

MEMORANDUM

Date:	August 9, 2018	Project #: 22051
To:	Tony Martin, City of Salem	
Cc:	Peter Kahn, AVP, Costco Wholesale Corporation Matt Oyen, Pacific Realty Associates, L.P. (PacTrust)	
From:	Andy Daleiden, PE, Claire Dougherty, and Anthony Yi, PE, Kittelson & Associates, Inc.	
Project:	Kuebler Gateway Shopping Center	
Subject:	Response to City and ODOT review comments	

This memorandum responds to City of Salem and ODOT review comments to the May 2018 Traffic Impact Analysis (TIA) for the Kuebler Gateway Shopping Center. The City review comments were provided as part of the planning review checklist dated July 6, 2018 and the ODOT review comments (dated June 28, 2018) were provided by the City to the Applicant on July 3, 2018. The remainder of this memorandum summarizes City and ODOT comments in *italics* and provides our response in standard text.

CITY OF SALEM – TIA REVIEW COMMENTS

City comment #1: *Figure 5 - Some of the traffic volumes in the 2019 background appear to be greater than a 1% background growth rate. Is that because it includes “in process” development? If that is the case, make a note in the figures.*

Response #1: Yes, the 2019 background traffic volumes include traffic from in-process developments and is referenced in the May 2018 TIA at the following locations:

- Page 11 (first paragraph) - “The year 2019 background analysis includes off-site transportation system improvements, regional growth and in-process developments.”
- Page 13 (fourth paragraph) - “As shown in Figures 5 and 6, inclusive of regional growth and in-process developments,…”

Attachment A includes a revised set of figures that includes a note regarding the inclusion of in-process developments.

City comment #2: *Table 4 – Since the trip generation is estimated from Costco data, please provide some background how it was derived. The sum of “Gas Station” ITE 944 (30 fuel positions) plus “Shopping Center” ITE 857 (160 ksf) are quite close to the Costco ADT and PHV in the table.*

Response #2: Costco has developed sites and operated business in the Pacific Northwest for close to 40 years. Over time, the Costco prototype has evolved to meet their member demands and provide new services (such as fuel stations and car washes).

For over 15 years, Kittelson & Associates, Inc. (Kittelson) has maintained a database of transportation data and travel characteristics for Costco Wholesale. The database contains transportation information such as trip rates, trip type percentages, and parking demand for Costco locations throughout the United States, Mexico, and Canada. Costco is a unique use due to its successful business model and membership requirements. Costco has entrusted this on-going effort to Kittelson to ensure that their site planning and development work is based upon the best possible information related to the unique travel patterns and operations associated with Costco warehouses and their associated uses.

Kittelson has collected, analyzed, and refined transportation data for Costco related to trip generation, trip type (primary, pass-by, diverted, internal trips), parking demand, gasoline service rates, car wash service rates, and vehicle queuing. The database contains large data sample sizes and includes very recent information as it is continually updated and refined as new data is collected. The transportation information within the database has been approved in numerous jurisdictions in the U.S., Canada, and Mexico and has been validated by jurisdiction staff in several cases through independent peer study during the development review process. The Costco transportation database is the best source of information to use in developing trip generation estimates for Costco developments since it provides use-specific data that most accurately represents the anticipated traffic characteristics of the unique development type.

As presented in the May 2018 TIA, Table A summarizes the trip generation estimate for the proposed Salem Costco.

Table A. Estimated Trip Generation for the Proposed Salem Costco

Land Use	ITE Land Use Code	Size (Square Feet)	Daily	Weekday PM Peak Hour			Saturday Midday Peak Hour		
				Total	In	Out	Total	In	Out
Costco Warehouse with Gas Station (30 positions)	NA	160,000 ¹	12,138	1,198	623	575	1,459	715	744
Internal Trips (10%)			(1,214)	(120)	(62)	(58)	(146)	(72)	(74)
Pass-by Trips (34% Daily, 35% AM/PM, 30% Sat)			(3,714)	(377)	(196)	(181)	(394)	(193)	(201)
Total Net New Trips			7,210	701	365	336	919	450	469

¹ The building size of the Costco warehouse is 168,550 s.f., which includes 8,550 s.f. of mechanical elements and entry canopy that do not generate vehicle trips. Therefore, it is standard practice to base the estimated trip generation on the net warehouse area of 160,000 s.f.

The trip generation estimate for the proposed Salem Costco, shown in Table A, was determined using data from the existing Salem Costco and various Costco Wholesale locations in the United States. Below is a summary of the specific sources of data for the trip generation:

- Daily trip generation rate – data taken from existing Costco’s with gas stations in the United States (includes warehouses with gas stations in California, Colorado, Florida, New York, Virginia, Washington, and Utah)

- Weekday PM peak hour trip generation rate – data taken from existing Salem Costco
- Saturday midday peak hour trip generation rate – data taken from existing Salem Costco
- Pass-by trip generation rate – data taken from existing Costco's with gas stations in the United States (includes warehouses with gas stations in California, Colorado, Florida, Oregon, Montana, New York, Virginia, Utah, and Washington)

It is important to note that trip generation for the Costco sites is not linearly tied to square-footage size of the Costco warehouse building. While 160,000 square feet is a typical size for the Costco buildings, some are constructed with slightly smaller or larger footprints depending on the given site's individual constraints and configuration. In those cases, trip generation is not typically impacted as the additional size is most often used for additional storage, stock room, mechanical elements, and/or entry canopy for the warehouse.

City comment #3: Table 4, Table 5, Figure 8 – When I add up all of the inbound and outbound traffic from Figure 8 (which is blurry and a little difficult to read) at the four driveway locations, the traffic volume is higher than the gross PM PHV shown in tables 4 and 5. I would think that if the 10% internal trips were removed from the total, the traffic on the roadway could be overestimated.

- a. Figure 8: (2) 279 in, (6) 231 in + 329 out + 8 out, (8) 73 in + 66 out + 47 out, (9) 73 in + 252 out = = = > 656 in, 702 out
- b. Table 4: 623 in + 575 out,
- c. Table 5: 37 in + 41 out = = = > 660 in, 616 out

Response #3: The trip generation and trip assignments for the proposed Costco are provided in Table 4 and Figure 8 of the May 2018 TIA. Attachment B includes a revised Figure 8 that provides better clarity. The trip generation and trip assignments for the proposed retail pads are provided in Table 5 and Figure 9 of the May 2018 TIA. Table B (below) is a comparison of the trip generation for the proposed Costco (Table 4 and Figure 8 from the May 2018 TIA). Table C (below) is a comparison of the trip generation for the proposed retail pads (Table 5 and Figure 9 from the May 2018 TIA).

Table B. Estimated Trip Generation for the Proposed Salem Costco – Trip Generation Comparison

Source from May 2018 TIA	Weekday PM Peak Hour Trips	
	In	Out
Table 4	623 – 62 (internal) + 196 (pass-by) = 757 in	575 – 58 (internal) + 181 (pass-by) = 698 out
Figure 8	279 (intersection #2) + 331 (intersection #6) + 73 (intersection #8) + 73 (intersection #9) = 756 in	0 (intersection #2) + 329 out (intersection #6) + 8 out (intersection #6) + 66 (intersection #8) out + 47 (intersection #8) + 252 (intersection #9) = 702 out
Difference = Figure 8 – Table 4	-1	+4

As shown in the Table B (above), the minor difference in trips are due to numerical rounding. The trip generation and assignment used in the traffic analysis are those shown in Figure 8.

Table C. Estimated Trip Generation for the Proposed Retail Pads – Trip Generation Comparison

Source from May 2018 TIA	Weekday PM Peak Hour Trips	
	In	Out
Table 5	37 – 4 (internal) + 11 (pass-by) = 44 in	41 – 4 (internal) + 13 (pass-by) = 50 out
Figure 9	16 (intersection #2) + 19 (intersection #6) + 0 (intersection #8) + 9 (intersection #9) = 44 in	0 (intersection #2) + 12 out (intersection #6) + 0 (intersection #8) + 24 (intersection #9) + 14 (intersection #9) = 50 out
Difference = Figure 9 – Table 5	0	0

As shown in the Table C (above), Figure 9 and Table 5 have the same trip count.

City comment #4: Page 30, Recommendations – “The westbound left turn lane at Kuebler Boulevard/Battle Creek Road intersection should be restriped to provide 400 feet of storage.” I am not sure how that would be accomplished. There is currently about 235 feet, and Kuebler begins to taper to the east. It appears that about 100 feet additional is the most that could be restriped.

Response #4: Attachment C includes an exhibit that illustrates the ability to restripe the westbound left-turn lane at the Kuebler Boulevard/Battle Creek Road intersection to provide 400 feet of storage.

