

City of Coos Bay Front Street Blueprint

MEMORANDUM 3

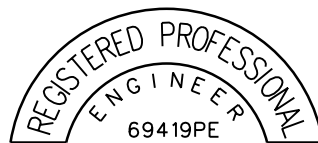
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ODOT

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Introduction

David Evans and Associates, Inc. ("Consultant") have been retained to conduct the City of Coos Bay Front Street Blueprint project. This memorandum, Draft Memo #3, has been prepared to summarize the existing and future transportation conditions of the project study area. The assessment was conducted in accordance with the *Methodology Memo (Revised)* dated April 9, 2021.

Study Area

The Front Street Project study area is an industrial and commercial area within the City of Coos Bay, bound on the west by US 101 and on the east by an active channel on the bay. The northern boundary is in line with Ivy Avenue and the southern boundary is Market Avenue. The street network within the project study area includes the length of N Front Street from Market Avenue to Hemlock Avenue. The Front Street Project study area is shown in Figure 1.



Figure 1. Study Area

Vehicles and Freight

Study Intersections

As indicated in the *Methodology Memo*, 12 intersections were included in the study. Table 1 below summarizes the locations of the study intersections as well as the count date, count duration, and whether the counts included pedestrian, bicycle, and heavy vehicle counts. Intersection count sheets are provided in Appendix A.

Table 1. Study Intersections

ID	Count Location	Duration	Date	Ped	Bike	Trucks
1	Koos Bay Blvd & US 101	16 hr	Tue 7/11/17	Y	Y	Y
2	Ivy Ave & US 101	6 hr	Tue 4/10/18	Y		
3	Hemlock/Front & US 101	16 hr	Tue 4/10/18	Y		
4	Fir St & US 101 NB	6 hr	Wed 4/11/18	Y		
5	Fir St & US 101 SB	6 hr	Wed 4/11/18	Y		
6	Fir St (south) & US 101 NB	6 hr	Wed 4/11/18	Y		
7	Front St & Fir St (south)	6 hr	Wed 4/11/18	Y		
8	Market Ave & US 101 NB	6 hr	Tue 4/10/18	Y		
9	US 101 & Cedar Avenue	4 hr	Tue 3/10/20	Y	Y	Y
10	Front Street & Alder Ave	4 hr	Tue 3/10/20	Y	Y	Y
11	Front Street & Cedar Ave	4 hr	Tue 3/10/20	Y	Y	Y
12	US 101 NB & Alder Ave	4 hr	Tue 3/10/20	Y	Y	Y

Base Year (2020) Conditions

Peak Hour Selection

The intersection turning movement counts were first reviewed to determine a single common system peak hour. Traffic counts were reviewed and compared in 15-minute intervals to determine the common peak study hour. Subsequent turning movements, peak hour factors, vehicle classification, and future volumes describing demand in the study area were derived for this peak hour for all study intersections. Based on the traffic counts, the common peak hour occurred from 4:30 PM to 5:30 PM.

Adjustment Factors

Annual growth factors and seasonal adjustment factors were developed based on the *Methodology Memo*. As stated in the *Methodology Memo*, **the annual growth factor was determined to be 1.0%**. The seasonal adjustment factors were calculated based an average of the Commuter and the Coastal Destination methods and interpolated to the count dates based on the latest ODOT Seasonal Trend Table (updated 10/14/20). Based on the calculations, **the seasonal trend factors to count dates of 3/10, 4/10, 4/11, and 7/11 were 1.26, 1.16, 1.16, and 1.03 respectively.**

Base Year Volumes

The annual growth factor was applied to the existing counts for the appropriate number of years based on the count year from year 2020. Next, the seasonal trend factors were applied according to the count dates. Finally, the volumes were balanced between intersections and rounded to the nearest five.

The final 2020 base year intersection turning movement volumes are illustrated in Figure 2. The detailed volume development spreadsheet is provided in Appendix B.

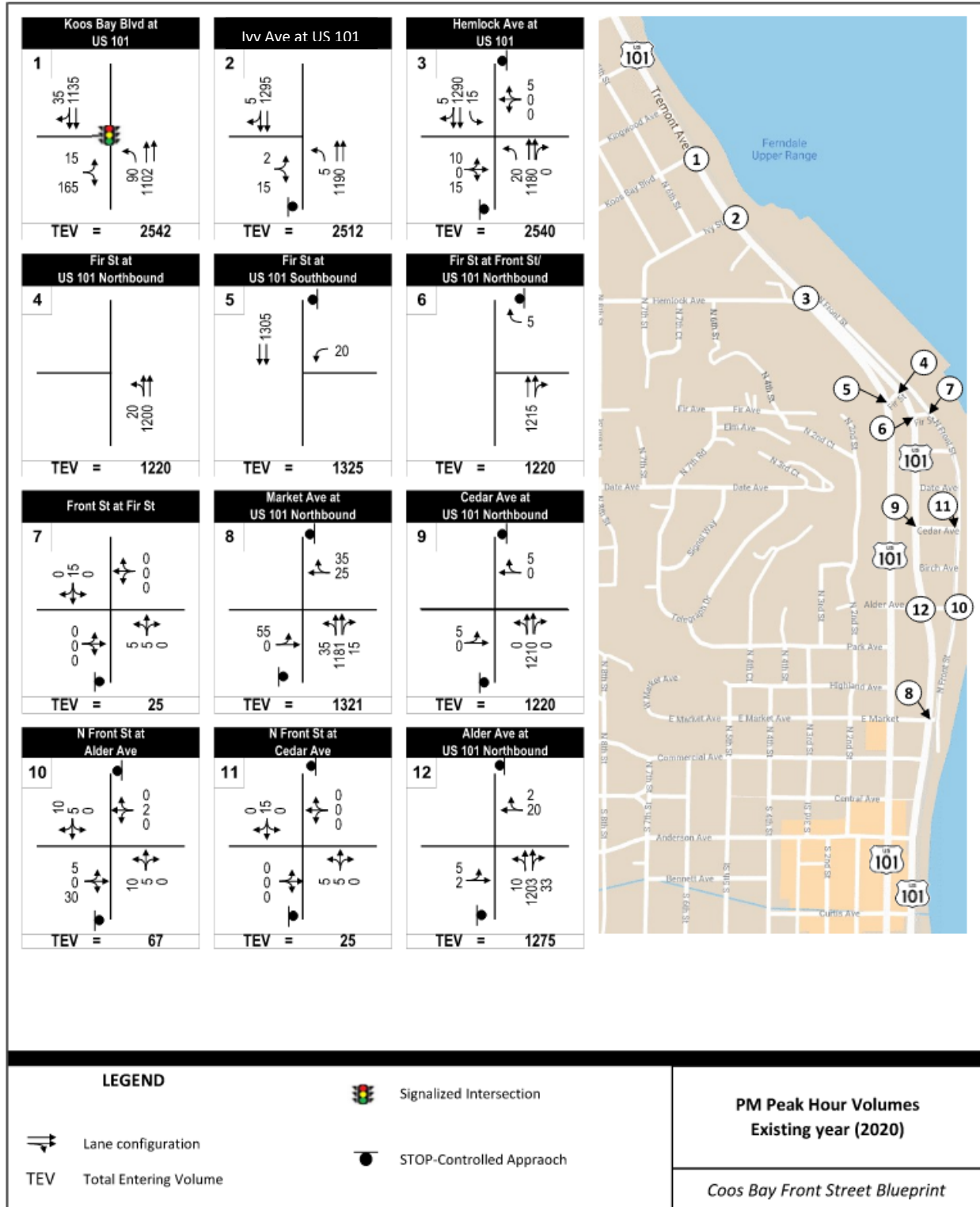


Figure 2: Existing (2020) PM Peak Hour Volumes

Adopted Performance Standards

US 101 is a state facility and all other streets in the study area are City of Coos Bay streets. Nine of the 12 study intersections are along US 101 with a city cross street. The other three study intersections consist of two intersecting city streets.

For intersections along US 101, the *Oregon Highway Plan (OHP)* and the *Highway Design Manual (HDM)* will be used in the assessment of intersection operations. Both documents base their mobility performance on the calculation of volume-to-capacity ratios (v/c). The mobility targets from the OHP will be applied to the existing and future baseline analysis summarized in this memorandum. The standards from the HDM will be applied in the event of any proposed design alternatives in subsequent memorandums. The City of Coos Bay Municipal Code states “City streets shall maintain a LOS of “D” during the p.m. peak hour of the day.”

At signalized intersections, the critical intersection v/c was calculated according to ODOT APM methodologies and compared against the performance standards. At unsignalized intersections, the results were reported for movements that must stop or yield the right of travel to other traffic flows on major and minor roads and compared against the performance standards.

The adopted performance measures are summarized in Table 2.

Table 2. Applicable Performance Measures

State Highways		Volume-to-Capacity Ratio	
		OHP ¹	HDM ²
US 101 (Freight Route on a Statewide Highway)	Non-MPO, Outside STAs, ≤35 mph	0.85	0.70
	Non-MPO, ≥45 mph	0.80	0.70
Local Interest Roads	Non-MPO, Outside STAs, ≤35 mph	0.95	0.80
	Non-MPO, Outside STAs, ≥45 mph	0.90	0.75
City Streets		Level of Service ³	
City of Coos Bay		LOS D	

Notes:

1. Table 6: Volume to Capacity Ratio Targets Outside Metro, Oregon Highway Plan, 1999.
2. Table 10-2: 20 Year Design-Mobility Standards (Volume-to-Capacity Ratio), Highway Design Manual, 2012
3. Coos Bay Municipal Code, Section 18.15.005.

Base Year Intersection Operations

Intersection operating conditions were evaluated using Synchro software based on methodologies in the *Highway Capacity Manual (HCM) 6th Edition* along with the procedures outlined in ODOT's *Analysis Procedures Manual (APM)*. In the base study year of 2020, there is one signalized intersection and 11 stop-controlled intersections.

Based on the analysis, all study intersections and minor movements at Stop-controlled intersections are determined to meet the performance standards in the base year of 2020. Intersection analysis are summarized in Table 3. Analysis output worksheets are provided in Appendix C.

Table 3. Summary of Existing (2020) Operations

No.	Intersection	Control	Critical Movement	v/c Ratio	LOS	Mobility Target
1	US 101 & Coos Bay Blvd	Signal	Overall Intersection	0.69	-	0.80
2	US 101 & Ivy Ave	Two-Way Stop	Major Leg - Northbound Left Minor Leg - Eastbound	0.01 0.13	- -	0.80 0.95
3	US 101 & Hemlock Ave	Two-Way Stop	Major Leg - Northbound Left Minor Leg - Eastbound	0.04 0.43	- -	0.80 0.95
4	US 101 NB & Fir St	Two-Way Stop	Major Leg - Northbound Thru-Left Minor Leg - Eastbound	0.35 0.00	- -	0.85 0.95
5	US 101 SB & Fir St	Two-Way Stop	Major Leg – Southbound Thru-Left Minor Leg - Westbound	0.38 0.06	- -	0.85 0.95
6	US 101 NB & Fir St (south)	Two-Way Stop	Major Leg – Northbound Thru-Right Minor Leg - Westbound Right	0.36 0.01	- -	0.85 0.95
7	Fir St (south) & Front St	Two-Way Stop	Major Leg - Northbound Thru-Left Minor Leg - Eastbound Left-Right	- -	A A	D D
8	US 101 NB & Market Ave	Two-Way Stop	Major Leg – Northbound Thru-Left Minor Leg - Eastbound Left	0.35 0.21	- -	0.85 0.95
9	US 101 NB & Cedar Ave/ driveway	Two-Way Stop	Major Leg – Northbound Thru-Right Minor Leg - Eastbound Left	0.36 0.02	- -	0.85 0.95
10	Front St & Alder Ave	Two-Way Stop	Major Leg - Northbound Left Minor Leg - Eastbound Left	- -	A A	D D
11	Front St & Cedar Ave	Two-Way Stop	Major Leg - Northbound Left Minor Leg - Eastbound Left	- -	A A	D D
12	US 101 NB & Alder Ave	Two-Way Stop	Major Leg – Northbound Thru-Left Minor Leg - Westbound	0.35 0.13	- -	0.85 0.95

Future Year (2042) Conditions

Future year, also known as no-build, conditions were evaluated for the year 2042. The assessment of future year traffic conditions included development of future traffic volumes and analysis of the 12 study intersections.

Planned Projects and Improvements

A new traffic signal is included in the future year analysis at the intersection of US 101 & Hemlock Avenue. This new traffic signal is expected to be operational sometime in 2021. As part of this new signal, a new pedestrian crosswalk is planned across US 101 on the north leg and one across Hemlock Avenue on the west leg.

The proposed Coos Bay Village Center east of US 101 between Ivy Avenue and Fir Street along the waterfront includes office, retail and mixed commercial uses. The main access point to this site is proposed at the eastern leg of the US 101 & Hemlock Avenue intersection, the location of the planned new traffic signal mentioned above. Project trips associated with the new Coos Bay Village Center development were accounted for in the future traffic volume development described below. The traffic impact study for Coos Bay Village Center is provided in Appendix F.

Other future development along Front Street will be required to conduct traffic impact analyses to determine additional transportation-related improvements that may be necessary.

Future Year Volumes

In order to calculate the future year volumes, the 1.0% annual growth factor previously described and used in developing the base year volumes was applied to the base year 2020 volumes for a total of 22 years to the future year 2042, resulting in a 22% growth rate. This factor was applied to the previously calculated, seasonally adjusted base year 2020 volumes. Next, the newly calculated 2042 volumes were balanced between intersections and rounded to the nearest five.

The previously described Coos Bay Village Center development site-generated traffic were then added to the 2042 intersection volumes according to the Coos Bay Village Center traffic impact study provided in Appendix F. For those intersections that were not included in the Coos Bay Village Center traffic study, site generated traffic was added to the study intersections by balancing and interpolating between those intersections that were included in the traffic study. The final 2020 base year intersection turning movement volumes are illustrated in Figure 3. The detailed volume development spreadsheet is provided in Appendix B.

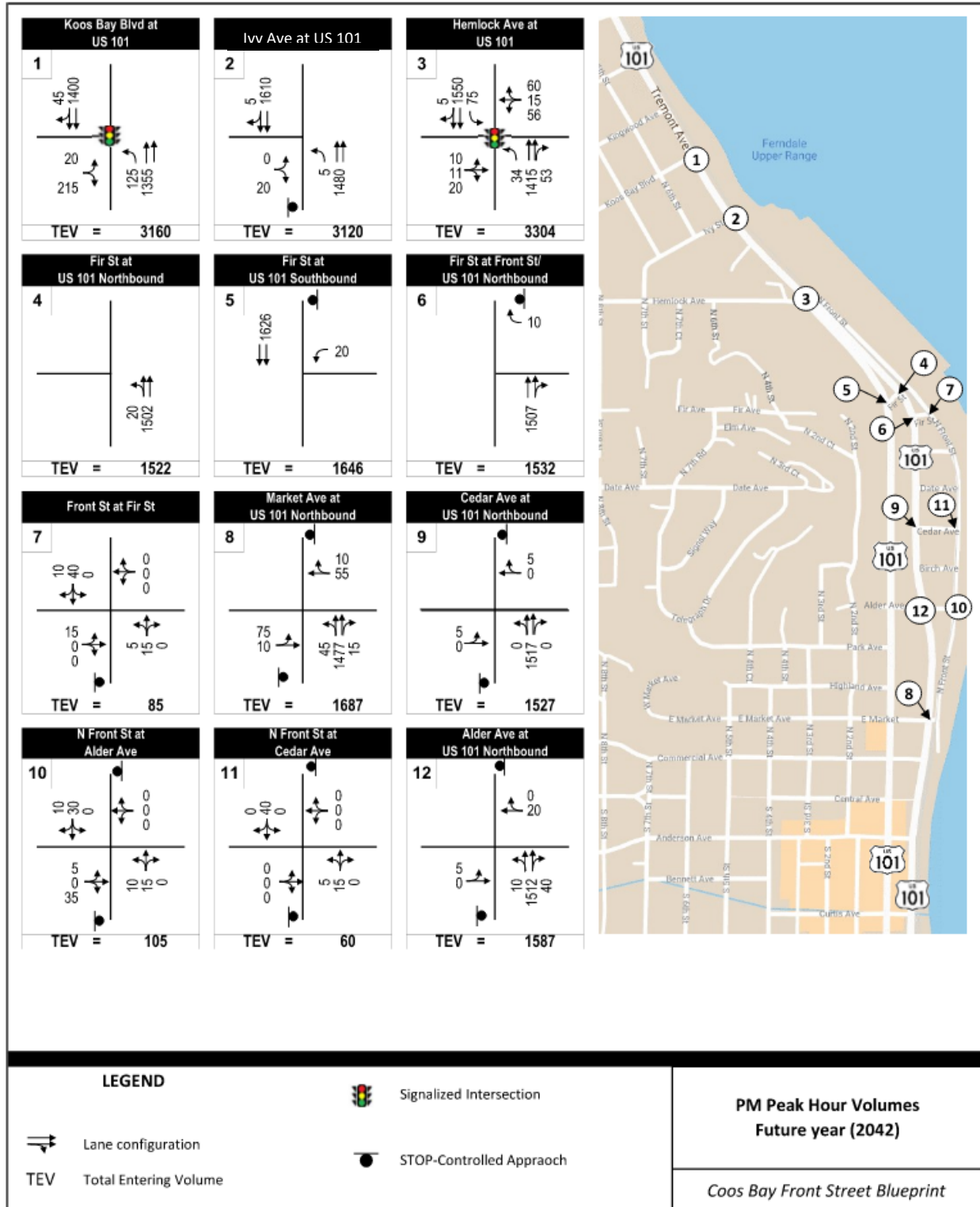


Figure 3: Future (2042) No-Build PM Peak Hour Volumes

Future Year Intersection Operations

Intersection operating conditions were evaluated using Synchro software based on methodologies in the *Highway Capacity Manual (HCM) 6th Edition* along with the procedures outlined in ODOT's *Analysis Procedures Manual (APM)*. Future year PM peak hour traffic operations were evaluated for the same intersections and peak hours as in the existing conditions. The intersection of US 101 & Hemlock Avenue was analyzed as a signalized intersection in anticipation of the upcoming new traffic signal.

Based on the analysis, the US 101 & Coos Bay Boulevard intersection is projected to operate at a critical intersection v/c ratio of 0.83 in the PM peak hour, while the ODOT standard for US 101 at this location has a mobility target of 0.80. US 101 is a State Freight Route with a speed limit of 45 mph in the vicinity of this intersection. All other study intersections and minor movements at Stop-controlled intersections were determined to meet the performance standards during the PM peak hour in the future year of 2042. Intersection analysis results are summarized in Table 3. Future year analysis output worksheets are provided in Appendix E.

Table 4. Summary of Future Year 2042 PM Peak Hour Operations

No	Intersection	Control	Critical Movement	v/c Ratio	LOS	Mobility Target
1	US 101 & Coos Bay Blvd	Signal	Overall Intersection	0.83	-	0.80
2	US 101 & Ivy Ave	Two-Way Stop	Major Leg - Northbound Left Minor Leg - Eastbound	0.02 0.07	- -	0.80 0.95
3	US 101 & Hemlock Ave	Signal	Overall Intersection	0.75	-	0.80
4	US 101 NB & Fir St	Two-Way Stop	Major Leg – Northbound Thru-Left Minor Leg – Eastbound	0.44 0.00	- -	0.85 0.95
5	US 101 SB & Fir St	Two-Way Stop	Major Leg – Southbound Thru-Left Minor Leg - Westbound	0.48 0.07	- -	0.85 0.95
6	US 101 NB & Fir St (south)	Two-Way Stop	Major Leg – Northbound Thru-Right Minor Leg – Westbound Right	0.44 0.05	- -	0.85 0.95
7	Fir St (south) & Front St	Two-Way Stop	Major Leg - Northbound Thru-Left Minor Leg - Eastbound Left-Right	- -	A B	D D
8	US 101 NB & Market Ave	Two-Way Stop	Major Leg – Northbound Thru-Left Minor Leg - Eastbound	0.43 0.69	- -	0.85 0.95
9	US 101 NB & Cedar Ave/ driveway	Two-Way Stop	Major Leg – Northbound Thru-Right Minor Leg - Eastbound	0.45 0.02	- -	0.85 0.95
10	Front St & Alder Ave	Two-Way Stop	Major Leg - Northbound Left Minor Leg - Eastbound Left	- -	A A	D D
11	Front St & Cedar Ave	Two-Way Stop	Major Leg - Northbound Left Minor Leg - Eastbound	- -	A A	D D
12	US 101 NB & Alder Ave	Two-Way Stop	Major Leg – Northbound Thru-Left Minor Leg - Westbound	0.44 0.21	- -	0.85 0.95

Safety Analysis

This section discusses the safety analysis performed at study area intersections. The study intersection crash data is summarized in Table 5 and shown in Figure 4. The analysis is based on the most recent and available five years of crash data from ODOT’s Data and Reporting Unit (January 1, 2014 through December 31, 2018). The analysis reviewed the following:

- Total crashes, severity and collision type
- Network screening through comparison of study intersection crash rates to 90th percentile crash rates, critical crash rates, and excess proportions
- Top 10% Safety Priority Index System (SPIS) sites

Table 5: Crash History at Study Area Intersections

Intersection	Reference Population Type	Total	Severity			Crash Type										90 th Percentile Crash Rate	Critical Crash Rate	5-Year Crash Rate ^{1,2}		
			Property Damage Only	Non-Fatal Injury B/C	Fatal/Injury A	Rear-End	Fixed-Object	Angle	Backing	Turning	Sideswipe-Overtaking	Non-Collision	Pedestrian	Bicycle	Other					
1. Koos Bay Blvd at US 101	U3SG	9	4	5	0	2	0	0	0	7	0	0	0	0	0	0	0	0.509	-	0.20
2. Ivy Ave at US 101	U3ST	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0.293	0.14	0.02
3. Hemlock Ave at US 101	U4ST	6	3	3	0	2	2	0	0	2	0	0	0	0	0	0	0	0.408	-	0.13
4. Fir St at US 101 NB	U3ST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.293	0.19	0.00
5. Fir St at US 101 SB	U3ST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.293	0.18	0.00
6. Fir St (south) at US 101 NB	U3ST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.293	0.19	0.00
7. Front St at Fir St (south)	U4ST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.408	-	0.00
8. Market Ave at US 101 NB	U3ST	3	1	2	0	1	0	0	0	1	0	0	0	0	1	0	0	0.293	0.18	0.14
9. US 101 NB at Cedar Ave	U3ST	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0.293	0.19	0.05
10. Front St at Alder Ave	U4ST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.408	-	0.00
11. Front St at Cedar Ave	U4ST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.408	-	0.00
12. US 101 NB at Alder Ave	U3ST	7	3	4	0	1	0	3	0	3	0	0	0	0	0	0	0	0.293	0.19	0.35
Totals		27	11	16	0	8	2	3	0	13	0	0	0	0	1	0				

Source: ODOT Crash Analysis and Reporting Unit 2014-2018

Acronyms: R = Rural; U = Urban; 3 = 3-leg intersection; 4 = 4-leg intersection; ST = STOP-controlled; SG = Signalized

Notes:

1. Highway Safety Manual Part B methodology was used to calculate critical crash rates for the study intersections with sufficient reference populations (i.e. at least five intersections with a similar configuration). Where the observed rate exceeds the critical crash rate, the observed rate is **bold and shaded**.
2. Where the observed rate exceeds the Statewide 90th Percentile Crash Rate, the observed rate is *italic and underlined*.

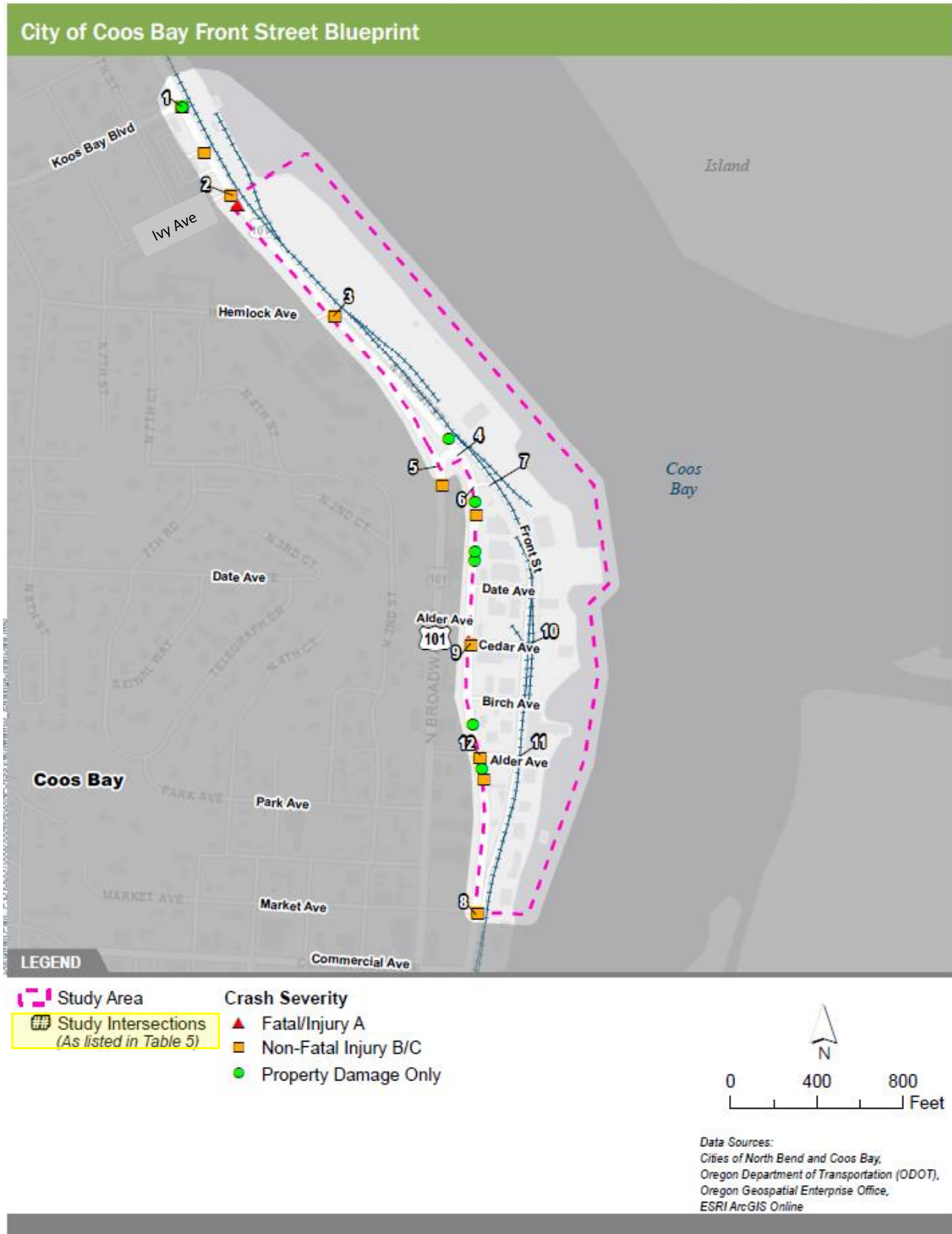


Figure 4. Study Area Crashes

Crash History

A review of the available data at the study intersections identified 27 total crashes. The 27 crashes occurred at six of the 12 study intersections, with no documented crashes on Front Street. Of these, 59% percent were injury crashes, while the rest were property damage only (PDO). There were no fatalities in the analysis period at study area intersections. Most of the study intersection crashes were turning-related (52%), followed by rear-end collisions (30%). The intersection of Market Avenue at US 101 North had a documented turning collision which included a crash with a bicycle.

A review of the crash history for the entire study area (including crashes attributed to roadway segments, driveways and alleyways) documented 39 total crashes between 2014 and 2018. This includes the 27 crashes documented at the study area intersections. There was a documented crash with a pedestrian on US 101 near Ivy Avenue. This crash was not attributed to the intersection, but rather along US 101 when a driver became distracted due to an animal or insect in their vehicle. This distraction caused the driver to hit a pedestrian, which resulted in a suspected serious injury.

Network Screening

Highway Safety Manual Part B

The Highway Safety Manual Part B describes the critical crash rate method as a means of identifying locations that warrant further investigation. The critical crash rate is based upon average crash rates at comparable sites, traffic volume, and a confidence interval. Critical crash rates were calculated for three-legged STOP-controlled intersections according to the HSM Part B Network Screening Critical Crash Rate method. As part of this method, each reference population, made up of locations with similar geometric and operational characteristics, must contain at least five sites for comparison. Within the study area, three-legged unsignalized intersections are the only reference population with sufficient size to utilize the network screening method.

Based on critical crash rates determined by the HSM Part B Network Screening methodology, the intersection of US 101 Northbound at Alder Avenue is found to exceed both the critical crash rate and the 90th percentile crash rate for its reference population, suggesting further review. This intersection is STOP-controlled on the side street and had seven total crashes during the analysis period that included three turning, three angle and one fixed object collision. Most of the crashes were due to drivers failing to yield the right of way.

Excess Proportion of Specific Crash Types

An Excess Proportion of Specific Crash Types analysis was also performed, but it did not yield any significant results. According to Chapter 4 of ODOT's *Analysis Procedures Manual*, this analysis may be of limited usefulness for small study areas with low crash frequencies. For the method to be statistically valid, there need to be at least five sites in each reference population, with a minimum of two of those sites having two or more crashes of the target crash type. This is not the case in the project study area.

Although the Excess Proportion of Specific Crash Type analysis was not applicable for the study area, the crash data clearly indicates turning movement collisions are the most prevalent and improvements aimed at curbing turning-related collision types would have the most impact in the study area.

Safety Priority Index System (SPIS)

The SPIS is a method used in Oregon to identify safety problem areas along state highways. Highways are evaluated in approximately one-tenth mile increments (often grouped into larger segments). Each year these segments are ranked by assigning a SPIS score based on the frequency and severity crashes observed, while taking traffic volume into account. When a segment is ranked in the top 10% of the index, a crash analysis is typically warranted, and corrective actions are considered.

There are no segments within the study area that are identified in the top 10% of the most recent (2019) SPIS rankings.

Pedestrian Conditions

Facility Inventory

There are existing curb-tight sidewalks on both sides of Front Street south of the intersection with Birch Avenue. North of Birch Avenue, sidewalks are mostly missing on both sides until the Coos History Museum which has complete sidewalk along its frontage on the east side of Front Street. On the cross streets—Cedar Avenue, Birch Avenue, and Alder Avenue—that intersect Front Street, there is generally complete sidewalk on one side. Conditions of the existing sidewalks vary; there are some areas with brand new sidewalk and others with older sidewalks and locations where sidewalks are impeded by fixed objects such as utility poles.

Along the east side of US 101 adjacent to the study area, sidewalk exists from Market Avenue to just south of Fir Street next to the Marshfield Sun Printing Museum. From that location north, there is no sidewalk on the east side of US 101; the Coos Bay TSP identifies this segment of US 101 as “ODOT Sidewalk Need” in the Pedestrian Action Plan.

There are currently no marked crosswalks within the study area. Legal crossing locations exist at each intersection. A new traffic signal is planned at the intersection of US 101 & Hemlock Avenue. This new traffic signal is expected to be operational sometime in 2021. As part of this new signal, a new, marked pedestrian crosswalk is planned across US 101 on the northern leg and one across Hemlock Avenue on the western leg; the southern leg across US 101 will be closed to pedestrian crossing as part of this new signal.

According to ODOT data, there are ADA curb ramps near the intersections of US 101 with most of the cross streets—Alder, Birch, Cedar, Date, Fir, and Front St/Hemlock Ave—in the study area; although these ADA ramps are identified as in “Poor” condition. Based on a visual inspection of online street mapping program, there are two ADA curb ramps at the intersection of Front Street at Market Avenue.

The current sidewalk, crosswalk, and curb ramp inventory is illustrated in Figure 5.



Figure 5. Sidewalk, Crosswalk, Curb Ramp Inventory

Pedestrian Level of Traffic Stress

The Pedestrian Level of Traffic Stress (PLTS) was evaluated for the study area according to the ODOT Analysis Procedures Manual (APM). The assessment considers factors such as presence of sidewalks and their conditions, presence of buffer, number of adjacent traffic lanes and posted speed, illumination, and general land use. There are four levels of PLTS with PLTS 1 being the lowest stress level and PLTS 4 the highest. Generally speaking, PLTS 2 is considered a reasonable minimum target for pedestrian routes, while PLTS 1 is most desired for areas near schools with high number of children and youths.

Based on the APM methodologies for PLTS, the following pedestrian stress levels were identified for facilities within the study area:

- Front Street: While there is low speed limit and low traffic volume, due to the light industrial nature of surrounding land use, Front Street has a PLTS score of 3 where there are sidewalks and PLTS 4 where there are no sidewalks. The segment adjacent to the Coos History Museum with continuous sidewalk, the score is PLTS 2.
- Side streets (Date, Cedar, Birch, Alder): Similar to assessment along Front Street, due to the light industrial nature of surrounding land use, the side streets that intersect with Front Street within the study area generally have PLTS 3 where there are sidewalks and PLTS 4 where there are no sidewalks.
- US 101 from Market Street to Fir Street: This segment of US 101 has a PLTS 3. While there are continuous and wide sidewalks on the east side; the adjacent two travel lanes on US 101 northbound with speed limit of 30 mph and the adjacent light industrial land use yield a PLTS of 3.
- US 101 north of Fir Street: This segment of US 101 has PLTS 4 due to the lack of sidewalk on the east side and the two travel lanes at 45 mph speed limit on US 101.

The PLTS score for the study area is illustrated in Figure 6.

Bicycle Conditions

There are no dedicated bicycle facilities in the project study area. The current bicycling network in the study area is on-street, shared lanes with motor vehicles. As such, the condition and surface type of bike facilities is equivalent to pavement conditions for the streets on which they exist.

Bicycle Level of Traffic Stress (BLTS) was evaluated for the study area according to the ODOT Analysis Procedures Manual (APM). The assessment considers factors such as presence and types of bike lanes, number of adjacent traffic lanes and posted speed, illumination, and general land use. Similar to the PLTS, there are four levels of BLTS with BLTS 1 being the lowest stress level and BLTS 4 the highest. A BLTS 2 is often used as a reasonable target to appeal to the potential bike-riding population. A BLTS 1 is most desired for areas near schools with high number of children and parents of younger children.

Based on the APM methodologies for BLTS, the following BLTS scores were identified for facilities within the study area:

- Front Street: While bicycles are expected to travel in mixed traffic along Front Street, this road has a BLTS 1 based on the prevailing travel speed of 25 mph on a two-lane road with an unmarked center line and low traffic volumes.
- Side streets (Date Ave, Cedar Ave, Birch Ave, Alder Ave): Similar to the assessment along Front Street, based on the prevailing travel speed of 25 mph and low traffic volumes, side streets within the study area that intersect with Front Street have BLTS 1.
- US 101 from Market Street to Fir Street: This segment of US 101 has BLTS 4 due to the lack of dedicated bike lanes, and the adjacent two-lane arterial with 30 mph posted speed and greater than 8,000 ADT traffic volume.
- US 101 north of Fir Street: This segment of US 101 has BLTS 4 due to the lack of dedicated bike lanes, and the adjacent arterial with 45 mph posted speed.

The Coos Bay TSP identifies US 101 adjacent to the study area as having “Future Type II (Striped)” bicycle facilities in the Bicycle Route Plan.

Transit Conditions

Within the study area, based on ODOT TransGIS data, Coos County Area Transit (CCAT) operates a “Weekend Express” route that connects downtown Coos Bay and downtown North Bend via the length of Front Street with one stop just north of Market Avenue and one stop at the Coos History Museum. At the time of writing, this service is suspended due to the Coronavirus pandemic.

The CCAT Myrtle Point Connector travels US 101 adjacent to the study area connecting Coquille, Myrtle Point, and Powers in the south to Lakeside and Hauser to the north.

Curry Public Transit offers a connecting service, Coastal Express, from Coos Bay to the communities of Bandon, Port Orford, Gold Beach, Brookings, Harbor and Smith River. The Coastal Express operates Monday through Saturday and provides service three times daily in the morning, mid-day, and early afternoon.

Parking Conditions

On-street parking is available along Front Street on both sides with a few exceptions near business driveways and loading areas. Similarly, on-street parking is available along the side streets—Date Avenue, Cedar Avenue, Birch Avenue, Alder Avenue—within the study area. There is no on-street parking along US 101 adjacent to the study area. The on-street parking in the study area is unmarked.

The City of Coos Bay’s on-street parking inventory indicates that there is approximately 1,557 feet of on-street parking along the east side of Front Street between Fir Avenue and Market Avenue, 880 feet on the west side of Front Street between Fir Avenue and Market Avenue, and 772 feet along the side streets of Date Avenue, Cedar Avenue, Birch Avenue, and Alder Avenue. The city’s engineering design standards in Chapter 18.15.010 of the Coos Bay Municipal Code stated that the minimum length of an on-street parking stall shall be 20 feet. Based on this information and taking into account the location of breaks due to driveways and intersections, it is estimated that there are approximately 75 on-street parking stalls on the east side of Front Street between Fir Avenue and Market Avenue, 39 on the west side of Front Street between Fir Avenue and Market Avenue, and 34 along the side streets of Date Avenue, Cedar Avenue, Birch Avenue, and Alder Avenue for a total of 148 on-street parking stalls in the study area between Fir Avenue and Market Avenue. This estimate is based on a parking stall length of 20 feet as stated in the Coos Bay engineering design standards. Larger vehicles such as RVs or large trucks may reduce the amount of on-street parking availability.

The available on-street parking inventory and approximate curb length are summarized in Table 6 and illustrated in Figure 7.

Table 6. On-Street Parking Summary

Location	Length of Available On-Street Parking	Approximate Number of Stalls (at 20' per stall)
Front Street east side curb (between Fir Avenue and Market Avenue)	1,557 feet	75
Front Street west side curb (between Fir Avenue and Market Avenue)	880 feet	39
Side Streets (Date Avenue, Cedar Avenue, Birch Avenue, Alder Avenue)	772 feet	34
Total (Between Fir Avenue and Market Avenue)	3,209 feet	148

A new public parking lot is planned by the City of Coos Bay to be constructed in 2021/2022 on the west side of Front Street between Date Avenue and Cedar Avenue. This new parking lot is proposed to have 47 parking spaces with additional amenities such as bike racks, trash and recycling bins, wayfinding, and lighting. Vehicle access for this parking lot is planned on Date Avenue and Cedar Avenue. As part of this planned parking lot, continuous sidewalk will be constructed along Front Street between Date Avenue and Cedar Avenue. This new public parking lot may affect the amount of on-street parking along its frontage on Date Avenue, Cedar Avenue, and Front Street.

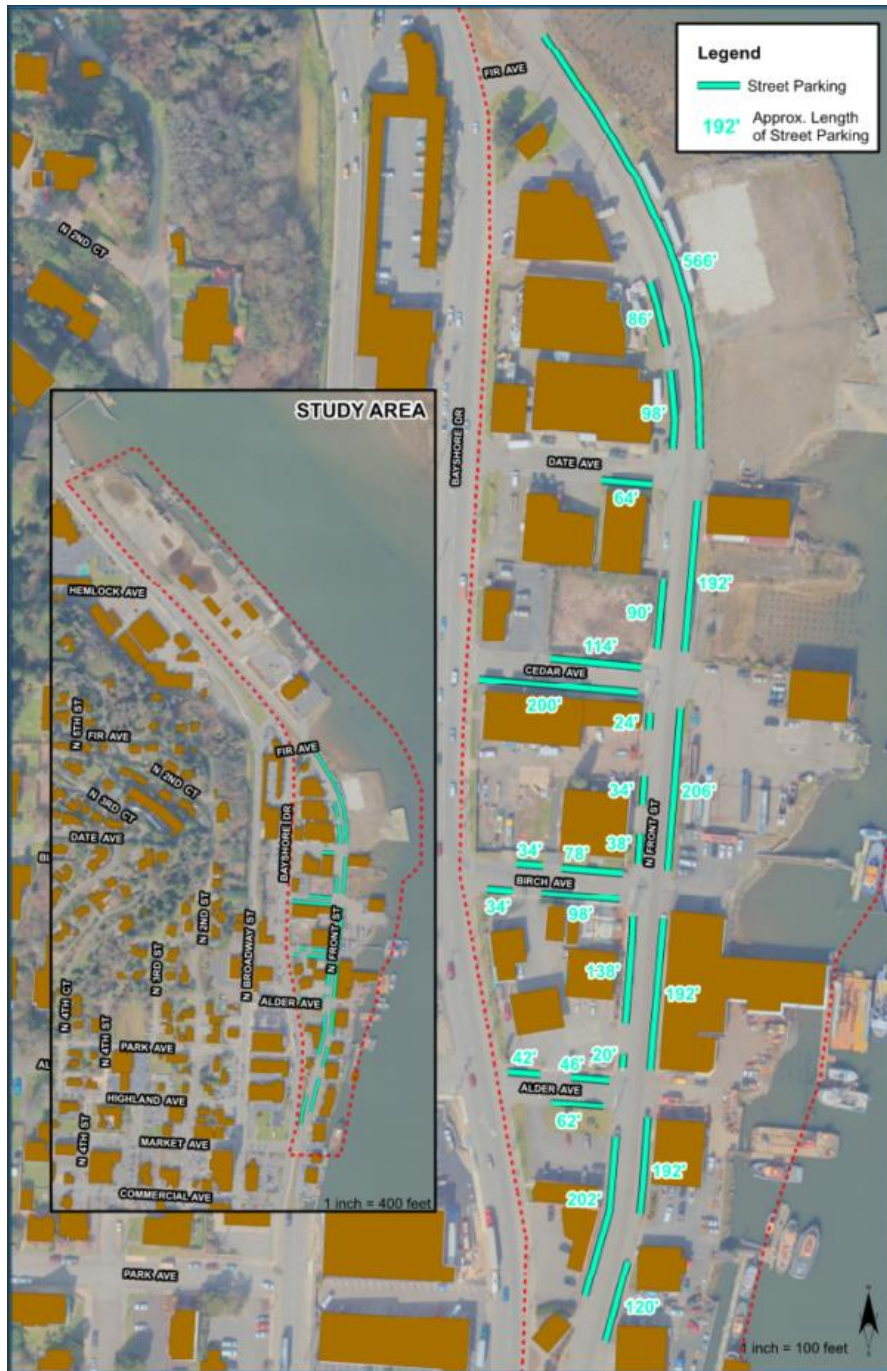


Figure 7. On-Street Parking Inventory

APPENDIX A

Existing Traffic Counts

US 101 & Koos Bay Blvd

Transportation Development Division Transportation System Monitoring Unit Vehicular Volume

Time settings

Date: 7/11/2017
 Hours: 6:00 AM-10:00 PM
 Weather:

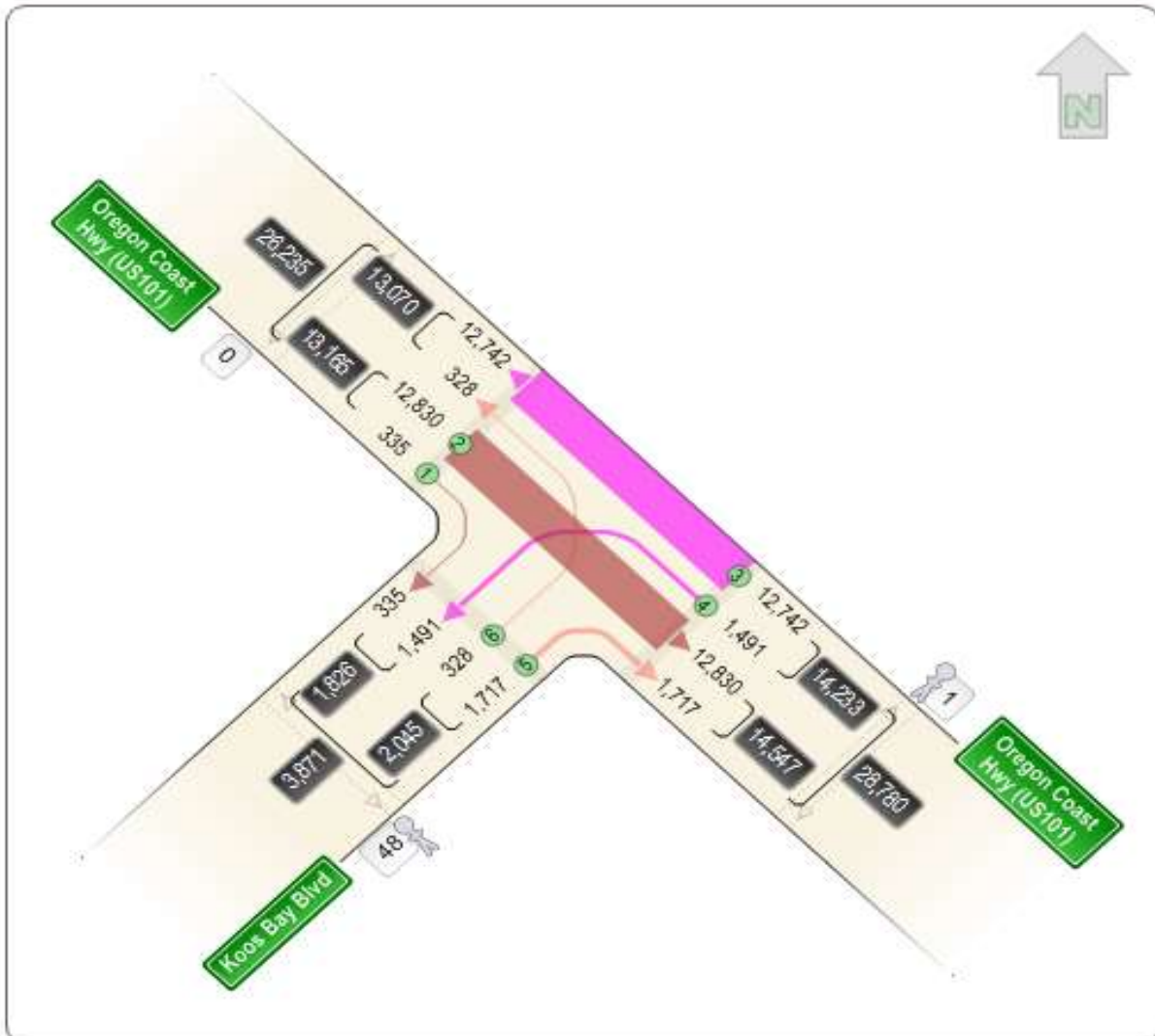
Source

Site Number: 37226
 Mile Point: 237.38
 Street Number: 009
 Vehicle Type: Vehicles
 Crossing Flow: Pedestrians

Source Description

Location Description: OREGON COAST HIGHWAY NO. 9 / N.Bayshore Dr. (US101) at
 Coos Bay Boulevard

County: Coos
 City: Coos Bay



**Summary of Traffic Count
Transportation Development Division**

Site: 37226
County: Coos
City: Coos Bay

Date: 7/11/2017
Hours: 6:00 AM-10:00 PM
Highway #: 009
OREGON COAST HIGHWAY
Location: NO. 9 / N.Bayshore Dr.
Weather:

Milepoint: 237.38
Count Number: 1.00

Time of Day	Summary By Movements							Entering Volumes		
	SE-SW	SE-NW	SW-SE	SW-NW	NW-SE	NW-SW	TOTAL	South-East	South-West	North-West
6:00	12	51	4	2	72	0	141	63	6	72
6:15	18	70	4	0	68	0	160	88	4	68
6:30	24	88	7	2	77	0	198	112	9	77
6:45	32	126	13	3	91	0	265	158	16	91
7:00	24	95	11	1	106	1	238	119	12	107
7:15	26	143	8	6	115	2	300	169	14	117
7:30	30	164	19	1	178	2	394	194	20	180
7:45	59	195	17	3	193	7	474	254	20	200
8:00	29	135	18	3	156	2	343	164	21	158
8:15	30	171	15	3	142	5	366	201	18	147
8:30	28	177	18	3	150	1	377	205	21	151
8:45	36	189	23	3	169	5	425	225	26	174
9:00	26	158	23	2	162	3	374	184	25	165
9:15	32	186	19	7	171	4	419	218	26	175
9:30	27	164	16	2	180	2	391	191	18	182
9:45	28	214	20	7	188	6	463	242	27	194
10:00	26	185	24	3	194	3	435	211	27	197
10:15	26	201	35	4	212	9	487	227	39	221
10:30	27	234	19	5	202	4	491	261	24	206
10:45	26	230	34	4	224	9	527	256	38	233
11:00	24	227	25	11	206	4	497	251	36	210
11:15	29	208	24	10	244	14	529	237	34	258
11:30	16	258	37	8	254	7	580	274	45	261
11:45	15	260	35	10	243	5	568	275	45	248
12:00	21	272	38	3	262	11	607	293	41	273
12:15	30	219	32	11	233	13	538	249	43	246
12:30	27	286	27	4	243	9	596	313	31	252
12:45	28	248	26	6	262	7	577	276	32	269
13:00	23	251	32	9	234	6	555	274	41	240
13:15	34	248	23	5	286	7	603	282	28	293
13:30	27	246	38	5	189	3	508	273	43	192
13:45	25	247	45	4	190	6	517	272	49	196
14:00	34	242	38	4	225	5	548	276	42	230
14:15	27	242	42	8	190	7	516	269	50	197
14:30	21	241	51	10	251	5	579	262	61	256
14:45	31	242	32	5	249	5	564	273	37	254
15:00	20	263	33	11	272	12	611	283	44	284
15:15	21	227	30	10	227	5	520	248	40	232
15:30	17	253	44	11	230	9	564	270	55	239
15:45	17	233	42	3	265	6	566	250	45	271
16:00	18	208	36	9	267	6	544	226	45	273
16:15	28	254	28	3	262	4	579	282	31	266
16:30	20	228	28	2	261	11	550	248	30	272
16:45	20	233	34	5	270	6	568	253	39	276
17:00	27	269	41	4	294	12	647	296	45	306
17:15	19	251	50	5	272	4	601	270	55	276
17:30	22	208	38	8	223	5	504	230	46	228
17:45	16	180	26	8	217	1	448	196	34	218
18:00	21	203	25	5	188	7	449	224	30	195
18:15	13	160	24	5	191	4	397	173	29	195
18:30	15	137	20	6	150	5	333	152	26	155
18:45	19	161	21	2	146	7	356	180	23	153
19:00	9	110	18	3	143	4	287	119	21	147
19:15	5	108	22	0	126	3	264	113	22	129
19:30	4	104	20	2	105	2	237	108	22	107
19:45	5	91	13	1	105	2	217	96	14	107
20:00	9	102	7	3	78	0	199	111	10	78
20:15	4	83	12	4	104	1	208	87	16	105
20:30	5	64	6	2	80	3	160	69	8	83
20:45	8	67	7	2	71	2	157	75	9	73
21:00	5	62	15	0	94	0	176	67	15	94
21:15	4	51	14	2	64	3	138	55	16	67
21:30	2	99	9	2	89	1	202	101	11	90
21:45	4	61	5	3	58	0	131	65	8	58
Total Count	1355	11583	1560	298	11663	304	26763	12938	1858	11967
24hr Factor	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
24hr Volume	1491	12742	1716	328	12830	335	29440	14232	2044	13164

Date: 7/11/2017 N.Bayshore Dr. (US101) at Koos Bay
 Hours: 6:00 AM-10:00 PM Highway #009

Time of Day	Summary By Movements							TOTAL
	NBL	NBT	EBR	EBL	SBT	SBR		
7:30	30	164	19	1	178	2		394
7:45	59	195	17	3	193	7		474
8:00	29	135	18	3	156	2		343
8:15	30	171	15	3	142	5		366
	148	665	69	10	669	16		1577

Date: 7/11/2017 N.Bayshore Dr. (US101) at Koos Bay
 Hours: 6:00 AM-10:00 PM Highway #009

Time of Day	Summary By Movements							TOTAL
	NBL	NBT	EBR	EBL	SBT	SBR		
16:30	20	228	28	2	261	11		550
16:45	20	233	34	5	270	6		568
17:00	27	269	41	4	294	12		647
17:15	19	251	50	5	272	4		601
	86	981	153	16	1097	33		2366

