

MEMORANDUM

Date: October 5, 2017 Project #: 21266.0

To: Gerald Fisher and Dan Huff, City of Molalla
Gail Curtis, Oregon Department of Transportation, Region 1

From: Matt Bell and Nick Gross, Kittelson & Associates, Inc.

Project: Molalla Transportation System Plan (TSP) Update

Subject: Final Tech Memo 2A: TSP Analyses Methodology (Subtask 2.2)

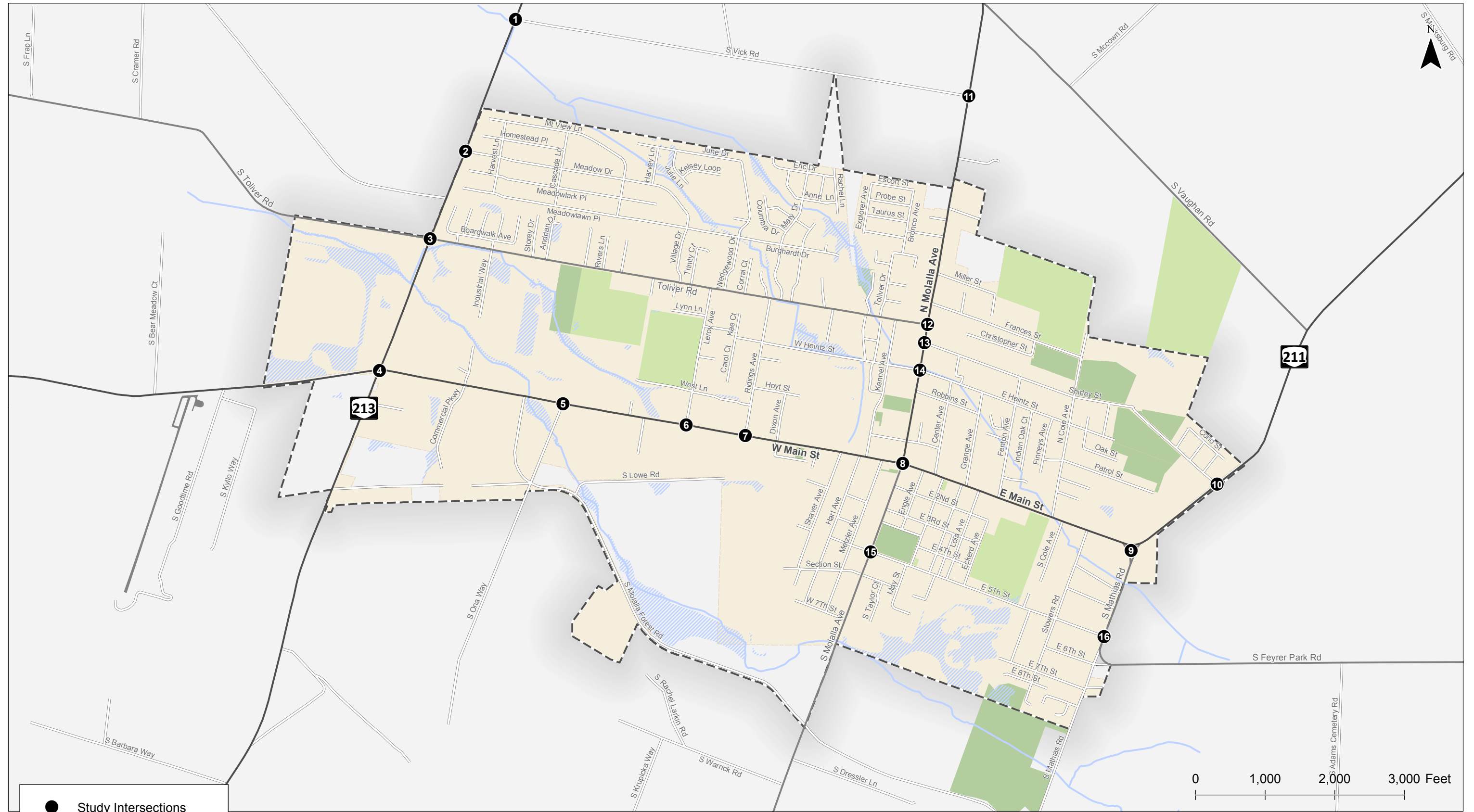
This memorandum documents the methodology and assumptions associated with the existing and future transportation system operations analyses for the Molalla Transportation System Plan (TSP) Update. The methodology and assumptions included in this memorandum are based on guidance provided in the Oregon Department of Transportation (ODOT) Transportation System Plan Guidelines (Reference 1), the ODOT Analysis Procedures Manual (APM – Reference 2), and direction provided by City and ODOT staff. The analyses described in this memorandum will help identify potential deficiencies in the transportation system, including:

- Traffic operations at the study intersection under existing and future traffic conditions,
- Traffic safety at the study intersections and along study area roadways,
- Gaps and deficiencies in the bicycle and pedestrian network,
- Gaps and deficiencies in the transit service (service frequency, hours, coverage, etc.), and
- Gaps and deficiencies in other travel modes.

This information will serve as a baseline for identifying a comprehensive list needs and deficiencies to be addressed as part of the TSP update. It will also serve as a baseline for identifying and evaluating potential solutions and developing a prioritized list of improvements for the TSP update.

STUDY INTERSECTIONS

The study intersections for the Molalla TSP Update were determined by the City and ODOT prior to the development of the scope of work. There are a total of 16 study intersections located along City and ODOT facilities, including 1 signalized and 15 unsignalized intersections. Figure 1 illustrates the location of the study intersections. The following provides information related to the traffic counts conducted at the study intersections and how they will be used to develop existing and future traffic volumes. The 16 study intersections include:



- Study Intersections
- Molalla City Limits
- Urban Growth Boundary

**Study Intersections
Molalla, Oregon**

**Figure
1**

H:\2121266 - Molalla TSP Update\GIS\Map211_Study Intersections.mxd - mbeli - 3:37 PM 10/20/2017

State Facilities

- OR 213/Vick Road
- OR 213/Meadow Drive
- OR 213/Toliver Road
- OR 213/OR 211
- OR 211/S Ona Way
- OR 211/Leroy Avenue
- OR 211/ Ridings Avenue
- OR 211/S Molalla Avenue
- OR 211/Mathias Road
- OR 211/Shirley Street

City Facilities

- N Molalla Avenue/S Vick Road
- N Molalla Avenue/Toliver Road
- N Mollala Avenue/Shirley Street
- N Molalla Avenue/Heintz Street
- S Molalla Avenue/5th Street
- 5th Street/Mathias Road

Traffic Counts

Manual turning movement counts were conducted at the study intersections in April, 2017. The counts were conducted on a typical mid-week day during the evening (4:00 to 6:00 p.m.) peak period while school was in session. The counts include the total number of pedestrians, bicyclists, and motor vehicles that entered the study intersections in 5-minute intervals. *The traffic count worksheets are provided in Attachment A.*

Peak Hour Development

The traffic counts were reviewed to determine individual and system-wide peak hours for the operational analyses. The system-wide peak hour for the study intersections was identified as 4:00 to 5:00 p.m. Although a system-wide peak hour was identified, individual intersection peak hours will be used to complete the operational analyses because the system-wide peak hour is not consistent with the individual peak hours. Table 1 summarizes the study intersections, the individual intersection peak hours, and the percent difference in peak hour total entering volume (TEV) between the individual intersection and system-wide peak hours.

Table 1: Study Intersection Peak Hours

Map ID	Intersection	Intersection Peak Hour	Total Entering Volume (TEV)	% difference from System Peak Hour
1	OR 213/S Vick Road	4:05 to 5:05 p.m.	1,188	+0.17%
2	OR 213/Meadow Drive	4:00 to 5:00 p.m.	1,207	0.00%
3	OR 213/Toliver Road	4:00 to 5:00 p.m.	1,268	0.00%
4	OR 213/OR 211	4:35 to 5:35 p.m.	1,499	0.47%
5	OR 211/S Ona Way	4:20 to 5:20 p.m.	1,256	+1.70%
6	OR 211/Leroy Avenue	4:25 to 5:25 p.m.	1,254	+3.47%

7	OR 211/Ridings Avenue	4:25 to 5:25 p.m.	1,212	+1.25%
8	OR 211/S Molalla Avenue	4:00 to 5:00 p.m.	1,242	0.00%
9	OR 211/Mathias Road	4:15 to 5:15 p.m.	842	+0.48%
10	OR 211/Shirley Street	4:00 to 5:00 p.m.	629	0.00%
11	N Molalla Avenue/S Vick Road	4:55 to 5:55 p.m.	460	0.66%
12	N Molalla Avenue/Toliver Road	4:15 to 5:15 p.m.	742	1.64%
13	N Molalla Avenue/Shirley Street	4:15 to 5:15 p.m.	654	2.35%
14	N Molalla Avenue/Heintz Street	4:15 to 5:15 p.m.	642	1.26%
15	S Molalla Avenue/5 th Street	4:40 to 5:40 p.m.	372	0.54%
16	5 th Street/Mathias Road	4:20 to 5:20 p.m.	333	0.30%

Seasonal Factors

30th Hour Volumes (30 HV) for the Molalla TSP Update will be developed based on the traffic counts collected at the study intersections and the application of seasonal adjustment factors consistent with the methodology identified in the APM. The APM identifies three methods for identifying seasonal adjustment factors for highway traffic volumes. All three methods utilize information provided by Automatic Traffic Recorders (ATRs) located in select locations throughout the State Highway System that collect traffic data 24-hours a day, 365 days a year. Each method was evaluated to determine the most appropriate method for the study intersections. Based on the evaluations, the ATR Characteristics Table method will be used to develop 30 HV volumes at the ODOT study intersections. The results of the evaluation are summarized below.

ATR Characteristics Table

The ATR Characteristics Table Method requires that the ATR be located on a facility that shares similar characteristics with the facility to be adjusted, such as seasonal traffic trends, area type, and number of travel lanes. The ATR Characteristic Table Method also requires that the Average Annual Daily Traffic (AADT) at the ATR is within 10 percent of the AADT near the project area. Based on a review of the ATR Characteristics Table and AADTs within the study areas, ATR #03-020 was selected for use along OR213 and ATR #03-014 was selected for use along OR211. The following provides a summary of each ATR and the associated seasonal adjustment factors.

OR213 (ATR #03-020)

The ATR selected for OR213 (ATR #03-020) is located along OR 213 approximately seven miles north of the OR211/OR213 intersection in Mulino, OR. The ATR was installed in April 2009 and has traffic count data for the last six years. Based on historical traffic data provided by the ATR, the Peak Month generally occurs in July. Table 2 summarizes the percent of average daily traffic (ADT) at the ATR for the past five years.

Table 2: Seasonal Adjustment Factor (ATR #03-020)

Year	2011	2012	2013	2014	2015	Average	Seasonal Adjustment
Peak Month (July)	109	110	109	112	109	109.33	N/A
Count Month (April)	104	106	108	106	105	105.67	1.03

Note: Shaded values dropped from average calculation per ODOT methodology.

Based on the data shown in Table 2, traffic volumes along OR213 will be seasonally adjusted by a factor of 1.03 to reflect 30 HV.

OR211 (ATR #03-014)

The ATR selected for OR211 (ATR #03-014) is located along OR211 approximately 13 miles east of the OR211/OR213 intersection in Colton, OR. The ATR was installed in October 1957 and has traffic count data for the last 20 years. Based on historical traffic data provided by the ATR, the Peak Month generally occurs in September. Table 3 summarizes the percent of ADT at the ATR for the past five years.

Table 3: Seasonal Adjustment Factor (ATR #03-014)

Year	2011	2012	2013	2014	2015	Average	Seasonal Adjustment
Peak Month (Sept.)	111	119	110	111	107	110.67	N/A
Count Month (April)	98	98	101	100	100	99.33	1.11

Note: Shaded values dropped from average calculation per ODOT methodology.

Based on the data shown in Table 3, traffic volumes along OR211 will be seasonally adjusted by a factor of 1.11 to reflect 30 HV.

Historical Factors

All traffic counts were conducted in 2017; therefore, no historical factors are needed to adjust traffic volumes.

Forecast Traffic Volumes

Forecast traffic volumes for the Molalla TSP Update will be developed for the study intersections based on the methodology identified in the National Cooperative Highway Research Program (NCHRP) Report 225 *Highway Traffic Data for Urbanized Area Project Planning and Design*. The methodology combines the year 2017 30 HV developed at the study intersections with the base year 2010 and future year 2040 traffic volume forecasts from the current Metro travel demand model developed for the adopted 2014 Regional Transportation Plan (RTP) to develop forecast year traffic volumes. Note: the travel demand model will be reviewed and updated as necessary to reflect existing and forecast conditions within the Molalla area prior to use in developing forecast traffic volumes.