City comment #5: Appendix D, E, and F – Ideal Flow Rate: The City of Salem TIA Standards require using 1800 pvhpl unless there is a separate flow rate analysis included. The standards can be found in Division 6, Section 6.33, under “Current documents – Administrative Rule 109-001 to 109-007: Public Works Design Standards”. <https://www.cityofsalem.net/standard-plans-and-specifications>

Response #5: Per discussion with City staff, a saturation flow rate study was performed at several key locations. These locations were discussed and confirmed with City staff as an acceptable representation of saturation flow rates within the study, as these locations experience higher levels of traffic flow and congestion. Table D (below) provides a comparison of the saturation flow rates collected in the field to the rates used in the May 2018 TIA.

Table D. Saturation Flow Rate

Movement	Saturation Flow Study	TIA Saturation Flow ¹	Difference ²
Battle Creek at Kuebler			
Westbound Through	3,540	3,539	+1
Eastbound Through	3,519	3,505	+14
I-5 Southbound Ramp at Kuebler			
Southbound Right	3,255	2,787	+468

¹ TIA saturation flow is based on a baseline ideal flow of 1,900 vehicle per hour per lane (vphpl).

² Difference = Saturation Flow Study – TIA Saturation Flow

As show in Table D, because the saturation flow rates collected in the field are greater than the rates used in the May 2018 TIA, using a 1,900 vphpl baseline flow rate meets the City of Salem TIA Standards per Division 6, Section 6.33. Attachment D includes the results of the saturation flow rate analysis.

ODOT – TIA REVIEW COMMENTS

ODOT comment #1: *This study has utilized unsignalized intersection methodology from the Highway Capacity Manual (HCM) 2000. HCM 2000 methodology for unsignalized intersections are outdated and the current version of the HCM (6th Edition, 2017) should have rather been utilized for unsignalized intersections.*

Response #1: All unsignalized study intersections have been reanalyzed per the HCM (6th Edition, 2017) and are forecast to meet agency performance standards. Attachment E includes the operational worksheets.

ODOT comment #2: *Region Traffic assumes all land uses and densities offered under the current zoning are consistent with the City's code as cited in the report.*

Response #2: Yes, and this can be confirmed by City staff.

ODOT comment #3: *The study did not utilize the most recent complete crash data available as data up to December 31, 2016 has been available.*

Response #3: A request for the most recent 5-years of crash data was e-mailed on January 19, 2018 to ODOT Crash Analysis and Reporting Unit. The crash data provided by ODOT on February 6, 2018 was for the time period of January 1, 2011 through December 31, 2015. To respond to this ODOT review comment, year 2016 crash was requested on July 3, 2018 and received on July 23, 2018.

Similar to the results summarized in the May 2018 TIA, the crash rate at the Battle Creek/Boone intersection is greater than the corresponding 90th percentile rate. However, this intersection will be signalized as part of the planned off-site improvements, which is expected to improve the intersection safety performance. Attachment F includes the year 2016 crash data provided by ODOT.

ODOT comment #4: *The study utilized traffic counts from December 2017, during a period of the year when volumes are lowest, and did not apply any seasonal adjustment. ODOT's analysis procedures specify use of the 30th highest hour volume (30HV) of the year for analyses of ODOT facilities as the Oregon Highway Plan (OHP) mobility targets are specifically defined to be compared to the 30HV. As a result, the conditions at the I-5 terminal signalized intersections have not been accurately compared to the OHP mobility targets. Either new counts conducted during the peak travel months for I-5 near Kuebler (June-August) should be collected and analyzed or an appropriate seasonal adjustment should be applied for movements at these intersections. This will have an effect on the operational analysis results and will likely have an effect on the conclusions of the study as the I-5 SB Ramp/Kuebler Blvd intersection is right at the mobility target of 0.85 with the proposed land uses and this intersection has been under analyzed.*

Response #4: Based on previous coordination with City staff as part of the initial scoping of the May 2018 TIA, it was determined that traffic levels throughout the study area during the month of December does represent acceptable traffic levels for use in a traffic analysis (i.e. 30th highest hour volume of the year). Per recent coordination with City and ODOT staff, it was agreed upon that a reasonable approach to verifying the December traffic count would be to collect a sample traffic count at the Kuebler/I-5 southbound ramp terminal during the peak travel months (June – August), as defined by ODOT. Table 5 summarizes the traffic counts taken at the Kuebler/I-5 southbound ramp terminal intersection during the months of December and July. As shown in Table E, the December traffic count is higher than the July 2018 traffic count, so the traffic volumes included in the May 2018 TIA represent acceptable traffic levels. Attachment G includes the July 2018 traffic count data.

Table E. Traffic Volume Comparison

Intersection	Traffic Volume (Total Entering Traffic)	
	December 2017	July 2018
Kuebler / I-5 Southbound Ramp Terminal	3,702	3,648

ODOT comment #5: *This study has not provided the data referenced to produce the custom trip generation for the “Costco Warehouse with Gas Station (30 positions)”. This information should be provided for review.*

Response #5: Please see City comment #2 above and the response that starts on page 1 of this memorandum.

ODOT comment #6: *The study utilized the weighted average rate method of trip generation for one situation where the fitted curve equation method is instead recommended, per the Institute of Transportation Engineers (ITE). The proposed trip generation for “Shopping Center” (ITE land use code 820) in Table 5 has used the weighted average rate method to generate 897 daily, 78 weekday PM peak hour, and 101 Saturday midday peak hour trips. However, per Section 4.4 of the current ITE Trip Generation Handbook (3rd Edition, August 2014), the fitted curve equation method is recommended for the proposed size of this land use code. Therefore, the fitted curve equation method, which generates 2,080 daily, 171 weekday PM peak hour, and 180 Saturday midday peak hour trips should instead be utilized. Following reanalysis, all affected tables and figures should be updated as appropriate.*

Response #6: The City’s recommended practice for estimating trip generation is to use the average rate, and the May 2018 TIA is consistent with this approach. In order to respond to this ODOT review comment, trip generation for the proposed shopping center land use (ITE Code 820) was re-calculated using the fitted curve equation and total traffic conditions were reanalyzed. Results of the reanalysis show that all study intersections are forecast to meet agency operating standards assuming the same total conditions transportation network as defined in the May 2018 TIA, and therefore all key findings and recommendations remain the same. Attachment H includes the summary tables, figures, and analysis worksheets associated with this revised analysis.

ODOT comment #7: *The limited queuing analysis prepared appears to have been developed using Synchro which is acceptable for isolated intersections. However, ODOT recommends simulation-based queuing analyses (such as SimTraffic) where intersections are closely spaced, such as in this study, per Chapter 8 of Version 1 of the APM. Further, the provided queuing reports identifies “95th percentile volume exceeds capacity, queue may be longer” for multiple movements. This is another indication that a simulation-based queuing analysis is appropriate. We recommend a simulation-based queuing analysis be conducted.*

Response #7: The queueing analysis presented in the TIA meets the City of Salem requirements for a TIA (Division 006 – Street Design Standards). However, per ODOT’s request, a 95th percentile queueing analysis was performed using SimTraffic 10 under existing and year 2019 total traffic conditions during the weekday PM and Saturday midday peak hours. The analysis focused on the subject intersections related to ODOT jurisdiction, which includes the I-5 Northbound and I-5 Southbound Ramps along Kuebler Boulevard. Additionally, the 27th Street/Kuebler Boulevard intersection (City of Salem) was included in the operational analysis, since this intersection is the closest signalized intersection to the I-5 Southbound Ramp (approximately 1,225 feet of spacing).

The queueing analysis reported 95th percentile queue lengths from two SimTraffic models. The first SimTraffic model is based on calibrating the model to existing conditions and using default values from SimTraffic. The second SimTraffic model is based on using the ODOT Analysis Procedures Manual (APM) guidance for developing SimTraffic models. Two models were used in the analysis since the ODOT SimTraffic model results were not matching with the field observations. ***Under both SimTraffic models, the 95th percentile queue lengths are accommodated for all movements at the three intersections, which is consistent with the findings in the TIA.***

SIMTRAFFIC MODELS

Model #1 – Calibrated Model

The existing conditions SimTraffic model was calibrated to traffic conditions based on field observations and queue measurements at the study intersections. The following adjustments were made to calibrate the SimTraffic model to field observations:

- Used default values from SimTraffic
- Modified the southbound right-turn lane channelization and added signal control within the movement settings at the I-5 Southbound Ramp and Kuebler Boulevard intersection—this change helped with getting right-turn-on-red (RTOR) operations for this movement to align with field conditions.
- Adjusted offsets for the time-space diagram
- Increased the green time for a few movements
 - Westbound left turn at Kuebler Boulevard/27th Street
 - Westbound left turn and northbound left turn at Kuebler Boulevard / Battle Creek Road

- No signal timing changes were made to the I-5/Northbound and Southbound Ramps intersections (ODOT facilities)
- Simulated 10 runs for the analysis results

Model #2 - ODOT Model

Using the recommended guidance in the ODOT APM, the SIMTraffic model was simulated 10 times for the analysis results.