Summary of Traffic Count Transportation Development Division											
Site: 37226						Date: 7/11/2017					
County: Coos						Hours: 6:00 AM-10:00 PM					
City: Coos Bay						Highway #: 009					
Milepoint: 237.38						Location: NO. 9 / N.Bayshore Dr.					
Count Number: 1.00						Weather:					
Time of Day	Summary By Movements							TOTAL	Entering Volumes		
	SE-SW	SE-NW	SW-SE	SW-NW	NW-SE	NW-SW			South-East	South-West	North-West
6:00	12	51	4	2	72	0	141	63	6	72	
6:15	18	70	4	0	68	0	160	88	4	68	
6:30	24	88	7	2	77	0	198	112	9	77	
6:45	32	126	13	3	91	0	265	158	16	91	
7:00	24	95	11	1	106	1	238	119	12	107	
7:15	26	143	8	6	115	2	300	169	14	117	
7:30	30	164	19	1	178	2	394	194	20	180	
7:45	59	195	17	3	193	7	474	254	20	200	
8:00	29	135	18	3	156	2	343	164	21	158	
8:15	30	171	15	3	142	5	366	201	18	147	
8:30	28	177	18	3	150	1	377	205	21	151	
8:45	36	189	23	3	169	5	425	225	26	174	
9:00	26	158	23	2	162	3	374	184	25	165	
9:15	32	186	19	7	171	4	419	218	26	175	
9:30	27	164	16	2	180	2	391	191	18	182	
9:45	28	214	20	7	188	6	463	242	27	194	
10:00	26	185	24	3	194	3	435	211	27	197	
10:15	26	201	35	4	212	9	487	227	39	221	
10:30	27	234	19	5	202	4	491	261	24	206	
10:45	26	230	34	4	224	9	527	256	38	233	
11:00	24	227	25	11	206	4	497	251	36	210	
11:15	29	208	24	10	244	14	529	237	34	258	
11:30	16	258	37	8	254	7	580	274	45	261	
11:45	15	260	35	10	243	5	568	275	45	248	
12:00	21	272	38	3	262	11	607	293	41	273	
12:15	30	219	32	11	233	13	538	249	43	246	
12:30	27	286	27	4	243	9	596	313	31	252	
12:45	28	248	26	6	262	7	577	276	32	269	
13:00	23	251	32	9	234	6	555	274	41	240	
13:15	34	248	23	5	286	7	603	282	28	293	
13:30	27	246	38	5	189	3	508	273	43	192	
13:45	25	247	45	4	190	6	517	272	49	196	
14:00	34	242	38	4	225	5	548	276	42	230	
14:15	27	242	42	8	190	7	516	269	50	197	
14:30	21	241	51	10	251	5	579	262	61	256	
14:45	31	242	32	5	249	5	564	273	37	254	
15:00	20	263	33	11	272	12	611	283	44	284	
15:15	21	227	30	10	227	5	520	248	40	232	
15:30	17	253	44	11	230	9	564	270	55	239	
15:45	17	233	42	3	265	6	566	250	45	271	
16:00	18	208	36	9	267	6	544	226	45	273	
16:15	28	254	28	3	262	4	579	282	31	266	
16:30	20	228	28	2	261	11	550	248	30	272	
16:45	20	233	34	5	270	6	568	253	39	276	
17:00	27	269	41	4	294	12	647	296	45	306	
17:15	19	251	50	5	272	4	601	270	55	276	
17:30	22	208	38	8	223	5	504	230	46	228	
17:45	16	180	26	8	217	1	448	196	34	218	
18:00	21	203	25	5	188	7	449	224	30	195	
18:15	13	160	24	5	191	4	397	173	29	195	
18:30	15	137	20	6	150	5	333	152	26	155	
18:45	19	161	21	2	146	7	356	180	23	153	
19:00	9	110	18	3	143	4	287	119	21	147	
19:15	5	108	22	0	126	3	264	113	22	129	
19:30	4	104	20	2	105	2	237	108	22	107	
19:45	5	91	13	1	105	2	217	96	14	107	
20:00	9	102	7	3	78	0	199	111	10	78	
20:15	4	83	12	4	104	1	208	87	16	105	
20:30	5	64	6	2	80	3	160	69	8	83	
20:45	8	67	7	2	71	2	157	75	9	73	
21:00	5	62	15	0	94	0	176	67	15	94	
21:15	4	51	14	2	64	3	138	55	16	67	
21:30	2	99	9	2	89	1	202	101	11	90	
21:45	4	61	5	3	58	0	131	65	8	58	
Total Count	1355	11583	1560	298	11663	304	26763	12938	1858	11967	
24hr Factor	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
24hr Volume	1491	12742	1716	328	12830	335	29440	14232	2044	13164	

Vehicular Volume
Transportation Development Division

Site: 37226

Date: 7/11/2017

County: Coos

Hours: 6:00 AM-10:00 PM

City: Coos Bay

Highway #: 009

Milepoint: 237.38

Location: 9 / N.Bayshore Dr. (US101) at

Count Number: 1.00

Weather:

From North	0	From South	0
North to N	0	South to N	0
North to NE	0	South to NE	0
North to E	0	South to E	0
North to SE	0	South to SE	0
North to S	0	South to S	0
North to SW	0	South to SW	0
North to W	0	South to W	0
North to NW	0	South to NW	0
To North	0	To South	0
From NE	0	From SW	1858
NE to N	0	SW to N	0
NE to NE	0	SW to NE	0
NE to E	0	SW to E	0
NE to SE	0	SW to SE	1560
NE to S	0	SW to S	0
NE to SW	0	SW to SW	0
NE to W	0	SW to W	0
NE to NW	0	SW to NW	298
To NE	0	To SW	1659
From East	0	From West	0
East to N	0	West to N	0
East to NE	0	West to NE	0
East to E	0	West to E	0
East to SE	0	West to SE	0
East to S	0	West to S	0
East to SW	0	West to SW	0
East to W	0	West to W	0
East to NW	0	West to NW	0
To East	0	To West	0
From SE	12938	From NW	11967
SE to N	0	NW to N	0
SE to NE	0	NW to NE	0
SE to E	0	NW to E	0
SE to SE	0	NW to SE	11663
SE to S	0	NW to S	0
SE to SW	1355	NW to SW	304
SE to W	0	NW to W	0
SE to NW	11583	NW to NW	0
To SE	13223	To NW	11881

Summary Of Traffic Count
Transportation Development Division

Site: 37226 Date: 7/11/2017
 County: Coos Hours: 6:00 AM-10:00 PM
 City: Coos Bay Highway #: 009
 Milepoint: 237.38 Location: NO. 9 / N.Bayshore Dr.
 Count Number: 1.00 Weather:

Time of Day	Total Volume	SE and NW	% of Total	SW and NE	% of Total	Entering Volumes		
						South-East	South-West	North-West
6:00	141	135	95.7	6	4.3	63	6	72
6:15	160	156	97.5	4	2.5	88	4	68
6:30	198	189	95.5	9	4.5	112	9	77
6:45	265	249	94	16	6	158	16	91
7:00	238	226	95	12	5	119	12	107
7:15	300	286	95.3	14	4.7	169	14	117
7:30	394	374	94.9	20	5.1	194	20	180
7:45	474	454	95.8	20	4.2	254	20	200
8:00	343	322	93.9	21	6.1	164	21	158
8:15	366	348	95.1	18	4.9	201	18	147
8:30	377	356	94.4	21	5.6	205	21	151
8:45	425	399	93.9	26	6.1	225	26	174
9:00	374	349	93.3	25	6.7	184	25	165
9:15	419	393	93.8	26	6.2	218	26	175
9:30	391	373	95.4	18	4.6	191	18	182
9:45	463	436	94.2	27	5.8	242	27	194
10:00	435	408	93.8	27	6.2	211	27	197
10:15	487	448	92	39	8	227	39	221
10:30	491	467	95.1	24	4.9	261	24	206
10:45	527	489	92.8	38	7.2	256	38	233
11:00	497	461	92.8	36	7.2	251	36	210
11:15	529	495	93.6	34	6.4	237	34	258
11:30	580	535	92.2	45	7.8	274	45	261
11:45	568	523	92.1	45	7.9	275	45	248
12:00	607	566	93.2	41	6.8	293	41	273
12:15	538	495	92	43	8	249	43	246
12:30	596	565	94.8	31	5.2	313	31	252
12:45	577	545	94.5	32	5.5	276	32	269
13:00	555	514	92.6	41	7.4	274	41	240
13:15	603	575	95.4	28	4.6	282	28	293
13:30	508	465	91.5	43	8.5	273	43	192
13:45	517	468	90.5	49	9.5	272	49	196
14:00	548	506	92.3	42	7.7	276	42	230
14:15	516	466	90.3	50	9.7	269	50	197
14:30	579	518	89.5	61	10.5	262	61	256
14:45	564	527	93.4	37	6.6	273	37	254
15:00	611	567	92.8	44	7.2	283	44	284
15:15	520	480	92.3	40	7.7	248	40	232
15:30	564	509	90.2	55	9.8	270	55	239
15:45	566	521	92	45	8	250	45	271
16:00	544	499	91.7	45	8.3	226	45	273
16:15	579	548	94.6	31	5.4	282	31	266
16:30	550	520	94.5	30	5.5	248	30	272
16:45	568	529	93.1	39	6.9	253	39	276
17:00	647	602	93	45	7	296	45	306
17:15	601	546	90.8	55	9.2	270	55	276
17:30	504	458	90.9	46	9.1	230	46	228
17:45	448	414	92.4	34	7.6	196	34	218
18:00	449	419	93.3	30	6.7	224	30	195
18:15	397	368	92.7	29	7.3	173	29	195
18:30	333	307	92.2	26	7.8	152	26	155
18:45	356	333	93.5	23	6.5	180	23	153
19:00	287	266	92.7	21	7.3	119	21	147
19:15	264	242	91.7	22	8.3	113	22	129
19:30	237	215	90.7	22	9.3	108	22	107
19:45	217	203	93.5	14	6.5	96	14	107
20:00	199	189	95	10	5	111	10	78
20:15	208	192	92.3	16	7.7	87	16	105
20:30	160	152	95	8	5	69	8	83
20:45	157	148	94.3	9	5.7	75	9	73
21:00	176	161	91.5	15	8.5	67	15	94
21:15	138	122	88.4	16	11.6	55	16	67
21:30	202	191	94.6	11	5.4	101	11	90
21:45	131	123	93.9	8	6.1	65	8	58
Total Count	26763	24905	94	1858	7	12938	1858	11967
24hr Factor	1.1	1.1		1.1		1.1	1.1	1.1
24hr Volume	29440	27396	94	2044	7	14232	2044	13164

**Traffic Count Summary Sheet
Transportation Development Division (SE-SW)**

Site: 37226
County: Coos
City: Coos Bay

Date: 7/11/2017
Hours: 6:00 AM-10:00 PM
Highway #: 009

Milepoint: 237.38
Count Number: 1.00

OREGON COAST HIGHWAY NO. 9 /
Location: N. Bayshore Dr. (US101) at Coos Bay
Weather:

Time of Day	Car	Lt Truck	Sgl. Unit Truck			Sgl. Trailer Truck			Multi Trailer Truck			Bus	Motor-cycle	Ped With Bicycle	Other Ped	Vehicles	Bicycle
			2 Axl	3 Axl	4+ Axl	4- Axl	5 Axl	6+ Axl	5- Axl	6 Axl	7+ Axl						
6:00	5	7	0	0	0	0	0	0	0	0	0	0	0			12	0
6:15	8	10	0	0	0	0	0	0	0	0	0	0	0			18	0
6:30	11	13	0	0	0	0	0	0	0	0	0	0	0			24	0
6:45	13	19	0	0	0	0	0	0	0	0	0	0	0			32	1
7:00	15	9	0	0	0	0	0	0	0	0	0	0	0			24	0
7:15	10	15	0	1	0	0	0	0	0	0	0	0	0			26	0
7:30	15	15	0	0	0	0	0	0	0	0	0	0	0			30	0
7:45	20	36	1	0	0	1	0	0	0	0	0	0	1			59	0
8:00	10	18	1	0	0	0	0	0	0	0	0	0	0			29	0
8:15	6	22	1	0	0	0	0	0	0	0	0	1	0			30	0
8:30	13	15	0	0	0	0	0	0	0	0	0	0	0			28	0
8:45	11	25	0	0	0	0	0	0	0	0	0	0	0			36	0
9:00	7	19	0	0	0	0	0	0	0	0	0	0	0			26	0
9:15	9	22	1	0	0	0	0	0	0	0	0	0	0			32	0
9:30	12	15	0	0	0	0	0	0	0	0	0	0	0			27	0
9:45	10	18	0	0	0	0	0	0	0	0	0	0	0			28	0
10:00	10	16	0	0	0	0	0	0	0	0	0	0	0			26	0
10:15	8	17	1	0	0	0	0	0	0	0	0	0	0			26	0
10:30	9	18	0	0	0	0	0	0	0	0	0	0	0			27	0
10:45	11	14	0	0	0	0	0	0	0	0	0	1	0			26	0
11:00	6	18	0	0	0	0	0	0	0	0	0	0	0			24	0
11:15	6	22	0	0	0	0	1	0	0	0	0	0	0			29	0
11:30	1	15	0	0	0	0	0	0	0	0	0	0	0			16	0
11:45	6	9	0	0	0	0	0	0	0	0	0	0	0			15	0
12:00	3	18	0	0	0	0	0	0	0	0	0	0	0			21	0
12:15	11	18	1	0	0	0	0	0	0	0	0	0	0			30	0
12:30	11	16	0	0	0	0	0	0	0	0	0	0	0			27	0
12:45	15	12	0	1	0	0	0	0	0	0	0	0	0			28	0
13:00	5	16	1	0	0	0	0	0	0	0	1	0	0			23	0
13:15	20	12	1	0	0	0	1	0	0	0	0	0	0			34	0
13:30	11	11	1	0	0	0	1	0	0	0	0	3	0			27	0
13:45	9	15	1	0	0	0	0	0	0	0	0	0	0			25	0
14:00	17	16	1	0	0	0	0	0	0	0	0	0	0			34	0
14:15	9	15	2	0	0	0	1	0	0	0	0	0	0			27	0
14:30	7	14	0	0	0	0	0	0	0	0	0	0	0			21	0
14:45	9	21	1	0	0	0	0	0	0	0	0	0	0			31	0
15:00	6	11	2	0	0	1	0	0	0	0	0	0	0			20	0
15:15	6	14	0	0	0	0	0	0	0	0	0	1	0			21	0
15:30	10	7	0	0	0	0	0	0	0	0	0	0	0			17	0
15:45	7	9	0	1	0	0	0	0	0	0	0	0	0			17	0
16:00	4	11	1	0	0	0	0	0	0	0	2	0	0			18	0
16:15	10	15	1	1	0	0	1	0	0	0	0	0	0			28	0
16:30	7	13	0	0	0	0	0	0	0	0	0	0	0			20	0
16:45	5	14	1	0	0	0	0	0	0	0	0	0	0			20	0
17:00	7	18	2	0	0	0	0	0	0	0	0	0	0			27	0
17:15	5	13	0	1	0	0	0	0	0	0	0	0	0			19	0
17:30	14	8	0	0	0	0	0	0	0	0	0	0	0			22	1
17:45	6	8	1	0	0	0	0	0	0	0	0	1	0			16	0
18:00	10	11	0	0	0	0	0	0	0	0	0	0	0			21	0
18:15	2	11	0	0	0	0	0	0	0	0	0	0	0			13	0
18:30	6	8	1	0	0	0	0	0	0	0	0	0	0			15	0
18:45	7	12	0	0	0	0	0	0	0	0	0	0	0			19	0
19:00	2	7	0	0	0	0	0	0	0	0	0	0	0			9	0
19:15	1	4	0	0	0	0	0	0	0	0	0	0	0			5	0
19:30	3	1	0	0	0	0	0	0	0	0	0	0	0			4	0
19:45	2	3	0	0	0	0	0	0	0	0	0	0	0			5	0
20:00	4	5	0	0	0	0	0	0	0	0	0	0	0			9	0
20:15	1	3	0	0	0	0	0	0	0	0	0	0	0			4	0
20:30	3	2	0	0	0	0	0	0	0	0	0	0	0			5	0
20:45	2	6	0	0	0	0	0	0	0	0	0	0	0			8	0
21:00	3	2	0	0	0	0	0	0	0	0	0	0	0			5	0
21:15	0	3	1	0	0	0	0	0	0	0	0	0	0			4	0
21:30	0	2	0	0	0	0	0	0	0	0	0	0	0			2	0
21:45	1	3	0	0	0	0	0	0	0	0	0	0	0			4	0
Total	493	815	24	5	0	2	5	0	0	0	0	5	6			1355	2

**Traffic Count Summary Sheet
Transportation Development Division (SE-NW)**

Site: 37226
County: Coos
City: Coos Bay

Date: 7/11/2017
Hours: 6:00 AM-10:00 PM
Highway #: 009

Milepoint: 237.38
Count Number: 1.00

OREGON COAST HIGHWAY NO. 9 /
Location: N. Bayshore Dr. (US101) at Coos Bay
Weather:

Time of Day	Car	Lt Truck	Sgl. Unit Truck			Sgl. Trailer Truck			Multi Trailer Truck			Bus	Motor-cycle	Ped With Bicycle	Other Ped	Vehicles	Bicycle
			2 Axl	3 Axl	4+ Axl	4- Axl	5 Axl	6+ Axl	5- Axl	6 Axl	7+ Axl						
6:00	10	27	4	0	0	2	3	2	0	0	2	0	1			51	0
6:15	17	41	4	1	0	1	2	3	1	0	0	0	0			70	0
6:30	21	53	3	2	0	3	6	0	0	0	0	0	0			88	0
6:45	32	68	6	2	1	1	7	5	0	0	2	0	2			126	1
7:00	35	48	2	1	0	0	7	1	0	0	1	0	0			95	0
7:15	38	85	7	1	0	2	3	2	0	0	2	1	2			143	0
7:30	62	89	4	1	0	1	3	3	0	0	1	0	0			164	0
7:45	76	108	2	0	0	2	3	2	0	0	1	0	1			195	0
8:00	29	91	2	1	0	2	8	0	0	0	2	0	0			135	1
8:15	47	102	2	1	0	1	9	3	0	0	0	3	3			171	1
8:30	49	106	6	4	0	1	3	2	0	0	0	1	5			177	0
8:45	45	122	3	2	0	3	7	3	0	0	1	1	2			189	0
9:00	40	99	5	1	0	4	3	4	0	0	1	0	1			158	1
9:15	49	117	7	2	0	2	3	4	0	0	1	0	1			186	0
9:30	43	93	4	5	0	4	6	4	0	0	0	0	5			164	1
9:45	72	120	12	0	0	3	3	4	0	0	0	0	0			214	0
10:00	54	112	6	5	0	3	2	2	0	0	0	0	1			185	0
10:15	50	134	6	1	0	3	4	2	0	0	1	0	0			201	1
10:30	72	127	7	4	0	4	5	4	0	0	1	1	9			234	0
10:45	65	137	10	3	1	3	5	1	0	0	2	0	3			230	0
11:00	64	131	11	3	0	1	10	2	0	0	0	0	5			227	0
11:15	70	119	4	1	0	3	3	3	0	0	2	0	3			208	0
11:30	87	141	7	2	1	10	4	1	0	0	0	1	4			258	0
11:45	79	150	8	1	0	7	3	5	0	0	3	1	3			260	0
12:00	94	149	6	2	0	6	6	4	0	0	0	1	4			272	0
12:15	61	125	11	4	0	5	3	2	0	0	0	0	8			219	0
12:30	79	172	9	3	0	6	9	2	0	0	0	1	5			286	0
12:45	80	143	5	2	0	6	6	1	0	0	1	2	2			248	0
13:00	81	144	10	3	0	3	6	1	0	0	0	1	2			251	0
13:15	84	140	7	1	0	1	9	1	0	0	0	1	4			248	1
13:30	70	152	4	1	0	9	6	1	0	0	1	0	2			246	0
13:45	81	138	8	1	0	7	7	3	0	0	0	0	2			247	0
14:00	74	137	11	1	0	3	8	2	0	0	1	0	5			242	0
14:15	66	148	7	2	0	5	6	4	0	0	1	0	3			242	0
14:30	75	143	9	1	0	4	4	3	0	0	1	0	1			241	0
14:45	83	132	12	4	0	1	9	1	0	0	0	0	0			242	0
15:00	86	154	8	2	0	2	3	3	0	0	1	0	4			263	0
15:15	67	146	3	2	0	2	3	3	0	0	1	0	0			227	0
15:30	66	168	4	1	0	1	7	2	0	0	1	0	3			253	1
15:45	64	152	4	4	0	2	2	0	0	0	0	1	4			233	0
16:00	60	134	5	0	0	0	3	1	0	1	2	2	0			208	0
16:15	84	143	9	2	0	5	1	2	0	0	0	0	8			254	0
16:30	83	135	5	0	0	0	2	0	0	0	0	0	3			228	0
16:45	67	155	6	0	0	2	0	3	0	0	0	0	0			233	0
17:00	87	168	5	1	0	1	1	3	0	0	3	0	0			269	0
17:15	73	166	2	2	0	3	2	0	0	0	0	0	3			251	0
17:30	68	127	7	0	0	1	0	3	0	0	0	0	2			208	0
17:45	55	113	2	0	0	3	3	1	0	0	0	0	3			180	0
18:00	62	129	1	0	0	1	3	0	0	0	0	0	7			203	1
18:15	54	97	2	0	0	2	0	2	0	0	1	0	2			160	0
18:30	54	72	3	1	0	0	1	3	0	0	0	0	3			137	0
18:45	54	100	3	0	0	0	1	1	0	0	1	0	1			161	0
19:00	45	58	2	0	0	1	1	3	0	0	0	0	0			110	0
19:15	36	63	6	0	0	0	1	1	1	0	0	0	0			108	0
19:30	44	55	0	1	0	1	0	2	0	0	0	0	1			104	0
19:45	33	53	2	0	0	1	0	0	0	0	0	0	2			91	0
20:00	45	51	2	0	0	0	0	2	0	0	0	0	2			102	0
20:15	34	43	2	0	0	0	1	1	0	0	1	0	1			83	0
20:30	24	36	0	0	0	0	1	0	0	0	2	0	1			64	0
20:45	27	38	1	0	0	0	0	0	0	0	0	1	0			67	0
21:00	19	38	2	1	0	0	0	1	0	0	1	0	0			62	0
21:15	17	30	0	0	0	0	1	0	0	0	0	0	3			51	0
21:30	26	66	5	0	0	1	1	0	0	0	0	0	0			99	0
21:45	18	39	2	0	0	0	2	0	0	0	0	0	0			61	0
Total	3586	6872	324	86	3	151	231	124	2	1	42	19	142			11583	9

Traffic Count Summary Sheet
Transportation Development Division (SW-SE)

Site: 37226
 County: Coos
 City: Coos Bay

Date: 7/11/2017
 Hours: 6:00 AM-10:00 PM
 Highway #: 009

Milepoint: 237.38
 Count Number: 1.00

OREGON COAST HIGHWAY NO. 9 /
 Location: N. Bayshore Dr. (US101) at Coos Bay
 Weather:

Time of Day	Car	Lt Truck	Sgl. Unit Truck			Sgl. Trailer Truck			Multi Trailer Truck			Bus	Motor-cycle	Ped With Bicycle	Other Ped	Vehicles	Bicycle
			2 Axl	3 Axl	4+ Axl	4- Axl	5 Axl	6+ Axl	5- Axl	6 Axl	7+ Axl						
6:00	1	1	0	0	0	0	0	0	0	0	0	0	2			4	0
6:15	2	2	0	0	0	0	0	0	0	0	0	0	0			4	0
6:30	2	5	0	0	0	0	0	0	0	0	0	0	0			7	0
6:45	6	7	0	0	0	0	0	0	0	0	0	0	0			13	0
7:00	5	5	1	0	0	0	0	0	0	0	0	0	0			11	0
7:15	2	6	0	0	0	0	0	0	0	0	0	0	0			8	0
7:30	8	9	1	0	0	1	0	0	0	0	0	0	0			19	0
7:45	5	10	2	0	0	0	0	0	0	0	0	0	0			17	0
8:00	3	13	1	0	0	0	0	0	0	0	0	1	0			18	0
8:15	3	11	0	0	0	1	0	0	0	0	0	0	0			15	0
8:30	4	11	2	1	0	0	0	0	0	0	0	0	0			18	0
8:45	8	15	0	0	0	0	0	0	0	0	0	0	0			23	0
9:00	6	17	0	0	0	0	0	0	0	0	0	0	0			23	0
9:15	5	13	1	0	0	0	0	0	0	0	0	0	0			19	0
9:30	5	9	2	0	0	0	0	0	0	0	0	0	0			16	0
9:45	8	12	0	0	0	0	0	0	0	0	0	0	0			20	0
10:00	9	12	2	0	0	0	0	0	0	0	0	1	0			24	0
10:15	13	18	1	0	0	2	0	0	0	0	0	1	0			35	0
10:30	6	11	2	0	0	0	0	0	0	0	0	0	0			19	0
10:45	11	20	2	1	0	0	0	0	0	0	0	0	0			34	0
11:00	7	16	1	0	0	0	1	0	0	0	0	0	0			25	0
11:15	9	12	2	0	0	0	0	0	0	0	0	1	0			24	0
11:30	8	29	0	0	0	0	0	0	0	0	0	0	0			37	0
11:45	10	24	1	0	0	0	0	0	0	0	0	0	0			35	0
12:00	14	23	1	0	0	0	0	0	0	0	0	0	0			38	0
12:15	10	20	2	0	0	0	0	0	0	0	0	0	0			32	0
12:30	10	15	2	0	0	0	0	0	0	0	0	0	0			27	1
12:45	8	16	1	0	0	0	0	0	0	0	0	1	0			26	0
13:00	4	24	3	1	0	0	0	0	0	0	0	0	0			32	0
13:15	11	12	0	0	0	0	0	0	0	0	0	0	0			23	0
13:30	13	22	1	2	0	0	0	0	0	0	0	0	0			38	0
13:45	14	21	5	0	0	2	0	3	0	0	0	0	0			45	0
14:00	12	22	2	0	0	1	0	0	0	0	0	1	0			38	0
14:15	15	19	4	1	0	1	0	1	0	0	0	0	1			42	0
14:30	20	26	0	4	0	0	1	0	0	0	0	0	0			51	0
14:45	12	16	3	1	0	0	0	0	0	0	0	0	0			32	0
15:00	17	15	0	0	0	1	0	0	0	0	0	0	0			33	0
15:15	7	20	1	1	0	0	0	0	0	0	0	1	0			30	0
15:30	14	27	2	0	0	0	1	0	0	0	0	0	0			44	0
15:45	14	25	3	0	0	0	0	0	0	0	0	0	0			42	0
16:00	13	23	0	0	0	0	0	0	0	0	0	0	0			36	0
16:15	13	14	1	0	0	0	0	0	0	0	0	0	0			28	0
16:30	11	16	0	0	0	1	0	0	0	0	0	0	0			28	0
16:45	11	23	0	0	0	0	0	0	0	0	0	0	0			34	0
17:00	16	24	1	0	0	0	0	0	0	0	0	0	0			41	0
17:15	15	33	1	0	0	0	0	0	0	0	0	1	0			50	0
17:30	11	24	3	0	0	0	0	0	0	0	0	0	0			38	0
17:45	10	15	1	0	0	0	0	0	0	0	0	0	0			26	0
18:00	10	15	0	0	0	0	0	0	0	0	0	0	0			25	0
18:15	8	14	1	0	0	0	1	0	0	0	0	0	0			24	0
18:30	9	11	0	0	0	0	0	0	0	0	0	0	0			20	0
18:45	9	12	0	0	0	0	0	0	0	0	0	0	0			21	0
19:00	6	11	1	0	0	0	0	0	0	0	0	0	0			18	0
19:15	9	13	0	0	0	0	0	0	0	0	0	0	0			22	1
19:30	9	11	0	0	0	0	0	0	0	0	0	0	0			20	0
19:45	7	6	0	0	0	0	0	0	0	0	0	0	0			13	0
20:00	3	4	0	0	0	0	0	0	0	0	0	0	0			7	0
20:15	6	6	0	0	0	0	0	0	0	0	0	0	0			12	0
20:30	2	4	0	0	0	0	0	0	0	0	0	0	0			6	0
20:45	2	5	0	0	0	0	0	0	0	0	0	0	0			7	0
21:00	4	11	0	0	0	0	0	0	0	0	0	0	0			15	0
21:15	11	2	0	0	0	0	0	0	0	0	0	1	0			14	0
21:30	6	2	1	0	0	0	0	0	0	0	0	0	0			9	0
21:45	3	2	0	0	0	0	0	0	0	0	0	0	0			5	0
Total	545	912	61	12	0	10	4	4	0	0	0	4	8			1560	2

**Traffic Count Summary Sheet
Transportation Development Division (SW-NW)**

Site: 37226
County: Coos
City: Coos Bay

Date: 7/11/2017
Hours: 6:00 AM-10:00 PM
Highway #: 009

Milepoint: 237.38
Count Number: 1.00

OREGON COAST HIGHWAY NO. 9 /
Location: N.Bayshore Dr. (US101) at Coos Bay
Weather:

Time of Day	Car	Lt Truck	Sgl. Unit Truck			Sgl. Trailer Truck			Multi Trailer Truck			Bus	Motor-cycle	Ped With Bicycle	Other Ped	Vehicles	Bicycle
			2 Axl	3 Axl	4+ Axl	4- Axl	5 Axl	6+ Axl	5- Axl	6 Axl	7+ Axl						
6:00	0	1	1	0	0	0	0	0	0	0	0	0	0			2	0
6:15	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0
6:30	0	2	0	0	0	0	0	0	0	0	0	0	0			2	0
6:45	1	2	0	0	0	0	0	0	0	0	0	0	0			3	0
7:00	1	0	0	0	0	0	0	0	0	0	0	0	0			1	0
7:15	1	5	0	0	0	0	0	0	0	0	0	0	0			6	0
7:30	0	1	0	0	0	0	0	0	0	0	0	0	0			1	0
7:45	1	1	1	0	0	0	0	0	0	0	0	0	0			3	0
8:00	0	3	0	0	0	0	0	0	0	0	0	0	0			3	0
8:15	1	2	0	0	0	0	0	0	0	0	0	0	0			3	0
8:30	1	1	1	0	0	0	0	0	0	0	0	0	0			3	0
8:45	1	2	0	0	0	0	0	0	0	0	0	0	0			3	0
9:00	0	1	1	0	0	0	0	0	0	0	0	0	0			2	0
9:15	0	5	1	0	0	0	0	0	0	0	0	1	0			7	0
9:30	0	1	1	0	0	0	0	0	0	0	0	0	0			2	0
9:45	1	5	1	0	0	0	0	0	0	0	0	0	0			7	0
10:00	0	3	0	0	0	0	0	0	0	0	0	0	0			3	0
10:15	0	4	0	0	0	0	0	0	0	0	0	0	0			4	0
10:30	3	2	0	0	0	0	0	0	0	0	0	0	0			5	0
10:45	0	4	0	0	0	0	0	0	0	0	0	0	0			4	0
11:00	4	6	0	0	0	0	0	0	0	0	0	1	0			11	0
11:15	3	6	1	0	0	0	0	0	0	0	0	0	0			10	0
11:30	4	4	0	0	0	0	0	0	0	0	0	0	0			8	0
11:45	3	7	0	0	0	0	0	0	0	0	0	0	0			10	0
12:00	1	2	0	0	0	0	0	0	0	0	0	0	0			3	0
12:15	7	4	0	0	0	0	0	0	0	0	0	0	0			11	0
12:30	1	1	1	0	0	0	1	0	0	0	0	0	0			4	0
12:45	2	3	1	0	0	0	0	0	0	0	0	0	0			6	0
13:00	4	5	0	0	0	0	0	0	0	0	0	0	0			9	0
13:15	2	2	1	0	0	0	0	0	0	0	0	0	0			5	0
13:30	2	2	0	0	0	1	0	0	0	0	0	0	0			5	0
13:45	2	1	1	0	0	0	0	0	0	0	0	0	0			4	0
14:00	2	1	0	0	0	0	0	0	0	0	0	1	0			4	0
14:15	4	4	0	0	0	0	0	0	0	0	0	0	0			8	0
14:30	4	5	0	0	0	0	1	0	0	0	0	0	0			10	0
14:45	2	3	0	0	0	0	0	0	0	0	0	0	0			5	0
15:00	2	7	2	0	0	0	0	0	0	0	0	0	0			11	0
15:15	5	4	1	0	0	0	0	0	0	0	0	0	0			10	0
15:30	4	6	1	0	0	0	0	0	0	0	0	0	0			11	0
15:45	1	2	0	0	0	0	0	0	0	0	0	0	0			3	0
16:00	3	4	0	0	0	0	0	0	0	0	0	1	1			9	0
16:15	2	1	0	0	0	0	0	0	0	0	0	0	0			3	0
16:30	2	0	0	0	0	0	0	0	0	0	0	0	0			2	0
16:45	0	5	0	0	0	0	0	0	0	0	0	0	0			5	0
17:00	2	2	0	0	0	0	0	0	0	0	0	0	0			4	0
17:15	2	3	0	0	0	0	0	0	0	0	0	0	0			5	0
17:30	1	7	0	0	0	0	0	0	0	0	0	0	0			8	0
17:45	2	6	0	0	0	0	0	0	0	0	0	0	0			8	0
18:00	1	3	0	0	0	0	1	0	0	0	0	0	0			5	0
18:15	2	3	0	0	0	0	0	0	0	0	0	0	0			5	0
18:30	3	3	0	0	0	0	0	0	0	0	0	0	0			6	0
18:45	0	1	1	0	0	0	0	0	0	0	0	0	0			2	0
19:00	1	2	0	0	0	0	0	0	0	0	0	0	0			3	0
19:15	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0
19:30	1	1	0	0	0	0	0	0	0	0	0	0	0			2	0
19:45	1	0	0	0	0	0	0	0	0	0	0	0	0			1	0
20:00	1	2	0	0	0	0	0	0	0	0	0	0	0			3	0
20:15	0	4	0	0	0	0	0	0	0	0	0	0	0			4	0
20:30	2	0	0	0	0	0	0	0	0	0	0	0	0			2	0
20:45	0	2	0	0	0	0	0	0	0	0	0	0	0			2	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0
21:15	2	0	0	0	0	0	0	0	0	0	0	0	0			2	0
21:30	1	1	0	0	0	0	0	0	0	0	0	0	0			2	0
21:45	1	2	0	0	0	0	0	0	0	0	0	0	0			3	0
Total	100	172	17	0	0	1	3	0	0	0	0	4	1			298	0

**Traffic Count Summary Sheet
Transportation Development Division (NW-SW)**

Site: 37226
County: Coos
City: Coos Bay

Date: 7/11/2017
Hours: 6:00 AM-10:00 PM
Highway #: 009

Milepoint: 237.38
Count Number: 1.00

OREGON COAST HIGHWAY NO. 9 /
Location: N. Bayshore Dr. (US101) at Coos Bay
Weather:

Time of Day	Car	Lt Truck	Sgl. Unit Truck			Sgl. Trailer Truck			Multi Trailer Truck			Bus	Motor-cycle	Ped With Bicycle	Other Ped	Vehicles	Bicycle
			2 Axl	3 Axl	4+ Axl	4- Axl	5 Axl	6+ Axl	5- Axl	6 Axl	7+ Axl						
6:00	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0
6:15	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0
6:30	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0
6:45	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0
7:00	1	0	0	0	0	0	0	0	0	0	0	0	0			1	0
7:15	0	1	0	0	0	0	1	0	0	0	0	0	0			2	0
7:30	1	1	0	0	0	0	0	0	0	0	0	0	0			2	0
7:45	5	2	0	0	0	0	0	0	0	0	0	0	0			7	0
8:00	2	0	0	0	0	0	0	0	0	0	0	0	0			2	0
8:15	1	4	0	0	0	0	0	0	0	0	0	0	0			5	0
8:30	1	0	0	0	0	0	0	0	0	0	0	0	0			1	0
8:45	2	2	0	0	0	0	1	0	0	0	0	0	0			5	0
9:00	1	2	0	0	0	0	0	0	0	0	0	0	0			3	0
9:15	0	3	1	0	0	0	0	0	0	0	0	0	0			4	0
9:30	0	2	0	0	0	0	0	0	0	0	0	0	0			2	0
9:45	2	4	0	0	0	0	0	0	0	0	0	0	0			6	0
10:00	0	3	0	0	0	0	0	0	0	0	0	0	0			3	1
10:15	5	3	0	1	0	0	0	0	0	0	0	0	0			9	0
10:30	1	2	1	0	0	0	0	0	0	0	0	0	0			4	0
10:45	3	6	0	0	0	0	0	0	0	0	0	0	0			9	0
11:00	2	1	1	0	0	0	0	0	0	0	0	0	0			4	0
11:15	8	6	0	0	0	0	0	0	0	0	0	0	0			14	0
11:30	2	4	0	0	0	0	0	0	0	0	0	1	0			7	0
11:45	3	2	0	0	0	0	0	0	0	0	0	0	0			5	0
12:00	4	6	0	0	0	1	0	0	0	0	0	0	0			11	0
12:15	6	7	0	0	0	0	0	0	0	0	0	0	0			13	0
12:30	3	5	1	0	0	0	0	0	0	0	0	0	0			9	0
12:45	2	5	0	0	0	0	0	0	0	0	0	0	0			7	0
13:00	2	4	0	0	0	0	0	0	0	0	0	0	0			6	0
13:15	2	4	1	0	0	0	0	0	0	0	0	0	0			7	0
13:30	2	1	0	0	0	0	0	0	0	0	0	0	0			3	0
13:45	1	5	0	0	0	0	0	0	0	0	0	0	0			6	0
14:00	1	4	0	0	0	0	0	0	0	0	0	0	0			5	0
14:15	3	4	0	0	0	0	0	0	0	0	0	0	0			7	0
14:30	0	5	0	0	0	0	0	0	0	0	0	0	0			5	0
14:45	2	2	0	0	0	0	1	0	0	0	0	0	0			5	0
15:00	6	5	1	0	0	0	0	0	0	0	0	0	0			12	0
15:15	2	3	0	0	0	0	0	0	0	0	0	0	0			5	0
15:30	6	3	0	0	0	0	0	0	0	0	0	0	0			9	0
15:45	3	3	0	0	0	0	0	0	0	0	0	0	0			6	0
16:00	3	2	1	0	0	0	0	0	0	0	0	0	0			6	0
16:15	3	0	1	0	0	0	0	0	0	0	0	0	0			4	0
16:30	5	6	0	0	0	0	0	0	0	0	0	0	0			11	0
16:45	3	3	0	0	0	0	0	0	0	0	0	0	0			6	0
17:00	5	7	0	0	0	0	0	0	0	0	0	0	0			12	0
17:15	3	1	0	0	0	0	0	0	0	0	0	0	0			4	0
17:30	2	3	0	0	0	0	0	0	0	0	0	0	0			5	0
17:45	1	0	0	0	0	0	0	0	0	0	0	0	0			1	0
18:00	1	6	0	0	0	0	0	0	0	0	0	0	0			7	0
18:15	2	2	0	0	0	0	0	0	0	0	0	0	0			4	0
18:30	3	2	0	0	0	0	0	0	0	0	0	0	0			5	0
18:45	4	3	0	0	0	0	0	0	0	0	0	0	0			7	0
19:00	2	2	0	0	0	0	0	0	0	0	0	0	0			4	0
19:15	1	2	0	0	0	0	0	0	0	0	0	0	0			3	0
19:30	2	0	0	0	0	0	0	0	0	0	0	0	0			2	0
19:45	1	1	0	0	0	0	0	0	0	0	0	0	0			2	0
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0
20:15	1	0	0	0	0	0	0	0	0	0	0	0	0			1	0
20:30	1	2	0	0	0	0	0	0	0	0	0	0	0			3	0
20:45	1	1	0	0	0	0	0	0	0	0	0	0	0			2	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0
21:15	0	3	0	0	0	0	0	0	0	0	0	0	0			3	0
21:30	1	0	0	0	0	0	0	0	0	0	0	0	0			1	0
21:45	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0
Total	130	160	8	1	0	1	3	0	0	0	0	1	0			304	1

Summary Of Bicycle Count
Transportation Development Division

Site: 37226 Date: 7/11/2017
 County: Coos Hours: 6:00 AM-10:00 PM
 City: Coos Bay Highway #: 009
 Milepoint: 237.38 Location: NO. 9 / N.Bayshore Dr.
 Count Number: 1.00 Weather:

Time of Day	Summary By Movements							TOTAL	Entering Volumes		
	SE-SW	SE-NW	SW-SE	SW-NW	NW-SE	NW-SW			South-East	South-West	North-West
6:00	0	0	0	0	0	0	0	0	0	0	0
6:15	0	0	0	0	0	0	0	0	0	0	0
6:30	0	0	0	0	0	0	0	0	0	0	0
6:45	1	1	0	0	0	0	0	2	2	0	0
7:00	0	0	0	0	0	0	0	0	0	0	0
7:15	0	0	0	0	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	0	0	0	0
8:00	0	1	0	0	0	0	0	1	1	0	0
8:15	0	1	0	0	0	0	0	1	1	0	0
8:30	0	0	0	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0	0	0	0
9:00	0	1	0	0	0	0	0	1	1	0	0
9:15	0	0	0	0	1	0	0	1	0	0	1
9:30	0	1	0	0	1	0	0	2	1	0	1
9:45	0	0	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	1	0	1	0	0	1
10:15	0	1	0	0	0	0	0	1	1	0	0
10:30	0	0	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	1	0	0	1	0	0	1
11:00	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	2	0	0	2	0	0	2
12:00	0	0	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	2	0	0	2	0	0	2
12:30	0	0	1	0	0	0	0	1	0	1	0
12:45	0	0	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	1	0	0	1	0	0	1
13:15	0	1	0	0	1	0	0	2	1	0	1
13:30	0	0	0	0	0	0	0	0	0	0	0
13:45	0	0	0	0	0	0	0	0	0	0	0
14:00	0	0	0	0	1	0	0	1	0	0	1
14:15	0	0	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0	0	0	0
15:00	0	0	0	0	1	0	0	1	0	0	1
15:15	0	0	0	0	0	0	0	0	0	0	0
15:30	0	1	0	0	1	0	0	2	1	0	1
15:45	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	1	0	0	1	0	0	1
16:15	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	2	0	0	2	0	0	2
16:45	0	0	0	0	1	0	0	1	0	0	1
17:00	0	0	0	0	3	0	0	3	0	0	3
17:15	0	0	0	0	1	0	0	1	0	0	1
17:30	1	0	0	0	3	0	0	4	1	0	3
17:45	0	0	0	0	0	0	0	0	0	0	0
18:00	0	1	0	0	0	0	0	1	1	0	0
18:15	0	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	1	0	0	1	0	0	1
18:45	0	0	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0	0	0
19:15	0	0	1	0	0	0	0	1	0	1	0
19:30	0	0	0	0	0	0	0	0	0	0	0
19:45	0	0	0	0	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0	0	0
20:15	0	0	0	0	0	0	0	0	0	0	0
20:30	0	0	0	0	0	0	0	0	0	0	0
20:45	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	1	0	0	1	0	0	1
21:15	0	0	0	0	0	0	0	0	0	0	0
21:30	0	0	0	0	0	0	0	0	0	0	0
21:45	0	0	0	0	0	0	0	0	0	0	0
Total Count	2	9	2	0	25	1		39	11	2	26
24hr Factor	1.1	1.1	1.1	1.1	1.1	1.1		1.1	1.1	1.1	1.1
24hr Volume	3	10	3	0	28	2		43	13	3	29

**Summary Of Pedestrian Count
Transportation Development Division**

Site: 37226	Date: 7/11/2017
County: Coos	Hours: 6:00 AM-10:00 PM
City: Coos Bay	Highway #: 009
Milepoint: 237.38	OREGON COAST HIGHWAY
Count Number: 1.00	Location: NO. 9 / N.Bayshore Dr.
	Weather:

Time of Day	Pedestrian		
	South-East	South-West	North-West
6:00		1	
6:15			
6:30			
6:45		2	
7:00			
7:15			
7:30		1	
7:45		1	
8:00		1	
8:15		1	
8:30			
8:45		4	
9:00		1	
9:15		1	
9:30			
9:45		1	
10:00			
10:15		1	
10:30		1	
10:45		1	
11:00		3	
11:15			
11:30		2	
11:45			
12:00			
12:15			
12:30		1	
12:45			
13:00		2	
13:15		2	
13:30			
13:45		1	
14:00			
14:15			
14:30			
14:45		2	
15:00			
15:15			
15:30		3	
15:45			
16:00			
16:15			
16:30			
16:45			
17:00			
17:15		1	
17:30			
17:45		1	
18:00		2	
18:15			
18:30			
18:45			
19:00		1	
19:15		2	
19:30		1	
19:45			
20:00			
20:15		2	
20:30			
20:45		1	
21:00	1	3	
21:15			
21:30			
21:45		1	
Total	1	48	0

Traffic Count Axle Factor Sheet
Transportation Development Division

Site: 37226
 County: Coos
 City: Coos Bay

Date: 7/11/2017
 Hours: 6:00 AM-10:00 PM

Highway #: 009
 OREGON COAST HIGHWAY NO. 9 /
 Location: N.Bayshore Dr. (US101) at Coos Bay

Milepoint: 237.38
 Count Number: 1.00

Weather:

Direction From- To	Car	Lt Truck	Sgl. Unit Truck			Sgl. Trailer Truck			Multi Trailer Truck			Bus	Motor- cycle	Ped With Bicycle	Other Ped	Total All Vehicle
			2 Axl	3 Axl	4+ Axl	4- Axl	5 Axl	6+ Axl	5- Axl	6 Axl	7+ Axl					
SE-SW	493	815	24	5		2	5					5	6			1355
SE-NW	3586	6872	324	86	3	151	231	124	2	1	42	19	142			11583
SW-SE	545	912	61	12		10	4	4				4	8			1560
NW-SE	3678	6802	362	108		153	219	120	3		40	23	155			11663
Total Volume	8302	15401	771	211	3	316	459	248	5	1	82	51	311			26161
Axle Factor	1.1	1.1	1	1.5	2	2	2.5	3	2.5	3	3.5	1.1	1			0.862 SE Leg
Veh O/Count	9132	16941	771	317	6	632	1148	744	13	3	287	56	311			30361
SE-SW	493	815	24	5		2	5					5	6			1355
SW-SE	545	912	61	12		10	4	4				4	8			1560
SW-NW	100	172	17			1	3					4	1			298
NW-SW	130	160	8	1		1	3					1				304
Total Volume	1268	2059	110	18	0	14	15	4	0	0	0	14	15			3517
Axle Factor	1.1	1.1	1	1.5	2	2	2.5	3	2.5	3	3.5	1.1	1			0.901 SW Leg
Veh O/Count	1395	2265	110	27	0	28	38	12	0	0	0	15	15			3905
SE-NW	3586	6872	324	86	3	151	231	124	2	1	42	19	142			11583
SW-NW	100	172	17			1	3					4	1			298
NW-SE	3678	6802	362	108		153	219	120	3		40	23	155			11663
NW-SW	130	160	8	1		1	3					1				304
Total Volume	7494	14006	711	195	3	306	456	244	5	1	82	47	298			23848
Axle Factor	1.1	1.1	1	1.5	2	2	2.5	3	2.5	3	3.5	1.1	1			0.858 NW Leg
Veh O/Count	8243	15407	711	293	6	612	1140	732	13	3	287	52	298			27797

**Percentage By Federal Vehicle Classification
Transportation Development Division**

Site: 37226
County: Coos
City: Coos Bay
Milepoint: 237.38
Count Number: 1.00

Date: 7/11/2017
Hours: 6:00 AM-10:00 PM
Highway #: 009
OREGON COAST HIGHWAY NO. 9 / N.Bayshore
Location: Dr. (US101) at Coos Bay Boulevard
Weather:

	Motor-cycle	Car	Lt Truck	Bus	Sgl. Unit Truck			Sgl. Trailer Truck			Multi Trailer Truck			Total All Vehicles	
					2 Axl	3 Axl	4+ Axl	4- Axl	5 Axl	6+ Axl	5- Axl	6 Axl	7+ Axl		
NW	148	4079	7687	24	348	91	3	153	236	124	2	1	42	12938	
%	1.144	31.527	59.414	0.186	2.69	0.703	0.023	1.183	1.824	0.958	0.015	0.008	0.325		
SE	163	4223	7714	27	423	120		163	223	124	3		40	13223	
%	1.233	31.937	58.338	0.204	3.199	0.908		1.233	1.686	0.938	0.023		0.303		
Total volume	311	8302	15401	51	771	211	3	316	459	248	5	1	82	26161	
% of Total	1.189	31.734	58.87	0.195	2.947	0.807	0.011	1.208	1.755	0.948	0.019	0.004	0.313		South-East Leg
NE	9	645	1084	8	78	12		11	7	4				1858	
%	0.484	34.715	58.342	0.431	4.198	0.646		0.592	0.377	0.215					
SW	6	623	975	6	32	6		3	8					1659	
%	0.362	37.553	58.77	0.362	1.929	0.362		0.181	0.482						
Total volume	15	1268	2059	14	110	18		14	15	4				3517	
% of Total	0.426	36.053	58.544	0.398	3.128	0.512		0.398	0.426	0.114					South-West Leg
SE	155	3808	6962	24	370	109		154	222	120	3		40	11967	
%	1.295	31.821	58.177	0.201	3.092	0.911		1.287	1.855	1.003	0.025		0.334		
NW	143	3686	7044	23	341	86	3	152	234	124	2	1	42	11881	
%	1.204	31.024	59.288	0.194	2.87	0.724	0.025	1.279	1.97	1.044	0.017	0.008	0.354		
Total volume	298	7494	14006	47	711	195	3	306	456	244	5	1	82	23848	
% of Total	1.25	31.424	58.73	0.197	2.981	0.818	0.013	1.283	1.912	1.023	0.021	0.004	0.344		North-West Leg

**Percentage Trucks By Federal Vehicle Classification
Transportation Development Division**

Site: 37226

Date: 7/11/2017

County: Coos

Hours: 6:00 AM-10:00 PM

City: Coos Bay

Highway #: 009

OREGON COAST HIGHWAY

Milepoint: 237.38

Location: NO. 9 / N.Bayshore Dr.

