Technical Memo #5

Existing Conditions Assessment
July 12, 2021 – FINAL

Prepared by Fehr & Peers

Introduction

Manzanita, Nehalem, and Wheeler are distinct communities with unique needs, challenges, and goals. However, these coastal communities are also deeply interconnected by their location along U.S. 101 and proximity to Nehalem Bay, which reinforces strong economic and cultural ties. The three cities have an exceptional history of cooperative planning and are now undertaking a joint Nehalem Bay Transportation System Plan (TSP).

This memorandum summarizes conditions experienced by all travel modes in Manzanita, Nehalem, and Wheeler as of 2020. The memorandum includes a comprehensive review of current transportation policies in the Nehalem Bay communities as they relate to county, regional, and state designations and standards. The memorandum then reports on the current operations of the transportation system, with consideration given to all modes, and identifies existing infrastructure gaps and deficiencies, transportation system completeness, operations, and safety.

This analysis establishes the base condition upon which a forecast conditions analysis will be built. The forecast conditions analysis will be integral to identifying future (2040) system gaps and opportunities for Nehalem Bay's TSP.

Plan Area

Located on the northern Oregon coast in Tillamook County, the Nehalem Bay planning area is composed of the cities of Manzanita, Nehalem, and Wheeler. The three cities are arranged around the bay where the Nehalem River meets the Pacific Ocean and are connected by U.S. 101, as shown in **Figure 1**.

Manzanita has an estimated population of 393 people and has the largest land area of the three cities. U.S. 101 provides access to the City at Manzanita Avenue and Laneda Avenue, but only flanks the city's northeast border. Laneda Avenue is Manzanita's main commercial corridor, and Manzanita is the only one of the three cities with beach access. The Manzanita urban growth boundary (UGB) encompasses a section of the Bayside Gardens neighborhood located between Manzanita and Nehalem in unincorporated Tillamook County.

Nehalem is located between Manzanita and Wheeler, with U.S. 101 serving as its main street. With a population of 355 people, it is bounded by the Nehalem River to the east. Nehalem's urban growth boundary encompasses a large portion of the Bayside Gardens neighborhood between Manzanita and Nehalem and stretches north and south of the City boundary along the Nehalem River.

Wheeler is the southern-most city in Nehalem Bay, and like Nehalem, U.S. 101 is the main commercial corridor. Wheeler has a population of 357 people and the Nehalem River runs along the north side of the city. The Wheeler UGB extends to a small area north of the city.

Figure 1. Nehalem Bay Planning Area

Urban Growth Boundary (2019)
City
Park
Railroad

Figure 1

Nehalem Bay Planning Area

Land Use and Key Destinations

The development in an area, coupled with the characteristics of the transportation network, provides a distinct experience for people who live, work, or visit a place. Moreover, the types and densities of land uses in a city are major determinants of traffic levels and travel patterns. The zoning map for Nehalem Bay (shown in **Figure 2**) guides the types of land uses and allowable densities in different areas.

The location of key destinations such as schools, parks, and public facilities also drives both local and recreational trip making. Within Nehalem Bay, the three cities share some facilities such as:

- Nehalem Elementary School (Nehalem)
- Nehalem Bay Fire & Rescue (Nehalem UGB)
- Urgent Care (Manzanita UGB)
- Water and wastewater treatment facilities (Nehalem)
- Grocery stores (Manzanita, Nehalem)
- Tillamook County Library (Manzanita)

In Manzanita, the land on either side of Laneda Avenue and along U.S. 101 is zoned for commercial use. Directly off of Laneda Avenue there is a small area zoned for high density residential use; the rest of the city is medium to low density residential uses. Manzanita has a library, police department, and grocery stores within city limits. Directly south of the city limits is Nehalem Bay State Park, which receives approximately 700,000 visitors a year. The park has an airport, boat launch, and a variety of year-round recreational offerings.

The commercial core of Nehalem is location along U.S. 101 from 10th Street to the river, and from B Street to Tohls Street. Medium and low density residential uses make up the rest of the city, with some designated park and shoreland space along the riverfront. There is also a public dock in Nehalem and watersports are a popular draw to the area. Nehalem Elementary School is located in Nehalem and serves all three cities, while the middle and high schools are south of Nehalem Bay in Rockaway Beach. Outside of the city limits but within Nehalem's UGB there is a mix of commercial uses along U.S. 101 and medium density residential in the Bayside Gardens area.

The majority of Wheeler is medium density residential land, with commercial uses along U.S. 101. There is a small amount of industrial land along the river, along with a public marina for boat access to the river. Wheeler does not have a grocery store, so residents have to travel to Nehalem, Manzanita, or nearby Mohler for groceries.

Figure 2. Nehalem Bay Zoning

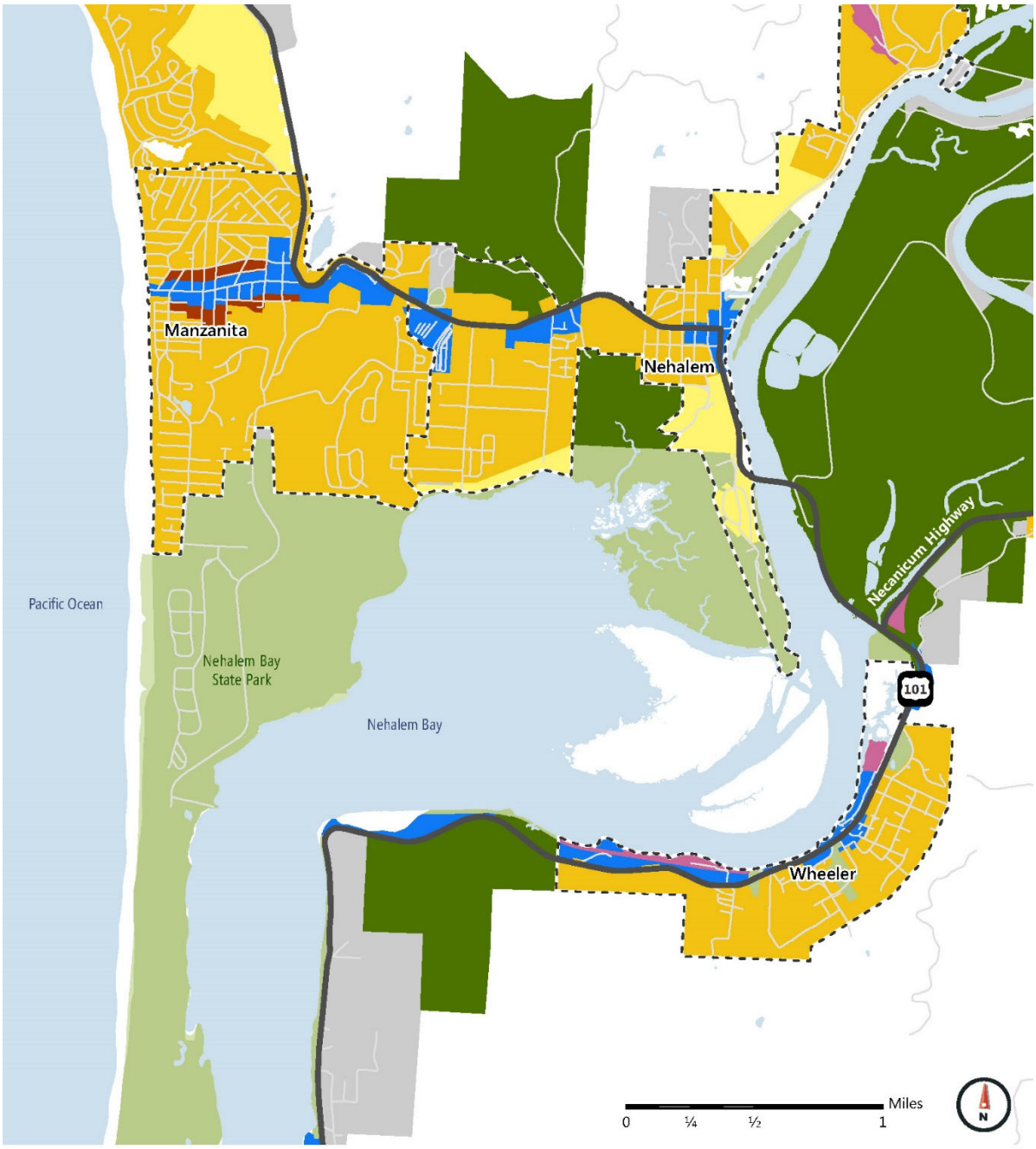


Figure 2

Zoning

Population and Employment

The total permanent population living within the cities of Nehalem, Wheeler, and Manzanita is fairly small, but many of the residences in Nehalem Bay are a second home for part-time residents. There are also many homes within the UGB areas just outside the city limits.

Title VI and Environmental Justice Populations

The distribution of Title VI and Environmental Justice populations in Nehalem Bay was reported from the U.S. Census Bureau's most recent American Community Survey (2015-2019). There are four Census Block Groups in the region which make up Census Tract 9601 as shown in

Figure 3 below. The Census areas do not directly match up with the City boundaries so **Table 1** below lists the breakdown for each city and Tillamook County, while **Table 2** shows the totals for the Block Group or Census Tract depending on how the information is reported.

As seen in Table 1, Wheeler and Manzanita have high percentages of residents over the age of 65, while proportionally they both have smaller percentages of children than the Tillamook County average. All three cities have a lower share of residents that identify as non-white than Tillamook County, and both Manzanita and Wheeler have a lower percentage of residents in poverty than the County as a whole. Due to a large number of vacation homes, Manzanita has the most housing units of the three cities, eclipsing both Nehalem and Wheeler combined.

Table 1: Demographics of Nehalem Bay Cities

	Total Population	Over age 65		Under age 18		Non-white		Below Poverty Level		Disability		Housing units
Manzanita	393	196	*50%*	15	*4%*	8	*2%*	16	*4%*	115	*29%*	1,250
Nehalem	355	43	*12%*	82	*23%*	20	*6%*	45	*13%*	80	*23%*	163
Wheeler	357	135	*38%*	54	*15%*	30	*8%*	41	*11%*	81	*23%*	259
Tillamook County	*26,389*	*6,560*	*25%*	*5,033*	*19%*	*4,555*	*17%*	*3,365*	*13%*	*5,706*	*22%*	*19,000*

Source: U.S. Census Bureau American Community Survey, 2015-2019

Table 2: Demographics of Nehalem Bay Block Groups

	Total Population	Over age 65		Under age 18		Non-white[1]	Below Poverty Level[1]	Disability[1]	Housing units[1]
Census Tract 9601, Block Group 1	1,155	362	*31%*	250	*22%*	*162 (5%)*	*233 (7%)*	*639 (20%)*	4060
Census Tract 9601, Block Group 2	932	348	*37%*	94	*10%*				
Census Tract 9601, Block Group 3	444	213	*48%*	15	*3%*				
Census Tract 9601, Block Group 4	*775*	*317*	*41%*	*144*	*19%*				

Source: U.S. Census Bureau American Community Survey, 2015-2019

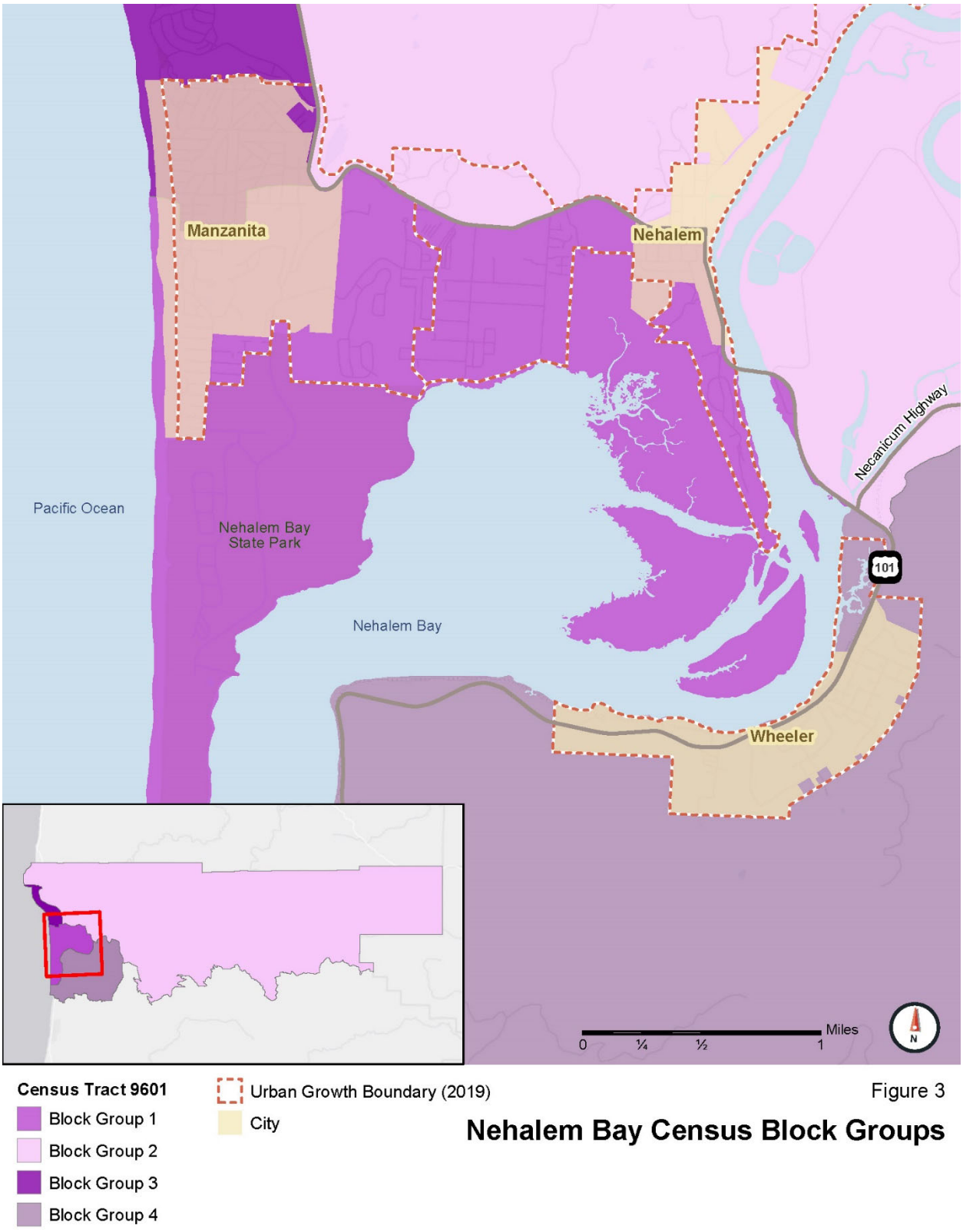
1 This data is only reported at the Census Tract level, not at the Block Group level.

Employment

Manzanita has the highest number of jobs in the area, though there are also many in the UGB area between Manzanita and Nehalem. Approximately 91 percent of people employed in Manzanita live outside of the city limits[1]. In Nehalem and Wheeler, 97.5 percent and 95 percent, respectively, of the people employed within city limits live outside of the city.

[1] U.S. Census Bureau Longitudinal-Employer Household Dynamics data, 2018.

Figure 3. Nehalem Bay Census Block Groups



Existing System Inventory

Nehalem Bay's transportation system is primarily a network of local and neighborhood roadways. These facilities must accommodate many travel modes within their rights of way, with users' experience also shaped by the surrounding land use and by seasonal factors. The following section inventories the current state of the network for each mode of travel.

Roadway

Streets in Nehalem Bay are owned and maintained by ODOT, Tillamook County, and the Cities. They are designed to fit the purpose that they serve, from longer distance mobility on the highway to neighborhood circulation. Overall, the roadway network serves auto, freight, and transit needs in addition to active transportation needs. Locations that have inconsistencies between their design and their intended function, such as gaps in sidewalks, are opportunities for further evaluation and potential improvements.

Functional Class

Functional classification is an important identifying metric for roadways. Roadways are assigned a functional classification to indicate purpose, design, and function. General descriptions of functional classes are as follows.

> **Principal arterials** carry the highest volume of traffic of any roadway type below grade-separated freeways and provide regional connections. Mobility is a priority on principal arterials and access control is important.
>
> **Arterials** are designed for higher volumes but carry fewer regional trips. These streets link major commercial, residential, industrial, and institutional areas.
>
> **Collectors** distribute trips between local streets and arterials. They serve as transition roadways between commercial and residential areas and provide a citywide circulation function. Collectors can be split into **Major** and **Minor** collectors, with major collectors generally having longer lengths, higher speed limits, higher traffic volumes, and more travel lanes than minor collectors. Major collectors offer more mobility and minor collectors offer more access.
>
> **Local streets** are the lowest functional classification. They provide circulation within residential neighborhoods, provide access to homes and properties, and serve a slower-moving mix of modes.

Nehalem Bay's street network contains a mix of collector and local streets which connect users to City main streets and U.S. 101. **Table 3** shows the jurisdiction and functional classification of roadways in

Nehalem Bay that are classified as collectors or higher, while **Figure 4** shows the functional class of all streets in the region.

Table 3: Roadway Jurisdiction and Functional Classification

Roadway	Location	Jurisdiction	Functional Classification
U.S. 101	Study Area	ODOT	Principal Arterial
Laneda Avenue	Manzanita	Manzanita and Tillamook County	Major Collector
7th Street / North Fork Road	Nehalem	Tillamook County	Major Collector
Necarney City Road	Nehalem UGB	Tillamook County	Minor Collector
Ocean Road	Manzanita	Tillamook County	Minor Collector
Nehalem Road	Manzanita	Tillamook County	Minor Collector
Carmel Avenue/ Necarney Boulevard	Manzanita	Manzanita	Minor Collector
Classic Street	Manzanita	Manzanita	Minor Collector
Sitka Lane	Manzanita UGB	Tillamook County	Minor Collector
Sandpiper Lane	Manzanita UGB	Tillamook County	Minor Collector
Gary Street	Manzanita UGB	Tillamook County	Minor Collector

Source: Fehr & Peers.

Both Nehalem and Wheeler have a Special Transportation Area (STA) designation for U.S. 101 through the cities. An STA is an ODOT highway segment designation for an existing downtown or planned downtown that straddles the state highway. The primary objective of an STA is to provide access to community activities and businesses to accommodate pedestrian, bicycle and transit movement. These areas must balance the need for appropriate local access with the considerations of highway mobility.

Freight Routes

Freight movement is essential to bring goods to residents and to move products throughout the region. U.S. 101 is designated by the FHWA as part of the National Highway System (NHS), which is defined as roads that are important to the nation's economy, defense, and mobility. The highway is the only designated freight route in Nehalem Bay, and must balance the needs of residents, visitors, and goods. It is also classified by ODOT as a Reduction Review Route, which are facilities that require review during any planning, project development, development review and maintenance for any potential reduction in vehicle-carrying capacity. These routes may not have any permanent reduction in the vehicle-carrying capacity unless required for safety or access considerations or through a local exemption.