MODEL CALIBRATION RESULTS

Table F summarizes the 95th percentile queues from Synchro (values reported in the TIA), SimTraffic (Calibrated), and field observations under existing weekday PM peak hour conditions at two of the intersections on the Kuebler Boulevard corridor.

Table F. Synchro, SimTraffic, and Field Observations – Existing Conditions Weekday PM Peak Hour, 95th Percentile Queue Lengths (all values in feet)

Intersection	Approach	Movement	Synchro	imTraffic (Calibrated Model)	Field Observations	Available Storage
Kuebler Blvd / Battle Creek Road	EB	LT RT	50 25	100 75	125 25	420 220
	WB	LT RT	175 0 ^m	300 250	325 25	250 ¹ 250
Kuebler Blvd / I-5 Southbound Ramps	WB	RT	0	100	0	425
	SB	LT RT	125 450	150 450	125 450	1,350 1,350

¹ As recommended in the TIA report, the WB left-turn lane will be restriped to provide 400 feet of storage for the WB left-turn.

As shown in Table F, the 95th percentile queues from SimTraffic (calibrated model) and the field observations were matching closely except for the westbound right turn movement at the Kuebler Boulevard and Battle Creek Road intersection. In reviewing the field observations, SimTraffic reports and watching the simulation runs on Kuebler Boulevard, vehicle queues were observed to store within their existing storage lengths. On occasion, the westbound and eastbound through queues might spill back beyond the left- and right-turn lane storage lengths. However, the through movement queues are served during each cycle length, which allows vehicles trying to make a left or right turn movement to access the turn lane pockets. This type of operation is typical in urban environments similar to the conditions that exist along Kuebler Boulevard.

95TH PERCENTILE QUEUE RESULTS UNDER YEAR 2019 TOTAL TRAFFIC CONDITIONS

Table G summarizes the 95th percentile queues from Synchro (values reported in the TIA), SimTraffic (Calibrated and ODOT models), and field observations under year 2019 total traffic conditions during the weekday PM and Saturday midday peak hour conditions at the subject ODOT intersections.

Table G. Synchro, SimTraffic (Calibrated Model), and SimTraffic (ODOT APM) – Year 2019 Total Traffic Conditions Weekday PM and Saturday Midday Peak Hours, 95th Percentile Queue Lengths (all values in feet)

Intersection	Approach	Movement	Synchro (TIA)		Available Storage	SimTraffic (Calibrated Model)		SimTraffic (ODOT APM)	
			P.M.	Saturday		P.M.	Saturday	P.M.	Saturday
Kuebler Blvd / 27 th Avenue	EB	LT THR RT	25 ^m 600 0 ^m	50 650 0	290 1800 210	25 275 25	50 375 75	50 375 50	50 375 50
	WB	LT THR RT	300* 700 0 ^m	275* 450 0	400 1100 175	350 400 25	375 350 25	400 500 25	350 300 25
	NB	LT THR RT	175 25 325	175 25 325	225 400 325	175 100 300	150 25 250	175 100 325	150 25 225
	SB	TH/RT LT	75 150	50 50	385 150	100 125	50 50	125 150	50 50
Kuebler Blvd / I-5 Southbound Ramps	EB	RT TH	0 725	0 600	300 1125	250 500	175 450	275 525	200 450
	WB	RT TH	0 450	0 200	425 940	175 400	0 275	225 450	0 250
	SB	LT RT RT	175* 375 375	150* 275 275	1350 1350 550	250 600 550	125 400 275	275 825 700	125 375 275
Kuebler Blvd / I-5 Northbound Ramps	EB	TH RT	100 0	50 0	940 150	100 0	100 0	125 0	100 0
	NB	TH/LT RT	150 75	50 25	100 ¹ 100 ¹	125 125	75 75	150 125	75 75

¹ The NB ramp has an additional 1,200 feet of available storage for through/left-turn and right turn vehicles after the deceleration length.

As shown in Table G, all of the 95th percentile queue lengths are projected to be accommodated within the existing storage lengths at the I-5 Northbound Ramp/Kuebler Boulevard, I-5 Southbound Ramp/Kuebler Boulevard, and 27th Street/Kuebler Boulevard intersections under year 2019 total traffic conditions during the weekday p.m. and Saturday midday peak hours. Attachment I includes the 95th percentile queue worksheets associated with the SimTraffic analysis results.

Exhibits 1 and 2 (on the next page) illustrate typical operations and queue lengths at and between the 27th Avenue/Kuebler Boulevard and I-5 Southbound Ramp/Kuebler Boulevard intersections. As shown in

the two Exhibits, the typical weekday p.m. peak hour operations are projected to be acceptable and queue lengths managed and stored within the existing storage lengths at these intersections.



Exhibit 1. Typical PM Peak Hour Operations at I-5 Southbound Ramp/Kuebler Boulevard



Exhibit 2. Typical PM Peak Hour Operations between 27th Avenue/Kuebler Boulevard and I-5 Southbound Ramp/Kuebler Boulevard

Under both SimTraffic models, the 95th percentile queue lengths are accommodated for all movements at the three intersections, which is consistent with the findings in the TIA. Based on these additional operational findings, no further analysis or additional mitigation is required with the proposed Kuebler Gateway Shopping Center.

ODOT comment #8: *ODOT maintains jurisdiction of the Pacific Highway No. 1 (I-5) and ODOT approval shall be required for all proposed mitigation measures to this facility. No mitigation measures to ODOT facilities have been proposed. However, this conclusion may not be appropriate as the I-5 SB Ramp/Kuebler Blvd intersection is right at the mobility target of 0.85 with the proposed zoning and this intersection has been under analyzed, per comment #1 above.*

Response #8: As summarized above in responses #4, #5, and #7, all key findings and recommendations remain the same as summarized in the May 2018 TIA. The ODOT mobility standard of 0.85 is met at the I-5 SB Ramp/Kuebler Boulevard and I-5 NB Ramp/Kuebler Boulevard intersections.

ODOT comment #9: *This study has assumed many improvements, listed on pages 11 and 12 of the study, will have been installed prior to the analysis year (2019). However, Region Traffic does not recommended assuming these improvements will have been built by the analysis year unless they are currently funded projects. If the City does not identify these projects as currently funded or reasonably likely to occur, the study should also include scenarios without these improvements and specifically address how operations at all intersections will be affected if these improvements have not been installed by the analysis year.*

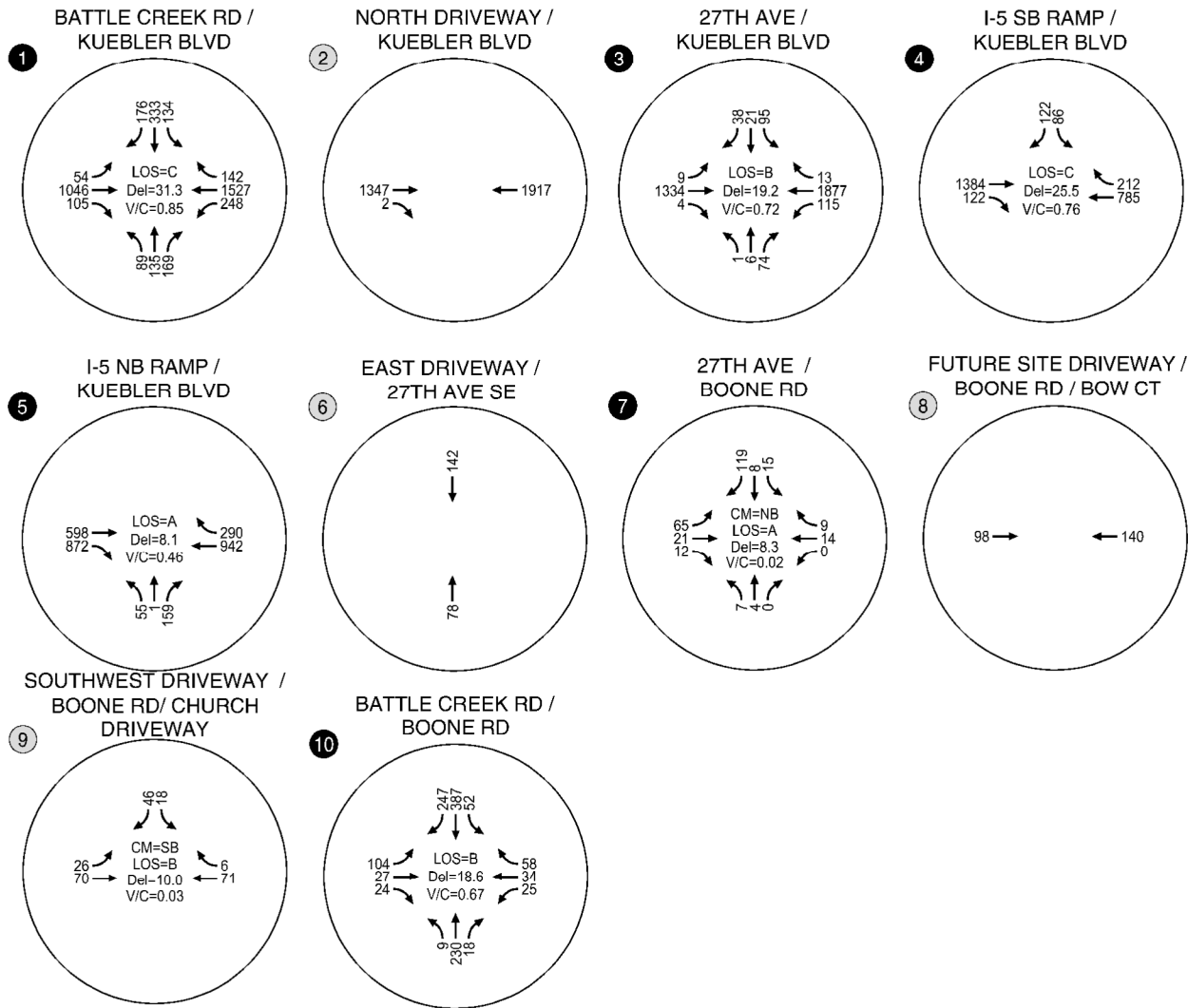
Response #9: Based on previous coordination with City staff as part of the initial scoping of the TIA, it is appropriate to assume the planned transportation improvements listed in the May 2018 TIA as they are part of the conditions of approval tied to the project site.