Count Number: 1.00

Weather:

Peak Volume Hour 7/11/17 12:00 PM

	Sgl. Unit Truck	Multi Unit Truck	Total All Vehicles	
NW	48	57	1131	
%	4.244	5.04	100	
SE	57	51	1123	
%	5.076	4.541	100	
Total volume	105	108	2254	
% of Total	4.658	4.791	100	South-East Leg
NE	8	1	147	
%	5.442	0.68	100	
SW	3	1	146	
%	2.055	0.685	100	
Total volume	11	2	293	
% of Total	3.754	0.683	100	South-West Leg
SE	52	52	1040	
%	5	5	100	
NW	48	58	1049	
%	4.576	5.529	100	
Total volume	100	110	2089	
% of Total	4.787	5.266	100	North-West Leg

US 101 & Hemlock/Front

SOUTHERN OREGON TRANSPORTATION ENGINEERING

Medford, Oregon 97504 | Kim.parducci@gmail.com | (541) 941-4148 cell

North-South: US 101
East-West: Hemlock Ave / Front St
Weather: Overcast / 60 deg
Veh Type: All Vehicles

File Name : Hemlock-101
Site Code : 00000001
Start Date : 4/10/2018
Page No : 1

Groups Printed- Unshifted

Start Time	US 101 From North					Front St From East					US 101 From South					Hemlock Ave From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
06:00 AM	1	61	1	1	64	0	0	0	0	0	1	63	0	0	64	0	1	0	0	1	129
06:15 AM	1	75	1	0	77	0	0	0	0	0	2	96	0	0	98	0	1	4	0	5	180
06:30 AM	1	112	2	3	118	0	0	2	0	2	5	115	0	0	120	2	0	4	0	6	246
06:45 AM	2	117	2	1	122	0	0	0	0	0	2	177	0	0	179	0	0	3	0	3	304
Total	5	365	6	5	381	0	0	2	0	2	10	451	0	0	461	2	2	11	0	15	859
07:00 AM	3	130	2	0	135	0	0	1	0	1	5	148	0	0	153	1	0	3	0	4	293
07:15 AM	0	163	0	0	163	0	0	0	0	0	2	199	0	0	201	3	0	7	0	10	374
07:30 AM	2	184	2	2	190	0	0	0	0	0	8	252	0	0	260	1	0	1	0	2	452
07:45 AM	6	255	0	2	263	0	0	0	0	0	5	268	1	0	274	2	0	0	0	2	539
Total	11	732	4	4	751	0	0	1	0	1	20	867	1	0	888	7	0	11	0	18	1658
08:00 AM	2	176	8	4	190	0	0	1	0	1	6	192	0	0	198	1	0	2	1	4	393
08:15 AM	3	145	7	0	155	0	0	0	0	0	8	194	0	0	202	2	0	5	0	7	364
08:30 AM	3	144	2	2	151	0	0	0	0	0	8	229	0	0	237	3	0	5	0	8	396
08:45 AM	5	162	6	1	174	0	0	0	0	0	3	206	0	0	209	1	0	5	0	6	389
Total	13	627	23	7	670	0	0	1	0	1	25	821	0	0	846	7	0	17	1	25	1542
09:00 AM	5	157	1	1	164	0	0	0	0	0	4	181	0	0	185	2	0	3	0	5	354
09:15 AM	4	172	3	0	179	0	0	0	0	0	5	174	0	0	179	2	0	2	0	4	362
09:30 AM	5	152	1	0	158	0	0	1	0	1	8	202	0	0	210	0	0	5	0	5	374
09:45 AM	6	206	5	0	217	0	0	0	0	0	4	189	0	0	193	0	0	1	0	1	411
Total	20	687	10	1	718	0	0	1	0	1	21	746	0	0	767	4	0	11	0	15	1501
10:00 AM	8	190	2	1	201	0	0	0	0	0	1	190	0	0	191	1	0	2	0	3	395
10:15 AM	3	195	2	2	202	0	0	1	0	1	5	207	0	0	212	1	1	6	0	8	423
10:30 AM	2	163	4	2	171	0	0	1	0	1	5	226	0	0	231	1	0	1	0	2	405
10:45 AM	0	193	5	1	199	0	0	3	0	3	8	233	1	1	243	2	0	0	0	2	447
Total	13	741	13	6	773	0	0	5	0	5	19	856	1	1	877	5	1	9	0	15	1670
11:00 AM	4	249	5	3	261	0	0	3	0	3	5	214	1	0	220	2	0	1	0	3	487
11:15 AM	4	231	8	2	245	0	0	1	0	1	6	212	0	0	218	4	0	5	0	9	473
11:30 AM	3	196	4	4	207	0	0	1	0	1	7	243	0	0	250	2	0	6	0	8	466
11:45 AM	7	227	3	3	240	0	0	1	0	1	4	211	0	0	215	0	0	5	0	5	461
Total	18	903	20	12	953	0	0	6	0	6	22	880	1	0	903	8	0	17	0	25	1887
12:00 PM	4	257	4	2	267	0	0	2	0	2	10	261	0	0	271	1	0	6	0	7	547
12:15 PM	1	224	2	3	230	0	0	4	0	4	4	234	0	0	238	0	0	1	0	1	473
12:30 PM	6	227	4	0	237	0	0	1	0	1	5	259	0	0	264	2	0	9	0	11	513
12:45 PM	2	240	5	1	248	0	0	5	0	5	4	256	0	0	260	1	0	2	0	3	516
Total	13	948	15	6	982	0	0	12	0	12	23	1010	0	0	1033	4	0	18	0	22	2049
01:00 PM	4	267	5	1	277	0	0	0	0	0	9	232	8	0	249	2	0	4	0	6	532
01:15 PM	3	235	6	1	245	0	0	0	0	0	9	203	0	0	212	2	0	5	0	7	464
01:30 PM	2	242	2	1	247	0	0	1	0	1	4	239	0	0	243	1	0	7	0	8	499
01:45 PM	3	249	7	5	264	0	0	2	0	2	4	212	0	0	216	0	0	2	0	2	484
Total	12	993	20	8	1033	0	0	3	0	3	26	886	8	0	920	5	0	18	0	23	1979
02:00 PM	3	253	2	1	259	0	0	0	0	0	8	242	0	0	250	2	0	1	0	3	512
02:15 PM	2	287	2	0	291	0	0	4	0	4	2	211	0	0	213	0	0	6	0	6	514
02:30 PM	1	253	1	3	258	0	0	0	0	0	10	256	0	0	266	1	0	2	0	3	527
02:45 PM	4	252	4	1	261	0	0	1	0	1	7	229	0	0	236	3	0	3	0	6	504
Total	10	1045	9	5	1069	0	0	5	0	5	27	938	0	0	965	6	0	12	0	18	2057
03:00 PM	3	227	4	0	234	0	0	1	0	1	1	256	0	0	257	1	0	7	0	8	500
03:15 PM	0	268	3	0	271	0	0	2	0	2	8	229	0	0	237	2	0	4	1	7	517

SOUTHERN OREGON TRANSPORTATION ENGINEERING

Medford, Oregon 97504 | Kim.parducci@gmail.com | (541) 941-4148 cell

North-South: US 101
East-West: Hemlock Ave / Front St
Weather: Overcast / 60 deg
Veh Type: All Vehicles

File Name : Hemlock-101
Site Code : 00000001
Start Date : 4/10/2018
Page No : 2

Groups Printed- Unshifted

Start Time	US 101 From North					Front St From East					US 101 From South					Hemlock Ave From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
03:30 PM	3	281	1	1	286	1	0	1	0	2	0	243	0	0	243	2	0	5	0	7	538
03:45 PM	5	245	5	0	255	0	0	3	0	3	6	253	0	0	259	3	0	3	0	6	523
Total	11	1021	13	1	1046	1	0	7	0	8	15	981	0	0	996	8	0	19	1	28	2078
04:00 PM	3	297	2	1	303	0	0	2	0	2	6	243	0	0	249	0	0	5	0	5	559
04:15 PM	1	275	4	4	284	0	0	1	0	1	4	246	0	0	250	1	0	2	0	3	538
04:30 PM	2	244	0	0	246	0	0	1	0	1	3	236	0	0	239	6	0	5	0	11	497
04:45 PM	2	298	3	3	306	0	0	1	0	1	5	264	0	0	269	1	0	4	0	5	581
Total	8	1114	9	8	1139	0	0	5	0	5	18	989	0	0	1007	8	0	16	0	24	2175
05:00 PM	3	291	1	2	297	0	0	3	0	3	3	245	0	0	248	1	0	2	0	3	551
05:15 PM	4	265	2	1	272	0	0	0	0	0	5	250	0	0	255	2	0	3	0	5	532
05:30 PM	1	249	0	1	251	0	0	2	0	2	2	217	1	0	220	2	0	1	0	3	476
05:45 PM	0	234	1	1	236	0	0	0	0	0	1	198	0	0	199	0	0	2	0	2	437
Total	8	1039	4	5	1056	0	0	5	0	5	11	910	1	0	922	5	0	8	0	13	1996
06:00 PM	0	146	0	2	148	0	0	0	0	0	4	174	0	0	178	1	0	2	0	3	329
06:15 PM	2	179	1	1	183	1	0	2	0	3	3	171	0	0	174	0	1	0	0	1	361
06:30 PM	1	153	1	0	155	0	0	0	0	0	0	147	0	0	147	0	0	3	0	3	305
06:45 PM	0	127	0	0	127	0	0	1	0	1	2	104	0	0	106	0	0	3	0	3	237
Total	3	605	2	3	613	1	0	3	0	4	9	596	0	0	605	1	1	8	0	10	1232
07:00 PM	1	144	0	0	145	0	0	0	0	0	2	99	0	0	101	0	0	3	0	3	249
07:15 PM	1	143	2	4	150	0	0	0	1	1	0	115	0	0	115	1	0	1	0	2	268
07:30 PM	0	131	0	1	132	0	0	1	0	1	2	118	0	0	120	2	0	4	0	6	259
07:45 PM	1	115	0	1	117	0	0	0	0	0	3	92	0	0	95	0	0	2	0	2	214
Total	3	533	2	6	544	0	0	1	1	2	7	424	0	0	431	3	0	10	0	13	990
08:00 PM	1	97	1	5	104	0	0	0	0	0	1	80	0	0	81	0	0	4	0	4	189
08:15 PM	0	95	2	1	98	0	0	0	0	0	2	70	0	1	73	1	0	1	0	2	173
08:30 PM	0	83	0	1	84	0	0	0	0	0	1	71	0	0	72	0	0	2	0	2	158
08:45 PM	1	95	2	0	98	0	0	0	0	0	1	70	0	0	71	1	0	1	0	2	171
Total	2	370	5	7	384	0	0	0	0	0	5	291	0	1	297	2	0	8	0	10	691
09:00 PM	1	92	0	1	94	0	0	0	0	0	2	62	0	0	64	0	0	0	0	0	158
09:15 PM	1	97	0	2	100	0	0	0	0	0	2	45	0	0	47	1	0	2	0	3	150
09:30 PM	0	49	0	0	49	0	0	0	0	0	0	57	0	0	57	0	0	1	0	1	107
09:45 PM	0	52	0	0	52	0	0	0	0	0	0	34	0	0	34	0	0	0	0	0	86
Total	2	290	0	3	295	0	0	0	0	0	4	198	0	0	202	1	0	3	0	4	501
Grand Total	152	12013	155	87	12407	2	0	57	1	60	262	11844	12	2	12120	76	4	196	2	278	24865
Apprch %	1.2	96.8	1.2	0.7		3.3	0	95	1.7		2.2	97.7	0.1	0		27.3	1.4	70.5	0.7		
Total %	0.6	48.3	0.6	0.3	49.9	0	0	0.2	0	0.2	1.1	47.6	0	0	48.7	0.3	0	0.8	0	1.1	

SOUTHERN OREGON TRANSPORTATION ENGINEERING

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North-South: US 101
 East-West: Hemlock Ave / Front St
 Weather: Overcast / 60 deg
 Veh Type: All Vehicles

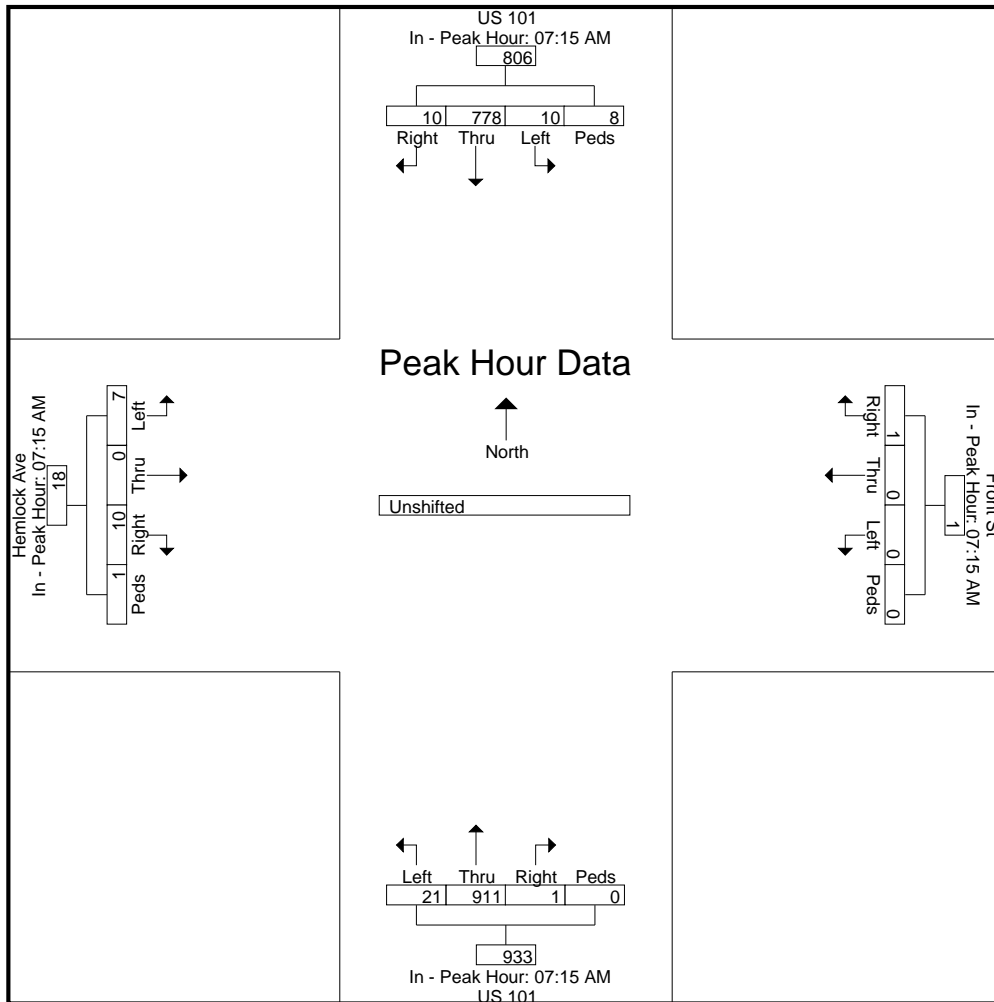
File Name : Hemlock-101
 Site Code : 00000001
 Start Date : 4/10/2018
 Page No : 3

Start Time	US 101 From North					Front St From East					US 101 From South					Hemlock Ave From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM					07:15 AM					07:15 AM					07:15 AM				
+0 mins.	0	163	0	0	163	0	0	0	0	0	2	199	0	0	201	3	0	7	0	10
+15 mins.	2	184	2	2	190	0	0	0	0	0	8	252	0	0	260	1	0	1	0	2
+30 mins.	6	255	0	2	263	0	0	0	0	0	5	268	1	0	274	2	0	0	0	2
+45 mins.	2	176	8	4	190	0	0	1	0	1	6	192	0	0	198	1	0	2	1	4
Total Volume	10	778	10	8	806	0	0	1	0	1	21	911	1	0	933	7	0	10	1	18
% App. Total	1.2	96.5	1.2	1		0	0	100	0		2.3	97.6	0.1	0		38.9	0	55.6	5.6	
PHF	.417	.763	.313	.500	.766	.000	.000	.250	.000	.250	.656	.850	.250	.000	.851	.583	.000	.357	.250	.450



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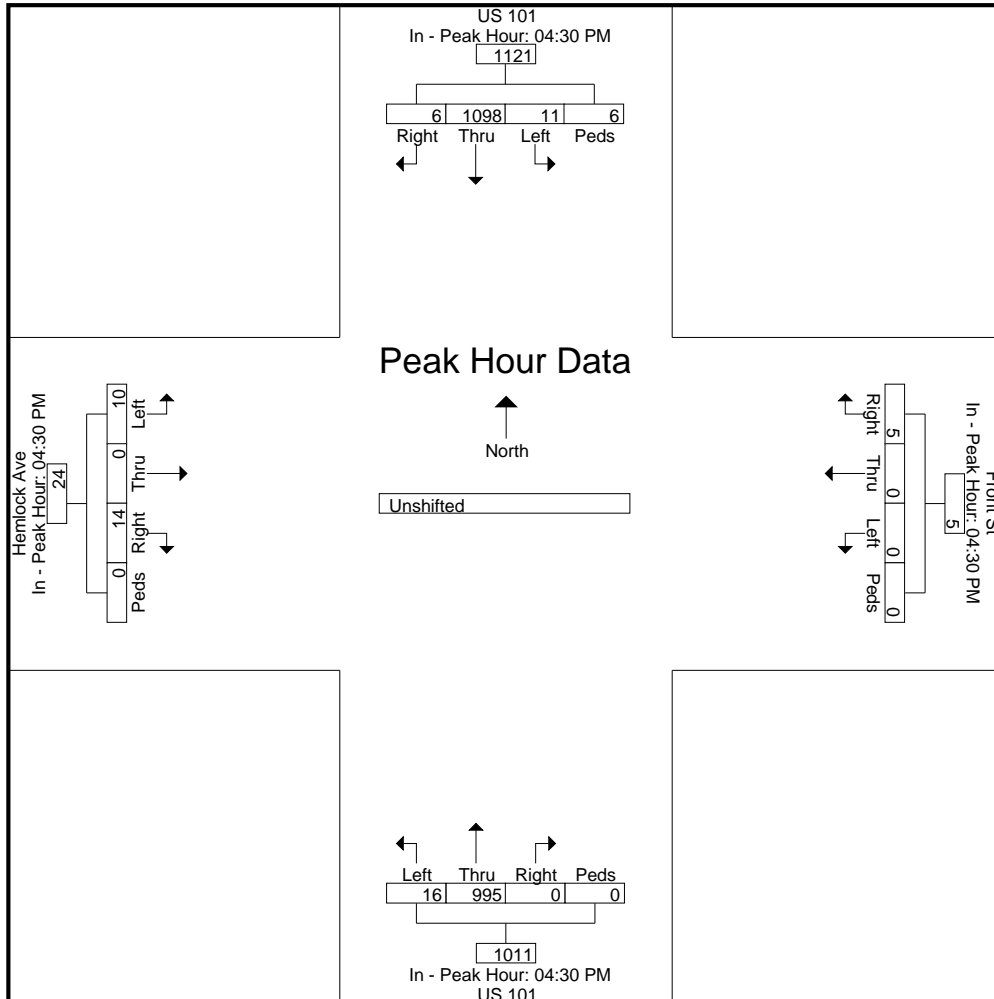
North-South: US 101
 East-West: Hemlock Ave / Front St
 Weather: Overcast / 60 deg
 Veh Type: All Vehicles

File Name : Hemlock-101
 Site Code : 00000001
 Start Date : 4/10/2018
 Page No : 4

Start Time	US 101 From North					Front St From East					US 101 From South					Hemlock Ave From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:30 PM					04:30 PM					04:30 PM					04:30 PM				
+0 mins.	2	244	0	0	246	0	0	1	0	1	3	236	0	0	239	6	0	5	0	11
+15 mins.	2	298	3	3	306	0	0	1	0	1	5	264	0	0	269	1	0	4	0	5
+30 mins.	3	291	1	2	297	0	0	3	0	3	3	245	0	0	248	1	0	2	0	3
+45 mins.	4	265	2	1	272	0	0	0	0	0	5	250	0	0	255	2	0	3	0	5
Total Volume	11	1098	6	6	1121	0	0	5	0	5	16	995	0	0	1011	10	0	14	0	24
% App. Total	1	97.9	0.5	0.5		0	0	100	0		1.6	98.4	0	0		41.7	0	58.3	0	
PHF	.688	.921	.500	.500	.916	.000	.000	.417	.000	.417	.800	.942	.000	.000	.940	.417	.000	.700	.000	.545



US 101 & Ivy St

SOUTHERN OREGON TRANSPORTATION ENGINEERING

Medford, Oregon 97504 | Kim.parducci@gmail.com | (541) 941-4148 cell

North-South: US 101
East-West: Ivy Street
Weather: Overcast / 60 deg
Veh Type: All Vehicles

File Name : Ivy-101
Site Code : 00000002
Start Date : 4/10/2018
Page No : 1

Groups Printed- Unshifted

Start Time	US 101 From North					DW From East					US 101 From South					Ivy St From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
06:30 AM	0	114	1	4	119	0	0	0	0	0	1	120	0	0	121	0	0	1	0	1	241
06:45 AM	0	117	2	2	121	0	0	0	0	0	0	171	0	0	171	1	0	0	0	1	293
Total	0	231	3	6	240	0	0	0	0	0	1	291	0	0	292	1	0	1	0	2	534
07:00 AM	0	135	0	0	135	0	0	0	0	0	3	150	0	0	153	0	0	0	0	0	288
07:15 AM	0	159	0	0	159	0	0	0	0	0	4	210	0	0	214	1	0	0	0	1	374
07:30 AM	0	192	1	1	194	0	0	0	0	0	2	243	0	0	245	1	0	1	0	2	441
07:45 AM	0	249	2	0	251	0	0	0	0	0	1	277	1	0	279	1	0	2	0	3	533
Total	0	735	3	1	739	0	0	0	0	0	10	880	1	0	891	3	0	3	0	6	1636
08:00 AM	0	162	0	4	166	0	0	0	0	0	0	189	1	0	190	1	0	3	0	4	360
08:15 AM	2	159	3	0	164	0	0	0	0	0	1	186	0	1	188	0	0	4	0	4	356
08:30 AM	0	148	2	0	150	0	0	0	0	0	0	219	0	0	219	0	0	0	0	0	369
08:45 AM	0	162	1	2	165	0	0	0	0	0	1	203	0	0	204	0	0	5	0	5	374
Total	2	631	6	6	645	0	0	0	0	0	2	797	1	1	801	1	0	12	0	13	1459
09:00 AM	0	169	3	1	173	0	0	0	0	0	4	186	0	0	190	3	0	2	0	5	368
09:15 AM	0	164	1	0	165	0	0	0	0	0	0	182	0	0	182	1	0	6	0	7	354
*** BREAK ***																					
Total	0	333	4	1	338	0	0	0	0	0	4	368	0	0	372	4	0	8	0	12	722
*** BREAK ***																					
03:00 PM	0	235	0	0	235	0	0	0	0	0	2	270	0	0	272	1	0	3	0	4	511
03:15 PM	0	266	2	0	268	0	0	0	0	0	5	226	0	0	231	2	0	3	0	5	504
03:30 PM	0	257	3	1	261	0	0	0	0	0	4	236	0	0	240	1	0	4	0	5	506
03:45 PM	0	257	1	2	260	1	0	2	0	3	2	250	0	0	252	2	0	4	0	6	521
Total	0	1015	6	3	1024	1	0	2	0	3	13	982	0	0	995	6	0	14	0	20	2042
04:00 PM	0	276	2	3	281	0	0	1	0	1	5	252	0	0	257	0	0	8	0	8	547
04:15 PM	0	280	2	0	282	0	0	0	0	0	4	238	0	0	242	0	0	6	0	6	530
04:30 PM	0	240	1	3	244	0	0	0	0	0	2	231	0	0	233	1	0	3	0	4	481
04:45 PM	0	300	0	3	303	0	0	0	0	0	2	267	0	0	269	2	0	5	0	7	579
Total	0	1096	5	9	1110	0	0	1	0	1	13	988	0	0	1001	3	0	22	0	25	2137
05:00 PM	0	272	1	4	277	0	0	0	0	0	0	246	0	0	246	1	0	3	0	4	527
05:15 PM	0	282	2	2	286	0	0	0	0	0	1	258	0	0	259	1	0	3	0	4	549
05:30 PM	0	255	3	2	260	0	0	0	0	0	3	210	0	0	213	3	0	2	0	5	478
05:45 PM	0	234	3	3	240	0	0	0	0	0	0	193	0	0	193	2	0	4	0	6	439
Total	0	1043	9	11	1063	0	0	0	0	0	4	907	0	0	911	7	0	12	0	19	1993
Grand Total	2	5084	36	37	5159	1	0	3	0	4	47	5213	2	1	5263	25	0	72	0	97	10523
Apprch %	0	98.5	0.7	0.7		25	0	75	0		0.9	99	0	0		25.8	0	74.2	0		
Total %	0	48.3	0.3	0.4	49	0	0	0	0	0	0.4	49.5	0	0	50	0.2	0	0.7	0	0.9	

SOUTHERN OREGON TRANSPORTATION ENGINEERING

Medford, Oregon 97504 | Kim.parducci@gmail.com | (541) 941-4148 cell

North-South: US 101
 East-West: Ivy Street
 Weather: Overcast / 60 deg
 Veh Type: All Vehicles

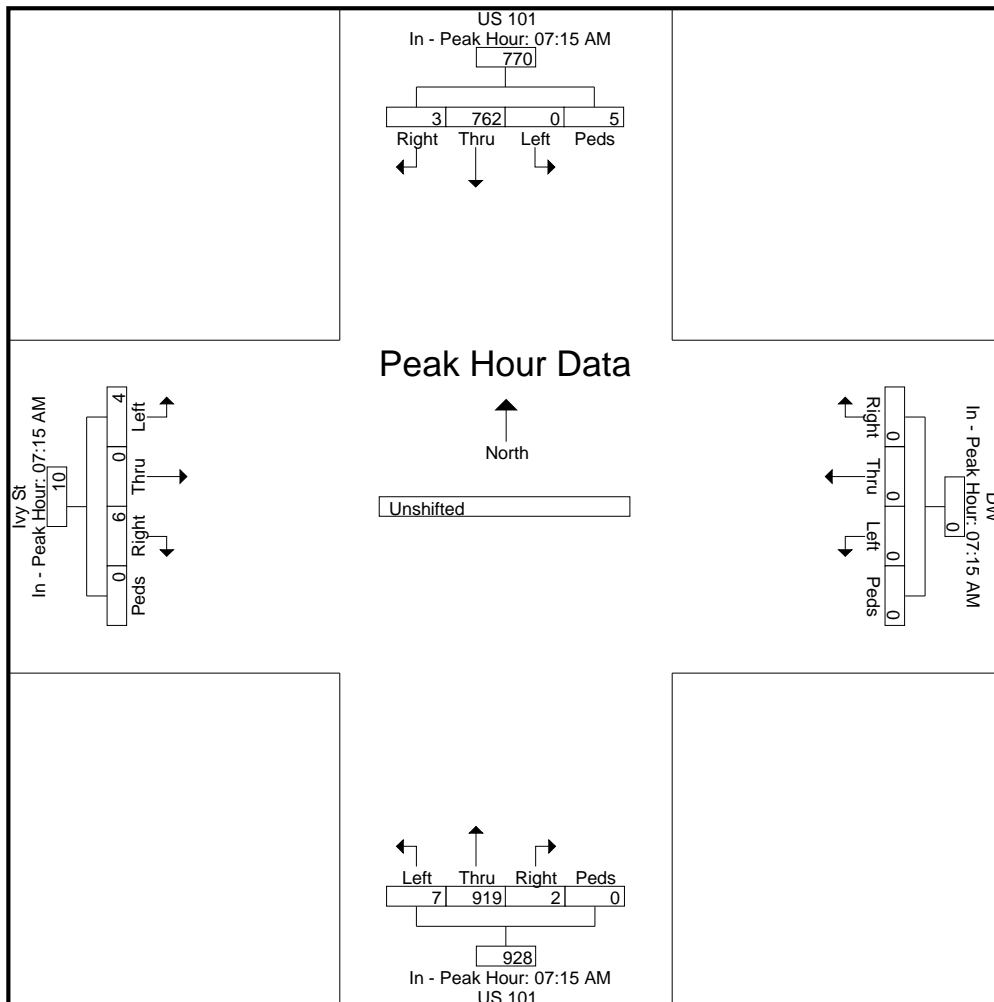
File Name : Ivy-101
 Site Code : 00000002
 Start Date : 4/10/2018
 Page No : 2

Start Time	US 101 From North					DW From East					US 101 From South					Ivy St From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM					07:15 AM					07:15 AM					07:15 AM				
+0 mins.	0	159	0	0	159	0	0	0	0	0	4	210	0	0	214	1	0	0	0	1
+15 mins.	0	192	1	1	194	0	0	0	0	0	2	243	0	0	245	1	0	1	0	2
+30 mins.	0	249	2	0	251	0	0	0	0	0	1	277	1	0	279	1	0	2	0	3
+45 mins.	0	162	0	4	166	0	0	0	0	0	0	189	1	0	190	1	0	3	0	4
Total Volume	0	762	3	5	770	0	0	0	0	0	7	919	2	0	928	4	0	6	0	10
% App. Total	0	99	0.4	0.6		0	0	0	0		0.8	99	0.2	0		40	0	60	0	
PHF	.000	.765	.375	.313	.767	.000	.000	.000	.000	.000	.438	.829	.500	.000	.832	1.000	.000	.500	.000	.625



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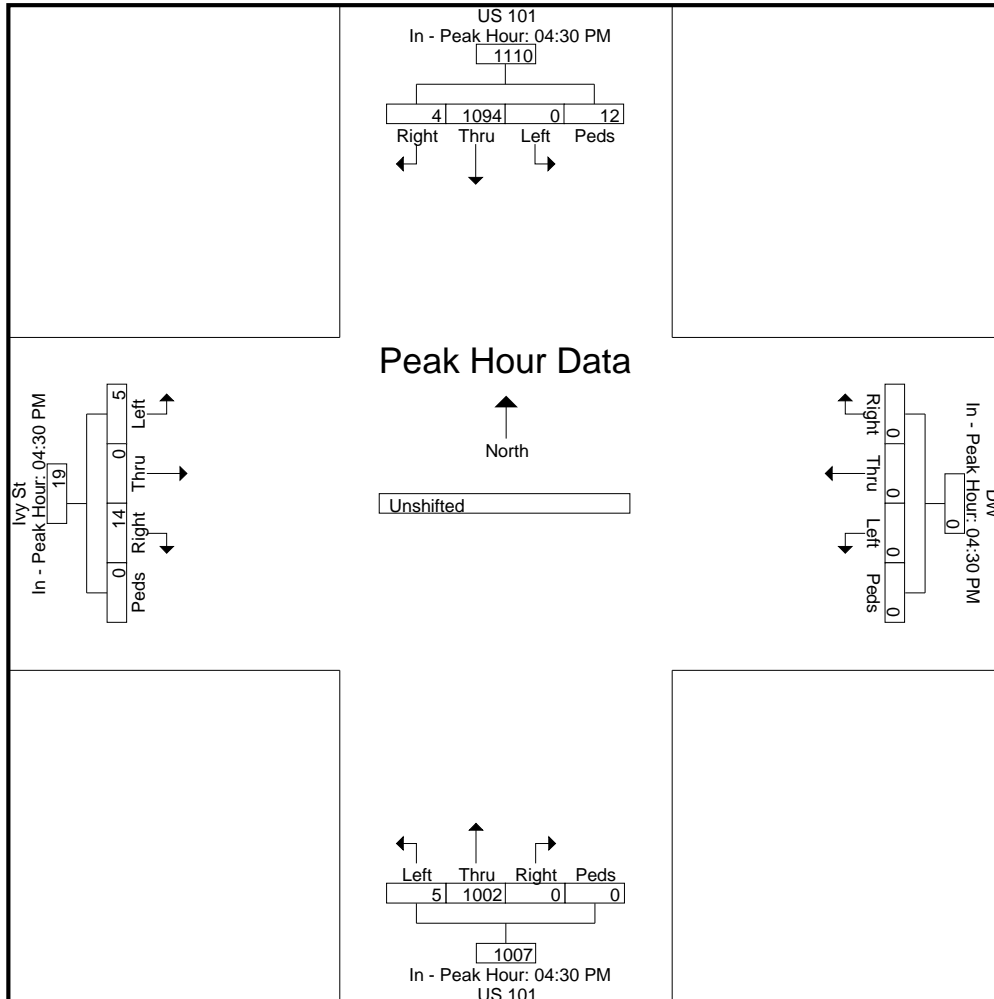
North-South: US 101
 East-West: Ivy Street
 Weather: Overcast / 60 deg
 Veh Type: All Vehicles

File Name : Ivy-101
 Site Code : 00000002
 Start Date : 4/10/2018
 Page No : 3

Start Time	US 101 From North					DW From East					US 101 From South					Ivy St From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:30 PM					04:30 PM					04:30 PM					04:30 PM				
+0 mins.	0	240	1	3	244	0	0	0	0	0	2	231	0	0	233	1	0	3	0	4
+15 mins.	0	300	0	3	303	0	0	0	0	0	2	267	0	0	269	2	0	5	0	7
+30 mins.	0	272	1	4	277	0	0	0	0	0	0	246	0	0	246	1	0	3	0	4
+45 mins.	0	282	2	2	286	0	0	0	0	0	1	258	0	0	259	1	0	3	0	4
Total Volume	0	1094	4	12	1110	0	0	0	0	0	5	1002	0	0	1007	5	0	14	0	19
% App. Total	0	98.6	0.4	1.1		0	0	0	0		0.5	99.5	0	0		26.3	0	73.7	0	
PHF	.000	.912	.500	.750	.916	.000	.000	.000	.000	.000	.625	.938	.000	.000	.936	.625	.000	.700	.000	.679



US 101 (SB) & Fir St

SOUTHERN OREGON TRANSPORTATION ENGINEERING

Medford, Oregon 97504 | Kim.parducci@gmail.com | (541) 941-4148 cell

North-South: 101 Southbound
East-West: Fir Street
Weather: Overcast
Veh Type: All Vehicles

File Name : FirSt-101SB
Site Code : 00000004
Start Date : 4/11/2018
Page No : 1

Groups Printed- Unshifted

Start Time	101 SB From North					Fir Street From East					From South					From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
06:00 AM	0	76	0	0	76	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
06:15 AM	0	61	0	0	61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 AM	0	108	0	0	108	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0
06:45 AM	0	121	0	0	121	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Total	0	366	0	0	366	5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0
07:00 AM	0	150	0	0	150	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	156	0	0	156	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	183	0	1	184	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	235	0	2	237	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	724	0	3	727	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	167	0	3	170	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	146	0	1	147	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	152	0	1	153	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	167	0	0	167	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Total	0	632	0	5	637	9	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0
*** BREAK ***																					
03:00 PM	0	233	0	2	235	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	236	0	0	236	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0
03:30 PM	0	219	0	1	220	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	238	0	1	239	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Total	0	926	0	4	930	13	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0
04:00 PM	0	253	0	1	254	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	262	0	1	263	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	279	0	1	280	9	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	239	0	3	242	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0
Total	0	1033	0	6	1039	21	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	276	0	1	277	8	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	277	0	1	278	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	236	0	3	239	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	204	0	2	206	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0
Total	0	993	0	7	1000	15	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	4674	0	25	4699	65	0	0	0	65	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	99.5	0	0.5		100	0	0	0		0	0	0	0		0	0	0	0		
Total %	0	98.1	0	0.5	98.6	1.4	0	0	0	1.4	0	0	0	0	0	0	0	0	0	0	0

SOUTHERN OREGON TRANSPORTATION ENGINEERING

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North-South: 101 Southbound
East-West: Fir Street
Weather: Overcast
Veh Type: All Vehicles

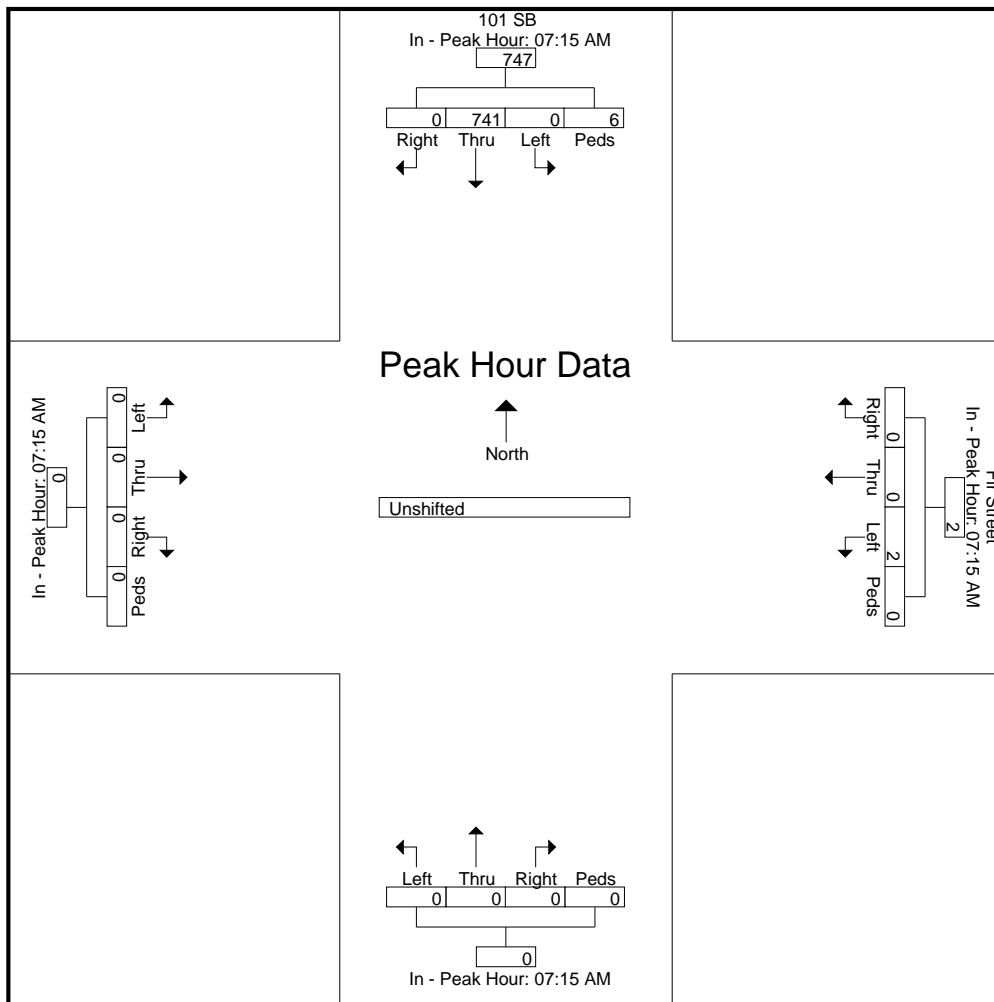
File Name : FirSt-101SB
Site Code : 00000004
Start Date : 4/11/2018
Page No : 2

Start Time	101 SB From North					Fir Street From East					From South					From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM					07:15 AM					07:15 AM					07:15 AM									
+0 mins.	0	156	0	0	156	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	183	0	1	184	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	235	0	2	237	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	167	0	3	170	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	741	0	6	747	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	99.2	0	0.8		100	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
PHF	.000	.788	.000	.500	.788	.250	.000	.000	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000



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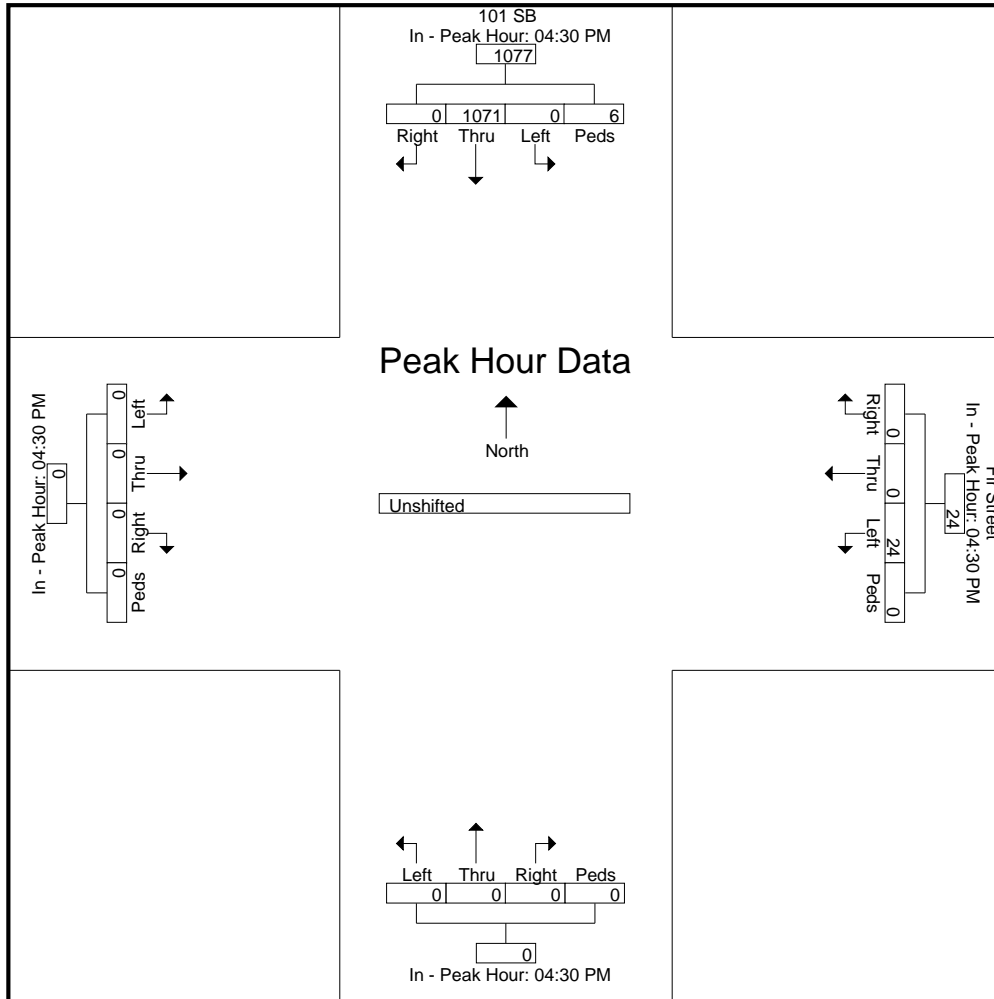
North-South: 101 Southbound
East-West: Fir Street
Weather: Overcast
Veh Type: All Vehicles

File Name : FirSt-101SB
Site Code : 00000004
Start Date : 4/11/2018
Page No : 3

Start Time	101 SB From North					Fir Street From East					From South					From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM					04:30 PM					04:30 PM					04:30 PM									
+0 mins.	0	279	0	1	280	9	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	239	0	3	242	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	276	0	1	277	8	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	277	0	1	278	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1071	0	6	1077	24	0	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	99.4	0	0.6		100	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
PHF	.000	.960	.000	.500	.962	.667	.000	.000	.000	.667	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000



US 101 (NB) & Fir St

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North-South: 101 Northbound
East-West: Fir Street
Weather: Overcast
Veh Type: All Vehicles

File Name : FirSt-101NB
Site Code : 00000006
Start Date : 4/11/2018
Page No : 1

Groups Printed- Unshifted

Start Time	From North					From East					101 NB From South					Fir Street From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
06:00 AM	0	6	0	0	6	0	0	0	0	0	1	60	0	0	61	0	0	0	0	0	0
06:15 AM	0	0	0	0	0	0	0	0	0	0	0	99	0	0	99	0	0	0	0	0	0
06:30 AM	0	0	0	0	0	0	0	0	0	0	1	106	0	0	107	0	0	0	0	0	0
06:45 AM	0	0	0	0	0	0	0	0	0	0	1	148	0	0	149	0	0	0	0	0	0
Total	0	6	0	0	6	0	0	0	0	0	3	413	0	0	416	0	0	0	0	0	0
07:00 AM	0	0	0	0	0	0	0	0	0	0	1	146	0	0	147	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	211	0	0	211	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	214	0	0	214	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	265	0	0	265	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	1	836	0	0	837	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	1	216	0	0	217	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	3	199	0	0	202	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	3	245	0	0	248	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	1	212	0	0	213	0	0	0	1	1	1
Total	0	0	0	0	0	0	0	0	0	0	8	872	0	0	880	0	0	0	1	1	1
*** BREAK ***																					
03:00 PM	0	0	0	0	0	0	0	0	0	0	4	222	0	0	226	0	0	0	0	0	0
03:15 PM	0	0	0	0	0	0	0	0	0	0	3	250	0	0	253	0	0	0	0	0	0
03:30 PM	0	0	0	0	0	0	0	0	0	0	4	257	0	0	261	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0	0	0	0	1	235	0	0	236	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	12	964	0	0	976	0	0	0	0	0	0
04:00 PM	0	0	0	0	0	0	0	0	0	0	4	232	0	0	236	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	3	209	0	0	212	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	8	238	0	0	246	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	4	257	0	0	261	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	19	936	0	0	955	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	4	269	0	0	273	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	3	248	0	0	251	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	240	0	0	240	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	2	194	0	0	196	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	9	951	0	0	960	0	0	0	0	0	0
Grand Total	0	6	0	0	6	0	0	0	0	0	52	4972	0	0	5024	0	0	0	1	1	5031
Apprch %	0	100	0	0		0	0	0	0		1	99	0	0		0	0	0	100		
Total %	0	0.1	0	0	0.1	0	0	0	0	0	1	98.8	0	0	99.9	0	0	0	0	0	0

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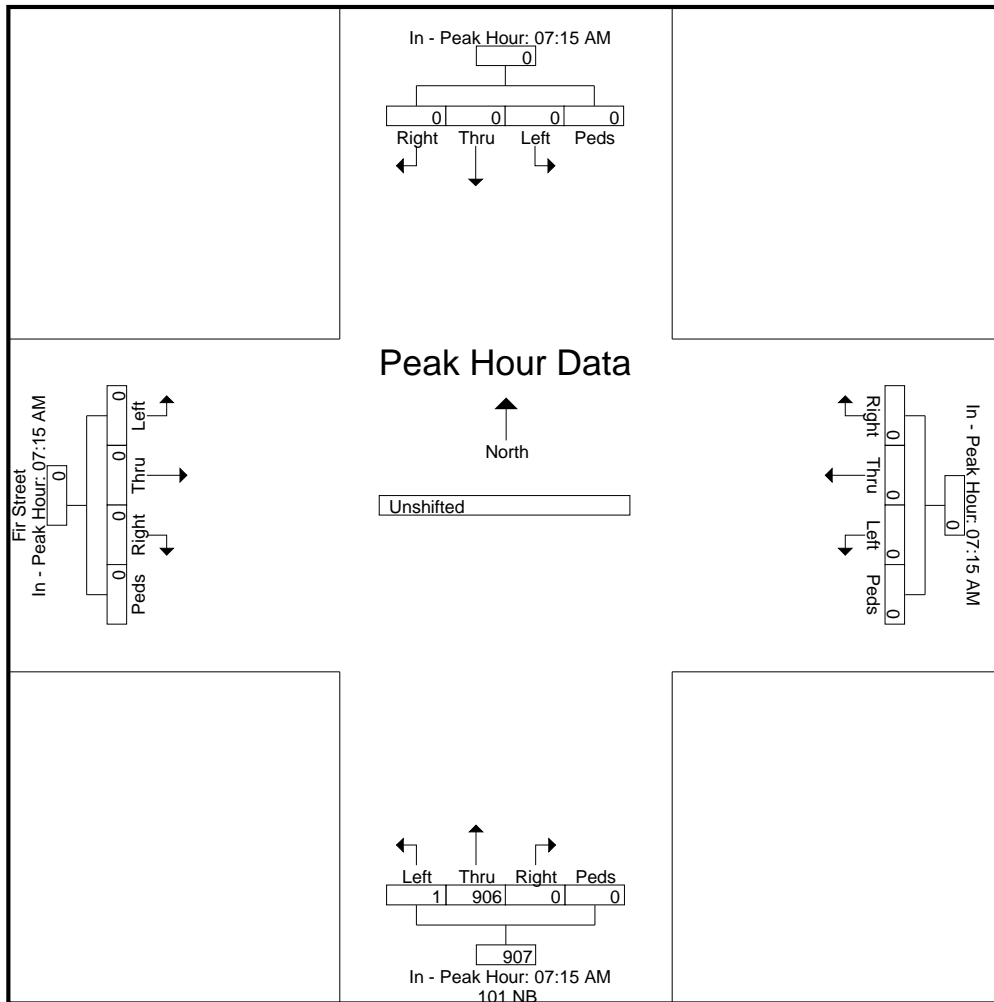
North-South: 101 Northbound
East-West: Fir Street
Weather: Overcast
Veh Type: All Vehicles

File Name : FirSt-101NB
Site Code : 00000006
Start Date : 4/11/2018
Page No : 2

Start Time	From North					From East					101 NB From South					Fir Street From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM					07:15 AM					07:15 AM					07:15 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	211	0	0	211	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	214	0	0	214	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	265	0	0	265	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	1	216	0	0	217	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	1	906	0	0	907	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	0	0.1	99.9	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.855	.000	.000	.856	.000	.000	.000	.000	.000



SOUTHERN OREGON TRANSPORTATION ENGINEERING

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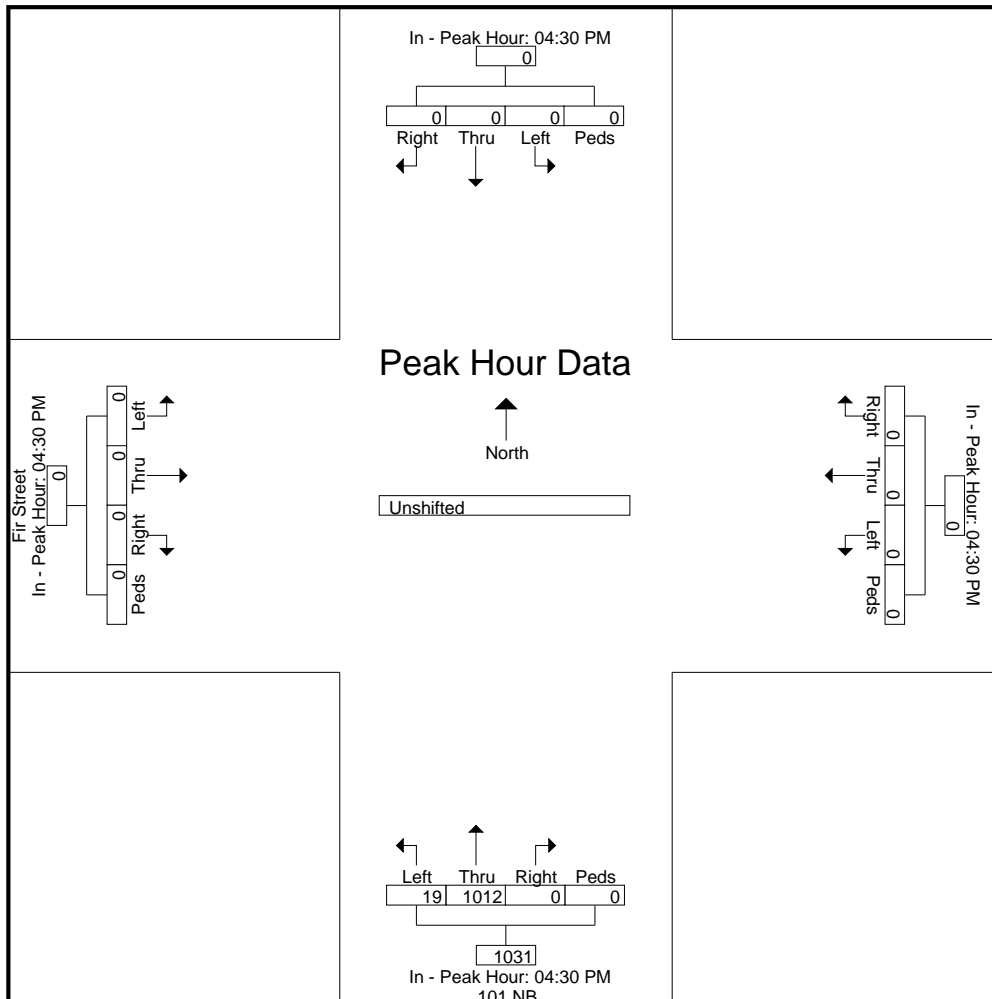
North-South: 101 Northbound
East-West: Fir Street
Weather: Overcast
Veh Type: All Vehicles

File Name : FirSt-101NB
Site Code : 00000006
Start Date : 4/11/2018
Page No : 3

Start Time	From North					From East					101 NB From South					Fir Street From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM					04:30 PM					04:30 PM					04:30 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	8	238	0	0	246	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	4	257	0	0	261	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	4	269	0	0	273	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	3	248	0	0	251	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	19	1012	0	0	1031	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	0	1.8	98.2	0	0		0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.594	.941	.000	.000	.944	.000	.000	.000	.000	.000



US 101 & Fir (turn lane to
Front)

SOUTHERN OREGON TRANSPORTATION ENGINEERING

Medford, Oregon 97504 | Kim.parducci@gmail.com | (541) 941-4148 cell

North-South: 101 Northbound
East-West: Front Street
Weather: Overcast
Veh Type: All Vehicles

File Name : 101NB-Front
Site Code : 00000005
Start Date : 4/11/2018
Page No : 1

Groups Printed- Unshifted

Start Time	From North					Front St From East					101 NB From South					From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
06:00 AM	0	0	0	0	0	0	0	0	0	0	0	58	0	0	58	0	0	0	0	0	0
06:15 AM	0	0	0	0	0	0	0	0	0	0	0	101	0	0	101	0	0	0	0	0	0
06:30 AM	0	0	0	0	0	0	0	1	0	1	0	105	0	0	105	0	0	0	0	0	0
06:45 AM	0	0	0	0	0	0	0	0	0	0	0	151	1	0	152	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	1	0	1	0	415	1	0	416	0	0	0	0	0	0
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	147	0	0	147	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	212	0	0	212	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	226	1	0	227	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	258	0	0	258	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	843	1	0	844	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	214	0	0	214	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	195	1	0	196	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	1	0	1	0	244	2	0	246	0	0	0	0	0	0
08:45 AM	0	0	0	1	1	0	0	0	0	0	0	219	4	0	223	0	0	0	0	0	0
Total	0	0	0	1	1	0	0	1	0	1	0	872	7	0	879	0	0	0	0	0	0
*** BREAK ***																					
03:00 PM	0	0	0	0	0	0	0	2	0	2	0	230	1	0	231	0	0	0	0	0	0
03:15 PM	0	0	0	0	0	0	0	0	0	0	0	241	2	0	243	0	0	0	0	0	0
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	251	1	0	252	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0	1	0	1	0	230	1	0	231	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	3	0	3	0	952	5	0	957	0	0	0	0	0	0
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	237	0	0	237	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	214	1	0	215	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	1	0	1	0	243	0	0	243	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	3	0	3	0	257	1	0	258	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	4	0	4	0	951	2	0	953	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	1	0	1	0	271	1	0	272	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	249	1	0	250	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	1	0	1	0	241	0	0	241	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	200	1	0	201	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	2	0	2	0	961	3	0	964	0	0	0	0	0	0
Grand Total	0	0	0	1	1	0	0	11	0	11	0	4994	19	0	5013	0	0	0	0	0	5025
Apprch %	0	0	0	100		0	0	100	0		0	99.6	0.4	0		0	0	0	0		
Total %	0	0	0	0	0	0	0	0.2	0	0.2	0	99.4	0.4	0	99.8	0	0	0	0	0	

SOUTHERN OREGON TRANSPORTATION ENGINEERING

Medford, Oregon 97504 | Kim.parducci@gmail.com | (541) 941-4148 cell

North-South: 101 Northbound
 East-West: Front Street
 Weather: Overcast
 Veh Type: All Vehicles