Intersection Operational Standards

ODOT Facilities

ODOT uses volume-to-capacity (V/C) ratios to assess intersection operations. Table 6 of the *Oregon Highway Plan* (OHP – Reference 3) and Table 10-2 of the *Oregon Highway Design Manual* (HDM – Reference 4) provide maximum volume-to-capacity ratios for all signalized and unsignalized intersections located outside the Portland metropolitan area. The OHP ratios are used to evaluate existing and future no-build conditions, while the HDM ratios are used in the creation of future TSP alternatives which involve projects along state highways. The ODOT controlled intersections within the study area are located along OR213 and OR211. Table 4 summarizes the v/c ratios that will be used to identify the existing and potential future operational issues at the ODOT study intersections.

Table 4: ODOT Mobility Standards

Map ID	Intersection	Traffic Control	OHP Mobility Target	HDM Standard
1	OR 213/Vick Road	TWSC	0.80	0.75
2	OR 213/Meadow Road	TWSC	0.90	0.85
3	OR 213/Toliver Road	TWSC	0.90	0.85
4	OR 213/OR 211	Signal	0.90	0.85
5	OR 211/S Ona Way	TWSC	0.90	0.85
6	OR 211/Leroy Avenue	TWSC	0.90	0.85
7	OR 211/Ridings Avenue	TWSC	0.90	0.85
8 ¹	OR 211/S Molalla Avenue	AWSC	1.00	0.95
9	OR 211/Mathias Road	TWSC	0.95	0.85
10	OR 211/Shirley Street	TWSC	0.90	0.85

1. The segment of OR 211 from Hart Avenue to Grange Avenue is designated as a Special Transportation Area (STA), which allows a high level of congestion, and therefore, has a higher mobility target.

City Facilities

The City of Molalla uses Level of Service (LOS) to assess intersection operations. The City’s current TSP sets a maximum LOS Standard of E for all signalized and unsignalized intersections. Table 5 summarizes the LOS standards that will be used to identify existing and potential future operational issues at the City study intersection.

Table 5: City Mobility Standards

Map ID	Intersection	Traffic Control	Mobility Standard
11	N Molalla Avenue/S Vick Road	TWSC	LOS E
12	N Molalla Avenue/Toliver Road	TWSC	LOS E
13	N Molalla Avenue/Shirley Street	TWSC	LOS E
14	N Molalla Avenue/Heintz Street	TWSC	LOS E
15	N Molalla Avenue/5 th Street	TWSC	LOS E
16	5 th Street/Mathias Road	TWSC	LOS E

Traffic operations at the study intersections will be evaluated based on the mobility targets and standards shown in Tables 4 and 5. Potential solutions will be identified and evaluated for the study intersections that are found to exceed the mobility targets and standards under existing and/or future traffic conditions.

ANALYSIS MODEL PARAMETERS

The bullets below identify the specific sources of data and methodologies proposed to conduct the operational analyses. Analyses of all state facilities will be conducted according to the APM, unless otherwise agreed upon by the City and ODOT.

1. *Intersection/Roadway Geometry* (lane numbers and arrangements, cross-section elements, signal phasing, etc.) will be collected through aerial photography and confirmed through a site visit. Available as-built data may also be used to verify existing roadway geometry. The analysis models will be built on scaled roadway line work from GIS or aerial photography.
2. *Operational Data* (such as posted speeds, intersection control, parking, transit stops, rail crossings, right-turn on red, etc.) will be collected through a site visit. Data will be reviewed and supplemented by available GIS data, traffic count DVDs, aerials, and photos.
3. *Peak Hour Factors* (PHF) will be calculated for each intersection and applied to the existing conditions analyses. Per the APM, PHFs of 0.95 will be used for the year 2040 analysis for high-order facilities (arterials), with 0.90 applied to medium-order facilities (collectors) and 0.85 applied to local roads. If the existing PHF is greater than these default future values, the existing PHF will be applied.
4. *Traffic Volume* development is described above.
5. *Signal Timing Data* will be requested from ODOT for use in the existing conditions analysis. Signal parameters such as Flash Don't Walk, Walk, and Minimum Times will be retained in the forecast analysis with the signal splits optimized to better serve the future traffic volume patterns. Optimized signal cycle lengths may range between 60 and 120 seconds.
6. *Traffic Operations*
 - a. The 2000 Highway Capacity Manual (HCM 2000) methodology will be used to analyze traffic operations at the signalized intersections while the HCM 2010 methodology will be used to analyze traffic operations at the unsignalized intersections.
 - b. The existing and future no-build traffic operations analyses will use Synchro 9 software using HCM 2000 reports for signalized intersections and HCM 2010 reports for unsignalized intersections.
 - c. Queuing analysis methodology will be based on Synchro 95th percentile queue lengths. Microsimulation is not proposed as part of this long-range planning effort.

TRAFFIC ANALYSIS SOFTWARE AND INPUT ASSUMPTIONS

Synchro 9 software will be used for the intersection analysis. The reported results will be the level of service, intersection delay, and v/c ratios generated by the HCM report. Analysis assumptions are listed in Table 6.

Table 6: Synchro Operations Parameters/Assumptions

Arterial Intersection Parameters	Existing Conditions
Peak Hour Factor	From traffic counts
Conflicting Bikes and Pedestrian per Hour	From traffic counts, as available
Area Type	Other
Ideal Saturation Flow Rate (for all movements)	1,750 passenger cars per hour green per lane
Lane Width	12 feet unless field observations suggest otherwise
Percent Heavy Vehicles	From traffic counts by movement, as available
Percent Grade	Estimated based on field observations
Parking Maneuvers per Hour	Estimated based on field observations
Bus Blockages	Estimated based on frequency of service
Intersection signal phasing and coordination	From ODOT/County/City
Intersection signal timing optimization limits	Maximum cycle length = 120 seconds
Minimum Green time	From timing plans
Yellow and all-red time	From timing plans
95 th percentile vehicle queues	Synchro 9 summary output

MULTI-MODAL ANALYSIS

The multimodal analysis will be performed in accordance with the methodologies identified in Chapter 14 of the APM and identify the needs associated with pedestrian, bicycle, and public transportation facilities and service. The pedestrian and bicycle analyses will include a Pedestrian Level of Traffic Stress (PLTS) and a Bicycle Level of Traffic Stress (BLTS) analysis, consistent with the methodologies identified in the APM. All analysis results will be presented in a tabular format and as part of a GIS map. Both PLTS and BLTS methods group facilities into four different stress levels for segments, intersection approaches, and intersection crossings. Facilities with an LTS 1 rating have little to no traffic stress, require less attention, and are suitable for all users. Facilities with an LTS 2 rating have little traffic stress, but require more attention and therefore, may or may not be suitable for small children. Facilities with an LTS 3 rating have moderate traffic stress and are suitable for adults. Facilities with an LTS 4 rating have high traffic stress and are only suitable for able-bodied adults with limited options. The transit analysis will include a Transit Level of Service (TLOS) analysis, consistent with the methodologies identified in the Transit Capacity and Quality of Service Manual (TCQSM). Per the TCQSM the most appropriate measures for long-range planning efforts, such as TSPs, include hours of service, service frequency, and service coverage. The TLOS for hours and service and service frequencies will be determined based on information provided by TriMet, while the TLOS for service coverage will be based on an evaluation of existing routes and stops and the population and employment densities within the proximity of the routes and stops.

CRASH ANALYSIS

The five most recent years of crash data will be reviewed at the study intersections and along the City's roadway segments consistent with the methodologies outlined in the APM. The data will be analyzed for number, type, severity, and location to identify potential crash patterns and million entering vehicle (MEV) crash rates (critical crash rates will also be developed as evaluated as applicable). Intersection crash rates will be compared to the published 90th percentile crash rates in Exhibit 4.1 of the APM and segment crash rates will be compared to Table II in the current ODOT Crash Rate Tables. In addition, ODOT's top 10% ODOT Safety Priority System sites will be reviewed, as appropriate. Any identified potential countermeasures (and any resulting crash percentage reduction) will be taken from the All Roads Transportation Safety (ARTS) Crash Reduction Factors (CRF) listing or the CRF Appendix.

REFERENCES

1. Oregon Department of Transportation. *Transportation System Plan Guidelines*, 2008.
2. Oregon Department of Transportation. *Analysis Procedures Manual*, 2012.
3. Oregon Department of Transportation. *Oregon Highway Plan*, 2012.
4. Oregon Department of Transportation. *Highway Design Manual*, 2012.
5. Transportation Research Board, Nation Research Council. *TCRP Report 100: Transit Capacity and Quality of Service Manual*, 2003.

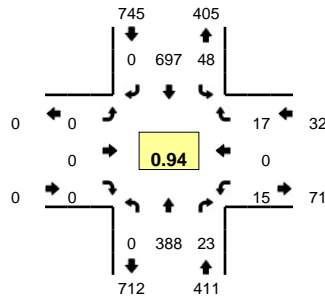
ATTACHMENTS

- A. Traffic Counts

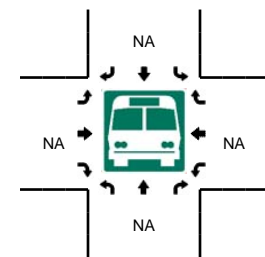
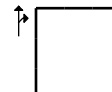
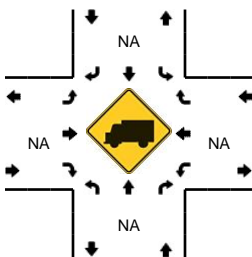
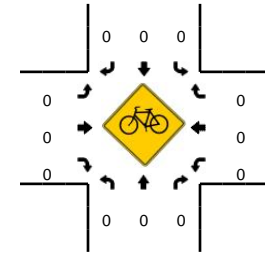
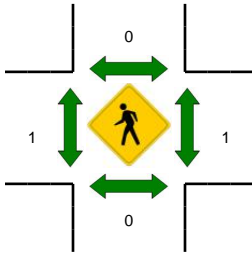
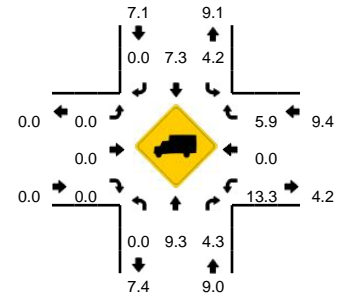
Attachment A Traffic Counts

LOCATION: OR-213 -- S Vick Rd
CITY/STATE: Clackamas, OR

QC JOB #: 14397607
DATE: Thu, Apr 27 2017



Peak-Hour: 4:05 PM -- 5:05 PM
Peak 15-Min: 4:05 PM -- 4:20 PM

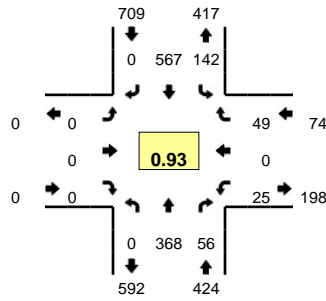


5-Min Count Period Beginning At	OR-213 (Northbound)				OR-213 (Southbound)				S Vick Rd (Eastbound)				S Vick Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	37	2	0	5	47	0	0	0	0	0	0	2	0	2	0	95	
4:05 PM	0	39	3	0	2	67	0	0	0	0	0	0	3	0	2	0	116	
4:10 PM	0	38	0	0	2	60	0	0	0	0	0	0	2	0	6	0	108	
4:15 PM	0	30	1	0	3	55	0	0	0	0	0	0	2	0	1	0	92	
4:20 PM	0	23	1	0	5	64	0	0	0	0	0	0	1	0	2	0	96	
4:25 PM	0	26	2	0	4	53	0	0	0	0	0	0	0	0	0	0	85	
4:30 PM	0	29	2	0	7	54	0	0	0	0	0	0	1	0	0	0	93	
4:35 PM	0	38	4	0	0	70	0	0	0	0	0	0	1	0	1	0	114	
4:40 PM	0	35	0	0	2	42	0	0	0	0	0	0	3	0	1	0	83	
4:45 PM	0	32	2	0	4	66	0	0	0	0	0	0	0	0	1	0	105	
4:50 PM	0	28	2	0	3	61	0	0	0	0	0	0	1	0	0	0	95	
4:55 PM	0	35	4	0	9	55	0	0	0	0	0	0	0	0	1	0	104	1186
5:00 PM	0	35	2	0	7	50	0	0	0	0	0	0	1	0	2	0	97	1188
5:05 PM	0	22	1	0	4	61	0	0	0	0	0	0	1	0	0	0	89	1161
5:10 PM	0	27	4	0	6	50	0	0	0	0	0	0	1	0	1	0	89	1142
5:15 PM	0	41	2	0	3	57	0	0	0	0	0	0	1	0	4	0	108	1158
5:20 PM	0	34	1	0	4	49	0	0	0	0	0	0	1	0	2	0	91	1153
5:25 PM	0	34	1	0	3	56	0	0	0	0	0	0	1	0	0	0	95	1163
5:30 PM	0	30	2	0	7	54	0	0	0	0	0	0	1	0	1	0	95	1165
5:35 PM	0	36	1	0	3	57	0	0	0	0	0	0	0	0	0	0	97	1148
5:40 PM	0	36	3	0	3	55	0	0	0	0	0	0	0	0	0	0	97	1162
5:45 PM	0	30	2	0	2	49	0	0	0	0	0	0	0	0	4	0	87	1144
5:50 PM	0	31	4	0	4	49	0	0	0	0	0	0	0	0	1	0	89	1138
5:55 PM	0	35	0	0	2	50	0	0	0	0	0	0	0	0	0	0	87	1121
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	428	16	0	28	728	0	0	0	0	0	0	28	0	36	0	1264	
Heavy Trucks	0	48	4		4	44	0		0	0	0		0	0	4		104	
Pedestrians	0				0				4				0				4	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Railroad																	0	
Stopped Buses																		