ATTACHMENTS

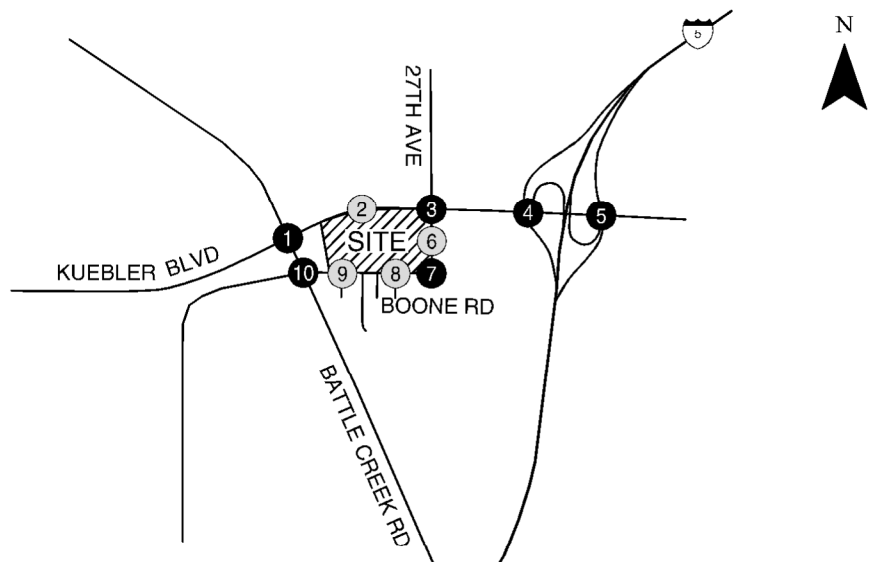
- Attachment A: Revised Figures 5 & 6
- Attachment B: Re-plotted Figure 8
- Attachment C: Striping Exhibit SST-5
- Attachment D: Saturation Flow Rate Study
- Attachment E: 6th Edition Operations Worksheets for Unsignalized Intersections
- Attachment F: Year 2016 ODOT Crash Data
- Attachment G: July 2018 Traffic Count Data
- Attachment H: Fitted Curve Shopping Center Trip Generation Operations Results
- Attachment I: SimTraffic Queuing Analysis Results

Appendix A: Revised Figures 5 & 6



Volumes shown are inclusive of:
 Regional Growth
 In-Process Developments

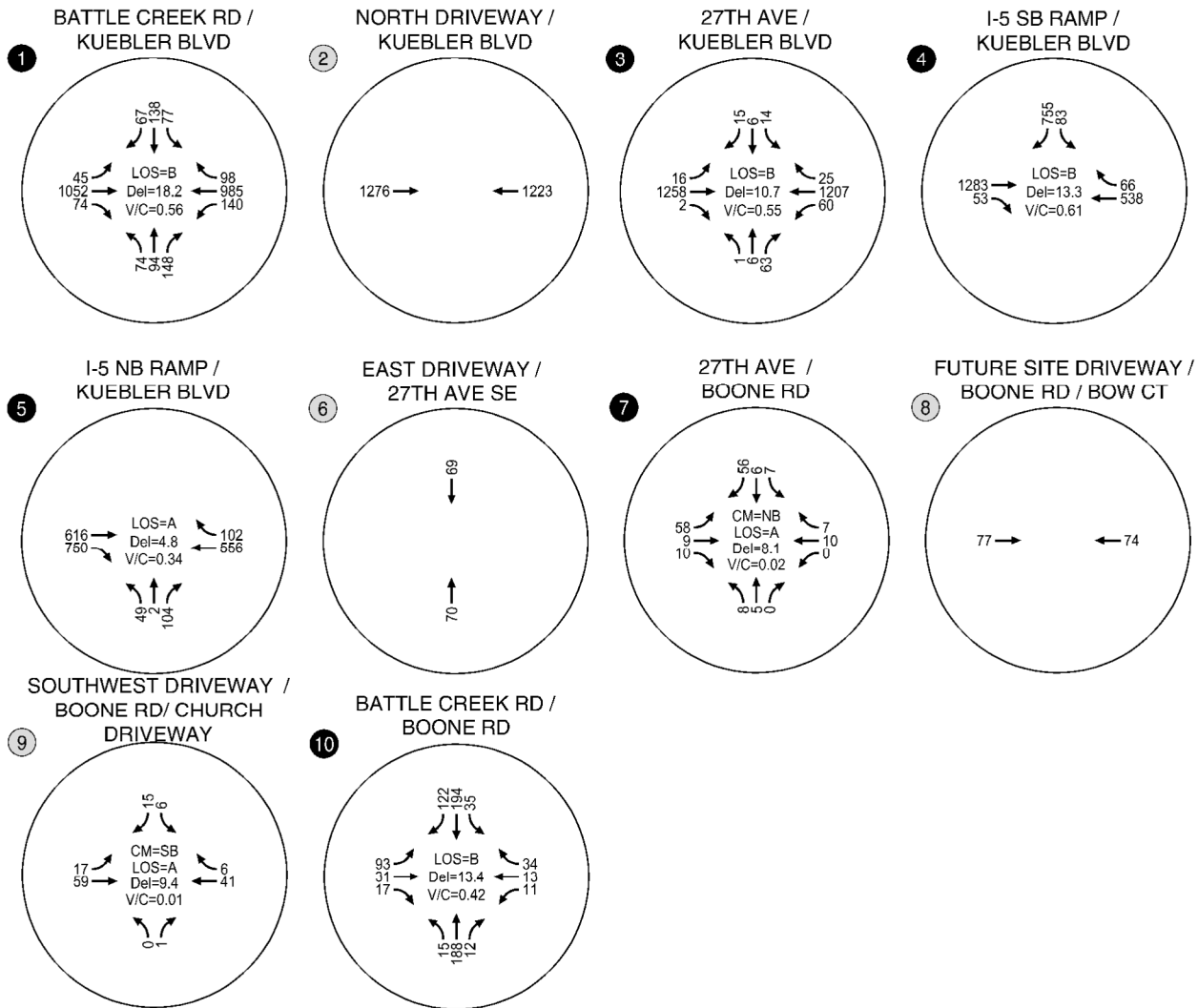
CM = Critical Movement (Unsignalized)
 LOS = Intersection Level of Service (Signalized) / Critical Movement Level of Service (Unsignalized)
 Del = Intersection Average Control Delay (Signalized) / Critical Movement Control Delay (Unsignalized)
 V/C = Critical Volume-to-Capacity Ratio