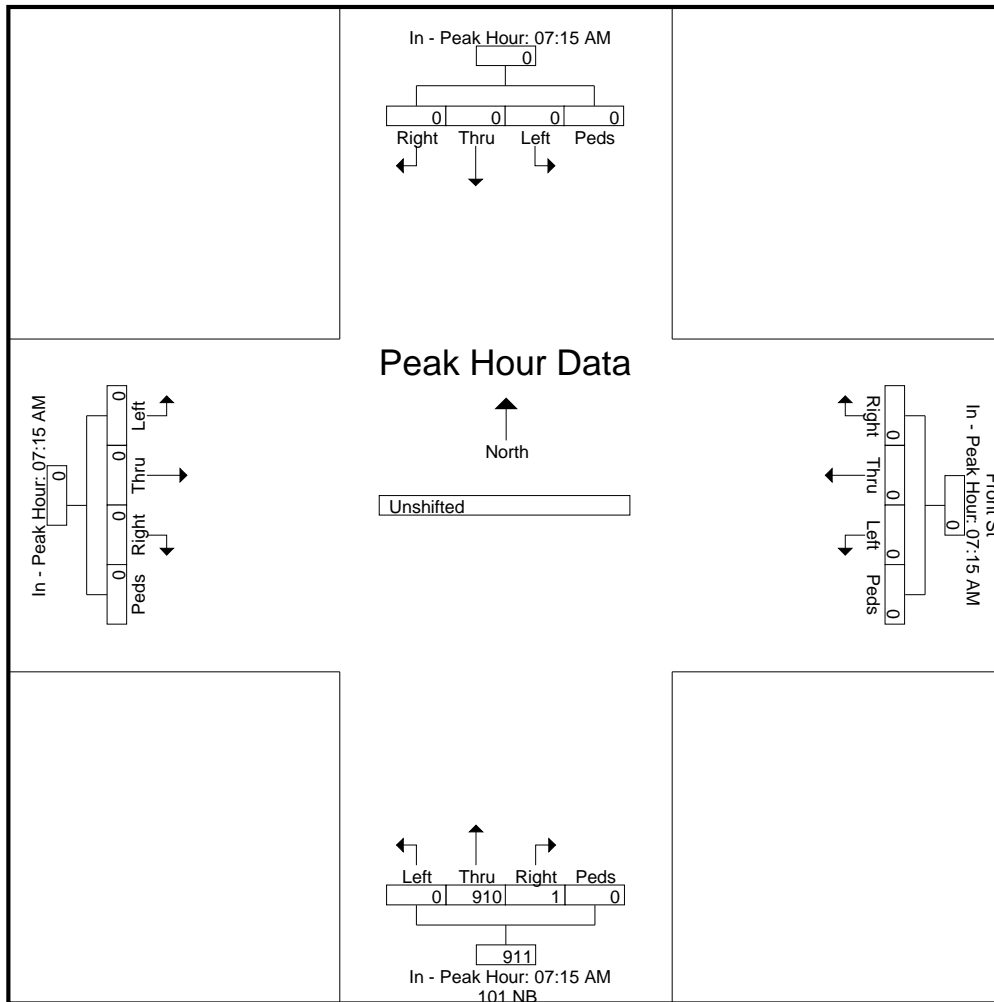
File Name : 101NB-Front
 Site Code : 00000005
 Start Date : 4/11/2018
 Page No : 2

Start Time	From North					Front St From East					101 NB From South					From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM					07:15 AM					07:15 AM					07:15 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	212	0	0	212	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	226	1	0	227	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	258	0	0	258	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	214	0	0	214	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	910	1	0	911	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	0	0	99.9	0.1	0		0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.882	.250	.000	.883	.000	.000	.000	.000	.000



SOUTHERNOREGON TRANSPORTATION ENGINEERING

Medford, Oregon 97504 | Kim.parducci@gmail.com | (541) 941-4148 cell

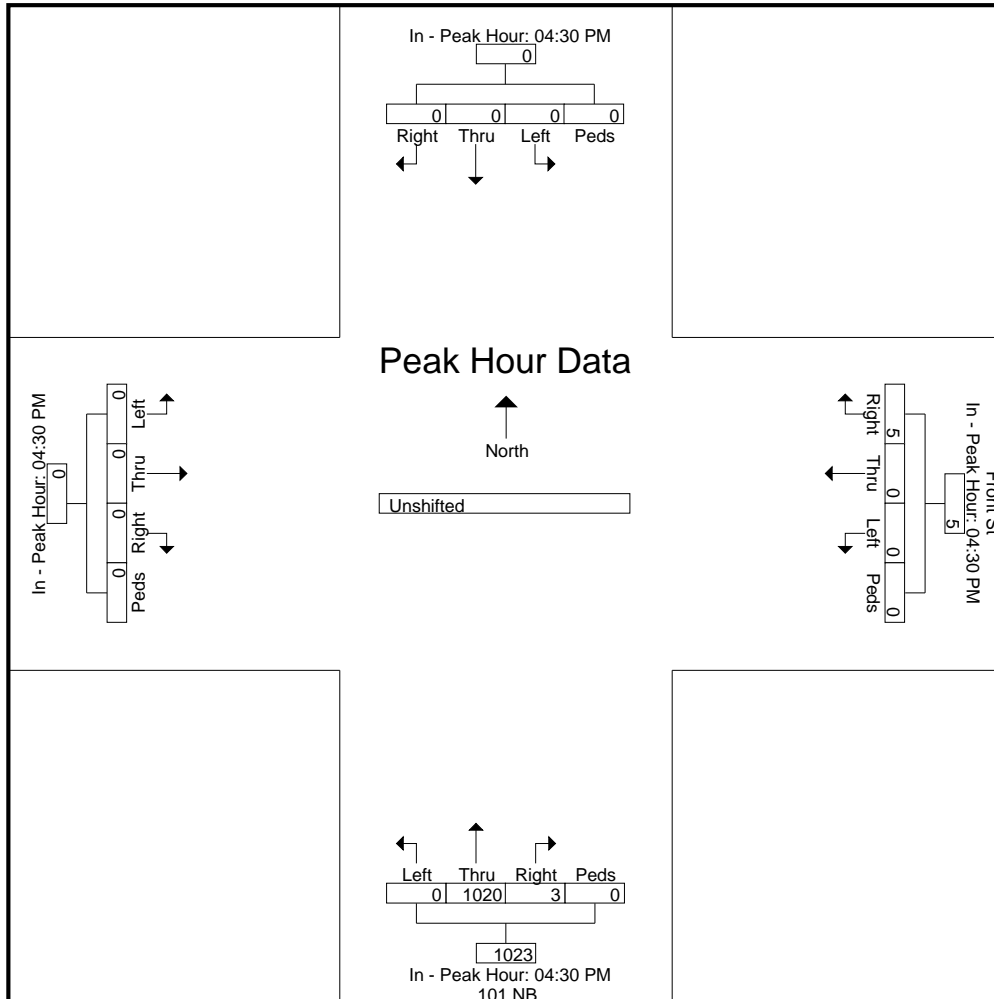
North-South: 101 Northbound
East-West: Front Street
Weather: Overcast
Veh Type: All Vehicles

File Name : 101NB-Front
Site Code : 00000005
Start Date : 4/11/2018
Page No : 3

Start Time	From North					Front St From East					101 NB From South					From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM					04:30 PM					04:30 PM					04:30 PM				
+0 mins.	0	0	0	0	0	0	0	1	0	1	0	243	0	0	243	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	3	0	3	0	257	1	0	258	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	1	0	1	0	271	1	0	272	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	249	1	0	250	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	5	0	5	0	1020	3	0	1023	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	100	0	0	0	99.7	0.3	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.417	.000	.417	.000	.941	.750	.000	.940	.000	.000	.000	.000	.000



Front St & Fir (turn lane to US
101)

SOUTHERN OREGON TRANSPORTATION ENGINEERING

Medford, Oregon 97504 | Kim.parducci@gmail.com | (541) 941-4148 cell

North-South: Front Street
 East-West: Front Street
 Weather: Overcast / 55 deg
 Veh Type: All Vehicles

File Name : FrontSt-Front
 Site Code : 00000007
 Start Date : 4/11/2018
 Page No : 1

Groups Printed- Unshifted

Start Time	Front St From North					From East					Front St From South					Front St From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
06:00 AM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
06:30 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 AM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	4
Total	0	6	1	0	7	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	9
07:00 AM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
07:15 AM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
07:30 AM	0	6	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	7
07:45 AM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Total	0	14	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	15
08:00 AM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
08:15 AM	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	1	0	1	5
08:30 AM	0	6	0	0	6	0	0	0	0	0	1	0	0	0	1	0	0	2	0	2	9
08:45 AM	0	4	0	0	4	0	0	0	0	0	0	1	0	0	1	0	0	4	0	4	9
Total	0	14	0	0	14	0	0	0	0	0	1	3	0	0	4	0	0	7	0	7	25
*** BREAK ***																					
03:00 PM	0	4	1	0	5	0	0	0	0	0	1	0	0	0	1	0	0	1	0	1	7
03:15 PM	0	1	0	0	1	0	0	0	0	0	1	1	0	0	2	1	0	1	0	2	5
03:30 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3
03:45 PM	0	2	0	0	2	0	0	0	0	0	1	0	0	0	1	1	0	0	0	1	4
Total	0	9	1	0	10	0	0	0	0	0	3	1	0	0	4	2	0	3	0	5	19
04:00 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
04:15 PM	0	4	0	0	4	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	6
04:30 PM	0	1	1	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
04:45 PM	0	3	0	0	3	0	0	0	0	0	3	2	0	0	5	1	0	0	0	1	9
Total	0	9	1	0	10	0	0	0	0	0	3	5	0	0	8	1	0	1	0	2	20
05:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	1	2
05:15 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3
05:30 PM	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	2
05:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
Total	0	4	0	0	4	0	0	0	0	0	2	0	0	0	2	2	0	1	0	3	9
Grand Total	0	56	3	0	59	0	0	0	0	0	9	10	0	0	19	5	0	14	0	19	97
Apprch %	0	94.9	5.1	0		0	0	0	0		47.4	52.6	0	0		26.3	0	73.7	0		
Total %	0	57.7	3.1	0	60.8	0	0	0	0	0	9.3	10.3	0	0	19.6	5.2	0	14.4	0	19.6	

SOUTHERN OREGON TRANSPORTATION ENGINEERING

Medford, Oregon 97504 | Kim.parducci@gmail.com | (541) 941-4148 cell

North-South: Front Street
 East-West: Front Street
 Weather: Overcast / 55 deg
 Veh Type: All Vehicles

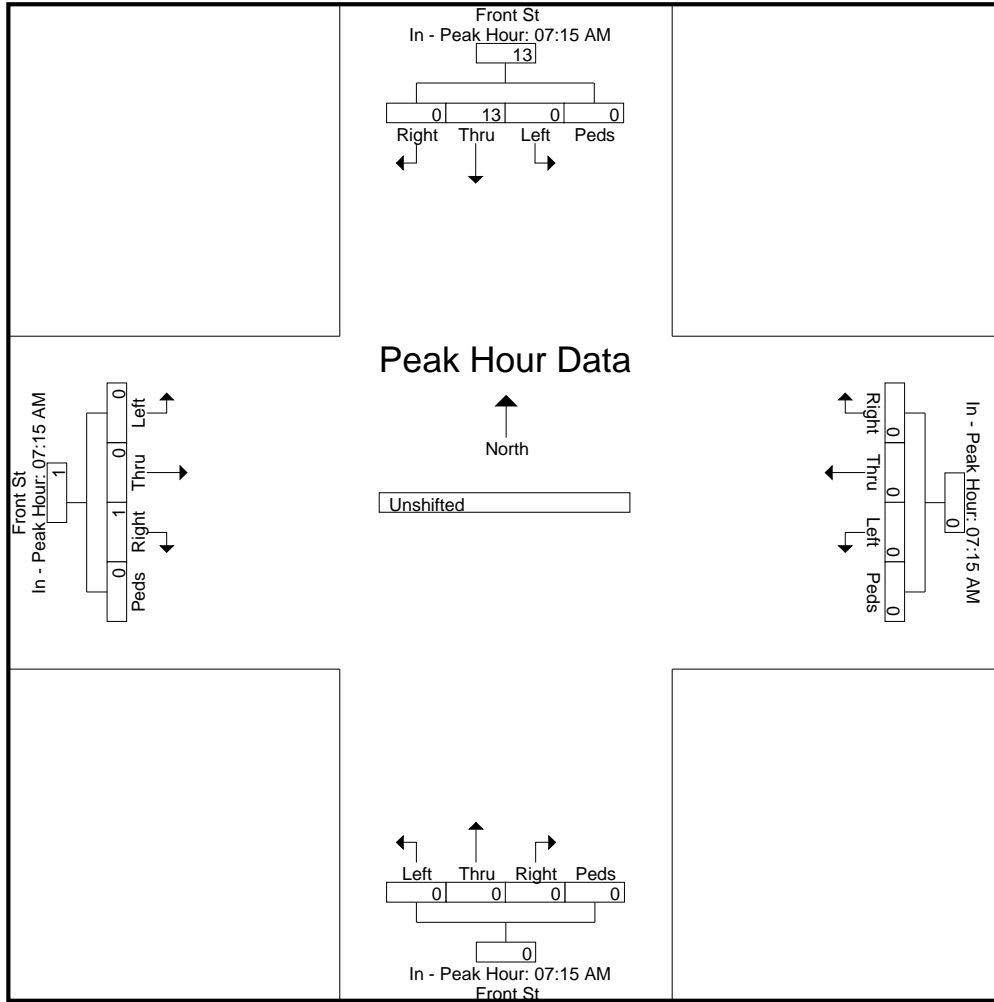
File Name : FrontSt-Front
 Site Code : 00000007
 Start Date : 4/11/2018
 Page No : 2

Start Time	Front St From North					From East					Front St From South					Front St From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM					07:15 AM					07:15 AM					07:15 AM									
+0 mins.	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	6	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
+30 mins.	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	13	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
% App. Total	0	100	0	0		0	0	0	0		0	0	0	0		0	0	100	0		0	0	0	0	
PHF	.000	.542	.000	.000	.542	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.250



SOUTHERN OREGON TRANSPORTATION ENGINEERING

Medford, Oregon 97504 | Kim.parducci@gmail.com | (541) 941-4148 cell

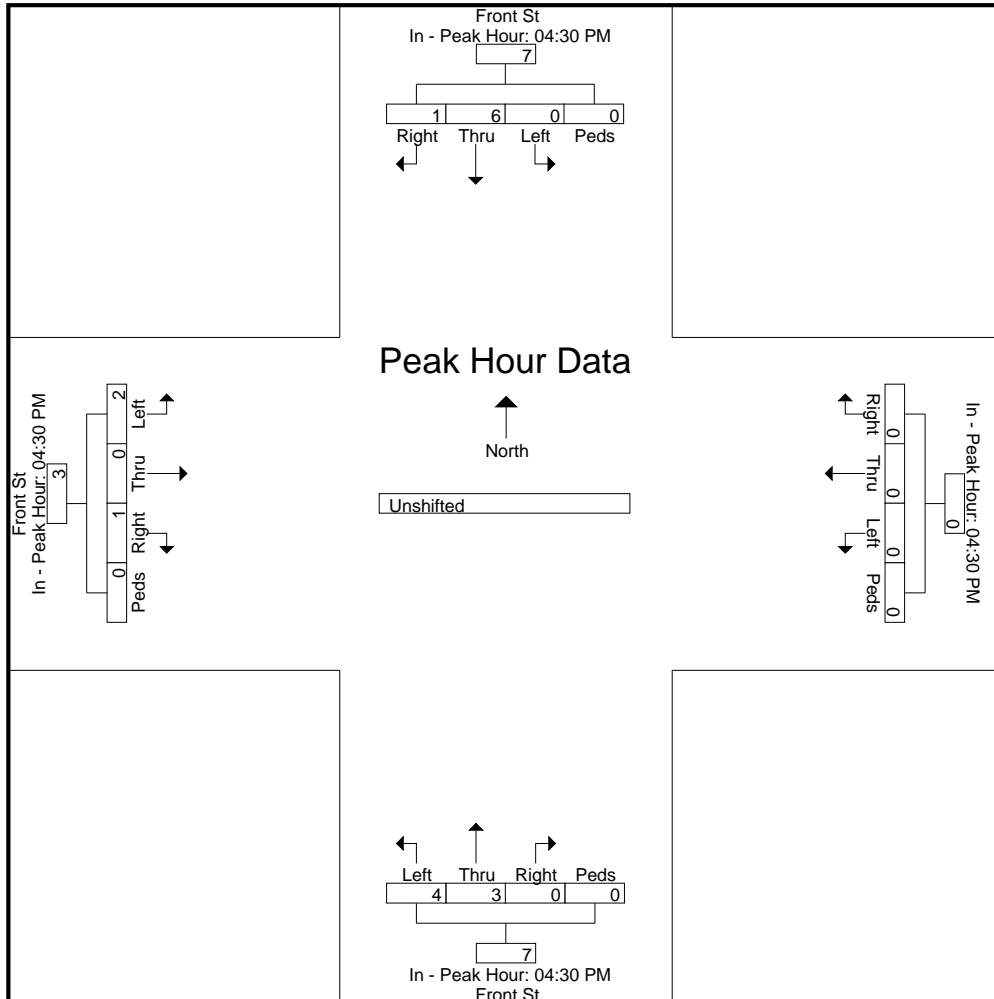
North-South: Front Street
 East-West: Front Street
 Weather: Overcast / 55 deg
 Veh Type: All Vehicles

File Name : FrontSt-Front
 Site Code : 00000007
 Start Date : 4/11/2018
 Page No : 3

Start Time	Front St From North					From East					Front St From South					Front St From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:30 PM					04:30 PM					04:30 PM					04:30 PM									
+0 mins.	0	1	1	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	3	0	0	3	0	0	0	0	0	3	2	0	0	5	1	0	0	0	1	1	0	0	0	1
+30 mins.	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	1
+45 mins.	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1
Total Volume	0	6	1	0	7	0	0	0	0	0	4	3	0	0	7	2	0	1	0	3	2	0	1	0	3
% App. Total	0	85.7	14.3	0		0	0	0	0		57.1	42.9	0	0		66.7	0	33.3	0		66.7	0	33.3	0	
PHF	.000	.500	.250	.000	.583	.000	.000	.000	.000	.000	.333	.375	.000	.000	.350	.500	.000	.250	.000	.750	.500	.000	.250	.000	.750



US 101 (NB) & Market

SOUTHERN OREGON TRANSPORTATION ENGINEERING

Medford, Oregon 97504 | Kim.parducci@gmail.com | (541) 941-4148 cell

North-South: US 101 NB
 East-West: Market Street / Front Street
 Weather: Overcast / 60 deg
 Veh Type: All Vehicles

File Name : Market-101NB_rec
 Site Code : 00000003
 Start Date : 4/10/2018
 Page No : 1

Groups Printed- Unshifted

Start Time	From North					Front St From East					US 101 NB From South					Market St From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
06:30 AM	0	0	0	0	0	0	0	1	0	1	3	123	1	0	127	2	0	0	0	2	130
06:45 AM	0	0	0	0	0	0	4	0	0	4	2	180	5	0	187	1	0	0	0	1	192
Total	0	0	0	0	0	0	4	1	0	5	5	303	6	0	314	3	0	0	0	3	322
07:00 AM	0	0	0	0	0	0	3	0	0	3	5	151	3	0	159	4	1	0	0	5	167
07:15 AM	0	0	0	0	0	0	0	0	0	0	7	202	5	0	214	4	2	0	0	6	220
07:30 AM	0	0	0	0	0	0	1	0	0	1	3	264	10	0	277	7	1	0	0	8	286
07:45 AM	0	0	0	0	0	0	3	0	0	3	16	270	9	0	295	10	1	0	0	11	309
Total	0	0	0	0	0	0	7	0	0	7	31	887	27	0	945	25	5	0	0	30	982
08:00 AM	0	0	0	0	0	0	1	1	0	2	9	198	3	1	211	6	0	0	0	6	219
08:15 AM	0	0	0	0	0	0	0	0	1	1	3	203	7	0	213	12	1	0	0	13	227
08:30 AM	0	0	0	0	0	0	1	1	0	2	9	237	3	0	249	10	0	0	0	10	261
08:45 AM	0	0	0	0	0	0	4	0	0	4	4	207	4	0	215	8	2	0	0	10	229
Total	0	0	0	0	0	0	6	2	1	9	25	845	17	1	888	36	3	0	0	39	936
09:00 AM	0	0	0	0	0	0	3	2	0	5	10	183	2	0	195	8	0	0	0	8	208
09:15 AM	0	0	0	0	0	0	2	0	0	2	4	187	5	1	197	10	3	0	0	13	212
*** BREAK ***																					
Total	0	0	0	0	0	0	5	2	0	7	14	370	7	1	392	18	3	0	0	21	420
*** BREAK ***																					
03:00 PM	0	0	0	0	0	0	19	2	0	21	6	258	6	1	271	7	1	0	2	10	302
03:15 PM	0	0	0	0	0	0	3	0	1	4	10	221	7	0	238	10	0	0	1	11	253
03:30 PM	0	0	0	0	0	0	1	2	0	3	12	234	4	0	250	15	0	0	0	15	268
03:45 PM	0	0	0	0	0	0	6	1	0	7	9	238	7	1	255	20	0	0	0	20	282
Total	0	0	0	0	0	0	29	5	1	35	37	951	24	2	1014	52	1	0	3	56	1105
04:00 PM	0	0	0	0	0	0	9	3	1	13	7	235	6	0	248	17	0	0	0	17	278
04:15 PM	0	0	0	0	0	0	7	0	0	7	10	234	9	0	253	12	1	0	0	13	273
04:30 PM	0	0	0	0	0	0	14	2	0	16	8	232	1	0	241	15	0	0	0	15	272
04:45 PM	0	0	0	0	0	0	5	3	0	8	7	253	4	1	265	11	0	0	0	11	284
Total	0	0	0	0	0	0	35	8	1	44	32	954	20	1	1007	55	1	0	0	56	1107
05:00 PM	0	0	0	0	0	0	10	2	1	13	7	240	2	0	249	15	0	0	3	18	280
05:15 PM	0	0	0	0	0	0	6	0	2	8	9	256	5	1	271	4	0	0	2	6	285
05:30 PM	0	0	0	0	0	0	3	1	1	5	5	197	0	2	204	11	0	0	1	12	221
05:45 PM	0	0	0	0	0	0	5	1	0	6	6	194	1	2	203	5	1	0	1	7	216
Total	0	0	0	0	0	0	24	4	4	32	27	887	8	5	927	35	1	0	7	43	1002
Grand Total	0	0	0	0	0	0	110	22	7	139	171	5197	109	10	5487	224	14	0	10	248	5874
Apprch %	0	0	0	0	0	0	79.1	15.8	5		3.1	94.7	2	0.2		90.3	5.6	0	4		
Total %	0	0	0	0	0	0	1.9	0.4	0.1	2.4	2.9	88.5	1.9	0.2	93.4	3.8	0.2	0	0.2	4.2	

SOUTHERN OREGON TRANSPORTATION ENGINEERING

Medford, Oregon 97504 | Kim.parducci@gmail.com | (541) 941-4148 cell

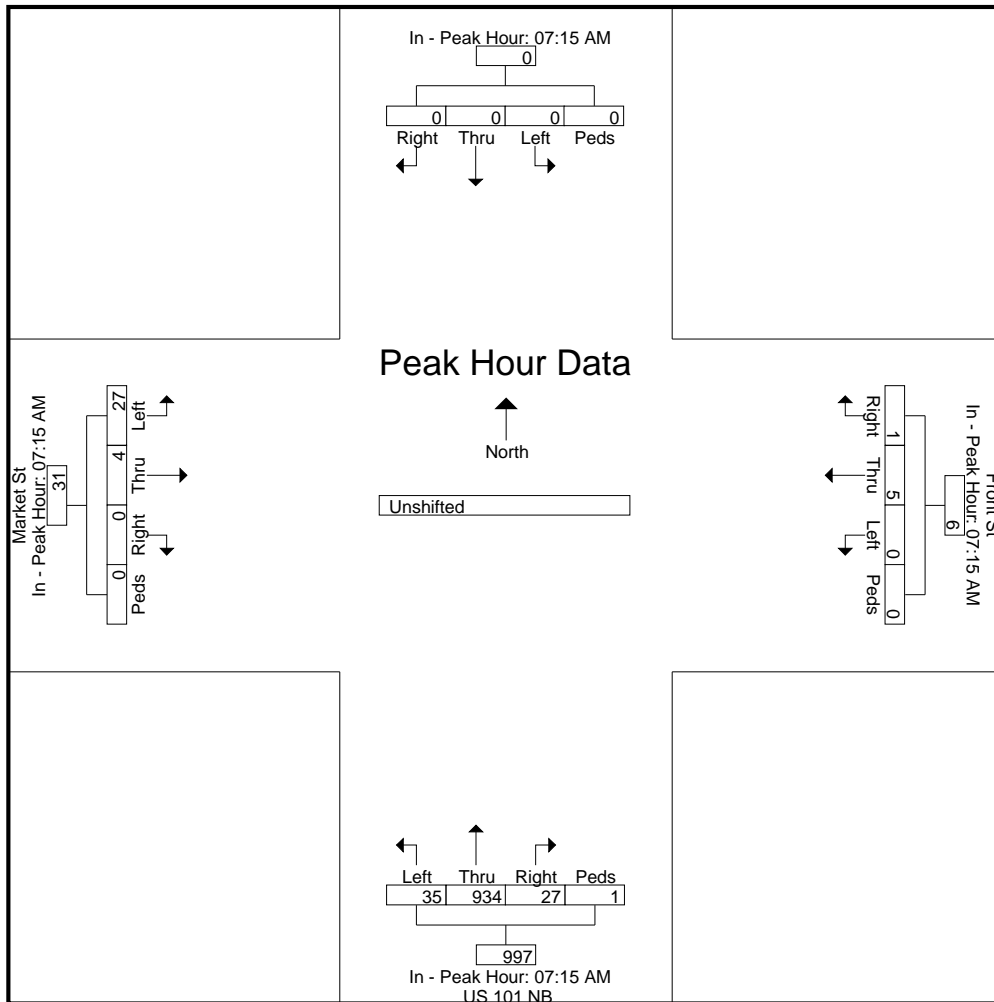
North-South: US 101 NB
 East-West: Market Street / Front Street
 Weather: Overcast / 60 deg
 Veh Type: All Vehicles

File Name : Market-101NB_rec
 Site Code : 00000003
 Start Date : 4/10/2018
 Page No : 2

Start Time	From North					Front St From East					US 101 NB From South					Market St From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM					07:15 AM					07:15 AM					07:15 AM					
+0 mins.	0	0	0	0	0	0	0	0	0	0	7	202	5	0	214	4	2	0	0	6	
+15 mins.	0	0	0	0	0	0	1	0	0	1	3	264	10	0	277	7	1	0	0	8	
+30 mins.	0	0	0	0	0	0	3	0	0	3	16	270	9	0	295	10	1	0	0	11	
+45 mins.	0	0	0	0	0	0	1	1	0	2	9	198	3	1	211	6	0	0	0	6	
Total Volume	0	0	0	0	0	0	5	1	0	6	35	934	27	1	997	27	4	0	0	31	
% App. Total	0	0	0	0	0	0	83.3	16.7	0		3.5	93.7	2.7	0.1		87.1	12.9	0	0		
PHF	.000	.000	.000	.000	.000	.000	.417	.250	.000	.500	.547	.865	.675	.250	.845	.675	.500	.000	.000	.705	



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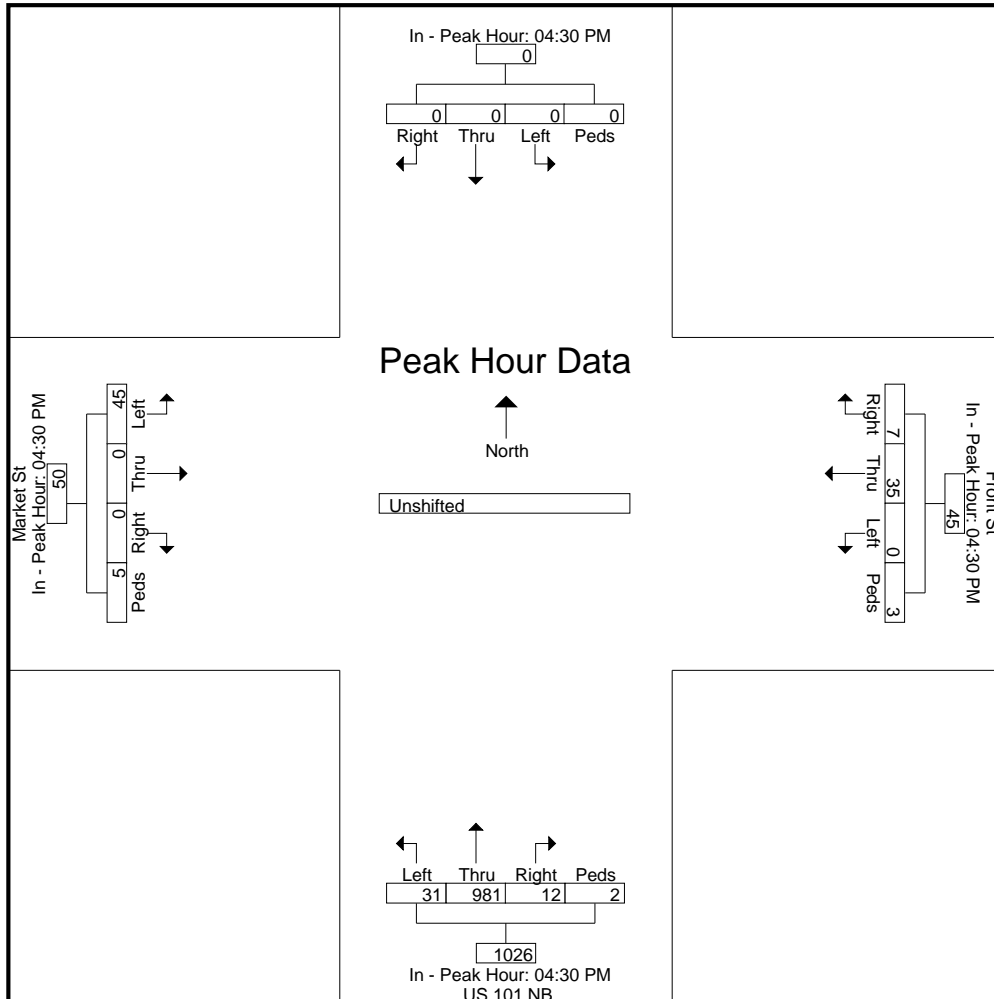
North-South: US 101 NB
 East-West: Market Street / Front Street
 Weather: Overcast / 60 deg
 Veh Type: All Vehicles

File Name : Market-101NB_rec
 Site Code : 00000003
 Start Date : 4/10/2018
 Page No : 3

Start Time	From North					Front St From East					US 101 NB From South					Market St From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:30 PM					04:30 PM					04:30 PM					04:30 PM				
+0 mins.	0	0	0	0	0	0	14	2	0	16	8	232	1	0	241	15	0	0	0	15
+15 mins.	0	0	0	0	0	0	5	3	0	8	7	253	4	1	265	11	0	0	0	11
+30 mins.	0	0	0	0	0	0	10	2	1	13	7	240	2	0	249	15	0	0	3	18
+45 mins.	0	0	0	0	0	0	6	0	2	8	9	256	5	1	271	4	0	0	2	6
Total Volume	0	0	0	0	0	0	35	7	3	45	31	981	12	2	1026	45	0	0	5	50
% App. Total	0	0	0	0	0	0	77.8	15.6	6.7		3	95.6	1.2	0.2		90	0	0	10	
PHF	.000	.000	.000	.000	.000	.000	.625	.583	.375	.703	.861	.958	.600	.500	.946	.750	.000	.000	.417	.694



US 101 (NB) & Cedar

Transportation Development Division Transportation System Monitoring Unit Vehicular Volume

Time settings

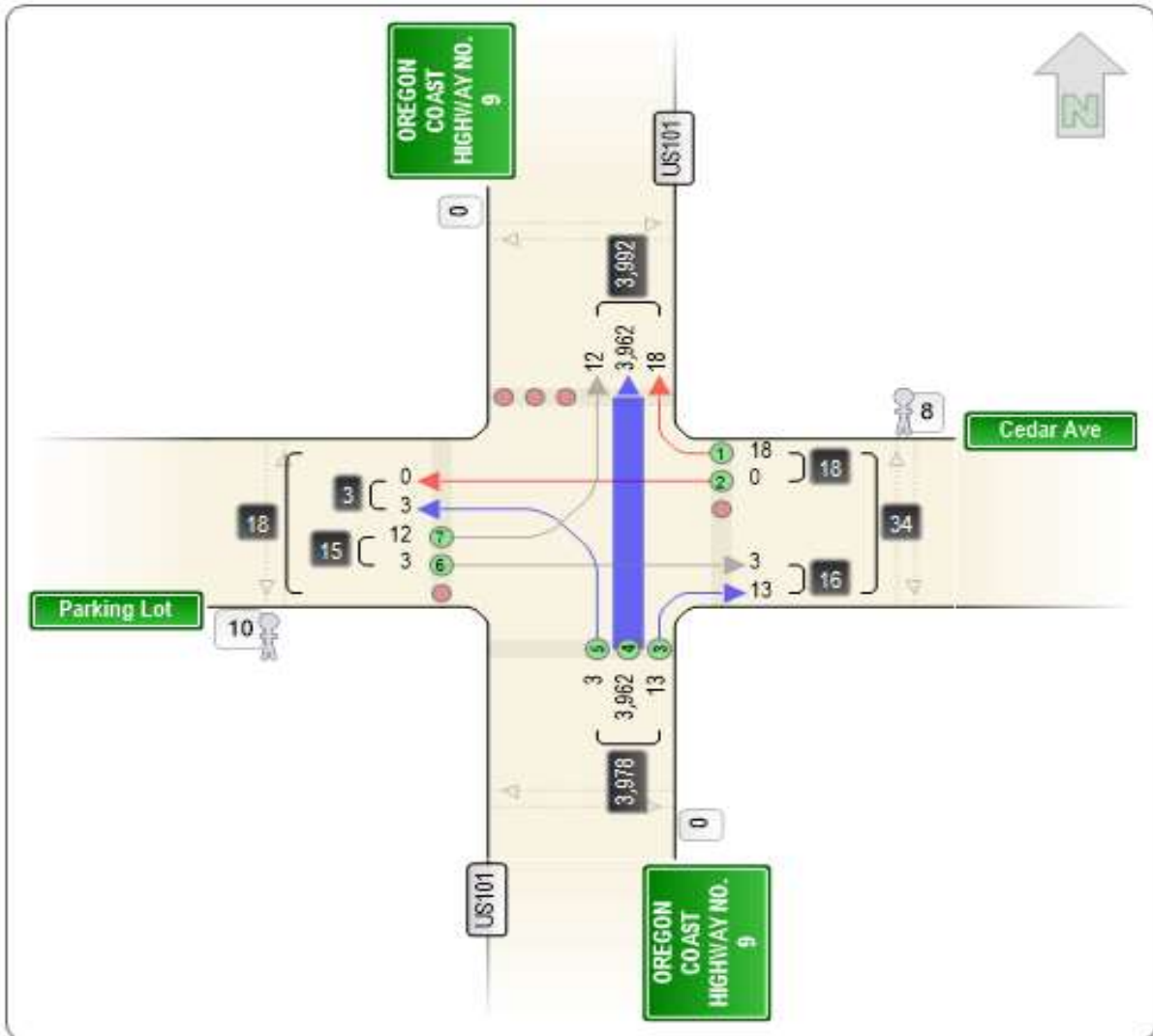
Date: 3/10/2020
Hours: 2:00 PM-6:00 PM
Weather:

Source

Site Number: 49316
Mile Point: 237.93
Street Number: 009
Vehicle Type: Vehicles
Crossing Flow: Pedestrians

Source Description

Location Description: OREGON COAST HIGHWAY NO. 9 (US101) at Cedar Ave
County: Coos
City: Coos Bay



**Summary of Traffic Count
Transportation Development Division**

Site: 49316

Date: 3/10/2020

County: Coos

Hours: 2:00 PM-6:00 PM

City: Coos Bay

Highway #: 009

OREGON COAST HIGHWAY

Milepoint: 237.93

Location: NO. 9 (US101) at Cedar Ave

Count Number:

Weather:

Time of Day	Summary By Movements									Entering Volumes		
	E-N	E-W	S-N	S-E	S-W	W-N	W-E		TOTAL	East	South	West
14:00	2	0	245	1	1	0	0		249	2	247	0
14:15	0	0	234	1	0	0	0		235	0	235	0
14:30	0	0	224	1	1	1	0		227	0	226	1
14:45	1	0	262	1	0	4	0		268	1	263	4
15:00	1	0	234	0	0	0	0		235	1	234	0
15:15	1	0	258	0	0	0	1		260	1	258	1
15:30	0	0	256	0	0	3	1		260	0	256	4
15:45	3	0	270	0	0	0	0		273	3	270	0
16:00	1	0	257	1	1	1	0		261	1	259	1
16:15	3	0	255	4	0	1	0		263	3	259	1
16:30	1	0	255	0	0	1	1		258	1	255	2
16:45	1	0	247	0	0	0	0		248	1	247	0
17:00	1	0	271	1	0	0	0		273	1	272	0
17:15	1	0	256	0	0	1	0		258	1	256	1
17:30	1	0	238	0	0	0	0		239	1	238	0
17:45	1	0	200	3	0	0	0		204	1	203	0
Total Count	18	0	3962	13	3	12	3		4011	18	3978	15
24hr Factor	1	1	1	1	1	1	1		1	1	1	1
24hr Volume	18	0	3962	13	3	12	3		4011	18	3978	15

Vehicular Volume
Transportation Development Division

Site: 49316

Date: 3/10/2020

County: Coos

Hours: 2:00 PM-6:00 PM

City: Coos Bay

Highway #: 009

Milepoint: 237.93

Location: OREGON COAST HIGHWAY NO. 9

Count Number:

Weather:

From North	0	From South	3978
North to N	0	South to N	3962
North to NE	0	South to NE	0
North to E	0	South to E	13
North to SE	0	South to SE	0
North to S	0	South to S	0
North to SW	0	South to SW	0
North to W	0	South to W	3
North to NW	0	South to NW	0
To North	3992	To South	0

From NE	0	From SW	0
NE to N	0	SW to N	0
NE to NE	0	SW to NE	0
NE to E	0	SW to E	0
NE to SE	0	SW to SE	0
NE to S	0	SW to S	0
NE to SW	0	SW to SW	0
NE to W	0	SW to W	0
NE to NW	0	SW to NW	0
To NE	0	To SW	0

From East	18	From West	15
East to N	18	West to N	12
East to NE	0	West to NE	0
East to E	0	West to E	3
East to SE	0	West to SE	0
East to S	0	West to S	0
East to SW	0	West to SW	0
East to W	0	West to W	0
East to NW	0	West to NW	0
To East	16	To West	3

From SE	0	From NW	0
SE to N	0	NW to N	0
SE to NE	0	NW to NE	0
SE to E	0	NW to E	0
SE to SE	0	NW to SE	0
SE to S	0	NW to S	0
SE to SW	0	NW to SW	0
SE to W	0	NW to W	0
SE to NW	0	NW to NW	0
To SE	0	To NW	0

**Summary Of Traffic Count
Transportation Development Division**

Site: 49316	Date: 3/10/2020
County: Coos	Hours: 2:00 PM-6:00 PM
City: Coos Bay	Highway #: 009
Milepoint: 237.93	OREGON COAST HIGHWAY
Count Number:	Location: NO. 9 (US101) at Cedar Ave
	Weather:

Time of Day	Total Volume	East and West	% of Total	South and North	% of Total	Entering Volumes		
						East	South	West
14:00	249	2	0.8	247	99.2	2	247	0
14:15	235	0	0	235	100	0	235	0
14:30	227	1	0.4	226	99.6	0	226	1
14:45	268	5	1.9	263	98.1	1	263	4
15:00	235	1	0.4	234	99.6	1	234	0
15:15	260	2	0.8	258	99.2	1	258	1
15:30	260	4	1.5	256	98.5	0	256	4
15:45	273	3	1.1	270	98.9	3	270	0
16:00	261	2	0.8	259	99.2	1	259	1
16:15	263	4	1.5	259	98.5	3	259	1
16:30	258	3	1.2	255	98.8	1	255	2
16:45	248	1	0.4	247	99.6	1	247	0
17:00	273	1	0.4	272	99.6	1	272	0
17:15	258	2	0.8	256	99.2	1	256	1
17:30	239	1	0.4	238	99.6	1	238	0
17:45	204	1	0.5	203	99.5	1	203	0
Total Count	4011	33	1	3978	100	18	3978	15
24hr Factor	1	1		1		1	1	1
24hr Volume	4011	33	1	3978	100	18	3978	15

Traffic Count Summary Sheet
Transportation Development Division (S-N)

Site: 49316
 County: Coos
 City: Coos Bay

Date: 3/10/2020
 Hours: 2:00 PM-6:00 PM
 Highway #: 009
 OREGON COAST HIGHWAY NO. 9
 Location: (US101) at Cedar Ave
 Weather:

Milepoint: 237.93
 Count Number:

Time of Day	Car	Lt Truck	Sgl. Unit Truck			Sgl. Trailer Truck			Multi Trailer Truck			Bus	Motor-cycle	Vehicles	Bicycle
			2 Axl	3 Axl	4+ Axl	4- Axl	5 Axl	6+ Axl	5- Axl	6 Axl	7+ Axl				
14:00	157	69	6	0	1	1	4	3	0	0	1	1	2	245	0
14:15	156	66	3	1	1	1	2	1	0	0	1	1	1	234	0
14:30	146	62	4	1	1	1	2	4	0	0	2	0	1	224	0
14:45	176	69	6	1	0	1	3	2	0	0	1	1	2	262	0
15:00	146	76	6	0	0	0	2	2	0	0	0	1	1	234	0
15:15	162	75	7	1	0	1	4	4	0	0	1	2	1	258	0
15:30	158	76	8	0	0	1	3	5	0	0	0	2	3	256	0
15:45	181	77	8	1	0	0	1	1	0	0	1	0	0	270	1
16:00	155	87	8	1	0	0	2	4	0	0	0	0	0	257	0
16:15	166	75	8	0	0	0	0	2	0	0	0	1	3	255	0
16:30	162	76	10	2	0	0	0	2	0	0	0	1	2	255	0
16:45	163	76	6	0	0	1	1	0	0	0	0	0	0	247	0
17:00	188	64	9	0	0	2	2	4	1	0	0	1	0	271	0
17:15	179	69	5	2	0	1	0	0	0	0	0	0	0	256	0
17:30	162	69	2	2	0	0	0	3	0	0	0	0	0	238	0
17:45	140	52	4	1	0	0	0	1	0	0	0	0	2	200	0
Total	2597	1138	100	13	3	10	26	38	1	0	7	11	18	3962	1

**Summary Of Bicycle Count
Transportation Development Division**

Site: 49316

Date: 3/10/2020

County: Coos

Hours: 2:00 PM-6:00 PM

City: Coos Bay

Highway #: 009

OREGON COAST HIGHWAY

Milepoint: 237.93

Location: NO. 9 (US101) at Cedar Ave

Count Number:

Weather:

Time of Day	Summary By Movements									Entering Volumes		
	E-N	E-W	S-N	S-E	S-W	W-N	W-E		TOTAL	East	South	West
14:00	0	0	0	0	0	0	0		0	0	0	0
14:15	0	0	0	0	0	0	0		0	0	0	0
14:30	0	0	0	0	0	0	0		0	0	0	0
14:45	0	0	0	0	0	0	0		0	0	0	0
15:00	0	0	0	0	0	0	0		0	0	0	0
15:15	0	0	0	0	0	0	0		0	0	0	0
15:30	0	0	0	0	0	0	0		0	0	0	0
15:45	0	0	1	0	0	0	0		1	0	1	0
16:00	0	0	0	0	0	0	0		0	0	0	0
16:15	0	0	0	0	0	0	0		0	0	0	0
16:30	0	0	0	0	0	0	0		0	0	0	0
16:45	0	0	0	0	0	0	0		0	0	0	0
17:00	0	0	0	0	0	0	0		0	0	0	0
17:15	0	0	0	0	0	0	0		0	0	0	0
17:30	0	0	0	0	0	0	0		0	0	0	0
17:45	0	0	0	0	0	0	0		0	0	0	0
Total Count	0	0	1	0	0	0	0		1	0	1	0
24hr Factor	1	1	1	1	1	1	1		1	1	1	1
24hr Volume	0	0	1	0	0	0	0		1	0	1	0

**Summary Of Pedestrian Count
Transportation Development Division**

Site: 49316

Date: 3/10/2020

County: Coos

Hours: 2:00 PM-6:00 PM

City: Coos Bay

Highway #: 009

OREGON COAST HIGHWAY

Milepoint: 237.93

Location: NO. 9 (US101) at Cedar Ave

Count Number:

Weather:

Time of Day	Pedestrian (Bike)				Pedestrian (Other)			
	North	East	South	West	North	East	South	West
14:00						1		1
14:15						1		2
14:30								1
14:45								1
15:00								
15:15		1				2		1
15:30						1		
15:45						1		1
16:00								1
16:15								1
16:30								
16:45								
17:00								1
17:15		1						
17:30								
17:45								
Total	0	2	0	0	0	6	0	10

Front St & Alder

Transportation Development Division Transportation System Monitoring Unit Vehicular Volume

Time settings

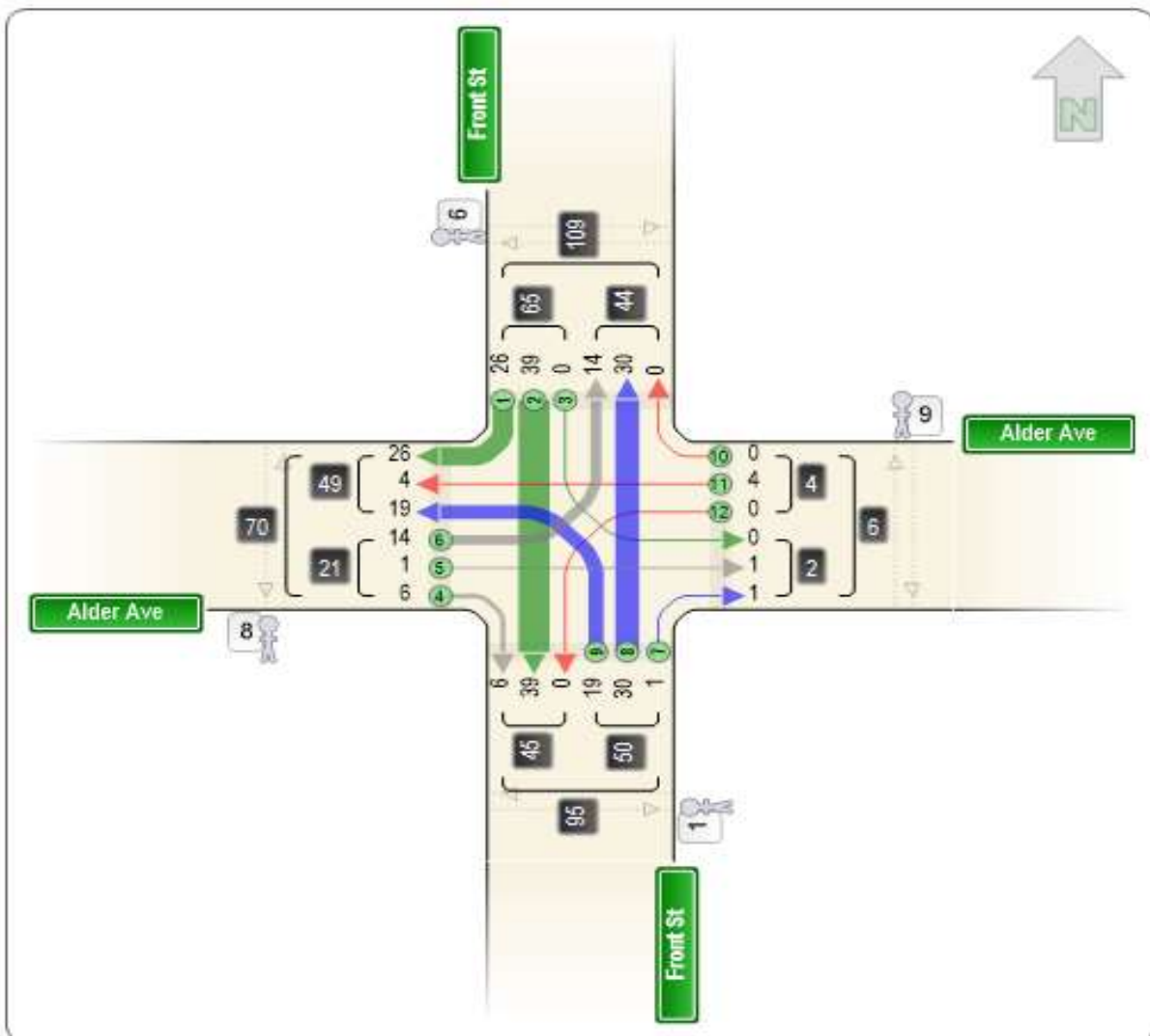
Date: 3/10/2020
 Hours: 2:00 PM-6:00 PM
 Weather: Clear

Source

Site Number: 49317
 Street Number: 000
 Vehicle Type: Vehicles
 Crossing Flow: Pedestrians

Source Description

Location Description: Front St at Alder Ave
 County: Coos
 City: Coos Bay



**Summary of Traffic Count
Transportation Development Division**

Site: 49317
County: Coos
City: Coos Bay

Date: 3/10/2020
Hours: 2:00 PM-6:00 PM
Highway #: 000

Milepoint:
Count Number: 1.00

Location: Front St at Alder Ave
Weather: Clear

Time of Day	Summary By Movements													Entering Volumes				
	N-E	N-S	N-W	E-N	E-S	E-W	S-N	S-E	S-W	W-N	W-E	W-S		TOTAL	North	East	South	West
14:00	0	3	2	0	0	0	4	0	0	0	0	1		10	5	0	4	1
14:15	0	3	1	0	0	1	1	0	1	1	0	0		8	4	1	2	1
14:30	0	1	4	0	0	0	2	0	2	1	0	0		10	5	0	4	1
14:45	0	2	3	0	0	0	3	0	1	1	0	3		13	5	0	4	4
15:00	0	2	3	0	0	0	3	0	1	1	0	0		10	5	0	4	1
15:15	0	3	1	0	0	0	4	0	0	1	0	1		10	4	0	4	2
15:30	0	8	2	0	0	0	5	0	2	2	0	0		19	10	0	7	2
15:45	0	2	1	0	0	0	0	0	0	2	0	0		5	3	0	0	2
16:00	0	4	0	0	0	0	1	0	3	2	0	0		10	4	0	4	2
16:15	0	3	2	0	0	0	2	0	2	0	0	0		9	5	0	4	0
16:30	0	1	1	0	0	1	0	0	1	0	1	0		5	2	1	1	1
16:45	0	1	3	0	0	0	3	0	1	0	0	0		8	4	0	4	0
17:00	0	1	2	0	0	0	2	1	4	1	0	1		12	3	0	7	2
17:15	0	3	0	0	0	2	0	0	0	1	0	0		6	3	2	0	1
17:30	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0
17:45	0	2	1	0	0	0	0	0	1	1	0	0		5	3	0	1	1
Total Count	0	39	26	0	0	4	30	1	19	14	1	6		140	65	4	50	21
24hr Factor	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1
24hr Volume	0	39	26	0	0	4	30	1	19	14	1	6		140	65	4	50	21

Vehicular Volume
Transportation Development Division

Site: 49317

Date: 3/10/2020

County: Coos

Hours: 2:00 PM-6:00 PM

City: Coos Bay

Highway #: 000

Milepoint:

Location: Front St at Alder Ave

Count Number: 1.00

Weather: Clear

From North	65	From South	50
North to N	0	South to N	30
North to NE	0	South to NE	0
North to E	0	South to E	1
North to SE	0	South to SE	0
North to S	39	South to S	0
North to SW	0	South to SW	0
North to W	26	South to W	19
North to NW	0	South to NW	0
To North	44	To South	45
From NE	0	From SW	0
NE to N	0	SW to N	0
NE to NE	0	SW to NE	0
NE to E	0	SW to E	0
NE to SE	0	SW to SE	0
NE to S	0	SW to S	0
NE to SW	0	SW to SW	0
NE to W	0	SW to W	0
NE to NW	0	SW to NW	0
To NE	0	To SW	0
From East	4	From West	21
East to N	0	West to N	14
East to NE	0	West to NE	0
East to E	0	West to E	1
East to SE	0	West to SE	0
East to S	0	West to S	6
East to SW	0	West to SW	0
East to W	4	West to W	0
East to NW	0	West to NW	0
To East	2	To West	49
From SE	0	From NW	0
SE to N	0	NW to N	0
SE to NE	0	NW to NE	0
SE to E	0	NW to E	0
SE to SE	0	NW to SE	0
SE to S	0	NW to S	0
SE to SW	0	NW to SW	0
SE to W	0	NW to W	0
SE to NW	0	NW to NW	0
To SE	0	To NW	0

**Summary Of Traffic Count
Transportation Development Division**

Site: 49317 Date: 3/10/2020
 County: Coos Hours: 2:00 PM-6:00 PM
 City: Coos Bay Highway #: 000

Milepoint: Location: Front St at Alder Ave
 Count Number: 1.00 Weather: Clear

Time of Day	Total Volume	North and South	% of Total	East and West	% of Total				Entering Volumes			
									North	East	South	West
14:00	10	9	90	1	10				5	0	4	1
14:15	8	6	75	2	25				4	1	2	1
14:30	10	9	90	1	10				5	0	4	1
14:45	13	9	69.2	4	30.8				5	0	4	4
15:00	10	9	90	1	10				5	0	4	1
15:15	10	8	80	2	20				4	0	4	2
15:30	19	17	89.5	2	10.5				10	0	7	2
15:45	5	3	60	2	40				3	0	0	2
16:00	10	8	80	2	20				4	0	4	2
16:15	9	9	100	0	0				5	0	4	0
16:30	5	3	60	2	40				2	1	1	1
16:45	8	8	100	0	0				4	0	4	0
17:00	12	10	83.3	2	16.7				3	0	7	2
17:15	6	3	50	3	50				3	2	0	1
17:30	0	0	0	0	0				0	0	0	0
17:45	5	4	80	1	20				3	0	1	1
Total Count	140	115	83	25	18	0			65	4	50	21
24hr Factor	1	1		1		1			1	1	1	1
24hr Volume	140	115	83	25	18	0			65	4	50	21

Traffic Count Summary Sheet
Transportation Development Division (N-W)

Site: 49317
 County: Coos
 City: Coos Bay

Date: 3/10/2020
 Hours: 2:00 PM-6:00 PM
 Highway #: 000

Milepoint:
 Count Number: 1.00

Location: Front St at Alder Ave
 Weather: Clear

Time of Day	Car	Lt Truck	Sgl. Unit Truck			Sgl. Trailer Truck			Multi Trailer Truck			Bus	Motor-cycle	Vehicles	Bicycle
			2 Axl	3 Axl	4+ Axl	4- Axl	5 Axl	6+ Axl	5- Axl	6 Axl	7+ Axl				
14:00	1	0	1	0	0	0	0	0	0	0	0	0	0	2	0
14:15	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
14:30	1	2	0	0	0	0	0	0	0	0	0	0	1	4	0
14:45	3	0	0	0	0	0	0	0	0	0	0	0	0	3	0
15:00	2	1	0	0	0	0	0	0	0	0	0	0	0	3	0
15:15	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
15:30	1	1	0	0	0	0	0	0	0	0	0	0	0	2	0
15:45	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0
16:30	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
16:45	1	1	1	0	0	0	0	0	0	0	0	0	0	3	0
17:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
Total	15	8	2	0	0	0	0	0	0	0	0	0	1	26	0

**Summary Of Bicycle Count
Transportation Development Division**

Site: 49317
County: Coos
City: Coos Bay

Date: 3/10/2020
Hours: 2:00 PM-6:00 PM
Highway #: 000

Milepoint:
Count Number: 1.00

Location: Front St at Alder Ave
Weather: Clear

Time of Day	Summary By Movements													Entering Volumes				
	N-E	N-S	N-W	E-N	E-S	E-W	S-N	S-E	S-W	W-N	W-E	W-S		TOTAL	North	East	South	West
14:00	0	0	0	0	0	0	1	0	0	0	0	0		1	0	0	1	0
14:15	0	1	0	0	0	0	0	0	0	0	0	0		1	1	0	0	0
14:30	0	0	0	0	0	0	1	0	0	0	0	0		1	0	0	1	0
14:45	0	1	0	0	0	0	0	0	0	0	0	0		1	1	0	0	0
15:00	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	1	0	0	0		1	0	0	1	0
15:30	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0
16:30	0	2	0	0	0	0	0	0	0	0	0	0		2	2	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0
17:30	0	0	0	0	0	0	1	0	0	0	0	0		1	0	0	1	0
17:45	0	1	0	0	0	0	0	0	0	0	0	0		1	1	0	0	0
Total Count	0	5	0	0	0	0	3	0	1	0	0	0		9	5	0	4	0
24hr Factor	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1
24hr Volume	0	5	0	0	0	0	3	0	1	0	0	0		9	5	0	4	0

Summary Of Pedestrian Count Transportation Development Division

Site: 49317 Date: 3/10/2020
 County: Coos Hours: 2:00 PM-6:00 PM
 City: Coos Bay Highway #: 000

Milepoint: Location: Front St at Alder Ave
 Count Number: 1.00 Weather: Clear

Time of Day	Pedestrian (Bike)				Pedestrian (Other)			
	North	East	South	West	North	East	South	West
14:00								
14:15								1
14:30								
14:45								
15:00								2
15:15						2		
15:30						1	1	1
15:45					1			
16:00								
16:15								
16:30						1		
16:45					3	2		3
17:00						1		
17:15						1		
17:30					2	1		
17:45								1
Total	0	0	0	0	6	9	1	8

Front St & Cedar

Transportation Development Division Transportation System Monitoring Unit Vehicular Volume

Time settings

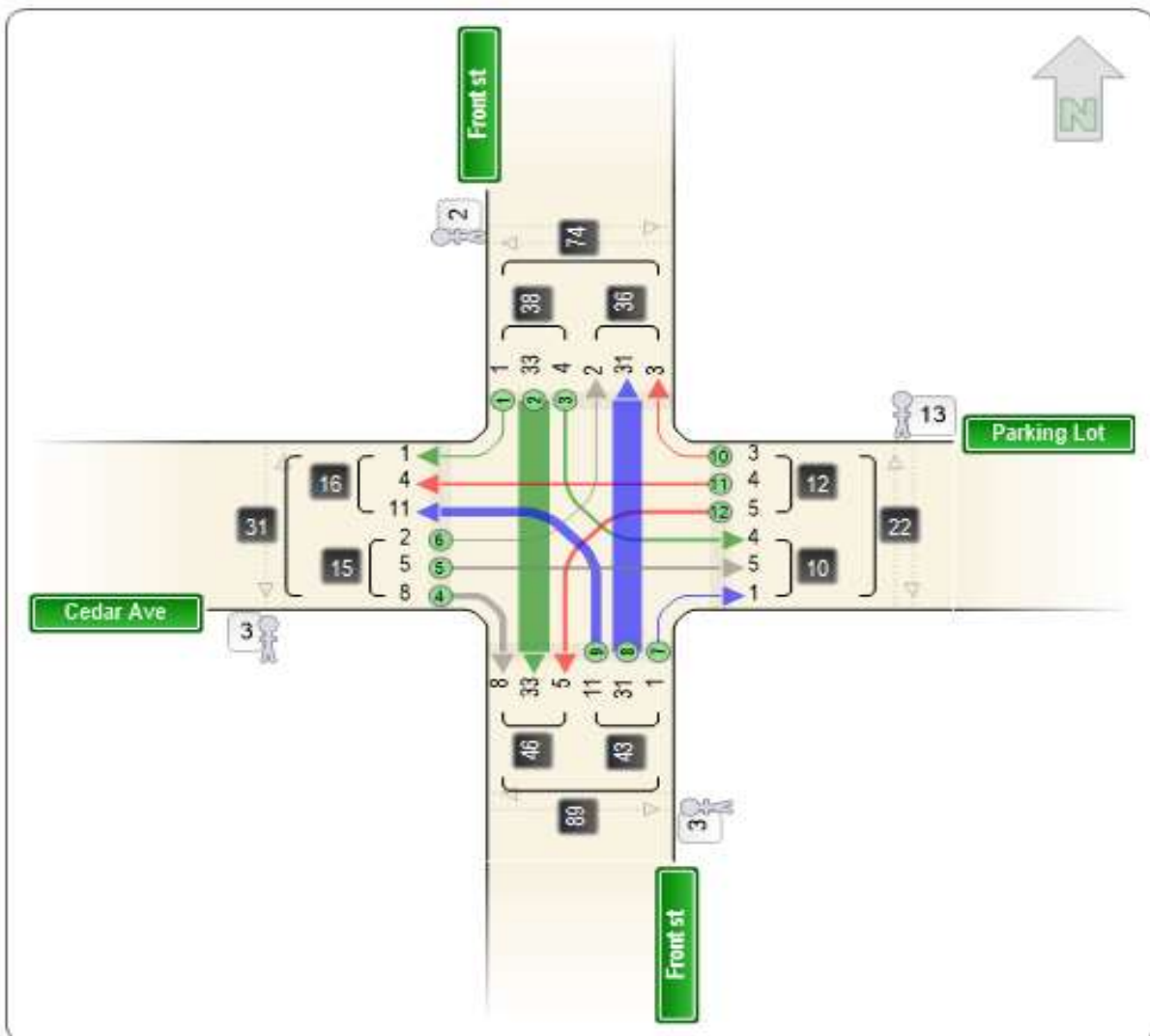
Date: 3/10/2020
Hours: 2:00 PM-6:00 PM
Weather: Clear

Source

Site Number: 49318
Street Number: 000
Vehicle Type: Vehicles
Crossing Flow: Pedestrians

Source Description

Location Description: Front St at Cedar Ave
County: Coos
City: Coos Bay



**Summary of Traffic Count
Transportation Development Division**

Site: 49318
County: Coos
City: Coos Bay

Date: 3/10/2020
Hours: 2:00 PM-6:00 PM
Highway #: 000

Milepoint:
Count Number: 1.00

Location: Front St at Cedar Ave
Weather: Clear

Time of Day	Summary By Movements													TOTAL	Entering Volumes			
	N-E	N-S	N-W	E-N	E-S	E-W	S-N	S-E	S-W	W-N	W-E	W-S	North		East	South	West	
14:00	0	3	0	0	0	2	4	0	0	0	0	1	10	3	2	4	1	
14:15	0	3	0	1	0	0	0	1	0	0	1	0	6	3	1	1	1	
14:30	0	2	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	
14:45	0	3	0	0	0	0	1	0	1	0	0	1	6	3	0	2	1	
15:00	1	4	0	0	0	0	4	0	0	0	0	0	9	5	0	4	0	
15:15	1	2	0	1	0	0	6	0	1	0	0	1	12	3	1	7	1	
15:30	0	3	0	0	1	0	7	0	1	0	0	2	14	3	1	8	2	
15:45	0	3	0	0	1	0	1	0	2	0	0	0	7	3	1	3	0	
16:00	0	1	1	0	1	0	1	0	0	0	0	0	4	2	1	1	0	
16:15	0	3	0	0	0	0	2	0	2	1	2	1	11	3	0	4	4	
16:30	0	1	0	0	0	1	1	0	0	0	0	1	4	1	1	1	1	
16:45	1	3	0	1	1	0	0	0	1	0	0	0	7	4	2	1	0	
17:00	1	0	0	0	0	0	3	0	1	1	0	0	6	1	0	4	1	
17:15	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	0	
17:30	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	0	
17:45	0	2	0	0	1	1	1	0	0	0	2	1	8	2	2	1	3	
Total Count	4	33	1	3	5	4	31	1	11	2	5	8	108	38	12	43	15	
24hr Factor	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
24hr Volume	4	33	1	3	5	4	31	1	11	2	5	8	108	38	12	43	15	

Vehicular Volume
Transportation Development Division

Site: 49318

Date: 3/10/2020

County: Coos

Hours: 2:00 PM-6:00 PM

City: Coos Bay

Highway #: 000

Milepoint:

Location: Front St at Cedar Ave

Count Number: 1.00

Weather: Clear

From North	38	From South	43
North to N	0	South to N	31
North to NE	0	South to NE	0
North to E	4	South to E	1
North to SE	0	South to SE	0
North to S	33	South to S	0
North to SW	0	South to SW	0
North to W	1	South to W	11
North to NW	0	South to NW	0
To North	36	To South	46
From NE	0	From SW	0
NE to N	0	SW to N	0
NE to NE	0	SW to NE	0
NE to E	0	SW to E	0
NE to SE	0	SW to SE	0
NE to S	0	SW to S	0
NE to SW	0	SW to SW	0
NE to W	0	SW to W	0
NE to NW	0	SW to NW	0
To NE	0	To SW	0
From East	12	From West	15
East to N	3	West to N	2
East to NE	0	West to NE	0
East to E	0	West to E	5
East to SE	0	West to SE	0
East to S	5	West to S	8
East to SW	0	West to SW	0
East to W	4	West to W	0
East to NW	0	West to NW	0
To East	10	To West	16
From SE	0	From NW	0
SE to N	0	NW to N	0
SE to NE	0	NW to NE	0
SE to E	0	NW to E	0
SE to SE	0	NW to SE	0
SE to S	0	NW to S	0
SE to SW	0	NW to SW	0
SE to W	0	NW to W	0
SE to NW	0	NW to NW	0
To SE	0	To NW	0

**Summary Of Traffic Count
Transportation Development Division**

Site: 49318 Date: 3/10/2020
 County: Coos Hours: 2:00 PM-6:00 PM
 City: Coos Bay Highway #: 000

Milepoint: Location: Front St at Cedar Ave
 Count Number: 1.00 Weather: Clear

Time of Day	Total Volume	North and South	% of Total	East and West	% of Total				Entering Volumes			
									North	East	South	West
14:00	10	7	70	3	30				3	2	4	1
14:15	6	4	66.7	2	33.3				3	1	1	1
14:30	2	2	100	0	0				2	0	0	0
14:45	6	5	83.3	1	16.7				3	0	2	1
15:00	9	9	100	0	0				5	0	4	0
15:15	12	10	83.3	2	16.7				3	1	7	1
15:30	14	11	78.6	3	21.4				3	1	8	2
15:45	7	6	85.7	1	14.3				3	1	3	0
16:00	4	3	75	1	25				2	1	1	0
16:15	11	7	63.6	4	36.4				3	0	4	4
16:30	4	2	50	2	50				1	1	1	1
16:45	7	5	71.4	2	28.6				4	2	1	0
17:00	6	5	83.3	1	16.7				1	0	4	1
17:15	1	1	100	0	0				0	0	1	0
17:30	1	1	100	0	0				0	0	1	0
17:45	8	3	37.5	5	62.5				2	2	1	3
Total Count	108	81	75	27	25	0			38	12	43	15
24hr Factor	1	1		1		1			1	1	1	1
24hr Volume	108	81	75	27	25	0			38	12	43	15

**Summary Of Bicycle Count
Transportation Development Division**

Site: 49318
County: Coos
City: Coos Bay

Date: 3/10/2020
Hours: 2:00 PM-6:00 PM
Highway #: 000

Milepoint:
Count Number: 1.00

Location: Front St at Cedar Ave
Weather: Clear

Time of Day	Summary By Movements													Entering Volumes				
	N-E	N-S	N-W	E-N	E-S	E-W	S-N	S-E	S-W	W-N	W-E	W-S		TOTAL	North	East	South	West
14:00	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0
14:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0
14:30	0	0	0	0	0	0	0	0	1	1	0	0	0	2	0	0	1	1
14:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	1	0	0	0	1	0	0	0	0	0	0	2	1	0	1	0
17:45	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1
Total Count	0	4	1	0	0	0	2	0	1	1	0	1		10	5	0	3	2
24hr Factor	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1
24hr Volume	0	4	1	0	0	0	2	0	1	1	0	1		10	5	0	3	2

**Summary Of Pedestrian Count
Transportation Development Division**

Site: 49318 Date: 3/10/2020
 County: Coos Hours: 2:00 PM-6:00 PM
 City: Coos Bay Highway #: 000

Milepoint: Location: Front St at Cedar Ave
 Count Number: 1.00 Weather: Clear

Time of Day	Pedestrian (Bike)				Pedestrian (Other)			
	North	East	South	West	North	East	South	West
14:00								
14:15								1
14:30								
14:45						1		
15:00							1	
15:15						2		
15:30								
15:45						2		
16:00					2		2	
16:15								
16:30						1		
16:45						5		
17:00								
17:15						1		1
17:30								
17:45						1		1
Total	0	0	0	0	2	13	3	3

US 101 (NB) & Alder

Transportation Development Division Transportation System Monitoring Unit Vehicular Volume

Time settings

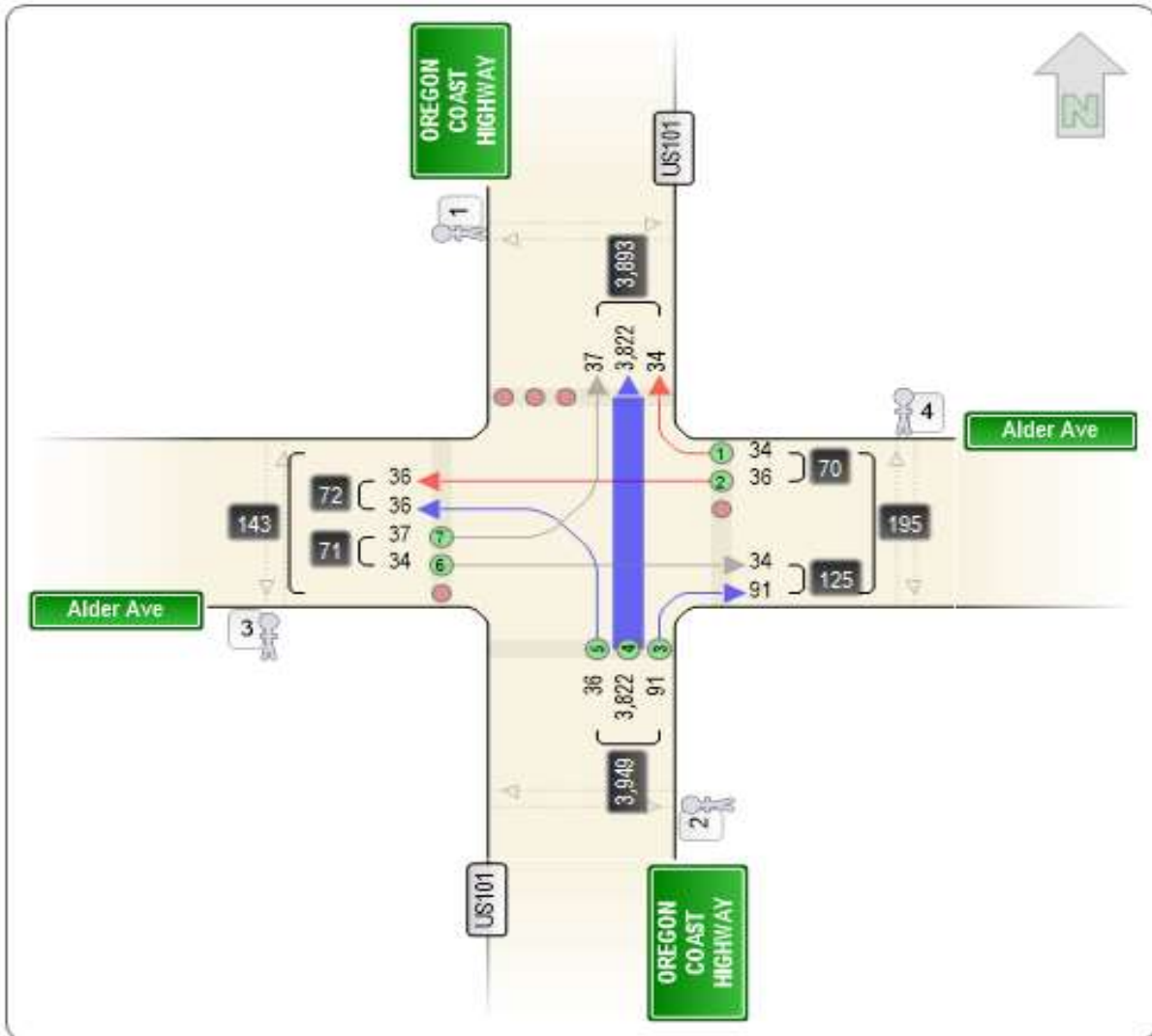
Date: 3/10/2020
Hours: 2:00 PM-6:00 PM
Weather: Clear

Source

Site Number: 49319
Mile Point: 238.03
Street Number: 009
Vehicle Type: Vehicles
Crossing Flow: Pedestrians

Source Description

Location Description: OREGON COAST HIGHWAY NO. 9 (US101) at Alder Ave
County: Coos
City: Coos Bay



**Summary of Traffic Count
Transportation Development Division**

Site: 49319

Date: 3/10/2020

County: Coos

Hours: 2:00 PM-6:00 PM

City: Coos Bay

Highway #: 009

OREGON COAST HIGHWAY

Milepoint: 238.03

Location: NO. 9 (US101) at Alder Ave

Count Number: 1.00

Weather: Clear

Time of Day	Summary By Movements									Entering Volumes		
	E-N	E-W	S-N	S-E	S-W	W-N	W-E		TOTAL	East	South	West
14:00	2	2	229	6	2	3	3		247	4	237	6
14:15	3	1	226	3	3	3	4		243	4	232	7
14:30	1	6	211	6	5	2	3		234	7	222	5
14:45	2	3	249	8	2	2	4		270	5	259	6
15:00	2	4	219	9	2	4	0		240	6	230	4
15:15	1	1	252	8	0	1	2		265	2	260	3
15:30	4	2	248	2	3	3	5		267	6	253	8
15:45	2	2	263	7	3	2	2		281	4	273	4
16:00	1	2	250	6	3	6	1		269	3	259	7
16:15	3	2	252	1	4	4	0		266	5	257	4
16:30	1	3	249	7	4	2	2		268	4	260	4
16:45	4	2	231	6	0	2	3		248	6	237	5
17:00	5	2	262	7	3	0	1		280	7	272	1
17:15	0	3	253	8	2	1	3		270	3	263	4
17:30	1	0	225	3	0	2	0		231	1	228	2
17:45	2	1	203	4	0	0	1		211	3	207	1
Total Count	34	36	3822	91	36	37	34		4090	70	3949	71
24hr Factor	1	1	1	1	1	1	1		1	1	1	1
24hr Volume	34	36	3822	91	36	37	34		4090	70	3949	71

Vehicular Volume
Transportation Development Division

Site: 49319

Date: 3/10/2020

County: Coos

Hours: 2:00 PM-6:00 PM

City: Coos Bay

Highway #: 009

Milepoint: 238.03

Location: OREGON COAST HIGHWAY NO. 9

Count Number: 1.00

Weather: Clear

From North	0	From South	3949
North to N	0	South to N	3822
North to NE	0	South to NE	0
North to E	0	South to E	91
North to SE	0	South to SE	0
North to S	0	South to S	0
North to SW	0	South to SW	0
North to W	0	South to W	36
North to NW	0	South to NW	0
To North	3893	To South	0

From NE	0	From SW	0
NE to N	0	SW to N	0
NE to NE	0	SW to NE	0
NE to E	0	SW to E	0
NE to SE	0	SW to SE	0
NE to S	0	SW to S	0
NE to SW	0	SW to SW	0
NE to W	0	SW to W	0
NE to NW	0	SW to NW	0
To NE	0	To SW	0

From East	70	From West	71
East to N	34	West to N	37
East to NE	0	West to NE	0
East to E	0	West to E	34
East to SE	0	West to SE	0
East to S	0	West to S	0
East to SW	0	West to SW	0
East to W	36	West to W	0
East to NW	0	West to NW	0
To East	125	To West	72

From SE	0	From NW	0
SE to N	0	NW to N	0
SE to NE	0	NW to NE	0
SE to E	0	NW to E	0
SE to SE	0	NW to SE	0
SE to S	0	NW to S	0
SE to SW	0	NW to SW	0
SE to W	0	NW to W	0
SE to NW	0	NW to NW	0
To SE	0	To NW	0

**Summary Of Traffic Count
Transportation Development Division**

Site: 49319

Date: 3/10/2020

County: Coos

Hours: 2:00 PM-6:00 PM

City: Coos Bay

Highway #: 009

OREGON COAST HIGHWAY

Milepoint: 238.03

Location: NO. 9 (US101) at Alder Ave

Count Number: 1.00

Weather: Clear

Time of Day	Total Volume	East and West	% of Total	South and North	% of Total	Entering Volumes		
						East	South	West
14:00	247	10	4	237	96	4	237	6
14:15	243	11	4.5	232	95.5	4	232	7
14:30	234	12	5.1	222	94.9	7	222	5
14:45	270	11	4.1	259	95.9	5	259	6
15:00	240	10	4.2	230	95.8	6	230	4
15:15	265	5	1.9	260	98.1	2	260	3
15:30	267	14	5.2	253	94.8	6	253	8
15:45	281	8	2.8	273	97.2	4	273	4
16:00	269	10	3.7	259	96.3	3	259	7
16:15	266	9	3.4	257	96.6	5	257	4
16:30	268	8	3	260	97	4	260	4
16:45	248	11	4.4	237	95.6	6	237	5
17:00	280	8	2.9	272	97.1	7	272	1
17:15	270	7	2.6	263	97.4	3	263	4
17:30	231	3	1.3	228	98.7	1	228	2
17:45	211	4	1.9	207	98.1	3	207	1
Total Count	4090	141	4	3949	97	70	3949	71
24hr Factor	1	1		1		1	1	1
24hr Volume	4090	141	4	3949	97	70	3949	71

Traffic Count Summary Sheet
Transportation Development Division (E-W)

Site: 49319
 County: Coos
 City: Coos Bay

Milepoint: 238.03
 Count Number: 1.00

Date: 3/10/2020
 Hours: 2:00 PM-6:00 PM
 Highway #: 009
 OREGON COAST HIGHWAY NO. 9
 Location: (US101) at Alder Ave
 Weather: Clear

Time of Day	Car	Lt Truck	Sgl. Unit Truck			Sgl. Trailer Truck			Multi Trailer Truck			Bus	Motor-cycle	Vehicles	Bicycle
			2 Axl	3 Axl	4+ Axl	4- Axl	5 Axl	6+ Axl	5- Axl	6 Axl	7+ Axl				
14:00	1	0	1	0	0	0	0	0	0	0	0	0	0	2	0
14:15	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
14:30	3	2	0	0	0	0	0	0	0	0	0	0	1	6	0
14:45	2	0	0	0	0	0	0	0	0	0	0	0	1	3	0
15:00	1	3	0	0	0	0	0	0	0	0	0	0	0	4	0
15:15	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
15:30	1	1	0	0	0	0	0	0	0	0	0	0	0	2	0
15:45	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0
16:00	1	1	0	0	0	0	0	0	0	0	0	0	0	2	0
16:15	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0
16:30	2	1	0	0	0	0	0	0	0	0	0	0	0	3	0
16:45	1	1	0	0	0	0	0	0	0	0	0	0	0	2	0
17:00	1	1	0	0	0	0	0	0	0	0	0	0	0	2	0
17:15	1	2	0	0	0	0	0	0	0	0	0	0	0	3	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
Total	20	13	1	0	0	0	0	0	0	0	0	0	2	36	0

Traffic Count Summary Sheet
Transportation Development Division (S-N)

Site: 49319
 County: Coos
 City: Coos Bay

Milepoint: 238.03
 Count Number: 1.00

Date: 3/10/2020
 Hours: 2:00 PM-6:00 PM
 Highway #: 009
 OREGON COAST HIGHWAY NO. 9
 Location: (US101) at Alder Ave
 Weather: Clear

Time of Day	Car	Lt Truck	Sgl. Unit Truck			Sgl. Trailer Truck			Multi Trailer Truck			Bus	Motor-cycle	Vehicles	Bicycle
			2 Axl	3 Axl	4+ Axl	4- Axl	5 Axl	6+ Axl	5- Axl	6 Axl	7+ Axl				
14:00	145	67	5	1	0	0	4	3	0	0	1	1	2	229	0
14:15	152	62	3	2	0	1	2	1	0	1	0	1	1	226	0
14:30	140	56	3	1	1	1	2	4	0	0	2	0	1	211	0
14:45	168	64	5	1	0	2	3	2	0	0	1	1	2	249	0
15:00	141	66	6	0	0	0	3	1	0	0	0	1	1	219	0
15:15	159	72	7	1	0	1	5	3	0	0	1	2	1	252	0
15:30	151	74	8	0	0	2	4	4	0	0	0	2	3	248	0
15:45	178	73	8	1	0	0	1	1	0	0	1	0	0	263	1
16:00	148	88	7	1	0	1	1	4	0	0	0	0	0	250	0
16:15	162	76	8	0	0	0	1	1	0	0	0	1	3	252	0
16:30	157	76	9	2	0	0	0	2	0	0	0	1	2	249	0
16:45	151	73	6	0	0	1	0	0	0	0	0	0	0	231	0
17:00	182	62	9	0	0	1	2	4	1	0	0	1	0	262	0
17:15	176	69	5	2	0	1	0	0	0	0	0	0	0	253	0
17:30	155	61	4	2	0	0	0	3	0	0	0	0	0	225	0
17:45	143	51	5	1	0	0	0	1	0	0	0	0	2	203	0
Total	2508	1090	98	15	1	11	28	34	1	1	6	11	18	3822	1

**Traffic Count Summary Sheet
Transportation Development Division (S-E)**

Site: 49319
County: Coos
City: Coos Bay

Date: 3/10/2020
Hours: 2:00 PM-6:00 PM
Highway #: 009
OREGON COAST HIGHWAY NO. 9
Location: (US101) at Alder Ave
Weather: Clear

Milepoint: 238.03
Count Number: 1.00

Time of Day	Car	Lt Truck	Sgl. Unit Truck			Sgl. Trailer Truck			Multi Trailer Truck			Bus	Motor-cycle	Vehicles	Bicycle
			2 Axl	3 Axl	4+ Axl	4- Axl	5 Axl	6+ Axl	5- Axl	6 Axl	7+ Axl				
14:00	4	1	1	0	0	0	0	0	0	0	0	0	0	6	0
14:15	2	1	0	0	0	0	0	0	0	0	0	0	0	3	0
14:30	2	2	1	0	0	0	0	0	0	0	0	0	1	6	0
14:45	8	0	0	0	0	0	0	0	0	0	0	0	0	8	0
15:00	5	4	0	0	0	0	0	0	0	0	0	0	0	9	0
15:15	5	2	1	0	0	0	0	0	0	0	0	0	0	8	0
15:30	1	1	0	0	0	0	0	0	0	0	0	0	0	2	0
15:45	7	0	0	0	0	0	0	0	0	0	0	0	0	7	0
16:00	6	0	0	0	0	0	0	0	0	0	0	0	0	6	0
16:15	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
16:30	7	0	0	0	0	0	0	0	0	0	0	0	0	7	0
16:45	6	0	0	0	0	0	0	0	0	0	0	0	0	6	0
17:00	6	1	0	0	0	0	0	0	0	0	0	0	0	7	0
17:15	5	3	0	0	0	0	0	0	0	0	0	0	0	8	0
17:30	2	1	0	0	0	0	0	0	0	0	0	0	0	3	0
17:45	3	1	0	0	0	0	0	0	0	0	0	0	0	4	0
Total	70	17	3	0	0	0	0	0	0	0	0	0	1	91	0

Traffic Count Summary Sheet
Transportation Development Division (W-E)

Site: 49319
 County: Coos
 City: Coos Bay

Milepoint: 238.03
 Count Number: 1.00

Date: 3/10/2020
 Hours: 2:00 PM-6:00 PM
 Highway #: 009
 OREGON COAST HIGHWAY NO. 9
 Location: (US101) at Alder Ave
 Weather: Clear

Time of Day	Car	Lt Truck	Sgl. Unit Truck			Sgl. Trailer Truck			Multi Trailer Truck			Bus	Motor-cycle	Vehicles	Bicycle
			2 Axl	3 Axl	4+ Axl	4- Axl	5 Axl	6+ Axl	5- Axl	6 Axl	7+ Axl				
14:00	2	1	0	0	0	0	0	0	0	0	0	0	0	3	0
14:15	1	2	1	0	0	0	0	0	0	0	0	0	0	4	0
14:30	1	1	0	0	0	0	0	0	0	0	0	0	1	3	0
14:45	0	4	0	0	0	0	0	0	0	0	0	0	0	4	0
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15	1	1	0	0	0	0	0	0	0	0	0	0	0	2	0
15:30	3	2	0	0	0	0	0	0	0	0	0	0	0	5	0
15:45	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0
16:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0
16:45	3	0	0	0	0	0	0	0	0	0	0	0	0	3	0
17:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
17:15	3	0	0	0	0	0	0	0	0	0	0	0	0	3	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Total	20	12	1	0	0	0	0	0	0	0	0	0	1	34	0

**Summary Of Bicycle Count
Transportation Development Division**

Site: 49319

Date: 3/10/2020

County: Coos

Hours: 2:00 PM-6:00 PM

City: Coos Bay

Highway #: 009

OREGON COAST HIGHWAY

Milepoint: 238.03

Location: NO. 9 (US101) at Alder Ave

Count Number: 1.00

Weather: Clear

Time of Day	Summary By Movements									Entering Volumes		
	E-N	E-W	S-N	S-E	S-W	W-N	W-E		TOTAL	East	South	West
14:00	0	0	0	0	0	0	0		0	0	0	0
14:15	0	0	0	0	0	0	0		0	0	0	0
14:30	0	0	0	0	0	0	0		0	0	0	0
14:45	0	0	0	0	0	0	0		0	0	0	0
15:00	0	0	0	0	0	0	0		0	0	0	0
15:15	0	0	0	0	0	0	0		0	0	0	0
15:30	0	0	0	0	0	0	0		0	0	0	0
15:45	0	0	1	0	0	0	0		1	0	1	0
16:00	0	0	0	0	0	0	0		0	0	0	0
16:15	0	0	0	0	0	0	0		0	0	0	0
16:30	0	0	0	0	0	0	0		0	0	0	0
16:45	0	0	0	0	0	0	0		0	0	0	0
17:00	0	0	0	0	0	0	0		0	0	0	0
17:15	0	0	0	0	0	0	0		0	0	0	0
17:30	0	0	0	0	0	0	0		0	0	0	0
17:45	0	0	0	0	0	0	0		0	0	0	0
Total Count	0	0	1	0	0	0	0		1	0	1	0
24hr Factor	1	1	1	1	1	1	1		1	1	1	1
24hr Volume	0	0	1	0	0	0	0		1	0	1	0

**Summary Of Pedestrian Count
Transportation Development Division**

Site: 49319

Date: 3/10/2020

County: Coos

Hours: 2:00 PM-6:00 PM

City: Coos Bay

Highway #: 009

OREGON COAST HIGHWAY

Milepoint: 238.03

Location: NO. 9 (US101) at Alder Ave

Count Number: 1.00

Weather: Clear

Time of Day	Pedestrian (Bike)				Pedestrian (Other)			
	North	East	South	West	North	East	South	West
14:00						1		1
14:15								
14:30						1	2	
14:45								
15:00								
15:15								1
15:30								
15:45					1			
16:00								1
16:15								
16:30								
16:45								
17:00								
17:15		1				1		
17:30								
17:45								
Total	0	1	0	0	1	3	2	3

**Summary Of Pedestrian Count
Transportation Development Division**

Site: 49319

Date: 3/10/2020

County: Coos

Hours: 2:00 PM-6:00 PM

City: Coos Bay

Highway #: 009

OREGON COAST HIGHWAY

Milepoint: 238.03

Location: NO. 9 (US101) at Alder Ave

Count Number: 1.00

Weather: Clear

Time of Day	Pedestrian (Bike)				Pedestrian (Other)			
	North	East	South	West	North	East	South	West
14:00						1		1
14:15								
14:30						1	2	
14:45								
15:00								
15:15								1
15:30								
15:45					1			
16:00								1
16:15								
16:30								
16:45								
17:00								
17:15		1				1		
17:30								
17:45								
Total	0	1	0	0	1	3	2	3

APPENDIX B

Volume Development Worksheets

Project: Coos Bay TSP
 Job #: ODOT00001006
 Subject: **PM Turning Movement Volumes**

N-S ID	Synchro ID	Intersection	Movement	Int ID	2020			AADT			2020	Growth factor	2042			Peak Ped Vol	Peak Bike Vol	Volume Balancing Adjustments	Coos Bay Trip gen	Unbalanced Future volumes 2042	Balanced future 2042 volumes			
					Existing Counts	Existing HV Count	Existing HV %	Base Year Adjustment Factor	Seasonal Adjustment Factor	Adjusted 30 DHV 1-Hr Volume PM Peak			Volume Balancing Adjustments	Balanced Volumes PM Peak	NCHRP Unbalanced Future Baseline							2042 Rounded Future Baseline	2042 Balanced Future Baseline	
1	10	Coos Bay Boulevard at US 101 7/11/2017	EBL	10	16	0	0%	1.030	1.04	15	0	15	1.220	18	20	20	0	0	0	0	20	20		
1	10		EBT	10	0	0	0%	1.030	1.04	0	0	0	1.220	0	0	0	0	0	0	0	0	0		
1	10		EBR	10	153	3	2%	1.030	1.04	165	0	165	1.220	201	200	200	1	0	0	0	15	215	215	
1	10		WBL	10	0	0	0%	1.030	1.04	0	0	0	1.220	0	0	0	0	0	0	0	0	0		
1	10		WBT	10	0	0	0%	1.030	1.04	0	0	0	1.220	0	0	0	0	0	0	0	0	0		
1	10		WBR	10	0	0	0%	1.030	1.04	0	0	0	1.220	0	0	0	0	0	0	0	0	0		
1	10		PM Peak Hour: 4:30 PM-5:30 PM	NBL	10	86	4	5%	1.030	1.04	90	0	90	1.220	110	110	110	0	0	0	0	15	125	125
1	10		PM Peak Hour Used: 4:30 PM-5:30 PM	NBT	10	981	41	4%	1.030	1.04	1050	52	1102	1.220	1,344	1345	1340	0	0	-5	0	15	1355	1355
1	10		Volume Difference: 0	NBR	10	0	0	0%	1.030	1.04	0	0	0	1.220	0	0	0	0	0	0	0	0	0	0
1	10		PHF: 0.88	SBL	10	0	0	0%	1.030	1.04	0	0	0	1.220	0	0	0	0	0	0	0	0	0	0
1	10			SBT	10	1097	51	5%	1.030	1.04	1175	-40	1135	1.220	1,385	1385	1385	0	7	0	0	15	1400	1400
1	10			SBR	10	33	0	0%	1.030	1.04	35	0	35	1.220	43	45	45	0	0	0	0	0	45	45
1	10			TEV	10	2366	99	4%			2530	12	2542		3101	3105	3100	1	7	-5		60	3160	
2	20	Ivy Street at US 101 4/10/2018	EBL	20	5	NA	#VALUE!	1.020	1.16	5	-3	2	1.220	2	0	0	0	NA	0	0	0	0	0	
2	20		EBT	20	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	0	NA	0	0	0	0	0	
2	20		EBR	20	14	NA	#VALUE!	1.020	1.16	15	0	15	1.220	18	20	20	0	NA	0	0	0	20	20	
2	20		WBL	20	0	NA	#VALUE!	1.020	1.16	0	0	0	1.220	0	0	0	0	NA	0	0	0	0	0	
2	20		WBT	20	0	NA	#VALUE!	1.020	1.16	0	0	0	1.220	0	0	0	0	NA	0	0	0	0	0	
2	20		WBR	20	0	NA	#VALUE!	1.020	1.16	0	0	0	1.220	0	0	0	0	NA	0	0	0	0	0	
2	20		PM Peak Hour: 4:00 PM-5:00 PM	NBL	20	5	NA	#VALUE!	1.020	1.16	5	0	5	1.220	6	5	5	0	NA	0	0	0	5	5
2	20		PM Peak Hour Used: 4:30 PM-5:30 PM	NBT	20	1002	NA	#VALUE!	1.020	1.16	1185	5	1190	1.220	1,452	1450	1450	0	NA	0	0	30	1480	1480
2	20		Volume Difference: 4	NBR	20	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	0	NA	0	0	0	0	0
2	20		PHF: 0.92	SBL	20	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	0	NA	0	0	0	0	0
2	20			SBT	20	1094	NA	#VALUE!	1.020	1.16	1295	0	1295	1.220	1,580	1580	1580	12	NA	0	0	30	1610	1610
2	20			SBR	20	4	NA	#VALUE!	1.020	1.16	5	0	5	1.220	6	5	5	0	NA	0	0	0	5	5
2	20			TEV	20	2124	0	0%			2510	2	2512		3065	3060	3060	12	0	0		60	3120	3120
3	30	Hemlock Avenue at US 101 4/10/2018	EBL	30	10	NA	#VALUE!	1.020	1.16	10	0	10	1.220	12	10	10	0	NA	0	0	0	10	10	
3	30		EBT	30	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	0	NA	0	0	0	11	11	
3	30		EBR	30	14	NA	#VALUE!	1.020	1.16	15	0	15	1.220	18	20	20	0	NA	0	0	0	20	20	
3	30		WBL	30	0	NA	#VALUE!	1.020	1.16	0	0	0	1.220	0	0	0	0	NA	0	0	0	56	56	
3	30		WBT	30	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	0	NA	0	0	0	15	15	
3	30		WBR	30	5	NA	#VALUE!	1.020	1.16	5	0	5	1.220	6	5	5	0	NA	0	0	0	55	60	60
3	30		PM Peak Hour: 4:00 PM-5:00 PM	NBL	30	16	NA	#VALUE!	1.020	1.16	20	0	20	1.220	24	25	25	0	NA	0	0	0	25	34
3	30		PM Peak Hour Used: 4:30 PM-5:30 PM	NBT	30	995	NA	#VALUE!	1.020	1.16	1175	5	1180	1.220	1,440	1440	1440	0	NA	0	0	-26	1414	1415
3	30		Volume Difference: 12	NBR	30	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	0	NA	0	0	0	53	53
3	30		PHF: 0.93	SBL	30	11	NA	#VALUE!	1.020	1.16	15	0	15	1.220	18	20	20	6	NA	0	0	55	75	75
3	30			SBT	30	1098	NA	#VALUE!	1.020	1.16	1300	-10	1290	1.220	1,574	1575	1575	0	NA	0	0	-25	1550	1550
3	30			SBR	30	6	NA	#VALUE!	1.020	1.16	5	0	5	1.220	6	5	5	0	NA	0	0	0	5	5
3	30			TEV	30	2155	0	0%			2545	-5	2540		3099	3100	3100	6	0	0		194	3294	3304
4	40	Fir Street at US 101 northbound 4/11/2018	EBL	40	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	0	NA	0	0	0	0	0	
4	40		EBT	40	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	0	NA	0	0	0	0	0	
4	40		EBR	40	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	0	NA	0	0	0	0	0	
4	40		WBL	40	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	0	NA	0	0	0	0	0	
4	40		WBT	40	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	0	NA	0	0	0	0	0	
4	40		WBR	40	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	0	NA	0	0	0	0	0	
4	40		PM Peak Hour: 4:30 PM-5:30 PM	NBL	40	19	NA	#VALUE!	1.020	1.16	20	0	20	1.220	24	25	20	0	NA	-5	0	10	30	20
4	40		PM Peak Hour Used: 4:30 PM-5:30 PM	NBT	40	1012	NA	#VALUE!	1.020	1.16	1195	5	1200	1.220	1,464	1465	1465	0	NA	0	0	27	1492	1502
4	40		Volume Difference: 0	NBR	40	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	0	NA	0	0	0	0	0
4	40		PHF: 0.94	SBL	40	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	0	NA	0	0	0	0	0
4	40			SBT	40	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	0	NA	0	0	0	0	0
4	40			SBR	40	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	0	NA	0	0	0	0	0
4	40			TEV	40	1031	0	0%			1215	5	1220		1488	1490	1485	0	0	-5		37	1522	1522
5	50	Fir Street at US 101 southbound 4/11/2018	EBL	50	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	0	NA	0	0	0	0	0	
5	50		EBT	50	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	0	NA	0	0	0	0	0	
5	50		EBR	50	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	0	NA	0	0	0	0	0	
5	50		WBL	50	24	NA	#VALUE!	1.020	1.16	30	-10	20	1.220	24	25	20	0	NA	-5	0	0	20	20	
5	50		WBT	50	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	0	NA	0	0	0	0	0	
5	50		WBR	50	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	0	NA	0	0	0	0	0	
5	50		PM Peak Hour: 4:30 PM-5:30 PM	NBL	50	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	0	NA	0	0	0	0	0
5	50		PM Peak Hour Used: 4:30 PM-5:30 PM	NBT	50	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	0	NA	0	0	0	0	0
5	50		Volume Difference: 0	NBR	50	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	0	NA	0	0	0	0	0
5	50		PHF:	SBL	50	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	6	NA	0	0	0	0	0
5	50			SBT	50	1071	NA	#VALUE!	1.020	1.16	1265	40	1305	1.220	1,592	1590	1595	0	NA	5	0	30	1625	1626

Project: Coos Bay TSP
 Job #: ODOT00001006
 Subject: **PM Turning Movement Volumes**

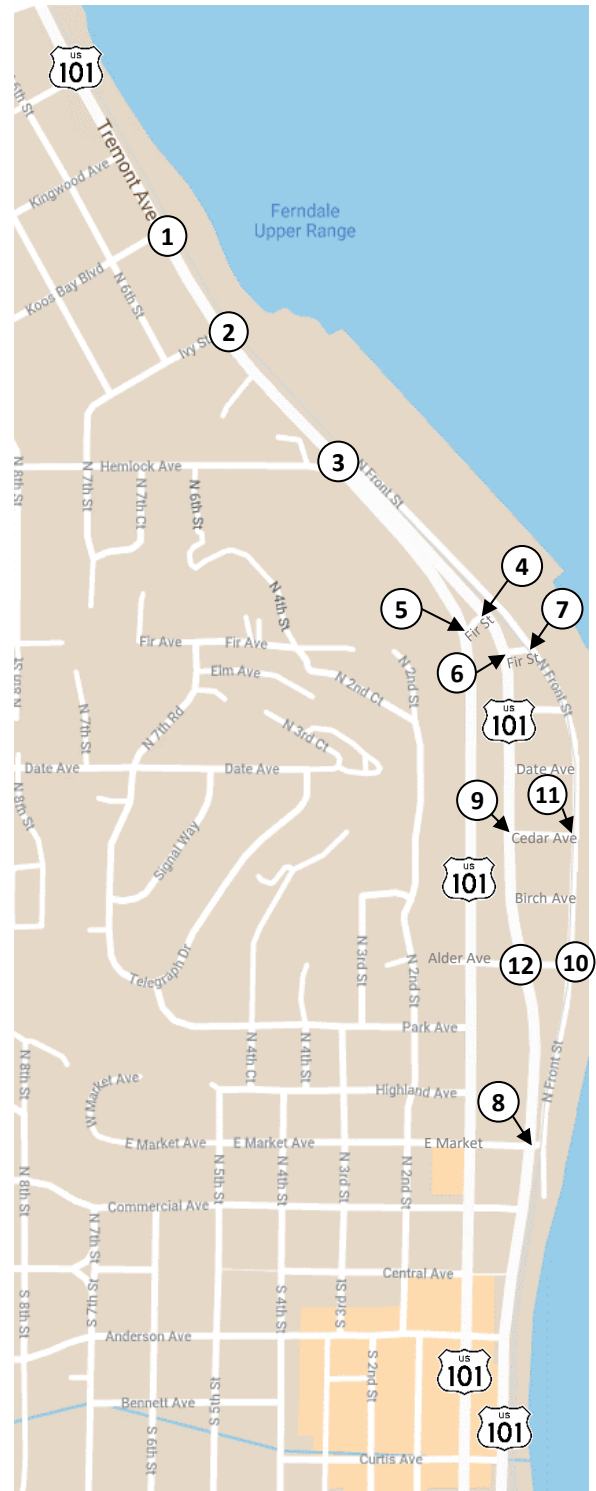
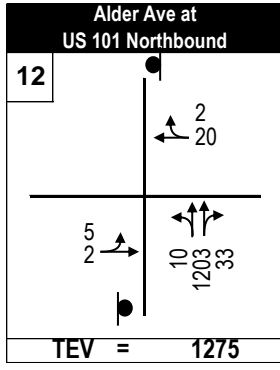
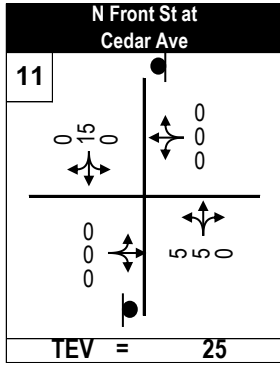
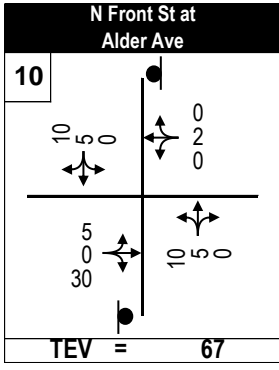
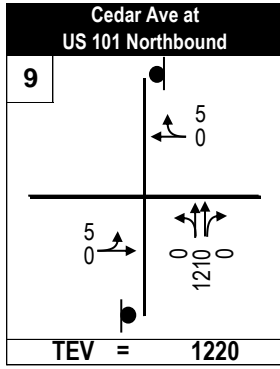
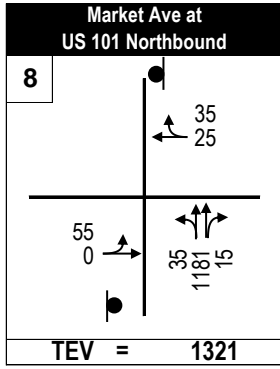
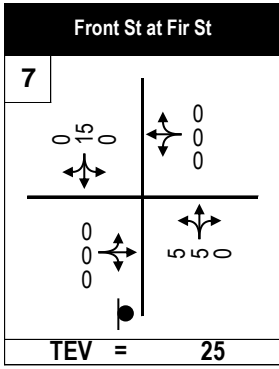
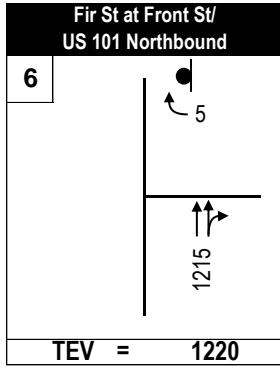
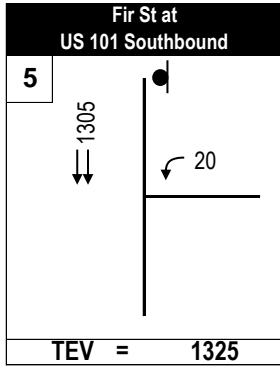
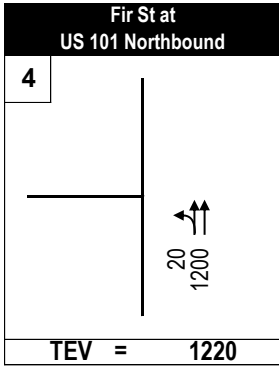
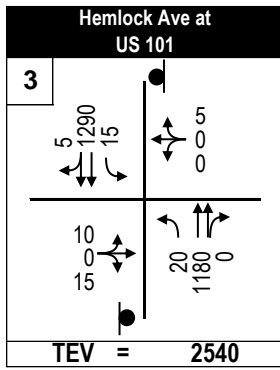
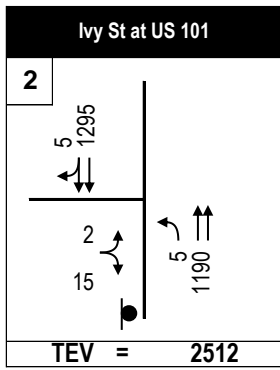
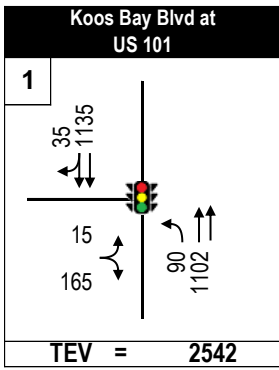
N-S ID	Synchro ID	Intersection	Movement	Int ID	2020			AADT			2020	Growth factor	2042			Peak Ped Vol	Peak Bike Vol	Volume Balancing Adjustments	Coos Bay Trip gen	Unbalanced Future volumes 2042	Balanced future 2042 volumes		
					Existing Counts	Existing HV Count	Existing HV %	Base Year Adjustment Factor	Seasonal Adjustment Factor	Adjusted 30 DHV 1-Hr Volume PM Peak			Volume Balancing Adjustments	Balanced Volumes PM Peak	NCHRP Unbalanced Future Baseline							2042 Rounded Future Baseline	2042 Balanced Future Baseline
5	50	0.95	SBR	50	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	NA	0	0	0			
5	50		TEV	50	1095	0	0%			1295	30	1325		1617	1615	1615	6	0	0	30	1645	1646	
6	60	Fir Street at US 101 northbound/ Front 4/11/2018	EBL	60	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	NA	0	0	0	0	0	0
6	60		EBT	60	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	NA	0	0	0	0	0	
6	60		EBR	60	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	NA	0	0	0	0	0	
6	60		WBL	60	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	NA	0	0	0	0	0	
6	60		WBT	60	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	NA	0	0	0	0	0	
6	60		WBR	60	5	NA	#VALUE!	1.020	1.16	5	0	5	1.220	6	5	5	NA	0	0	10	15	10	
6	60	PM Peak Hour: 4:30 PM-5:30 PM	NBL	60	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	NA	0	0	0	0	0	
6	60	PM Peak Hour Used: 4:30 PM-5:30 PM	NBT	60	1020	NA	#VALUE!	1.020	1.16	1205	10	1215	1.220	1,482	1480	1480	NA	0	0	27	1507	1507	
6	60	Volume Difference: 0	NBR	60	3	NA	#VALUE!	1.020	1.16	5	-5	0	1.220	0	0	0	NA	0	15	15	15		
6	60	PHF:	SBL	60	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	NA	0	0	0	0	0	
6	60	0.94	SBT	60	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	NA	0	0	0	0	0	
6	60		SBR	60	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	NA	0	0	0	0	0	
6	60		TEV	60	1028	0	0%			1215	5	1220		1488	1485	1485	0	0	0	52	1537	1532	
7	70	Front Street at Fir Street 4/11/2018	EBL	70	2	NA	#VALUE!	1.020	1.16	0	0	0	1.220	0	0	0	NA	0	0	15	15	15	
7	70		EBT	70	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	NA	0	0	0	0	0	
7	70	6 hr	EBR	70	0	NA	0%	1.020	1.16	0	0	0	1.220	0	0	0	NA	0	0	0	0	0	
7	70		WBL	70	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	NA	0	0	0	0	0	
7	70		WBT	70	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	NA	0	0	0	0	0	
7	70		WBR	70	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	NA	0	0	0	0	0	
7	70	PM Peak Hour: 12:45 AM-1:45 AM	NBL	70	4	NA	#VALUE!	1.020	1.16	5	0	5	1.220	6	5	5	NA	0	0	5	5	5	
7	70	PM Peak Hour Used: 4:30 PM-5:30 PM	NBT	70	3	NA	#VALUE!	1.020	1.16	5	0	5	1.220	6	5	5	NA	0	10	15	15	15	
7	70	Volume Difference: 3	NBR	70	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	NA	0	0	0	0	0	
7	70	PHF:	SBL	70	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	NA	0	0	0	0	0	
7	70	0.44	SBT	70	6	NA	#VALUE!	1.020	1.16	5	10	15	1.220	18	20	20	NA	0	20	40	40	40	
7	70		SBR	70	1	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	NA	0	10	10	10	10	
7	70		TEV	70	16	0	0%			15	10	25		31	30	30	0	0	0	55	85	85	
8	80	Market Ave at US 101 northbound 4/10/2018	EBL	80	45	NA	#VALUE!	1.020	1.16	55	0	55	1.220	67	65	65	NA	0	10	75	75	75	
8	80		EBT	80	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	NA	0	10	10	10	10	
8	80	0	EBR	80	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	NA	0	0	0	0	0	
8	80		WBL	80	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	NA	0	0	0	0	0	
8	80		WBT	80	35	NA	#VALUE!	1.020	1.16	40	-15	25	1.220	31	30	35	NA	5	20	55	55	55	
8	80		WBR	80	7	NA	#VALUE!	1.020	1.16	10	0	10	1.220	12	10	10	NA	0	0	10	10	10	
8	80	PM Peak Hour: 4:30 PM-5:30 PM	NBL	80	31	NA	#VALUE!	1.020	1.16	35	0	35	1.220	43	45	45	NA	0	0	45	45	45	
8	80	PM Peak Hour Used: 4:30 PM-5:30 PM	NBT	80	981	NA	#VALUE!	1.020	1.16	1160	21	1181	1.220	1,441	1440	1445	NA	5	32	1477	1477	1477	
8	80	Volume Difference: 0	NBR	80	12	NA	#VALUE!	1.020	1.16	15	0	15	1.220	18	20	15	NA	-5	0	15	15	15	
8	80	PHF:	SBL	80	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	NA	0	0	0	0	0	
8	80	0.98	SBT	80	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	NA	0	0	0	0	0	
8	80		SBR	80	0	0	0%	1.020	1.16	0	0	0	1.220	0	0	0	NA	0	0	0	0	0	
8	80		TEV	80	1111	0	0%			1315	6	1321		1612	1610	1615	10	0	5	72	1687	1687	
9	90	US 101 at Cedar Avenue 3/10/2020	EBL	90	2	0	0%	1.000	1.26	5	0	5	1.220	6	5	5	NA	0	0	0	0	5	
9	90		EBT	90	1	0	0%	1.000	1.26	0	0	0	1.220	0	0	0	NA	0	0	0	0	0	
9	90	0	EBR	90	0	0	0%	1.000	1.26	0	0	0	1.220	0	0	0	NA	0	0	0	0	0	
9	90		WBL	90	0	0	0%	1.000	1.26	0	0	0	1.220	0	0	0	NA	0	0	0	0	0	
9	90		WBT	90	0	0	0%	1.000	1.26	0	0	0	1.220	0	0	0	NA	0	0	0	0	0	
9	90		WBR	90	4	0	0%	1.000	1.26	5	0	5	1.220	6	5	5	NA	0	0	5	5	5	
9	90	PM Peak Hour: 3:30 PM-4:30 PM	NBL	90	1	0	0%	1.000	1.26	0	0	0	1.220	0	0	0	NA	0	0	0	0	0	
9	90	PM Peak Hour Used: 4:30 PM-5:30 PM	NBT	90	1029	50	5%	1.000	1.26	1295	-85	1210	1.220	1,476	1475	1475	NA	0	0	0	0	1517	
9	90	Volume Difference: 23	NBR	90	1	0	0%	1.000	1.26	0	0	0	1.220	0	0	0	NA	0	0	0	0	0	
9	90	PHF:	SBL	90	0	0	0%	1.000	1.26	0	0	0	1.220	0	0	0	NA	0	0	0	0	0	
9	90	0.95	SBT	90	0	0	0%	1.000	1.26	0	0	0	1.220	0	0	0	NA	0	0	0	0	0	
9	90		SBR	90	0	0	0%	1.000	1.26	0	0	0	1.220	0	0	0	NA	0	0	0	0	0	
9	90		TEV	90	1038	50	5%			1305	-85	1220		1488	1485	1485	2	0	0	0	0	1527	
10	100	N Front Street at Alder Avenue 3/10/2020	EBL	100	2	0	0%	1.000	1.26	5	0	5	1.220	6	5	5	NA	0	0	0	0	5	
10	100		EBT	100	1	0	0%	1.000	1.26	0	0	0	1.220	0	0	0	NA	0	0	0	0	0	
10	100	0	EBR	100	1	0	0%	1.000	1.26	0	30	30	1.220	37	35	35	NA	0	0	0	0	35	
10	100		WBL	100	0	0	0%	1.000	1.26	0	0	0	1.220	0	0	0	NA	0	0	0	0	0	
10	100		WBT	100	3	0	0%	1.000	1.26	2	0	2	1.220	2	0	0	NA	0	5	0	0	0	
10	100		WBR	100	0	0	0%	1.000	1.26	0	0	0	1.220	0	0	0	NA	0	0	0	0	0	
10	100	PM Peak Hour: 3:15 PM-4:15 PM	NBL	100	6	0	0%	1.000	1.26	10	0	10	1.220	12	10	10	NA	0	0	0	0	10	
10	100	PM Peak Hour Used: 4:30 PM-5:30 PM	NBT	100	5	0	0%	1.000	1.26	5	0	5	1.220	6	5	5	NA	0	0	0	0	15	

Project: Coos Bay TSP
 Job #: ODOT00001006
 Subject: **PM Turning Movement Volumes**

N-S ID	Synchro ID	Intersection	Movement	Int ID	2020			AADT			2020	Growth factor	2042		2042		Peak Ped Vol	Peak Bike Vol	Volume Balancing Adjustments	Coos Bay Trip gen	Unbalanced Future volumes 2042	Balanced future 2042 volumes
					Existing Counts	Existing	Existing	Base	Seasonal	Adjusted			Volume	2020	NCHRP	2042						
					1-Hr Volume	HV	HV	Year	Seasonal	Adjusted	Volume	Balanced Volumes	Unbalanced	Rounded	Balanced							
					PM Peak	Count	%	Adjustment	Adjustment	1-Hr Volume	Balancing	PM Peak	Future Baseline	Future Baseline	Future Baseline							
10	100	Volume Difference: 13	NBR	100	1	0	0%	1.000	1.26	0	0	0	1.220	0	0	0	0	0			0	
10	100		SBL	100	0	0	0%	1.000	1.26	0	0	0	1.220	0	0	0	0	0			0	
10	100	PHF:	SBT	100	6	0	0%	1.000	1.26	10	-5	5	1.220	6	5	10	3	2	5		30	
10	100	0.65	SBR	100	6	1	17%	1.000	1.26	10	0	10	1.220	12	10	10	0	0	0		10	
10	100		TEV	100	31	1	3%			42	25	67	82	70	75	8	2	5			105	
11	110	N Front Street at Cedar Avenue	EBL	110	1	0	0%	1.000	1.26	0	0	0	1.220	0	0	0	0	0			0	
11	110	3/10/2020	EBT	110	0	0	0%	1.000	1.26	0	0	0	1.220	0	0	0	1	0	0		0	
11	110	0	EBR	110	1	0	0%	1.000	1.26	0	0	0	1.220	0	0	0	0	0			0	
11	110		WBL	110	1	0	0%	1.000	1.26	0	0	0	1.220	0	0	0	0	0			0	
11	110		WBT	110	1	0	0%	1.000	1.26	0	0	0	1.220	0	0	0	7	0	0		0	
11	110		WBR	110	1	0	0%	1.000	1.26	0	0	0	1.220	0	0	0	0	0			0	
11	110	PM Peak Hour: 3:00 PM-4:00 PM	NBL	110	3	0	0%	1.000	1.26	5	0	5	1.220	6	5	5	0	0	0		5	
11	110	PM Peak Hour Used: 4:30 PM-5:30 PM	NBT	110	4	0	0%	1.000	1.26	5	0	5	1.220	6	5	5	0	0	0		15	
11	110	Volume Difference: 24	NBR	110	0	0	0%	1.000	1.26	0	0	0	1.220	0	0	0	0	0	0		0	
11	110		SBL	110	2	0	0%	1.000	1.26	5	-5	0	1.220	0	0	0	0	0			0	
11	110	PHF:	SBT	110	4	1	25%	1.000	1.26	5	10	15	1.220	18	20	20	0	2	0		40	
11	110	0.64	SBR	110	0	0	0%	1.000	1.26	0	0	0	1.220	0	0	0	0	0	0		0	
11	110		TEV	110	18	1	6%			20	5	25	31	30	30	8	2	0			60	
12	120	US 101 northbound at Alder Ave	EBL	120	5	1	20%	1.000	1.26	5	0	5	1.220	6	5	5	0	0	0		5	
12	120	3/10/2020	EBT	120	9	0	0%	1.000	1.26	2	0	2	1.220	2	0	0	0	0			0	
12	120	0	EBR	120	0	0	0%	1.000	1.26	0	0	0	1.220	0	0	0	0	0			0	
12	120		WBL	120	0	0	0%	1.000	1.26	0	0	0	1.220	0	0	0	0	0			0	
12	120		WBT	120	10	0	0%	1.000	1.26	15	5	20	1.220	24	25	20	1	0	-5		20	
12	120		WBR	120	10	0	0%	1.000	1.26	2	0	2	1.220	2	0	0	0	0			0	
12	120	PM Peak Hour: 3:45 PM-4:45 PM	NBL	120	9	0	0%	1.000	1.26	10	0	10	1.220	12	10	10	0	0	0		10	
12	120	PM Peak Hour Used: 4:30 PM-5:30 PM	NBT	120	995	47	5%	1.000	1.26	1255	-52	1203	1.220	1,468	1470	1470	0	0	0		1512	
12	120	Volume Difference: 18	NBR	120	28	0	0%	1.000	1.26	35	-2	33	1.220	40	40	40	0	0	0		40	
12	120		SBL	120	0	0	0%	1.000	1.26	0	0	0	1.220	0	0	0	0	0			0	
12	120	PHF:	SBT	120	0	0	0%	1.000	1.26	0	0	0	1.220	0	0	0	0	0	0		0	
12	120	0.95	SBR	120	0	0	0%	1.000	1.26	0	0	0	1.220	0	0	0	0	0	0		0	
12	120		TEV	120	1066	48	5%			1324	-49	1275	1556	1550	1545	1	0	-5			1587	

APPENDIX C

Synchro Worksheets: Existing
Operations



LEGEND

- Signalized Intersection
- Lane configuration
- Roundabout
- TEV Total Entering Volume
- STOP-Controlled Approach

**PM Peak Hour Volumes
Existing year (2020)**

Coos Bay Front Street Blueprint

EXISTING (2020) SYNCHRO
OPERATIONS

Stop Controlled Intersections

Intersection												
Int Delay, s/veh	0.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	2	0	15	0	0	0	5	1190	0	0	1295	5
Future Vol, veh/h	2	0	15	0	0	0	5	1190	0	0	1295	5
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	200	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	20	0	0	0	0	0	0	5	0	0	4	0
Mvmt Flow	2	0	16	0	0	0	5	1293	0	0	1408	5

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2069	2715	708	2007	2717	647	1414	0	0	1293	0	0
Stage 1	1412	1412	-	1303	1303	-	-	-	-	-	-	-
Stage 2	657	1303	-	704	1414	-	-	-	-	-	-	-
Critical Hdwy	7.9	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.9	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.9	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.7	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	25	21	382	36	21	418	488	-	-	543	-	-
Stage 1	123	206	-	173	233	-	-	-	-	-	-	-
Stage 2	380	233	-	398	206	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	25	21	382	34	21	418	488	-	-	543	-	-
Mov Cap-2 Maneuver	25	21	-	34	21	-	-	-	-	-	-	-
Stage 1	122	206	-	171	231	-	-	-	-	-	-	-
Stage 2	376	231	-	381	206	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	33.9	0	0.1	0
HCM LOS	D	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	488	-	-	143	-	543	-
HCM Lane V/C Ratio	0.011	-	-	0.129	-	-	-
HCM Control Delay (s)	12.5	-	-	33.9	0	0	-
HCM Lane LOS	B	-	-	D	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.4	-	0	-

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	10	0	15	0	0	5	20	1180	0	15	1290	5
Future Vol, veh/h	10	0	15	0	0	5	20	1180	0	15	1290	5
Conflicting Peds, #/hr	0	0	0	0	0	0	6	0	0	0	0	6
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	200	-	-	400	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	7	0	0	0	0	5	0	9	4	0
Mvmt Flow	11	0	16	0	0	5	22	1269	0	16	1387	5

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2107	2741	702	2039	2743	635	1398	0	0	1269	0	0
Stage 1	1428	1428	-	1313	1313	-	-	-	-	-	-	-
Stage 2	679	1313	-	726	1430	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	7.04	7.5	6.5	6.9	4.1	-	-	4.28	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.37	3.5	4	3.3	2.2	-	-	2.29	-	-
Pot Cap-1 Maneuver	30	20	369	34	20	426	495	-	-	507	-	-
Stage 1	144	203	-	170	230	-	-	-	-	-	-	-
Stage 2	412	230	-	387	202	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	28	18	367	31	18	426	493	-	-	507	-	-
Mov Cap-2 Maneuver	28	18	-	31	18	-	-	-	-	-	-	-
Stage 1	137	195	-	162	220	-	-	-	-	-	-	-
Stage 2	389	220	-	358	195	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	99.3		13.6		0.2		0.1	
HCM LOS	F		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	493	-	-	63	426	507	-
HCM Lane V/C Ratio	0.044	-	-	0.427	0.013	0.032	-
HCM Control Delay (s)	12.6	-	-	99.3	13.6	12.3	-
HCM Lane LOS	B	-	-	F	B	B	-
HCM 95th %tile Q(veh)	0.1	-	-	1.6	0	0.1	-

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↙			↗↑		
Traffic Vol, veh/h	0	0	20	1200	0	0
Future Vol, veh/h	0	0	20	1200	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	16965	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	10	6	0	0
Mvmt Flow	0	0	21	1277	0	0

Major/Minor	Minor2	Major1	
Conflicting Flow All	681	-	0
Stage 1	0	-	-
Stage 2	681	-	-
Critical Hdwy	6.8	-	4.3
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	5.8	-	-
Follow-up Hdwy	3.5	-	2.3
Pot Cap-1 Maneuver	389	0	-
Stage 1	-	0	-
Stage 2	469	0	-
Platoon blocked, %			-
Mov Cap-1 Maneuver	389	-	-
Mov Cap-2 Maneuver	389	-	-
Stage 1	-	-	-
Stage 2	469	-	-

Approach	EB	NB
HCM Control Delay, s	0	
HCM LOS	A	

Minor Lane/Major Mvmt	NBL	NBT	EBLn1
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	0
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	-

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔				↔↔	
Traffic Vol, veh/h	20	0	0	0	0	1305
Future Vol, veh/h	20	0	0	0	0	1305
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	16974	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	8	0	0	0	0	4
Mvmt Flow	21	0	0	0	0	1374

Major/Minor	Minor1	Major2	
Conflicting Flow All	687	-	0
Stage 1	0	-	-
Stage 2	687	-	-
Critical Hdwy	6.96	-	4.1
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	5.96	-	-
Follow-up Hdwy	3.58	-	2.2
Pot Cap-1 Maneuver	368	0	-
Stage 1	-	0	-
Stage 2	445	0	-
Platoon blocked, %			-
Mov Cap-1 Maneuver	368	-	-
Mov Cap-2 Maneuver	368	-	-
Stage 1	-	-	-
Stage 2	445	-	-

Approach	WB	SB
HCM Control Delay, s	15.4	0
HCM LOS	C	

Minor Lane/Major Mvmt	WBLn1	SBL	SBT
Capacity (veh/h)	368	-	-
HCM Lane V/C Ratio	0.057	-	-
HCM Control Delay (s)	15.4	0	-
HCM Lane LOS	C	A	-
HCM 95th %tile Q(veh)	0.2	-	-

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			
Traffic Vol, veh/h	0	5	1215	0	0	0
Future Vol, veh/h	0	5	1215	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	16979
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	9	8	0	0
Mvmt Flow	0	5	1293	0	0	0

Major/Minor	Minor1	Major1		
Conflicting Flow All	-	647	0	0
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	-	6.9	-	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	-	3.3	-	-
Pot Cap-1 Maneuver	0	418	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-
Platoon blocked, %			-	-
Mov Cap-1 Maneuver	-	418	-	-
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	WB	NB
HCM Control Delay, s	13.7	0
HCM LOS	B	

Minor Lane/Major Mvmt	NBT	NBRWBLn1
Capacity (veh/h)	-	418
HCM Lane V/C Ratio	-	0.013
HCM Control Delay (s)	-	13.7
HCM Lane LOS	-	B
HCM 95th %tile Q(veh)	-	0

Intersection						
Int Delay, s/veh	1.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T		T		T	
Traffic Vol, veh/h	0	0	5	5	15	0
Future Vol, veh/h	0	0	5	5	15	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	44	44	44	44	44	44
Heavy Vehicles, %	50	0	0	33	17	0
Mvmt Flow	0	0	11	11	34	0

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	67	34	34	0	0
Stage 1	34	-	-	-	-
Stage 2	33	-	-	-	-
Critical Hdwy	6.9	6.2	4.1	-	-
Critical Hdwy Stg 1	5.9	-	-	-	-
Critical Hdwy Stg 2	5.9	-	-	-	-
Follow-up Hdwy	3.95	3.3	2.2	-	-
Pot Cap-1 Maneuver	831	1045	1591	-	-
Stage 1	878	-	-	-	-
Stage 2	879	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	825	1045	1591	-	-
Mov Cap-2 Maneuver	825	-	-	-	-
Stage 1	872	-	-	-	-
Stage 2	879	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	3.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1591	-	-	-	-
HCM Lane V/C Ratio	0.007	-	-	-	-
HCM Control Delay (s)	7.3	0	0	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

HCM 6th TWSC
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Intersection												
Int Delay, s/veh	1.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔↔				
Traffic Vol, veh/h	55	0	0	0	25	10	35	1181	15	0	0	0
Future Vol, veh/h	55	0	0	0	25	10	35	1181	15	0	0	0
Conflicting Peds, #/hr	3	0	0	0	0	3	0	0	2	2	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	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	9	0	0	0	3	0	0	5	0	0	0	0
Mvmt Flow	56	0	0	0	26	10	36	1205	15	0	0	0

Major/Minor	Minor2		Minor1		Major1						
Conflicting Flow All	691	1294	-	-	1287	615	0	0	0		
Stage 1	0	0	-	-	1287	-	-	-	-		
Stage 2	691	1294	-	-	0	-	-	-	-		
Critical Hdwy	7.68	6.5	-	-	6.56	6.9	4.1	-	-		
Critical Hdwy Stg 1	-	-	-	-	5.56	-	-	-	-		
Critical Hdwy Stg 2	6.68	5.5	-	-	-	-	-	-	-		
Follow-up Hdwy	3.59	4	-	-	4.03	3.3	2.2	-	-		
Pot Cap-1 Maneuver	318	164	0	0	162	439	-	-	-		
Stage 1	-	-	0	0	231	-	-	-	-		
Stage 2	385	235	0	0	-	-	-	-	-		
Platoon blocked, %								-	-		
Mov Cap-1 Maneuver	273	164	-	-	162	438	-	-	-		
Mov Cap-2 Maneuver	273	164	-	-	162	-	-	-	-		
Stage 1	-	-	-	-	231	-	-	-	-		
Stage 2	335	235	-	-	-	-	-	-	-		

Approach	EB		WB		NB		
HCM Control Delay, s	21.6		27.1				
HCM LOS	C		D				

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	-	-	-	273	198
HCM Lane V/C Ratio	-	-	-	0.206	0.18
HCM Control Delay (s)	-	-	-	21.6	27.1
HCM Lane LOS	-	-	-	C	D
HCM 95th %tile Q(veh)	-	-	-	0.8	0.6

Intersection												
Int Delay, s/veh	0.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔				↔		↔↔				
Traffic Vol, veh/h	5	0	0	0	0	5	0	1210	0	0	0	0
Future Vol, veh/h	5	0	0	0	0	5	0	1210	0	0	0	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	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16979	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	2	2	0	2	0	2	5	0	0	0	2
Mvmt Flow	5	0	0	0	0	5	0	1274	0	0	0	0

Major/Minor	Minor2		Minor1			Major1			
Conflicting Flow All	637	1274	-	-	-	637	-	0	0
Stage 1	0	0	-	-	-	-	-	-	-
Stage 2	637	1274	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.54	-	-	-	6.9	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.02	-	-	-	3.3	-	-	-
Pot Cap-1 Maneuver	366	166	0	0	0	425	0	-	-
Stage 1	-	-	0	0	0	-	0	-	-
Stage 2	437	236	0	0	0	-	0	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	362	166	-	-	-	425	-	-	-
Mov Cap-2 Maneuver	362	166	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	432	236	-	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	15.1	13.6	0
HCM LOS	C	B	

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	-	-	362	425
HCM Lane V/C Ratio	-	-	0.015	0.012
HCM Control Delay (s)	-	-	15.1	13.6
HCM Lane LOS	-	-	C	B
HCM 95th %tile Q(veh)	-	-	0	0

Intersection												
Int Delay, s/veh	5.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	0	30	0	2	0	10	5	0	0	5	10
Future Vol, veh/h	5	0	30	0	2	0	10	5	0	0	5	10
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	0	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	65	65	65	65	65	65	65	65	65	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	17
Mvmt Flow	8	0	46	0	3	0	15	8	0	0	8	15

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	56	-	16	77	61	8	23	0	-	-	-	0
Stage 1	16	-	-	38	38	-	-	-	-	-	-	-
Stage 2	40	-	-	39	23	-	-	-	-	-	-	-
Critical Hdwy	7.12	-	6.22	7.12	6.52	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	6.12	-	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	-	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	-	3.318	3.518	4.018	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	941	0	1063	912	830	1074	1592	-	0	0	-	-
Stage 1	1004	0	-	977	863	-	-	-	0	0	-	-
Stage 2	975	0	-	976	876	-	-	-	0	0	-	-
Platoon blocked, %	-											
Mov Cap-1 Maneuver	932	-	1063	866	823	1074	1592	-	-	-	-	-
Mov Cap-2 Maneuver	932	-	-	866	823	-	-	-	-	-	-	-
Stage 1	995	-	-	968	855	-	-	-	-	-	-	-
Stage 2	963	-	-	934	876	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	8.6		9.4		4.9		0	
HCM LOS	A		A					

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1592	-	1042	823	-	-
HCM Lane V/C Ratio	0.01	-	0.052	0.004	-	-
HCM Control Delay (s)	7.3	0	8.6	9.4	-	-
HCM Lane LOS	A	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	0	-	-

Intersection						
Int Delay, s/veh	1.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	0	0	5	5	15	0
Future Vol, veh/h	0	0	5	5	15	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	64	64	64	64	64	64
Heavy Vehicles, %	2	2	2	2	25	2
Mvmt Flow	0	0	8	8	23	0

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	47	23	23	0	0
Stage 1	23	-	-	-	-
Stage 2	24	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	963	1054	1592	-	-
Stage 1	1000	-	-	-	-
Stage 2	999	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	958	1054	1592	-	-
Mov Cap-2 Maneuver	958	-	-	-	-
Stage 1	995	-	-	-	-
Stage 2	999	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	3.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1592	-	-	-	-
HCM Lane V/C Ratio	0.005	-	-	-	-
HCM Control Delay (s)	7.3	0	0	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection												
Int Delay, s/veh	0.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔↔				
Traffic Vol, veh/h	5	2	0	0	20	2	10	1203	33	0	0	0
Future Vol, veh/h	5	2	0	0	20	2	10	1203	33	0	0	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	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	20	0	0	0	0	0	0	5	0	0	0	0
Mvmt Flow	5	2	0	0	21	2	11	1266	35	0	0	0

Major/Minor	Minor2		Minor1		Major1					
Conflicting Flow All	666	1323	-	-	1306	651	0	0	0	
Stage 1	0	0	-	-	1306	-	-	-	-	
Stage 2	666	1323	-	-	0	-	-	-	-	
Critical Hdwy	7.9	6.5	-	-	6.5	6.9	4.1	-	-	
Critical Hdwy Stg 1	-	-	-	-	5.5	-	-	-	-	
Critical Hdwy Stg 2	6.9	5.5	-	-	-	-	-	-	-	
Follow-up Hdwy	3.7	4	-	-	4	3.3	2.2	-	-	
Pot Cap-1 Maneuver	312	158	0	0	161	416	-	-	-	
Stage 1	-	-	0	0	232	-	-	-	-	
Stage 2	375	228	0	0	-	-	-	-	-	
Platoon blocked, %								-	-	
Mov Cap-1 Maneuver	279	158	-	-	161	416	-	-	-	
Mov Cap-2 Maneuver	279	158	-	-	161	-	-	-	-	
Stage 1	-	-	-	-	232	-	-	-	-	
Stage 2	339	228	-	-	-	-	-	-	-	

Approach	EB		WB		NB		
HCM Control Delay, s	21.2		29.3				
HCM LOS	C		D				

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	-	-	-	229	171
HCM Lane V/C Ratio	-	-	-	0.032	0.135
HCM Control Delay (s)	-	-	-	21.2	29.3
HCM Lane LOS	-	-	-	C	D
HCM 95th %tile Q(veh)	-	-	-	0.1	0.5

EXISTING (2020) SYNCHRO
OPERATIONS

Signalized Intersections

HCM 6th Signalized Intersection Summary

10: US 101 & Koos Bay Blvd

05/11/2021



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	15	165	90	1102	1135	35
Future Volume (veh/h)	15	165	90	1102	1135	35
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1750	1723	1682	1695	1682	1750
Adj Flow Rate, veh/h	17	188	102	1252	1290	40
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	2	5	4	5	0
Cap, veh/h	21	237	141	2287	1759	55
Arrive On Green	0.17	0.17	0.09	0.71	0.56	0.55
Sat Flow, veh/h	123	1365	1602	3306	3248	98
Grp Volume(v), veh/h	206	0	102	1252	651	679
Grp Sat Flow(s),veh/h/ln	1495	0	1602	1611	1598	1664
Q Serve(g_s), s	9.1	0.0	4.3	12.7	21.0	21.0
Cycle Q Clear(g_c), s	9.1	0.0	4.3	12.7	21.0	21.0
Prop In Lane	0.08	0.91	1.00			0.06
Lane Grp Cap(c), veh/h	260	0	141	2287	888	925
V/C Ratio(X)	0.79	0.00	0.72	0.55	0.73	0.73
Avail Cap(c_a), veh/h	457	0	490	2287	942	982
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.4	0.0	30.5	4.7	11.4	11.4
Incr Delay (d2), s/veh	4.1	0.0	5.1	0.5	3.5	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.0	1.7	2.2	6.2	6.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	31.5	0.0	35.6	5.2	14.9	14.8
LnGrp LOS	C	A	D	A	B	B
Approach Vol, veh/h				1354	1330	
Approach Delay, s/veh	31.5			7.5	14.8	
Approach LOS	C			A	B	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	10.1	42.7			52.7	15.9
Change Period (Y+Rc), s	4.5	5.0			5.0	4.5
Max Green Setting (Gmax), s	20.5	40.0			40.0	20.5
Max Q Clear Time (g_c+I1), s	6.3	23.0			14.7	11.1
Green Ext Time (p_c), s	0.2	14.7			20.2	0.6
Intersection Summary						
HCM 6th Ctrl Delay			12.6			
HCM 6th LOS			B			

APPENDIX D

Crash Analysis Worksheets

General & Site Information	
Analyst:	Dipa
Agency/Company:	DEA
Date:	5/10/2021
Project Name:	Coos Bay Front Street

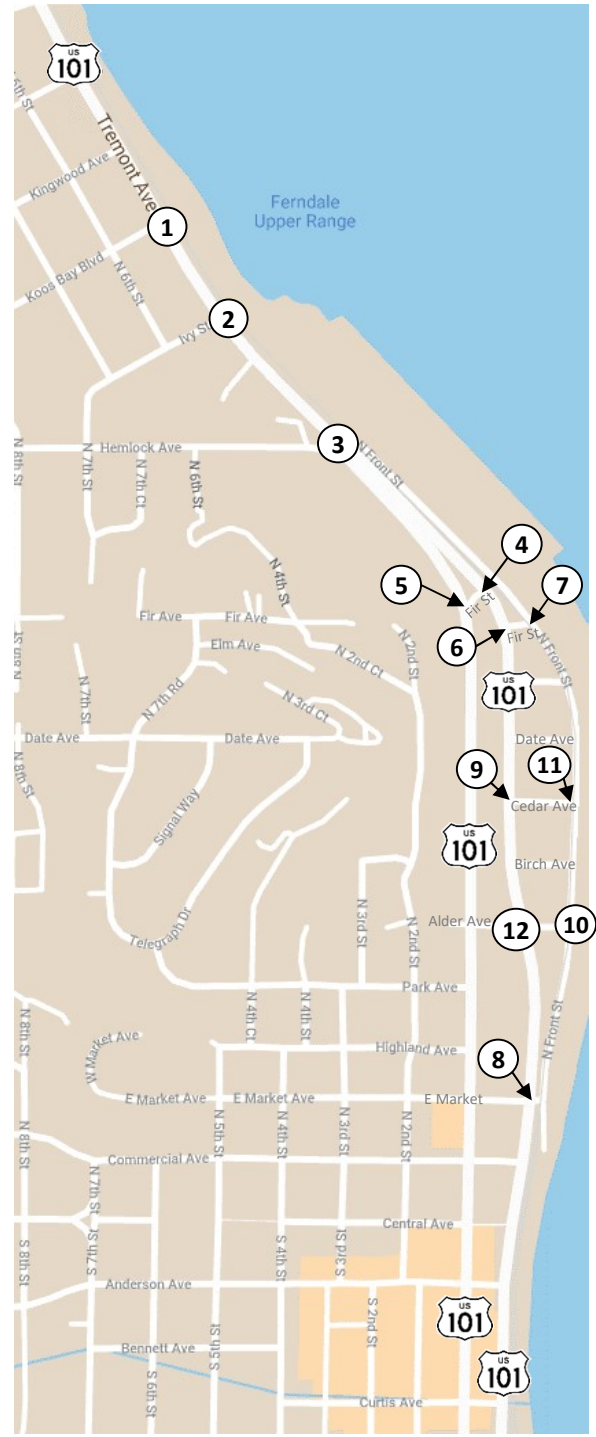
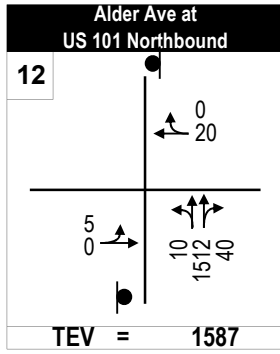
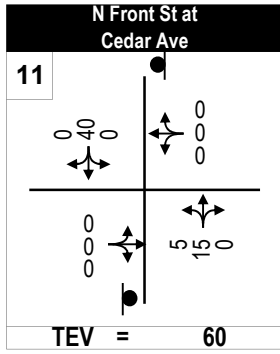
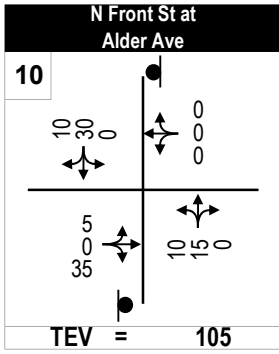
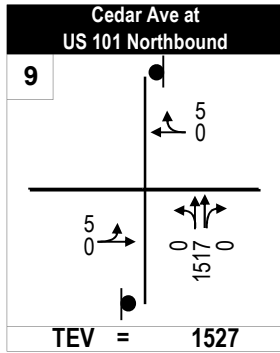
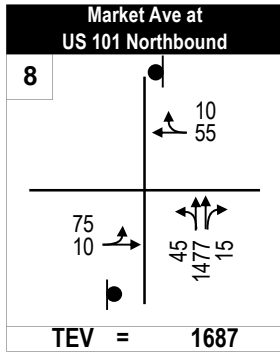
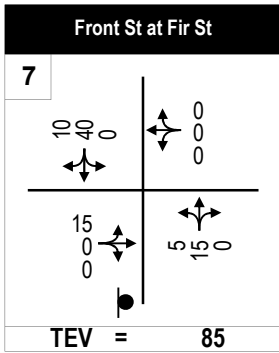
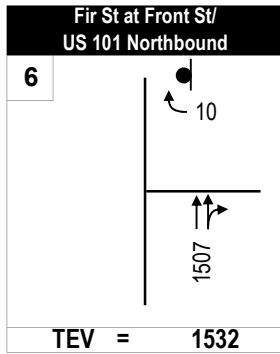
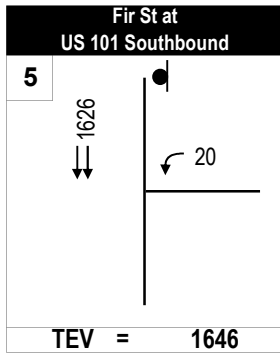
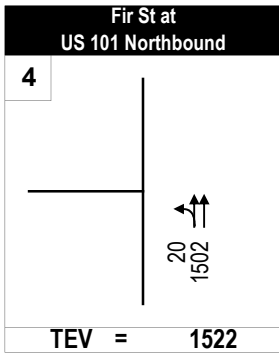
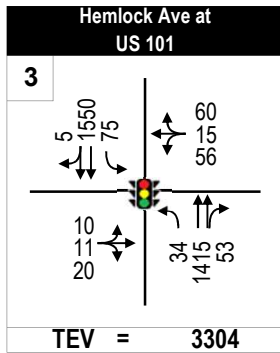
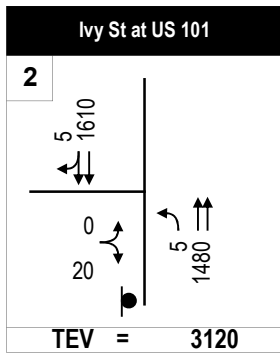
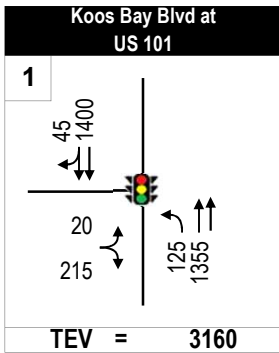
Intersection Crash Data							
Intersection	Intersection Type	Year					Total
		2014	2015	2016	2017	2018	
Koos Bay Blvd at US 101	Urban 3SG	1	0	2	2	3	8
Ivy St at US 101	Urban 3ST	1	0	0	0	0	1
Hemlock/Front at US 101	Urban 4ST	2	1	0	0	3	6
Fir St at US 101 NB	Urban 3ST	0	0	0	0	0	0
Fir St at US 101 SB	Urban 3ST	0	0	0	0	0	0
Fir St (south) at US 101 NB	Urban 3ST	0	0	0	0	0	0
Front St at Fir St (south)	Urban 4ST	0	0	0	0	0	0
Market Ave at US 101 NB	Urban 3ST	1	1	0	1	0	3
US 101 at Cedar Avenue	Urban 3ST	0	0	0	0	0	0
Front Street at Alder Ave	Urban 4ST	0	0	0	0	0	0
Front Street at Cedar Ave	Urban 4ST	0	0	0	0	0	0
US 101 NB at Alder Ave	Urban 3ST	1	1	2	2	1	7
	Total	6	3	4	5	7	25

Intersection Population Type Crash Rate				
Average Crash Rate per intersection type				
Intersection Pop. Type	Sum of Crashes	Sum of 5-year MEV	Avg Crash Rate for Ref Pop.	INT in Pop
Rural 3SG	0	0	0.0000	0
Rural 3ST	0	0	0.0000	0
Rural 4SG	0	0	0.0000	0
Rural 4ST	0	0	0.0000	0
Urban 3ST	11	163	0.0673	7
Urban 3SG	8	45	0.1793	1
Urban 4ST	6	46	0.1292	4
Urban 4SG	0	0	0.0000	0

Critical Rate Calculation									
Intersection	AADT Entering Intersection	5-year MEV	Crash Total	Intersection Population Type	Intersection Crash Rate	Reference Population Crash Rate	Critical Rate	Over Critical	90th %tile rate
Koos Bay Blvd at US 101	24,450	44.6	8	Urban 3SG	0.18	APM Exhibit 4-1			0.509
Ivy St at US 101	24,150	44.1	1	Urban 3ST	0.02	0.0673	0.14	Under	0.293
Hemlock/Front at US 101	24,425	44.6	6	Urban 4ST	0.13	APM Exhibit 4-1			0.408
Fir St at US 101 NB	10,525	19.2	0	Urban 3ST	0.00	0.0673	0.19	Under	0.293
Fir St at US 101 SB	11,425	20.9	0	Urban 3ST	0.00	0.0673	0.18	Under	0.293
Fir St (south) at US 101 NB	10,525	19.2	0	Urban 3ST	0.00	0.0673	0.19	Under	0.293
Front St at Fir St (south)	225	0.4	0	Urban 4ST	0.00	APM Exhibit 4-1			0.408
Market Ave at US 101 NB	11,400	20.8	3	Urban 3ST	0.14	0.0673	0.18	Under	0.293
US 101 at Cedar Avenue	10,525	19.2	0	Urban 3ST	0.00	0.0673	0.19	Under	0.293
Front Street at Alder Ave	575	1.0	0	Urban 4ST	0.00	APM Exhibit 4-1			0.408
Front Street at Cedar Ave	225	0.4	0	Urban 4ST	0.00	APM Exhibit 4-1			0.408
US 101 NB at Alder Ave	11,000	20.1	7	Urban 3ST	0.35	0.0673	0.19	Over	0.293

APPENDIX E

Synchro Worksheets: Future
Operations



LEGEND

- Signalized Intersection
- Lane configuration
- STOP-Controlled Approach
- TEV Total Entering Volume

**PM Peak Hour Volumes
Future year (2042)**

Coos Bay Front Street Blueprint

FUTURE (2042) SYNCHRO
OPERATIONS

Stop Controlled Intersections

Intersection												
Int Delay, s/veh	0.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	0	0	20	0	0	0	5	1480	0	0	1610	5
Future Vol, veh/h	0	0	20	0	0	0	5	1480	0	0	1610	5
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	200	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	20	0	0	0	0	0	0	5	0	0	4	0
Mvmt Flow	0	0	22	0	0	0	5	1609	0	0	1750	5

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2569	3373	879	2494	3375	805	1756	0	0	1609	0	0
Stage 1	1754	1754	-	1619	1619	-	-	-	-	-	-	-
Stage 2	815	1619	-	875	1756	-	-	-	-	-	-	-
Critical Hdwy	7.9	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.9	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.9	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.7	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	10	8	295	15	8	330	361	-	-	411	-	-
Stage 1	73	140	-	110	164	-	-	-	-	-	-	-
Stage 2	301	164	-	315	140	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	10	8	295	14	8	330	361	-	-	411	-	-
Mov Cap-2 Maneuver	10	8	-	14	8	-	-	-	-	-	-	-
Stage 1	72	140	-	108	162	-	-	-	-	-	-	-
Stage 2	297	162	-	292	140	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	18.2	0	0.1	0
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	361	-	-	295	-	411	-
HCM Lane V/C Ratio	0.015	-	-	0.074	-	-	-
HCM Control Delay (s)	15.1	-	-	18.2	0	0	-
HCM Lane LOS	C	-	-	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	-	0	-

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↘		↖↗			
Traffic Vol, veh/h	0	0	20	1502	0	0
Future Vol, veh/h	0	0	20	1502	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	16965	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	10	6	0	0
Mvmt Flow	0	0	21	1598	0	0

Major/Minor	Minor2	Major1	
Conflicting Flow All	841	-	0
Stage 1	0	-	-
Stage 2	841	-	-
Critical Hdwy	6.8	-	4.3
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	5.8	-	-
Follow-up Hdwy	3.5	-	2.3
Pot Cap-1 Maneuver	308	0	-
Stage 1	-	0	-
Stage 2	388	0	-
Platoon blocked, %			-
Mov Cap-1 Maneuver	308	-	-
Mov Cap-2 Maneuver	308	-	-
Stage 1	-	-	-
Stage 2	388	-	-

Approach	EB	NB
HCM Control Delay, s	0	
HCM LOS	A	

Minor Lane/Major Mvmt	NBL	NBT	EBLn1
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	0
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	-

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔				↔↔	
Traffic Vol, veh/h	20	0	0	0	0	1626
Future Vol, veh/h	20	0	0	0	0	1626
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	16974	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	8	0	0	0	0	4
Mvmt Flow	21	0	0	0	0	1712

Major/Minor	Minor1	Major2	
Conflicting Flow All	856	-	0
Stage 1	0	-	-
Stage 2	856	-	-
Critical Hdwy	6.96	-	4.1
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	5.96	-	-
Follow-up Hdwy	3.58	-	2.2
Pot Cap-1 Maneuver	285	0	-
Stage 1	-	0	-
Stage 2	362	0	-
Platoon blocked, %			-
Mov Cap-1 Maneuver	285	-	-
Mov Cap-2 Maneuver	285	-	-
Stage 1	-	-	-
Stage 2	362	-	-

Approach	WB	SB
HCM Control Delay, s	18.6	0
HCM LOS	C	

Minor Lane/Major Mvmt	WBLn1	SBL	SBT
Capacity (veh/h)	285	-	-
HCM Lane V/C Ratio	0.074	-	-
HCM Control Delay (s)	18.6	0	-
HCM Lane LOS	C	A	-
HCM 95th %tile Q(veh)	0.2	-	-

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			
Traffic Vol, veh/h	0	15	1507	15	0	0
Future Vol, veh/h	0	15	1507	15	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	16979
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	9	8	0	0
Mvmt Flow	0	16	1603	16	0	0

Major/Minor	Minor1	Major1		
Conflicting Flow All	-	810	0	0
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	-	6.9	-	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	-	3.3	-	-
Pot Cap-1 Maneuver	0	327	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-
Platoon blocked, %			-	-
Mov Cap-1 Maneuver	-	327	-	-
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	WB	NB
HCM Control Delay, s	16.6	0
HCM LOS	C	

Minor Lane/Major Mvmt	NBT	NBRWBLn1
Capacity (veh/h)	-	- 327
HCM Lane V/C Ratio	-	- 0.049
HCM Control Delay (s)	-	- 16.6
HCM Lane LOS	-	- C
HCM 95th %tile Q(veh)	-	- 0.2

Intersection						
Int Delay, s/veh	2.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	15	0	5	15	40	10
Future Vol, veh/h	15	0	5	15	40	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	44	44	44	44	44	44
Heavy Vehicles, %	50	0	0	33	17	0
Mvmt Flow	34	0	11	34	91	23

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	159	103	114	0	0
Stage 1	103	-	-	-	-
Stage 2	56	-	-	-	-
Critical Hdwy	6.9	6.2	4.1	-	-
Critical Hdwy Stg 1	5.9	-	-	-	-
Critical Hdwy Stg 2	5.9	-	-	-	-
Follow-up Hdwy	3.95	3.3	2.2	-	-
Pot Cap-1 Maneuver	732	957	1488	-	-
Stage 1	814	-	-	-	-
Stage 2	857	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	726	957	1488	-	-
Mov Cap-2 Maneuver	726	-	-	-	-
Stage 1	807	-	-	-	-
Stage 2	857	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.2	1.9	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1488	-	726	-	-
HCM Lane V/C Ratio	0.008	-	0.047	-	-
HCM Control Delay (s)	7.4	0	10.2	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection												
Int Delay, s/veh	6.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔↔				
Traffic Vol, veh/h	75	10	0	0	55	10	45	1477	15	0	0	0
Future Vol, veh/h	75	10	0	0	55	10	45	1477	15	0	0	0
Conflicting Peds, #/hr	3	0	0	0	0	3	0	0	2	2	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	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	9	0	0	0	3	0	0	5	0	0	0	0
Mvmt Flow	77	10	0	0	56	10	46	1507	15	0	0	0

Major/Minor	Minor2		Minor1		Major1						
Conflicting Flow All	877	1616	-	-	1609	766	0	0	0		
Stage 1	0	0	-	-	1609	-	-	-	-		
Stage 2	877	1616	-	-	0	-	-	-	-		
Critical Hdwy	7.68	6.5	-	-	6.56	6.9	4.1	-	-		
Critical Hdwy Stg 1	-	-	-	-	5.56	-	-	-	-		
Critical Hdwy Stg 2	6.68	5.5	-	-	-	-	-	-	-		
Follow-up Hdwy	3.59	4	-	-	4.03	3.3	2.2	-	-		
Pot Cap-1 Maneuver	232	105	0	0	103	350	-	-	-		
Stage 1	-	-	0	0	161	-	-	-	-		
Stage 2	296	164	0	0	-	-	-	-	-		
Platoon blocked, %								-	-		
Mov Cap-1 Maneuver	128	105	-	-	103	349	-	-	-		
Mov Cap-2 Maneuver	128	105	-	-	103	-	-	-	-		
Stage 1	-	-	-	-	161	-	-	-	-		
Stage 2	187	164	-	-	-	-	-	-	-		

Approach	EB		WB		NB		
HCM Control Delay, s	82.1		71.1				
HCM LOS	F		F				

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	-	-	-	125	116
HCM Lane V/C Ratio	-	-	-	0.694	0.572
HCM Control Delay (s)	-	-	-	82.1	71.1
HCM Lane LOS	-	-	-	F	F
HCM 95th %tile Q(veh)	-	-	-	3.8	2.8

Intersection												
Int Delay, s/veh	0.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔				↔		↕↔				
Traffic Vol, veh/h	5	0	0	0	0	5	0	1517	0	0	0	0
Future Vol, veh/h	5	0	0	0	0	5	0	1517	0	0	0	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	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16979	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	2	2	0	2	0	2	5	0	0	0	2
Mvmt Flow	5	0	0	0	0	5	0	1597	0	0	0	0

Major/Minor	Minor2		Minor1			Major1			
Conflicting Flow All	799	1597	-	-	-	799	-	0	0
Stage 1	0	0	-	-	-	-	-	-	-
Stage 2	799	1597	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.54	-	-	-	6.9	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.02	-	-	-	3.3	-	-	-
Pot Cap-1 Maneuver	280	105	0	0	0	333	0	-	-
Stage 1	-	-	0	0	0	-	0	-	-
Stage 2	350	164	0	0	0	-	0	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	276	105	-	-	-	333	-	-	-
Mov Cap-2 Maneuver	276	105	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	344	164	-	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	18.3	16	0
HCM LOS	C	C	

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	-	-	276	333
HCM Lane V/C Ratio	-	-	0.019	0.016
HCM Control Delay (s)	-	-	18.3	16
HCM Lane LOS	-	-	C	C
HCM 95th %tile Q(veh)	-	-	0.1	0

Intersection												
Int Delay, s/veh	4.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	0	35	0	0	0	10	15	0	0	30	10
Future Vol, veh/h	5	0	35	0	0	0	10	15	0	0	30	10
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	0	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	65	65	65	65	65	65	65	65	65	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	17
Mvmt Flow	8	0	54	0	0	0	15	23	0	0	46	15

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	107	-	54	134	114	23	61	0	-	-	-	0
Stage 1	54	-	-	53	53	-	-	-	-	-	-	-
Stage 2	53	-	-	81	61	-	-	-	-	-	-	-
Critical Hdwy	7.12	-	6.22	7.12	6.52	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	6.12	-	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	-	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	-	3.318	3.518	4.018	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	872	0	1013	838	776	1054	1542	-	0	0	-	-
Stage 1	958	0	-	960	851	-	-	-	0	0	-	-
Stage 2	960	0	-	927	844	-	-	-	0	0	-	-
Platoon blocked, %	-											
Mov Cap-1 Maneuver	865	-	1013	788	768	1054	1542	-	-	-	-	-
Mov Cap-2 Maneuver	865	-	-	788	768	-	-	-	-	-	-	-
Stage 1	948	-	-	950	842	-	-	-	-	-	-	-
Stage 2	950	-	-	878	844	-	-	-	-	-	-	-

Approach	EB		WB		NB			SB			
HCM Control Delay, s	8.9		0		2.9			0			
HCM LOS	A		A								

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1542	-	992	-	-	-
HCM Lane V/C Ratio	0.01	-	0.062	-	-	-
HCM Control Delay (s)	7.4	0	8.9	0	-	-
HCM Lane LOS	A	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-	-

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	0	0	5	15	40	0
Future Vol, veh/h	0	0	5	15	40	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	64	64	64	64	64	64
Heavy Vehicles, %	2	2	2	2	25	2
Mvmt Flow	0	0	8	23	63	0

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	102	63	63	0	-
Stage 1	63	-	-	-	-
Stage 2	39	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	896	1002	1540	-	-
Stage 1	960	-	-	-	-
Stage 2	983	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	892	1002	1540	-	-
Mov Cap-2 Maneuver	892	-	-	-	-
Stage 1	955	-	-	-	-
Stage 2	983	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	1.8	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1540	-	-	-	-
HCM Lane V/C Ratio	0.005	-	-	-	-
HCM Control Delay (s)	7.3	0	0	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection												
Int Delay, s/veh	0.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔↔				
Traffic Vol, veh/h	5	0	0	0	20	0	10	1512	40	0	0	0
Future Vol, veh/h	5	0	0	0	20	0	10	1512	40	0	0	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	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	20	0	0	0	0	0	0	5	0	0	0	0
Mvmt Flow	5	0	0	0	21	0	11	1592	42	0	0	0

Major/Minor	Minor2		Minor1		Major1					
Conflicting Flow All	829	1656	-	-	1635	817	0	0	0	
Stage 1	0	0	-	-	1635	-	-	-	-	
Stage 2	829	1656	-	-	0	-	-	-	-	
Critical Hdwy	7.9	6.5	-	-	6.5	6.9	4.1	-	-	
Critical Hdwy Stg 1	-	-	-	-	5.5	-	-	-	-	
Critical Hdwy Stg 2	6.9	5.5	-	-	-	-	-	-	-	
Follow-up Hdwy	3.7	4	-	-	4	3.3	2.2	-	-	
Pot Cap-1 Maneuver	234	99	0	0	102	324	-	-	-	
Stage 1	-	-	0	0	161	-	-	-	-	
Stage 2	295	157	0	0	-	-	-	-	-	
Platoon blocked, %								-	-	
Mov Cap-1 Maneuver	197	99	-	-	102	324	-	-	-	
Mov Cap-2 Maneuver	197	99	-	-	102	-	-	-	-	
Stage 1	-	-	-	-	161	-	-	-	-	
Stage 2	256	157	-	-	-	-	-	-	-	

Approach	EB		WB		NB	
HCM Control Delay, s	23.8		49.2			
HCM LOS	C		E			

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	-	-	-	197	102
HCM Lane V/C Ratio	-	-	-	0.027	0.206
HCM Control Delay (s)	-	-	-	23.8	49.2
HCM Lane LOS	-	-	-	C	E
HCM 95th %tile Q(veh)	-	-	-	0.1	0.7

FUTURE (2042) SYNCHRO
OPERATIONS

Signalized Intersections

HCM 6th Signalized Intersection Summary
 10: US 101 & Koos Bay Blvd

06/02/2021

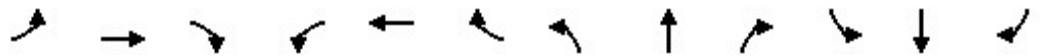


Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	20	215	125	1355	1400	45
Future Volume (veh/h)	20	215	125	1355	1400	45
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1750	1723	1682	1695	1682	1750
Adj Flow Rate, veh/h	24	253	132	1426	1474	47
Peak Hour Factor	0.85	0.85	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	5	4	5	0
Cap, veh/h	24	257	165	2381	1897	60
Arrive On Green	0.19	0.18	0.10	0.74	0.60	0.59
Sat Flow, veh/h	129	1361	1602	3306	3245	101
Grp Volume(v), veh/h	278	0	132	1426	744	777
Grp Sat Flow(s),veh/h/ln	1496	0	1602	1611	1598	1664
Q Serve(g_s), s	20.6	0.0	9.0	23.0	38.7	39.0
Cycle Q Clear(g_c), s	20.6	0.0	9.0	23.0	38.7	39.0
Prop In Lane	0.09	0.91	1.00			0.06
Lane Grp Cap(c), veh/h	283	0	165	2381	959	998
V/C Ratio(X)	0.98	0.00	0.80	0.60	0.78	0.78
Avail Cap(c_a), veh/h	283	0	245	2638	1006	1048
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.1	0.0	48.7	6.8	16.6	16.7
Incr Delay (d2), s/veh	48.7	0.0	9.0	0.5	4.3	4.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.4	0.0	3.9	5.9	13.4	14.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	93.8	0.0	57.7	7.3	21.0	21.0
LnGrp LOS	F	A	E	A	C	C
Approach Vol, veh/h	278			1558	1521	
Approach Delay, s/veh	93.8			11.6	21.0	
Approach LOS	F			B	C	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	15.4	70.7			86.1	25.0
Change Period (Y+Rc), s	4.5	5.0			5.0	4.5
Max Green Setting (Gmax), s	16.5	69.0			90.0	20.5
Max Q Clear Time (g_c+I1), s	11.0	41.0			25.0	22.6
Green Ext Time (p_c), s	0.2	24.7			47.1	0.0
Intersection Summary						
HCM 6th Ctrl Delay			22.6			
HCM 6th LOS			C			

HCM 6th Signalized Intersection Summary

30: US 101 & Hemlock/Front

06/02/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↗	↕↔		↗	↕↔	
Traffic Volume (veh/h)	10	11	20	56	15	60	34	1415	53	75	1550	5
Future Volume (veh/h)	10	11	20	56	15	60	34	1415	53	75	1550	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1750	1750	1654	1750	1750	1750	1750	1682	1750	1627	1695	1750
Adj Flow Rate, veh/h	12	13	24	66	18	71	36	1489	56	79	1632	5
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	7	0	0	0	0	5	0	9	4	0
Cap, veh/h	18	19	36	85	23	91	75	1804	68	115	1989	6
Arrive On Green	0.04	0.05	0.04	0.12	0.13	0.12	0.05	0.57	0.56	0.07	0.60	0.59
Sat Flow, veh/h	389	422	779	675	184	726	1667	3140	118	1550	3294	10
Grp Volume(v), veh/h	49	0	0	155	0	0	36	756	789	79	798	839
Grp Sat Flow(s),veh/h/ln	1590	0	0	1586	0	0	1667	1598	1660	1550	1611	1693
Q Serve(g_s), s	2.6	0.0	0.0	8.2	0.0	0.0	1.8	33.0	33.3	4.3	33.5	33.6
Cycle Q Clear(g_c), s	2.6	0.0	0.0	8.2	0.0	0.0	1.8	33.0	33.3	4.3	33.5	33.6
Prop In Lane	0.24		0.49	0.43		0.46	1.00		0.07	1.00		0.01
Lane Grp Cap(c), veh/h	73	0	0	199	0	0	75	918	954	115	972	1022
V/C Ratio(X)	0.67	0.00	0.00	0.78	0.00	0.00	0.48	0.82	0.83	0.69	0.82	0.82
Avail Cap(c_a), veh/h	111	0	0	313	0	0	126	1297	1347	207	1401	1473
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.7	0.0	0.0	36.8	0.0	0.0	40.2	14.8	14.9	38.9	13.4	13.4
Incr Delay (d2), s/veh	10.2	0.0	0.0	6.5	0.0	0.0	4.7	3.1	3.0	7.0	2.7	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.0	3.5	0.0	0.0	0.8	10.3	10.8	1.8	10.1	10.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.9	0.0	0.0	43.2	0.0	0.0	44.8	17.9	18.0	46.0	16.1	16.0
LnGrp LOS	D	A	A	D	A	A	D	B	B	D	B	B
Approach Vol, veh/h		49			155			1581				1716
Approach Delay, s/veh		50.9			43.2			18.5				17.4
Approach LOS		D			D			B				B
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.9	53.6		8.0	7.4	56.1		14.8				
Change Period (Y+Rc), s	4.5	5.0		4.5	4.5	5.0		4.5				
Max Green Setting (Gmax), s	10.5	69.0		5.5	5.5	74.0		16.5				
Max Q Clear Time (g_c+I1), s	6.3	35.3		4.6	3.8	35.6		10.2				
Green Ext Time (p_c), s	0.1	13.3		0.0	0.0	15.3		0.4				

Intersection Summary

HCM 6th Ctrl Delay	19.5
HCM 6th LOS	B

SIGNALIZED INTERSECTION MANUAL CALCULATIONS

US 101 @ Koos Bay Blvd			
Critical movement	Adjusted flow	Saturated flow	ratio
EBL	24	129	0.186
NBL	132	1602	0.082
SBT	1474	3245	0.454
		SUM	0.723

Cycle length 90 seconds

LOST TIME 12 seconds

critical v/c ratio 0.834

US 101 @ Hemlock Ave			
Critical movement	Adjusted flow	Saturated flow	ratio
EBT	13	422	0.031
WBT	18	184	0.098
SBL	79	1550	0.051
NBT	1489	3140	0.474
		SUM	0.654

Cycle length 120 seconds

LOST TIME 16 seconds

critical v/c ratio 0.754

APPENDIX F

Coos Bay Village Center Traffic Impact Analysis

Coos Bay Village Center Commercial Development

Traffic Impact Analysis

September 11, 2018

Prepared By:



*TRANSPORTATION
ENGINEERING, LLC*

SOUTHERN OREGON TRANSPORTATION ENGINEERING, LLC

Coos Bay Village Center Commercial Development

Traffic Impact Analysis

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Prepared By:

SOUTHERN OREGON TRANSPORTATION ENGINEERING, LLC



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I. EXECUTIVE SUMMARY

Summary

Southern Oregon Transportation Engineering, LLC prepared a traffic analysis for the proposed Coos Bay Village Center mixed-use commercial development in Coos Bay, Oregon. The subject property is located east of US 101 between Ivy Street and Fir Street.

Proposed commercial development includes a mix of office, retail, and restaurant uses, and is estimated to generate 2,969 average daily trips (ADT) to the transportation system with 74 trips occurring during the a.m. peak hour and 198 trips during the p.m. peak hour. Study area intersections include:

- Koosbay Blvd. / US 101
- Ivy Street / US 101
- Hemlock Ave. / US 101
- Fir Street / US 101
- Market Ave. / Front Street / US 101
- Access points

Study area intersections were evaluated under existing year 2018, design year 2021 (no-build and build), and future year 2026 (no-build and build) conditions during the a.m. and p.m. peak hours.

Conclusions

The findings of the traffic impact analysis conclude that the proposed Coos Bay Village Center can be approved on the transportation system with recommended improvements without creating adverse impacts. Results of the analysis are as follows:

1. One study area intersection is shown to exceed performance standards by the design year 2021 with proposed development. The intersection of Hemlock Avenue and US 101, as a two-way stop controlled intersection, will require a traffic signal as a result of proposed development. This improvement is shown to meet applicable warrants and, if implemented, will adequately mitigate the intersection through future year 2026 build conditions. A deviation will be required for spacing between signalized intersections.
2. There were no safety concerns as a result of crash history within the study area
3. A conceptual signal layout is provided which shows that a traffic signal can work within the existing right-of-way with some recommended striping changes and allowance of minimum setbacks. This will require further negotiations with ODOT Roads, ODOT Rail, and the Port of Coos Bay due to the close proximity of the railroad.

The proposed Coos Bay Village Center is shown to be in compliance with the Coos Bay Comprehensive Plan and Land Development Code. Streets that serve the subject property are shown to have adequate capacity to support proposed development.

II. INTRODUCTION

Background

Southern Oregon Transportation Engineering, LLC prepared a traffic impact analysis for the proposed Coos Bay Village Center mixed-use commercial development in Coos Bay, Oregon.

A traffic impact analysis is required by the City of Coos Bay, Oregon Department of Transportation (ODOT), ODOT Rail, and the Port of Coos Bay to address development impacts to the transportation system and nearby railroad. The scope of the analysis includes evaluating development impacts within an identified study area under existing, design year, and future (5-years) year conditions during the a.m. and p.m. peak hours. Study area intersections were identified by ODOT and the City of Coos Bay to include:

- Koosbay Blvd. / US 101
- Ivy Street / US 101
- Hemlock Ave. / US 101
- Fir Street / US 101
- Market Ave. / Front Street / US 101
- Access points

The main development entrance is proposed at the east approach of the Hemlock Avenue / US 101 stop-controlled intersection. A second, shared access is proposed along the north boundary line of the Coos Bay Museum.

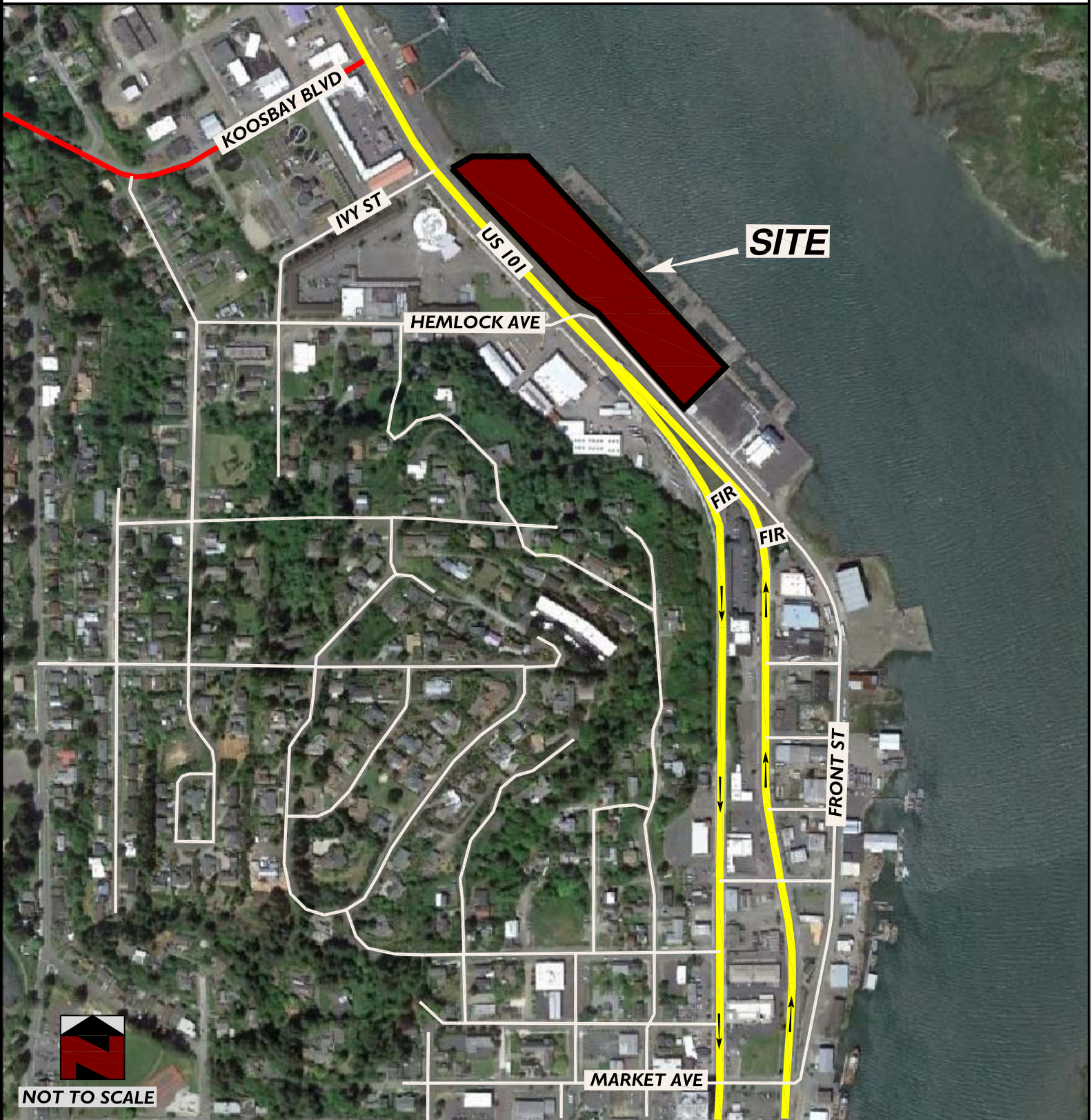
Project Location

The subject property is located east of US 101 between Ivy Street and Fir Street at 25S13W26BB lot 400 & 25S13W26BD lot 100 in Coos Bay, Oregon. Refer to Figures 1 and 2 for a vicinity map and site plan.

Project Description

The subject property is currently vacant. Proposed development includes approximately 78,642 square feet of office, retail, and restaurant uses within a mixed-use commercial development. The estimated traffic generation is 2,969 average daily trips (ADT) to the transportation system with 74 primary trips occurring during the a.m. peak hour and 198 primary trips during the p.m. peak hour. Two access points are proposed to the site.

Figure 1 : Vicinity Map

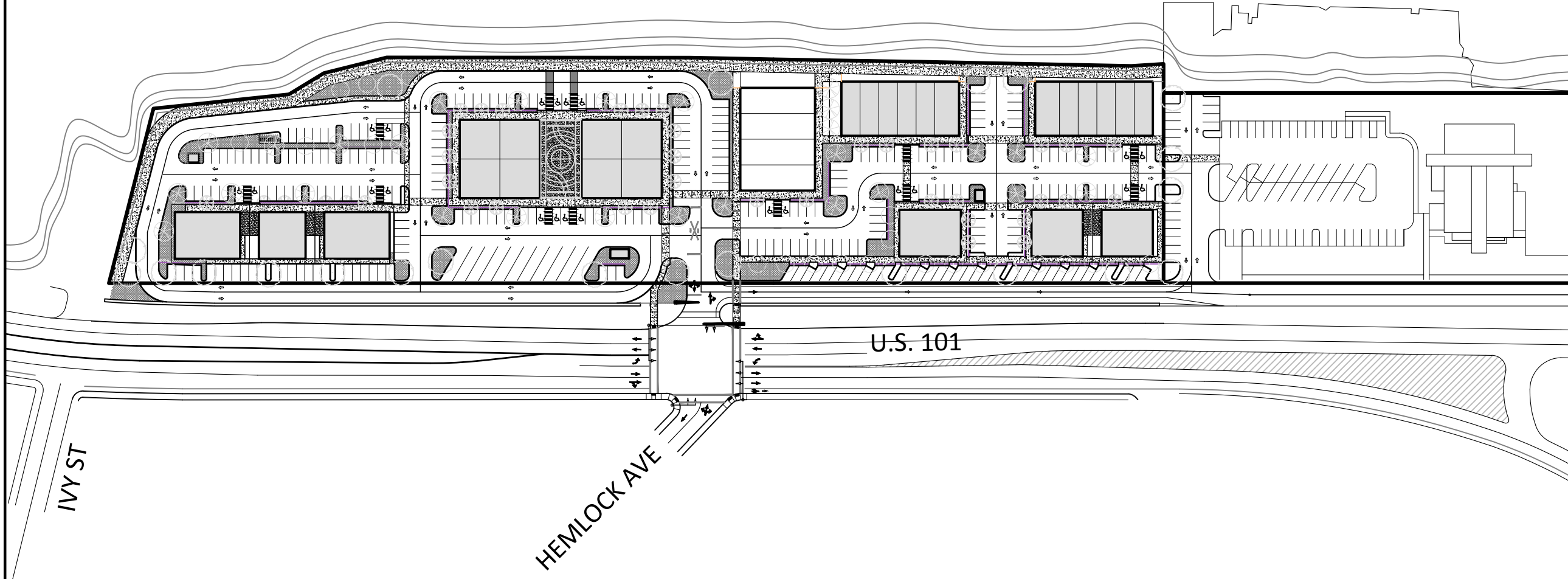


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***Coos Bay Village Center
Mixed Use Development
Traffic Impact Study
Coos Bay, Oregon***

Figure 2 : Site Plan

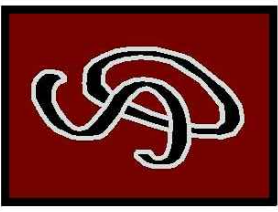


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III. EXISTING YEAR 2018 NO-BUILD CONDITIONS

Site Conditions

The subject property is located east of US 101 between Ivy Street and Fir Street at 25S13W26BB lot 400 & 25S13W26BD lot 100 in Coos Bay, Oregon. The main development entrance is proposed at the east approach of the Hemlock Avenue / US 101 intersection. A second, shared access is proposed along the north boundary line of the Coos Bay Museum. US 101 is under ODOT jurisdiction and is classified as a Statewide Highway. Hemlock Avenue, Ivy Street, Fir Street, Market Avenue, and Koosbay Boulevard are all under City of Coos Bay jurisdiction.

Roadway Characteristics

The project study area includes key intersections along US 101 and Front Street between Market Avenue and Koosbay Boulevard. Table 1 provides a summary of existing roadway classifications and descriptions in the study area.

Table 1 - Roadway Classifications and Descriptions					
Roadway	Jurisdiction	Functional Classification	Lanes	Operational Standard	Posted Speed (MPH)
US 101	ODOT	Statewide Highway / Principal Arterial	2-5	V/C 0.80-0.85 ¹	30-45
Market Avenue	City of Coos Bay	Local	2	LOS D	25
Fir Street	City of Coos Bay	Local	2	LOS D	25
Hemlock Avenue	City of Coos Bay	Local	2	LOS D	25
Ivy Street	City of Coos Bay	Local	2	LOS D	25
Koosbay Boulevard	City of Coos Bay	Arterial	2	LOS D	35

Note:

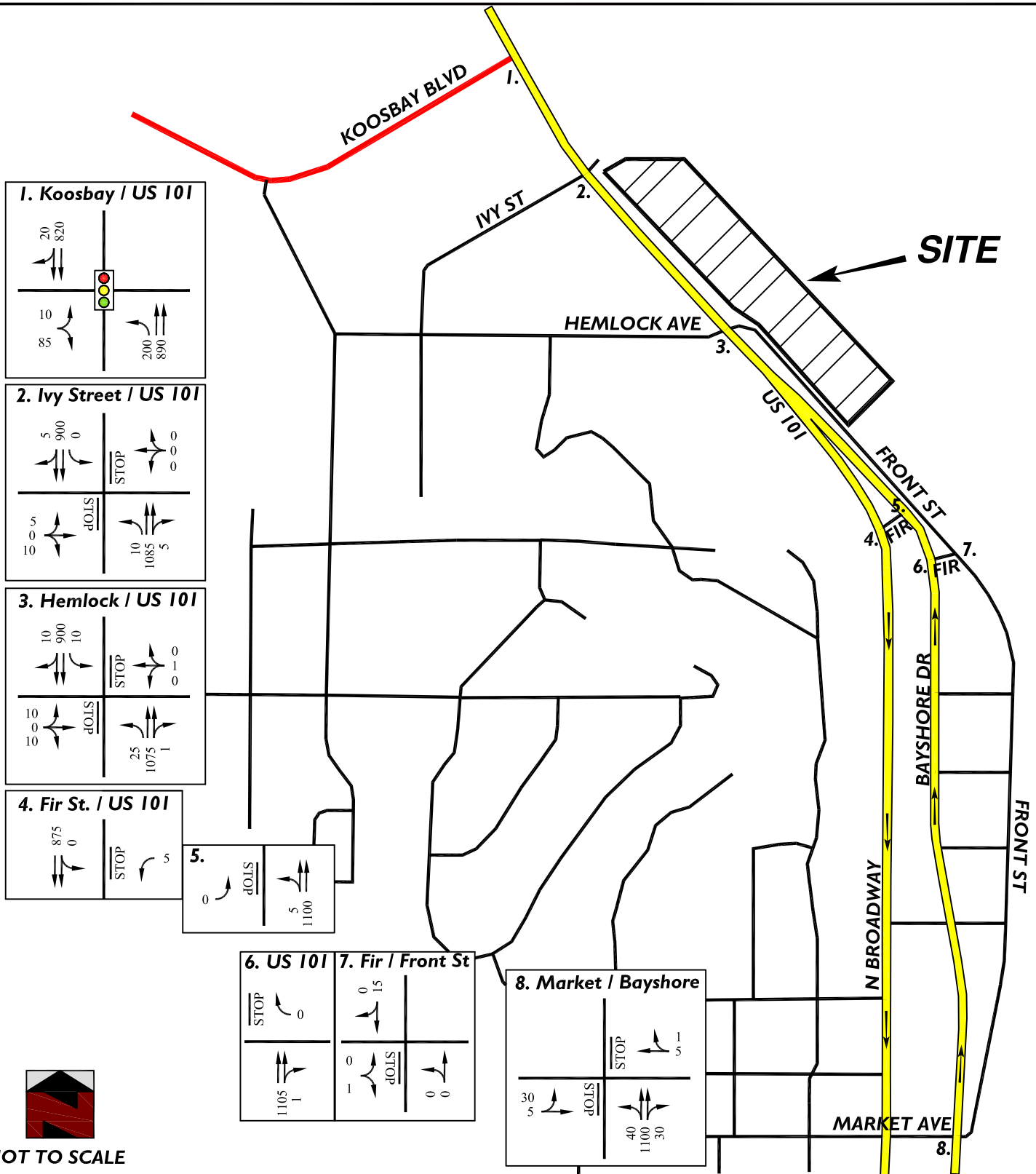
1. Volume-to-capacity (V/C) ratio performance standard in Oregon Highway Plan (OHP) is 0.85 for 30 mph and 0.80 for 45 mph

Traffic Counts

Manual traffic counts were collected in April of 2018 at study area intersections with the exception of Koosbay Boulevard / US 101, which was counted by ODOT in July of 2017. Six intersections were counted for 3-hour a.m. (6:00-9:00 a.m.) and p.m. (3:00-6:00 p.m.) peak periods, and two intersections for 16 hour (6:00 a.m. to 10:00 p.m.) durations. The global peak hour was determined to be 7:15–8:15 a.m. and 4:30-5:30 p.m. within the study area.

April counts were seasonally adjusted using ODOT’s Automated Traffic Recorder (ATR) Characteristic Table and ATR station 06-009, located on US 101 at milepost 244.02. The seasonal adjustment factor (calculated to be 1.18) was applied to raw traffic counts and balanced to represent 30th highest hourly volumes. Adjusted traffic volumes were compared to July counts from 2017 and shown to be approximately 4% higher southbound and 12% higher northbound so the adjustment is considered conservative. July traffic volumes were balanced to the seasonally adjusted study area counts before evaluating. Refer to Figures 3a and 3b for year 2018 design hour volumes during the a.m. and p.m. peak hours. Counts are provided in Appendix A.

Figure 3a : Year 2018 No-Build Traffic Volumes, AM Peak Hour



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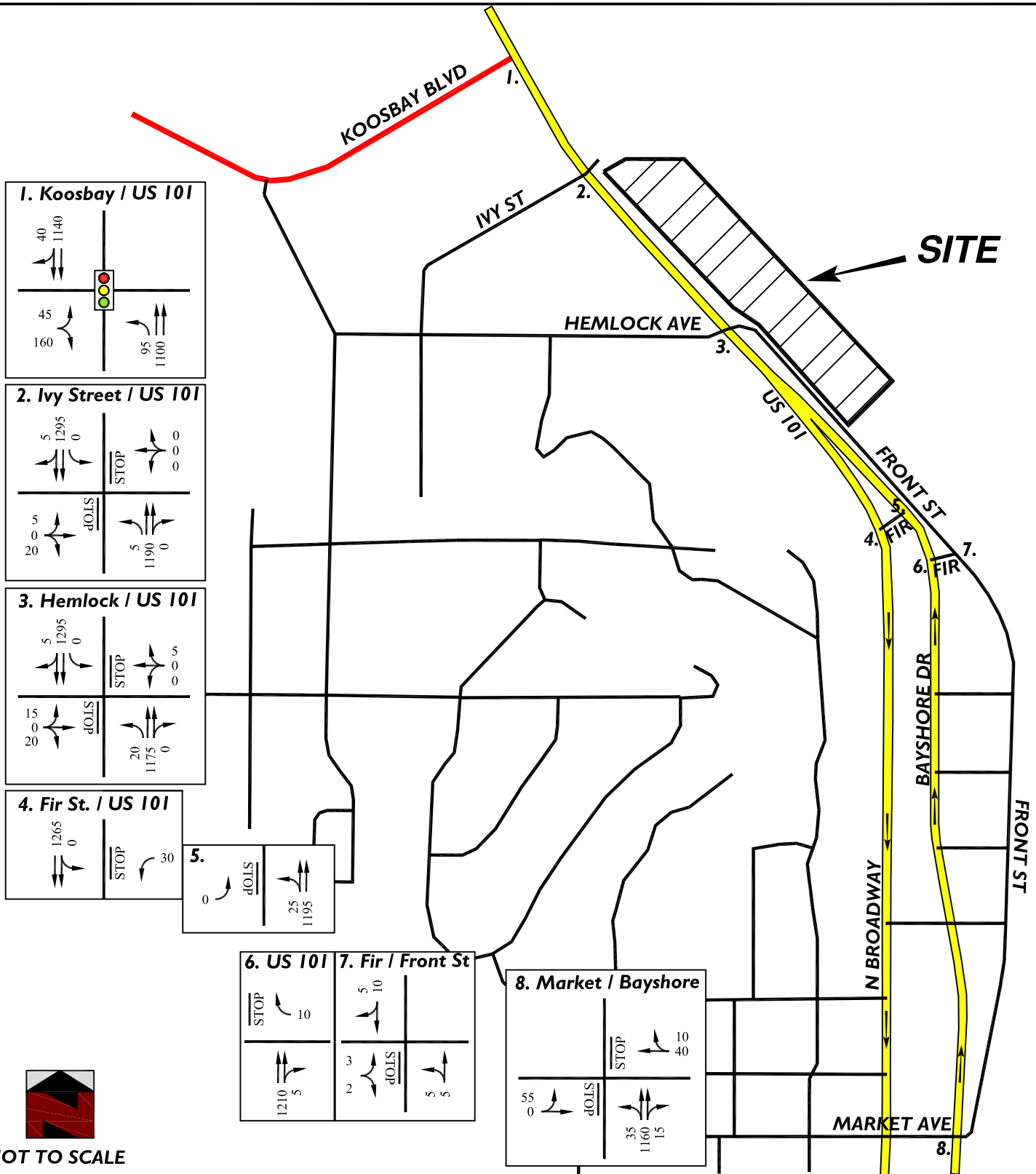


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Figure 3b : Year 2018 No-Build Traffic Volumes, PM Peak Hour



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Intersection Capacity and Level of Service

Intersection capacity calculations were conducted utilizing the methodologies presented in the Year 2010 *Highway Capacity Manual*. Capacity and level of service calculations for unsignalized intersections were prepared using “SYNCHRO” timing software. Two performance measures were evaluated. They include level of service (LOS) and the volume-to-capacity (v/c) ratio.

Level of service quantifies the degree of comfort afforded to drivers as they travel through an intersection or along a roadway section. The level of service methodology was developed to quantify the quality of service of transportation facilities. Level of service is based on total delay, defined as the total elapsed time from when a vehicle stops at the end of a queue until the vehicle departs from the stop line. Level of service ranges from “A” to “F”, with “A” indicating the most desirable condition and “F” indicating an unsatisfactory condition. The HCM LOS designations for stop-controlled and signalized intersections are provided in Tables 2 and 3.

Level of Service	Delay Range
A	< 10
B	>10 – 15
C	>15 – 25
D	>25 – 35
E	>35 – 50
F	> 50

Level of Service	Delay Range
A	< 10
B	>10 – 20
C	>20 – 35
D	>35 – 55
E	>55 – 80
F	> 80

The v/c ratio is a measure that describes the level of capacity being utilized by vehicles passing through an intersection or within a lane group as compared to the number of vehicles that could pass through at capacity (i.e. a v/c of 1.0 represent a roadway operating at 100% capacity).

Streets within the study area are under City of Coos Bay and ODOT jurisdiction. The City of Coos Bay uses a level of service “D” performance standard for intersections, while ODOT uses a volume-to-capacity (v/c) ratio. Table 6 of the *Oregon Highway Plan* (OHP) identifies ODOT mobility standards for state highway and non-state highway approaches outside of the Metro area. Per the OHP, the mobility standard for statewide highway approaches on a freight route outside of a Metropolitan Planning Organization (MPO) is a v/c ratio of 0.80 within a 30 mph zone and 0.85 within a 45 mph zone. The mobility standard for non-state highway approaches is a v/c ratio of 0.90/0.95 (District/Local Interest) depending on the roadway speed. Mitigation is required if proposed development causes a study area intersection to exceed an operational standard and operate worse than no-build conditions.

Year 2018 No-Build Intersection Operations

Study area intersections were evaluated under year 2018 no-build conditions during the a.m. and p.m. peak hours. Results are summarized in Table 4.

Intersection	Performance Standard	Traffic Control	AM Peak Hour	PM Peak Hour
Koosbay Boulevard / US 101	V/C 0.80 ²	Signal	0.68	0.70
Ivy Street / US 101	V/C 0.90 ¹	TWSC	0.21, EB	0.28, EB
Hemlock Avenue / US 101	V/C 0.90 ¹	TWSC	0.44, EB	0.64, EB
Fir Street / US 101 northbound	V/C 0.95 ¹	TWSC	0.00, EB	0.00, EB
Fir Street / US 101 southbound	V/C 0.95 ¹	TWSC	0.01, WB	0.08, WB
Fir Street / US 101 northbound / Front	V/C 0.95 ¹	TWSC	0.00, WB	0.03, WB
Front Street / Fir Street	LOS D	TWSC	A, EB	A, EB
Market Avenue / US 101 northbound	V/C 0.95 ¹	TWSC	0.20, EB	0.27, WB

LOS = Level of Service, V/C = volume-to-capacity, WB = westbound, EB = eastbound

1. The v/c ratio is based on Action 1F.1 of the OHP for non-state highway approaches at unsignalized intersections
2. The v/c ratio is based on Action 1F.1 of the OHP for the more restrictive v/c ratio at a signalized intersection

Results of the analysis show study area intersections operate acceptably (within performance standards) under existing year 2018 no-build conditions during both the a.m. and p.m. peak hours. Refer to Appendix C for synchro output sheets.

Year 2018 No-Build 95th Percentile Queuing

Queuing is the stacking up of vehicles for a given lane movement, and it can have a significant effect on roadway safety and the overall operation of a transportation system. Long queue lengths in through lanes can block access to turn lanes, driveways, and minor street approaches, as well as spill back into upstream intersections. As a result of this, the estimation of queue lengths is an important aspect of the analysis process for determining how a transportation corridor operates.

Queue lengths are reported as the average, maximum, or 95th percentile queue length. The 95th percentile queue length is used for design purposes and is the queue length reported in this analysis. Five simulations were run and averaged in SimTraffic to determine 95th percentile queue lengths. Queues were rounded up to the nearest 25 feet (single vehicle length) and reported in Table 5 for the a.m. and p.m. peak hours if shown to exceed their available link distance or block a downstream intersection/driveway. Full queuing and blocking reports are provided in Appendix C.

Table 5 – Year 2018 No-Build 95th Percentile Queue Lengths, PM Peak Hour

Intersection	Available Distance (feet)	95 th Percentile Queue (feet)	Exceeded Roadway
Koosbay Blvd / US 101			
Southbound Through/Right	125	<i>150 a.m., 175 p.m.</i>	Car wash driveway

Note: Exceeded performance standards are shown in bold, italic

Results of the queuing analysis show one 95th percentile queue length on US 101 at Koosbay Boulevard in the southbound outside lane blocks the nearest driveway at the Hot Spot Car Wash. This occurs during both the a.m. and p.m. peak hours. No other queue lengths are shown to exceed their available link distance or block a downstream intersection/driveway during either peak hour.

Crash History

Crash data for the most recent five-year period was gathered from ODOT's online crash database. Results were gathered for the period of January 1, 2012 through December 31st, 2016. Crash data is gathered to identify crash patterns that could be attributable to geometric or operational deficiencies, or crash trends of a specific type that would indicate the need for further investigation. The crash rate at each intersection is also compared to a critical crash rate provided in the Highway Safety Manual (HSM). Intersections that exceed their respective critical crash rate are flagged for further review. Tables 6 and 7 provide intersection crash rates and types of collisions at study area intersections that were shown to have reported crashes. Full crash reports are provided in Appendix B.

Table 6 - Study Area Intersection Crash Rates, 2012-2016

Intersection	2012	2013	2014	2015	2016	Total Crashes	ADT	Crash Rate	Critical Crash Rate
Koosbay Blvd / US 101	0	0	1	0	3	4	25,800	0.08	0.509
Ivy St / US 101	0	0	1	0	0	1	25,200	0.02	0.408
Hemlock Ave / US 101	0	1	2	1	0	4	25,500	0.09	0.408
Market Ave / US 101	1	3	1	1	0	6	13,150	0.25	0.293

Table 7 - Crash History by Type, 2012-2016

Intersection	Collision Type				Severity		
	Rear-End	Turning/Angle	Other	Pedestrian / Bicyclist	Non-Injury	Injury	Fatal
Koosbay Blvd / US 101	2	2	0	0	2	2	0
Ivy St / US 101	1	0	0	0	0	1	0
Hemlock Ave / US 101	2	2	0	0	2	2	0
Market Ave / US 101	0	5	0	1	3	3	0

Results of the crash analysis identified 15 reported crashes at study area intersections within a five-year period. Of the 15 reported crashes, none resulted in fatality or severe injury (injury A). Approximately half of crashes resulted in less severe injury or property damage only.

The intersection with the highest occurrence (6 reported collisions) was the unsignalized intersection of Market Avenue and US 101 northbound (Bayshore Drive), where 100% of reported crashes were turning movement or angle collisions. One collision involved a cyclist and resulted in a low level injury. The cyclist was riding against traffic on the shoulder. An eastbound left turning vehicle failed to yield to the cyclist, and the cyclist was determined to be at fault for the crash. Four of the six crashes were caused from error by the eastbound left turning vehicle.

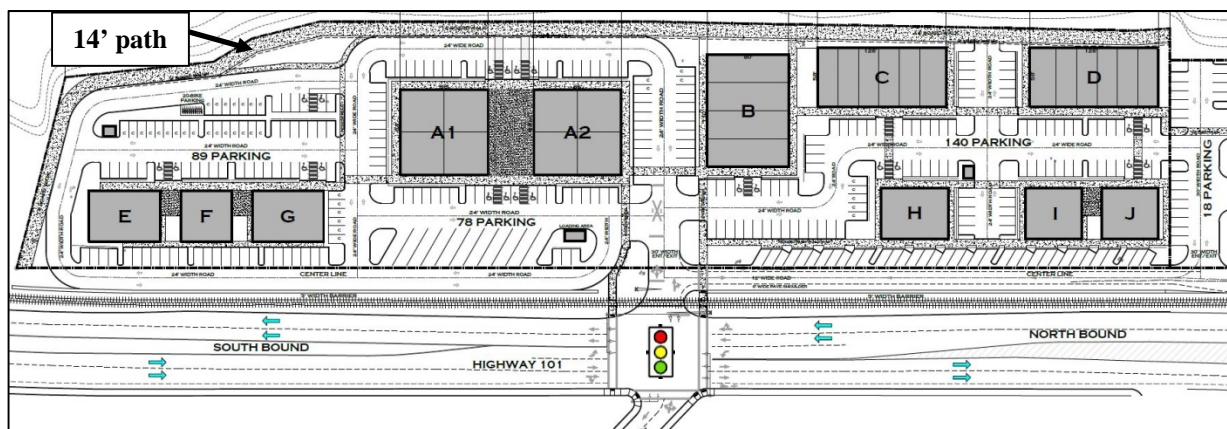
No study area intersection was shown to have a crash rate exceeding the ODOT critical crash rate. No intersections were listed as top 5% SPIS (Safety Priority Index System) sites, which helps identify potential problem areas. The overall conclusion of the crash analysis is that crash data does not raise concerns regarding the number, type, or severity of collisions reported in the study area that would require further investigation.

Pedestrian and Bicycle Accessibility

Pedestrian and bicyclist activity was observed to be low within the study area, but this would be expected to increase after development of the mixed-use commercial center. A bike lane is currently striped on the west side of US 101 between Myrtle Avenue and Hemlock Avenue. Sidewalks are provided on the west side of US 101 from north of Coos Bay Boulevard to the one-way couplet south of Hemlock Avenue. Sidewalk continues along the west side of US 101 southbound (N. Broadway) through the study area and begins on the east side of southbound US 101 from a location approximately 500 feet north of Alder Avenue. On US 101 northbound (Bayshore Drive), sidewalk is provided on both sides of the highway from Market Street to Fir Street, but stops where the railroad transitions over from the middle of Front Street to parallel US 101. Front Street has sidewalk on both sides for most of its length, with the exception of a small section north and south of the Coos Bay Museum.

Sidewalk will be provided along the proposed commercial development frontage and connect to existing sidewalk in front of the Coos Bay Museum for pedestrians traveling to the site from Front Street. A 14-foot wide multi-use path is also proposed along the bay that will provide circulation across the site and to specific outdoor eating areas for pedestrians and cyclists. See site plan below.

Proposed Coos Bay Village Center



Pedestrians traveling to the site from US 101 will likely be coming from one or more of the hotels or businesses along the west side of 101 and will have a sidewalk to walk on to Hemlock Avenue. At the intersection of Hemlock Avenue and US 101, crosswalks will be provided through a proposed new

traffic signal, and pedestrian paths from the signal to the site for the final connections. Internally, pedestrian paths are provided between all buildings and across connecting parking areas for enhanced safety.

Cyclists will be able to use the striped bike lane on US 101 if coming from the north. If coming from the south, cyclists will have the option of riding along the shoulder of US 101 or diverting over to Front Street where traffic volumes are much lower.

Transit Service

Public Transit is provided by Coos County Area Transit Service District (CCAT). CCAT provides a “Loop Bus” fixed route service as well as a demand-response (dial-a-ride) service to areas within $\frac{3}{4}$ mile of either side of an existing fixed route. The dial-a-ride service is for passengers who are unable to access the fixed-route stops. Service hours are from 7:00 a.m. to 5:30 p.m. Monday – Friday. Transit in the site vicinity is provided by the Bay Area Loop Route.

IV. DESIGN YEAR 2021 NO-BUILD CONDITIONS

Design Year 2021 No-Build Description

Design year 2021 no-build conditions represent development build year conditions for the study area without consideration of proposed development trips. This condition is evaluated to determine how a study area will be impacted by area background growth. Background growth in this report was derived using the Coos Bay/North Bend Transportation Model. Base year 2013 and future year 2035 model runs were provided by ODOT's Transportation Planning Analysis Unit (TPAU). Approach inflow and outflow volumes were post-processed in accordance with National Cooperative Research Project (NCHRP) Report 765 methodology. Growth rates were applied to study area traffic volumes to develop design year no-build traffic volumes. Refer to Figures 4a, 4b, 5a, and 5b for background growth and design year 2021 no-build traffic volumes during the a.m. and p.m. peak hours.

Design Year 2021 No-Build Intersection Operations

Study area intersections were evaluated under design year 2021 no-build conditions during the a.m. and p.m. peak hours. Results are summarized in Table 8.

Intersection	Performance Standard	Traffic Control	AM Peak Hour	PM Peak Hour
Koosbay Boulevard / US 101	V/C 0.80 ²	Signal	0.69	0.71
Ivy Street / US 101	V/C 0.90 ¹	TWSC	0.22, EB	0.30, EB
Hemlock Avenue / US 101	V/C 0.90 ¹	TWSC	0.48, EB	0.71, EB
Fir Street / US 101 northbound	V/C 0.95 ¹	TWSC	0.00, EB	0.00, EB
Fir Street / US 101 southbound	V/C 0.95 ¹	TWSC	0.01, WB	0.09, WB
Fir Street / US 101 northbound / Front	V/C 0.95 ¹	TWSC	0.00, WB	0.03, WB
Front Street / Fir Street	LOS D	TWSC	A, EB	A, EB
Market Avenue / US 101 northbound	V/C 0.95 ¹	TWSC	0.20, EB	0.28, WB

LOS = Level of Service, V/C = volume-to-capacity, WB = westbound, EB = eastbound

1. The v/c ratio is based on Action 1F.1 of the OHP for non-state highway approaches at unsignalized intersections

2. The v/c ratio is based on Action 1F.1 of the OHP for the more restrictive v/c ratio at a signalized intersection

Results of the analysis show study area intersections continue to operate acceptably (within performance standards) under design year 2021 no-build conditions. Slight changes are observed at Koosbay Boulevard and Hemlock Avenue intersections with US 101 as a result of background growth. Refer to Appendix D for synchro output sheets.

Design Year 2021 No-Build 95th Percentile Queuing

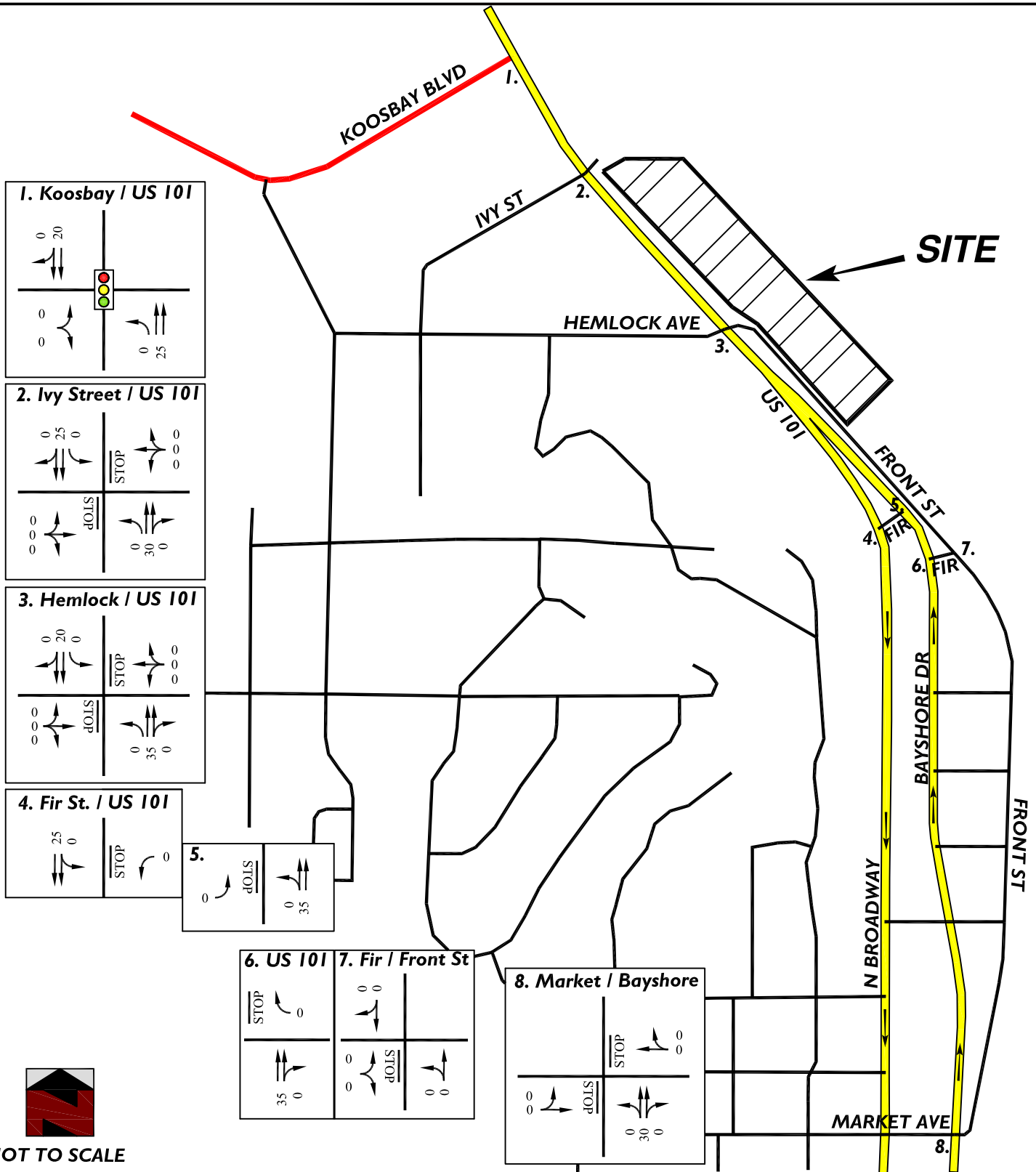
Five simulations were run and averaged in SimTraffic to determine 95th percentile queue lengths under design year 2021 no-build conditions. Queues were rounded up to the nearest 25 feet (single vehicle length) and reported in Table 9 for the a.m. and p.m. peak hours if shown to exceed their available link distance or block a downstream intersection/driveway. Full queuing and blocking reports are provided in Appendix D.

Table 9 – Design Year 2021 No-Build 95th Percentile Queue Lengths, PM Peak Hour			
Intersection	Available Distance (feet)	95th Percentile Queue (feet)	Exceeded Roadway
<u>Koosbay Blvd / US 101</u>			
Southbound Through/Right	125	<i>150 a.m., 200 p.m.</i>	Car wash driveway

Note: Exceeded performance standards are shown in bold, italic

Results of the queuing analysis show a slight increase in the southbound queue length on US 101 at Koosbay Boulevard as a result of background growth. This continues to be the only study area queue length shown to block a downstream intersection/driveway. Drivers on the mainline will often leave space at a driveway if stopped at a signalized intersection so this generally doesn't create a safety issue.

Figure 4a : Background Growth Year 2018-2021, AM Peak Hour

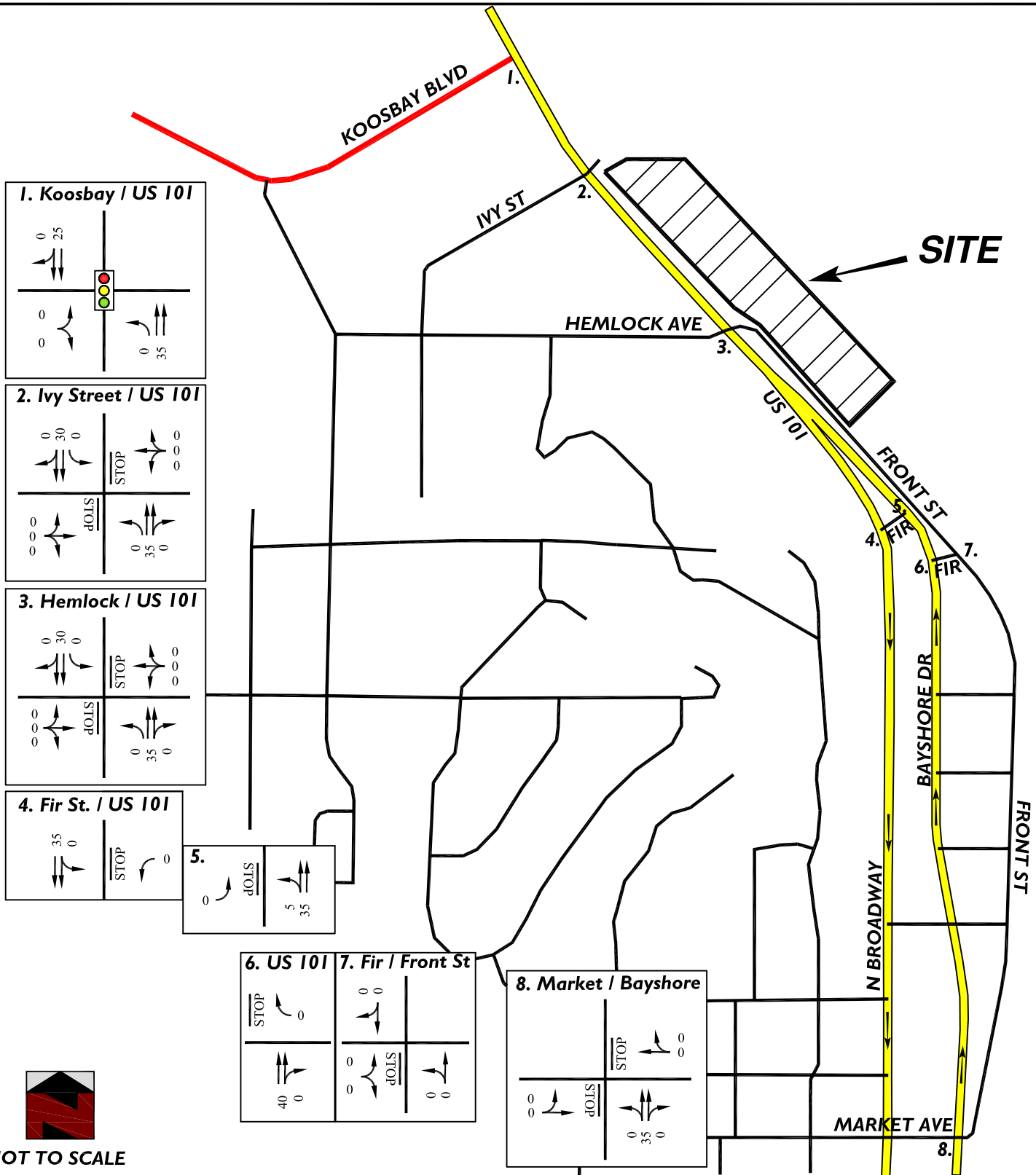


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Figure 4b : Background Growth Year 2018-2021, PM Peak Hour

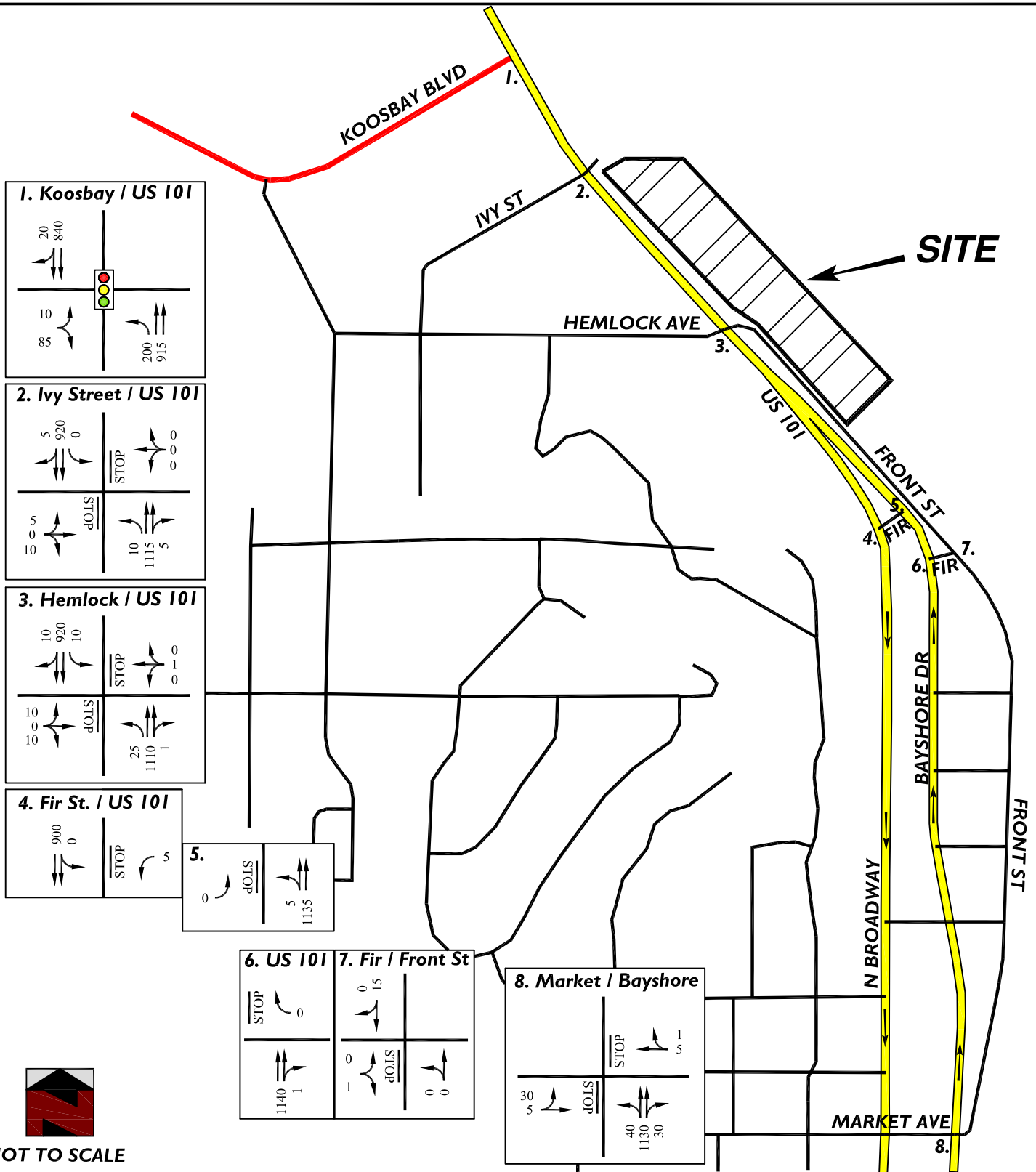


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Figure 5a : Design Year 2021 No-Build Traffic Volumes, AM Peak Hour

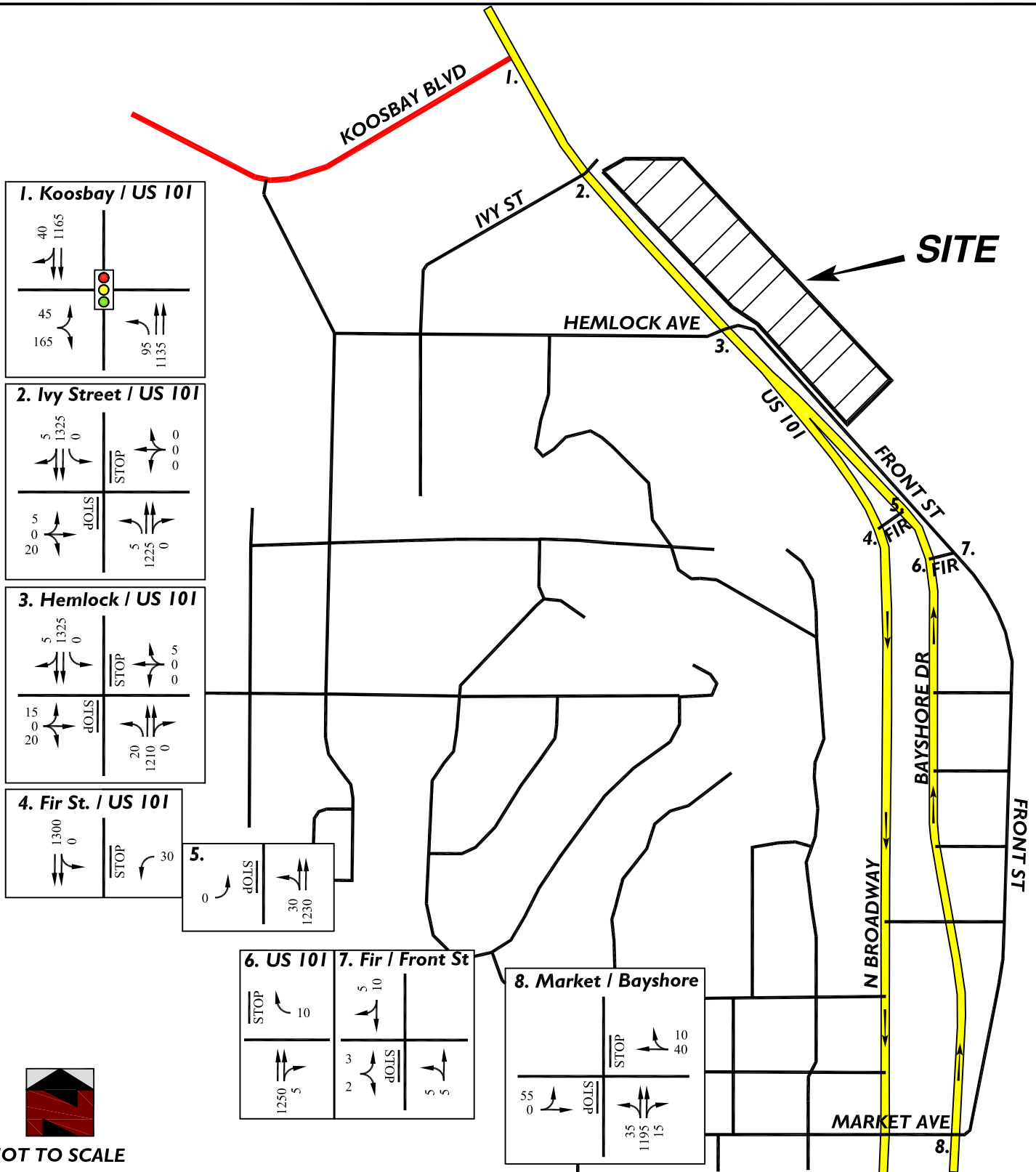


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Figure 5b : Design Year 2021 No-Build Traffic Volumes, PM Peak Hour



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V. SITE TRAFFIC

Trip Generation

Trip generation calculations for the proposed mixed-use commercial development were prepared utilizing the Institute of Transportation Engineers (ITE) *Trip Generation*, 10th Edition. Rates were used for land use code 820 – Shopping Center to cover a wide variety of commercial/office/retail uses. Refer to Table 10 for a summary of trip generations. ITE trip generation sheets are provided in Appendix B.

Land Use	Unit	Size	Daily Trips	AM Rate	AM Peak Hour			PM Rate	PM Peak Hour		
					Total	In	Out		Total	In	Out
820											
Shopping Center	1000SF	78.642	2,969	0.94	74	46	28	3.81	300	144	156
Pass-by									(102)	(51)	(51)
Primary Trips			2,969		74	46	28		198	93	105

Trip Distribution and Assignment

Development trips were distributed to the transportation system in accordance with existing traffic patterns, splits from counts at surrounding intersections, and the nature of the one-way couplet. It was assumed that approximately 15-20% of development trips would use Front Street, but that the majority of trips would use US 101 and enter/exit through the main entrance at the Hemlock Avenue intersection on US 101. This produced the following distribution percentages:

A.M. Peak Hour

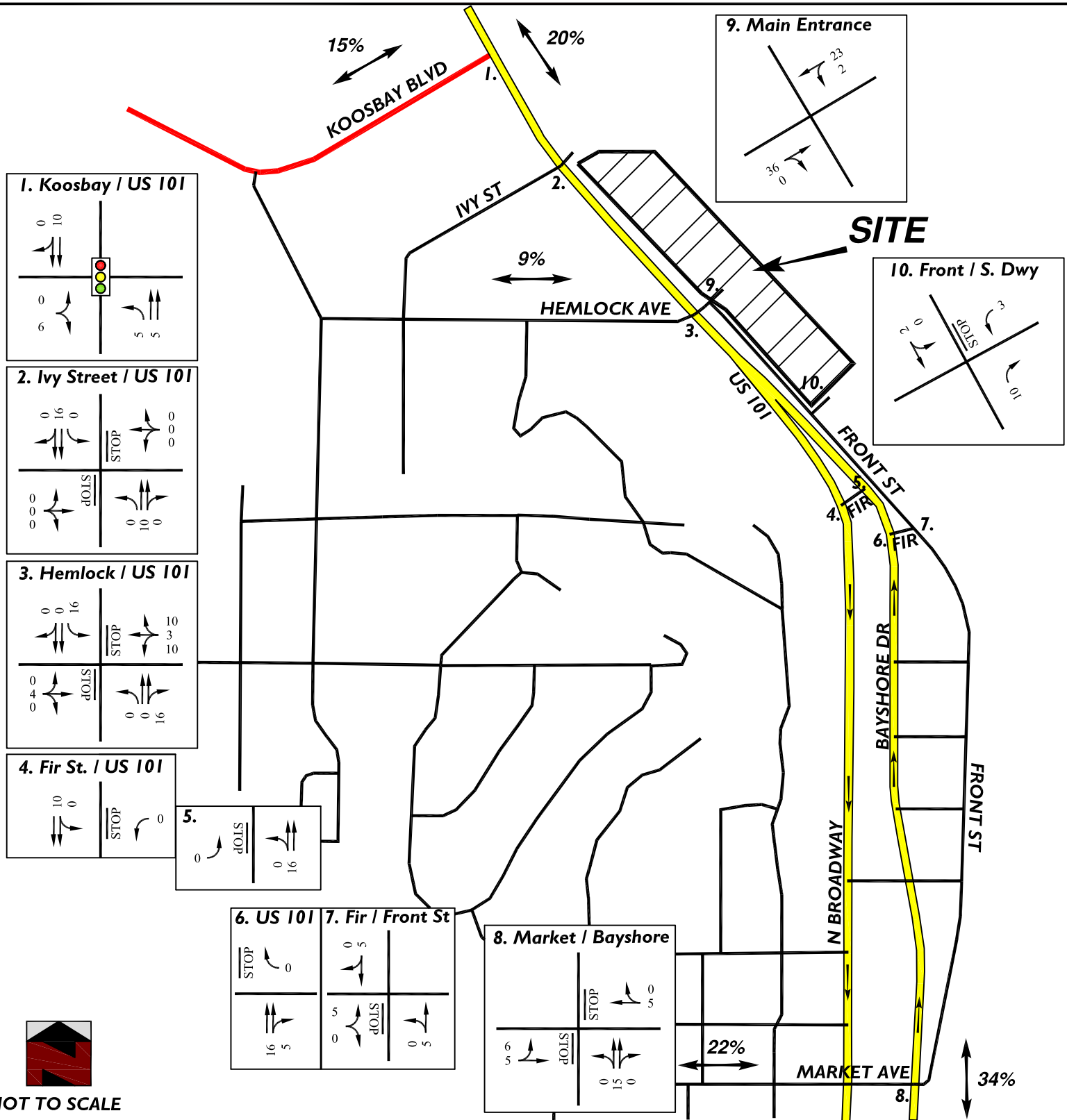
20% US 101 to/from the north
 15% to/from Koosbay Boulevard
 9% to/from Hemlock Avenue
 34% US 101 to/from the south
 22% to/from the downtown area

P.M. Peak Hour

20% US 101 to/from the north
 18% to/from Koosbay Boulevard
 10% to/from Hemlock Avenue
 36% US 101 to/from the south
 16% to/from the downtown area

Refer to Figures 6a and 6b for development trip distributions and assignments during the a.m. and p.m. peak hours.

Figure 6a : Development Trip Distributions, AM Peak Hour



NOT TO SCALE

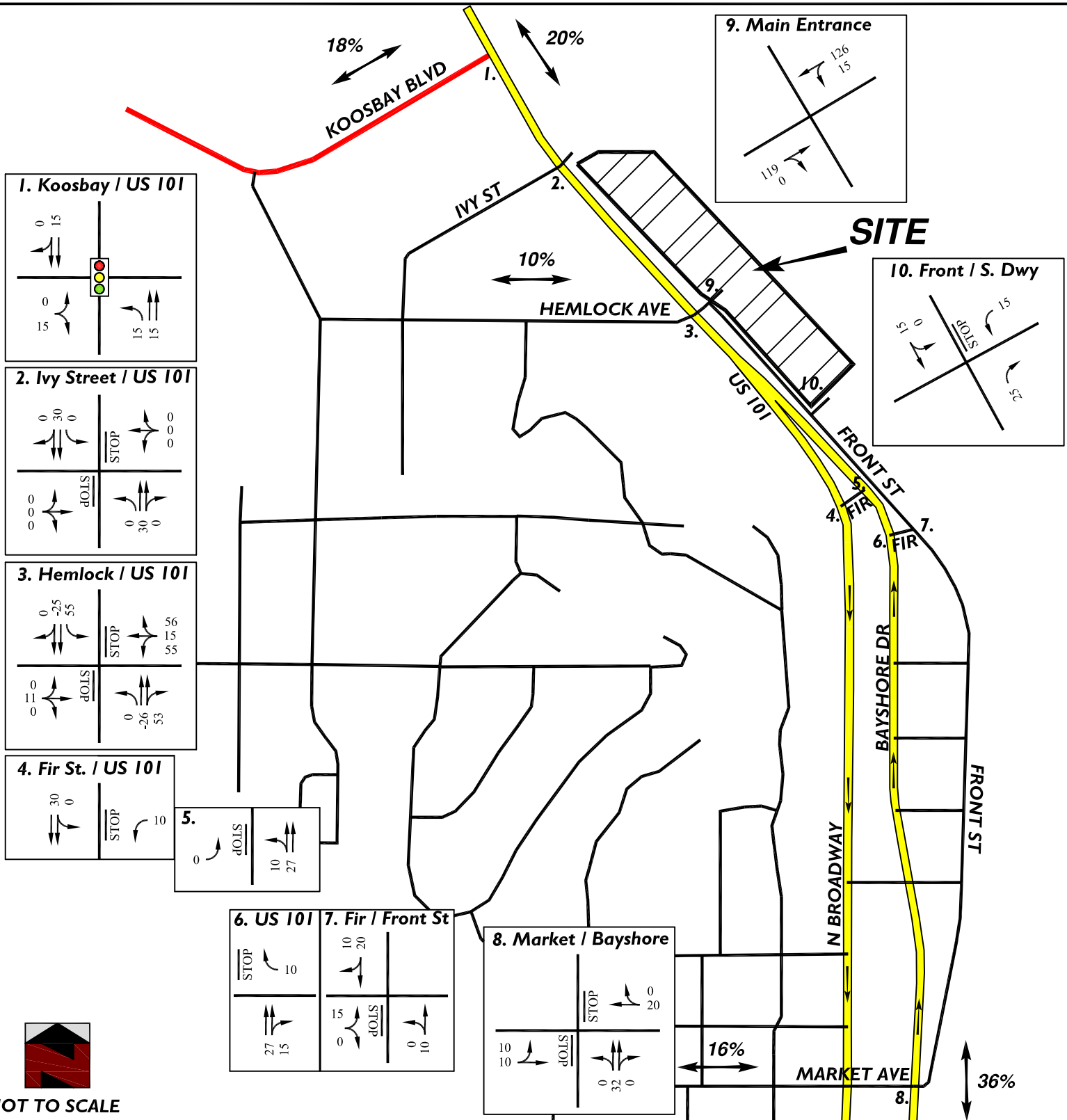


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Figure 6b : Development Trip Distributions, PM Peak Hour




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VI. DESIGN YEAR 2021 BUILD CONDITIONS

Design Year 2021 Build Description

Build conditions in this analysis represent no-build conditions for the study area with the addition of proposed development trips. Build conditions are compared to no-build conditions to determine what impacts and/or mitigation measures will result from proposed development. Refer to Figure 7a and 7b for design year 2021 build traffic volumes during the a.m. and p.m. peak hours.

Design Year 2021 Build Intersection Operations

Study area intersections were evaluated under design year 2021 build conditions during the a.m. and p.m. peak hours. Results are summarized in Table 11.

Table 11 – Design Year 2021 Build Intersection Operations, (AM)PM Peak Hours				
Intersection	Performance Standard	Traffic Control	AM Peak Hour	PM Peak Hour
Koosbay Boulevard / US 101	V/C 0.80 ²	Signal	0.70	0.73
Ivy Street / US 101	V/C 0.90 ¹	TWSC	0.23, EB	0.30, EB
Hemlock Avenue / US 101	V/C 0.90 ¹	TWSC	0.69, EB	>1.0, WB
Fir Street / US 101 northbound	V/C 0.95 ¹	TWSC	0.00, EB	0.00, EB
Fir Street / US 101 southbound	V/C 0.95 ¹	TWSC	0.01, WB	0.12, WB
Fir Street / US 101 northbound / Front	V/C 0.95 ¹	TWSC	0.00, WB	0.07, WB
Front Street / Fir Street	LOS D	TWSC	A, EB	A, EB
Market Avenue / US 101 northbound	V/C 0.95 ¹	TWSC	0.31, EB	0.43, WB
Front Street / Site south driveway	LOS D	TWSC	A, WB	A, WB

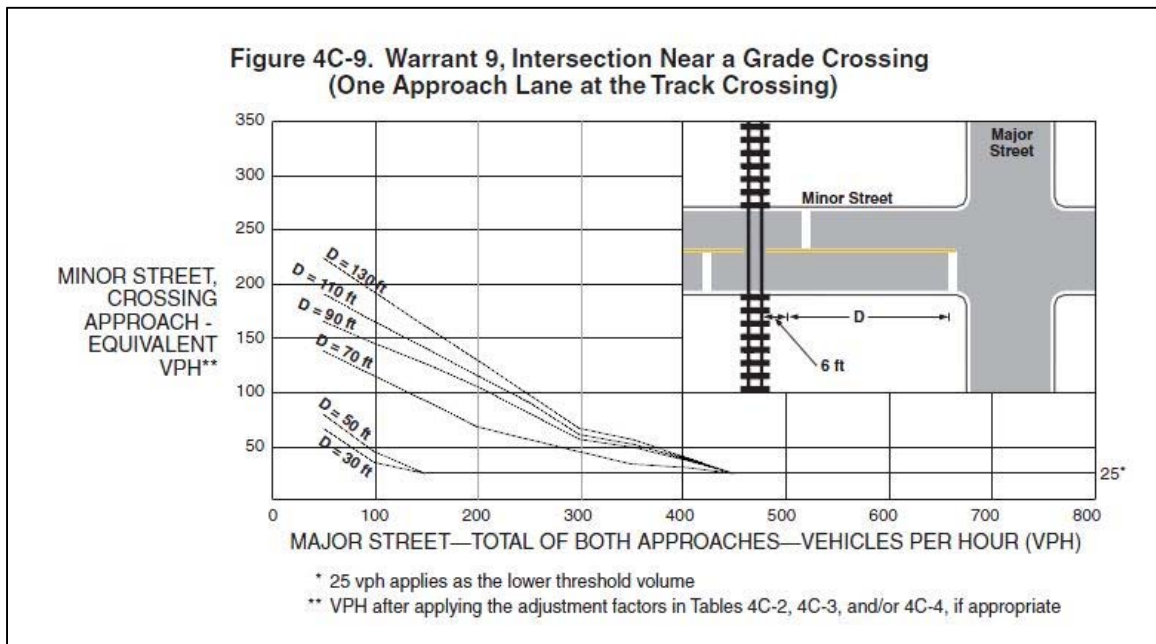
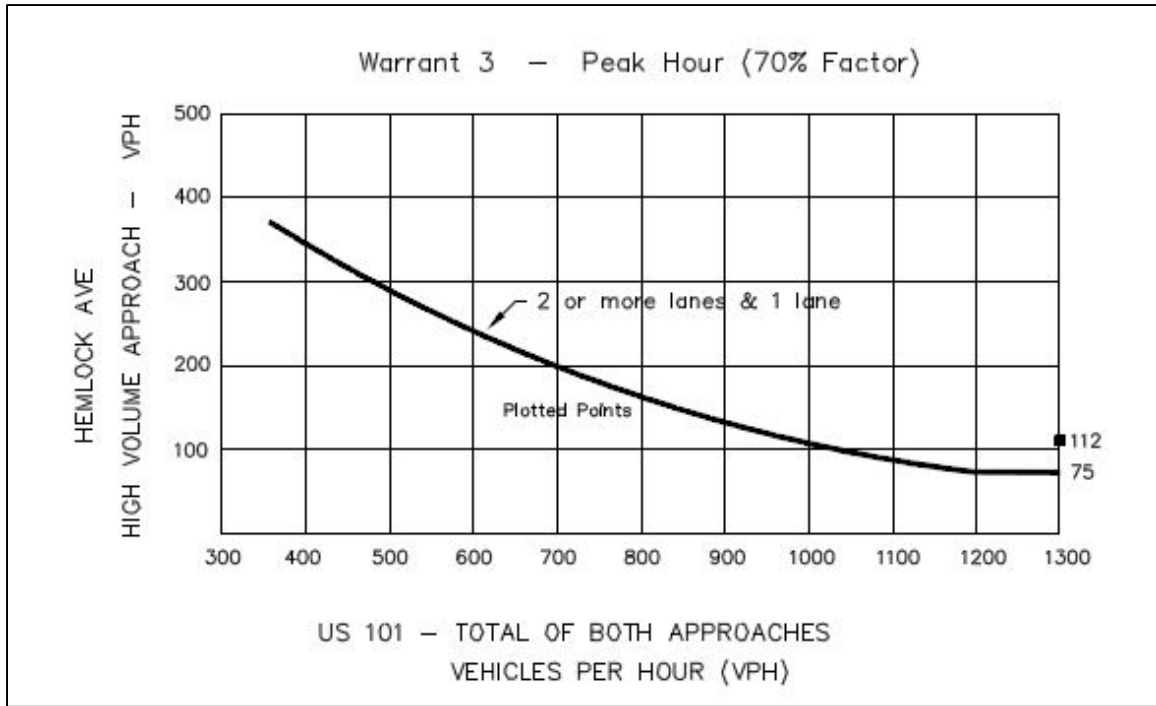
LOS = Level of Service, V/C = volume-to-capacity, WB = westbound, EB = eastbound

1. The v/c ratio is based on Action 1F.1 of the OHP for non-state highway approaches at unsignalized intersections
2. The v/c ratio is based on Action 1F.1 of the OHP for the more restrictive v/c ratio at a signalized intersection

Results of the analysis show the intersection of Hemlock Avenue and US 101 exceeding its mobility standard under design year 2021 build conditions during the p.m. peak hour. All other intersections continue to operate acceptably (within performance standards) under design year 2021 build conditions during both the a.m. and p.m. peak hours. Proposed mitigation includes a traffic signal. With a traffic signal in place, the intersection is shown to operate at a v/c ratio of 0.67. Refer to Appendix E for synchro output sheets.

Signal Warrants

Two signal warrants were shown to be met at the intersection of Hemlock Avenue and US 101 under design year 2021 build conditions. These included Warrant 3 (Peak Hour) and Warrant 9 (Intersection Near Grade Crossing). Both were shown to be met in accordance with the *Manual on Uniform Traffic Control Devices* (MUTCD). Additionally, an ODOT Preliminary Traffic Signal Warrant was met for Case B : Interruption of Continuous Traffic. Refer to Appendix H for further details.



In Warrant 9 Figure 4C-9 of the MUTCD, distance D represents the stacking distance between the stop bar at an intersection and six feet from edge of track. On the east approach at the Hemlock Avenue intersection, the distance between the edge of track and face of curb is approximately six feet, which makes distance D zero. If US 101 is re-striped with reduced travel lanes, then distance D can be increased to approximately five feet, but this is still not enough stacking for a single vehicle to store. Based on this, the stop bar for the east approach is proposed east of the tracks.

Signal Spacing

A signalized intersection must meet spacing standards for signalization relative to all planned future signalized public road intersections and the location on state highways must meet the criteria of OAR 734-020-0400 through 734-020-0500. The required spacing standard between signalized intersections on statewide and regional highways is ½ mile or 2,640 feet. The distance between Hemlock Avenue and the nearest signalized intersection at Koosbay Boulevard is approximately 1,185 feet (approximately ¼ mile), which does not meet the requirement. It does, however, provide the same spacing distance that’s currently provided between the Newmark Street signal on US 101 and the next signal to the north at the Mill Casino, which could assist with possible coordination between signals in the future. A deviation from the spacing standard will be requested on the basis that there are limited access options along US 101 for Front Street properties due to the railroad and crossing restrictions, and a signal at the Hemlock Avenue intersection is not shown to create problems for the nearest signal to the north at Koosbay Boulevard or progression through the US 101 corridor.

Conceptual Signal Layout Description

A conceptual layout is provided that shows the feasibility of a new traffic signal at Hemlock Avenue if US 101 is re-stripped, and minimal setbacks are approved by ODOT Roads, ODOT Rail, and the Port of Coos Bay. To provide enough room for minimum clearances, re-striping would be proposed on US 101 to reduce travel lane widths. This provides the additional space needed for signal poles and crossing arms on the east side of US 101. The proposed re-striping of lanes from west to east would include a 5-foot bike lane (4-foot existing), 12-foot outside travel lane, 11-foot inside travel lane, 13-foot left turn lane, 11-foot inside travel lane, 12-foot outside travel lane, and 4-foot shoulder. This proposed re-striping reduces the width of US 101 curb-to-curb to provide enough offset from the railroad tracks to maintain minimum setbacks to signal poles and crossing gates. On the south side of Hemlock Avenue, there is an existing median. The proposed re-striping includes the same general widths as on the north side, but has to address the median so the median is proposed to be reduced in width to one-foot with a 14-foot center turn lane. The conceptual signal layout is provided in Figure 8.

Design Year 2021 Build 95th Percentile Queuing

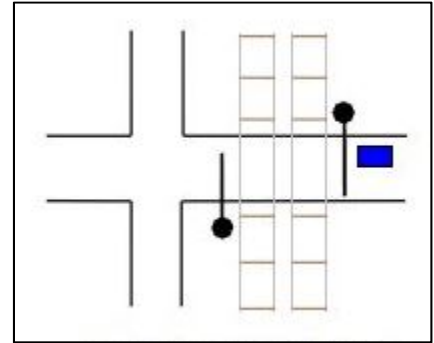
Five simulations were run and averaged in SimTraffic to determine 95th percentile queue lengths under design year 2021 build conditions. Queues were rounded up to the nearest 25 feet (single vehicle length) and reported in Table 12 for the a.m. and p.m. peak hours if shown to exceed their available link distance or block a downstream intersection/driveway. Full queuing and blocking reports are provided in Appendix E.

Table 12 – Design Year 2021 Build 95th Percentile Queue Lengths, PM Peak Hour			
Intersection	Available Distance (feet)	95th Percentile Queue (feet)	Exceeded Roadway
<u>Koosbay Blvd / US 101</u>			
Southbound Through/Right	125	<i>150 a.m., 200 p.m.</i>	Car wash driveway
<u>Hemlock Ave / US 101</u>			
Eastbound Left/Through/Right	25, 100, 550	<i>650 p.m.</i>	ProBuild, Red Lion, 6 th St
Westbound Left/Through/Right	25	<i>75 p.m.</i>	Frontage Road

Note: Exceeded performance standards are shown in bold, italic

Results of the queuing analysis show increases in eastbound and westbound queue lengths at Hemlock Avenue and US 101 as a result of proposed development traffic. With a signal in place, the eastbound

queue reduces significantly, and the westbound queue remains the same. One change that occurs under the build condition is the frontage road becomes a one-lane, one-way southbound facility with six-foot shoulders on each side. This improvement provides additional storage for the east approach at the Hemlock Avenue intersection, and allows westbound vehicles to queue across the frontage road and into the proposed development, without blocking any traffic movements. Due to insufficient stacking distance between the tracks and US 101 on the east approach, the stop bar will have to be located east of the railroad tracks.



Queue lengths at the intersection of Hemlock Avenue and US 101 as a signalized intersection during the occurrence of a train were estimated based upon a train on average taking 2-minutes to clear. Year 2021 build conditions were modeled in synchro so that the northbound through-shared-right movement and southbound left turn movement would have 60 seconds of red stopped time within a 90 second cycle. This allowed us to estimate a queue length for those movements and then double it to come up with a reasonable assumption during a train occurrence. A train is estimated to occur up to four times a day with one in each a.m. and p.m. 3-hour peak period. During our 16-hour counts, there were two trains each day.

We evaluated three options to determine what a reasonable queue might be during a train occurrence. The first option assumed lane configurations exactly as they were with the northbound movement on US 101 having a left turn lane, a through lane, and a through-shared-right turn lane. This option, when simulated, showed northbound 95th percentile queue lengths equal to 200 feet for both through lanes, which would be doubled and assumed to be 400 feet during a 2-minute train occurrence. This, however, is skewed because during a train occurrence, the northbound through movement will continue to receive a green light, and only the right turn movement will stop. Because there are two travel lanes, it is expected that northbound through vehicles will shift over to the inside through lane to go around any vehicles stopped in the outside lane who want to make a right turn. This essentially creates a default single through lane and exclusive right turn lane during a train occurrence, but synchro/simtraffic doesn't model it that way so the reported queue lengths in the simulation output are higher than they actually would be. In an effort to isolate the right turn lane queue length during a train occurrence, two more options were modeled. Both evaluated an exclusive right turn lane, but one had a single through lane and the other two through lanes. The option with the larger cross-section was simulated for the full peak hour. The option with one through lane and one right turn lane was seeded for 5 minutes and simulated for fifteen minutes. Both showed 95th percentile queue lengths for the northbound right turn movement to be 50 feet, which is the movement we were trying to isolate. Based on this, the estimated queue length for the outside northbound through-shared-right turn lane is estimated to be approximately 100 feet during a 2-minute train occurrence.

Estimated 95th percentile queue lengths for stopped movements at the Hemlock Avenue and US 101 signalized intersection during a 2-minute train occurrence are concluded to be:

<u>Traffic Movement</u>	<u>95th Percentile Queues</u>
Northbound Through/Right	100 feet
Southbound Left	150 feet
Eastbound Left/Through/Right	100 feet
Westbound Left/Through/Right	150 feet

85th Percentile Speed

Speeds were measured on US 101 south of Hemlock Avenue to determine the 85th percentile speed for northbound and southbound traffic. The 85th percentile speed represents the speed at which 85 percent of drivers drive at or below, and is used in speed studies. Speeds were measured from tubes laid across US 101 one-way sections on either side of the center median. In the northbound direction, the 85th percentile speed was measured to be 37.9 miles per hour (mph). In the southbound direction, the 85th percentile speed was measured to be 43.4 mph. The posted speed on US 101 is 30 mph south of Hemlock Avenue and 45 mph north of Hemlock Avenue. If a traffic signal is approved on US 101 at Hemlock Avenue, then it would be recommended that the posted speed change be re-located a short distance north of Hemlock Avenue to decrease the potential for rear-end collisions at the new signalized intersection.

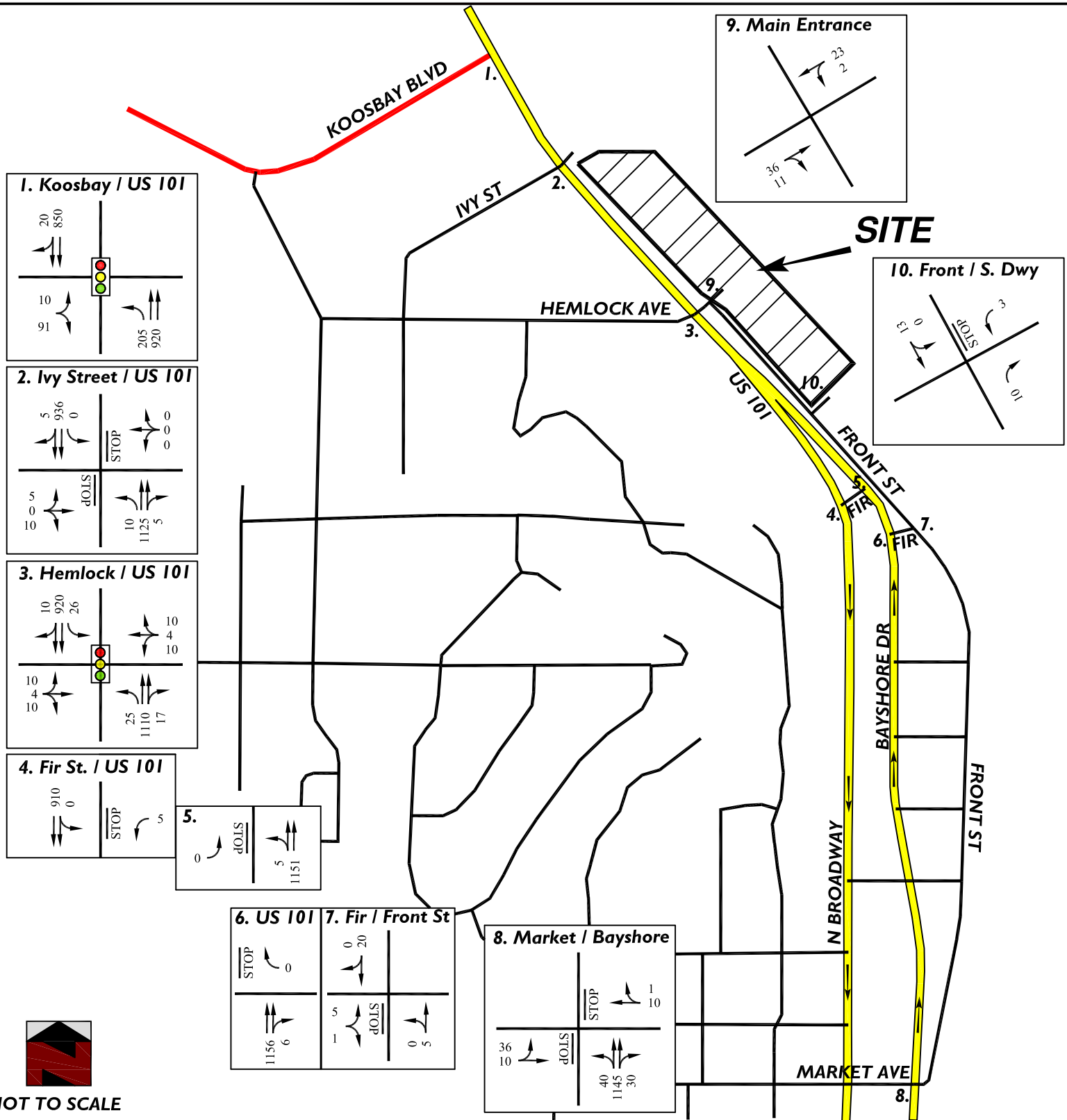
Sight Distance

US 101 is a straight, flat, five-lane facility at Hemlock Avenue. Sight distance was measured in the field and shown to be clear and unobstructed to the north and south from the east approach of the Hemlock Avenue / US 101 intersection. Intersection sight distance in Table 2 of Oregon Administrative Rules (OAR) 734-051-4020(8) requires a minimum of 650 feet of sight distance for a two-lane highway with a posted speed of 45 miles per hour.

Posted Speed (mph)	Assumed Design Speed ¹ (mph)	Two-Way Highway -- Number of Lanes Crossed by Vehicle Making Left Turn from Approach ²			One-Way Highway ³
		1 Lane	2 Lanes	3 Lanes	
		ISD (ft)			
20	25	280	295	315	240
25	30	335	355	375	290
30	35	390	415	440	335
35	40	445	475	500	385
40	45	500	530	565	430
45	55	610	650	690	530
50	65	720	765	815	625
55	70	775	825	875	720
60	70	775	825	875	720
65	70	775	825	875	720

Sight distance measurements in the field from the east approach were over 800 feet in each direction, which is shown to be adequate.

Figure 7a : Design Year 2021 Build Traffic Volumes, AM Peak Hour

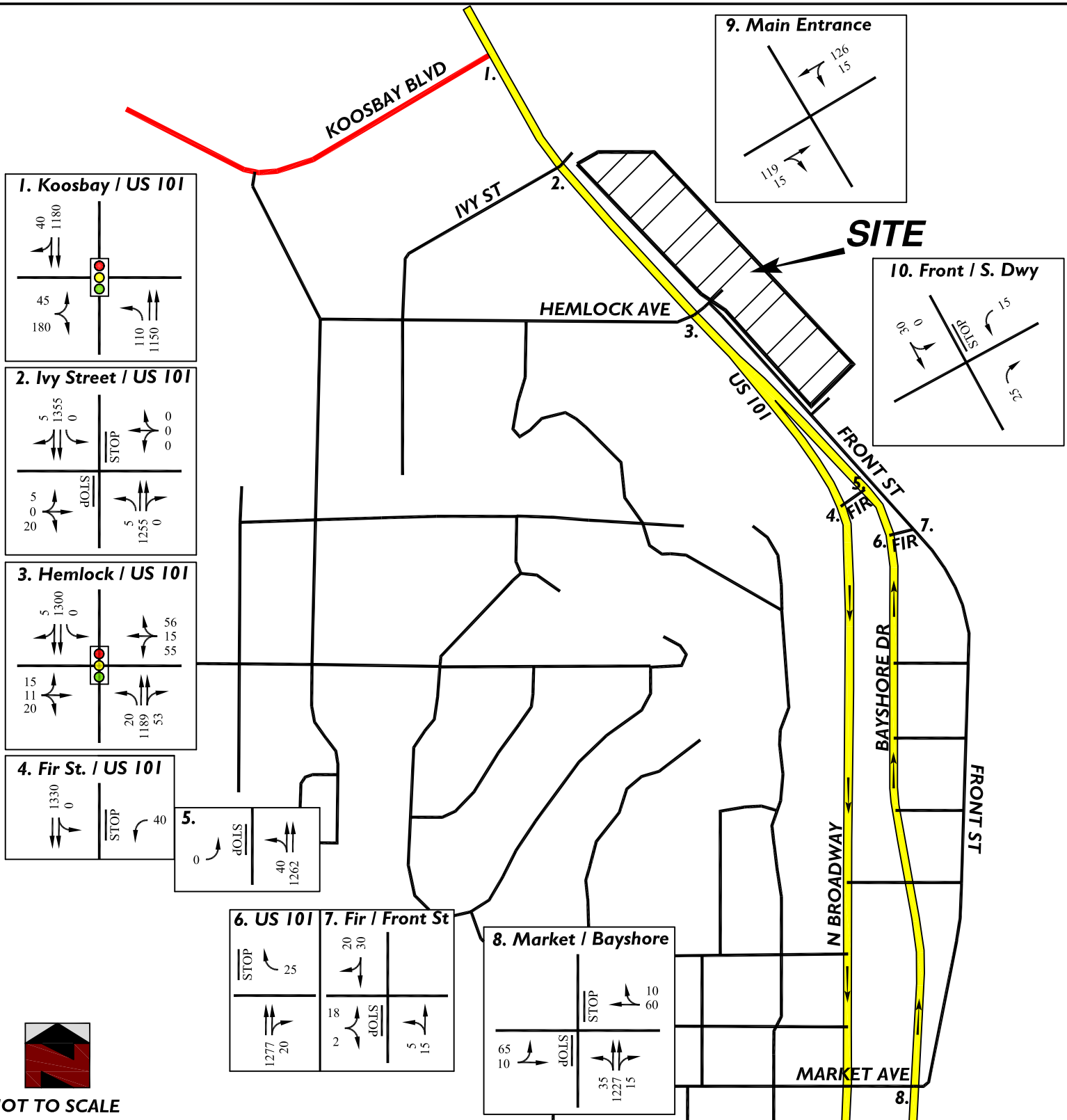


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Figure 7b : Design Year 2021 Build Traffic Volumes, PM Peak Hour



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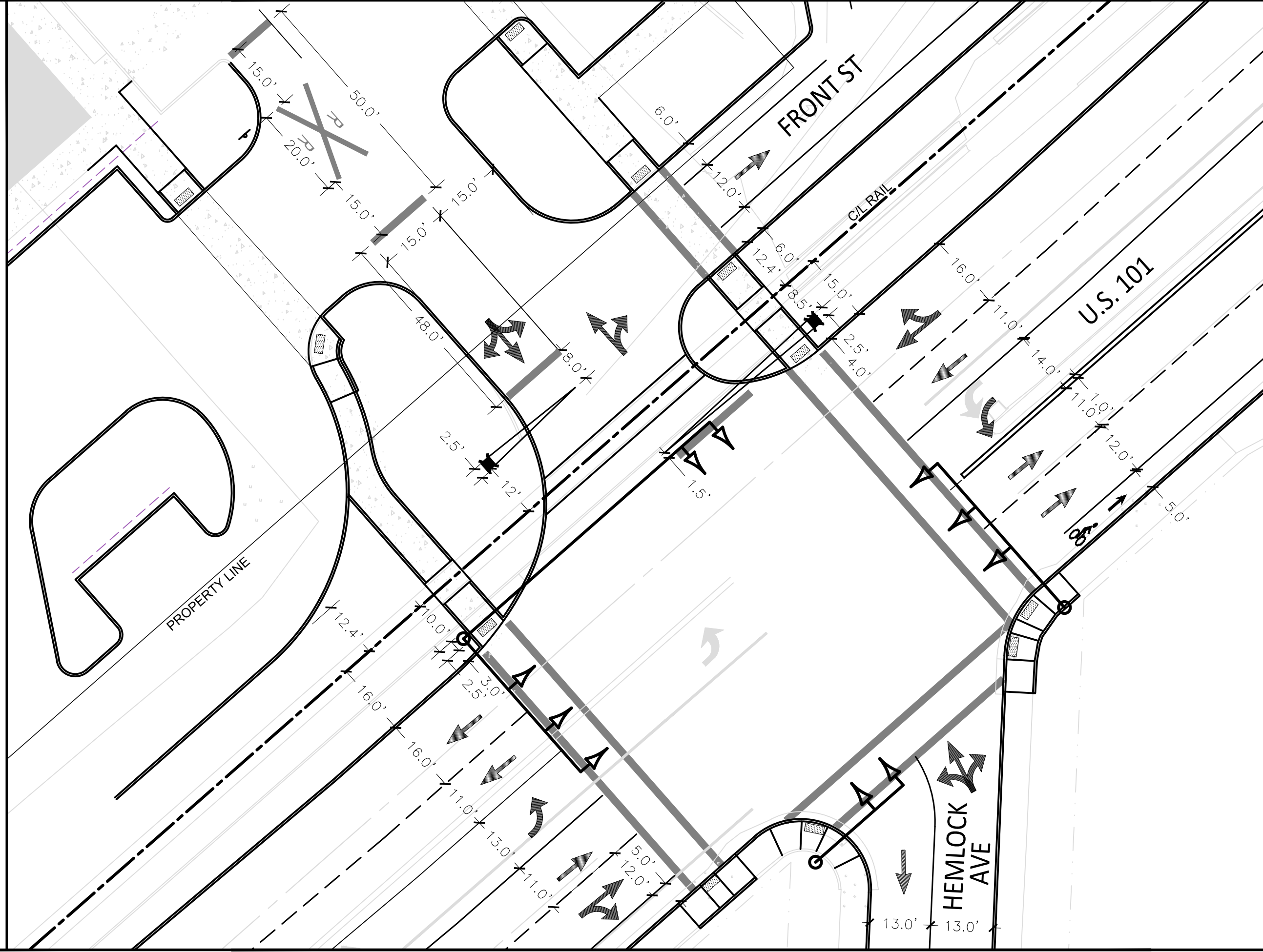


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Figure 8 : Conceptual Signal Layout



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VII. FUTURE YEAR 2026 NO-BUILD/BUILD CONDITIONS

Future Year 2026 No-Build Description

The future year analysis for a proposed development estimated to generate less than 2,999 ADT is year of opening plus five years. The estimated year of opening for the proposed development is design year 2021. The future year is, therefore, year 2026. Future year no-build conditions represent future year conditions for a study area without consideration of proposed development trips. This condition is evaluated to determine how a study area will be impacted by area background growth. Background growth in this report, as stated previously in Section IV, was derived using the Coos Bay/North Bend Transportation Model. Growth rates were derived and applied to study area traffic volumes to develop future year 2026 no-build traffic volumes during the p.m. peak hour. The p.m. peak hour was shown to have higher v/c ratios and queue lengths at all study area intersections than the a.m. peak hour, so the a.m. peak hour was not evaluated in the future condition. Refer to Figure 9 for future year 2026 no-build traffic volumes during the p.m. peak hour.

Future Year 2026 Build Description

Future year 2026 build conditions represent future conditions for the study area with background growth and proposed development trips considered. Build conditions are compared to no-build conditions to determine what impacts and/or mitigation measures will result from proposed development. Refer to Figure 10 for future year 2026 build conditions during the p.m. peak hour.

Future Year 2026 No-Build / Build Intersection Operations

Study area intersections were evaluated under future year 2026 no-build and build conditions during the p.m. peak hour. Results are summarized in Table 13.

Table 13 – Future Year 2026 No-Build / Build Intersection Operations, PM Peak Hour				
Intersection	Performance Standard	Traffic Control	PM Peak Hour	
			No-Build	Build
Koosbay Boulevard / US 101	V/C 0.80 ²	Signal	0.73	0.75
Ivy Street / US 101	V/C 0.90 ¹	TWSC	0.33, EB	0.36, EB
Hemlock Avenue / US 101	V/C 0.80 ²	TWSC, Signal	0.80, EB (TWSC)	0.69 (Signal)
Fir Street / US 101 northbound	V/C 0.95 ¹	TWSC	0.00, EB	0.00, EB
Fir Street / US 101 southbound	V/C 0.95 ¹	TWSC	0.09, WB	0.12, WB
Fir Street / US 101 northbound / Front	V/C 0.95 ¹	TWSC	0.03, WB	0.07, WB
Front Street / Fir Street	LOS D	TWSC	A, EB	A, EB
Market Avenue / US 101 northbound	V/C 0.95 ¹	TWSC	0.30, WB	0.47, WB
Front Street / Site south driveway	LOS D	TWSC	Not Applicable	A, WB

LOS = Level of Service, V/C = volume-to-capacity, WB = westbound, EB = eastbound

1. The v/c ratio is based on Action 1F.1 of the OHP for non-state highway approaches at unsignalized intersections
2. The v/c ratio is based on Action 1F.1 of the OHP for the more restrictive v/c ratio at a signalized intersection

Results of the analysis show study area intersections operate acceptably under future year 2026 no-build and build condition with a signal included at the intersection of Hemlock Avenue and US 101. Refer to Appendix F for synchro output sheets.

Future Year 2026 No-Build / Build 95th Percentile Queuing

Five simulations were run and averaged in SimTraffic to determine 95th percentile queue lengths under future year 2026 no-build and build conditions. Queues were rounded up to the nearest 25 feet (single vehicle length) and reported in Table 14 for the p.m. peak hour if shown to exceed its available link distance or block a downstream intersection/driveway. Full queuing and blocking reports are provided in Appendix F.

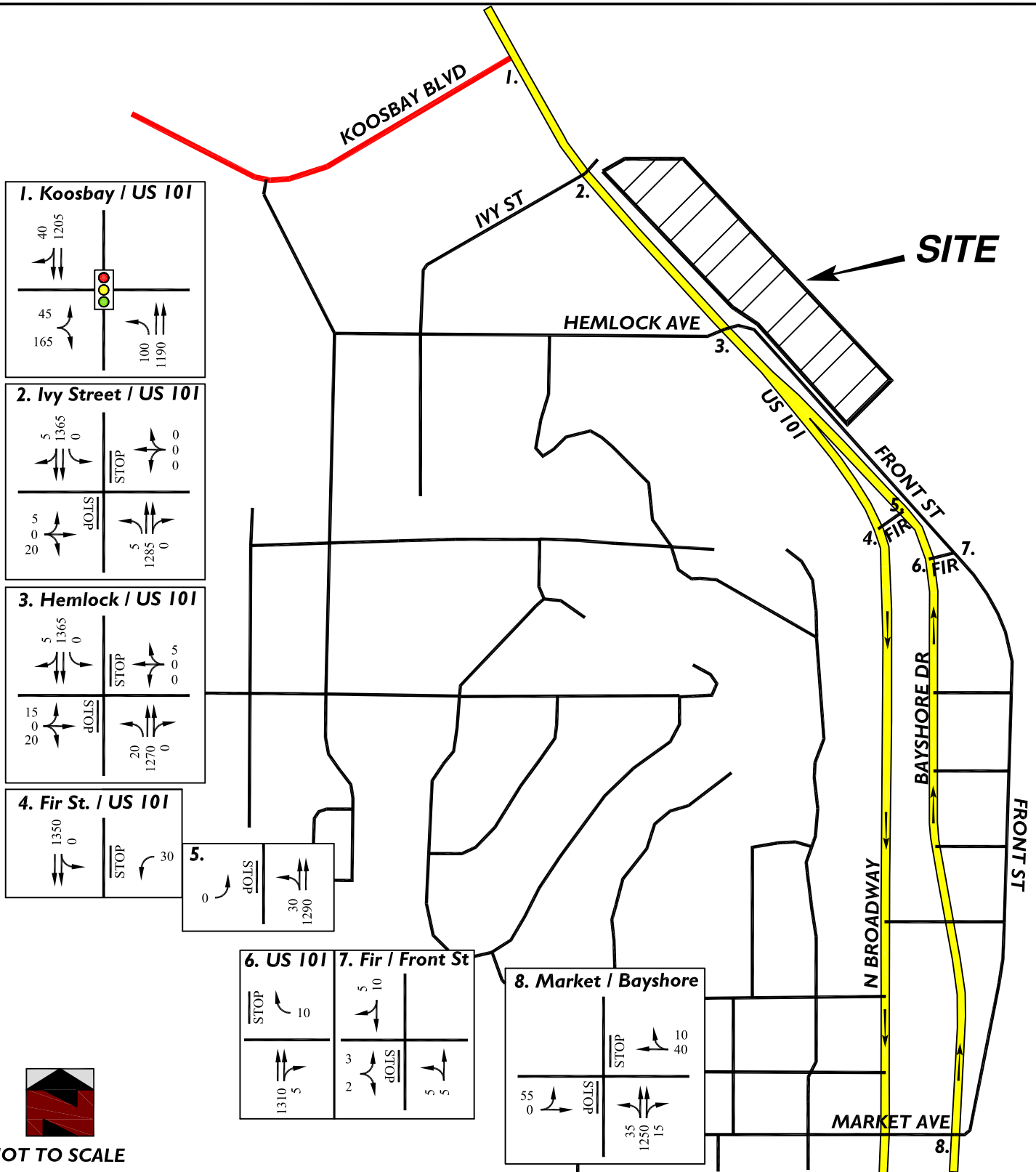
Table 14 – Future Year 2026 No-Build / Build 95th Percentile Queue Lengths, PM Peak Hour			
Intersection	Available Distance (feet)	95th Percentile Queue (feet)	Exceeded Roadway
<u>Koosbay Blvd / US 101</u>			
Southbound Through/Right	125	<i>225 / 225</i> (no-build / build)	Car wash driveway
<u>Hemlock Ave / US 101</u>			
Eastbound Left/Through/Right	25, 100, 550	<i>100 / 50</i> (no-build / build)	ProBuild driveway
Westbound Left/Through/Right	25	<i>25 / 75</i> (no-build / build)	Frontage Road

Note: Exceeded performance standards are shown in bold, italic

Results of the queuing analysis show very few changes in queue lengths as a result of additional background traffic. Two of the three queues are blocking driveways. The westbound approach at the Hemlock Avenue and US 101 signalized intersection will have the stop bar east of the tracks so the 75-foot queue will extend into the site at times.

Queue lengths at the signalized intersection of Hemlock Avenue and US 101, during a train occurrence, are estimated from model simulations to remain the same under future year 2026 build conditions as they were under design year 2021 build conditions. The two northbound through lanes on US 101 are expected to operate much like a default through and right turn lane during a train occurrence with through vehicles continuing to move and right turning vehicles stopping. None of the estimated queue lengths are considered to be excessive.

Figure 9 : Future Year 2026 No-Build Traffic Volumes, PM Peak Hour



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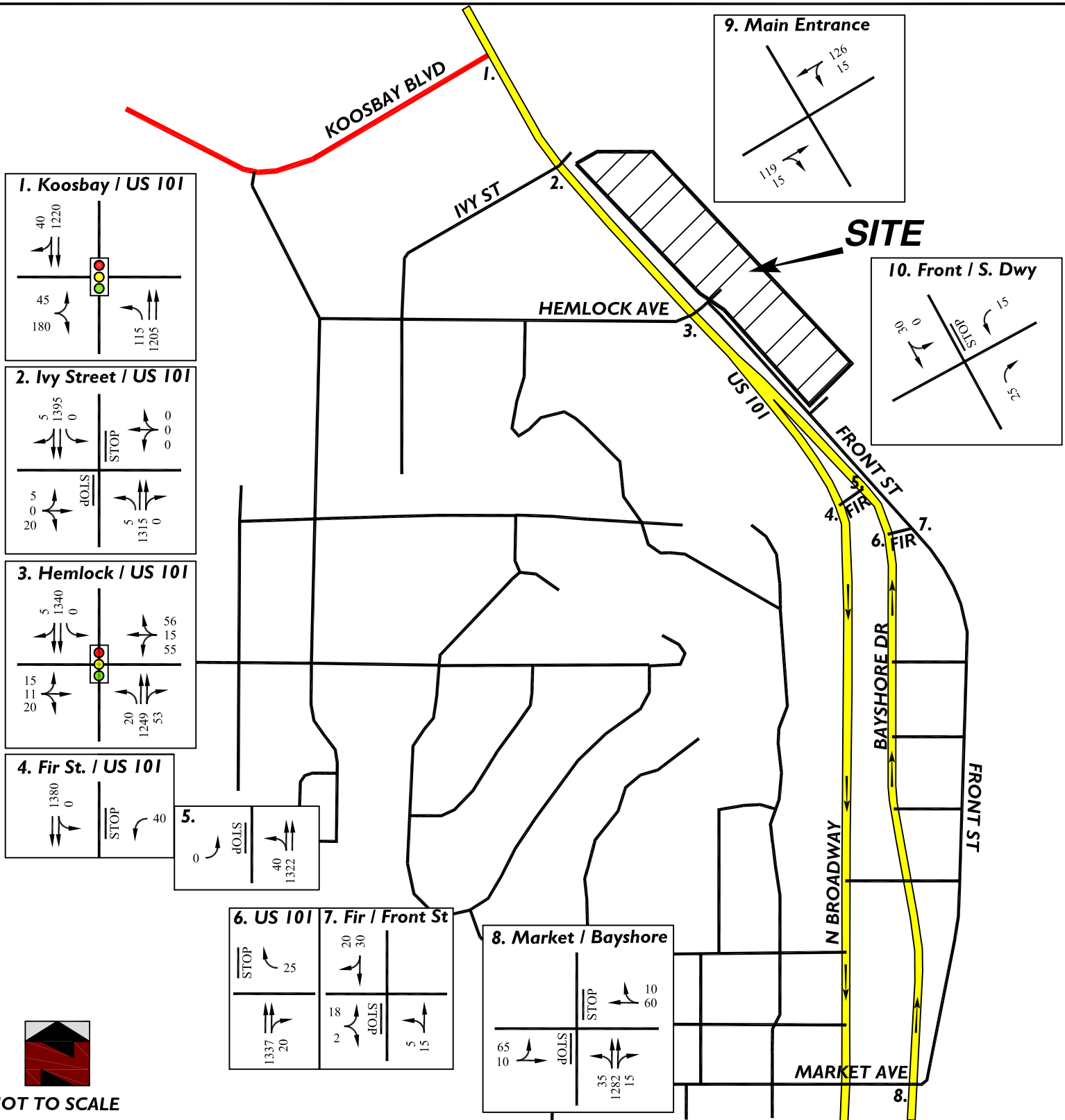


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Figure 10 : Future Year 2021 Build Traffic Volumes, PM Peak Hour



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VIII. CONCLUSIONS

Conclusions

The findings of the traffic impact analysis conclude that the proposed Coos Bay Village Center can be approved on the transportation system with recommended improvements without creating adverse impacts. Results of the analysis are as follows:

1. One study area intersection is shown to exceed performance standards by the design year 2021 with proposed development. The intersection of Hemlock Avenue and US 101, as a two-way stop controlled intersection, will require a traffic signal as a result of proposed development. This improvement is shown to meet applicable warrants and, if implemented, will adequately mitigate the intersection through future year 2026 build conditions. A deviation will be required for spacing between signalized intersections.
2. There were no safety concerns as a result of crash history within the study area
3. A conceptual signal layout is provided which shows that a traffic signal can work within the existing right-of-way with some recommended striping changes and allowance of minimum setbacks. This will require further negotiations with ODOT Roads, ODOT Rail, and the Port of Coos Bay due to the close proximity of the railroad.

The proposed Coos Bay Village Center is shown to be in compliance with the Coos Bay Comprehensive Plan and Land Development Code. Streets that serve the subject property are shown to have adequate capacity to support proposed development.



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