Figure 4. Nehalem Bay Functional Classifications

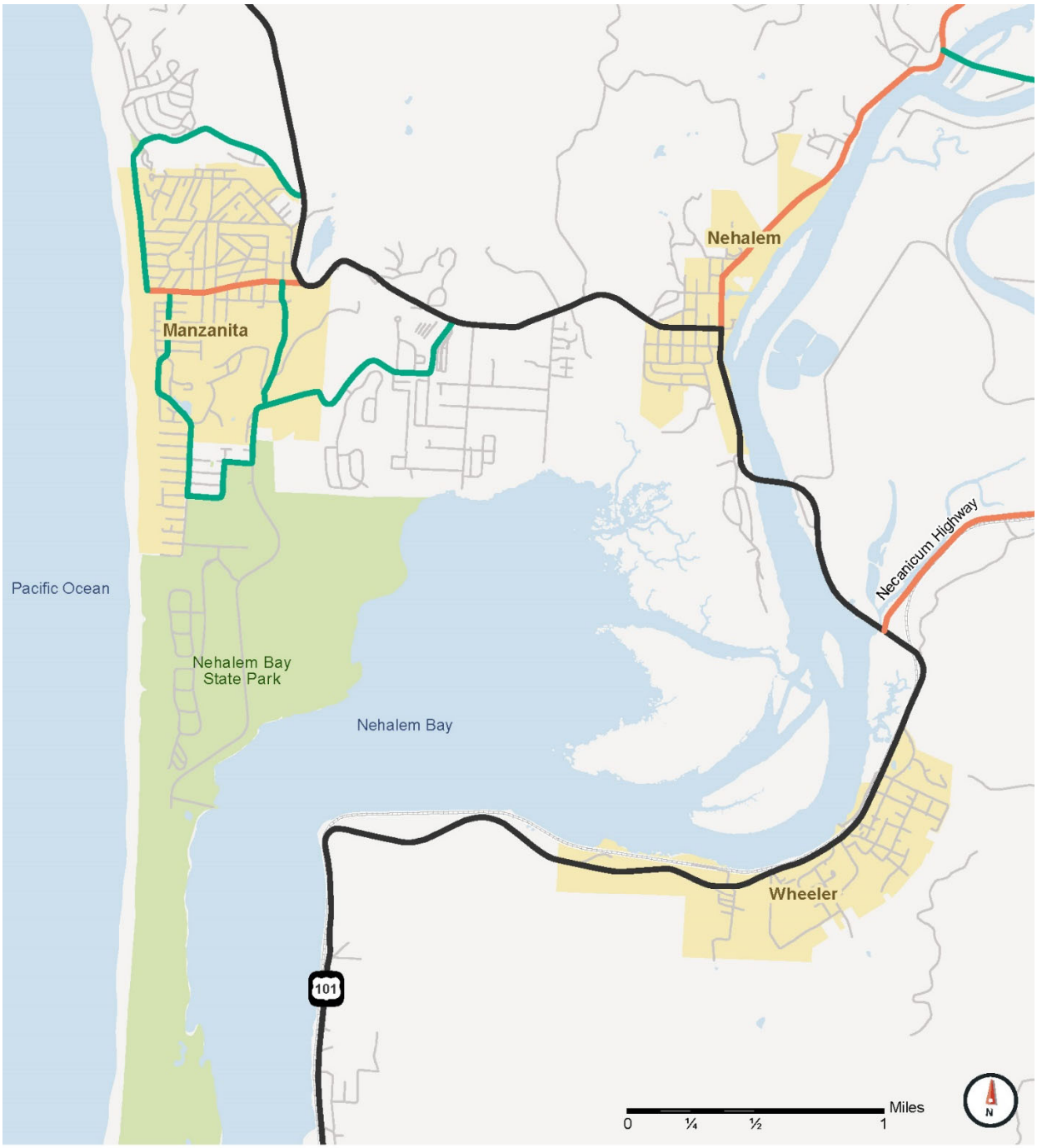


Figure 4

Roadway Functional Classification

Roadway Design Standards

Design standards set the minimum widths for roadways, usually based on functional classification, as well as street elements such as parking lanes, sidewalks, and bike lanes. **Table 4** to **Table 6** summarize design standards for roadway cross-section elements in each City.

Table 4: Manzanita Roadway Standards by Functional Class

Functional Class	ROW Width	Base Width	Gravel Width	Paving Width
Arterial	50 feet	28 feet	28 feet	24 feet
Collector	40 feet	26 feet	26 feet	22 feet
Residential	40 feet	24 feet	24 feet	20 feet

Source: Manzanita Ordinance No 91-2

Table 5: Nehalem Roadway Standards by Functional Class

Functional Class	ROW Width	Curb to Curb Pavement Width	Travel Lanes	Parking Lanes	Sidewalks
Arterial	60 feet	40 feet	12 feet	8 feet	6 feet
Collector	50 feet	38 feet	11 feet	8 feet	6 feet
Driveway	10 feet	10 feet	10 feet	-	-
Private street, alley	20 feet	18 feet	9 feet	-	-
Residential	40 feet	32 feet	9 feet	7 feet	4 feet
	30 feet	25 feet	9 feet	7 feet	4 feet

Source: Nehalem Municipal Code 156.081

Table 6: Wheeler Roadway Standards by Functional Class

Functional Class	ROW Width	Base Width	Gravel Width	Paving Width	Shoulder Width
Arterial	50 feet	32 feet	32 feet	24 feet	5 feet
Collector	50 feet	32 feet	32 feet	22 feet	5 feet
Minor	50 feet	26 feet	26 feet	20 feet	3 feet

Source: Wheeler Ordinance 92.04

Travel Lanes

All of the roads in Nehalem Bay have a two-lane cross-section, with the exception of Highway 101 which has a three-lane cross section (two travel lanes and one center turn lane) between Bayside Gardens Road and the Rex Champ Field entrance. There are also left-turn bays at the intersections of:

- U.S. 101 and Manzanita Avenue (Manzanita)
- U.S. 101 and Laneda Avenue (Manzanita)
- U.S. 101 and 8th Street (Nehalem)
- U.S. 101 and Tideland Road
- U.S. 101 and OR 53
- U.S. 101 and the Paradise Cove Resort and Marina entrance

Pavement

The pavement condition of U.S. 101 through Nehalem Bay ranges from "Good" to "Very Good" according to ODOT's pavement condition records. Most public roadways within Manzanita city limits are paved. In Wheeler Depot Street and the northernmost quarter of First Street are unpaved, while in Nehalem a portion of 8th Street, the north end of 9th street, and J Street are unpaved. There are also several gravel roadways outside of city limits but within urban growth boundaries that are maintained by Tillamook County.

Intersection Control

There are no signalized intersections in Nehalem Bay. Most intersections are treated with two-way or four-way stop-control intersection control. The intersection of 7th Street and H Street in Nehalem is a stop-controlled intersection with a red flashing beacon.

Posted Speed

The posted speed limits in Nehalem Bay range from 25 mph on most local and neighborhood roads, to 55 mph on segments of U.S. 101 outside of city limits. Additionally, 7th Street and U.S. 101 have speed limits of 35 mph and 30 mph, respectively, within Nehalem. **Figure 5** shows the posted speed limits of U.S. 101 in the region.

Figure 5. Posted Speed Limits

Access and Connectivity

The Oregon Transportation Planning Rule (TPR) defines "Access Management" as "…measures regulating access to streets, roads and highways from public roads and private driveways." The TPR requires that new connections to both arterials and state highways follow designated access management guidelines. Typically, existing access points can remain so long as the land use does not change.

In general, access management standards require more spacing for higher capacity roadways. However, the specific spacing value may vary by jurisdiction. The City of Manzanita's Ordinance No. 94-2 states that lots in commercial zones C-1 and LC may have 12.5 feet of driveway if the property is less than 100 feet in frontage width, while lots greater than 100 feet in frontage width may have 12.5 feet of driveway per 50 feet of frontage. In all other zones, the same rules apply with a differentiating frontage width of 50 feet (instead of 100 feet).

The Oregon Highway Plan (OHP) includes access management spacing standards for ODOT highways, most recently amended in 2005. U.S. 101 is under ODOT management and must follow OHP standards. The OHP access management spacing standards as applied to U.S. 101 are shown in Table 1**Table 7**. The highway classification of U.S. 101 (statewide highway) can be found in Appendix D of the OHP.

Table 7: OHP Access Spacing Standards

Roadway	Speed Limit	Spacing Standard (rural)	Spacing Standard (urban)
U.S. 101	55 or higher	1320 feet	1320 feet
	50	1100 feet	1100 feet
	40 & 45	990 feet	800 feet
	30 & 35	770 feet	500 feet
	25 & lower	550 feet	350 feet

Segments of U.S. 101 do not meet the OHP's spacing standards within the city limits of Manzanita, Nehalem, and Wheeler.

Bridges

There are seven bridges along U.S. 101 through Nehalem Bay. Of these bridges:

- Five of these bridges are 40 feet or less and two are long (lengths of 321 feet and 1,062 feet).
- Two of the bridges on U.S. 101 have low sufficiency ratings (26 for both). The sufficiency rating is a tool to determine the structural condition and functionality of a bridge. Bridges with a rating under 50 could be eligible for federal funding for replacement or rehabilitation.

Figure 6 shows all of the bridges in Nehalem Bay and denotes their sufficiency ratings.

Figure 6. Sufficiency Ratings of Bridges

Figure 6

Sufficiency Ratings of Bridges

Parking

In Manzanita, parking is prohibited on public streets except in areas specifically marked for public parking, according to ordinance No. 11-03. Laneda Avenue has striped on-street parking along the commercial core, and Ocean Road has gravel shoulders where visitors often park. All permitted on-street parking is free and without time restrictions. There are no off-street public parking lots near beach access points in Manzanita; the only free public lot is on 5th Street at the Manzanita bus stop with approximately 20 parking stalls. There are a few small public bike parking racks located along Laneda Avenue.

In Nehalem, free on-street parking is available on U.S. 101 and Tohls Street. There are a few small off-street lots available to customers of local businesses and a large open parking lot on the northwest corner of U.S. 101 and 7th Street. There is also public parking in the open lot behind City Hall. There are no time restrictions on these parking spaces.

Wheeler has free on-street parking on U.S. 101 in the commercial core and along Rorvik and Gregory Streets. There is also an off-street public parking lot with approximately 25 parking stalls and access to the boat launch. A few businesses along U. S. 101 have small parking lots available to their customers.

Transit

NW Connector

Public transportation in the region is provided by NW Connector. The NW Connector Route 3 runs daily Northbound and Southbound through Nehalem Bay, with a frequency between two and three hours. The route has a total of five scheduled stops through Nehalem Bay (**Figure 7)**:

- Wheeler Stop #157 (Rinehart Clinic)
- Wheeler Stop #189 (U.S. 101 & Rector Street)
- Wheeler Stop #190 (U.S. 101 & Hemlock Street)Nehalem Stop #155 (8th Street & Tohls Avenue)
- Manzanita Stop #148 (5th Street S)

Stop #189 in Wheeler and the stops in Nehalem and Manzanita have transit shelters for riders, benches, and schedule information. The Rinehart Clinic stop in Wheeler is in front of the health clinic which has shelter and a bench, while the stop at Hemlock Street has only a bench and no signage stating that it is a bus stop. Riders may also flag the bus anywhere along the route where it is safe to do so. Route 3 extends to the Tillamook Transit Center Northbound and Midtown Cannon Beach Southbound; fares are zone-based and range from $1.50 to $4.50.

Oregon Coast Scenic Railroad

The Oregon Coast Scenic Railroad is a heritage railroad that operates seasonally between Rockaway Beach and Garibaldi, with special trips to Wheeler. Tickets are round-trip and can be booked in advance. The Wheeler depot is located at U.S. 101 & Rector Street, East of Waterfront Park.

Figure 7. Existing Transit

Figure 7

Existing Transit

Bicycle System

Most roadways in Nehalem Bay are low speed local and residential roadways that are unmarked for bicycles. One marked bicycle facility exists in Manzanita, where there is a striped bicycle lane on the east side of Carmel Avenue between Laneda Avenue and Horizon Lane.

There are no marked bicycle facilities connecting Manzanita, Nehalem, and Wheeler. U.S. 101 is designated as the Oregon Coast Bike Route; however, the bicycle facility is a paved shoulder with a minimum width of 3 feet, and a maximum width of 8 feet. The facility condition is classified as fair on the shoulder and shared lane facilities through Nehalem and Wheeler. There are no signalized crossings of U.S. 101, which can make crossing U.S. 101 difficult when traffic is heavy. **Figure 8** shows the bicycle network in Nehalem Bay.

Figure 8. Bicycle Network

Figure 8

Bicycle Network

Pedestrian System

Pedestrian facilities are present around retail and active storefront developments in Nehalem Bay. Pedestrian facilities include sidewalks, crosswalks, and curb ramps, however there are gaps in pedestrian infrastructure along main roads. There are three marked crossings of U.S. 101 in Nehalem, two in Wheeler, and none in Manzanita. While most residential streets in each of the cities lack sidewalks, they may not be needed, given each these streets' narrow, low speed and low volume character, which makes it fairly comfortable for pedestrians to share the roadway with other users. Sidewalks and marked crossings may be needed on higher speed and higher volume facilities and/or on those with a history of pedestrian collisions.

Manzanita has seven marked crossings of Laneda Avenue between U.S. 101 and Ocean Road. Laneda Avenue has sidewalks on one side from U.S. 101 to Division Street and on both sides from Division Street to Ocean Road. A short segment of U.S. 101 between Manzanita Avenue and Laneda Avenue has a sidewalk on one side, and the facility is in good condition. The rest of the streets in Manzanita, including Ocean Road, do not have sidewalks.

Nehalem has sidewalks on one side of U.S. 101 from 9th Street to 8th Street and on both sides from 8th Street to 7th Street to just south of Tohls Street. These facilities are all classified as fair condition. There are four marked crossings of U.S. 101 in Nehalem at 9th Street, 7th Street, and Tohls Street. Nehalem Elementary School is the only public school in Nehalem Bay, located at the intersection of 7th Street and Northfork Road. There are no pedestrian facilities in the vicinity of Nehalem Elementary School.

Wheeler has sidewalks on one side of U.S. 101 from Hemlock Street to Rector Street, on two sides from Rector Street to Gregory Street, and on one side from Gregory Street to Gamble Street. These facilities are all classified as fair condition. There are also sidewalks on sections of Gregory Street and Rorvik Street. There are two marked crossings of U.S. 101 in Wheeler, one at Rorvik Street and one at Rector Street.

There are no pedestrian facilities connecting the cities of Manzanita, Nehalem, and Wheeler. **Figure 9** shows the pedestrian network in Nehalem Bay.

Figure 9. Pedestrian Network

Aviation

There are no commercial airports within the city limits. The Nehalem Bay State Airport, which is located within the Nehalem Bay State Park, is a publicly owned airport open to general private aviation. The airport features one paved runway that is 2,350 feet long and offers fly-in camping.

Marine

Nehalem Bay and the Nehalem River are designated as part of the National Waterway Networks by the U.S. Army Corps of Engineers as far inland as the westernmost edge of Lazarus Island. They are also designated as a Tillamook County Water Trail, which is a waterway connected through signs, maps, and access points to provide a recreational and educational experience for non-motorized recreational users. There are many private and public docks, marinas, and boat launches in Nehalem Bay. Public docks and boat launches include the Tillamook County Boat Launch off U.S. 101 between Nehalem and Wheeler, the Nehalem Bay State Park Boat Launch in Manzanita, the Waterfront Park Dock in Wheeler, and the H Street and Tohls Street Docks in Nehalem.

Rail

A segment of the 46-mile rail line travels parallel to U.S.101 south of the intersection of U.S.101 and OR 53 and is under lease from the Port of Tillamook Bay Railroad (POTB). There are three at-grade rail crossings in Wheeler, which are stop-controlled eastbound towards U.S.101 and yield-controlled westbound away from U.S.101.

Pipeline

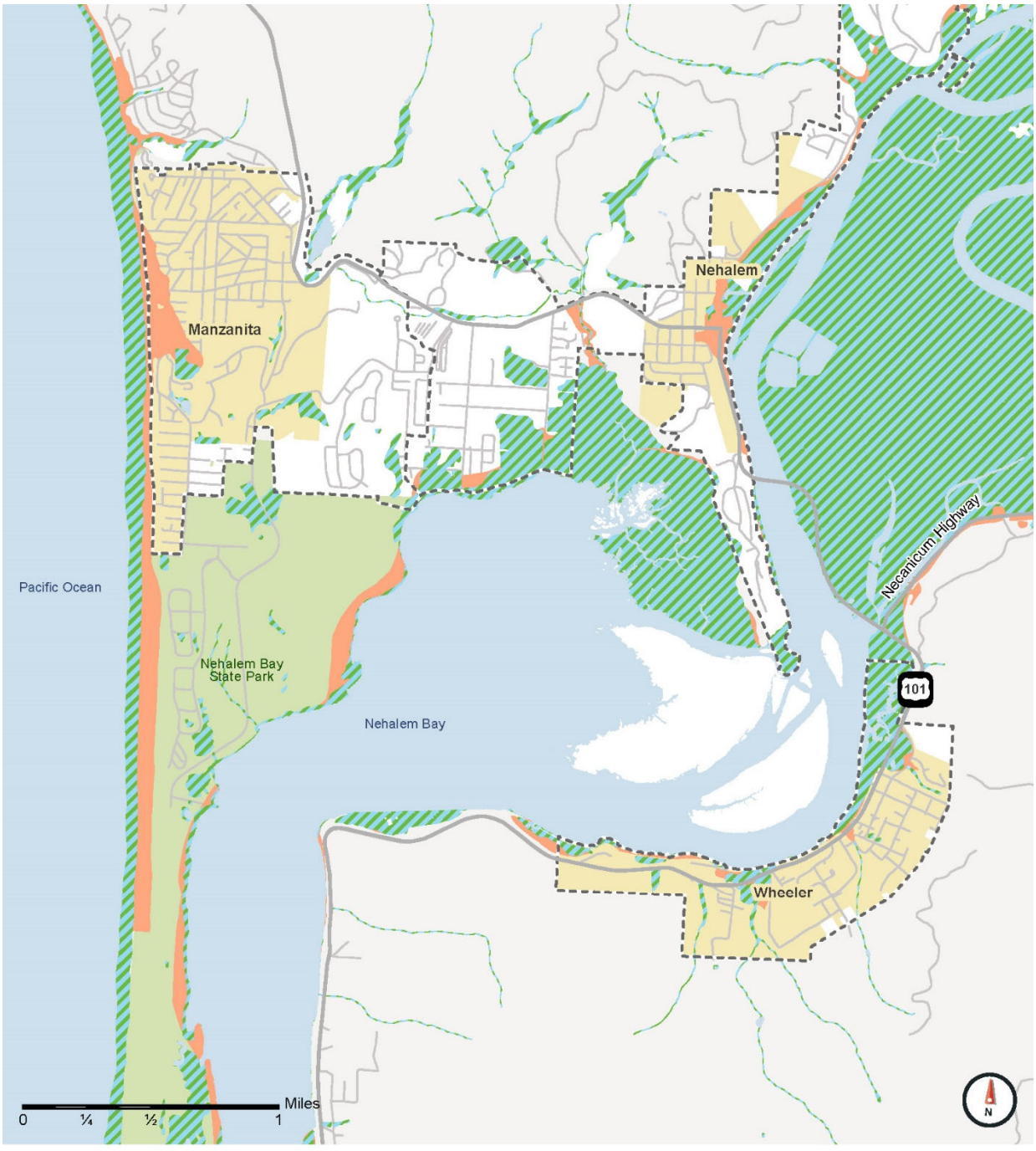
There are no pipelines within the study area.

Environmental and Cultural Resources

While not a direct component of the transportation system, riparian habitat, wetlands, and flood zones are important local and regional resources that can affect or be affected by the transportation system. Nehalem experiences annual flooding that affects the commercial zone and sometimes closes the intersection of U.S. 101 and 7th Street.

The location of these sensitive areas may affect the transportation projects that can be built and may limit connectivity in certain areas. Identifying these sensitive areas helps to avoid and limit adverse impacts when developing TSP projects and programs. This is a planning-level assessment and more detailed study may be needed during project development. Locations identified by this study are shown in **Figure 10**.