- # - Study Intersections
- # - Study Site Driveways

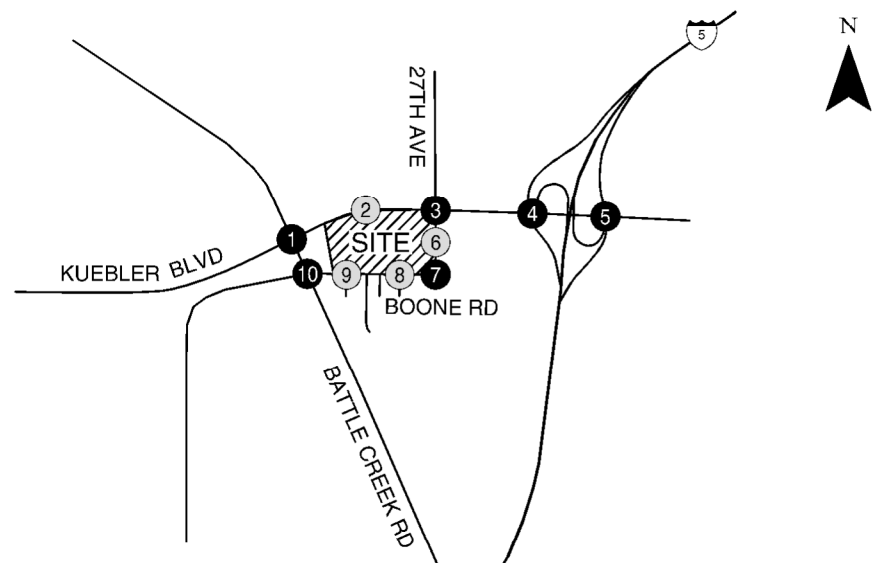
**2019 Background Traffic Conditions
 Weekday PM Peak Hour
 Salem, Oregon**

Figure
5



Volumes shown are inclusive of:
 Regional Growth
 In-Process Developments

CM = Critical Movement (Unsignalized)
 LOS = Intersection Level of Service (Signalized) / Critical Movement Level of Service (Unsignalized)
 Del = Intersection Average Control Delay (Signalized) / Critical Movement Control Delay (Unsignalized)
 V/C = Critical Volume-to-Capacity Ratio

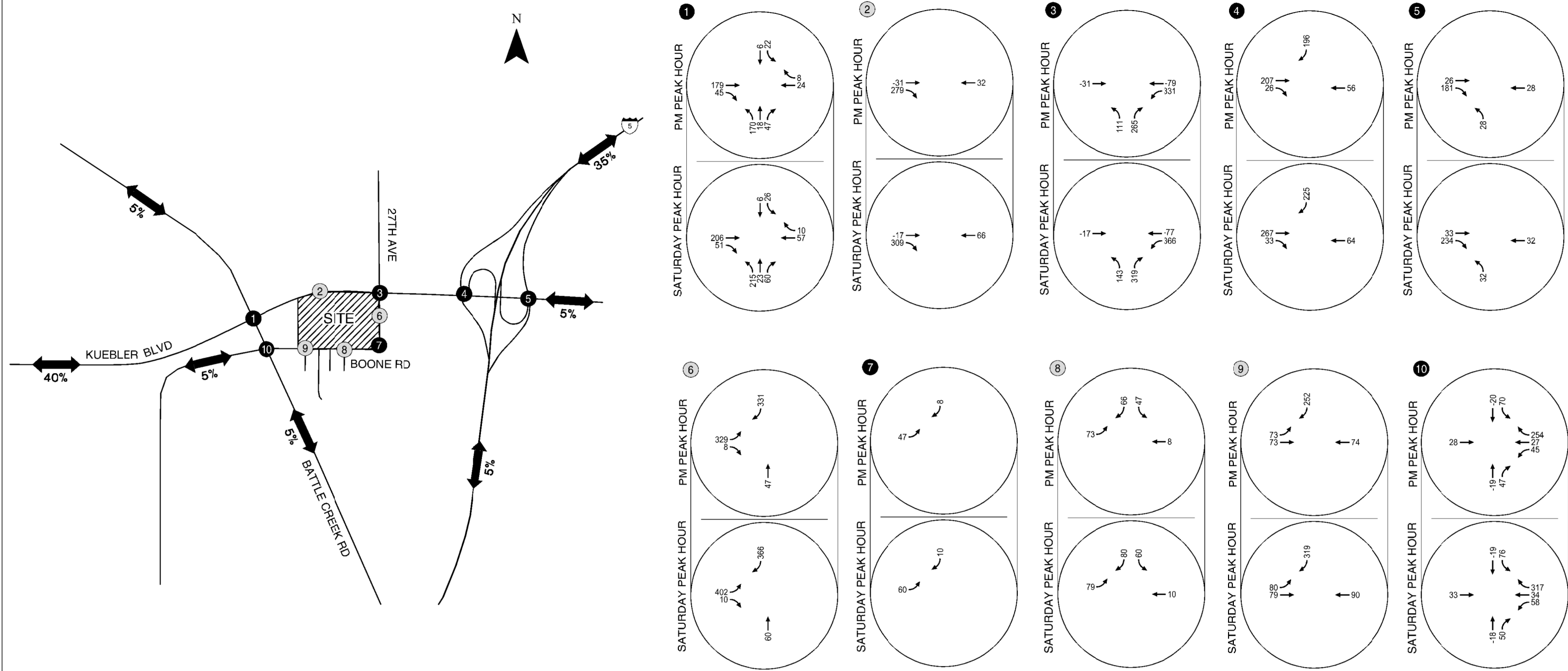


- - Study Intersections
- - Study Site Driveways

**2019 Background Traffic Conditions
 Saturday Midday Peak Hour
 Salem, Oregon**

**Figure
 6**

Appendix B: Re-plotted Figure 8



Trip distribution is based on FY 2014 - FY 2016 Salem Costco sales data.
Negative trips represent pass-by trips.

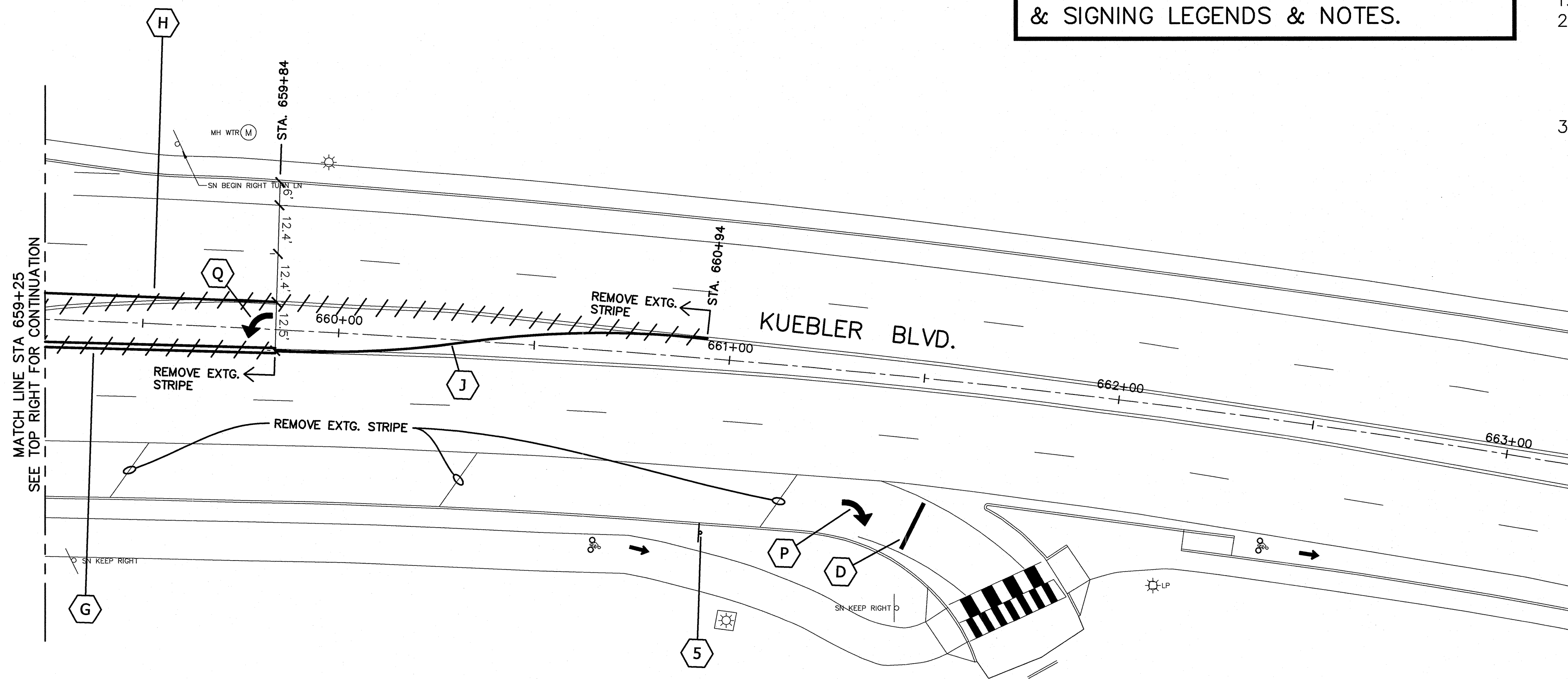
- - Study Intersections
- - Study Site Driveways

**Estimated Costco Trip Distribution Pattern and Assignment (Total Trips)
Weekday PM and Saturday Midday Peak Hour
Salem, OR**