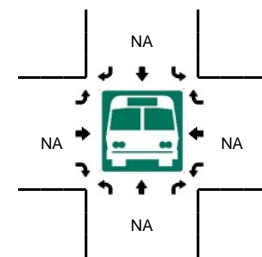
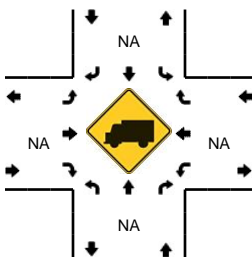
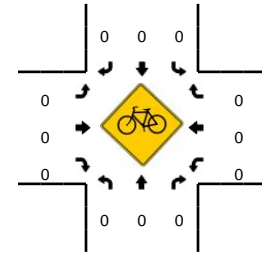
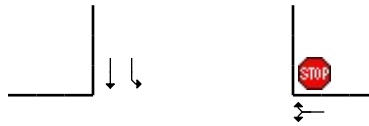
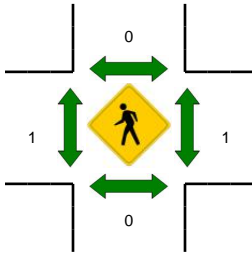
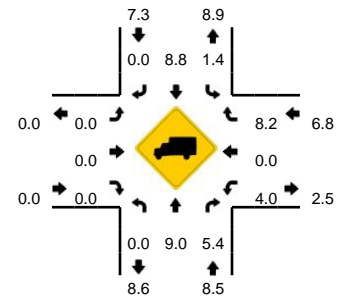
Comments:

LOCATION: OR-213 -- Meadow Dr
CITY/STATE: Clackamas, OR

QC JOB #: 14397608
DATE: Thu, Apr 27 2017



Peak-Hour: 4:00 PM -- 5:00 PM
Peak 15-Min: 4:05 PM -- 4:20 PM

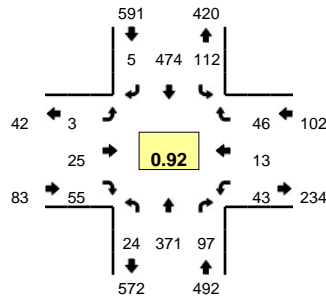


5-Min Count Period Beginning At	OR-213 (Northbound)				OR-213 (Southbound)				Meadow Dr (Eastbound)				Meadow Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	35	4	0	7	43	0	0	0	0	0	0	1	0	5	0	95	
4:05 PM	0	36	4	0	16	51	0	0	0	0	0	0	3	0	8	0	118	
4:10 PM	0	32	4	0	15	50	0	0	0	0	0	0	1	0	3	0	105	
4:15 PM	0	31	3	0	13	46	0	0	0	0	0	0	4	0	5	0	102	
4:20 PM	0	18	9	0	12	53	0	0	0	0	0	0	2	0	1	0	95	
4:25 PM	0	30	4	0	11	38	0	0	0	0	0	0	4	0	2	0	89	
4:30 PM	0	29	2	0	8	45	0	0	0	0	0	0	2	0	2	0	88	
4:35 PM	0	39	8	0	10	62	0	0	0	0	0	0	2	0	4	0	125	
4:40 PM	0	27	6	0	11	30	0	0	0	0	0	0	1	0	5	0	80	
4:45 PM	0	31	4	0	11	57	0	0	0	0	0	0	0	0	3	0	106	
4:50 PM	0	32	3	0	9	44	0	0	0	0	0	0	2	0	4	0	94	
4:55 PM	0	28	5	0	19	48	0	0	0	0	0	0	3	0	7	0	110	1207
5:00 PM	0	30	4	0	14	29	0	0	0	0	0	0	3	0	4	0	84	1196
5:05 PM	0	18	3	0	16	52	0	0	0	0	0	0	2	0	8	0	99	1177
5:10 PM	0	29	3	0	9	41	0	0	0	0	0	0	2	0	5	0	89	1161
5:15 PM	0	33	5	0	17	45	0	0	0	0	0	0	2	0	5	0	107	1166
5:20 PM	0	38	8	0	12	34	0	0	0	0	0	0	0	0	1	0	93	1164
5:25 PM	0	29	9	0	11	49	0	0	0	0	0	0	4	0	3	0	105	1180
5:30 PM	0	26	7	0	12	42	0	0	0	0	0	0	3	0	5	0	95	1187
5:35 PM	0	32	5	0	14	42	0	0	0	0	0	0	3	0	3	0	99	1161
5:40 PM	0	36	6	0	16	37	0	0	0	0	0	0	0	0	7	0	102	1183
5:45 PM	0	21	5	0	15	33	0	0	0	0	0	0	3	0	9	0	86	1163
5:50 PM	0	28	9	0	11	43	0	0	0	0	0	0	4	0	5	0	100	1169
5:55 PM	0	32	5	0	15	33	0	0	0	0	0	0	3	0	6	0	94	1153
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	396	44	0	176	588	0	0	0	0	0	0	32	0	64	0	1300	
Heavy Trucks	0	44	4		4	40	0		0	0	0		4	0	8		104	
Pedestrians		0				0				0				0			0	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Railroad																		
Stopped Buses																		

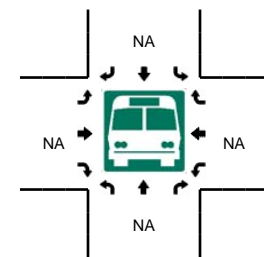
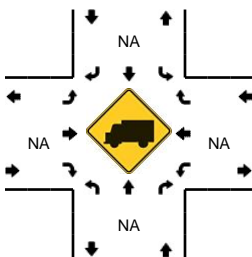
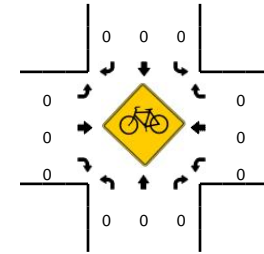
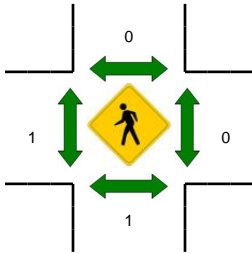
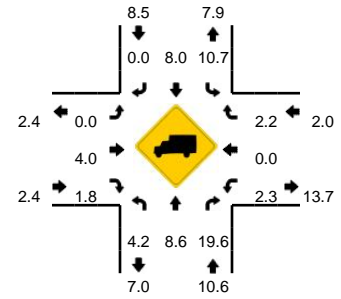
Comments:

LOCATION: OR-213 -- Toliver Rd
CITY/STATE: Clackamas, OR

QC JOB #: 14397609
DATE: Thu, Apr 27 2017



Peak-Hour: 4:00 PM -- 5:00 PM
Peak 15-Min: 4:35 PM -- 4:50 PM

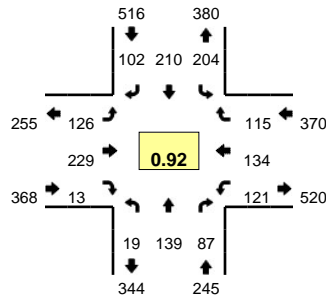


5-Min Count Period Beginning At	OR-213 (Northbound)				OR-213 (Southbound)				Toliver Rd (Eastbound)				Toliver Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	2	34	4	0	5	35	1	0	0	3	2	0	6	0	5	0	97	
4:05 PM	1	39	4	0	14	40	1	0	1	2	7	0	2	0	1	0	112	
4:10 PM	3	30	7	0	14	40	0	0	0	2	2	0	0	0	7	0	105	
4:15 PM	1	27	10	0	7	42	0	0	0	1	4	0	6	1	3	0	102	
4:20 PM	4	24	9	0	7	43	1	0	0	1	6	0	3	2	4	0	104	
4:25 PM	4	33	6	0	8	39	0	0	1	1	4	0	1	1	5	0	103	
4:30 PM	3	24	7	0	9	38	0	0	0	2	3	0	6	2	3	0	97	
4:35 PM	1	36	12	0	5	54	0	0	0	4	7	0	1	2	7	0	129	
4:40 PM	2	31	8	0	10	25	0	0	1	1	4	0	9	2	4	0	97	
4:45 PM	0	29	13	0	12	48	1	0	0	1	8	0	1	0	4	0	117	
4:50 PM	2	33	11	0	12	33	0	0	0	4	6	0	3	1	1	0	106	
4:55 PM	1	31	6	0	9	37	1	0	0	3	2	0	5	2	2	0	99	1268
5:00 PM	1	30	5	0	2	29	0	0	0	4	7	0	9	2	4	0	93	1264
5:05 PM	1	16	9	0	10	47	0	0	1	1	7	0	10	0	4	0	106	1258
5:10 PM	3	30	3	0	6	35	0	0	0	0	3	0	7	2	4	0	93	1246
5:15 PM	2	32	4	0	7	35	1	0	0	4	7	0	1	2	5	0	100	1244
5:20 PM	3	37	6	0	4	32	1	0	0	2	4	0	5	1	10	0	105	1245
5:25 PM	0	36	7	0	5	53	1	0	2	0	5	0	2	0	3	0	114	1256
5:30 PM	1	26	5	0	4	39	0	0	0	5	3	0	4	0	2	0	89	1248
5:35 PM	3	32	5	0	6	42	0	0	0	1	4	0	0	1	6	0	100	1219
5:40 PM	3	38	6	0	3	32	0	0	0	0	2	0	5	2	2	0	93	1215
5:45 PM	1	26	4	0	3	41	0	0	0	2	5	0	3	2	2	0	89	1187
5:50 PM	5	33	7	0	5	38	0	0	0	1	2	0	5	2	5	0	103	1184
5:55 PM	3	32	8	0	3	38	0	0	0	0	3	0	1	2	4	0	94	1179
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	12	384	132	0	108	508	4	0	4	24	76	0	44	16	60	0	1372	
Heavy Trucks	0	40	12		8	52	0		0	0	4		4	0	0		120	
Pedestrians		0				0				0				0				0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Railroad																		0
Stopped Buses																		0

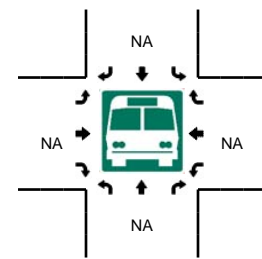
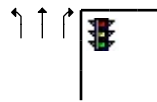
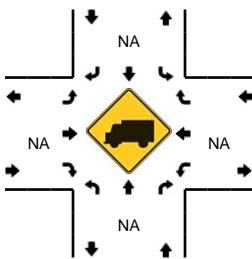
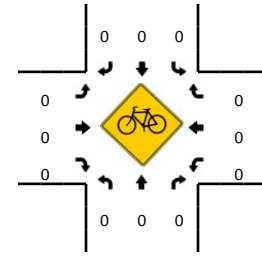
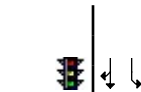
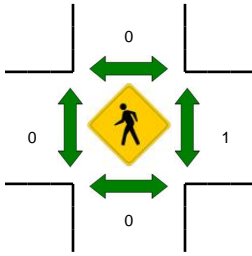
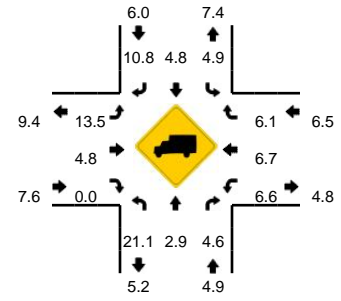
Comments:

LOCATION: OR-213 -- OR-211
CITY/STATE: Clackamas, OR

QC JOB #: 14397610
DATE: Thu, Apr 27 2017



Peak-Hour: 4:35 PM -- 5:35 PM
Peak 15-Min: 4:40 PM -- 4:55 PM

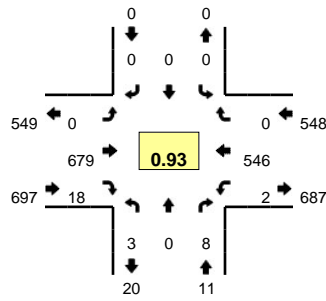


5-Min Count Period Beginning At	OR-213 (Northbound)				OR-213 (Southbound)				OR-211 (Eastbound)				OR-211 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	12	6	0	12	12	9	0	10	32	1	0	11	11	9	0	125	
4:05 PM	1	15	13	0	16	22	7	0	3	11	5	0	6	17	12	0	128	
4:10 PM	1	13	8	0	16	20	7	0	6	20	0	0	5	16	13	0	125	
4:15 PM	2	12	3	0	16	13	9	0	5	20	1	0	5	16	7	0	109	
4:20 PM	2	11	11	0	15	15	5	0	8	23	0	0	4	20	12	0	126	
4:25 PM	3	16	6	0	15	11	11	0	14	15	3	0	9	15	8	0	126	
4:30 PM	1	11	9	0	16	9	8	0	10	21	1	0	12	8	10	0	116	
4:35 PM	1	6	4	0	14	28	6	0	20	14	1	0	13	6	8	0	121	
4:40 PM	2	10	4	0	20	13	7	0	8	22	0	0	7	16	8	0	117	
4:45 PM	2	14	7	0	16	21	14	0	19	26	2	0	16	17	6	0	160	
4:50 PM	2	22	8	0	20	17	7	0	6	17	2	0	10	10	11	0	132	
4:55 PM	4	12	15	0	19	14	5	0	8	7	1	0	7	8	7	0	107	1492
5:00 PM	1	10	6	0	16	14	10	0	9	19	1	0	6	11	6	0	109	1476
5:05 PM	1	13	4	0	17	18	15	0	3	14	0	0	13	15	9	0	122	1470
5:10 PM	0	6	7	0	16	14	10	0	11	28	2	0	10	14	13	0	131	1476
5:15 PM	1	7	6	0	16	13	3	0	14	14	2	0	16	11	11	0	114	1481
5:20 PM	0	13	6	0	20	16	10	0	11	22	1	0	10	10	15	0	134	1489
5:25 PM	3	14	12	0	17	22	10	0	9	24	0	0	6	5	10	0	132	1495
5:30 PM	2	12	8	0	13	20	5	0	8	22	1	0	7	11	11	0	120	1499
5:35 PM	2	9	7	0	15	15	7	0	9	13	2	0	13	11	4	0	107	1485
5:40 PM	2	14	8	0	16	8	9	0	12	15	0	0	16	10	13	0	123	1491
5:45 PM	2	2	9	0	18	15	5	0	9	20	3	0	6	15	9	0	113	1444
5:50 PM	1	18	10	0	15	14	6	0	12	23	0	0	10	19	5	0	133	1445
5:55 PM	0	10	6	0	17	21	8	0	9	16	3	0	4	17	12	0	123	1461
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	24	184	76	0	224	204	112	0	132	260	16	0	132	172	100	0	1636	
Heavy Trucks	8	8	0		8	12	12		24	20	0		8	12	8		120	
Pedestrians		0				0				0				0				0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Railroad																		0
Stopped Buses																		0

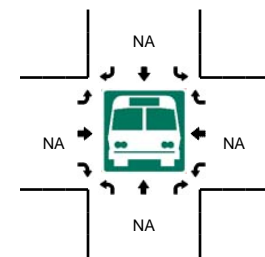
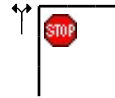
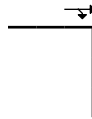
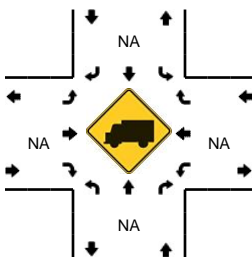
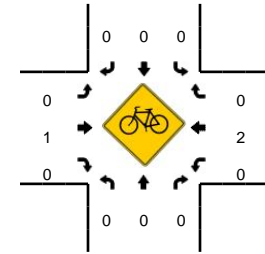
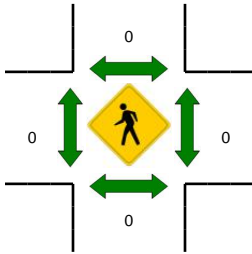
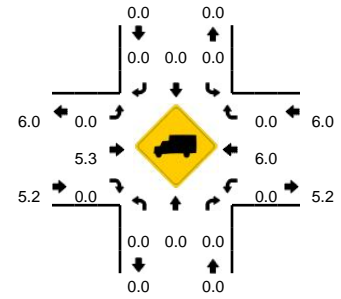
Comments:

LOCATION: S Ona Way -- OR-211
CITY/STATE: Molalla, OR

QC JOB #: 14397601
DATE: Thu, Apr 27 2017



Peak-Hour: 4:20 PM -- 5:20 PM
Peak 15-Min: 4:40 PM -- 4:55 PM

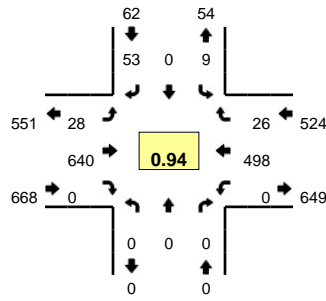


5-Min Count Period Beginning At	S Ona Way (Northbound)				S Ona Way (Southbound)				OR-211 (Eastbound)				OR-211 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	0	0	0	0	0	0	0	72	2	0	0	39	0	0	113	
4:05 PM	1	0	0	0	0	0	0	0	0	46	0	0	0	51	0	0	98	
4:10 PM	1	0	2	0	0	0	0	0	0	58	1	0	1	38	0	0	101	
4:15 PM	0	0	0	0	0	0	0	0	0	47	0	0	1	44	0	0	92	
4:20 PM	0	0	1	0	0	0	0	0	0	65	2	0	1	44	0	0	113	
4:25 PM	0	0	0	0	0	0	0	0	0	55	1	0	0	43	0	0	99	
4:30 PM	0	0	1	0	0	0	0	0	0	44	0	0	0	51	0	0	96	
4:35 PM	0	0	0	0	0	0	0	0	0	51	0	0	0	44	0	0	95	
4:40 PM	2	0	0	0	0	0	0	0	0	52	1	0	0	49	0	0	104	
4:45 PM	0	0	0	0	0	0	0	0	0	73	1	0	0	46	0	0	120	
4:50 PM	0	0	2	0	0	0	0	0	0	64	1	0	0	47	0	0	114	
4:55 PM	0	0	1	0	0	0	0	0	0	54	2	0	0	33	0	0	90	1235
5:00 PM	0	0	0	0	0	0	0	0	0	63	2	0	0	34	0	0	99	1221
5:05 PM	1	0	1	0	0	0	0	0	0	52	3	0	0	44	0	0	101	1224
5:10 PM	0	0	1	0	0	0	0	0	0	55	3	0	1	58	0	0	118	1241
5:15 PM	0	0	1	0	0	0	0	0	0	51	2	0	0	53	0	0	107	1256
5:20 PM	1	0	0	0	0	0	0	0	0	60	1	0	1	50	0	0	113	1256
5:25 PM	1	0	2	0	0	0	0	0	0	49	1	0	0	30	0	0	83	1240
5:30 PM	0	0	0	0	0	0	0	0	0	61	0	0	1	43	0	0	105	1249
5:35 PM	0	0	0	0	0	0	0	0	0	42	3	0	0	45	0	0	90	1244
5:40 PM	0	0	0	0	0	0	0	0	0	56	0	0	1	44	0	0	101	1241
5:45 PM	1	0	0	0	0	0	0	0	0	61	0	0	2	35	0	0	99	1220
5:50 PM	1	0	0	0	0	0	0	0	0	65	0	0	0	45	0	0	111	1217
5:55 PM	1	0	1	0	0	0	0	0	0	44	2	0	0	37	0	0	85	1212
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	8	0	8	0	0	0	0	0	0	756	12	0	0	568	0	0	1352	
Heavy Trucks	0	0	0	0	0	0	0	0	0	36	0	0	0	28	0	0	64	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

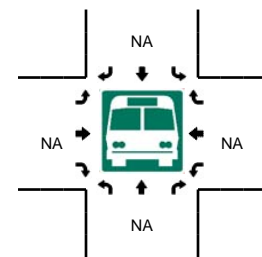
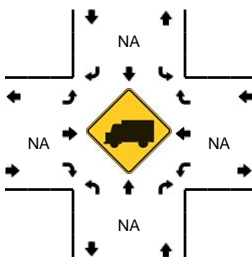
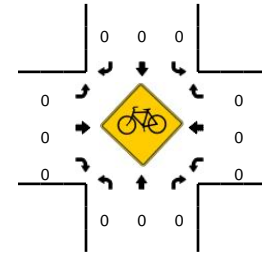
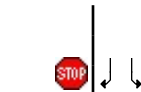
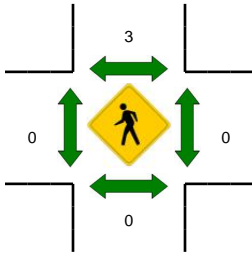
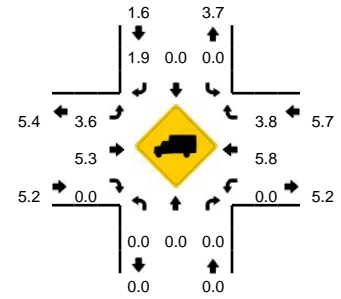
Comments:

LOCATION: Leroy Ave -- OR-211
CITY/STATE: Molalla, OR

QC JOB #: 14397602
DATE: Thu, Apr 27 2017



Peak-Hour: 4:25 PM -- 5:25 PM
Peak 15-Min: 5:10 PM -- 5:25 PM

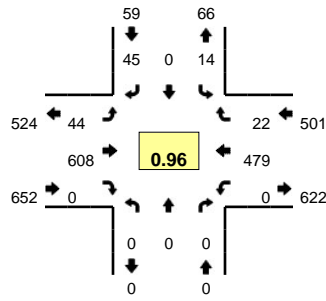


5-Min Count Period Beginning At	Leroy Ave (Northbound)				Leroy Ave (Southbound)				OR-211 (Eastbound)				OR-211 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	0	0	1	0	2	0	3	62	0	0	0	33	1	0	102	
4:05 PM	0	0	0	0	1	0	3	0	2	47	0	0	0	45	2	0	100	
4:10 PM	0	0	0	0	1	0	3	0	1	52	0	0	0	29	2	0	88	
4:15 PM	0	0	0	0	0	0	2	0	5	42	0	0	0	48	0	0	97	
4:20 PM	0	0	0	0	0	0	3	0	6	57	0	0	0	37	3	0	106	
4:25 PM	0	0	0	0	2	0	2	0	4	45	0	0	0	45	2	0	100	
4:30 PM	0	0	0	0	1	0	6	0	2	40	0	0	0	38	6	0	93	
4:35 PM	0	0	0	0	2	0	2	0	2	55	0	0	0	46	1	0	108	
4:40 PM	0	0	0	0	1	0	5	0	3	50	0	0	0	42	1	0	102	
4:45 PM	0	0	0	0	0	0	4	0	5	56	0	0	0	43	2	0	110	
4:50 PM	0	0	0	0	0	0	5	0	0	67	0	0	0	37	3	0	112	
4:55 PM	0	0	0	0	1	0	2	0	2	55	0	0	0	33	1	0	94	1212
5:00 PM	0	0	0	0	0	0	1	0	2	58	0	0	0	34	5	0	100	1210
5:05 PM	0	0	0	0	0	0	6	0	2	54	0	0	0	41	0	0	103	1213
5:10 PM	0	0	0	0	1	0	11	0	1	47	0	0	0	49	1	0	110	1235
5:15 PM	0	0	0	0	0	0	5	0	2	54	0	0	0	50	1	0	112	1250
5:20 PM	0	0	0	0	1	0	4	0	3	59	0	0	0	40	3	0	110	1254
5:25 PM	0	0	0	0	5	0	4	0	2	45	0	0	0	32	1	0	89	1243
5:30 PM	0	0	0	0	1	0	2	0	4	45	0	0	0	36	4	0	92	1242
5:35 PM	0	0	0	0	2	0	4	0	4	45	0	0	0	51	6	0	112	1246
5:40 PM	0	0	0	0	0	0	5	0	1	48	0	0	0	37	1	0	92	1236
5:45 PM	0	0	0	0	1	0	1	0	4	53	0	0	0	33	5	0	97	1223
5:50 PM	0	0	0	0	1	0	8	0	4	59	0	0	0	41	2	0	115	1226
5:55 PM	0	0	0	0	3	0	6	0	3	38	0	0	0	33	2	0	85	1217
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	0	0	8	0	80	0	24	640	0	0	0	556	20	0	1328	
Heavy Trucks	0	0	0	0	0	0	0	0	4	36	0	0	0	24	4	0	68	
Pedestrians	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	4	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