Figure 10. Environmental Resources



Wetlands
Flood Zone >1% chance
Park
City
Urban Growth Boundary (2019)

Figure 10

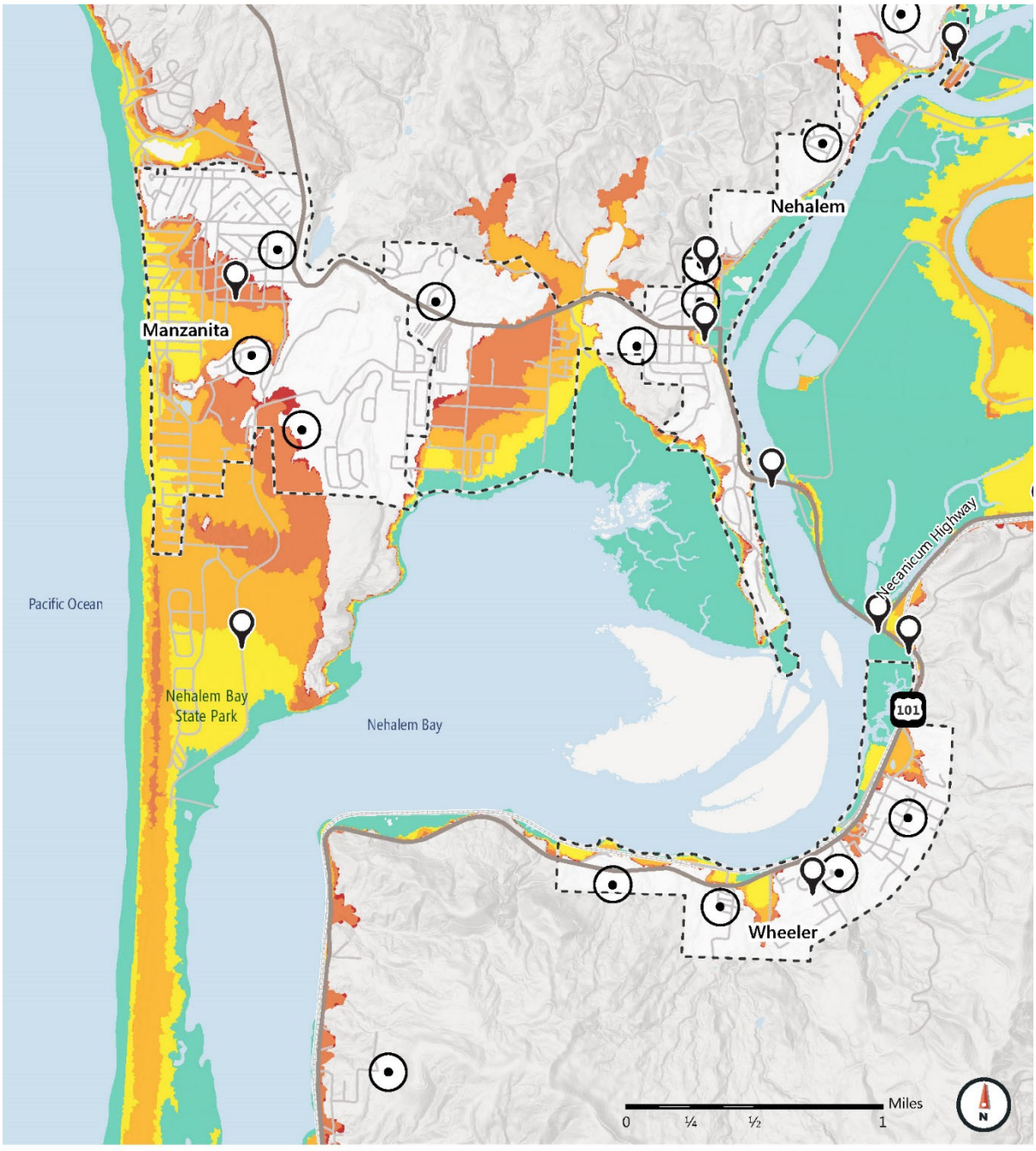
Environmental Resources

Tsunami and Hazard Evacuation

According to the Oregon Department of Geology and Mineral Industries (DOGAMI), the Nehalem Bay area is at risk for tsunamis caused by both the Cascadia Subduction Zone (CSZ) and the Alaska-Aleutian Subduction Zone (AASZ). The smallest CSZ tsunami is projected to inundate 2.3 percent of the Nehalem Bay area, with the City of Manzanita falling outside of the inundation zone. The largest CSZ tsunami is projected to inundate 48.6 percent of the Nehalem Bay area, with a greater proportion of Manzanita falling within the inundation zone than Nehalem and Wheeler. A map of the CSZ's inundation zone in Nehalem Bay is shown in **Figure 11.** Tsunamis in Nehalem Bay caused by the AASZ are significantly smaller, with the largest possible tsunami inundating less than 1 percent of the Nehalem Bay area. The City of Manzanita does not fall in the AASZ inundation zone while Nehalem and Wheeler do.

There are fifteen assembly locations within the UGB study area in the event of a tsunami and hazard evacuation. Six are located in the Wheeler UGB, six in the Nehalem UGB, and three in the Manzanita UGB. There are no vertical evacuation shelters constructed or under construction in Nehalem Bay. Wheeler is especially vulnerable to a CSZ event when considering access, with U.S. 101 northbound and southbound out of Wheeler falling within the inundation zone of a small CSZ tsunami. In a large CSZ tsunami, the segment of U.S. 101 between the Alder Creek bridge and Rex Champ Field also falls within the inundation zone.

Figure 11. Tsunami Inundation Zones



Statewide Tsunami Inundation Scenario

- Small
- Medium
- Large
- Extra Large
- Extra Extra Large

- Critical Facility*
- Assembly Area
- Urban Growth Boundary (2019)

* As defined by DOGAMI, includes facilities such as schools, medical facilities, and bridges.

Figure 11

Tsunami Inundation Zones

Operations and Safety

The following section describes how Nehalem Bay's transportation network performs today, in terms of traffic operations, collisions, as well as conditions for biking and walking. These analyses estimate the demand on the network and how well the existing system serves the residents of Nehalem Bay.

Traffic

The evaluation of existing traffic conditions focuses on volumes along U.S. 101 and intersection operations at U.S. 101 / 7th Street in Nehalem and U.S. 101 / Hemlock Street in Wheeler. Results from this analysis will provide a baseline against which the 2040 operations can be compared.

Average Daily Volumes

ODOT keeps an inventory of the annual average daily volume (AADT) along U.S. 101 and a few of the connection roadways in Nehalem Bay, as shown in **Figure 12.** The figure shows that the highest volumes are between Manzanita and Nehalem, and from Nehalem to the Tillamook County Boat Launch.

Segment Operations Methodology

A total of seven roadway segments were analyzed using the volume for the 30th highest hour volume (30HV). The AADT volume provided by ODOT was converted to the 30HV using the methodology outlined in Section 5.7 of the Analysis Procedures Manual (APM) and the Automatic Traffic Recorder (ATR) Trend Summary from the nearest location in the Traffic Volume Tables (TVT). The 30HV was then used to calculate the volume to capacity (v/c) ratio for the seven segments analyzed.

The v/c ratio is a mathematical calculation of the amount of capacity that is used at the intersection at a point in time. A v/c ratio of 1.0 indicates that the intersection or segment is "at capacity." As the v/c ratio approaches 1.0, it is typically an indication of increased congestion. For signalized intersections, the average v/c for all approaches is reported. For unsignalized intersections, the movement with the highest v/c is used.

The OHP establishes v/c mobility targets for highways throughout the state, with a v/c target of 0.8 to 0.85[2] for U.S. 101 within the UGB and 0.70 outside the UGB. These are, however, targets rather than standards and the OHP acknowledges that in some cases it may be impractical to meet these targets. As shown in **Table 8,** all segments currently have a v/c ratio significantly below the targets defined in the OHP. Detailed calculations can be found in Appendix A.

[2] The v/c targets cited for the segments of U.S. 101 through Nehalem Bay are based on the Oregon Highway Plan Table 6 *Volume To Capacity Ratio Targets Outside Metro*. These segments are classified as Freight Routes on a Statewide Highway Non-MPO, with different targets identified based on posted speed <= 35 mph, >35 and < 45 mph, or >=45 mph.

Table 8: Roadway Segment 30th HV V/C

ID	Segment	v/c target[1]	v/c[2]
1	US 101 north of Laneda Avenue	0.80	0.31
2	US 101 at west city limits of Nehalem	0.80	0.42
3	US 101 west of 7th Street	0.85	0.39
4	US 101 north of Tohls Street	0.85	0.39
5	US 101 north of Necanicum Highway	0.70	0.35
6	US 101 north of Hemlock Street	0.80	0.32
7	US 101 north of Rector Street	0.85	0.30

[1] v/c targets taken from the Oregon Highway Plan Table 6 based on highway category and posted speed.
[2] v/c calculated using HCS for a two-lane highway and reported for the peak direction.

Intersection Operations Methodology

Intersection operations analysis was conducted at two key intersections in Nehalem Bay: U.S. 101/7th Street (Nehalem) and U.S. 101/Hemlock Street (Wheeler). To understand transportation needs that exist today, the baseline year was determined to be 2020 pre-COVID. To develop the 2020 pre-COVID baseline, volumes at U.S. 101/Hemlock Street (Wheeler) were counted in January 2020 and volumes at US 101/7th Street (Nehalem) were counted in March 2021. As the March 2021 count was conducted during COVID conditions, the turning movement distribution was taken from this count and applied to the link-level volumes described in the section above. Per ODOT's APM, the evaluation period for this analysis was the weekday 30HV. To calculate the 30HV, the PM peak hour volume was multiplied by seasonal factors from ODOT's Seasonal Trend Table per the ODOT recommended methodology. Seasonal factors and calculations can be found in Appendix B.

Level of Service and Queueing

Level of service (LOS) is a standard method for characterizing delay at an intersection. For signalized and all-way stop controlled (AWSC) intersections, the LOS is based on the average delay for all approaches. For two-way stop controlled (TWSC) intersections, the movement with the highest delay is used.

Table 9 summarizes the LOS and delay thresholds specified in the 6th Edition Highway Capacity Manual (HCM), which is a standard methodology for measuring intersection performance.

Table 9: Level of Service Definitions for Unsignalized Intersections

Level of Service	Description	Unsignalized Intersection Delay (seconds/vehicle)
A	Free-flowing Conditions	0-10
B	Stable Flow (slight delays)	>10-15
C	Stable Flow (acceptable delays)	>15-25
D	Approaching Unstable Flow (tolerable delay)	>25-35
E	Unstable Flow (intolerable delay)	>35-50
F	Forced Flow (congested and queues fail to clear)	>50

Source: 6th Edition Highway Capacity Manual (HCM)

SIDRA was used to evaluate operations at the U.S. 101/7th Street intersection as it has a non-standard control with a flashing red signal that controls all movements, except eastbound right turns, which are an uncontrolled movement. Synchro 11 was used to evaluate the US 101/Hemlock Street intersection. The modeled network reflects conditions on the ground today, including intersection geometry, vehicle volumes and pedestrian/bicycle volumes. Corridors that show high existing delay or queuing will be examined in greater detail in the future conditions assessment and may require a refined analysis as potential solutions are evaluated. There is no intersection level of service or delay standard in Nehalem Bay.

As shown in **Table 10**, both intersections operate at LOS C and have v/c ratios well below the mobility targets identified in the OHP. Queueing was also evaluated as part of the intersection analysis. No movements were found to exceed available storage or have queues that would impact traffic flow. It is important to note that, during peak seasonal travel, driver unfamiliarity with the configuration at the U.S. 101/7th Street intersection has been reported to cause an increase in congestion, specifically for eastbound vehicles turning right. Detailed calculations can be found in Appendix A.

Table 10: Intersection Operations

ID	Intersection	Delay (seconds)/LOS	Minor Street v/c	Major Street v/c
1	US 101/7th Street (Nehalem)	17/C[1]	0.38[1]	0.27
2	US 101/Hemlock Street (Wheeler)	17/C	0.03	0.0[1]

[1] Metric reported for the leg with the highest delay and v/c due to non-standard configuration
[2] Synchro software does not report v/c since major street is uncontrolled

Figure 12. Annual Average Daily Traffic (AADT)

Figure 12

Annual Average Daily Traffic

Figure 13. Existing V/C Ratio and LOS

V/C < 0.8
LOS C
Urban Growth Boundary (2019)
City
Park
Railroad

Figure 13

Existing V/C Ratio and LOS

Safety

The collision data and analysis discussed here is derived from the most recent available ODOT crash data for all facilities in the region, collected between the years of 2014 and 2018. There were 78 collisions recorded for the area within the UGBs and on the stretch of U.S. 101 between Nehalem and Wheeler. **Table 11** compares crash data from the 78 collisions in the study area to statewide crash data for the same time period. Based on the comparison, collisions related to speeding or driving too fast for the conditions are overrepresented in Nehalem Bay compared to the rest of the state. All collision data can be found in Appendix C.

Table 11: Comparison of Regional Collisions by Attribute

Crash Attribute	Nehalem Bay	Oregon Statewide
Intersection	41%	38%
Speeding/Too fast for conditions	16%	5%
Motorcycle	0%	2%
Pedestrian	0%	2%
Bicyclist	1%	2%

Note: Shaded cells indicate rates for Nehalem Bay that are above the statewide average.

There were no fatal collisions and one severe injury collision in Nehalem Bay between 2014 and 2018. The severe injury collision occurred on U.S. 101 just outside the Manzanita city limits but inside the UGB. It was attributed to improper driving and alcohol was involved, and the vehicle hit a fixed object. Additionally, one collision involving a bicyclist was observed during the study period.

Of the recorded collisions, roughly a quarter (24%) occurred within the city limits of Nehalem. About 13 percent of collisions occurred in Manzanita[3] and 10 percent occurred Wheeler. All other reported collisions (53%) occurred in unincorporated areas.The intersection of U.S. 101 and Laneda Avenue was under construction in 2017 which could have affected the collision information for Manzanita for this time period.

Most of the reported collisions (67%) occurred on U.S.101.Other notable locations with concentrations of collisions include Laneda Avenue (6% of total collisions) and Necarney City Road (5% of total collisions). Almost a third (30%) of all collisions occurred between the hours of 4pm and 7pm, and collisions were observed to occur more frequently during the summer season.

In Manzanita, of the 10 collisions in the City limits (excluding U.S. 101), four were turning-related and three were sideswipes. Of the nineteen collisions in Nehalem, ten were turning-related (t-bone)

[3] The intersection of U.S. 101 and Laneda Avenue was under construction in 2017 which could have affected the collision information for Manzanita for this time period.

collisions, and five were rear-end collisions. Three occurred at the intersection of U.S. 101 and 7th Avenue. Wheeler had eight collisions in the City limits. Of these, three were turning movement-related and two were collisions with fixed objects.

Locations of collisions and their severity are shown in **Figure 14**.

ODOT Safety Priority Index System

A Safety Priority Index System (SPIS) identifies and ranks intersections and roadway segments that are most likely to benefit from crash reduction countermeasures. Typically, an SPIS considers linear crash data along roadways and excludes side-street crashes at intersections. Three years of crash data are analyzed to yield SPIS scores that range between 0 (least severe) and 100 (most severe) based on crash frequency, crash rate, and crash severity. ODOT publishes a statewide SPIS and a SPIS for each region, which includes all ODOT-owned roadways and highways. There are no intersections or roadway segments in the study area that are listed in the ODOT top 15% SPIS sites for 2019.

Figure 14. Collision Severity

Figure 14

Collision Severity

Bicycle Standards and Level of Traffic Stress

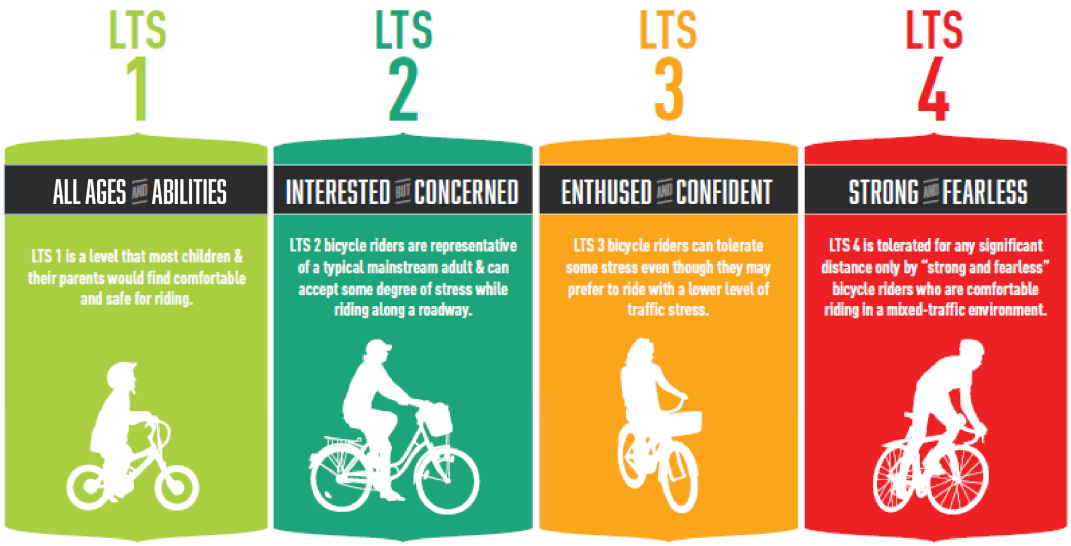
Bicycle Standards and Gaps

U.S. 101 is the most direct bicycle connection between the Nehalem Bay communities; however, most of the route does not meet ODOT standards for bicycle accommodation. The Statewide Active Transportation Needs Inventory[4] identified where there are gaps in the sidewalk and bicycle networks and where existing facilities do not meet ODOT's minimum standard of six-foot wide bike lanes, eight-foot wide buffered bike lanes, or eight-foot wide shoulders depending on the highway characteristics[5]. **Figure 16.** identifies locations with gaps and substandard facilities. Only a portion of U.S. 101 between Nehalem and Necanicum Highway currently meets the standard.

Bicycle Level of Traffic Stress

Bicycle level of traffic stress (BLTS) is a measure of how comfortable it is to bike on a given facility. It ranges from BLTS 1, a facility that is comfortable for riders of all ages and abilities, to BLTS 4, facilities that are only used by "strong and fearless" riders. **Figure** shows the bicycle level of traffic stress categories.

Figure 16.. Bicycle Level of Traffic Stress (BLTS) Categories



Source: Fehr & Peers, 2021.

As shown in **Figure 15,** U.S. 101 offers varying levels of comfort for bicyclists. West of Nehalem and both east and west of Wheeler 's commercial core, it is a BLTS 4 facility. These sections have higher speeds, higher traffic volumes, and no separate bicycle facilities. Within Nehalem, U.S. 101 offers

[4] https://www.oregon.gov/odot/RPTD/Pages/Statewide-Active-Transportation-Needs-Inventory.aspx
[5] See Table 13-1 of the ODOT Highway Design Manual

friendlier facilities, as it is mostly BLTS 3 with a short stretch of BLTS 2 between 8th Street and 10th Street where speeds are lower and there are wide shoulders for bicyclists to use. It is also BLTS 3 in Wheeler from Hemlock Street to Dubois Street, another segment that has lower posted traffic speeds.

Figure 15. Bicycle Gaps and Substandard Facilities

Figure 16

Bicycle Gaps and Substandard Facilities

Figure 15. Bicycle Level of Traffic Stress

Figure 17

Bicycle Level of Traffic Stress

Source: ODOT Active Transportation Network Inventory

Pedestrian Network Gaps

Sidewalks and marked crossings are generally present within the commercial core of each city. However, there are few sidewalks outside of the commercial cores, including along U.S. 101 between the cities which lacks pedestrian facilities altogether. **Figure 16** shows where U.S. 101 has pedestrian gaps or does not meet ODOT standards of six-to-eight foot wide buffered sidewalks or eight-foot wide conventional sidewalks or shoulders per the ODOT Highway Design Manual.

Figure 16. Pedestrian Network Gaps

Summary of Existing Deficiencies

U.S. 101

U.S. 101 is the most direct connection between all three cities in Nehalem Bay. It is responsible for moving residents, visitors, and goods to and from the communities and also carries significant traffic passing through the region. It performs well in achieving its primary objective: carrying vehicles. Existing traffic operations indicate that U.S. 101 has sufficient capacity and operates well below ODOT's v/c targets within the study area.

The majority of the traffic collisions from 2014 to 2018 within Nehalem Bay occurred on U.S. 101, and while there were no fatal collisions in that timeframe there was one suspected severe injury collision and one bicycle collision. Additionally, speeding related collisions are over-represented in Nehalem Bay compared to the state of Oregon.

While U.S. 101 is the designated pedestrian and bicycle connection between Manzanita, Nehalem, and Wheeler, it lacks dedicated bicycle facilities throughout the study area and only has sidewalks through downtown Nehalem and downtown Wheeler. Due to the high volume and speed of vehicle traffic, this lack of separation from vehicles makes the route uncomfortable for people walking and bicycling.

Manzanita

Manzanita does not have U.S. 101 traffic through its commercial core but still has high vehicle volumes on Laneda Avenue, which also caters to pedestrians, bicyclists, and on-street parking. There have been several collisions along Laneda Avenue in the last five years, including one at its intersection with U.S. 101, and the most common collision types were turning related and sideswipes. Parking has been identified by City staff as a concern, especially during the busy summer months when visitors want to access the shopping on Laneda Avenue and the beach access points on Ocean Road.

Laneda Avenue has sidewalks and low vehicle speeds, making for a generally comfortable walking and biking environment. There is also one bicycle lane in Manzanita along Carmel Avenue from Laneda Avenue to Nehalem Bay State Park. However, outside of these two streets there are no dedicated bicycle facilities or sidewalks in Manzanita, and few connections between Manzanita city limits and the UGB area to the east that encompasses a large number of homes. There are also no dedicated facilities for walking and biking connecting Manzanita and Nehalem, so visitors and residents must drive or walk or bike along roadway shoulders to travel between the cities.

Nehalem

U.S. 101 bisects Nehalem and runs through the commercial core. The intersection of U.S. 101 and 7th Street in the center of the City has had ongoing operational issues that the City would like to address. While the intersection has sufficient capacity and generally operates at LOS C, its non-standard

configuration causes congestion for vehicles traveling eastbound and turning right on U.S. 101. This issue is particularly pronounced in the summer and during holiday weekends, given the number of unfamiliar drivers. There were a high number of recorded collisions along U.S. 101 through Nehalem, with three at the intersection of U.S. 101 and 7th Avenue. The most common collision types in Nehalem are turning-related or angle collisions and rear ends.