Figure
8

Appendix C: Striping Exhibit SST-5

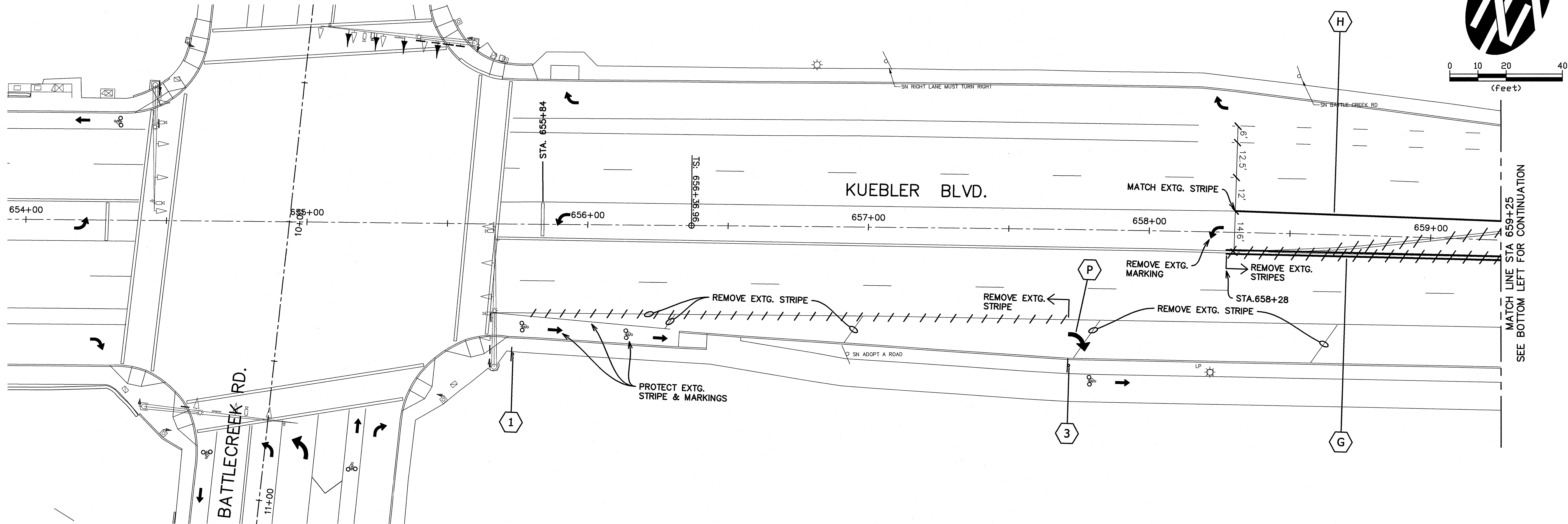
7/27/2018 9:26:52 AM
R:\Dwg\PAC-TRUST\Kuebler Property\Phase 2 Offsite Buildout\Civil\Plots\SST-1-6 Signing-Striping.dwg, (SST-5 tab)



REFER TO SHEET SST-5 FOR STRIPING
& SIGNING LEGENDS & NOTES.

GENERAL NOTES:

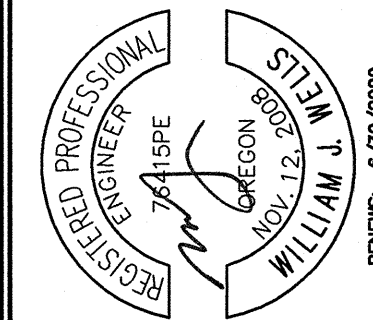
1. ALL LIGHTING TO BE TO CITY OF SALEM AND PGE STANDARDS.
2. ALL STRIPING REMOVAL BY HYDROBLASTING OR STEEL SHOT BLASTING SO THAT THE PAVEMENT SURFACE IS NOT DAMAGED BELOW A DEPTH OF 1/8". GRINDING REMOVAL OF PAVEMENT MARKINGS IS NOT ALLOWED ON PAVEMENT THAT IS WILL REMAIN IN SERVICE.
3. PROTECT ALL EXISTING STRIPING NOT SHOWN TO BE REMOVED.



PACTRUST KUEBLER DEVELOPMENT
PHASE 2 OFFSITE BUILDOUT
KUEBLER BLVD. RIGHT-IN
SIGNING & STRIPING PLAN

DRAWING
SST-5
JOB NUMBER
2672.8000.0

WESTTECH ENGINEERING, INC.
CONSULTING ENGINEERS AND PLANNERS
3841 Fairview Industrial Dr. S.E., Suite 100, Salem, OR 97302
Phone: (503) 585-2474 Fax: (503) 585-3986
E-mail: westtech@westtech-eng.com



VERIFY SCALE
BAR IS ONE INCH ON
ORIGINAL DRAWING
1"
IF ANY ONE INCH ON
THIS SHEET, ADJUST
SCALES ACCORDINGLY

DRN.	JW	TN	JW
CRD.	TN	JW	JW

DATE: JAN. 2018

NO.	DATE	DESCRIPTION	BY
1	7-25-18	PER CITY COMMENTS	TN
		REVISIONS	

Appendix D: Saturation Flow Rate Study

Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

Battle Creek Rd SE & Kubeler Blvd SE (EB Approach)

File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 1

Cycle Number: 1
Time: 4:01:04.1
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	0	0	0	0.0	0.0	Green	61.0
Arrived on Green	17	19	4	13.3	40.0	Yellow	4.9
Volume	17	19	4	13.3	40.0	Red	60.5
Arrival Type						Total	126.4
Lost Time		-3.5		-3.5	-3.5		
# For Sat Flow		2		2.0	2.0		
Sat Flow		1108		1108.0	1108.0		

Lane	Enter Intersection: Headway																		
1	3.0	1.8	71.4	134.4															
2	2.4	2.5	2.2	16.9	2.0	2.8	2.4	1.7	2.3	1.4	8.6	2.2	6.3	2.0	2.0	0.8	4.1		
3	2.7	1.5	2.0	3.9	2.6	5.9	7.1	4.4	3.8	4.0	2.3	3.1	1.4	4.5	2.1	1.7	6.6	2.1	2.9

Lane	Join Queue: Headway							
2	12.2	1.9	0.5	21.5	22.8			
3	5.7	0.6	5.2	3.9	5.9	0.9	7.4	19.0
4	33.4							

Cycle Number: 1
Time: 4:00:37.5
Lane Type: Left

Lane	1	Average	Total			
Volume	4	4.0	4.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
------	---------------------

Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 2

Cycle Number: 2
Time: 4:03:10.4
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	5	8	1	4.7	14.0	Green	65.7
Arrived on Green	13	17	1	10.3	31.0	Yellow	4.7
Volume	18	25	2	15.0	45.0	Red	57.9
Arrival Type	4	4	3	3.7	11.0	Total	128.3
Lost Time	1.7	-1.2		0.3	0.5		
# For Sat Flow	1	4		2.5	5.0		
Sat Flow	1714	1674		1694.0	3388.0		

Lane	Enter Intersection: Headway																								
1	2. 2																								
2	3. 5	2. 6	2. 0	1. 9	2. 1	1. 7	12. .2	3. 9	1. 2	1. 3	8. 0	6. 1	1. 1	2. 4	2. 0	2. 9	4. 6	5. 8							
3	2. 5	1. 5	1. 5	2. 0	2. 3	2. 7	1. 7	1. 9	3. 3	2. 5	1. 7	2. 9	3. 8	4. 5	1. 2	1. 9	2. 2	2. 4	1. 3	9. 0	5. 4	1. 1	1. 7	4. 1	1. 9

Lane	Join Queue: Headway					
2	15.9	1.3	0.9	9.3		
3	16.5	1.1	0.8	0.9	5.2	30.7
4	15.4					

Cycle Number: 2
Time: 4:05:04.2
Lane Type: Left

Lane	1	Average	Total			
Volume	1	1.0	1.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
------	---------------------

Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 3

Cycle Number: 3
Time: 4:05:18.8
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	4	6	1	3.7	11.0	Green	67.4
Arrived on Green	10	17	2	9.7	29.0	Yellow	4.8
Volume	14	23	3	13.3	40.0	Red	67.2
Arrival Type	4	5	4	4.3	13.0	Total	139.4
Lost Time		-0.4		-0.4	-0.4		
# For Sat Flow		2		2.0	2.0		
Sat Flow		1674		1674.0	1674.0		

Lane	Enter Intersection: Headway																						
1	2.2																						
2	2.0	2.1	2.3	1.3	2.3	16.9	9.4	1.3	5.3	4.1	7.1	2.7	12.2	2.3									
3	2.1	2.2	2.4	1.4	1.3	3.0	11.5	1.6	5.4	3.1	1.1	3.9	3.4	8.3	2.0	1.4	1.2	1.4	3.6	2.9	2.3	2.9	2.2