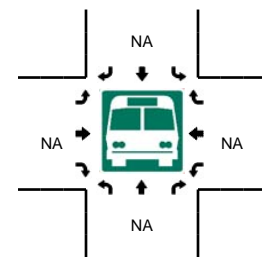
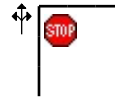
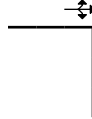
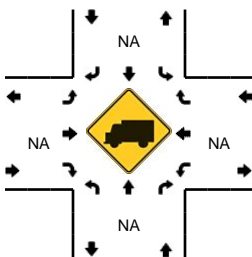
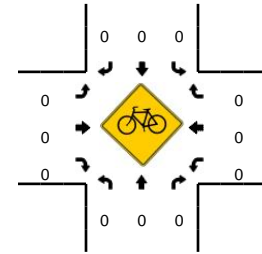
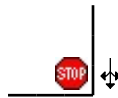
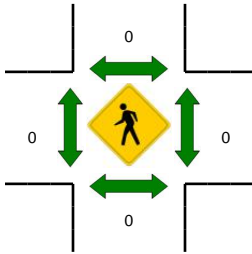
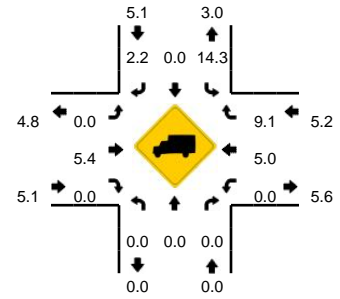
Comments:

LOCATION: Ridings Ave -- OR-211
CITY/STATE: Molalla, OR

QC JOB #: 14397603
DATE: Thu, Apr 27 2017



Peak-Hour: 4:25 PM -- 5:25 PM
Peak 15-Min: 5:10 PM -- 5:25 PM

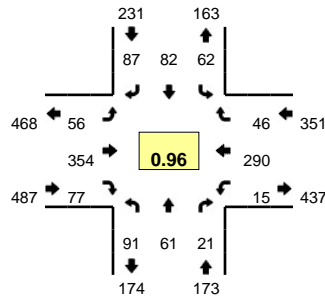


5-Min Count Period Beginning At	Ridings Ave (Northbound)				Ridings Ave (Southbound)				OR-211 (Eastbound)				OR-211 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	1	0	0	0	0	0	3	0	6	58	0	0	0	31	4	0	103	
4:05 PM	0	0	0	0	0	0	4	0	2	47	0	0	0	45	1	0	99	
4:10 PM	0	0	0	0	1	0	2	0	4	40	0	0	0	30	0	0	77	
4:15 PM	0	0	0	0	1	0	3	0	5	47	0	0	0	47	5	0	108	
4:20 PM	0	0	0	0	1	0	3	0	6	53	0	0	0	38	3	0	104	
4:25 PM	0	0	0	0	1	0	5	0	3	43	0	0	0	43	5	0	100	
4:30 PM	0	0	0	0	3	0	2	0	0	46	0	0	0	43	1	0	95	
4:35 PM	0	0	0	0	1	0	2	0	4	50	0	0	0	49	0	0	106	
4:40 PM	0	0	0	0	1	0	9	0	6	42	0	0	0	33	2	0	93	
4:45 PM	0	0	0	0	0	0	3	0	2	54	0	0	0	42	2	0	103	
4:50 PM	0	0	0	0	2	0	1	0	3	71	0	0	0	35	3	0	115	
4:55 PM	0	0	0	0	1	0	3	0	5	50	0	0	0	33	2	0	94	1197
5:00 PM	0	0	0	0	0	0	4	0	0	52	0	0	0	34	1	0	91	1185
5:05 PM	0	0	0	0	1	0	4	0	5	52	0	0	0	37	0	0	99	1185
5:10 PM	0	0	0	0	1	0	6	0	3	43	0	0	0	47	0	0	100	1208
5:15 PM	0	0	0	0	0	0	5	0	4	50	0	0	0	43	3	0	105	1205
5:20 PM	0	0	0	0	3	0	1	0	9	55	0	0	0	40	3	0	111	1212
5:25 PM	0	0	0	0	1	0	6	0	1	49	0	0	0	28	2	0	87	1199
5:30 PM	0	0	0	0	1	0	2	0	4	43	0	0	0	41	2	0	93	1197
5:35 PM	0	0	0	0	3	1	7	0	2	45	0	0	0	47	2	0	107	1198
5:40 PM	0	0	0	0	0	0	1	0	3	43	0	0	0	36	0	0	83	1188
5:45 PM	0	0	1	0	2	0	5	0	7	50	0	0	0	38	2	0	105	1190
5:50 PM	0	0	0	0	0	0	1	0	6	52	0	0	0	40	7	0	106	1181
5:55 PM	0	0	0	0	1	0	2	0	2	40	0	0	0	28	1	0	74	1161
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	0	0	16	0	48	0	64	592	0	0	0	520	24	0	1264	
Heavy Trucks	0	0	0	0	8	0	4	0	0	36	0	0	0	16	0	0	64	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

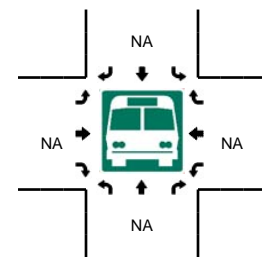
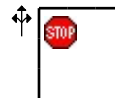
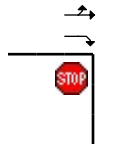
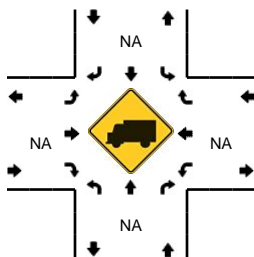
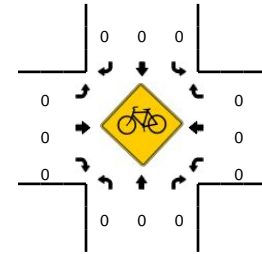
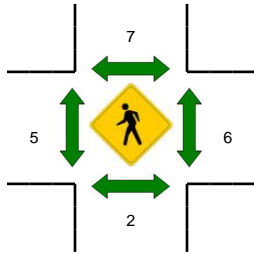
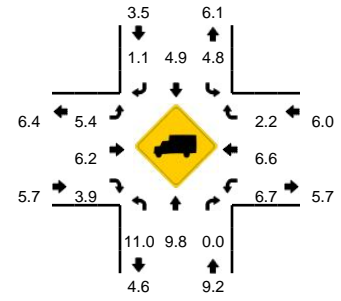
Comments:

LOCATION: Molalla Ave -- OR-211
CITY/STATE: Molalla, OR

QC JOB #: 14397604
DATE: Thu, Apr 27 2017



Peak-Hour: 4:00 PM -- 5:00 PM
Peak 15-Min: 4:15 PM -- 4:30 PM

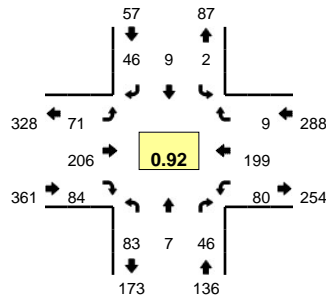


5-Min Count Period Beginning At	Molalla Ave (Northbound)				Molalla Ave (Southbound)				OR-211 (Eastbound)				OR-211 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	5	5	1	0	3	6	11	0	2	37	13	0	0	20	6	0	109	
4:05 PM	9	7	4	0	3	2	4	0	6	28	5	0	3	23	5	0	99	
4:10 PM	11	2	0	0	3	7	7	0	3	29	4	0	2	27	5	0	100	
4:15 PM	12	2	1	0	10	8	8	0	8	22	2	0	2	24	6	0	105	
4:20 PM	11	6	2	0	6	13	3	0	4	27	4	0	0	23	4	0	103	
4:25 PM	6	6	4	0	5	9	12	0	5	28	10	0	0	26	3	0	114	
4:30 PM	5	4	2	0	4	1	7	0	2	38	7	0	2	28	2	0	102	
4:35 PM	10	8	0	0	4	5	10	0	4	29	10	0	2	19	2	0	103	
4:40 PM	5	6	2	0	6	10	3	0	5	27	6	0	2	24	3	0	99	
4:45 PM	6	3	2	0	8	7	5	0	5	28	6	0	1	30	3	0	104	
4:50 PM	5	7	1	0	4	7	8	0	4	34	3	0	1	28	4	0	106	
4:55 PM	6	5	2	0	6	7	9	0	8	27	7	0	0	18	3	0	98	1242
5:00 PM	4	4	2	0	3	7	4	0	6	34	4	0	1	20	2	0	91	1224
5:05 PM	7	3	0	0	4	6	5	0	9	32	11	0	1	24	7	0	109	1234
5:10 PM	4	6	3	0	5	10	8	0	2	22	4	0	1	30	2	0	97	1231
5:15 PM	6	2	1	0	7	3	6	0	2	35	5	0	5	27	5	0	104	1230
5:20 PM	5	6	1	0	4	10	0	0	4	21	9	0	4	26	1	0	91	1218
5:25 PM	3	5	4	0	8	11	3	0	5	31	6	0	2	20	1	0	99	1203
5:30 PM	7	5	1	0	4	8	8	0	5	24	6	0	2	28	5	0	103	1204
5:35 PM	6	4	0	0	4	6	6	0	8	25	10	0	2	34	1	0	106	1207
5:40 PM	5	10	0	0	3	5	3	0	3	19	8	0	2	23	3	0	84	1192
5:45 PM	7	6	2	0	8	9	5	0	3	30	6	0	0	24	2	0	102	1190
5:50 PM	7	3	1	0	0	5	6	0	9	28	11	0	2	20	3	0	95	1179
5:55 PM	5	7	0	0	7	4	5	0	9	24	7	0	2	15	2	0	87	1168
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	116	56	28	0	84	120	92	0	68	308	64	0	8	292	52	0	1288	
Heavy Trucks	16	12	0		4	8	0		4	16	0		0	28	0		88	
Pedestrians		8				0				0				8			16	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Railroad																		
Stopped Buses																		

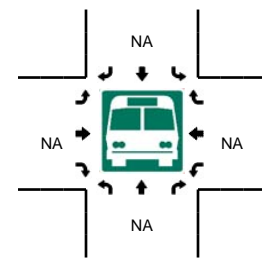
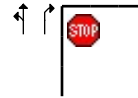
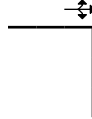
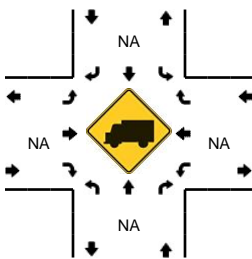
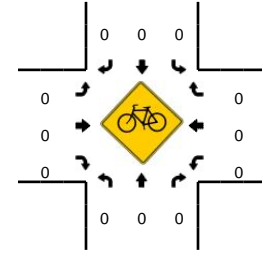
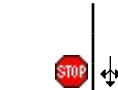
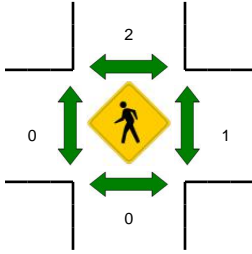
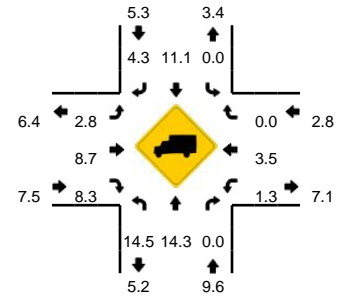
Comments:

LOCATION: Mathias Rd -- OR-211
CITY/STATE: Molalla, OR

QC JOB #: 14397605
DATE: Thu, Apr 27 2017



Peak-Hour: 4:15 PM -- 5:15 PM
Peak 15-Min: 4:20 PM -- 4:35 PM

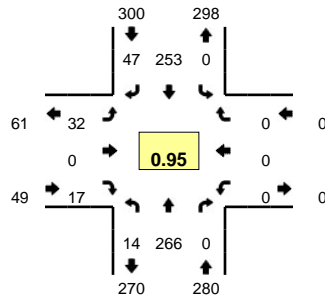


5-Min Count Period Beginning At	Mathias Rd (Northbound)				Mathias Rd (Southbound)				OR-211 (Eastbound)				OR-211 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	5	0	4	0	1	0	2	0	2	26	9	0	7	16	0	0	72	
4:05 PM	6	0	2	0	0	0	6	0	2	24	6	0	3	13	1	0	63	
4:10 PM	6	0	6	0	0	0	1	0	4	18	8	0	5	11	0	0	59	
4:15 PM	9	0	4	0	0	0	1	0	6	17	6	0	7	19	2	0	71	
4:20 PM	9	1	8	0	0	0	2	0	2	19	10	0	8	20	1	0	80	
4:25 PM	8	0	3	0	1	0	5	0	4	13	6	0	9	18	1	0	68	
4:30 PM	7	0	4	0	0	2	6	0	8	20	9	0	6	16	2	0	80	
4:35 PM	6	0	2	0	0	2	5	0	7	18	6	0	4	13	0	0	63	
4:40 PM	2	1	2	0	0	3	7	0	11	15	7	0	3	29	1	0	81	
4:45 PM	7	3	5	0	0	1	4	0	2	18	6	0	11	15	0	0	72	
4:50 PM	6	1	3	0	1	0	3	0	10	21	8	0	8	10	0	0	71	
4:55 PM	6	0	5	0	0	0	5	0	5	16	5	0	3	13	0	0	58	838
5:00 PM	7	0	3	0	0	0	2	0	6	17	4	0	5	16	1	0	61	827
5:05 PM	8	0	4	0	0	1	4	0	5	14	9	0	7	12	1	0	65	829
5:10 PM	8	1	3	0	0	0	2	0	5	18	8	0	9	18	0	0	72	842
5:15 PM	3	1	6	0	0	1	4	0	6	16	4	0	6	18	2	0	67	838
5:20 PM	6	4	3	0	1	1	3	0	6	13	4	0	7	14	0	0	62	820
5:25 PM	2	1	1	0	0	0	3	0	2	21	4	0	6	16	0	0	56	808
5:30 PM	8	0	4	0	1	1	8	0	5	17	2	0	4	14	0	0	64	792
5:35 PM	6	0	7	0	0	0	2	0	2	13	5	0	6	13	0	0	54	783
5:40 PM	6	0	7	0	0	4	2	0	6	5	8	0	0	13	1	0	52	754
5:45 PM	3	1	2	0	1	1	0	0	4	16	10	0	9	24	0	0	71	753
5:50 PM	2	0	3	0	0	1	6	0	4	16	7	0	7	13	1	0	60	742
5:55 PM	3	0	1	0	0	1	4	0	4	18	4	0	5	13	0	0	53	737
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	96	4	60	0	4	8	52	0	56	208	100	0	92	216	16	0	912	
Heavy Trucks	20	0	0	0	0	0	4	0	8	16	16	0	4	4	0	0	72	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

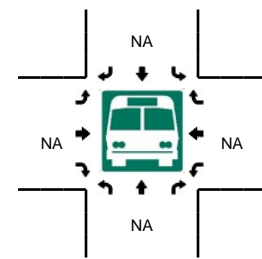
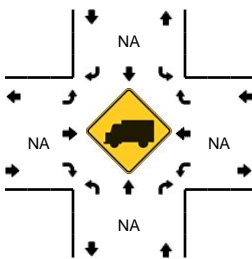
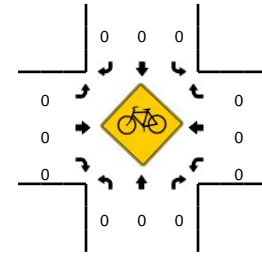
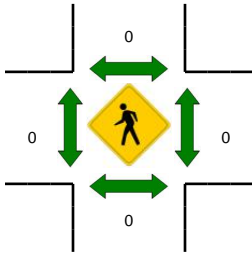
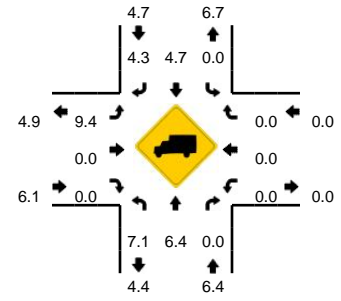
Comments:

LOCATION: OR-211 -- Shirley St
CITY/STATE: Molalla, OR

QC JOB #: 14397606
DATE: Thu, Apr 27 2017



Peak-Hour: 4:00 PM -- 5:00 PM
Peak 15-Min: 4:35 PM -- 4:50 PM

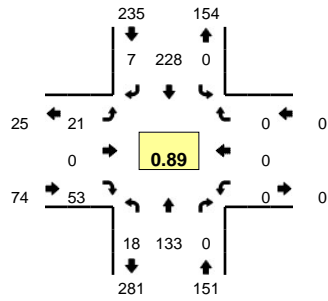


5-Min Count Period Beginning At	OR-211 (Northbound)				OR-211 (Southbound)				Shirley St (Eastbound)				Shirley St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	3	30	0	0	0	20	3	0	6	0	2	0	0	0	0	0	64	
4:05 PM	0	27	0	0	0	18	4	0	0	0	1	0	0	0	0	0	50	
4:10 PM	1	18	0	0	0	17	6	0	2	0	2	0	0	0	0	0	46	
4:15 PM	1	20	0	0	0	23	2	0	3	0	2	0	0	0	0	0	51	
4:20 PM	3	24	0	0	0	28	5	0	0	0	1	0	0	0	0	0	61	
4:25 PM	0	20	0	0	0	25	1	0	1	0	0	0	0	0	0	0	47	
4:30 PM	3	20	0	0	0	19	1	0	4	0	2	0	0	0	0	0	49	
4:35 PM	1	18	0	0	0	16	8	0	7	0	2	0	0	0	0	0	52	
4:40 PM	0	15	0	0	0	33	5	0	3	0	0	0	0	0	0	0	56	
4:45 PM	0	25	0	0	0	24	4	0	3	0	1	0	0	0	0	0	57	
4:50 PM	0	27	0	0	0	15	5	0	2	0	1	0	0	0	0	0	50	
4:55 PM	2	22	0	0	0	15	3	0	1	0	3	0	0	0	0	0	46	629
5:00 PM	1	20	0	0	0	17	4	0	2	0	3	0	0	0	0	0	47	612
5:05 PM	0	18	0	0	0	14	1	0	4	0	0	0	0	0	0	0	37	599
5:10 PM	0	20	0	0	0	25	1	0	8	0	3	0	0	0	0	0	57	610
5:15 PM	0	24	0	0	0	24	1	0	3	0	1	0	0	0	0	0	53	612
5:20 PM	1	19	0	0	0	17	0	0	0	0	0	0	0	0	0	0	37	588
5:25 PM	0	26	0	0	0	23	2	0	1	0	0	0	0	0	0	0	52	593
5:30 PM	0	22	0	0	0	17	1	0	0	0	1	0	0	0	0	0	41	585
5:35 PM	1	21	0	0	0	21	2	0	0	0	0	0	0	0	0	0	45	578
5:40 PM	0	12	0	0	0	15	3	0	1	0	2	0	0	0	0	0	33	555
5:45 PM	1	17	0	0	0	30	2	0	2	0	1	0	0	0	0	0	53	551
5:50 PM	0	20	0	0	0	18	3	0	1	0	0	0	0	0	0	0	42	543
5:55 PM	3	16	0	0	0	24	3	0	2	0	0	0	0	0	0	0	48	545
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	4	232	0	0	0	292	68	0	52	0	12	0	0	0	0	0	660	
Heavy Trucks	0	8	0	0	0	12	0	0	8	0	0	0	0	0	0	0	28	
Pedestrians		0				0				0				0			0	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Railroad																		
Stopped Buses																		

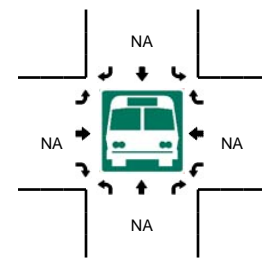
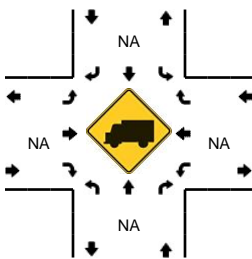
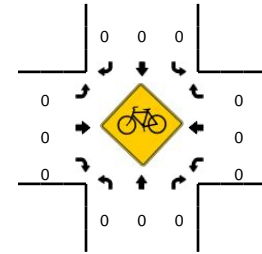
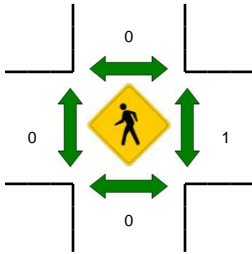
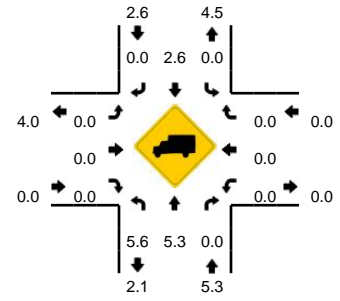
Comments:

LOCATION: N Molalla Ave -- S Vick Rd
CITY/STATE: Clackamas, OR

QC JOB #: 14397611
DATE: Thu, Apr 27 2017



Peak-Hour: 4:55 PM -- 5:55 PM
Peak 15-Min: 5:05 PM -- 5:20 PM

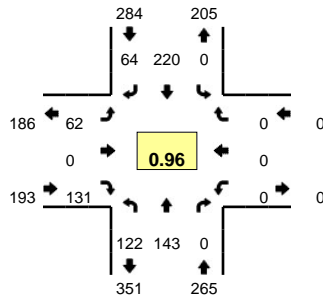


5-Min Count Period Beginning At	N Molalla Ave (Northbound)				N Molalla Ave (Southbound)				S Vick Rd (Eastbound)				S Vick Rd (Westbound)				Total	Hourly Totals	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U			
4:00 PM	1	14	0	0	0	16	3	0	1	0	3	0	0	0	0	0	38		
4:05 PM	3	17	0	0	0	17	2	0	4	0	4	0	0	0	0	0	47		
4:10 PM	4	13	0	0	0	16	3	0	0	0	2	0	0	0	0	0	38		
4:15 PM	3	7	0	0	0	25	0	0	1	0	3	0	0	0	0	0	39		
4:20 PM	0	13	0	0	0	20	1	0	1	0	4	0	0	0	0	0	39		
4:25 PM	0	9	0	0	0	16	1	0	1	0	5	0	0	0	0	0	32		
4:30 PM	0	17	0	0	0	12	0	0	2	0	6	0	0	0	0	0	37		
4:35 PM	1	9	0	0	0	17	4	0	4	0	1	0	0	0	0	0	36		
4:40 PM	0	10	0	0	0	15	1	0	1	0	1	0	0	0	0	0	28		
4:45 PM	1	11	0	0	0	28	0	0	2	0	3	0	0	0	0	0	45		
4:50 PM	2	7	0	0	0	15	0	0	0	0	4	0	0	0	0	0	28		
4:55 PM	2	13	0	0	0	24	0	0	4	0	7	0	0	0	0	0	50	457	
5:00 PM	1	6	0	0	0	17	1	0	2	0	6	0	0	0	0	0	33	452	
5:05 PM	0	14	0	0	0	21	1	0	0	0	6	0	0	0	0	0	42	447	
5:10 PM	1	15	0	0	0	16	1	0	1	0	3	0	0	0	0	0	37	446	
5:15 PM	3	18	0	0	0	18	0	0	4	0	7	0	0	0	0	0	50	457	
5:20 PM	3	13	0	0	0	16	1	0	2	0	2	0	0	0	0	0	37	455	
5:25 PM	0	7	0	0	0	18	0	0	0	0	4	0	0	0	0	0	29	452	
5:30 PM	0	4	0	0	0	22	2	0	2	0	4	0	0	0	0	0	34	449	
5:35 PM	1	7	0	0	0	16	0	0	0	0	3	0	0	0	0	0	27	440	
5:40 PM	2	14	0	0	0	15	0	0	1	0	4	0	0	0	0	0	36	448	
5:45 PM	3	12	0	0	0	34	1	0	2	0	1	0	0	0	0	0	53	456	
5:50 PM	2	10	0	0	0	11	0	0	3	0	6	0	0	0	0	0	32	460	
5:55 PM	0	11	0	0	0	22	2	0	2	0	1	0	0	0	0	0	38	448	
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total		
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U			
All Vehicles	16	188	0	0	0	220	8	0	20	0	64	0	0	0	0	0	516		
Heavy Trucks	0	8	0	0	0	12	0	0	0	0	0	0	0	0	0	0	20		
Pedestrians		0				0					0						0		
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0		
Railroad																			
Stopped Buses																			