There are no designated bicycle facilities in Nehalem, and the sidewalks only span a short section of U.S. 101. There are also no sidewalks or marked crossings in the vicinity of Nehalem Elementary School. There are no direct pedestrian facilities connecting Nehalem with either Manzanita or Wheeler, which makes residents dependent on cars to travel between the cities. The City also contends with occasional flooding that affects businesses, homes, and transportation facilities.

Wheeler

Wheeler's commercial core is on the south side of U.S. 101 while the waterfront, boat launch, and additional businesses are located on the north side. There are sidewalks on one side of U.S. 101 from Hemlock Street to Gamble Street, and on both sides between Rector Street and Gregory Street. There are no dedicated bicycle facilities in Wheeler.

The intersection of Hemlock Street and U.S. 101 operates at LOS C, with a v/c ratio below the state's mobility standards. The most common collision types in Wheeler from 2014-2018 were turning movement and fixed object collisions. There are no direct pedestrian facilities connecting Wheeler with either Manzanita or Nehalem, which makes residents dependent on cars to travel between the cities.

Appendix A: LOS Calculations

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	0	2	0	10	2	323	8	14	304	0
Future Vol, veh/h	2	0	0	2	0	10	2	323	8	14	304	0
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	-	-	-	-	-	-	-	-	-	-	-	-
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	0	0	100	0	0	0	8	0	29	10	0
Mvmt Flow	2	0	0	2	0	12	2	380	9	16	358	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	785	783	358	779	779	385	358	0	0	389	0	0
Stage 1	390	390	-	389	389	-	-	-	-	-	-	-
Stage 2	395	393	-	390	390	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	8.1	6.5	6.2	4.1	-	-	4.39	-	-
Critical Hdwy Stg 1	6.1	5.5	-	7.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	7.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	4.4	4	3.3	2.2	-	-	2.461	-	-
Pot Cap-1 Maneuver	313	328	691	220	330	667	1212	-	-	1037	-	-
Stage 1	638	611	-	477	612	-	-	-	-	-	-	-
Stage 2	634	609	-	477	611	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	303	321	691	216	323	667	1212	-	-	1037	-	-
Mov Cap-2 Maneuver	303	321	-	216	323	-	-	-	-	-	-	-
Stage 1	637	599	-	476	611	-	-	-	-	-	-	-
Stage 2	622	608	-	468	599	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17	12.5	0	0.4
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1212	-	-	303	495	1037	-	-
HCM Lane V/C Ratio	0.002	-	-	0.008	0.029	0.016	-	-
HCM Control Delay (s)	8	0	-	17	12.5	8.5	0	-
HCM Lane LOS	A	A	-	C	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

MOVEMENT SUMMARY

Site: 1 [7th_101]

New Site
Site Category: (None)
Stop (All-Way)

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: U.S. 101												
3	L2	396	4.0	0.271	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	28.0
8	T1	37	0.0	0.271	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	28.0
18	R2	4	5.0	0.271	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	28.1
Approach		437	3.7	0.271	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	28.0
East: H Street												
1	L2	3	3.0	0.037	16.0	LOS C	0.1	3.1	0.93	1.22	1.97	23.0
6	T1	6	3.0	0.037	16.0	LOS C	0.1	3.1	0.93	1.22	1.97	23.1
16	R2	1	3.0	0.037	16.0	LOS C	0.1	3.1	0.93	1.22	1.97	23.2
Approach		11	3.0	0.037	16.0	LOS C	0.1	3.1	0.93	1.22	1.97	23.1
North: 7th Street												
7	L2	3	0.0	0.346	16.9	LOS C	1.4	39.5	0.93	1.37	2.43	22.8
4	T1	39	25.0	0.346	16.9	LOS C	1.4	39.5	0.93	1.37	2.43	22.7
14	R2	95	12.0	0.346	16.9	LOS C	1.4	39.5	0.93	1.37	2.43	22.9
Approach		137	15.4	0.346	16.9	LOS C	1.4	39.5	0.93	1.37	2.43	22.8
West: U.S. 101												
5	L2	96	10.0	0.378	13.2	LOS B	1.6	43.6	0.99	1.45	2.56	23.7
2	T1	3	0.0	0.378	13.2	LOS B	1.6	43.6	0.99	1.45	2.56	23.8
12	R2	424	3.0	0.294	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	28.1
Approach		523	4.3	0.378	2.5	LOS A	1.6	43.6	0.19	0.27	0.48	27.1
All Vehicles		1106	5.4	0.378	3.5	LOS A	1.6	43.6	0.21	0.31	0.55	26.8

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

HCS7 Two-Lane Highway Report

Project Information

Analyst	Fehr & Peers	Date	June 2021
Agency	ODOT	Analysis Year	2021
Jurisdiction	Region 2	Time Period Analyzed	30th Hour
Project Description	Nehalem Bay TSP Existing Conditions	Unit	United States Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	1840
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	521	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.95	Total Trucks, %	15.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.31

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	45.1
Speed Slope Coefficient	2.96246	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.46414	PF Power Coefficient	0.70569
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	7.3
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5280	-	-	43.0

Vehicle Results

Average Speed, mi/h	43.0	Percent Followers, %	60.3
Segment Travel Time, minutes	0.49	Followers Density, followers/mi/ln	7.3
Vehicle LOS	C		

Bicycle Results

Percent Occupied Parking	0	Pavement Condition Rating	4
Flow Rate Outside Lane, veh/h	521	Bicycle Effective Width, ft	24
Bicycle LOS Score	6.94	Bicycle Effective Speed Factor	4.17
Bicycle LOS	F		

Segment 2

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	7300
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	40	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	709	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.95	Total Trucks, %	15.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.42

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	45.1
Speed Slope Coefficient	3.02271	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.37932	PF Power Coefficient	0.71194
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	11.0
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5280	-	-	42.6

Vehicle Results

Average Speed, mi/h	42.6	Percent Followers, %	66.1
Segment Travel Time, minutes	1.95	Followers Density, followers/mi/ln	11.0
Vehicle LOS	D		

Bicycle Results

Percent Occupied Parking	0	Pavement Condition Rating	4
Flow Rate Outside Lane, veh/h	709	Bicycle Effective Width, ft	24
Bicycle LOS Score	7.10	Bicycle Effective Speed Factor	4.17
Bicycle LOS	F		

Segment 3

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	1420
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	665	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.95	Total Trucks, %	15.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.39

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	33.7
Speed Slope Coefficient	2.33720	Speed Power Coefficient	0.41674

PF Slope Coefficient	-1.48321	PF Power Coefficient	0.65177
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	14.2
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5280	-	-	31.9

Vehicle Results

Average Speed, mi/h	31.9	Percent Followers, %	67.9
Segment Travel Time, minutes	0.51	Followers Density, followers/mi/ln	14.2
Vehicle LOS	D		

Bicycle Results

Percent Occupied Parking	0	Pavement Condition Rating	4
Flow Rate Outside Lane, veh/h	665	Bicycle Effective Width, ft	24
Bicycle LOS Score	6.05	Bicycle Effective Speed Factor	3.39
Bicycle LOS	F		

Segment 4

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	355
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	663	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.95	Total Trucks, %	15.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.39

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	33.7
Speed Slope Coefficient	2.33529	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.48979	PF Power Coefficient	0.65001
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	14.2
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5280	-	-	31.9

Vehicle Results

Average Speed, mi/h	31.9	Percent Followers, %	68.0
Segment Travel Time, minutes	0.13	Followers Density, followers/mi/ln	14.2
Vehicle LOS	D		

Bicycle Results

Percent Occupied Parking	0	Pavement Condition Rating	4
Flow Rate Outside Lane, veh/h	663	Bicycle Effective Width, ft	24
Bicycle LOS Score	6.05	Bicycle Effective Speed Factor	3.39
Bicycle LOS	F		

Segment 5

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	6860
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	55	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	587	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.95	Total Trucks, %	15.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.35

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	62.2
Speed Slope Coefficient	3.94583	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.27082	PF Power Coefficient	0.76401
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	5.7
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5280	-	-	59.3

Vehicle Results

Average Speed, mi/h	59.3	Percent Followers, %	57.1
Segment Travel Time, minutes	1.32	Followers Density, followers/mi/ln	5.7
Vehicle LOS	C		

Bicycle Results

Percent Occupied Parking	0	Pavement Condition Rating	4
Flow Rate Outside Lane, veh/h	587	Bicycle Effective Width, ft	24
Bicycle LOS Score	7.81	Bicycle Effective Speed Factor	4.79
Bicycle LOS	F		

Segment 6

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	3480
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	45	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	543	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.95	Total Trucks, %	15.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.32

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	50.8
Speed Slope Coefficient	3.29420	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.38534	PF Power Coefficient	0.73565
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	6.6
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	5280	-	-	48.5

Vehicle Results

Average Speed, mi/h	48.5	Percent Followers, %	58.7
Segment Travel Time, minutes	0.82	Followers Density, followers/mi/ln	6.6
Vehicle LOS	C		

Bicycle Results

Percent Occupied Parking	0	Pavement Condition Rating	4
Flow Rate Outside Lane, veh/h	543	Bicycle Effective Width, ft	24
Bicycle LOS Score	7.29	Bicycle Effective Speed Factor	4.42
Bicycle LOS	F		

Segment 7

Vehicle Inputs

Segment Type	Passing Constrained	Length, ft	1360
Lane Width, ft	12	Shoulder Width, ft	6
Speed Limit, mi/h	25	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	509	Opposing Demand Flow Rate, veh/h	-
Peak Hour Factor	0.95	Total Trucks, %	15.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.30

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	28.0
Speed Slope Coefficient	2.02712	Speed Power Coefficient	0.41674
PF Slope Coefficient	-1.44792	PF Power Coefficient	0.61940
In Passing Lane Effective Length?	No	Total Segment Density, veh/mi/ln	11.8
%Improved % Followers	0.0	% Improved Avg Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	1360	-	-	26.6

Vehicle Results

Average Speed, mi/h	26.6	Percent Followers, %	61.5
Segment Travel Time, minutes	0.58	Followers Density, followers/mi/ln	11.8
Vehicle LOS	D		

Bicycle Results

Percent Occupied Parking	0	Pavement Condition Rating	4
Flow Rate Outside Lane, veh/h	509	Bicycle Effective Width, ft	24
Bicycle LOS Score	4.89	Bicycle Effective Speed Factor	2.61
Bicycle LOS	E		

Appendix B: Intersection Counts and Volume Calculations

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: 7th St/US 101 -- US 101/H St

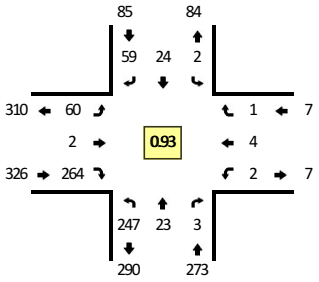
CITY/STATE: Nehalem, OR

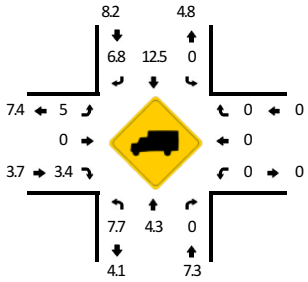
QC JOB #: 15383401

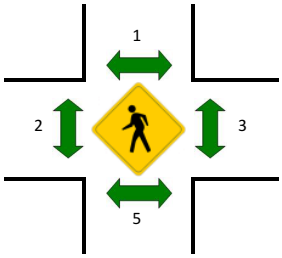
DATE: Thu, Mar 11 2021

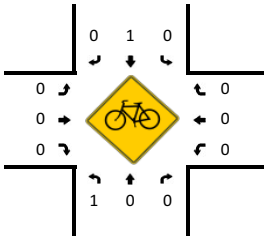
Peak-Hour: 3:15 PM -- 4:15 PM

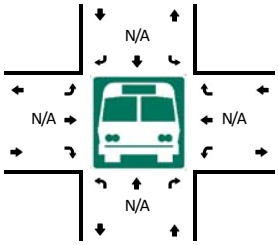
Peak 15-Min: 3:15 PM -- 3:30 PM

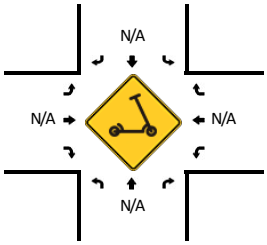












5-Min Count Period Beginning At	7th St/US 101 (Northbound)				7th St/US 101 (Southbound)				US 101/H St (Eastbound)				US 101/H St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:00 PM	17	1	0	0	0	1	2	0	2	2	19	0	0	0	0	0	44	
3:05 PM	5	0	0	0	0	7	2	0	2	1	28	0	0	0	0	0	45	
3:10 PM	12	0	0	0	0	2	2	0	2	0	25	0	0	0	0	0	43	
3:15 PM	19	1	0	0	0	1	5	0	6	0	21	0	0	0	0	0	53	
3:20 PM	31	0	0	0	1	1	5	0	4	0	21	0	1	0	0	0	64	
3:25 PM	28	2	1	0	0	2	7	0	9	2	14	0	0	3	0	0	68	
3:30 PM	17	1	1	0	0	1	5	0	3	0	16	0	1	0	0	0	45	
3:35 PM	18	2	0	0	0	1	6	0	5	0	25	0	0	0	0	0	57	
3:40 PM	10	5	1	0	1	3	1	0	3	0	31	0	0	0	1	0	56	
3:45 PM	28	2	0	0	0	0	11	0	4	0	18	0	0	1	0	0	64	
3:50 PM	18	4	0	0	0	3	2	0	8	0	28	0	0	0	0	0	63	
3:55 PM	20	0	0	0	0	5	4	0	0	0	28	0	0	0	0	0	57	659
4:00 PM	21	1	0	0	0	2	7	0	7	0	19	0	0	0	0	0	57	672
4:05 PM	19	2	0	0	0	4	4	0	4	0	14	0	0	0	0	0	47	674
4:10 PM	18	3	0	0	0	1	2	0	7	0	29	0	0	0	0	0	60	691
4:15 PM	20	1	0	0	0	1	4	0	9	0	18	0	0	0	0	0	53	691
4:20 PM	19	3	0	0	1	0	5	0	6	2	21	0	0	0	0	0	57	684
4:25 PM	24	3	0	0	0	1	3	0	1	0	17	0	0	2	0	0	51	667
4:30 PM	13	2	0	0	0	4	1	0	6	1	15	0	0	1	0	0	43	665
4:35 PM	12	1	0	0	0	2	5	0	3	0	11	0	0	0	1	0	35	643
4:40 PM	19	4	1	0	0	3	3	0	5	0	15	0	0	0	0	0	50	637
4:45 PM	22	4	0	0	1	1	1	0	6	0	17	0	0	1	0	0	53	626
4:50 PM	24	2	0	0	0	3	6	0	3	0	8	0	0	0	1	0	47	610
4:55 PM	21	4	0	0	0	3	10	0	3	0	15	0	0	0	0	0	56	609
5:00 PM	29	1	0	0	0	1	6	0	4	0	19	0	0	0	0	0	60	612
5:05 PM	9	4	0	1	0	3	4	0	4	0	16	0	0	0	0	0	41	606
5:10 PM	14	2	0	0	0	8	3	0	5	1	14	0	0	0	0	0	47	593
5:15 PM	11	1	0	0	0	3	9	0	6	0	18	0	1	0	0	0	49	589
5:20 PM	14	2	0	0	1	1	8	0	8	0	19	0	0	0	0	0	53	585
5:25 PM	15	5	0	0	0	2	7	0	1	0	20	0	0	0	0	0	50	584
5:30 PM	19	2	0	0	0	5	4	0	5	0	14	0	0	0	0	0	49	590
5:35 PM	14	0	0	0	0	2	2	0	4	0	12	0	0	0	1	0	35	590
5:40 PM	16	0	0	0	0	0	4	0	4	0	10	0	0	0	0	0	34	574
5:45 PM	8	1	0	0	0	3	2	0	3	0	13	0	0	0	0	0	30	551
5:50 PM	13	2	0	0	0	0	4	0	5	0	13	0	0	0	0	0	37	541
5:55 PM	24	0	0	0	1	1	1	0	3	0	12	0	0	0	1	0	43	528

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	312	12	4	0	4	16	68	0	76	8	224	0	4	12	0	0	740
Heavy Trucks	12	0	0		0	4	8		8	0	12		0	0	0		44
Buses																	
Pedestrians		8				0				0				0			8
Bicycles	0	0	0		0	4	0		0	0	0		0	0	0		4
Scooters																	

Comments:

Report generated on 3/17/2021 11:23 AM

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

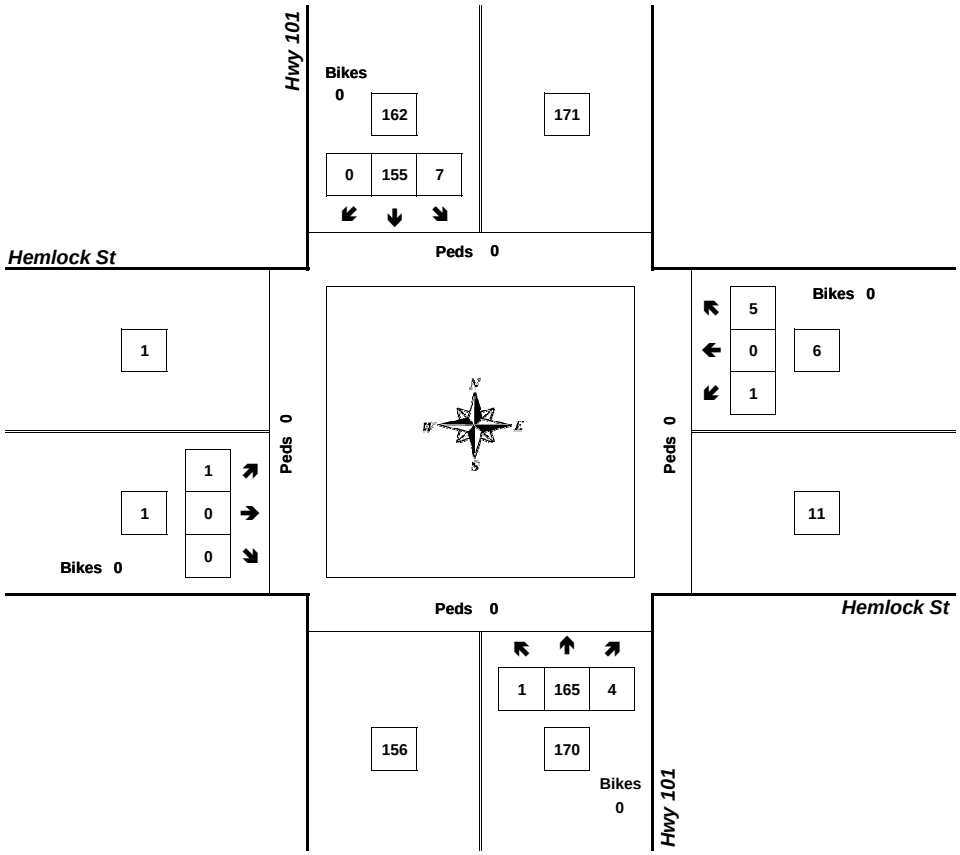
Peak Hour Summary

All Traffic Data Services Inc.

Clay Carney
(503) 833-2740

Hwy 101 & Hemlock St

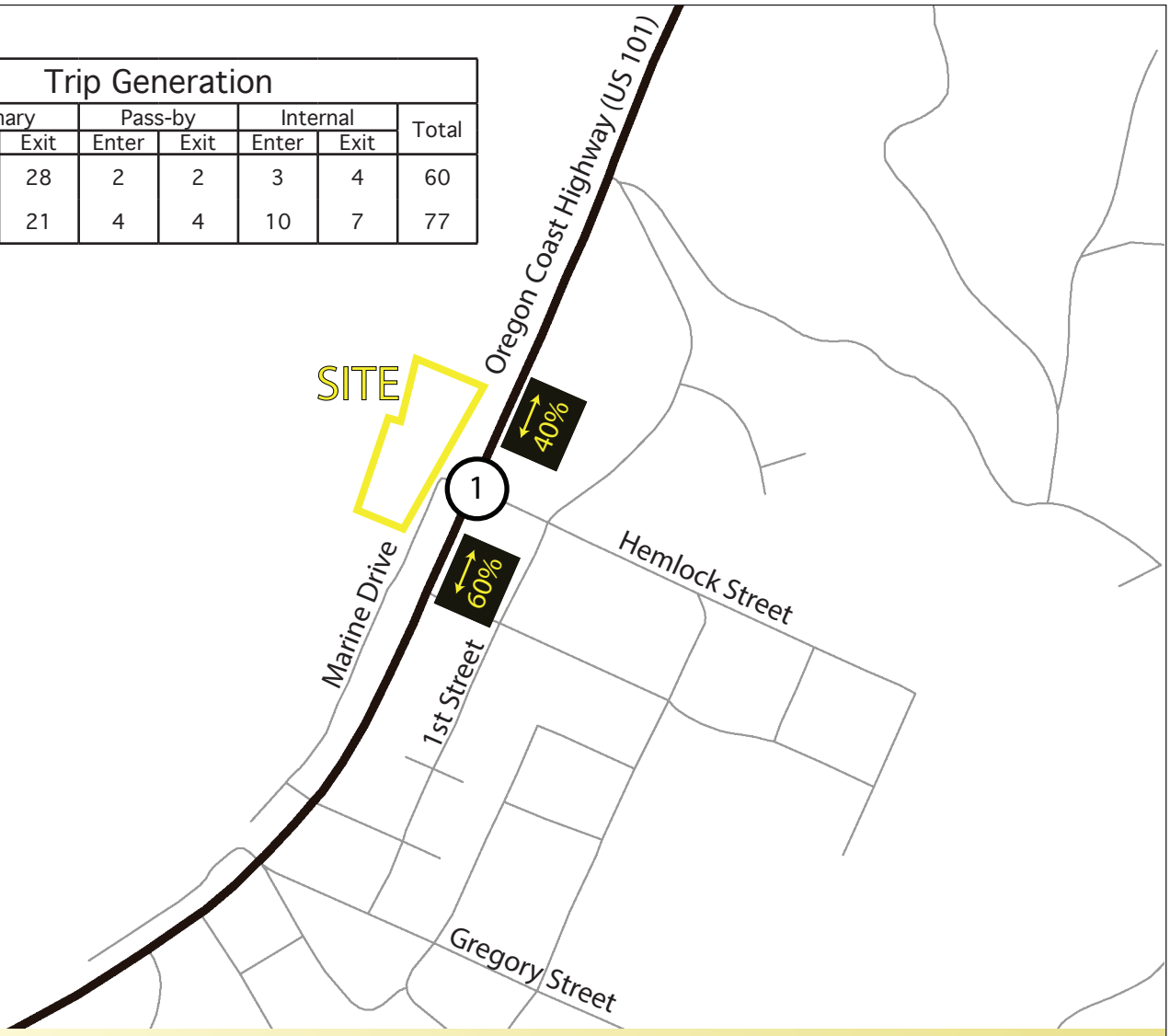
3:20 PM to 4:20 PM
Tuesday, February 04, 2020



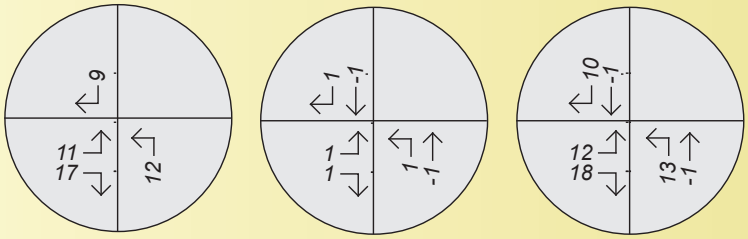
Approach	PHF	HV%	Volume
EB	0.25	0.0%	1
WB	0.50	16.7%	6
NB	0.79	8.2%	170
SB	0.83	11.1%	162
Intersection	0.85	9.7%	339

Count Period: 3:00 PM to 6:00 PM

Trip Generation							
Peak	Primary		Pass-by		Internal		Total
	Enter	Exit	Enter	Exit	Enter	Exit	
AM	21	28	2	2	3	4	60
PM	31	21	4	4	10	7	77

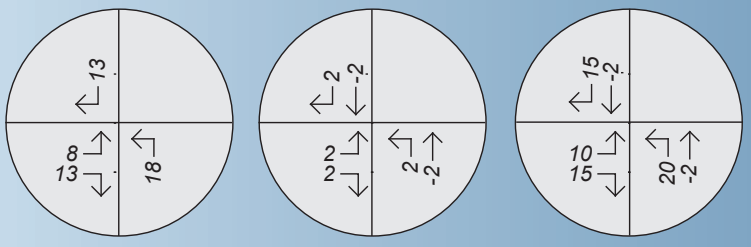


Morning peak hour



Primary Trips Passby Trips Total External Trips

Evening peak hour



Primary Trips Passby Trips Total External Trips

Figure 2

SiteTrip Distribution

N

Not to Scale

PM peak hour volume conversion to 30 HV volume for Existing traffic analysis

2019 ODOT Seasonal Trend Table

Trend	1-Jan	15-Jan	1-Feb	15-Feb	1-Mar	15-Mar	1-Apr	15-Apr	1-May	15-May	1-Jun	15-Jun	1-Jul	15-Jul	1-Aug	15-Aug	1-Sep	15-Sep	1-Oct	15-Oct	1-Nov	15-Nov	1-Dec	15-Dec	Seasonal Trend Peak Period Factor
Coastal Destination Route	1.3445	1.3248	1.4108	1.4968	1.2858	1.0747	1.0911	1.1076	1.0274	0.9473	0.8941	0.8409	0.782	0.7231	0.7218	0.7205	0.8016	0.8827	0.9669	1.0511	1.1133	1.1754	1.248	1.3206	0.7205

PM Individual Peak Hour (raw)

Intersection	ID	Year	Month	Day (1 or 15)	PHF	Peak Hour	1 NBL	2 NBT	3 NBR	4 SBL	5 SBT	6 SBR	7 EBL	8 EBT	9 EBR	10 WBL	11 WBT	12 WBR	Total
US 101 x Hemlock St	1	2020	2	1	0.85	15:20	1	165	4	7	155	0	1	0	0	1	0	5	339
US 101 x 7th St	2	2020	3	15	0.93	15:15	247	23	3	2	24	59	60	2	264	2	4	1	691

30HV (2020)

Intersection	ID	Annual Growth	Year for Seasonal	Count Date Seasonal Factor	Seasonal Factor	1 NBL	2 NBT	3 NBR	4 SBL	5 SBT	6 SBR	7 EBL	8 EBT	9 EBR	10 WBL	11 WBT	12 WBR	Total
US 101 x Hemlock St	1	0.00%	2020	1.41	1.96	2	323	8	14	304	0	2	0	0	2	0	10	664
US 101 x 7th St	2	0.00%	2020	1.07	1.49	368	34	4	3	36	88	89	3	394	3	6	1	1031

Appendix C: Collision Records

FID	Shape	AGY_ST_NO	ALCHL_INVL	CITY_SECT_	CITY_SECT1	CMPSS_DIR_	CMPSS_DIR1	CNTY_ID	CNTY_M	COLLIS_TYP	COLLIS_T_1	CRASH_CAUS	CRASH_CA_1	CRASH_CA_2	CRASH_CA_3	CRASH_CA_4	CRASH_CA_5	CRASH_DAY_	CRASH_DT	CRASH_EVNT
990	Point	2301	0	150	Nehalem		7 W	29	Tillamook		1 Angle	10	Other improper driving					26	4/26/2014	101
4127	Point		0	0			0 UN	29	Tillamook		9 Fixed Object or Other Object	1	Too fast for conditions (not exceed posted speed)					7	2/7/2014	124
5687	Point	503	0	0			5 S	29	Tillamook	-	Backing	10	Other improper driving					3	8/3/2014	92
8048	Point		0	0			9 CN	29	Tillamook		6 Turning movement	6	Improper overtaking					16	6/16/2014	
11014	Point		0	0			0 UN	29	Tillamook		6 Turning movement	2	Did not yield right-of-way					4	8/4/2014	
11564	Point		0	0			1 N	29	Tillamook		3 Rear-End	29	Failed to avoid vehicle ahead					18	6/18/2014	
11837	Point		1	0			0 UN	29	Tillamook		9 Fixed Object or Other Object	10	Other improper driving					20	3/20/2014	62
18106	Point	1001	0	150	Nehalem		3 E	29	Tillamook		3 Rear-End	1	Too fast for conditions (not exceed posted speed)					6	2/6/2014	40
19076	Point		0	0			0 UN	29	Tillamook		9 Fixed Object or Other Object	1	Too fast for conditions (not exceed posted speed)					9	5/9/2014	124
25335	Point		0	0			0 UN	29	Tillamook		9 Fixed Object or Other Object	1	Too fast for conditions (not exceed posted speed)					5	8/5/2014	79
34786	Point	1601	0	232	Wheeler		2 NE	29	Tillamook		3 Rear-End	7	Followed too closely	32	Careless Dri		27 Inattentior	11	4/11/2014	
36969	Point		0	0			0 UN	29	Tillamook		9 Fixed Object or Other Object	8	Made improper turn					9	5/9/2014	62
39101	Point	1401	0	129	Manzanita		3 E	29	Tillamook		5 Sideswipe - Overtaking	10	Other improper driving					9	5/9/2014	40
42018	Point	405	0	129	Manzanita		7 W	29	Tillamook		9 Fixed Object or Other Object	1	Too fast for conditions (not exceed posted speed)					3	5/3/2014	97
42739	Point		1	0			0 UN	29	Tillamook		3 Rear-End	10	Other improper driving					12	7/12/2014	
45377	Point	102	0	129	Manzanita		0 UN	29	Tillamook	&	Miscellaneous	12	Other (not improper driving)					5	7/5/2014	35
46904	Point	1401	0	129	Manzanita		9 CN	29	Tillamook		6 Turning movement	2	Did not yield right-of-way					11	9/11/2014	
15021	Point	504	0	0			0 UN	29	Tillamook		6 Turning movement	6	Improper overtaking					20	7/20/2015	128
17806	Point	1001	0	150	Nehalem		1 N	29	Tillamook		7 Parking Maneuver	33	Reckless Driving (per PAR)	1	Too fast for		8 Made impı	14	7/14/2015	13
22290	Point	1401	0	129	Manzanita		3 E	29	Tillamook		3 Rear-End	17	Physical illness					29	9/29/2015	
23353	Point	1001	0	150	Nehalem		7 W	29	Tillamook		9 Fixed Object or Other Object	32	Careless Driving (per PAR)					21	4/21/2015	128
23702	Point		0	0			3 E	29	Tillamook		9 Fixed Object or Other Object	33	Reckless Driving (per PAR)	31	Speed Racir			28	8/28/2015	53
30363	Point		0	0			0 UN	29	Tillamook		9 Fixed Object or Other Object	1	Too fast for conditions (not exceed posted speed)					27	11/27/2015	22
33400	Point		0	0			9 CN	29	Tillamook		4 Sideswipe - Meeting	27	Inattention					11	9/11/2015	128
42074	Point	1601	0	232	Wheeler		7 W	29	Tillamook		9 Fixed Object or Other Object	1	Too fast for conditions (not exceed posted speed)					26	11/26/2015	79
44327	Point	2201	0	232	Wheeler		9 CN	29	Tillamook		1 Angle	3	Passed stop sign or red flasher					16	12/16/2015	
45866	Point		0	0			9 CN	29	Tillamook		3 Rear-End	29	Failed to avoid vehicle ahead					1	7/1/2015	
46380	Point		0	0			0 UN	29	Tillamook		9 Fixed Object or Other Object	16	Driver drowsy/fatigued/sleepy					11	11/11/2015	79
51261	Point		0	0			0 UN	29	Tillamook		4 Sideswipe - Meeting	5	Drove left of center on two-way road; straddling					12	7/12/2015	
7483	Point	1601	0	232	Wheeler		2 NE	29	Tillamook		6 Turning movement	8	Made improper turn					30	7/30/2016	92
11996	Point	801	0	150	Nehalem		5 S	29	Tillamook		9 Fixed Object or Other Object	32	Careless Driving (per PAR)	16	Driver drow		30 Driving in (	16	5/16/2016	61
12090	Point		0	0			0 UN	29	Tillamook		9 Fixed Object or Other Object	1	Too fast for conditions (not exceed posted speed)					6	12/6/2016	128
12856	Point	1001	0	150	Nehalem		9 CN	29	Tillamook		1 Angle	2	Did not yield right-of-way					5	12/5/2016	
32954	Point	583	0	0			7 W	29	Tillamook		3 Rear-End	29	Failed to avoid vehicle ahead					9	4/9/2016	
34022	Point		0	0			0 UN	29	Tillamook		9 Fixed Object or Other Object	10	Other improper driving					1	12/1/2016	53
36553	Point		0	0			0 UN	29	Tillamook		9 Fixed Object or Other Object	1	Too fast for conditions (not exceed posted speed)					6	12/6/2016	124
39155	Point	1401	0	129	Manzanita		2 NE	29	Tillamook		6 Turning movement	8	Made improper turn					19	8/19/2016	
39437	Point	101	0	150	Nehalem		9 CN	29	Tillamook		6 Turning movement	2	Did not yield right-of-way					3	8/3/2016	83
40761	Point		0	0			0 UN	29	Tillamook		4 Sideswipe - Meeting	11	Mechanical defect					21	7/21/2016	
50153	Point	201	0	150	Nehalem		1 N	29	Tillamook		6 Turning movement	2	Did not yield right-of-way	8	Made impro			19	9/19/2016	
50432	Point	801	0	150	Nehalem		0 UN	29	Tillamook		6 Turning movement	8	Made improper turn					23	12/23/2016	
50974	Point	1601	0	232	Wheeler		6 SW	29	Tillamook		9 Fixed Object or Other Object	32	Careless Driving (per PAR)					27	1/27/2016	69
51186	Point	1001	0	150	Nehalem		9 CN	29	Tillamook		6 Turning movement	8	Made improper turn					27	5/27/2016	
54292	Point		0	0			1 N	29	Tillamook		3 Rear-End	29	Failed to avoid vehicle ahead					19	5/19/2016	
2503	Point	1101	0	129	Manzanita		9 CN	29	Tillamook		6 Turning Movement	2	Did not yield right-of-way					2	11/2/2018	
2849	Point	103	0	129	Manzanita		5 S	29	Tillamook		6 Turning Movement	8	Made improper turn					30	6/30/2018	128
3601	Point	1001	0	150	Nehalem		9 CN	29	Tillamook		1 Angle	2	Did not yield right-of-way					4	7/4/2018	
4329	Point		0	0			9 CN	29	Tillamook		6 Turning Movement	2	Did not yield right-of-way					19	1/19/2018	
4951	Point	201	1	150	Nehalem		7 W	29	Tillamook		6 Turning Movement	33	Reckless Driving (per PAR)	8	Made impro		1 Too fast fo	16	10/16/2018	
9135	Point		0	0			0 UN	29	Tillamook		9 Fixed Object or Other Object	1	Too fast for conditions (not exceed posted speed)					14	9/14/2018	79
9677	Point		0	0			0 UN	29	Tillamook		4 Sideswipe - Meeting	32	Careless Driving (per PAR)	5	Drove left o		16 Driver dro	17	11/17/2018	
12581	Point		1	0			5 S	29	Tillamook		9 Fixed Object or Other Object	8	Made improper turn					19	7/19/2018	53
17410	Point		0	0			0 UN	29	Tillamook		9 Fixed Object or Other Object	1	Too fast for conditions (not exceed posted speed)					26	7/26/2018	22
19475	Point		0	0			9 CN	29	Tillamook		6 Turning Movement	2	Did not yield right-of-way					21	11/21/2018	
21489	Point	1401	0	129	Manzanita		7 W	29	Tillamook		5 Sideswipe - Overtaking	10	Other improper driving					13	2/13/2018	
23960	Point	1001	0	150	Nehalem		9 CN	29	Tillamook		6 Turning Movement	3	Passed stop sign or red flasher					27	8/27/2018	
27221	Point	1001	0	150	Nehalem		7 W	29	Tillamook		3 Rear-End	22	Inadequate or no brakes	29	Failed to av			28	12/28/2018	
27663	Point	1001	0	150	Nehalem		9 CN	29	Tillamook		6 Turning Movement	2	Did not yield right-of-way					19	10/19/2018	92
31885	Point	801	0	150	Nehalem		1 N	29	Tillamook		9 Fixed Object or Other Object	27	Inattention					27	6/27/2018	43
32790	Point	8002	0	129	Manzanita		1 N	29	Tillamook		5 Sideswipe - Overtaking	10	Other improper driving					12	9/12/2018	
35090	Point	801	0	150	Nehalem		1 N	29	Tillamook		9 Fixed Object or Other Object	1	Too fast for conditions (not exceed posted speed)					10	12/10/2018	53
40328	Point		0	0			0 UN	29	Tillamook		6 Turning Movement	2	Did not yield right-of-way					2	10/2/2018	
40476	Point		0	0			0 UN	29	Tillamook		9 Fixed Object or Other Object	16	Driver drowsy/fatigued/sleepy					11	5/11/2018	79
40639	Point		0	0			0 UN	29	Tillamook		3 Rear-End	29	Failed to avoid vehicle ahead					25	5/25/2018	
46526	Point		0	0			9 CN	29	Tillamook		6 Turning Movement	40	View obscured	2	Did not yiel			22	7/22/2018	
118098	Point	102	-1				1 N	29	Tillamook		9 Fixed Object or Other Object	32	Careless Driving (per PAR)					4	4/4/2017	79
118600	Point	153	-1				3 E	29	Tillamook		2 Head-On	10	Other improper driving					20	5/20/2017	93
123124	Point	236	0				0 UN	29	Tillamook		3 Rear-End	32	Careless Driving (per PAR)	8	Made improper turn			18	7/18/2017	
123535	Point	248	0				0 UN	29	Tillamook		6 Turning movement	2	Did not yield right-of-way	40	View obscured			22	7/22/2017	
126958	Point	238	0	150	Nehalem		1 N	29	Tillamook		3 Rear-End	29	Failed to avoid vehicle ahead					18	7/18/2017	
131094	Point	434	0	150	Nehalem		7 W	29	Tillamook		3 Rear-End	29	Failed to avoid vehicle ahead					30	11/30/2017	
142958	Point	197	0				9 CN	29	Tillamook		6 Turning movement	8	Made improper turn					23	6/23/2017	
149584	Point	90	0	232	Wheeler		8 NW	29	Tillamook		6 Turning movement	8	Made improper turn					22	3/22/2017	
150408	Point	362	0	232	Wheeler		2 NE	29	Tillamook		6 Turning movement	8	Made improper turn					8	10/8/2017	
150543	Point	383	0	232	Wheeler		1 N	29	Tillamook		8 Non-collision	10	Other improper driving					21	10/21/2017	20
156973	Point	270	0				5 S	29	Tillamook		9 Fixed Object or Other Object	22	Inadequate or no brakes					31	7/31/2017	62
164622	Point	350	0				7 W	29	Tillamook		8 Non-collision	1	Too fast for conditions (not exceed posted speed)	32	Careless Driving (per PAR)			25	9/25/2017	21
168369	Point	378	0				0 UN	29	Tillamook		3 Rear-End	27	Inattention	29	Failed to avoid vehicle ahead			19	10/19/2017	

CRASH_EV_1	CRASH_EV_2	CRASH_EV_3	CRASH_EV_4	CRASH_EV_5	CRASH_HIT_	CRASH_HR_L	CRASH_HR_N	CRASH_ID	CRASH_MON_N	CRASH_SPEE	CRASH_SVRT	CRASH_SV_1	CRASH_TYP_	CRASH_TYP1	CRASH_WK_D	CRASH_YR_N	DIST_ID
Non-fixed object, other or unknown type						1 02:00 AM to 02:59 AM	2	1547742	4	0	5	Property Damage Only		2 Parked motor vehicle	7	2014	1
Sliding or swerving due to wet, icy, slippery or loose surface (not gravel)		78 Low or hig		10 Overturne		0 06:00 PM to 06:59 PM	18	1552996	2	1	5	Property Damage Only		8 Fixed Object	6	2014	1
Other (phantom) non-contact vehicle						0 06:00 PM to 06:59 PM	18	1568010	8	0	5	Property Damage Only	A	Entering at angle - one vehicle stopped	1	2014	1
						0 10:00 AM to 10:59 AM	10	1561921	6	0	5	Property Damage Only	D	From same direction - one turn, one straight	2	2014	1
						0 01:00 PM to 01:59 PM	13	1568015	8	0	5	Property Damage Only	H	From opposite direction-one left turn,one straight	2	2014	1
						0 04:00 PM to 04:59 PM	16	1561927	6	0	4	Non-Fatal Injury	E	From same direction - one stopped	4	2014	1
Tree, stump or shrubs						0 02:00 AM to 02:59 AM	2	1556780	3	0	4	Non-Fatal Injury		8 Fixed Object	5	2014	1
Curb (also narrow sidewalks on bridges)		13 Vehicle for				0 11:00 AM to 11:59 AM	11	1553023	2	1	4	Non-Fatal Injury		2 Parked motor vehicle	5	2014	1
Sliding or swerving due to wet, icy, slippery or loose surface (not gravel)		43 Guard rail				0 07:00 PM to 07:59 PM	19	1556984	5	1	5	Property Damage Only		8 Fixed Object	6	2014	1
Cut slope or ditch embankment		10 Overturne				0 08:00 PM to 08:59 PM	20	1568023	8	1	5	Property Damage Only		8 Fixed Object	3	2014	1
						0 06:00 PM to 06:59 PM	18	1556915	4	0	4	Non-Fatal Injury	E	From same direction - one stopped	6	2014	1
Tree, stump or shrubs						0 03:00 PM to 03:59 PM	15	1561564	5	0	5	Property Damage Only		8 Fixed Object	6	2014	1
Curb (also narrow sidewalks on bridges)		91 Building or				0 06:00 PM to 06:59 PM	18	1561599	5	0	5	Property Damage Only		2 Parked motor vehicle	6	2014	1
Gravel in roadway						0 12:00 AM (Midnight) to 12	0	1561610	5	1	5	Property Damage Only		9 Other object	7	2014	1
						0 01:00 AM to 01:59 AM	1	1567408	7	0	4	Non-Fatal Injury		2 Parked motor vehicle	7	2014	1
Deer or elk, wapiti						0 04:00 PM to 04:59 PM	16	1581827	7	0	5	Property Damage Only		7 Animal	7	2014	1
						0 05:00 PM to 05:59 PM	17	1574292	9	0	5	Property Damage Only	B	Entering at angle - all others	5	2014	1
Curve present at crash location						0 01:00 PM to 01:59 PM	13	1650917	7	0	5	Property Damage Only	D	From same direction - one turn, one straight	2	2015	1
Vehicle forced by impact into another vehicle, pedalcyclist or pedestrian		57 Stop or yie		91 Building or		0 12:00 PM (Noon) to 12:59	12	1650983	7	1	5	Property Damage Only	B	Entering at angle - all others	3	2015	1
						0 10:00 AM to 10:59 AM	10	1629644	9	0	4	Non-Fatal Injury	F	From same direction-all others, including parking	3	2015	1
Curve present at crash location		60 Delineator		79 Cut slope c		0 12:00 AM (Midnight) to 12	0	1604315	4	0	4	Non-Fatal Injury		8 Fixed Object	3	2015	1
Pole – power or telephone		121 Fence		10 Overturne		0 07:00 AM to 07:59 AM	7	1651397	8	1	5	Property Damage Only		8 Fixed Object	6	2015	1
Trailer connection broke		20 Jackknife;				0 08:00 AM to 08:59 AM	8	1652326	11	1	5	Property Damage Only		9 Other object	6	2015	1
Curve present at crash location		79 Cut slope c				0 10:00 AM to 10:59 AM	10	1651579	9	0	5	Property Damage Only	G	From opposite direction - both going straight	6	2015	1
Cut slope or ditch embankment		10 Overturne				0 09:00 AM to 09:59 AM	9	1629009	11	1	4	Non-Fatal Injury		8 Fixed Object	5	2015	1
						1 05:00 PM to 05:59 PM	17	1652468	12	0	5	Property Damage Only	B	Entering at angle - all others	4	2015	1
						0 03:00 PM to 03:59 PM	15	1650659	7	0	5	Property Damage Only	E	From same direction - one stopped	4	2015	1
Cut slope or ditch embankment						0 11:00 AM to 11:59 AM	11	1652265	11	0	5	Property Damage Only		8 Fixed Object	4	2015	1
						0 10:00 AM to 10:59 AM	10	1615348	7	0	4	Non-Fatal Injury	G	From opposite direction - both going straight	1	2015	1
Other (phantom) non-contact vehicle						0 04:00 PM to 04:59 PM	16	1680086	7	0	4	Non-Fatal Injury	F	From same direction-all others, including parking	7	2016	1
Mailbox		43 Guard rail		10 Overturne		0 06:00 PM to 06:59 PM	18	1679289	5	1	4	Non-Fatal Injury		8 Fixed Object	2	2016	1
Curve present at crash location		62 Tree, stum				0 09:00 AM to 09:59 AM	9	1712158	12	1	5	Property Damage Only		8 Fixed Object	3	2016	1
						0 12:00 PM (Noon) to 12:59	12	1711867	12	0	5	Property Damage Only	B	Entering at angle - all others	2	2016	1
						0 02:00 PM to 02:59 PM	14	1706759	4	0	5	Property Damage Only	E	From same direction - one stopped	7	2016	1
Pole – power or telephone						0 05:00 PM to 05:59 PM	17	1711734	12	0	5	Property Damage Only		8 Fixed Object	5	2016	1
Sliding or swerving due to wet, icy, slippery or loose surface (not gravel)		46 Bridge raili		128 Curve pres		0 07:00 AM to 07:59 AM	7	1711893	12	1	5	Property Damage Only		8 Fixed Object	3	2016	1
						0 12:00 PM (Noon) to 12:59	12	1709787	8	0	5	Property Damage Only	A	Entering at angle - one vehicle stopped	6	2016	1
Vegetation obscured view						0 12:00 PM (Noon) to 12:59	12	1708958	8	0	5	Property Damage Only	A	Entering at angle - one vehicle stopped	4	2016	1
						0 11:00 AM to 11:59 AM	11	1679978	7	0	4	Non-Fatal Injury	G	From opposite direction - both going straight	5	2016	1
						0 04:00 PM to 04:59 PM	16	1680932	9	0	4	Non-Fatal Injury	F	From same direction-all others, including parking	2	2016	1
						0 12:00 PM (Noon) to 12:59	12	1681592	12	0	4	Non-Fatal Injury	D	From same direction - one turn, one straight	6	2016	1
Equipment working in/off road						0 05:00 PM to 05:59 PM	17	1706001	1	0	5	Property Damage Only		9 Other object	4	2016	1
						0 01:00 PM to 01:59 PM	13	1681641	5	0	4	Non-Fatal Injury	F	From same direction-all others, including parking	6	2016	1
						0 12:00 PM (Noon) to 12:59	12	1679365	5	0	4	Non-Fatal Injury	E	From same direction - one stopped	5	2016	1
						0 04:00 PM to 04:59 PM	16	1822248	11	0	5	Property Damage Only	B	Entering at angle - all others	6	2018	1
Curve present at crash location						0 02:00 PM to 02:59 PM	14	1819753	6	0	5	Property Damage Only		2 Parked motor vehicle	7	2018	1
						0 02:00 PM to 02:59 PM	14	1793197	7	0	4	Non-Fatal Injury	B	Entering at angle - all others	4	2018	1
						0 04:00 PM to 04:59 PM	16	1776881	1	0	4	Non-Fatal Injury	H	From opposite direction-one left turn,one straight	6	2018	1
						0 06:00 PM to 06:59 PM	18	1800154	10	1	4	Non-Fatal Injury	B	Entering at angle - all others	3	2018	1
Cut slope or ditch embankment						0 11:00 AM to 11:59 AM	11	1816576	9	1	5	Property Damage Only		8 Fixed object	6	2018	1
						0 05:00 PM to 05:59 PM	17	1801247	11	0	4	Non-Fatal Injury	G	From opposite direction - both going straight	7	2018	1
Pole – power or telephone						0 09:00 PM to 09:59 PM	21	1793293	7	0	4	Non-Fatal Injury		8 Fixed object	5	2018	1
Trailer connection broke		43 Guard rail				0 12:00 PM (Noon) to 12:59 PM	12	1793391	7	1	4	Non-Fatal Injury		8 Fixed object	5	2018	1
						0 11:00 AM to 11:59 AM	11	1801274	11	0	4	Non-Fatal Injury	B	Entering at angle - all others	4	2018	1
						0 05:00 PM to 05:59 PM	17	1805730	2	0	5	Property Damage Only		2 Parked motor vehicle	3	2018	1
						0 12:00 PM (Noon) to 12:59 PM	12	1795424	8	0	4	Non-Fatal Injury	B	Entering at angle - all others	2	2018	1
						0 10:00 AM to 10:59 AM	10	1817002	12	0	5	Property Damage Only	E	From same direction - one stopped	6	2018	1
Other (phantom) non-contact vehicle						0 08:00 AM to 08:59 AM	8	1800182	10	0	4	Non-Fatal Injury	A	Entering at angle - one vehicle stopped	6	2018	1
Guard rail (not metal median barrier)						0 06:00 AM to 06:59 AM	6	1790339	6	0	4	Non-Fatal Injury		8 Fixed object	4	2018	1
						0 11:00 AM to 11:59 AM	11	1820921	9	0	5	Property Damage Only		2 Parked motor vehicle	4	2018	1
Pole – power or telephone		62 Tree, stum		86 Vehicle im		0 08:00 AM to 08:59 AM	8	1801618	12	1	4	Non-Fatal Injury		8 Fixed object	2	2018	1
						0 07:00 PM to 07:59 PM	19	1799977	10	0	4	Non-Fatal Injury	B	Entering at angle - all others	3	2018	1
Cut slope or ditch embankment		62 Tree, stum		86 Vehicle im		0 03:00 AM to 03:59 AM	3	1785798	5	0	4	Non-Fatal Injury		8 Fixed object	6	2018	1
						0 02:00 PM to 02:59 PM	14	1785977	5	0	4	Non-Fatal Injury	E	From same direction - one stopped	6	2018	1
						0 05:00 PM to 05:59 PM	17	1793375	7	0	4	Non-Fatal Injury	B	Entering at angle - all others	1	2018	1
Cut slope or ditch embankment						0 07:00 PM to 07:59 PM	19	1773747	4	0	5	Property Damage Only		8 Fixed Object	3	2017	1
Cell phone (on PAR or driver in use)						0 09:00 PM to 09:59 PM	21	1773952	5	0	5	Property Damage Only		2 Parked motor vehicle	7	2017	1
						0 05:00 PM to 05:59 PM	17	1746660	7	0	4	Non-Fatal Injury	E	From same direction - one stopped	3	2017	1
						0 04:00 PM to 04:59 PM	16	1746695	7	0	4	Non-Fatal Injury		6 Pedalcyclist	7	2017	1
						0 06:00 PM to 06:59 PM	18	1774318	7	0	5	Property Damage Only	C	From same direction - both going straight	3	2017	1
						0 01:00 PM to 01:59 PM	13	1774694	11	0	5	Property Damage Only	C	From same direction - both going straight	5	2017	1
						0 06:00 PM to 06:59 PM	18	1737503	6	0	4	Non-Fatal Injury	F	From same direction-all others, including parking	6	2017	1
						0 01:00 PM to 01:59 PM	13	1773704	3	0	5	Property Damage Only	B	Entering at angle - all others	4	2017	1
						0 04:00 PM to 04:59 PM	16	1774999	10	0	5	Property Damage Only	A	Entering at angle - one vehicle stopped	1	2017	1
Jackknife; trailer or towed vehicle struck towing vehicle		85 Wind Gust				0 07:00 PM to 07:59 PM	19	1746523	10	0	4	Non-Fatal Injury	&	Overturned	7	2017	1
Tree, stump or shrubs						0 08:00 AM to 08:59 AM	8	1774481	7	0	5	Property Damage Only		8 Fixed Object	2	2017	1
Trailer or towed vehicle overturned						0 02:00 PM to 02:59 PM	14	1774992	9	-1	5	Property Damage Only	&	Overturned	2	2017	1
						0 10:00 AM to 10:59 AM	10	1746894	10	0	4	Non-Fatal Injury	C	From same direction - both going straight	5	2017	1

DRUG_IN	DRVWY_	EFFECTV_		FROM_IS		HIGHEST_		HWY_CO			HWY_SFX	IMPCT_L	INVSTG_		ISECT_AG	ISECT_RE	ISECT_RE	ISECT_SE		ISECT_TY	ISECT_TY	LAT_DEG
VLV	REL_	DT	FC_CD	FC_DESC	ECT	GIS_PRC_DT	IN	HIGHEST__1	MPNT	HWY_COMP_1	HWY_MED_NM	HWY_NO	_NO	OC_	AGY	INVSTG_A_1	Y_	CR	L_	Q_	ISECT_ST_F	P_	P1	LAT_DD	_NO
0	0	2014	9	RURAL LOC	100	8/21/2019	5	No Apparent Injury/PDO Crash (O)							7	2 County Police	8009		0	1	9TH ST			45.71664	45
0	0	2014	2	RURAL PRI	0	8/21/2019	5	No Apparent Injury/PDO Crash (O)		0 Mainline State H	OREGON COAST	9			6	1 State Police -			0	0				45.69937	45
0	1	2014	8	RURAL MI	0	8/21/2019	5	No Apparent Injury/PDO Crash (O)							5	2 County Police			0	0		3	3-LEG	45.71752	45
0	0	2014	2	RURAL PRI	0	8/21/2019	5	No Apparent Injury/PDO Crash (O)		0 Mainline State H	OREGON COAST	9			1	5 On Scene - No			0	0		3	3-LEG	45.72424	45
0	0	2014	2	RURAL PRI	0	8/21/2019	5	No Apparent Injury/PDO Crash (O)		0 Mainline State H	OREGON COAST	9			3	3 City Police - R			0	0				45.71914	45
0	0	2014	7	RURAL MA	0	8/21/2019	3	Suspected Minor Injury Crash (B)		0 Mainline State H	NECANICUM	46			6	5 On Scene - No			0	0		3	3-LEG	45.70102	45
1	0	2014	2	RURAL PRI	0	8/21/2019	2	Suspected Serious Injury (A)		0 Mainline State H	OREGON COAST	9			1	2 County Police			0	0				45.71985	45
0	0	2014	2	RURAL PRI	0	8/21/2019	4	Possible Injury Crash (C)		0 Mainline State H	OREGON COAST	9			5	0 Not Investiga	8010		0	1	10TH ST			45.71765	45
0	0	2014	2	RURAL PRI	0	8/21/2019	5	No Apparent Injury/PDO Crash (O)		0 Mainline State H	OREGON COAST	9			6	5 On Scene - No			0	0				45.71759	45
0	0	2014	2	RURAL PRI	0	8/21/2019	5	No Apparent Injury/PDO Crash (O)		0 Mainline State H	OREGON COAST	9			6	1 State Police -			0	0				45.69893	45
1	0	2014	2	RURAL PRI	0	8/21/2019	3	Suspected Minor Injury Crash (B)		0 Mainline State H	OREGON COAST	9			3	3 City Police - R	2101		0	1	RECTOR ST			45.69132	45
0	0	2014	2	RURAL PRI	0	8/21/2019	5	No Apparent Injury/PDO Crash (O)		0 Mainline State H	OREGON COAST	9			5	3 City Police - R			0	0				45.7183	45
0	0	2014	7	RURAL MA	85	8/21/2019	5	No Apparent Injury/PDO Crash (O)							8	3 City Police - R	402		0	1	CARMEL AVE			45.71849	45
0	0	2014	7	RURAL MA	0	8/21/2019	5	No Apparent Injury/PDO Crash (O)							6	2 County Police	1501		0	1	MANZANITA AVE	1	CROSS	45.71928	45
0	0	2014	2	RURAL PRI	0	8/21/2019	3	Suspected Minor Injury Crash (B)		0 Mainline State H	OREGON COAST	9			5	1 State Police -			0	0				45.70302	45
0	0	2014	2	RURAL PRI	0	8/21/2019	5	No Apparent Injury/PDO Crash (O)		0 Mainline State H	OREGON COAST	9			3	5 On Scene - No	1401		0	1	LANEDA AVE			45.71668	45
0	0	2014	7	RURAL MA	0	8/21/2019	5	No Apparent Injury/PDO Crash (O)							3	0 Not Investiga	8003		0	1	3RD ST	1	CROSS	45.71849	45
0	0	2015	7	RURAL MA	0	8/20/2019	5	No Apparent Injury/PDO Crash (O)							2	2 County Police			0	0				45.73049	45
0	0	2015	2	RURAL PRI	0	8/20/2019	5	No Apparent Injury/PDO Crash (O)		0 Mainline State H	OREGON COAST	9			6	2 County Police	8009		0	1	9TH ST	1	CROSS	45.71766	45
0	0	2015	7	RURAL MA	100	8/20/2019	4	Possible Injury Crash (C)							8	3 City Police - R	405		0	1	CLASSIC ST			45.71927	45
0	0	2015	2	RURAL PRI	0	8/20/2019	4	Possible Injury Crash (C)		0 Mainline State H	OREGON COAST	9			6	2 County Police	8012		0	1	12TH ST	3	3-LEG	45.71769	45
0	0	2015	2	RURAL PRI	0	8/20/2019	5	No Apparent Injury/PDO Crash (O)		0 Mainline State H	OREGON COAST	9			6	1 State Police -			0	0		3	3-LEG	45.71733	45
0	0	2015	2	RURAL PRI	0	8/20/2019	5	No Apparent Injury/PDO Crash (O)		0 Mainline State H	OREGON COAST	9			4	3 City Police - R			0	0				45.71916	45
0	0	2015	2	RURAL PRI	0	8/20/2019	5	No Apparent Injury/PDO Crash (O)		0 Mainline State H	OREGON COAST	9			3	2 County Police			0	0		3	3-LEG	45.69963	45
0	0	2015	2	RURAL PRI	0	8/20/2019	3	Suspected Minor Injury Crash (B)		0 Mainline State H	OREGON COAST	9			6	1 State Police -	2001		0	1	PENNSYLVANIA AVE			45.68702	45
0	0	2015	9	RURAL LOC	0	8/20/2019	5	No Apparent Injury/PDO Crash (O)							4	2 County Police	8003		0	1	3RD ST	1	CROSS	45.69115	45
0	0	2015	2	RURAL PRI	0	8/20/2019	5	No Apparent Injury/PDO Crash (O)		0 Mainline State H	OREGON COAST	9			4	0 Not Investiga			0	0		3	3-LEG	45.71061	45
0	0	2015	2	RURAL PRI	0	8/20/2019	5	No Apparent Injury/PDO Crash (O)		0 Mainline State H	OREGON COAST	9			1	1 State Police -			0	0				45.72151	45
0	0	2015	2	RURAL PRI	0	8/20/2019	3	Suspected Minor Injury Crash (B)		0 Mainline State H	OREGON COAST	9			4	3 City Police - R			0	0				45.71985	45
0	0	2016	2	RURAL PRI	0	8/20/2019	4	Possible Injury Crash (C)		0 Mainline State H	OREGON COAST	9			3	3 City Police - R	2101		0	1	RECTOR ST			45.6904	45
0	0	2016	2	RURAL PRI	0	8/20/2019	3	Suspected Minor Injury Crash (B)		0 Mainline State H	OREGON COAST	9			6	2 County Police	102		0	1	NEHALEM POINT RD			45.71121	45
0	0	2016	2	RURAL PRI	0	8/20/2019	5	No Apparent Injury/PDO Crash (O)		0 Mainline State H	OREGON COAST	9			6	5 On Scene - No			0	0		3	3-LEG	45.69963	45
0	0	2016	2	RURAL PRI	0	8/20/2019	5	No Apparent Injury/PDO Crash (O)		0 Mainline State H	OREGON COAST	9			2	0 Not Investiga	8009		0	1	9TH ST	1	CROSS	45.71766	45
0	0	2016	7	RURAL MA	0	8/20/2019	5	No Apparent Injury/PDO Crash (O)							6	0 Not Investiga			0	0		3	3-LEG	45.71926	45
0	0	2016	2	RURAL PRI	0	8/20/2019	5	No Apparent Injury/PDO Crash (O)		0 Mainline State H	OREGON COAST	9			1	0 Not Investiga			0	0				45.7174	45
0	0	2016	2	RURAL PRI	0	8/20/2019	5	No Apparent Injury/PDO Crash (O)		0 Mainline State H	OREGON COAST	9			1	0 Not Investiga			0	0				45.70006	45
0	0	2016	7	RURAL MA	0	8/20/2019	5	No Apparent Injury/PDO Crash (O)							6	5 On Scene - No	8004		0	1	4TH ST	1	CROSS	45.71865	45
0	0	2016	2	RURAL PRI	0	8/20/2019	5	No Apparent Injury/PDO Crash (O)		0 Mainline State H	OREGON COAST	9			2	5 On Scene - No	8010		0	1	10TH ST	1	CROSS	45.71765	45
0	0	2016	2	RURAL PRI	0	8/20/2019	4	Possible Injury Crash (C)		0 Mainline State H	OREGON COAST	9			4	1 State Police -			0	0				45.71008	45
0	0	2016	7	RURAL MA	25	8/20/2019	3	Suspected Minor Injury Crash (B)							3	3 City Police - R	8007		0	1	7TH ST			45.71987	45
0	0	2016	2	RURAL PRI	0	8/20/2019	3	Suspected Minor Injury Crash (B)		0 Mainline State H	OREGON COAST	9			4	1 State Police -	102		0	1	NEHALEM POINT RD			45.71076	45
0	0	2016	2	RURAL PRI	0	8/20/2019	5	No Apparent Injury/PDO Crash (O)		0 Mainline State H	OREGON COAST	9			4	1 State Police -	2001		0	1	PENNSYLVANIA AVE			45.68702	45
0	0	2016	2	RURAL PRI	0	8/20/2019	4	Possible Injury Crash (C)		0 Mainline State H	OREGON COAST	9			3	3 City Police - R	8007		0	1	7TH ST	1	CROSS	45.71769	45
0	0	2016	7	RURAL MA	0	8/20/2019	4	Possible Injury Crash (C)		0 Mainline State H	NECANICUM	46			6	0 Not Investiga			0	0		3	3-LEG	45.70102	45
0	0	2018	9	RURAL LOC	0	6/30/2020	5	No Apparent Injury/PDO Crash (O)							3	5 On Scene - No	8001		0	1	N 1ST ST	3	3-LEG	45.71919	45
0	0	2018	9	RURAL LOC	275	6/30/2020	5	No Apparent Injury/PDO Crash (O)							8	0 Not Investiga	105		0	1	UPLAND DR			45.71253	45
0	0	2018	2	RURAL PRI	0	6/30/2020	4	Possible Injury Crash (C)		0 Mainline State H	OREGON COAST	9			2	1 State Police -	8007		0	1	7TH ST	1	CROSS	45.71769	45
0	0	2018	2	RURAL PRI	0	6/30/2020	4	Possible Injury Crash (C)		0 Mainline State H	OREGON COAST	9			1	1 State Police -			0	0		3	3-LEG	45.71733	45
0	0	2018	7	RURAL MA	0	6/30/2020	4	Possible Injury Crash (C)							5	2 County Police	8007		0	1	7TH ST	3	3-LEG	45.71967	45
0	0	2018	2	RURAL PRI	0	6/30/2020	5	No Apparent Injury/PDO Crash (O)		0 Mainline State H	OREGON COAST	9			6	5 On Scene - No			0	0				45.72061	45
0	0	2018	2	RURAL PRI	0	6/30/2020	4	Possible Injury Crash (C)		0 Mainline State H	OREGON COAST	9			6	1 State Police -			0	0				45.71959	45
0	0	2018	2	RURAL PRI	0	6/30/2020	3	Suspected Minor Injury Crash (B)		0 Mainline State H	OREGON COAST	9			5	1 State Police -			0	0		3	3-LEG	45.71752	45
0	0	2018	2	RURAL PRI	0	6/30/2020	3	Suspected Minor Injury Crash (B)		0 Mainline State H	OREGON COAST	9			6	1 State Police -			0	0				45.70736	45
0	0	2018	2	RURAL PRI	0	6/30/2020	3	Suspected Minor Injury Crash (B)		0 Mainline State H	OREGON COAST	9			3	1 State Police -			0	0		3	3-LEG	45.71733	45
0	0	2018	7	RURAL MA	25	6/30/2020	5	No Apparent Injury/PDO Crash (O)							5	0 Not Investiga	8001		0	1	1ST ST			45.71848	45
0	0	2018	2	RURAL PRI	0	6/30/2020	4	Possible Injury Crash (C)		0 Mainline State H	OREGON COAST	9			1	2 County Police	8007		0	1	7TH ST	1	CROSS	45.71769	45
0	0	2018	2	RURAL PRI	0	6/30/2020	5	No Apparent Injury/PDO Crash (O)		0 Mainline State H	OREGON COAST	9			6	2 County Police	8010		0	1	10TH ST	1	CROSS	45.71766	45
0	0	2018	2	RURAL PRI	0	6/30/2020	4	Possible Injury Crash (C)		0 Mainline State H	OREGON COAST	9			3	3 City Police - R	8009		0	1	9TH ST	1	CROSS	45.71766	45
0	0	2018	2	RURAL PRI	0	6/30/2020	4	Possible Injury Crash (C)		0 Mainline State H	OREGON COAST	9			6	1 State Police -	102		0	1	NEHALEM POINT RD			45.71122	45
0	0	2018	9	RURAL LOC	50	6/30/2020	5	No Apparent Injury/PDO Crash (O)							5	0 Not Investiga	1401		0	1	LANEDA AVE			45.7187	45
0	0	2018	2	RURAL PRI	0	6/30/2020	3	Suspected Minor Injury Crash (B)		0 Mainline State H	OREGON COAST	9			6	1 State Police -	102		0	1	NEHALEM POINT RD			45.7124	45
0	0	2018	2	RURAL PRI	0	6/30/2020	4	Possible Injury Crash (C)		0 Mainline State H	OREGON COAST	9			4	0 Not Investiga			0	0				45.7183	45
0	0	2018	2	RURAL PRI	0	6/30/2020	3	Suspected Minor Injury Crash (B)		0 Mainline State H	OREGON COAST	9			6	2 County Police			0	0				45.69923	45
0	0	2018	2	RURAL PRI	0	6/30/2020	4	Possible Injury Crash (C)		0 Mainline State H	OREGON COAST	9			4	0 Not Investiga			0	0				45.71771	45
0	0	2018	2	RURAL PRI	0	6/30/2020	4	Possible Injury Crash (C)		0 Mainline State H	OREGON COAST	9			3	1 State Police -			0	0		3	3-LEG	45.71819	45
0	0	2017	8	RURAL MI	1	6/25/2019	5	No Apparent Injury/PDO Crash (O)							7	1 State Police -	529		0	1	THE PROMENADE			45.71469	45
0	0	2017	9	RURAL LOC	25	6/25/2019	5	No Apparent Injury/PDO Crash (O)							2	2 County Police	535		0	1	BAYSIDE GARDENS RD			45.71262	45
0	0	2017	2	RURAL PRINCIPAL ART		6/25/2019	4	Possible Injury Crash (C)		0 Mainline State H	OREGON COAST	9			4	2 County Police - Report received			0					45.70138	45
0	0	2017	2	RURAL PRINCIPAL ART		6/25/2019	3	Suspected Minor Injury Crash (B)		0 Mainline State H	OREGON COAST	9			3	1 State Police - Report received.			0					45.71882	45
0	0	2017	2	RURAL PRINCIPAL ART		6/25/2019	5	No Apparent Injury/PDO Crash (O)		0 Mainline State H	OREGON COAST	9			6	5 On Scene - No	2301		0	1	TOHLS ST	1	CROSS	45.71669	45
0	0	2017	2	RURAL PRINCIPAL ART		6/25/2019	5	No Apparent Injury/PDO Crash (O)		0 Mainline State H	OREGON COAST	9			4	5 On Scene - No	8010		0	1	10TH ST			45.71765	45
0	0	2017	2	RURAL PRINCIPAL ART		6/25/2019	3	Suspected Minor Injury Crash (B)		0 Mainline State H	OREGON COAST	9			1	5 On Scene - No report received			0			3	3-LEG	45.70102	45
0	0	2017	9	RURAL LOC	190	6/25/2019	5	No Apparent Injury/PDO Crash (O)							8	3 City Police - R	8003		0	1	3RD ST			45.68635	45
0	-1	2017	9	RURAL LOC	0	6/25/2019	5	No Apparent Injury/PDO Crash (O)							1	0 Not Investiga	2101		0	1	RECTOR ST	3	3-LEG	45.69032	45
0	0	2017	2	RURAL PRINCIPAL ART		6/25/2019	4	Possible Injury Crash (C)		0 Mainline State H	OREGON COAST	9			3	1 State Police -	103		0	1	MARINE DR			45.69467	45
0	0	2017	8	RURAL MI	0	6/25/2019	5	No Apparent Injury/PDO Crash (O)							5	5 On Scene - No	529		0	1	THE PROMENADE	3	3-LEG	45.71458	45
0	0	2017	8	RURAL MI	9	6/25/2019	5	No Apparent Injury/PDO Crash (O)							2	3 City Police - R	546		0	1	CLIPPER CT			45.71506	45
0	0	2017	2	RURAL PRINCIPAL ART		6/25/2019	4	Possible Injury Crash (C)		0 Mainline State H	OREGON COAST	9			3	1 State Police - Report received.			0					45.71783	45

LAT_MINUTE	LAT_SEC_NO	LGT_COND_C	LGT_COND_L	LN_QTY	LONGTD_DD	LONGTD_DEG	LONGTD_MIN	LONGTD_SEC	LRS_VAL	MEDN_TY P_C	MEDN_TY P_L	MJ_INVL V_F	MLGE_TY P_C	MLGE_TY P_L	MP_NO	NHS_FLG	OFF_RD WY_F	POP_RNG _CD	POP_RNG _ME	POST_SPED	RDWY_NO	RD_CHAR _CD	RD_CHAR RD_CHAR_LO	RD_CNTL _CD	RD_CNTL _ME	RD_CON_NO	RD_SURF _CO	RD_SURF _ME	RECRE_R D_N	REG_ID	RNDABT_FLG
42	59.88884	2	Darkness -	2	-123.897	-123	53	47.84978		0	No median	0			0	0	1		0 1 to 500				2 Driveway or Alley	7	RURAL CIT			2 Wet		2	0
41	57.73247	3	Darkness -	2	-123.877	-123	52	36.92813	00090010(	0	No median	0	0	Regular Mi	46.67	1	1			55	1		5 Curve (horizontal curve)	5	RURAL HW			3 Snow		2	0
43	3.07	1	Daylight	0	-123.916	-123	54	56.95		0					0	0	0			0			1 Intersection	6	RURAL COI			1 Dry		2	0
43	27.26306	1	Daylight	0	-123.928	-123	55	41.87244	00090010(			0	0	Regular Mi	42.83	1	0			40	1		1 Intersection	5	RURAL HW			2 Wet		2	0
43	8.89	1	Daylight	2	-123.928	-123	55	39.66	00090010(	0	No median	0	0	Regular Mi	43.2	1	0			40	1		2 Driveway or Alley	5	RURAL HW			1 Dry		2	0
42	3.684096	1	Daylight	0	-123.88	-123	52	48.03722	00460010(			0	0	Regular Mi	19.03	0	0			55	1		1 Intersection	5	RURAL HW			1 Dry		2	0
43	11.46436	3	Darkness -	2	-123.922	-123	55	20.05457	00090010(	0	No median	0	0	Regular Mi	43.52	1	1			40	1		5 Curve (horizontal curve)	5	RURAL HW			1 Dry		2	0
43	3.555228	1	Daylight	2	-123.897	-123	53	49.42604	00090010(	0	No median	0	0	Regular Mi	44.85	1	1		0 1 to 500	30	1		3 Straight Roadway	5	RURAL HW			3 Snow		2	0
43	3.324648	1	Daylight	2	-123.91	-123	54	35.2638	00090010(	0	No median	0	0	Regular Mi	44.18	1	1			40	1		3 Straight Roadway	5	RURAL HW			4 Ice		2	0
41	56.15	5	Dusk (Twili	2	-123.877	-123	52	36.3	00090010(	0	No median	0	0	Regular Mi	46.7	1	1			55	1		6 Open access or turnout	5	RURAL HW			1 Dry		2	0
41	28.74466	1	Daylight	2	-123.881	-123	52	50.53508	00090010(	0	No median	0	0	Regular Mi	47.25	1	0		0 1 to 500	25	1		3 Straight Roadway	5	RURAL HW			1 Dry		2	0
43	5.862576	1	Daylight	2	-123.918	-123	55	5.957328	00090010(	0	No median	0	0	Regular Mi	43.75	1	1			40	1		2 Driveway or Alley	5	RURAL HW			2 Wet		2	0
43	6.552048	1	Daylight	2	-123.938	-123	56	18.03998		0	No median	0			0	0	1		1 501 to 1,0(	20			3 Straight Roadway	7	RURAL CIT			2 Wet		2	0
43	9.396156	2	Darkness -	0	-123.93	-123	55	46.97098		0			0		0	0	0	0	1 501 to 1,0(	0			1 Intersection	7	RURAL CIT			2 Wet		2	0
42	10.87	3	Darkness -	2	-123.884	-123	53	2.51	00090010(	0	No median	0	0	Regular Mi	46.25	1	1			55	1		5 Curve (horizontal curve)	5	RURAL HW			1 Dry		2	0
43	0.06	1	Daylight	2	-123.932	-123	55	54.58	00090010(	0	No median	0	0	Regular Mi	999.99	1	0	1	501 to 1,0(		1		3 Straight Roadway	5	RURAL HW			1 Dry		2	0
43	6.58	1	Daylight	0	-123.936	-123	56	9.7		0			0		0	0	0	0	1 501 to 1,0(	0			1 Intersection	7	RURAL CIT			1 Dry		2	0
43	49.77	1	Daylight	2	-123.883	-123	52	59.57		0	No median	0			0.98	0	0			45			2 Driveway or Alley	6	RURAL COI			1 Dry		2	0
43	3.58	1	Daylight	0	-123.896	-123	53	46.53	00090010(			0	0	Regular Mi	44.89	1	0		0 1 to 500	30	1		1 Intersection	5	RURAL HW			1 Dry		2	0
43	9.36	1	Daylight	2	-123.929	-123	55	45.4		0	No median	0			0	0	1		1 501 to 1,0(	25			7 Grade (vertical curve)	7	RURAL CIT			1 Dry		2	0
43	3.7	3	Darkness -	0	-123.899	-123	53	57.05	00090010(			0	0	Regular Mi	44.75	1	1		0 1 to 500	30	1		1 Intersection	5	RURAL HW			1 Dry		2	0
43	2.4	1	Daylight	0	-123.914	-123	54	51.06	00090010(			0	0	Regular Mi	43.96	1	1			40	1		1 Intersection	5	RURAL HW			2 Wet		2	0
43	8.98	4	Dawn (Twi	2	-123.927	-123	55	37.47	00090010(	0	No median	0	0	Regular Mi	43.23	1	0			40	1		5 Curve (horizontal curve)	5	RURAL HW			1 Dry		2	0
41	58.67	1	Daylight	0	-123.877	-123	52	37.71	00090010(			0	0	Regular Mi	46.65	1	0			55	1		1 Intersection	5	RURAL HW			1 Dry		2	0
41	13.27	1	Daylight	2	-123.898	-123	53	51.16	00090010(	0	No median	0	0	Regular Mi	48.23	1	1		0 1 to 500	55	1		7 Grade (vertical curve)	5	RURAL HW			4 Ice		2	0
41	28.14	2	Darkness -	0	-123.877	-123	52	38.3		0			0		0	0	0	0	1 501 to 1,0(	25			1 Intersection	7	RURAL CIT			2 Wet		2	0
42	38.21	1	Daylight	0	-123.892	-123	53	32.16	00090010(			0	0	Regular Mi	45.48	1	0			30	1		1 Intersection	5	RURAL HW			1 Dry		2	0
43	17.42	1	Daylight	2	-123.929	-123	55	42.95	00090010(	0	No median	0	0	Regular Mi	43.02	1	1			40	1		3 Straight Roadway	5	RURAL HW			1 Dry		2	0
43	11.46	1	Daylight	2	-123.922	-123	55	20.05	00090010(	0	No median	0	0	Regular Mi	43.52	1	0			40	1		5 Curve (horizontal curve)	5	RURAL HW			1 Dry		2	0
41	25.43	1	Daylight	2	-123.881	-123	52	52.89	00090010(	0	No median	0	0	Regular Mi	47.32	1	0		0 1 to 500	25	1		2 Driveway or Alley	5	RURAL HW			1 Dry		2	0
42	40.37	1	Daylight	2	-123.892	-123	53	32.24	00090010(	0	No median	0	0	Regular Mi	45.44	1	1		0 1 to 500	30	1		3 Straight Roadway	5	RURAL HW			1 Dry		2	0
41	58.67	1	Daylight	0	-123.877	-123	52	37.71	00090010(			0	0	Regular Mi	46.65	1	1			55	1		1 Intersection	5	RURAL HW			4 Ice		2	0
43	3.58	1	Daylight	0	-123.896	-123	53	46.53	00090010(			0	0	Regular Mi	44.89	1	0		0 1 to 500	30	1		1 Intersection	5	RURAL HW			2 Wet		2	0
43	9.34	1	Daylight	0	-123.928	-123	55	40.98		0			0		0	0	0						1 Intersection	6	RURAL COI			1 Dry		2	0
43	2.64	3	Darkness -	2	-123.915	-123	54	54.46	00090010(	0	No median	0	0	Regular Mi	43.92	1	1			40	1		5 Curve (horizontal curve)	5	RURAL HW			2 Wet		2	0
42	0.23	3	Darkness -	2	-123.878	-123	52	40.19	00090010(	0	No median	0	0	Regular Mi	46.61	1	1			55	1		8 Bridge Structure	5	RURAL HW			4 Ice		2	0
43	7.15	1	Daylight	0	-123.935	-123	56	6.36		0			0		0	0	0	0	1 501 to 1,0(				1 Intersection	7	RURAL CIT			1 Dry		2	0
43	3.55	1	Daylight	0	-123.897	-123	53	50.15	00090010(			0	0	Regular Mi	44.84	1	0		0 1 to 500	30	1		1 Intersection	5	RURAL HW			1 Dry		2	0
42	36.27	1	Daylight	2	-123.892	-123	53	31.59	00090010(	0	No median	0	0	Regular Mi	45.52	1	0			55	1		5 Curve (horizontal curve)	5	RURAL HW			1 Dry		2	0
43	11.54	1	Daylight	2	-123.894	-123	53	39.37		0	No median	0			0	0	0		0 1 to 500	30			3 Straight Roadway	7	RURAL CIT			1 Dry		2	0
42	38.75	1	Daylight	2	-123.892	-123	53	32.17	00090010(	0	No median	0	0	Regular Mi	45.47	1	0		0 1 to 500	30	1		3 Straight Roadway	5	RURAL HW			2 Wet		2	0
41	13.27	5	Dusk (Twili	2	-123.898	-123	53	51.16	00090010(	0	No median	0	0	Regular Mi	48.23	1	0		0 1 to 500	55	1		7 Grade (vertical curve)	5	RURAL HW			2 Wet		2	0
43	3.68	1	Daylight	0	-123.894	-123	53	39.07	00090010(			0	0	Regular Mi	44.98	1	0		0 1 to 500	30	1		1 Intersection	5	RURAL HW			1 Dry		2	0
42	3.68	1	Daylight	0	-123.88	-123	52	48.04	00460010(			0	0	Regular Mi	19.03	0	0			55	1		1 Intersection	5	RURAL HW			1 Dry		2	0
43	9.08	1	Daylight	0	-123.939	-123	56	21		0			0		0	0	0	1	501 to 1,0(				1 Intersection	7	RURAL CIT			1 Dry		2	0
42	45.11	1	Daylight	2	-123.935	-123	56	5.31		0	No median	0			0	0	0	1	501 to 1,0(				2 Driveway or Alley	7	RURAL CIT			1 Dry		2	0
43	3.68	1	Daylight	0	-123.894	-123	53	39.07	00090010(			0	0	Regular Mi	44.98	1	0		0 1 to 500	30	1		1 Intersection	5	RURAL HW			1 Dry		2	0
43	2.39	1	Daylight	0	-123.914	-123	54	51.06	00090010(			0	0	Regular Mi	43.96	1	0			40	1		1 Intersection	5	RURAL HW			2 Wet		2	0
43	10.82	5	Dusk (Twili	0	-123.894	-123	53	39.35		0			0		0	0	0	0	1 501 to 1,0(	25			1 Intersection	7	RURAL CIT			1 Dry		2	0
43	14.19	1	Daylight	2	-123.925	-123	55	29.53	00090010(	0	No median	0	0	Regular Mi	43.38	1	1			40	1		5 Curve (horizontal curve)	5	RURAL HW			1 Dry		2	0
43	10.52	3	Darkness -	2	-123.922	-123	55	18.34	00090010(	0	No median	0	0	Regular Mi	43.55	1	1			40	1		5 Curve (horizontal curve)	5	RURAL HW			1 Dry		2	0
43	3.07	5	Dusk (Twili	0	-123.916	-123	54	56.95	00090010(			0	0	Regular Mi	43.89	1	1			40	1		1 Intersection	5	RURAL HW			1 Dry		2	0
42	26.49	1	Daylight	2	-123.886	-123	53	9.03	00090010(	0	No median	0	0	Regular Mi	45.93	1	1			55	1		5 Curve (horizontal curve)	5	RURAL HW			1 Dry		2	0
43	2.4	1	Daylight	0	-123.914	-123	54	51.07	00090010(			0	0	Regular Mi	43.96	1	0			40	1		1 Intersection	5	RURAL HW			2 Wet		2	0
43	6.53	5	Dusk (Twili	2	-123.94	-123	56	23.35		0	No median	0			0	0	1		1 501 to 1,0(				3 Straight Roadway	7	RURAL CIT			1 Dry		2	0
43	3.68	1	Daylight	0	-123.894	-123	53	39.07	00090010(			0	0	Regular Mi	44.98	1	0		0 1 to 500	30	1		1 Intersection	5	RURAL HW			1 Dry		2	0
43	3.56	1	Daylight	0	-123.897	-123	53	50.17	00090010(			0	0	Regular Mi	44.84	1	0		0 1 to 500	30	1		1 Intersection	5	RURAL HW			2 Wet		2	0
43	3.58	1	Daylight	0	-123.896	-123	53	46.53	00090010(			0	0	Regular Mi	44.89	1	0		0 1 to 500	30	1		1 Intersection	5	RURAL HW			1 Dry		2	0
42	40.39	4	Dawn (Twi	2	-123.892	-123	53	32.25	00090010(	0	No median	0	0	Regular Mi	45.44	1	1		0 1 to 500	30	1		5 Curve (horizontal curve)	5	RURAL HW			1 Dry		2	0
43	7.31	1	Daylight	2	-123.937	-123	56	13.14		0	No median	0			0	0	1		1 501 to 1,0(				3 Straight Roadway	7	RURAL CIT			1 Dry		2	0
42	44.63	1	Daylight	2	-123.893	-123	53	33.15	00090010(	0	No median	0	0	Regular Mi	45.36	1	1		0 1 to 500	30	1		3 Straight Roadway	5	RURAL HW			1 Dry		2	0
43	5.87	3	Darkness -	2	-123.918	-123	55	5.96	00090010(	0	No median	0	0	Regular Mi	43.75	1	0			40	1		2 Driveway or Alley	5	RURAL HW			1 Dry		2	0
41	57.22	3	Darkness -	2	-123.877	-123	52	36.68	00090010(	0	No median	0	0	Regular Mi	46.68	1	1			55	1		5 Curve (horizontal curve)	5	RURAL HW			2 Wet		2	0
43	3.75	1	Daylight	2	-123.917	-123	54	59.6	00090010(	0	No median	0	0	Regular Mi	43.85	1	0			40	1		2 Driveway or Alley	5	RURAL HW			1 Dry		2	0
43	5.49	1	Daylight	0	-123.908	-123	54	27.82	00090010(			0	0	Regular Mi	44.29	1	0			40	1		1 Intersection	5	RURAL HW			1 Dry		2	0
42	52.89	2	Darkness -	2	-123.917	-123	55	2.95		0	No median					0	-1						3 Straight Roadway	6	RURAL COUNTY ROAD			2 Wet		2	0
42	45.42	2	Darkness -	2	-123.909	-123	54	32.84		0	No median					0	-1			25			3 Straight Roadway	6	RURAL COUNTY ROAD			1 Dry		2	0
42	4.96	1	Daylight	2	-123.881	-123	52	51.1	00090010(	0	No median	0	0	Regular Mi	46.45	-1	0			55	1		3 Straight Roadway	5	RURAL HWY SYSTEM			1 Dry		2	0
43	7.76	1	Daylight	2	-123.92	-123	55	11.69	00090010(	0	No median	0	0	Regular Mi	43.66	-1	0			40	1		2 Driveway or Alley	5	RURAL HWY SYSTEM			1 Dry		2	0
43	0.1	1	Daylight		-123.894	-123	53	39	00090010S00			0	0	Regular Mi	45.06	-1	0		0 1 to 500	30	1		1 Intersection	5	RURAL HWY SYSTEM			1 Dry		2	0
43	3.53	1	Daylight	2	-123.898	-123	53	51.57	00090010(	0	No median	0	0	Regular Mi	44.82	-1	0		0 1 to 500	30	1		3 Straight Roadway	5	RURAL HWY SYSTEM			2 Wet		2	0
42	3.68	1	Daylight		-123.88	-123	52	48.04	00090010S00			0	0	Regular Mi	46.5	-1	0			55	1		1 Intersection	5	RURAL HWY SYSTEM			1 Dry		2	0
41	10.86	1	Daylight	2	-123.884	-123	53	1.81		0	No median					0	0		0 1 to 500				2 Driveway or Alley	7	RURAL CITY STREET			2 Wet		2	0
41	25.14	1	Daylight		-123.882	-123	52	54.99								0	0		0 1 to 500				1 Intersection	7	RURAL CITY STREET			1 Dry		2	0
41	40.81	3	Darkness -	2	-123.879	-123	52	43.71	00090010(	0	No median			Regular Mi	47	-1	0		0 1 to 500	45	1		3 Straight Roadway	5	RURAL HWY SYSTEM			2 Wet		2	0
42	52.47	1	Daylight		-123.918	-123	55	3.26								0	-1						1 Intersection	6	RURAL COUNTY ROAD			1 Dry		2	0
42	54.2	1	Daylight	2	-123.922	-123	55	19.96		0	No median					0	-1						5 Curve (horizontal curve)	6	RURAL COUNTY ROAD			1 Dry		2	0
43	4.18	1	Daylight	2	-123.917	-123	55	0.86	00090010(	0	No median		0	Regular Mi	43.83	-1	0			40	1		3 Straight Roadway	5	RURAL HWY SYSTEM			2 Wet		2	0

RTE_ID	RTE_NM	RTE_TYP_CD	SCHL_ZONE_	SEG_MRK_ID	SEG_PT_LRS	SER_NO	SPECL_JRSD	SPECL_JR_1	ST_FULL_NM	TOT_FATAL_	TOT_INJ_CN	TAG_KSI	TOT_INJ_LV	TOT_INJ_1	TOT_INJ_2	TOT_INJ_UP_	TOT_OCCCYC	TOT_PEDC_1	TOT_PEDC_2	TOT_PED_CN	TOT_PED_FA	TOT_PED_IN	TOT_PED_IN	TOT_PER_E	TOT_SFTY_1	TOT_SFTY_2	TOT_SFTY NJD	TOT_UNI N_1	TOT_UNI NWN	TOT_UNK N_1	TOT_UNK
			0	52_29003	153.07	86			TOHLS ST	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	1	0	1	0	2	0	0
101	US 101	US	0	293_1905	110.68	37				0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	0	3	0	0	3	0	0
				52_29002	0	217			NECARNEY CITY RD	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	0	3	0	0	3	0	0
101	US 101	US		293_1818	3580.4	137				0	0	0	0	0	0	0	5	0	0	0	0	0	0	5	0	2	3	1	5	0	0
101	US 101	US	0	293_1705	105.457	220				0	0	0	0	0	0	0	5	0	0	0	0	0	0	5	0	4	1	0	5	0	0
53	OR 53	OR		293_1042	5424.27	139				0	1	1	0	1	0	2	0	0	0	0	0	0	0	2	0	1	1	0	1	0	0
101	US 101	US	0	293_1705	1791.95	62				0	1	1	1	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
101	US 101	US		293_1677	51.459	47			H ST	0	1	1	0	0	1	4	0	0	0	0	0	0	0	4	0	2	2	0	3	0	0
101	US 101	US		293_1830	1145.94	90191				0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0
101	US 101	US	0	293_1905	277.336	223				0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	1	0	0
101	US 101	US	0	293_1342	267.717	76			OREGON COAST HY	0	2	1	0	1	1	4	0	0	0	0	0	0	0	4	1	3	0	0	2	0	0
101	US 101	US	0	293_1830	1049.6	97				0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0	2	0	0	2	0	0
			0	52_29001	567.589	100			LANEDA AVE	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0	2	0	0	2	0	0
				52_29002	2804.65	102			CLASSIC ST	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	1	0	0
101	US 101	US		293_1228	1366.27	176				0	1	1	0	1	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
				0		164			OREGON COAST HY	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0	0	2	0	2	0	0
				52_29000	0	269			LANEDA AVE	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0	1	1	0	2	0	0
				52_29002	5732.83	215			NORTH FORK NEHLM RD	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0	1	1	0	2	0	0
101	US 101	US		293_1819	0	219			H ST	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5	0	5	0	0	5	0	0
			0	52_29000	2916.19	310			LANEDA AVE	0	1	1	0	0	1	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
101	US 101	US		293_1995	0	99			H ST	0	2	1	0	0	2	2	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0
101	US 101	US	0	293_1830	0	286				0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0
101	US 101	US		293_1705	263.464	399				0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	1	0	0
101	US 101	US	0	293_4839	896.908	302				0	0	0	0	0	0	4	0	0	0	0	0	0	0	4	0	4	0	0	4	0	0
101	US 101	US	0	293_9496	1524.12	395			OREGON COAST HY	0	1	1	0	1	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
			0	52_29003	0	421			SPRUCE ST	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0	1	1	0	2	0	0
101	US 101	US		293_1706	1696.83	176				0	0	0	0	0	0	3	0	0	0	0	0	0	0	3	0	3	0	0	3	0	0
101	US 101	US		293_1342	1007.06	383				0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	1	0	0
101	US 101	US		293_1705	1791.95	197				0	1	1	0	1	0	2	0	0	0	0	0	0	0	2	0	2	0	0	1	0	0
101	US 101	US	0	293_1342	642.946	219			OREGON COAST HY	0	1	1	0	0	1	2	0	0	0	0	0	0	0	2	0	2	0	0	1	0	0
101	US 101	US		293_1706	1477.98	123			RIVERSIDE DR	0	1	1	0	1	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
101	US 101	US		293_4839	896.908	448				0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0
101	US 101	US		293_1819	0	440			H ST	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0	1	1	0	2	0	0
				52_29000	3229.94	93			LANEDA AV(MANZANITA)	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3	0	2	1	0	3	0	0
101	US 101	US		293_1895	182.066	433				0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0
101	US 101	US		293_4839	657.748	446				0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0
				52_29003	1403.15	266			LANEDA AVE	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4	0	3	1	0	4	0	0
101	US 101	US		293_1677	0	229			A ST	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0	1	1	0	2	0	0
101	US 101	US	0	293_1633	201.052	198				0	1	1	0	0	1	2	0	0	0	0	0	0	0	2	0	2	0	0	1	0	0
			0	52_29000	796.373	321			B ST	0	1	1	0	1	0	6	0	0	0	0	0	0	0	6	0	6	0	1	5	0	0
101	US 101	US	0	293_1706	1642.1	471			RIVERSIDE DR	0	2	1	0	1	1	2	0	0	0	0	0	0	0	2	0	1	1	0	0	0	0
101	US 101	US		293_9496	1524.12	29			OREGON COAST HY	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	1	0	0
101	US 101	US	0	293_1342	265.691	129			H ST	0	1	1	0	0	1	2	0	0	0	0	0	0	0	2	0	0	2	0	1	0	0
53	OR 53	OR		293_1042	5424.27	238				0	1	1	0	0	1	2	0	0	0	0	0	0	0	2	0	1	1	0	1	0	0
				52_29000	0	381			IDAHO AVE	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0	1	1	0	2	0	0
				52_29002	0	197			LAKEVIEW DR	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0
101	US 101	US	0	293_1342	0	206			H ST	0	2	1	0	0	2	4	0	0	0	0	0	0	0	4	0	4	0	0	2	0	0
101	US 101	US	0	293_1830	0	9				0	1	1	0	0	1	4	0	0	0	0	0	0	0	4	0	4	0	0	3	0	0
			0	52_29000	0	357			B ST	0	1	1	0	0	1	2	0	0	0	0	0	0	0	2	0	2	0	0	1	0	0
101	US 101	US		293_1705	0	317				0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	1	0	0
101	US 101	US	0	293_1830	0	395				0	3	1	0	0	3	4	0	0	0	0	0	0	0	4	0	4	0	0	1	0	0
101	US 101	US	0	293_1830	0	227				0	1	1	0	1	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
101	US 101	US	0	293_9471	0	242				0	3	1	0	3	0	5	0	0	0	0	0	0	0	5	0	5	0	0	2	0	0
101	US 101	US	0	293_1830	0	401				0	1	1	0	1	0	2	0	0	0	0	0	0	0	2	0	2	0	0	1	0	0
				52_29002	0	29			LANEDA AVE	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0
101	US 101	US	0	293_1342	0	294			H ST	0	1	1	0	0	1	2	0	0	0	0	0	0	0	2	0	2	0	0	1	0	0
101	US 101	US	0	293_1226	0	454			H ST	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0	2	0	0	2	0	0
101	US 101	US	0	293_1677	0	361			H ST	0	1	1	0	0	1	2	0	0	0	0	0	0	0	2	0	2	0	0	1	0	0
101	US 101	US	0	293_1706	0	195			RIVERSIDE DR	0	1	1	0	0	1	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
				52_29001	0	90311			2ND ST	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0
101	US 101	US	0	293_1706	0	451			RIVERSIDE DR	0	1	1	0	1	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
101	US 101	US		293_1830	0	341				0	1	1	0	0	1	2	0	0	0	0	0	0	0	2	0	0	2	0	1	0	0
101	US 101	US		293_1905	0	130				0	1	1	0	1	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
101	US 101	US		293_1830	0	145				0	2	1	0	0	2	3	0	0	0	0	0	0	0	3	0	3	0	0	1	0	0
101	US 101	US	0	293_1830	0	236				0	1	1	0	0	1	3	0	0	0	0	0	0	0	3	0	3	0	0	2	0	0
			0	52_29002	7385.979	503			NECARNEY CITY RD	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0
				52_29002	1738.338	537			FERN WY	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0
101	US 101	US	0	293_1228	2378.328					0	0	0	0	2	2	4	0	0	0	0	0	0	0	4	4	0	0	2	0	0	0
101	US 101	US	0	293_1830	600.0073					0	0	0	1	0	1	2	1	0	1	0	0	0	0	3	3	0	0	2	0	0	0
101	US 101	US		293_1706	362.6328	801			RIVERSIDE DR	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0	0	2	2	0	0	0
101	US 101	US		293_1226	150.8409	1001			H ST	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4	3	0	1	4	0	0	0
101	US 101	US		293_1228	2631.311					0	0	0	1	0	1	3	0	0	0	0	0	0	0	3	2	0	1	2	0	0	0
				52_29003	806.8622	2103			ROWE ST	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	2	0	0	2	0	0	0
				52_29002	0	103			MARINE DR	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5	4	0	1	5	0	0	0
101	US 101	US	0	293_1342	372.2245	1601			OREGON COAST HY	0	0	0	0	1	1	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
				52_29002	7338.139	503			NECARNEY CITY RD	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	2	0	0	2	0	0	0
			0	52_29002	5772.833	503			NECARNEY CITY RD	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0
101	US 101	US	0	293_1830	1449.689					0	0	0	0	3	3	6	0	0	0	0	0	0	0	6	6	0	0	3	0	0	0

TOT_UNKN_2	TOT_VHCL_C	TRAF_CNTL_	TRAF_CNTL1	TRAF_CNT_1	TURNG_LEG_	UNLOCT_FLG	URB_AREA_C	URB_AREA_L	WRK_ZONE_I	WTHR_COND_	WTHR_COND1
0	2	0	No control	1	0	0	0		0	3	Rain
0	1	9	Curve Sign	1	0	0	0		0	6	Snow
0	2	0	No control	1	0	0	0			1	Clear
0	2	4	Stop Sign	1	0	0	0			3	Rain
0	2	0	No control	1	0	0	0		0	1	Clear
0	2	4	Stop Sign	1	0	0	0			1	Clear
0	1	99	Unknown or not definite	1	0	0	0		0	1	Clear
0	3	99	Unknown or not definite	1	0	0	0			6	Snow
0	1	99	Unknown or not definite	1	0	0	0			4	Sleet
0	1	9	Curve Sign	1	0	0	0		0	1	Clear
0	2	0	No control	1	0	0	0		0	1	Clear
0	1	0	No control	1	0	0	0		0	3	Rain
0	2	0	No control	1	0	0	0		0	3	Rain
0	1	4	Stop Sign	1	0	0	0		1	3	Rain
0	2	9	Curve Sign	1	0	0	0			2	Cloudy
0	1	99	Unknown or not definite	1	0	1	0			1	Clear
0	2	4	Stop Sign	1	0	0	0			1	Clear
0	2	0	No control	0	0	0	0			1	Clear
0	3	4	Stop Sign	1	0	0	0			1	Clear
0	2	0	No control	1	0	0	0		0	1	Clear
0	1	0	No control	1	0	0	0			1	Clear
0	1	4	Stop Sign	1	0	0	0		0	3	Rain
0	1	0	No control	1	0	0	0		1	1	Clear
0	2	4	Stop Sign	1	0	0	0		0	1	Clear
0	1	99	Unknown or not definite	1	0	0	0		0	0	Unknown
0	2	4	Stop Sign	1	0	0	0		0	3	Rain
0	2	4	Stop Sign	1	0	0	0			1	Clear
0	1	0	No control	1	0	0	0		1	1	Clear
0	2	0	No control	1	0	0	0			1	Clear
0	2	0	No control	1	0	0	0		0	1	Clear
0	1	0	No control	1	0	0	0			1	Clear
0	1	4	Stop Sign	1	0	0	0			0	Unknown
0	2	4	Stop Sign	1	0	0	0			1	Clear
0	2	4	Stop Sign	1	0	0	0			1	Clear
0	1	99	Unknown or not definite	1	0	0	0			3	Rain
0	1	99	Unknown or not definite	1	0	0	0			0	Unknown
0	2	4	Stop Sign	1	0	0	0			1	Clear
0	2	4	Stop Sign	1	0	0	0			1	Clear
0	2	0	No control	1	0	0	0		0	1	Clear
0	2	0	No control	1	0	0	0		0	1	Clear
0	2	0	No control	1	0	0	0		0	2	Cloudy
0	1	11	Police Officer, Flagman - School Patrol	1	0	0	0		1	3	Rain
0	2	23	Right Turn Green Arrow, Lane Markings, or Signal	1	0	0	0		0	1	Clear
0	2	4	Stop Sign	1	0	0	0			1	Clear
0	2	0	No control	1	0	0	0			1	Clear
0	2	99	Unknown or not definite	1	0	0	0			1	Clear
0	2	4	Stop Sign	1	0	0	0		0	2	Cloudy
0	2	4	Stop Sign	1	0	0	0		0	3	Rain
0	2	4	Stop Sign	1	0	0	0		0	1	Clear
0	1	99	Unknown or not definite	1	0	0	0			1	Clear
0	2	0	No control	1	0	0	0		0	1	Clear
0	1	4	Stop Sign	1	0	0	0		0	1	Clear
0	2	0	No control	1	0	0	0		0	1	Clear
0	2	4	Stop Sign	1	0	0	0		0	3	Rain
0	2	99	Unknown or not definite	1	0	0	0			1	Clear
0	2	2	Flashing Beacon - Red (Stop)	1	0	0	0		0	1	Clear
0	2	99	Unknown or not definite	1	0	0	0		0	3	Rain
0	2	4	Stop Sign	1	0	0	0		0	1	Clear
0	1	0	No control	1	0	0	0		0	1	Clear
0	2	99	Unknown or not definite	1	0	0	0			1	Clear
0	1	99	Unknown or not definite	1	0	0	0		0	1	Clear
0	2	99	Unknown or not definite	1	0	0	0			1	Clear
0	1	0	No control	1	0	0	0			3	Rain
0	2	4	Stop Sign	1	0	0	0			1	Clear
0	2	4	Stop Sign	1	0	0	0		0	1	Clear
0	1	99	Unknown or not definite	-1		0			0	2	Cloudy
0	2	99	Unknown or not definite	-1		0				1	Clear
0	2	0	No control	-1		0			0	1	Clear
0	1	99	Unknown or not definite	-1		0			0	1	Clear
0	2	99	Unknown or not definite	-1	0	0				1	Clear
0	2	99	Unknown or not definite	-1		0				3	Rain
0	2	4	Stop Sign	-1	0	0				1	Clear
0	2	99	Unknown or not definite	-1		0				3	Rain
0	2	0	No control	-1	0	0				1	Clear
0	1	99	Unknown or not definite	-1		0			0	2	Cloudy
0	1	99	Unknown or not definite	-1	0	0				1	Clear
0	1	99	Unknown or not definite	-1		0			0	2	Cloudy
0	2	99	Unknown or not definite	-1		0			0	3	Rain