Lane	Join Queue: Headway			
2	7.8	23.0		
3	7.1	10.5		
4				

Cycle Number: 3
Time: 4:07:18.0
Lane Type: Left

Lane	1	Average	Total		
Volume	1	1.0	1.0	Red	
# For Sat Flow					
Sat Flow					

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
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File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 4

Cycle Number: 4
Time: 4:07:38.2
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	2	2	0	1.3	4.0	Green	58.0
Arrived on Green	12	17	0	9.7	29.0	Yellow	4.9
Volume	14	19	0	11.0	33.0	Red	68.0
Arrival Type	5	6		5.5	11.0	Total	130.9
Lost Time							
# For Sat Flow							
Sat Flow							

Lane	Enter Intersection: Headway																		
1	2.0	2.8	2.6																
2	2.8	2.2	15.2	2.4	2.9	2.4	1.3	4.2	7.2	1.7	1.7	1.9	4.1	11.0					
3	3.5	3.3	4.6	2.8	3.3	2.0	3.7	2.3	4.1	8.4	0.9	2.6	3.2	2.3	1.2	2.8	1.5	2.0	2.1

Lane	Join Queue: Headway				
2	25.6	23.4	6.7		
3	14.7	9.9	7.4	2.2	29.1
4					

Cycle Number: 4
Time: 4:11:37.5
Lane Type: Left

Lane	1	Average	Total			
Volume	3	3.0	3.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 5

Cycle Number: 5
Time: 4:09:49.1
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	3	5	0	2.7	8.0	Green	56.9
Arrived on Green	18	13	3	11.3	34.0	Yellow	4.8
Volume	21	18	3	14.0	42.0	Red	59.4
Arrival Type	5	5	6	5.3	16.0	Total	121.1
Lost Time		-2.6		-2.6	-2.6		
# For Sat Flow		1		1.0	1.0		
Sat Flow		1200		1200.0	1200.0		

Lane	Enter Intersection: Headway																				
1	2.2																				
2	1.6	1.7	3.4	1.9	3.5	1.7	1.2	1.4	3.4	6.5	1.1	7.9	4.1	1.8	1.3	1.7	1.2	0.9	3.9	6.4	3.2
3	1.8	2.5	2.6	2.4	3.0	4.2	5.0	2.6	6.2	1.9	2.2	3.6	1.5	1.9	2.0	4.3	5.0	5.0			

Lane	Join Queue: Headway						
2	11.2	7.2	12.6	11.5			
3	7.6	1.9	2.7	10.7	10.0	8.3	3.4
4	21.8						

Cycle Number: 5
Time: 4:13:47.6
Lane Type: Left

Lane	1	Average	Total			
Volume	1	1.0	1.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 6

Cycle Number: 6
Time: 4:11:50.1
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	4	7	1	4.0	12.0	Green	66.5
Arrived on Green	15	11	4	10.0	30.0	Yellow	5.2
Volume	19	18	5	14.0	42.0	Red	67.6
Arrival Type	5	4	5	4.7	14.0	Total	139.3
Lost Time		-0.5		-0.5	-0.5		
# For Sat Flow		3		3.0	3.0		
Sat Flow		1385		1385.0	1385.0		

Lane	Enter Intersection: Headway																		
1	2.1	21.6	59.9																
2	1.7	2.3	2.4	2.3	18.4	1.5	1.5	1.0	2.4	7.6	3.2	2.4	1.0	3.1	1.5	2.6	5.8	5.1	2.7
3	1.9	1.8	3.0	3.3	1.7	3.4	2.7	3.7	4.0	2.1	2.7	2.7	5.9	9.1	2.3	3.9	2.0	14.3	

Lane	Join Queue: Headway					
2	2.8	8.4	3.9			
3	8.9	1.6	1.7	2.0	3.6	6.9
4						

Cycle Number: 6
Time: 4:15:57.1
Lane Type: Left

Lane	1	Average	Total			
Volume	3	3.0	3.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 7

Cycle Number: 7
Time: 4:14:09.4
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	3	6	0	3.0	9.0	Green	57.9
Arrived on Green	18	13	0	10.3	31.0	Yellow	4.8
Volume	21	19	0	13.3	40.0	Red	66.7
Arrival Type	5	5		5.0	10.0	Total	129.4
Lost Time		0.8		0.8	0.8		
# For Sat Flow		2		2.0	2.0		
Sat Flow		1800		1800.0	1800.0		

Lane	Enter Intersection: Headway																				
1	3.6	3.3	2.1	2.4	1.5																
2	1.8	1.8	2.3	1.7	11.6	2.2	2.2	2.1	1.3	1.1	2.9	2.2	1.0	0.9	3.1	1.6	1.5	1.2	11.3	2.5	2.3
3	2.6	1.6	2.3	2.3	2.0	2.0	1.5	2.3	16.5	2.1	1.6	1.7	2.3	2.5	4.5	1.8	5.7	1.3	3.0		

Lane	Join Queue: Headway				
2	0.5	10.3	1.3	41.3	
3	8.6	2.6	11.8	8.0	10.6
4					

Cycle Number: 7
Time: 4:18:06.3
Lane Type: Left

Lane	1	Average	Total		
Volume	5	5.0	5.0	Red	
# For Sat Flow	1	1.0	1.0		
Sat Flow	2355	2355.0	2355.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 8

Cycle Number: 8
Time: 4:16:18.8
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	4	5	0	3.0	9.0	Green	57.4
Arrived on Green	15	10	1	8.7	26.0	Yellow	4.8
Volume	19	15	1	11.7	35.0	Red	66.8
Arrival Type	5	4	6	5.0	15.0	Total	129.0
Lost Time		4.2		4.2	4.2		
# For Sat Flow		1		1.0	1.0		
Sat Flow		2400		2400.0	2400.0		

Lane	Enter Intersection: Headway																		
1	3.5	2.2	2.0	2.8	2.5														
2	3.1	3.1	2.1	1.1	1.8	8.4	1.1	2.1	2.4	4.7	1.2	1.5	1.5	3.2	10.7	2.7	4.0	2.4	1.6
3	3.5	2.3	2.4	2.1	1.5	4.2	5.7	4.2	3.0	2.5	3.6	8.0	1.2	3.3	5.7				

Lane	Join Queue: Headway					
2	5.3	8.3	7.1	3.8	16.1	6.6
3	19.3	11.3	7.3	1.7	6.2	
4						

Cycle Number: 8
Time: 4:20:16.4
Lane Type: Left

Lane	1	Average	Total			
Volume	5	5.0	5.0	Red		
# For Sat Flow	5	5.0	5.0			
Sat Flow	1379	1379.0	1379.0			

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 9

Cycle Number: 9
Time: 4:18:27.8
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	6	5	0	3.7	11.0	Green	58.3
Arrived on Green	11	11	2	8.0	24.0	Yellow	4.9
Volume	17	16	2	11.7	35.0	Red	64.8
Arrival Type	4	5	6	5.0	15.0	Total	128.0
Lost Time	0.1	1.6		0.9	1.7		
# For Sat Flow	3	1		2.0	4.0		
Sat Flow	1459	1895		1677.0	3354.0		

Lane	Enter Intersection: Headway															
1	1.6	2.7	3.2	3.5												
2	2.6	2.3	2.2	2.8	1.8	2.6	3.0	11.0	7.0	1.4	2.1	0.9	0.9	1.0	1.3	2.4
3	3.6	1.7	2.6	1.3	1.9	13.5	1.8	2.7	7.8	1.4	3.9	1.4	2.0	4.8	3.4	7.6

Lane	Join Queue: Headway						
2	-	62.8	68.7	30.6	2.9		
3	9.5	2.8	3.7	18.5	9.2	3.4	16.9
4							

Cycle Number: 9
Time: 4:22:26.9
Lane Type: Left

Lane	1	Average	Total		
Volume	4	4.0	4.0	Red	
# For Sat Flow					
Sat Flow					

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 10

Cycle Number: 10
Time: 4:20:35.7
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	4	7	0	3.7	11.0	Green	60.3
Arrived on Green	12	9	1	7.3	22.0	Yellow	5.2
Volume	16	16	1	11.0	33.0	Red	66.6
Arrival Type	5	4	6	5.0	15.0	Total	132.1
Lost Time		2.0		2.0	2.0		
# For Sat Flow		4		4.0	4.0		
Sat Flow		1674		1674.0	1674.0		

Lane	Enter Intersection: Headway															
1	2.5	2.5	2.5	1.4	1.5	1.8	2.2									
2	1.9	1.9	2.5	2.2	3.9	5.6	7.6	2.4	1.4	5.7	1.4	2.0	12.2	6.8	2.0	3.7
3	2.8	2.5	2.3	3.0	2.1	2.8	1.9	1.8	9.8	2.3	0.5	10.1	10.9	3.4	1.9	2.6