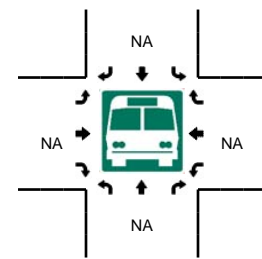
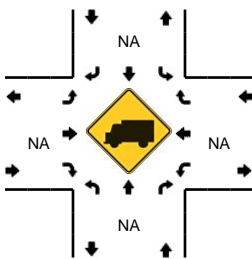
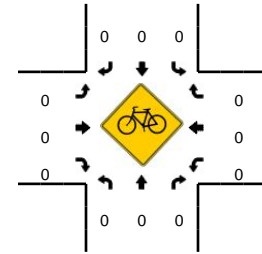
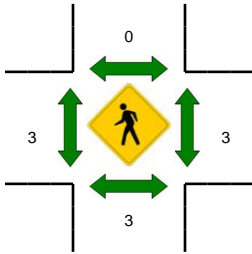
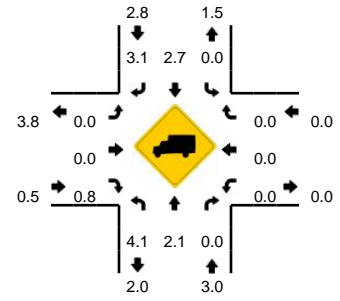
Comments:

LOCATION: N Molalla Ave -- Toliver Rd
CITY/STATE: Clackamas, OR

QC JOB #: 14397612
DATE: Thu, Apr 27 2017



Peak-Hour: 4:15 PM -- 5:15 PM
Peak 15-Min: 4:20 PM -- 4:35 PM

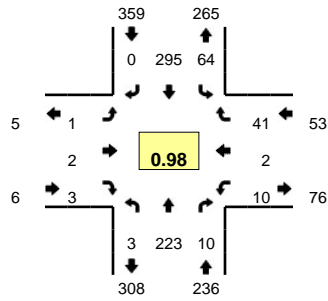


5-Min Count Period Beginning At	N Molalla Ave (Northbound)				N Molalla Ave (Southbound)				Toliver Rd (Eastbound)				Toliver Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	5	13	0	0	0	17	7	0	6	0	8	0	0	0	0	0	56	
4:05 PM	8	18	0	0	0	17	4	0	2	0	10	0	0	0	0	0	59	
4:10 PM	9	8	0	0	0	19	5	0	2	0	12	0	0	0	0	0	55	
4:15 PM	5	15	0	0	0	21	7	0	6	0	9	0	0	0	0	0	63	
4:20 PM	10	9	0	0	0	18	3	0	6	0	11	0	0	0	0	0	57	
4:25 PM	10	13	0	0	0	26	8	0	5	0	7	0	0	0	0	0	69	
4:30 PM	15	9	0	0	0	15	3	0	9	0	16	0	0	0	0	0	67	
4:35 PM	10	10	0	0	0	14	5	0	6	0	12	0	0	0	0	0	57	
4:40 PM	14	11	0	0	0	14	4	0	2	0	15	0	0	0	0	0	60	
4:45 PM	11	11	0	0	0	20	4	0	3	0	12	0	0	0	0	0	61	
4:50 PM	9	11	0	0	0	17	3	0	7	0	11	0	0	0	0	0	58	
4:55 PM	12	15	0	0	0	20	5	0	10	0	6	0	0	0	0	0	68	730
5:00 PM	7	8	0	0	0	13	10	0	3	0	8	0	0	0	0	0	49	723
5:05 PM	11	14	0	0	0	24	8	0	2	0	14	0	0	0	0	0	73	737
5:10 PM	8	17	0	0	0	18	4	0	3	0	10	0	0	0	0	0	60	742
5:15 PM	7	15	0	0	0	17	2	0	0	0	8	0	0	0	0	0	49	728
5:20 PM	7	16	0	0	0	18	4	0	4	0	7	0	0	0	0	0	56	727
5:25 PM	5	5	0	0	0	16	2	0	6	0	9	0	0	0	0	0	43	701
5:30 PM	6	8	0	0	0	24	5	0	3	0	5	0	0	0	0	0	51	685
5:35 PM	11	7	0	0	0	14	1	0	3	0	12	0	0	0	0	0	48	676
5:40 PM	5	15	0	0	0	15	2	0	2	0	13	0	0	0	0	0	52	668
5:45 PM	5	17	0	0	0	24	3	0	5	0	5	0	0	0	0	0	59	666
5:50 PM	4	13	0	0	0	12	4	0	6	0	9	0	0	0	0	0	48	656
5:55 PM	5	9	0	0	0	17	4	0	13	0	18	0	0	0	0	0	66	654
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	140	124	0	0	0	236	56	0	80	0	136	0	0	0	0	0	772	
Heavy Trucks	12	8	0	0	0	12	4	0	0	0	0	0	0	0	0	0	36	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	8	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

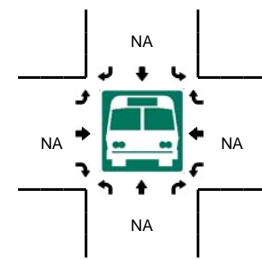
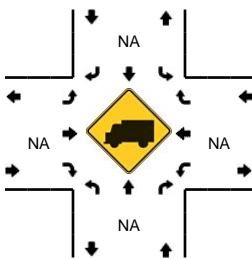
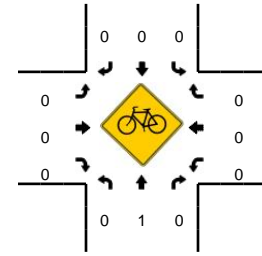
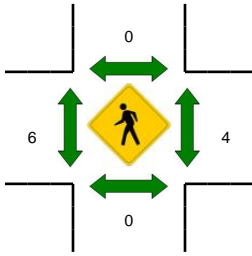
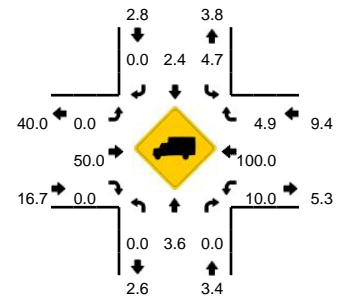
Comments:

LOCATION: N Molalla Ave -- Shirley St
CITY/STATE: Molalla, OR

QC JOB #: 14397614
DATE: Thu, Apr 27 2017



Peak-Hour: 4:15 PM -- 5:15 PM
Peak 15-Min: 4:25 PM -- 4:40 PM

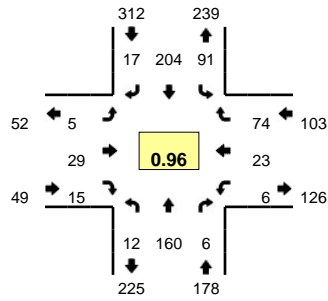


5-Min Count Period Beginning At	N Molalla Ave (Northbound)				N Molalla Ave (Southbound)				Shirley St (Eastbound)				Shirley St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	16	0	0	6	21	0	0	0	0	0	0	1	0	1	0	45	
4:05 PM	0	23	1	0	4	22	0	0	0	0	0	0	2	1	3	0	56	
4:10 PM	0	13	0	0	6	23	1	0	0	0	0	0	0	0	4	0	47	
4:15 PM	0	20	0	0	7	25	0	0	0	2	0	0	1	2	0	0	57	
4:20 PM	0	13	0	0	5	24	0	0	1	0	0	0	0	0	7	0	50	
4:25 PM	1	18	0	0	6	27	0	0	0	0	2	0	1	0	3	0	58	
4:30 PM	0	21	0	0	6	24	0	0	0	0	0	0	2	0	4	0	57	
4:35 PM	1	17	1	0	5	23	0	0	0	0	0	0	1	0	3	0	51	
4:40 PM	0	21	1	0	3	28	0	0	0	0	0	0	0	0	4	0	57	
4:45 PM	0	18	1	0	6	26	0	0	0	0	0	0	1	0	4	0	56	
4:50 PM	0	18	1	0	4	24	0	0	0	0	0	0	1	0	1	0	49	
4:55 PM	0	22	2	0	3	24	0	0	0	0	0	0	1	0	4	0	56	639
5:00 PM	0	15	1	0	4	17	0	0	0	0	0	0	0	0	1	0	38	632
5:05 PM	0	18	0	0	10	29	0	0	0	0	1	0	2	0	6	0	66	642
5:10 PM	1	22	3	0	5	24	0	0	0	0	0	0	0	0	4	0	59	654
5:15 PM	0	21	0	0	2	23	0	0	0	0	0	0	1	0	0	0	47	644
5:20 PM	0	13	1	0	2	22	0	0	0	0	0	0	0	0	9	0	47	641
5:25 PM	0	9	0	0	6	19	0	0	0	0	0	0	0	0	1	0	35	618
5:30 PM	0	12	0	0	6	23	0	0	0	0	0	0	0	0	2	0	43	604
5:35 PM	0	17	2	0	1	25	0	0	0	0	0	0	0	0	2	0	47	600
5:40 PM	0	19	0	0	3	26	0	0	0	0	0	0	1	0	0	0	49	592
5:45 PM	0	20	0	0	4	25	0	0	0	0	0	0	2	0	3	0	54	590
5:50 PM	0	15	3	0	2	18	0	0	0	0	0	0	1	0	1	0	40	581
5:55 PM	0	11	0	0	4	29	0	0	0	0	0	0	0	0	3	0	47	572
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	8	224	4	0	68	296	0	0	0	0	8	0	16	0	40	0	664	
Heavy Trucks	0	12	0	0	8	4	0	0	0	0	0	0	0	0	0	0	24	
Pedestrians	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	12	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

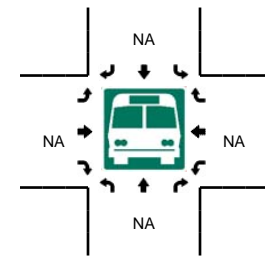
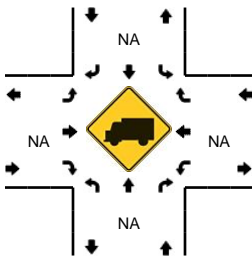
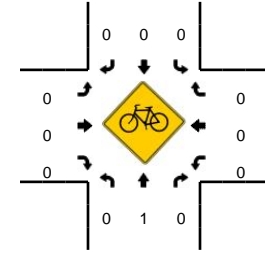
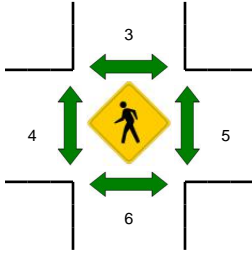
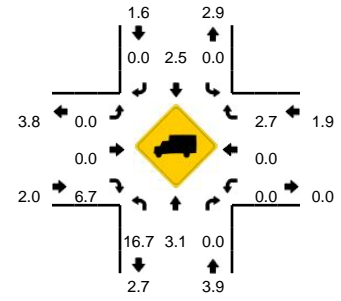
Comments:

LOCATION: N Molalla Ave -- Heintz St
CITY/STATE: Clackamas, OR

QC JOB #: 14397613
DATE: Thu, Apr 27 2017



Peak-Hour: 4:15 PM -- 5:15 PM
Peak 15-Min: 4:25 PM -- 4:40 PM

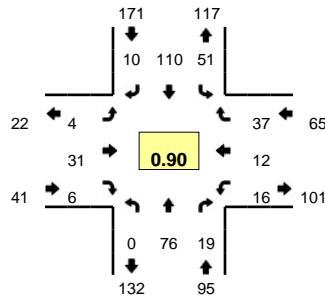


5-Min Count Period Beginning At	N Molalla Ave (Northbound)				N Molalla Ave (Southbound)				Heintz St (Eastbound)				Heintz St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	3	13	0	0	7	15	1	0	0	2	1	0	0	2	4	0	48	
4:05 PM	0	21	0	0	8	11	1	0	1	4	2	0	1	1	4	0	54	
4:10 PM	1	10	0	0	4	21	1	0	0	1	0	0	1	2	3	0	44	
4:15 PM	0	19	2	0	6	19	2	0	0	2	1	0	0	3	3	0	57	
4:20 PM	2	8	0	0	4	18	0	0	1	4	2	0	0	2	4	0	45	
4:25 PM	3	10	0	0	10	18	0	0	1	1	2	0	1	2	8	0	56	
4:30 PM	0	16	0	0	10	13	3	0	0	2	0	0	0	1	6	0	51	
4:35 PM	3	8	1	0	6	21	2	0	1	6	1	0	0	2	10	0	61	
4:40 PM	0	13	1	0	5	19	2	0	0	1	1	0	1	2	7	0	52	
4:45 PM	1	15	0	0	13	14	1	0	0	0	1	0	0	2	4	0	51	
4:50 PM	1	17	1	0	11	13	1	0	1	2	4	0	1	2	1	0	55	
4:55 PM	0	16	0	0	8	18	3	0	1	5	2	0	0	0	7	0	60	634
5:00 PM	1	9	0	0	5	10	1	0	0	3	0	0	1	3	7	0	40	626
5:05 PM	1	15	1	0	9	22	1	0	0	2	1	0	1	2	4	0	59	631
5:10 PM	0	14	0	0	4	19	1	0	0	1	0	0	1	2	13	0	55	642
5:15 PM	0	13	0	0	8	13	3	0	0	1	2	0	0	3	8	0	51	636
5:20 PM	0	8	1	0	7	14	0	0	3	2	1	0	1	2	2	0	41	632
5:25 PM	0	6	0	0	5	11	1	0	0	0	1	0	0	2	2	0	28	604
5:30 PM	3	10	0	0	7	17	1	0	0	2	0	0	1	1	5	0	47	600
5:35 PM	0	12	1	0	12	13	0	0	0	1	0	0	0	1	5	0	45	584
5:40 PM	1	8	0	0	6	19	1	0	1	1	2	0	1	2	10	0	52	584
5:45 PM	1	13	0	0	8	17	3	0	0	3	2	0	0	3	6	0	56	589
5:50 PM	1	10	0	0	5	14	1	0	0	0	2	0	1	0	8	0	42	576
5:55 PM	0	6	0	0	6	22	0	0	0	4	3	0	0	0	6	0	47	563
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	24	136	4	0	104	208	20	0	8	36	12	0	4	20	96	0	672	
Heavy Trucks	0	12	0	0	0	4	0	0	0	0	0	0	0	0	0	0	16	
Pedestrians		8				0				4				0			12	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Railroad																		
Stopped Buses																		

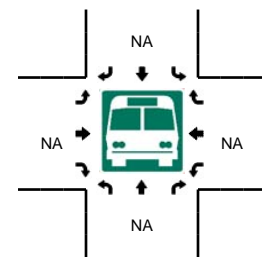
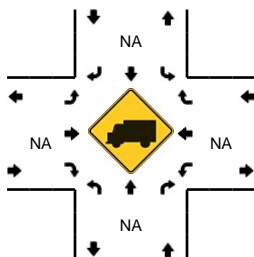
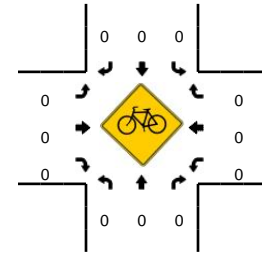
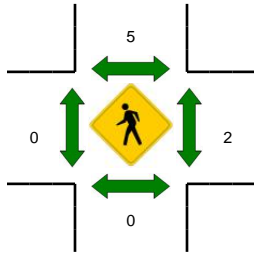
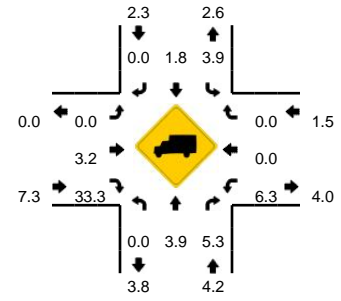
Comments:

LOCATION: S Molalla Ave -- 5th St
CITY/STATE: Clackamas, OR

QC JOB #: 14397615
DATE: Thu, Apr 27 2017



Peak-Hour: 4:40 PM -- 5:40 PM
Peak 15-Min: 5:20 PM -- 5:35 PM

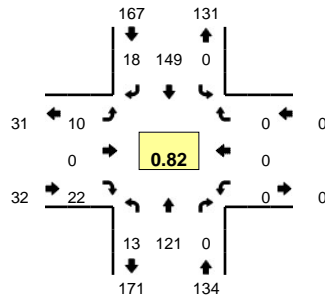


5-Min Count Period Beginning At	S Molalla Ave (Northbound)				S Molalla Ave (Southbound)				5th St (Eastbound)				5th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	8	1	0	3	10	0	0	1	4	1	0	3	2	2	0	35	
4:05 PM	0	7	0	0	5	6	1	0	0	1	1	0	5	1	4	0	31	
4:10 PM	0	7	2	0	5	5	0	0	1	2	0	0	2	1	5	0	30	
4:15 PM	0	4	3	0	3	6	0	0	0	0	1	0	3	2	5	0	27	
4:20 PM	0	11	1	0	3	7	0	0	1	3	1	0	0	2	6	0	35	
4:25 PM	0	12	0	0	4	6	0	0	0	1	0	0	0	0	3	0	26	
4:30 PM	0	8	2	0	3	7	1	0	0	3	2	0	3	0	2	0	31	
4:35 PM	0	9	0	0	5	6	0	0	0	2	2	0	2	0	2	0	28	
4:40 PM	0	11	1	0	6	9	1	0	1	1	1	0	1	1	2	0	35	
4:45 PM	0	7	2	0	6	4	1	0	0	2	1	0	2	1	2	0	28	
4:50 PM	0	8	2	0	4	5	3	0	0	8	1	0	1	0	2	0	34	
4:55 PM	0	6	4	0	3	5	2	0	0	4	0	0	2	1	3	0	30	370
5:00 PM	0	5	2	0	3	8	0	0	0	4	1	0	0	0	6	0	29	364
5:05 PM	0	5	2	0	2	12	0	0	0	3	1	0	2	1	1	0	29	362
5:10 PM	0	9	1	0	6	12	0	0	0	0	0	0	0	0	1	0	29	361
5:15 PM	0	6	0	0	5	5	0	0	0	3	0	0	2	0	3	0	24	358
5:20 PM	0	3	1	0	4	14	0	0	0	3	0	0	3	1	7	0	36	359
5:25 PM	0	3	0	0	3	17	0	0	3	0	1	0	0	3	4	0	34	367
5:30 PM	0	7	3	0	2	9	2	0	0	3	0	0	3	1	3	0	33	369
5:35 PM	0	6	1	0	7	10	1	0	0	0	0	0	0	3	3	0	31	372
5:40 PM	0	12	1	0	2	7	0	0	1	0	0	0	2	1	1	0	27	364
5:45 PM	0	9	1	0	5	8	0	0	0	1	0	0	0	2	3	0	29	365
5:50 PM	0	8	0	0	5	12	0	0	0	2	2	0	0	1	2	0	32	363
5:55 PM	0	9	2	0	4	6	0	0	1	1	0	0	0	0	2	0	25	358
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	52	16	0	36	160	8	0	12	24	4	0	24	20	56	0	412	
Heavy Trucks	0	0	0		0	4	0		0	0	0		4	0	0		8	
Pedestrians	0				0	4			0	0			0				4	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Railroad																		
Stopped Buses																		

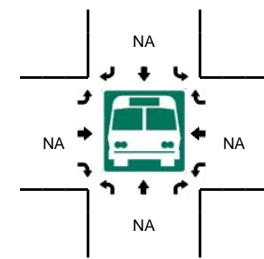
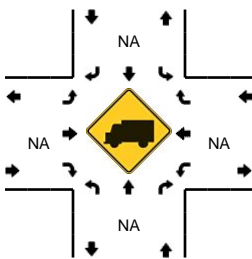
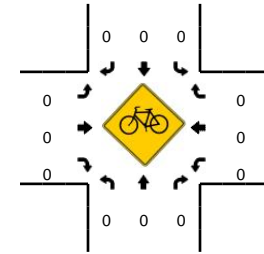
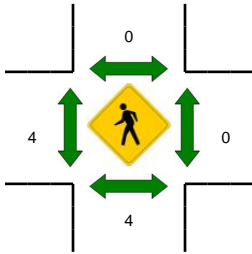
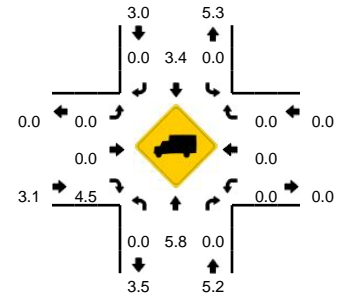
Comments:

LOCATION: Mathias Rd -- 5th St
CITY/STATE: Clackamas, OR

QC JOB #: 14397616
DATE: Thu, Apr 27 2017



Peak-Hour: 4:20 PM -- 5:20 PM
Peak 15-Min: 4:20 PM -- 4:35 PM



5-Min Count Period Beginning At	Mathias Rd (Northbound)				Mathias Rd (Southbound)				5th St (Eastbound)				5th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	2	6	0	0	0	12	1	0	2	0	4	0	0	0	0	0	27	
4:05 PM	0	6	0	0	0	8	3	0	2	0	3	0	0	0	0	0	22	
4:10 PM	1	14	0	0	0	14	0	0	0	0	0	0	0	0	0	0	29	
4:15 PM	2	7	0	0	0	9	1	0	0	0	0	0	0	0	0	0	19	
4:20 PM	5	18	0	0	0	13	1	0	1	0	1	0	0	0	0	0	39	
4:25 PM	3	11	0	0	0	16	3	0	1	0	3	0	0	0	0	0	37	
4:30 PM	0	10	0	0	0	10	3	0	0	0	2	0	0	0	0	0	25	
4:35 PM	1	8	0	0	0	11	1	0	0	0	2	0	0	0	0	0	23	
4:40 PM	1	4	0	0	0	13	0	0	1	0	1	0	0	0	0	0	20	
4:45 PM	1	12	0	0	0	17	3	0	2	0	2	0	0	0	0	0	37	
4:50 PM	0	13	0	0	0	11	2	0	0	0	3	0	0	0	0	0	29	
4:55 PM	2	4	0	0	0	9	2	0	2	0	6	0	0	0	0	0	25	332
5:00 PM	0	9	0	0	0	9	0	0	1	0	0	0	0	0	0	0	19	324
5:05 PM	0	11	0	0	0	14	0	0	0	0	1	0	0	0	0	0	26	328
5:10 PM	0	8	0	0	0	14	2	0	1	0	0	0	0	0	0	0	25	324
5:15 PM	0	13	0	0	0	12	1	0	1	0	1	0	0	0	0	0	28	333
5:20 PM	1	9	0	0	0	13	0	0	2	0	2	0	0	0	0	0	27	321
5:25 PM	0	5	0	0	0	10	0	0	0	0	1	0	0	0	0	0	16	300
5:30 PM	1	10	0	0	0	8	1	0	1	0	1	0	0	0	0	0	22	297
5:35 PM	1	12	0	0	0	7	0	0	3	0	2	0	0	0	0	0	25	299
5:40 PM	0	9	0	0	0	14	1	0	3	0	1	0	0	0	0	0	28	307
5:45 PM	1	4	0	0	0	20	0	0	0	0	2	0	0	0	0	0	27	297
5:50 PM	4	6	0	0	0	11	2	0	0	0	3	0	0	0	0	0	26	294
5:55 PM	1	5	0	0	0	7	1	0	0	0	1	0	0	0	0	0	15	284
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	32	156	0	0	0	156	28	0	8	0	24	0	0	0	0	0	404	
Heavy Trucks	0	12	0	0	0	12	0	0	0	0	0	0	0	0	0	0	24	
Pedestrians		0				0					0						0	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Railroad																		
Stopped Buses																		

Comments: