many of these treatments can be applied simultaneously to further alert drivers of the presence of pedestrians in the roadway. *Attachment B contains a description of several enhanced crosswalk treatments.*

ODOT provides guidance on the types of enhanced crosswalk treatments that can be applied along ODOT facilities. Additional guidance is available from the Federal Highway Administration (FHWA) and the National Cooperative Highway Research Program (NCHRP). The guidance generally considers the physical and operational characteristics of roadways at the crosswalk location, including number of lanes, traffic volumes, travel speeds, and (in some cases) pedestrian activity. With this information, the City or ODOT can determine the most appropriate treatment for a given crossing; however, this is not typically done as part of a TSP.

Shared-use Paths and Trails

Shared-use paths and trails are improved (i.e., paved) and unimproved (i.e., dirt and gravel) facilities that serve pedestrians and bicyclists. Shared-use paths and trails can be constructed adjacent to roadways where topography, right-of-way, or other issues preclude construction of sidewalks and bike facilities on both sides (i.e., side path) or they may be constructed away from the roadway within their own right-of-way. A minimum width of 10 feet is recommended in areas with low levels of pedestrian/bicycle traffic (8-feet in constrained areas); 12 feet should be considered in areas with moderate to high levels of pedestrian/bicycle traffic. Shared-use paths and trails can be used to create long distance links within and between communities and provide regional connections. They play an integral role in recreation, commuting, and accessibility due to their appeal to users of all ages and skill levels.

Pedestrian Amenities

In addition to pedestrian facilities focused on throughput and movements, there are pedestrian amenities that can be provided to enhance the user experience. Street furniture, such as benches and garbage cans, can be provided in the public right-of-way in support of pedestrian and bike trips. In addition, amenities including street patios or parklets utilize space between the curbs that might have been previously used for another purpose such as parking.

PEDESTRIAN ALTERNATIVES

The pedestrian alternatives considered for Florence are summarized in Table 5. These alternatives are intended to address gaps and deficiencies in the existing pedestrian system as well as enhance pedestrian connectivity. The alternatives shown in **bold** are identified in the current TSP.

Table 5: Pedestrian Facility Alternatives

Roadway	Considerations	Alternatives
ODOT Streets		
US 101 37th St to UGB	» Sidewalk gaps on both sides of roadway » High level of traffic stress (sidewalk gaps, high travel speeds, 5 lanes, no buffer) » Limited crossing opportunities	» Fill sidewalk gaps at key destinations (e.g., Fred Meyer) » Complete sidewalks on both sides to Munsel Lake Rd » Complete sidewalks on both sides to Heceta Beach Rd » Complete sidewalks on both sides to the UGB » Reconstruct existing sidewalks with landscaped buffers » Install an enhanced crossing at 43rd Street
US 101 37th St to Siuslaw River Bridge	» Complete sidewalk network » High level of traffic stress (narrow sidewalks, high travel speeds, 5 lanes, no buffer) » High number of pedestrian destinations	» Reconstruct existing sidewalks with landscaped buffers » Install enhanced crossings at select locations » Install a pedestrian/bicycle bridge at select locations
OR 126 US 101 to east UGB	» Urban highway to Tamarack St, rural highway to the UGB » Sidewalk gaps on both sides of roadway » High level of traffic stress (sidewalk gaps, high travel speeds, no buffer) » Limited crossing opportunities	» Complete sidewalks on north side to casino » Complete sidewalks on both sides to Tamarack St » Reconstruct existing sidewalks with landscape strips
Lane County Streets		
Heceta Beach Rd US 101 to Rhododendron Dr	» Narrow shoulders » Evacuation route for homes in northern part of Florence » A potential alternative route for the Oregon Coast Bike Route	» Widen shoulders on both sides/ reconfigure as mixed-use shoulders » Construct sidewalks on one side » Construct shared-use path on one side – include landscape strip as feasible
Jetty Rd Rhododendron Dr to North Jetty Beach	» Little to no shoulders » Relatively high travel speeds (not posted) » Multiple pull-outs	» Widen shoulders on both sides/ reconfigure as mixed-use shoulders » Construct shared-use path on one side – include landscape strip as feasible

Munsel Lake Rd US 101 to Spruce Street	» Narrow shoulders » Connects to new housing developments	» Widen shoulders on both sides/ reconfigure as mixed-use shoulders » Construct sidewalks with landscape strips on one side and a shared-use path with a bioswale on the other
Munsel Lake Rd Spruce Street to Ocean Dunes Dr	» Narrow shoulders » Connects to Munsel Lake Landing County Park	» Widen shoulders on both sides/ reconfigure as mixed-use shoulders » Construct sidewalks on one side » Construct shared-use path on one side – include landscape strip as feasible » Install enhanced crossings at select locations
Munsel Lake Rd Ocean Dunes Dr to N Fork Siuslaw Rd	» Limited paved shoulder, but often large gravel shoulder » Residential driveways along entire segment	» Widen shoulders on both sides/ reconfigure as mixed-use shoulders » Construct sidewalks on one side » Construct shared-use path on one side – include landscape strip as feasible
N Fork Siuslaw Rd OR 126 to Munsel Lake Rd	» Narrow shoulders » Provides access to casino	» Widen shoulders on both sides/ reconfigure as mixed-use shoulders » Construct sidewalks on one side » Construct shared-use path on one side – include landscape strip as feasible
City Streets - Arterial		
9th St US 101 to Rhododendron Dr	» Existing sidewalks along both sides of entire segment » Low level of traffic stress » Several major destinations (hospital, library, police)	» Do nothing » Install enhanced crossing treatments at existing crosswalks
Rhododendron Dr US 101 to Hemlock St	» Existing sidewalks along both sides of entire segment » Low level of traffic stress » A potential alternative route for the Oregon Coast Bike Route	» Do nothing » Install enhanced crossing treatments at existing crosswalks
Rhododendron Dr Hemlock Street to 9th St	» New sidewalk construction on north/east side of roadway » A potential alternative route for the Oregon Coast Bike Route	» Construct sidewalks on the south/west side » Install enhanced crossings at select locations (e.g., Exploding Whale Memorial Park)
Rhododendron Dr 9th St to Wild Winds St	» Striped bike lanes on both sides » A potential route for the Oregon Coast Bike Route	» Reconfigure bike lanes as mixed-use shoulders » Construct shared-use path on one side – include landscape strip as feasible

Rhododendron Dr Wild Winds St to 35th St	» Narrow shoulders on both sides » Primarily next to the Siuslaw River – limited areas to expand right-of-way » Few homes or destinations along this segment » A potential route for the Oregon Coast Bike Route	» Widen shoulders on both sides/ reconfigure as mixed-use shoulders » Construct shared-use path on one side – include landscape strip as feasible
Rhododendron Dr 35th Street to Heceta Beach Rd	» Narrow shoulders on both sides » More residential segment of roadway » A potential route for the Oregon Coast Bike Route	» Widen shoulders on both sides/ reconfigure as mixed-use shoulders » Construct shared-use path on one side – include landscape strip as feasible
City Streets - Collector		
2nd St US 101 to Harbor St	» Sidewalk gaps and narrow sidewalks on both sides » Enhanced crosswalk at US 101/2nd St » Connects US 101 and OR 126 via Quince St	» **Fill sidewalk gaps within Old Town** » Reconstruct existing sidewalks with landscape strips » Install enhanced crossings at Nopal St, Oak St, Harbor St (e.g., marked crosswalks with curb extensions)
21st St **Oak St to US 101**	» Signalized crosswalk at US 101 » Direct access to Siuslaw Elementary School	» Retime signal at US 101 for improved pedestrian access (e.g., leading pedestrian interval)
21st St US 101 to Spruce St	» Sidewalk gaps on both sides » Direct access to Grocery Outlet » Major transit stop at Grocery Outlet » Moderate level of traffic stress east of US 101 (lack of existing sidewalks)	» Fill sidewalk gaps on both sides
27th St US 101 to Kingwood St	» Sidewalk gaps on both sides » Direct access to Siuslaw Middle and High schools » Shared-use path east of US 101 connects to Spruce St	» Fill side sidewalk gaps between US 101 and Oak St » Install enhanced crossing at US 101
35th St Rhododendron Dr to Kingwood St	» No sidewalks on either side » Important connection between Rhododendron Dr and US 101	» Construct sidewalks on one side » Construct sidewalks on both sides » Construct shared-use path on one side – include landscape strip as feasible » Install an enhanced crossing at Kingwood St
35th St Kingwood St to Oak St	» Sidewalk gaps on both sides » Primarily undeveloped property on north side » Important connection between Rhododendron Dr and US 101	» Fill in sidewalk gaps on one side » Fill in sidewalk gaps on both sides » Construct shared-use path on one side – include landscape strip as feasible

35th St Oak St to US 101	» Sidewalk gaps on both sides » Signalized crosswalk at US 101	» Fill in sidewalk gaps on both sides » Retime signal at US 101 for improved pedestrian access (e.g., leading pedestrian interval)
35th St US 101 to Spruce St	» Missing sidewalk sections east of Spruce St » Includes one of few signalized crosswalks on US 101	» Do Nothing
42nd St US 101 to Spruce St	» No sidewalks on either side » Northern-most connection to Spruce St from US 101 » Private road east of Munsel Creek Dr limits residential mobility	» Construct sidewalks on both sides » Install enhanced crossing on US 101 at 42nd St or between 42nd St and 43rd St » Create pedestrian connection between Munsel Creek Dr and Munsel Creek Lp
43rd St Oak St to US 101	» Sidewalks gaps on both sides » Connects Oak St to US 101 – next closest is 46th to the north	» Fill in sidewalk gaps on south sides
46th St Oak St to US 101	» Complete sidewalk on both sides » Connects Oak St to US 101 – next closest is 43rd to the south » Access to Fred Meyer	» Do nothing » Install enhanced crossing on US 101 at 46th St
Airport Rd/15th St Kingwood St to US 101	» Sidewalk gaps on both sides » Connects to Kingwood St to US 101 – next closest is 10th to the south » Enhanced crossing on US 101 north of 15th St	» Fill in sidewalk gaps on both sides
Bay St Kingwood St to Maple St	» Complete sidewalks on both sides » High level of traffic stress (narrow sidewalk width, no buffer)	» Reconstruct sidewalks to increase width » Install curb extensions at Kingwood St, Laurel St, Maple St, and mid-block by the boardwalk » **Install mid-block crosswalk at Bay St/ Nopal St corner by the boardwalk** » Develop a streetscape design plan
Kingwood St Bay St to 9th St	» Sidewalk gaps on both sides » Connections to residential land and to downtown Florence	» **Fill in sidewalk gaps on both sides** » Install enhanced crossing at Bay St
Kingwood St 9th Street to Airport Way	» Sidewalk gaps on both sides » Segment serves a wide variety of land uses	» **Fill in sidewalk gaps on both sides** » Install enhanced crossings at select locations

Kingwood St Airport Way to 20th St	» Sidewalk gaps on both sides » Segment serves a wide variety of land uses	» **Fill in sidewalk gaps on both sides** » Install enhanced crossings at select locations
Kingwood St 20th St to 35th St	» Complete sidewalks on both sides » High level of traffic stress (high speeds) » Some physical buffering, but not consistent	» Reconstruct sidewalks with landscape strips » Implement traffic calming measures
Maple St US 101 to Bay St	» Sidewalk gaps on one side » Connects US 101 with downtown Florence	» Fill in sidewalk gaps on one side
Oak St 20th St to 27th St	» Complete sidewalks on both sides » Serves Siuslaw Elementary and Middle schools, and Miller Park	» Install enhanced crossings at select location
Oak St 27th St to 35th St	» Sidewalk gaps on one side » Serves Siuslaw High School and Lane Community College	» **Fill in sidewalk gaps on one side** » Install enhanced crossings at select location
Oak St 35th St to 46th St	» Sidewalk gaps on one side » Land use mix includes residential and industrial land » Moderate level of traffic stress	» Fill in sidewalk gaps on one side » Reconstruct sidewalks with landscape strips » Implement traffic calming measures
Quince St 2nd St to OR 126	» Complete sidewalk network » Important connection from downtown to OR 126 » Florence Events Center is on the west side of Quince St	» Install enhanced crossing at 6th St for events center access
32nd-Redwood St Spruce St to 35th St	» Sidewalk gaps on south/west side » Extension of Spruce St in northern Florence	» Fill in sidewalk gap on south/west side
Spruce St 42nd St to 35th St	» Sidewalk gaps on both sides » Major north-south roadway in northern Florence	» Fill sidewalks gaps on both sides
Spruce St 32nd St to 17th St	» Complete sidewalk network » Major north-south roadway next to US 101 » Connections to two shared-use paths	» Install enhanced crossings at shared-use paths
Spruce St 17th St to OR 126	» Sidewalk gaps on both sides » Major north-south road connecting to OR 126	» Fill sidewalks gaps on both sides

Spruce St Munsel Lake Road to northern Terminus	» New roadway with sidewalks on one side	» Do nothing » Construct sidewalks on the west side
City Streets – Other Streets of Significance		
4th Ave Heceta Beach Rd to Joshua Lane	» No sidewalks or paved shoulder » Extension of Rhododendron Dr, north of Heceta Beach Rd » Serves greater Heceta Beach area in northern Florence	» Construct mixed-use shoulders on both sides » Construct sidewalks on one side » Construct shared-use path on one side – include landscape strip as feasible
20th St Kingwood St to US 101	» No sidewalks on 20th St except short segment near US 101 » Important connect to public schools, Miller Park, Grocery Outlet » Unpaved shared-use path connection to Kingwood St	» Construct sidewalks on both sides » Install enhanced crossing at US 101 » Extend 20th St west to Kingwood St
Laurel St-Old Town Wy US 101 to Maple St	» Sidewalk gaps on Laurel St and Old Town Wy » Streets run through downtown Florence and connect to US 101	» **Fill sidewalk gaps on both sides**
30th St Oak St to US 101	» Complete sidewalks on both sides » Direct access to Siuslaw High School » Existing enhanced crosswalk at US 101 and Oak St	» Do nothing » Install second crosswalk at Oak St and install school crosswalk signs
30th St US 101 to Spruce St	» Complete sidewalk on both sides » Near the Oregon Department of Human Services office	» Do nothing

Table 5 identifies several shared-use path alternatives along existing City, County, and ODOT facilities. The following summarizes additional shared-use path alternatives.

- Munsel Creek Shared-use Path – Install and/or improve the segments of the Munsel Creek Trail between Quince Street and 16th Street and between 25th Street and 29th Street. Extend the path from the Munsel Lake Greenway to Munsel Lake Road.
- Estuary Trail – Install a shared-use path from the Boardwalk in Old Town to south end of Munsel Creek Trail.
- 12th Street Shared-use Path – Install and/or improve the existing path between Kingwood Street and Rhododendron Drive.
- Oak Street Shared-use Path – Install a shared-use path from Oak Street at 15th Street to 10th Street.
- Ivy Street Shared-use Path – Install a shared-use path from 12th Street to 8th Street.

- Elm Street Shared-use Path – Install a shared-use path in the existing Elm Street right-of-way between 8th Street and Rhododendron Drive.
- Driftwood Street Shared-use Path – Install a shared-use path in the existing Driftwood Street right-of-way between 12th Street and 11th Street.
- North Florence County Park Shared-use Path – Install a network of shared-use paths within the County Park in the North Florence area.
- Oceana Drive Shared-use Path – Install a shared-use path from the eastern terminus of Oceana Drive to the southern Terminus of Kelsie Way.

Bicycle Connectivity

This section provides an overview of bicycle facilities that could be implemented within Florence to improve access and circulation for bicyclists. This section also identifies the bicycle alternatives developed to address gaps and deficiencies in bicycle connectivity along arterial and collector streets.

BICYCLE FACILITIES

Bicycle facilities are the elements of the transportation system that enable people to travel safely and efficiently between residential neighborhoods and destinations in the city and the surrounding area by bike. These include facilities for bicycle movement 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, bike hubs, tune-up stations, changing rooms, and showers at worksites); however, most of these facilities are addressed through the development code. Each facility plays an important role in developing a comprehensive bicycle system.

Mixed-use Shoulders

A mixed-use shoulder is a roadway shoulder that is wide enough to be used by pedestrians and bicyclists as a mixed-use path. Mixed-use shoulders are ideal on low-volume streets where topography or the surrounding environment does not allow for the addition of a sidewalk or separate bicycle facility.

Low-Traffic Bikeway

Low-traffic bikeways, also known as “bicycle boulevards,” are streets with low vehicular volumes and speeds that can be optimized for bicycle travel by including treatments for traffic calming and traffic reduction, signage and pavement markings, and intersection crossing treatments. Bike boulevards are ideal on local streets that parallel larger, high traffic routes and provide connections to similar destinations.

Shared Lane Pavement Markings

Shared lane pavement markings (often called “sharrows”) are used to indicate a shared space for cyclists and motorists and are typically centered in the roadway, or approximately four feet from the edge of the travel lane, and spaced approximately 50 to 250-feet apart depending on the traffic volumes and travel speeds. Sharrows are suitable on roadways with relatively low traffic volumes (<2,500 Average Daily Traffic [ADT]) and low travel speeds (<25 MPH); however, they may also be used to transition between discontinuous bicycle facilities along roadways with higher volumes and speeds.

On-Street Bike Lanes

On-street bike lanes provide a dedicated space for the exclusive use of cyclists on the roadway surface. They are usually 5 to 6-feet wide and include an 8-inch stripe along the roadway and bike symbols at intersections; they may also include a buffer as indicated below. On-street bike lanes are typically placed at the outer edge of the roadway surface but to the inside of right-turn lanes and/or on-street parking. On-street bike lanes can improve 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 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.

Bicycle Crossings

Bicycle crossings enable cyclists to travel safely through intersections and across streets, railroad tracks, and other transportation facilities. Planning for appropriate bicycle crossings requires the community to balance vehicular mobility needs with providing crossing locations along the desired routes of cyclists. Enhanced bicycle crossing treatments include pavement markings through conflict areas, bike boxes, two-stage left-turn bike boxes, bike only signals, and 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 and comfortable bicycle 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 shared-use paths.

Bicycle Parking

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 parking can generally be categorized into two types: short-term and long-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 bicycle parking** places an emphasis on security and 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.

Bike Corral

This treatment coverts vehicle parallel parking stalls into bicycle parking. These facilities can be installed on segments or near intersections. If installed near an intersection, it can be an effective alternative to vehicle parking which can cause sight distance hazards. Bike corrals are often designed to hold approximately 12-24 bikes and have been shown to have a positive impact on business.

Bike Sharing

Bicycle sharing has been growing rapidly in recent years along with the overall trend of micro mobility. Bike sharing in particular can be a key component in the public transit system while utilizing the bicycle infrastructure of the city. The strategic location of stations can highlight key destinations around the city and be an important asset to tourists and visitors seeking to experience the city without using a vehicle.

BICYCLE ALTERNATIVES

The bicycle alternatives considered for Florence are summarized in Table 6. These alternatives are intended to address gaps and deficiencies in the existing bicycle system as well as enhanced bicycle connectivity. The alternatives shown in **bold** are identified in the current TSP.

Table 6: Bicycle Facility Alternatives

Roadway	Considerations	Alternatives
ODOT Streets		
US 101 UGB to 32nd St	» On-street bike lanes » High levels of traffic stress (posted speed, number of lanes) » 40+ MPH speed limit	» Construct buffered bike lanes on both sides – requires narrowing travel lanes » Construct separated bike lanes on one or two sides » Provide pavement markings through conflict areas (e.g., Fred Meyer Dwy, 46th St) » Provide protected intersection treatment at signalized intersections
US 101 32nd St to 22nd St	» On-street bike lanes » High level of traffic stress (posted speed, number of lanes) » 35 MPH speed limit	» Construct buffered bike lanes on both sides – requires narrowing travel lanes » Construct separated bike lanes on one or two sides » Provide protected intersection treatment at signalized intersections
US 101 22nd St to Siuslaw River Bridge	» On-street bike lanes » Moderate level of traffic stress (number of lanes, existing facilities)	» Construct buffered bike lanes on both sides – requires narrowing travel lanes

	» 30 MPH speed limit	» Construct separated bike lanes on one or two sides » Provide protected intersection treatments at signalized intersections
OR 126 US 101 to Tamarack St	» On-street bike lanes » Moderate level of traffic stress (posted speed, existing facilities) » 35 MPH speed limit	» Construct buffered bike lanes on both sides – requires narrowing travel lanes » Construct separated bike lanes on one or two sides
OR 126 Tamarack St to UGB	» Shoulder bike lanes » Moderate level of traffic stress (posted speed, existing facilities) » 45+ MPH speed limit	» Construct buffered bike lanes on both sides – requires narrowing travel lanes » Construct separated bike lanes on one or two sides
Lane County Streets		
Heceta Beach Rd US 101 to Rhododendron Dr	» Minimal paved shoulder » High level of traffic stress (posted speed, no existing infrastructure) » 40 MPH speed limit » A potential alternative route for the Oregon Coast Bike Route	» Widen shoulders on both sides/ reconfigure as mixed-use shoulder » **Construct bike lanes on both sides** » Construct buffered bike lanes on both sides – requires narrowing travel lanes » Construct shared-use path on one side – include landscape strip as feasible
Jetty Rd Rhododendron Dr to North Jetty Beach	» Little to no shoulders » Relatively high travel speeds (not posted) » Multiple pull-outs	» Widen shoulders on both sides/ reconfigure as mixed-use shoulders » Construct shared-use path on one side – include landscape strip as feasible
Munsel Lake Rd US 101 to Spruce St	» Minimal paved shoulder » Moderate level of traffic stress (posted speed, no existing infrastructure) » 35 MPH speed limit	» Widen shoulders on both sides/ reconfigure as mixed-use shoulder » Construct bike lanes on one side and shared-use path on the other – include landscape strip as feasible » Install wayfinding signs to nearby parks and trails
Munsel Lake Rd Spruce St Ocean Dunes Dr	» Minimal paved shoulder » Moderate level of traffic stress (posted speed, no existing infrastructure) » 35 MPH speed limit	» Widen shoulders on both sides/ reconfigure as mixed-use shoulder » Construct buffered bike lanes on both sides – requires narrowing travel lanes » Construct shared-use path on one side – include landscape strip as feasible
Munsel Lake Rd Ocean Dunes Dr to N Fork Siuslaw Rd	» Minimal paved shoulder » Moderate level of traffic stress (no existing infrastructure) » 25 MPH speed limit	» Widen shoulders on both sides/ reconfigure as mixed-use shoulder » Construct bike lanes on both sides

		» Construct buffered bike lanes on both sides – requires narrowing travel lanes » Construct shared-use path on one side – include landscape strip as feasible
N Fork Siuslaw Rd OR 126 to Munsel Lake Rd	» Minimal paved shoulder » Low level of traffic stress	» Widen shoulders on both sides/ reconfigure as mixed-use shoulder » Construct bike lanes on both sides » Construct buffered bike lanes on both sides – requires narrowing travel lanes » Construct shared-use path on one side – include landscape strip as feasible
City Streets – Arterial		
9th St US 101 to Rhododendron Dr	» Bike lanes on both sides » Low level of traffic stress » 25 MPH speed limit	» Do nothing » Construct buffered bike lanes on both sides – requires narrowing travel lanes
Rhododendron Dr US 101 to 9th St	» Bike lanes on both sides » Low level of traffic stress » 30 MPH speed limit » A potential route for the Oregon Coast Bike Route	» Do nothing » Construct buffered bike lanes on both sides – requires narrowing travel lanes
Rhododendron Dr 9th St to Wild Winds St	» Bike lanes on both sides » Low level of traffic stress » 30 MPH speed limit » A potential route for the Oregon Coast Bike Route	» Construct buffered bike lanes on both sides – requires narrowing travel lanes » Construct shared-use path on one side – include landscape strip as feasible
Rhododendron Dr Wild Winds St to 35th St	» Minimal paved shoulder » High level of traffic stress (posted speed, no existing infrastructure) » 40 MPH speed limit » A potential route for the Oregon Coast Bike Route	» Widen shoulders on both sides/ reconfigure as mixed-use shoulder » Construct shared-use path on one side – include landscape strip as feasible
Rhododendron Dr 35th St to Heceta Beach Rd	» Minimal paved shoulder » High level of traffic stress (posted speed, no existing infrastructure) » 40 MPH speed limit » A potential route for the Oregon Coast Bike Route	» Widen shoulders on both sides/ reconfigure as mixed-use shoulder » Construct shared-use path on one side – include landscape strip as feasible

City Streets - Collector		
2nd St US 101 to Harbor St	» Shared lane pavement markings exist from Maple St to the east » Approximately 20-foot lanes (including on-street parking)	» Do nothing » **Add shared lane pavement markings**
21st St Oak St to US 101	» No existing bike infrastructure » Approximately 20-foot travel lanes (including on-street parking) » Low level of bicycle traffic stress	» Do nothing » Add shared lane pavement markings
21st St US 101 to Spruce St	» No existing bike infrastructure » Approximately 20-foot travel lanes (including on-street parking) » Low level of bicycle traffic stress	» Do nothing » Add shared lane pavement markings
27th St US 101 to Kingwood St	» Bike lanes on both sides from Oak St to Kingwood St » Narrow right-of-way east of Oak St » Low level of bicycle traffic stress	» Do nothing » Add shared lane pavement markings from Oak St to US 101 » Construct bike lanes from Oak St to US 101 – requires widening
35th St Rhododendron Dr to Kingwood St	» Bike lanes on both sides » Low level of bicycle traffic stress	» Do nothing » Implement traffic calming measures
35th St Kingwood St to Oak St	» Bike lanes on both sides » Low level of bicycle traffic stress	» Do nothing » Implement traffic calming measures
35th St Oak St to US 101	» Bike lanes on both sides » Low level of bicycle traffic stress	» Do nothing » Implement traffic calming measures
35th St Oak St to Spruce St	» Narrow bike lanes on both sides » Low level of bicycle traffic stress	» Do nothing » Widen bike lanes
42nd St US 101 to Spruce St	» Bike lanes on both sides » Private road east of Munsel Creek Dr limits residential mobility » Low level of bicycle traffic stress	» Do nothing » Add shared lane pavement markings east of Spruce St » Create bike connection between Munsel Creek Dr and Munsel Creek Lp
43rd St Oak St to US 101	» No existing bike infrastructure » Low level of bicycle traffic stress	» Add shared lane pavement markings » Construct bike lanes on both sides – requires removing on-street parking
46th St Oak St to US 101	» Bike lanes on both sides	» Do nothing
Airport Rd/15th St Kingwood St to US 101	» No existing bike infrastructure » Low level of bicycle traffic stress	» Add shared lane pavement markings » Construct bike lanes on both sides – requires removing on-street parking

		» Incorporate enhanced bicycle crossing at US 101 into existing crossing
Bay St Kingwood St to Maple St	» No existing bike infrastructure » Low level of bicycle traffic stress » Commercial center of Florence with lots of pedestrians » Public input seeks to improve walking and biking experience	» Do nothing » Add shared lane pavement markings
Kingwood St Bay St to 9th St	» Shared lane pavement markings » Moderate level of traffic stress	» Do nothing » Implement traffic calming measures » **Add shared lane pavement markings** » Construct bike lanes on both sides – requires removing on-street parking
Kingwood St 9th St to Airport Wy	» Bike lanes on both sides from 10th St to the north » Low level of bicycle traffic stress	» Construct bike lanes on both sides from 9th St to 10th St – requires removing on-street parking
Kingwood St Airport Wy to 35th St	» Bike lanes on both sides » 40 MPH speed limit » Moderate level of traffic stress (posted speed)	» Do nothing » Implement traffic calming measures » Construct buffer bike lanes on both sides – requires narrowing travel lanes
Maple St US 101 to Bay St	» No existing bike infrastructure » Connects US 101 with downtown Florence	» Do nothing » Add shared lane pavement markings
Oak St 20th St to 27th St	» Bike lanes from Siuslaw Middle School Dwy to 27th St » Serves Siuslaw Elementary and Middle schools, and Miller Park	» Shared lane pavement marking from 20th St to Siuslaw Middle School Dwy » **Construct bike lanes from 20th St to Siuslaw Middle School Dwy – requires removing on-street parking**
Oak St 27th St to 35th St	» Bike lanes on both sides » Serves Siuslaw High School and Lane Community College	» Do nothing » Construct buffered bike lanes – requires narrowing travel lanes
Oak St 35th St to 46th St	» Bike lanes on both sides » Speed increases to 25 and 30 MPH north of 35th St	» Do nothing » Construct buffered bike lanes – requires narrowing travel lanes
Quince St 2nd St to OR 126	» Shared lane pavement markings » Connects OR 126 to downtown without needing to use US 101 » Low level of bicycle traffic stress	» Do nothing » Construct bike lanes – requires removing on-street parking
32nd-Redwood St Spruce St to 35th St	» Bike lanes on both sides » Key connection between Spruce St from 32nd St to 35th St	» Do nothing » Construct buffered bike lanes – requires narrowing travel lanes

Spruce St 42nd St to 35th St	» Bike lanes from 35th St to 37th St » No existing infrastructure north of 37th St » Major north-south road east of US 101	» **Add shared lane pavement markings north of 37th St** » Extend bike lanes north to 42nd St
Spruce St 32nd St to 17th St	» Bike lanes on both sides from 32nd St to 25th St » Shared lane pavement markings south of 25th St » Moderate level of traffic stress » Major north-south road east of US 101	» **Construct bike lanes south of 25th St – requires removing on-street parking**
Spruce St 17th St to OR 126	» Shared lane pavement markings » Moderate level of traffic stress » Major north-south road east of US 101	» **Construct bike lanes on both sides – requires removing on-street parking**
City Streets – Other Roads of Interest		
4th Ave Heceta Beach Rd to Falcon St	» No shoulder and narrow pavement width » Extension of Rhododendron Dr, north of Heceta Beach Rd » Serves greater Heceta Beach area in northern Florence	» Add shared lane pavement markings » Construct mixed-use shoulders on both sides » Construct bike lanes on both sides » Construct shared-use path on one side – include landscape strip as feasible
20th St Kingwood St to US 101	» No existing bike infrastructure » Important connection to public schools, Miller Park, Grocery Outlet » Unpaved shared-use path connection to Kingwood St	» Add shared lane pavement markings » Extend 20th St west to Kingwood St
Laurel St-Old Town Wy US 101 to Maple St	» No existing bike infrastructure » Streets run through downtown Florence and connect to US 101	» Do nothing » Add shared lane pavement markings
30th St Oak St to US 101	» No existing bike infrastructure » Low level of bicycle traffic stress	» Do nothing » Add shared lane pavement markings » Construct bike lanes on both sides – requires removing on-street parking
30th St US 101 to Spruce St	» No existing bike infrastructure » Low level of bicycle traffic stress	» Do nothing » Add shared lane pavement markings » Construct bike lanes on both sides – requires removing on-street parking
Park Dr//18th St/ Willow Lp/Willow St	» No existing bike infrastructure » Low level of bicycle traffic stress	» Do nothing » Add shared lane pavement markings

Transit

This section provides an overview of transit facilities and services that could be implemented within Florence to improve access and circulation by transit. This section also identifies the transit alternatives developed to address gaps and deficiencies in transit connectivity.

TRANSIT FACILITIES AND SERVICES

Public transit provides important connections to destinations for people that do not drive or bike and can provide an additional option for all transportation system users for certain trips. Public transit can complement walking, bicycling, or driving trips: users can walk/roll to and from transit stops and their homes, shopping, or workplaces; people can drive to park-and-ride locations to access a bus; or people can bring their bicycles on transit vehicles and bicycle from a transit stop to their final destination.

There are two types of transit service in Florence. First, the City operates two Rhody Express routes that provide fixed-route service in southern Florence and along the US 101 corridor to the north. The Rhody Express also provides dial-a-ride service for people who live within three-quarters of a mile of fixed-route service and have a disability that prevents them from riding the bus. Second, there are intercity transit routes (operated by Link Lane and by Coos County Area Transit) that connect Florence to Yachats, Eugene, and Coos Bay.

Fixed-Route Service

Fixed-route service refers to transit service that runs on regular, scheduled routes, with designated transit stops. Fixed-route service is typically characterized by service frequency (the time between arrivals), service hours (the number of hours service is provided throughout the day), and service coverage (the amount of the population, households, and jobs served by transit).

Transit Stops

Transit stops are designated locations where residents can access local transit service. Transit stops are normally located at major destinations and at key intersections. The types of amenities provided at each transit stop (e.g., pole, bench, shelter, ridership information, trash receptacles) tend to reflect the level of usage.

» **Pole and bus stop sign** – All bus stops require a pole and bus stop sign to identify the bus stop location. Some transit agencies prefer the bus stop signs to be provided on a separate dedicated pole instead of on an existing utility pole, column, or other location.

» **Bus stop shelters** – Shelters are typically provided at higher volume stops but may be considered at stops with fewer daily boardings if served by routes with long headways.

» **Seating** – Seating should always be considered as long as it is accessible and the safety and accessibility of the adjacent sidewalk are not compromised by seating placement.

» **Trash receptacles** – While trash cans can be considered at any stop, they are usually located at stops with shelters and/or seating. Trash cans will require regular pick-up.

» **Lighting** – Lighting is an important amenity for bus stops as it provides visibility and increased security for transit users waiting, boarding, and aligning transit service.

- **ADA accessibility** – Bus stops should be accessible for users with all ranges of abilities, including a concrete landing pad, adjacent parking restrictions, and ADA-compliant pedestrian ramps.
- **Real-time bus arrival reader boards** – Bus stops with several different routes can include an electronic arrival board showing when the next bus on each route is scheduled to arrive in real-time.
- **Bicycle parking, storage, and/or repair stations** – Bicycle amenities located at bus stops further support multi-modal trips, allowing travelers to store their bicycles at one end of their trip or even repair their bicycle enroute as needed.

Park-and-Rides

Park-and-rides provide parking for people who wish to transfer from their personal vehicle to public transportation or carpools/vanpools. Park-and-rides are frequently located near major intersections, at commercial centers, or intercity bus routes. It is Oregon state policy to encourage the development and use of park-and-rides at appropriate urban and rural locations adjacent to or within the highway right-of-way.

Park-and-rides may be either shared-use, such as at a school or shopping center, or exclusive-use. Shared-use facilities are generally designated and maintained through agreements reached between the local public transit agency or rideshare program operator and the property owner. Shared-use lots can save the expense of building a new parking lot, increase the utilization of existing spaces, and avoid utilization of developable land for surface parking. In the case of shopping centers, the presence of a shared-use park-and-ride has frequently been shown to be mutually beneficial for the businesses in the center.

Mobility Hubs

Mobility hubs focus on the connectivity of public transit to a variety of travel modes, supporting non-single-occupancy-vehicle trips and helping to connect people to the different modes they need. Although mobility hubs support a transit stop or station, all services and amenities do not need to be provided immediately adjacent to the stop as long as they are still within an easily accessible area. Shared mobility services such as bikeshare, carshare, e-scooters, and on-demand rideshare zones are all located within the hub, in addition to amenities such as transit waiting areas, pedestrian and bicycle facilities, bicycle parking, bicycle repair stations, and electric vehicle charging. Additional information on the mobility hubs is provided under the Emerging Technology section.

Real-Time Transit Information

Transit agencies or third-party sources can disseminate both schedule and system performance information to travelers through in-vehicle, wayside, or in-terminal dynamic message signs, as well as on the internet or wireless devices. Coordination with regional or multimodal traveler information efforts can increase the availability of this transit schedule and system performance information. These systems enhance passenger convenience and encourage travelers to consider transit instead of driving alone. They do require cooperation and integration between agencies for disseminating the information.

TRANSIT ALTERNATIVES

Table 7 summarizes the alternatives developed to address the gaps and deficiencies in the transit facilities and services provided in Florence.

Table 7: Transit Facility Alternatives

Transit Facilities and Services	Considerations	Alternatives
New Routes and Existing Route Changes	» Public comment has been supportive of adding transit service along Rhododendron Dr (north of 35th St), to Driftwood Shores Resort, along Heceta Beach Rd, and at the US 101/Munsel Lake Rd intersection. » The South Loop and North Loop operate on a combined one-hour headway, so extending one of the loop routes would alter the existing schedule and blocking.	» Explore adding service to Rhododendron Dr » Explore adding service to the Heceta Beach neighborhood
Service Frequency, Hours, and Coverage	» Link Lane is creating a Transit Development Plan to understand the transit needs between coastal communities and between these coastal communities and Eugene. While this plan has yet to develop project alternatives, the project has discovered a need to increase intercity service. As alternatives are developed for this project, they will be incorporated into the Florence TSP Update.	» Increased intercity service frequency » Service to Eugene Airport » Service to North Bend Municipal Airport
Marketing	» Link Lane launched its Florence to Yachats route in September 2018 as a pilot , and the Eugene to Florence route launched in February 2020 as a pilot, as well. » Given the uncertain nature of the routes due to funding and to the COVID-19 pandemic, there is a need to market these routes now that the worst of the pandemic appears to be over and funding is more secure.	» Improve marketing for intercity services (specifically to Eugene and Yachats)
New Amenities	» Multiple public comments sought to establish a transit center in Florence. The Grocery Outlet at US 101/21st St, is a commonly-identified location.	» Establish a transit center at the Grocery Outlet bus stop on 21st St » Add bathroom facilities to transit center

	» Several commenters also wanted to see additional services at a future transit center, including bathroom facilities for people waiting. » Establishing a transit center could be partnered with creating a shared park-and-ride at the Grocery Outlet or at any other location where a transit center may be located.	» Formally establish a shared park-and-ride with Grocery Outlet » Add transit shelters and/or benches to existing bus stops
Transit Stops	» Most transit stops within the city do not have a shelter or a bench. Adding these would make the ridership experience more comfortable for people who are waiting for the bus.	» Add shelters and/or benches to existing bus stops » As new service is added, build bus stops that are accessible
Potential Park and Ride Locations	» A park and ride could be valuable both for trips within Florence for those not wanting to drive on US 101, OR 126, or in downtown Florence » A park and ride could also be valuable as a meeting point for service between cities (to Yachats, Eugene, or Coos Bay)	» Explore establishing a park-and-ride at the Grocery Outlet at US 101/21st St » Explore establishing a park-and-ride at the Three Rivers Casino » Explore establishing a park-and-ride at the Florence Events Center (parking lot south of 6th St)
Potential Mobility Hub Locations	» As a first step in the formation of mobility hubs, Florence should identify one primary as well as one secondary mobility hub. The primary will be the priority for transportation infrastructure in the City of Florence and the secondary will be developed when funding already satisfies the needs of the primary. » Mobility hubs are most effective next to transit stops where other mobility options (bikeshare, carshare, scooters, etc.) are available.	» Explore establishing a primary mobility hub at the Grocery Outlet at US 101/21st St » Explore establishing a secondary mobility hub at the Port parking lot (1st St and Nopal St) » Explore establishing a secondary mobility hub at the Florence Events Center (parking lot south of 6th St)

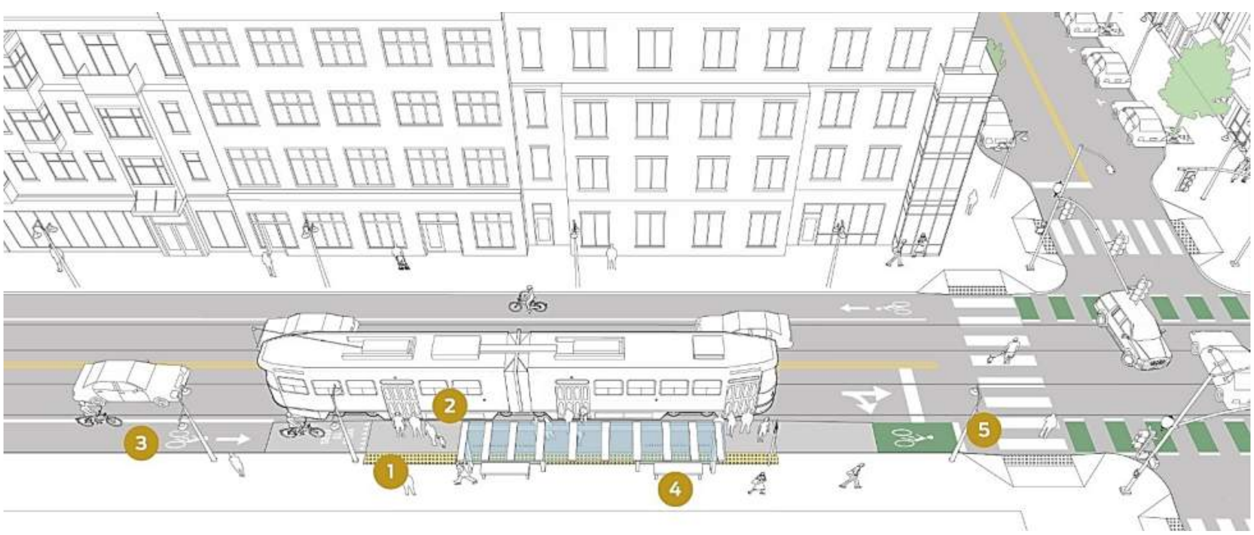
Intermodal Route Connectivity

The future transit network was overlaid with existing bicycle and pedestrian facilities to understand intermodal route connectivity. Pedestrian facilities in Florence generally connect the arterial street network to bus stops. Bicycle facilities in Florence provide less connectivity to the transit system.

When considering roadways that need to support transit vehicles, bicycles, and private vehicles, there can be constrained right-of-way to accomplish the range of safety, connectivity, and mobility goals for a particular street. The National Association of City Transportation Officials (NACTO) Transit Street Design Guide was reviewed for potential intermodal route connectivity solutions. Based on the existing street widths and classifications, transit routes, and bicycle facility gaps in Florence, the following two solutions will be considered within the city.

- Shared lanes with a mix of transit vehicles, bicycles, and private vehicles. The following recommendations are provided in the NACTO Transit Street Design Guide:
  - This treatment is appropriate on roadways where bus volumes are moderate and/or where bus speeds are low
  - Along segments where buses and bicyclists are not expected to pass each other, shared lanes may be 10 to 11 feet
  - If passing is anticipated, shared lanes may be 13 feet wide
  - For roadways where there is adjacent parking, the combined width of the shared lane and parking lane is recommended to be 19 to 21 feet wide
- Shared cycle track stops. The following recommendations are provided in the NACTO Transit Street Design Guide:
  - This treatment is appropriate on higher classification roadways where there are in-lane stops and a bike lane or protected bike lane along the segment
  - Special consideration is needed for width of cycle track, placement of bicycle ramps, curbside activity restrictions, and proximity to turning traffic

Exhibit 2: Example Shared Cycle Track Stop Configuration from NACTO Transit Street Design Guide



1. Detectable warning strips and shark's teeth yield markings
2. Accessible waiting and boarding areas
3. Bike ramps that consider maintenance, visually impaired passengers, and curbside conflicts
4. Shelters that are transparent and open to the building side
5. Ensure bicyclists are visible for turning traffic and queue in front of transit vehicles

Source: NACTO Transit Street Design Guide (https://nacto.org/publication/transit-street-design-guide/stations-stops/stop-configurations/shared-cycle-track-stop/)

Freight

As detailed in *Tech Memo #3A: Transportation System Inventory*, OR 126 and US 101 (from the intersection of OR 126 south) are the designated ODOT freight routes in Florence. Additionally, the city has a policy of accommodating local freight traffic on Kingwood Street via 9th Street, 27th Street, and 35th Street.

Two of the major freight generators identified in *Tech Memo #3A* (Florence Municipal Airport and Florence Industrial Park) are located off Kingwood Street, as well as the City's Public Works Department building. Of the remaining freight generators, the city's four grocery stores are all located on US 101, and the Port of Siuslaw is accessible from OR 126 via Quince Street or from US 101 via 2nd Street.

The following alternatives were developed to address potential issues with freight traffic:

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

Rail

There are no rail facilities within Florence and the nearest passenger rail service is located in Eugene/Springfield. The Coos Bay Rail Link, a 134-mile rail line which runs between Eugene and Coos Bay and is operated by the Port of Coos Bay, crosses the Siuslaw River approximately 2.5 miles east of Florence.

The current TSP identifies the rail overpass at Cushman as deficient: the clearance over OR 126 was below the optimal 18 feet, and during high water or high tides, this section of OR 126 is prone to flooding. Raising the rail overpass would likely require a full railroad bridge replacement over the Siuslaw River, given how close the highway and the rail overpass are to the river. In 2012, a rough estimate for this project (raising the overpass and rebuilding the bridge) was $100 million to $150 million, well beyond the financial means for the Coos Bay Rail Link, the Port of Coos Bay, or the Port of Siuslaw. The current TSP includes a policy to "promote a feasibility study to identify solutions to the deficient rail overpass in Cushman, and support implementation of the chosen alternative."

The following alternatives were developed to address rail transportation:

- Work with Link Lane on adding runs or adjusting existing runs to better coordinate with Amtrak and Cascade POINT service at the Eugene Amtrack Station.

Air

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

The airport completed an Airport Master Plan Update in 2010, which the Florence City Council adopted. The current TSP also outlines projects and policies related to the airport. The project and policies from these two plans are outlined below:

- Airport Master Plan Update projects
  - Runway and Taxiway Extension (Phase 1): Construct the 400-foot north runway extension with a 200-foot displaced threshold for obstruction clearance.
  - Runway and Taxiway Extension (Phase 2): Eliminate the 200-foot displaced threshold for Runway 15 by removing approximately 87,100 cubic yards of material from the sand dune.
  - Runway and Taxiway Extension (Phase 3): Remove approximately 116,200 cubic yards of additional material from the sand dune.
  - Non precision Instrument Approach: The development of an instrument approach is recommended for Runway 15/33.
  - North Landside Development Area: The preferred alternative includes space reserved for development of additional conventional hangars, T-hangars and aircraft apron. As currently planned, the north landside area provides storage capacity for approximately 60 additional aircraft.
- Other projects and policies
  - As the use of the airport increases, and night operations become a reality, the City shall work with neighboring residential uses to minimize issues of noise and vibration.
  - The City shall protect current and future viability of the airport and compatibility of land uses through the Public Airport Safety and Compatibility Overlay Zone and coordination with the Oregon Department of Aviation and the Federal Aviation Administration.
  - Coordinate between the City of Florence and the Florence Municipal Airport on extending Pacific View Drive to Rhododendron Drive.

Safe Routes to School

Safe Routes to School (SRTS) plans make it safer for students to walk, bike, or take public transit to school. Safer routes encourage more walking and biking and provide convenient and accessible options to and from school and in surrounding neighborhoods. SRTS programs include six components known as the Six E's: evaluation, education, encouragement, engineering, enforcement, and equity. This section provides a summary of the Six E's and identifies alternatives to be considered by the City.

SAFE ROUTES TO SCHOOL – SIX E'S

Education

The education component provides students and residents with information such as transportation options and the benefits of walking and biking to school. Education strategies for SRTS programs include identifying who needs to receive the information, what information needs to be shared, and how to convey the messages. Education components could include:

- Educational videos
- Structured skill practice training
- Lessons integrated into classroom subjects
- Media: radio, internet videos, newspaper articles, and television features

Encouragement

The encouragement component is most closely linked to the education component of a SRTS program. Encouragement strategies generate excitement and interest in walking and biking through events and activities. The encouragement component rewards participation and is used to increase the number of students who walk and bike to school. Encouragement strategies can be used to garner support for other SRTS components such as installing sidewalk. Encouragement components could include:

- Special events, such as international walk to school events
- Mileage clubs and contests
- Ongoing activities
  - Walking school bus or bicycle train
  - Park and walk
  - On-campus walking activities

Engineering

The engineering component of a SRTS program identifies design, implementation, operations and maintenance of physical improvements aimed at addressing specific needs which make walking and biking to school safer, more comfortable and convenient. An evaluation of the school environment is necessary to identify engineering problems and solutions. Engineering components could include:

- Pedestrian and bicycle facilities: sidewalks, crosswalks, bike lanes, bicycle racks, etc.
- Pedestrian and bicycle signage and signals equipment
- Enhanced crossing treatments: curb extensions, raised median islands, flashing beacons

Enforcement

Enforcement is included as part of a SRTS program to reinforce the objectives of the program and deter unsafe traffic behaviors and encourage all road users to obey traffic laws and share the road safely. Enforcement strategies involve a network of community members who promote safe walking, biking and driving. Enforcement components could include:

- Identifying unsafe behaviors
  - Driver behaviors (e.g., speeding, failing to yield to pedestrians/bicyclists, running red lights, passing stopped school buses, parking in crosswalks, etc.)
  - Pedestrian and bicyclist behaviors (e.g., not following direction of crossing guards, crossing at undesirable locations, riding in traffic, no wearing bike helmet, etc.)
- Community enforcement (e.g., safety patrols, adult school crossing guards, neighborhood speed watch programs, etc.)
- Law enforcement methods (e.g., speed trailers, active speed monitors, traffic complaint hotlines, photo enforcement, etc.)

Evaluation

The evaluation component assesses which strategies and approaches are successful. Evaluation of SRTS programs ensure that initiatives support equitable outcomes, identify unintended consequences or opportunities to improve effectiveness and ensure there are adequate resources to implement all components of a SRTS program. Evaluation components could include:

- Data collection; surveys, observations
- Information sharing
- Walkability assessment
- Records of citations

Equity

Equity in a SRTS program ensures that program initiatives are benefiting all demographic groups. This component is especially important to ensuring safe, healthy, and fair opportunities for low-income students, students of color, students of all genders, students with disabilities and others. Incorporating equity efforts into all components of a SRTS could include:

- Assessing whether the recipient of education efforts reflect larger demographic patterns of the community
- Ensuring encouragement activities are available to low-income students and students of color
- Ensuring policy and physical improvements are implemented in low-income communities and communities of color
- Ensuring law enforcement officers build trust with communities and do not target students of color, low-income students, or other community residents
- Initiating efforts that decrease health disparities

SAFE ROUTES TO SCHOOL ALTERNATIVES

The SRTS alternatives considered for Florence are summarized below:

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

Safety

Traffic safety plays an important role in developing the most appropriate alternatives for a given gap or deficiency, particularly in areas where real or perceived safety risks may prevent people from using more active travel modes, such as walking, biking, and taking transit. The real or perceived safety risks may reflect the crash history of an area or the physical and/or operational characteristics of the roadways (winding curves, steep grades, high traffic volumes, high travel speeds, excessive heavy vehicles, etc.). Several methodologies have been developed to analyze and identify alternatives for addressing traffic safety within an area. Many of which are documented in the Highway Safety Manual (HSM) as well as several other resources developed by ODOT for addressing safety along roadway segments, at intersections, and for pedestrian and bicyclists.

SAFETY COUNTERMEASURES

This section summarizes the countermeasures considered for implementation to address traffic safety along roadway segments, at intersections, and for pedestrians and bicyclists. Note: many of the countermeasures overlap, which illustrates how some countermeasures address multiple safety issues.

Roadway Segments

There are a variety of potential safety solutions that can be applied within Florence to address systemic crashes that occur along roadway segments, such as head-on collisions, sideswipes, and run off the road crashes as well as general speeding and other driver behaviors.

- Enhanced signs and pavement markings for curves (with and without flashing beacons)
- Tree/vegetation removal

- Street lighting
- Speed reduction treatments/traffic calming
- Enhanced enforcement
- Roadway reconfiguration

Intersections

There are a variety of potential safety solutions that can be applied within Florence to address systemic crashes that occur at intersections, such as angled crashes, turning movement crashes, rear-end crashes, and crashes that involve other travel modes (pedestrian, and bicycles).

- Enhanced signs and pavement markings (e.g. stop signs, warning signs, and/or beacons)
- Enhanced visibility of the intersection for entering vehicles (e.g. warning signs, street name signage on both sides of the road, and intersection lighting)
- Application of traffic control devices (signs, markings and signals)
- Signal improvements (e.g. signal timing, signal phasing)
- Left-turn phasing (e.g. permitted, protected, permitted-protected)
- Enhanced enforcement
- Pedestrian and bicycle improvements (see below)
- Intersection lighting
- Speed reduction treatments/traffic calming
- Roundabouts

Pedestrian and Bicycle

There are a variety of potential safety solutions that can be applied within Florence to address pedestrian and bicycle safety. The following provides a summary of the solutions by traffic control.

Signalized Intersections

Pedestrian Safety Solutions

- Street lighting
- Right-turn channelization
- Countdown pedestrian heads
- Leading pedestrian interval
- Left-turn phasing
- Vehicle turning movement restrictions
- Curb extensions (bulb-outs, neck downs)

Bicycle Safety Solutions

- Street lighting
- Bicycle signal
- Bicycle detection
- Pavement markings
- Right-turn channelization
- Leading bicycle interval
- Left-turn phasing
- Vehicle turning movement restrictions
- Protected intersection design
- Forward bicycle queueing area (bike box)

Unsignalized intersections

Pedestrian Safety Solutions

- Street lighting
- Enhanced crossing treatments
- Reduced curb radii
- Pedestrian refuge island or median
- Speed reduction treatments
- Vehicle turning movement restrictions
- Raised crosswalks

Bicycle Safety Solutions

- Street lighting
- Enhanced crossing treatments
- Reduced curb radii
- Skip Striping
- Supplemental signs and markings
- Bicycle boulevards
- Longitudinal bike stencil
- Speed reduction treatments
- Vehicle turning movement restrictions
- Strip bike lanes
- Raised crossings

Roadway segment – No traffic control

Pedestrian Safety Solutions

- Street lighting
- In-roadway warning lights
- Pedestrian-activated warning beacons
- Access management
- Sidewalks street lighting
- Enhanced mid-block crossing treatments
- Road reconfiguration
- Pedestrian refuge island or median

Bicycle Safety Solutions

- Access management
- Bicycle route signage
- Longitudinal bike stencil
- Separated bike lanes
- Dynamic warning signs
- Enhanced mid-block crossing treatments
- Street lighting
- Restrict on-street parking
- Road reconfiguration
- Refuge Island or median

SAFETY ALTERNATIVES

The safety alternatives are summarized in Table 8. These alternatives are intended to address safety issues identified at the study intersections. Many of these alternatives will also address operational deficiencies described earlier in this memorandum. The alternatives shown in **bold** are identified in the current TSP.

Table 8: Safety Alternatives

Intersection	Considerations	Alternatives
ODOT Intersections		
US 101/ Heceta Beach Rd	» Excess proportion of turn movement crashes	» Install advance intersection warning signs with flashing beacons » Install southbound dynamic speed feedback sign after entering Florence

		» Provide traffic calming measures on US 101 approaching the intersection » Install intersection lighting
US 101/ Munsel Lake Rd	» Excess proportion of turn movement crashes	» Install advance intersection warning signs with flashing beacons » Evaluate need for traffic control modification (see intersection alternatives) » Provide traffic calming measures on US 101 approaching the intersection » Install intersection lighting
US 101/ 46^{th} St	» Excess proportion of turn movement crashes	» Install advance intersection warning signs with flashing beacons » Provide traffic calming measures on US 101 approaching the intersection » Install street name signs » Install intersection lighting » Trim/remove vegetation
US 101/ OR 126	» Excess proportion of rear-end crashes	» Provide traffic calming measures on US 101 and OR 126 approaching the intersection » Increase visibility of traffic signal heads (larger bulbs, reflective backplates, etc.)
US 101/ Rhododendron Dr	» Excess proportion of rear-end crashes	» Provide traffic calming measures on US 101 approaching the intersection » Increase visibility of traffic signal heads (larger bulbs, reflective backplates, etc.)
OR 126/ Quince St	» Intersection crash rate exceeds 90^{th} percentile rate » Intersection crash rate exceeds critical crash rate » Excess proportion of angle crashes	» Evaluate need for traffic control modification (see intersection alternatives) » Provide traffic calming measures on OR 126 approaching the intersection » Install additional street lighting
City Intersections		
Rhododendron Dr/ Heceta Beach Rd	» Intersection crash rate exceeds 90^{th} percentile rate » Excess proportion of angle crashes	» Install advance intersection warning signs on Heceta Beach Rd » Provide traffic calming measures on Heceta Beach Rd approaching the intersection » Trim vegetation in SE and SW corners to increase sight distance

		» Install intersection lighting
Kingwood St/ 15th Street	» Intersection crash rate exceeds 90th percentile rate	» Install advance intersection warning signs on Kingwood St » Provide traffic calming measures on Kingwood St approaching the intersection » Trim vegetation in SE corner to increase sight distance
Kingwood St/ 9th Street	» Intersection crash rate exceeds 90th percentile rate » Intersection crash rate exceeds critical crash rate » Excess proportion of angle crashes	» Install advance intersection warning signs on 9th St » Evaluate need for traffic control modification (see intersection alternatives) » Install additional intersection lighting

In addition to the Safety Alternatives identified in Table 8, several additional alternatives were considered along specific roadways:

- Heceta Beach Road – implement traffic calming/speed reduction treatments from Rhododendron Drive to US 101.
- Munsel Lake Road – implement traffic calming/speed reduction treatments from US 101 to N Fork Road.
- N Fork Road – implement traffic calming/speed reduction treatments from US 101 to Munsel Lake Road.
- Park Village Drive-Loop – implement traffic calming/speed reduction treatments around loop.

Local Street Connectivity

Most streets in Florence are classified as local streets. Many local streets were built on a grid system while others were built on a network of cul-de-sacs and stub streets, which limits the potential for future connections. These streets can be desirable to residents because they tend to have lower traffic volumes and travel speeds; however, cul-de-sacs and stub streets result in longer trip distances, increased reliance on arterials and collectors for local trips, and limited options for people to walk and bike to the places they want to go.

Incremental improvements to the street system can be planned carefully to provide route choices for motorists, cyclists, and pedestrians 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, as discussed in the previous sections. The following summarizes the potential local street connection and extension opportunities within Florence.

LOCAL STREET CONNECTIONS

There are a number of areas within Florence that could experience future development or redevelopment, including in the southwest, south, and north parts of the City. Within these areas, there are opportunities for new local streets that could improve access and circulation for all travel modes. Figure 1 illustrates the location of the local street connections. The lines shown in Figure 1 represent potential connections and the general direction for the placement of the connection. In each case, the specific alignments and design will be determined upon development review.

Emerging Transportation Technologies

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

TRANSPORTATION TECHNOLOGY LIAISON

A transportation technology liaison is someone who facilitates connections between the city and private sector companies offering various forms of emerging technologies. The liaison could be a City employee, an employee of a public or private organization, or a private contractor. The liaison role could also be developed in coordination with Lane County, University of Oregon, and/or others (see stakeholder connection for more potential roles and responsibilities of the liaison).

PUBLIC PARTNERSHIPS

Public partnerships are strategic partnerships with public entities in the region, state, or nation which can provide value to the City in the form of collaboration or other means depending on the partnership. The two primary public partnerships which may be most beneficial to the City are university partnerships and city partnerships.

- University partnership can be beneficial to the City by providing them with a direct connection to students and research programs. In addition, the partnership can create student interest and engagement with the City and encourage students to come to Florence after completing their studies.
- City partnerships can be beneficial to the City by allowing them to pool resources and collaborate on emerging technologies and to support users in the region so that emerging technologies do not stop at the city limits.

Private Sector Incentives

Private sector incentives are incentives provided to private sector companies that focus on emerging technologies to encourage them to operate in the City. These incentives could include financial assistance to help with the start-up cost or other incentives that lower the bar for operating within the City.

PRIVATE SECTOR POLICIES

As emerging technologies are primarily initiated by private sector companies, cities need to find a way to effectively work with these companies if they want to be supported by the emerging technologies. The primary connecting point of cities and private sector companies is through policy. Currently, the prime example of this interaction can be found in cities with micro mobility services, such as e-scooters. However, as private sector companies advance autonomous vehicle fleets and other technologies, these policies could become instrumental in maintaining a healthy transportation network. For example, policies that prevent an autonomous vehicle from using a specific cut through route and prioritizing routes that utilize the City's arterial network.

REVIEW CURRENT POLICIES

In addition to crafting new policy to accommodate emerging technologies, the review of current policies can be an effective first step to prepare the city for emerging technologies. Cities preparing for emerging technologies should review their current policies through the lens of the future technology they plan to accommodate. If the policy hinders or prohibits the desired future technology, alterations should be considered for that policy. Specifically, a review of the development code can be effective to find and alter policies that could prevent future flexible use areas as many innovative technologies push the boundaries of traditional land uses.

TECHNOLOGY INCUBATORS AND STARTUP LABS

As a focus on creative problem solving has emerged and startup businesses have begun to gain popularity, Technology Incubators and Startup Labs have become an effective means to foster innovation and entrepreneurship. Technology Incubators (commonly referred to as Incubators) and Startup Labs provide infrastructure for new ideas and emerging businesses to grow.

INFRASTRUCTURE

Investing in new infrastructure is often the first step cities take in preparing for emerging technologies. However, as emerging technologies are driven by the private sector, they can change rapidly and may not require major changes to the existing system to be effective. The following summarizes infrastructure improvements that could be useful to consider now in anticipation of the future transportation system.

EV Charging Stations

Electric vehicle (EV) charging stations are critical in accelerating the adoption of electric vehicles and other types of electric transportation. EV charging stations could be provided in many areas through the city to support the growing use of EVs. Potential locations in the City of Florence include: PeaceHealth Pease Harbor Medical Center, Old Town, Safeway, Fred Meyer, and the Three Rivers Casino Resort. Additionally, EV charging stations could be a requirement of private development.

Electric vehicle charging station funding is available through the Federal Highway Administration (FHWA) National Electric Vehicle Infrastructure (NEVI) formula funding program made available each fiscal year (FY) through FY 2026. In September 2022, it was announced the FHWA approved Oregon's state plan for $100 million funding for EV charging infrastructure. About two-thirds of the funding must be spent along identified Alternative Fuel Corridors. The FHWA has identified 11 roads as Alternative Fuel Corridors including US 101. The remaining funds will be used to close EV infrastructure gaps will be used for charging sites in rural and urban areas, underserved communities, and multi-family housing complexes. According to the Oregon National Electric Vehicle Infrastructure Plan, Oregon anticipates building out US 101 EV charging infrastructure with FY 2024 funding but has not yet identified where along US 101 infrastructure will be placed. EV charging stations may be provided in the City through NEVI funding.

Curb Management

As the city develops, curb management will become more important to ensure an efficient use of the space. The City should begin to develop curbside prioritization and management frameworks to help influence decision making based on user priority. Cities should evaluate how to allocate curbside priority for buses, bikes, freight, and individual vehicles. The National Association of City Transportation Officials (NACTO) Blueprint for Autonomous Urbanism provides, "a vision for how autonomous vehicles, and technology more broadly, can work in service of safe, sustainable, equitable, vibrant cities." The Blueprint asserts that autonomous vehicles offer opportunities for many benefits, however if not developed effectively could also exacerbate existing challenges and create new challenges. When an autonomous fleet becomes available to cities, parking in the quantity it is provided today will likely not be necessary. The City should begin to make plans for adaptive reuse of parking areas and find alternative uses for parking around the city, especially near mobility hubs. Considerations for pick-up drop-off zones at key destinations that are more likely to be used by mobility on demand, ride sharing, and taxi services.

CONNECT WITH STAKEHOLDERS ABOUT EMERGING TECHNOLOGIES

When adopting emerging technologies into the transportation system, it is important to connect with stakeholders prior to adoption to ensure the service can be offered throughout the city and surrounding area. The transportation needs of the community are not contained within the UGB of the city nor are the needs contained to only streets owned and operated by the City. Key stakeholders for the City include local residents, Lane County, and ODOT.

MOBILITY ON DEMAND & INNOVATIVE TRANSIT

Technology advances in ride hailing and other forms of transit (transportation with vehicles not owned by the user) have allowed for some innovative solutions to challenges that have been present in transportation systems for decades. These new transportation services are all in various phases of development and therefore some may not be practical at this time. A common service available now are services that offer mobility on demand such as Uber and Lyft. Mobility on demand is an effective way to offer a transportation alternative that is generally accepted among users around the world already. The addition of mobility on demand offers users a means to go directly from point A to point B without the need to park or return to a specific destination. Establishing these services in the area can also be used as an effective means to set up the city for a future autonomous shuttle service. Multiple mobility on demand service providers have programs developing autonomous technology. If a public-private relationship can be formed and Florence can be included in the service area, then this can open the door for an autonomous shuttle fleet that is funded/provided via private sector funding and through good policy practices these services can be regulated to function in the best interest of the city.

MOBILITY HUBS

Another major step Florence can take now is establishing mobility hubs within the city. Designating them early and building the infrastructure needed to support them is important to the success of the mobility hubs. As a first step in the formation of mobility hubs the City of Florence should identify one primary as well as one secondary mobility hub. The primary will be the priority for transportation infrastructure in the City of Florence and the secondary will be developed when funding already satisfies the needs of the primary. The Grocery Outlet area should be the primary mobility hub as this is currently the only location where the local transit service, The Rhody Express and the two intercity transit services, the Eugene-Florence Connector and Florence-Yachats Connector all operate and a potential secondary hub could be located somewhere in the vicinity of Old Town.

EMERGING TECHNOLOGY ALTERNATIVES

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

- Create a Transportation Technology Liaison Role: This role should serve to carry out the listed tasks below.
- Connect with cities in the surrounding area (Eugene), establish a service zone for any emerging technology coming to the area.
- Develop partnerships and programs with Lane Community College and the University of Oregon to attract students.
- Review the development code and create avenues for flexible uses.
- Hold public outreach to determine which emerging technologies local residents are interested in.
- Meet with ODOT, Lane County, and other relevant jurisdictions in the surrounding area and discuss emerging technologies.
- Establish a primary and secondary mobility hub in the City.
- Consider adding EV charging stations at key destinations (PeaceHealth Pease Harbor Medical Center, grocery stores, Three Rivers Casino Resort, and Old Town) and EV charging requirement to development code.
- Invest in pick-up drop-off loops and adaptive reuse design for any parking structures/lots.
- Allow multiple ride-hailing services and micromobility services (E-scooters, bike share, etc.) to be established in Florence.

Parking Management Strategies

The parking study prepared prior to the start of this project indicates that on- and off-street parking demand is generally below the *effective capacity* of the parking supply throughout most of the study area except Old Town. On- and off-street parking demand in Old Town currently exceeds *effective capacity* during the weekday and weekend peak time periods and is projected to continue to exceed *effective capacity* in the future.

This section identifies several parking policies and strategies the City could implement in Old Town to manage parking demand while improving access and circulation for all travel modes. Many of these strategies could be applied throughout the city to address similar issues if/when they arise. The policies and strategies are organized into five categories as described below.

USER INFORMATION

The first step to improving parking conditions within Old Town is to improve user information. Many parking issues can be improved or resolved with more effective communication about the location, purpose, and availability of parking as well as information about other methods of accessing a destination (e.g., walking, biking, taking transit, etc.).

Old Town attracts many out-of-town visitors who may not have extensive knowledge about parking or alternative transportation options within the city. User information could provide people with information they need to understand the local parking system and the most appropriate ways to use it. The user information policies and strategies that could be implemented within Old Town include:

- Establish consistent branding for public parking facilities, such as a common "P"
- Install wayfinding and signage to help locate available parking
- Develop neighborhood parking maps and post them online and in prominent areas
- Develop *How to Park* or *How to Access Old Town* resources and post them online
- Coordinate with community destinations to develop and distribute materials
- Conduct stakeholder outreach and education to inform public about parking options
- Create a parking ambassador position to provide information and guidance
- Collect and distribute real-time information about parking conditions at key locations

TRANSPORTATION DEMAND MANAGEMENT

The next step in improving parking conditions within Old Town is implementing Transportation Demand Management (TDM) programs and strategies to reduce parking demand by promoting active modes of transportation for commute and non-commute trips. These programs and strategies are particularly effective in reducing parking demand generated by employees of local businesses and supporting alternative modes of accessing local destinations by residents and visitors. The TDM policies and strategies that could be implemented within Old Town are summarized below. A detailed description of potential TDM measures is also provided later in this memorandum.

- Improve pedestrian and bicycle facilities (e.g., sidewalks, bike lanes, safe crossings, bike racks)
- Improve transit facilities and services (e.g., frequency, hours of operation, stop amenities)
- Increase transit supportive programs and services (e.g., free transit passes, trip planning)
- Improve safety and security (e.g., neighborhood watch, community policing, special police patrols, improved lighting, pedestrian escorts, monitoring of facilities)

PARKING MANAGEMENT

The tools and strategies below are intended to encourage more efficient use of the existing parking supply and improve the quality of service provided to parking users. When parking demand regularly exceeds the *effective capacity* of the parking supply, these tools and strategies can be used to help manage parking.

- Require good neighbor agreements between local businesses and associations
- Establish parking collaborative to align the City's interests with local businesses
- Implement/recalibrate time limits and/or user restrictions
- Establish parking zones (e.g., loading zones, pick-up/drop-off zones)
- Implement and manage an area parking permit program
- Implement and manage a paid parking program
- Complete a neighborhood audit – this was completed as part of the parking study
- Monitor, measure and evaluate the performance of the parking system

ENFORCEMENT

The following tools and strategies are intended to improve enforcement of parking management strategies. Almost all parking management strategies require regular enforcement to be effective. In general, parking enforcement should be frequent, fair, friendly, and designed to encourage proper parking behavior, not to discourage users from accessing an area.

- Implement regular parking enforcement of parking requirements
- Implement focused enforcement in problematic areas
- Issue warnings to first time parking violators
- Implement a periodic ticket forgiveness program to improve the perception of parking enforcement and clear a potential backlog of unpaid parking tickets
- Extend enforcement hours as necessary to reflect the needs of Old Town
- Implement a graduated citation structure that is lenient on infrequent or first time violators and more punitive on repeat offenders

INCREASE THE PARKING SUPPLY

The following tools and strategies are intended to increase the parking supply. Generally speaking, constructing relatively large amounts of new parking should be a last resort, as it is a major investment that has a long life and can significantly alter the character and landscape of an area. Constructing new parking areas can also be difficult in locations with space constraints, such as Old Town.

- Convert no-parking areas to parking areas, particularly in areas where existing restrictions are no longer needed
- Create motorcycle or compact vehicle parking in areas that are insufficient for a regular parking stall

- Reconfigure existing off-street parking facilities to identify additional space for parking
- Restripe parallel parking to angled parking (e.g., front-in or back-in angle parking)
- Convert travel lanes to parking lanes during off-peak periods or on a permanent basis
- Establish remote parking areas that are served by transit to relocate parking demand to the fringe area of the community
- Allow multiple proximate land uses to share a common parking supply, particularly if peak parking demand occurs at different times
- Establish public-private partnerships to open access to existing private parking facilities or construct new parking (for instance, through co-financing) to serve both site-specific users and the general public.
- Construct a new parking facility - If all other parking management tools and strategies have been implemented and parking demand continues to exceed the *effective capacity* of the parking supply, it may be necessary to construct a new parking facility.

Strategies for Old Town

Florence's Old Town neighborhood, centered around Bay Street and the city's waterfront along the Siuslaw River, is the city's downtown with a wide range of dining and shopping options. The neighborhood, with a tight street grid, is a reasonably accessible place to get around by foot, bike, or car. While there are sidewalks on most streets, the sidewalk network isn't complete in all places, and not all curb ramps are accessible for people with mobility devices. Conversely, there is limited to no bicycle infrastructure for anyone getting around. Parking can sometimes be an issue along Bay Street, but the neighborhood generally has ample parking availability, as found in the City's *Parking Data Collection Assessment Summary* from June 2021.

Like many communities, the Old Town neighborhood has added outdoor dining during the COVID-19 pandemic. This approach to using street space for non-automotive use should foster a renewed focus on improving accessibility for all modes to the city's downtown. Table 9 below outlines all of the walking, biking, transit, and freight alternatives, and general accessibility is a broad theme. The alternatives shown in **bold** are identified in the current TSP.

Table 9: Old Town Alternatives

Roadway	Considerations	Alternatives
Street System Alternatives		
Bay Street US 101 Bridge to Nopal Street	» Narrow sidewalks with limited opportunities for outdoor seating » Limited pedestrian and bicycle facilities and ADA accommodation » Limited parking opportunities	» Convert to one-way westbound » Convert to one-way eastbound » Convert to a festival Street – Restrict vehicle traffic during events through use of removable bollards » Complete a streetscape plan

Pedestrian Alternatives		
2nd St US 101 to Harbor St	» Sidewalk gaps and narrow sidewalks on both sides » Enhanced crosswalk at US 101/2nd St » Connects US 101 and OR 126 via Quince St	» **Fill sidewalk gaps within Old Town** » Reconstruct existing sidewalks with landscape strips » Install enhanced crossings at Nopal St, Oak St, Harbor St (e.g., marked crosswalks with curb extensions)
Bay St Kingwood St to Maple St	» Complete sidewalks on both sides » High level of traffic stress (narrow sidewalk width, no buffer)	» Reconstruct sidewalks to increase width » Install curb extensions at Kingwood St, Laurel St, Maple St, and mid-block by the boardwalk » **Install mid-block crosswalk at Bay St/ Nopal St corner by the boardwalk** » Develop a streetscape design plan
Laurel St-Old Town Wy US 101 to Maple St	» Sidewalk gaps on Laurel St and Old Town Wy » Streets run through downtown Florence and connect to US 101	» **Fill sidewalk gaps on both sides**
Maple St US 101 to Bay St	» Sidewalk gaps on one side » Connects US 101 with downtown Florence	» Fill in sidewalk gaps on one side
Bicycle Alternatives		
2nd St US 101 to Harbor St	» Shared lane pavement markings exist from Maple St to the east » Approximately 20-foot lanes (including on-street parking)	» Do nothing » Extend shared lane pavement markings from Maple St to US 101
Bay St Kingwood St to Maple St	» No existing bike infrastructure » Low level of bicycle traffic stress » Commercial center of Florence with lots of pedestrians » Public input seeks to improve walking and biking experience	» Do nothing » Add shared lane pavement markings
Laurel St-Old Town Wy US 101 to Maple St	» No existing bike infrastructure » Streets run through downtown Florence and connect to US 101	» Do nothing » Add shared lane pavement markings
Maple St US 101 to Bay St	» No existing bike infrastructure » Connects US 101 with downtown Florence	» Do nothing » Add shared lane pavement markings

Transit Alternatives		
Potential Mobility Hub Locations	» As a first step in the formation of mobility hubs, Florence should identify one primary as well as one secondary mobility hub. The primary will be the priority for transportation infrastructure in the City of Florence and the secondary will be developed when funding already satisfies the needs of the primary. » Mobility hubs are most effective next to transit stops where other mobility options (bikeshare, carshare, scooters, etc.) are available.	» Explore establishing a secondary mobility hub at the Port parking lot (1st St and Nopal St)
Freight Alternatives		
Old Town	» Trucks frequently double park to make deliveries » Deliveries occur at all times of the day	» Establish truck loading zones within the downtown area and develop policies related to the use of the truck loading zones, specifically for businesses on Bay Street.

Funding Programs

The following summarizes current and potential future funding sources for transportation improvements.

CURRENT AND POTENTIAL FUTURE FUNDING SOURCES

The city of Florence currently received funding from the state gas tax, which is comprised of proceeds from excise taxes imposed by the state and federal government, and from several local sources, including transportation system development charges (SDCs), franchise fees for solid waste processing, intergovernmental revenues from formula funding and grants, a street lighting fee, and interest income and transfers.

Based on the current transportation funding sources identified above, Florence will likely need to identify additional funding sources that can be dedicated to transportation-related capital improvement projects over the next 20 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. Table 10 summarizes the funding opportunities and identifies the intended use of the funds and any applicable project types.

Table 10: Funding Opportunities Summary

Funding Source	Intended Use
Federal Sources	
Infrastructure Investment and Jobs Act (IIJA)	The bipartisan infrastructure bill signed into law in 2021 to fund road, bridge, bicycling, and pedestrian improvements

Surface Transportation Block Grant (STBG) Program	Preserve and improve surface transportation investments from a flexible funding source
TA Set-Aside	Smaller-scale transportation projects
Congestion Mitigation and Air Quality (CMAQ) Improvement Program	Support programs that reduce emissions from transportation-related activities
Highway Safety Improvement Program (HSIP)	Reduce traffic fatalities and serious injuries on all public roads
Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grants	Road, rail, transit, and port projects that achieve national objectives and have significant local and regional impact
Recreational Trails	Develop and maintain recreational trails and trail-related facilities
National Highway Performance Program (NHPP)	Projects that improve conditions along NHS Routes
State Sources	
Statewide Transportation Improvement Program (STIP)	Multi-modal projects on federal, state, and local facilities
State Highway Trust Fund	Bicycle and pedestrian infrastructure improvements
Sidewalk Improvement Program (SWIP)	Projects that enable people to move across or around the state highway system
Safe Routes to School (SRTS)	Projects that improve safety for children walking or biking to school
All Roads Transportation Safety (ARTS)	Projects that address hotspot and systemic safety issues and concerns (roadway departure, intersection safety, and bicycle and pedestrian safety); part of STIP program and utilizes federal HSIP funds
Oregon Community Paths (OCP) Program	Create and maintain connections through shared-use paths
House Bill 2017	Create a steady funding stream for statewide transportation improvements
Local Sources	
SDCs	Increase capacity of transportation system to accommodate growth
Tax-Increment Financing (TIF)	Provide additional funding for transportation infrastructure
Local Fuel Tax	Adds a tax on top of gasoline costs that support street operation, maintenance, and preservation
Local Improvement Districts (LIDs)	Pools funds from property owners to make local transportation improvements

Economic Improvement Districts (EIDs)	Pools funds from area businesses to make improvements in the business district.
Urban Renewal/Tax Increment Financing	Raises revenue from increased property values in an area to fund localized improvements
Local Bond Measures	Asks voters for bond funding to finance a set list of infrastructure investments
Street Utility Fee/Road Maintenance Fee	Calculates trips generated for land uses and charges owners a fee relative to the number of trips

Development Code Amendments

Oregon Administrative Rule (OAR) 660, Division 12, also known as the Transportation Planning Rule (TPR), defines the necessary elements of a local TSP and how to implement Statewide Planning Goal 12 – Transportation. The overall purpose of the TPR is to provide and encourage a safe, convenient, and economic transportation system. The rule also implements provisions of other statewide planning goals related to transportation planning in order to plan and develop transportation facilities and services in close coordination with urban and rural development. The TPR directs TSPs to integrate comprehensive land use planning with transportation needs and to promote multi-modal systems that make it more convenient for people to walk, bicycle, use transit and drive less. The Florence TSP must be consistent with the TPR, which was amended most recently in 2022.

The TPR requires cities to prepare local TSPs that are consistent with the Oregon Transportation Plan (OTP); Technical Memorandum #1 (Plans and Policy Review) addresses the OTP and other background documents that will be referenced in updating the TSP. Attachment C contains a review of the City's Development Code for compliance with the TPR. The table contained in Attachment C describes how Development Code requirements meet particular TPR sections. The table provides a list of recommended Development Code amendments, recommended modifications that may be necessary to implement the updated TSP, or where local requirements could be strengthened to be more consistent with the TPR. To the extent necessary, suggested draft code language will be prepared at the implementation phase of the TSP update project that supports the policies and recommendations of the draft TSP.

Transportation Demand Management

Transportation Demand Management (TDM) is a general term used to describe any action that removes single occupancy vehicle (SOV) trips from the roadway during peak time periods. As population and employment increase in the city, the number of trips will also increase. The ability to change travel behavior and provide alternative modes will help accommodate the growth in trips without the need for significant investments in new infrastructure. A major focus of TDM is on major employers; however, there are many things the City can do to support TDM implementation. The following summarizes TDM alternatives that can be applied by the City.

- Learn about TDM and the role it can play in achieving local planning objectives
- Encourage and require local businesses to implement TDM solutions
- Work to build partnerships with community organizations to support TDM implementation.

- Help create TDM programs to provide local TDM services
- Improve non-motorized transportation facilities, public transit services, and other transportation services
- Support carshare, ridesharing, bikeshare, e-scooters, and other micromobility services
- Apply more comprehensive transportation planning, including multimodal level of service indicators when evaluating transportation improvements
- Implement TDM strategies, such as commute trip reductions programs for employees, and special transportation management when sponsoring events that attract crowds.

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

Attachments

A. Intersection Operations Analysis Worksheets
B. Enhanced Crossing Treatments
C. Development Code Review

Attachment A Intersection Operations Analysis Worksheets

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	6	216	0	181	4	759	203	184	598	1
Future Volume (veh/h)	0	0	6	216	0	181	4	759	203	184	598	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1750	1750	1300	1300	1750	1436	726	1491	1381	1163	1409	1750
Adj Flow Rate, veh/h	0	0	6	232	0	195	4	816	218	198	643	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	33	33	0	23	75	19	27	43	25	0
Cap, veh/h	0	0	350	308	0	350	179	837	643	171	907	1
Arrive On Green	0.00	0.00	0.24	0.24	0.00	0.24	0.01	0.56	0.56	0.09	0.64	0.64
Sat Flow, veh/h	0	0	1483	1064	0	1483	692	1491	1146	1108	1406	2
Grp Volume(v), veh/h	0	0	6	232	0	195	4	816	218	198	0	644
Grp Sat Flow(s),veh/h/ln	0	0	1483	1064	0	1483	692	1491	1146	1108	0	1408
Q Serve(g_s), s	0.0	0.0	0.4	25.3	0.0	13.7	0.3	62.8	12.2	10.5	0.0	35.4
Cycle Q Clear(g_c), s	0.0	0.0	0.4	25.7	0.0	13.7	0.3	62.8	12.2	10.5	0.0	35.4
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	0	0	350	308	0	350	179	837	643	171	0	908
V/C Ratio(X)	0.00	0.00	0.02	0.75	0.00	0.56	0.02	0.97	0.34	1.16	0.00	0.71
Avail Cap(c_a), veh/h	0	0	357	314	0	357	205	850	653	171	0	908
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	34.7	44.6	0.0	39.8	14.0	25.2	14.1	34.9	0.0	13.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	9.7	0.0	1.9	0.0	24.6	0.3	118.9	0.0	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	7.5	0.0	5.2	0.0	26.6	3.2	10.7	0.0	11.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	34.7	54.2	0.0	41.7	14.0	49.8	14.4	153.8	0.0	16.3
LnGrp LOS	A	A	C	D	A	D	B	D	B	F	A	B
Approach Vol, veh/h		6			427			1038			842	
Approach Delay, s/veh		34.7			48.5			42.2			48.7	
Approach LOS		C			D			D			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.0	71.0		32.4	5.1	80.9		32.4				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	10.5	67.5		28.5	5.0	73.0		28.5				
Max Q Clear Time (g_c+I1), s	12.5	64.8		2.4	2.3	37.4		27.7				
Green Ext Time (p_c), s	0.0	1.7		0.0	0.0	5.3		0.2				
Intersection Summary												
HCM 6th Ctrl Delay			45.7									
HCM 6th LOS			D									

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	164	244	35	93	116	992	46	1010
v/c Ratio	0.68	0.67	0.27	0.27	0.44	0.65	0.15	0.79
Control Delay	48.6	32.5	36.4	24.9	10.8	15.2	6.2	22.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.6	32.5	36.4	24.9	10.8	15.2	6.2	22.0
Queue Length 50th (ft)	76	77	15	27	20	193	8	210
Queue Length 95th (ft)	#218	#231	51	83	38	262	18	299
Internal Link Dist (ft)		1885		563		1469		3402
Turn Bay Length (ft)	225		150		150		100	
Base Capacity (vph)	240	363	132	342	431	2007	536	1915
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.67	0.27	0.27	0.27	0.49	0.09	0.53

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	0	40	1	0	24	30	1065	2	14	1030	21
Future Volume (veh/h)	15	0	40	1	0	24	30	1065	2	14	1030	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1463	1750	1313	1750	1750	1409	1504	1518	1750	1231	1422	1204
Adj Flow Rate, veh/h	16	0	43	1	0	26	32	1133	2	15	1096	22
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	21	0	32	0	0	25	18	17	0	38	24	40
Cap, veh/h	177	1	92	121	1	124	395	1872	3	370	1716	34
Arrive On Green	0.08	0.00	0.08	0.08	0.00	0.08	0.63	0.63	0.63	0.63	0.63	0.63
Sat Flow, veh/h	398	11	1101	46	11	1484	440	2954	5	354	2708	54
Grp Volume(v), veh/h	59	0	0	27	0	0	32	553	582	15	547	571
Grp Sat Flow(s),veh/h/ln	1510	0	0	1541	0	0	440	1442	1517	354	1351	1411
Q Serve(g_s), s	0.6	0.0	0.0	0.0	0.0	0.0	1.5	7.3	7.3	0.8	7.9	7.9
Cycle Q Clear(g_c), s	1.1	0.0	0.0	0.5	0.0	0.0	9.5	7.3	7.3	8.1	7.9	7.9
Prop In Lane	0.27		0.73	0.04		0.96	1.00		0.00	1.00		0.04
Lane Grp Cap(c), veh/h	270	0	0	246	0	0	395	914	961	370	856	894
V/C Ratio(X)	0.22	0.00	0.00	0.11	0.00	0.00	0.08	0.61	0.61	0.04	0.64	0.64
Avail Cap(c_a), veh/h	974	0	0	958	0	0	572	1494	1572	513	1400	1462
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.9	0.0	0.0	13.6	0.0	0.0	6.5	3.5	3.5	5.9	3.6	3.6
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.2	0.0	0.0	0.1	0.7	0.6	0.0	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	0.2	0.0	0.0	0.1	0.5	0.5	0.0	0.5	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.3	0.0	0.0	13.8	0.0	0.0	6.6	4.1	4.1	5.9	4.4	4.4
LnGrp LOS	B	A	A	B	A	A	A	A	A	A	A	A
Approach Vol, veh/h		59			27			1167			1133	
Approach Delay, s/veh		14.3			13.8			4.2			4.4	
Approach LOS		B			B			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		24.7		7.2		24.7		7.2				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		33.0		18.0		33.0		18.0				
Max Q Clear Time (g_c+I1), s		11.5		3.1		10.1		2.5				
Green Ext Time (p_c), s		8.7		0.2		8.7		0.1				
Intersection Summary												
HCM 6th Ctrl Delay			4.6									
HCM 6th LOS			A									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	34	4	22	17	4	22	32	1125	11	21	1056	36
Future Volume (vph)	34	4	22	17	4	22	32	1125	11	21	1056	36
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.95			0.93		1.00	1.00		1.00	1.00	
Flt Protected		0.97			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1353			1078		1308	2765		1445	2734	
Flt Permitted		0.80			0.84		0.23	1.00		0.22	1.00	
Satd. Flow (perm)		1111			925		316	2765		329	2734	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	36	4	23	18	4	23	34	1184	12	22	1112	38
RTOR Reduction (vph)	0	21	0	0	21	0	0	1	0	0	3	0
Lane Group Flow (vph)	0	42	0	0	24	0	34	1195	0	22	1147	0
Confl. Peds. (#/hr)	4					4	2		3	3		2
Confl. Bikes (#/hr)									1			2
Heavy Vehicles (%)	20%	67%	10%	46%	0%	56%	27%	20%	25%	15%	21%	19%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		4.5			4.5		33.9	33.9		33.9	33.9	
Effective Green, g (s)		4.5			4.5		33.9	33.9		33.9	33.9	
Actuated g/C Ratio		0.09			0.09		0.72	0.72		0.72	0.72	
Clearance Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		105			87		226	1977		235	1955	
v/s Ratio Prot								c0.43			0.42	
v/s Ratio Perm		c0.04			0.03		0.11			0.07		
v/c Ratio		0.40			0.28		0.15	0.60		0.09	0.59	
Uniform Delay, d1		20.2			19.9		2.2	3.4		2.1	3.3	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		2.5			1.7		0.3	0.5		0.2	0.5	
Delay (s)		22.7			21.7		2.5	3.9		2.2	3.8	
Level of Service		C			C		A	A		A	A	
Approach Delay (s)		22.7			21.7			3.9			3.7	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	4.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	47.4	Sum of lost time (s)	9.0
Intersection Capacity Utilization	47.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	4	22	17	4	22	32	1125	11	21	1056	36
Future Volume (veh/h)	34	4	22	17	4	22	32	1125	11	21	1056	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1477	835	1614	1122	1750	986	1381	1477	1409	1545	1463	1491
Adj Flow Rate, veh/h	36	4	23	18	4	23	34	1184	12	22	1112	38
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	20	67	10	46	0	56	27	20	25	15	21	19
Cap, veh/h	201	12	29	200	34	93	354	1792	18	360	1726	59
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.63	0.63	0.63	0.63	0.63	0.63
Sat Flow, veh/h	347	104	260	495	298	829	392	2845	29	420	2740	94
Grp Volume(v), veh/h	63	0	0	45	0	0	34	584	612	22	564	586
Grp Sat Flow(s),veh/h/ln	711	0	0	1622	0	0	392	1403	1471	420	1390	1444
Q Serve(g_s), s	2.1	0.0	0.0	0.0	0.0	0.0	2.1	9.2	9.2	1.2	8.8	8.8
Cycle Q Clear(g_c), s	3.0	0.0	0.0	0.9	0.0	0.0	10.9	9.2	9.2	10.4	8.8	8.8
Prop In Lane	0.57		0.37	0.40		0.51	1.00		0.02	1.00		0.06
Lane Grp Cap(c), veh/h	242	0	0	327	0	0	354	884	927	360	876	910
V/C Ratio(X)	0.26	0.00	0.00	0.14	0.00	0.00	0.10	0.66	0.66	0.06	0.64	0.64
Avail Cap(c_a), veh/h	519	0	0	915	0	0	477	1325	1389	492	1313	1364
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.0	0.0	0.0	14.2	0.0	0.0	7.4	4.1	4.1	7.4	4.0	4.0
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.2	0.0	0.0	0.1	0.9	0.8	0.1	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	0.3	0.0	0.0	0.1	0.9	1.0	0.1	0.9	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.6	0.0	0.0	14.4	0.0	0.0	7.5	4.9	4.9	7.5	4.8	4.8
LnGrp LOS	B	A	A	B	A	A	A	A	A	A	A	A
Approach Vol, veh/h		63			45			1230			1172	
Approach Delay, s/veh		15.6			14.4			5.0			4.9	
Approach LOS		B			B			A			A	

Timer - Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		26.5		8.4		26.5		8.4
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green Setting (Gmax), s		33.0		18.0		33.0		18.0
Max Q Clear Time (g_c+I1), s		12.9		5.0		12.4		2.9
Green Ext Time (p_c), s		9.1		0.2		8.6		0.1

Intersection Summary	
HCM 6th Ctrl Delay	5.4
HCM 6th LOS	A

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	160	178	153	160	189	52	742	171	225	850
v/c Ratio	0.68	0.76	0.77	0.72	0.53	0.57	0.87	0.30	0.78	0.65
Control Delay	72.1	77.7	83.0	76.9	12.9	92.3	58.5	9.9	73.1	34.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	72.1	77.7	83.0	76.9	12.9	92.3	58.5	9.9	73.1	34.0
Queue Length 50th (ft)	136	148	138	144	0	46	327	34	192	306
Queue Length 95th (ft)	259	281	270	276	79	111	503	89	#468	532
Internal Link Dist (ft)		1368		448			1440			1918
Turn Bay Length (ft)	275		400			125		100	475	
Base Capacity (vph)	380	370	317	351	459	195	1239	669	290	1431
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.48	0.48	0.46	0.41	0.27	0.60	0.26	0.78	0.59

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	160	178	153	160	189	52	742	171	225	850
v/c Ratio	0.68	0.76	0.77	0.73	0.53	0.63	0.86	0.30	0.83	0.66
Control Delay	64.2	68.9	75.9	69.7	12.1	90.9	52.6	8.7	74.5	31.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.2	68.9	75.9	69.7	12.1	90.9	52.6	8.7	74.5	31.1
Queue Length 50th (ft)	122	132	124	128	0	41	290	26	174	277
Queue Length 95th (ft)	212	229	224	228	70	#113	#504	79	#387	460
Internal Link Dist (ft)		1368		448			1440			1918
Turn Bay Length (ft)	275		400			125		100	475	
Base Capacity (vph)	382	374	299	331	444	99	897	662	272	1293
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.48	0.51	0.48	0.43	0.53	0.83	0.26	0.83	0.66

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	154	138	33	199	102	181	50	712	164	216	741	75
Future Volume (veh/h)	154	138	33	199	102	181	50	712	164	216	741	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1545	1450	1463	1327	1504	1477	1368	1463	1286	1354	1450	1559
Adj Flow Rate, veh/h	160	144	34	156	177	0	52	742	171	225	772	78
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	15	22	21	31	18	20	28	21	34	29	22	14
Cap, veh/h	239	184	43	199	237		59	854	505	247	1142	115
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.00	0.05	0.31	0.31	0.19	0.45	0.45
Sat Flow, veh/h	1472	1132	267	1264	1504	1252	1303	2780	1085	1290	2519	254
Grp Volume(v), veh/h	160	0	178	156	177	0	52	742	171	225	422	428
Grp Sat Flow(s),veh/h/ln	1472	0	1399	1264	1504	1252	1303	1390	1085	1290	1377	1396
Q Serve(g_s), s	10.2	0.0	12.1	11.8	11.2	0.0	3.9	25.1	10.0	17.0	24.0	24.0
Cycle Q Clear(g_c), s	10.2	0.0	12.1	11.8	11.2	0.0	3.9	25.1	10.0	17.0	24.0	24.0
Prop In Lane	1.00		0.19	1.00		1.00	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	239	0	227	199	237		59	854	505	247	625	633
V/C Ratio(X)	0.67	0.00	0.78	0.79	0.75		0.87	0.87	0.34	0.91	0.68	0.68
Avail Cap(c_a), veh/h	474	0	450	381	454		122	1105	603	331	772	782
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.1	0.0	39.9	40.3	40.0	0.0	47.1	32.5	16.9	39.3	21.4	21.4
Incr Delay (d2), s/veh	2.4	0.0	4.4	5.0	3.5	0.0	13.6	5.1	0.1	20.1	1.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	0.0	4.4	3.9	4.3	0.0	1.5	8.8	3.3	6.7	7.6	7.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.5	0.0	44.3	45.3	43.5	0.0	60.8	37.6	17.1	59.4	22.4	22.4
LnGrp LOS	D	A	D	D	D		E	D	B	E	C	C
Approach Vol, veh/h		338			333			965			1075	
Approach Delay, s/veh		43.0			44.4			35.2			30.1	
Approach LOS		D			D			D			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.0	49.6		20.1	23.6	35.0		20.7				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	9.3	55.7		30.0	25.5	39.5		32.0				
Max Q Clear Time (g_c+I1), s	5.9	26.0		13.8	19.0	27.1		14.1				
Green Ext Time (p_c), s	0.0	4.0		1.0	0.1	3.3		1.1				

Intersection Summary		
HCM 6th Ctrl Delay		35.3
HCM 6th LOS		D

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	480	30	0	480	17	0	0	101	0	0	6
Future Vol, veh/h	0	480	30	0	480	17	0	0	101	0	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	3	0	0	0	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	150	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	19	28	14	19	25	31	35	28	27	38	29	17
Mvmt Flow	0	511	32	0	511	18	0	0	107	0	0	6

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	529	0	0	543	0	0	1053	1056	272	776	1063	523
Stage 1	-	-	-	-	-	-	527	527	-	520	520	-
Stage 2	-	-	-	-	-	-	526	529	-	256	543	-
Critical Hdwy	4.385	-	-	4.385	-	-	7.825	6.92	7.305	7.87	6.935	6.455
Critical Hdwy Stg 1	-	-	-	-	-	-	7.025	5.92	-	6.67	5.935	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.625	5.92	-	7.07	5.935	-
Follow-up Hdwy	2.3805	-	-	2.3805	-	-	3.8325	4.266	3.5565	3.861	4.2755	3.4615
Pot Cap-1 Maneuver	941	-	-	929	-	-	158	194	665	252	191	518
Stage 1	-	-	-	-	-	-	439	477	-	464	479	-
Stage 2	-	-	-	-	-	-	466	476	-	645	467	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	941	-	-	929	-	-	156	194	665	211	191	517
Mov Cap-2 Maneuver	-	-	-	-	-	-	156	194	-	211	191	-
Stage 1	-	-	-	-	-	-	439	477	-	464	479	-
Stage 2	-	-	-	-	-	-	459	476	-	541	467	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	11.5	12.1
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	665	941	-	-	929	-	-	517
HCM Lane V/C Ratio	-	0.162	-	-	-	-	-	-	0.012
HCM Control Delay (s)	0	11.5	0	-	-	0	-	-	12.1
HCM Lane LOS	A	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	-	0.6	0	-	-	0	-	-	0

Traffic Signal Alternative

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	480	0	0	494	51	0	0	0	36	3	108
Future Volume (veh/h)	114	480	0	0	494	51	0	0	0	36	3	108
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1436	1340	1750	1750	1395	1491	1750	1750	1750	1463	1750	1463
Adj Flow Rate, veh/h	124	522	0	0	537	55	0	0	0	39	3	117
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	23	30	0	0	26	19	0	0	0	21	0	21
Cap, veh/h	390	807	0	185	747	77	0	292	0	158	24	184
Arrive On Green	0.60	0.60	0.00	0.00	0.60	0.60	0.00	0.00	0.00	0.17	0.17	0.17
Sat Flow, veh/h	688	1341	0	894	1242	127	0	1750	0	254	141	1102
Grp Volume(v), veh/h	124	522	0	0	0	592	0	0	0	159	0	0
Grp Sat Flow(s),veh/h/ln	688	1341	0	894	0	1369	0	1750	0	1497	0	0
Q Serve(g_s), s	6.0	9.9	0.0	0.0	0.0	11.8	0.0	0.0	0.0	1.9	0.0	0.0
Cycle Q Clear(g_c), s	17.8	9.9	0.0	0.0	0.0	11.8	0.0	0.0	0.0	3.8	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.09	0.00		0.00	0.25		0.74
Lane Grp Cap(c), veh/h	390	807	0	185	0	824	0	292	0	365	0	0
V/C Ratio(X)	0.32	0.65	0.00	0.00	0.00	0.72	0.00	0.00	0.00	0.44	0.00	0.00
Avail Cap(c_a), veh/h	552	1121	0	395	0	1145	0	833	0	822	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	11.7	5.0	0.0	0.0	0.0	5.4	0.0	0.0	0.0	15.1	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.9	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	1.2	0.0	0.0	0.0	1.5	0.0	0.0	0.0	1.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.1	5.9	0.0	0.0	0.0	6.8	0.0	0.0	0.0	15.9	0.0	0.0
LnGrp LOS	B	A	A	A	A	A	A	A	A	B	A	A
Approach Vol, veh/h		646			592			0			159	
Approach Delay, s/veh		7.1			6.8			0.0			15.9	
Approach LOS		A			A						B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		11.0		27.9		11.0		27.9				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.5		32.5		18.5		32.5				
Max Q Clear Time (g_c+I1), s		0.0		19.8		5.8		13.8				
Green Ext Time (p_c), s		0.0		3.6		0.7		3.8				

Intersection Summary			
HCM 6th Ctrl Delay			8.0
HCM 6th LOS			A

Intersection	
Intersection Delay, s/veh	8.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	2	11	22	0	20	6	123	33	17	95	1
Future Vol, veh/h	1	2	11	22	0	20	6	123	33	17	95	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	0	0	50	38	0	11	33	15	29	25	13	100
Mvmt Flow	1	2	13	25	0	23	7	140	38	19	108	1
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	7.4	8.6	9.1	8.6
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	7%	52%	100%	0%
Vol Thru, %	0%	79%	14%	0%	0%	99%
Vol Right, %	0%	21%	79%	48%	0%	1%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	6	156	14	42	17	96
LT Vol	6	0	1	22	17	0
Through Vol	0	123	2	0	0	95
RT Vol	0	33	11	20	0	1
Lane Flow Rate	7	177	16	48	19	109
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.011	0.241	0.019	0.068	0.031	0.152
Departure Headway (Hd)	5.846	4.889	4.284	5.161	5.738	5.024
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	616	739	837	696	626	717
Service Time	3.546	2.589	2.303	3.177	3.45	2.736
HCM Lane V/C Ratio	0.011	0.24	0.019	0.069	0.03	0.152
HCM Control Delay	8.6	9.1	7.4	8.6	8.6	8.6
HCM Lane LOS	A	A	A	A	A	A
HCM 95th-tile Q	0	0.9	0.1	0.2	0.1	0.5

Traffic Signal Alternative

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	136	21	30	101	67	19	72	27	57	73	41
Future Volume (veh/h)	36	136	21	30	101	67	19	72	27	57	73	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1463	1491	1573	1422	1409	1218	1300	1422	1463	1231	1409	1586
Adj Flow Rate, veh/h	40	151	23	33	112	74	21	80	30	63	81	46
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	21	19	13	24	25	39	33	24	21	38	25	12
Cap, veh/h	252	310	43	233	209	123	234	256	86	312	187	86
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	162	1095	151	114	737	435	113	908	303	285	665	303
Grp Volume(v), veh/h	214	0	0	219	0	0	131	0	0	190	0	0
Grp Sat Flow(s),veh/h/ln	1409	0	0	1286	0	0	1324	0	0	1253	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0
Cycle Q Clear(g_c), s	2.5	0.0	0.0	2.9	0.0	0.0	1.6	0.0	0.0	2.5	0.0	0.0
Prop In Lane	0.19		0.11	0.15		0.34	0.16		0.23	0.33		0.24
Lane Grp Cap(c), veh/h	606	0	0	564	0	0	575	0	0	585	0	0
V/C Ratio(X)	0.35	0.00	0.00	0.39	0.00	0.00	0.23	0.00	0.00	0.32	0.00	0.00
Avail Cap(c_a), veh/h	1889	0	0	1751	0	0	1802	0	0	1739	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.2	0.0	0.0	6.4	0.0	0.0	5.9	0.0	0.0	6.2	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.4	0.0	0.0	0.2	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	0.4	0.0	0.0	0.2	0.0	0.0	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.6	0.0	0.0	6.8	0.0	0.0	6.1	0.0	0.0	6.5	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		214			219			131			190	
Approach Delay, s/veh		6.6			6.8			6.1			6.5	
Approach LOS		A			A			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		10.3		10.4		10.3		10.4				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		25.5		25.5		25.5		25.5				
Max Q Clear Time (g_c+I1), s		3.6		4.5		4.5		4.9				
Green Ext Time (p_c), s		0.7		1.2		1.1		1.3				
Intersection Summary												
HCM 6th Ctrl Delay			6.6									
HCM 6th LOS			A									

Intersection	
Intersection Delay, s/veh	11.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✥			✥			✥			✥	
Traffic Vol, veh/h	36	136	21	30	101	67	19	72	27	57	73	41
Future Vol, veh/h	36	136	21	30	101	67	19	72	27	57	73	41
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	21	19	13	24	25	39	33	24	21	38	25	12
Mvmt Flow	40	151	23	33	112	74	21	80	30	63	81	46
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	11.4	11.2	10.6	11.7
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	16%	19%	15%	33%
Vol Thru, %	61%	70%	51%	43%
Vol Right, %	23%	11%	34%	24%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	118	193	198	171
LT Vol	19	36	30	57
Through Vol	72	136	101	73
RT Vol	27	21	67	41
Lane Flow Rate	131	214	220	190
Geometry Grp	1	1	1	1
Degree of Util (X)	0.216	0.332	0.334	0.313
Departure Headway (Hd)	5.94	5.568	5.471	5.938
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	604	645	658	606
Service Time	3.977	3.6	3.503	3.971
HCM Lane V/C Ratio	0.217	0.332	0.334	0.314
HCM Control Delay	10.6	11.4	11.2	11.7
HCM Lane LOS	B	B	B	B
HCM 95th-tile Q	0.8	1.5	1.5	1.3

Attachment B Enhanced Crossing Treatments

Enhanced Crossing Treatments

PEDESTRIAN CROSSING TREATMENTS

Pedestrian crossing facilities enable people 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. The following summarizes several enhanced pedestrian crossing treatments.

Unmarked Crosswalks

Under Oregon law, pedestrians have the right-of-way at all unsignalized intersections. On narrow, low-speed streets unmarked crosswalks are generally sufficient for pedestrians to cross the street safely, as the low-speed environment makes drivers more responsive to the presence of pedestrians. However, drivers are less likely to yield to pedestrians at unmarked crosswalks on high-speed and/or high-volume roadways, even when the pedestrian has stepped onto the roadway. In these situations, enhanced pedestrian crossing facilities are needed to remind drivers that they must yield when pedestrians are present.

Marked Crosswalks

Marked crosswalks are painted roadway markings that indicate the location of a crosswalk to motorists. Marked crosswalks can be accompanied by signs, curb extensions and/or median refuge islands, and may occur at intersections or at mid-block locations. Research has shown that marked crosswalks in certain situations do not improve pedestrian safety and can even make it worse. Recent research indicates that on multi-lane roadways (more than two lanes), marked crosswalks should not be installed without accompanying treatments, such as Rectangular Rapid Flash Beacons (RRFBs) or Pedestrian Hybrid beacons.

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 to improve safety for pedestrians using a crosswalk. RRFBs could be used at any unsignalized intersection or mid-block crossing where warrants require a higher level of crosswalk protection.

Pedestrian Hybrid Beacon

A Pedestrian Hybrid Beacon (sometimes called a HAWK) is a user-actuated signal that is unlit when not in use. It begins with a yellow light alerting drivers to slow, and then displays a solid red light requiring drivers to remain stopped while pedestrians cross the street. The beacon then shifts to flashing red lights to signal that motorists may proceed, after stopping, and after pedestrians have completed their crossing. A Pedestrian Hybrid Beacon can be used at mid-block crossings or, in some cases, at unsignalized intersections (the MUTCD suggests that the beacons be located at least 100-feet from an intersection). Pedestrian Hybrid Beacons could be used at any unsignalized intersection or mid-block crossing where warrants require a higher level of crosswalk protection.

Pedestrian Signal

Pedestrian signals provide pedestrians with a signal-controlled crossing at a mid-block location or, in some cases at a previously stop-controlled intersection where pedestrian volumes warrant full signalization (the MUTCD no longer allows half signals at intersections). The signal remains green for the mainline traffic movements until actuated by a pushbutton to call a red signal for traffic. They are typically located at midblock crossings with high pedestrian or bicycle demand and/or high traffic volumes, such as where shared-use paths intersect with roadways.

Pedestrian Countdown Heads

Pedestrian Countdown heads inform pedestrians of the time remaining to cross the street with a countdown timer at the signalized crossing. The countdown should include enough time for a pedestrian to cross the full length of the street, or in rare cases, reach a refuge island. The current Manual on Uniform Traffic Control Devices (MUTCD) requires all new pedestrian signals, and any retrofitted signals to include pedestrian countdown heads.

Leading Pedestrian Interval (LPI)

Leading pedestrian intervals allow pedestrians to start crossing the street at a signalized intersections five to seven seconds before conflicting vehicles are given a green light and allowed to enter the intersection. They are most commonly used at signalized intersections where left- or right-turning vehicles interfere with pedestrian crossing movements. LPI could be applied at all existing or potential future traffic signals to improve crossing conditions for pedestrians.

Geometric Considerations

There are a number of geometric enhancements that can be considered at pedestrian crossings that may be implemented in conjunction with previously discuss treatments.

Curb Extensions

Curb extensions create additional space for pedestrians at crosswalks and allow pedestrians and vehicles to better see each other. Curb extensions are typically installed at intersections and midblock crossings located along roadways with on-street parking to help reduce crossing distances and the amount of exposure pedestrians have to vehicle traffic. Curb extensions can narrow the vehicle path, slow down traffic, and prohibit fast turns. Curb extensions could be applied along any street where on-street parking is allowed or where there is sufficient shoulder width so the curb extension does not conflict with on-street bike lanes.

Raised Median Island

Raised median islands provide a protected area in the middle of the roadway where pedestrians can stop while crossing the street. Raised median islands allow pedestrians to complete two-stage crossings if needed. Raised median islands can narrow the vehicle path and slow down traffic along the roadway. Raised median islands could be applied along any street where they would not interfere with turning movements at driveways and intersecting roadways.

BICYCLE CROSSING TREATMENTS

Pavement Markings Through Intersections

Pavement markings can be extended through the intersection for bicyclists. Green paint can be used in "conflict zones" where vehicles and bicycles cross paths in intersections, at driveways, or at right-turn pockets. These pavement markings are typically used at signalized intersections to emphasize a connection in a larger bicycle network. They could be used at all signalized intersections and in other select "conflict zones".

Bike Box

Bicycle boxes are designated spaces at signalized intersections, placed between a set-back stop bar and the pedestrian crosswalk, that allow bicyclists to queue in front of motor vehicles at red lights. Bike boxes are typically used at signalized intersections to facilitate turn movements as well as other movements for cyclists.

Two-Stage Left-Turn Bike Box

Two-stage left-turn bike boxes allow bicyclists to safely and comfortably make left-turns at multilane intersections from a right-side bicycle lane or cycle track. Bicyclists arriving on a green light travel into the intersection and pull out into the two-stage turn queue box away from through-moving bicycles and in front of cross street traffic, where they can wait to proceed through on the side-street green signal. Two-stage left-turn bike boxes can be applied at signalized intersections to improve bicycle crossing conditions.

Bicycle Detection

Many traffic signals along are actuated, meaning that green indication is given to a movement when a vehicle is detected. However, actuating a signal as a cyclist can be difficult. Bicycle detection allows cyclists to actuate the traffic signal from the bicycle lane with a detector that is calibrated to recognize a bicycle. Pavement markings could be added to show cyclists where to stand to actuate a signal. Bicycle detection is typically applied at signalized intersections that accommodate bicycles and can be used at all of the signalized intersections to improve bicycle crossing conditions.

Bicycle Signal

Bicycle signals can be used at intersections to provide a separate signal phase that is dedicated to bicyclists. At this stage, the MUTCD does not allow bicycle signals to operation concurrent with permissive vehicle phases.

Attachment C Development Code Review

ATTACHMENT C: FLORENCE TSP CODE CONCEPTS

Date:	March 27, 2023
To:	Wendy Farley-Campbell, Shirley Gray, Erin Reynolds, Mike Miller, City of Florence Michael Duncan, Oregon Department of Transportation
From:	Darci Rudzinski, Clinton "CJ" Doxsee, and Brandon Crawford, MIG | APG
Project:	City of Florence Transportation System Plan Update
Subject:	Final Tech Memo #5, Attachment C: Florence TSP Code Concepts

Overview

This memorandum includes general recommendations for potential future code amendments, or "Code Concepts." The City should consider these Code Concepts as potential strategies to implement the strategies and recommendations from the Florence Transportation System Plan (TSP) update project. The Code Concept recommendations are also informed by a regulatory review, or "Code Audit," which evaluates the City's compliance with Oregon Administrative Rule (OAR) 660-012, or the Oregon Transportation Planning Rule (TPR). The TPR audit is included later in this memorandum (Table 2).

Land Use & Transportation Code Concepts

MULTIMODAL TRANSPORTATION, CONNECTIVITY, AND ACCESS STANDARDS

The TSP process recommends the City explore a number of transportation elements related to bicycle and pedestrian connectivity, transit improvements, intermodal route connectivity, and other improvements related to the City's multimodal network. The results of a regulatory review reveal that the City's Development Code currently includes a robust collection of standards and requirements related to bicycle, pedestrian, and transit access and connectivity. (See Table 2: Regulatory Review – TPR Audit, for details on the City's current multimodal standards and compliance with the TPR as it relates to multimodal requirements.) However, this code audit identifies a handful of improvements that would bring the City into closer compliance with State requirements. Specifically, the City should consider amending transportation-related conditions of approval criteria to include bicycle and pedestrian improvements. This change would strengthen the City's ability to implement and improve bicycle, pedestrian, and transit connectivity and access through future development approval.

Any other specific updates related to bicycle, pedestrian, and transit standards or requirements that emerge from the TSP recommendations should also be added to the list of possible Code amendments. The project team will evaluate the adequacy of existing standards and provide updates that will determine whether facility standards need amendments.

EMERGING TECHNOLOGIES

The City should explore requirements and standards for electric vehicle (EV) charging/parking facility requirements for new construction and possibly for redevelopment. Some cities in Oregon have adopted "EV ready" code requirements that are intended to enable future retrofits of on-site parking and utilities to include EV charging stations. In addition, cities are increasingly incorporating standards for EV facilities to take advantage of recent amendments to the state building code to include provisions for EV charging capacity for certain building types.[1] The City may consider applying EV charging requirements to developments that exceed size or trip generation thresholds based on Traffic Impact Study (TIS) findings. For example, the City of Portland is in the process of adopting code amendments as a part of their "EV Ready Code Project" that will include requirements for multi-family and mixed-use developments over a certain size to have a minimum percentage of their overall parking spaces be "EV Ready."[2] The City may also consider regulatory/code incentives for providing EV charging stations or EV-ready spaces, which could include minimum parking reductions in exchange for EV-ready spaces, or providing height or density bonuses for sites that provide EV spaces.

If Florence is interested in adopting EV facility standards, siting and design criteria that is specific to EV charging stations may also be beneficial. Examples of standards to explore include electricity/utility capacity, signage, accessibility, and EV-ready spaces to conventional parking spaces ratios. The American Planning Association (APA) offers extensive guidance and research on the topic of zoning for EV facilities. One of APA's recent publications provides a summary table of EV development standards from a sampling of jurisdictions throughout the country, as shown in Table 1.

Table 1: EV Parking Standards Throughout the Country

Jurisdiction	Multifamily Parking	Commercial Parking	Code Citation
Atlanta, GA	NA	20% of spaces must be EV-ready	Appendix B §101.8
Chicago, IL	20% of spaces must be EV-ready or EV-installed	20% of spaces must be EV-ready or EV-installed	§17-10-1011
Honolulu, HI	Buildings with 8+ spaces: 25% must be EV-ready	Buildings with 12+ spaces: 25% must be EV-ready	§32-1.1(20)
Issaquah, WA	10% of spaces must be EV-installed; 30% must be EV-ready	5% of spaces must be EV-installed; 10% must be EV-ready	§18.09.140
Madison, WI	2% of spaces must be EV-installed; 10% must be EV-ready (increases by 10% every 5 years)	1% of spaces must be EV-installed (increases by 1% every 5 years); 10% must be EV-ready (increases by 10% every 5 years)	§28.141(8)(e)
San Jose, CA	10% of spaces must be EV-installed; 20% must be EV-ready; 70% must be EV-capable	10% of spaces must be EV-installed; 40% must be EV-ready	§24.10.200
St. Louis, MO	2% of spaces must be EV-installed; 5% must be EV-ready (increases to 10% in 2025)	2% must be EV-installed; 5% must be EV-ready	§25.01.020-406.2.7
Washington, DC	Buildings with 3+ spaces: 20% must be EV-ready	Buildings with 3+ spaces: 20% must be EV-ready	§6-1451.03a

Select Findings from the 2022 Scan of EV Ordinances

[1] HB 2180 Enrolled. https://olis.oregonlegislature.gov/liz/2021R1/Measures/Overview/HB2180
[2] EV Ready Code Project: https://www.portland.gov/bps/planning/ev-ready

Source: *"Preparing for the Electric Vehicle Surge", American Planning Association, Zoning Practice*.

The City may consider other development standards to support emerging mobility and technology trends, such as siting and design standards for e-bike and e-scooter facilities. Such standards could follow a similar model as the EV charging requirements, standards, or incentives, such as requiring e-bike parking with charging ports for developments of a certain size (e.g., over 10,000 square feet, over a specified number of employees, over specified number of dwelling units, etc.).

OFF-STREET PARKING

To create a compact and visually appealing environment in the downtown area, the amount of space dedicated to parking should be minimized. By removing off-street parking requirements, the City can give business owners and developers flexibility and freedom to determine the amount and type of parking that will meet the needs of their clients. Removing off-street parking requirements can provide even more opportunity for future development or redevelopment. This could free up land currently used for parking lots to be developed over time into new buildings for business – an arguably more efficient use of valuable land. Removing off-street parking requirements does not mean that all off-street parking will go away, it simply allows the City and business owners to work together to meet the true parking needs of the Old Town district.

The City currently waives minimum parking requirements for changes of use in Old Town Subarea A that existed prior to October 2014. In addition, new construction (not including residential or lodging) may reduce off street parking by 50% of the minimum parking requirement. Although the minimum parking requirements in the Old Town district are relaxed compared to the rest of Florence, the City should still consider removing off-street parking minimums for both Old Town Subareas A and B altogether. As discussed, complete removal of off-street parking requirements will enable redevelopment of underutilized parking areas and would support a more walkable/bikeable, mixed-use environment.

The City's minimum off-street parking requirements are relatively consistent with requirements in other Oregon coastal communities. However, the City may consider reducing off-street parking requirements for single-family detached homes based on square footage or number of rooms to allow more flexibility for smaller units. For example, Lincoln City only requires one space per unit for dwellings under 1,000 square feet, and two spaces for any single-family dwellings over 1,000 square feet. In addition, Florence is currently considering reducing minimum parking requirements for duplexes to one space per unit and removing minimum parking for ADUs (as required by ORS 197.312). Consistent with parking requirements for duplexes, the City could also consider reducing minimum parking to one space per unit for other middle housing types (triplexes, quadplexes, townhomes), multi-family, and manufactured homes. These housing types generally provide housing for smaller households and tend to have lower vehicle-use rates than other large households and lower-density types of housing. Lowering off-street parking requirements can free up valuable land for more living space.3

LAND USE AND TRANSPORTATION COORDINATION

Development Code requirements, standards, and procedures are critical for ensuring the City's land uses and transportation system are thoughtfully coordinated. The City should consider

[3] Parking and Middle Housing https://www.oregon.gov/lcd/TGM/Documents/ParkingDemandsAcrossCities.pdf

Code amendments to improve integration of land use and transportation standards, practices, and procedures. The TPR includes specific requirements and guidance to ensure coordinated transportation and land use planning. For example, the City does not have any notice requirements that apply to transportation service providers and agencies. Proper notice allows transportation providers to offer input on how a proposed development could better address potential traffic or transportation-related impacts. Other examples for improved land use/transportation integration include ensuring consistency between land use/zoning amendments with TSP goals and policies, as well as allowing consolidated procedures for related land use and transportation proposals. The TPR Audit summarized below provides more details and recommendations related to land-use-transportation coordination amendments.

Regulatory Review (TPR Audit)

This section presents a review of applicable development ordinances from the City of Florence for compliance with the TPR. This section provides the intent, purpose, and requirements of the TPR, followed by a comprehensive review in the subsequent tables.

The purpose of the TPR is "…*to implement Statewide Planning Goal 12 (Transportation) and promote the development of safe, convenient and economic transportation systems that are designed to reduce reliance on the automobile so that the air pollution, traffic and other livability problems faced by urban areas in other parts of the country might be avoided." The TPR also establishes requirements for coordination among affected levels of government for preparation, adoption, refinement, implementation, and amendment of transportation system plans.*

Specifically, Section -0045 of the TPR addresses implementation of the TSP. TPR Section -0060 (Plan and Land Use Regulation Amendments) specifies measures to be taken to ensure that allowed land uses are consistent with the identified function and capacity of existing and planned transportation facilities. Section -0060 establishes criteria for identifying the significant effects of plan or land use regulation amendments on transportation facilities, actions to be taken when a significant effect would occur, identification of planned facilities, and coordination with transportation facility providers.

In summary, the TPR requires that local governments revise their land use regulations to implement the TSP in the following manner:

- Amend land use regulations to reflect and implement the TSP.
- Clearly identify which transportation facilities, services, and improvements are allowed outright, and which will be conditionally permitted or permitted through other procedures.
- Adopt land use or subdivision ordinance measures, consistent with applicable federal and state requirements, to protect transportation facilities, corridors, and sites for their identified functions, through:
  - access management and control;
  - protection of public use airports;

  - coordinated review of land use decisions potentially affecting transportation facilities;
  - conditions to minimize development impacts to transportation facilities;
  - regulations to provide notice to public agencies providing transportation facilities and services of land use applications that potentially affect transportation facilities; and
  - regulations ensuring that amendments to land use applications, densities, and design standards are consistent with the TSP.
- Adopt land use or subdivision regulations for urban areas and rural communities to provide safe and convenient pedestrian and bicycle circulation and bicycle parking, and to ensure that new development provides on-site streets and accessways that provide reasonably direct routes for pedestrian and bicycle travel.
- Establish street standards that minimize pavement width and total right-of-way.

Table 2 provides an assessment of TPR compliance for the City based on adopted ordinances regulating land development. Each table lists TPR implementation requirements, an assessment of existing City code and regulatory provisions that meet the requirements, and recommendations for changes that will likely be needed to fully implement the new TSP and bring city regulations in compliance with the TPR. Recommended changes to local regulatory documents are intended to provide guidance to project staff during the update the City's TSP.

Table 2 provides a review of the following ordinances for the City of Florence:

- Public Ways and Property (Title 8)
- Zoning Regulations (Title 10)
- Subdivision Regulations (Title 11)

Table 2: Regulatory Review – TPR Audit

Oregon Revised Statutes	Comments & Recommendations
OAR 660-12-0045	
(1) Each local government shall amend its land use regulations to implement the TSP.	
(a) The following transportation facilities, services and improvements need not be subject to land use regulations except as necessary to implement the TSP and, under ordinary circumstances do not have a significant impact on land use: (A) Operation, maintenance, and repair of existing transportation facilities identified in the TSP, such as road, bicycle, pedestrian, port, airport and rail facilities, and major regional pipelines and terminals; (B) Dedication of right-of-way, authorization of construction and the construction of facilities and improvements, where the improvements are	The purpose of this provision is to allow for certain transportation uses, such as operation, maintenance, and repair of transportation facilities identified in the TSP, without being subject to land use regulations. Per FCC 10-2-12, the City permits the following uses and activities in all zones without review: Operation, maintenance, and repair of public roads and highway facilities and existing transportation facilities identified in the TSP Construction of facilities and improvements identified in the TSP or Public Facility Plan Changes to transit or airport services

Oregon Revised Statutes	Comments & Recommendations
consistent with clear and objective dimensional standards; (C) Uses permitted outright under ORS 215.213(1)(j)–(m) and 215.283(1)(h)–(k), consistent with the provisions of OAR 660-012-0065; and (D) Changes in the frequency of transit, rail and airport services.	**Recommendation:** Existing Ordinance provisions meet this TPR requirement. No further changes to the code are recommended.
(b) To the extent, if any, that a transportation facility, service or improvement concerns the application of a comprehensive plan provision or land use regulation, it may be allowed without further land use review if it is permitted outright or if it is subject to standards that do not require interpretation or the exercise of factual, policy or legal judgment;	See responses to -0045(1)(a)
(c) In the event that a transportation facility, service or improvement is determined to have a significant impact on land use or to concern the application of a comprehensive plan or land use regulation and to be subject to standards that require interpretation or the exercise of factual, policy or legal judgment, the local government shall provide a review and approval process that is consistent with OAR 660-012-0050. To facilitate implementation of the TSP, each local government shall amend its land use regulations to provide for consolidated review of land use decisions required to permit a transportation project.	This TPR Section references project development and implementation - how a transportation facility or improvement authorized in a TSP is designed and constructed (660-012-0050). Project development may or may not require land use decision-making. The TPR directs that during project development, projects authorized in an acknowledged TSP will not be subject to further justification with regard to their need, mode, function, or general location. To this end, the TPR calls for consolidated review of land use decisions and proper noticing requirements for affected transportation facilities and service providers. FCC 10-1-1-6-2.D and -3.B establish public notice requirements for Type II and Type III land use decisions. These provisions require notice to be sent to ODOT for any proposal located adjacent to a state roadway or that is expected to have an impact on a state transportation facility. FCC 10-1-1-5.B allows for consolidated proceedings when an applicant applies for more than one type of land use or development permit for the same or multiple parcels of land. **Recommendation:** The City should add provisions to FCC to 10-1-1-6-2.D and -3.B to include notice requirements to all transportation providers whose facilities may be impacted by a land use decision, including County facilities and the regional transit provider.
(2) Local governments shall adopt land use or subdivision ordinance regulations, consistent with applicable federal and state requirements, to protect transportation facilities, corridors and sites for their identified functions. Such regulations shall include:	
(a) Access control measures, for example, driveway and public road spacing, median control and signal spacing standards, which are	FCC Chapter 10-36 – Public Facilities – includes provisions for access control measures, including:

Oregon Revised Statutes	Comments & Recommendations
consistent with the functional classification of roads and consistent with limiting development on rural lands to rural uses and densities;	Intersection spacing (FCC 10-36-2-13) Right-of-way widths for functional street classifications and specific corridors (FCC 10-36-2-5) Traffic signals and roundabouts (FCC 10-36-2-11) Medians (FCC 10-36-2-12) All newly created lots must have street frontage and approved street access (FCC 10-36-2-1) FCC 10-35-2-7 establishes spacing standards between driveways and intersections. The City does not have minimum spacing requirements specific to driveways alone. Requirements that regulate driveway, street, and intersection spacing are not provided in City ordinances. Recommendation: The TSP process will assess the adequacy of existing standards to meet current and future needs and may result in new or updated roadway and access management standards. The City should also amend FCC 10-35-2-7 to include minimum spacing between driveways based on street functional classification. Street Improvement Standards will need to be made consistent with TSP standards.
(b) Standards to protect future operation of roads, transitways and major transit corridors;	FCC 10-1-1-4.E outlines the criteria for when a Traffic Impact Study may be required. Per this FCC section, Traffic Impact Studies are intended to determine capacity and safety impacts from a particular development proposal, whether the development will meet City transportation standards for capacity and safety, to mitigate anticipated impacts, and to implement applicable TPR regulations. FCC 10-35-2-5 establishes Traffic Study standards, which includes the required components of a Traffic Impact Study and authorizes the City to include conditions of approval. **Recommendation:** Existing Ordinance provisions meet this TPR requirement. No further changes to the code are recommended.
(c) Measures to protect public use airports by controlling land uses within airport noise corridors and imaginary surfaces, and by limiting physical hazards to air navigation;	FCC 10-21-1 establishes the Airport Development District, which is intended to encourage and support the operation of the City's airport by allowing aviation-compatible uses. FCC 10-21-2, the Public Use Airport Safety and Compatibility Overlay Zone, is intended to establish safety standards to promote air navigation safety and reduce potential hazards to land uses near the airport. This Section includes provisions for the Airport Imaginary Surfaces, Airport Noise Impact Boundary,

Oregon Revised Statutes	Comments & Recommendations
	and the Airport Secondary Impact Area. These provisions require land uses within these zones to be compliant with applicable Federal Aviation Administration (FAA) requirements. **Recommendation:** Existing Ordinance provisions meet this TPR requirement. No further changes to the code are recommended.
(d) A process for coordinated review of future land use decisions affecting transportation facilities, corridors or sites;	See response to -0045(1)(c).
(e) A process to apply conditions to development proposals in order to minimize impacts and protect transportation facilities, corridors or sites;	FCC 10-36-1.E authorizes the City to require improvements to public facilities as a condition of development approval, provided the improvements are roughly proportional to the impact of the development on the facilities. FCC 10-35-2-5 – Traffic Study Requirements – authorizes the City to require conditions of approval in order for a development proposal to meet operations and safety standards consistent with the planned transportation system. The provision states that conditions of approval may include, but are not limited to the following: Crossover/reciprocal easement agreements for all adjoining parcels to facilitate future access Access adjustments where proposed access points do not meet access spacing standards Right-of-way dedications for future improvements Street improvements Turn restrictions FCC 10-35-2-6 authorizes the city to require consolidation of vehicle access points, recording of reciprocal access easements, installation of traffic control devices, and other mitigation measures as a condition of approval to land use approval to ensure safe and efficient operation of the City's transportation system. **Recommendation:** Existing code provisions meet the TPR requirement. However, the City should consider specifying that transportation-related conditions of approval may include bicycle and pedestrian improvements.
(f) Regulations to provide notice to public agencies providing transportation facilities and services, MPOs, and ODOT of: (A) Land use applications that require public hearings; (B) Subdivision and partition applications;	FCC 10-1-1-6-2.D requires notice of any Type II decision to the airport, per ORS 227.175 and FCC 10-21-2-4, as well as any governmental agency entitled to notice under an intergovernmental agreement. This provision also requires notice be provided to ODOT for proposals adjacent to or expected to have an impact on state roadways.

Oregon Revised Statutes	Comments & Recommendations
(C) Other applications which affect private access to roads; and (D) Other applications within airport noise corridors and imaginary surfaces which affect airport operations; and	Per FCC Table 10-1-1, Subdivisions and Partitions are Type II procedures, and therefore they require notice to ODOT if they are adjacent to or expected to have an impact on state roadways. FCC 10-1-1-6-3.B requires notices for quasi-judicial land use hearings (Type III decision) to the airport, per ORS 227.175 and FCC 10-21-2-4, as well as any governmental agency entitled to notice under an intergovernmental agreement. This provision also requires notice be provided to ODOT for proposals adjacent to or expected to have an impact on state roadways. FCC 10-21-2-4 requires notice for any land use decision to the airport sponsor and the Department of Aviation for any land use decision within the Public Use Airport Zone. FCC 10-1-1-6-4.D requires notice to any affected government agency of a hearing for a Type IV decision, which may include transportation agencies. **Recommendation:** Existing Ordinance provisions meet this TPR requirement. No further changes to the code are recommended.
(g) Regulations assuring that amendments to land use designations, densities, and design standards are consistent with the functions, capacities and performance standards of facilities identified in the TSP.	FCC 10-1-2 establishes rules and procedures for zoning map amendments, and FCC 10-1-3 provides rules and procedures for zoning and comprehensive plan amendments. Neither section requires that amendments must be consistent with transportation facility functions, capacities, or performance standards as identified in the TSP. **Recommendation:** Add language to FCC 10-1-2 and 10-1-3 that ensures zoning map and ordinance amendments are consistent with the planned transportation system. See recommendations for TPR Section -0060.
(3) Local governments shall adopt land use or subdivision regulations for urban areas and rural communities as set forth below. The purposes of this section are to provide for safe and convenient pedestrian, bicycle and vehicular circulation consistent with access management standards and the function of affected streets, to ensure that new development provides on-site streets and accessways that provide reasonably direct routes for pedestrian and bicycle travel in areas where pedestrian and bicycle travel is likely if connections are provided, and which avoids wherever possible levels of automobile traffic which might interfere with or discourage pedestrian or bicycle travel.	
(a) Bicycle parking facilities as part of new multi-family residential developments of four units or more, new retail, office and institutional developments, and all transit transfer stations and park-and-ride lots;	FCC 10-3-10 establishes bicycle parking requirements. Bicycle parking is required for all non-residential uses at a rate of one space per every ten off-street vehicle spaces. Bicycle parking is required for triplexes, quadplexes, cluster housing, and multi-family housing at a rate of 1 space per 3 units, and bicycle parking is required at a rate of 1 space per

Oregon Revised Statutes	Comments & Recommendations
	20 bedrooms for group living and 1 space per 8 bedrooms for dormitories. **Recommendation:** Existing Ordinance provisions meet this TPR requirement. No further changes to the code are recommended.
(b) On-site facilities shall be provided which accommodate safe and convenient pedestrian and bicycle access from within new subdivisions, multi-family developments, planned developments, shopping centers, and commercial districts to adjacent residential areas and transit stops, and to neighborhood activity centers within one-half mile of the development. Single-family residential developments shall generally include streets and accessways. Pedestrian circulation through parking lots should generally be provided in the form of accessways. (A) "Neighborhood activity centers" includes, but is not limited to, existing or planned schools, parks, shopping areas, transit stops or employment centers; (B) Bikeways shall be required along arterials and major collectors. Sidewalks shall be required along arterials, collectors and most local streets in urban areas, except that sidewalks are not required along controlled access roadways, such as freeways; (C) Cul-de-sacs and other dead-end streets may be used as part of a development plan, consistent with the purposes set forth in this section; (D) Local governments shall establish their own standards or criteria for providing streets and accessways consistent with the purposes of this section. Such measures may include but are not limited to: standards for spacing of streets or accessways; and standards for excessive out-of-direction travel; (E) Streets and accessways need not be required where one or more of the following conditions exist: (i) Physical or topographic conditions make a street or accessway connection impracticable. Such conditions include but are not limited to freeways, railroads, steep slopes, wetlands or other bodies of water where a connection could not reasonably be provided; (ii) Buildings or other existing development on adjacent lands physically preclude a connection	FCC 10-35-3-2 – Site Design and Layout – requires all developments to provide a continuous pedestrian system. These provisions include requirements for pedestrian walkway systems to connect to all future phases of development, existing or planned adjacent off-site trails, adjacent public parks or open space, and previously reserved public access easements on neighboring properties. These provisions also require developments to include safe, direct, and convenient walkways and pedestrian connections that are within the development site. Provisions for internal pedestrian connections also include requirements for walkway connections for all on-site parking areas, and the City may also require raised walkways for parking areas with 80 or more parking spaces. FCC 10-35-4 requires proposed developments within a quarter mile of an existing or proposed transit stop to demonstrate a pedestrian route from building entrances to the transit facility or to the nearest public right-of-way that provides access to the transit facility. FCC 10-36-2-5 includes cross section requirements for each street functional classification in the city. Bike lanes or bike sharrows are required for collectors and other specific street segments, such as portions of Munsel Lake Road, Rhododendron Drive, and Heceta Beach Road. Sidewalks are required along all streets and roads in the city. Per FCC 10-36-2-6, cul-de-sacs are allowed only when environmental or topographical constraints, existing development, or conflicting City requirements preclude street extensions or through circulation. FCC 10-35-2-7 establishes spacing standards between driveways and intersections. FCC 10-36-2-9.C allows mid-block connections and multi-use paths in lieu of street connections and authorizes the City to require multi-use paths off cul-de-sacs to provide bicycle and pedestrian connections to adjacent development or paths. **Recommendation:** Existing Ordinance provisions meet this TPR requirement. No further changes to the code are recommended.

Oregon Revised Statutes	Comments & Recommendations
now or in the future considering the potential for redevelopment; or (iii) Where streets or accessways would violate provisions of leases, easements, covenants, restrictions or other agreements existing as of May 1, 1995, which preclude a required street or accessway connection.	
(c) Where off-site road improvements are otherwise required as a condition of development approval, they shall include facilities accommodating convenient pedestrian and bicycle travel, including bicycle ways along arterials and major collectors; [Note: Subsection (d) defines safe and convenient]	See response to Section -0045(2)(e).
(e) Internal pedestrian circulation within new office parks and commercial developments shall be provided through clustering of buildings, construction of accessways, walkways and similar techniques.	FCC 10-35-3-2 – Site Design and Layout – requires all developments to provide a continuous pedestrian system. These provisions include requirements for pedestrian walkway systems to connect to all future phases of development, existing or planned adjacent off-site trails, adjacent public parks or open space, and previously reserved public access easements on neighboring properties. These provisions also require developments to include safe, direct, and convenient walkways and pedestrian connections that are within the development site. Provisions for internal pedestrian connections also include requirements for walkway connections for all on-site parking areas, and the City may also require raised walkways for parking areas with 80 or more parking spaces. **Recommendation:** Existing Ordinance provisions meet this TPR requirement. No further changes to the code are recommended.
(6) In developing a bicycle and pedestrian circulation plan as required by OAR 660-012-0020(2)(d), local governments shall identify improvements to facilitate bicycle and pedestrian trips to meet local travel needs in developed areas. Appropriate improvements should provide for more direct, convenient and safer bicycle or pedestrian travel within and between residential areas and neighborhood activity centers (i.e., schools, shopping, transit stops). Specific measures include, for example, constructing walkways between cul-de-sacs and adjacent roads, providing walkways between buildings, and providing direct access between adjacent uses.	The TSP will make recommendations to the bicycle and pedestrian plan that are consistent with TPR -0020. This TPR requirements is currently addressed in the following areas: Bicycle/pedestrian connection between cul-de-sacs and adjacent streets. See response to section -0045(3)(b) Site design criteria that create pedestrian paths – see response to section -004(3)(b) **Recommendation:** This TPR requirement will be addressed by the TSP planning process, which will identify pedestrian and bicycle improvements for inclusion in the TSP and is met by requiring improvements in developing areas consistent with adopted code provisions.

Oregon Revised Statutes	Comments & Recommendations
(7) Local governments shall establish standards for local streets and accessways that minimize pavement width and total right-of-way consistent with the operational needs of the facility. The intent of this requirement is that local governments consider and reduce excessive standards for local streets and accessways in order to reduce the cost of construction, provide for more efficient use of urban land, provide for emergency vehicle access while discouraging inappropriate traffic volumes and speeds, and which accommodate convenient pedestrian and bicycle circulation. Notwithstanding section (1) or (3) of this rule, local street standards adopted to meet this requirement need not be adopted as land use regulations.	FCC 10-36-2-5 includes cross section requirements that include minimum right-of-way width for functional classification. There are no minimum right-of-way width standards for Arterial streets in the Code. Recommendation: The TSP process will revisit adopted roadway cross-sections and design requirements, keeping in mind that the TPR requires that cities minimize pavement width and total right-of-way consistent with the operational needs of the facility. At a minimum, the City should adopt right-of-way width and cross-section design standards for general arterial development in addition to the existing standards that are specific segments of existing roads. Standards should be made consistent between the TSP and Street Improvement Standards.
OAR 660-12-0060	
Amendments to functional plans, acknowledged comprehensive plans, and land use regulations that significantly affect an existing or planned transportation facility shall assure that allowed land uses are consistent with the identified function, capacity, and performance standards of the facility.	FCC 10-1-3 authorizes amendments to zoning district boundaries and zoning regulations. The approval criteria do not contain specific requirements that ensures proposed amendments are consistent with planned facilities within the adopted TSP. Recommendation: FCC 10-3-1 should add provisions that address plan amendment consistency with transportation facilities.

APPENDIX G: TECH MEMO #6: PREFERRED ALTERNATIVES

TECH MEMO #6: PREFERRED ALTERNATIVES

Date:	June 12, 2023
To:	Wendy Farley-Campbell, Clare Kurth, Erin Reynolds, and Mike Miller, City of Florence Michael Duncan, Oregon Department of Transportation
From:	Russ Doubleday, Michael Ruiz-Leon, Matt Bell, Susan Wright, PE, PMP, Kittelson & Associates, Inc.
Project:	City of Florence Transportation System Plan Update
Subject:	Final Tech Memo #6: Preferred Alternatives

Table of Contents

Introduction

This memorandum presents the preferred alternatives developed by the project team to address the gaps, deficiencies, and needs identified throughout the planning process. The preferred alternatives identified in this memorandum will form the basis for the plans, policies, programs, and projects included in the Florence Transportation System Plan (TSP) update.

Previous tech memos documented existing gaps and deficiencies in the transportation system (see *Tech Memo #3: Existing Conditions Inventory and Analysis)*, future transportation system needs to address growth (see *Tech Memo #4: Future Systems Conditions*), and potential transportation system alternatives (see *Tech Memo #5: Alternatives Analysis and Funding Program*). The project team combined information provided in these and other tech memos to select the preferred alternatives and identify priorities for the preferred and cost constrained plans. The priorities reflect the goals and objectives and evaluation criteria developed for the

TSP update (see *Tech Memo 2: Project Goals and Objectives and Evaluation Criteria*). The information provided in this memorandum was revised based on input from the project team, the project advisory committee, and the community.

Project Goals, Objectives, and Evaluation Criteria

Project goals, objectives, and evaluation criteria were developed early in the planning process to guide the development of the TSP update. The project goals, objectives, and evaluation criteria reflect the vision of a vibrant community and emphasize the desire to increase options for people walking, biking, and taking transit. The project goals and objectives were used to select the preferred alternatives, while the evaluation criteria were used to prioritize them in the planned and cost constrained plans.

PREFERRED ALTERNATIVES

A qualitative assessment of the transportation system alternatives was conducted by the project team to identify the preferred alternatives. The qualitative assessment considered the goals and objectives of the TSP update as well as potential environmental impacts, engineering challenges, and input from the community. The goals of the TSP update are documented in Tech Memo 2 and summarized below.

- **Goal 1: Creating a Safe Transportation System for All** – Prioritize the safe movement for all users and for all modes within the community along city, county, and state roadways. Minimize crashes and fatalities that occur on the transportation network.
- **Goal 2: Building Facilities that Support Economic Development and Are Cost-Effective** – Build transportation facilities that are suited for the community and its continued economic development. Transportation decisions should balance the needs of the summer peak period and the needs of the year-round population, where those may be in conflict.
- **Goal 3: Meeting the Wide-Ranging Transportation Needs of All Users** – Build a transportation system that meets the needs of all users in Florence. Invest in non-automotive transportation modes to help people travel within Florence. Connect neighborhoods to major activity centers without needing to use an automobile.
- **Goal 4**: **Minimizing Environmental Impacts** – Support policies and programs that minimize pollution and reduce impacts to the environment and climate change. Recognize that transportation impacts are more likely to be felt negatively by historically marginalized communities.
- **Goal 5**: **Adding Resilience to the Network and Planning for Emergencies** – Create a transportation network that can quickly evacuate residents in the event of a major earthquake and/or tsunami and can build resilience within the community.
- **Goal 6**: **Coordinating with Local, Regional, and State Partners** – Foster good relationships with public and private partners in the common interest of building the city's transportation network.

Alternatives that received the same or similar scores were discussed by the project team and, in most cases, a preferred alternative was identified. However, in some cases two or more preferred alternatives remain and are presented below for further consideration. *Attachment A contains the qualitative assessment of the alternatives.*

EXISTING CITY GOALS AND POLICIES

The *Florence Realization 2020 Comprehensive Plan* includes 13 goals and 34 policies related to transportation, which were developed in the city's current transportation system plan from 2012. As discussed in *Tech Memo #2: Goals, Objectives, and Evaluation Criteria*, these goals and policies were molded into goals, objectives, and evaluation criteria to better assess project alternatives and the selection of preferred alternatives. However, not all goals and policies were rolled into the new set of project goals and objectives. Existing goals and objectives include the following topics that are not covered by the six project goals listed above:

- Creating an annual street maintenance plan
- Having a transportation system that supports existing and proposed land uses
- Providing adequate parking facilities, and avoid constructing off-street parking areas where backing onto a public street is necessary
- Maintaining vision clearance on private property

Roadway System

The preferred alternatives developed for the roadway system include changes to the functional classification plan, new major street (arterial and collector) connections, new local street connections, traffic safety and operational enhancements, and more. Collectively, these alternatives will improve the safety and efficiency of the transportation system while accommodating the needs of future growth.

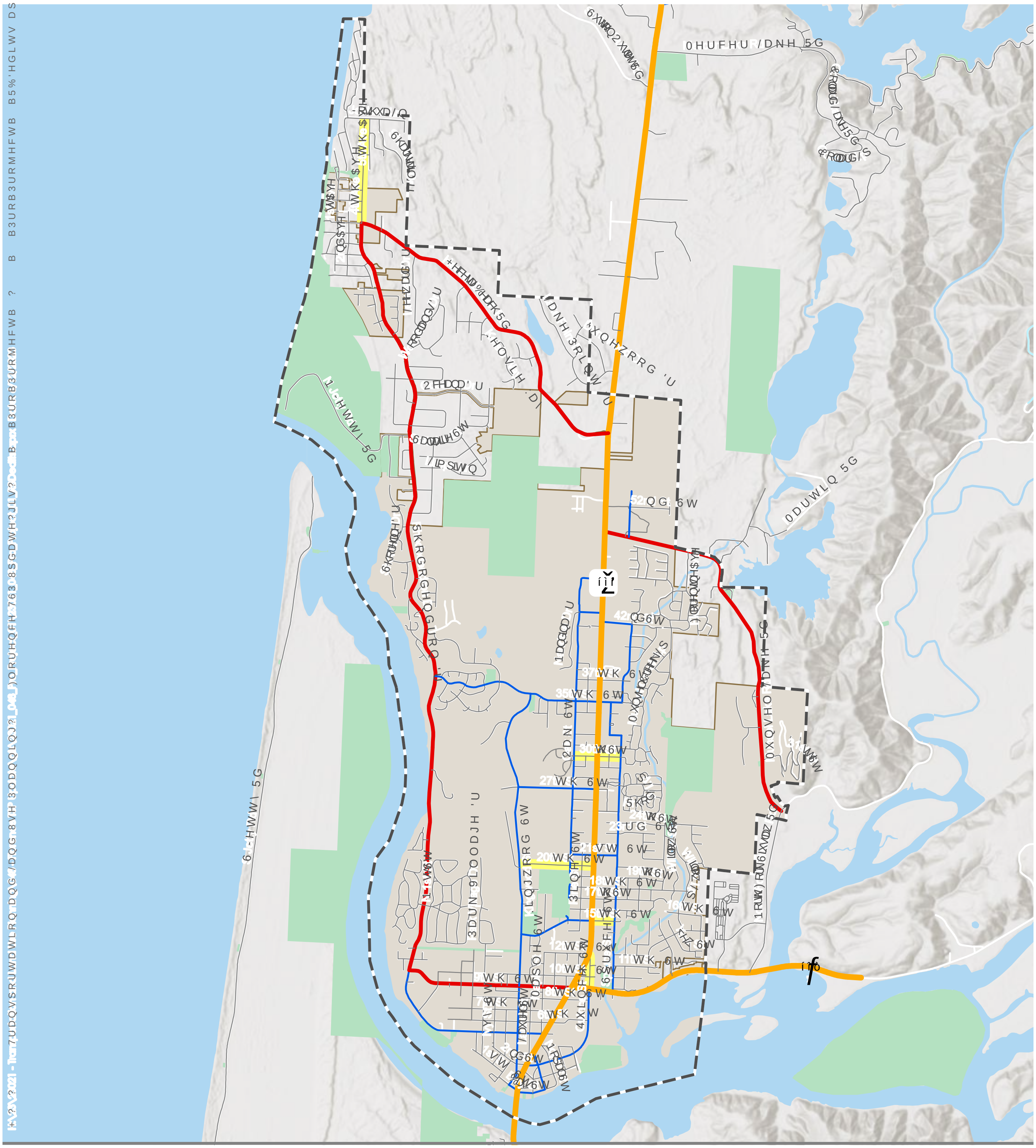
FUNCTIONAL CLASSIFICATION

The preferred alternatives include several changes to the City's functional classification plan, each of which increases the classification of City roadways from local streets to collectors. The changes reflect a review of the City's existing functional classification plan along with the functional classification plans of ODOT and Lane County. The changes are intended to better align the classifications with the roadway uses and to provide further arterial and collector connectivity within the built network. The proposed changes in functional classification are shown in summarized in Table 1 and shown in Figure 1.

Table 1. Proposed Functional Classification Changes

Street	Segment	Existing Classification	Proposed Classification
	Lane County Streets		
4th Avenue	Falcon Street to Joshua Lane	Local Street	Collector
Quince Street	OR 126 to US 101	Local Street	Collector
	City Streets		
4th Avenue	Heceta Beach Rd to Falcon Street	Local Street	Collector
15th Street	US 101 to Spruce Street	Local Street	Collector
20th Street	Kingwood Rd to US 101	Local Street	Collector
30th Street	Oak Street to Spruce Street	Local Street	Collector

The City will coordinate with ODOT and Lane County to address discrepancies in the functional classification of roadways within the city.



5RDGV

+LJKZD\ 0DMRU $UWHULDO

0LQRU $UWHULDO

&ROOHFWRU

/RFDO 6WUHHW

)XQFWLRQDO &ODVVLILFDWLRQ &KDQJH

3DUNV

:DWHU

&LW\ %RXQGDU\

8UEDQ *URZWK %RXQGDU\

0LOHV

)LJXUH

)XQFWLRQDO &ODVV

)ORUHQFH 2U

KITTELSON & ASSOCIATES

MAJOR STREET CONNECTIVITY AND ROADWAY CAPACITY

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

Table 2 identifies the preferred alternatives for the roadway system. The priorities shown in Table 2 are based on the project evaluation criteria as well as input from the project team, the project advisory committee, and the community. The cost estimates are based on average unit costs for similar roadway improvements in the northwest. Figure 2 illustrates the location of the preferred roadway system alternatives.

Table 2. Preferred Roadway System Alternatives

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

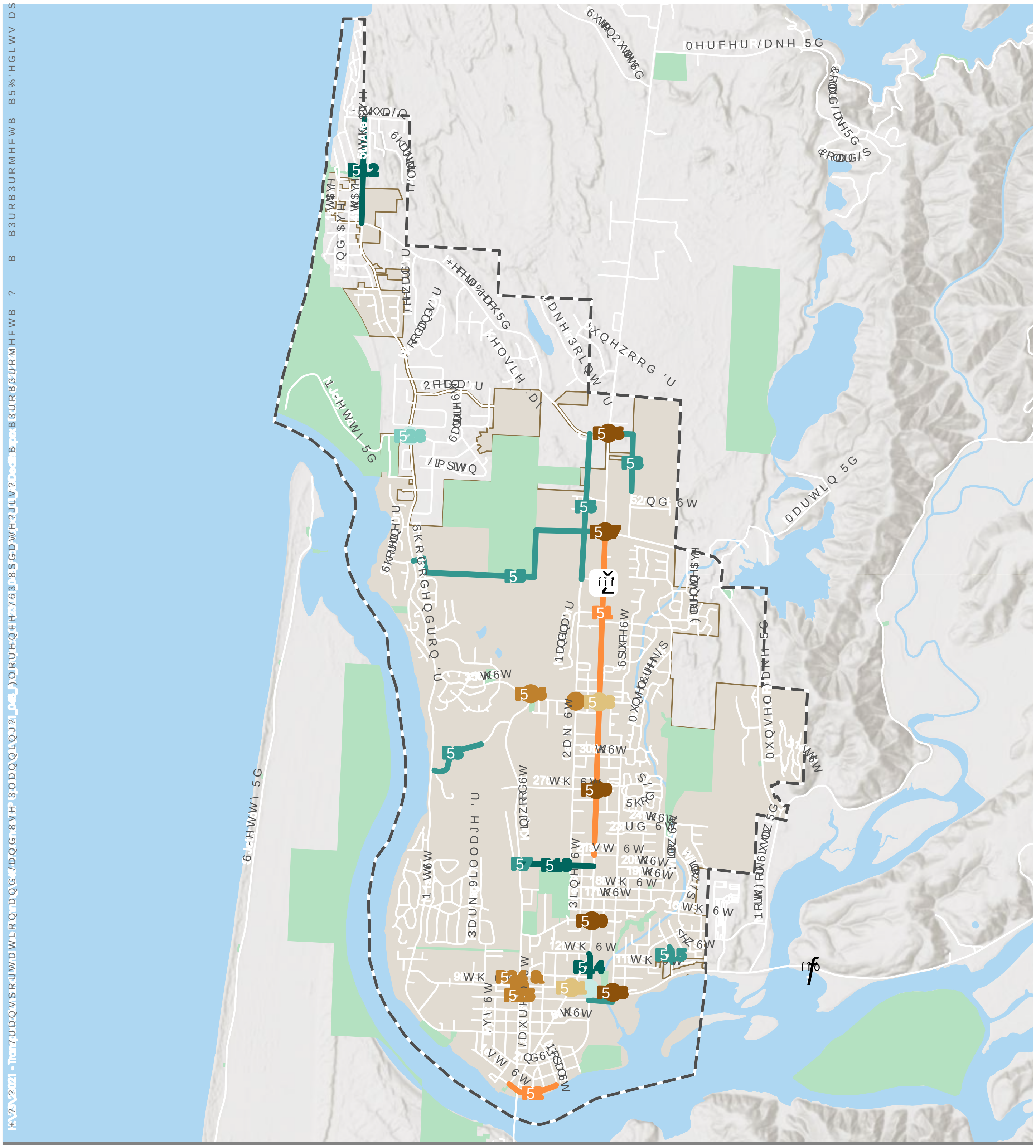
R14	Quince Street	Upgrade the roadway from OR 126 to US 101 to Collector standard	Low	$420
R15	Xylo Street	Upgrade the roadway from Willow Ct to 12th St	Medium	$465
		Preferred Intersection Alternatives		
R16[1]	US 101/Heceta Beach Road	Reconfigure the intersection/modify the traffic control (e.g., traffic signal, roundabout) when warranted – cost estimate reflects a traffic signal	Medium	$1,250
R17[1]	US 101/Munsel Lake Road	Reconfigure the intersection/modify the traffic control (e.g., traffic signal, roundabout) when warranted – cost estimate reflects a traffic signal	High	$1,250
R18[1]	US 101/35th Street	Restripe the eastbound approach to the intersection to maximize the available storage	Medium	$50
R19[1]	US 101/27th Street	Reconfigure the intersection/modify the traffic control (e.g., traffic signal, roundabout) when warranted – cost estimate reflects a traffic signal	Medium	$1,250
R20[1]	US 101/15th Street	Reconfigure the intersection/modify the traffic control (e.g., traffic signal, roundabout) when warranted – cost estimate reflects a traffic signal	Low	$1,250
R21[1]	US 101/OR 126	Restripe the eastbound and southbound approaches to maximize the available storage	High	$50
R22[1]	OR 126/Quince Street	Implement turning movement restrictions (right-in/right-out/left-in)	High	$150
R23[1]	OR 126/Spruce Street	Reconfigure the intersection/modify the traffic control (e.g., traffic signal, roundabout) when warranted – cost estimate reflects a traffic signal	Low	$1,250
R24	9th Street/ Kingwood Street	Reconfigure the intersection to all-way stop-control when warranted	High	$50
R25	9th Street/ Kingwood Street	Reconfigure the intersection as a mini-roundabout when warranted	Low	$1,250
R26	35th Street/ Kingwood Street	Reconfigure the intersection to all-way stop-control when warranted	High	$50
R27	35th Street/Oak Street	Reconfigure the intersection to all-way stop-control when warranted	High	$50
R28	Rhododendron Drive/Jetty Road	Install separate left- and/or right-turn lanes at the intersection	Low	$250
			Total High Priority Cost	$1,800
			Total Medium Priority Cost	$11,695
			Total Low Priority Cost	$16,670
			Total Cost	$30,165

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

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

LOCAL STREET CONNECTIVITY

Several local street connections were identified for the Florence TSP update. Figure 3 illustrates the location and general orientation of the connections. Roadway alignments and cost estimates are not provided as they are anticipated to be determined as part of future development. The City will refer to the local street connections shown in Figure 3 during development review to ensure future development and redevelopment improve local street access and circulation within the city.



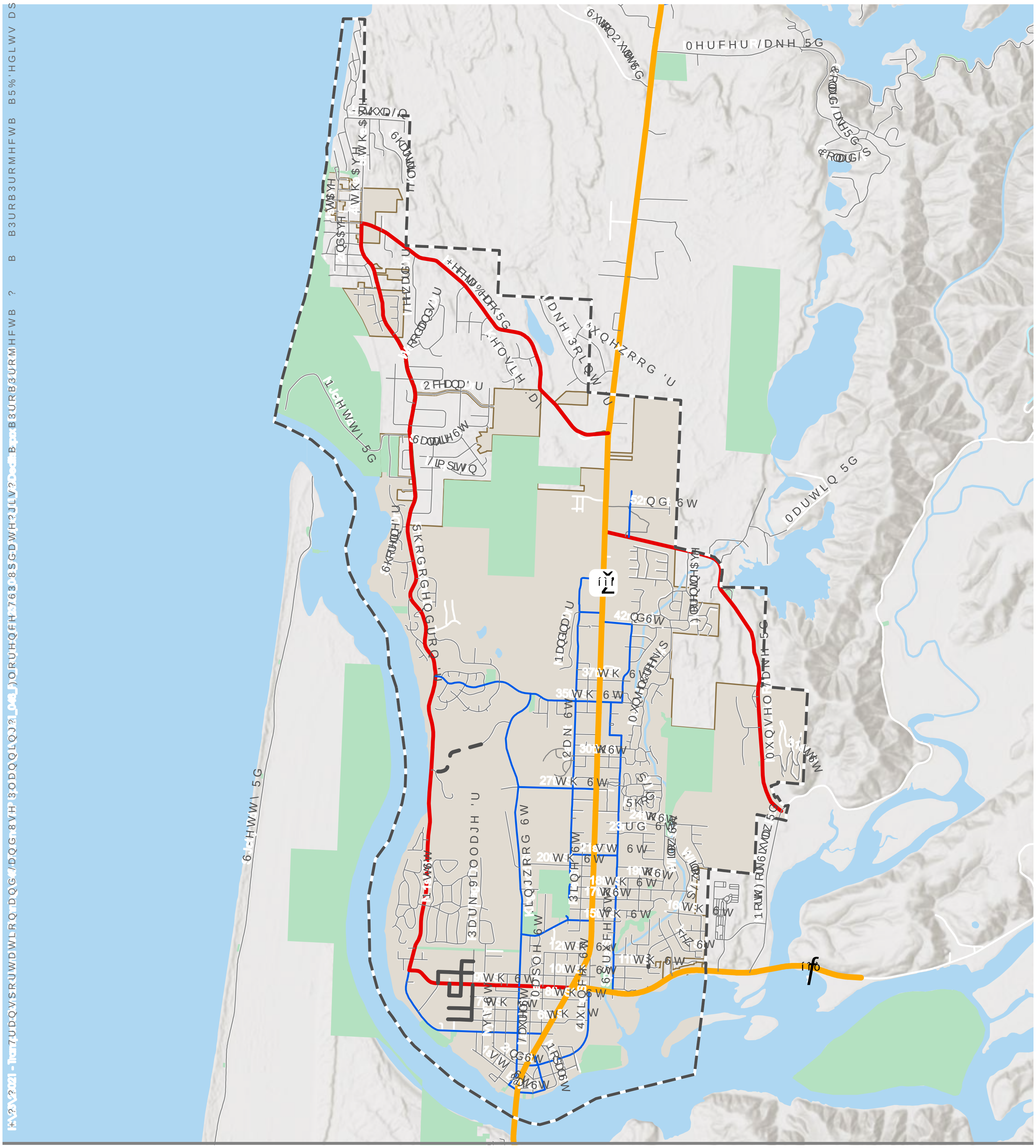
8SJUDGH &ODVVLILFDWLRQ
7XUQ /DQH &KDQJHV
%XLOG 5RDGZD\
3DUNV
5HILQHPHQW 6WUHHW
&DSLWDO 3ODQ
5HFRQILJXUH ,QWHUVHFWLRQ
&LW\ %RXQGDU\
$OO :D\ 6WRS &RQWURO
8UEDQ *URZWK %RXQGDU\
$GG 6WRUDJH

0LOHV

)LJXUH

3UHIHUUHG 5RDGZD\ 6\VWHP
)ORUHQFH 2U

KITTELSON & ASSOCIATES



5RDGV

+LJKZD\ 0DMRU $UWHULDO

0LQRU $UWHULDO

&ROOHFWRU

/RFDO 6WUHHW

)XWXUH /RFDO 6WUHHW

3DUNV

:DWHU

&LW\ %RXQGDU\

8UEDQ *URZWK %RXQGDU\

0LOHV

)LJXUH

/RFDO 6WUHHW &RQ
)ORUHQFH 2U

KITTELSON & ASSOCIATES

TRAFFIC SAFETY

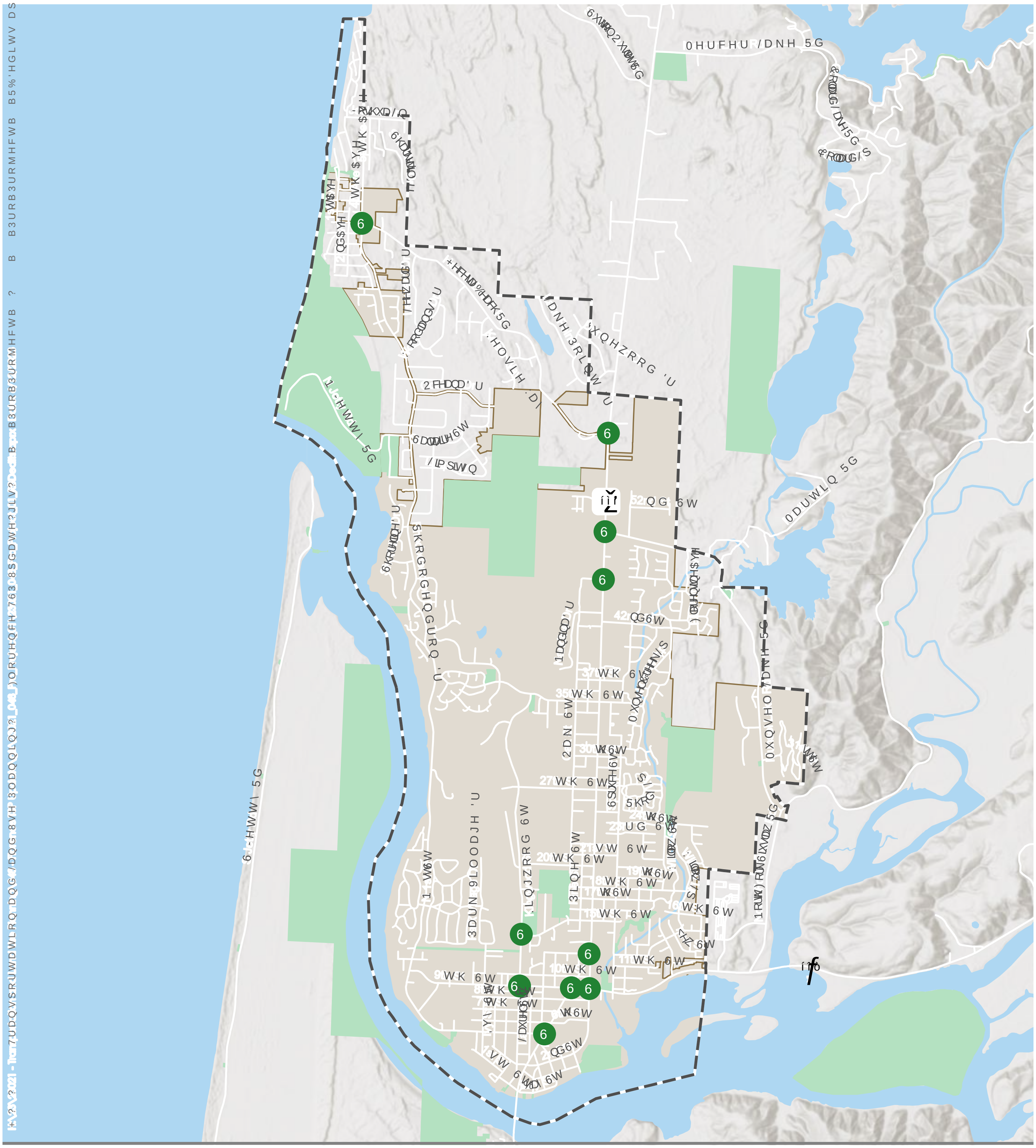
The preferred alternatives developed for the roadway system also include traffic safety enhancements at locations with a history of fatal and severe injury crashes as well as locations with high crash rates. Table 3 identifies the preferred alternatives to address traffic safety. The priorities shown in Table 3 are based on the project evaluation criteria as well as input from the project team, the project advisory committee, and the community. The cost estimates are based on average unit costs for similar roadway improvements in the northwest. Figure 4 illustrates the location of the preferred traffic safety alternatives.

Table 3. Preferred Traffic Safety Alternatives

Map ID	Location	Description	Priority	Cost ($1,000)
S1[1,2]	US 101/Heceta Beach Road	Install advance intersection warning signs with flashing beacons; install southbound dynamic speed feedback sign after entering Florence; and install intersection lighting	Medium	$250
S2[1]	US 101/Munsel Lake Road	Install advance intersection warning signs with flashing beacons and install intersection lighting	High	$150
S3[1]	US 101/46th Street	Install advance intersection warning signs with flashing beacons; install street name signs; install intersection lighting; and trim/remove vegetation	Medium	$150
S4[1]	US 101/12th Street	Install street lighting and evaluate need for traffic control modification	Low	$50
S5[1]	US 101/OR 126	Increase visibility of traffic signal heads (larger bulbs, reflective backplates, etc.)	High	$50
S6[1]	US 101/ Rhododendron Drive	Increase visibility of traffic signal heads (larger bulbs, reflective backplates, etc.)	High	$50
S7[1]	OR 126/Quince Street	Install street lighting and evaluate need for traffic control modification (Coordinate with Project R22)	High	$100
S8	Rhododendron Drive/Heceta Beach Road	Install advance intersection warning signs on Heceta Beach Road; trim vegetation in SE and SW corners to increase sight distance; and install intersection lighting	High	$150
S9	Kingwood Street/ 15th Street	Install advance intersection warning signs on Kingwood Street and trim vegetation in SE corner to increase sight distance	High	$100
S10	Kingwood Street/ 9th Street	Install advance intersection warning signs on 9th Street; install additional intersection lighting; and evaluate need for traffic control modification (Coordinate with Projects R24 and R25)	High	$100
			Total High Priority Cost	$700
			Total Medium Priority Cost	$400
			Total Low Priority Cost	$50
			Total Cost	$1,150

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

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



7UDIILF 6DIHW\ $OWHUQDWLYHV

3DUNV

:DWHU

&LW\ %RXQGDU\

8UEDQ *URZWK %RXQGDU\

0LOHV

)LJXUH

3UHIHUUHG 7UDIILF 6DIHW
)ORUHQFH 2U

KITTELSON & ASSOCIATES

In addition to the Safety Alternatives identified in Table 3, several additional alternatives were considered along specific roadways:

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

ACCESS MANAGEMENT

Numerous driveways and street connections increase the number of conflict points and potential for collisions and decrease mobility and traffic flow. *Tech Memo 5* identifies potential access management alternatives to preserve transportation system investments and guard against deteriorations in safety and increased congestion. The alternatives include:

- Update the city-wide access spacing standards to include spacing between driveways,
- Define a variance process for when the standard cannot be met, and
- Establish an approach for access consolidation over time to move in the direction of the access spacing standards at each opportunity.

Access Spacing Standards

The City's access spacing standards will continue to be determined by functional classification and provide standards for minimum intersection and driveway spacing. However, they will also include minimum spacing between driveways. Table 4 summarizes City's access spacing standards.

Table 4: City Access Spacing Standards

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

Access Management Policies

The access management policies are provided below.

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

A comprehensive list of potential access spacing variance policies and an approach for access consolidation are provided in Tech Memo 5.

NEIGHBORHOOD TRAFFIC MANAGEMENT

Neighborhood Traffic Management (NTM) is a term used to describe traffic control devices that reduce travel speeds and traffic volumes in residential neighborhoods. NTM is also commonly referred to as traffic calming because of its ability to calm traffic. NTM strategies have been implemented in locations throughout the city; however, there are many areas where additional NTM could be considered. Table 5 lists several common NTM options that are typically supported by emergency response as long as minimum street criteria are met.

Table 5: Neighborhood Traffic Management (NTM) Options by Functional Classification

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

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

As shown in Table 5, several NTM solutions are limited to local streets; on arterial or collector streets, implementation of these NTM solutions can be counterproductive and lead to cut through traffic on local streets. NTM solutions on arterial and collector streets can also cause conflicts for emergency response as well as freight and public transit.

Pedestrian System

The preferred alternatives developed for the pedestrian system include sidewalks that fill gaps and provide new facilities along city streets, multi-use paths/trails that augment and support the sidewalks, and enhanced crossings that enable people to safely cross streets. Collectively, these alternatives will help enhance and expand the multimodal transportation system and encourage walking and other non-motorized trips consistent with the goals of the TSP Update.

PEDESTRIAN SYSTEM ALTERNATIVES

Table 6 identifies the preferred alternatives developed for the pedestrian system. The priorities shown in Table 6 are based on the project evaluation criteria as well as input from the project team, the project advisory committee, and the community. The cost estimates are based on average unit costs for similar roadway improvements in the northwest. Figure 5 illustrates the location of the preferred pedestrian system alternatives.

Table 6. Preferred Pedestrian System Alternatives

Map ID	Location	Description	Priority	Cost ($1,000)
		ODOT Streets		
P1	**US 101** 37th St to UGB	Complete sidewalks on both sides of the street	High	$3,090
P2	**OR 126** US 101 to N Fork Road	Construct sidewalks on both sides of the street from Spruce Street to Tamarack Street and a multi-use path on the north side from Tamarack Street to N Fork Road	High	$1,605
		Lane County Streets		
P3	**Heceta Beach Rd** US 101 to Rhododendron Dr	Construct multi-use path on one side of the street with stormwater facility	High	$2,750
P4	**Munsel Lake Rd** US 101 to Spruce St	Construct sidewalks with landscape strips on one side of the street and a multi-use path on the other side of the street	High	$450
P5	**Munsel Lake Rd** Spruce St to Ocean Dunes Dr	Construct multi-use path on one side of the street (include landscape strip as feasible)	High	$2,125
P6	**Munsel Lake Rd** Ocean Dunes Dr to N Fork Rd	Construct multi-use path on one side of the street (include landscape strip as feasible)	High	$705
P7	**N Fork Rd** OR 126 to Munsel Lake Rd	Construct multi-use path on one side of the street (include landscape strip as feasible)	High	$1,310
P8	**N Jetty Rd** Rhododendron Dr to North Jetty Beach	Construct multi-use path on one side of the street (include landscape strip as feasible)	Medium	$1,550
		City Streets – Arterial		
P9	**9th St**	Maintain existing facilities	N/A	N/A

	US 101 to Rhododendron Dr			
P10	**Rhododendron Dr** US 101 to Hemlock St	Maintain existing facilities	N/A	N/A
P11	**Rhododendron Dr** 9th St to Wild Winds St	Construct multi-use path on one side of the street (include landscape strip as feasible)	High	$1,040
P12	**Rhododendron Dr** Wild Winds St to 35th St	Construct multi-use path on one side of the street (include landscape strip as feasible)	High	$1,295
P13	**Rhododendron Dr** 35th St to Heceta Beach Rd	Construct multi-use path on one side of the street (include landscape strip as feasible)	High	$3,730
		City Streets – Collector		
P14	**2nd St** US 101 to Harbor St	Fill in sidewalk gaps on both sides of the street within Old Town	High	$530
P15	**21st St** Oak St to US 101	Maintain existing facilities	N/A	N/A
P16	**21st St** US 101 to Spruce St	Fill in sidewalk gaps on both sides of the street	Medium	$255
P17	**27th St** US 101 to Kingwood St	Fill in sidewalk gaps on both sides of the street between US 101 and Oak St	Medium	$840
P18	**35th St** Rhododendron Dr to Kingwood St	Construct sidewalks on both sides of the street	High	$1,105
P19	**35th St** Kingwood St to Oak St	Fill in sidewalk gaps on both sides of the street	High	$505
P20	**35th St** Oak St to US 101	Fill in sidewalk gaps on both sides of the street	High	$255
P21	**35th St** US 101 to Spruce St	Maintain existing facilities	N/A	N/A
P22	**42nd St** US 101 to Spruce St	Construct sidewalks on both sides of the street	Medium	$325
P23	**43rd St** Oak St to US 101	Fill in sidewalk gaps on both sides of the street	Medium	$245
P24	**46th St** Oak St to US 101	Maintain existing facilities	N/A	N/A
P25	**Airport Rd/15th St** Kingwood St to US 101	Fill in sidewalk gaps on both sides of the street	Medium	$805
P26	**Bay St** Kingwood St to Nopal St	Reconstruct sidewalks to increase width (Coordinate with project R2)	Medium	$550
P27	**Kingwood St** Bay St to 9th St	Fill in sidewalk gaps on both sides of the street	Medium	$1,090
P28	**Kingwood St**	Fill in sidewalk gaps on both sides of the street	Medium	$560

	9th St to Airport Wy			
P29	**Kingwood St** Airport Wy to 20th St	Fill in sidewalk gaps on both sides of the street	Medium	$720
P30	**Kingwood St** 20th St to 35th St	Reconstruct sidewalks with landscape strips **OR** implement traffic calming	Low	$2,000
P31	**Maple St** US 101 to Bay St	Maintain existing facilities	N/A	N/A
P32	**Oak St** 20th St to 27th St	Maintain existing facilities	N/A	N/A
P33	**Oak St** 27th St to 35th St	Construct sidewalk on the east side of the street	High	$950
P34	**Oak St** 35th St to 46th St	Reconstruct sidewalks with landscape strips **OR** implement traffic calming	Low	$1,335
P35	**Quince St** 2nd St to OR 126	Reconstruct and fill-in Sidewalks	Medium	$365
P36	**32nd-Redwood St** Spruce St to 35th St	Fill in sidewalk gaps on south and west side of the street	Medium	$480
P37	**Spruce St** 42nd St to 35th St	Fill in sidewalk gaps on both sides of the street	Medium	$875
P38	**Spruce St** 32nd to 17th St	Maintain existing facilities	N/A	N/A
P39	**Spruce St** 17th St to OR 126	Fill sidewalks gaps on both sides of the street	Medium	$1,005
P40	**Spruce St** Munsel Lake Rd to northern terminus	Construct sidewalks on the west side of the street	Low	$495
		City Streets – Other Streets of Significance		
P41	**4th Ave** Heceta Beach Rd to Joshua Ln	Construct sidewalks on both sides of the street (coordinate with Project R12)	Low	$0[1]
P42	**20th St** Kingwood St to US 101	Construct sidewalks on both sides of the street (coordinate with Project R13)	Medium	$0[1]
P43	**Laurel St-Old Town Wy** US 101 to Maple St	Fill in sidewalk gaps on both sides of the street	High	$405
P44	**30th St** Oak St to US 101	Maintain existing facilities	N/A	N/A
P45	**30th St** US 101 to Spruce St	Maintain existing facilities	N/A	N/A
			Total High Priority Cost	$21,850
			Total Medium Priority Cost	$9,665
			Total Low Priority Cost	$3,830
			Total Cost	$35,345

1. Project cost included in roadway system cost.

Table 7 identifies the preferred pedestrian crossing alternatives developed for the pedestrian system. Figure 6 illustrates the location of the preferred pedestrian crossing alternatives.

Table 7. Preferred Pedestrian Crossing Alternatives

Map ID	Location	Description	Priority	Cost ($1,000)
		ODOT Streets		
C1[1]	US 101	Install enhanced crossing treatments on US 101 at 46th St and 42nd/43rd St	High	$250
C2[1]	US 101	Install enhanced crossing treatments on US 101 at 27th St	Medium	$250
C3[1]	US 101	Install protected intersection treatments at all signalized intersections as feasible – include at future intersections if a signal is being constructed	Low	$1,500
C4[1]	US 101	Add leading pedestrian intervals on US 101 at 35th St and 21st St	Medium	$50
		Lane County Streets		
C5	Munsel Lake Rd	Install enhanced crossing treatments on Munsel Lake Rd at Munsel Landing County Park and at Ocean Dunes Dr	High	$50
		City Streets		
C6	9th St	Install enhanced crossing treatments at existing crosswalks: Maple St, Kingwood St, and PeaceHealth access road	Medium	$150
C7	Rhododendron Dr	Install enhanced crossings treatments on Rhododendron Dr at Kingwood St, Hemlock St, Greentrees Village, 35th St, and Heceta Beach Rd	Medium	$250
C8	Kingwood St	Install enhanced crossing treatments at Bay St, 27th St, and 35th St	Medium	$100
C9	Oak St	Install enhanced crossing treatments at 35th St, 27th St, and 21st St; install second crosswalk and school crosswalk signs at 30th St	High	$200
C10	Quince St	Install enhanced crossing treatments at the Florence Events Center access	Medium	$50
C11	Spruce St	Install enhanced crossing treatments at multi-use path locations at 13th St, 27th St, and 29th St	Medium	$150
C12	Old Town	Install marked crosswalks with curb extensions on 2nd St at Nopal St, Oak St, and Harbor St; install midblock crossings at Bay St and the boardwalk	High	$250
			Total High Priority Cost	$750
			Total Medium Priority Cost	$1,000
			Total Low Priority Cost	$1,500
			Total Cost	$3,250

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

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

Table 8 identifies the preferred multi-use path alternatives developed for the pedestrian system. Figure 7 illustrates the location of the preferred multi-use path alternatives.

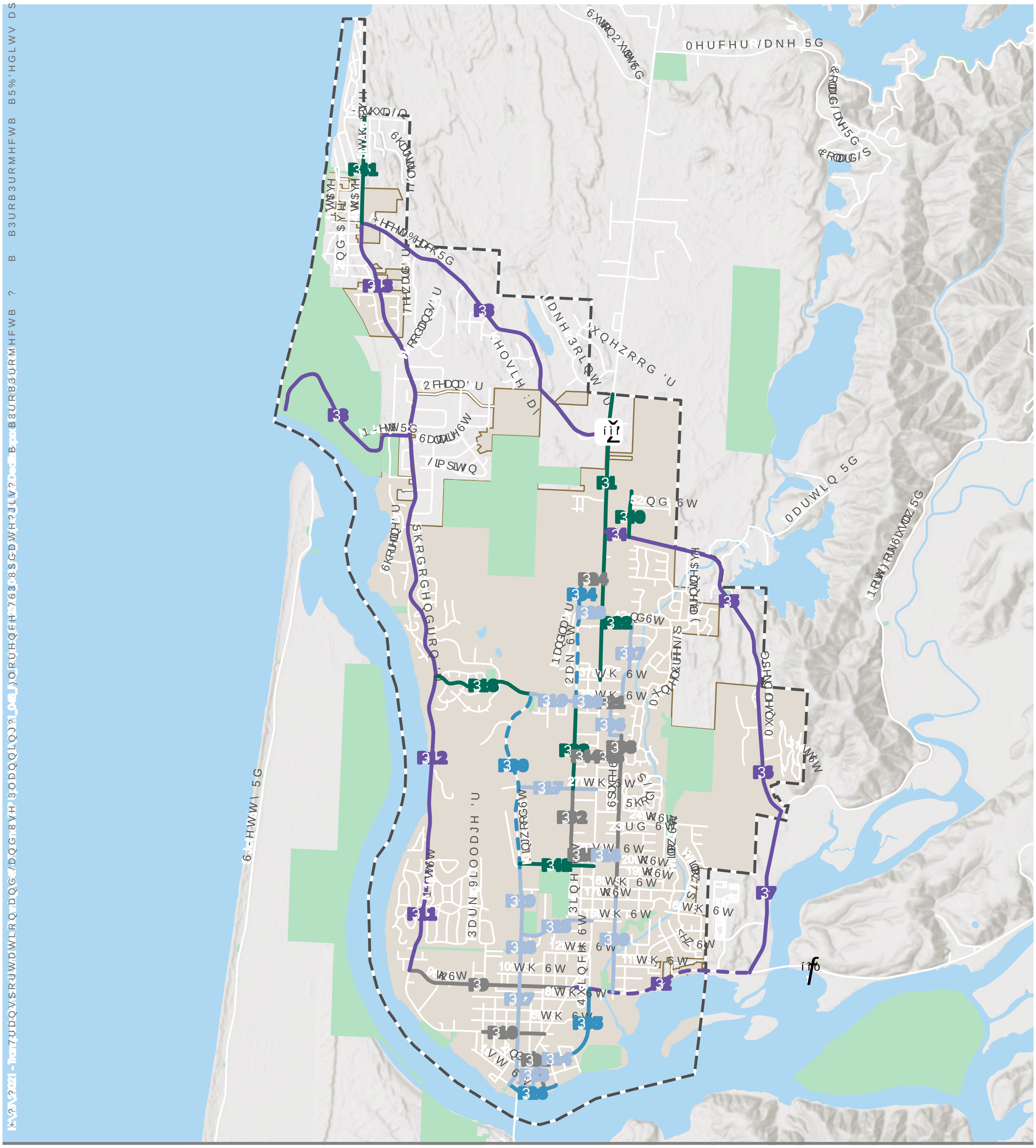
Table 8. Preferred Multi-use Path Alternatives

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

PEDESTRIAN SYSTEM POLICIES

The pedestrian system policies are provided below:

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



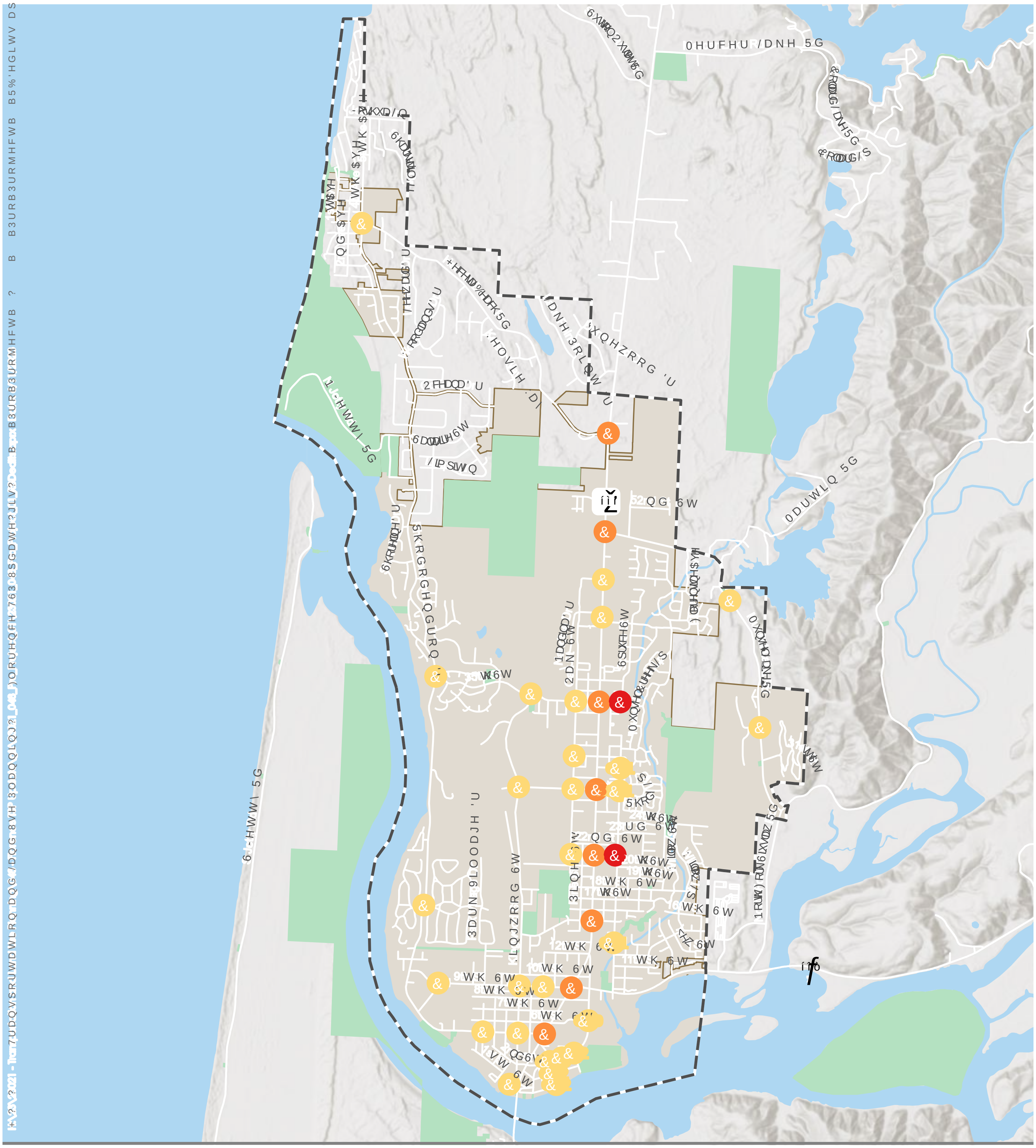
0XOWL 8VH 3DWK
0XOWL 8VH 3DWK DQG 6LGHZDONV
%XLOG 6LGHZDONV
5HFRQVWUXFW 6LGHZDONV
5HFRQVWUXFW 6LGHZDONV
)LOO 6LGHZDON *DSV
0DLQWDLQ ([LVWLQJ)DFLOLW\
3DUNV
:DWHU
&LW\ %RXQGDU\
8UEDQ *URZWK %RXQGDU\

0LOHV

)LJXUH

3UHIHUUHG 3HGHVWULDQ
)ORUHQFH 2U

KITTELSON
& ASSOCIATES



(QKDQFHG &URVVLQJ | 3DUNV
3URWHFWHG ,QWHUVHFWLRQ | :DWHU
/HDGLQJ 3HGHVWULDQ | &LW\ %RXQGDU\
7UDIILF &DOPLQJ | 8UEDQ *URZWK %RXQGDU\

0LOHV

)LJXUH

KITTELSON & ASSOCIATES

3UHIHUUHG &URVVLQJ
)ORUHQFH 2U

Bicycle System

The preferred alternatives developed for the bicycle system include mixed-use shoulders, low-traffic bikeways, shared lane pavement markings (sharrows) on-street bike lanes, buffered bike lanes, and separated bike lanes on city streets, as well as bicycle crossings, wayfinding signs, bike parking, bike corrals, and bike sharing that enable people to safely cross streets, navigate around Florence park their bicycles, and more easily use bicycles in general. Collectively, these alternatives will help enhance and expand the multimodal transportation system and encourage biking and other non-motorized.

BICYCLE SYSTEM ALTERNATIVES

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

Table 9. Preferred Bicycle System Alternatives

Map ID	Location	Description	Priority	Cost ($1,000)
		ODOT Streets		
B1	**US 101** UGB to 37th St	Construct buffered bike lanes on both sides of the street (requires narrowing travel lanes) **OR** construct bike facilities consistent with US 101 Refinement Plan	High	$360
B2	**US 101** 37th St to 21st St	Construct buffered bike lanes on both sides of the street (requires narrowing travel lanes) **OR** construct bike facilities consistent with US 101 Refinement Plan	Medium	$205
B3	**US 101** 21st St to Siuslaw River Bridge	Construct buffered bike lanes on both sides of the street (requires narrowing travel lanes)	Medium	$345
B4	**OR 126** US 101 to Tamarack St	Construct buffered bike lanes on both sides of the street (requires narrowing travel lanes)	High	$65
B5	**OR 126** Tamarack St to UGB	Maintain existing facilities	N/A	N/A
		Lane County Streets		
B6	**Heceta Beach Rd** US 101 to Rhododendron Dr	Construct shoulder bikeways on both sides of the street (coordinate with Project P3)	High	$915
B7	**Munsel Lake Rd** US 101 to Spruce St	Construct bike lanes on both sides of the street (coordinate with Project P4)	High	$65
B8	**Munsel Lake Rd** Spruce St to Ocean Dunes Dr	Construct shoulder bikeways on both sides of the street (coordinate with Project P5)	High	$710

B9	**Munsel Lake Rd** Ocean Dunes Dr to N Fork Rd	Construct shoulder bikeways on both sides of the street (coordinate with Project P6)	High	$235
B10	**N Fork Rd** OR 126 to Munsel Lake Rd	Construct shoulder bikeways on both sides of the street (coordinate with Project P7)	High	$435
B11	**N Jetty Rd** Rhododendron Dr to North Jetty Beach	Construct shoulder bikeways on both sides of the street (coordinate with Project P8)	Medium	$515
City Streets – Arterials				
B12	**9th St** US 101 to Rhododendron Dr	Maintain existing facilities	N/A	N/A
B13	**Rhododendron Dr** US 101 to 9th St	Maintain existing facilities	N/A	N/A
B14	**Rhododendron Dr** 9th St to Wild Winds St	Construct shoulder bikeways on both sides of the street (coordinate with Project P11)	High	$345
B15	**Rhododendron Dr** Wild Winds St to 35th St	Construct shoulder bikeways on both sides of the street (coordinate with Project P12)	High	$430
B16	**Rhododendron Dr** 35th St to Heceta Beach Rd	Construct shoulder bikeways on both sides of the street (coordinate with Project P13)	High	$1,245
City Streets – Collectors				
B17	**2nd St** US 101 to Harbor St	Extend shared lane pavement markings from Maple St to US 101	High	$5
B18	**21st St** Oak St to US 101	Add shared lane pavement markings	Medium	$5
B19	**21st St** US 101 to Spruce St	Add shared lane pavement markings	Medium	$5
B20	**27th St** US 101 to Kingwood St	Construct bike lanes from Oak St to US 101	Medium	$205
B21	**35th St** Rhododendron Dr to Kingwood St	Maintain existing facilities	N/A	N/A
B22	**35th St** Kingwood St to Oak St	Maintain existing facilities	N/A	N/A
B23	**35th St** Oak St to US 101	Maintain existing facilities	N/A	N/A
B24	**35th St** US 101 to Spruce St	Maintain existing facilities	N/A	N/A
B25	**42nd St** US 101 to Spruce St	Add shared lane pavement markings from Spruce to eastern terminus and create bike connection between the eastern terminus and Munsel Creek Lp	Medium	$5

B26	**43rd St** Oak St to US 101	Add shared lane pavement markings	Medium	$5
B27	**46th St** Oak St to US 101	Maintain existing facilities	N/A	N/A
B28	**Airport Rd/15th St** Kingwood St to US 101	Add shared lane pavement markings	Medium	$10
B29	**Bay St** Kingwood St to Maple St	Add shared lane pavement markings	Medium	$5
B30	**Kingwood St** Bay St to 9th St	Construct bike lanes on both sides of the street (requires removing on-street parking) **OR** implement traffic calming measures	Medium	$265
B31	**Kingwood St** 9th St to Airport Wy	Construct bike lanes on both sides of the street from 9th St to 10th St (will require removing on-street parking) **OR** implement traffic calming measures	Medium	$135
B32	**Kingwood St** Airport Wy to 35th St	Construct buffered bike lanes on both sides of the street (requires narrowing travel lanes) **OR** implement traffic calming measures	Medium	$215
B33	**Maple St** US 101 to Bay St	Add shared lane pavement markings	High	$5
B34	**Oak St** 20th St to 27th St	Construct bike lanes from 20th St to Siuslaw Middle School Dwy (requires removing on-street parking)	High	$200
B35	**Oak St** 27th St to 35th St	Maintain existing facilities	N/A	N/A
B36	**Oak St** 35th St to 46th St	Maintain existing facilities	N/A	N/A
B37	**Quince St** 2nd St to OR 126	Construct bike lanes on both sides of the street (requires removing on-street parking)	High	$180
B38	**32nd-Redwood St** Spruce St to 35th St	Maintain existing facilities	N/A	N/A
B39	**Spruce St** 42nd St to 35th St	Construct bike lanes on both sides of the street from 37th to 42nd (requires removing on-street parking)	High	$210
B40	**Spruce St** 32nd St to 17th St	Construct bike lanes on both sides of the street from 25th St to 17th Street (requires removing on-street parking)	High	$430
B41	**Spruce St** 17th St to OR 126	Construct bike lanes on both sides of the street (requires removing on-street parking)	High	$245
City Streets – Other Roads of Interest				
B42	**4th Ave** Heceta Beach Rd to Falcon St	Construct bike lanes on both sides of the street (coordinate with Project R12)	Low	$0[1]
B43	**20th St** Kingwood St to US 101	Add shared lane pavement markings	Medium	$10
B44	**Laurel St-Old Town Wy**	Add shared lane pavement markings	High	$5

	US 101 to Laurel St			
B45	**30th St** Oak St to US 101	Add shared lane pavement markings	Low	$5
B46	**30th St** US 101 to Spruce St	Add shared lane pavement markings	Low	$5
B47	**West Park Dr/18th St/Willow Lp/Willow St**	Add shared lane pavement marking (coordinate with Project MU1)	High	$15
			Total High Priority Cost	$6,100
			Total Medium Priority Cost	$1,930
			Total Low Priority Cost	$10
			Total Cost	$8,040

1. Project cost included in roadway system cost.

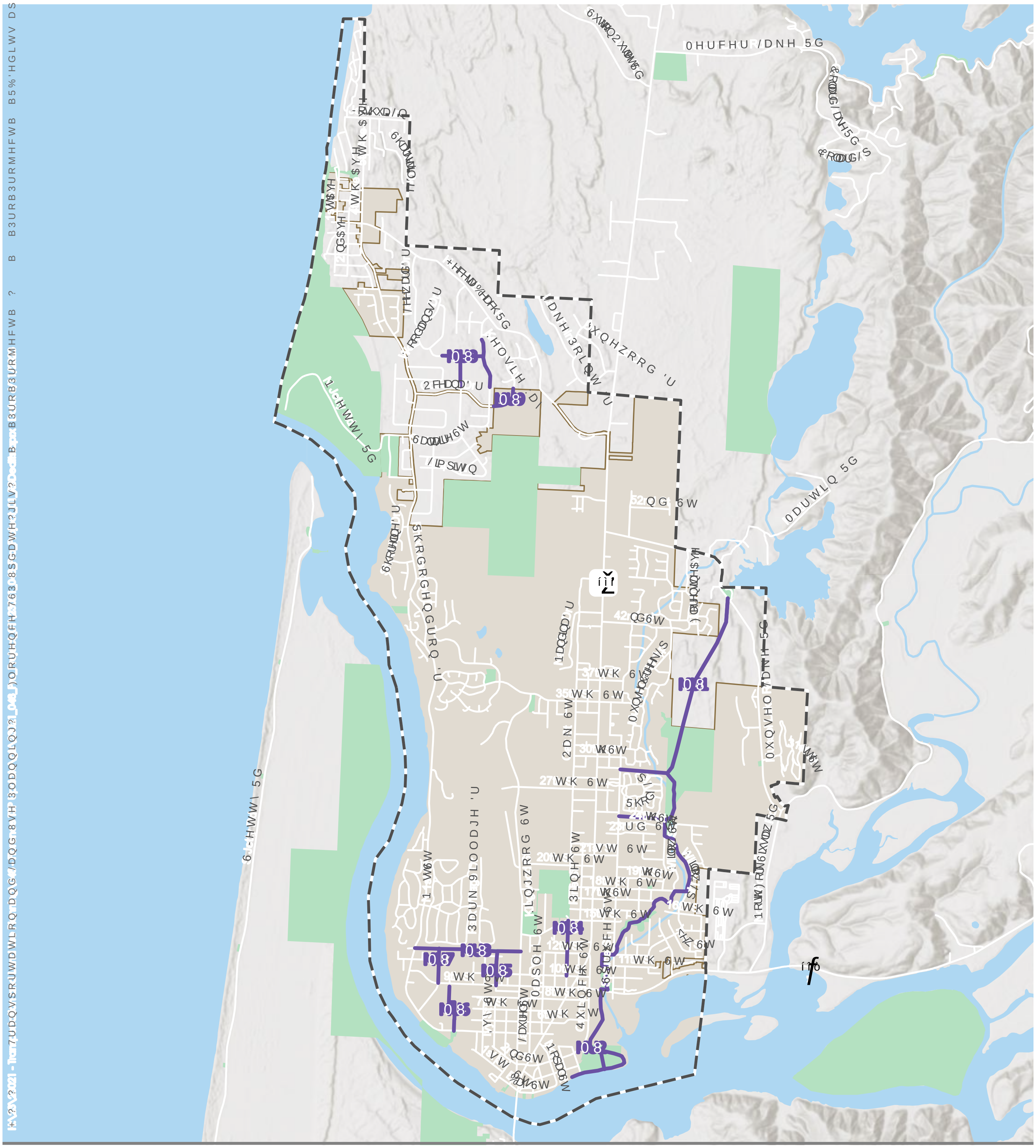
BICYCLE SYSTEM POLICIES

The bicycle system policies are provided below:

- The City will perform regular street sweeping of US 101.
- The City will perform regular enforcement of "No Parking in Bicycle Lanes".
- The City will institute a program to educate and encourage existing businesses to provide bicycle parking.
- The City will work toward becoming a "Bicycle-Friendly Community".
- The City will create a map (available on paper and electronically) showing designated bicycle route through town (roads with bicycle lanes, multi-use paths, sharrows).
- The City will partner with the Port to promote bicycle camping.
- The City will educate bicyclists about rules of the road.
- The City will partner with PeaceHealth to promote Bike to Work/School month, week, day.
- The City will replace storm drains dangerous to bicyclists with drains that have cross-members.

Transit System

Public transit service within Florence is provided by Rhody Express (for local trips), Link Lane (for intercity trips to Eugene and to Yachats), and Coos County Area Transit (for intercity trips to Coos Bay). In addition to coordinating with local and regional transit agencies to help implement their planned service enhancements, Florence can support development of a more efficient transit service by providing easy and safe walking and bicycling connections between key roadways, neighborhoods, and local destinations; by working with Rhody Express to explore local route improvements; by working with transit providers to improve service frequency and marketing in Florence; by providing amenities, such as shelters and benches, at transit stops; and by planning for park-and-ride and mobility hub locations. These types of enhancements can encourage increased transit ridership consistent with Goal 3 and Goal 6 of the TSP update.



0XOWL 8VH 3DWK $OWHUQDWLYHV

3DUNV

:DWHU

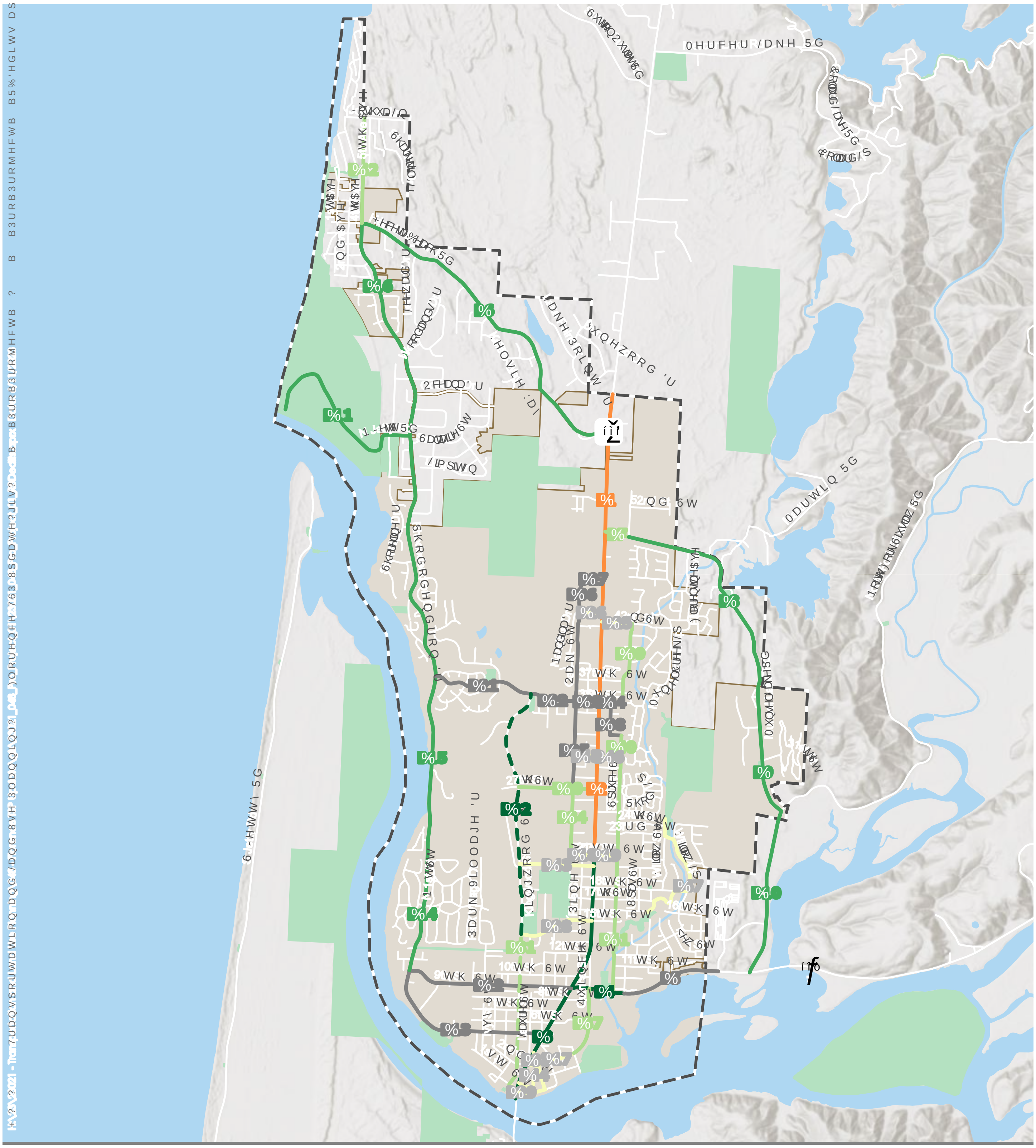
&LW\ %RXQGDU\

8UEDQ *URZWK %RXQGDU\

)LJXUH

3UHIHUUHG 0XOWL 8VH 3D
)ORUHQFH 2U

KITTELSON & ASSOCIATES



86 5HILQHPHQW 3ODQ

%XIIHUHG %LNH /DQHV

%XIIHUHG %LNH /DQHV 7UDIILF &DOPLQJ

6KRXOGHU %LNHZD\

%LNH /DQHV

%LNH /DQHV 7UDIILF &DOPLQJ

6KDUHG /DQH 3DYHPHQW 0DUNLQJV

0DLQWDLQ ([LVWLQJ)DFLOLWLHV

3DUNV

:DWHU

&LW\ %RXQGDU\

8UEDQ *URZWK %RXQGDU\

0LOHV

)LJXUH

3UHIHUUHG %LF\FOH $

)ORUHQFH 2U

KITTELSON & ASSOCIATES

TRANSIT SYSTEM ALTERNATIVES

Table 10 identifies the preferred alternatives developed for the transit system. The priorities shown in Table 10 are based on the project evaluation criteria as well as input from the project team, the project advisory committee, and the community. Figure 9 illustrates the location of the preferred transit system alternatives, where applicable.

Table 10. Preferred Transit System Alternatives

Map ID	Location	Description	Priority	Cost ($1,000)
T1	Local Service	Explore adding service to Rhododendron Dr and Heceta Beach neighborhood	High	0[1]
T2	Intercity Service	Increase intercity service frequency, access to Eugene Airport and Southwest Oregon Regional Airport	Medium	0[1]
T3	Marketing	Improve marketing for intercity service, specifically for Link Lane service to Eugene and to Yachats	High	$50
T4	Transit Center	Establish a transit center at the Grocery Outlet bus stop on 21st St, add bathroom facilities to transit center, formally establish a park-and-ride with Grocery Outlet, add transit shelters and/or benches to existing stop locations	Medium	$500
T5	Bus Stops	Add shelters and/or benches to existing bus stops and build bus stops that are accessible	High	$250
T6	Park and Rides	Explore establishing park-and-rides at Three Rivers Casino and Florence Events Center	Medium	$100
T7	Mobility Hubs	Explore establishing mobility hubs at Grocery Outlet (primary location), Port of Siuslaw parking lot (secondary location), and Florence Events Center (secondary location)	Medium	$250
			Total High Priority Cost	$300
			Total Medium Priority Cost	$850
			Total Low Priority Cost	$0
			Total Cost	$1,150

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

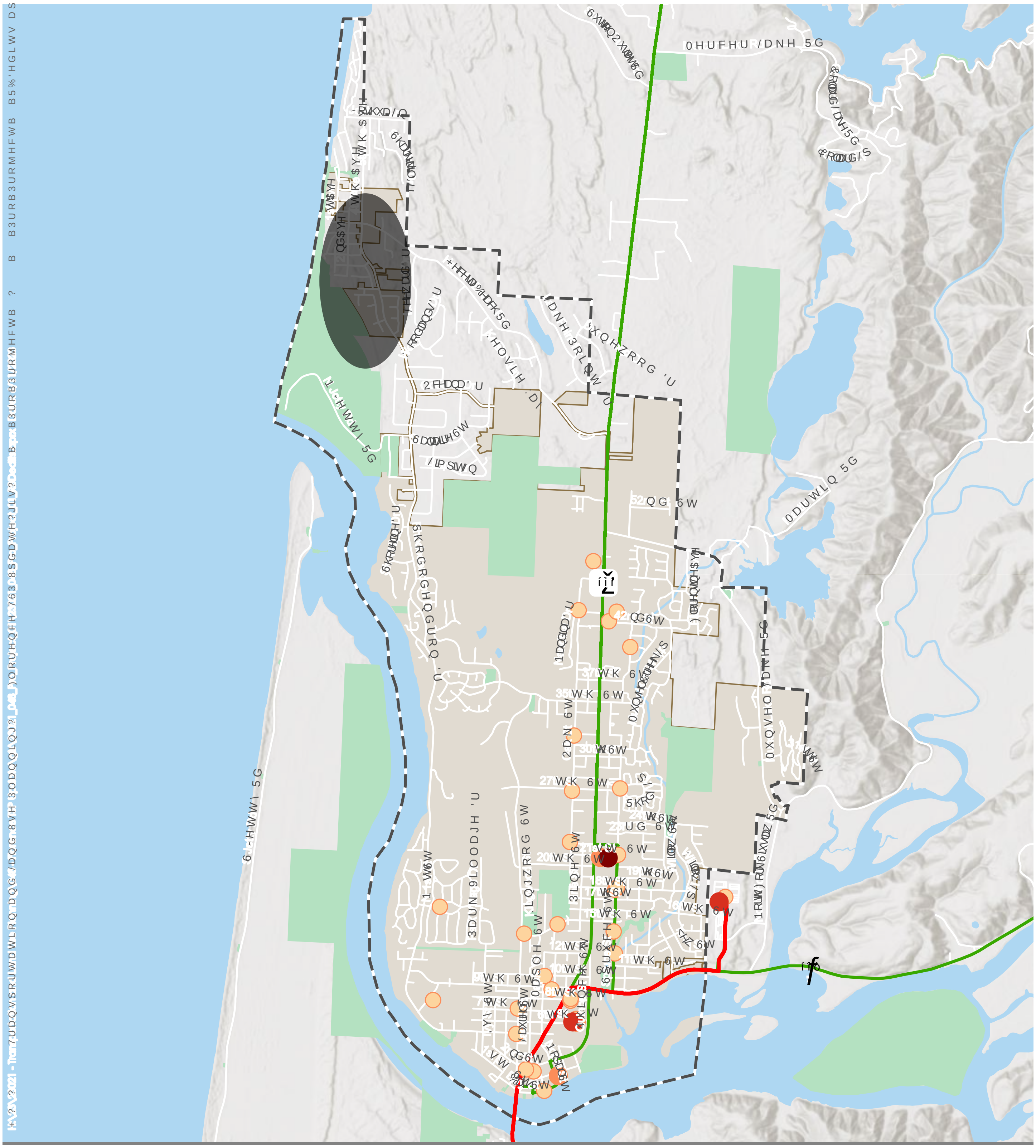
TRANSIT SYSTEM POLICIES

The transit system policies are provided below:

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

Freight, Air, and Rail Systems

The freight, air, and rail transportation systems are smaller transportation networks within Florence that are confined to more limited locations within the city (or outside of the city for the rail network). Each of these systems is detailed below.



3URMHFW 7 ([SDQGHG ,QWHUFLW\ 6HUYLFH
3URMHFW 7 7 ([SDQGHG ,QWHUFLW\ 6HUYLFH
3URMHFW 7 /RFDO 6HUYLFH
3URMHFW 7 7UDQVLW &HQWHU
3URMHFW 7 3DUN DQG 5LGH
3URMHFW 7 0RELOLW\ +XE
3URMHFW 7 %XV 6WRS
6SHFLILF 0DUNHWLQJ
:DWHU
&LW\ %RXQGDU\
8UEDQ *URZWK %RXQGDU\

)LJXUH

3UHIHUUHG 7UDQVLW
)ORUHQFH 2U

KITTELSON & ASSOCIATES

FREIGHT SYSTEM POLICIES

The *Oregon Highway Plan* identifies OR 126 and US 101 (from the intersection of OR 126 south) as freight routes in Florence. US 101 to the north of OR 126, while not designated as a freight route, clearly has significant freight capacity. Additionally, the segment of US 101 from OR 126 to Bay Street is designated as a Special Transportation Area (STA), where local access needs to be weighed against broader freight needs.

Two of the major freight generators identified in *Tech Memo #3A: Transportation System Inventory* (Florence Municipal Airport and Florence Industrial Park) are located off Kingwood Street, as well as the City's Public Works Department building. Of the remaining freight generators (local grocery stores and the Port of Siuslaw), the city's four grocery stores are all located on US 101, and the Port of Siuslaw is accessible from OR 126 via Quince Street or from US 101 via 2nd Street.

The freight alternatives identified in *Tech Memo #5: Alternatives Analysis and Funding Program* were determined to be better suited as policies. These freight policies include:

- Accommodate local freight traffic on Kingwood Street via 9th Street, 27th Street, and 35th Street.
- Ensure that planned pedestrian and bicycle improvements on City streets with local freight traffic (Kingwood Street, 9th Street, 27th Street, 35th Street, Quince Street, and 2nd Street) are designed to allow for safe and distinct space for all modes.
- Ensure that planned pedestrian and bicycle improvements along the segment of US 101 south of OR 126 and OR 126, which are reduction review routes, do not impact the "hole in the air".
- Develop policies related to maintenance along designated freight routes to ensure the facilities do not become degraded over time.
- Develop policies related to pedestrian and bicycle facilities along designated freight routes to ensure greater separation of travel modes.
- Establish truck loading zones within the downtown area and develop policies related to the use of the truck loading zones, specifically for businesses on Bay Street.

AIR SYSTEM POLICIES

The Florence Municipal Airport is located west of Kingwood Street and accommodates small aircraft on its 3,000-foot runway. The airport completed the *Airport Master Plan Update* in February 2010 to better understanding existing facilities and activities, determine future airport needs, and create a capital improvement program to meet these future needs. While the projects in the *Airport Master Plan Update* largely fall outside of the TSP Update, there are policies that Florence can implement to support the airport. These policies include:

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

RAIL SYSTEM POLICIES

There are no rail facilities within Florence and the nearest passenger rail service is located in Eugene/Springfield. The Coos Bay Rail Link, a 134-mile rail line which runs between Eugene and Coos Bay and is operated by the Port of Coos Bay, crosses the Siuslaw River approximately 2.5 miles east of Florence. The following policies were developed to address rail transportation:

- Work with Link Lane on adding runs or adjusting existing runs to better coordinate with Amtrak and Cascade POINT service at the Eugene Amtrak Station.

Safe Routes to School

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

SAFE ROUTES TO SCHOOL POLICIES

The SRTS policies are provided below.

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

Emerging Technology

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

EMERGING TRANSPORTATION TECHNOLOGY POLICIES

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

- Create a Transportation Technology Liaison Role: This role should serve to carry out the listed tasks below.
- Connect with cities in the surrounding area (Eugene), establish a service zone for any emerging technology coming to the area.
- Develop partnerships and programs with Lane Community College and the University of Oregon to attract students.
- Review the development code and create avenues for flexible uses.
- Hold public outreach to determine which emerging technologies local residents are interested in.
- Meet with ODOT, Lane County, and other relevant jurisdictions in the surrounding area and discuss emerging technologies.
- Establish a primary and secondary mobility hub in the City.
- Consider adding EV charging stations at key destinations (PeaceHealth Peace Harbor Medical Center, grocery stores, Three Rivers Casino Resort, and Old Town) and EV charging requirement to development code.
- Invest in pick-up drop-off loops and adaptive reuse design for any parking structures/lots.
- Plan for multiple ride-hailing services and micromobility services (E-scooters, bike share, etc.) to be established in Florence.

Parking Management

The preferred parking management policies and strategies are summarized below. These policies and strategies are focused on improving user information, enhancing parking management, enhancing enforcement, and increasing the parking supply. Most of these policies and strategies are applicable to Old Town; however, the City could implement them in other locations throughout the city to better manage parking demand while also improving access and circulation for all travel modes.

PARKING MANAGEMENT STRATEGIES

The preferred parking management strategies are shown in Table 11. As indicated below, most of these strategies are applicable to Old Town, but could be implemented in other areas as well.

Table 11. Preferred Parking Management Strategies

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

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

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

PARKING MANAGEMENT POLICIES

The preferred parking management policies are summarized below.

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

- Establish parking zones (e.g., loading zones, pick-up/drop-off zones).
- Reconfigure parking facilities to identify additional space for parking.

Transportation Demand Management

Transportation Demand Management (TDM) is a general term used to describe any action that removes single occupancy vehicle (SOV) trips from the roadway during peak time periods. As population and employment increase in the city, the number of trips will also increase. The ability to change travel behavior and provide alternative modes will help accommodate the growth in trips without the need for significant investments in new infrastructure. A major focus of TDM is on major employers; however, there are many things the City can do to support TDM implementation. The following summarizes the preferred TDM alternatives that can be applied by the City.

- Learn about TDM and the role it can play in achieving local planning objectives.
- Encourage and require local businesses to implement TDM solutions.
- Work to build partnerships with community organizations to support TDM implementation.
- Help create TDM programs to provide local TDM services.
- Improve non-motorized transportation facilities, public transit services, and other transportation services.
- Support carshare, ridesharing, bikeshare, e-scooters, and other micromobility services.
- Apply more comprehensive transportation planning, including multimodal level of service indicators when evaluating transportation improvements.
- Implement TDM strategies, such as commute trip reductions programs for employees, and special transportation management when sponsoring events that attract crowds.

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

Transportation System Cost Summary

Table 12 summarizes the full cost of the preferred and cost constrained plans for the TSP Update. As shown, the full cost of the preferred plan is approximately $83.9 million over the 20-year period, including $36.2 million in high priority projects, $21.0 million in medium priority projects, and $26.7 million in low priority projects. Based on the anticipated funds available for capital improvements, the cost constrained plan includes many of the high priority projects.[1]

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

Table 12: Planned Transportation System Cost Summary

Project Type	High Priority ($1,000)	Medium Priority ($1,000)	Low Priority ($1,000)	Total ($1,000)
Planned Transportation System				
Roadway	$1,800	$11,695	$16,670	$30,165
Safety	$700	$400	$50	$1,150
Pedestrian	$21,850	$9,665	$3,830	$35,345
Crossing	$750	$1,000	$1,500	$3,250
Multi-use Path	$4,555	$2,160	$1,180	$7,895
Bicycle	$6,100	$1,930	$10	$8,040
Transit	$300	$850	$0	$1,150
Parking	$150	$100	$0	$250
Total	$36,205	$27,800	$23,240	$87,245

Note: TDM = Transportation Demand Management

Given limited funding, the City will need to identify additional revenue sources to implement all projects identified in the preferred plan over the next 20 years. A summary of these potential revenue sources is provided in Tech Memo 5.

Attachments

A. Preliminary Screening of Alternatives
B. Qualitative Evaluation of Preferred Alternatives

ATTACHMENT A: PRELIMINARY SCREENING OF ALTERNATIVES

Gap/ Deficiency ID (Future Project ID)	Location/Name	Extents	Alternative Type	Alternative Description	Preliminary Screening									Total	Preferred Solution
					Safe Transportation System for all	Support Economic Development & Cost Effective	Meeting Wide-Ranging Transportation Needs for all users	Minimizing Environmental Impacts	Adding Resilience	Coordinating with Partners	Are there minimal environmental impacts?	Are there minimal engineering challenges?	Is it preferred by the public based on completed outreach?		
Roadway System															
R1	Pacific View Drive	Kingwood Street to Rhododendron Drive	Roadway extension	Extend Pacific View Drive to Rhododendron Drive											✓
R2	Munsel Lake Road	US 101 to Oak Street	Roadway extension	Extend Munsel Lake Road to the Oak Street											✓
R3	Oak Street	Heceta Beach Road to Fred Meyers	Roadway extension	Extend Oak Street from Heceta Beach Road to Fred Meyers											✓
R4	Spruce Street	45th Court to Heceta Beach	Roadway extension	Extend Spruce Street to the Heceta Beach Road											✓
R5	Oak Street	Heceta Beach to north City limits	Roadway extension	Extend Oak Street from Heceta Beach Road to the north city limits											✓
R6	Heceta Beach Road	US 101 to Spruce Street	Roadway extension	Extend Heceta Beach Road to the Spruce Street											✓
R7	Munsel Lake Road	Oak Street to Rhododendron Drive	Roadway extension	Extend Munsel Lake Road from Oak Street to Rhododendron Drive											✓
R8	20th Street	Oak Street to Kingwood Street	Roadway extension	Extend 20th Street to Kingwood Street											✓
R9	US 101/Munsel Lake Road Intersection	N/A	Traffic control	Install a traffic signal when warranted	2	1	1	2	1	0	2	2	2	13	✓
			Intersection geometry	Reconfigure the intersection/modify the traffic control	1	2	2	1	2	0	1	1	1	11	
R10	US 101/35th Street Intersection	N/A	Intersection geometry	Restripe the eastbound approach to maximize the available storage	0	2	0	-1	0	0	0	2	0	3	
			Traffic Control	Optimize the signal timing/phasing to address queuing	2	1	1	1	0	2	0	1	0	8	✓
R11	US 101/27th Street Intersection	N/A	Do nothing	Do nothing	-2	-2	-2	2	-2	-2	2	2	-2	-6	
			Traffic Control	Install a traffic signal when warranted	2	1	1	2	1	0	2	2	2	13	✓
			Intersection geometry	Reconfigure the intersection/modify the traffic control	1	2	2	1	2	0	1	1	1	11	
R12	US 101/15th Street Intersection	N/A	Do nothing	Do nothing	-2	-2	-2	2	-2	-2	2	2	-2	-6	
			Traffic Control	Install a traffic signal when warranted	-2	-2	-2	2	-2	-2	2	2	2	-2	
			Intersection geometry	Reconfigure the intersection/modify the traffic control	2	1	1	2	1	0	2	2	1	12	✓
R13	US 101/OR 126 Intersection	N/A	Intersection geometry	Restripe the eastbound and southbound approaches to maximize the available storage	0	2	0	-1	0	0	0	2	0	3	
			Traffic Control	Optimize the signal timing/phasing to address queuing	2	1	1	1	0	2	0	1	0	8	✓
R14	OR 126/Quince Street Intersection	N/A	Do Nothing	Do nothing	-2	-2	-2	2	-2	-2	2	2	-2	-6	
			Intersection geometry	Implement turning movement restrictions (right-in/right-out only)	2	-1	2	0	0	1	2	2	0	8	
			Intersection geometry and traffic control	Reconfigure the intersection/modify the traffic control	2	1	1	2	1	0	2	2	2	13	✓
R15	OR 126/Spruce Street Intersection	N/A	Do Nothing	Do nothing	-2	-2	-2	2	-2	-2	2	2	-2	-6	
			Traffic control	Install a traffic signal when warranted	-2	-2	-2	2	-2	-2	2	2	2	-2	
			Intersection geometry and traffic control	Reconfigure the intersection/modify the traffic control	1	2	2	1	2	0	1	1	1	11	✓
R16	9th Street/Kingwood Street Intersection	N/A	Do nothing	Do nothing	-2	-2	-2	2	-2	-2	2	2	-2	-6	
			Traffic control	Install a traffic signal when warranted	-2	-2	-2	2	-2	-2	2	2	2	-2	
			Intersection geometry and traffic control	Reconfigure the intersection/modify the traffic control	1	2	2	1	2	0	1	1	1	11	✓
R17	35th Street/Kingwood Street Intersection		Traffic control	Reconfigure the intersection as all-way stop control											
Safety Plan															
			Safety intersection	Install advance intersection warning signs with flashing beacons											

Gap/ Deficiency ID (Future Project ID)	Location/Name	Extents	Alternative Type	Alternative Description	Preliminary Screening									Total	Preferred Solution
					Safe Transportation System for all	Support Economic Development & Cost Effective	Meeting Wide-Ranging Transportation Needs for all users	Minimizing Environmental Impacts	Adding Resilience	Coordinating with Partners	Are there minimal environmental impacts?	Are there minimal engineering challenges?	Is it preferred by the public based on completed outreach?		
S1	US 101/Heceta Beach Road Intersection	N/A		Install southbound dynamic speed feedback sign after entering Florence											
				Provide traffic calming measures on US 101 approaching the intersection											
				Install intersection lighting											
S2	US 101/Munsel Lake Road Intersection	N/A	Safety intersection	Install advance intersection warning signs with flashing beacons											
				Evaluate need for traffic control modification (see intersection alternatives)											
				Provide traffic calming measures on US 101 approaching the intersection											
				Install intersection lighting											
S3	US 101/46th Street	N/A	Safety intersection	Install advance intersection warning signs with flashing beacons											
				Provide traffic calming measures on US 101 approaching the intersection											
				Install street name signs											
				Install intersection lighting											
S4	US 101/OR 126 Intersection	N/A	Safety intersection	Provide traffic calming measures on US 101 and OR 126 approaching the intersection											
				Increase visibility of traffic signal heads (larger bulbs, reflective backplates, etc.)											
S5	US 101/Rhododendron Drive Intersection	N/A	Safety intersection	Provide traffic calming measures on US 101 approaching the intersection											
				Increase visibility of traffic signal heads (larger bulbs, reflective backplates, etc.)											
S6	OR 126/Quince Street Intersection	N/A	Safety intersection	Evaluate need for traffic control modification (see intersection alternatives)											
				Provide traffic calming measures on OR 126 approaching the intersection											
				Install additional street lighting											
S7	Rhododendron Drive/Heceta Beach Road Intersection	N/A	Safety intersection	Install advance intersection warning signs on Heceta Beach Rd											
				Provide traffic calming measures on Heceta Beach Rd approaching the intersection											
				Trim vegetation in SE and SW corners to increase sight distance											
				Install intersection lighting											
S8	Kingwood Street/15th Street Intersection	N/A	Safety intersection	Install advance intersection warning signs on Kingwood St											
				Provide traffic calming measures on Kingwood St approaching the intersection											
				Trim vegetation in SE corner to increase sight distance											
S9	Kingwood Street/9th Street Intersection	N/A	Safety intersection	Install advance intersection warning signs on 9th St											
				Evaluate need for traffic control modification (see intersection alternatives)											
				Install additional intersection lighting											
Pedestrian System															
			Fill in sidewalk gaps	Fill sidewalk gaps at key destinations (e.g., Fred Meyer)	-1	-1	1	-1	1	0	1	2	1	3	

					Preliminary Screening										
Gap/ Deficiency ID (Future Project ID)	Location/Name	Extents	Alternative Type	Alternative Description	Safe Transportation System for all	Support Economic Development & Cost Effective	Meeting Wide-Ranging Transportation Needs for all users	Minimizing Environmental Impacts	Adding Resilience	Coordinating with Partners	Are there minimal environmental impacts?	Are there minimal engineering challenges?	Is it preferred by the public based on completed outreach?	Total	Preferred Solution
P1	US 101	37th Street to UGB	Fill in sidewalk gaps	Complete sidewalks on both sides to Munsel Lake Rd											
			Fill in sidewalk gaps	Complete sidewalks on both sides to Heceta Beach Rd											
			Fill in sidewalk gaps	Complete sidewalks on both sides to the UGB	2	2	2	1	2	2	-2	1	2	12	✓
			Fill in sidewalk gaps	Reconstruct existing sidewalks with landscaped buffers	1	1	-1	2	1	1	2	-1	1	7	
			Enhanced crossing	Install an enhanced crossing at 43rd Street											
P2	US 101	37th Street to Siuslaw River Bridge	Fill in sidewalk gaps	Reconstruct existing sidewalks with landscaped buffers											
			Reconstruct sidewalks	Install enhanced crossings at select locations											
P3	OR 126	US 101 to east UGB	Fill in sidewalk gaps	Complete sidewalks on north side to casino	2	2	2	1	0	2	1	1	2	13	
			Fill in sidewalk gaps	Complete sidewalks on both sides to Tamarack St	2	2	2	1	0	2	1	1	2	13	
			Reconstruct sidewalks	Reconstruct existing sidewalks with landscape strips	1	1	-1	2	1	1	2	-1	1	7	
P4	Heceta Beach Road	US 101 to Rhododendron Drive	Fill in sidewalk gaps	Widen shoulders on both sides/reconfigure as mixed-use shoulders.	-1	-1	1	2	-1	-1	2	-1	-1	-1	
			Fill in sidewalk gaps	Construct sidewalks on one side.	1	1	1	1	-1	1	1	2	1	8	
			Fill in sidewalk gaps	Construct shared-use path on one side. - include landscape strip as feasible	2	2	2	1	1	2	1	1	2	14	✓
P5	Munsel Lake Road	US 101 to Spruce Street	Fill in sidewalk gaps	Widen shoulders on both sides/reconfigure as mixed-use shoulders.	-1	-1	1	2	-1	-1	2	-1	-1	-1	
			Reconstruct sidewalks	Construct sidewalks with landscape strips on one side and a shared-use path with a bioswale on the other side.	2	2	2	1	1	2	1	1	2	14	✓
P6	Munsel Lake Road	Spruce Street to Ocean Dunes Drive	Fill in sidewalk gaps	Widen shoulders on both sides/reconfigure as mixed-use shoulders.	-1	-1	1	2	-1	-1	2	-1	-1	-1	
			Fill in sidewalk gaps	Construct sidewalks on one side.	1	1	1	1	-1	1	1	2	1	8	
			Fill in sidewalk gaps	Construct shared-use path on one side. - include landscape strip as feasible	2	2	2	1	1	2	1	1	2	14	✓
			Reconstruct sidewalks	Install enhanced crossings at select locations											
P7	Munsel Lake Road	Ocean Dunes Drive to N Fork Siuslaw Road	Fill in sidewalk gaps	Widen shoulders on both sides/reconfigure as mixed-use shoulders.	-1	-1	1	2	-1	-1	2	-1	-1	-1	
			Fill in sidewalk gaps	Construct sidewalks on one side.	1	1	1	1	-1	1	1	2	1	8	
			Reconstruct sidewalks	Construct shared-use path on one side. - include landscape strip as feasible	2	2	2	1	1	2	1	1	2	14	✓
P8	N Fork Siuslaw Road	OR 126 to Munsel Lake Road	Fill in sidewalk gaps	Widen shoulders on both sides/reconfigure as mixed-use shoulders.	-1	-1	1	2	-1	-1	2	-1	-1	-1	
			Fill in sidewalk gaps	Construct sidewalks on one side.	1	1	1	1	-1	1	1	2	1	8	
			Reconstruct sidewalks	Construct shared-use path on one side. - include landscape strip as feasible	2	2	2	1	1	2	1	1	2	14	✓
P9	9th Street	US 101 to Rhododendron Drive	Do nothing	Do nothing	-2	-2	-2	2	-2	-2	2	2	-2	-6	
			Enhanced crossing	Install enhanced crossings treatments at existing crosswalks	2	2	2	0	1	2	1	1	1	12	✓
P10	Rhododendron Drive	US 101 to Hemlock Street	Do nothing	Do nothing	-2	-2	-2	2	-2	-2	2	2	-2	-6	
			Enhanced crossing	Install enhanced crossings treatments at existing crosswalks	2	2	2	0	1	2	1	1	1	12	✓
P11	Rhododendron Drive	Hemlock Street to 9th Street	Fill in sidewalk gaps	Construct sidewalks on the south/west side											

Gap/ Deficiency ID (Future Project ID)	Location/Name	Extents	Alternative Type	Alternative Description	Preliminary Screening: Safe Transportation System for all	Support Economic Development & Cost Effective	Meeting Wide-Ranging Transportation Needs for all users	Minimizing Environmental Impacts	Adding Resilience	Coordinating with Partners	Are there minimal environmental impacts?	Are there minimal engineering challenges?	Is it preferred by the public based on completed outreach?	Total	Preferred Solution
P11	Rhododendron Drive	Hemlock Street to 9th Street	Enhanced crossing	Install enhanced crossings at select locations											
P12	Rhododendron Drive	9th Street to Wild Winds Street	Fill in sidewalk gaps	Reconfigure bike lanes as mixed-use shoulders	-1	-1	1	2	-1	-1	2	-1	-1	-1	
			Fill in sidewalk gaps	Construct shared-use path on one side. - include landscape strip as feasible	2	2	2	1	1	2	1	1	2	14	✓
P13	Rhododendron Drive	Wild Winds Street to 35th Street	Fill in sidewalk gaps	Install sidewalks on the north side of the roadway with new sidewalks.	1	1	1	1	-1	1	1	2	1	8	
			Reconstruct sidewalks	Reconstruct the sidewalks consistent per City standards as part of future development/redevelopment projects.	2	2	2	1	1	2	1	1	2	14	✓
P14	Rhododendron Drive	35th Street to Heceta Beach Road	Fill in sidewalk gaps	Widen shoulders on both sides/reconfigure as mixed-use shoulders.	1	1	1	1	-1	1	1	2	1	8	
			Fill in sidewalk gaps	Construct shared-use path on one side. - include landscape strip as feasible	2	2	2	1	1	2	1	1	2	14	✓
P15	2nd Street	US 101 to Harbor Street	Fill in sidewalk gaps	Fill sidewalk gaps within Old Town	2	2	2	1	1	2	1	1	2	14	✓
			Reconstruct sidewalks	Reconstruct existing sidewalks with landscape strips	1	1	-1	2	1	1	2	-1	1	7	
			Enhanced crossing	Install enhanced crossings at Nopal St, Oak St, Harbor St (e.g., marked crosswalks with curb extensions)											
P16	21st Street	Oak Street to US 101	Enhanced crossing	Retime signal at US 101 for improved pedestrian access (e.g., leading pedestrian interval)											
P17	21st Street	US 101 to Spruce Street	Fill in sidewalk gaps	Fill sidewalk gaps on both sides											
P17	27th Street	US 101 to Kingwood Street	Fill in sidewalk gaps	fill sidewalk gaps between US 101 and Oak Street; install enhanced crossing at US 101											
P18	35th Street	Rhododendron Drive to Kingwood Street	Fill in sidewalk gaps	Fill in sidewalk gaps on one side	1	1	1	1	-1	1	1	-1	1	5	
			Fill in sidewalk gaps	Fill in sidewalk gaps on both sides	2	2	2	1	1	2	1	1	2	14	✓
			Fill in sidewalk gaps	Construct shared-use path on one side. - include landscape strip as feasible	1	1	1	1	1	1	1	1	1	9	
			Enhanced crossing	Install an enhanced crossing at Kingwood Street											
P19	35th Street	Kingwood Street to Oak Street	Fill in sidewalk gaps	Fill in sidewalk gaps on one side	1	1	1	1	-1	1	1	-1	1	5	
			Fill in sidewalk gaps	Fill in sidewalk gaps on both sides	2	2	2	1	1	2	1	1	2	14	✓
			Fill in sidewalk gaps	Construct shared-use path on one side. - include landscape strip as feasible	1	1	1	1	1	1	1	1	1	9	
P20	35th Street	Oak Street to US 101	Fill in sidewalk gaps	Fill in sidewalk gaps on both sides											✓
			Enhanced crossing	Retime signal at US 101 for improved pedestrian access (e.g., leading pedestrian interval)											✓
P21	35th Street	US 101 to Spruce Street	Do nothing	Do nothing											✓
P22	42nd Street	US 101 to Spruce Street	Fill in sidewalk gaps	Construct sidewalks on both sides	2	2	2	1	1	2	1	1	2	14	✓
			Enhanced crossing	Install enhanced crossing on US 101 at 42nd St or between 42nd St and 43rd St											✓
			Fill in sidewalk gaps	Create pedestrian connection between Munsel Creek Dr and Munsel Creek Ln	1	1	1	1	-1	1	1	-1	1	5	
P23	43rd Street	Oak Street to US 101	Fill in sidewalk gaps	Fill in sidewalk gaps on south sides											✓
			Do nothing	Do nothing.	-2	-2	-2	2	-2	-2	2	2	-2	-6	

Gap/ Deficiency ID (Future Project ID)	Location/Name	Extents	Alternative Type	Alternative Description	Preliminary Screening									Total	Preferred Solution
					Safe Transportation System for all	Support Economic Development & Cost Effective	Meeting Wide-Ranging Transportation Needs for all users	Minimizing Environmental Impacts	Adding Resilience	Coordinating with Partners	Are there minimal environmental impacts?	Are there minimal engineering challenges?	Is it preferred by the public based on completed outreach?		
P24	46th Street	Oak Street to US 101	Enhanced crossing	Install enhanced crossing on US 101 at 46th St.	2	2	2	1	1	2	1	1	2	14	✓
P25	Airport Road/15th street	Kingwood Street to US 101	Fill in sidewalk gaps	Fill in sidewalk gaps on both sides											✓
P26	Bay Street	Kingwood Street to Maple Street	Reconstruct sidewalks	Reconstruct sidealks to increase width											✓
			Reconstruct sidewalks	Install curb extensions at Kingwood St, Laurel St, Maple St, and mid-block by the boardwalk											✓
			Enhanced crossing	Install mid-block crosswalk at Bay St/Nopal St corner by the boardwalk											✓
			Reconstruct sidewalks	Develop a streetscape design plan											✓
P27	Kingwood Street	Bay Street to 9th Street	Fill in sidewalk gaps	Fill in sidewalk gaps on both sides											✓
			Enhanced crossing	Install enhanced crossing at Bay St											✓
P28	Kingwood Street	9th Street to Airport Way	Fill in sidewalk gaps	Fil in sidewalk gaps on both sides											✓
			Enhanced crossing	Install enhanced crossing at Bay St											✓
P29	Kingwood Street	Airport Way to 20th Street	Fill in sidewalk gaps	Fill in sidewalk gaps on both sides											✓
			Enhanced crossing	Install enhanced crossings at select locations											✓
P30	Kingwood Street	20th Street to 35th Street	Reconstruct sidewalks	Reconstruct sidewalks with landscape strips											✓
			Traffic calming	Implement traffic calming measures											✓
P31	Maple Street	US 101 to Bay Street	Fill in sidewalk gaps	Fill in sidewalk gaps on one side											✓
P32	Oak Street	20th Street to 27th Street	Enhanced crossing	Install enhanced crossing at select location											✓
P33	Oak Street	27th Street to 35th Street	Fill in sidewalk gaps	Fill in sidewalk gaps on one side											✓
			Enhanced crossing	Install enhanced crossing at select location											✓
P34	Oak Street	35th Street to 46th Street	Fill in sidewalk gaps	Fill in sidewalk gaps on one side	1	1	1	1	-1	1	1	-1	1	5	
			Reconstruct sidewalks	Reconstruct sidewalks with landscape strips	2	2	2	1	1	2	1	1	2	14	✓
			traffic calming	Implement traffic calming measures											✓
P35	Quince Street	2nd Street to OR 126	Enhanced crossing	Install enhanced crossing at 6th St for events center access											✓
P36	32nd-Redwood Street	Spruce Street to 35th Street	Fill in sidewalk gaps	Fill in sidewalk gap on south/west side											✓
P37	Spruce Street	42nd Street to 35th Street	Fill in sidewalk gaps	Fill sidewalks gaps on both sides											✓
P38	Spruce Street	32nd Street to 17th Street	Enhanced crossing	Install enhanced crossings at shared-use paths											✓
P39	Spruce Street	17th Street to OR 126	Fill in sidewalk gaps	Fill sidewalks gaps on both sides											✓
P40	Spruce Street	Munsel Lake to northern Terminus	Do nothing	Do nothing	-2	-2	-2	2	-2	-2	2	2	-2	-6	
			Fill in sidewalk gaps	Construct sidewalks on the west side	2	2	2	1	1	2	1	1	2	14	✓
P41	4th Avenue	Heceta Beach Road to Joshua Lane	Fill in sidewalk gaps	Construct mixed-use shoulders on both sides	-1	-1	1	2	-1	-1	2	-1	-1	-1	
			Fill in sidewalk gaps	Construct sidewalks on one side.	1	1	1	1	-1	1	1	2	1	8	
			Fill in sidewalk gaps	Construct shared-use path on one side. - include landscape strip as feasible	2	2	2	1	1	2	1	1	2	14	✓

Gap/ Deficiency ID (Future Project ID)	Location/Name	Extents	Alternative Type	Alternative Description	Preliminary Screening									Total	Preferred Solution
					Safe Transportation System for all	Support Economic Development & Cost Effective	Meeting Wide-Ranging Transportation Needs for all users	Minimizing Environmental Impacts	Adding Resilience	Coordinating with Partners	Are there minimal environmental impacts?	Are there minimal engineering challenges?	Is it preferred by the public based on completed outreach?		
P42	20th Street	Kingwood Street to US 101	Fill in sidewalk gaps	Construct sidewalks on both sides											✓
			Enhanced crossing	Install enhanced crossings at US 101											✓
			Fill in sidewalk gaps	Extend 20th St west to Kingwood St											✓
P43	Laurel Street/Old Town Way Intersection	US 101 to Maple Street	Fill in sidewalk gaps	Fill sidewalk gaps on both sides											✓
P44	30th Street	Oak Street to US 101	Do nothing	Do nothing	-2	-2	-2	2	-2	-2	2	2	-2	-6	
			Enhanced crossing	Install second crosswalk at Oak St and install school crosswalk signs	2	2	2	1	1	2	1	1	2	14	✓
P45	30th Street	US 101 to Spruce Street	Do nothing	Do nothing											✓
Bicycle System															
B1	US 101	UGB to 32nd Street	Buffered Bike Lanes	Construct buffered bike lanes on both sides - requires narrowing travel lanes	1	1	1	2	1	1	2	2	1	12	
			Separated Bike Lanes	Construct separated bike lanes on one or two sides	2	2	2	1	2	2	1	1	2	15	✓
			Pavement	Provide pavement markings through conflict areas (e.g., Fred Meyer Dwy, 46th St)										0	
			Protected Intersection	Provide protected intersection treatment at signalized intersections											✓
B2	US 101	32nd St to 22nd St	Buffered Bike Lanes	Construct buffered bike lanes on both sides - requires narrowing travel lanes	1	1	1	2	1	1	2	2	1	12	
			Separated Bike Lanes	Construct separated bike lanes on one or two sides	2	2	2	1	2	2	1	1	2	15	✓
			Protected Intersection	Provide protected intersection treatment at signalized intersections											✓
B3	US 101	22nd Street to Siuslaw River Bridge	Buffered Bike Lanes	Construct buffered bike lanes on both sides - requires narrowing travel lanes	1	1	1	2	1	1	2	2	1	12	
			Separated Bike Lanes	Construct separated bike lanes on one or two sides	2	2	2	1	2	2	1	1	2	15	✓
			Protected Intersection	Provide protected intersection treatment at signalized intersections											✓
B4	OR 126	US 101 to Tamarack Street	Buffered Bike Lanes	Construct buffered bike lanes on both sides - requires narrowing travel lanes	1	1	1	2	1	1	2	2	1	12	
			Separated Bike Lanes	Construct separated bike lanes on one or two sides	2	2	2	1	2	2	1	1	2	15	✓
B5	OR 126	Tamarack Street to UGB	Buffered Bike Lanes	Construct buffered bike lanes on both sides - requires narrowing travel lanes	1	1	1	2	1	1	2	2	1	12	
			Separated Bike Lanes	Construct separated bike lanes on one or two sides	2	2	2	1	2	2	1	1	2	15	✓
B6	Heceta Beach Road	US 101 to Rhododendron Drive	Widen Shoulders	Widen shoulders on both sides/reconfigure as mixed-use shoulder	-1	-1	1	2	-1	-1	2	-1	-1	-1	
			Bike Lanes	Construct bike lanes on both sides	1	1	1	1	1	1	2	2	1	11	
			Buffered Bike Lanes	Construct buffered bike lanes on both sides - requires narrowing travel lanes	1	2	1	2	1	1	2	2	1	13	
			Shared-Use Path	Construct shared-use path on one side- include landscape strip as feasible	2	2	2	1	2	2	1	1	2	15	✓
B7	Munsel Lake Road	US 101 to Spruce Street	Widen Shoulders	Widen shoulders on both sides/reconfigure as mixed-use shoulder	-1	-1	1	2	-1	-1	2	-1	-1	-1	
			Shared-Use Path	Construct bike lanes on one side and shared-use path on the other - include landscape strip as feasible	2	2	2	1	2	2	1	1	2	15	✓
B8	Munsel Lake Road	Spruce Street to Ocean Dunes Drive	Widen Shoulders	Widen shoulders on both sides/reconfigure as mixed-use shoulder	-1	-1	1	2	-1	-1	2	-1	-1	-1	
			Buffered Bike Lanes	Construct buffered bike lanes on both sides - requires narrowing travel lanes	1	2	1	2	1	1	2	2	1	13	
			Shared-Use Path	Construct shared-use path on one side- include landscape strip as feasible	2	2	2	1	2	2	1	1	2	15	✓

Gap/ Deficiency ID (Future Project ID)	Location/Name	Extents	Alternative Type	Alternative Description	Preliminary Screening									Total	Preferred Solution
					Safe Transportation System for all	Support Economic Development & Cost Effective	Meeting Wide-Ranging Transportation Needs for all users	Minimizing Environmental Impacts	Adding Resilience	Coordinating with Partners	Are there minimal environmental impacts?	Are there minimal engineering challenges?	Is it preferred by the public based on completed outreach?		
B9	Munsel Lake Road	Ocean Dunes Drive to N Fork Siuslaw Road	Widen Shoulders	Widen shoulders on both sides/reconfigure as mixed-use shoulder	-1	-1	1	2	-1	-1	2	-1	-1	-1	
			Bike Lanes	Construct bike lanes on both sides	1	1	1	1	1	1	2	2	1	11	
			Buffered Bike Lanes	Construct buffered bike lanes on both sides - requires narrowing travel lanes	1	2	1	2	1	1	2	2	1	13	
			Shared-Use Path	Construct shared-use path on one side-include landscape strip as feasible	2	2	2	1	2	2	1	1	2	15	✓
B10	N Fork Siuslaw Road	OR 126 to Munsel Lake Road	Widen Shoulders	Widen shoulders on both sides/reconfigure as mixed-use shoulder	-1	-1	1	2	-1	-1	2	-1	-1	-1	
			Bike Lanes	Construct bike lanes on both sides	1	1	1	1	1	1	2	2	1	11	
			Buffered Bike Lanes	Construct buffered bike lanes on both sides - requires narrowing travel lanes	1	2	1	2	1	1	2	2	1	13	
			Shared-Use Path	Construct shared-use path on one side-include landscape strip as feasible	2	2	2	1	2	2	1	1	2	15	✓
B11	9th Street	US 101 to Rhododendron Drive	Do nothing	Do nothing	-2	-2	-2	2	-2	-2	2	2	-2	-6	
			Buffered Bike Lanes	Construct buffered bike lanes on both sides - requires narrowing travel lanes	1	2	1	2	1	1	2	2	1	13	✓
B12	Rhododendron Drive	US 101 to 9th Street	Do nothing	Do nothing	-2	-2	-2	2	-2	-2	2	2	-2	-6	
			Buffered Bike Lanes	Construct buffered bike lanes on both sides - requires narrowing travel lanes	1	2	1	2	1	1	2	2	1	13	✓
B13	Rhododendron Drive	9th Street to Wild Winds Street	Buffered Bike Lanes	Construct buffered bike lanes on both sides - requires narrowing travel lanes	1	2	1	2	1	1	2	2	1	13	
			Shared-Use Path	Construct shared-use path on one side-include landscape strip as feasible	2	2	2	1	2	2	1	1	2	15	✓
B14	Rhododendron Drive	Wild Winds Street to 35th Street	Widen Shoulders	Widen shoulders on both sides/reconfigure as mixed-use shoulder	-1	-1	1	2	-1	-1	2	-1	-1	-1	
			Shared-Use Path	Construct shared-use path on one side-include landscape strip as feasible	2	2	2	1	2	2	1	1	2	15	✓
B15	Rhododendron Drive	35th Street to Heceta Beach Road	Widen Shoulders	Widen shoulders on both sides/reconfigure as mixed-use shoulder	-1	-1	1	2	-1	-1	2	-1	-1	-1	
			Shared-Use Path	Construct shared-use path on one side-include landscape strip as feasible	2	2	2	1	2	2	1	1	2	15	✓
B16	2nd Street	US 101 to Harbor Street	Do nothing	Do nothing	-2	-2	-2	2	-2	-2	2	2	-2	-6	
			Pavement Markings	Extend shared lane pavement markings from Maple St to US 101	1	1	1	1	1	1	2	2	1	11	✓
B17	21st Street	Oak Street to US 101	Do nothing	Do nothing	-2	-2	-2	2	-2	-2	2	2	-2	-6	
			Pavement Markings	Add shared lane pavement markings	1	2	1	1	1	1	1	1	1	10	✓
B18	21st Street	US 101 to Spruce Street	Do nothing	Do nothing	-2	-2	-2	2	-2	-2	2	2	-2	-6	
			Pavement Markings	Add shared lane pavement markings	1	2	1	1	1	1	1	1	1	10	✓
B19	27th Street	US 101 to Kingwood Street	Do nothing	Do nothing	-2	-2	-2	2	-2	-2	2	2	-2	-6	
			Pavement Markings	Add shared lane pavement markings from Oak Street to US 101	1	2	1	1	1	1	1	1	1	10	
			Bike Lanes	Construct bike lanes from Oak Street to US 101 - requires widening	1	1	1	1	1	1	2	2	1	11	✓
B20	35th Street	Rhododendron Drive to Kingwood Street	Do nothing	Do nothing											✓
B21	35th Street	Kingwood Street to Oak Street	Do nothing	Do nothing											✓
B22	35th Street	Oak Street to US 101	Do nothing	Do nothing											✓

Gap/ Deficiency ID (Future Project ID)	Location/Name	Extents	Alternative Type	Alternative Description	Preliminary Screening									Total	Preferred Solution
					Safe Transportation System for all	Support Economic Development & Cost Effective	Meeting Wide-Ranging Transportation Needs for all users	Minimizing Environmental Impacts	Adding Resilience	Coordinating with Partners	Are there minimal environmental impacts?	Are there minimal engineering challenges?	Is it preferred by the public based on completed outreach?		
B23	35th Street	US 101 to Spruce Street	Do nothing	Do nothing	-2	-2	-2	2	-2	-2	2	2	-2	-6	
			Widen Bike Lanes	Widen Bike Lanes	1	2	1	2	1	1	2	2	1	13	✓
B24	42nd Street	US 101 to Spruce Street	Do nothing	Do nothing	-2	-2	-2	2	-2	-2	2	2	-2	-6	
			Pavement Markings	Add shared lane pavement markings east of Spruce Street	1	2	1	1	1	1	1	1	1	10	
			Fill in gaps	Create bike connection between Munsel Creek Dr and Munsel Creek Lp	2	2	2	1	2	2	1	1	2	15	✓
B25	43rd Street	Oak Street to US 101	Pavement Markings	Add shared lane pavement markings	1	2	1	1	1	1	1	1	1	10	
			Bike Lanes	Construct bike lanes on both sides - requires removing on-street parking	2	2	2	1	2	2	1	1	2	15	✓
B26	46th Street	Oak Street to US 101	Do nothing	Do nothing											✓
B27	Airport Road/15th street	Kingwood St to US 101	Pavement Markings	Add shared lane pavement markings	1	2	1	1	1	1	1	1	1	10	
			Bike Lanes	Construct bike lanes on both sides - requires removing on-street parking	2	2	2	1	2	2	1	1	2	15	✓
			Enhanced crossing	Incorporate enhanced bicycle crossing at US 101 into existing crossing											✓
B28	Bay Street	Kingwood St to Maple St	Do nothing	Do nothing	-2	-2	-2	2	-2	-2	2	2	-2	-6	
			Pavement Markings	Add shared lane pavement markings	1	2	1	1	1	1	1	1	1	10	✓
B29	Kingwood Street	Bay St to 9th St	Do nothing	Do nothing	-2	-2	-2	2	-2	-2	2	2	-2	-6	
			traffic calming	Implement traffic calming measures	2	2	2	1	1	1	2	-1	1	11	✓
			Bike Lanes	Construct bike lanes on both sides - requires removing on-street parking	1	-1	2	1	2	1	2	1	1	10	✓
B30	Kingwood Street	9th St to Airport Wy	Bike Lanes	Construct bike lanes on both sides from 9th St to 10th St - requires removing on-street parking											✓
B31	Kingwood Street	Airport Wy to 35th St	Do nothing	Do nothing	-2	-2	-2	2	-2	-2	2	2	-2	-6	
			Traffic calming	Implement traffic calming measures	2	1	2	1	1	1	2	-1	1	10	
			Buffered Bike Lanes	Construct buffered bike lanes on both sides - requires narrowing travel lanes	1	2	1	2	1	1	2	2	1	13	✓
B32	Maple Street	US 101 to Bay Street	Do nothing	Do nothing	-2	-2	-2	2	-2	-2	2	2	-2	-6	
			Pavement Markings	Add shared lane pavement markings	1	2	1	1	1	1	1	1	1	10	✓
B33	Oak Street	20th St to 27th St	Pavement Markings	Shared lane pavement marking from 20th St to Siuslaw Middle School Dwy	1	2	1	1	1	1	2	1	1	11	✓
			Bike Lanes	Construct bike lanes from 20th St to Siuslaw Middle School Dwy - requires removing on-street parking	1	-1	2	1	2	1	1	1	1	9	
B34	Oak Street	27th to 35th St	Do nothing	Do nothing	-2	-2	-2	2	-2	-2	2	2	-2	-6	
			Buffered Bike Lanes	Construct buffered bike lanes on both sides - requires narrowing travel lanes	1	2	1	2	1	1	2	2	1	13	✓
B35	Oak Street	35th St to 46th St	Do nothing	Do nothing	-2	-2	-2	2	-2	-2	2	2	-2	-6	
			Buffered Bike Lanes	Construct buffered bike lanes on both sides - requires narrowing travel lanes	1	2	1	2	1	1	2	2	1	13	✓
B36	Quince Street	2nd St to OR 126	Do nothing	Do nothing	-2	-2	-2	2	-2	-2	2	2	-2	-6	
			Buffered Bike Lanes	Construct buffered bike lanes on both sides - requires narrowing travel lanes	1	2	1	2	1	1	2	2	1	13	✓
B37	32nd Street - Redwood Street	Spruce Street to 35th Street	Do nothing	Do nothing	-2	-2	-2	2	-2	-2	2	2	-2	-6	
			Buffered Bike Lanes	Construct buffered bike lanes on both sides - requires narrowing travel lanes	1	2	1	2	1	1	2	2	1	13	✓
B38	Spruce Street	42nd St to 35th St	Pavement Markings	Add shared lane pavement markings north of 37th St	1	1	1	2	0	1	2	2	1	11	
			Fill in gaps	Extend bike lanes north to 42nd St	2	2	2	1	2	2	1	1	2	15	✓
B39	Spruce Street	32nd St to 17th St	Bike Lanes	construct bike lanes south of 25th St - requires removing on-street parking											✓

Gap/ Deficiency ID (Future Project ID)	Location/Name	Extents	Alternative Type	Alternative Description	Preliminary Screening									Total	Preferred Solution
					Safe Transportation System for all	Support Economic Development & Cost Effective	Meeting Wide-Ranging Transportation Needs for all users	Minimizing Environmental Impacts	Adding Resilience	Coordinating with Partners	Are there minimal environmental impacts?	Are there minimal engineering challenges?	Is it preferred by the public based on completed outreach?		
B40	Spruce Street	17th St to OR 126	Bike Lanes	Construct bike laneson both sides - requires removing on-street parking											✓
B41	4th Avenue	Heceta Beach Rd to Falcon St	Pavement Markings	Add shared lane pavement markings	1	1	1	2	0	1	2	2	1	11	
			Mixed-use Shoulders	Construct mixed-use shoulders on both sides	1	1	1	1	1	1	1	1	0	8	
			Bike Lanes	Construct bike lanes on both sides	2	2	2	1	1	2	1	1	2	14	✓
			Shared-Use Path	Construct shared-use path on one side- include landscape strip as feasible	2	1	2	2	1	2	1	-1	1	11	
B42	20th Street	Kingwood St to US 101	Pavement Markings	Add shared lane pavement markings											✓
			Fill in gaps	Extend 20th St west to Kingwood St											✓
B43	Laurel Street - Old Town Way	US 101 to Maple St	Do nothing	Do nothing	-2	-2	-2	2	-2	-2	2	2	-2	-6	
			Pavement Markings	Add shared lane pavement markings	1	2	1	1	1	1	1	1	1	10	✓
B44	30th Street	Oak St to US 101	Do nothing	Do nothing	-2	-2	-2	2	-2	-2	2	2	-2	-6	
			Pavement Markings	Add shared lane pavement markings	1	2	1	1	1	1	1	1	1	10	
			Bike Lanes	Construct bike lanes on both sides - requires removing on-street parking	2	2	2	1	2	2	1	1	2	15	✓
B45	30th Street	US 101 to Spruce St	Do nothing	Do nothing	-2	-2	-2	2	-2	-2	2	2	-2	-6	
			Pavement Markings	Add shared lane pavement markings	1	2	1	1	1	1	1	1	1	10	
			Bike Lanes	Construct bike lanes on both sides - requires removing on-street parking	1	2	1	2	1	1	2	2	1	13	✓
Transit System															
T1	New Routes and Existing Route Changes	City-wide	Study	Explore adding service to Rhododendron Dr and Heceta Beach neighborhood											✓
T2	Service, Frequency, Hours, and Coverage	N/A	Frequency	Increased intercity service frequency											✓
T3	Marketing	N/A	Marketing	Improve marketing for intercity services - Specifically to Eugene and Yachats											✓
T4	New Amentities	N/A	Study	Establish a transit center at the Grocery Outlet bus stop on 21st St, add bathroom facilities to transit center, formally establish a park-and-ride with Grocery Outlet, add transit shelters and/or benches to existing stop locations.											✓
T5	Transit Stops	N/A	Bus stop enhancements	Add shelters and/or benches to existing bus stops and build bus stops that are accessible.											✓
T6	Park and Ride Locations	N/A	Study	Explore establishing a park-and-ride: - Grocery Outlet at US 101/21st Street - Three Rivers Casino - Florence Events Center (parking lot south of 6th Street)											✓
T7	Mobility Hub Locations	N/A	Study	Explore establishing a mobility hub: - Primary mobility hub at the Grocery Outlet at US 101/21st Street - Secondary mobility hub at the Port parking lot (1st Street and Nopal Street) - Secondary mobility hub at the Florence Events Center (parking lot south of 6th Street)											✓

ATTACHMENT B: QUALITATIVE EVALUATION OF ALTERNATIVES

ID	Location/Name	Description	Evaluation Criteria (-2 to +2 scoring)																											Evaluation Total	Priority
			Transportation System for All			Goal 2: Building Cost-Effective Facilities that Support Economic Development						Goal 3: Meeting the Wide-Ranging Transportation Needs of all Users					Goal 4: Minimizing Environmental Impacts				Goal 5: Adding Resilience to the Network & Planning for Emergencies					Goal 6: Coordinating with Local, Regional, & State Partners					
			Objective 1A: Address Known Historical Safety Issues	Objective 1B: Provide Safe Pedestrian Crossings	Objective 1C: Support Safe Roadway Improvements for All	Objective 2A: Convenient Access for All Modes to Major	Objective 2B: Non-motorized Routes	Objective 2C: Vehicle Mobility	Objective 2D: Roadway Connections	Objective 2E: Minimize Vehicle Delay	Objective 2F: Balance Economic and Traffic Impacts	Objective 3A: Low Stress Network	Objective 3B: Non-motorized Gaps	Objective 3C: Non-motorized Connectivity	Objective 3D: Demand Management Programs	Objective 3E: Comfortable and Reliable Transit	Objective 4A: Minimize Natural and Culture Resources Impacts	Objective 4B: Policies that Encourage Low-Emission Travel	Objective 4C: Sustainable Alternatives	Objective 4D: Minimize Impacts on Natural Resources	Objective 5A: Add Resilience	Objective 5B: Outside Tsunami Inudation Zones	Objective 5C: Enhance Livability and Tsunami Evacuation Routes	Objective 5D: Non-motorized Evacuation Route and Signage	Objective 5E: Accommodate Emergency Service	Objective 6A: Consistency with Local Plans	Objective 6B: Consistency with Statewide Plannig	Objective 6C: Partnerships	Objective 6D: City Goals and Policies		
Roadway System																															
R1	Pacific View Drive	Extend Pacific View Drive to Rhododendron Drive	0	0	1	1	1	2	0	1	0	1	2	2	0	0	-1	-1	-1	-1	1	-1	2	1	1	1	0	1	1	14	Low
R2	Munsel Lake Road	Extend Munsel Lake Road to the Oak Street	0	0	1	1	1	1	-1	-1	1	1	2	1	0	0	-1	-1	-1	-1	1	2	1	1	1	1	0	1	1	12	Low
R3	Oak Street	Extend Oak Street from Heceta Beach Road to Fred Meyers	0	0	1	2	2	1	2	1	1	2	2	2	1	0	-1	-1	1	-1	1	2	1	1	1	0	0	1	1	23	Medium
R4	Spruce Street	Extend Spruce Street to the Heceta Beach Road	0	0	1	1	1	1	2	1	1	2	1	1	0	0	-1	-1	-1	-2	1	2	2	1	1	0	0	1	1	16	Low
R5	Oak Street	Extend Oak Street from Heceta Beach Road to the north city limits	0	0	1	0	1	1	1	1	1	2	1	1	1	0	-1	-1	1	-1	1	1	1	1	1	0	0	1	1	16	Low
R6	Heceta Beach Road	Extend Heceta Beach Road to the Spruce Street	0	0	1	1	1	1	-1	-2	1	1	1	1	0	0	-2	-1	-1	-2	1	2	1	1	1	1	0	1	1	8	Low
R7	Munsel Lake Road	Extend Munsel Lake Road from Oak Street to Rhododendron Drive	0	0	1	1	1	2	-1	1	1	1	1	1	0	0	-1	-1	-1	-1	1	2	2	1	1	0	0	1	1	14	Low
R8	20th Street	Extend 20th Street to Kingwood Street	0	0	1	2	2	2	0	1	0	2	2	2	0	0	-1	2	1	1	1	1	1	1	1	0	0	1	0	23	Medium
R9	US 101/Munsel Lake Road Intersection	Install traffic signal when warranted	1	2	1	2	2	2	0	2	2	0	0	0	0	0	1	1	1	2	0	2	0	0	0	2	0	0	1	24	Medium
R10	US 101/35th Street Intersection	Optimize the signal timing and phasing to address queueing	0	0	0	1	0	2	0	2	2	0	0	0	0	1	2	1	2	2	0	2	0	0	0	1	0	0	0	18	Medium
R11	US 101/27th Street Intersection	Install a traffic signal when warranted	0	2	1	1	2	2	0	2	2	0	0	0	0	0	1	1	1	2	0	2	0	0	0	0	0	0	0	19	Medium
R12	US 101/15th Street Intersection	Reconfigure the intersection/modify the traffic control	0	1	1	1	1	2	0	1	1	0	0	0	0	1	-1	1	1	2	1	1	0	0	1	0	0	0	0	15	Low
R13	US 101/OR 126 Intersection	Optimize the signal timing and phasing to address queueing	0	0	0	2	0	2	0	2	1	0	0	0	0	1	2	1	2	2	0	2	0	0	1	0	0	0	0	18	Medium
R14	OR 126/Quince Street Intersection	Reconfigure the intersection/modify the traffic control	2	2	1	2	1	2	0	1	1	0	0	0	0	1	-1	1	1	2	1	2	0	0	1	0	0	0	0	20	Medium
R15	OR 126/Spruce Street Intersection	Reconfigure the intersection/modify the traffic control	0	1	1	2	1	1	0	1	1	0	0	0	0	0	-1	1	1	2	1	2	0	0	1	0	0	0	0	15	Low
R16	9th Street/Kingwood Street Intersection	Reconfigure the intersection/modify the traffic control	0	1	1	1	2	1	0	1	1	1	0	0	0	0	-1	1	1	2	1	1	0	0	1	0	0	0	0	15	Low
R17	35th Street/Kingwood Street Intersection	Reconfigure the intersection/modify the traffic control	0	1	1	1	2	1	0	1	1	1	0	0	0	0	-1	1	1	2	1	1	0	0	1	0	0	0		15	Low
Safety Plan																															Low
S1	US 101/Heceta Beach Road Intersection	Install advance intersection warning signs with flashing beacons, southbound dynamic speed feedback sign after entering Florence, traffic calming measures on US 101, and intersection lighting.	1	2	2	1	2	1	1	-1	1	2	1	1	1	0	0	1	1	1	1	0	0	1	-1	1	1	1	0	22	Medium
S2	US 101/Munsel Lake Road Intersection	Install advance intersection warning signs with flashing beacons, evaluate need for traffic control modification, traffic calming measures on US 101, and intersection lighting.	2	2	2	2	2	1	1	2	2	2	1	1	1	0	0	1	1	1	1	0	0	1	-1	1	1	1	0	28	High
S3	US 101/46th Street	Install advance iintersection warning signs with flashing beacons, traffic calming on US 101, street name signs, and intersection lighting.	1	2	2	1	2	1	1	-1	1	2	1	1	1	0	0	1	1	1	1	0	0	1	-1	1	1	1	0	22	Medium
S4	US 101/OR 126	Provide traffic calming measures on US 101 and OR 126 approaching the intersection and increase visibility of traffic signal heads.	1	2	2	1	2	1	1	-1	1	2	1	1	1	0	0	1	1	1	1	0	0	1	-1	1	1	1	0	22	Medium
S5	US 101/Rhododendron Drive Intersection	Provide traffic calming measures on US 101 and OR 126 approaching the intersection and increase visibility of traffic signal heads.	1	2	2	1	2	1	1	-1	1	2	1	1	1	0	0	1	1	1	1	0	0	1	-1	1	1	1	0	22	Medium

ID	Location/Name	Description	Evaluation Criteria (-2 to +2 scoring)																										Evaluation Total	Priority
			Transportation System for All			Goal 2: Building Cost-Effective Facilities that Support Economic Development						Goal 3: Meeting the Wide-Ranging Transportation Needs of all Users					Goal 4: Minimizing Environmental Impacts				Goal 5: Adding Resilience to the Network & Planning for Emergencies					Goal 6: Coordinating with Local, Regional, & State Partners					
			Objective 1A: Address Known Historical Safety Issues	Objective 1B: Provide Safe Pedestrian Crossings	Objective 1C: Support Safe Roadway Improvements for All	Objective 2A: Convenient Access for All Modes to Major	Objective 2B: Non-motorized Routes	Objective 2C: Vehicle Mobility	Objective 2D: Roadway Connections	Objective 2E: Minimize Vehicle Delay	Objective 2F: Balance Economic and Traffic Impacts	Objective 3A: Low Stress Network	Objective 3B: Non-motorized Gaps	Objective 3C: Non-motorized Connectivity	Objective 3D: Demand Management Programs	Objective 3E: Comfortable and Reliable Transit	Objective 4A: Minimize Natural and Culture Resources Impacts	Objective 4B: Policies that Encourage Low-Emission Travel	Objective 4C: Sustainable Alternatives	Objective 4D: Minimize Impacts on Natural Resources	Objective 5A: Add Resilience	Objective 5B: Outside Tsunami Inudation Zones	Objective 5C: Enhance Livability and Tsunami Evacuation Routes	Objective 5D: Non-motorized Evacuation Route and Signage	Objective 5E: Accommodate Emergency Service	Objective 6A: Consistency with Local Plans	Objective 6B: Consistency with Statewide Plannig	Objective 6C: Partnerships	Objective 6D: City Goals and Policies		
S6	OR 126/Quince Street Intersection	Evaluate need for traffic control modification, provide traffic calming on OR 126, and install additional street lighting.	2	2	2	2	2	1	1	2	2	2	1	1	1	0	0	1	1	1	1	0	0	1	-1	1	1	1	0	28	High
S7	Rhododendron Drive/Heceta Beach Road Intersection	Install advance intersection warning signs on Heceta Beach Road, provide traffic calming on Heceta Beach Road, trim vegetation, and install intersection lighting.	2	2	2	2	2	1	1	2	2	2	1	1	1	0	0	1	1	1	1	0	0	1	-1	1	1	1	0	28	High
S8	Kingwood Street/15th Street Intersection	Install advance intersection warning signs on Kingwood Street, provide traffic calming on Kingwood Street, and trim vegetation.	2	2	2	2	2	1	1	2	2	2	1	1	1	0	0	1	1	1	1	0	0	1	-1	1	1	1	0	28	High
S9	Kingwood Street/9th Street Intersection	Install advance intersection warning signs on 9th Street, evaluate need for traffic control modification, and install additional intersection lighting.	2	2	2	2	2	1	1	2	2	2	1	1	1	0	0	1	1	1	1	0	0	1	-1	1	1	1	0	28	High
Pedestrian System																															Low
P1	US 101	Complete sidewalks from 37th Street to UGB and install an enhanced crossing at 43rd Street.	1	2	2	2	2	-1	1	-1	2	2	2	2	1	1	-1	2	2	-1	1	0	0	1	0	1	1	1	1	26	High
P2	US 101	Reconstruct existing sidewalks with landscape buffers from 37th Street to Siuslaw River Bridge and install an enhanced crossing at 43rd Street.	1	2	2	2	1	-1	1	-1	2	2	2	2	1	1	-1	2	2	-1	1	0	0	1	0	1	1	1	1	25	Medium
P3	OR126	Complete sidewalks on north side to Casino and both sidews to Tamarack Street.	1	2	2	2	2	-1	2	-1	2	2	2	2	2	2	-1	2	2	-1	1	0	0	1	0	1	1	1	1	29	High
P4	Heceta Beach Road	Construct shared-use path on one side and include landscape strip as feasible from US 101 to Rhododendron Drive.	0	1	2	2	2	-1	2	-1	2	2	2	2	2	2	-1	2	2	-1	1	0	0	1	0	1	1	1	1	27	High
P5	Munsel Lake Road	Construct shared-use path on one side and include landscape strip as feasible from US 101 to Spruce Street.	2	1	2	2	2	0	0	0	2	2	2	2	0	0	0	2	2	0	2	2	2	2	0	1	1	1	1	33	High
P6	Munsel Lake Road	Construct shared-use path on one side and include landscape strip as feasible from Spruce Street to Ocean Dunes Drive.	1	0	2	2	2	0	0	0	1	2	2	2	0	0	1	2	2	1	1	2	2	2	0	1	1	1	1	31	High
P7	Munsel Lake Road	Construct shared-use path on one side and include landscape strip as feasible from Ocean Dunes Drive to N Fork Siuslaw Road.	1	0	1	1	2	0	0	0	1	2	2	2	0	0	1	2	2	1	1	2	2	2	0	1	1	1	2	30	High
P8	N Fork Road	Construct shared-use path on one side and include landscape strip as feasible from OR 126 to Munsel Lake.	1	0	2	1	2	0	0	0	1	2	2	2	0	0	1	2	2	1	1	2	2	2	0	1	1	1	1	30	High
P9	North Jetty Rd																														
P10	9th Street	Install enhanced crossings treatments at existing crosswalks at US 101 to Rhododendron Drive.	0	2	2	1	2	0	0	0	1	1	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	14	Low
P11	Rhododendron Drive	Install enhanced crossings treatments at existing crosswalks at US 101 to Hemlock Street.	0	1	2	1	2	0	0	0	1	1	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	13	Low
P12	Rhododendron Drive	Construct sidewalks on the south/west side and install enhanced crossings at select locations at Hemlock Street to 9th Street.	0	2	2	1	2	0	0	0	1	2	2	2	0	0	0	1	1	0	0	0	0	1	0	0	0	0	1	18	Medium
P13	Rhododendron Drive	Construct shared-use path on one side of 9th Street to Wild Winds Street.	1	2	2	2	2	0	1	0	1	2	2	2	0	0	0	2	2	0	2	2	2	1	0	1	1	0	1	31	High
P14	Rhododendron Drive	Reconstruct the sidewalks consistent per City standards as part of future at Wild Winds Street to 35th Street.	1	2	2	2	2	0	1	0	1	2	2	2	0	0	0	2	2	0	2	2	2	1	0	1	1	0	1	31	High
P15	Rhododendron Drive	Construct shared-use path on one side at 35th Street to Hecetra Beach Road.	1	2	2	2	2	0	1	0	1	2	2	2	0	0	0	2	2	0	2	2	2	1	0	1	1	0	1	31	High
P16	2nd Street	Fill sidewalk gaps within Old Town and install enhanced crossings at Nopal Street, Oak Street, Harbor Street (e.g. marked crosswalks with curb extensions).	1	2	2	2	2	0	0	0	2	2	2	2	0	0	1	2	2	1	1	1	2	1	0	1	0	2	1	32	High

ID	Location/Name	Description	Evaluation Criteria (-2 to +2 scoring)																										Evaluation Total	Priority
			Transportation System for All			Goal 2: Building Cost-Effective Facilities that Support Economic Development						Goal 3: Meeting the Wide-Ranging Transportation Needs of all Users					Goal 4: Minimizing Environmental Impacts				Goal 5: Adding Resilience to the Network & Planning for Emergencies					Goal 6: Coordinating with Local, Regional, & State Partners					
			Objective 1A: Address Known Historical Safety Issues	Objective 1B: Provide Safe Pedestrian Crossings	Objective 1C: Support Safe Roadway Improvements for All	Objective 2A: Convenient Access for All Modes to Major	Objective 2B: Non-motorized Routes	Objective 2C: Vehicle Mobility	Objective 2D: Roadway Connections	Objective 2E: Minimize Vehicle Delay	Objective 2F: Balance Economic and Traffic Impacts	Objective 3A: Low Stress Network	Objective 3B: Non-motorized Gaps	Objective 3C: Non-motorized Connectivity	Objective 3D: Demand Management Programs	Objective 3E: Comfortable and Reliable Transit	Objective 4A: Minimize Natural and Culture Resources Impacts	Objective 4B: Policies that Encourage Low-Emission Travel	Objective 4C: Sustainable Alternatives	Objective 4D: Minimize Impacts on Natural Resources	Objective 5A: Add Resilience	Objective 5B: Outside Tsunami Inudation Zones	Objective 5C: Enhance Livability and Tsunami Evacuation Routes	Objective 5D: Non-motorized Evacuation Route and Signage	Objective 5E: Accommodate Emergency Service	Objective 6A: Consistency with Local Plans	Objective 6B: Consistency with Statewide Plannig	Objective 6C: Partnerships	Objective 6D: City Goals and Policies		
P17	21st Street	Retime signal at US 101 for improved pedestrian access (e.g. leading pedestrian interval)	0	1	1	1	1	-1	0	-1	1	0	0	2	0	0	2	1	1	2	0	1	0	0	0	0	0	0	1	13	Low
P18	21st Street	Fill sidewalk gaps on both sides at US 101 to Spruce Street.	0	1	1	2	2	0	0	0	1	2	2	1	0	0	-1	2	2	-1	2	1	2	1	0	1	0	0	1	22	Medium
P19	27th Street	Fill sidewalk gaps on both sides at US 101 to Oak Street.	0	1	1	2	2	0	0	0	1	2	2	1	0	0	-1	2	2	-1	2	1	2	1	0	1	0	0	1	22	Medium
P20	35th Street	Fill in sidewalk gaps on one side at Rhododendron Drive to Kingwood Street and install an enhanced crossing at Kingwood Street.	2	2	2	1	2	0	0	0	1	1	2	1	0	2	1	1	2	1	1	1	1	1	0	1	0	0	1	27	High
P21	35th Street	Fill in sidewalk gaps on both sides at Kingwood Street to Oak Street.	2	2	2	1	2	0	0	0	1	1	2	1	0	2	1	1	2	1	1	1	1	1	0	1	0	0	1	27	High
P22	35th Street	Fill in sidewalk gaps on both sides at Oak Street to US 101 and retime signal at US 101 for improved pedestrian access (e.g. leading pedestrian interval).	2	2	2	1	2	0	0	0	1	1	2	1	0	2	1	1	2	1	1	1	1	1	0	1	0	0	1	27	High
P23	35th Street	Do nothing.	0	-2	-2	-2	0	0	0	0	2	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	Low
P24	42nd Street	Construct sidewalks on both sides at US 101 to Spruce Street and install enhanced crossings at select locations at US 101 at 42nd Street or between 42nd Street and 43rd Street.	0	2	2	2	2	-1	0	-1	1	2	2	2	0	0	-1	2	2	1	1	1	1	1	0	1	0	0	1	23	Medium
P25	43rd Street	Fill in sidewalk gaps on south side at Oak Street to US 101.	0	1	1	2	1	0	0	0	2	2	2	2	0	0	1	1	2	1	1	1	1	2	0	1	0	0	1	25	Medium
P26	46th Street	Install enhanced crossing on US 101 at 46th Street.	0	2	2	1	1	-1	0	-1	1	2	0	2	0	0	2	2	1	2	1	1	0	0	0	0	0	0	2	20	Medium
P27	Airport Road/15th Street	Fill in sidewalk gaps on both sides at Kingwood Street to US 101.	0	1	1	2	1	0	0	0	1	2	2	1	0	0	1	1	2	1	1	1	0	1	0	1	0	0	1	21	Medium
P28	Bay Street	Reconstruct sidewalks to increase width, install curb extensions at Kingwood Street, Laurel Street, Maple Street, and mid-block by the boardwalk, install mid-block crosswalk at Bay Street/Nopal Street corner by the boardwalk, and develop a streetscape design plan at Kingwood Street to Maple Street.	0	1	2	2	2	-1	0	-1	2	1	2	1	0	0	-1	2	1	-1	2	1	0	1	0	0	0	0	1	17	Medium
P29	Kingwood Street	Fill in sidewalk gaps on both sides at Bay Street to 9th Street and install an enhanced crossing at Bay Street.	2	2	2	2	1	-1	0	-1	1	1	2	2	0	0	-1	2	1	-1	1	1	0	2	0	1	0	0	1	20	Medium
P30	Kingwood Street	Fill in sidewalk gaps on both sides at 9th Street to Airport Way and install enhanced crossing at Bay Street.	2	2	2	2	1	-1	0	-1	1	2	2	2	0	0	-1	1	1	-1	1	1	0	1	0	1	0	0	1	19	Medium
P31	Kingwood Street	Fill in sidewalk gaps on both sides at Airport Way to 20th Street and install enhanced crossings at select locations.	2	2	2	2	2	-1	0	-1	1	2	2	2	0	0	-1	1	1	-1	1	1	0	1	0	1	0	0	1	20	Medium
P32	Kingwood Street	Reconstruct sidewalks with landscape strips and implement traffic calming measures at 20th Street to 35th Street.	0	1	1	1	1	0	0	-1	1	1	1	2	0	0	2	1	2	2	1	1	0	0	0	1	0	0	1	19	Medium
P33	Maple Street	Fill in sidewalk gaps on one side at US 101 to Bay Street.		1	1	0	1	0	0	0	2	1	2	1	0	0	1	2	1	1	1	1	1	0	0	1	0	0	1	19	Medium
P34	Oak Street	Install enhanced crossing at select locations at 20th Street to 27th Street.	0	2	2	2	2	-1	0	0	1	1	0	1	0	0	2	1	2	2	0	1	1	0	0	0	0	0	0	19	Medium
P35	Oak Street	Fill in sidewalk gaps on one side and install enhanced crossing at select location at 27th Street to 35th Street.	0	2	1	2	2	-1	0	-1	1	1	2	1	0	0	1	1	1	2	1	1	1	2	0	1	0	0	1	22	Medium
P36	Oak Street	Reconstruct sidewalks with landscape strips and implement traffic calming measures at 35th Street to 46th Street.	0	1	1	1	1	0	0	0	2	2	1	1	0	0	1	2	1	1	1	1	1	1	0	1	0	0	1	21	Medium

ID	Location/Name	Description	Evaluation Criteria (-2 to +2 scoring)																											Evaluation Total	Priority
			Transportation System for All			Goal 2: Building Cost-Effective Facilities that Support Economic Development						Goal 3: Meeting the Wide-Ranging Transportation Needs of all Users					Goal 4: Minimizing Environmental Impacts				Goal 5: Adding Resilience to the Network & Planning for Emergencies					Goal 6: Coordinating with Local, Regional, & State Partners					
			Objective 1A: Address Known Historical Safety Issues	Objective 1B: Provide Safe Pedestrian Crossings	Objective 1C: Support Safe Roadway Improvements for All	Objective 2A: Convenient Access for All Modes to Major	Objective 2B: Non-motorized Routes	Objective 2C: Vehicle Mobility	Objective 2D: Roadway Connections	Objective 2E: Minimize Vehicle Delay	Objective 2F: Balance Economic and Traffic Impacts	Objective 3A: Low Stress Network	Objective 3B: Non-motorized Gaps	Objective 3C: Non-motorized Connectivity	Objective 3D: Demand Management Programs	Objective 3E: Comfortable and Reliable Transit	Objective 4A: Minimize Natural and Culture Resources Impacts	Objective 4B: Policies that Encourage Low-Emission Travel	Objective 4C: Sustainable Alternatives	Objective 4D: Minimize Impacts on Natural Resources	Objective 5A: Add Resilience	Objective 5B: Outside Tsunami Inudation Zones	Objective 5C: Enhance Livability and Tsunami Evacuation Routes	Objective 5D: Non-motorized Evacuation Route and Signage	Objective 5E: Accommodate Emergency Service	Objective 6A: Consistency with Local Plans	Objective 6B: Consistency with Statewide Plannig	Objective 6C: Partnerships	Objective 6D: City Goals and Policies		
P37	Quince Street	Install enhanced crossing at 6th Street for events center access.	0	2	2	2	2	-1	0	-1	1	1	1	2	0	0	2	2	2	2	0	1	0	0	0	0	0	2	0	22	Medium
P38	32nd-Redwood Street	Fill in sidewalk gap on south/west side at Spruce Street to 35th Street.	0	1	1	0	1	0	0	0	2	1	2	1	0	0	1	1	1	1	1	1	2	1	0	1	0	0	1	20	Medium
P39	Spruce Street	Fill in sidewalk gaps on both sides at 42nd Street to 35th Street.	0	1	1	0	2	0	0	0	2	1	2	1	0	0	-1	1	1	1	1	1	2	2	0	1	0	0	1	20	Medium
P40	Spruce Street	Install enhanced crossings at shared-use paths at 32nd Street to 17th Street.	0	2	2	2	1	-1	0	-1	1	1	1	2	0	0	2	2	2	2	0	1	0	0	0	1	0	0	0	20	Medium
P41	Spruce Street	Fill sidewalks gaps on both sides at 17th Street to OR 126.	0	1	1	2	2	0	0	0	1	1	2	1	0	0	-1	1	1	1	1	1	1	2	0	1	0	0	1	20	Medium
P42	Spruce Street	Construct sidewalks on west side at Munsel Lake to northern Terminus.	0	1	1	1	1	0	0	0	1	1	1	1	0	0	1	1	1	1	1	1	2	1	0	1	0	0	1	19	Medium
P43	4th Avenue	Construct shared-use path on one side at Heceta Beach Road to Joshua Lane.	0	1	1	0	1	0	0	0	1	2	2	1	0	0	1	1	1	1	1	1	1	1	0	1	0	0	1	19	Medium
P44	20th Street	Construct sidewalks on both sides at Kingwood Street to US 101, install enhanced crossings at US 101, and extend 20th Street west to Kingwood Street.	0	2	2	1	1	0	0	-1	1	1	2	1	0	0	-1	2	2	2	1	1	2	2	0	1	0	0	1	23	Medium
P45	Laurel Street/Old Town Way	Fill sidewalk gaps on both sides at US 101 to Maple Street.	0	2	1	2	1	0	0	0	1	1	2	2	0	0	-1	1	1	1	1	1	1	2	0	1	0	0	1	21	Medium
P46	30th Street	Install second crosswalk at Oak Street and install school crosswalk signs.	0	2	2	2	1	0	0	-1	2	2	0	2	0	0	2	2	2	2	0	1	0	0	0	2	2	0	2	27	High
P47	30th Street	Do nothing.	0	-2	-2	0	0	2	0	0	2	0	0	0	0	0	2	0	1	2	0	0	0	0	0	0	0	0	0	5	Low
Bicycle System																															Low
B1	US 101	Construct separated bike lanes on one or two sides at UGB to 32nd Street and provide protected intersection treatment at signalized intersections.	0	0	2	1	2	-1	2	-1	1	2	1	2	0	1	1	2	2	-1	1	2	2	1	0	0	0	0	0	22	Medium
B2	US 101	Construct separated bike lanes on one or two sides at 32nd Street to 22nd Street and provide protected intersection treatment at signalized intersections.	0	0	2	2	2	-1	2	-1	1	2	1	2	0	1	1	2	2	-1	1	2	2	1	0	0	0	0	0	23	Medium
B3	US 101	Construct separated bike lanes on one or two sides at 22nd Street to Siuslaw River Bridge and provide protected intersection treatment at signalized intersections.	0	0	2	2	2	-1	2	-1	1	2	1	2	0	0	1	2	2	-1	1	2	2	1	0	0	0	0	0	22	Medium
B4	OR 126	Construct separated bike lanes on one or two sides at US 101 to Tamarack Street.	2	0	1	2	2	0	2	0	2	2	2	2	1	0	1	2	2	-1	0	2	2	1	0	0	0	0	1	28	High
B5	OR 126	Construct separated bike lanes on one or two sides at Tamarack Street to UGB.	1	0	1	1	2	0	2	0	2	2	2	2	0	1	1	2	2	-1	0	2	2	1	0	0	0	0	1	26	High
B6	Heceta Beach Road	Construct shared-use path on one side include landscape strip as feasible at US 101 to Rhododendron Drive.	0	0	2	1	2	0	2	0	2	2	2	2	0	0	2	2	2	1	2	-1	2	1	0	0	0	0	1	27	High
B7	Munsel Lake Road	Construct bike lanes on one side and shared-use path on the other side from US 101 to Spruce Street.	0	0	1	1	2	0	2	0	2	2	2	2	0	0	2	2	2	1	2	2	2	1	0	0	0	0	1	29	High
B8	Munsel Lake Road	Construct shared-use path on one side include landscape strip as feasible at Spruce Street to Ocean Dunes Drive.	0	0	2	1	2	0	2	0	2	2	2	2	0	0	2	2	2	1	2	2	2	1	0	0	0	0	1	30	High
B9	Munsel Lake Road	Construct shared-use path on one side include landscape strip as feasible at OR 126 to Munsel Lake Road.	0	0	2	1	2	0	2	0	2	2	2	2	0	0	2	2	2	1	2	2	2	1	0	0	0	0	1	30	High
B10	N Fork Siuslaw Road	Construct shared-use path on one side include landscape strip as feasible at OR 126 to N Fork Siuslaw Road.	0	0	2	1	1	0	2	0	2	2	2	2	0	0	2	2	2	1	2	2	2	1	0	0	0	0	1	29	High
B11	9th Street	Construct buffered bike lanes on both sides - requires narrowing travel lanes at US 101 to Rhododendron Drive.	0	0	1	2	1	0	1	0	1	1	1	2	0	0	1	2	2	0	2	2	1	0	0	2	0	0	1	23	Medium

ID	Location/Name	Description	Evaluation Criteria (-2 to +2 scoring)																											Evaluation Total	Priority
			Transportation System for All			Goal 2: Building Cost-Effective Facilities that Support Economic Development						Goal 3: Meeting the Wide-Ranging Transportation Needs of all Users					Goal 4: Minimizing Environmental Impacts				Goal 5: Adding Resilience to the Network & Planning for Emergencies					Goal 6: Coordinating with Local, Regional, & State Partners					
			Objective 1A: Address Known Historical Safety Issues	Objective 1B: Provide Safe Pedestrian Crossings	Objective 1C: Support Safe Roadway Improvements for All	Objective 2A: Convenient Access for All Modes to Major	Objective 2B: Non-motorized Routes	Objective 2C: Vehicle Mobility	Objective 2D: Roadway Connections	Objective 2E: Minimize Vehicle Delay	Objective 2F: Balance Economic and Traffic Impacts	Objective 3A: Low Stress Network	Objective 3B: Non-motorized Gaps	Objective 3C: Non-motorized Connectivity	Objective 3D: Demand Management Programs	Objective 3E: Comfortable and Reliable Transit	Objective 4A: Minimize Natural and Culture Resources Impacts	Objective 4B: Policies that Encourage Low-Emission Travel	Objective 4C: Sustainable Alternatives	Objective 4D: Minimize Impacts on Natural Resources	Objective 5A: Add Resilience	Objective 5B: Outside Tsunami Inudation Zones	Objective 5C: Enhance Livability and Tsunami Evacuation Routes	Objective 5D: Non-motorized Evacuation Route and Signage	Objective 5E: Accommodate Emergency Service	Objective 6A: Consistency with Local Plans	Objective 6B: Consistency with Statewide Plannig	Objective 6C: Partnerships	Objective 6D: City Goals and Policies		
B12	Rhododendron Drive	Construct buffered bike lanes on both sides - requires narrowing travel lanes at US 101 to 9th Street.	0	0	1	2	1	0	1	0	1	1	2	2	0	0	1	2	2	0	2	-1	1	0	0	2	0	0	1	21	Medium
B13	Rhododendron Drive	Construct shared-use path on one side include landscape strip as feasble at 9th Street to Wild Winds Street.	0	0	2	2	2	0	1	0	2	2	2	2	0	0	2	2	2	1	2	-1	2	1	0	0	0	0	1	27	High
B14	Rhododendron Drive	Construct shared-use path on one side include landscape strip as feasible at Wild Winds Street to 35th Street.	0	0	2	1	2	0	1	0	2	2	2	2	0	0	2	2	2	1	1	-1	2	1	0	0	0	0	1	25	Medium
B15	Rhododendron Drive	Construct shared-use path on one side include landscape strip as feasible at 35th Street to Heceta Beach Road.	2	0	2	1	2	0	1	0	2	2	2	2	0	0	2	2	2	1	1	-1	2	1	0	0	0	0	1	27	High
B16	2nd Street	Extend shared lane pavement marking from Maple Street to US 101.	0	0	1	1	1	-2	0	-1	1	1	1	1	0	0	2	1	1	2	1	1	1	0	0	1	0	0	1	15	Low
B17	21st Street	Add shared lane pavement markings at Oak Street to US 101.	0	0	1	1	1	-2	0	-1	1	1	1	1	0	0	2	1	1	2	1	2	1	0	0	1	0	0	1	16	Low
B18	21st Street	Add shared lane pavement markings at US 101 to Spruce Street.	0	0	1	1	1	-2	0	-1	1	1	1	1	0	0	2	1	1	2	1	2	1	0	0	1	0	0	1	16	Low
B19	27th Street	Construct bike lanes from Oak Street to US 101 - requires widening.	0	0	1	2	1	0	1	0	2	1	1	2	0	0	-1	2	2	-1	1	2	1	0	0	1	0	0	1	19	Medium
B20	35th Street	Do nothing.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Low
B21	35th Street	Do nothing.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Low
B22	35th Street	Do nothing.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Low
B23	35th Street	Widen bike lanes at US 101 to Spruce Street.	0	0	1	0	1	0	0	0	1	1	0	0	0	0	-1	1	1	-1	1	1	1	0	0	0	0	0	0	7	Low
B24	42nd Street	Create bike connection between Munsel Creek Drive and Munsel Creek Lp and add shared lane pavement markings east of Spruce Street from US 101 to Spruce Street.	0	0	1	0	2	-1	2	-1	1	2	2	2	0	0	-2	2	2	-2	2	2	2	2	0	0	0	0	1	19	Medium
B25	43rd Street	Construct bike lanes on both sides - requires removing on-street parking at Oak Street to US 101.	0	0	2	1	2	0	1	0	1	1	0	2	0	0	0	1	2	1	2	2	2	0	0	0	0	0	1	21	Medium
B26	46th Street	Do nothing.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Low
B27	Airport Road/15th Street	Construct bike lanes on both sides - requires removing on-street parking at Kingwood Street to US 101 and incorporate enhanced bicycle crossing at US 101 into existing crossing.	0	0	2	0	2	0	1	0	1	1	1	2	0	0	0	2	2	2	2	1	2	1	0	0	0	0	0	22	Medium
B28	Bay Street	Add shared lane pavement markings at Kingwood Street to Maple Street.	0	0	1	1	1	-2	0	-1	1	1	1	1	0	0	2	1	1	1	1	1	1	0	0	1	0	0	1	14	Low
B29	Kingwood Street	Construct bike lanes on both sides - requires removing on-street parking at Bay Street to 9th Street and implement traffic calming measures.	2	0	2	1	2	0	1	0	-1	2	0	2	0	0	2	2	2	1	2	2	2	1	0	0	0	0	0	25	Medium
B30	Kingwood Street	Construct bike lanes on both sides from 9th Street to 10th Street - requires removing on-street parking.	2	0	1	2	2	0	1	0	1	2	1	2	0	0	2	1	2	1	2	2	2	1	0	0	0	0	0	27	High
B31	Kingwood Street	Construct bike lanes on both sides - requires narrowing travel lanes at Airport Way to 35th Street.	2	0	1	2	2	0	1	-1	1	2	1	2	0	0	2	1	2	1	2	2	2	1	0	0	0	0	0	26	High
B32	Maple Street	Add shared lane pavement markings at US 101 to Bay Street.	0	0	1	0	1	-2	0	-1	1	1	1	1	0	0	2	1	1	2	1	2	1	0	0	1	0	0	1	15	Low
B33	Oak Street	Shared lane pavement marking from 20th Street to Siuslaw Middle School Driveway.	0	0	1	2	1	-2	0	-1	1	1	1	1	2	0	2	1	1	1	1	2	1	0	0	1	0	0	1	18	Medium
B34	Oak Street	Construct buffered bike lanes on both sides - requires narrowing travel lanes at 27th Street o 35th Street.	0	0	1	2	2	0	1	0	1	2	0	2	0	0	1	1	2	1	2	2	2	1	0	-1	0	0	1	23	Medium
B35	Oak Street	Construct buffered bike lanes on both sides - requires narrowing travel lane at 35th Street to 46th Street.	0	0	1	2	2	0	1	0	1	2	0	2	0	0	1	1	2	1	2	2	2	1	0	1	0	0	0	24	Medium

ID	Location/Name	Description	Evaluation Criteria (-2 to +2 scoring)																											Evaluation Total	Priority
			Transportation System for All			Goal 2: Building Cost-Effective Facilities that Support Economic Development						Goal 3: Meeting the Wide-Ranging Transportation Needs of all Users					Goal 4: Minimizing Environmental Impacts				Goal 5: Adding Resilience to the Network & Planning for Emergencies					Goal 6: Coordinating with Local, Regional, & State Partners					
			Objective 1A: Address Known Historical Safety Issues	Objective 1B: Provide Safe Pedestrian Crossings	Objective 1C: Support Safe Roadway Improvements for All	Objective 2A: Convenient Access for All Modes to Major	Objective 2B: Non-motorized Routes	Objective 2C: Vehicle Mobility	Objective 2D: Roadway Connections	Objective 2E: Minimize Vehicle Delay	Objective 2F: Balance Economic and Traffic Impacts	Objective 3A: Low Stress Network	Objective 3B: Non-motorized Gaps	Objective 3C: Non-motorized Connectivity	Objective 3D: Demand Management Programs	Objective 3E: Comfortable and Reliable Transit	Objective 4A: Minimize Natural and Culture Resources Impacts	Objective 4B: Policies that Encourage Low-Emission Travel	Objective 4C: Sustainable Alternatives	Objective 4D: Minimize Impacts on Natural Resources	Objective 5A: Add Resilience	Objective 5B: Outside Tsunami Inudation Zones	Objective 5C: Enhance Livability and Tsunami Evacuation Routes	Objective 5D: Non-motorized Evacuation Route and Signage	Objective 5E: Accommodate Emergency Service	Objective 6A: Consistency with Local Plans	Objective 6B: Consistency with Statewide Planning	Objective 6C: Partnerships	Objective 6D: City Goals and Policies		
B36	Quince Street	Construct buffered bike lanes on both sides - requires narrowing travel lane at 2nd Street to OR 126.	0	0	1	2	2	0	1	0	1	2	0	2	0	0	1	1	2	1	2	2	2	0	0	-1	0	0	0	21	Medium
B37	32nd-Redwood Street	Construct buffered bike lanes on both sides - requires narrowing travel lane at Spruce Street to 35th Street.	0	0	1	1	2	0	1	0	1	2	0	2	0	0	1	1	2	1	2	2	2	0	0	-1	0	0	0	20	Medium
B38	Spruce Street	Extend bike lanes north to 42nd Street.	0	0	2	1	1	0	1	0	1	1	1	1	0	0	-1	1	1	-1	1	2	1	0	0	1	0	0	1	15	Low
B39	Spruce Street	Construct bike lanes south of 25th Street - requires removing on-street parking.	0	0	2	1	2	0	0	0	-1	2	1	2	0	0	2	2	2	2	2	2	2	0	0	-1	0	0	0	22	Medium
B40	Spruce Street	Construct bike lanes on both sides -requires removing on-street parking from 17th Street to OR 126.	0	0	1	0	2	0	0	0	-1	2	2	2	0	0	2	2	2	2	2	2	2	1	0	-1	0	0	0	22	Medium
B41	4th Avenue	Construct bike lanes on both sides at Heceta Beach Road to Falcon Street.	0	0	1	0	2	0	0	0	1	2	2	2	0	0	1	2	2	-1	2	2	2	1	0	1	0	0	0	22	Medium
B42	20th Street	Add shared lane pavement markings and extend 20th Street west to Kingwood Street from Kingwood Street to US 101.	0	0	1	0	1	-1	0	-1	2	1	1	1	0	0	2	1	2	2	1	2	1	0	0	1	0	0	0	17	Medium
B43	Laurel Street/Old Town Way	Add shared lane pavement markings at US 101 to Maple Street.	0	0	1	2	1	-1	0	-1	2	1	1	1	0	0	2	1	1	2	1	1	1	0	0	1	0	0	1	18	Medium
B44	30th Street	Construct bike lanes on both sides - requires removing on-street parking at Oak Street to US 101.	0	0	2	2	2	0	1	0	-1	2	2	2	0	0	2	2	2	2	2	2	1	1	0	-1	0	0	0	25	Medium
B45	30th Street	Construct bike lanes on both sides - requires removing on-street parking at US 101 to Spruce Street.	0	0	2	2	2	0	1	0	-1	2	2	2	0	0	2	2	2	2	2	2	1	1	0	-1	0	0	0	25	Medium
Transit System											0																				Low
T1	New Routes and Existing Route Changes	Explore adding service to Rhododendron Dr and Heceta Beach neighorhood	0	0	0	1	0	0	0	-1	1	0	0	0	2	2	1	2	2	1	1	-1	2	0	0	0	0	1	1	15	Low
T2	Service, Frequency, Hours, and Coverage	Increased intercity service frequency	0	0	0	2	0	0	0	-1	1	0	0	0	2	2	2	2	2	1	1	1	1	0	0	1	0	2	1	20	Medium
T3	Marketing	Improve marketing for intercity services - Specifically to Eugene and Yachats	0	0	0	2	0	0	0	0	2	0	0	0	2	1	2	2	1	2	0	0	2	0	0	1	0	2	2	21	Medium
T4	New Amenities	Establish a transit center at the Grocery Outlet bus stop on 21st St, add bathroom facilities to transit center, formally establish a park-and-ride with Grocery Outlet, add transit shelters and/or benches to existing stop locations.	0	0	0	1	0	0	0	0	1	0	0	0	2	2	-1	2	2	2	1	1	1	0	0	1	0	1	0	16	Low
T5	Transit Stops	Add shelters and/or benches to existing bus stops and build bus stops that are accessible.	0	0	0	0	0	0	0	0	1	0	0	0	2	2	1	2	1	1	1	1	2	0	0	1	0	0	0	15	Low
T6	Park and Ride Locations	Explore establishing a park-and-ride: - Grocery Outlet at US 101/21st Street - Three Rivers Casino - Florence Events Center (parking lot south of 6th Street)	0	0	0	2	0	0	0	0	2	0	0	0	2	2	2	2	2	1	0	1	2	0	0	1	1	2	1	23	Medium
T7	Mobility Hubs	Explore establishing a mobility hub: - Primary mobility hub at the Grocery Outlet at US 101/21st Street - Secondary mobility hub at the Port parking lot (1st Street and Nopal Street) - Secondary mobility hub at the Florence Events Center (parking lot south of 6th Street)	0	1	1	1	0	0	0	0	1	0	0	0	2	2	-2	2	2	1	2	2	0	1	0	1	0	2	1	20	Medium

APPENDIX H: ANALYSIS METHODOLOGIES AND ASSUMPTIONS

ANALYSIS METHODOLOGY AND ASSUMPTIONS MEMORANDUM

Date: October 11, 2023

To: Wendy Farley-Campbell, Shirley Gray, Erin Reynolds, Mike Miller, City of Florence
Michael Duncan, Oregon Department of Transportation

From: Michael Ruiz-Leon, Russ Doubleday, Matt Bell, Susan Wright, PE, PMP, Kittelson & Associates, Inc.

Project: City of Florence Transportation System Plan Update

Subject: Final Analysis Methodology and Assumptions Memorandum

Table of Contents

Introduction

This memorandum documents the methodologies and assumptions associated with the existing and future transportation system operations analyses for the City of Florence Transportation System Plan (TSP) update. The methodologies and assumptions included in this memorandum are based on guidance provided in the Oregon Department of Transportation (ODOT) Transportation System Plan Guidelines (Reference 1), the ODOT Analysis Procedures Manual (APM – Reference 2), and direction provided by City of Florence (City) and ODOT staff. The methodologies and assumptions described in this memorandum will help identify potential deficiencies in the transportation system, including:

- Traffic operations at the study intersections under existing and future traffic conditions,
- Traffic safety at the study intersections and along study area roadways,
- Gaps and deficiencies in bicycle and pedestrian facilities,
- Gaps and deficiencies in transit facilities and services, and
- Gaps and deficiencies in other travel modes.

This information will serve as a baseline for identifying a comprehensive list of multi-modal transportation system gaps, deficiencies, and needs to be addressed as part of the TSP update. It will also serve as a baseline for identifying and evaluating potential solutions and developing a prioritized list of improvements for the TSP update.

Study Area

The study area for the Florence TSP update is defined as the urban growth boundary (UGB) for the City of Florence. Figure 1 depicts the study area, including the UGB, city limits, and other key features.

Study Intersections

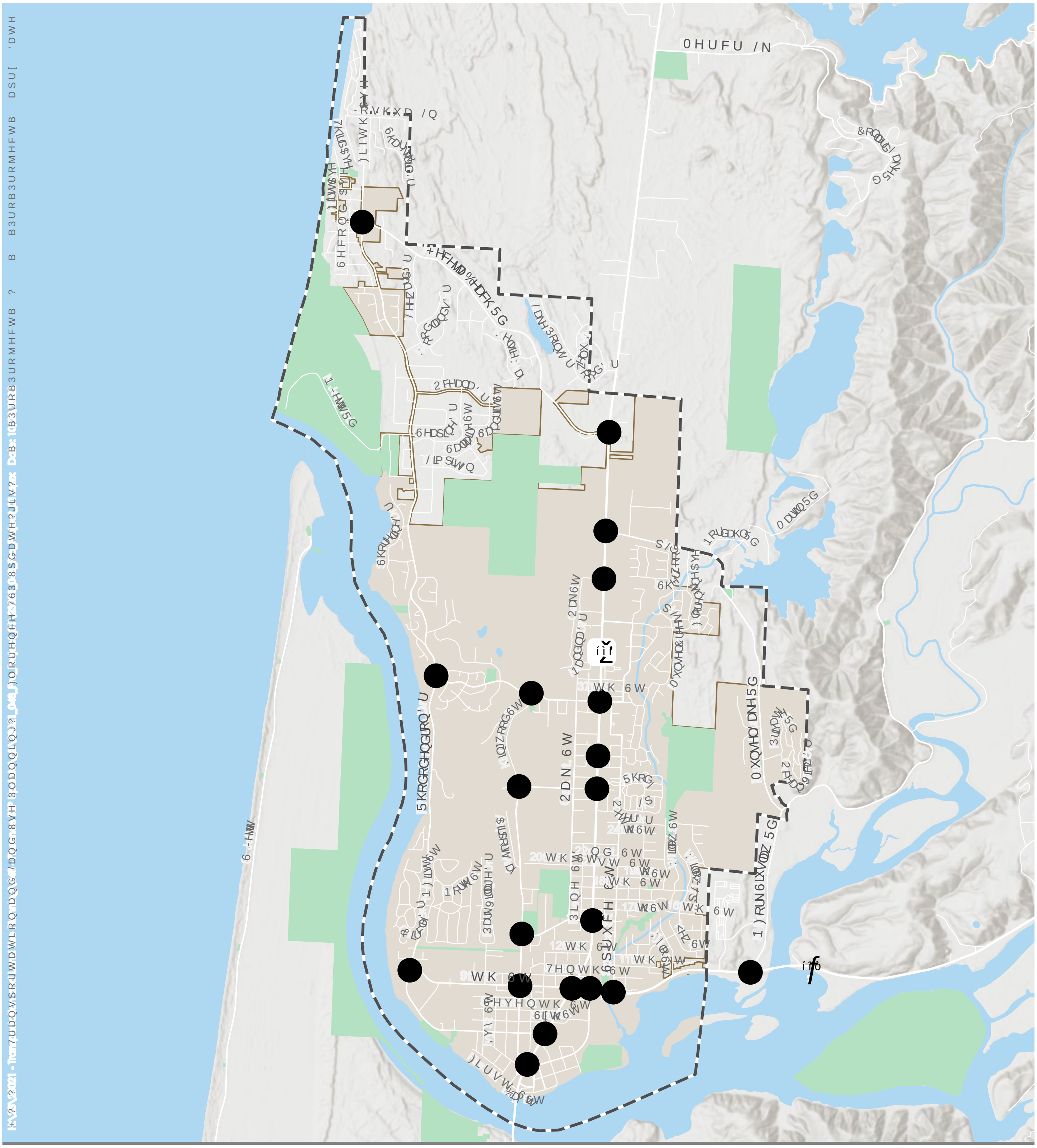
The study intersections for the Florence TSP update were determined by the City in coordination with ODOT. There is a total of 20 study intersections located along state and local facilities, including three signalized intersections (intersections 4, 8, and 9) and seventeen unsignalized intersections. Figure 1 illustrates the location of the study intersections.

STATE FACILITIES

1. US 101/Heceta Beach Road
2. US 101/Munsel Lake Road
3. US 101/46th Street
4. US 101/35th Street (Signal)
5. US 101/30th Street
6. US 101/27th Street
7. US 101/15th Street
8. US 101/OR 126 (Signal)
9. US 101/Rhododendron Drive (Signal)
10. US 101/2nd Street
11. OR 126/Quince Street
12. OR 126/Spruce Street
13. OR 126/North Fork Siuslaw Road

LOCAL FACILITIES

1. Rhododendron Drive/35th Street
2. Rhododendron Drive/9th Street
3. Rhododendron Drive/Heceta Beach Road
4. Kingwood Street/35th Street
5. Kingwood Street/27th Street
6. Kingwood Street/15th Street
7. Kingwood Street/9th Street



6WXG\ ,QWHUVHFWLRQV
3DUNV
:DWHU
&LW\ %RXQGDU\
8UEDQ *URZWK %RXQGDU\

0LOHV

)LJXUH

6WXG\ ,QWHUVH
)ORUHQFH 2U

KITTELSON & ASSOCIATES

Volume Development

TRAFFIC COUNTS

Turning movement counts were conducted at the study intersections in June 2021. The counts were conducted on a typical mid-week day when local schools were in session but in a remote learning environment. All the counts were conducted over a 16-hour period (6:00 AM to 10:00 PM) and include the total number of pedestrians, bicyclists, and motor vehicles that entered the intersections in 15-minute intervals. Table 1 summarizes the traffic count information for the Florence TSP update. *The traffic count worksheets are provided in Attachment A – the traffic counts were conducted by ODOT and post-processed by Quality Counts.*

Table 1. Traffic Count Summary

Map ID	Intersection	Count Date	Count Type	Duration
1	US 101/Heceta Beach Road	06/03/2021	16-hour	6 AM to 10 PM
2	US 101/Munsel Lake Road	06/03/2021	16-hour	6 AM to 10 PM
3	US 101/46th Street	06/03/2021	16-hour	6 AM to 10 PM
4	US 101/35th Street	06/03/2021	16-hour	6 AM to 10 PM
5	US 101/30th Street	06/03/2021	16-hour	6 AM to 10 PM
6	US 101/27th Street	06/03/2021	16-hour	6 AM to 10 PM
7	US 101/15th Street	06/03/2021	16-hour	6 AM to 10 PM
8	US 101/OR 126	06/03/2021	16-hour	6 AM to 10 PM
9	US 101/Rhododendron Drive	06/03/2021	16-hour	6 AM to 10 PM
10	US 101/2nd Street	06/03/2021	16-hour	6 AM to 10 PM
11	OR 126/Quince Street	06/03/2021	16-hour	6 AM to 10 PM
12	OR 126/Spruce Street	06/03/2021	16-hour	6 AM to 10 PM
13	OR 126/North Fork Siuslaw Road	06/03/2021	16-hour	6 AM to 10 PM
14	Rhododendron Drive/Heceta Beach Road	06/03/2021	16-hour	6 AM to 10 PM
15	Rhododendron Drive/35th Street	06/03/2021	16-hour	6 AM to 10 PM
16	Rhododendron Drive/9th Street	06/03/2021	16-hour	6 AM to 10 PM
17	Kingwood Street/35th Street	06/03/2021	16-hour	6 AM to 10 PM
18	Kingwood Street/27th Street	06/03/2021	16-hour	6 AM to 10 PM
19	Kingwood Street/15th Street	06/03/2021	16-hour	6 AM to 10 PM
20	Kingwood Street/9th Street	06/03/2021	16-hour	6 AM to 10 PM

PEAK HOUR DEVELOPMENT

The traffic counts were reviewed to identify a system-wide peak hour and/or individual intersection peak hours for the operational analysis. A system-wide peak hour was found to occur from 12:15 to 1:15 PM while individual intersection peak hours were found to occur at different times throughout the mid-day. However, based on further review of historical data along US 101 and discussions with City and ODOT staff about the implications of using a system-wide peak hour from the mid-day, a system-wide peak hour that occurred during the typical evening peak period was selected for the analysis. The system-wide peak hour is 4:00 to 5:00 PM.

Table 2 summarizes the individual intersection peak hours at the study intersections, the total entering volume (TEV) during the individual intersection peak hours, and the percent difference between the TEV during the individual intersection peak hours and the system-wide peak hour. As shown, where the percent difference is greater than five percent, the TEV is relatively low.

Table 2. Study Intersection Peak Hours

Map ID	Intersection	Individual Intersection Peak Hour	Individual Intersection Peak Hour TEV	System-wide Peak Hour (4:00 to 5:00 PM) TEV	Percent Difference in TEV
1	US 101/Heceta Beach Road	1:45-2:45 PM	1,055	953	-10.7%
2	US 101/Munsel Lake Road	12:15-1:15 PM	1,195	1,073	-11.4%
3	US 101/46th Street	12:00-1:00 PM	1,441	1,172	-23.0%
4	US 101/35th Street	12:00-1:00 PM	1,933	1,571	-23.0%
5	US 101/30th Street	12:00-1:00 PM	1,716	1,448	-18.5%
6	US 101/27th Street	12:30-1:30 PM	1,774	1,528	-16.1%
7	US 101/15th Street	12:15-1:15 PM	1,936	1,629	-18.8%
8	US 101/OR 126	12:15-1:15 PM	2,444	2,010	-21.6%
9	US 101/Rhododendron Drive	12:30-1:30 PM	1,644	1,335	-23.1%
10	US 101/2nd Street	3:00-4:00 PM	1,293	1,108	-16.7%
11	OR 126/Quince Street	2:15-3:15 PM	1,106	947	-16.8%
12	OR 126/Spruce Street	2:15-3:15 PM	1,092	945	-15.6%
13	OR 126/North Fork Siuslaw Road	2:15-3:15 PM	814	666	-22.2%
14	Rhododendron Drive/Heceta Beach Road	3:45-4:45 PM	290	278	-4.3%
15	Rhododendron Drive/35th Street	11:30-12:30 PM	566	427	-32.6%
16	Rhododendron Drive/9th Street	12:30-1:30 PM	393	279	-40.9%
17	Kingwood Street/35th Street	11:45-12:45 PM	648	503	-28.8%
18	Kingwood Street/27th Street	2:45-3:45 PM	344	269	-27.9%
19	Kingwood Street/15th Street	4:15-5:15 PM	337	325	-3.7%
20	Kingwood Street/9th Street	12:30-1:30 PM	602	513	-17.3%

SEASONAL ADJUSTMENT FACTOR

30th Hour Volumes (30 HV) for the Florence TSP update will be developed based on the traffic counts collected at the study intersections and the application of seasonal adjustment factors consistent with the methodologies identified in the APM. The APM identifies three methods for developing seasonal adjustment factors for highway traffic volumes. All three methods utilize information provided by Automatic Traffic Recorders (ATRs) located in select locations throughout the State Highway System that collect traffic data 24-hours a day, 365 days a year. Each method was evaluated to determine the most appropriate method for the study intersections. Based on these evaluations, the On-Site ATR Method was used to develop a seasonal adjustment factor for the study intersections on US 101and the ATR Characteristic Table Method was used to develop a seasonal adjustment factor for the study intersections on OR 126. The results of the evaluations and proposed seasonal adjustment factors are summarized below.

On-Site ATR Method

The on-site ATR method is used when there is an ATR within or near the project area. The Florence ATR (#20-026) is located along US101, approximately 0.77 miles north of Heceta Beach Road. The ATR was installed in July 2010 and has traffic count data for the last 10 years. Based on data provided by the ATR, the peak month generally occurs in July. Table 3 summarizes the five most recent years of data available from the ATR for the peak month and compares it to the five most recent years of data available for the count month.

Table 3. Seasonal Adjustment Factor (On-Site ATR Method)

Year	2016	2017	2018	2019	2020	Average	Seasonal Adjustment
Peak Month (July, *August*)	*139%*	*143%*	143%	136%*	*145%**	142%	N/A
Count Month (June)	120%*	116%	119%	118%	113%*	118%	1.20

* Indicates values that were discarded from the average as indicated in the APM.

The seasonal adjustment factor shown in Table 3 will be applied to the study intersections on US 101.

ATR Characteristic Table

The ATR Characteristic Table is an Excel spreadsheet that provides general information on ATRs in Oregon. The table is filtered from left to right to find ATRs that share similar characteristics with roadways in the study area. Based on information provided in the 2021 ATR Characteristics Table, one ATR was found that shares similar characteristics with OR126. The Noti ATR (#20-005) is located along a facility with a coastal destination seasonal trend in a rural area, it has two travel lanes with a weekend traffic trend, and the average annual daily traffic (AADT) at the ATR is within 10% of the AADT on OR 126. Additional information on this ATR is provided below.

The Noti ATR (#20-005) is located along OR 126, approximately 3.06 miles west of OR 200. The ATR was installed in November 1959 and has traffic count data for the last 61 years. Based on data provided by the ATR, the peak month generally occurs in July. Table 4 summarizes the five most recent years of data available from the ATR for the peak month and compares it to the five most recent years of data available for the count month.

Table 4. Seasonal Adjustment Factor (ATR Characteristic Table Method)

Year	2016	2017	2018	2019	2020	Average	Seasonal Adjustment
Peak Month (July, *August*)	124%*	*128%*	126%	*124%*	*136%**	126%	N/A
Count Month (June)	114%*	111%	109%*	111%	110%	111%	1.14

*indicates values that were discarded from the average as indicated in the APM.

The seasonal adjustment factor shown in Table 4 will be applied to the study intersections along OR126.

HISTORICAL GROWTH ADJUSTMENT

All traffic counts were conducted in 2021. Therefore, historical growth factors will be developed in accordance with the methodologies identified in the APM to adjust volumes to 2022. The methodology utilizes future volumes tables that are updated annually and based on long-term 20-year trends at traffic count sites on Oregon highways. Future volume trends are based on linear regression best-fit trends. The traffic volumes for the Florence ATR (#20-026) were selected due to the proximity to the study area. Based on the future volume tables the annual growth rate along US 101 is 1.45%. The annual growth rate will be applied to the study intersections to adjust counts to 2022.

COVID ADJUSTMENT

An additional adjustment factor of 6 percent will be applied to all the counts to account for changes in traffic volumes related to the COVID-19 pandemic. This adjustment factor was determined based on a review of historical traffic counts conducted along Rhododendron Drive and 35th Street. The counts, which were conducted in 2019, showed higher turning movement volumes at the intersections than the counts conducted in 2021, particularly to/from the minor street. The differences in the turning movement volumes ranged from 4.5 to 5.2 percent; however, based on discussion with the City and ODOT an adjustment factor of 6 percent was selected for the analysis.

FUTURE YEAR VOLUMES

Forecast traffic volumes will be developed for the study intersections in accordance with the Zonal Cumulative Analysis methodology described in the APM. This methodology is suggested when analyzing entire cities of up to 10,000 residents. This methodology combines growth in regional traffic volumes with growth in local traffic volumes associated with projected household and employment growth in the city. The traffic volume projection process includes three steps (trip generation, trip distribution, and trip assignment). The process accounts for the following four categories of vehicle trips:

1. *External-External (through trips):* vehicles with an origin and destination outside the UGB. An example of an external-external trip is someone traveling from Reedsport to Newport through Florence.
2. *External-Internal (inbound trips):* vehicles with an origin outside the UGB and a destination inside the UGB. An example of an external-internal trip is someone who works in Eugene but returns home to Florence.
3. *Internal-External (outbound trips):* vehicles with an origin inside the UGB and a destination outside the UGB. An example of an internal-external trip is someone who works in Florence but returns home to Waldport.
4. *Internal-Internal (local trips):* vehicles with an origin and destination inside the UGB. An example of an internal-internal trip is someone who travels from their home to the grocery store without leaving Florence.

Using these vehicle trip types, the basic steps for a zonal cumulative analysis are:

1. Identify the study area and divide into transportation analysis zones (TAZ).
2. Identify vacant lands, in-process developments, comprehensive plan allowed land uses/densities, and development rates using Census data and GIS data from the City.

3. Develop trip generation estimates for new residential, retail/commercial, office, and other uses by TAZ.
4. Determine the through trip percentages and E-E trips for the external station (external zone).
5. Determine the I-E and E-I trips at each external station (external zone).
6. Determine the trip distribution for the I-E and E-I trips for each internal TAZ.
7. Determine the trip distribution for I-I trips.
8. Calculate network link travel times.
9. Assign total trips to the network and the study intersections.

Traffic Analysis

This section documents the mobility standards and targets that will be used to evaluate the performance of the study intersections and to identify potential alternatives to address operational issues on ODOT and City facilities.

ODOT FACILITIES

ODOT uses volume-to-capacity (v/c) ratios to assess intersection operations. Table 6 of the Oregon Highway Plan (OHP – Reference 3) and Table 1200-1 of the Oregon Highway Design Manual (HDM – Reference 4) provide maximum v/c ratios for all signalized and unsignalized intersections located outside the Portland metropolitan area. The OHP ratios are used to evaluate existing and future no-build conditions, while the HDM ratios are used in the creation of future TSP alternatives which involve projects along state highways.[1] The following summarizes the factors that determine the OHP and HDM ratios at the ODOT-controlled intersections within the study area, which are located along US 101 and OR 126.

- US 101 is classified as a Statewide Highway within Florence. It is designated as an Urban Business Area (UBA) from 30th Street to OR 126, a Special Transportation Area (STA) from OR 126 to Bay Street, and a Freight Route from OR 126 to the south city limits. All study intersections on US 101 are located inside the Florence UGB, which is a non-MPO (metropolitan planning organization) area. US 101 has a posted speed limit of 55 miles per hour (mph) at Heceta Beach Road. It changes to 40 mph north of Munsel Lake Road, 35 mph north of 31st Street, 30 mph north of 22nd Street, and 40 mph north of Bay Street.
- OR 126 is classified as a Statewide Highway and it is a designated Freight Route within Florence. Two of the study intersections on OR 126 are located inside the Florence UGB and one is located further to the east. OR 126 has a posted speed limit of 35 mph at Quince Street and Spruce Street. It changes to 45 mph east of the city limits and 55 mph east of Xylo Street.

[1] The mobility targets in Table 6 of the OHP, or locally adopted Alternative Mobility Standards (AMSs) should be used as the baseline for Transportation Planning Rule (TPR) analyses consistent with Oregon Administrative Rule (OAR) 660-012-0060. The relevant mobility targets (or AMSs) should be met at the planning horizon, or projects mitigating a significant effect determination should be included in the TSP's financially constrained project list, for consistency with the OAR.

Table 5 summarizes the v/c ratios that will be used to identify existing and projected future traffic conditions at the ODOT study intersections.

Table 5. ODOT Mobility Targets

Map ID	Intersection	Traffic Control	OHP Mobility Target[2]	HDM Standard
1	US 101/Heceta Beach Road	TWSC	V/C = 0.80 / 0.90	V/C = 0.70 / 0.75
2	US 101/Munsel Lake Road	TWSC	V/C = 0.85 / 0.90	V/C = 0.75 / 0.80
3	US 101/46th Street	TWSC	V/C = 0.85 / 0.90	V/C = 0.75 / 0.80
4	US 101/35th Street	Signalized	V/C = 0.85	V/C = 0.75
5	US 101/30th Street	TWSC	V/C = 0.90 / 0.95	V/C = 0.75 / 0.80
6	US 101/27th Street	TWSC	V/C = 0.90 / 0.95	V/C = 0.75 / 0.80
7	US 101/15th Street	TWSC	V/C = 0.90 / 0.95	V/C = 0.75 / 0.80
8	US 101/OR 126	Signalized	V/C = 0.80	V/C = 0.70
9	US 101/Rhododendron Drive	Signalized	V/C = 0.90	V/C = 0.85
10	US 101/2nd Street	TWSC	V/C = 0.90 / 1.0	V/C = 0.85 / 0.95
11	OR 126/Quince Street	TWSC	V/C = 0.85 / 0.95	V/C = 0.70 / 0.80
12	OR 126/Spruce Street	TWSC	V/C = 0.85 / 0.95	V/C = 0.70 / 0.80
13	OR 126/North Fork Siuslaw Road	TWSC	V/C = 0.70 / 0.75	V/C = 0.60 / 0.70

1. TWSC = Two-way stop-control
2. State Highway V/C Ratio / Side-Street V/C Ratio

LOCAL FACILITIES

The City of Florence uses level of service (LOS) to assess intersection operations. Per the current Florence TSP, all signalized and unsignalized intersections should maintain LOS D operations at the minimum. Table 6 summarizes the City performance standards that will be used to evaluate existing and projected future traffic conditions at City study intersections.

Table 6. City Mobility Targets

Map ID	Intersection	Traffic Control	Mobility Target
14	Rhododendron Drive/35th Street	TWSC	LOS D
15	Rhododendron Drive/9th Street	TWSC	LOS D
16	Rhododendron Drive/Heceta Beach Road	TWSC	LOS D
17	Kingwood Street/35th Street	TWSC	LOS D
18	Kingwood Street/27th Street	TWSC	LOS D
19	Kingwood Street/15th Street	TWSC	LOS D
20	Kingwood Street/9th Street	TWSC	LOS D

TWSC = two-way stop-control

Traffic operations at the study intersections will be evaluated based on the mobility standards and targets shown in Tables 5 and 6. Potential solutions will be identified and evaluated for the study intersections that are found to exceed ODOT's mobility target or the City's Performance Standard under existing and future traffic conditions.

Traffic Analysis Parameters

The bullets below identify the specific sources of data and methodologies proposed to conduct the operational analyses. Analyses of all state facilities will be conducted according to the APM, unless otherwise agreed upon by the City and ODOT.

1. *Intersection/Roadway Geometry* (lane numbers and arrangements, cross-section elements, signal phasing, etc.) will be collected through aerial photography and confirmed through a site visit. Available as-built data may also be used to verify existing roadway geometry. The analysis models will be built on scaled roadway line work from GIS or aerial photography.
2. *Operational Data* (such as posted speeds, intersection control, parking, transit stops, rail crossings, right-turn on red, etc.) will be collected through a site visit.
3. *Peak Hour Factors (PHF)* will be calculated for each intersection and applied to the existing conditions analyses. Default PHFs from the APM may be used for the future conditions analysis if they are greater than the existing PHFs. However, if the existing PHFs are greater than the default PHFs, then the existing PHFs will be applied.
    - Since the federal functional classification of US 101 and OR 126 is principal arterial, the US 101/OR 126 intersection may use a PHF of 0.95 and all other intersections on US 101 and OR 126 may use a PHF of 0.92.
    - Since the federal functional classification of all other major roadways in the city is collector, all other intersections may use a PHF of 0.85.
4. *Signal Timing Data* will be requested from ODOT for use in the existing conditions analysis. Signal parameters such as Flash Don't Walk, Walk, and Minimum Times will be retained in the forecast analysis with the signal splits optimized to better serve the future traffic volume patterns. Optimized signal cycle lengths may range between 60 and 120 seconds.
5. *Traffic Operations*
    a. The methodologies identified in the Highway Capacity Manual, 6th Edition (HCM – Reference 5) will be used to analyze traffic operations at the study intersections.
    b. Synchro 11 will be used to conduct the traffic operations analyses. Synchro 11 is a software tool designed to assist with operations analyses in accordance with HCM 6th methodologies. The analysis results will be reported for the overall intersection at signalized intersections and the critical movement at unsignalized intersections – overall intersection v/c ratios will be developed for the signalized intersections in accordance with the methodologies identified in the APM.
    c. Synchro 11 will be used to conduct a queuing analysis at the signalized study intersections. The 95th percentile queue lengths will be reported for all separate left- and right-turn movements and compared to available striped storage lengths. The 95th percentile queue and storage lengths will be rounded to the nearest 25-feet. Microsimulation is not proposed as part of this long-range planning effort.

TRAFFIC ANALYSIS SOFTWARE AND INPUT ASSUMPTIONS

Synchro 11 will be used to evaluate intersection performance under the following conditions and assumptions detailed below in Table 7.

Table 7. Operations Parameters/Assumptions

Arterial Intersection Parameters	Existing Conditions
Peak Hour Factor	From traffic counts
Conflicting Bikes and Pedestrian per Hour	From traffic counts, as available
Signal Timing Data	From ODOT or City of Florence
Ideal Saturation Flow Rate (for all movements)	1,750 passenger cars per hour per lane
Lane Width	12 feet unless field observations suggest otherwise
Percent Heavy Vehicles	From traffic counts by movement
Percent Grade	Estimated based on field observations
95th percentile Vehicle Queues	Synchro summary output

Crash Analysis

The five most recent years of complete crash data available will be obtained from ODOT's crash database and reviewed at the study intersections and along study area roadways consistent with the methodologies outlined in Chapter 4 of the APM. Currently, complete crash data is available for the period from January 1, 2016 through December 31, 2020. The crash data will be analyzed for number, type, severity, and location to identify potential crash patterns.

Crash rates and critical crash rates will be developed for the study intersections and roadway segments as applicable. Intersection crash rates will be compared to the 90th percentile crash rates in Table 4.1 of the APM and segment crash rates will be compared to Table II in the current ODOT State Highway Crash Rate Tables. In addition, ODOT's Safety Priority Index System (SPIS) will be reviewed to identify sites in the top 5% and 10%, as appropriate. Potential countermeasures (and resulting crash percentage reductions) will be taken from the All Roads Transportation Safety (ARTS) Crash Reduction Factors (CRF) listing, the CRF Appendix, or the Crash Modification Factor (CMF) Clearinghouse; CMFs from the Clearinghouse will be three stars or better.

Multimodal Analysis

The multimodal analysis will be performed in accordance with the methodologies identified in Chapter 14 of the APM and identify the needs associated with pedestrian, bicycle, and public transportation facilities and service. The pedestrian and bicycle analyses will follow the Pedestrian Level of Traffic Stress (PLTS) and Bicycle Level of Traffic Stress (BLTS) analysis methodologies outlined in the APM. Both PLTS and BLTS methods group facilities into four different stress levels for segments, intersection approaches, and intersection crossings. Facilities with an LTS 1 rating have little to no traffic stress, require less attention, and are suitable for all users. Facilities with an LTS 2 rating have little traffic stress, but require more attention and therefore, may or may not be suitable for small children. Facilities with an LTS 3 rating have moderate traffic stress and are suitable for adults. Facilities with an LTS 4 rating have high traffic stress and are only suitable for able-bodied adults with limited options. The transit analysis will follow the qualitative multimodal assessment (QMA) methodology outlined in the APM. Transit QMA provides a qualitative "good", "fair", "poor" rating for transit service based on hours of service, service frequency, and service coverage.

References

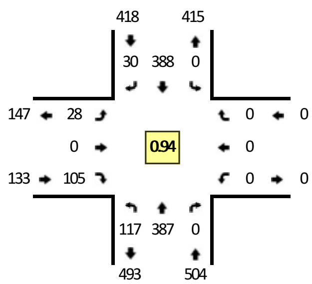
1. Oregon Department of Transportation. *Transportation System Plan Guidelines*, 2018.
2. Oregon Department of Transportation. *Analysis Procedures Manual*, 2018.
3. Oregon Department of Transportation. *Oregon Highway Plan*, 2015.
4. Oregon Department of Transportation. *Highway Design Manual*, 2023.
5. Transportation Research Board. *Highway Capacity Manual, 6th Edition*, 2016.

Attachments

A. Traffic Counts – the traffic counts that will be used to evaluate traffic operations for the Florence TSP update were conducted by ODOT and post-processed by Quality Counts. The traffic count worksheets included in Attachment A summarize the traffic counts information. The images in the worksheets reflect the system-wide peak hour (12:15 to 1:15 PM) and include (from top to bottom and left to right) the total of number of motor vehicles, heavy vehicle percentages, pedestrians, bicyclists, buses, and scooters that entered the study intersections during the peak hour. The Tabular summaries in the worksheets include all motor vehicle movements during the count period, as well as all movements during the peak 15-minutes of traffic at the intersection. The peak 15-minute flow rates are multiplied by four to extrapolate the effect of the peak 15 minutes over the whole hour.

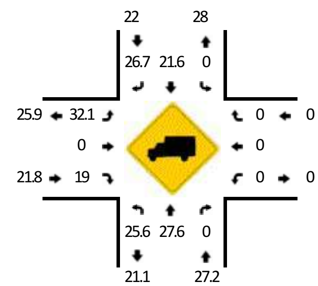
ATTACHMENT A: TRAFFIC COUNTS

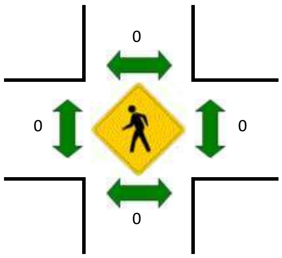
LOCATION: US 101 -- Heceta Beach Rd | **QC JOB #:** 15890301
CITY/STATE: Florence, OR | **DATE:** Thu, Jun 3 2021

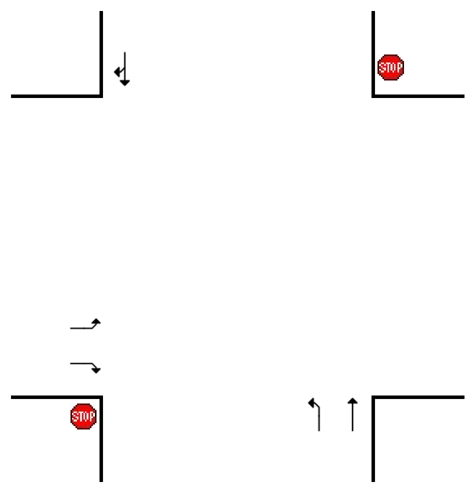


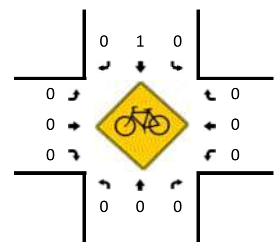
Peak-Hour: 1:45 PM -- 2:45 PM
Peak 15-Min: 2:00 PM -- 2:15 PM

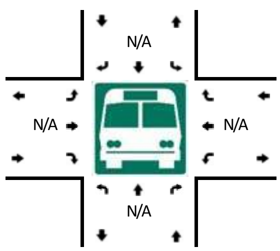
Quality Counts
DATA THAT DRIVES COMMUNITIES

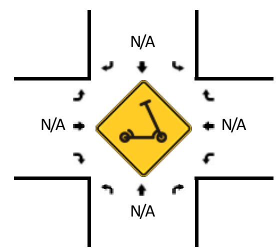












15-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				Heceta Beach Rd (Eastbound)				Heceta Beach Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	4	0	0	0	14	0	0	0	0	2	0	0	0	0	0	20	
6:15 AM	5	9	0	0	0	17	0	0	1	0	4	0	0	0	0	0	36	
6:30 AM	3	11	0	0	0	20	1	0	1	0	9	0	0	0	0	0	45	
6:45 AM	4	20	0	0	0	33	2	0	1	0	10	0	0	0	0	0	70	171
7:00 AM	8	17	0	0	0	30	1	0	2	0	14	0	0	0	0	0	72	223
7:15 AM	13	27	0	0	0	45	5	0	1	0	17	0	0	0	0	0	108	295
7:30 AM	11	34	0	0	0	55	0	0	0	0	14	0	0	0	0	0	114	364
7:45 AM	11	43	0	0	0	80	2	0	3	0	19	0	0	0	0	0	158	452
8:00 AM	10	40	0	0	0	64	1	0	1	0	19	0	0	0	0	0	135	515
8:15 AM	14	43	0	0	0	58	1	0	1	0	16	0	0	0	0	0	133	540
8:30 AM	11	59	0	0	0	69	2	0	2	0	17	0	0	0	0	0	160	586
8:45 AM	17	36	0	0	0	56	5	0	6	0	24	0	0	0	0	0	144	572
9:00 AM	17	50	0	0	0	58	2	0	6	0	16	0	0	0	0	0	149	586
9:15 AM	12	57	0	0	0	70	1	0	11	0	19	0	0	0	0	0	170	623
9:30 AM	13	57	0	0	0	81	5	0	7	0	28	0	0	0	0	0	191	654
9:45 AM	24	73	0	0	0	74	3	0	5	0	26	0	0	0	0	0	205	715
10:00 AM	14	54	0	0	0	58	3	0	2	0	19	0	0	0	0	0	150	716
10:15 AM	23	73	0	0	0	81	3	0	7	0	29	0	0	0	0	0	216	762
10:30 AM	20	68	0	0	0	51	2	0	1	0	30	0	0	0	0	0	172	743
10:45 AM	19	75	0	0	0	93	9	0	11	0	30	0	0	0	0	0	237	775
11:00 AM	26	89	0	0	0	88	6	0	11	0	27	0	0	0	0	0	247	872
11:15 AM	19	92	0	0	0	93	4	0	3	0	42	0	0	0	0	0	253	909
11:30 AM	21	90	0	0	0	94	6	0	8	0	26	0	0	0	0	0	245	982
11:45 AM	24	81	0	0	0	110	4	0	7	0	24	0	0	0	0	0	250	995
12:00 PM	24	90	0	0	0	72	4	0	12	0	37	0	0	0	0	0	239	987
12:15 PM	29	92	0	0	0	90	8	0	7	0	20	0	0	0	0	0	246	980
12:30 PM	25	97	0	0	0	97	11	0	2	0	29	0	0	0	0	0	261	996
12:45 PM	35	91	0	0	0	94	9	0	12	0	33	0	0	0	0	0	274	1020
1:00 PM	40	84	0	0	0	89	7	0	3	0	23	0	0	0	0	0	246	1027
1:15 PM	29	81	0	0	0	82	3	0	9	0	25	0	0	0	0	0	229	1010
1:30 PM	29	98	0	0	0	82	8	0	9	0	32	0	0	0	0	0	258	1007
1:45 PM	21	96	0	0	0	91	1	0	10	0	33	0	0	0	0	0	252	985
2:00 PM	30	103	0	0	0	104	11	0	6	0	27	0	0	0	0	0	281	1020
2:15 PM	25	103	0	0	0	92	8	0	11	0	24	0	0	0	0	0	263	1054
2:30 PM	41	85	0	0	0	101	10	0	1	0	21	0	0	0	0	0	259	1055
2:45 PM	29	93	0	0	0	79	4	0	10	0	23	0	0	0	0	0	238	1041
3:00 PM	23	102	0	0	0	76	5	0	11	0	29	0	0	0	0	0	246	1006
3:15 PM	22	92	0	0	0	79	7	0	2	0	21	0	0	0	0	0	223	966

15-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				Heceta Beach Rd (Eastbound)				Heceta Beach Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	32	98	0	0	0	78	8	0	4	0	19	0	0	0	0	0	239	946
3:45 PM	32	90	0	0	0	92	10	0	5	0	23	0	0	0	0	0	252	960
4:00 PM	36	87	0	0	0	81	8	0	6	0	33	0	0	0	0	0	251	965
4:15 PM	40	93	0	0	0	64	6	0	4	0	27	0	0	0	0	0	234	976
4:30 PM	31	102	0	0	0	77	10	0	7	0	29	0	0	0	0	0	256	993
4:45 PM	31	91	0	0	0	61	7	0	6	0	16	0	0	0	0	0	212	953
5:00 PM	38	98	0	0	0	69	5	0	10	0	18	0	0	0	0	0	238	940
5:15 PM	26	75	0	0	0	55	3	0	6	0	20	0	0	0	0	0	185	891
5:30 PM	24	74	0	0	0	71	4	0	3	0	19	0	0	0	0	0	195	830
5:45 PM	20	65	0	0	0	52	6	0	1	0	17	0	0	0	0	0	161	779
6:00 PM	16	80	0	0	0	51	2	0	5	0	16	0	0	0	0	0	170	711
6:15 PM	17	53	0	0	0	41	9	0	4	0	19	0	0	0	0	0	143	669
6:30 PM	29	69	0	0	0	50	4	0	3	0	19	0	0	0	0	0	174	648
6:45 PM	20	40	0	0	0	52	5	0	4	0	19	0	0	0	0	0	140	627
7:00 PM	18	34	0	0	0	34	2	0	3	0	9	0	0	0	0	0	100	557
7:15 PM	9	39	0	0	0	30	4	0	3	0	14	0	0	0	0	0	99	513
7:30 PM	23	43	0	0	0	31	1	0	4	0	16	0	0	0	0	0	118	457
7:45 PM	12	34	0	0	0	38	4	0	3	0	12	0	0	0	0	0	103	420
8:00 PM	18	21	0	0	0	37	1	0	2	0	6	0	0	0	0	0	85	405
8:15 PM	12	24	0	0	0	44	0	0	3	0	11	0	0	0	0	0	94	400
8:30 PM	13	13	0	0	0	19	2	0	1	0	6	0	0	0	0	0	54	336
8:45 PM	10	39	0	0	0	22	5	0	2	0	17	0	0	0	0	0	95	328
9:00 PM	8	21	0	0	0	24	0	0	0	0	9	0	0	0	0	0	62	305
9:15 PM	11	10	0	0	0	18	1	0	2	0	9	0	0	0	0	0	51	262
9:30 PM	7	15	0	0	0	13	0	0	1	0	4	0	0	0	0	0	40	248
9:45 PM	6	23	0	0	0	10	3	0	2	0	4	0	0	0	0	0	48	201

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	120	412	0	0	0	416	44	0	24	0	108	0	0	0	0	0	1124
Heavy Trucks	40	116	0		0	80	16		8	0	12		0	0	0		272
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	4	0		0	0	0		0	0	0		4
Scooters																	

Comments:

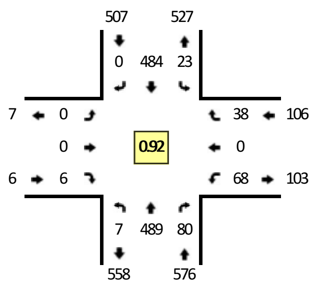
Report generated on 7/24/2022 12:23 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

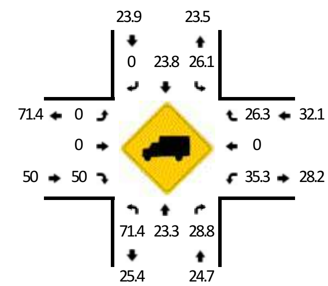
LOCATION: US 101 -- Munsel Lake Rd | **QC JOB #:** 15890302

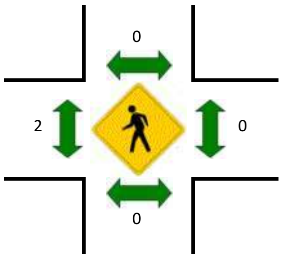
CITY/STATE: Florence, OR | **DATE:** Thu, Jun 3 2021

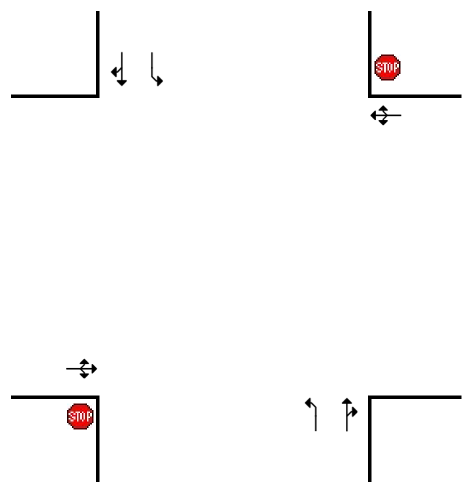


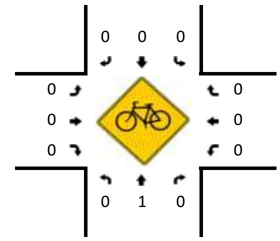
Peak-Hour: 12:15 PM -- 1:15 PM

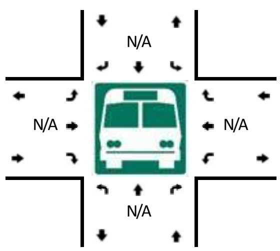
Peak 15-Min: 12:45 PM -- 1:00 PM

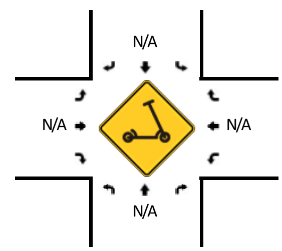












15-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				Munsel Lake Rd (Eastbound)				Munsel Lake Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	4	1	0	2	16	0	0	0	0	0	0	2	0	0	0	25	
6:15 AM	0	13	1	0	2	20	0	0	0	0	0	0	4	0	1	0	41	
6:30 AM	0	17	2	0	4	31	0	0	0	0	0	0	7	0	0	0	61	
6:45 AM	0	22	6	0	3	43	0	0	0	0	0	0	4	0	2	0	80	207
7:00 AM	0	23	9	0	6	45	0	0	0	0	0	0	10	0	2	0	95	277
7:15 AM	0	31	4	0	6	56	0	0	0	0	0	0	12	0	8	0	117	353
7:30 AM	0	45	7	0	9	67	1	0	0	0	1	0	23	0	8	0	161	453
7:45 AM	0	50	7	0	6	84	0	0	0	0	0	0	13	0	7	0	167	540
8:00 AM	0	57	11	0	5	78	0	0	0	0	0	0	14	0	4	0	169	614
8:15 AM	0	53	12	0	8	81	1	0	0	0	0	0	10	0	3	0	168	665
8:30 AM	0	67	7	0	12	80	0	0	0	0	1	0	9	0	3	0	179	683
8:45 AM	1	49	13	0	8	69	1	0	1	0	0	0	11	0	7	0	160	676
9:00 AM	0	61	6	0	5	74	0	0	1	0	0	0	10	0	9	0	166	673
9:15 AM	0	66	21	0	10	88	0	0	0	0	0	0	10	0	8	0	203	708
9:30 AM	0	76	15	0	7	106	0	0	0	0	0	0	13	0	3	0	220	749
9:45 AM	0	73	21	0	14	89	0	0	0	0	0	0	14	0	8	0	219	808
10:00 AM	1	76	18	0	9	79	1	0	0	0	1	0	11	1	5	0	202	844
10:15 AM	1	83	18	0	6	109	1	0	1	0	0	0	7	0	9	0	235	876
10:30 AM	0	93	10	0	5	81	0	0	0	0	1	0	9	0	9	0	208	864
10:45 AM	0	109	14	0	9	119	0	0	0	0	0	0	10	0	5	0	266	911
11:00 AM	1	103	12	0	9	111	0	0	0	0	1	0	13	0	8	0	258	967
11:15 AM	1	114	19	0	10	130	1	0	0	0	0	0	20	0	6	0	301	1033
11:30 AM	1	101	8	0	8	112	1	0	1	0	1	0	19	0	4	0	256	1081
11:45 AM	1	110	15	0	13	129	0	0	0	2	0	0	10	0	7	0	287	1102
12:00 PM	0	113	16	0	13	114	0	0	0	0	1	0	14	0	9	0	280	1124
12:15 PM	1	125	22	0	5	114	0	0	0	0	0	0	14	0	6	0	287	1110
12:30 PM	2	117	18	0	6	131	0	0	0	0	1	0	19	0	9	0	303	1157
12:45 PM	3	124	20	0	6	132	0	0	0	0	4	0	20	0	14	0	323	1193
1:00 PM	1	123	20	0	6	107	0	0	0	0	1	0	15	0	9	0	282	1195
1:15 PM	1	124	21	0	12	100	1	0	0	0	3	0	15	0	7	0	284	1192
1:30 PM	1	121	26	0	8	119	2	0	0	0	3	0	17	0	9	0	306	1195
1:45 PM	1	103	17	0	15	111	1	0	0	0	1	0	12	0	17	0	278	1150
2:00 PM	0	122	19	0	10	127	0	0	0	0	1	0	17	1	11	0	308	1176
2:15 PM	0	130	17	0	7	116	0	0	0	0	1	0	17	0	7	0	295	1187
2:30 PM	1	129	11	0	6	124	4	0	0	0	2	0	17	0	11	0	305	1186
2:45 PM	3	126	20	0	6	106	1	0	0	0	4	0	11	0	5	0	282	1190
3:00 PM	1	126	15	0	9	103	0	0	1	0	2	0	17	0	6	0	280	1162
3:15 PM	0	109	9	0	4	102	0	0	0	0	0	0	15	0	6	0	245	1112

15-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				Munsel Lake Rd (Eastbound)				Munsel Lake Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	0	133	15	0	9	91	0	0	0	0	1	0	17	1	8	0	275	1082
3:45 PM	2	119	20	0	10	114	0	0	0	0	2	0	12	0	7	0	286	1086
4:00 PM	3	126	21	0	7	112	0	0	0	0	3	0	8	0	8	0	288	1094
4:15 PM	0	131	18	0	6	90	0	0	0	0	3	0	14	0	6	0	268	1117
4:30 PM	1	129	12	0	11	107	0	0	0	0	0	0	10	0	11	0	281	1123
4:45 PM	0	116	16	0	6	74	1	0	0	0	0	0	13	0	10	0	236	1073
5:00 PM	0	129	18	0	7	86	0	0	1	0	1	0	9	0	11	0	262	1047
5:15 PM	0	93	18	0	4	77	0	0	0	0	0	0	7	0	7	0	206	985
5:30 PM	0	105	18	0	5	88	0	0	0	0	1	0	4	0	7	0	228	932
5:45 PM	2	78	10	0	5	65	0	0	0	0	1	0	7	0	8	0	176	872
6:00 PM	1	83	9	0	2	72	0	0	1	0	1	0	4	0	5	0	178	788
6:15 PM	0	74	8	0	3	64	0	0	0	0	0	0	9	0	8	0	166	748
6:30 PM	1	89	8	0	5	70	0	0	0	0	1	0	8	0	5	0	187	707
6:45 PM	0	67	10	0	6	70	0	0	0	0	0	0	7	0	5	0	165	696
7:00 PM	0	45	8	0	4	38	1	0	0	0	0	0	5	0	4	0	105	623
7:15 PM	0	52	6	0	4	54	0	0	0	0	0	0	2	0	4	0	122	579
7:30 PM	0	59	4	0	2	47	0	0	0	0	1	0	2	1	11	0	127	519
7:45 PM	0	51	6	0	4	44	0	0	0	0	0	0	3	0	4	0	112	466
8:00 PM	0	28	9	0	6	44	0	0	0	0	1	0	7	0	7	0	102	463
8:15 PM	0	37	3	0	7	50	0	0	0	0	0	0	2	0	2	0	101	442
8:30 PM	0	24	5	0	2	25	0	0	0	0	0	0	2	0	4	0	62	377
8:45 PM	0	46	5	0	3	38	0	0	0	0	0	0	4	0	4	0	100	365
9:00 PM	0	22	1	0	2	32	0	0	0	0	1	0	2	0	3	0	63	326
9:15 PM	0	25	3	0	2	26	0	0	0	0	0	0	1	0	3	0	60	285
9:30 PM	1	22	5	0	1	16	0	0	1	0	0	0	1	0	1	0	48	271
9:45 PM	0	22	4	0	4	12	0	0	0	0	0	0	0	0	3	0	45	216

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	12	496	80	0	24	528	0	0	0	0	16	0	80	0	56	0	1292
Heavy Trucks	12	136	24		12	104	0		0	0	8		36	0	12		344
Buses																	
Pedestrians		0				0				4				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 7/24/2022 12:23 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

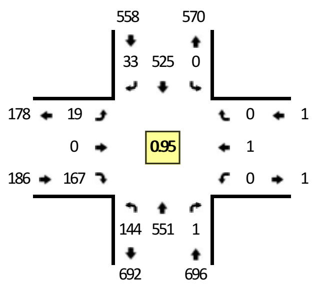
Method for determining peak hour: Total Entering Volume

LOCATION: US 101 -- 46th St

CITY/STATE: Florence, OR

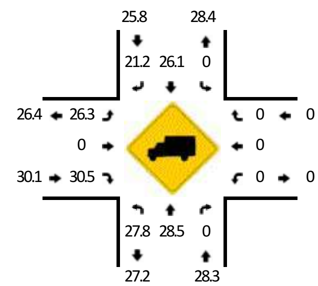
QC JOB #: 15890303

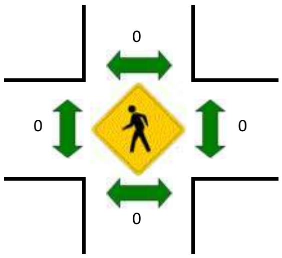
DATE: Thu, Jun 3 2021

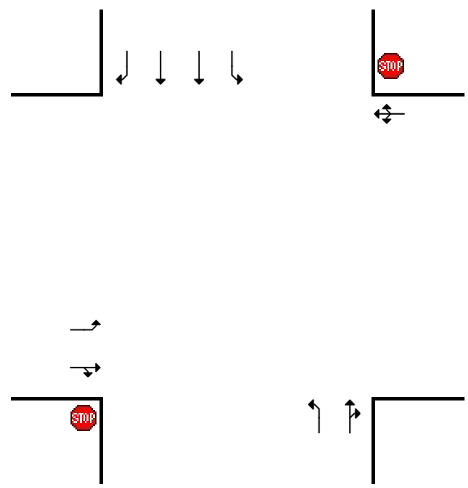


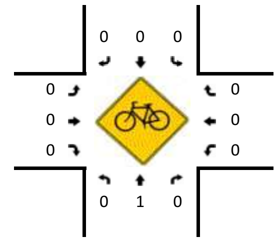
Peak-Hour: 12:00 PM -- 1:00 PM

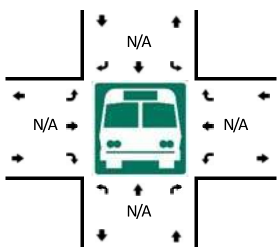
Peak 15-Min: 12:45 PM -- 1:00 PM

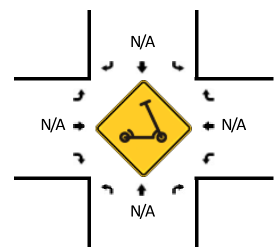












15-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				46th St (Eastbound)				46th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	1	11	0	0	0	15	1	0	0	0	2	0	0	0	0	0	30	
6:15 AM	5	18	0	0	0	19	1	0	0	0	0	0	0	0	0	0	43	
6:30 AM	2	20	0	0	0	32	1	0	0	0	4	0	0	0	0	0	59	
6:45 AM	4	27	0	0	0	42	3	0	0	0	5	0	0	0	0	0	81	213
7:00 AM	8	34	0	0	0	42	0	0	0	0	7	0	0	0	0	0	91	274
7:15 AM	5	35	0	0	0	48	6	0	1	0	11	0	0	0	0	0	106	337
7:30 AM	10	45	0	0	1	75	3	0	1	0	9	0	1	0	0	0	145	423
7:45 AM	7	56	1	0	0	89	5	0	2	0	11	0	0	0	0	0	171	513
8:00 AM	13	63	0	0	0	84	4	0	4	0	15	0	0	0	0	0	183	605
8:15 AM	9	61	0	0	0	66	3	0	8	0	14	0	0	0	1	0	162	661
8:30 AM	11	64	1	0	0	85	3	0	2	0	18	0	0	0	0	0	184	700
8:45 AM	18	70	0	0	0	80	3	0	1	0	20	0	0	0	0	0	192	721
9:00 AM	19	65	0	0	0	68	2	0	2	0	18	0	0	0	0	0	174	712
9:15 AM	15	76	1	0	0	97	5	0	6	0	25	0	0	0	0	0	225	775
9:30 AM	22	85	0	0	1	112	3	0	3	0	31	0	0	0	0	0	257	848
9:45 AM	33	85	0	0	0	83	3	0	4	0	18	0	1	0	0	0	227	883
10:00 AM	28	82	0	0	0	95	2	0	4	0	23	0	0	0	0	0	234	943
10:15 AM	26	102	0	0	0	105	0	0	3	0	31	0	0	0	0	0	267	985
10:30 AM	40	103	1	0	0	92	2	0	1	0	28	0	1	0	0	0	268	996
10:45 AM	35	121	1	0	0	118	5	0	4	0	34	0	0	0	0	0	318	1087
11:00 AM	35	119	0	0	0	103	6	0	6	0	34	0	1	0	0	0	304	1157
11:15 AM	36	118	0	0	0	133	11	0	5	0	38	0	0	0	0	0	341	1231
11:30 AM	37	114	0	0	0	125	2	0	10	0	30	0	0	0	0	0	318	1281
11:45 AM	26	117	1	0	0	126	4	0	3	0	45	0	0	0	0	0	322	1285
12:00 PM	36	126	0	0	0	115	6	0	6	0	45	0	0	1	0	0	335	1316
12:15 PM	35	146	0	0	0	120	10	0	5	0	40	0	0	0	0	0	356	1331
12:30 PM	41	137	0	0	0	139	7	0	4	0	42	0	0	0	0	0	370	1383
12:45 PM	32	142	1	0	0	151	10	0	4	0	40	0	0	0	0	0	380	1441
1:00 PM	34	124	1	0	0	113	6	0	5	0	36	0	0	0	0	0	319	1425
1:15 PM	30	131	0	0	0	117	5	0	12	0	36	0	0	0	1	0	332	1401
1:30 PM	33	138	0	0	0	116	7	0	2	0	27	0	0	0	0	0	323	1354
1:45 PM	32	123	1	0	0	119	9	0	4	0	39	0	0	0	1	0	328	1302
2:00 PM	26	129	0	0	0	125	4	0	8	0	33	0	0	1	0	0	326	1309
2:15 PM	34	140	0	0	0	120	8	0	8	0	27	0	0	0	0	0	337	1314
2:30 PM	34	135	0	0	0	131	5	0	4	0	31	0	0	0	0	0	340	1331
2:45 PM	32	130	1	0	0	107	6	0	8	0	29	0	0	0	0	0	313	1316
3:00 PM	37	126	0	0	0	108	5	0	4	0	37	0	0	0	0	0	317	1307
3:15 PM	32	116	0	0	0	105	4	0	8	0	37	0	0	0	0	0	302	1272

15-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				46th St (Eastbound)				46th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	39	133	0	0	0	109	2	0	5	0	43	0	0	0	0	0	331	1263
3:45 PM	33	118	0	0	0	112	5	0	10	0	27	0	0	0	0	0	305	1255
4:00 PM	20	142	0	0	0	102	11	0	4	0	27	0	0	0	0	0	306	1244
4:15 PM	24	130	0	0	0	93	7	0	4	0	36	0	0	0	0	0	294	1236
4:30 PM	28	128	0	0	0	104	7	0	6	0	29	0	0	0	0	0	302	1207
4:45 PM	23	123	0	0	0	83	2	0	6	1	31	0	0	0	1	0	270	1172
5:00 PM	20	123	0	0	0	85	3	0	2	0	28	0	0	0	0	0	261	1127
5:15 PM	16	114	0	0	0	67	4	0	4	0	23	0	0	0	0	0	228	1061
5:30 PM	30	98	0	0	0	85	4	0	5	0	37	0	0	0	0	0	259	1018
5:45 PM	26	93	0	0	0	64	4	0	3	0	31	0	1	0	0	0	222	970
6:00 PM	14	82	0	0	0	73	2	0	3	0	17	0	0	0	0	0	191	900
6:15 PM	18	75	0	0	1	57	1	0	1	0	23	0	0	0	0	0	176	848
6:30 PM	24	89	0	0	0	63	3	0	1	0	19	0	1	0	0	0	200	789
6:45 PM	14	67	0	0	0	62	2	0	2	0	22	0	0	0	0	0	169	736
7:00 PM	13	48	0	0	0	45	2	0	2	0	18	0	0	0	0	0	128	673
7:15 PM	11	44	0	0	0	42	7	0	5	0	12	0	0	0	0	0	121	618
7:30 PM	13	54	0	0	0	39	5	0	6	0	23	0	0	0	0	0	140	558
7:45 PM	9	49	0	0	0	42	5	0	0	0	18	0	0	0	0	0	123	512
8:00 PM	8	36	0	0	0	44	1	0	2	0	24	0	0	0	0	0	115	499
8:15 PM	13	37	0	0	0	40	3	0	3	0	12	0	0	0	0	0	108	486
8:30 PM	11	25	0	0	0	31	3	0	0	0	14	0	0	0	0	0	84	430
8:45 PM	9	42	0	0	0	35	0	0	1	0	11	0	0	0	0	0	98	405
9:00 PM	10	24	0	0	0	39	1	0	1	0	10	0	0	0	0	0	85	375
9:15 PM	5	26	0	0	0	26	1	0	0	0	8	0	0	0	0	0	66	333
9:30 PM	5	16	0	0	0	12	2	0	1	0	5	0	0	0	0	0	41	290
9:45 PM	1	26	0	0	0	15	0	0	2	0	6	0	0	0	0	0	50	242

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	128	568	4	0	0	604	40	0	16	0	160	0	0	0	0	0	1520
Heavy Trucks	36	140	0		0	192	12		8	0	40		0	0	0		428
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

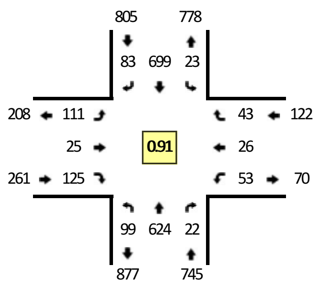
Comments:

Report generated on 7/24/2022 12:23 AM

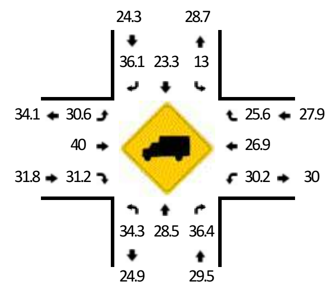
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

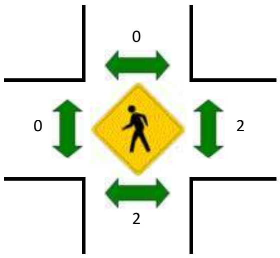
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

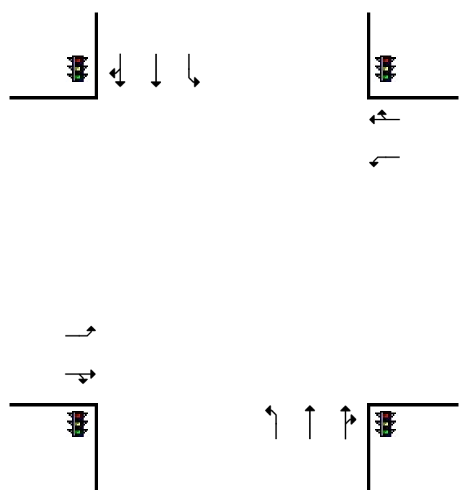
LOCATION: US 101 -- 35th St | **QC JOB #:** 15890304
CITY/STATE: Florence, OR | **DATE:** Thu, Jun 3 2021

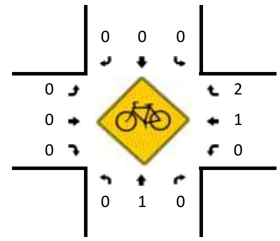


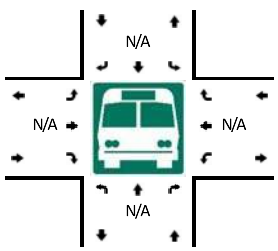
Peak-Hour: 12:00 PM -- 1:00 PM
Peak 15-Min: 12:45 PM -- 1:00 PM

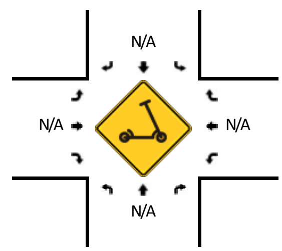












15-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				35th St (Eastbound)				35th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	1	13	0	0	0	17	2	0	0	0	5	0	1	0	0	0	39	
6:15 AM	4	21	0	0	0	17	1	0	0	0	6	0	0	1	1	0	51	
6:30 AM	4	26	0	0	0	35	3	0	3	0	6	0	1	2	2	0	82	
6:45 AM	6	32	0	0	0	48	4	0	5	0	14	0	4	2	0	0	115	287
7:00 AM	7	41	1	0	1	40	4	0	4	0	13	0	5	2	0	0	118	366
7:15 AM	6	42	2	0	2	50	8	0	6	0	11	0	0	3	0	0	130	445
7:30 AM	6	57	4	0	1	84	9	0	9	2	11	0	6	2	3	0	194	557
7:45 AM	14	85	1	0	3	85	14	0	8	4	24	0	6	9	6	0	259	701
8:00 AM	13	77	0	0	1	92	15	0	12	6	22	0	7	2	3	0	250	833
8:15 AM	17	63	3	0	1	80	9	0	8	4	17	0	5	6	3	0	216	919
8:30 AM	11	82	4	0	4	96	12	0	18	4	19	0	9	4	2	0	265	990
8:45 AM	8	83	7	0	3	94	6	0	11	5	34	0	5	7	8	0	271	1002
9:00 AM	13	91	5	0	4	82	7	0	11	3	17	0	10	3	2	0	248	1000
9:15 AM	14	110	7	0	4	122	14	0	14	3	19	0	5	5	2	0	319	1103
9:30 AM	16	118	6	0	3	140	14	0	19	2	17	0	11	7	4	0	357	1195
9:45 AM	18	98	3	0	2	119	12	0	25	4	23	0	7	7	7	0	325	1249
10:00 AM	10	129	3	0	2	131	7	0	14	2	17	0	4	2	6	0	327	1328
10:15 AM	11	114	6	0	9	132	17	0	18	5	25	0	6	3	5	0	351	1360
10:30 AM	9	139	9	0	4	121	12	0	10	1	33	0	4	8	5	0	355	1358
10:45 AM	9	143	3	0	4	139	10	0	24	8	36	0	16	7	13	0	412	1445
11:00 AM	21	145	10	0	10	140	9	0	29	4	27	0	10	8	7	0	420	1538
11:15 AM	14	155	6	0	6	162	13	0	18	7	27	0	9	6	5	0	428	1615
11:30 AM	22	133	6	0	7	161	15	0	25	11	21	0	9	6	8	0	424	1684
11:45 AM	19	160	9	0	4	157	17	0	22	9	40	0	15	3	8	0	463	1735
12:00 PM	28	152	8	0	5	156	22	0	29	9	33	0	8	4	11	0	465	1780
12:15 PM	21	161	4	0	4	162	16	0	30	4	26	0	10	6	10	0	454	1806
12:30 PM	24	135	3	0	4	178	21	0	35	6	41	0	10	12	13	0	482	1864
12:45 PM	26	176	7	0	10	203	24	0	17	6	25	0	25	4	9	0	532	1933
1:00 PM	26	163	4	0	4	157	6	0	18	6	27	0	19	3	15	0	448	1916
1:15 PM	20	153	5	0	5	161	17	0	20	7	25	0	8	11	4	0	436	1898
1:30 PM	20	175	8	0	4	145	18	0	23	7	23	0	15	0	5	0	443	1859
1:45 PM	26	133	7	0	12	189	6	0	19	6	26	0	5	4	12	0	445	1772
2:00 PM	14	150	8	0	3	166	13	0	20	6	25	0	5	9	15	0	434	1758
2:15 PM	19	163	11	0	7	148	15	0	12	5	25	0	10	3	14	0	432	1754
2:30 PM	19	154	4	0	9	159	10	0	16	7	26	0	10	11	11	0	436	1747
2:45 PM	27	154	7	0	5	146	10	0	21	8	17	0	12	7	11	0	425	1727
3:00 PM	18	151	13	0	9	145	7	0	30	10	20	0	7	15	12	0	437	1730
3:15 PM	17	142	7	0	2	156	16	0	18	7	15	0	8	11	10	0	409	1707

15-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				35th St (Eastbound)				35th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	24	143	4	0	11	131	15	0	32	6	25	0	7	5	14	0	417	1688
3:45 PM	16	134	4	0	6	132	9	0	26	7	20	0	8	8	9	0	379	1642
4:00 PM	18	159	13	0	4	143	12	0	18	9	32	0	9	6	4	0	427	1632
4:15 PM	17	144	6	0	7	135	9	0	18	6	28	0	3	4	7	0	384	1607
4:30 PM	12	145	11	0	10	135	12	0	16	9	26	0	8	5	5	0	394	1584
4:45 PM	21	141	5	0	4	125	10	0	13	7	15	0	10	7	8	0	366	1571
5:00 PM	31	132	7	0	9	118	2	0	22	9	18	0	9	5	5	0	367	1511
5:15 PM	19	120	7	0	3	108	8	0	17	7	17	0	6	5	5	0	322	1449
5:30 PM	22	117	2	0	1	122	8	0	11	3	13	0	5	4	6	0	314	1369
5:45 PM	21	106	3	0	6	103	11	0	12	8	9	0	4	1	9	0	293	1296
6:00 PM	21	93	5	0	2	97	9	0	13	4	8	0	2	7	2	0	263	1192
6:15 PM	13	82	4	0	2	70	12	0	9	5	20	0	3	11	6	0	237	1107
6:30 PM	16	109	5	0	3	83	9	0	9	6	9	0	0	1	6	0	256	1049
6:45 PM	12	77	2	0	2	82	8	0	8	2	9	0	2	2	2	0	208	964
7:00 PM	10	63	1	0	4	73	1	0	3	0	5	0	4	2	4	0	170	871
7:15 PM	5	67	2	0	2	58	4	0	5	3	9	0	1	0	2	0	158	792
7:30 PM	7	56	4	0	4	65	6	0	4	3	9	0	3	2	1	0	164	700
7:45 PM	8	48	1	0	3	58	5	0	2	2	11	0	0	4	4	0	146	638
8:00 PM	5	45	1	0	3	64	3	0	7	1	4	0	1	1	0	0	135	603
8:15 PM	8	51	1	0	2	46	3	0	3	2	11	0	1	5	0	0	133	578
8:30 PM	8	36	1	0	2	51	3	0	0	0	2	0	2	1	0	0	106	520
8:45 PM	8	53	0	0	2	41	1	0	3	3	6	0	3	0	1	0	121	495
9:00 PM	9	31	1	0	2	42	5	0	4	0	8	0	1	1	1	0	105	465
9:15 PM	8	27	2	0	0	34	3	0	2	3	5	0	2	2	1	0	89	421
9:30 PM	7	27	0	0	0	18	1	0	1	0	5	0	0	0	0	0	59	374
9:45 PM	4	29	0	0	0	22	0	0	1	1	1	0	0	0	0	0	58	311

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	104	704	28	0	40	812	96	0	68	24	100	0	100	16	36	0	2128
Heavy Trucks	40	172	12		8	192	32		24	12	24		24	4	12		556
Buses																	
Pedestrians		4				0				0				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	8		8
Scooters																	

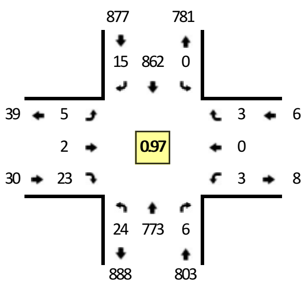
Comments:

Report generated on 7/24/2022 12:23 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

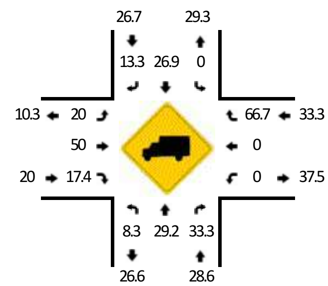
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

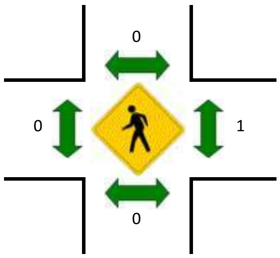
LOCATION: US 101 -- 30th St | **QC JOB #:** 15890305
CITY/STATE: Florence, OR | **DATE:** Thu, Jun 3 2021

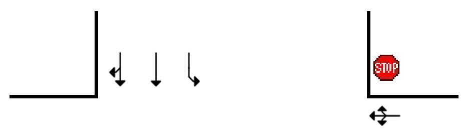


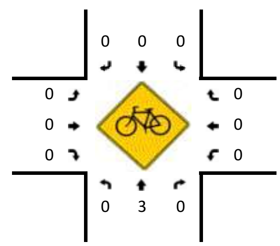
Peak-Hour: 12:00 PM -- 1:00 PM
Peak 15-Min: 12:45 PM -- 1:00 PM

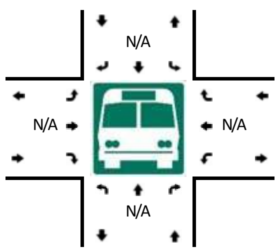
Quality Counts
DATA THAT DRIVES COMMUNITIES

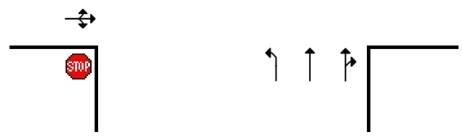


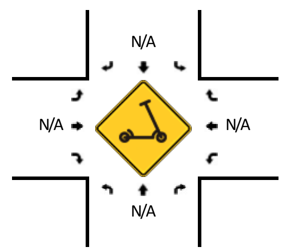












15-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				30th St (Eastbound)				30th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	21	0	0	0	24	0	0	0	0	0	0	0	0	0	0	45	
6:15 AM	0	27	0	0	0	27	0	0	0	0	0	0	0	0	0	0	54	
6:30 AM	0	34	0	0	0	42	0	0	0	0	2	0	1	0	1	0	80	
6:45 AM	1	41	0	0	0	65	0	0	0	0	1	0	0	0	1	0	109	288
7:00 AM	3	48	0	0	0	60	0	0	0	0	0	0	1	0	1	0	113	356
7:15 AM	3	53	0	0	0	63	2	0	0	0	3	0	0	0	0	0	124	426
7:30 AM	4	73	1	0	2	93	5	0	0	0	0	0	0	0	1	0	179	525
7:45 AM	3	107	0	0	0	111	4	0	0	0	3	0	3	0	0	0	231	647
8:00 AM	23	87	0	0	0	125	7	0	1	2	6	0	0	1	1	0	253	787
8:15 AM	3	89	0	0	0	104	3	0	1	0	7	0	1	0	0	0	208	871
8:30 AM	2	103	0	0	0	123	0	0	0	0	1	0	1	0	1	0	231	923
8:45 AM	5	103	3	0	1	126	0	0	0	0	2	0	0	0	0	0	240	932
9:00 AM	3	120	0	0	0	121	2	0	3	0	3	0	1	0	1	0	254	933
9:15 AM	1	133	2	0	0	142	2	0	0	2	1	0	0	1	0	0	284	1009
9:30 AM	3	130	1	0	0	167	1	0	1	0	3	0	1	0	5	0	312	1090
9:45 AM	3	130	1	0	0	162	0	0	0	3	3	0	4	0	1	0	307	1157
10:00 AM	3	144	0	0	0	145	0	0	0	0	3	0	0	0	2	0	297	1200
10:15 AM	3	137	1	0	0	177	4	0	1	0	4	0	1	0	0	0	328	1244
10:30 AM	4	163	2	0	0	164	0	0	0	0	4	0	0	0	3	0	340	1272
10:45 AM	2	173	0	0	1	201	0	0	0	0	4	0	2	0	1	0	384	1349
11:00 AM	4	173	3	0	0	183	3	0	0	0	5	0	1	0	1	0	373	1425
11:15 AM	9	176	0	0	1	200	3	0	2	0	9	0	1	0	3	0	404	1501
11:30 AM	10	179	2	0	0	182	3	0	1	0	30	0	0	0	0	0	407	1568
11:45 AM	5	177	0	0	0	223	0	0	0	2	8	0	0	0	0	0	415	1599
12:00 PM	12	205	1	0	0	206	3	0	1	0	4	0	1	0	0	0	433	1659
12:15 PM	1	184	3	0	0	200	2	0	3	0	6	0	1	0	0	0	400	1655
12:30 PM	5	178	1	0	0	240	7	0	1	2	7	0	0	0	0	0	441	1689
12:45 PM	6	206	1	0	0	216	3	0	0	0	6	0	1	0	3	0	442	1716
1:00 PM	5	190	0	0	0	212	0	0	1	0	2	0	0	0	1	0	411	1694
1:15 PM	6	176	0	0	0	201	2	0	0	0	8	0	1	0	1	0	395	1689
1:30 PM	6	208	1	0	0	180	3	0	2	0	7	0	0	0	1	0	408	1656
1:45 PM	3	177	0	0	1	198	2	0	0	0	7	0	0	0	3	0	391	1605
2:00 PM	4	173	1	0	1	204	2	0	3	0	6	0	1	0	1	0	396	1590
2:15 PM	6	200	1	0	0	182	2	0	0	0	9	0	0	0	1	0	401	1596
2:30 PM	1	178	1	0	0	196	3	0	0	0	3	0	3	0	1	0	386	1574
2:45 PM	2	193	1	0	0	180	1	0	0	2	8	0	0	1	2	0	390	1573
3:00 PM	5	189	4	0	0	176	7	0	0	0	6	0	0	0	0	0	387	1564
3:15 PM	5	172	0	0	1	174	2	0	1	0	10	0	1	1	2	0	369	1532

15-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				30th St (Eastbound)				30th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	5	168	3	0	0	171	4	0	1	0	4	0	0	0	1	0	357	1503
3:45 PM	1	172	0	0	1	164	1	0	0	0	10	0	1	0	1	0	351	1464
4:00 PM	1	193	0	0	0	192	1	0	0	0	8	0	0	0	1	0	396	1473
4:15 PM	7	170	3	0	0	167	0	0	0	0	4	0	0	0	2	0	353	1457
4:30 PM	10	166	1	0	0	174	0	0	1	0	6	0	0	0	2	0	360	1460
4:45 PM	7	169	0	0	0	152	0	0	2	2	3	0	2	0	2	0	339	1448
5:00 PM	6	175	2	0	1	153	1	0	0	0	6	0	0	0	2	0	346	1398
5:15 PM	3	147	2	0	0	131	2	0	1	0	5	0	1	0	1	0	293	1338
5:30 PM	4	138	2	0	0	138	0	0	2	0	5	0	0	0	0	0	289	1267
5:45 PM	4	136	2	0	0	119	2	0	2	0	1	0	2	0	1	0	269	1197
6:00 PM	2	117	0	0	1	117	0	0	0	0	2	0	0	0	2	0	241	1092
6:15 PM	1	99	0	0	0	99	0	0	0	0	3	0	1	0	0	0	203	1002
6:30 PM	3	135	0	0	0	91	1	0	0	0	0	0	0	0	1	0	231	944
6:45 PM	1	88	1	0	0	95	2	0	0	0	4	0	0	0	1	0	192	867
7:00 PM	2	76	1	0	0	81	2	0	0	0	1	0	0	0	1	0	164	790
7:15 PM	3	83	0	0	0	75	3	0	1	0	0	0	1	0	1	0	167	754
7:30 PM	3	70	0	0	0	71	0	0	1	0	4	0	0	0	0	0	149	672
7:45 PM	0	56	0	0	0	77	0	0	1	0	1	0	0	0	0	0	135	615
8:00 PM	1	60	1	0	0	73	0	0	0	0	0	0	0	0	0	0	135	586
8:15 PM	1	57	1	0	0	55	0	0	0	0	1	0	0	0	0	0	115	534
8:30 PM	0	46	1	0	0	53	0	0	0	0	1	0	0	0	1	0	102	487
8:45 PM	2	61	1	0	0	53	0	0	0	0	0	0	0	0	0	0	117	469
9:00 PM	2	47	1	0	0	51	0	0	0	0	0	0	0	0	0	0	101	435
9:15 PM	0	36	0	0	0	43	0	0	0	0	1	0	0	0	0	0	80	400
9:30 PM	2	34	1	0	0	26	0	0	1	0	0	0	0	0	0	0	64	362
9:45 PM	2	35	0	0	0	20	0	0	0	0	2	0	0	0	0	0	59	304

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	24	824	4	0	0	864	12	0	0	0	24	0	4	0	12	0	1768
Heavy Trucks	0	196	4		0	236	4		0	0	4		0	0	8		452
Buses																	
Pedestrians		0				0				0				4			4
Bicycles	0	8	0		0	0	0		0	0	0		0	0	0		8
Scooters																	

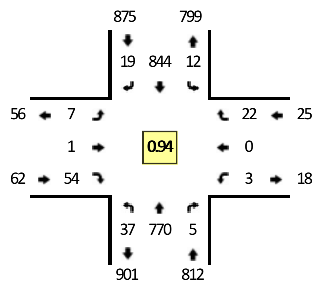
Comments:

Report generated on 7/24/2022 12:23 AM

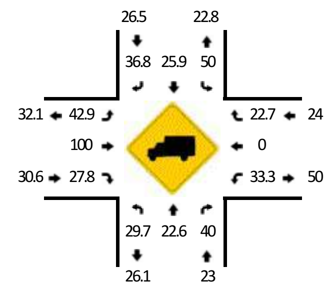
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

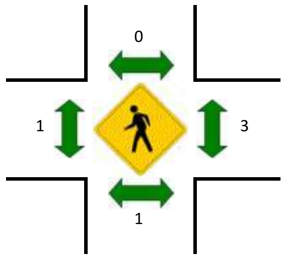
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

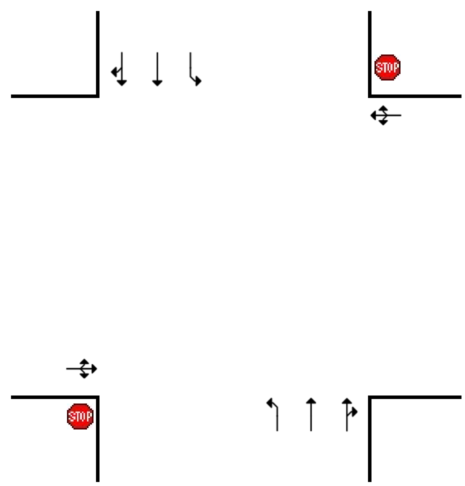
LOCATION: US 101 -- 27th St | **QC JOB #:** 15890306
CITY/STATE: Florence, OR | **DATE:** Thu, Jun 3 2021

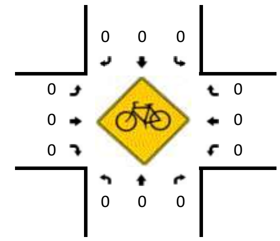


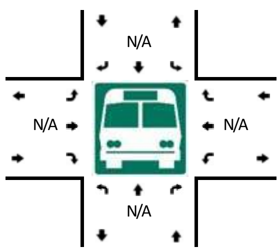
Peak-Hour: 12:30 PM -- 1:30 PM
Peak 15-Min: 12:45 PM -- 1:00 PM

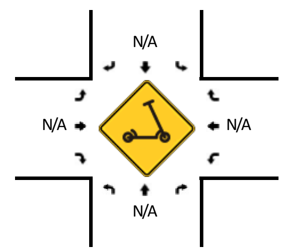












15-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				27th St (Eastbound)				27th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	1	23	0	0	0	24	1	0	0	0	1	0	0	0	0	0	50	
6:15 AM	1	26	0	0	0	22	1	0	0	0	2	0	0	0	0	0	52	
6:30 AM	1	29	0	0	0	39	1	0	0	0	0	0	0	0	0	0	70	
6:45 AM	5	41	0	0	0	58	5	0	0	0	1	0	0	0	0	0	110	282
7:00 AM	6	46	0	0	0	63	4	0	2	0	3	0	0	0	1	0	125	357
7:15 AM	8	52	0	0	0	56	2	0	2	0	1	0	0	0	0	0	121	426
7:30 AM	8	75	2	0	0	84	2	0	1	0	4	0	1	0	1	0	178	534
7:45 AM	9	108	0	0	0	115	2	0	0	0	10	0	0	0	1	0	245	669
8:00 AM	12	98	1	0	1	110	6	0	5	0	7	0	1	0	0	0	241	785
8:15 AM	6	94	0	0	0	113	6	0	4	0	7	0	0	0	0	0	230	894
8:30 AM	6	106	0	0	1	105	6	0	1	0	5	0	1	0	0	0	231	947
8:45 AM	5	104	0	0	2	126	7	0	4	0	8	0	0	0	0	0	256	958
9:00 AM	6	111	1	0	1	117	4	0	3	0	6	0	1	0	2	0	252	969
9:15 AM	4	132	0	0	3	138	7	0	1	0	6	0	0	0	3	0	294	1033
9:30 AM	11	130	0	0	0	142	11	0	3	0	15	0	0	0	2	0	314	1116
9:45 AM	12	132	0	0	4	143	7	0	1	0	4	0	0	0	3	0	306	1166
10:00 AM	3	151	0	0	0	163	3	0	2	0	7	0	0	0	0	0	329	1243
10:15 AM	7	138	1	0	0	158	5	0	2	0	5	0	1	0	5	0	322	1271
10:30 AM	5	150	1	0	2	152	4	0	3	0	5	0	2	0	7	0	331	1288
10:45 AM	8	153	1	0	4	187	1	0	3	1	11	0	1	1	6	0	377	1359
11:00 AM	14	186	2	0	5	176	4	0	2	0	14	0	1	0	8	0	412	1442
11:15 AM	9	177	0	0	0	198	5	0	2	0	8	0	2	0	5	0	406	1526
11:30 AM	9	179	0	0	1	205	11	0	4	1	24	0	1	0	9	0	444	1639
11:45 AM	7	183	2	0	5	220	6	0	4	1	11	0	1	0	8	0	448	1710
12:00 PM	7	196	1	0	4	195	5	0	3	0	14	0	3	0	9	0	437	1735
12:15 PM	9	175	0	0	2	204	5	0	2	0	10	0	1	0	7	0	415	1744
12:30 PM	10	191	2	0	0	207	5	0	3	0	14	0	0	0	6	0	438	1738
12:45 PM	7	211	0	0	4	221	7	0	1	0	13	0	2	0	8	0	474	1764
1:00 PM	11	177	1	0	5	221	4	0	1	1	18	0	1	0	4	0	444	1771
1:15 PM	9	191	2	0	3	195	3	0	2	0	9	0	0	0	4	0	418	1774
1:30 PM	10	212	0	0	5	184	1	0	1	0	7	0	3	0	8	0	431	1767
1:45 PM	12	188	1	0	1	176	8	0	3	0	10	0	2	0	7	0	408	1701
2:00 PM	4	176	0	0	3	204	3	0	1	1	13	0	0	0	5	0	410	1667
2:15 PM	3	193	2	0	1	185	6	0	3	1	9	0	1	0	6	0	410	1659
2:30 PM	17	173	2	0	2	181	7	0	3	0	12	0	1	0	9	0	407	1635
2:45 PM	6	207	1	0	7	189	4	0	2	0	13	0	4	0	3	0	436	1663
3:00 PM	3	187	0	0	2	180	4	0	4	0	19	0	1	0	4	0	404	1657
3:15 PM	3	181	0	0	3	188	5	0	3	0	15	0	1	0	6	0	405	1652

15-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				27th St (Eastbound)				27th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	5	175	0	0	3	164	5	0	7	0	12	0	2	0	7	0	380	1625
3:45 PM	5	155	1	0	1	169	4	0	1	0	11	0	0	1	8	0	356	1545
4:00 PM	5	183	1	0	4	180	4	0	4	0	12	0	0	0	6	0	399	1540
4:15 PM	6	172	0	0	5	158	4	0	5	0	7	0	0	0	4	0	361	1496
4:30 PM	13	185	1	0	2	180	8	0	2	0	10	0	1	0	4	0	406	1522
4:45 PM	4	172	0	0	2	162	4	0	3	0	9	0	0	0	6	0	362	1528
5:00 PM	6	188	1	0	5	153	2	0	2	0	10	0	1	0	5	0	373	1502
5:15 PM	5	139	1	0	0	133	1	0	3	0	9	0	1	0	4	0	296	1437
5:30 PM	8	149	1	0	5	129	4	0	6	0	3	0	0	0	4	0	309	1340
5:45 PM	5	135	0	0	0	139	6	0	3	0	7	0	0	0	2	0	297	1275
6:00 PM	6	127	0	0	2	119	3	0	1	0	9	0	0	0	5	0	272	1174
6:15 PM	3	97	1	0	1	106	1	0	3	0	4	0	0	0	5	0	221	1099
6:30 PM	4	124	0	0	1	85	4	0	1	0	8	0	0	0	2	0	229	1019
6:45 PM	1	107	0	0	3	90	5	0	3	0	4	0	0	1	3	0	217	939
7:00 PM	1	94	0	0	0	85	4	0	4	0	6	0	0	0	0	0	194	861
7:15 PM	3	73	1	0	0	76	0	0	0	0	5	0	0	0	2	0	160	800
7:30 PM	1	82	0	0	0	78	1	0	2	0	2	0	1	0	0	0	167	738
7:45 PM	3	58	0	0	0	77	1	0	1	0	2	0	1	0	0	0	143	664
8:00 PM	4	59	0	0	0	75	2	0	0	0	1	0	0	0	0	0	141	611
8:15 PM	0	62	0	0	0	54	0	0	1	0	6	0	0	0	0	0	123	574
8:30 PM	4	51	0	0	0	64	0	0	1	0	0	0	0	0	0	0	120	527
8:45 PM	0	68	0	0	0	53	1	0	1	0	2	0	0	0	0	0	125	509
9:00 PM	1	57	0	0	0	52	1	0	0	0	0	0	0	0	0	0	111	479
9:15 PM	0	38	0	0	0	52	0	0	0	0	1	0	0	0	0	0	91	447
9:30 PM	0	40	0	0	0	27	0	0	0	0	3	0	0	0	0	0	70	397
9:45 PM	0	38	0	0	0	28	1	0	1	0	1	0	0	0	1	0	70	342

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	28	844	0	0	16	884	28	0	4	0	52	0	8	0	32	0	1896
Heavy Trucks	12	180	0		4	248	12		4	0	20		4	0	0		484
Buses																	
Pedestrians		0				0				0				4			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

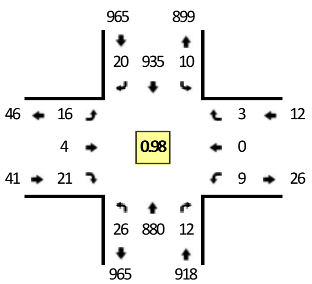
Comments:

Report generated on 7/24/2022 12:23 AM

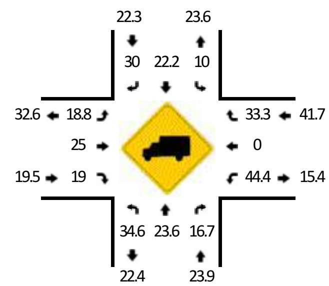
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

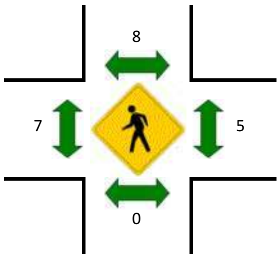
Type of peak hour being reported: Intersection Peak Method for determining peak hour: Total Entering Volume

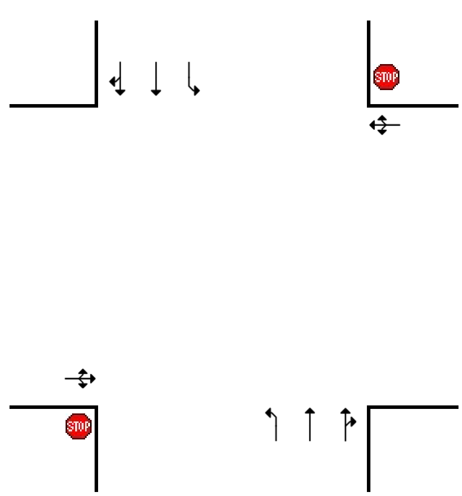
LOCATION: US 101 -- 15th St **QC JOB #:** 15890307
CITY/STATE: Florence, OR **DATE:** Thu, Jun 3 2021

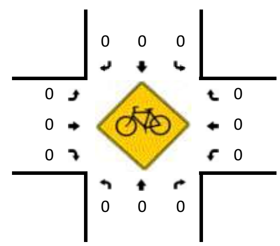


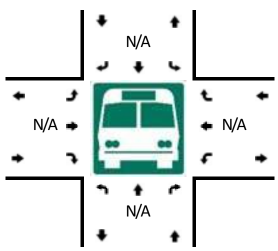
Peak-Hour: 12:15 PM -- 1:15 PM
Peak 15-Min: 12:15 PM -- 12:30 PM

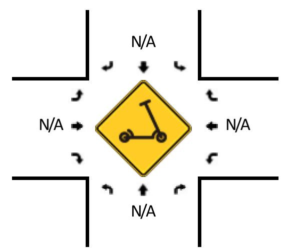












15-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				15th St (Eastbound)				15th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	2	27	0	0	1	26	1	0	1	0	0	0	0	0	1	0	59	
6:15 AM	1	37	0	0	0	29	1	0	2	0	1	0	1	0	1	0	73	
6:30 AM	2	37	0	0	3	47	1	0	1	1	1	0	0	2	0	0	95	
6:45 AM	1	61	0	0	1	73	0	0	1	0	2	0	0	0	0	0	139	366
7:00 AM	2	49	1	0	2	68	3	0	4	0	0	0	0	0	1	0	130	437
7:15 AM	1	81	1	0	2	70	3	0	1	0	4	0	2	1	2	0	168	532
7:30 AM	5	89	0	0	3	94	2	0	1	0	1	0	0	0	2	0	197	634
7:45 AM	3	132	2	0	2	107	3	0	3	2	3	0	1	2	3	0	263	758
8:00 AM	1	128	0	0	1	117	6	0	3	1	2	0	0	0	4	0	263	891
8:15 AM	2	118	2	0	2	122	3	0	1	0	2	0	0	0	1	0	253	976
8:30 AM	2	113	1	0	3	106	3	0	2	0	1	0	0	0	1	0	232	1011
8:45 AM	2	106	1	0	1	127	3	0	3	0	3	0	1	0	0	0	247	995
9:00 AM	3	147	3	0	1	146	1	0	1	0	3	0	0	0	0	0	305	1037
9:15 AM	6	151	0	0	3	143	4	0	4	1	4	0	1	0	4	0	321	1105
9:30 AM	2	157	0	0	3	173	2	0	2	0	4	0	2	0	3	0	348	1221
9:45 AM	7	155	1	0	5	151	8	0	2	0	4	0	3	0	1	0	337	1311
10:00 AM	5	170	1	0	5	176	7	0	5	2	3	0	1	0	1	0	376	1382
10:15 AM	4	151	0	0	0	157	6	0	2	1	5	0	2	3	4	0	335	1396
10:30 AM	3	196	1	0	0	166	3	0	1	0	5	0	0	0	0	0	375	1423
10:45 AM	5	186	3	0	3	191	7	0	4	0	9	0	0	0	6	0	414	1500
11:00 AM	4	201	1	0	3	187	5	0	0	0	10	0	1	1	4	0	417	1541
11:15 AM	3	180	3	0	2	215	4	0	2	1	6	0	1	0	1	0	418	1624
11:30 AM	2	203	3	0	6	208	4	0	4	0	6	0	3	0	1	0	440	1689
11:45 AM	9	195	4	0	3	232	4	0	2	1	10	0	0	0	6	0	466	1741
12:00 PM	7	204	2	0	7	225	3	0	6	0	6	0	0	0	6	0	466	1790
12:15 PM	7	221	3	0	0	245	4	0	3	2	6	0	1	0	0	0	492	1864
12:30 PM	10	224	5	0	2	217	5	0	4	1	6	0	3	0	1	0	478	1902
12:45 PM	3	223	3	0	2	228	3	0	4	0	6	0	2	0	0	0	474	1910
1:00 PM	6	212	1	0	6	245	8	0	5	1	3	0	3	0	2	0	492	1936
1:15 PM	2	215	4	0	5	213	5	0	5	1	3	0	1	0	3	0	457	1901
1:30 PM	0	202	5	0	2	216	5	0	3	1	5	0	0	0	3	0	442	1865
1:45 PM	3	208	7	0	4	196	5	0	2	0	6	0	1	0	3	0	435	1826
2:00 PM	10	202	2	0	1	228	3	0	1	1	10	0	2	0	5	0	465	1799
2:15 PM	5	238	1	0	6	190	6	0	4	0	5	0	1	2	2	0	460	1802
2:30 PM	4	211	1	0	3	178	2	0	4	1	9	0	0	4	1	0	418	1778
2:45 PM	2	207	2	0	5	224	6	0	0	0	8	0	0	0	1	0	455	1798
3:00 PM	6	243	1	0	3	203	10	0	1	1	7	0	4	0	1	0	480	1813
3:15 PM	8	198	0	0	0	206	6	0	6	1	9	0	2	0	2	0	438	1791

15-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				15th St (Eastbound)				15th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	7	172	4	0	3	205	5	0	6	0	7	0	4	1	3	0	417	1790
3:45 PM	7	184	1	0	2	177	8	0	5	0	14	0	2	1	0	0	401	1736
4:00 PM	8	202	1	0	4	190	4	0	4	2	7	0	1	0	2	0	425	1681
4:15 PM	9	197	0	0	4	201	2	0	4	0	8	0	2	0	2	0	429	1672
4:30 PM	7	183	2	0	4	178	8	0	4	0	1	0	5	0	2	0	394	1649
4:45 PM	6	201	1	0	1	152	2	0	3	1	5	0	5	1	3	0	381	1629
5:00 PM	5	196	6	0	1	179	4	0	3	0	5	0	1	0	2	0	402	1606
5:15 PM	8	171	1	0	5	160	5	0	3	0	4	0	0	0	1	0	358	1535
5:30 PM	4	148	1	0	2	139	6	0	2	0	7	0	0	0	3	0	312	1453
5:45 PM	5	142	2	0	6	144	6	0	5	2	6	0	1	0	1	0	320	1392
6:00 PM	1	113	0	0	2	122	3	0	2	2	7	0	0	0	0	0	252	1242
6:15 PM	2	118	5	0	1	136	4	0	3	0	3	0	0	0	2	0	274	1158
6:30 PM	3	120	1	0	3	109	4	0	5	0	0	0	1	0	1	0	247	1093
6:45 PM	1	88	1	0	8	123	3	0	2	0	5	0	0	0	1	0	232	1005
7:00 PM	4	92	2	0	1	85	0	0	1	0	0	0	1	0	2	0	188	941
7:15 PM	4	89	0	0	3	78	5	0	2	0	1	0	1	0	1	0	184	851
7:30 PM	1	79	0	0	3	89	3	0	0	0	4	0	1	0	1	0	181	785
7:45 PM	3	83	0	0	2	75	3	0	1	0	2	0	0	0	0	0	169	722
8:00 PM	5	65	0	0	1	66	1	0	1	0	2	0	2	1	3	0	147	681
8:15 PM	0	66	0	0	1	73	0	0	2	1	4	0	0	1	0	0	148	645
8:30 PM	0	53	0	0	3	57	2	0	0	1	1	0	0	1	3	0	121	585
8:45 PM	4	59	1	0	2	57	0	0	1	0	4	0	0	0	2	0	130	546
9:00 PM	2	61	0	0	3	55	2	0	1	0	4	0	1	0	0	0	129	528
9:15 PM	1	46	1	0	1	43	4	0	1	0	0	0	1	1	0	0	99	479
9:30 PM	1	49	0	0	0	35	0	0	1	0	1	0	0	0	0	0	87	445
9:45 PM	0	39	1	0	1	30	0	0	0	0	0	0	0	0	0	0	71	386

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	28	884	12	0	0	980	16	0	12	8	24	0	4	0	0	0	1968
Heavy Trucks	12	232	0		0	212	8		0	0	4		0	0	0		468
Buses																	
Pedestrians		0				4				8				0			12
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

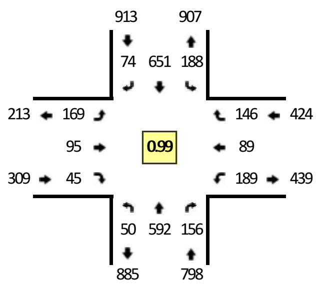
Comments:

Report generated on 7/24/2022 12:23 AM

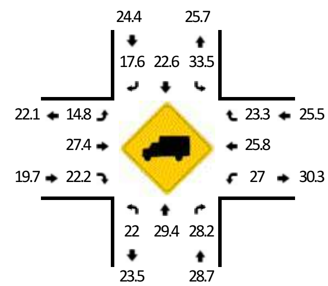
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

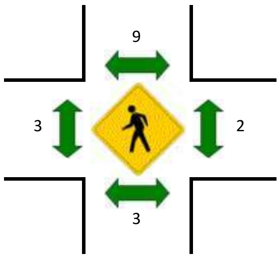
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

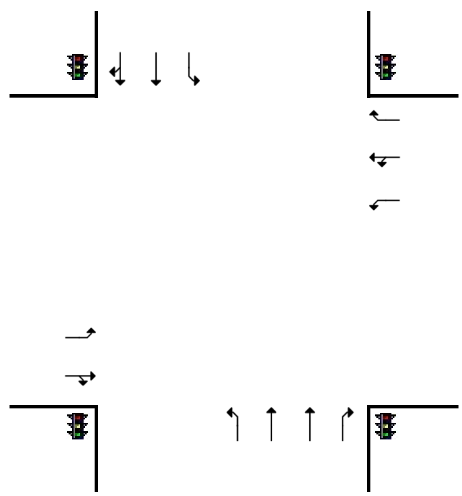
LOCATION: US 101 -- OR 126 | **QC JOB #:** 15890308
CITY/STATE: Florence, OR | **DATE:** Thu, Jun 3 2021

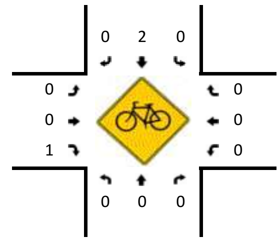


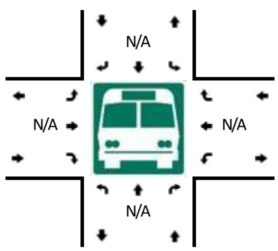
Peak-Hour: 12:15 PM -- 1:15 PM
Peak 15-Min: 1:00 PM -- 1:15 PM

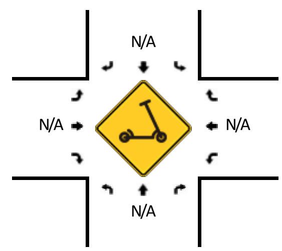












15-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				OR 126 (Eastbound)				OR 126 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	1	14	7	0	7	18	2	0	2	7	1	0	5	4	13	0	81	
6:15 AM	3	19	12	0	7	8	12	0	7	6	0	0	8	5	10	0	97	
6:30 AM	5	33	11	0	3	27	9	0	3	6	2	0	11	4	7	0	121	
6:45 AM	5	39	9	0	14	43	20	0	7	6	5	0	14	20	22	0	204	503
7:00 AM	2	26	19	0	18	40	12	0	14	6	5	0	10	10	12	0	174	596
7:15 AM	3	53	18	0	18	38	18	0	4	6	4	0	27	11	17	0	217	716
7:30 AM	2	64	16	0	15	60	9	0	21	10	2	0	21	15	22	0	257	852
7:45 AM	8	86	23	0	18	63	12	0	23	13	4	0	25	26	19	0	320	968
8:00 AM	5	78	15	0	29	67	12	0	16	9	4	0	21	17	34	0	307	1101
8:15 AM	5	75	27	0	29	84	15	0	15	12	6	0	28	14	27	0	337	1221
8:30 AM	4	66	25	0	25	69	12	0	22	2	2	0	27	18	20	0	292	1256
8:45 AM	4	70	30	0	25	87	13	0	15	16	6	0	30	16	28	0	340	1276
9:00 AM	8	102	26	0	31	88	16	0	29	16	13	0	22	12	33	0	396	1365
9:15 AM	5	111	24	0	30	96	16	0	23	14	11	0	25	9	23	0	387	1415
9:30 AM	6	97	21	0	26	105	17	0	20	17	11	0	29	21	20	0	390	1513
9:45 AM	10	98	29	0	45	103	16	0	33	21	8	0	29	15	27	0	434	1607
10:00 AM	11	108	35	0	33	114	21	0	37	23	10	0	33	15	34	0	474	1685
10:15 AM	11	94	26	0	32	103	15	0	35	11	4	0	36	17	31	0	415	1713
10:30 AM	13	118	29	0	29	126	14	0	32	18	13	0	47	17	19	0	475	1798
10:45 AM	12	123	39	0	36	115	19	0	37	33	5	0	31	20	29	0	499	1863
11:00 AM	8	120	28	0	46	137	22	0	40	26	10	0	41	16	33	0	527	1916
11:15 AM	13	105	38	0	33	136	18	0	39	29	14	0	49	17	31	0	522	2023
11:30 AM	12	130	45	0	35	153	14	0	45	23	6	0	39	15	31	0	548	2096
11:45 AM	10	128	37	0	40	170	27	0	42	29	9	0	50	13	46	0	601	2198
12:00 PM	4	134	42	0	41	159	27	0	50	29	11	0	32	9	20	0	558	2229
12:15 PM	9	148	41	0	60	162	20	0	39	23	7	0	45	23	42	0	619	2326
12:30 PM	12	137	40	0	43	152	17	0	47	23	14	0	51	21	38	0	595	2373
12:45 PM	13	153	35	0	44	163	12	0	41	24	11	0	57	25	32	0	610	2382
1:00 PM	16	154	40	0	41	174	25	0	42	25	13	0	36	20	34	0	620	2444
1:15 PM	13	141	29	0	36	150	14	0	29	30	12	0	45	17	33	0	549	2374
1:30 PM	4	139	40	0	44	162	18	0	22	15	13	0	41	18	36	0	552	2331
1:45 PM	9	130	39	0	36	134	16	0	33	28	13	0	47	15	37	0	537	2258
2:00 PM	13	131	32	0	42	152	16	0	47	21	11	0	41	14	26	0	546	2184
2:15 PM	10	163	37	0	37	141	18	0	38	26	6	0	70	21	41	0	608	2243
2:30 PM	9	129	40	0	28	126	12	0	32	28	14	0	61	21	45	0	545	2236
2:45 PM	17	140	44	0	42	159	9	0	32	28	4	0	52	17	29	0	573	2272
3:00 PM	9	144	41	0	35	149	7	0	55	28	7	0	42	20	40	0	577	2303
3:15 PM	12	119	29	0	32	166	21	0	34	26	9	0	49	20	30	0	547	2242

15-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				OR 126 (Eastbound)				OR 126 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	7	101	34	0	51	136	14	0	30	37	1	0	45	17	25	0	498	2195
3:45 PM	9	128	34	0	40	143	13	0	27	18	6	0	45	15	32	0	510	2132
4:00 PM	8	126	37	0	30	138	13	0	40	26	4	0	60	12	30	0	524	2079
4:15 PM	9	140	29	0	54	148	17	0	31	18	1	0	21	12	28	0	508	2040
4:30 PM	12	109	30	0	41	116	14	0	28	26	11	0	34	17	36	0	474	2016
4:45 PM	14	123	37	0	40	113	12	0	33	22	8	0	47	21	34	0	504	2010
5:00 PM	15	122	34	0	40	134	12	0	34	19	13	0	29	15	29	0	496	1982
5:15 PM	5	118	28	0	31	115	9	0	23	16	8	0	40	15	34	0	442	1916
5:30 PM	0	92	38	0	39	109	9	0	16	10	6	0	34	17	23	0	393	1835
5:45 PM	10	80	33	0	42	103	6	0	23	17	7	0	41	10	30	0	402	1733
6:00 PM	5	83	32	0	28	92	8	0	11	13	9	0	33	15	22	0	351	1588
6:15 PM	5	84	30	0	21	85	10	0	13	7	6	0	30	12	22	0	325	1471
6:30 PM	8	70	23	0	31	64	5	0	20	8	7	0	31	7	26	0	300	1378
6:45 PM	4	57	24	0	22	94	6	0	9	11	5	0	31	12	17	0	292	1268
7:00 PM	9	59	23	0	17	60	10	0	11	11	5	0	17	6	17	0	245	1162
7:15 PM	7	62	22	0	19	52	6	0	8	7	2	0	23	12	12	0	232	1069
7:30 PM	6	58	14	0	17	68	6	0	5	12	0	0	28	9	10	0	233	1002
7:45 PM	4	51	14	0	12	55	9	0	8	6	5	0	16	6	21	0	207	917
8:00 PM	4	47	20	0	21	50	9	0	7	7	4	0	12	5	17	0	203	875
8:15 PM	0	40	12	0	16	53	8	0	5	4	0	0	13	4	10	0	165	808
8:30 PM	0	30	16	0	15	47	4	0	10	6	2	0	19	8	9	0	166	741
8:45 PM	3	38	7	0	10	47	2	0	12	6	5	0	25	7	11	0	173	707
9:00 PM	2	40	9	0	5	45	6	0	6	6	1	0	14	6	12	0	152	656
9:15 PM	2	35	14	0	6	27	5	0	3	5	0	0	12	8	7	0	124	615
9:30 PM	0	35	6	0	6	29	3	0	3	3	1	0	10	5	8	0	109	558
9:45 PM	2	27	14	0	7	21	4	0	2	6	2	0	6	2	8	0	101	486

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	64	616	160	0	164	696	100	0	168	100	52	0	144	80	136	0	2480
Heavy Trucks	12	176	48		44	120	8		20	24	12		44	32	16		556
Buses																	
Pedestrians		0				16				0				4			20
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

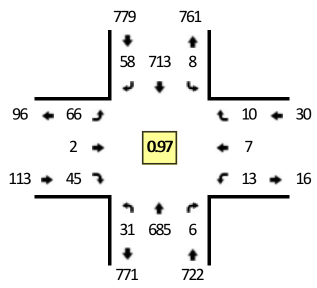
Comments:

Report generated on 7/24/2022 12:23 AM

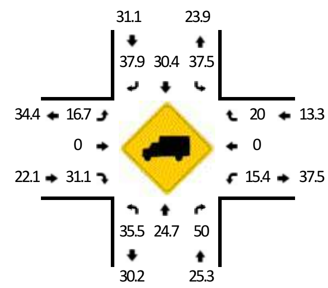
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

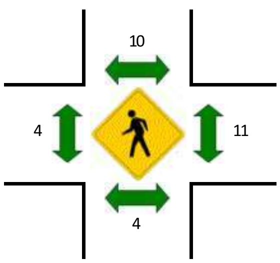
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

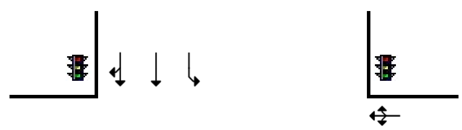
LOCATION: US 101 -- Rhododendron Dr | **QC JOB #:** 15890309
CITY/STATE: Florence, OR | **DATE:** Thu, Jun 3 2021

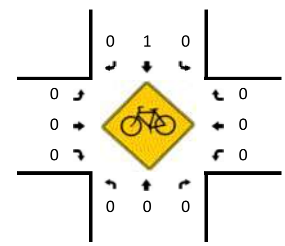


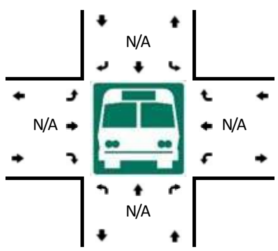
Peak-Hour: 12:30 PM -- 1:30 PM
Peak 15-Min: 12:45 PM -- 1:00 PM

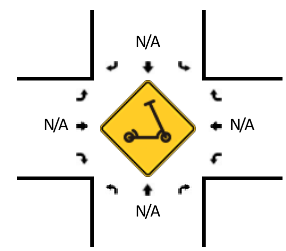












15-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				Rhododendron Dr (Eastbound)				Rhododendron Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	21	0	0	0	24	2	0	1	0	1	0	0	0	0	0	49	
6:15 AM	2	34	0	0	0	18	2	0	2	0	2	0	0	0	0	0	60	
6:30 AM	4	48	0	0	1	24	2	0	1	2	1	0	0	0	0	0	83	
6:45 AM	1	60	0	0	0	48	1	0	1	0	1	0	0	1	0	0	113	305
7:00 AM	3	38	0	0	0	48	1	0	3	0	1	0	1	0	0	0	95	351
7:15 AM	1	79	2	0	0	48	3	0	6	0	2	0	0	0	1	0	142	433
7:30 AM	3	82	0	0	1	53	12	0	10	1	4	0	0	0	2	0	168	518
7:45 AM	5	101	0	0	1	60	7	0	11	0	5	0	0	1	1	0	192	597
8:00 AM	3	93	0	0	2	68	5	0	8	0	5	0	0	1	2	0	187	689
8:15 AM	4	104	2	0	0	95	10	0	9	0	6	0	0	1	1	0	232	779
8:30 AM	7	87	1	0	0	73	6	0	12	0	9	0	2	0	1	0	198	809
8:45 AM	3	101	2	0	1	96	7	0	9	0	6	0	2	0	2	0	229	846
9:00 AM	8	110	1	0	1	81	7	0	14	0	5	0	1	2	1	0	231	890
9:15 AM	4	122	0	0	2	96	7	0	16	0	5	0	1	0	5	0	258	916
9:30 AM	3	107	2	0	2	114	13	0	11	0	4	0	1	2	1	0	260	978
9:45 AM	5	132	4	0	1	100	15	0	10	0	10	0	1	1	2	0	281	1030
10:00 AM	4	121	0	0	0	111	6	0	16	1	10	0	1	3	5	0	278	1077
10:15 AM	5	132	0	0	2	109	17	0	9	3	7	0	3	1	5	0	293	1112
10:30 AM	6	133	1	0	3	129	8	0	15	0	5	0	3	4	1	0	308	1160
10:45 AM	7	151	0	0	1	126	16	0	13	2	7	0	3	0	1	0	327	1206
11:00 AM	3	131	2	0	1	139	12	0	15	1	12	0	2	2	2	0	322	1250
11:15 AM	8	150	1	0	1	144	15	0	15	0	10	0	3	1	1	0	349	1306
11:30 AM	0	151	2	0	2	151	10	0	17	0	10	0	1	1	3	0	348	1346
11:45 AM	9	150	1	0	3	170	11	0	14	2	13	0	3	3	1	0	380	1399
12:00 PM	8	147	3	0	5	147	14	0	20	1	13	0	5	0	3	0	366	1443
12:15 PM	8	179	1	0	2	129	8	0	15	0	8	0	4	3	5	0	362	1456
12:30 PM	10	155	3	0	2	197	15	0	22	1	9	0	4	2	1	0	421	1529
12:45 PM	5	195	1	0	2	177	15	0	5	1	16	0	3	0	4	0	424	1573
1:00 PM	9	185	1	0	3	165	18	0	19	0	10	0	3	2	4	0	419	1626
1:15 PM	7	150	1	0	1	174	10	0	20	0	10	0	3	3	1	0	380	1644
1:30 PM	10	160	1	0	3	162	14	0	23	2	11	0	4	3	1	0	394	1617
1:45 PM	7	154	1	0	4	146	13	0	19	1	7	0	3	0	4	0	359	1552
2:00 PM	10	180	2	0	3	139	11	0	17	0	10	0	9	3	1	0	385	1518
2:15 PM	12	165	2	0	1	155	16	0	12	1	5	0	3	0	1	0	373	1511
2:30 PM	8	176	1	0	0	159	15	0	17	0	6	0	1	3	3	0	389	1506
2:45 PM	3	202	2	0	3	177	15	0	12	2	9	0	2	4	3	0	434	1581
3:00 PM	6	173	0	0	1	169	14	0	11	0	8	0	2	5	3	0	392	1588
3:15 PM	6	131	3	0	3	170	19	0	24	0	4	0	5	0	0	0	365	1580

15-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				Rhododendron Dr (Eastbound)				Rhododendron Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	7	136	1	0	7	162	9	0	9	0	10	0	7	1	5	0	354	1545
3:45 PM	8	174	0	0	0	149	4	0	20	1	13	0	3	1	4	0	377	1488
4:00 PM	9	136	0	0	4	156	14	0	22	2	6	0	4	0	5	0	358	1454
4:15 PM	5	137	2	0	3	129	6	0	12	2	9	0	3	1	2	0	311	1400
4:30 PM	6	136	1	0	1	135	12	0	14	0	8	0	2	1	2	0	318	1364
4:45 PM	2	160	0	0	1	146	13	0	13	1	6	0	1	1	4	0	348	1335
5:00 PM	7	153	3	0	2	155	9	0	13	0	1	0	5	0	2	0	350	1327
5:15 PM	6	126	2	0	3	131	5	0	11	0	3	0	3	0	1	0	291	1307
5:30 PM	6	123	0	0	0	144	8	0	8	0	3	0	2	2	0	0	296	1285
5:45 PM	6	111	0	0	3	129	8	0	9	1	2	0	5	1	1	0	276	1213
6:00 PM	2	114	1	0	2	127	4	0	4	1	5	0	2	0	0	0	262	1125
6:15 PM	8	101	1	0	0	109	4	0	9	0	7	0	5	1	0	0	245	1079
6:30 PM	0	92	1	0	1	90	3	0	5	1	4	0	1	0	1	0	199	982
6:45 PM	0	95	0	0	0	118	1	0	10	0	5	0	1	1	2	0	233	939
7:00 PM	0	74	1	0	2	83	4	0	6	0	3	0	1	0	0	0	174	851
7:15 PM	2	95	1	0	0	65	2	0	3	0	3	0	1	0	0	0	172	778
7:30 PM	1	73	0	0	0	89	4	0	0	0	1	0	0	0	0	0	168	747
7:45 PM	0	65	2	0	2	56	2	0	8	0	0	0	2	0	0	0	137	651
8:00 PM	2	60	0	0	2	65	6	0	2	0	2	0	1	0	1	0	141	618
8:15 PM	4	31	1	0	1	60	4	0	3	0	4	0	2	0	0	0	110	556
8:30 PM	1	45	0	0	0	61	7	0	5	0	2	0	1	0	0	0	122	510
8:45 PM	4	32	0	0	0	60	7	0	3	1	2	0	0	0	0	0	109	482
9:00 PM	2	42	0	0	0	53	1	0	2	0	0	0	0	0	0	0	100	441
9:15 PM	2	45	1	0	1	30	1	0	3	0	0	0	0	0	1	0	84	415
9:30 PM	1	35	1	0	0	36	0	0	2	0	2	0	0	1	1	0	79	372
9:45 PM	1	33	0	0	1	26	2	0	2	0	1	0	2	0	1	0	69	332

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	20	780	4	0	8	708	60	0	20	4	64	0	12	0	16	0	1696
Heavy Trucks	4	184	4		4	244	24		0	0	16		0	0	0		480
Buses																	
Pedestrians		0				16				0				12			28
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

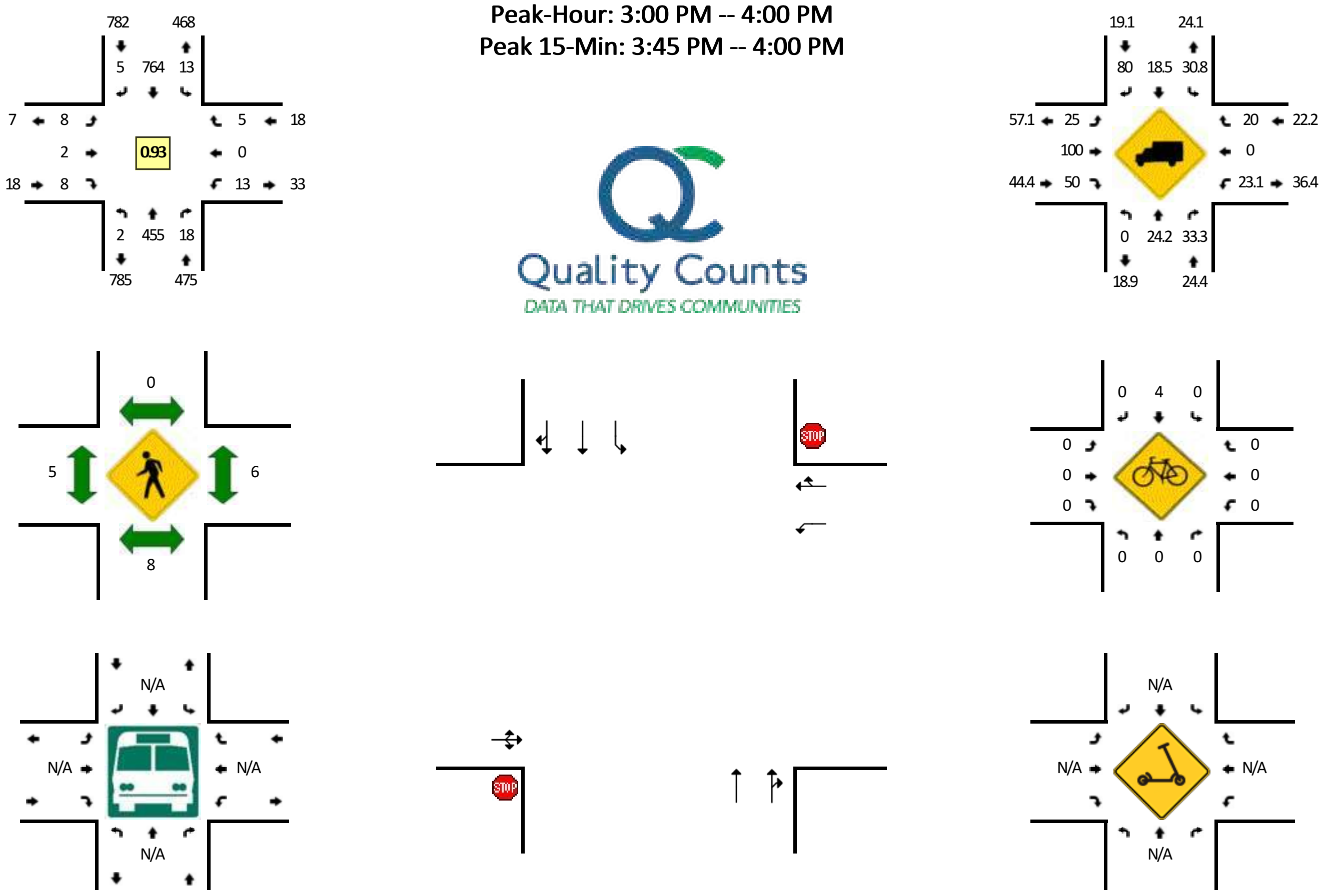
Report generated on 7/24/2022 12:23 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak — Method for determining peak hour: Total Entering Volume

LOCATION: US 101 -- 2nd St — **QC JOB #:** 15890310
CITY/STATE: Florence, OR — **DATE:** Thu, Jun 3 2021

Peak-Hour: 3:00 PM -- 4:00 PM
Peak 15-Min: 3:45 PM -- 4:00 PM



15-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				2nd St (Eastbound)				2nd St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	19	0	0	0	24	1	0	0	1	1	0	0	0	0	0	46	
6:15 AM	0	31	0	0	0	18	0	0	0	0	1	0	0	0	0	0	50	
6:30 AM	0	48	1	0	0	25	0	0	2	0	0	0	0	0	0	0	76	
6:45 AM	0	63	0	0	0	45	0	0	0	1	2	0	0	0	0	0	111	283
7:00 AM	0	39	2	0	0	43	3	0	1	0	0	0	1	0	1	0	90	327
7:15 AM	0	75	2	0	0	46	0	0	2	0	0	0	0	0	1	0	126	403
7:30 AM	0	83	0	0	0	50	1	0	0	0	0	0	0	0	1	0	135	462
7:45 AM	0	106	0	0	0	63	1	0	3	0	2	0	1	0	1	0	177	528
8:00 AM	0	90	0	0	0	63	0	0	1	0	0	0	1	0	1	0	156	594
8:15 AM	0	108	1	0	0	75	0	0	0	0	0	0	0	0	0	0	184	652
8:30 AM	1	84	1	0	0	66	0	0	2	0	0	0	0	1	0	0	155	672
8:45 AM	1	95	0	0	0	78	1	0	1	0	2	0	3	0	0	0	181	676
9:00 AM	0	96	0	0	1	76	1	0	0	0	1	0	1	0	3	0	179	699
9:15 AM	0	112	3	0	3	82	2	0	0	1	2	0	3	0	2	0	210	725
9:30 AM	0	96	4	0	1	94	2	0	2	0	0	0	0	1	1	0	201	771
9:45 AM	0	115	3	0	3	90	3	0	1	0	1	0	2	0	1	0	219	809
10:00 AM	0	102	0	0	1	99	3	0	2	0	1	0	1	0	0	0	209	839
10:15 AM	0	113	3	0	1	91	3	0	0	0	1	0	0	0	0	0	212	841
10:30 AM	0	115	10	0	2	118	2	0	1	0	3	0	0	0	1	0	252	892
10:45 AM	0	134	5	0	1	100	1	0	0	0	0	0	1	0	1	0	243	916
11:00 AM	0	114	4	0	1	128	0	0	1	0	2	0	3	0	2	0	255	962
11:15 AM	0	135	3	0	2	120	2	0	1	1	0	0	1	0	2	0	267	1017
11:30 AM	0	116	4	0	2	129	0	0	3	0	1	0	1	0	1	0	257	1022
11:45 AM	1	121	1	0	6	144	5	0	0	0	1	0	2	0	1	0	282	1061
12:00 PM	2	118	2	0	2	130	4	0	2	1	1	0	3	4	1	0	270	1076
12:15 PM	0	171	6	0	9	144	3	0	1	0	3	0	3	0	0	0	340	1149
12:30 PM	0	134	5	0	6	156	1	0	1	1	1	0	7	0	2	0	314	1206
12:45 PM	0	155	1	0	4	157	0	0	1	0	0	0	3	0	4	0	325	1249
1:00 PM	0	133	1	0	3	147	4	0	2	0	1	0	2	1	2	0	296	1275
1:15 PM	0	123	7	0	4	157	3	0	3	0	0	0	1	0	1	0	299	1234
1:30 PM	0	127	4	0	3	152	2	0	1	0	6	0	7	0	5	0	307	1227
1:45 PM	0	121	4	0	2	128	0	0	1	0	2	0	9	1	1	0	269	1171
2:00 PM	0	143	6	0	1	152	1	0	2	1	0	0	4	1	2	0	313	1188
2:15 PM	0	154	3	0	3	143	5	0	2	0	2	0	9	0	1	0	322	1211
2:30 PM	0	127	2	0	5	149	0	0	1	1	3	0	4	0	1	0	293	1197
2:45 PM	0	160	4	0	6	160	4	0	2	0	0	0	6	1	2	0	345	1273
3:00 PM	1	118	4	0	1	197	2	0	3	2	2	0	0	0	1	0	331	1291
3:15 PM	1	108	3	0	3	179	0	0	3	0	2	0	6	0	0	0	305	1274
3:30 PM	0	101	5	0	5	196	1	0	0	0	0	0	3	0	0	0	311	1292

15-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				2nd St (Eastbound)				2nd St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:45 PM	0	128	6	0	4	192	2	0	2	0	4	0	4	0	4	0	346	1293
4:00 PM	0	110	4	0	1	160	0	0	0	0	3	0	0	0	2	0	280	1242
4:15 PM	0	119	4	0	4	134	1	0	1	0	3	0	3	0	2	0	271	1208
4:30 PM	0	118	7	0	2	142	0	0	0	0	3	0	1	0	2	0	275	1172
4:45 PM	0	122	3	0	3	144	2	0	1	0	1	0	2	0	4	0	282	1108
5:00 PM	1	112	4	0	4	149	0	0	1	0	4	0	2	0	5	0	282	1110
5:15 PM	0	102	1	0	3	148	3	0	4	0	2	0	3	0	0	0	266	1105
5:30 PM	0	91	3	0	2	148	3	0	1	0	1	0	6	0	0	0	255	1085
5:45 PM	1	90	1	0	2	134	1	0	1	0	3	0	1	0	1	0	235	1038
6:00 PM	0	85	0	0	4	129	0	0	0	0	2	0	3	0	1	0	224	980
6:15 PM	0	86	2	0	2	106	1	0	6	0	2	0	3	0	0	0	208	922
6:30 PM	0	65	2	0	3	89	0	0	1	0	0	0	3	0	0	0	163	830
6:45 PM	0	63	2	0	0	123	1	0	0	0	0	0	5	0	1	0	195	790
7:00 PM	0	63	0	0	1	73	2	0	0	0	3	0	1	0	0	0	143	709
7:15 PM	0	63	2	0	1	56	2	0	0	0	2	0	1	0	1	0	128	629
7:30 PM	0	58	0	0	0	91	1	0	2	0	0	0	2	0	0	0	154	620
7:45 PM	0	36	1	0	1	54	1	0	1	0	0	0	2	0	0	0	96	521
8:00 PM	0	43	1	0	0	81	1	0	1	0	1	0	3	0	0	0	131	509
8:15 PM	0	41	1	0	0	68	2	0	0	0	0	0	3	0	1	0	116	497
8:30 PM	0	42	0	0	0	75	0	0	0	0	0	0	0	0	0	0	117	460
8:45 PM	0	27	0	0	0	67	2	0	0	0	1	0	1	0	0	0	98	462
9:00 PM	0	38	0	0	0	45	1	0	0	0	1	0	1	0	0	0	86	417
9:15 PM	0	36	0	0	0	48	0	0	2	0	0	0	2	0	0	0	88	389
9:30 PM	0	32	0	0	0	34	0	0	0	0	2	0	0	0	1	0	69	341
9:45 PM	0	23	1	0	0	30	0	0	1	0	0	0	0	0	0	0	55	298

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	512	24	0	16	768	8	0	8	0	16	0	16	0	16	0	1384
Heavy Trucks	0	128	4		8	124	8		4	0	8		4	0	4		292
Buses																	
Pedestrians		0				0				8				0			8
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

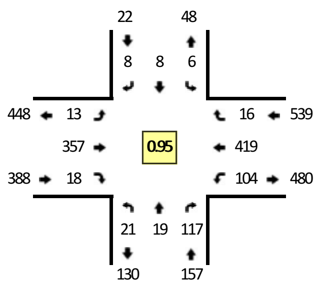
Comments:

Report generated on 7/24/2022 12:23 AM

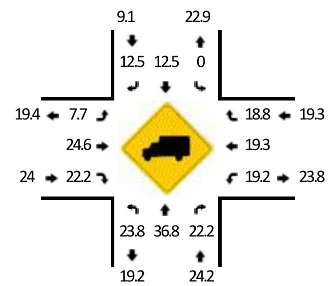
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

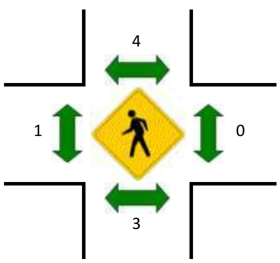
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

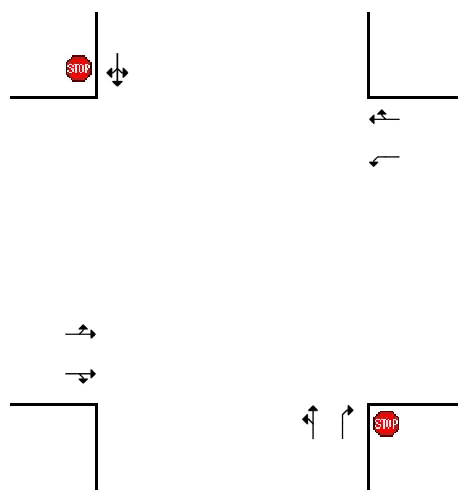
LOCATION: Quince St -- OR 126 | **QC JOB #:** 15890311
CITY/STATE: Florence, OR | **DATE:** Thu, Jun 3 2021

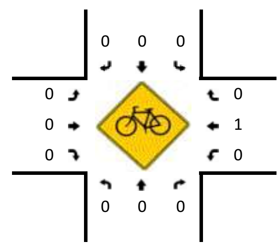


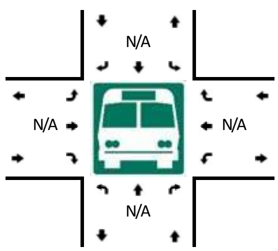
Peak-Hour: 2:15 PM -- 3:15 PM
Peak 15-Min: 2:30 PM -- 2:45 PM

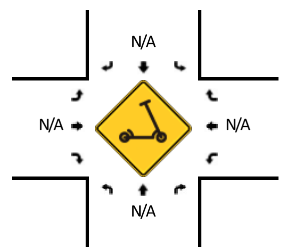












15-Min Count Period Beginning At	Quince St (Northbound)				Quince St (Southbound)				OR 126 (Eastbound)				OR 126 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	2	1	3	0	0	0	0	0	0	19	1	0	1	20	0	0	47	
6:15 AM	0	1	1	0	2	0	1	0	0	25	0	0	4	22	1	0	57	
6:30 AM	2	3	2	0	2	1	0	0	0	18	2	0	2	20	3	0	55	
6:45 AM	1	1	1	0	2	1	0	0	0	27	1	0	3	54	3	0	94	253
7:00 AM	1	1	2	0	0	0	2	0	0	42	1	0	3	32	2	0	86	292
7:15 AM	2	0	4	0	1	0	0	0	1	40	1	0	4	53	3	0	109	344
7:30 AM	0	1	11	0	1	0	1	0	1	35	3	0	10	55	1	0	119	408
7:45 AM	1	4	12	0	3	1	0	0	1	52	1	0	13	72	9	0	169	483
8:00 AM	1	3	11	0	1	2	3	0	0	45	3	0	17	62	4	0	152	549
8:15 AM	3	2	12	0	1	0	2	0	2	62	0	0	8	65	5	0	162	602
8:30 AM	4	3	12	0	1	1	1	0	3	40	0	0	21	57	5	0	148	631
8:45 AM	3	2	6	0	3	3	1	0	2	66	2	0	9	69	7	0	173	635
9:00 AM	1	4	6	0	2	3	2	0	5	62	3	0	14	58	2	0	162	645
9:15 AM	2	5	14	0	1	1	0	0	3	61	3	0	21	56	6	0	173	656
9:30 AM	3	2	14	0	0	3	3	0	4	43	5	0	15	66	8	0	166	674
9:45 AM	7	3	19	0	1	1	1	0	4	83	2	0	25	61	7	0	214	715
10:00 AM	4	5	18	0	3	0	3	0	1	83	3	0	23	79	2	0	224	777
10:15 AM	7	3	13	0	1	2	2	0	4	58	2	0	27	69	0	0	188	792
10:30 AM	4	3	16	0	2	1	1	0	4	60	5	0	13	78	2	0	189	815
10:45 AM	5	3	14	0	0	0	3	0	4	87	3	0	18	76	4	0	217	818
11:00 AM	5	3	23	0	2	2	1	0	7	70	14	0	33	89	7	0	256	850
11:15 AM	7	4	23	0	2	3	2	0	4	73	6	0	26	82	3	0	235	897
11:30 AM	5	1	25	0	4	2	0	0	9	84	7	0	29	77	6	0	249	957
11:45 AM	4	5	21	0	0	2	3	0	9	86	4	0	33	104	6	0	277	1017
12:00 PM	3	2	29	0	1	0	1	0	3	90	3	0	22	67	2	0	223	984
12:15 PM	7	1	24	0	2	3	4	0	8	104	5	0	26	86	4	0	274	1023
12:30 PM	15	3	20	0	0	2	5	0	3	81	6	0	32	92	7	0	266	1040
12:45 PM	3	3	14	0	4	4	2	0	9	83	7	0	35	106	9	0	279	1042
1:00 PM	7	5	29	0	2	3	3	0	2	87	5	0	41	78	1	0	263	1082
1:15 PM	7	3	31	0	0	2	0	0	4	75	3	0	25	93	5	0	248	1056
1:30 PM	6	5	18	0	0	1	2	0	2	85	4	0	34	79	2	0	238	1028
1:45 PM	9	2	35	0	4	0	1	0	4	91	4	0	21	96	3	0	270	1019
2:00 PM	6	5	22	0	1	2	1	0	4	77	4	0	23	82	2	0	229	985
2:15 PM	5	2	39	0	1	3	2	0	4	84	1	0	23	113	3	0	280	1017
2:30 PM	6	7	27	0	1	4	2	0	2	88	5	0	22	126	2	0	292	1071
2:45 PM	2	5	26	0	2	1	2	0	6	96	6	0	36	99	5	0	286	1087
3:00 PM	8	5	25	0	2	0	2	0	1	89	6	0	23	81	6	0	248	1106
3:15 PM	6	2	25	0	1	3	1	0	5	71	6	0	27	96	6	0	249	1075

15-Min Count Period Beginning At	Quince St (Northbound)				Quince St (Southbound)				OR 126 (Eastbound)				OR 126 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	3	4	23	0	5	0	2	0	4	106	4	0	15	80	9	0	255	1038
3:45 PM	4	2	19	0	1	1	0	0	6	83	4	0	19	93	3	0	235	987
4:00 PM	2	6	27	0	2	3	1	0	6	77	4	0	15	91	3	0	237	976
4:15 PM	6	9	18	0	2	0	3	0	4	82	8	0	27	60	3	0	222	949
4:30 PM	4	8	21	0	3	1	2	0	4	84	1	0	21	80	7	0	236	930
4:45 PM	5	9	24	0	1	3	0	0	2	81	1	0	27	96	3	0	252	947
5:00 PM	4	5	25	0	2	1	0	0	3	77	5	0	17	64	8	0	211	921
5:15 PM	6	4	21	0	0	2	3	0	5	69	4	0	24	82	6	0	226	925
5:30 PM	2	2	20	0	6	0	0	0	1	80	3	0	20	72	6	0	212	901
5:45 PM	8	3	25	0	0	0	2	0	1	81	3	0	15	70	2	0	210	859
6:00 PM	3	3	23	0	0	0	2	0	0	66	3	0	21	67	0	0	188	836
6:15 PM	6	4	10	0	0	1	1	0	1	52	0	0	11	50	3	0	139	749
6:30 PM	6	2	14	0	1	0	1	0	3	50	4	0	11	61	3	0	156	693
6:45 PM	6	1	19	0	2	1	0	0	0	51	1	0	8	51	1	0	141	624
7:00 PM	3	1	12	0	0	1	0	0	1	49	1	0	10	38	3	0	119	555
7:15 PM	1	2	10	0	1	2	0	0	1	44	2	0	9	43	1	0	116	532
7:30 PM	1	0	12	0	0	0	2	0	1	40	1	0	12	43	5	0	117	493
7:45 PM	0	0	10	0	3	0	2	0	0	30	1	0	11	39	0	0	96	448
8:00 PM	3	1	6	0	0	1	0	0	0	40	4	0	4	34	0	0	93	422
8:15 PM	2	0	7	0	2	1	0	0	1	28	2	0	7	25	2	0	77	383
8:30 PM	0	2	8	0	0	1	0	0	0	35	0	0	5	34	2	0	87	353
8:45 PM	0	5	6	0	3	1	0	0	2	21	1	0	8	45	1	0	93	350
9:00 PM	1	0	5	0	1	1	0	0	0	18	2	0	4	28	0	0	60	317
9:15 PM	0	0	3	0	0	0	0	0	0	23	0	0	3	30	1	0	60	300
9:30 PM	1	1	3	0	0	0	0	0	0	13	2	0	6	21	0	0	47	260
9:45 PM	0	1	3	0	0	0	0	0	1	25	2	0	4	15	3	0	54	221

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	24	28	108	0	4	16	8	0	8	352	20	0	88	504	8	0	1168
Heavy Trucks	0	16	20		0	4	0		0	84	0		12	124	0		260
Buses																	
Pedestrians		12				0				0				0			12
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

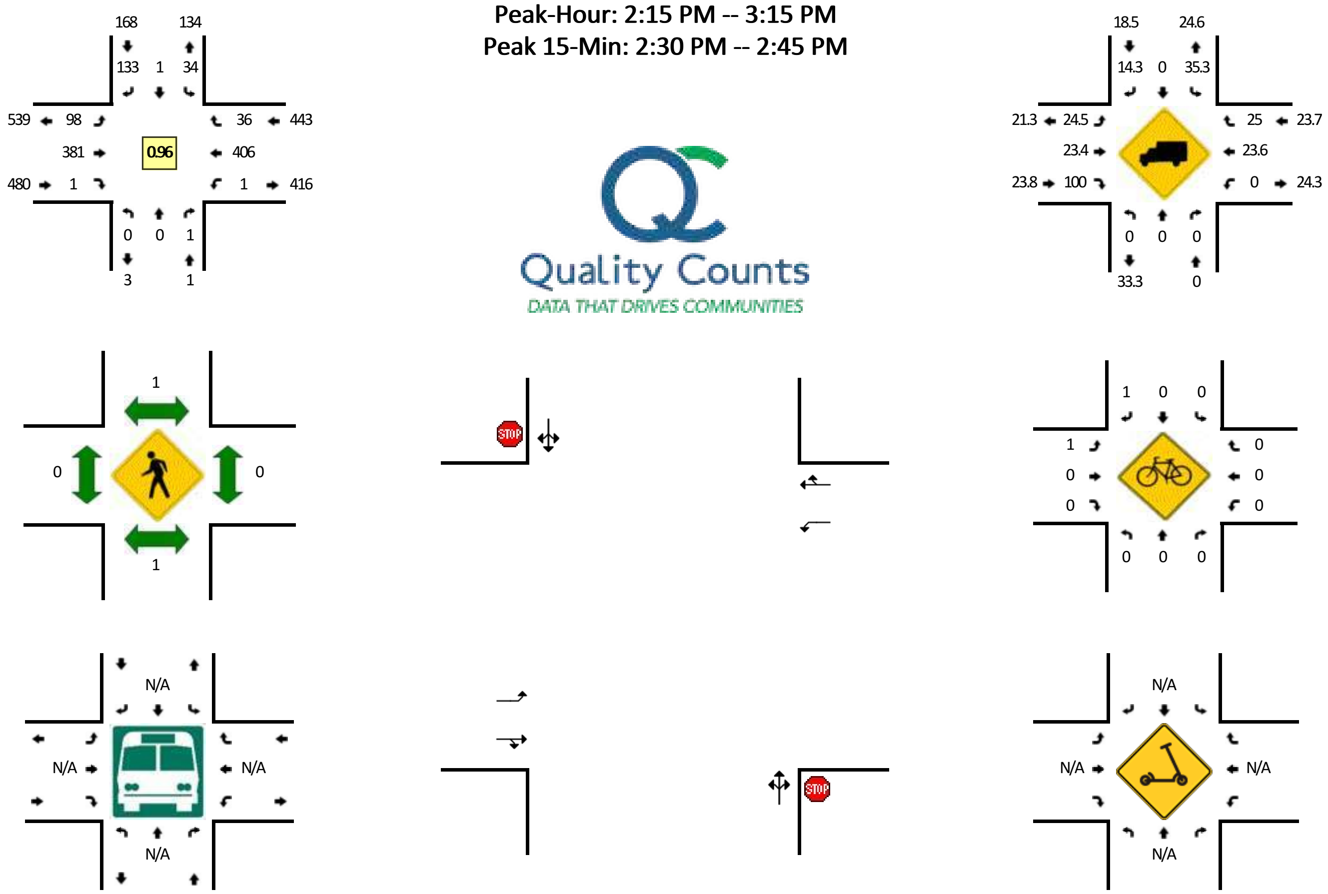
Report generated on 7/24/2022 12:23 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

LOCATION: Spruce St -- OR 126 | **QC JOB #:** 15890312
CITY/STATE: Florence, OR | **DATE:** Thu, Jun 3 2021

Peak-Hour: 2:15 PM -- 3:15 PM
Peak 15-Min: 2:30 PM -- 2:45 PM



15-Min Count Period Beginning At	Spruce St (Northbound)				Spruce St (Southbound)				OR 126 (Eastbound)				OR 126 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	0	0	0	4	1	1	0	4	18	0	0	0	20	3	0	51	
6:15 AM	0	0	0	0	4	0	3	0	1	26	0	0	0	24	0	0	58	
6:30 AM	0	0	0	0	4	0	5	0	3	20	0	0	0	20	0	0	52	
6:45 AM	0	0	0	0	7	0	12	0	1	26	0	0	0	47	3	0	96	257
7:00 AM	0	0	0	0	2	0	10	0	3	43	0	0	0	28	1	0	87	293
7:15 AM	0	0	0	0	6	0	8	0	6	35	0	0	0	51	4	0	110	345
7:30 AM	0	0	0	0	5	0	17	0	8	42	0	0	0	50	4	0	126	419
7:45 AM	0	0	0	0	7	0	24	0	17	49	0	0	0	69	5	0	171	494
8:00 AM	0	0	0	0	8	0	22	0	5	49	0	0	1	63	5	0	153	560
8:15 AM	0	0	0	0	5	0	21	0	11	62	0	0	0	57	7	0	163	613
8:30 AM	0	0	0	0	9	0	27	0	11	43	0	0	0	56	6	0	152	639
8:45 AM	0	0	0	0	4	0	30	0	11	62	0	0	0	57	8	0	172	640
9:00 AM	0	0	0	0	4	0	21	0	10	60	0	0	0	55	4	0	154	641
9:15 AM	0	0	0	0	3	0	25	0	18	55	0	0	0	58	10	0	169	647
9:30 AM	0	0	0	0	8	0	26	0	13	46	0	0	0	64	4	0	161	656
9:45 AM	0	0	0	0	9	0	34	0	17	81	0	0	0	58	5	0	204	688
10:00 AM	1	0	0	0	11	1	27	0	28	73	0	0	0	78	3	0	222	756
10:15 AM	0	0	0	0	6	0	33	0	17	62	0	0	0	62	2	0	182	769
10:30 AM	0	0	0	0	2	0	28	0	15	62	0	0	0	66	12	0	185	793
10:45 AM	0	0	0	0	11	0	23	0	21	75	1	0	1	75	8	0	215	804
11:00 AM	0	0	0	0	8	0	31	0	25	63	0	0	0	99	8	0	234	816
11:15 AM	0	0	0	0	12	0	40	0	30	69	0	0	0	70	11	0	232	866
11:30 AM	0	0	0	0	5	0	38	0	33	80	1	0	0	78	7	0	242	923
11:45 AM	0	0	0	0	10	0	42	0	25	82	0	0	0	102	10	0	271	979
12:00 PM	0	0	0	0	9	0	24	0	29	92	1	0	0	68	8	0	231	976
12:15 PM	2	0	2	0	8	0	28	0	19	109	0	0	1	87	6	0	262	1006
12:30 PM	0	0	0	0	12	0	35	0	33	73	1	0	0	94	5	0	253	1017
12:45 PM	0	0	0	0	6	0	52	0	16	91	1	0	0	99	14	0	279	1025
1:00 PM	0	0	0	0	10	0	31	0	29	87	1	0	0	87	4	0	249	1043
1:15 PM	0	0	0	0	4	0	35	0	27	79	0	0	0	86	10	0	241	1022
1:30 PM	0	0	1	0	9	0	30	0	26	77	1	0	0	87	6	0	237	1006
1:45 PM	0	0	1	0	7	1	28	0	35	96	1	0	0	89	7	0	265	992
2:00 PM	0	0	0	0	17	0	28	0	20	76	0	0	0	79	8	0	228	971
2:15 PM	0	0	0	0	8	0	38	0	30	96	0	0	0	104	7	0	283	1013
2:30 PM	0	0	0	0	10	0	29	0	22	92	0	0	0	120	12	0	285	1061
2:45 PM	0	0	0	0	7	0	31	0	25	96	0	0	0	106	9	0	274	1070
3:00 PM	0	0	1	0	9	1	35	0	21	97	1	0	1	76	8	0	250	1092
3:15 PM	1	0	0	0	7	0	26	0	23	70	2	0	0	102	8	0	239	1048

15-Min Count Period Beginning At	Spruce St (Northbound)				Spruce St (Southbound)				OR 126 (Eastbound)				OR 126 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	0	0	1	0	5	0	22	0	37	103	1	0	0	78	9	0	256	1019
3:45 PM	0	0	0	0	9	0	24	0	24	75	0	0	0	93	10	0	235	980
4:00 PM	0	0	0	0	11	0	22	0	32	80	0	0	0	88	10	0	243	973
4:15 PM	0	0	0	0	6	0	23	0	26	76	0	0	0	67	11	0	209	943
4:30 PM	0	0	0	0	9	0	24	0	18	85	0	0	0	83	14	0	233	920
4:45 PM	0	0	0	0	8	0	31	0	28	81	0	0	0	99	13	0	260	945
5:00 PM	0	0	0	0	4	0	15	0	25	77	0	0	0	73	7	0	201	903
5:15 PM	0	0	0	0	8	0	26	0	19	69	0	0	0	88	6	0	216	910
5:30 PM	0	0	0	0	12	0	19	0	23	82	0	0	0	81	8	0	225	902
5:45 PM	0	0	0	0	6	0	11	0	23	77	1	0	0	75	11	0	204	846
6:00 PM	0	0	0	0	3	0	15	0	21	74	0	0	0	67	4	0	184	829
6:15 PM	0	0	0	0	7	0	16	0	14	52	0	0	0	52	5	0	146	759
6:30 PM	0	0	0	0	5	0	13	0	10	57	0	0	0	62	5	0	152	686
6:45 PM	0	0	0	0	5	0	12	0	13	58	0	0	0	48	9	0	145	627
7:00 PM	0	0	0	0	5	0	9	0	13	45	0	0	0	43	2	0	117	560
7:15 PM	0	0	0	0	2	0	11	0	12	46	0	0	0	42	8	0	121	535
7:30 PM	0	0	0	0	1	0	18	0	12	38	0	0	0	41	4	0	114	497
7:45 PM	0	0	0	0	4	0	10	0	9	36	0	0	0	41	5	0	105	457
8:00 PM	0	0	0	0	4	0	4	0	9	35	1	0	0	35	4	0	92	432
8:15 PM	0	0	0	0	1	0	1	0	7	29	1	0	0	31	1	0	71	382
8:30 PM	0	0	0	0	1	0	8	0	13	32	0	0	0	36	0	0	90	358
8:45 PM	0	0	0	0	3	0	9	0	5	24	0	0	0	45	4	0	90	343
9:00 PM	0	0	0	0	1	0	8	0	7	18	0	0	0	23	3	0	60	311
9:15 PM	0	0	0	0	1	0	7	0	6	19	0	0	0	26	5	0	64	304
9:30 PM	0	0	0	0	2	0	5	0	4	13	0	0	0	22	1	0	47	261
9:45 PM	0	0	0	0	2	0	4	0	9	19	0	0	0	19	1	0	54	225

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	40	0	116	0	88	368	0	0	0	480	48	0	1140
Heavy Trucks	0	0	0		12	0	16		20	92	0		0	108	12		260
Buses																	
Pedestrians		4				4				0				0			8
Bicycles	0	0	0		0	0	4		4	0	0		0	0	0		8
Scooters																	

Comments:

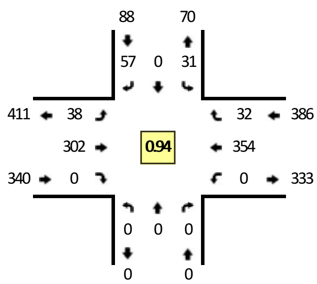
Report generated on 7/24/2022 12:23 AM

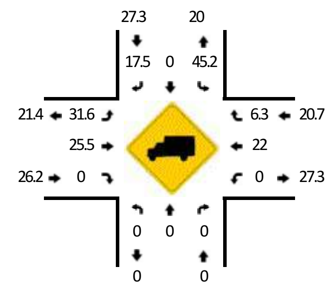
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

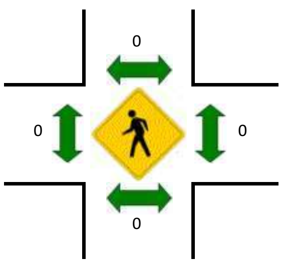
Type of peak hour being reported: Intersection Peak   Method for determining peak hour: Total Entering Volume

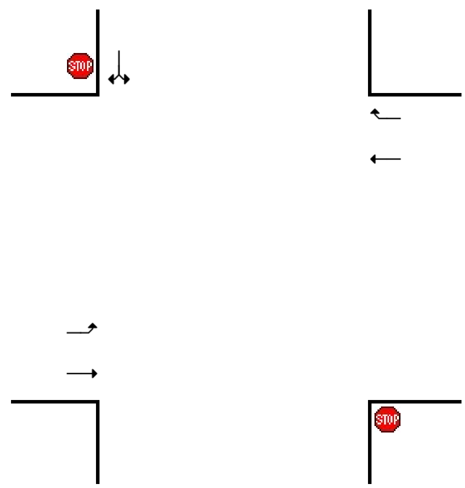
LOCATION: N Fork Rd -- OR 126   **QC JOB #:** 15890313
CITY/STATE: Florence, OR   **DATE:** Thu, Jun 3 2021

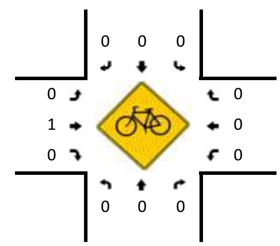
Peak-Hour: 2:15 PM -- 3:15 PM
Peak 15-Min: 2:15 PM -- 2:30 PM

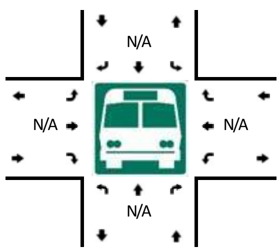


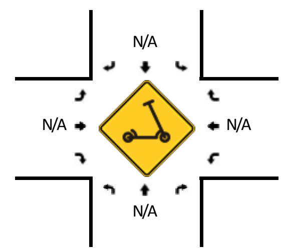












15-Min Count Period Beginning At	N Fork Rd (Northbound)				N Fork Rd (Southbound)				OR 126 (Eastbound)				OR 126 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	0	0	0	1	0	4	0	1	16	0	0	0	15	0	0	37	
6:15 AM	0	0	0	0	1	0	1	0	3	22	0	0	0	22	0	0	49	
6:30 AM	0	0	0	0	4	0	10	0	1	17	0	0	0	18	0	0	50	
6:45 AM	0	0	0	0	5	0	11	0	5	19	0	0	0	29	2	0	71	207
7:00 AM	0	0	0	0	3	0	2	0	2	30	0	0	0	25	2	0	64	234
7:15 AM	0	0	0	0	9	0	13	0	3	32	0	0	0	38	8	0	103	288
7:30 AM	0	0	0	0	3	0	16	0	6	28	0	0	0	36	5	0	94	332
7:45 AM	0	0	0	0	2	0	27	0	7	31	0	0	0	48	6	0	121	382
8:00 AM	0	0	0	0	4	0	16	0	9	39	0	0	0	51	6	0	125	443
8:15 AM	0	0	0	0	5	0	6	0	6	47	0	0	0	55	4	0	123	463
8:30 AM	0	0	0	0	6	0	10	0	2	37	0	0	0	50	7	0	112	481
8:45 AM	0	0	0	0	6	0	9	0	7	49	0	0	0	50	3	0	124	484
9:00 AM	0	0	0	0	5	0	7	0	6	46	0	0	0	47	6	0	117	476
9:15 AM	0	0	0	0	7	0	9	0	5	41	0	0	0	42	3	0	107	460
9:30 AM	0	0	0	0	8	0	7	0	7	39	0	0	0	55	4	0	120	468
9:45 AM	0	0	0	0	4	0	10	0	11	59	0	0	0	64	4	0	152	496
10:00 AM	0	0	0	0	8	0	10	0	11	61	0	0	0	49	3	0	142	521
10:15 AM	0	0	0	0	8	0	7	0	7	51	0	0	0	47	3	0	123	537
10:30 AM	0	0	0	0	2	0	9	0	5	47	0	0	0	58	3	0	124	541
10:45 AM	0	0	0	0	4	0	15	0	4	66	0	0	0	54	4	0	147	536
11:00 AM	0	0	0	0	4	0	9	0	4	48	0	0	0	83	8	0	156	550
11:15 AM	0	0	0	0	6	0	5	0	6	60	0	0	0	63	12	0	152	579
11:30 AM	0	0	0	0	4	0	17	0	9	59	0	0	0	70	8	0	167	622
11:45 AM	0	0	0	0	5	0	13	0	16	60	0	0	0	80	7	0	181	656
12:00 PM	0	0	0	0	7	0	18	0	17	66	0	0	0	55	7	0	170	670
12:15 PM	0	0	0	0	5	0	11	0	17	86	0	0	0	77	6	0	202	720
12:30 PM	0	0	0	0	9	0	11	0	11	54	0	0	0	75	6	0	166	719
12:45 PM	0	0	0	0	3	0	14	0	10	63	0	0	0	72	9	0	171	709
1:00 PM	0	0	0	0	4	0	13	0	9	71	0	0	0	74	6	0	177	716
1:15 PM	0	0	0	0	6	0	15	0	3	62	0	0	0	71	9	0	166	680
1:30 PM	0	0	0	0	12	0	14	0	8	64	0	0	0	65	6	0	169	683
1:45 PM	0	0	0	0	6	0	9	0	17	67	0	0	0	67	11	0	177	689
2:00 PM	0	0	0	0	12	0	8	0	10	72	0	0	0	61	5	0	168	680
2:15 PM	0	0	0	0	6	0	19	0	13	80	0	0	0	91	8	0	217	731
2:30 PM	0	0	0	0	10	0	11	0	10	75	0	0	0	96	12	0	214	776
2:45 PM	0	0	0	0	9	0	15	0	7	81	0	0	0	92	8	0	212	811
3:00 PM	0	0	0	0	6	0	12	0	8	66	0	0	0	75	4	0	171	814
3:15 PM	0	0	0	0	9	0	6	0	12	53	0	0	0	86	8	0	174	771

15-Min Count Period Beginning At	N Fork Rd (Northbound)				N Fork Rd (Southbound)				OR 126 (Eastbound)				OR 126 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	0	0	0	0	5	0	11	0	23	77	0	0	0	69	8	0	193	750
3:45 PM	0	0	0	0	3	0	7	0	10	66	0	0	0	75	10	0	171	709
4:00 PM	0	0	0	0	7	0	11	0	10	70	0	0	0	72	3	0	173	711
4:15 PM	0	0	0	0	5	0	9	0	13	66	0	0	0	54	7	0	154	691
4:30 PM	0	0	0	0	7	0	16	0	15	60	0	0	0	60	3	0	161	659
4:45 PM	0	0	0	0	5	0	10	0	9	61	0	0	0	82	11	0	178	666
5:00 PM	0	0	0	0	8	0	9	0	15	63	0	0	0	70	2	0	167	660
5:15 PM	0	0	0	0	8	0	11	0	14	57	0	0	0	67	8	0	165	671
5:30 PM	0	0	0	0	8	0	9	0	14	66	0	0	0	70	6	0	173	683
5:45 PM	0	0	0	0	4	0	7	0	9	58	0	0	0	69	6	0	153	658
6:00 PM	0	0	0	0	6	0	9	0	7	52	0	0	0	54	9	0	137	628
6:15 PM	0	0	0	0	2	0	2	0	14	37	0	0	0	45	9	0	109	572
6:30 PM	0	0	0	0	1	0	5	0	9	45	0	0	0	52	3	0	115	514
6:45 PM	0	0	0	0	3	0	4	0	14	40	0	0	0	51	5	0	117	478
7:00 PM	0	0	0	0	5	0	5	0	3	42	0	0	0	33	5	0	93	434
7:15 PM	0	0	0	0	3	0	4	0	3	39	0	0	0	34	2	0	85	410
7:30 PM	0	0	0	0	1	0	3	0	7	30	0	0	0	41	6	0	88	383
7:45 PM	0	0	0	0	5	0	3	0	3	30	0	0	0	31	2	0	74	340
8:00 PM	0	0	0	0	2	0	5	0	4	32	0	0	0	23	3	0	69	316
8:15 PM	0	0	0	0	3	0	3	0	3	17	0	0	0	18	1	0	45	276
8:30 PM	0	0	0	0	4	0	3	0	6	18	0	0	0	24	2	0	57	245
8:45 PM	0	0	0	0	0	0	2	0	7	16	0	0	0	21	1	0	47	218
9:00 PM	0	0	0	0	3	0	2	0	4	16	0	0	0	20	2	0	47	196
9:15 PM	0	0	0	0	0	0	2	0	0	14	0	0	0	16	0	0	32	183
9:30 PM	0	0	0	0	2	0	3	0	2	9	0	0	0	7	0	0	23	149
9:45 PM	0	0	0	0	2	0	0	0	4	13	0	0	0	16	5	0	40	142

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	24	0	76	0	52	320	0	0	0	364	32	0	868
Heavy Trucks	0	0	0		16	0	16		24	64	0		0	84	0		204
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	4	0		0	0	0		4
Scooters																	

Comments:

Report generated on 7/24/2022 12:24 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: Rhododendron Dr -- 35th St

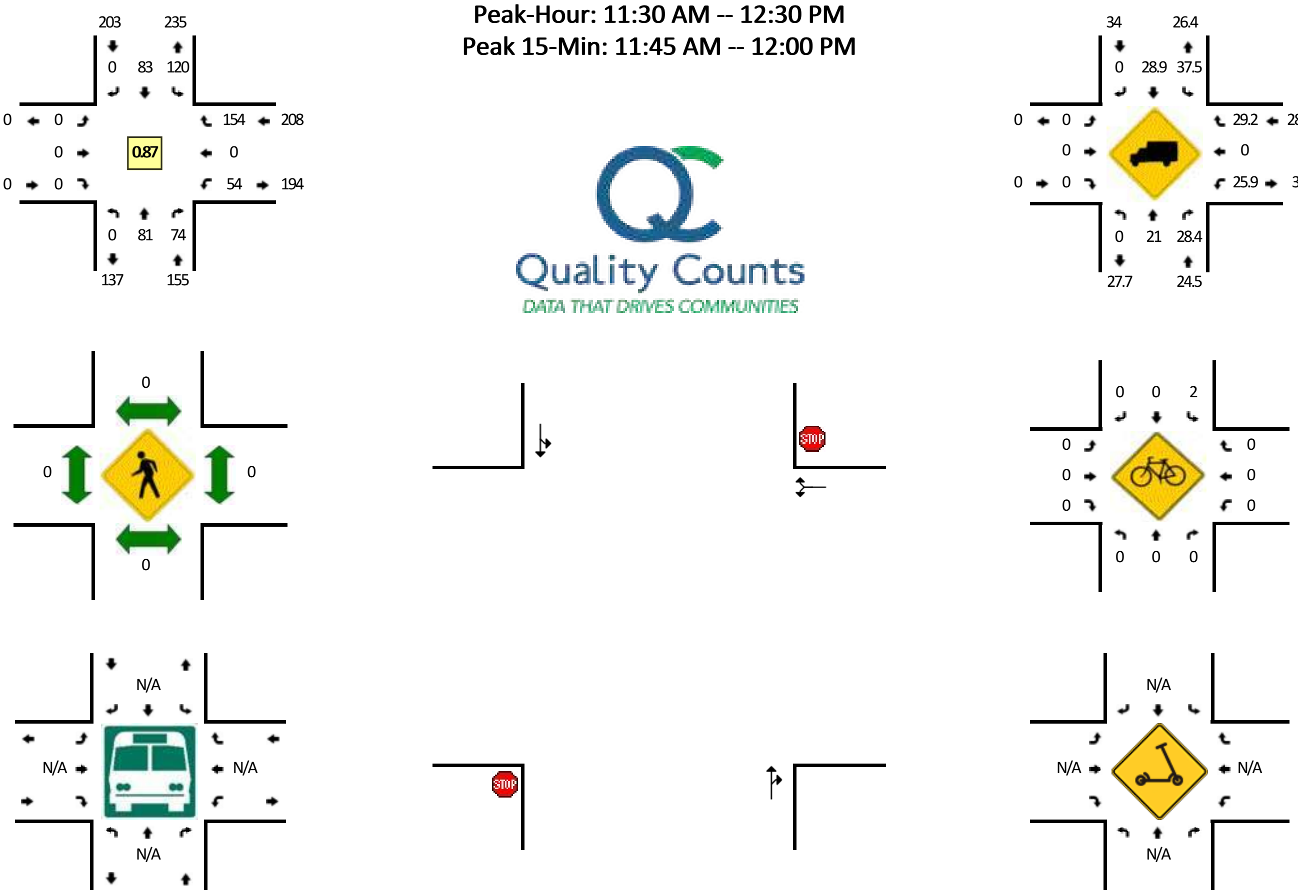
CITY/STATE: Florence, OR

QC JOB #: 15890314

DATE: Thu, Jun 3 2021

Peak-Hour: 11:30 AM -- 12:30 PM

Peak 15-Min: 11:45 AM -- 12:00 PM



15-Min Count Period Beginning At	Rhododendron Dr (Northbound)				Rhododendron Dr (Southbound)				35th St (Eastbound)				35th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	2	0	0	1	3	0	0	0	0	0	0	4	0	3	0	13	
6:15 AM	0	0	2	0	4	5	0	0	0	0	0	0	1	0	4	0	16	
6:30 AM	0	2	2	0	11	12	0	0	0	0	0	0	4	0	4	0	35	
6:45 AM	0	6	3	0	9	10	0	0	0	0	0	0	4	0	8	0	40	104
7:00 AM	0	3	1	0	15	8	0	0	0	0	0	0	1	0	8	0	36	127
7:15 AM	0	3	1	0	11	10	0	0	0	0	0	0	3	0	7	0	35	146
7:30 AM	0	7	2	0	17	12	0	0	0	0	0	0	5	0	18	0	61	172
7:45 AM	0	15	10	0	33	23	0	0	0	0	0	0	2	0	14	0	97	229
8:00 AM	0	5	4	0	25	14	0	0	0	0	0	0	11	0	15	0	74	267
8:15 AM	0	12	8	0	21	10	0	0	0	0	0	0	3	0	23	0	77	309
8:30 AM	0	5	5	0	23	20	0	0	0	0	0	0	7	0	15	0	75	323
8:45 AM	0	6	12	0	34	16	0	0	0	0	0	0	9	0	18	0	95	321
9:00 AM	0	7	13	0	20	16	0	0	0	0	0	0	4	0	20	0	80	327
9:15 AM	0	15	11	0	24	8	0	0	0	0	0	0	10	0	24	0	92	342
9:30 AM	0	12	12	0	14	14	0	0	0	0	0	0	11	0	20	0	83	350
9:45 AM	0	8	12	0	17	26	0	0	0	0	0	0	7	0	28	0	98	353
10:00 AM	0	15	10	0	19	19	0	0	0	0	0	0	10	0	23	0	96	369
10:15 AM	0	11	8	0	31	10	0	0	0	0	0	0	13	0	24	0	97	374
10:30 AM	0	19	12	0	25	16	0	0	0	0	0	0	19	0	18	0	109	400
10:45 AM	0	13	16	0	34	25	0	0	0	0	0	0	7	0	22	0	117	419
11:00 AM	0	17	13	0	37	25	0	0	0	0	0	0	10	0	27	0	129	452
11:15 AM	0	15	11	0	30	16	0	0	0	0	0	0	13	0	25	0	110	465
11:30 AM	0	17	15	0	24	19	0	0	0	0	0	0	10	0	44	0	129	485
11:45 AM	0	23	22	0	43	23	0	0	0	0	0	0	14	0	37	0	162	530
12:00 PM	0	21	19	0	31	21	0	0	0	0	0	0	16	0	38	0	146	547
12:15 PM	0	20	18	0	22	20	0	0	0	0	0	0	14	0	35	0	129	566
12:30 PM	0	16	10	0	30	27	0	0	0	0	0	0	15	0	27	0	125	562
12:45 PM	0	13	15	0	30	19	0	0	0	0	0	0	19	0	31	0	127	527
1:00 PM	0	17	21	0	24	27	0	0	0	0	0	0	17	0	46	0	152	533
1:15 PM	0	17	13	0	34	20	0	0	0	0	0	0	14	0	28	0	126	530
1:30 PM	0	15	15	0	19	28	0	0	0	0	0	0	13	0	32	0	122	527
1:45 PM	0	14	14	0	26	17	0	0	0	0	0	0	9	0	27	0	107	507
2:00 PM	0	19	14	0	29	24	0	0	0	0	0	0	10	0	36	0	132	487
2:15 PM	0	12	11	0	19	24	0	0	0	0	0	0	13	0	29	0	108	469
2:30 PM	0	14	12	0	21	31	0	0	0	0	0	0	8	0	26	0	112	459
2:45 PM	0	20	14	0	25	16	0	0	0	0	0	0	10	0	40	0	125	477
3:00 PM	0	21	13	0	34	31	0	0	0	0	0	0	10	0	25	0	134	479
3:15 PM	0	18	16	0	19	25	0	0	0	0	0	0	19	0	44	0	141	512

15-Min Count Period Beginning At	Rhododendron Dr (Northbound)				Rhododendron Dr (Southbound)				35th St (Eastbound)				35th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	0	15	14	0	22	12	0	0	0	0	0	0	10	0	33	0	106	506
3:45 PM	0	25	18	0	23	19	0	0	0	0	0	0	10	0	29	0	124	505
4:00 PM	0	19	9	0	31	21	0	0	0	0	0	0	9	0	20	0	109	480
4:15 PM	0	15	14	0	24	22	0	0	0	0	0	0	7	0	38	0	120	459
4:30 PM	0	9	12	0	20	15	0	0	0	0	0	0	9	0	25	0	90	443
4:45 PM	0	15	9	0	16	14	0	0	0	0	0	0	11	0	43	0	108	427
5:00 PM	0	27	9	0	20	16	0	0	0	0	0	0	5	0	33	0	110	428
5:15 PM	0	17	7	0	12	10	0	0	0	0	0	0	3	0	27	0	76	384
5:30 PM	0	13	9	0	15	15	0	0	0	0	0	0	9	0	24	0	85	379
5:45 PM	0	14	7	0	17	12	0	0	0	0	0	0	6	0	22	0	78	349
6:00 PM	0	20	9	0	16	12	0	0	0	0	0	0	4	0	25	0	86	325
6:15 PM	0	13	8	0	17	9	0	0	0	0	0	0	7	0	21	0	75	324
6:30 PM	0	10	1	0	15	7	0	0	0	0	0	0	8	0	23	0	64	303
6:45 PM	0	10	4	0	5	9	0	0	0	0	0	0	3	0	17	0	48	273
7:00 PM	0	2	4	0	6	4	0	0	0	0	0	0	3	0	16	0	35	222
7:15 PM	0	10	2	0	5	7	0	0	0	0	0	0	3	0	9	0	36	183
7:30 PM	0	7	0	0	9	5	0	0	0	0	0	0	1	0	12	0	34	153
7:45 PM	0	8	0	0	5	7	0	0	0	0	0	0	1	0	13	0	34	139
8:00 PM	0	4	1	0	3	7	0	0	0	0	0	0	0	0	5	0	20	124
8:15 PM	0	7	2	0	5	0	0	0	0	0	0	0	1	0	5	0	20	108
8:30 PM	0	7	3	0	3	7	0	0	0	0	0	0	0	0	8	0	28	102
8:45 PM	0	9	4	0	4	6	0	0	0	0	0	0	2	0	7	0	32	100
9:00 PM	0	3	3	0	6	8	0	0	0	0	0	0	2	0	6	0	28	108
9:15 PM	0	10	0	0	3	2	0	0	0	0	0	0	0	0	7	0	22	110
9:30 PM	0	4	0	0	3	7	0	0	0	0	0	0	2	0	5	0	21	103
9:45 PM	0	3	1	0	4	3	0	0	0	0	0	0	1	0	4	0	16	87

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	92	88	0	172	92	0	0	0	0	0	0	56	0	148	0	648
Heavy Trucks	0	20	24		52	12	0		0	0	0		12	0	40		160
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

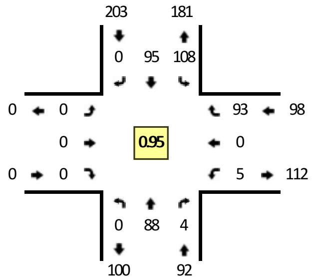
Comments:

Report generated on 8/1/2022 5:06 PM

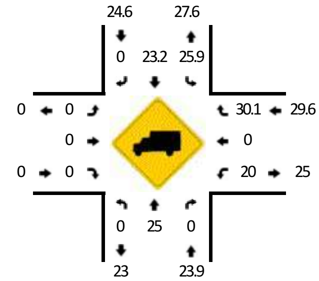
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

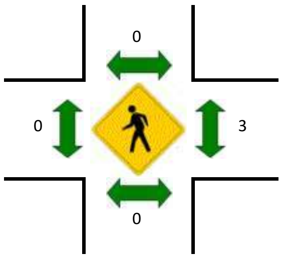
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

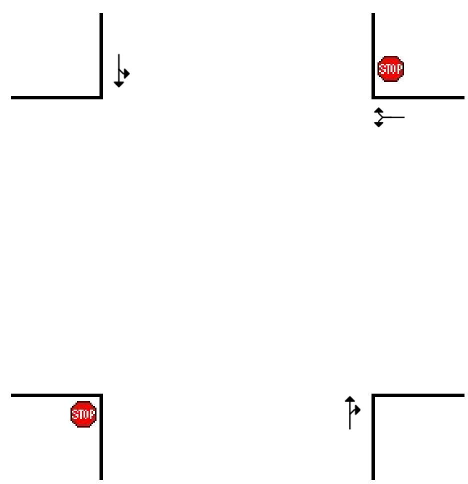
LOCATION: Rhododendron Dr -- 9th St **QC JOB #:** 15890315
CITY/STATE: Florence, OR **DATE:** Thu, Jun 3 2021

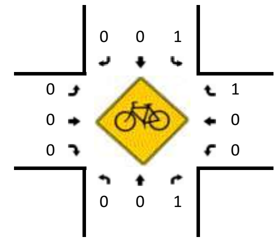


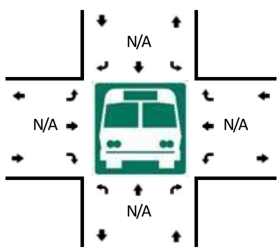
Peak-Hour: 12:30 PM -- 1:30 PM
Peak 15-Min: 12:30 PM -- 12:45 PM

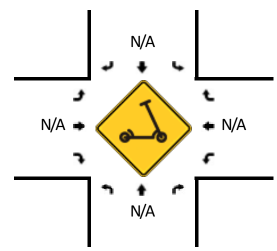












15-Min Count Period Beginning At	Rhododendron Dr (Northbound)				Rhododendron Dr (Southbound)				9th St (Eastbound)				9th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	0	1	0	9	3	0	0	0	0	0	0	0	0	3	0	16	
6:15 AM	0	1	0	0	8	5	0	0	0	0	0	0	0	0	1	0	15	
6:30 AM	0	1	0	0	10	5	0	0	0	0	0	0	0	0	5	0	21	
6:45 AM	0	3	0	0	9	8	0	0	0	0	0	0	1	0	7	0	28	80
7:00 AM	0	4	0	0	8	6	0	0	0	0	0	0	0	0	3	0	21	85
7:15 AM	0	3	1	0	10	9	0	0	0	0	0	0	0	0	4	0	27	97
7:30 AM	0	5	2	0	10	10	0	0	0	0	0	0	0	0	6	0	33	109
7:45 AM	0	16	2	0	27	10	0	0	0	0	0	0	1	0	7	0	63	144
8:00 AM	0	7	1	0	18	11	0	0	0	0	0	0	0	0	3	0	40	163
8:15 AM	0	6	2	0	7	12	0	0	0	0	0	0	0	0	14	0	41	177
8:30 AM	0	2	1	0	11	9	0	0	0	0	0	0	1	0	9	0	33	177
8:45 AM	0	8	0	0	26	11	0	0	0	0	0	0	2	0	7	0	54	168
9:00 AM	0	7	1	0	14	13	0	0	0	0	0	0	0	0	14	0	49	177
9:15 AM	0	10	1	0	14	10	0	0	0	0	0	0	1	0	18	0	54	190
9:30 AM	0	10	1	0	17	12	0	0	0	0	0	0	1	0	13	0	54	211
9:45 AM	0	4	2	0	28	15	0	0	0	0	0	0	3	0	12	0	64	221
10:00 AM	0	19	2	0	20	21	0	0	0	0	0	0	4	0	21	0	87	259
10:15 AM	0	14	1	0	22	12	0	0	0	0	0	0	2	0	17	0	68	273
10:30 AM	0	17	3	0	15	21	0	0	0	0	0	0	0	0	19	0	75	294
10:45 AM	0	16	0	0	32	17	0	0	0	0	0	0	0	0	15	0	80	310
11:00 AM	0	12	0	0	26	24	0	0	0	0	0	0	2	0	28	0	92	315
11:15 AM	0	15	0	0	23	15	0	0	0	0	0	0	2	0	19	0	74	321
11:30 AM	0	13	1	0	16	26	0	0	0	0	0	0	1	0	21	0	78	324
11:45 AM	0	24	2	0	29	22	0	0	0	0	0	0	0	0	18	0	95	339
12:00 PM	0	27	0	0	15	15	0	0	0	0	0	0	1	0	27	0	85	332
12:15 PM	0	19	0	0	21	20	0	0	0	0	0	0	2	0	23	0	85	343
12:30 PM	0	24	2	0	27	23	0	0	0	0	0	0	0	0	27	0	103	368
12:45 PM	0	15	0	0	24	26	0	0	0	0	0	0	3	0	21	0	89	362
1:00 PM	0	27	0	0	27	26	0	0	0	0	0	0	2	0	19	0	101	378
1:15 PM	0	22	2	0	30	20	0	0	0	0	0	0	0	0	26	0	100	393
1:30 PM	0	16	2	0	24	23	0	0	0	0	0	0	1	0	22	0	88	378
1:45 PM	0	15	3	0	27	21	0	0	0	0	0	0	0	0	16	0	82	371
2:00 PM	0	21	1	0	20	16	0	0	0	0	0	0	1	0	22	0	81	351
2:15 PM	0	17	2	0	19	21	0	0	0	0	0	0	5	0	26	0	90	341
2:30 PM	0	26	0	0	19	20	0	0	0	1	0	0	0	0	22	0	88	341
2:45 PM	0	26	2	0	36	14	0	0	0	0	0	0	8	0	20	0	106	365
3:00 PM	1	16	1	0	21	21	0	0	0	0	0	0	0	0	24	0	84	368
3:15 PM	0	18	1	0	23	17	0	0	0	0	0	0	0	0	24	0	83	361

15-Min Count Period Beginning At	Rhododendron Dr (Northbound)				Rhododendron Dr (Southbound)				9th St (Eastbound)				9th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	0	15	0	0	10	18	0	0	0	0	0	0	2	0	21	0	66	339
3:45 PM	0	18	1	0	11	18	0	0	0	0	0	0	0	0	15	0	63	296
4:00 PM	0	20	1	0	22	22	0	0	0	0	0	0	2	0	11	0	78	290
4:15 PM	0	18	0	0	17	17	0	0	0	0	0	0	2	0	21	0	75	282
4:30 PM	0	13	1	0	14	12	0	0	0	0	0	0	2	0	16	0	58	274
4:45 PM	0	10	0	0	15	20	0	0	0	0	0	0	2	0	21	0	68	279
5:00 PM	0	22	0	0	10	10	0	0	0	0	0	0	2	0	26	0	70	271
5:15 PM	0	10	0	0	15	9	0	0	0	0	0	0	0	0	19	0	53	249
5:30 PM	0	17	1	0	14	11	0	0	0	0	0	0	1	0	11	0	55	246
5:45 PM	0	7	1	0	11	7	0	0	0	0	0	0	2	0	13	0	41	219
6:00 PM	0	11	1	0	8	11	0	0	0	0	0	0	1	0	21	0	53	202
6:15 PM	0	15	0	0	4	12	0	0	0	0	0	0	2	0	14	0	47	196
6:30 PM	0	10	2	0	9	6	0	0	0	0	0	0	0	0	9	0	36	177
6:45 PM	0	6	2	0	8	10	0	0	0	0	0	0	0	0	9	0	35	171
7:00 PM	0	6	0	0	3	4	0	0	0	0	0	0	0	0	8	0	21	139
7:15 PM	0	6	1	0	5	7	0	0	0	0	0	0	0	0	10	0	29	121
7:30 PM	0	6	0	0	4	5	0	0	0	0	0	0	0	0	8	0	23	108
7:45 PM	0	4	0	0	6	3	0	0	0	0	0	0	0	0	7	0	20	93
8:00 PM	0	2	0	0	2	3	0	0	0	0	0	0	1	0	6	0	14	86
8:15 PM	0	9	0	0	2	4	0	0	0	0	0	0	0	0	6	0	21	78
8:30 PM	0	6	1	0	3	2	0	0	0	0	0	0	0	0	4	0	16	71
8:45 PM	0	10	0	0	8	3	0	0	0	0	0	0	1	0	5	0	27	78
9:00 PM	0	4	0	0	4	5	0	0	0	0	0	0	1	0	3	0	17	81
9:15 PM	0	7	0	0	4	5	0	0	0	0	0	0	0	0	10	0	26	86
9:30 PM	0	5	0	0	5	2	0	0	0	0	0	0	0	0	1	0	13	83
9:45 PM	0	8	0	0	3	2	0	0	0	0	0	0	0	0	5	0	18	74

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	96	8	0	108	92	0	0	0	0	0	0	0	0	108	0	412
Heavy Trucks	0	24	0		16	20	0		0	0	0		0	0	32		92
Buses																	
Pedestrians		0				0				0				8			8
Bicycles	0	0	0		0	0	0		0	0	0		0	0	4		4
Scooters																	

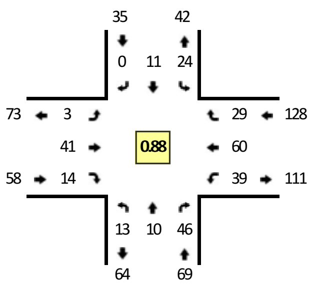
Comments:

Report generated on 8/1/2022 5:06 PM

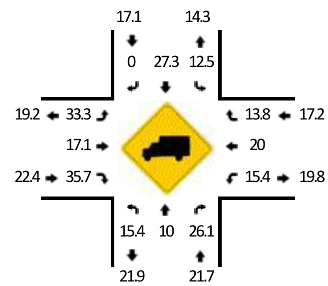
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

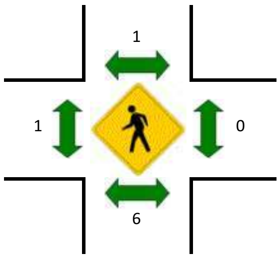
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

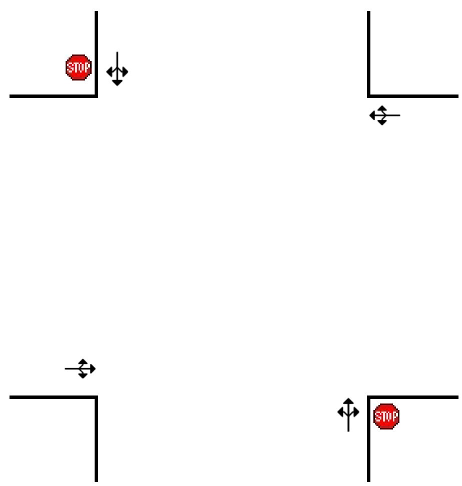
LOCATION: 4th Ave/Rhododendron Dr -- Kiwanda St/Heceta Beach Rd | **QC JOB #:** 15890316
CITY/STATE: Heceta Beach, OR | **DATE:** Thu, Jun 3 2021

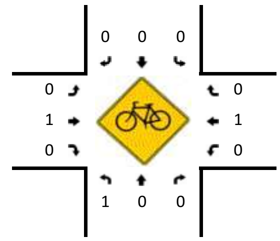


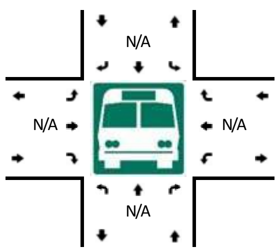
Peak-Hour: 3:45 PM -- 4:45 PM
Peak 15-Min: 4:30 PM -- 4:45 PM

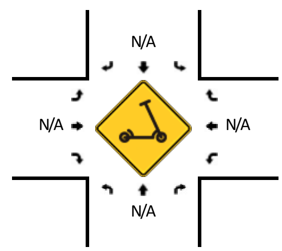












15-Min Count Period Beginning At	4th Ave/Rhododendron Dr (Northbound)				4th Ave/Rhododendron Dr (Southbound)				Kiwanda St/Heceta Beach Rd (Eastbound)				Kiwanda St/Heceta Beach Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	0	0	0	1	0	0	0	0	1	0	0	1	0	0	0	3	
6:15 AM	1	0	3	0	0	0	0	0	0	2	0	0	1	1	1	0	9	
6:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	1	3	0	0	5	
6:45 AM	0	0	3	0	2	0	0	0	0	1	2	0	2	3	0	0	13	30
7:00 AM	0	1	6	0	4	0	0	0	0	1	0	0	2	1	1	0	16	43
7:15 AM	0	0	3	0	2	2	0	0	0	2	0	0	3	9	3	0	24	58
7:30 AM	2	0	3	0	1	1	0	0	0	4	1	0	4	3	1	0	20	73
7:45 AM	5	0	4	0	1	6	0	0	0	5	5	0	6	6	1	0	39	99
8:00 AM	2	1	4	0	1	0	0	0	0	6	2	0	2	7	2	0	27	110
8:15 AM	1	0	6	0	4	2	0	0	0	5	3	0	2	4	4	0	31	117
8:30 AM	1	2	6	0	2	5	0	0	0	7	2	0	3	3	1	0	32	129
8:45 AM	2	2	6	0	2	2	1	0	1	5	1	0	5	4	1	0	32	122
9:00 AM	1	2	5	0	2	3	0	0	0	5	1	0	4	7	2	0	32	127
9:15 AM	4	2	11	0	3	0	0	0	0	8	1	0	6	7	1	0	43	139
9:30 AM	3	0	8	0	4	4	1	0	0	10	2	0	2	6	3	0	43	150
9:45 AM	0	4	8	0	7	4	0	0	1	9	2	0	9	6	3	0	53	171
10:00 AM	5	1	12	0	5	1	1	0	2	6	0	0	6	6	4	0	49	188
10:15 AM	7	3	10	0	6	1	1	0	0	15	6	0	5	11	3	0	68	213
10:30 AM	3	0	7	0	6	2	0	0	0	12	3	0	7	9	1	0	50	220
10:45 AM	1	7	8	0	7	6	0	0	0	11	4	0	5	8	6	0	63	230
11:00 AM	4	1	7	0	6	6	0	0	0	15	5	0	6	5	5	0	60	241
11:15 AM	4	1	14	0	6	4	0	0	0	10	4	0	8	9	9	0	69	242
11:30 AM	0	5	10	0	3	0	1	0	0	7	5	0	11	7	2	0	51	243
11:45 AM	5	3	15	0	2	3	0	0	0	12	5	0	8	11	4	0	68	248
12:00 PM	5	3	17	0	11	3	0	0	1	13	3	0	11	7	2	0	76	264
12:15 PM	2	2	9	0	4	4	0	0	1	7	1	0	11	9	5	0	55	250
12:30 PM	3	3	13	0	5	3	0	0	0	7	2	0	10	11	4	0	61	260
12:45 PM	3	2	17	0	5	2	0	0	0	7	4	0	10	17	4	0	71	263
1:00 PM	5	1	5	0	3	4	0	0	0	9	2	0	15	10	4	0	58	245
1:15 PM	2	2	6	0	5	2	1	0	0	12	1	0	10	10	6	0	57	247
1:30 PM	6	2	12	0	5	4	0	0	0	19	5	0	10	17	9	0	89	275
1:45 PM	5	1	13	0	7	2	0	0	0	9	3	0	2	6	3	0	51	255
2:00 PM	0	2	8	0	6	3	1	0	0	9	3	0	15	5	3	0	55	252
2:15 PM	2	2	19	0	4	0	1	0	0	8	2	0	11	12	2	0	63	258
2:30 PM	6	3	9	0	5	1	0	0	0	7	4	0	9	21	9	0	74	243
2:45 PM	3	3	8	0	6	4	0	0	0	9	6	0	6	11	7	0	63	255
3:00 PM	4	2	11	0	4	5	0	0	1	8	3	0	13	8	5	0	64	264
3:15 PM	2	7	7	0	1	3	0	0	0	9	3	0	5	5	6	0	48	249
3:30 PM	3	4	12	0	5	5	1	0	0	5	2	0	15	12	5	0	69	244

15-Min Count Period Beginning At	4th Ave/Rhododendron Dr (Northbound)				4th Ave/Rhododendron Dr (Southbound)				Kiwanda St/Heceta Beach Rd (Eastbound)				Kiwanda St/Heceta Beach Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:45 PM	5	4	9	0	7	3	0	0	0	10	7	0	10	16	6	0	77	258
4:00 PM	2	2	14	0	8	2	0	0	2	13	2	0	9	12	7	0	73	267
4:15 PM	1	2	12	0	3	3	0	0	0	5	3	0	6	15	8	0	58	277
4:30 PM	5	2	11	0	6	3	0	0	1	13	2	0	14	17	8	0	82	290
4:45 PM	6	2	14	0	3	2	1	0	1	6	1	0	13	8	8	0	65	278
5:00 PM	5	4	11	0	2	0	1	0	0	11	3	0	14	11	6	0	68	273
5:15 PM	3	0	8	0	2	3	0	0	0	7	1	0	4	4	6	0	38	253
5:30 PM	0	2	7	0	4	1	0	0	1	5	1	0	9	4	2	0	36	207
5:45 PM	3	4	5	0	3	3	0	0	0	7	1	0	9	10	4	0	49	191
6:00 PM	2	0	6	0	3	1	0	0	0	7	4	0	5	7	1	0	36	159
6:15 PM	1	1	12	0	2	3	0	0	0	6	0	0	8	6	4	0	43	164
6:30 PM	3	1	7	0	4	1	1	0	0	7	0	0	12	7	6	0	49	177
6:45 PM	2	2	9	0	1	1	0	0	0	0	0	0	5	10	8	0	38	166
7:00 PM	1	0	1	0	1	0	0	0	0	4	0	0	7	4	4	0	22	152
7:15 PM	1	3	6	0	3	4	0	0	1	5	2	0	3	3	2	0	33	142
7:30 PM	4	2	3	0	3	0	0	0	0	7	1	0	2	7	3	0	32	125
7:45 PM	2	1	5	0	3	0	0	0	0	3	2	0	4	7	3	0	30	117
8:00 PM	0	0	5	0	1	0	1	0	0	3	0	0	3	6	4	0	23	118
8:15 PM	2	0	2	0	6	0	0	0	0	6	0	0	1	3	2	0	22	107
8:30 PM	1	1	3	0	3	0	0	0	0	2	1	0	4	9	3	0	27	102
8:45 PM	0	1	3	0	2	2	0	0	0	5	0	0	2	4	4	0	23	95
9:00 PM	1	0	2	0	0	2	0	0	0	5	2	0	3	6	0	0	21	93
9:15 PM	0	1	6	0	1	0	0	0	0	2	1	0	1	2	2	0	16	87
9:30 PM	0	2	3	0	0	0	0	0	0	0	1	0	2	4	3	0	15	75
9:45 PM	1	1	3	0	2	0	0	0	0	0	1	0	3	1	2	0	14	66

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	20	8	44	0	24	12	0	0	4	52	8	0	56	68	32	0	328
Heavy Trucks	0	4	4		0	4	0		0	4	4		8	12	4		44
Buses																	
Pedestrians		4				4				4				0			12
Bicycles	4	0	0		0	0	0		0	0	0		0	0	0		4
Scooters																	

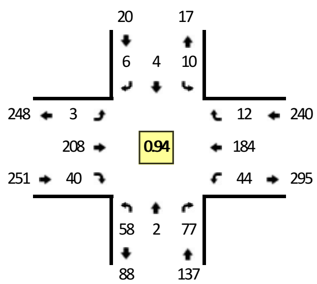
Comments:

Report generated on 8/1/2022 5:06 PM

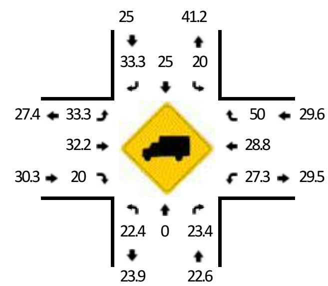
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

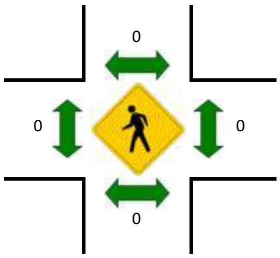
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

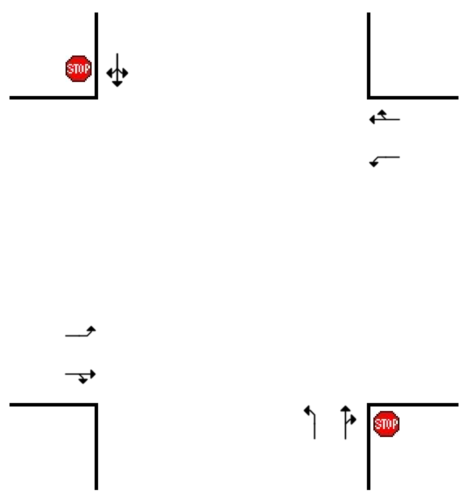
LOCATION: Kingwood St -- 35th St | **QC JOB #:** 15890317
CITY/STATE: Florence, OR | **DATE:** Thu, Jun 3 2021

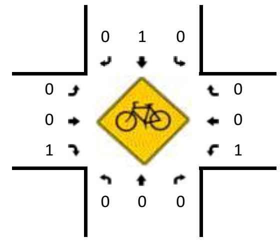


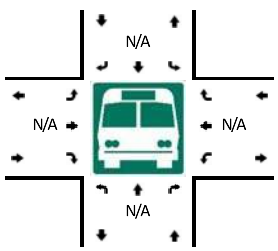
Peak-Hour: 11:45 AM -- 12:45 PM
Peak 15-Min: 11:45 AM -- 12:00 PM

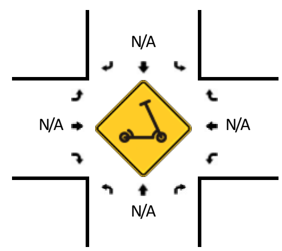












15-Min Count Period Beginning At	Kingwood St (Northbound)				Kingwood St (Southbound)				35th St (Eastbound)				35th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	1	0	0	0	0	0	0	0	0	5	1	0	2	4	0	0	13	
6:15 AM	1	0	2	0	0	0	0	0	0	6	3	0	2	5	0	0	19	
6:30 AM	1	1	1	0	0	0	0	0	0	9	9	0	4	7	1	0	33	
6:45 AM	3	0	5	0	0	0	0	0	0	16	3	0	5	11	1	0	44	109
7:00 AM	1	0	4	0	0	0	0	0	1	15	2	0	2	11	2	0	38	134
7:15 AM	2	0	5	0	0	0	0	0	0	17	9	0	6	15	1	0	55	170
7:30 AM	3	0	8	0	0	0	0	0	1	17	6	0	8	17	1	0	61	198
7:45 AM	4	0	7	0	0	0	1	0	1	41	13	0	22	21	2	0	112	266
8:00 AM	11	0	10	0	0	1	1	0	3	27	11	0	5	21	4	0	94	322
8:15 AM	8	0	10	0	0	0	0	0	0	33	8	0	6	26	2	0	93	360
8:30 AM	6	0	8	0	2	0	1	0	1	35	11	0	11	23	2	0	100	399
8:45 AM	7	0	12	0	0	0	0	0	1	45	13	0	12	24	0	0	114	401
9:00 AM	10	0	17	0	1	0	0	0	2	30	8	0	7	22	1	0	98	405
9:15 AM	9	0	14	0	0	0	0	0	2	33	9	0	10	30	5	0	112	424
9:30 AM	9	0	19	0	0	1	0	0	0	31	8	0	7	30	4	0	109	433
9:45 AM	9	0	15	0	1	0	1	0	0	29	9	0	6	31	1	0	102	421
10:00 AM	10	0	11	0	2	1	3	0	0	33	1	0	6	24	1	0	92	415
10:15 AM	8	1	14	0	0	0	1	0	0	39	7	0	11	30	0	0	111	414
10:30 AM	10	1	11	0	1	0	0	0	0	45	3	0	8	36	1	0	116	421
10:45 AM	6	0	23	0	0	1	0	0	0	57	9	0	4	22	0	0	122	441
11:00 AM	10	0	11	0	0	0	0	0	1	46	10	0	8	43	1	0	130	479
11:15 AM	8	0	14	0	2	0	0	0	0	45	7	0	8	36	5	0	125	493
11:30 AM	15	1	13	0	2	0	0	0	0	27	10	0	11	53	3	0	135	512
11:45 AM	18	0	18	0	5	3	1	0	1	63	13	0	11	39	1	0	173	563
12:00 PM	17	2	22	0	0	0	1	0	1	50	6	0	10	53	2	0	164	597
12:15 PM	15	0	13	0	3	1	3	0	1	47	10	0	11	50	4	0	158	630
12:30 PM	8	0	24	0	2	0	1	0	0	48	11	0	12	42	5	0	153	648
12:45 PM	13	1	12	0	4	3	1	0	0	49	15	0	13	50	3	0	164	639
1:00 PM	24	0	16	0	6	0	1	0	0	43	11	0	7	53	3	0	164	639
1:15 PM	14	0	7	0	3	0	1	0	0	37	13	0	20	41	1	0	137	618
1:30 PM	8	0	17	0	0	0	0	0	0	39	5	0	9	37	2	0	117	582
1:45 PM	9	0	14	0	1	1	0	0	1	38	16	0	6	41	3	0	130	548
2:00 PM	9	0	17	0	2	1	0	0	1	41	8	0	15	47	1	0	142	526
2:15 PM	16	0	12	0	1	1	0	0	0	32	5	0	9	39	1	0	116	505
2:30 PM	11	0	13	0	2	1	0	0	1	35	15	0	10	38	0	0	126	514
2:45 PM	17	1	20	0	2	2	1	0	0	36	13	0	13	43	1	0	149	533
3:00 PM	7	1	20	0	0	0	0	0	0	46	8	0	16	44	1	0	143	534
3:15 PM	9	0	14	0	2	0	0	0	1	30	7	0	11	53	1	0	128	546

15-Min Count Period Beginning At	Kingwood St (Northbound)				Kingwood St (Southbound)				35th St (Eastbound)				35th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	18	2	22	0	1	1	1	0	0	42	8	0	6	45	0	0	146	566
3:45 PM	10	2	19	0	3	3	1	0	0	39	9	0	17	32	2	0	137	554
4:00 PM	11	0	14	0	2	0	0	0	0	38	11	0	13	34	0	0	123	534
4:15 PM	15	0	20	0	0	3	1	0	0	43	8	0	11	45	2	0	148	554
4:30 PM	12	1	15	0	0	0	1	0	0	34	6	0	9	38	0	0	116	524
4:45 PM	22	0	12	0	0	0	2	0	0	28	9	0	4	39	0	0	116	503
5:00 PM	18	1	22	0	1	0	0	0	0	28	0	0	8	37	1	0	116	496
5:15 PM	8	0	17	0	4	0	0	0	0	23	7	0	3	39	1	0	102	450
5:30 PM	11	0	5	0	1	1	1	0	0	20	5	0	1	35	0	0	80	414
5:45 PM	7	0	6	0	2	2	0	0	0	24	5	0	3	33	0	0	82	380
6:00 PM	8	0	10	0	0	0	0	0	0	21	2	0	5	35	0	0	81	345
6:15 PM	5	0	7	0	0	1	0	0	0	30	5	0	5	31	2	0	86	329
6:30 PM	5	1	9	0	0	0	0	0	0	19	6	0	4	36	0	0	80	329
6:45 PM	10	0	3	0	1	0	0	0	0	13	2	0	6	22	0	0	57	304
7:00 PM	7	0	7	0	0	0	0	0	0	10	1	0	5	18	0	0	48	271
7:15 PM	4	0	6	0	0	0	0	0	0	8	2	0	1	14	0	0	35	220
7:30 PM	4	1	5	0	1	0	0	0	0	11	0	0	2	17	0	0	41	181
7:45 PM	3	1	4	0	0	0	0	0	0	8	3	0	2	15	0	0	36	160
8:00 PM	6	0	3	0	0	0	0	0	0	9	1	0	2	10	0	0	31	143
8:15 PM	3	0	6	0	1	0	0	0	0	11	2	0	3	10	1	0	37	145
8:30 PM	1	0	0	0	0	0	0	0	0	4	3	0	4	9	0	0	21	125
8:45 PM	0	0	4	0	0	0	0	0	0	9	2	0	0	7	0	0	22	111
9:00 PM	4	0	3	0	0	0	0	0	0	11	4	0	4	15	0	0	41	121
9:15 PM	2	1	3	0	0	0	0	0	0	5	1	0	4	11	0	0	27	111
9:30 PM	1	0	2	0	0	0	1	0	0	4	0	0	0	11	0	0	19	109
9:45 PM	3	0	0	0	0	0	0	0	0	4	0	0	1	4	0	0	12	99

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	72	0	72	0	20	12	4	0	4	252	52	0	44	156	4	0	692
Heavy Trucks	12	0	16		0	0	4		0	80	16		12	40	0		180
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

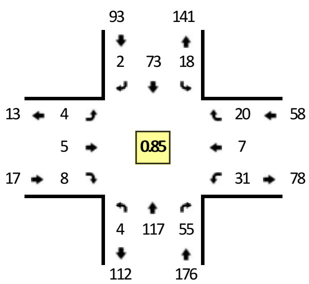
Comments:

Report generated on 8/1/2022 5:06 PM

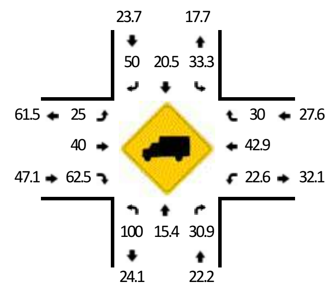
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

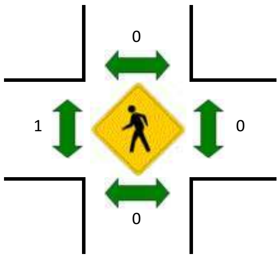
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

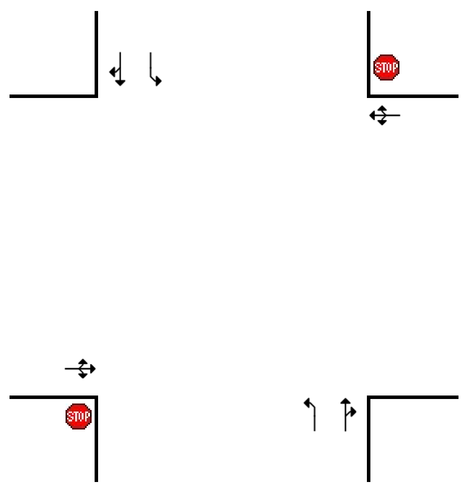
LOCATION: Kingwood St -- 27th St | **QC JOB #:** 15890318
CITY/STATE: Florence, OR | **DATE:** Thu, Jun 3 2021

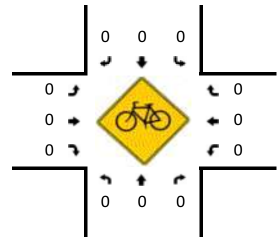


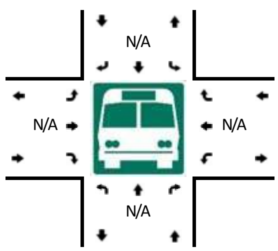
Peak-Hour: 2:45 PM -- 3:45 PM
Peak 15-Min: 2:45 PM -- 3:00 PM

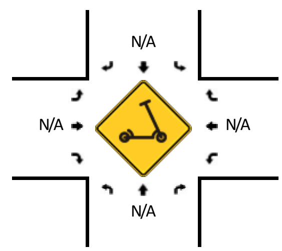












15-Min Count Period Beginning At	Kingwood St (Northbound)				Kingwood St (Southbound)				27th St (Eastbound)				27th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	1	0	0	0	2	0	0	0	1	1	0	2	0	0	0	7	
6:15 AM	0	3	0	0	0	5	0	0	0	1	0	0	2	1	1	0	13	
6:30 AM	2	2	0	0	0	8	1	0	0	0	0	0	4	2	0	0	19	
6:45 AM	2	6	0	0	1	7	1	0	0	0	1	0	1	4	2	0	25	64
7:00 AM	0	5	3	0	0	9	0	0	0	1	0	0	2	0	1	0	21	78
7:15 AM	0	7	3	0	5	9	0	0	0	2	3	0	5	1	1	0	36	101
7:30 AM	1	10	8	0	1	10	0	0	1	0	2	0	4	1	1	0	39	121
7:45 AM	2	16	14	0	7	22	4	0	0	1	2	0	10	4	2	0	84	180
8:00 AM	1	10	19	0	5	16	0	0	1	2	0	0	21	2	10	0	87	246
8:15 AM	1	17	5	0	5	9	0	0	0	0	2	0	9	2	4	0	54	264
8:30 AM	2	13	2	0	3	19	0	0	0	0	0	0	4	0	1	0	44	269
8:45 AM	1	19	10	0	2	20	0	0	0	0	3	0	5	3	2	0	65	250
9:00 AM	2	25	8	0	4	13	0	0	0	2	0	0	4	1	2	0	61	224
9:15 AM	1	21	8	0	3	17	0	0	2	3	3	0	6	1	2	0	67	237
9:30 AM	0	25	15	0	6	13	1	0	0	1	0	0	12	4	4	0	81	274
9:45 AM	0	21	8	0	2	13	0	0	0	0	2	0	14	2	6	0	68	277
10:00 AM	1	18	7	0	2	6	0	0	1	2	0	0	4	0	3	0	44	260
10:15 AM	0	21	4	0	2	16	1	0	1	0	2	0	3	1	1	0	52	245
10:30 AM	1	18	9	0	2	9	1	0	0	0	2	0	8	0	2	0	52	216
10:45 AM	0	23	2	0	2	14	0	0	3	0	0	0	6	0	8	0	58	206
11:00 AM	0	18	5	0	1	11	1	0	1	0	1	0	5	0	2	0	45	207
11:15 AM	0	19	23	0	1	13	0	0	0	0	1	0	3	0	5	0	65	220
11:30 AM	0	22	16	0	7	16	2	0	1	0	1	0	13	1	6	0	85	253
11:45 AM	7	29	8	0	6	23	0	0	0	0	1	0	5	2	9	0	90	285
12:00 PM	0	32	13	0	2	16	1	0	3	3	2	0	8	1	4	0	85	325
12:15 PM	0	27	11	0	1	18	1	0	0	2	0	0	7	3	2	0	72	332
12:30 PM	1	27	11	0	2	17	0	0	0	4	3	0	7	4	3	0	79	326
12:45 PM	1	24	11	0	4	25	1	0	0	5	1	0	5	3	7	0	87	323
1:00 PM	1	26	9	0	3	15	2	0	0	2	0	0	9	1	12	0	80	318
1:15 PM	1	15	13	0	1	28	0	0	0	2	2	0	6	1	6	0	75	321
1:30 PM	0	23	7	0	1	12	2	0	0	1	0	0	6	0	3	0	55	297
1:45 PM	0	24	11	0	3	21	1	0	2	1	1	0	6	0	2	0	72	282
2:00 PM	2	25	4	0	2	22	0	0	1	0	1	0	4	1	3	0	65	267
2:15 PM	0	23	15	0	1	13	1	0	0	3	1	0	7	1	2	0	67	259
2:30 PM	2	21	14	0	6	15	1	0	0	1	1	0	5	2	5	0	73	277
2:45 PM	0	32	18	0	9	21	1	0	1	1	2	0	11	0	5	0	101	306
3:00 PM	2	26	16	0	3	23	1	0	1	0	0	0	4	0	4	0	80	321
3:15 PM	1	22	9	0	1	18	0	0	0	0	1	0	6	6	2	0	66	320

15-Min Count Period Beginning At	Kingwood St (Northbound)				Kingwood St (Southbound)				27th St (Eastbound)				27th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	1	37	12	0	5	11	0	0	2	4	5	0	10	1	9	0	97	344
3:45 PM	0	20	5	0	3	22	0	0	1	2	0	0	3	0	5	0	61	304
4:00 PM	1	20	8	0	6	16	1	0	0	1	0	0	5	0	5	0	63	287
4:15 PM	0	32	6	0	5	25	0	0	0	0	2	0	5	0	1	0	76	297
4:30 PM	1	22	8	0	4	14	0	0	0	0	0	0	6	0	7	0	62	262
4:45 PM	1	28	9	0	1	16	0	0	1	1	0	0	5	0	6	0	68	269
5:00 PM	0	35	12	0	2	8	0	0	0	2	0	0	5	2	4	0	70	276
5:15 PM	0	22	3	0	3	6	0	0	0	0	0	0	4	2	4	0	44	244
5:30 PM	0	12	7	0	4	6	0	0	0	0	0	0	3	2	7	0	41	223
5:45 PM	0	9	1	0	1	9	0	0	0	0	0	0	2	0	2	0	24	179
6:00 PM	0	15	2	0	1	5	0	0	0	3	0	0	2	0	3	0	31	140
6:15 PM	1	11	1	0	0	12	0	0	0	0	0	0	0	0	0	0	25	121
6:30 PM	0	11	4	0	1	11	0	0	1	1	0	0	2	2	1	0	34	114
6:45 PM	0	8	7	0	1	7	0	0	0	1	1	0	1	0	6	0	32	122
7:00 PM	0	11	2	0	1	6	0	0	0	1	0	0	2	1	2	0	26	117
7:15 PM	0	10	3	0	0	1	0	0	0	0	1	0	1	0	1	0	17	109
7:30 PM	0	9	4	0	0	2	0	0	0	0	0	0	1	0	0	0	16	91
7:45 PM	0	7	0	0	0	4	0	0	0	0	0	0	2	0	1	0	14	73
8:00 PM	0	7	2	0	0	4	0	0	0	0	0	0	2	0	1	0	16	63
8:15 PM	0	9	2	0	0	5	0	0	0	0	0	0	1	0	0	0	17	63
8:30 PM	0	1	2	0	1	7	0	0	0	0	0	0	2	0	0	0	13	60
8:45 PM	0	4	0	0	0	6	0	0	0	0	0	0	2	0	0	0	12	58
9:00 PM	0	6	0	0	1	7	0	0	0	0	0	0	2	0	0	0	16	58
9:15 PM	0	4	1	0	0	4	0	0	0	0	0	0	1	0	2	0	12	53
9:30 PM	0	3	1	0	1	0	0	0	0	0	0	0	0	0	0	0	5	45
9:45 PM	0	2	1	0	0	0	0	0	0	0	0	0	3	0	1	0	7	40

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	128	72	0	36	84	4	0	4	4	8	0	44	0	20	0	404
Heavy Trucks	0	24	32		20	16	4		0	4	8		0	0	8		116
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

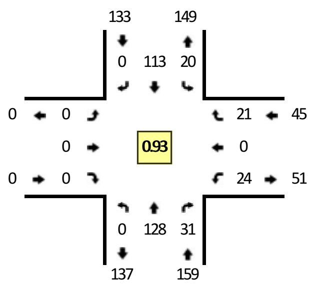
Report generated on 8/1/2022 5:06 PM

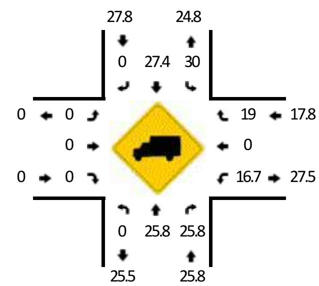
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

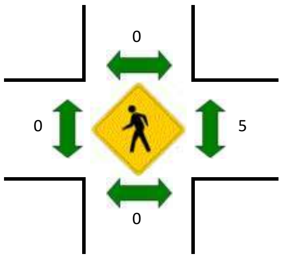
Type of peak hour being reported: Intersection Peak — Method for determining peak hour: Total Entering Volume

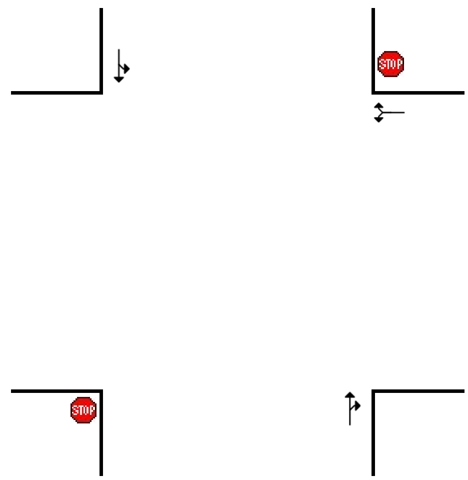
LOCATION: Kingwood St -- 15th St — **QC JOB #:** 15890319
CITY/STATE: Florence, OR — **DATE:** Thu, Jun 3 2021

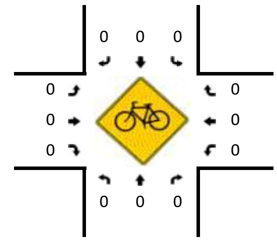
Peak-Hour: 4:15 PM -- 5:15 PM
Peak 15-Min: 4:15 PM -- 4:30 PM

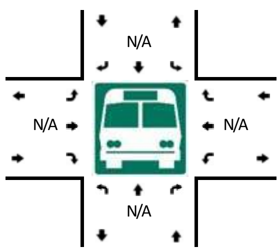


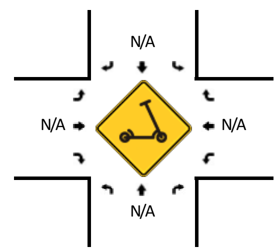












15-Min Count Period Beginning At	Kingwood St (Northbound)				Kingwood St (Southbound)				15th St (Eastbound)				15th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	2	0	0	1	5	0	0	0	0	0	0	1	0	3	0	12	
6:15 AM	0	6	0	0	0	6	0	0	0	0	0	0	0	0	1	0	13	
6:30 AM	0	9	1	0	1	6	0	0	0	0	0	0	3	0	2	0	22	
6:45 AM	0	9	3	0	0	12	0	0	0	0	0	0	3	0	2	0	29	76
7:00 AM	0	10	1	0	4	9	0	0	0	0	0	0	2	0	1	0	27	91
7:15 AM	0	14	4	0	0	9	0	0	0	0	0	0	1	0	3	0	31	109
7:30 AM	0	15	6	0	1	12	0	0	0	0	0	0	3	0	7	0	44	131
7:45 AM	0	35	6	0	8	22	0	0	0	0	0	0	4	0	9	0	84	186
8:00 AM	0	24	5	0	5	19	0	0	0	0	0	0	1	0	8	0	62	221
8:15 AM	0	18	2	0	4	17	0	0	0	0	0	0	3	0	6	0	50	240
8:30 AM	0	15	3	0	4	18	0	0	0	0	0	0	2	0	5	0	47	243
8:45 AM	0	22	4	0	2	19	0	0	0	0	0	0	4	0	4	0	55	214
9:00 AM	0	27	7	0	2	14	0	0	0	0	0	0	2	0	3	0	55	207
9:15 AM	0	26	5	0	2	16	0	0	0	0	0	0	4	0	13	0	66	223
9:30 AM	0	28	9	0	5	23	0	0	0	0	0	0	5	0	5	0	75	251
9:45 AM	0	24	11	0	5	20	0	0	0	0	0	0	7	0	7	0	74	270
10:00 AM	0	29	7	0	4	10	0	0	0	0	0	0	8	0	5	0	63	278
10:15 AM	0	27	6	0	4	22	0	0	0	0	0	0	3	0	3	0	65	277
10:30 AM	0	23	7	0	5	17	0	0	0	0	0	0	6	0	3	0	61	263
10:45 AM	0	22	5	0	3	16	0	0	0	0	0	0	4	0	7	0	57	246
11:00 AM	0	15	6	0	3	18	0	0	0	0	0	0	7	0	5	0	54	237
11:15 AM	0	38	7	0	3	16	0	0	0	0	0	0	2	0	6	0	72	244
11:30 AM	0	24	9	0	3	28	0	0	0	0	0	0	4	0	5	0	73	256
11:45 AM	0	31	7	0	7	17	0	0	0	0	0	0	11	0	9	0	82	281
12:00 PM	0	37	6	0	4	22	0	0	0	0	0	0	9	0	6	0	84	311
12:15 PM	0	30	4	0	7	16	0	0	0	0	0	0	5	0	9	0	71	310
12:30 PM	0	37	8	0	3	18	0	0	0	0	0	0	8	0	5	0	79	316
12:45 PM	0	25	9	0	9	26	0	0	0	0	0	0	6	0	4	0	79	313
1:00 PM	0	22	14	0	4	21	0	0	0	0	0	0	6	0	11	0	78	307
1:15 PM	0	26	7	0	3	26	0	0	0	0	0	0	8	0	6	0	76	312
1:30 PM	0	31	9	0	1	20	0	0	0	0	0	0	5	0	3	0	69	302
1:45 PM	0	24	8	0	4	23	0	0	0	0	0	0	7	0	12	0	78	301
2:00 PM	0	28	5	0	4	23	0	0	0	0	0	0	6	0	8	0	74	297
2:15 PM	0	31	4	0	7	24	0	0	0	0	0	0	5	0	3	0	74	295
2:30 PM	0	36	8	0	1	17	0	0	0	0	0	0	6	0	6	0	74	300
2:45 PM	0	29	5	0	2	23	0	0	0	0	0	0	5	0	9	0	73	295
3:00 PM	0	36	2	0	7	16	0	0	0	0	0	0	8	0	5	0	74	295
3:15 PM	0	28	8	0	3	16	0	0	0	0	0	0	6	0	6	0	67	288
3:30 PM	0	25	9	0	9	18	0	0	0	0	0	0	3	0	8	0	72	286

15-Min Count Period Beginning At	Kingwood St (Northbound)				Kingwood St (Southbound)				15th St (Eastbound)				15th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:45 PM	0	22	11	0	4	23	0	0	0	0	0	0	3	0	8	0	71	284
4:00 PM	0	25	6	0	8	18	0	0	0	0	0	0	8	0	9	0	74	284
4:15 PM	0	35	9	0	6	31	0	0	0	0	0	0	5	0	5	0	91	308
4:30 PM	0	33	8	0	6	24	0	0	0	0	0	0	7	0	7	0	85	321
4:45 PM	0	25	7	0	5	29	0	0	0	0	0	0	4	0	5	0	75	325
5:00 PM	0	35	7	0	3	29	0	0	0	0	0	0	8	0	4	0	86	337
5:15 PM	0	19	6	0	2	10	0	0	0	0	0	0	5	0	3	0	45	291
5:30 PM	0	18	6	0	3	8	0	0	0	0	0	0	4	0	1	0	40	246
5:45 PM	0	11	5	0	3	12	0	0	0	0	0	0	4	0	2	0	37	208
6:00 PM	0	14	6	0	7	12	0	0	0	0	0	0	4	0	2	0	45	167
6:15 PM	0	15	4	0	0	15	0	0	0	0	0	0	5	0	1	0	40	162
6:30 PM	0	9	1	0	2	13	0	0	0	0	0	0	2	0	2	0	29	151
6:45 PM	0	13	3	0	1	8	0	0	0	0	0	0	5	0	2	0	32	146
7:00 PM	0	10	3	0	3	6	0	0	0	0	0	0	2	0	1	0	25	126
7:15 PM	0	5	5	0	0	4	0	0	0	0	0	0	2	0	2	0	18	104
7:30 PM	0	10	0	0	1	2	0	0	0	0	0	0	1	0	3	0	17	92
7:45 PM	0	7	2	0	0	9	0	0	0	0	0	0	0	0	2	0	20	80
8:00 PM	0	8	5	0	2	5	0	0	0	0	0	0	2	0	3	0	25	80
8:15 PM	0	9	5	0	1	4	0	0	0	0	0	0	1	0	0	0	20	82
8:30 PM	0	1	3	0	2	2	0	0	0	0	0	0	5	0	1	0	14	79
8:45 PM	0	3	1	0	4	5	0	0	0	0	0	0	4	0	1	0	18	77
9:00 PM	0	8	1	0	1	5	0	0	0	0	0	0	3	0	1	0	19	71
9:15 PM	0	4	2	0	1	3	0	0	0	0	0	0	3	0	0	0	13	64
9:30 PM	0	4	3	0	3	2	0	0	0	0	0	0	1	0	3	0	16	66
9:45 PM	0	4	1	0	0	5	0	0	0	0	0	0	0	0	0	0	10	58

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	140	36	0	24	124	0	0	0	0	0	0	20	0	20	0	364
Heavy Trucks	0	20	8		4	32	0		0	0	0		4	0	0		68
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

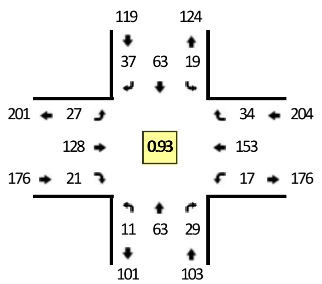
Report generated on 8/1/2022 5:06 PM

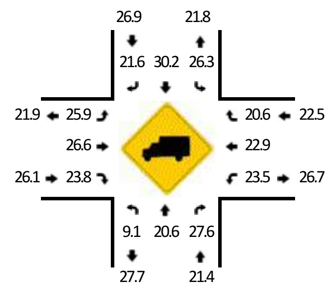
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

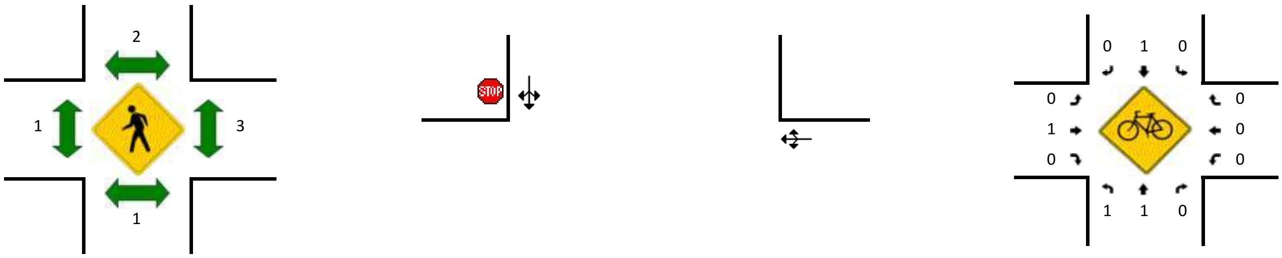
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

LOCATION: Kingwood St -- 9th St | **QC JOB #:** 15890320
CITY/STATE: Florence, OR | **DATE:** Thu, Jun 3 2021

Peak-Hour: 12:30 PM -- 1:30 PM
Peak 15-Min: 1:00 PM -- 1:15 PM







15-Min Count Period Beginning At	Kingwood St (Northbound)				Kingwood St (Southbound)				9th St (Eastbound)				9th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	0	0	0	0	2	2	0	1	9	0	0	0	4	0	0	18	
6:15 AM	0	3	1	0	2	1	2	0	1	10	0	0	0	18	1	0	39	
6:30 AM	0	8	2	0	1	1	8	0	0	10	1	0	0	16	3	0	50	
6:45 AM	3	5	1	0	4	4	5	0	2	10	0	0	0	42	4	0	80	187
7:00 AM	0	4	2	0	4	3	5	0	2	15	0	0	1	18	6	0	60	229
7:15 AM	2	11	1	0	4	3	5	0	2	12	0	0	0	23	2	0	65	255
7:30 AM	3	9	3	0	2	1	8	0	10	17	4	0	1	21	4	0	83	288
7:45 AM	4	10	4	0	6	8	17	0	12	24	6	0	5	26	10	0	132	340
8:00 AM	0	15	3	0	2	12	6	0	5	18	5	0	9	22	6	0	103	383
8:15 AM	2	8	0	0	5	11	8	0	4	17	4	0	4	24	9	0	96	414
8:30 AM	3	11	2	0	2	12	6	0	3	14	1	0	2	26	2	0	84	415
8:45 AM	2	10	4	0	4	13	8	0	5	25	3	0	1	24	6	0	105	388
9:00 AM	3	15	4	0	6	6	2	0	8	26	7	0	2	27	4	0	110	395
9:15 AM	6	11	6	0	4	12	6	0	11	19	3	0	1	24	6	0	109	408
9:30 AM	5	15	4	0	9	14	4	0	12	25	6	0	2	36	7	0	139	463
9:45 AM	4	15	5	0	1	14	10	0	6	37	6	0	1	26	4	0	129	487
10:00 AM	6	15	14	0	5	8	10	0	8	37	5	0	3	27	12	0	150	527
10:15 AM	4	14	4	0	3	10	9	0	4	26	7	0	3	29	8	0	121	539
10:30 AM	2	12	5	0	2	12	5	0	7	35	5	0	5	28	9	0	127	527
10:45 AM	3	13	0	0	5	12	5	0	5	42	4	0	5	33	6	0	133	531
11:00 AM	2	6	7	0	4	10	4	0	6	46	2	0	4	35	8	0	134	515
11:15 AM	3	17	8	0	6	8	6	0	11	36	5	0	5	26	10	0	141	535
11:30 AM	4	13	8	0	7	13	9	0	11	38	1	0	6	25	6	0	141	549
11:45 AM	1	13	7	0	6	12	10	0	12	37	8	0	6	31	5	0	148	564
12:00 PM	2	13	9	0	4	14	9	0	8	36	2	0	3	18	13	0	131	561
12:15 PM	5	16	9	0	7	13	2	0	6	29	3	0	4	36	7	0	137	557
12:30 PM	3	17	6	0	4	11	9	0	7	26	5	0	2	35	9	0	134	550
12:45 PM	5	16	8	0	4	19	8	0	4	39	6	0	3	42	7	0	161	563
1:00 PM	2	16	9	0	5	20	12	0	11	30	3	0	5	43	6	0	162	594
1:15 PM	1	14	6	0	6	13	8	0	5	33	7	0	7	33	12	0	145	602
1:30 PM	5	16	7	0	3	11	13	0	7	22	4	0	5	24	13	0	130	598
1:45 PM	3	17	7	0	9	10	6	0	6	38	5	0	6	35	3	0	145	582
2:00 PM	0	16	6	0	5	19	9	0	2	40	6	0	2	25	7	0	137	557
2:15 PM	3	22	9	0	6	14	9	0	4	34	2	0	2	38	10	0	153	565
2:30 PM	6	21	10	0	2	14	6	0	8	32	0	0	3	29	9	0	140	575
2:45 PM	2	18	8	0	2	17	7	0	6	30	8	0	2	26	7	0	133	563
3:00 PM	9	20	5	0	3	10	9	0	10	46	8	0	6	22	8	0	156	582
3:15 PM	3	12	10	0	8	10	8	0	5	27	5	0	6	36	8	0	138	567

15-Min Count Period Beginning At	Kingwood St (Northbound)				Kingwood St (Southbound)				9th St (Eastbound)				9th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	2	15	12	0	8	14	7	0	12	33	2	0	3	27	6	0	141	568
3:45 PM	2	21	5	0	4	17	3	0	5	16	3	0	2	27	5	0	110	545
4:00 PM	3	15	2	0	0	9	9	0	5	37	3	0	4	19	6	0	112	501
4:15 PM	3	17	1	0	5	22	4	0	10	25	4	0	3	20	11	0	125	488
4:30 PM	3	15	6	0	5	13	10	0	9	31	4	0	6	19	15	0	136	483
4:45 PM	6	16	5	0	6	21	11	0	4	26	4	0	4	31	6	0	140	513
5:00 PM	3	19	7	0	5	10	7	0	11	34	6	0	3	29	8	0	142	543
5:15 PM	1	15	5	0	4	9	2	0	7	27	3	0	4	19	3	0	99	517
5:30 PM	4	11	4	0	1	9	7	0	7	23	4	0	5	15	3	0	93	474
5:45 PM	1	9	5	0	3	8	2	0	7	22	0	0	4	19	0	0	80	414
6:00 PM	5	11	6	0	3	10	1	0	4	18	2	0	5	18	5	0	88	360
6:15 PM	0	8	6	0	2	10	5	0	2	13	4	0	3	17	6	0	76	337
6:30 PM	2	7	6	0	1	13	3	0	1	14	2	0	2	13	0	0	64	308
6:45 PM	1	7	2	0	3	6	4	0	0	13	2	0	2	17	1	0	58	286
7:00 PM	0	7	1	0	3	2	4	0	2	11	0	0	1	14	2	0	47	245
7:15 PM	1	4	3	0	1	1	5	0	2	9	1	0	4	21	3	0	55	224
7:30 PM	3	2	3	0	1	0	1	0	2	13	0	0	2	13	3	0	43	203
7:45 PM	0	4	0	0	2	5	1	0	1	11	1	0	1	11	2	0	39	184
8:00 PM	2	8	1	0	0	3	0	0	2	9	2	0	0	7	1	0	35	172
8:15 PM	2	5	4	0	0	2	3	0	3	1	0	0	1	6	0	0	27	144
8:30 PM	1	1	7	0	1	4	3	0	3	3	1	0	1	7	1	0	33	134
8:45 PM	2	3	1	0	3	2	2	0	1	10	0	0	2	8	0	0	34	129
9:00 PM	0	4	2	0	2	3	3	0	0	9	0	0	2	10	2	0	37	131
9:15 PM	0	5	2	0	1	4	0	0	1	4	0	0	0	11	3	0	31	135
9:30 PM	1	5	1	0	0	4	0	0	1	5	0	0	1	6	0	0	24	126
9:45 PM	1	2	1	0	2	0	2	0	0	3	0	0	0	5	1	0	17	109

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	8	64	36	0	20	80	48	0	44	120	12	0	20	172	24	0	648
Heavy Trucks	4	16	8		4	20	8		16	20	4		4	52	8		164
Buses																	
Pedestrians		0				8				0				0			8
Bicycles	4	0	0		0	0	0		0	0	0		0	0	0		4
Scooters																	

Comments:

Report generated on 8/1/2022 5:06 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

APPENDIX I: VALIDATION COUNT SUMMARY

VALIDATION COUNT SUMMARY

Date:	October 11, 2023
To:	Wendy Farley-Campbell, Clare Kurth, Erin Reynolds, and Mike Miller, City of Florence Michael Duncan, Oregon Department of Transportation
From:	Russ Doubleday, Matt Bell, and Susie Wright, PE, PMP, Kittelson & Associates, Inc.
Project:	City of Florence Transportation System Plan Update
Subject:	Validation Count Summary

Introduction

Oregon Department of Transportation (ODOT) collected 16-hour turning movement counts at 20 study intersections in Florence in anticipation of the Florence Transportation System Plan (TSP) update project. The counts were conducted on Thursday, June 3, 2021, while Siuslaw School District schools were in session, but all classes were online due to the ongoing COVID-19 pandemic. Given these conditions, the project team made several adjustments to the counts. The adjustments are documented in the *Analysis Methodology and Assumptions Memorandum* and summarized below.

- **Seasonal Adjustment Factors** of 1.20 and 1.14 were applied to the study intersections on US 101 and OR 126, respectively, to reflect 30th highest hour traffic volumes. The seasonal adjustment factors were developed based on methodologies outlined in the ODOT Analysis Procedures Manual (APM).
- A **Historical Growth Adjustment Factor** of 1.045 was applied to all study intersections, regardless of jurisdiction or location, to reflect 2022 traffic conditions. The historical growth adjustment factor was developed based on methodologies outlined in the ODOT APM.
- A **COVID Adjustment Factor** of 1.06 was applied to all study intersections, regardless of jurisdiction or location, to account for changes in traffic volumes related to the ongoing COVID-19 pandemic. The COVID adjustment factor was developed based on a review of historic traffic counts in the City and consideration of similar adjustment factors applied in cities throughout Oregon.

The seasonal, historical growth, and COVID-19 adjustment factors were developed in coordination with ODOT's Transportation Planning and Analysis Unit (TPAU). TPAU also reviewed and approved the factors and resulting traffic volumes prior to conducting the existing and future no-build traffic conditions analyses. However, City of Florence (City) staff, as well as members of the Stakeholder Transportation Advisory Committee (STAC), expressed concerns that the counts may not reflect peak traffic conditions. Therefore, ODOT agreed to conduct additional counts to validate the analysis results. As indicated below the validation counts show that the June 2021 counts (with adjustments) are higher at three of the four City study intersection than the May 2023 counts and the analysis results are similar and do not suggest the need for further evaluation or modification to the analyses used to support the TSP update.

Validation Traffic Counts

ODOT collected additional 16-hour turning movement counts at four city study intersections to validate the June 2021 counts – additional counts were not collected at any state study intersections given that ODOT has extensive historical traffic data, and the state highways have significantly higher traffic volumes than the the city streets and would be minimally impacted by school traffic. The counts were conducted on Tuesday, May 16, 2023, at the following city study intersections while Siuslaw School District schools were in-session and in-person.

- Rhododendron Drive & 35th Street
- Rhododendron Drive & 9th Street
- Kingwood Street & 35th Street
- Kingwood Street & 9th Street

PEAK HOUR VOLUME COMPARISON

Table 1 shows total entering volumes (TEV) at the four city study intersections during the weekday PM peak hour in June 2021 (with and without adjustments) and May 2023. As shown, the TEV in June 2021 with adjustments are higher at three of the four intersections. *Attachment A contains the traffic count worksheets for May 2023.*

Table 1. June 2021 to May 2023 Weekday PM Peak Hour Traffic Volume Comparison

	Total Entering Volumes (TEV), Weekday PM Peak Hour			
Intersection	**June 2021**	**June 2021 (with Adjustments)**	**May 2023**	**Difference (May 2023-June 2021)**
Rhododendron Dr/ 35th St	427	452	429	-23
Rhododendron Dr/ 9th St	279	295	311	+16
Kingwood St/ 35th St	503	533	498	-35
Kingwood St/ 9th St	513	544	534	-10
Oak St/ 35th St	--	--	539	--

TRAFFIC OPERATIONS COMPARISON

Table 2 summarizes the results a traffic operations analysis at the four City study intersections under June 2021 and May 2023 traffic conditions during the weekday PM peak hour. The results include the critical movement (CM), volume-to-capacity (v/c) ratios, level-of-service (LOS), and delay. As shown, the v/c ratios, LOS, and delay are higher at the four city study intersections under year 2021 traffic conditions that under May 2023 traffic conditions. *Attachments B and C contain the traffic operations analysis worksheets.*

Table 2. Traffic Operations Comparison

Intersection	June 2021 (with Adjustments)				May 2023			
	CM	V/C	LOS	Delay	CM	V/C	LOS	Delay
Rhododendron Dr/ 35th St	WB	0.25	B	11.2 sec	WB	0.21	B	10.4 sec
Rhododendron Dr/ 9th St	WB	0.10	A	9.6 sec	WB	0.11	A	9.2 sec
Kingwood St/ 35th St	NB	0.18	C	15.1 sec	NB	0.10	B	12.8 sec
Kingwood St/ 9th St	NB	0.22	C	14.4 sec	NB	.10	B	12.8 sec
Oak St/ 35th St	--	--	--	--	NB	0.18	B	14.0 sec

Summary

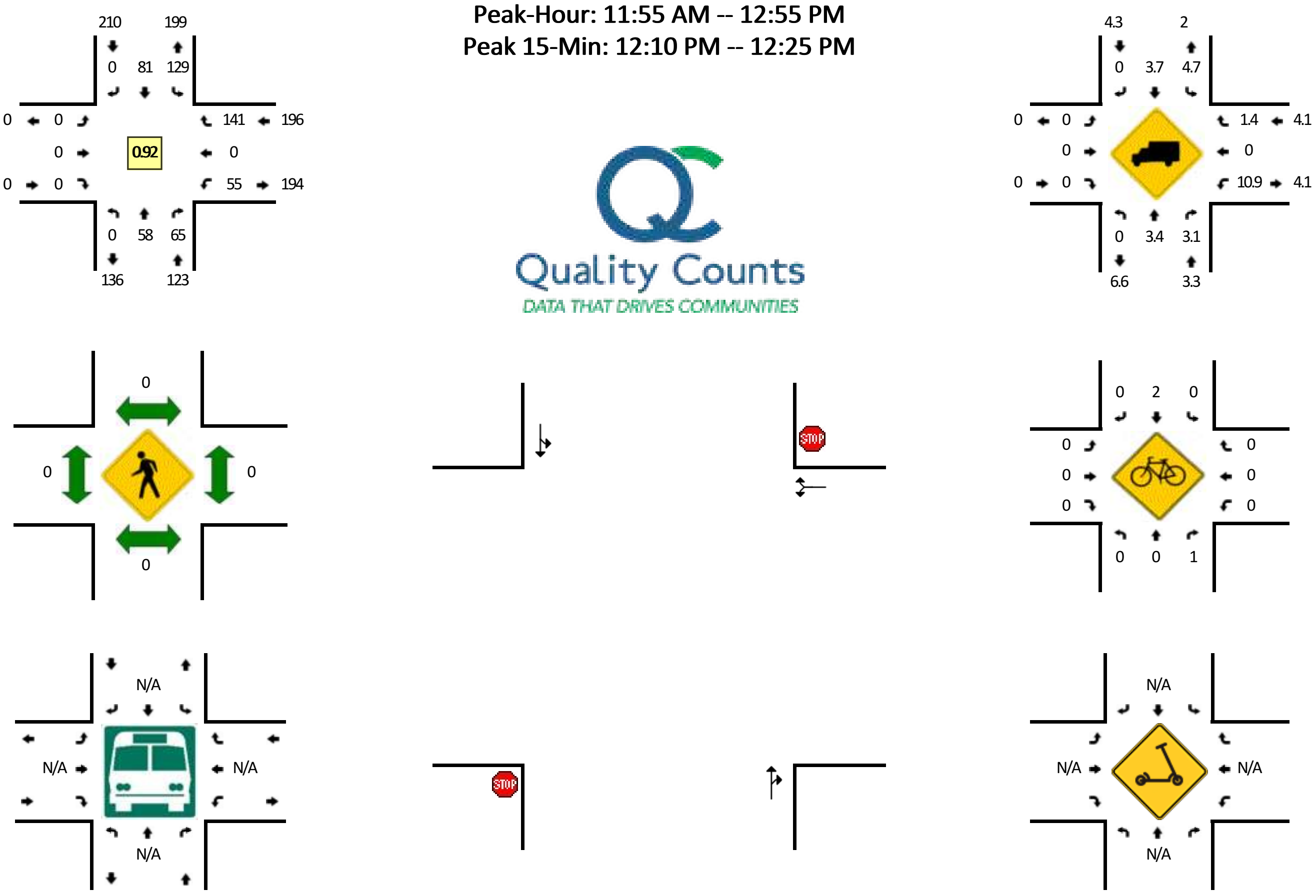
As indicated above the validation counts show that the June 2021 counts (with adjustments) are higher at three of the four City study intersection than the May 2023 counts and the analysis results are similar and do not suggest the need for further evaluation or modification to the analyses used to support the TSP update.

ATTACHMENT A: MAY 2023 TRAFFIC COUNTS

Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

LOCATION: Rhododendron Dr -- 35th St [20112009] | **QC JOB #:** 16201903
CITY/STATE: Florence, OR | **DATE:** Tue, May 16 2023

Peak-Hour: 11:55 AM -- 12:55 PM
Peak 15-Min: 12:10 PM -- 12:25 PM



5-Min Count Period Beginning At	Rhododendron Dr (Northbound)				Rhododendron Dr (Southbound)				35th St [20112009] (Eastbound)				35th St [20112009] (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	0	0	0	2	2	0	0	0	0	0	0	0	0	1	0	5	
6:05 AM	0	0	0	0	1	2	0	0	0	0	0	0	1	0	1	0	5	
6:10 AM	0	0	0	0	2	2	0	0	0	0	0	0	1	0	2	0	7	
6:15 AM	0	0	0	0	3	2	0	0	0	0	0	0	0	0	0	0	5	
6:20 AM	0	0	1	0	4	4	0	0	0	0	0	0	0	0	0	0	9	
6:25 AM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2	0	4	
6:30 AM	0	1	0	0	1	2	0	0	0	0	0	0	1	0	4	0	9	
6:35 AM	0	1	2	0	4	1	0	0	0	0	0	0	1	0	1	0	10	
6:40 AM	0	1	0	0	9	3	0	0	0	0	0	0	0	0	0	0	13	
6:45 AM	0	3	1	0	4	4	0	0	0	0	0	0	5	0	2	0	19	
6:50 AM	0	0	1	0	4	1	0	0	0	0	0	0	2	0	2	0	10	
6:55 AM	0	0	1	0	1	3	0	0	0	0	0	0	1	0	0	0	6	102
7:00 AM	0	2	1	0	5	2	0	0	0	0	0	0	1	0	7	0	18	115
7:05 AM	0	3	1	0	4	4	0	0	0	0	0	0	1	0	2	0	15	125
7:10 AM	0	2	0	0	6	1	0	0	0	0	0	0	0	0	3	0	12	130
7:15 AM	0	1	2	0	5	1	0	0	0	0	0	0	3	0	5	0	17	142
7:20 AM	0	1	0	0	2	1	0	0	0	0	0	0	1	0	2	0	7	140
7:25 AM	0	1	0	0	6	3	0	0	0	0	0	0	1	0	5	0	16	152
7:30 AM	0	3	1	0	4	3	0	0	0	0	0	0	1	0	2	0	14	157
7:35 AM	0	1	0	0	8	1	0	0	0	0	0	0	0	0	3	0	13	160
7:40 AM	0	2	4	0	6	4	0	0	0	0	0	0	2	0	1	0	19	166
7:45 AM	0	3	1	0	12	5	0	0	0	0	0	0	0	0	5	0	26	173
7:50 AM	0	2	4	0	6	8	0	0	0	0	0	0	1	0	5	0	26	189
7:55 AM	0	1	1	0	14	4	0	0	0	0	0	0	0	0	4	0	24	207
8:00 AM	0	2	3	0	10	4	0	0	0	0	0	0	0	0	9	0	28	217
8:05 AM	0	3	2	0	10	2	0	0	0	0	0	0	2	0	7	0	26	228
8:10 AM	0	1	1	0	11	4	0	0	0	0	0	0	4	0	7	0	28	244
8:15 AM	0	2	3	0	8	3	0	0	0	0	0	0	3	0	8	0	27	254
8:20 AM	0	2	2	0	9	8	0	0	0	0	0	0	2	0	6	0	29	276
8:25 AM	0	2	2	0	10	5	0	0	0	0	0	0	2	0	4	0	25	285
8:30 AM	0	3	2	0	6	2	0	0	0	0	0	0	5	0	8	0	26	297
8:35 AM	0	1	2	0	7	6	0	0	0	0	0	0	1	0	4	0	21	305
8:40 AM	0	4	3	0	9	4	0	0	0	0	0	0	1	0	6	0	27	313
8:45 AM	0	3	2	0	10	7	0	0	0	0	0	0	2	0	4	0	28	315
8:50 AM	0	5	4	0	6	4	0	0	0	0	0	0	3	0	5	0	27	316
8:55 AM	0	6	2	0	13	6	0	0	0	0	0	0	5	0	5	0	37	329
9:00 AM	0	2	5	0	4	2	0	0	0	0	0	0	0	0	4	0	17	318
9:05 AM	0	3	4	0	2	4	0	0	0	0	0	0	0	0	4	0	17	309
9:10 AM	0	5	2	0	11	6	0	0	0	0	0	0	1	0	5	0	30	311

5-Min Count Period Beginning At	Rhododendron Dr (Northbound)				Rhododendron Dr (Southbound)				35th St [20112009] (Eastbound)				35th St [20112009] (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
9:15 AM	0	4	1	0	11	4	0	0	0	0	0	0	0	0	7	0	27	311
9:20 AM	0	5	5	0	6	7	0	1	0	0	0	0	4	0	7	0	35	317
9:25 AM	0	6	3	0	6	8	0	0	0	0	0	0	0	0	10	0	33	325
9:30 AM	0	6	3	0	2	13	0	0	0	0	0	0	1	0	6	0	31	330
9:35 AM	0	5	8	0	15	5	0	0	0	0	0	0	0	0	11	0	44	353
9:40 AM	0	4	6	0	4	3	0	0	0	0	0	0	5	0	6	0	28	354
9:45 AM	0	3	4	0	16	7	0	0	0	0	0	0	5	0	5	0	40	366
9:50 AM	0	4	6	0	8	11	0	0	0	0	0	0	3	0	8	0	40	379
9:55 AM	0	5	3	0	7	3	0	0	0	0	0	0	4	0	6	0	28	370
10:00 AM	0	2	2	0	9	4	0	0	0	0	0	0	4	0	5	0	26	379
10:05 AM	0	3	0	0	14	6	0	0	0	0	0	0	0	0	5	0	28	390
10:10 AM	0	1	6	0	10	6	0	0	0	0	0	0	4	0	4	0	31	391
10:15 AM	0	6	0	0	5	8	0	0	0	0	0	0	2	0	8	0	29	393
10:20 AM	0	4	2	0	5	7	0	0	0	0	0	0	2	0	12	0	32	390
10:25 AM	0	8	3	0	6	5	0	0	0	0	0	0	4	0	4	0	30	387
10:30 AM	0	1	1	0	4	7	0	0	0	0	0	0	4	0	11	0	28	384
10:35 AM	0	5	4	0	8	7	0	0	0	0	0	0	4	0	5	0	33	373
10:40 AM	0	5	6	0	9	4	0	0	0	0	0	0	2	0	11	0	37	382
10:45 AM	0	6	6	0	14	7	0	0	0	0	0	0	4	0	4	0	41	383
10:50 AM	0	6	3	0	9	10	0	0	0	0	0	0	3	0	10	0	41	384
10:55 AM	0	6	3	0	8	12	0	0	0	0	0	0	1	0	10	0	40	396
11:00 AM	0	6	2	0	7	8	0	0	0	0	0	0	5	0	13	0	41	411
11:05 AM	0	6	11	0	9	11	0	0	0	0	0	0	5	0	11	0	53	436
11:10 AM	0	7	2	0	7	5	0	0	0	0	0	0	3	0	7	0	31	436
11:15 AM	0	9	8	0	8	5	0	0	0	0	0	0	6	0	11	0	47	454
11:20 AM	0	6	6	0	4	9	0	0	0	0	0	0	9	0	5	0	39	461
11:25 AM	0	5	6	0	12	6	0	0	0	0	0	0	3	0	11	0	43	474
11:30 AM	0	5	7	0	8	8	0	0	0	0	0	0	4	0	10	0	42	488
11:35 AM	0	5	5	0	9	6	0	0	0	0	0	0	6	0	8	0	39	494
11:40 AM	0	7	7	0	9	5	0	0	0	0	0	0	4	0	11	0	43	500
11:45 AM	0	5	5	0	6	1	0	0	0	0	0	0	4	0	5	0	26	485
11:50 AM	0	5	5	0	5	11	0	0	0	0	0	0	7	0	8	0	41	485
11:55 AM	0	9	7	0	8	7	0	0	0	0	0	0	5	0	9	0	45	490
12:00 PM	0	5	6	0	10	4	0	0	0	0	0	0	6	0	8	0	39	488
12:05 PM	0	4	8	0	7	5	0	0	0	0	0	0	3	0	10	0	37	472
12:10 PM	0	2	2	0	12	9	0	0	0	0	0	0	5	0	14	0	44	485
12:15 PM	0	8	6	0	10	8	0	0	0	0	0	0	7	0	13	0	52	490
12:20 PM	0	4	8	0	11	6	0	0	0	0	0	0	6	0	12	0	47	498
12:25 PM	0	4	9	0	7	10	0	0	0	0	0	0	1	0	11	0	42	497
12:30 PM	0	5	5	0	17	4	0	0	0	0	0	0	6	0	14	0	51	506
12:35 PM	0	6	2	0	10	7	0	0	0	0	0	0	1	0	9	0	35	502
12:40 PM	0	2	6	0	6	6	0	0	0	0	0	0	3	0	16	0	39	498
12:45 PM	0	4	3	0	20	7	0	0	0	0	0	0	5	0	14	0	53	525
12:50 PM	0	5	3	0	11	8	0	0	0	0	0	0	7	0	11	0	45	529
12:55 PM	0	4	3	0	7	7	0	0	0	0	0	0	5	0	7	0	33	517
1:00 PM	0	6	5	0	7	7	0	0	0	0	0	0	4	0	7	0	36	514
1:05 PM	0	3	6	0	5	5	0	0	0	0	0	0	3	0	11	0	33	510
1:10 PM	0	2	5	0	8	5	0	0	0	0	0	0	4	0	19	0	43	509
1:15 PM	0	7	2	0	12	6	0	0	0	0	0	0	8	0	12	0	47	504
1:20 PM	0	5	4	0	14	6	0	0	0	0	0	0	4	0	12	0	45	502
1:25 PM	0	9	2	0	2	10	0	0	0	0	0	0	7	0	6	0	36	496
1:30 PM	0	6	6	0	11	6	0	0	0	0	0	0	7	0	9	0	45	490
1:35 PM	0	4	3	0	6	8	0	0	0	0	0	0	2	0	15	0	38	493
1:40 PM	0	6	4	0	6	5	0	0	0	0	0	0	3	0	12	0	36	490
1:45 PM	0	6	3	0	6	5	0	0	0	0	0	0	7	0	15	0	42	479
1:50 PM	0	4	4	0	7	10	0	0	0	0	0	0	4	0	12	0	41	475
1:55 PM	0	3	5	0	5	12	0	0	0	0	0	0	3	0	11	0	39	481
2:00 PM	0	6	6	0	4	7	0	0	0	0	0	0	1	0	8	0	32	477
2:05 PM	0	6	2	0	7	8	0	0	0	0	0	0	4	0	7	0	34	478
2:10 PM	0	3	0	0	5	3	0	0	0	0	0	0	4	0	12	0	27	462
2:15 PM	0	10	11	0	10	6	0	0	0	0	0	0	5	0	9	0	51	466
2:20 PM	0	6	1	0	7	6	0	0	0	0	0	0	2	0	5	0	27	448
2:25 PM	0	5	3	0	8	6	0	0	0	0	0	0	2	0	12	1	37	449
2:30 PM	0	5	2	0	9	2	0	0	0	0	0	0	4	0	8	0	30	434
2:35 PM	0	4	6	0	9	11	0	0	0	0	0	0	3	0	13	0	46	442
2:40 PM	0	6	5	0	11	9	0	0	0	0	0	0	5	0	9	0	45	451
2:45 PM	0	6	3	0	7	8	0	0	0	0	0	0	4	0	8	0	36	445
2:50 PM	0	10	6	0	7	4	0	0	0	0	0	0	3	0	4	0	34	438
2:55 PM	0	7	8	0	8	3	0	0	0	0	0	0	3	0	11	0	40	439
3:00 PM	0	1	3	0	10	8	0	0	0	0	0	0	5	0	10	0	37	444
3:05 PM	0	4	3	0	8	2	0	0	0	0	0	0	5	0	7	0	29	439
3:10 PM	0	4	5	0	9	9	0	0	0	0	0	0	3	0	14	0	44	456
3:15 PM	0	6	2	0	6	11	0	0	0	0	0	0	2	0	7	0	34	439
3:20 PM	0	6	3	0	8	4	0	0	0	0	0	0	4	0	12	0	37	449
3:25 PM	0	2	9	0	11	5	0	0	0	0	0	0	6	0	8	0	41	453
3:30 PM	0	7	1	0	6	4	0	0	0	0	0	0	5	0	12	0	35	458
3:35 PM	0	4	6	0	10	8	0	0	0	0	0	0	4	0	13	0	45	457
3:40 PM	0	5	8	0	7	7	0	0	0	0	0	0	4	0	16	0	47	459
3:45 PM	0	5	4	0	11	4	0	0	0	0	0	0	8	0	17	0	49	472
3:50 PM	0	5	6	0	8	8	0	0	0	0	0	0	2	0	14	0	43	481
3:55 PM	0	4	1	0	9	5	0	0	0	0	0	0	3	0	9	0	31	472
4:00 PM	0	3	4	0	10	8	0	0	0	0	0	0	1	0	11	0	37	472
4:05 PM	0	6	2	0	5	7	0	0	0	0	0	0	6	0	16	0	42	485
4:10 PM	0	5	7	0	5	7	0	0	0	0	0	0	8	0	8	0	40	481
4:15 PM	0	3	2	0	5	4	0	0	0	0	0	0	1	0	10	0	25	472
4:20 PM	0	7	3	0	7	7	0	0	0	0	0	0	0	0	11	0	35	470
4:25 PM	0	5	4	0	7	7	0	0	0	0	0	0	1	0	8	0	32	461

5-Min Count Period Beginning At	Rhododendron Dr (Northbound)				Rhododendron Dr (Southbound)				35th St [20112009] (Eastbound)				35th St [20112009] (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:30 PM	0	3	7	0	4	2	0	0	0	0	0	0	2	0	7	0	25	451
4:35 PM	0	6	3	0	6	8	0	0	0	0	0	0	1	0	14	0	38	444
4:40 PM	0	9	3	0	5	5	0	0	0	0	0	0	3	0	14	0	39	436
4:45 PM	0	5	5	0	10	8	0	0	0	0	0	0	4	0	13	0	45	432
4:50 PM	0	4	6	0	3	10	0	0	0	0	0	0	2	0	7	0	32	421
4:55 PM	0	9	2	0	8	9	0	0	0	0	0	0	1	0	10	0	39	429
5:00 PM	0	5	3	0	8	4	0	0	0	0	0	0	5	0	9	0	34	426
5:05 PM	0	4	2	0	9	7	0	0	0	0	0	0	6	0	8	0	36	420
5:10 PM	0	6	6	0	7	7	0	0	0	0	0	0	2	0	19	0	47	427
5:15 PM	0	7	1	0	8	3	0	0	0	0	0	0	5	0	11	0	35	437
5:20 PM	0	5	3	0	9	2	0	0	0	0	0	0	3	0	10	0	32	434
5:25 PM	0	3	3	0	14	3	0	0	0	0	0	0	2	0	4	0	29	431
5:30 PM	0	4	2	0	2	3	0	0	0	0	0	0	4	0	12	0	27	433
5:35 PM	0	4	2	0	6	1	0	0	0	0	0	0	0	0	14	0	27	422
5:40 PM	0	6	3	0	5	4	0	0	0	0	0	0	1	0	5	0	24	407
5:45 PM	0	10	7	0	9	2	0	0	0	0	0	0	2	0	7	0	37	399
5:50 PM	0	5	2	0	6	3	0	0	0	0	0	0	0	0	12	0	28	395
5:55 PM	0	5	3	0	2	1	0	0	0	0	0	0	2	0	6	0	19	375
6:00 PM	0	6	4	0	0	1	0	0	0	0	0	0	0	0	9	0	20	361
6:05 PM	0	4	4	0	6	2	0	0	0	0	0	0	4	0	6	0	26	351
6:10 PM	0	3	3	0	5	5	0	0	0	0	0	0	1	0	3	0	20	324
6:15 PM	0	2	2	0	6	7	0	0	0	0	0	0	0	0	11	0	28	317
6:20 PM	0	3	2	0	5	3	0	0	0	0	0	0	2	0	6	0	21	306
6:25 PM	0	4	1	0	5	3	0	0	0	0	0	0	0	0	8	0	21	298
6:30 PM	0	2	2	0	4	3	0	0	0	0	0	0	1	0	6	0	18	289
6:35 PM	0	3	1	0	5	8	0	0	0	0	0	0	2	0	12	0	31	293
6:40 PM	0	7	1	0	2	2	0	0	0	0	0	0	2	0	9	0	23	292
6:45 PM	0	3	0	0	5	5	0	0	0	0	0	0	1	0	8	0	22	277
6:50 PM	0	4	0	0	4	3	0	0	0	0	0	0	0	0	8	0	19	268
6:55 PM	0	2	1	0	5	4	0	0	0	0	0	0	0	0	6	0	18	267
7:00 PM	0	0	1	0	2	1	0	0	0	0	0	0	2	0	6	0	12	259
7:05 PM	0	1	0	0	4	0	0	0	0	0	0	0	1	0	6	0	12	245
7:10 PM	0	2	2	0	2	2	0	0	0	0	0	0	1	0	9	0	18	243
7:15 PM	0	4	2	0	2	1	0	0	0	0	0	0	2	0	3	0	14	229
7:20 PM	0	5	2	0	3	3	0	0	0	0	0	0	5	0	3	0	21	229
7:25 PM	0	1	2	0	4	4	0	0	0	0	0	0	1	0	1	0	13	221
7:30 PM	0	4	1	0	0	4	0	0	0	0	0	0	1	0	3	0	13	216
7:35 PM	0	0	0	0	3	2	0	0	0	0	0	0	0	0	2	0	7	192
7:40 PM	0	3	1	0	2	2	0	0	0	0	0	0	3	0	2	0	13	182
7:45 PM	0	2	0	0	2	3	0	0	0	0	0	0	1	0	3	0	11	171
7:50 PM	0	2	0	0	2	4	0	0	0	0	0	0	1	0	1	0	10	162
7:55 PM	0	4	2	0	1	2	0	0	0	0	0	0	1	0	5	0	15	159
8:00 PM	0	4	1	0	3	2	0	0	0	0	0	0	4	0	8	0	22	169
8:05 PM	0	2	0	0	2	1	0	0	0	0	0	0	1	0	0	0	6	163
8:10 PM	0	1	0	0	1	1	0	0	0	0	0	0	6	0	2	0	11	156
8:15 PM	0	2	1	0	0	1	0	0	0	0	0	0	1	0	3	0	8	150
8:20 PM	0	0	0	0	3	0	0	0	0	0	0	0	1	0	8	0	12	141
8:25 PM	0	1	1	0	0	5	0	0	0	0	0	0	1	0	5	0	13	141
8:30 PM	0	1	0	0	1	5	0	0	0	0	0	0	1	0	0	0	8	136
8:35 PM	0	2	0	0	1	2	0	0	0	0	0	0	1	0	7	0	13	142
8:40 PM	0	5	2	0	4	1	0	0	0	0	0	0	0	0	3	0	15	144
8:45 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	8	0	10	143
8:50 PM	0	1	0	0	1	0	0	0	0	0	0	0	2	0	4	0	8	141
8:55 PM	0	0	0	0	1	0	0	0	0	0	0	0	2	0	1	0	4	130
9:00 PM	0	1	0	0	3	2	0	0	0	0	0	0	1	0	3	0	10	118
9:05 PM	0	0	1	0	2	1	0	0	0	0	0	0	1	0	2	0	7	119
9:10 PM	0	1	1	0	3	1	0	0	0	0	0	0	0	0	3	0	9	117
9:15 PM	0	2	1	0	2	0	0	0	0	0	0	0	0	0	3	0	8	117
9:20 PM	0	3	0	0	1	0	0	0	0	0	0	0	0	0	3	0	7	112
9:25 PM	0	1	0	0	1	2	0	0	0	0	0	0	0	0	1	0	5	104
9:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	2	98
9:35 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	87
9:40 PM	0	1	2	0	4	0	0	0	0	0	0	0	1	0	2	0	10	82
9:45 PM	0	2	0	0	2	1	0	0	0	0	0	0	0	0	0	0	5	77
9:50 PM	0	0	0	0	0	2	0	0	0	0	0	0	1	0	1	0	4	73
9:55 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	2	71

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	56	64	0	132	92	0	0	0	0	0	0	72	0	156	0	572
Heavy Trucks	0	0	4		4	4	0		0	0	0		12	0	4		28
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	4		0	0	0		0	0	0		0	0	0		4
Scooters																	

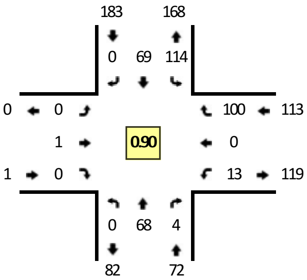
Comments:

Report generated on 6/26/2023 12:59 PM

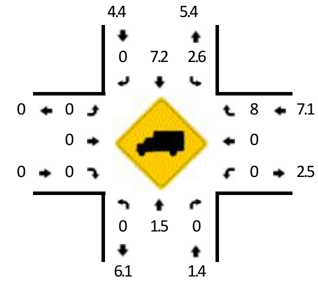
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

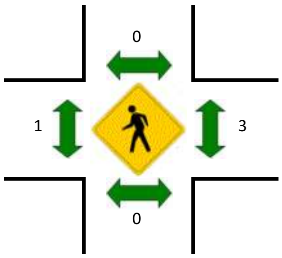
Type of peak hour being reported: Intersection Peak Method for determining peak hour: Total Entering Volume

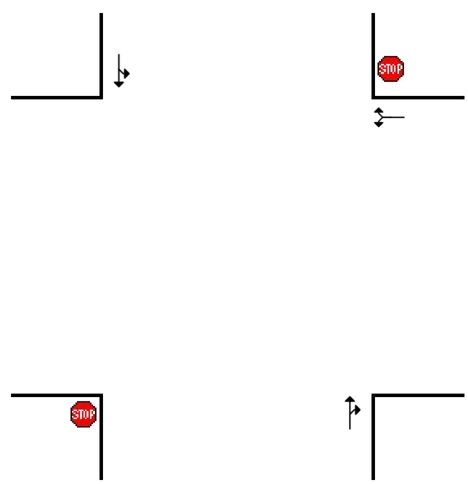
LOCATION: Rhododendron Dr -- 9th St [20042009] **QC JOB #:** 16201904
CITY/STATE: Florence, OR **DATE:** Tue, May 16 2023

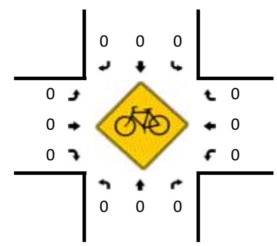


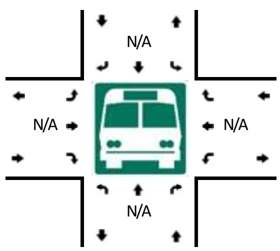
Peak-Hour: 1:25 PM -- 2:25 PM
Peak 15-Min: 1:50 PM -- 2:05 PM

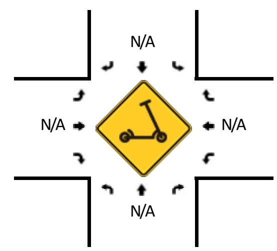












5-Min Count Period Beginning At	Rhododendron Dr (Northbound)				Rhododendron Dr (Southbound)				9th St [20042009] (Eastbound)				9th St [20042009] (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	3	
6:05 AM	0	0	1	0	1	2	0	0	0	0	0	0	0	0	0	0	4	
6:10 AM	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	4	
6:15 AM	0	0	0	0	2	0	0	0	0	0	0	0	0	0	3	0	5	
6:20 AM	0	0	0	0	3	1	0	0	0	0	0	0	0	0	1	0	5	
6:25 AM	0	0	0	0	2	2	0	0	0	0	0	0	0	0	1	0	5	
6:30 AM	0	2	0	0	3	1	0	0	0	0	0	0	0	0	0	0	6	
6:35 AM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	3	
6:40 AM	0	3	0	0	2	2	0	0	0	0	0	0	0	0	0	0	7	
6:45 AM	0	1	0	0	2	5	0	0	0	0	0	0	0	0	1	0	9	
6:50 AM	0	0	1	0	4	4	0	0	0	0	0	0	0	0	2	0	11	
6:55 AM	0	0	0	0	8	3	0	0	0	0	0	0	0	0	2	0	13	75
7:00 AM	0	1	0	0	1	1	0	0	0	0	0	0	0	0	2	0	5	77
7:05 AM	0	2	0	0	3	2	0	0	0	0	0	0	0	0	4	0	11	84
7:10 AM	0	2	0	0	4	1	0	0	0	0	0	0	0	0	1	0	8	88
7:15 AM	0	0	1	0	1	1	0	0	0	0	0	0	0	0	5	0	8	91
7:20 AM	0	1	0	0	3	0	0	0	0	0	0	0	0	0	5	0	9	95
7:25 AM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	1	0	7	97
7:30 AM	0	0	0	0	4	4	0	0	0	0	0	0	0	0	1	0	9	100
7:35 AM	0	0	0	0	4	3	0	0	0	0	0	0	1	0	2	0	10	107
7:40 AM	0	2	1	0	6	1	0	0	0	0	0	0	0	0	2	0	12	112
7:45 AM	0	1	0	0	6	4	0	0	0	0	0	0	0	0	1	0	12	115
7:50 AM	0	2	0	0	7	4	0	0	0	0	0	0	0	0	2	0	15	119
7:55 AM	0	0	1	0	5	3	0	0	0	0	0	0	0	0	4	0	13	119
8:00 AM	0	1	1	0	4	0	0	0	0	0	0	0	1	0	4	0	11	125
8:05 AM	0	3	1	0	6	3	0	0	0	0	0	0	0	0	2	0	15	129
8:10 AM	0	2	0	0	7	2	0	0	0	0	0	0	0	0	2	0	13	134
8:15 AM	0	1	0	0	3	2	0	0	0	0	0	0	0	0	3	0	9	135
8:20 AM	0	2	0	0	10	3	0	0	0	0	0	0	0	0	0	0	15	141
8:25 AM	0	1	2	0	8	4	0	0	0	0	0	0	1	0	3	0	19	153
8:30 AM	0	3	0	0	6	4	0	0	0	0	0	0	0	0	3	0	16	160
8:35 AM	0	1	0	0	6	4	0	0	0	0	0	0	0	0	1	0	12	162
8:40 AM	0	2	0	0	6	7	0	0	0	0	0	0	0	0	3	0	18	168
8:45 AM	0	2	0	0	4	5	0	0	0	0	0	0	0	0	6	0	17	173
8:50 AM	0	5	0	0	3	3	0	0	0	0	0	0	1	0	3	0	15	173
8:55 AM	0	1	0	0	9	3	0	0	0	0	0	0	0	0	3	0	16	176
9:00 AM	0	3	0	0	9	2	0	0	0	0	0	0	0	0	4	0	18	183
9:05 AM	0	1	0	0	12	3	0	0	0	0	0	0	0	0	6	0	22	190
9:10 AM	0	3	0	0	8	4	0	0	0	0	0	0	0	0	7	0	22	199

5-Min Count Period Beginning At	Rhododendron Dr (Northbound)				Rhododendron Dr (Southbound)				9th St [20042009] (Eastbound)				9th St [20042009] (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
9:15 AM	0	4	0	0	5	2	0	0	0	0	0	0	0	0	9	0	20	210
9:20 AM	0	3	0	0	5	2	0	0	0	0	0	0	0	0	6	0	16	211
9:25 AM	0	3	0	0	9	8	0	0	0	0	0	0	0	0	4	0	24	216
9:30 AM	0	5	1	0	7	4	0	0	0	0	0	0	1	0	9	0	27	227
9:35 AM	0	2	1	0	8	6	0	0	0	0	0	0	0	0	7	0	24	239
9:40 AM	0	2	1	0	4	5	0	0	0	0	0	0	1	0	7	0	20	241
9:45 AM	0	3	0	0	6	5	0	0	0	0	0	0	0	0	4	0	18	242
9:50 AM	0	3	1	0	9	9	0	0	0	0	0	0	1	0	3	0	26	253
9:55 AM	0	3	0	0	8	4	0	0	0	0	0	0	0	0	4	0	19	256
10:00 AM	0	6	0	0	12	1	0	0	0	0	0	0	1	0	6	0	26	264
10:05 AM	0	1	0	0	3	5	0	0	0	0	0	0	0	0	4	0	13	255
10:10 AM	0	3	0	0	10	2	0	0	0	0	0	0	0	0	6	0	21	254
10:15 AM	0	4	0	0	10	8	0	0	0	0	0	0	0	0	3	1	26	260
10:20 AM	0	2	0	0	11	5	0	0	0	0	0	0	0	0	6	0	24	268
10:25 AM	0	5	0	0	8	4	0	0	0	0	0	0	0	0	6	0	23	267
10:30 AM	0	2	1	0	10	5	0	0	0	0	0	0	0	0	11	0	29	269
10:35 AM	0	2	0	0	10	1	0	0	0	0	0	0	0	0	9	0	22	267
10:40 AM	0	7	1	0	6	5	0	0	0	0	0	0	2	0	5	0	26	273
10:45 AM	0	3	0	0	8	4	0	0	0	0	0	0	0	0	7	0	22	277
10:50 AM	0	4	1	0	8	11	0	0	0	0	0	0	1	0	7	0	32	283
10:55 AM	0	5	1	0	7	3	0	0	0	0	0	0	1	0	11	0	28	292
11:00 AM	0	4	0	0	7	8	0	0	0	0	0	0	0	0	13	0	32	298
11:05 AM	0	6	0	0	11	5	0	0	0	0	0	0	2	0	6	0	30	315
11:10 AM	0	6	0	0	11	8	0	0	0	0	0	0	1	0	11	0	37	331
11:15 AM	0	6	2	0	10	2	0	0	0	0	0	0	0	0	4	0	24	329
11:20 AM	0	3	0	0	9	6	0	0	0	0	0	0	0	0	13	0	31	336
11:25 AM	0	1	1	0	4	7	0	0	0	0	0	0	0	0	9	0	22	335
11:30 AM	0	3	1	0	6	7	0	0	0	0	0	0	1	0	5	0	23	329
11:35 AM	0	4	1	0	6	3	0	0	0	0	0	0	2	0	8	0	24	331
11:40 AM	0	4	0	0	10	4	0	0	0	0	0	0	1	0	8	0	27	332
11:45 AM	0	5	1	0	4	5	0	0	0	0	0	0	0	0	11	0	26	336
11:50 AM	0	7	0	0	9	3	0	0	0	0	0	0	1	0	5	0	25	329
11:55 AM	0	7	0	0	8	6	0	0	0	0	0	0	0	0	12	0	33	334
12:00 PM	0	3	0	0	6	6	0	0	0	0	0	0	0	0	9	0	24	326
12:05 PM	0	6	0	0	8	5	0	0	0	0	0	0	1	0	7	0	27	323
12:10 PM	0	9	1	0	9	5	0	0	0	0	0	0	0	0	14	0	38	324
12:15 PM	0	6	0	0	8	8	0	0	0	0	0	0	0	0	3	0	25	325
12:20 PM	0	5	1	0	13	5	0	0	0	0	0	0	0	0	10	0	34	328
12:25 PM	0	5	0	0	12	8	0	0	0	0	0	0	0	0	10	0	35	341
12:30 PM	0	4	0	0	10	6	0	0	0	0	0	0	0	0	6	0	26	344
12:35 PM	0	7	1	0	4	2	0	0	0	0	0	0	0	0	9	0	23	343
12:40 PM	0	7	0	0	7	5	0	0	0	0	0	0	0	0	5	0	24	340
12:45 PM	0	2	0	0	10	9	0	0	0	0	0	0	2	0	7	0	30	344
12:50 PM	0	5	2	0	11	6	0	0	0	0	0	0	1	0	11	0	36	355
12:55 PM	0	3	0	0	6	3	0	0	0	0	0	0	1	0	4	0	17	339
1:00 PM	0	6	0	0	6	8	0	0	0	0	0	0	0	0	9	0	29	344
1:05 PM	0	6	0	0	2	7	0	0	0	0	0	0	0	0	8	0	23	340
1:10 PM	0	2	1	0	11	5	0	0	0	0	0	0	1	0	8	0	28	330
1:15 PM	0	7	0	0	3	6	0	0	0	0	0	0	0	0	6	1	23	328
1:20 PM	0	3	1	0	7	9	0	0	0	0	0	0	0	0	11	0	31	325
1:25 PM	0	3	0	0	6	6	0	0	0	0	0	0	1	0	9	0	25	315
1:30 PM	0	5	0	0	11	8	0	0	0	0	0	0	0	0	9	0	33	322
1:35 PM	0	5	0	0	13	3	0	0	0	0	0	0	1	0	5	0	27	326
1:40 PM	0	7	0	0	8	8	0	0	0	0	0	0	0	0	9	0	32	334
1:45 PM	0	6	0	0	10	5	0	0	0	0	0	0	2	0	9	0	32	336
1:50 PM	0	2	1	0	14	5	0	0	0	0	0	0	1	0	8	0	31	331
1:55 PM	0	6	0	0	11	9	0	0	0	0	0	0	1	0	11	0	38	352
2:00 PM	0	8	0	0	8	7	0	0	0	1	0	0	0	0	10	0	34	357
2:05 PM	0	3	1	0	5	4	0	0	0	0	0	0	1	0	6	0	20	354
2:10 PM	0	8	0	0	8	4	0	0	0	0	0	0	4	0	6	0	30	356
2:15 PM	0	8	2	0	9	3	0	0	0	0	0	0	1	0	11	0	34	367
2:20 PM	0	7	0	0	11	7	0	0	0	0	0	0	1	0	7	0	33	369
2:25 PM	0	2	0	0	10	4	0	0	0	0	0	0	0	0	6	0	22	366
2:30 PM	0	4	1	0	8	4	0	0	0	0	0	0	0	0	4	0	21	354
2:35 PM	0	3	0	0	8	6	0	0	0	0	0	0	0	0	11	0	28	355
2:40 PM	0	8	1	0	15	8	0	0	0	0	0	0	0	0	3	0	35	358
2:45 PM	0	3	2	0	11	7	0	0	0	0	0	0	0	0	9	0	32	358
2:50 PM	0	5	0	0	8	5	0	0	0	0	0	0	1	0	13	0	32	359
2:55 PM	0	4	0	0	7	2	0	0	0	0	0	0	1	0	12	0	26	347
3:00 PM	0	3	0	0	10	4	0	0	0	0	0	0	0	0	6	0	23	336
3:05 PM	0	3	0	0	5	6	0	0	0	0	0	0	0	1	11	0	26	342
3:10 PM	0	5	0	0	10	2	0	0	0	0	0	0	0	0	6	0	23	335
3:15 PM	0	1	0	0	12	6	0	0	0	0	0	0	0	0	8	0	27	328
3:20 PM	0	2	0	0	8	10	0	0	0	0	0	0	1	0	11	0	32	327
3:25 PM	0	8	2	0	3	3	0	0	0	0	0	0	1	0	10	0	27	332
3:30 PM	0	6	1	0	9	2	0	0	0	0	0	0	0	0	12	0	30	341
3:35 PM	0	8	0	0	5	4	0	0	0	0	0	0	0	0	7	0	24	337
3:40 PM	0	6	1	0	5	6	0	0	0	0	0	0	1	0	15	0	34	336
3:45 PM	0	5	0	0	11	5	0	0	0	0	0	0	0	0	7	0	28	332
3:50 PM	0	4	1	0	5	6	0	0	0	0	0	0	2	0	9	0	27	327
3:55 PM	0	2	0	0	9	3	0	0	0	0	0	0	2	0	4	0	20	321
4:00 PM	0	7	0	0	7	3	0	0	0	0	0	0	0	0	6	0	23	321
4:05 PM	0	9	0	0	4	6	0	0	0	0	0	0	0	0	6	0	25	320
4:10 PM	0	4	0	0	10	3	0	0	0	0	0	0	0	0	11	0	28	325
4:15 PM	0	5	0	0	12	5	0	0	0	0	0	0	1	0	8	0	31	329
4:20 PM	0	4	0	0	5	4	0	0	0	0	0	0	1	0	8	0	22	319
4:25 PM	0	4	0	0	8	5	0	0	0	0	0	0	1	0	8	0	26	318

5-Min Count Period Beginning At	Rhododendron Dr (Northbound)				Rhododendron Dr (Southbound)				9th St [20042009] (Eastbound)				9th St [20042009] (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:30 PM	0	5	0	0	7	6	0	0	0	0	0	0	0	0	10	0	28	316
4:35 PM	0	6	0	0	8	1	0	0	0	0	0	0	0	0	8	0	23	315
4:40 PM	0	3	0	0	10	5	0	0	0	0	0	0	0	0	8	0	26	307
4:45 PM	0	3	0	0	5	7	0	0	0	0	0	0	0	0	11	0	26	305
4:50 PM	0	2	0	0	11	8	0	0	0	0	0	0	0	0	5	0	26	304
4:55 PM	0	4	0	0	11	3	0	0	0	0	0	0	0	0	9	0	27	311
5:00 PM	0	2	1	0	5	10	0	0	0	0	0	0	0	0	6	0	24	312
5:05 PM	0	6	0	0	4	3	0	0	0	0	0	0	1	0	11	0	25	312
5:10 PM	0	9	0	0	9	4	0	0	0	0	0	0	1	0	7	0	30	314
5:15 PM	0	2	1	0	6	4	0	0	0	0	0	0	2	0	7	0	22	305
5:20 PM	0	3	1	0	3	3	0	0	0	0	0	0	1	0	13	0	24	307
5:25 PM	0	3	0	0	6	4	0	0	0	0	0	0	0	0	5	0	18	299
5:30 PM	0	6	0	0	5	5	0	0	0	0	0	0	0	0	6	0	22	293
5:35 PM	0	3	0	0	7	3	0	0	0	0	0	0	2	0	9	0	24	294
5:40 PM	0	1	0	0	3	2	0	0	0	0	0	0	0	0	9	0	15	283
5:45 PM	0	4	0	0	3	1	0	0	0	0	0	0	0	0	6	0	14	271
5:50 PM	0	7	0	0	6	0	0	0	0	0	0	0	2	0	9	0	24	269
5:55 PM	0	9	0	0	2	3	0	0	0	0	0	0	1	0	5	0	20	262
6:00 PM	0	5	0	0	1	1	0	0	0	0	0	0	0	0	8	0	15	253
6:05 PM	0	3	0	0	0	1	0	0	0	0	0	0	0	0	5	0	9	237
6:10 PM	0	2	0	0	4	2	0	0	0	0	0	0	0	0	4	0	12	219
6:15 PM	0	3	1	0	5	4	0	0	0	0	0	0	0	0	5	0	18	215
6:20 PM	0	3	0	0	3	5	0	0	0	0	0	0	0	0	1	0	12	203
6:25 PM	0	4	0	0	2	3	0	0	0	0	0	0	0	0	2	0	11	196
6:30 PM	0	0	0	0	1	2	0	0	0	0	0	0	0	0	6	0	9	183
6:35 PM	0	5	0	0	6	2	0	0	0	0	0	0	0	0	8	0	21	180
6:40 PM	0	4	0	0	3	4	0	0	0	0	0	0	0	0	7	0	18	183
6:45 PM	0	2	0	0	4	1	0	0	0	0	0	0	0	0	4	0	11	180
6:50 PM	0	3	0	0	6	1	0	0	0	0	0	0	0	0	9	0	19	175
6:55 PM	0	1	0	0	2	3	0	0	0	0	0	0	0	0	3	0	9	164
7:00 PM	0	2	0	0	1	3	0	0	0	0	0	0	0	0	0	0	6	155
7:05 PM	0	3	0	0	2	1	0	0	0	0	0	0	0	0	4	0	10	156
7:10 PM	0	3	0	0	1	2	0	0	0	0	0	0	0	0	9	0	15	159
7:15 PM	0	3	0	0	0	2	0	0	0	0	0	0	0	0	5	0	10	151
7:20 PM	0	3	0	0	5	2	0	0	0	0	0	0	0	0	3	0	13	152
7:25 PM	0	0	0	0	2	1	0	0	0	0	0	0	0	0	4	0	7	148
7:30 PM	0	3	0	0	3	2	0	0	0	0	0	0	0	0	4	0	12	151
7:35 PM	0	2	0	0	2	2	0	0	0	0	0	0	0	0	4	0	10	140
7:40 PM	0	1	0	0	2	1	0	0	0	0	0	0	0	0	1	0	5	127
7:45 PM	0	4	0	0	3	1	0	0	0	0	0	0	0	0	1	0	9	125
7:50 PM	0	1	0	0	1	2	0	0	0	0	0	0	0	0	4	0	8	114
7:55 PM	0	6	0	0	2	1	0	0	0	0	0	0	0	0	3	0	12	117
8:00 PM	0	0	0	0	2	2	0	0	0	0	0	0	0	0	1	0	5	116
8:05 PM	0	0	0	0	1	3	0	0	0	0	0	0	0	0	2	0	6	112
8:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	98
8:15 PM	0	2	0	0	2	1	0	0	0	0	0	0	0	0	1	0	6	94
8:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	84
8:25 PM	0	1	0	0	1	1	0	0	0	0	0	0	0	0	1	0	4	81
8:30 PM	0	2	0	0	4	3	0	0	0	0	0	0	0	0	1	0	10	79
8:35 PM	0	3	0	0	2	4	0	0	0	0	0	0	0	0	3	0	12	81
8:40 PM	0	2	0	0	1	1	0	0	0	0	0	0	0	0	1	0	5	81
8:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	73
8:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	66
8:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	55
9:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	2	52
9:05 PM	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	3	49
9:10 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	3	51
9:15 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2	0	4	49
9:20 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	1	0	5	51
9:25 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	49
9:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0	3	42
9:35 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	3	0	5	35
9:40 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2	0	4	34
9:45 PM	0	1	0	0	0	2	0	0	0	0	0	0	0	0	2	1	6	39
9:50 PM	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3	41
9:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	41

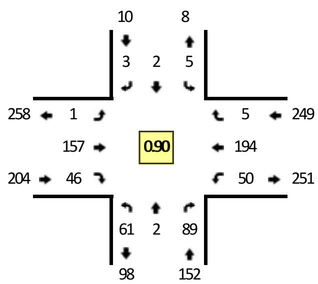
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	64	4	0	132	84	0	0	0	4	0	0	8	0	116	0	412
Heavy Trucks	0	0	0		12	4	0		0	0	0		0	0	12		28
Buses																	
Pedestrians		0				0				0				4			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

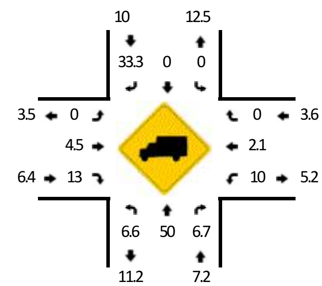
Report generated on 6/26/2023 12:59 PM

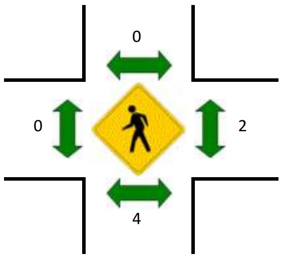
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

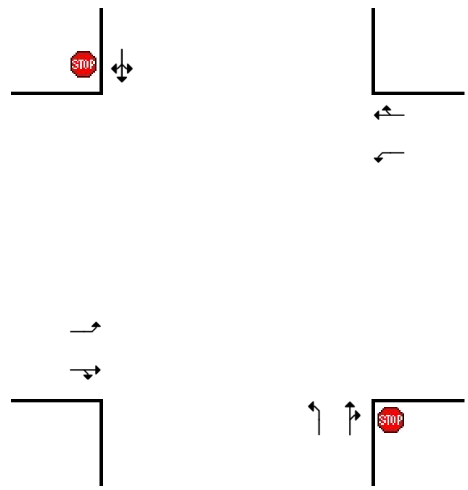
LOCATION: Kingwood St -- 35th St [999110077]
CITY/STATE: Florence, OR
QC JOB #: 16201902
DATE: Tue, May 16 2023

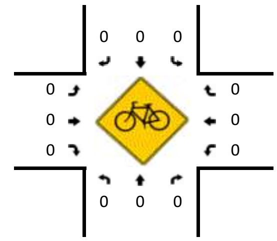


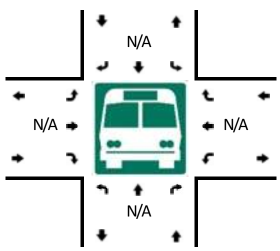
Peak-Hour: 3:10 PM -- 4:10 PM
Peak 15-Min: 3:40 PM -- 3:55 PM

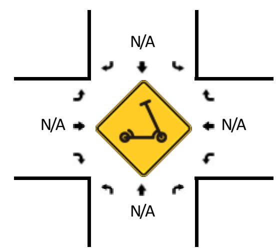












5-Min Count Period Beginning At	Kingwood St (Northbound)				Kingwood St (Southbound)				35th St [999110077] (Eastbound)				35th St [999110077] (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	1	0	0	0	0	0	0	0	0	2	1	0	1	2	0	0	7	
6:05 AM	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	3	
6:10 AM	1	0	1	0	0	0	0	0	0	0	1	0	0	2	0	0	5	
6:15 AM	0	0	0	0	0	0	0	0	0	5	0	0	1	0	0	0	6	
6:20 AM	0	0	1	0	0	0	0	0	0	3	1	0	2	0	0	0	7	
6:25 AM	3	0	0	0	0	0	0	0	0	2	0	0	1	1	0	0	7	
6:30 AM	1	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	4	
6:35 AM	0	0	2	0	0	0	0	0	0	2	3	0	0	2	0	0	9	
6:40 AM	0	0	0	0	0	0	0	0	0	10	1	0	1	2	0	0	14	
6:45 AM	1	0	0	0	0	0	0	0	0	2	1	0	1	6	0	0	11	
6:50 AM	0	0	2	0	0	0	0	0	1	7	0	0	0	2	0	0	12	
6:55 AM	0	0	1	0	0	0	0	0	0	4	2	0	2	3	0	0	12	97
7:00 AM	1	0	1	0	0	0	0	0	0	6	2	0	1	3	0	0	14	104
7:05 AM	0	0	1	0	0	0	0	0	0	5	0	0	0	3	1	0	10	111
7:10 AM	2	0	3	0	0	0	0	0	0	6	3	0	1	4	0	0	19	125
7:15 AM	0	0	2	0	0	0	0	0	0	9	1	0	1	7	0	0	20	139
7:20 AM	1	0	2	0	0	0	0	0	0	5	0	0	0	2	0	0	10	142
7:25 AM	2	0	2	0	0	0	1	0	0	6	1	0	2	5	1	0	20	155
7:30 AM	1	0	0	0	0	0	0	0	0	12	3	0	5	2	0	0	23	174
7:35 AM	0	1	2	0	0	0	0	0	0	4	2	0	2	6	0	0	17	182
7:40 AM	2	0	2	0	0	0	0	0	0	11	3	0	7	3	0	0	28	196
7:45 AM	1	0	1	0	0	0	0	0	0	12	6	0	5	5	0	0	30	215
7:50 AM	2	0	5	0	0	0	0	0	0	7	4	0	3	6	0	0	27	230
7:55 AM	2	0	5	0	0	0	0	0	0	15	9	0	8	6	0	0	45	263
8:00 AM	1	0	2	0	0	0	0	0	0	9	7	0	3	9	0	0	31	280
8:05 AM	8	1	1	0	0	0	0	0	0	10	4	0	2	5	0	0	31	301
8:10 AM	3	0	6	0	0	0	0	0	0	13	8	0	1	10	1	0	42	324
8:15 AM	4	0	3	0	0	0	0	0	0	14	4	0	9	9	0	0	43	347
8:20 AM	3	0	4	0	0	0	0	0	0	5	4	0	1	5	1	0	23	360
8:25 AM	1	0	5	0	0	0	0	0	0	19	5	0	5	5	0	0	40	380
8:30 AM	1	0	1	0	0	0	0	0	0	7	1	0	5	13	1	0	29	386
8:35 AM	1	0	1	0	0	0	0	0	0	12	0	0	5	3	0	0	22	391
8:40 AM	0	0	4	0	0	0	0	0	0	9	2	0	4	10	1	0	30	393
8:45 AM	1	0	4	0	0	0	0	0	1	15	0	0	4	6	1	0	32	395
8:50 AM	2	0	6	0	0	0	0	0	0	10	2	0	5	7	0	0	32	400
8:55 AM	2	0	2	0	0	0	0	0	0	16	9	0	2	5	0	0	36	391
9:00 AM	0	1	8	0	0	0	0	0	0	9	1	0	2	5	0	0	26	386
9:05 AM	1	0	2	0	0	0	0	0	0	10	0	0	3	6	0	0	22	377
9:10 AM	2	0	3	0	0	1	0	0	1	10	0	0	4	6	1	0	28	363

5-Min Count Period Beginning At	Kingwood St (Northbound)				Kingwood St (Southbound)				35th St [999110077] (Eastbound)				35th St [999110077] (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
9:15 AM	2	0	9	0	0	0	0	0	0	14	1	0	2	8	0	0	36	356
9:20 AM	5	0	1	0	0	1	0	0	0	8	2	0	4	13	0	0	34	367
9:25 AM	0	0	4	0	1	0	0	0	0	17	2	0	4	10	0	0	38	365
9:30 AM	1	0	3	0	0	0	0	0	0	11	0	0	4	8	1	0	28	364
9:35 AM	4	0	7	0	0	0	0	0	2	14	6	0	7	10	0	0	50	392
9:40 AM	2	0	6	0	0	1	1	0	1	11	2	0	8	14	1	0	47	409
9:45 AM	2	0	4	0	1	0	0	0	0	10	2	0	2	4	0	0	25	402
9:50 AM	3	0	4	0	0	0	0	0	0	15	6	0	6	12	0	0	46	416
9:55 AM	0	0	4	0	0	0	0	0	0	10	2	0	4	12	0	0	32	412
10:00 AM	2	0	5	0	0	0	0	0	0	10	5	0	2	7	1	0	32	418
10:05 AM	1	0	6	0	0	0	0	0	0	12	1	0	5	5	0	0	30	426
10:10 AM	2	0	4	0	1	0	0	0	0	15	4	0	7	11	1	0	45	443
10:15 AM	4	0	6	0	0	0	0	0	0	10	3	0	8	11	1	0	43	450
10:20 AM	1	0	5	0	0	0	0	0	1	8	0	0	4	15	2	0	36	452
10:25 AM	0	0	4	0	1	0	0	0	0	7	4	0	3	12	0	0	31	445
10:30 AM	7	0	5	0	0	0	0	0	0	9	3	0	3	7	0	0	34	451
10:35 AM	1	0	1	0	0	0	0	0	0	9	3	0	7	14	0	0	35	436
10:40 AM	3	0	9	0	0	0	0	0	0	15	1	0	1	13	1	0	43	432
10:45 AM	2	0	2	0	0	1	0	0	1	19	9	0	4	9	0	0	47	454
10:50 AM	1	0	4	0	1	0	0	0	0	10	6	0	6	13	1	0	42	450
10:55 AM	3	0	5	0	0	0	0	0	0	16	1	0	2	11	1	0	39	457
11:00 AM	10	0	8	0	0	0	0	0	0	5	1	0	2	12	0	0	38	463
11:05 AM	3	0	8	0	0	0	0	0	1	18	5	0	5	15	0	0	55	488
11:10 AM	3	0	8	0	0	0	0	0	0	9	3	0	2	13	1	0	39	482
11:15 AM	1	0	3	0	1	0	0	0	0	14	5	0	6	8	0	0	38	477
11:20 AM	5	0	5	0	0	0	0	0	0	16	1	0	5	16	0	0	48	489
11:25 AM	2	0	3	0	0	0	0	0	0	14	2	0	4	18	1	0	44	502
11:30 AM	4	0	5	0	0	0	0	0	0	15	0	0	4	12	0	0	40	508
11:35 AM	5	0	3	0	0	0	0	0	1	13	3	0	5	16	1	0	47	520
11:40 AM	4	0	9	0	0	0	1	0	0	12	1	0	7	10	0	0	44	521
11:45 AM	2	0	7	0	0	0	0	0	0	14	2	0	6	12	0	0	43	517
11:50 AM	2	0	6	0	0	0	0	0	0	10	4	0	4	14	1	0	41	516
11:55 AM	4	0	8	0	0	0	0	0	0	17	0	0	3	9	3	0	44	521
12:00 PM	5	0	6	0	1	0	0	0	0	16	6	0	3	13	0	0	50	533
12:05 PM	4	0	8	0	0	0	0	0	0	13	0	0	2	15	1	0	43	521
12:10 PM	5	0	8	0	0	0	2	0	0	16	5	0	3	14	0	0	53	535
12:15 PM	4	1	2	0	0	0	1	0	0	22	4	0	5	21	2	0	62	559
12:20 PM	4	1	4	0	1	0	0	0	0	22	3	0	6	20	1	0	62	573
12:25 PM	5	0	5	0	0	0	0	0	0	14	2	0	4	14	0	0	44	573
12:30 PM	5	0	8	0	0	1	0	0	1	20	6	0	5	13	1	0	60	593
12:35 PM	3	0	5	0	0	0	1	0	0	15	3	0	3	9	1	0	40	586
12:40 PM	5	0	5	0	2	0	0	0	0	5	2	0	3	14	0	0	36	578
12:45 PM	3	0	5	0	1	0	0	0	0	22	5	0	2	19	0	0	57	592
12:50 PM	4	0	6	0	1	0	1	0	0	19	6	0	2	13	2	0	54	605
12:55 PM	2	1	7	0	0	0	0	0	0	15	2	0	7	12	0	0	46	607
1:00 PM	3	0	12	0	0	0	0	0	0	12	3	0	3	13	1	0	47	604
1:05 PM	3	0	0	0	0	0	0	0	0	18	3	0	4	14	0	0	42	603
1:10 PM	6	0	5	0	0	0	0	0	0	12	4	0	2	18	0	0	47	597
1:15 PM	3	0	6	0	0	1	0	0	2	12	3	0	6	20	1	0	54	589
1:20 PM	1	0	5	0	0	1	0	0	0	21	2	0	6	17	0	0	53	580
1:25 PM	3	1	4	0	0	0	0	0	0	8	2	0	5	15	0	0	38	574
1:30 PM	2	0	7	0	1	0	0	0	1	8	2	0	5	18	0	0	44	558
1:35 PM	4	0	8	0	0	0	0	0	0	14	4	0	7	16	0	0	53	571
1:40 PM	6	0	5	0	1	0	0	0	0	11	3	0	6	17	1	0	50	585
1:45 PM	1	0	6	0	0	0	0	0	0	10	3	0	5	24	0	0	49	577
1:50 PM	3	0	5	0	1	0	1	0	0	15	2	0	5	13	0	0	45	568
1:55 PM	5	0	1	0	0	0	0	0	0	9	4	0	5	15	0	0	39	561
2:00 PM	5	0	9	0	2	0	1	0	0	9	3	0	6	7	1	0	43	557
2:05 PM	3	1	8	0	0	0	0	0	0	7	2	0	3	7	0	0	31	546
2:10 PM	5	0	4	0	0	0	1	0	0	5	1	0	6	14	0	0	36	535
2:15 PM	3	0	4	0	1	0	0	0	0	15	5	0	6	12	0	0	46	527
2:20 PM	2	0	4	0	0	0	0	0	0	8	1	0	4	9	0	0	28	502
2:25 PM	8	0	4	0	2	0	0	0	1	13	4	0	8	10	0	0	50	514
2:30 PM	4	0	3	0	0	0	0	0	0	9	3	0	1	13	0	0	33	503
2:35 PM	3	0	3	0	1	1	0	0	1	13	6	0	4	10	0	0	42	492
2:40 PM	5	0	2	0	0	1	0	0	0	13	2	0	2	12	0	0	37	479
2:45 PM	4	0	3	0	0	0	0	0	0	11	6	0	2	9	0	0	35	465
2:50 PM	2	0	8	0	1	0	0	0	0	10	1	0	7	11	0	0	40	460
2:55 PM	4	0	5	0	1	1	0	0	0	17	2	0	3	11	0	0	44	465
3:00 PM	5	0	2	0	0	0	0	0	0	14	5	0	3	17	2	0	48	470
3:05 PM	5	0	4	0	1	0	1	0	0	11	3	0	4	16	0	0	45	484
3:10 PM	7	1	6	0	1	0	0	0	0	10	6	0	4	14	0	0	49	497
3:15 PM	4	0	11	0	0	1	2	0	0	8	5	0	5	13	0	0	49	500
3:20 PM	5	0	5	0	1	0	0	0	0	8	5	0	2	12	1	0	39	511
3:25 PM	7	0	5	0	0	0	0	0	0	24	2	0	5	21	1	0	65	526
3:30 PM	5	0	10	0	0	0	0	0	0	10	4	0	5	12	1	0	47	540
3:35 PM	6	0	7	0	0	0	0	0	0	18	1	0	4	17	0	0	53	551
3:40 PM	7	1	10	0	0	1	0	0	0	17	2	0	3	19	1	0	61	575
3:45 PM	5	0	9	0	1	0	1	0	0	6	5	0	4	21	0	0	52	592
3:50 PM	3	0	8	0	0	0	0	0	0	20	5	0	4	18	0	0	58	610
3:55 PM	2	0	7	0	0	0	0	0	0	13	6	0	1	11	1	0	41	607
4:00 PM	7	0	4	0	1	0	0	0	0	9	3	0	4	18	0	0	46	605
4:05 PM	3	0	7	0	1	0	0	0	1	14	2	0	9	18	0	0	55	615
4:10 PM	3	0	7	0	0	0	0	0	0	10	0	0	5	12	0	0	37	603
4:15 PM	2	0	5	0	1	0	0	0	0	13	1	0	3	14	0	0	39	593
4:20 PM	8	1	7	0	2	0	0	0	0	11	3	0	3	14	0	0	49	603
4:25 PM	0	0	1	0	0	0	0	0	0	12	2	0	3	9	0	0	27	565

5-Min Count Period Beginning At	Kingwood St (Northbound)				Kingwood St (Southbound)				35th St [999110077] (Eastbound)				35th St [999110077] (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:30 PM	5	0	7	0	1	0	0	0	0	9	2	0	0	10	1	0	35	553
4:35 PM	6	0	6	0	0	0	2	0	0	8	0	0	2	13	1	0	38	538
4:40 PM	4	0	7	0	2	0	0	0	0	12	2	0	2	16	1	0	46	523
4:45 PM	2	0	9	0	0	0	0	0	0	13	0	0	1	13	0	0	38	509
4:50 PM	6	0	11	0	0	0	0	0	0	14	2	0	0	10	0	0	43	494
4:55 PM	2	0	8	0	1	0	0	0	0	12	1	0	3	18	0	0	45	498
5:00 PM	1	0	8	0	0	0	0	0	1	12	1	0	2	16	0	0	41	493
5:05 PM	5	0	7	0	3	1	0	0	0	14	2	0	3	16	0	0	51	489
5:10 PM	10	1	5	0	1	1	0	0	0	13	4	0	0	21	1	0	57	509
5:15 PM	6	0	0	0	0	1	0	0	0	8	3	0	1	11	0	0	30	500
5:20 PM	4	0	9	0	0	0	0	0	0	10	1	0	3	10	0	0	37	488
5:25 PM	4	0	6	0	0	0	0	0	0	8	5	0	1	9	0	0	33	494
5:30 PM	7	0	2	0	0	0	2	0	0	11	1	0	3	11	1	0	38	497
5:35 PM	3	0	3	0	0	0	0	0	0	4	4	0	3	10	0	0	27	486
5:40 PM	4	0	2	0	0	0	0	0	0	9	2	1	2	9	0	0	29	469
5:45 PM	4	0	8	0	0	0	0	0	0	12	4	0	4	11	0	0	43	474
5:50 PM	1	0	3	0	0	0	0	0	0	9	2	0	2	13	0	0	30	461
5:55 PM	2	0	2	0	0	0	0	0	0	7	0	0	1	10	0	0	22	438
6:00 PM	1	0	4	0	0	0	0	0	0	4	0	0	2	11	0	0	22	419
6:05 PM	2	0	4	0	0	0	0	0	0	15	0	0	1	13	0	0	35	403
6:10 PM	6	1	5	0	0	0	0	0	0	9	0	0	5	7	0	0	33	379
6:15 PM	2	0	4	0	0	0	0	0	0	6	2	0	3	10	0	0	27	376
6:20 PM	2	0	5	0	0	0	0	0	0	10	2	0	0	7	1	0	27	366
6:25 PM	2	0	1	0	0	0	0	0	0	7	0	0	2	8	0	0	20	353
6:30 PM	4	0	5	0	1	0	0	0	0	2	1	0	1	7	0	0	21	336
6:35 PM	2	0	2	0	0	0	0	0	0	9	1	0	2	16	1	0	33	342
6:40 PM	4	0	2	0	1	0	0	0	0	7	0	0	4	9	0	0	27	340
6:45 PM	4	0	0	0	0	0	0	0	0	5	0	0	1	8	0	0	18	315
6:50 PM	5	0	2	0	0	0	0	0	0	5	0	0	1	6	0	0	19	304
6:55 PM	3	0	2	0	0	0	0	0	0	7	1	0	0	6	0	0	19	301
7:00 PM	1	0	6	0	0	0	0	0	0	6	0	0	0	10	0	0	23	302
7:05 PM	3	0	4	0	0	0	0	0	0	3	3	0	0	8	0	0	21	288
7:10 PM	5	0	1	0	1	0	0	0	0	4	0	0	1	7	0	0	19	274
7:15 PM	4	0	0	0	0	0	0	0	0	7	0	0	1	2	0	0	14	261
7:20 PM	4	0	2	0	1	0	0	0	0	4	0	0	0	7	0	0	18	252
7:25 PM	0	0	1	0	1	0	0	0	0	6	3	0	1	2	0	0	14	246
7:30 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	7	0	0	11	236
7:35 PM	1	0	0	0	0	0	0	0	0	2	0	0	1	3	0	0	7	210
7:40 PM	2	0	2	0	0	0	0	0	0	1	1	0	2	4	0	0	12	195
7:45 PM	1	0	1	0	0	0	0	0	0	3	1	0	1	6	0	0	13	190
7:50 PM	0	0	3	0	0	0	0	0	0	2	0	0	0	2	0	0	7	178
7:55 PM	1	0	1	0	0	0	0	0	0	2	2	0	0	8	0	0	14	173
8:00 PM	4	0	0	0	0	0	0	0	0	3	1	0	1	6	0	0	15	165
8:05 PM	2	0	0	0	0	0	0	0	0	3	2	0	0	6	0	0	13	157
8:10 PM	3	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	5	143
8:15 PM	1	0	3	0	0	0	0	0	0	3	1	0	1	4	0	0	13	142
8:20 PM	3	0	1	0	0	0	0	0	0	2	0	0	1	8	0	0	15	139
8:25 PM	3	0	1	0	0	0	0	0	0	1	0	0	1	5	0	0	11	136
8:30 PM	1	0	1	0	0	0	0	0	0	3	0	0	0	5	0	0	10	135
8:35 PM	0	0	1	0	0	0	0	0	0	1	1	0	1	7	0	0	11	139
8:40 PM	1	0	0	0	0	0	0	0	0	3	1	0	1	4	0	0	10	137
8:45 PM	5	0	2	0	0	0	0	0	0	5	0	0	0	2	0	0	14	138
8:50 PM	1	0	1	0	0	0	0	0	0	1	0	0	1	5	0	0	9	140
8:55 PM	0	0	0	0	0	0	0	0	0	2	0	0	1	3	0	0	6	132
9:00 PM	3	0	2	0	0	0	0	0	0	4	0	0	1	3	0	0	13	130
9:05 PM	1	1	0	0	0	0	1	0	0	3	0	0	0	3	0	0	9	126
9:10 PM	0	0	2	0	0	0	0	0	0	6	2	0	0	5	0	0	15	136
9:15 PM	0	0	0	0	0	0	0	0	0	5	2	0	0	2	0	0	9	132
9:20 PM	3	0	1	0	0	0	0	0	0	1	2	0	0	3	0	0	10	127
9:25 PM	0	0	1	0	0	0	0	0	0	2	1	0	0	3	0	0	7	123
9:30 PM	0	0	0	0	0	0	0	0	0	1	4	0	0	5	0	0	10	123
9:35 PM	3	0	0	0	0	0	0	0	0	3	0	0	0	5	0	0	11	123
9:40 PM	0	0	0	0	0	0	0	0	0	1	2	0	0	1	0	0	4	117
9:45 PM	1	0	0	0	0	0	0	0	0	5	1	0	1	0	0	0	8	111
9:50 PM	1	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	3	105
9:55 PM	1	0	2	0	0	0	0	0	0	1	0	0	1	3	0	0	8	107

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	60	4	108	0	4	4	4	0	0	172	48	0	44	232	4	0	684
Heavy Trucks	4	0	8		0	0	0		0	4	8		4	0	0		28
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

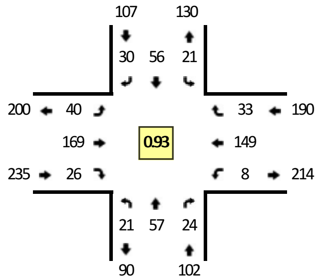
Comments:

Report generated on 6/26/2023 12:59 PM

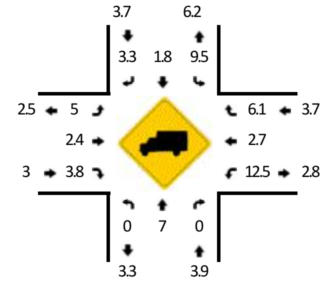
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

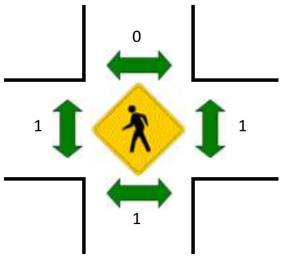
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

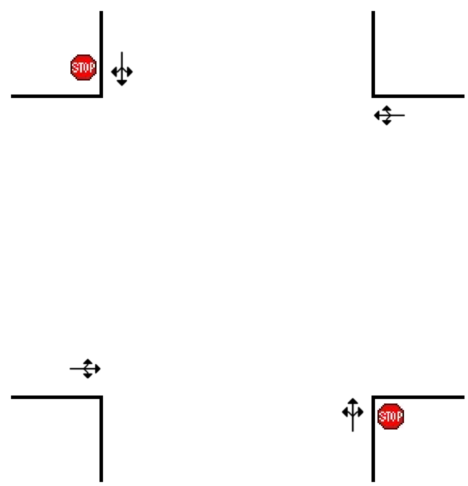
LOCATION: Kingwood St -- 9th St [999110080] | **QC JOB #:** 16201905
CITY/STATE: Florence, OR | **DATE:** Tue, May 16 2023

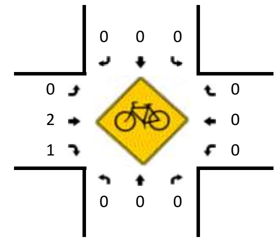


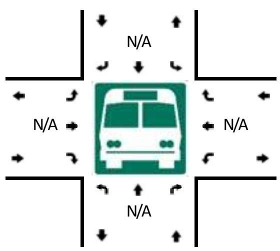
Peak-Hour: 11:10 AM -- 12:10 PM
Peak 15-Min: 11:20 AM -- 11:35 AM

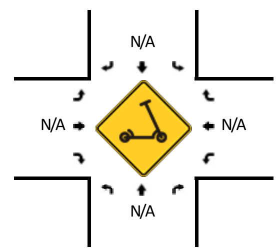












5-Min Count Period Beginning At	Kingwood St (Northbound)				Kingwood St (Southbound)				9th St [999110080] (Eastbound)				9th St [999110080] (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	1	0	0	0	0	0	0	0	3	0	0	0	4	0	0	8	
6:05 AM	0	2	2	0	0	0	0	0	1	3	0	0	0	3	1	0	12	
6:10 AM	1	2	2	0	0	0	0	0	1	2	1	0	0	2	0	0	11	
6:15 AM	0	0	0	0	1	0	2	0	1	4	1	0	0	7	2	0	18	
6:20 AM	0	2	2	0	0	1	1	0	0	5	0	0	0	6	0	0	17	
6:25 AM	0	0	1	0	1	1	1	0	0	2	0	0	0	4	2	0	12	
6:30 AM	1	7	2	0	0	0	3	0	1	1	0	0	0	3	2	0	20	
6:35 AM	0	0	1	0	0	0	1	0	0	5	0	0	0	5	4	0	16	
6:40 AM	2	0	1	0	0	0	0	0	2	3	0	0	0	9	0	0	17	
6:45 AM	0	1	2	0	1	0	0	0	0	5	0	0	0	6	0	0	15	
6:50 AM	1	4	0	0	1	0	1	0	2	6	0	0	0	9	0	0	24	
6:55 AM	1	2	0	0	1	5	1	0	2	4	0	0	0	8	0	0	24	194
7:00 AM	0	5	2	0	2	1	1	0	2	2	0	0	0	5	6	0	26	212
7:05 AM	1	1	0	0	0	5	1	0	0	4	0	0	0	7	0	0	19	219
7:10 AM	2	3	0	0	0	6	1	0	2	4	0	0	0	5	0	0	23	231
7:15 AM	1	3	3	0	4	4	1	0	0	2	0	0	0	9	2	0	29	242
7:20 AM	0	5	1	0	0	1	2	0	1	2	0	0	0	12	3	0	27	252
7:25 AM	0	3	1	0	0	2	2	0	1	11	3	0	0	8	1	0	32	272
7:30 AM	0	2	1	0	0	1	2	0	1	10	2	0	1	7	1	0	28	280
7:35 AM	1	2	0	0	0	2	2	0	1	6	0	0	1	5	1	0	21	285
7:40 AM	1	3	0	0	2	0	2	0	2	8	0	0	2	14	1	0	35	303
7:45 AM	1	8	1	0	0	6	3	0	7	9	1	0	0	7	2	0	45	333
7:50 AM	1	7	3	0	2	3	1	0	5	5	0	0	2	16	3	0	48	357
7:55 AM	0	11	1	0	1	2	3	0	4	12	0	0	1	10	2	0	47	380
8:00 AM	1	6	1	0	1	3	5	0	4	10	0	0	1	8	3	0	43	397
8:05 AM	0	11	1	0	0	5	0	0	3	9	1	0	3	15	7	0	55	433
8:10 AM	0	4	1	0	0	3	4	0	2	9	0	0	1	6	2	0	32	442
8:15 AM	0	2	2	0	6	2	4	0	6	8	1	0	0	6	1	0	38	451
8:20 AM	0	5	1	0	2	4	5	0	4	11	1	0	0	9	2	0	44	468
8:25 AM	0	1	2	0	0	3	3	0	6	8	4	0	1	12	0	0	40	476
8:30 AM	0	4	2	0	0	1	3	0	2	9	1	0	1	5	1	0	29	477
8:35 AM	1	3	0	0	1	5	5	0	1	13	0	0	1	6	2	0	38	494
8:40 AM	1	0	0	0	2	2	5	0	3	4	0	0	0	13	0	0	30	489
8:45 AM	0	0	7	0	1	3	5	0	5	10	3	0	0	11	5	0	50	494
8:50 AM	0	2	0	0	1	2	1	0	3	5	1	0	0	6	1	0	22	468
8:55 AM	1	6	1	0	0	0	2	0	5	8	0	0	1	12	1	0	37	458
9:00 AM	1	5	0	0	1	3	1	0	1	14	2	0	1	8	4	0	41	456
9:05 AM	0	0	1	0	3	3	3	0	3	7	1	0	0	8	1	0	30	431
9:10 AM	0	2	0	0	4	1	2	0	2	6	0	0	3	18	0	0	38	437

5-Min Count Period Beginning At	Kingwood St (Northbound)				Kingwood St (Southbound)				9th St [999110080] (Eastbound)				9th St [999110080] (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
9:15 AM	0	4	3	0	0	2	1	0	3	12	4	0	2	9	0	0	40	439
9:20 AM	0	4	1	0	2	1	0	0	5	7	0	0	0	6	3	0	29	424
9:25 AM	2	1	1	0	0	2	6	0	0	13	1	0	6	9	5	0	46	430
9:30 AM	0	3	2	0	1	5	5	0	3	6	1	0	0	14	0	0	40	441
9:35 AM	1	4	0	0	2	3	5	0	2	16	1	0	2	16	3	0	55	458
9:40 AM	0	5	4	0	1	3	3	0	1	15	3	0	3	17	1	0	56	484
9:45 AM	2	8	2	0	0	5	3	0	1	8	1	0	0	8	2	0	40	474
9:50 AM	1	3	2	0	1	3	1	0	1	16	1	0	2	8	1	0	40	492
9:55 AM	0	4	1	0	4	5	1	0	1	14	4	0	0	9	2	0	45	500
10:00 AM	1	4	5	0	1	1	2	0	4	11	5	0	2	12	2	0	50	509
10:05 AM	0	5	1	0	2	4	1	0	5	14	1	0	0	10	1	0	44	523
10:10 AM	4	8	2	0	1	3	4	0	2	17	1	0	0	10	2	0	54	539
10:15 AM	0	1	3	0	3	5	1	0	2	11	2	0	0	7	1	0	36	535
10:20 AM	4	2	1	0	1	3	2	0	1	22	3	0	0	13	5	0	57	563
10:25 AM	1	10	6	0	0	0	2	0	1	16	1	0	0	15	4	0	56	573
10:30 AM	2	0	0	0	0	2	4	0	4	22	2	0	0	11	3	0	50	583
10:35 AM	2	6	1	0	4	5	8	0	3	13	2	0	2	16	1	0	63	591
10:40 AM	2	3	1	0	3	2	4	0	2	11	2	0	1	12	3	0	46	581
10:45 AM	2	4	1	0	2	2	6	0	2	12	1	0	1	12	5	0	50	591
10:50 AM	1	3	3	0	0	6	10	0	2	8	1	0	0	9	1	0	44	595
10:55 AM	1	6	2	0	1	3	4	0	6	14	0	0	2	16	3	0	58	608
11:00 AM	2	6	1	0	1	2	1	0	2	10	1	0	0	13	4	0	43	601
11:05 AM	0	4	1	0	3	3	3	0	2	12	2	0	0	15	2	0	47	604
11:10 AM	2	4	1	0	3	5	1	0	6	15	3	0	0	12	5	0	57	607
11:15 AM	2	3	3	0	3	6	4	0	2	15	2	0	1	3	2	0	46	617
11:20 AM	1	4	1	0	1	3	3	0	1	17	2	0	1	18	2	0	54	614
11:25 AM	1	4	5	0	1	5	3	0	7	12	5	0	1	14	2	0	60	618
11:30 AM	5	12	5	0	2	3	2	0	5	10	2	0	0	8	2	0	56	624
11:35 AM	0	1	0	0	1	3	3	0	1	20	1	0	1	17	6	0	54	615
11:40 AM	4	4	2	0	0	3	1	0	3	15	1	0	1	10	0	0	44	613
11:45 AM	0	2	4	0	1	2	4	0	4	14	2	0	1	12	2	0	48	611
11:50 AM	1	6	1	0	2	8	3	0	1	12	0	0	1	16	1	0	52	619
11:55 AM	1	5	2	0	4	7	0	0	5	16	1	0	0	12	8	0	61	622
12:00 PM	3	7	0	0	2	9	2	0	1	6	3	0	0	15	1	0	49	628
12:05 PM	1	5	0	0	1	2	4	0	4	17	4	0	1	12	2	0	53	634
12:10 PM	1	2	5	0	1	3	5	0	4	10	0	0	1	11	5	0	48	625
12:15 PM	0	5	2	0	0	6	3	0	3	10	0	0	0	8	1	0	38	617
12:20 PM	3	5	1	0	2	3	2	0	4	15	4	0	0	12	7	0	58	621
12:25 PM	3	5	2	0	1	3	5	0	7	14	3	0	3	5	1	0	52	613
12:30 PM	0	12	0	0	1	3	1	0	3	13	1	0	1	8	3	0	46	603
12:35 PM	1	4	1	0	1	3	6	0	2	15	1	0	0	9	0	0	43	592
12:40 PM	1	1	1	0	2	6	1	0	3	12	1	0	2	10	1	0	41	589
12:45 PM	2	7	4	0	5	5	2	0	5	17	4	0	0	10	1	0	62	603
12:50 PM	4	9	1	0	2	4	4	0	5	14	4	0	0	26	2	0	75	626
12:55 PM	0	5	0	0	1	7	2	0	5	15	1	0	0	16	3	0	55	620
1:00 PM	1	4	3	0	0	6	4	0	1	11	1	0	0	12	1	0	44	615
1:05 PM	2	3	0	0	1	3	0	0	3	13	2	0	0	7	2	0	36	598
1:10 PM	4	4	3	0	1	3	6	0	1	13	5	0	3	13	1	0	57	607
1:15 PM	2	5	2	0	0	6	0	0	5	10	6	0	0	11	3	0	50	619
1:20 PM	1	2	1	0	1	4	6	0	2	12	1	0	2	16	4	0	52	613
1:25 PM	3	5	0	0	2	2	3	0	3	15	1	0	1	9	2	0	46	607
1:30 PM	1	6	1	0	8	3	4	0	4	5	1	0	1	12	1	0	47	608
1:35 PM	0	3	4	0	2	1	1	0	2	14	2	0	1	16	1	0	47	612
1:40 PM	1	4	1	0	1	4	3	0	4	5	1	0	3	11	4	0	42	613
1:45 PM	1	4	1	0	1	7	8	0	1	6	0	0	2	18	8	0	57	608
1:50 PM	2	2	6	0	2	8	2	0	2	10	1	0	1	17	1	0	54	587
1:55 PM	1	3	0	0	2	6	5	0	3	12	1	0	0	12	1	0	46	578
2:00 PM	1	5	1	0	3	2	5	0	1	11	1	0	0	12	5	0	47	581
2:05 PM	3	6	2	0	1	7	3	0	5	20	2	0	1	8	3	0	61	606
2:10 PM	3	2	2	0	2	1	1	0	4	11	1	0	0	17	2	0	46	595
2:15 PM	1	6	2	0	2	4	5	0	1	13	3	0	1	17	4	0	59	604
2:20 PM	1	2	3	0	1	3	1	0	2	14	1	0	1	12	2	0	43	595
2:25 PM	3	3	2	0	0	1	4	0	3	23	1	0	0	8	2	0	50	599
2:30 PM	1	1	1	0	5	1	4	0	1	14	3	0	1	8	2	0	42	594
2:35 PM	1	3	3	0	0	6	3	0	1	17	0	0	1	11	3	0	49	596
2:40 PM	0	2	3	0	4	4	1	0	5	12	1	0	1	3	3	0	39	593
2:45 PM	0	4	4	0	2	5	2	0	3	16	1	0	3	11	1	0	52	588
2:50 PM	1	5	2	0	1	8	5	0	5	13	2	0	1	21	4	0	68	602
2:55 PM	0	6	1	0	1	4	3	0	2	11	1	0	1	8	2	0	40	596
3:00 PM	0	7	2	0	2	6	6	0	1	9	1	0	1	12	2	0	49	598
3:05 PM	3	3	1	0	0	4	2	0	3	10	3	0	0	15	7	0	51	588
3:10 PM	1	7	2	0	4	2	4	0	7	12	1	0	1	8	5	0	54	596
3:15 PM	3	4	4	0	2	4	3	0	8	21	0	0	1	18	2	0	70	607
3:20 PM	1	5	1	0	5	1	2	0	2	11	1	0	0	8	1	0	38	602
3:25 PM	1	4	2	0	1	9	2	0	2	5	0	0	3	10	2	0	41	593
3:30 PM	1	9	1	0	1	7	4	0	13	12	1	0	0	9	2	0	60	611
3:35 PM	3	4	1	0	7	10	3	0	5	11	2	0	0	9	1	0	56	618
3:40 PM	0	7	3	0	3	2	3	0	4	8	2	0	2	10	1	0	45	624
3:45 PM	2	2	2	0	0	5	4	0	1	14	1	0	1	11	2	0	45	617
3:50 PM	0	7	2	0	1	5	2	0	2	9	1	0	2	10	1	0	42	591
3:55 PM	1	6	4	0	2	5	1	0	1	13	1	0	1	9	1	0	45	596
4:00 PM	2	3	2	0	3	5	1	0	4	9	1	0	0	7	3	0	40	587
4:05 PM	0	8	1	0	1	5	1	0	4	11	4	0	4	9	1	0	49	585
4:10 PM	1	1	1	0	5	7	2	0	7	16	0	0	1	11	1	0	53	584
4:15 PM	0	4	3	0	0	7	3	0	1	13	2	0	1	10	2	0	46	560
4:20 PM	2	3	3	0	1	6	1	0	3	4	1	0	0	5	0	0	29	551
4:25 PM	1	2	3	0	3	8	1	0	2	10	4	0	1	12	1	0	48	558

5-Min Count Period Beginning At	Kingwood St (Northbound)				Kingwood St (Southbound)				9th St [999110080] (Eastbound)				9th St [999110080] (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:30 PM	1	2	1	0	4	4	1	0	3	19	0	0	1	12	4	0	52	550
4:35 PM	1	8	1	0	1	9	1	0	1	13	1	0	3	5	1	0	45	539
4:40 PM	1	5	0	0	1	3	3	0	2	10	0	0	2	15	1	0	43	537
4:45 PM	1	5	1	0	0	4	2	0	3	13	0	0	1	12	3	0	45	537
4:50 PM	2	2	0	0	2	2	0	0	2	15	1	0	1	11	1	0	39	534
4:55 PM	2	2	1	0	3	2	7	0	1	16	0	0	1	7	3	0	45	534
5:00 PM	3	6	1	0	0	6	1	0	1	8	1	0	0	9	4	0	40	534
5:05 PM	1	3	1	0	1	2	1	0	6	21	2	0	4	9	2	0	53	538
5:10 PM	2	2	3	0	2	7	1	0	2	15	0	0	0	8	0	0	42	527
5:15 PM	1	6	2	0	3	5	2	0	1	11	4	0	3	12	5	0	55	536
5:20 PM	0	6	3	0	1	5	2	0	3	6	0	0	0	9	1	0	36	543
5:25 PM	0	3	0	0	0	5	0	0	8	9	4	0	3	7	1	0	40	535
5:30 PM	0	4	2	0	4	4	1	0	2	7	0	0	1	8	4	0	37	520
5:35 PM	2	3	3	0	1	2	2	0	5	9	2	0	1	12	1	0	43	518
5:40 PM	1	1	1	0	0	4	2	0	2	8	1	0	1	11	0	0	32	507
5:45 PM	0	6	1	0	1	4	2	0	1	8	1	0	0	13	0	0	37	499
5:50 PM	0	1	1	0	1	6	1	0	1	5	0	0	1	12	2	0	31	491
5:55 PM	1	5	3	0	0	1	0	0	0	9	1	0	0	7	3	0	30	476
6:00 PM	1	1	6	0	1	1	1	0	1	7	0	0	1	4	1	0	25	461
6:05 PM	0	1	1	0	1	1	1	0	1	3	0	0	1	7	1	0	18	426
6:10 PM	1	1	3	0	1	1	1	0	1	10	2	0	1	11	1	0	34	418
6:15 PM	2	4	1	0	2	1	2	0	2	5	0	0	2	8	1	0	30	393
6:20 PM	0	1	4	0	1	3	1	0	3	4	2	0	2	4	3	0	28	385
6:25 PM	1	2	1	0	0	3	1	0	3	4	0	0	3	10	0	0	28	373
6:30 PM	0	1	3	0	2	1	3	0	1	6	0	0	2	17	1	0	37	373
6:35 PM	0	1	0	0	0	1	2	0	3	9	0	0	1	9	0	0	26	356
6:40 PM	0	2	2	0	4	2	4	0	0	3	0	0	3	9	0	0	29	353
6:45 PM	0	1	0	0	0	1	5	0	3	5	1	0	0	8	2	0	26	342
6:50 PM	0	4	0	0	3	1	1	0	4	12	2	0	2	9	0	0	38	349
6:55 PM	0	2	0	0	1	1	4	0	1	5	0	0	0	3	5	0	22	341
7:00 PM	1	4	0	0	1	1	1	0	1	5	0	0	1	6	1	0	22	338
7:05 PM	1	1	0	0	0	3	3	0	1	2	0	0	1	3	1	0	16	336
7:10 PM	0	1	0	0	0	1	1	0	1	5	0	0	2	6	0	0	17	319
7:15 PM	1	0	0	0	0	1	2	0	5	7	1	0	1	9	1	0	28	317
7:20 PM	0	4	0	0	0	5	0	0	2	4	0	0	1	2	0	0	18	307
7:25 PM	0	0	1	0	0	3	0	0	1	3	1	0	0	4	1	0	14	293
7:30 PM	1	1	1	0	0	2	0	0	2	4	0	0	0	3	0	0	14	270
7:35 PM	1	1	0	0	0	1	0	0	0	4	1	0	0	6	0	0	14	258
7:40 PM	1	3	2	0	0	1	0	0	1	3	0	0	0	2	0	0	13	242
7:45 PM	0	1	0	0	0	3	0	0	0	2	0	0	2	5	1	0	14	230
7:50 PM	1	2	0	0	0	1	0	0	1	4	0	0	0	3	0	0	12	204
7:55 PM	1	1	2	0	0	1	1	0	0	4	0	0	1	1	2	0	14	196
8:00 PM	0	1	2	0	0	0	1	0	3	4	0	0	1	2	0	0	14	188
8:05 PM	1	0	1	0	0	1	0	0	0	2	0	0	1	4	0	0	10	182
8:10 PM	0	1	3	0	0	1	0	0	0	4	0	0	1	2	0	0	12	177
8:15 PM	1	3	1	0	1	1	1	0	0	1	0	0	0	8	3	0	20	169
8:20 PM	0	1	0	0	0	3	1	0	0	6	0	0	0	3	2	0	16	167
8:25 PM	0	2	1	0	0	0	0	0	0	2	0	0	0	4	0	0	9	162
8:30 PM	0	0	1	0	0	0	0	0	0	3	0	0	0	2	0	0	6	154
8:35 PM	1	3	0	0	1	0	0	0	1	3	1	0	3	3	0	0	16	156
8:40 PM	1	4	0	0	0	1	0	0	0	1	0	0	0	1	1	0	9	152
8:45 PM	0	1	0	0	0	0	2	0	2	3	1	0	0	0	2	0	11	149
8:50 PM	0	0	1	0	0	0	0	0	0	1	0	0	1	3	1	0	7	144
8:55 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	4	134
9:00 PM	0	1	0	0	0	3	0	0	1	0	0	0	1	2	0	0	8	128
9:05 PM	0	1	0	0	4	2	0	0	1	0	0	0	0	1	0	0	9	127
9:10 PM	1	0	0	0	0	0	2	0	2	1	0	0	1	1	0	0	8	123
9:15 PM	0	4	0	0	0	1	1	0	1	0	0	0	0	2	0	0	9	112
9:20 PM	0	2	0	0	0	1	0	0	0	2	0	0	1	1	1	0	8	104
9:25 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	96
9:30 PM	0	0	0	0	0	0	3	0	0	1	0	0	0	1	0	0	5	95
9:35 PM	0	0	0	0	0	0	1	0	0	2	1	0	2	3	1	0	10	89
9:40 PM	1	3	0	0	1	0	0	0	3	2	0	0	1	2	0	0	13	93
9:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3	85
9:50 PM	0	0	0	0	2	1	0	0	3	2	1	0	0	1	1	0	11	89
9:55 PM	0	0	1	0	0	3	1	0	1	1	0	0	0	2	0	0	9	94

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	28	80	44	0	16	44	32	0	52	156	36	0	8	160	24	0	680
Heavy Trucks	0	12	0		0	0	0		4	4	0		0	8	0		28
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

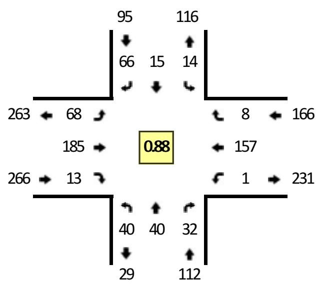
Comments:

Report generated on 6/26/2023 12:59 PM

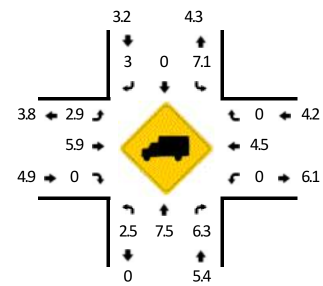
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

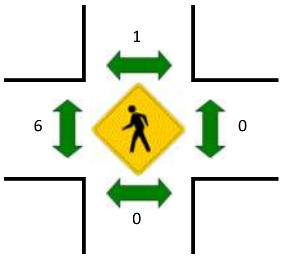
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

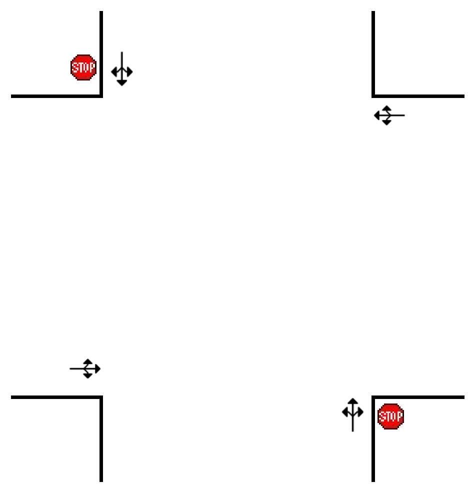
LOCATION: Oak St -- 35th St [999110393] | **QC JOB #:** 16201901
CITY/STATE: Florence, OR | **DATE:** Tue, May 16 2023

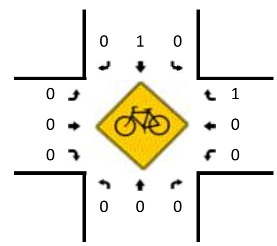


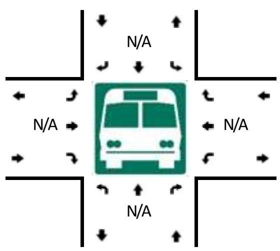
Peak-Hour: 3:25 PM -- 4:25 PM
Peak 15-Min: 3:25 PM -- 3:40 PM

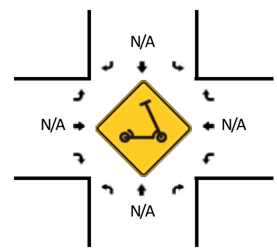












5-Min Count Period Beginning At	Oak St (Northbound)				Oak St (Southbound)				35th St [999110393] (Eastbound)				35th St [999110393] (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	0	1	0	0	0	1	0	0	1	0	0	0	1	0	0	4	
6:05 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	4	
6:10 AM	1	0	0	0	0	0	0	0	0	1	0	0	1	1	1	0	5	
6:15 AM	0	0	0	0	0	0	0	0	0	5	1	0	0	1	0	0	7	
6:20 AM	0	0	0	0	0	0	1	0	0	3	0	0	0	1	0	0	5	
6:25 AM	0	0	0	0	0	0	1	0	0	5	0	0	0	1	0	0	7	
6:30 AM	0	0	0	0	2	0	0	0	0	2	0	0	0	2	1	0	7	
6:35 AM	1	0	0	0	0	0	0	0	2	2	0	0	0	1	0	0	6	
6:40 AM	0	1	0	0	0	0	0	0	2	3	2	0	0	3	0	0	11	
6:45 AM	0	0	0	0	2	0	2	0	0	5	0	0	0	4	0	0	13	
6:50 AM	0	1	0	0	1	0	1	0	1	7	1	0	1	1	0	0	14	
6:55 AM	0	0	0	0	1	0	3	0	2	2	0	0	0	2	0	0	10	93
7:00 AM	1	0	0	0	0	1	1	0	1	5	1	0	0	3	0	0	13	102
7:05 AM	0	0	0	0	0	0	0	0	2	5	0	0	0	3	0	0	10	108
7:10 AM	1	0	0	0	0	0	2	0	2	7	1	0	0	3	0	0	16	119
7:15 AM	0	0	0	0	1	0	2	0	2	9	0	0	1	4	0	0	19	131
7:20 AM	0	0	0	0	0	0	1	0	2	6	0	0	1	3	0	0	13	139
7:25 AM	0	0	0	0	1	2	1	0	1	7	2	0	0	6	0	0	20	152
7:30 AM	0	0	0	0	1	0	1	0	0	9	5	0	1	6	0	0	23	168
7:35 AM	1	0	0	0	1	1	0	0	4	4	5	0	3	6	0	0	25	187
7:40 AM	3	1	1	0	0	3	4	0	3	5	5	0	0	6	1	0	32	208
7:45 AM	0	2	2	0	0	1	3	0	0	10	2	0	3	4	1	0	28	223
7:50 AM	3	1	0	0	1	6	1	0	3	7	3	0	0	8	2	0	35	244
7:55 AM	1	3	3	0	1	1	6	0	4	14	5	0	4	8	0	0	50	284
8:00 AM	2	2	2	0	3	4	3	0	3	4	7	0	1	6	0	0	37	308
8:05 AM	2	3	5	0	0	1	1	0	2	6	6	0	2	6	0	0	34	332
8:10 AM	3	1	2	0	1	4	3	0	1	8	6	0	0	7	1	0	37	353
8:15 AM	4	3	3	0	1	1	3	0	5	18	1	0	1	10	1	0	51	385
8:20 AM	1	3	2	0	1	2	4	0	2	5	1	0	1	6	0	0	28	400
8:25 AM	0	1	1	0	0	0	0	0	5	14	4	0	0	7	0	0	32	412
8:30 AM	2	0	2	0	1	3	5	0	0	10	0	0	1	12	0	0	36	425
8:35 AM	1	0	1	0	1	4	3	0	7	3	1	0	0	4	0	0	25	425
8:40 AM	0	1	1	0	0	1	1	0	2	15	2	0	0	13	0	0	36	429
8:45 AM	2	0	0	0	1	1	4	0	4	16	0	0	0	6	0	0	34	435
8:50 AM	0	5	1	0	0	0	3	0	4	15	0	0	0	7	0	0	35	435
8:55 AM	0	0	2	0	1	2	3	0	1	16	2	0	0	5	2	0	34	419
9:00 AM	0	1	0	0	1	0	2	0	3	12	0	0	0	10	0	0	29	411
9:05 AM	0	3	3	0	0	2	4	0	1	13	1	0	2	3	2	0	34	411
9:10 AM	1	1	1	0	2	0	3	0	2	8	1	0	0	6	0	0	25	399

5-Min Count Period Beginning At	Oak St (Northbound)				Oak St (Southbound)				35th St [999110393] (Eastbound)				35th St [999110393] (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
9:15 AM	1	1	1	0	0	0	1	0	5	18	0	0	0	8	0	0	35	383
9:20 AM	2	1	1	0	1	0	5	0	4	8	0	0	1	9	1	0	33	388
9:25 AM	0	1	0	0	2	0	5	0	6	11	3	0	1	11	1	0	41	397
9:30 AM	2	2	0	0	0	1	2	0	4	14	0	0	1	9	0	0	35	396
9:35 AM	2	1	1	0	1	2	3	0	2	15	2	0	0	16	0	0	45	416
9:40 AM	6	1	3	0	0	1	7	0	5	13	3	0	2	9	1	0	51	431
9:45 AM	1	4	1	0	2	0	2	0	4	11	0	0	0	4	0	0	29	426
9:50 AM	1	1	1	0	1	2	4	0	3	17	2	0	1	12	1	0	46	437
9:55 AM	0	1	2	0	0	0	6	0	3	8	1	0	0	9	0	0	30	433
10:00 AM	0	3	1	0	1	2	1	0	3	16	0	0	1	9	0	0	37	441
10:05 AM	0	0	1	0	2	0	3	0	1	19	0	0	1	8	0	0	35	442
10:10 AM	1	0	0	0	0	2	10	0	2	14	2	0	0	10	0	0	41	458
10:15 AM	4	1	2	0	0	1	6	0	5	14	1	0	0	11	1	0	46	469
10:20 AM	2	1	4	0	1	0	5	0	2	10	0	0	0	10	0	0	35	471
10:25 AM	1	0	1	0	1	1	3	0	2	11	0	0	0	11	1	0	32	462
10:30 AM	1	4	2	0	0	1	3	0	3	12	1	0	0	10	0	0	37	464
10:35 AM	4	0	0	0	2	1	5	0	2	8	1	0	1	8	0	0	32	451
10:40 AM	2	2	1	0	1	1	3	0	8	14	2	0	2	13	1	0	50	450
10:45 AM	0	2	2	0	1	2	3	0	5	17	2	0	1	12	0	0	47	468
10:50 AM	5	1	4	0	2	1	4	0	1	13	0	0	0	10	0	0	41	463
10:55 AM	0	2	3	0	1	2	2	0	7	11	3	0	0	14	0	0	45	478
11:00 AM	1	2	2	0	1	0	2	0	5	11	1	0	0	15	0	0	40	481
11:05 AM	1	3	1	0	1	1	6	0	10	14	2	0	0	14	1	0	54	500
11:10 AM	1	4	2	0	1	1	11	0	7	14	0	0	0	9	0	0	50	509
11:15 AM	1	1	1	0	0	3	3	0	3	13	3	0	0	6	1	0	35	498
11:20 AM	3	1	0	0	1	0	6	0	6	13	0	0	0	13	1	0	44	507
11:25 AM	6	5	8	0	2	1	5	0	5	15	2	0	0	10	0	0	59	534
11:30 AM	3	5	3	0	0	2	7	0	4	13	1	0	0	12	0	0	50	547
11:35 AM	1	0	2	0	0	1	10	0	6	8	1	0	0	10	1	0	40	555
11:40 AM	0	3	1	0	0	3	4	0	4	16	1	0	0	13	0	0	45	550
11:45 AM	1	2	2	0	2	3	9	0	7	16	1	0	0	11	2	0	56	559
11:50 AM	1	3	3	0	1	4	5	0	3	13	3	0	0	13	0	0	49	567
11:55 AM	1	2	2	0	1	0	6	0	6	17	1	0	0	11	2	0	49	571
12:00 PM	0	4	2	0	2	2	4	0	4	22	0	0	1	14	1	0	56	587
12:05 PM	2	1	4	0	0	2	2	0	5	16	1	0	0	12	0	0	45	578
12:10 PM	3	2	4	0	1	0	6	0	4	17	1	0	0	12	1	0	51	579
12:15 PM	1	0	4	0	1	2	10	0	4	25	0	0	0	16	1	0	64	608
12:20 PM	2	2	1	0	1	0	6	0	4	22	0	0	0	21	0	0	59	623
12:25 PM	1	1	1	0	1	1	4	0	5	19	1	0	0	12	0	0	46	610
12:30 PM	3	2	1	0	2	3	4	0	6	20	2	0	0	16	1	0	60	620
12:35 PM	3	1	0	0	2	1	5	0	4	16	3	0	0	8	1	0	44	624
12:40 PM	1	1	0	0	0	1	5	0	4	8	0	0	0	11	0	0	31	610
12:45 PM	3	2	2	0	0	2	4	0	2	23	2	0	1	15	1	0	57	611
12:50 PM	0	1	5	0	1	0	11	0	3	23	2	0	0	6	1	0	53	615
12:55 PM	1	0	2	0	1	1	9	0	6	15	2	0	0	14	3	0	54	620
1:00 PM	1	3	3	0	0	2	2	0	7	14	4	0	0	12	1	0	49	613
1:05 PM	0	1	1	0	0	0	12	0	3	20	1	0	1	12	0	0	51	619
1:10 PM	2	1	2	0	1	0	3	0	7	8	1	0	0	17	0	0	42	610
1:15 PM	4	0	1	0	1	0	7	0	3	12	1	0	0	16	0	0	45	591
1:20 PM	2	2	1	0	0	1	4	0	5	20	1	0	0	15	0	0	51	583
1:25 PM	1	3	2	0	2	3	7	0	5	10	1	0	1	12	0	0	47	584
1:30 PM	0	1	2	0	1	2	6	0	4	10	2	0	0	15	0	0	43	567
1:35 PM	1	1	2	0	3	0	7	0	9	13	2	0	1	18	0	0	57	580
1:40 PM	3	4	2	0	2	0	1	0	1	15	1	0	1	20	1	0	51	600
1:45 PM	1	1	2	0	0	3	14	0	3	10	2	0	1	16	1	0	54	597
1:50 PM	0	0	1	0	2	0	1	0	3	18	1	0	3	13	0	0	42	586
1:55 PM	3	2	1	0	1	0	8	0	3	10	0	0	1	11	1	0	41	573
2:00 PM	3	5	2	0	2	1	4	0	7	11	1	0	1	6	0	0	43	567
2:05 PM	0	1	0	0	1	1	3	0	4	10	2	0	2	10	0	0	34	550
2:10 PM	4	0	1	0	1	1	4	0	3	5	3	0	0	15	0	0	37	545
2:15 PM	1	2	3	0	2	3	4	0	6	12	2	0	1	13	0	0	49	549
2:20 PM	0	1	1	0	2	1	8	0	3	11	0	0	1	7	0	0	35	533
2:25 PM	1	0	1	0	2	1	10	0	3	16	2	0	0	10	0	0	46	532
2:30 PM	3	2	0	0	1	0	1	0	0	8	1	0	0	11	1	0	28	517
2:35 PM	4	0	2	0	3	2	4	0	2	14	1	0	0	5	0	0	37	497
2:40 PM	0	1	3	0	0	1	5	0	3	12	3	0	0	7	0	0	35	481
2:45 PM	1	0	1	0	2	2	4	0	4	11	0	0	0	11	0	0	36	463
2:50 PM	1	0	2	0	0	3	3	0	7	13	0	0	0	18	2	0	49	470
2:55 PM	1	3	4	0	1	2	2	0	6	17	1	0	1	8	0	0	46	475
3:00 PM	5	1	1	0	1	2	6	0	2	15	0	0	0	14	1	0	48	480
3:05 PM	2	2	2	0	0	1	9	0	3	8	3	0	0	16	1	0	47	493
3:10 PM	0	1	5	0	0	3	2	0	10	12	1	0	1	12	1	0	48	504
3:15 PM	3	2	1	0	2	1	3	0	2	14	1	0	1	11	1	0	42	497
3:20 PM	1	3	1	0	0	1	7	0	2	14	2	0	1	12	0	0	44	506
3:25 PM	5	5	9	0	1	1	7	0	3	21	3	0	0	12	1	0	68	528
3:30 PM	8	10	2	0	1	0	4	0	7	14	2	0	0	14	0	0	62	562
3:35 PM	5	3	4	0	2	1	3	0	5	17	3	0	0	9	0	0	52	577
3:40 PM	4	3	4	0	0	0	10	0	9	20	0	0	1	12	1	0	64	606
3:45 PM	3	2	2	0	0	1	9	0	6	13	0	0	0	17	0	0	53	623
3:50 PM	2	4	1	0	1	1	3	0	6	18	0	0	0	14	0	0	50	624
3:55 PM	0	1	2	0	1	2	2	0	8	15	1	0	0	12	1	0	45	623
4:00 PM	4	3	1	0	1	2	4	0	4	11	0	0	0	14	0	0	44	619
4:05 PM	4	1	4	0	3	4	10	0	4	18	1	0	0	14	1	0	64	636
4:10 PM	2	3	0	0	0	1	5	0	4	13	0	0	0	13	4	0	45	633
4:15 PM	3	3	1	0	3	1	5	0	3	10	2	0	0	13	0	0	44	635
4:20 PM	0	2	2	0	1	1	4	0	9	15	1	0	0	13	0	0	48	639
4:25 PM	2	1	2	0	2	0	6	0	1	8	1	0	0	3	0	0	26	597

5-Min Count Period Beginning At	Oak St (Northbound)				Oak St (Southbound)				35th St [999110393] (Eastbound)				35th St [999110393] (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:30 PM	1	3	1	0	2	3	6	0	4	16	1	0	0	7	0	0	44	579
4:35 PM	4	3	1	0	1	1	5	0	4	9	0	0	0	11	1	0	40	567
4:40 PM	2	1	2	0	2	1	2	0	5	15	1	0	0	14	0	0	45	548
4:45 PM	1	4	2	0	0	1	1	0	8	16	0	0	0	11	1	0	45	540
4:50 PM	3	1	2	0	0	2	2	0	3	18	1	0	0	8	0	0	40	530
4:55 PM	2	4	1	0	2	1	4	0	6	16	0	0	1	15	2	0	54	539
5:00 PM	2	1	3	0	1	1	5	0	9	15	1	0	1	13	0	0	52	547
5:05 PM	0	1	5	0	1	0	15	0	3	20	0	0	0	10	0	0	55	538
5:10 PM	1	4	4	0	1	2	8	0	8	11	1	0	0	14	2	0	56	549
5:15 PM	0	0	4	0	2	2	4	0	2	11	0	0	0	10	3	0	38	543
5:20 PM	1	2	2	0	1	3	2	0	8	10	1	0	0	8	1	0	39	534
5:25 PM	2	4	2	0	0	5	5	0	1	15	1	0	0	7	0	0	42	550
5:30 PM	2	1	1	0	0	2	5	0	3	7	2	0	1	7	1	0	32	538
5:35 PM	3	3	3	0	1	3	9	0	4	2	1	0	0	6	2	0	37	535
5:40 PM	1	1	2	0	1	3	3	0	3	11	0	0	0	6	0	0	31	521
5:45 PM	1	0	1	0	0	1	7	0	4	11	0	0	1	7	1	0	34	510
5:50 PM	1	2	1	0	3	0	1	0	1	12	2	0	0	14	0	0	37	507
5:55 PM	0	1	1	0	0	1	5	0	1	4	0	0	0	8	1	0	22	475
6:00 PM	3	2	0	0	2	2	2	0	5	6	1	0	0	8	0	0	31	454
6:05 PM	0	0	0	0	2	2	3	0	0	13	2	0	0	13	2	0	37	436
6:10 PM	1	0	0	0	1	0	3	0	6	13	0	0	0	8	0	0	32	412
6:15 PM	2	1	0	0	0	1	2	0	5	5	0	0	0	8	1	0	25	399
6:20 PM	1	0	0	0	2	1	2	0	4	9	3	0	0	4	0	0	26	386
6:25 PM	0	0	2	0	1	1	3	0	3	5	1	0	0	9	0	0	25	369
6:30 PM	1	2	2	0	1	0	1	0	1	6	0	0	0	7	1	0	22	359
6:35 PM	2	1	0	0	1	0	2	0	4	10	0	0	0	16	0	0	36	358
6:40 PM	1	0	2	0	0	0	6	0	5	7	0	0	0	7	0	0	28	355
6:45 PM	0	1	0	0	0	0	1	0	0	4	0	0	0	8	0	0	14	335
6:50 PM	3	1	1	0	0	1	1	0	0	6	0	0	0	2	0	0	15	313
6:55 PM	1	1	1	0	0	2	3	0	1	10	1	0	0	4	0	0	24	315
7:00 PM	0	0	0	0	0	0	2	0	1	10	1	0	0	8	1	0	23	307
7:05 PM	0	1	0	0	1	0	1	0	1	7	0	0	0	8	1	0	20	290
7:10 PM	1	0	0	0	0	0	3	0	2	4	1	0	1	5	0	0	17	275
7:15 PM	0	1	1	0	0	1	1	0	0	8	0	0	0	3	0	0	15	265
7:20 PM	1	1	2	0	0	0	1	0	5	1	0	0	0	6	1	0	18	257
7:25 PM	1	0	1	0	0	0	1	0	2	5	0	0	1	2	1	0	14	246
7:30 PM	1	2	1	0	1	1	1	0	2	3	0	0	0	8	0	0	20	244
7:35 PM	1	0	0	0	0	0	0	0	1	3	0	0	0	2	0	0	7	215
7:40 PM	0	1	0	0	0	1	3	0	0	3	0	0	0	5	0	0	13	200
7:45 PM	0	1	0	0	0	0	3	0	1	2	1	0	0	4	0	0	12	198
7:50 PM	0	1	0	0	0	0	2	0	1	3	0	0	0	0	0	0	7	190
7:55 PM	1	0	0	0	0	0	5	0	2	3	1	0	0	6	0	0	18	184
8:00 PM	0	0	0	0	0	0	2	0	1	3	0	0	0	5	0	0	11	172
8:05 PM	0	0	1	0	0	0	3	0	2	4	0	0	0	2	0	0	12	164
8:10 PM	0	0	0	0	0	0	0	0	0	2	0	0	1	4	0	0	7	154
8:15 PM	0	1	0	0	0	0	1	0	2	2	0	0	0	6	0	0	12	151
8:20 PM	2	0	0	0	0	0	3	0	0	5	0	0	0	7	0	0	17	150
8:25 PM	1	0	1	0	0	2	0	0	1	2	0	0	0	5	0	0	12	148
8:30 PM	0	0	0	0	0	1	1	0	2	2	0	0	0	7	1	0	14	142
8:35 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	9	0	0	10	145
8:40 PM	1	1	0	0	0	0	1	0	1	4	0	0	0	2	0	0	10	142
8:45 PM	0	1	1	0	0	1	3	0	2	4	0	0	0	3	0	0	15	145
8:50 PM	0	0	0	0	0	0	1	0	1	2	0	0	0	3	0	0	7	145
8:55 PM	1	1	0	0	1	0	1	0	1	0	1	0	0	2	0	0	8	135
9:00 PM	1	0	1	0	0	1	0	0	1	6	0	0	0	3	0	0	13	137
9:05 PM	0	0	0	0	0	0	0	0	2	2	1	0	0	5	0	0	10	135
9:10 PM	0	0	0	0	0	0	0	0	1	6	1	0	0	5	0	0	13	141
9:15 PM	0	0	0	0	0	0	1	0	1	4	0	0	0	1	0	0	7	136
9:20 PM	1	1	0	0	0	0	0	0	1	0	1	0	0	1	1	0	6	125
9:25 PM	0	3	0	0	0	1	1	0	1	2	0	0	0	2	0	0	10	123
9:30 PM	1	0	0	0	0	1	1	0	0	1	0	0	0	3	1	0	8	117
9:35 PM	0	0	0	0	0	0	1	0	1	1	0	0	1	6	0	0	10	117
9:40 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2	109
9:45 PM	0	0	0	0	0	0	1	0	0	6	1	0	0	0	0	0	8	102
9:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	97
9:55 PM	1	1	0	0	0	0	1	0	1	0	0	0	1	5	0	0	10	99

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	72	72	60	0	16	8	56	0	60	208	32	0	0	140	4	0	728
Heavy Trucks	0	8	8		0	0	0		4	4	0		0	4	0		28
Buses																	
Pedestrians		0				0				20				0			20
Bicycles	0	0	0		0	4	0		0	0	0		0	0	4		8
Scooters																	

Comments:

Report generated on 6/26/2023 12:59 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

ATTACHMENT B: JUNE 2021 TRAFFIC CONDITIONS WORKSHEETS

Intersection	
Int Delay, s/veh	6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	38	134	61	47	96	76
Future Vol, veh/h	38	134	61	47	96	76
Conflicting Peds, #/hr	0	2	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	44	13	22	32	33	19
Mvmt Flow	43	151	69	53	108	85

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	397	98	0	0	122	0
Stage 1	96	-	-	-	-	-
Stage 2	301	-	-	-	-	-
Critical Hdwy	6.84	6.33	-	-	4.43	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.896	3.417	-	-	2.497	-
Pot Cap-1 Maneuver	535	929	-	-	1294	-
Stage 1	833	-	-	-	-	-
Stage 2	664	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	488	927	-	-	1294	-
Mov Cap-2 Maneuver	488	-	-	-	-	-
Stage 1	833	-	-	-	-	-
Stage 2	606	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.2	0	4.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	773	1294	-
HCM Lane V/C Ratio	-	-	0.25	0.083	-
HCM Control Delay (s)	-	-	11.2	8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1	0.3	-

Intersection	
Int Delay, s/veh	4.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	73	65	2	72	75
Future Vol, veh/h	8	73	65	2	72	75
Conflicting Peds, #/hr	0	0	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	12	22	15	0	24	30
Mvmt Flow	9	82	73	2	81	84

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	325	79	0	0	80	0
Stage 1	79	-	-	-	-	-
Stage 2	246	-	-	-	-	-
Critical Hdwy	6.52	6.42	-	-	4.34	-
Critical Hdwy Stg 1	5.52	-	-	-	-	-
Critical Hdwy Stg 2	5.52	-	-	-	-	-
Follow-up Hdwy	3.608	3.498	-	-	2.416	-
Pot Cap-1 Maneuver	649	929	-	-	1390	-
Stage 1	919	-	-	-	-	-
Stage 2	772	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	606	925	-	-	1383	-
Mov Cap-2 Maneuver	606	-	-	-	-	-
Stage 1	914	-	-	-	-	-
Stage 2	725	-	-	-	-	-

Approach	WB		NB		SB	
HCM Control Delay, s	9.6		0		3.8	
HCM LOS	A					

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	879	1383	-
HCM Lane V/C Ratio	-	-	0.104	0.058	-
HCM Control Delay (s)	-	-	9.6	7.8	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.2	-

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	152	36	39	165	2	64	1	65	2	3	4
Future Vol, veh/h	0	152	36	39	165	2	64	1	65	2	3	4
Conflicting Peds, #/hr	0	0	1	1	0	0	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	125	-	-	50	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	39	21	16	28	50	25	0	28	100	100	50
Mvmt Flow	0	179	42	46	194	2	75	1	76	2	4	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	196	0	0	222	0	0	494	489	201	526	509	196
Stage 1	-	-	-	-	-	-	201	201	-	287	287	-
Stage 2	-	-	-	-	-	-	293	288	-	239	222	-
Critical Hdwy	4.1	-	-	4.26	-	-	7.35	6.5	6.48	8.1	7.5	6.7
Critical Hdwy Stg 1	-	-	-	-	-	-	6.35	5.5	-	7.1	6.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.35	5.5	-	7.1	6.5	-
Follow-up Hdwy	2.2	-	-	2.344	-	-	3.725	4	3.552	4.4	4.9	3.75
Pot Cap-1 Maneuver	1389	-	-	1268	-	-	450	482	778	340	353	737
Stage 1	-	-	-	-	-	-	751	739	-	551	529	-
Stage 2	-	-	-	-	-	-	668	677	-	589	570	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1389	-	-	1267	-	-	431	464	777	298	340	736
Mov Cap-2 Maneuver	-	-	-	-	-	-	431	464	-	298	340	-
Stage 1	-	-	-	-	-	-	750	738	-	551	510	-
Stage 2	-	-	-	-	-	-	635	653	-	530	569	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	1.5	12.6	13.6
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	431	769	1389	-	-	1267	-	-	429
HCM Lane V/C Ratio	0.175	0.101	-	-	-	0.036	-	-	0.025
HCM Control Delay (s)	15.1	10.2	0	-	-	7.9	-	-	13.6
HCM Lane LOS	C	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.6	0.3	0	-	-	0.1	-	-	0.1

Intersection	
Int Delay, s/veh	6.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	126	16	18	94	40	16	67	15	17	69	36
Future Vol, veh/h	30	126	16	18	94	40	16	67	15	17	69	36
Conflicting Peds, #/hr	1	0	2	2	0	1	0	0	3	3	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	21	19	13	24	25	39	33	24	21	38	25	12
Mvmt Flow	33	140	18	20	104	44	18	74	17	19	77	40

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	149	0	0	160	0	0	442	406	154	431	393	127
Stage 1	-	-	-	-	-	-	217	217	-	167	167	-
Stage 2	-	-	-	-	-	-	225	189	-	264	226	-
Critical Hdwy	4.31	-	-	4.34	-	-	7.43	6.74	6.41	7.48	6.75	6.32
Critical Hdwy Stg 1	-	-	-	-	-	-	6.43	5.74	-	6.48	5.75	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.43	5.74	-	6.48	5.75	-
Follow-up Hdwy	2.389	-	-	2.416	-	-	3.797	4.216	3.489	3.842	4.225	3.408
Pot Cap-1 Maneuver	1324	-	-	1296	-	-	476	502	844	477	509	897
Stage 1	-	-	-	-	-	-	720	684	-	757	719	-
Stage 2	-	-	-	-	-	-	713	704	-	669	676	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1323	-	-	1294	-	-	386	479	840	397	486	896
Mov Cap-2 Maneuver	-	-	-	-	-	-	386	479	-	397	486	-
Stage 1	-	-	-	-	-	-	699	664	-	736	706	-
Stage 2	-	-	-	-	-	-	597	691	-	565	656	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.4	0.9	14.4	13.8
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	492	1323	-	-	1294	-	-	542
HCM Lane V/C Ratio	0.221	0.025	-	-	0.015	-	-	0.25
HCM Control Delay (s)	14.4	7.8	0	-	7.8	0	-	13.8
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.8	0.1	-	-	0	-	-	1

ATTACHMENT C: MAY 2023 TRAFFIC CONDITIONS WORKSHEETS

Intersection	
Int Delay, s/veh	5.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	129	65	48	75	82
Future Vol, veh/h	30	129	65	48	75	82
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	10	2	2	10	11	4
Mvmt Flow	34	147	74	55	85	93

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	366	103	0	0	130	0
Stage 1	103	-	-	-	-	-
Stage 2	263	-	-	-	-	-
Critical Hdwy	6.5	6.22	-	-	4.21	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.318	-	-	2.299	-
Pot Cap-1 Maneuver	618	952	-	-	1402	-
Stage 1	902	-	-	-	-	-
Stage 2	763	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	578	951	-	-	1401	-
Mov Cap-2 Maneuver	578	-	-	-	-	-
Stage 1	901	-	-	-	-	-
Stage 2	714	-	-	-	-	-

Approach	WB		NB		SB	
HCM Control Delay, s	10.4		0		3.7	
HCM LOS	B					

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	848	1401	-
HCM Lane V/C Ratio	-	-	0.213	0.061	-
HCM Control Delay (s)	-	-	10.4	7.7	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.8	0.2	-

Intersection	
Int Delay, s/veh	5.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	98	56	0	98	56
Future Vol, veh/h	3	98	56	0	98	56
Conflicting Peds, #/hr	1	0	0	2	2	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	5	0	0	7	4
Mvmt Flow	3	105	60	0	105	60

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	333	62	0	0	62	0
Stage 1	62	-	-	-	-	-
Stage 2	271	-	-	-	-	-
Critical Hdwy	6.4	6.25	-	-	4.17	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.345	-	-	2.263	-
Pot Cap-1 Maneuver	666	995	-	-	1510	-
Stage 1	966	-	-	-	-	-
Stage 2	779	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	616	993	-	-	1507	-
Mov Cap-2 Maneuver	616	-	-	-	-	-
Stage 1	964	-	-	-	-	-
Stage 2	722	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.2	0	4.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	975	1507	-
HCM Lane V/C Ratio	-	-	0.111	0.07	-
HCM Control Delay (s)	-	-	9.2	7.6	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0.2	-

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	137	18	35	165	3	48	1	79	9	0	2
Future Vol, veh/h	1	137	18	35	165	3	48	1	79	9	0	2
Conflicting Peds, #/hr	0	0	3	3	0	0	3	0	0	0	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	75	-	-	125	-	-	50	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	10	6	14	2	0	2	0	3	0	0	0
Mvmt Flow	1	152	20	39	183	3	53	1	88	10	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	186	0	0	175	0	0	434	431	165	472	440	188
Stage 1	-	-	-	-	-	-	167	167	-	263	263	-
Stage 2	-	-	-	-	-	-	267	264	-	209	177	-
Critical Hdwy	4.1	-	-	4.24	-	-	7.12	6.5	6.23	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.326	-	-	3.518	4	3.327	3.5	4	3.3
Pot Cap-1 Maneuver	1401	-	-	1332	-	-	532	520	877	506	514	859
Stage 1	-	-	-	-	-	-	835	764	-	747	694	-
Stage 2	-	-	-	-	-	-	738	694	-	798	756	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1401	-	-	1328	-	-	516	503	874	444	497	857
Mov Cap-2 Maneuver	-	-	-	-	-	-	516	503	-	444	497	-
Stage 1	-	-	-	-	-	-	832	761	-	746	674	-
Stage 2	-	-	-	-	-	-	712	674	-	716	753	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	1.3	10.8	12.6
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	516	866	1401	-	-	1328	-	-	487
HCM Lane V/C Ratio	0.103	0.103	0.001	-	-	0.029	-	-	0.025
HCM Control Delay (s)	12.8	9.6	7.6	-	-	7.8	-	-	12.6
HCM Lane LOS	B	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.3	0.3	0	-	-	0.1	-	-	0.1

Intersection												
Int Delay, s/veh	5.4											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	33	149	14	16	116	21	14	45	17	24	62	23
Future Vol, veh/h	33	149	14	16	116	21	14	45	17	24	62	23
Conflicting Peds, #/hr	1	0	2	2	0	1	1	0	1	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	6	3	7	6	5	5	0	4	0	12	3	4
Mvmt Flow	37	166	16	18	129	23	16	50	19	27	69	26

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	153	0	0	184	0	0	475	439	177	462	436	143
Stage 1	-	-	-	-	-	-	250	250	-	178	178	-
Stage 2	-	-	-	-	-	-	225	189	-	284	258	-
Critical Hdwy	4.16	-	-	4.16	-	-	7.1	6.54	6.2	7.22	6.53	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.54	-	6.22	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.54	-	6.22	5.53	-
Follow-up Hdwy	2.254	-	-	2.254	-	-	3.5	4.036	3.3	3.608	4.027	3.336
Pot Cap-1 Maneuver	1403	-	-	1367	-	-	503	509	871	494	512	899
Stage 1	-	-	-	-	-	-	759	696	-	801	750	-
Stage 2	-	-	-	-	-	-	782	740	-	702	692	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1402	-	-	1364	-	-	421	486	869	430	489	897
Mov Cap-2 Maneuver	-	-	-	-	-	-	421	486	-	430	489	-
Stage 1	-	-	-	-	-	-	735	674	-	777	739	-
Stage 2	-	-	-	-	-	-	679	729	-	617	671	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.3	0.8	13.2	13.9
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	523	1402	-	-	1364	-	-	523
HCM Lane V/C Ratio	0.161	0.026	-	-	0.013	-	-	0.232
HCM Control Delay (s)	13.2	7.6	0	-	7.7	0	-	13.9
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.6	0.1	-	-	0	-	-	0.9

Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	55	165	8	1	136	9	28	29	19	17	18	54
Future Vol, veh/h	55	165	8	1	136	9	28	29	19	17	18	54
Conflicting Peds, #/hr	2	0	0	0	0	2	3	0	0	0	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	8	0	0	6	0	4	3	0	0	6	2
Mvmt Flow	63	188	9	1	155	10	32	33	22	19	20	61

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	167	0	0	197	0	0	525	488	193	510	487	165
Stage 1	-	-	-	-	-	-	319	319	-	164	164	-
Stage 2	-	-	-	-	-	-	206	169	-	346	323	-
Critical Hdwy	4.12	-	-	4.1	-	-	7.14	6.53	6.2	7.1	6.56	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.53	-	6.1	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.53	-	6.1	5.56	-
Follow-up Hdwy	2.218	-	-	2.2	-	-	3.536	4.027	3.3	3.5	4.054	3.318
Pot Cap-1 Maneuver	1411	-	-	1388	-	-	460	479	854	477	475	879
Stage 1	-	-	-	-	-	-	688	651	-	843	755	-
Stage 2	-	-	-	-	-	-	791	757	-	674	643	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1408	-	-	1388	-	-	396	454	854	422	450	875
Mov Cap-2 Maneuver	-	-	-	-	-	-	396	454	-	422	450	-
Stage 1	-	-	-	-	-	-	654	618	-	799	753	-
Stage 2	-	-	-	-	-	-	713	755	-	591	611	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.9	0.1	14	11.8
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	485	1408	-	-	1388	-	-	627
HCM Lane V/C Ratio	0.178	0.044	-	-	0.001	-	-	0.161
HCM Control Delay (s)	14	7.7	0	-	7.6	0	-	11.8
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.6	0.1	-	-	0	-	-	0.6

APPENDIX J: IMPLEMENTING ORDINANCES AND FINDINGS

FLORENCE TSP IMPLEMENTING ORDINANCES

Date:	October 11, 2023
To:	Wendy Farley-Campbell, Shirley Gray, Erin Reynolds, Mike Miller, City of Florence Michael Duncan, Oregon Department of Transportation
From:	Darci Rudzinski, Clinton "CJ" Doxsee, and Brandon Crawford, MIG | APG
Project:	City of Florence Transportation System Plan Update
Subject:	Florence TSP Draft Implementing Ordinances

Overview

This memo summarizes the Draft Implementing Ordinances for the Florence Transportation System Plan (TSP). Implementing Ordinances include recommendations for compliance with requirements of Oregon Administrative Rule (OAR) Chapter 660, Division 12 (OAR 660-012), otherwise known as the "Transportation Planning Rule" (TPR). The project team conducted a regulatory review, or "Code Audit," earlier in the TSP update process, which evaluates the City's compliance with the TPR. The audit is included as an attachment to this memo (Attachment A). The Code Audit informs which sections of the Florence City Code (FCC) the City needs to amend to comply with the TPR.

The project team shared some "Code Concepts" for the City to consider (Attachment B), which were delivered to the City in January 2023 along with the TPR Code Audit. The Code Concepts discuss potential TSP implementation strategies for Florence to consider. Some of the Code Concepts that were discussed include multimodal standards, emerging technologies, off-street parking updates, and land use-transportation coordination. Some of the code concepts are included in the recommended implementing ordinances, however most of them are intended as preliminary strategies for the City to consider. The recommended Implementing Ordinances in this memo are focused on bringing the City into compliance with the TPR and ensuring that local land use/zoning regulations are consistent with the TSP.

Implementing Ordinances Summary

Table 1 summarizes FCC amendment recommendations and corresponding TPR references. Amendments to FCC Title 10 – Zoning Regulations – are intended to implement updated transportation standards and to be consistent with the TPR.

Table 1. Implementing Ordinances Summary

Reference Number	FCC Chapter or Section	Proposed Amendments	Comments and TPR Citation
1.	10-1-3	Add language to FCC 10-1-3 that ensures zoning map, ordinance amendments, and plan amendments are consistent with the planned transportation system and transportation facilities.	OAR 660-012-0045(2)(g) and -0060
2.	10-2-13	Clarify multimodal terms related to multi-use paths	
3.	10-2-13 and 10-3-3	Add provisions to support the installation of electric vehicle charging stations	
4.	10-3-3	Add provisions for carpool and vanpool parking standards for employee parking.	OAR 660-012-0045(4)(d)
5.	10-3-3 and 10-35-4	Identify connection between minimum parking requirements and transit facilities within ¼ mile of a transit stop	OAR 660-012-0045(4) (b)
6.	10-35-2-7, 10-35-2-12, and 10-36-2-13	Update roadway and access management standards, including driveway and intersection spacing, consistent with updated standards in the TSP.	OAR 660-012-0045(2)(a)
7.	10-35-2-6 and 10-35-3-4	Specify that transportation-related conditions of approval may include bicycle and pedestrian improvements.	OAR 660-012-0045(2)(e)
8.	10-36-2-5	Update the existing cross section requirements to be consistent with updated cross section standards in the TSP.	OAR 660-012-0045(6)

Implementing Ordinances DRAFT

1. ZONING AND PLAN AMENDMENT CONSISTENCY WITH TSP AND TRANSPORTATIN FACILITIES

10-1-3: AMENDMENTS AND CHANGES:

[…]

C. Type IV (Legislative) Changes:

1. Initiation: A legislative change in zoning district boundaries, in the text of this Title, (Title 10), Title 11, or in the Comprehensive Plan may be initiated by resolution of the Planning Commission or by a request of the Council to the Planning Commission that proposes changes be considered by the Commission and its recommendation returned to the Council, or by an application for an amendment by a citizen.

[…]

3. Transportation System Consistency: A legislative change in zoning district boundaries, in the text of this Title, (Title 10), Title 11, or in the Comprehensive Plan must be consistent with the functions, capacities, and performance standards of facilities identified in the Transportation System Plan.

2. CLARIFY MULTI-MODAL TERMS

10-2-13 DEFINITIONS: For the purpose of this Title, certain words, terms and phrases are defined below.

[…]

Accessways: A walkway or multi-use path~~way~~ providing a through connection for pedestrians and bicyclists between two streets, between two lots, or between a development and adjoining public right-of-way. It may be an accessway for pedestrians and bicyclists (with no vehicle access), or a walkway ~~walk way~~ on public or private property (i.e., with a public access easement).

[…]

Multi-Use Path: A paved 10 to 12-foot wide path~~way~~ that is physically separated from motorized vehicular traffic; shared with pedestrians, bicyclists, skaters, and other non-motorized users, including e-bikes and e-scooters. (Ord. No. 2, Series 2011)

~~Multi-Use Pathway: A transportation facility serving pedestrians, bicycles and, where allowed, equestrian usage.~~

[…]

Walkways: A sidewalk or path~~way~~, including accessways, providing a pedestrian connection that is improved to City standards, or to other roadway authority standards, as applicable.

[…]

3. ELECTRIC VEHICLE CHARGING

10-2-13 DEFINITIONS: For the purpose of this Title, certain words, terms and phrases are defined below.

[…]

Charging Level: The amount of voltage provided to charge an electric vehicle varies depending on the type of equipment as follows:

A. Level 1 operates on a fifteen (15) to twenty (20) amp breaker on a one hundred twenty (120) volt AC circuit.

B. Level 2 operates on a forty (40) to one hundred (100) amp breaker on a two hundred eight (208) or two hundred forty (240) volt AC circuit.

C. Direct-current fast charger (DCFC) operates on a sixty (60) amp or higher breaker on a four hundred eighty (480) volt or higher three phase circuit with special grounding equipment. DCFC stations can also be referred to as rapid charging stations that are typically characterized by industrial grade electrical outlets that allow for faster recharging of electric vehicles.

[...]

Electric Vehicle: Any vehicle that is licensed and registered for operation on public and private highways, roads, and streets; and operates either partially or exclusively using an electric motor powered by an externally charged on-board battery.

[…]

10-3-3: MINIMUM STANDARDS BY USE: The number of required off-street vehicle parking spaces shall be determined in accordance with the standards in Table 10-3-1. Where a use is not specifically listed in this table, parking requirements are determined by finding that a use is similar to one of those listed in terms of parking needs, or by estimating parking needs individually using the demand analysis option described below:

D. For Commercial and Retail Trade types and for sites with five or more dwelling units, the following standards must be met.

1. Commercial and Retail Trade. For Commercial and Retail Trade type uses provided in Table 10-3-1.C, at least 20 percent of the total number of parking spaces must include electrical conduit adjacent to the spaces that will allow for the installation of at least a Level 2 electric vehicle charger.
2. In buildings with five or more dwelling units, if parking spaces are provided, the following standards apply.
   A. If between one and six spaces are provided for dwelling units, 100 percent of the spaces must include electrical conduit adjacent to the spaces that will allow for the installation of at least a Level 2 electric vehicle charger.
   B. If seven or more spaces are provided for dwelling units, 50 percent, or six, whichever is greater of the parking spaces provided must include electrical conduit adjacent to the spaces that will allow for installation of at least a Level 2 electric vehicle charger.

4. CARPOOL AND VANPOOL PARKING

10-3-3: MINIMUM STANDARDS BY USE: The number of required off-street vehicle parking spaces shall be determined in accordance with the standards in Table 10-3-1. Where a use is not specifically listed in this table, parking requirements are determined by finding that a use is similar to one of those listed in terms of parking needs, or by estimating parking needs individually using the demand analysis option described below:

[…]

<u>E. Carpool and vanpool parking. Uses with at least 25 or more required parking spaces shall include designated carpool or vanpool parking.</u>

1. <u>At least 10% of the employee, student, or commuter parking spaces shall be carpool or vanpool parking.</u>
2. <u>Carpool and vanpool designated spaces must be the closest non-ADA parking spaces to the main employee, student, or commuter entrance.</u>
3. <u>Carpool and vanpool parking may count toward the minimum parking requirements by use in FCC Table 10-3-1.</u>
4. <u>Carpool and vanpool parking shall be marked "Reserved – Carpool/Vanpool Only."</u>

5. MINMUM PARKING REQUIREMENTS AND TRANSIT FACILITIES

10-3-3: MINIMUM STANDARDS BY USE: The number of required off-street vehicle parking spaces shall be determined in accordance with the standards in Table 10-3-1. Where a use is not specifically listed in this table, parking requirements are determined by finding that a use is similar to one of those listed in terms of parking needs, or by estimating parking needs individually using the demand analysis option described below:

[…]

C. The minimum number of parking spaces may also be determined through a parking demand analysis prepared by the applicant and approved by the Planning Commission. This parking demand analysis may include an acceptable proposal for alternate modes of transportation, including a description of existing and proposed facilities and assurances that the use of the alternate modes of transportation will continue to reduce the need for on-site parking on an ongoing basis. Examples of alternate modes include but are not limited to:

1. Transit-related parking reduction. The number of minimum parking spaces may be reduced by up to 10% if:
   a. The proposal is located within a ¼ mile of an existing or planned transit route <u>(FCC 10-35-4 identifies additional requirements for proposals within a ¼ mile of an existing or planned transit stop)</u>, and;
   b. Transit-related amenities such as transit stops, pull-outs, shelters, park-and-ride lots, transit-oriented development, and transit service on an adjacent street are present or will be provided by the applicant.

10-35-4: Transit Facilities: Proposed uses other than single-family residences and duplexes must provide for transit riders by providing developmental improvements to accommodate current or planned transit stops pursuant to the following:

A. If the proposed uses are located on a site within ¼ mile of an existing or planned transit stop, the proposed pedestrian circulation system must demonstrate a safe and direct pedestrian route from building entrances to the transit stop or to a public right-of-way that provides access to the transit stop (FCC 10-3-3.C identifies potential reductions in minimum parking requirements for providing transit-related amenities).

6. ROADWAY AND ACCESS MANAGEMENT STANDARDS

10-35-2-7: Intersection Separation; Backing onto Public Streets: New and modified accesses shall conform to the following standards:

A. Except as provided under subsection B, below, the distance from a street intersection to a driveway and from a driveway to a driveway shall meet the following minimum spacing requirements for the street's classification, as measured from side of driveway to street or alley pavement (see Figure 10-35(1)). A greater separation may be required for accesses onto an arterial or collector for compliance with ODOT or County requirements.

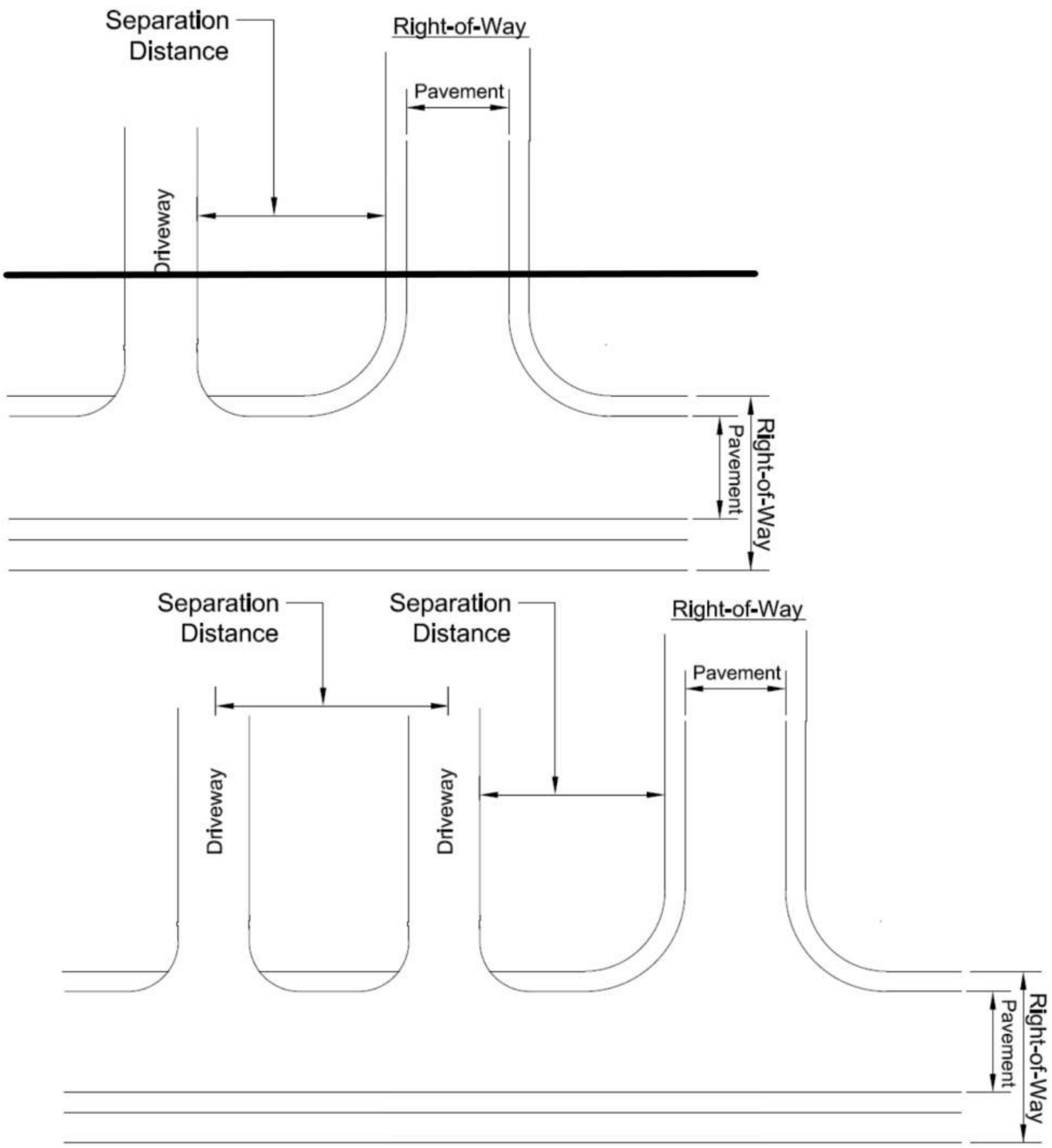
Separation Distance from Driveway Edge to ~~Pavement~~Street Right-of-Way

Alley	15 feet
Local Street	25 feet
Collector Street	30 feet
Arterial Street	50 feet

Separation Distance from Driveway Centerline to Driveway Centerline

Alley	N/A
Local Street	25 feet
Collector Street	125 feet
Arterial Street	125 feet

Figure 10-35(1): Separation Distance from Driveway to Street and Driveway to Driveway



10-35-2-12: Driveway Design: All openings onto a public right-of-way and driveways shall conform to the following:

[…]

B. Driveways. Driveways shall meet the following standards, subject to review and approval by the Public Works Director:

1. Driveways for single family residences shall have a width of not less than twelve (12) ~~ten (10)~~ feet and not more than twenty (20) ~~twenty-four (24)~~ feet. Driveways

leading to covered parking should be not less than 20 feet in depth from the property line to the structure.

[…]

10-36-2-13: Street Alignment, Radii:

A. On Arterial and Collector Roadways, intersections shall be spaced at a minimum of 250 feet, as measured from the centerline of the street.

B. On Local Streets, street centerlines at intersections may not be offset by more than two feet. Intersections shall be spaced at a minimum of 125 feet, as measured from the centerline of the street.

C. Corner curb return radii shall be at least thirty-five (35) feet on Arterial Streets and at least twenty (20) feet on other streets, except where smaller radii are approved by the Public Works Director. Larger Radii may be required by the Director to accommodate emergency and freight vehicles.

7. CONDITIONS OF APPROVAL

10-35-2-6: Conditions of Approval: The roadway authority may require ~~as a condition of granting a land use or development approval or access permit, to ensure the safe and efficient operation of the street and highway system~~. the following as a condition of granting a land use or development approval or access permit to ensure the safe and efficient operation of the street and highway system.

1. ~~t~~The closing or consolidation of existing curb cuts or other vehicle access points, recording of reciprocal access easements (i.e., for shared driveways), development of a frontage street, installation of traffic control devices, and/or other mitigation.
2. Mitigation measures for impacts to the transportation system as documented in a Traffic Impact Study. These measures may be off-site and may include multi-modal transportation improvements which would help protect the function and operation of the planned transportation system, provided that the measures are proportionate to the impact of the proposed development.

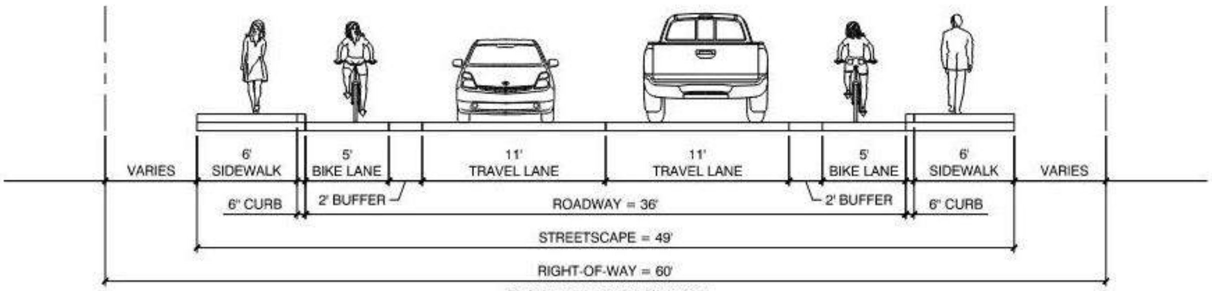
[…]

10-35-3-4: Conditions of Approval: The roadway authority may require pedestrian or bicycle improvements as a condition of granting land use or development approval to ensure the development properly connects to the City's planned bicycle and pedestrian network.

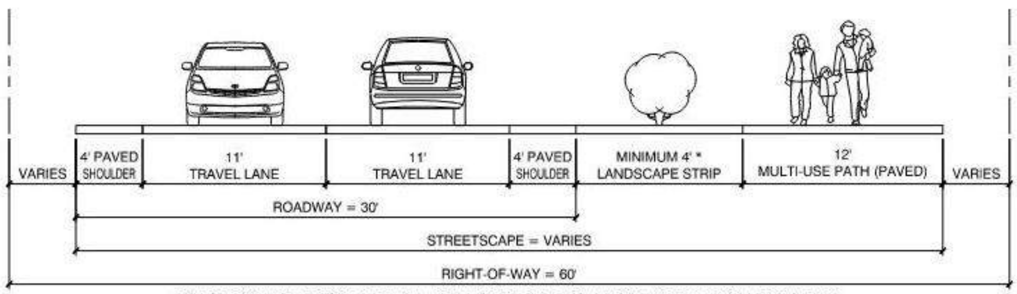
8. CROSS SECTION UPDATES

10-36-2-5: Rights-of-Way and Street Sections: Street rights-of-way and improvements shall be consistent with the Transportation System Plan and standards specified in Title 8 Chapter 2.

A. Street right-of-way and pavement widths shall be based on the following cross section standards. See individual zoning chapters for additional requirements regarding sidewalk width (for sidewalks wider than the standard 5 feet).
   1. Minor Arterial Cross Sections

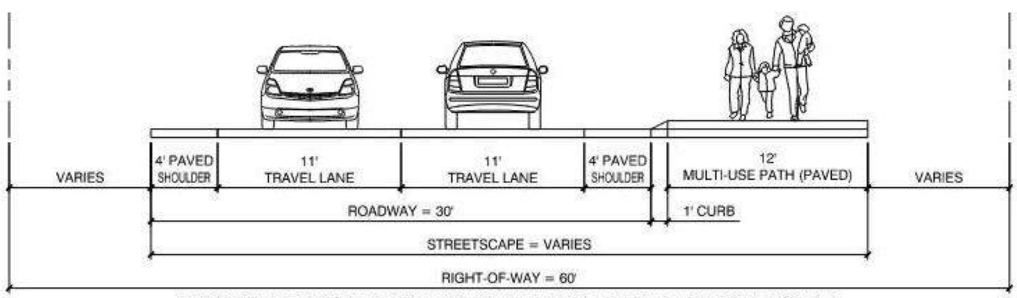


STANDARD SECTION



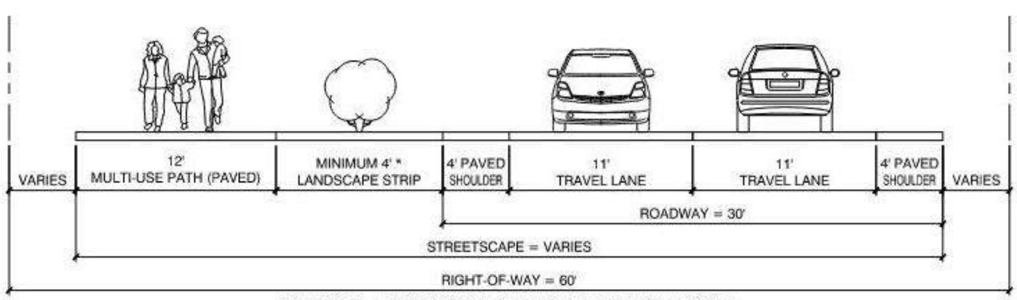
RHODODENDRON DRIVE: 9TH STREET TO HECETA BEACH ROAD **
(STANDARD SECTION WITH SEPARATED PATH)

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



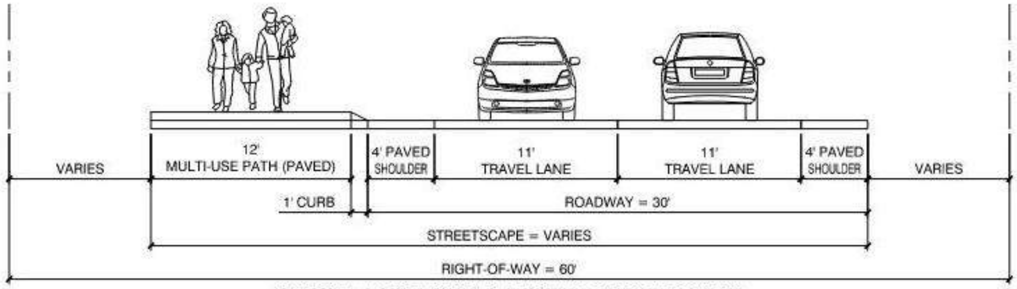
RHODODENDRON DRIVE: 9TH STREET TO HECETA BEACH ROAD *
(ALTERNATE SECTION WITH RAISED PATH)

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



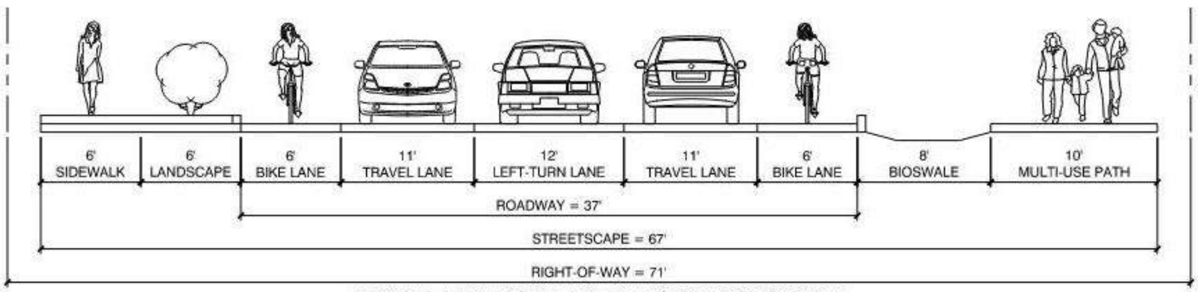
MUNSEL LAKE ROAD & HECETA BEACH ROAD
(STANDARD SECTION WITH SEPARATED PATH)

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



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

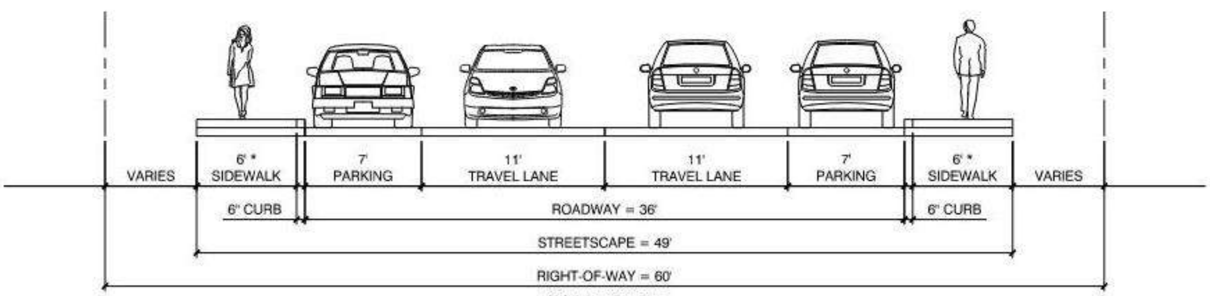
* SLOPED CURB SAME AS FOR ALTERNATE SECTION ON RHODODENDRON DRIVE AND DOCUMENTED IN RHODODENDRON DRIVE TRANSPORTATION PLAN (JAN 2008).



MUNSEL LAKE ROAD: US 101 TO SPRUCE STREET

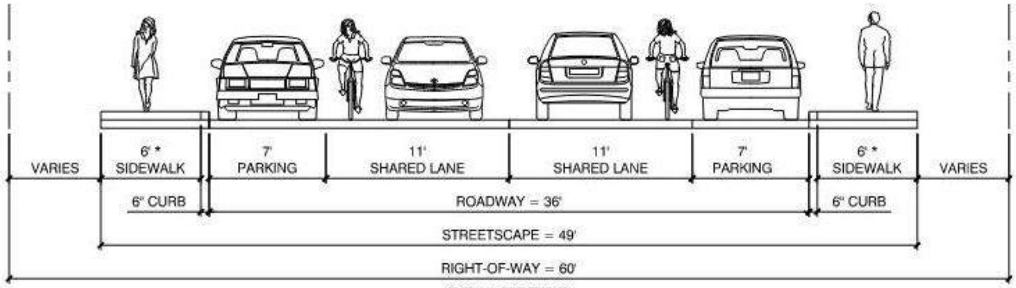
SOURCE: JRH TRANSPORTATION ENGINEERING 4/27/09.

2. Collector Cross Sections



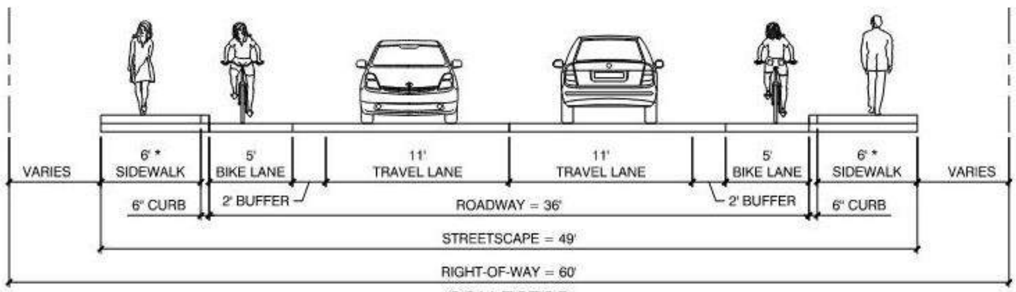
COLLECTOR
(ON-STREET PARKING)

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



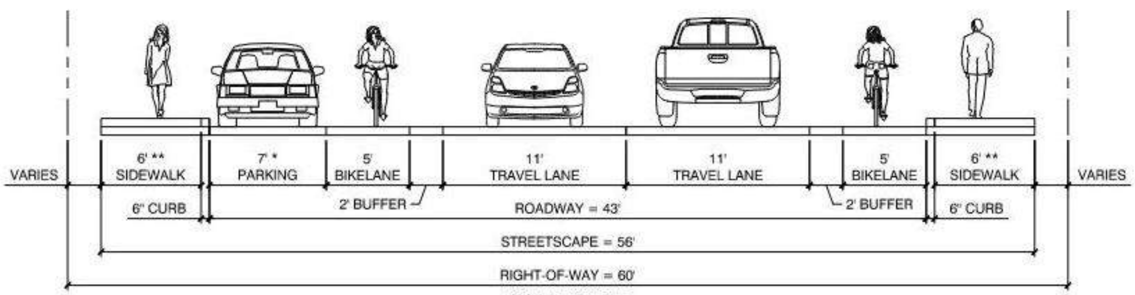
COLLECTOR
(BIKE SHARROWS WITH ON-STREET PARKING)

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



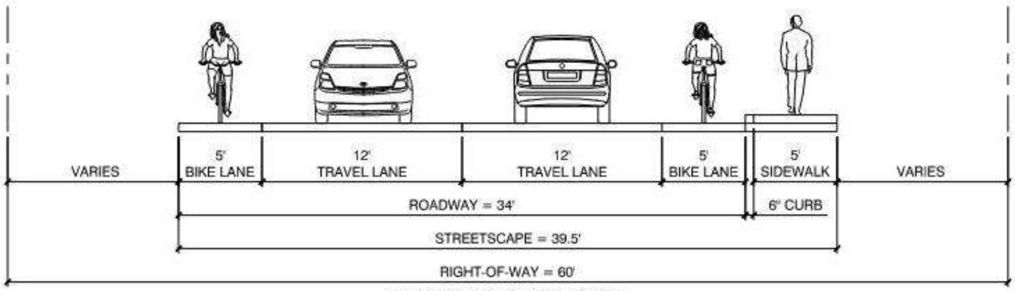
COLLECTOR
(NO PARKING)

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



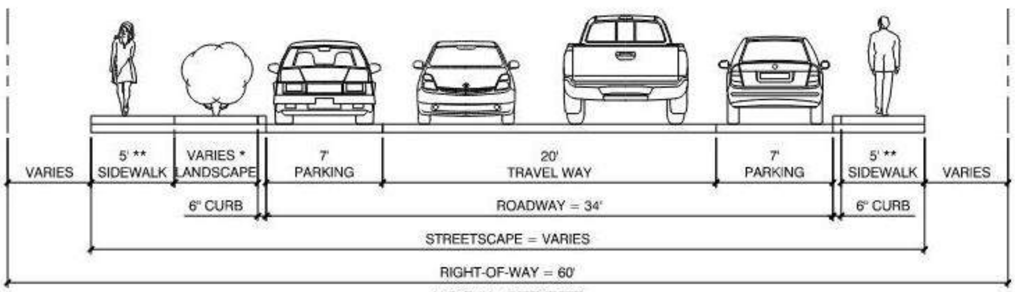
COLLECTOR
(BIKE LANES WITH ON-STREET PARKING)

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



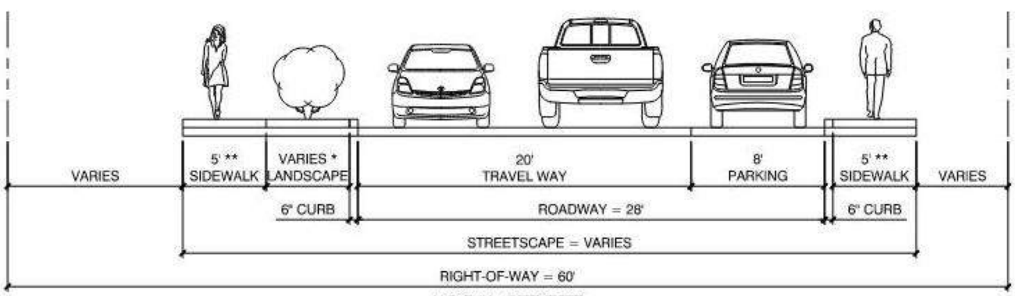
RHODODENDRON DRIVE
(HEMLOCK STREET TO 9TH STREET)

3. <u>Local Street Cross Sections</u>



LOCAL STREET
(PARKING BOTH SIDES)

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



LOCAL STREET
(PARKING ONE SIDE)***

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

ATTACHMENT A – REGULATORY REVIEW (TPR AUDIT)

Attachment A presents a review of applicable development ordinances from the City of Florence for compliance with the State of Oregon's Transportation Planning Rule (TPR), OAR 660 Division 12. The memorandum provides the intent, purpose, and requirements of the TPR, followed by a comprehensive review in the subsequent tables.

The purpose of the TPR is "*…to implement Statewide Planning Goal 12 (Transportation) and promote the development of safe, convenient and economic transportation systems that are designed to reduce reliance on the automobile so that the air pollution, traffic and other livability problems faced by urban areas in other parts of the country might be avoided.*" The TPR also establishes requirements for coordination among affected levels of government for preparation, adoption, refinement, implementation, and amendment of transportation system plans.

Specifically, Section -0045 of the TPR addresses implementation of the Transportation System Plan (TSP). TPR Section -0060 (Plan and Land Use Regulation Amendments) specifies measures to be taken to ensure that allowed land uses are consistent with the identified function and capacity of existing and planned transportation facilities. Section -0060 establishes criteria for identifying the significant effects of plan or land use regulation amendments on transportation facilities, actions to be taken when a significant effect would occur, identification of planned facilities, and coordination with transportation facility providers.

In summary, the TPR requires that local governments revise their land use regulations to implement the TSP in the following manner:

- Amend land use regulations to reflect and implement the TSP.
- Clearly identify which transportation facilities, services, and improvements are allowed outright, and which will be conditionally permitted or permitted through other procedures.
- Adopt land use or subdivision ordinance measures, consistent with applicable federal and state requirements, to protect transportation facilities, corridors, and sites for their identified functions, through:
    - access management and control;
    - protection of public use airports;
    - coordinated review of land use decisions potentially affecting transportation facilities;
    - conditions to minimize development impacts to transportation facilities;
    - regulations to provide notice to public agencies providing transportation facilities and services of land use applications that potentially affect transportation facilities; and
    - regulations ensuring that amendments to land use applications, densities, and design standards are consistent with the TSP.
- Adopt land use or subdivision regulations for urban areas and rural communities to provide safe and convenient pedestrian and bicycle circulation and bicycle parking, and to ensure that new development provides on-site streets and accessways that provide reasonably direct routes for pedestrian and bicycle travel.
- Establish street standards that minimize pavement width and total right-of-way.

Tables 1 provides an assessment of TPR compliance for the City based on adopted ordinances regulating land development. Each table lists TPR implementation requirements, an assessment of existing City code and regulatory provisions that meet the requirements, and recommendations for changes that will likely be needed to fully implement the new TSP and bring city regulations in compliance with the TPR. Recommended changes to local regulatory documents are intended to provide guidance to project staff during the update the City's TSP.

Table 1 provides a review of the following ordinances for the City of Florence:

Public Ways and Property (Title 8)
Zoning Regulations (Title 10)
Subdivision Regulations (Title 11)

Table 1: City of Florence Ordinances – Regulatory Review	
Oregon Revised Statutes	**Comments & Recommendations**
OAR 660-12-0045	
(1) Each local government shall amend its land use regulations to implement the TSP.	
(a) The following transportation facilities, services and improvements need not be subject to land use regulations except as necessary to implement the TSP and, under ordinary circumstances do not have a significant impact on land use: (A) Operation, maintenance, and repair of existing transportation facilities identified in the TSP, such as road, bicycle, pedestrian, port, airport and rail facilities, and major regional pipelines and terminals; (B) Dedication of right-of-way, authorization of construction and the construction of facilities and improvements, where the improvements are consistent with clear and objective dimensional standards; (C) Uses permitted outright under ORS 215.213(1)(j)–(m) and 215.283(1)(h)–(k), consistent with the provisions of OAR 660-012-0065; and (D) Changes in the frequency of transit, rail and airport services.	The purpose of this provision is to allow for certain transportation uses, such as operation, maintenance, and repair of transportation facilities identified in the TSP, without being subject to land use regulations. Per FCC 10-2-12, the City permits the following uses and activities in all zones without review: • Operation, maintenance, and repair of public roads and highway facilities and existing transportation facilities identified in the TSP • Construction of facilities and improvements identified in the TSP or Public Facility Plan • Changes to transit or airport services **Recommendation:** Existing Ordinance provisions meet this TPR requirement. No further changes to the code are recommended.
(b) To the extent, if any, that a transportation facility, service or improvement concerns the application of a comprehensive plan provision or land use regulation, it may be allowed without further land use review if it is permitted outright or if it is subject to standards that do not require interpretation or the exercise of factual, policy or legal judgment;	See responses to -0045(1)(a)

Table 1: City of Florence Ordinances – Regulatory Review	
Oregon Revised Statutes	**Comments & Recommendations**
(c) In the event that a transportation facility, service or improvement is determined to have a significant impact on land use or to concern the application of a comprehensive plan or land use regulation and to be subject to standards that require interpretation or the exercise of factual, policy or legal judgment, the local government shall provide a review and approval process that is consistent with OAR 660-012-0050. To facilitate implementation of the TSP, each local government shall amend its land use regulations to provide for consolidated review of land use decisions required to permit a transportation project.	This TPR Section references project development and implementation - how a transportation facility or improvement authorized in a TSP is designed and constructed (660-012-0050). Project development may or may not require land use decision-making. The TPR directs that during project development, projects authorized in an acknowledged TSP will not be subject to further justification with regard to their need, mode, function, or general location. To this end, the TPR calls for consolidated review of land use decisions and proper noticing requirements for affected transportation facilities and service providers. FCC 10-1-1-6-2.D and -3.B establish public notice requirements for Type II and Type III land use decisions. These provisions require notice to be sent to ODOT for any proposal located adjacent to a state roadway or that is expected to have an impact on a state transportation facility. In addition, these requirements apply to "(a)ny governmental agency that is entitled to notice under and intergovernmental agreement with the City or that is potentially affected by the proposal." This may include other transportation agencies or providers, such as local/regional transit agencies and the County. FCC 10-1-1-5.B allows for consolidated proceedings when an applicant applies for more than one type of land use or development permit for the same or multiple parcels of land. **Recommendation:** Existing Ordinance provisions meet this TPR requirement. No further changes to the code are recommended.

Table 1: City of Florence Ordinances – Regulatory Review	
Oregon Revised Statutes	**Comments & Recommendations**
(2) Local governments shall adopt land use or subdivision ordinance regulations, consistent with applicable federal and state requirements, to protect transportation facilities, corridors and sites for their identified functions. Such regulations shall include:	
(a) Access control measures, for example, driveway and public road spacing, median control and signal spacing standards, that are consistent with the functional classification of roads and consistent with limiting development on rural lands to rural uses and densities;	FCC Chapter 10-36 – Public Facilities – includes provisions for access control measures, including: • Intersection spacing (FCC 10-36-2-13) • Right-of-way widths for functional street classifications and specific corridors (FCC 10-36-2-5) • Traffic signals and roundabouts (FCC 10-36-2-11) • Medians (FCC 10-36-2-12) • All newly created lots must have street frontage and approved street access (FCC 10-36-2-1) FCC 10-35-2-7 establishes spacing standards between driveways and intersections. The City does not have minimum spacing requirements specific to driveways alone. Requirements that regulate driveway, street, and intersection spacing are not provided in City ordinances. **Recommendation:** The TSP process will assess the adequacy of existing standards to meet current and future needs and may result in new or updated roadway and access management standards. The City should also amend FCC 10-35-2-7 to include minimum spacing between driveways based on street functional classification. Street Improvement Standards will need to be made consistent with TSP standards.
(b) Standards to protect future operation of roads, transitways and major transit corridors;	FCC 10-1-1-4.E outlines the criteria for when a Traffic Impact Study may be required. Per this FCC section, Traffic Impact Studies are intended to determine capacity and safety impacts from a particular development proposal, whether the development will meet City transportation standards for capacity and safety, to mitigate anticipated impacts, and to implement applicable TPR regulations. FCC 10-35-2-5 establishes Traffic Study standards, which includes the required components of a Traffic Impact Study and authorizes the City to include conditions of approval. **Recommendation:** Existing Ordinance provisions meet this TPR requirement. No further changes to the code are recommended.

Table 1: City of Florence Ordinances – Regulatory Review	
Oregon Revised Statutes	**Comments & Recommendations**
(c) Measures to protect public use airports by controlling land uses within airport noise corridors and imaginary surfaces, and by limiting physical hazards to air navigation;	FCC 10-21-1 establishes the Airport Development District, which is intended to encourage and support the operation of the City's airport by allowing aviation-compatible uses. FCC 10-21-2, the Public Use Airport Safety and Compatibility Overlay Zone, is intended to establish safety standards to promote air navigation safety and reduce potential hazards to land uses near the airport. This Section includes provisions for the Airport Imaginary Surfaces, Airport Noise Impact Boundary, and the Airport Secondary Impact Area. These provisions require land uses within these zones to be compliant with applicable Federal Aviation Administration (FAA) requirements. **Recommendation:** Existing Ordinance provisions meet this TPR requirement. No further changes to the code are recommended.
(d) A process for coordinated review of future land use decisions affecting transportation facilities, corridors or sites;	See response to -0045(1)(c).
(e) A process to apply conditions to development proposals in order to minimize impacts and protect transportation facilities, corridors or sites;	FCC 10-36-1.E authorizes the City to require improvements to public facilities as a condition of development approval, provided the improvements are roughly proportional to the impact of the development on the facilities. FCC 10-35-2-5 – Traffic Study Requirements – authorizes the City to require conditions of approval in order for a development proposal to meet operations and safety standards consistent with the planned transportation system. The provision states that conditions of approval may include, but are not limited to the following: • Crossover/reciprocal easement agreements for all adjoining parcels to facilitate future access • Access adjustments where proposed access points do not meet access spacing standards • Right-of-way dedications for future improvements • Street improvements • Turn restrictions FCC 10-35-2-6 authorizes the city to require consolidation of vehicle access points, recording of reciprocal access easements, installation of traffic control devices, and other mitigation measures as a condition of approval to land use approval to ensure safe and efficient operation of the City's transportation system. **Recommendation:** Existing code provisions meet the TPR requirement. However, the City should consider specifying that transportation-related conditions of approval may include bicycle and pedestrian improvements.

Table 1: City of Florence Ordinances – Regulatory Review	
Oregon Revised Statutes	**Comments & Recommendations**
(f) Regulations to provide notice to public agencies providing transportation facilities and services, MPOs, and ODOT of: (A) Land use applications that require public hearings; (B) Subdivision and partition applications; (C) Other applications that affect private access to roads; and (D) Other applications within airport noise corridors and imaginary surfaces that affect airport operations; and	FCC 10-1-1-6-2.D requires notice of any Type II decision to the airport, per ORS 227.175 and FCC 10-21-2-4, as well as any governmental agency entitled to notice under an intergovernmental agreement. This provision also requires notice be provided to ODOT for proposals adjacent to or expected to have an impact on state roadways. Per FCC Table 10-1-1, Subdivisions and Partitions are Type II procedures, and therefore they require notice to ODOT if they are adjacent to or expected to have an impact on state roadways. FCC 10-1-1-6-3.B requires notices for quasi-judicial land use hearings (Type III decision) to the airport, per ORS 227.175 and FCC 10-21-2-4, as well as any governmental agency entitled to notice under an intergovernmental agreement. This provision also requires notice be provided to ODOT for proposals adjacent to or expected to have an impact on state roadways. FCC 10-21-2-4 requires notice for any land use decision to the airport sponsor and the Department of Aviation for any land use decision within the Public Use Airport Zone. FCC 10-1-1-6-4.D requires notice to any affected government agency of a hearing for a Type IV decision, which may include transportation agencies. **Recommendation:** Existing Ordinance provisions meet this TPR requirement. No further changes to the code are recommended.
(g) Regulations ensuring that amendments to land use designations, densities, and design standards are consistent with the functions, capacities and performance standards of facilities identified in the TSP.	FCC 10-1-2 establishes rules and procedures for zoning map amendments, and FCC 10-1-3 provides rules and procedures for zoning and comprehensive plan amendments. Neither section requires that amendments must be consistent with transportation facility functions, capacities, or performance standards as identified in the TSP. **Recommendation:** Add language to FCC 10-1-2 and 10-1-3 that ensures zoning map and ordinance amendments are consistent with the planned transportation system. See recommendations for TPR Section -0060.

Table 1: City of Florence Ordinances – Regulatory Review	
Oregon Revised Statutes	**Comments & Recommendations**
(3) Local governments shall adopt land use or subdivision regulations for urban areas and rural communities as set forth below. The purposes of this section are to provide for safe and convenient pedestrian, bicycle and vehicular circulation consistent with access management standards and the function of affected streets, to ensure that new development provides on-site streets and accessways that provide reasonably direct routes for pedestrian and bicycle travel in areas where pedestrian and bicycle travel is likely if connections are provided, and that avoids wherever possible levels of automobile traffic that might interfere with or discourage pedestrian or bicycle travel.	
(a) Bicycle parking facilities as part of new multi-family residential developments of four units or more, new retail, office and institutional developments, and all transit transfer stations and park-and-ride lots;	FCC 10-3-10 establishes bicycle parking requirements. Bicycle parking is required for all non-residential uses at a rate of one space per every ten off-street vehicle spaces. Bicycle parking is required for triplexes, quadplexes, cluster housing, and multi-family housing at a rate of 1 space per 3 units, and bicycle parking is required at a rate of 1 space per 20 bedrooms for group living and 1 space per 8 bedrooms for dormitories. **Recommendation:** Existing Ordinance provisions meet this TPR requirement. No further changes to the code are recommended.
(b) On-site facilities shall be provided that accommodate safe and convenient pedestrian and bicycle access from within new subdivisions, multi-family developments, planned developments, shopping centers, and commercial districts to adjacent residential areas and transit stops, and to neighborhood activity centers within one-half mile of the development. Single-family residential developments shall generally include streets and accessways. Pedestrian circulation through parking lots should generally be provided in the form of accessways. (A) "Neighborhood activity centers" include, but are not limited to, existing or planned schools, parks, shopping areas, transit stops or employment centers; (B) Bikeways shall be required along arterials and major collectors. Sidewalks shall be required along arterials, collectors, and most local streets in urban areas, except that sidewalks are not required along controlled access roadways, such as freeways; (C) Cul-de-sacs and other dead-end streets may be used as part of a development plan, consistent with the purposes set forth in this section; (D) Local governments shall establish their own standards or criteria for providing streets and accessways consistent with the purposes of this section. Such measures may include but are not limited to: standards for spacing of streets or accessways; and standards for excessive out-of-direction travel; (E) Streets and accessways need not be required where one or more of the following conditions exist: (i) Physical or topographic conditions make a street or accessway connection impracticable. Such	FCC 10-35-3-2 – Site Design and Layout – requires all developments to provide a continuous pedestrian system. These provisions include requirements for pedestrian walkway systems to connect to all future phases of development, existing or planned adjacent off-site trails, adjacent public parks or open space, and previously reserved public access easements on neighboring properties. These provisions also require developments to include safe, direct, and convenient walkways and pedestrian connections that are within the development site. Provisions for internal pedestrian connections also include requirements for walkway connections for all on-site parking areas, and the City may also require raised walkways for parking areas with 80 or more parking spaces. FCC 10-35-4 requires proposed developments within a quarter mile of an existing or proposed transit stop to demonstrate a pedestrian route from building entrances to the transit facility or to the nearest public right-of-way that provides access to the transit facility. FCC 10-36-2-5 includes cross section requirements for each street functional classification in the City. Bike lanes or bike sharrows are required for collectors and other specific street segments, such as portions of Munsel Lake Road, Rhododendron Drive, and Heceta Beach Road. Sidewalks are required along all streets and roads in the City. Per FCC 10-36-2-6, cul-de-sacs are allowed only when environmental or topographical constraints, existing development, or conflicting City requirements preclude street extensions or through circulation. FCC 10-35-2-7 establishes spacing standards between driveways and intersections. FCC 10-36-2-9.C allows mid-block connections and multi-use paths in lieu of street connections and authorizes the City to

Table 1: City of Florence Ordinances – Regulatory Review	
Oregon Revised Statutes	**Comments & Recommendations**
conditions include but are not limited to freeways, railroads, steep slopes, wetlands or other bodies of water where a connection could not reasonably be provided; (ii) Buildings or other existing development on adjacent lands physically preclude a connection now or in the future considering the potential for redevelopment; or (iii) Where streets or accessways would violate provisions of leases, easements, covenants, restrictions or other agreements existing as of May 1, 1995, which preclude a required street or accessway connection.	require multi-use paths off cul-de-sacs to provide bicycle and pedestrian connections to adjacent development or paths. **Recommendation:** Existing Ordinance provisions meet this TPR requirement. No further changes to the code are recommended.
(c) Where off-site road improvements are otherwise required as a condition of development approval, they shall include facilities accommodating convenient pedestrian and bicycle travel, including bicycle ways along arterials and major collectors; *[Note: Subsection (d) defines safe and convenient]*	See response to Section -0045(2)(e).
(e) Internal pedestrian circulation within new office parks and commercial developments shall be provided through clustering of buildings, construction of accessways, walkways and similar techniques.	FCC 10-35-3-2 – Site Design and Layout – requires all developments to provide a continuous pedestrian system. These provisions include requirements for pedestrian walkway systems to connect to all future phases of development, existing or planned adjacent off-site trails, adjacent public parks or open space, and previously reserved public access easements on neighboring properties. These provisions also require developments to include safe, direct, and convenient walkways and pedestrian connections that are within the development site. Provisions for internal pedestrian connections also include requirements for walkway connections for all on-site parking areas, and the City may also require raised walkways for parking areas with 80 or more parking spaces. **Recommendation:** Existing Ordinance provisions meet this TPR requirement. No further changes to the code are recommended.

Table 1: City of Florence Ordinances – Regulatory Review	
Oregon Revised Statutes	**Comments & Recommendations**
(4) To support transit in urban areas containing a population greater than 25,000, where the area is already served by a public transit system or where a determination has been made that a public transit system is feasible, local governments shall adopt land use and subdivision regulations as provided in subsections (a)–(g) below:	
(a) Transit routes and transit facilities shall be designed to support transit use through provision of bus stops, pullouts and shelters, optimum road geometrics, on-road parking restrictions and similar facilities, as appropriate;	LinkLane offers daily bus service between Eugene and Florence, with stops in Veneta, Mapleton and at Three Rivers Casino, as well as Monday through Saturday service between Florence and Yachats. The Rhody Express provides transportation around Florence and is part of the Lane Transit District.[1] FCC 10-35-4.B requires any development other than single-family residences or duplexes to accommodate on site any existing or planned transit facility, including accessible landing pads, seating or shelter, and lighting. FCC 7-1-7-5 prohibits on-street parking at a bus stop. **Recommendation:** Existing Ordinance provisions meet this TPR requirement. No further changes to the code are recommended.

[1] Lane Transit District, Rhody Express: https://www.ltd.org/system-map/route_901/

Table 1: City of Florence Ordinances – Regulatory Review	
Oregon Revised Statutes	**Comments & Recommendations**
(b) New retail, office, and institutional buildings at or near major transit stops shall provide for convenient pedestrian access to transit through the measures listed in paragraphs (A) and (B) below. (A) Accessible walkways shall be provided connecting building entrances and streets adjoining the site; (B) Accessible pedestrian facilities connecting to adjoining properties shall be provided except where such a connection is impracticable as provided for in paragraph (3)(b)(E). Pedestrian facilities shall connect the on-site circulation system to existing or proposed streets, walkways, and driveways that abut the property. Where adjacent properties are undeveloped or have potential for redevelopment, streets, accessways and walkways on site shall be laid out or stubbed to allow for extension to the adjoining property; (C) In addition to paragraphs (A) and (B) above, on sites at major transit stops provide the following: (i) Either locate buildings within 20 feet of the transit stop, a transit street or an intersecting street or provide a pedestrian plaza at the transit stop or a street intersection; (ii) An accessible and reasonably direct pedestrian facility between the transit stop and building entrances on the site; (iii) A transit passenger landing pad accessible to people with disabilities; (iv) An easement or dedication for a passenger shelter if requested by the transit provider; and (v) Lighting at the transit stop.	OAR 660-012-0005 defines "major transit stop" as "(e)xisting or planned transit stations" that "(h)ave or are planned for an above average frequency of schedule, fixed-route service when compared to region wide service." The Rhody Express operates hourly service between 10 AM and 5 PM on weekdays. This transit service is not more frequent than other transit services in the Lane Transit District. Nonetheless, FCC 10-35-4.A requires any development within ¼ mile of an existing transit stop (other than single-family residences or duplexes) to ensure that the proposed pedestrian circulation system provides a safe and direct route from building entrances to the transit stop or to a public right-of-way that provides access to the transit stop. In addition, FCC 10-35-4.B requires any development other than single-family residences or duplexes to accommodate on site any existing or planned transit facility, including accessible landing pads, seating or shelter, and lighting. **Recommendation:** The City largely complies with this TPR requirement.
(c) Local governments may implement paragraphs (b)(A) and (B) through the designation of pedestrian districts and adoption of appropriate implementing measures regulating development within pedestrian districts. Pedestrian districts must comply with the requirement of paragraph (b)(C);	The City does not have any major transit stops. Therefore, this TPR requirement does not apply.

Table 1: City of Florence Ordinances – Regulatory Review	
Oregon Revised Statutes	**Comments & Recommendations**
(d) Designated employee parking areas in new developments shall provide preferential parking for carpools and vanpools;	The City does not have any parking standards for carpools or vanpools. **Recommendation:** Add provisions for carpool and vanpool parking standards for employee parking to FCC 10-3. These standards should require a certain percentage of parking spaces be designated for carpool and vanpool parking for uses with over a certain number of employees. The carpool and vanpool spaces should be located closer to the employee entrance than any non-ADA parking spaces.
(e) Existing development shall be allowed to redevelop a portion of existing parking areas for transit-oriented uses, including bus stops and pullouts, bus shelters, park and ride stations, transit-oriented developments, and similar facilities, where appropriate;	FCC 10-3-3 allows transit-related parking reductions of up to 10% if transit stops, pull-outs, shelters, park-and-ride lots, transit-oriented development, and transit service on an adjacent street are present or will be provided by the applicant. **Recommendation:** Existing Ordinance provisions meet this TPR requirement. No further changes to the code are recommended.
(f) Road systems for new development shall be provided that can be adequately served by transit, including provision of pedestrian access to existing and identified future transit routes. This shall include, where appropriate, separate accessways to minimize travel distances;	FCC 10-36-2-5 includes cross section requirements that include minimum right-of-way width for functional classification. **Recommendation:** The TSP process will revisit adopted roadway cross-sections and design requirements, keeping in mind that the TPR requires that cities need to include pedestrian access to existing and identified future transit routes. Standards should be made consistent between the TSP and Street Improvement Standards.
(g) Along existing or planned transit routes, designation of types and densities of land uses adequate to support transit.	The Rhody Express mainly provides service along, Oak Street, Spruce Street, Highway 126, Quince Street, Bay Street, parts of Highway 101, 9th Street, and Rhodendron Drive. The zoning that is adjacent to these routes primarily includes: • Medium Density Residential • Professional Office/Institutional • High Density Residential • Main Street Area A and B • Old Town District • Commercial • Highway District • North Commercial A few small segments of these routes also run adjacent to the Low-Density Residential and Airport Development zones. **Recommendation:** The existing zoning designations near the City's transit routes meet this TPR requirement. No further changes to the code are recommended.

Table 1: City of Florence Ordinances – Regulatory Review	
Oregon Revised Statutes	**Comments & Recommendations**
(5) In developing a bicycle and pedestrian circulation plan as required by OAR 660-012-0020(2)(d), local governments shall identify improvements to facilitate bicycle and pedestrian trips to meet local travel needs in developed areas. Appropriate improvements should provide for more direct, convenient, accessible, and safer bicycle or pedestrian travel within and between residential areas and neighborhood activity centers (i.e., schools, shopping, transit stops). Specific measures include, for example, constructing walkways between cul-de-sacs and adjacent roads, providing walkways between buildings, and providing direct access between adjacent uses.	The TSP will make recommendations to the bicycle and pedestrian plan that are consistent with TPR -0020. This TPR requirements is currently addressed in the following areas: • Bicycle/pedestrian connection between cul-de-sacs and adjacent streets. See response to section -0045(3)(b) • Site design criteria that create pedestrian paths – see response to section -004(3)(b) **Recommendation:** This TPR requirement will be addressed by the TSP planning process, which will identify pedestrian and bicycle improvements for inclusion in the TSP and is met by requiring improvements in developing areas consistent with adopted code provisions.
(6) Local governments shall establish standards for local streets and accessways that minimize pavement width and total right-of-way consistent with the operational needs of the facility. The intent of this requirement is that local governments consider and reduce excessive standards for local streets and accessways in order to reduce the cost of construction, provide for more efficient use of urban land, provide for emergency vehicle access while discouraging inappropriate traffic volumes and speeds, and which accommodate convenient pedestrian and bicycle circulation. Notwithstanding section (1) or (3) of this rule, local street standards adopted to meet this requirement need not be adopted as land use regulations.	FCC 10-36-2-5 includes cross section requirements that include minimum right-of-way width for functional classification. There are no minimum right-of-way width standards for Arterial streets in the Code. **Recommendation:** The TSP process will revisit adopted roadway cross-sections and design requirements, keeping in mind that the TPR requires that cities minimize pavement width and total right-of-way consistent with the operational needs of the facility. At a minimum, the City should adopt right-of-way width and cross-section design standards for general arterial development in addition to the existing standards that are specific segments of existing roads. Standards should be made consistent between the TSP and Street Improvement Standards.
OAR 660-12-0060	
Amendments to functional plans, acknowledged comprehensive plans, and land use regulations that significantly affect an existing or planned transportation facility shall assure that allowed land uses are consistent with the identified function, capacity, and performance standards of the facility.	FCC 10-1-3 authorizes amendments to zoning district boundaries and zoning regulations. The approval criteria do not contain specific requirements that ensures proposed amendments are consistent with planned facilities within the adopted TSP. **Recommendation:** FCC 10-1-3 should add provisions that address plan amendment consistency with transportation facilities.

ATTACHMENT B – LAND USE & TRANSPORTATION CODE CONCEPTS

Overview

This section includes general recommendations for potential future code amendments, or "Code Concepts." The City should consider these Code Concepts as potential strategies to implement strategies and recommendations from the Florence TSP update project.

Multimodal Transportation, Connectivity, and Access Standards. The TSP process recommends the City explore a number of transportation elements related to bicycle and pedestrian connectivity, transit improvements, intermodal route connectivity, and other improvements related to the City's multimodal network. The results of a regulatory review reveal that the City's Development Code currently includes a robust collection of standards and requirements related to bicycle, pedestrian, and transit access and connectivity. The City's current multimodal standards and compliance with State requirements are summarized in Attachment A, Regulatory Review – TPR Audit. The code audit also identifies a handful of improvements that would bring the City into closer compliance with State requirements. Specifically, the City should consider amending transportation-related conditions of approval criteria to include bicycle and pedestrian improvements. This change would strengthen the City's ability to implement and improve bicycle, pedestrian, and transit connectivity and access through future development approval.

Any other specific updates related to bicycle, pedestrian, and transit standards or requirements that emerge from the TSP recommendations should also be added to the list of possible Code amendments.

Emerging Technologies. The City should explore requirements and standards for electric vehicle (EV) charging/parking facility requirements for new construction and possibly for redevelopment. Some cities in Oregon have adopted "EV ready" code requirements that are intended to enable future retrofits of on-site parking and utilities to include EV charging stations. In addition, cities are increasingly incorporating standards for EV facilities to take advantage of recent amendments to the state building code to include provisions for EV charging capacity for certain building types.[2] The City may consider applying EV charging requirements to developments that exceed size or trip generation thresholds based on TIS/TIA findings. For example, the City of Portland is in the process of adopting code amendments as a part of their "EV Ready Code Project" that will include requirements for multi-family and mixed-use developments over a certain size to have a minimum percentage of their overall parking spaces be "EV Ready."[3] The City may also consider regulatory/code incentives for providing EV charging stations or EV-ready spaces, which could include minimum parking reductions in

[2] HB 2180 Enrolled. https://olis.oregonlegislature.gov/liz/2021R1/Measures/Overview/HB2180
[3] EV Ready Code Project: https://www.portland.gov/bps/planning/ev-ready

exchange for EV-ready spaces, or providing height or density bonuses for sites that provide EV spaces.

If Florence is interested in adopting EV facility standards, siting and design criteria that is specific to EV charging stations may also be beneficial. Examples of standards to explore include electricity/utility capacity, signage, accessibility, and EV-ready spaces to conventional parking spaces ratios. The American Planning Association (APA) offers extensive guidance and research on the topic of zoning for EV facilities. A recent American Planning Association publication provides a summary table of EV development standards from a sampling of jurisdictions throughout the country, as shown in Table 2.[4]

Table 2: EV Parking Standards Throughout the Country

Jurisdiction	Multifamily Parking	Commercial Parking	Code Citation
Atlanta, GA	NA	20% of spaces must be EV-ready	Appendix B §101.8
Chicago, IL	20% of spaces must be EV-ready or EV-installed	20% of spaces must be EV-ready or EV-installed	§17-10-1011
Honolulu, HI	Buildings with 8+ spaces: 25% must be EV-ready	Buildings with 12+ spaces: 25% must be EV-ready	§32-1.1(20)
Issaquah, WA	10% of spaces must be EV-installed; 30% must be EV-ready	5% of spaces must be EV-installed; 10% must be EV-ready	§18.09.140
Madison, WI	2% of spaces must be EV-installed; 10% must be EV-ready (increases by 10% every 5 years)	1% of spaces must be EV-installed (increases by 1% every 5 years); 10% must be EV-ready (increases by 10% every 5 years)	§28.141(8)(e)
San Jose, CA	10% of spaces must be EV-installed; 20% must be EV-ready; 70% must be EV-capable	10% of spaces must be EV-installed; 40% must be EV-ready	§24.10.200
St. Louis, MO	2% of spaces must be EV-installed; 5% must be EV-ready (increases to 10% in 2025)	2% must be EV-installed; 5% must be EV-ready	§25.01.020-406.2.7
Washington, DC	Buildings with 3+ spaces: 20% must be EV-ready	Buildings with 3+ spaces: 20% must be EV-ready	§6-1451.03a

Select Findings from the 2022 Scan of EV Ordinances

Source: "Preparing for the Electric Vehicle Surge", American Planning Association, Zoning Practice

The City may consider other development standards to support emerging mobility and technology trends, such as siting and design standards for e-bike and e-scooter facilities. Such standards could follow a similar model as the EV charging requirements, standards, or incentives, such as requiring e-bike parking with charging ports for developments of a certain size (e.g., over 10,000 square feet, over a specified number of employees, over specified number of dwelling units, etc.).

Off-Street Parking. To create a compact and visually appealing environment in a downtown area, the amount of space dedicated to parking should be minimized. By removing off-street parking requirements, the City can give business owners and developers flexibility and freedom to determine the amount and type of parking that will meet the needs of their clients. Removing

[4] Preparing for the Electric Vehicle Surge: https://planning.org/publications/document/9257171/

off-street parking requirements can provide even more opportunity for future development or redevelopment. This could free up land currently used for parking lots to be developed over time into new buildings for business – an arguably more efficient use of valuable land. Removing off-street parking requirements does not mean that all off-street parking will go away, it simply allows the City and business owners to work together to meet the true parking needs of the Old Town district.

The City currently waives minimum parking requirements for changes of use in Old Town Subarea A that existed prior to October 2014. In addition, new construction (not including residential or lodging) may reduce off street parking by 50% of the minimum parking requirement. Although the minimum parking requirements in the Old Town district are relaxed compared to the rest of Florence, the City should still consider removing off-street parking minimums for both Old Town Subareas A and B altogether. As discussed, complete removal of off-street parking requirements will enable redevelopment of underutilized parking areas and would support a more walkable/bikeable, mixed-use environment.

The City's minimum off-street parking requirements are relatively consistent with requirements in other Oregon coastal communities. However, the City may consider reducing off-street parking requirements for single-family detached homes based on square footage or number of rooms to allow more flexibility for smaller units. For example, Lincoln City only requires one space per unit for dwellings under 1,000 square feet, and two spaces for any single-family dwellings over 1,000 square feet. In addition, Florence is currently considering reducing minimum parking requirements for duplexes to one space per unit and removing minimum parking for ADUs (as required by ORS 197.312).Consistent with parking requirements for duplexes, the City could also consider reducing minimum parking to one space per unit for other middle housing types (triplexes, quadplexes, townhomes), multi-family, and manufactured homes. These housing types generally provide housing for smaller households and tend to have lower vehicle-use rates than other large households and lower-density types of housing. Lowering off-street parking requirements can free up valuable land for more living space.[5]

Land Use and Transportation Coordination. Development Code requirements, standards, and procedures are critical for ensuring the City's land uses and transportation system are thoughtfully coordinated. The City should consider Code amendments to improve integration of land use and transportation standards, practices, and procedures. Chapter 660, Division 12 of the Oregon Administrative Rules (OAR 660-012) includes specific requirements and guidance to ensure coordinated transportation and land use planning. For example, the City should ensure consistency between land use/zoning amendments with TSP goals and policies. See the TPR Audit (Attachment A) for more details and recommendations related to land-use-transportation coordination amendments.

[5] Parking and Middle Housing https://www.oregon.gov/lcd/TGM/Documents/ParkingDemandsAcrossCities.pdf