Lane	Join Queue: Headway				
2	7.1	0.9	3.2	2.1	47.0
3	-	61.2	72.9	0.4	4.8
4	54.8				

Cycle Number: 10
Time: 4:24:37.5
Lane Type: Left

Lane	1	Average	Total		
Volume	7	7.0	7.0	Red	
# For Sat Flow	2	2.0	2.0		
Sat Flow	2187	2187.0	2187.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 11

Cycle Number: 11
Time: 4:22:47.8
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	5	5	1	3.7	11.0	Green	57.9
Arrived on Green	10	15	2	9.0	27.0	Yellow	5.1
Volume	15	20	3	12.7	38.0	Red	66.5
Arrival Type	4	5	4	4.3	13.0	Total	129.5
Lost Time	2.5			2.5	2.5		
# For Sat Flow	1			1.0	1.0		
Sat Flow	1895			1895.0	1895.0		

Lane	Enter Intersection: Headway																			
1	2.3	2.7	1.5	4.4																
2	3.3	3.0	2.3	1.6	1.9	5.2	8.5	0.7	1.3	1.4	2.1	1.2	7.1	1.4	22.1					
3	2.7	2.7	2.0	3.5	1.4	3.5	6.3	1.1	2.9	3.4	1.5	1.6	0.8	0.8	1.4	1.1	4.3	12.8	0.8	0.9

Lane	Join Queue: Headway			
2	13.7	1.0	1.9	
3	12.9	4.3	34.6	5.6
4				

Cycle Number: 11
Time: 4:26:46.5
Lane Type: Left

Lane	1	Average	Total		
Volume	4	4.0	4.0	Red	
# For Sat Flow					
Sat Flow					

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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Tigard, OR 97223

File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 12

Cycle Number: 12
Time: 4:24:57.3
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	3	4	0	2.3	7.0	Green	59.4
Arrived on Green	12	12	5	9.7	29.0	Yellow	4.8
Volume	15	16	5	12.0	36.0	Red	68.0
Arrival Type	5	5	6	5.3	16.0	Total	132.2
Lost Time							
# For Sat Flow							
Sat Flow							

Lane	Enter Intersection: Headway															
1	2.3	1.9														
2	3.0	2.7	1.6	8.8	6.1	2.9	7.5	2.6	1.5	2.2	6.2	2.2	2.8	0.9	3.0	
3	3.4	4.1	2.4	1.9	9.9	6.2	1.8	8.4	2.3	1.4	1.5	5.8	1.2	2.2	1.1	6.5

Lane	Join Queue: Headway			
2	6.3	1.5	10.5	28.0
3	28.2	16.7		
4	10.6	14.6		

Cycle Number: 12
Time: 4:28:56.5
Lane Type: Left

Lane	1	Average	Total			
Volume	2	2.0	2.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 13

Cycle Number: 13
Time: 4:27:09.5
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	4	2	2	2.7	8.0	Green	56.3
Arrived on Green	10	13	2	8.3	25.0	Yellow	5.2
Volume	14	15	4	11.0	33.0	Red	63.6
Arrival Type	5	5	3	4.3	13.0	Total	125.1
Lost Time							
# For Sat Flow							
Sat Flow							

Lane	Enter Intersection: Headway															
1	2.0	2.4	1.8													
2	3.6	1.8	1.8	1.8	12.0	3.1	6.7	2.7	4.7	6.3	4.0	2.2	4.8	3.2		
3	3.1	2.0	3.6	16.0	3.8	5.9	0.9	3.1	2.0	4.7	3.1	1.5	1.3	3.9	3.1	

Lane	Join Queue: Headway			
2				
3	39.0	7.5		
4	20.1			

Cycle Number: 13
Time: 4:31:07.4
Lane Type: Left

Lane	1	Average	Total			
Volume	3	3.0	3.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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Tigard, OR 97223

File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 14

Cycle Number: 14
Time: 4:29:14.5
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	0	2	1	1.0	3.0	Green	61.4
Arrived on Green	17	13	2	10.7	32.0	Yellow	5.2
Volume	17	15	3	11.7	35.0	Red	66.1
Arrival Type	6	5	4	5.0	15.0	Total	132.7
Lost Time							
# For Sat Flow							
Sat Flow							

Lane	Enter Intersection: Headway															
1	1.9	2.0	2.2													
2	1.5	19.2	8.5	1.6	1.1	1.0	4.0	1.0	1.2	5.8	2.7	1.2	1.8	1.6	0.8	8.6
3	3.9	14.2	4.1	6.1	2.9	2.0	1.9	2.6	2.6	4.0	3.8	2.0	7.5	3.7	4.8	1.4

Lane	Join Queue: Headway					
2	11.9	0.6	18.6			
3	10.3	2.5	7.0	4.4	2.2	15.9
4	4.7	3.3	8.2			

Cycle Number: 14
Time: 4:33:18.8
Lane Type: Left

Lane	1	Average	Total			
Volume	3	3.0	3.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 15

Cycle Number: 15
Time: 4:31:27.2
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	3	6	3	4.0	12.0	Green	59.2
Arrived on Green	12	15	-2	8.3	25.0	Yellow	4.9
Volume	15	21	1	12.3	37.0	Red	75.1
Arrival Type	5	5	1	3.7	11.0	Total	139.2
Lost Time		0.9		0.9	0.9		
# For Sat Flow		2		2.0	2.0		
Sat Flow		1412		1412.0	1412.0		

Lane	Enter Intersection: Headway																				
1	2.7	1.4																			
2	2.3	3.1	1.2	9.4	1.4	1.6	4.0	16.4	6.5	4.9	1.5	4.5	1.7	0.9	2.4						
3	2.2	3.0	3.2	2.7	3.3	1.8	1.6	2.4	1.0	2.8	3.4	3.2	4.7	1.6	2.4	6.5	1.4	3.1	2.4	3.0	4.4

Lane	Join Queue: Headway						
2	1.7	9.6	3.1	2.9	3.8	2.6	
3	9.5	3.3	6.9	2.3	6.2	15.4	28.9
4							

Cycle Number: 15
Time: 4:35:26.9
Lane Type: Left

Lane	1	Average	Total			
Volume	2	2.0	2.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 16

Cycle Number: 16
Time: 4:33:46.4
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	6	7	0	4.3	13.0	Green	49.6
Arrived on Green	12	11	2	8.3	25.0	Yellow	5.0
Volume	18	18	2	12.7	38.0	Red	66.7
Arrival Type	5	4	6	5.0	15.0	Total	121.3
Lost Time	-0.8	2.6		0.9	1.8		
# For Sat Flow	3	3		3.0	6.0		
Sat Flow	1333	1543		1438.0	2876.0		

Lane	Enter Intersection: Headway																	
1	3.6	4.1																
2	3.7	2.1	2.2	1.9	3.6	2.3	2.2	2.4	2.4	2.6	4.3	2.5	1.7	3.5	0.8	1.7	7.9	2.3
3	3.5	3.2	2.9	2.4	3.2	2.1	1.7	3.0	1.5	1.8	2.5	2.7	2.1	1.6	3.0	6.0	7.1	1.2

Lane	Join Queue: Headway			
2	-	48.5	52.4	8.8
3	6.8	23.4	3.6	
4	16.8			

Cycle Number: 16
Time: 4:37:37.1
Lane Type: Left

Lane	1	Average	Total		
Volume	2	2.0	2.0	Red	
# For Sat Flow					
Sat Flow					

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 17

Cycle Number: 17
Time: 4:35:47.6
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	3	3	1	2.3	7.0	Green	58.9
Arrived on Green	9	17	0	8.7	26.0	Yellow	4.8
Volume	12	20	1	11.0	33.0	Red	67.1
Arrival Type	5	5	1	3.7	11.0	Total	130.8
Lost Time							
# For Sat Flow							
Sat Flow							

Lane	Enter Intersection: Headway																			
1	2.8	2.3	2.8	2.8	1.6	71.3														
2	2.7	1.9	18.0	1.8	8.3	1.0	1.4	8.1	1.7	3.1	1.3	3.1								
3	2.9	2.0	1.9	1.9	10.0	2.0	9.7	2.7	2.7	1.1	1.2	1.9	3.4	2.1	1.4	0.9	2.9	3.2	3.5	2.3

Lane	Join Queue: Headway			
2	49.2	8.1		
3	6.7	2.2	16.2	27.6
4				

Cycle Number: 17
Time: 4:44:06.5
Lane Type: Left

Lane	1	Average	Total		
Volume	6	6.0	6.0	Red	
# For Sat Flow	1	1.0	1.0		
Sat Flow	2308	2308.0	2308.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 18

Cycle Number: 18
Time: 4:37:58.4
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	2	4	0	2.0	6.0	Green	58.6
Arrived on Green	13	12	5	10.0	30.0	Yellow	4.8
Volume	15	16	5	12.0	36.0	Red	65.7
Arrival Type	5	5	6	5.3	16.0	Total	129.1
Lost Time		2.4		2.4	2.4		
# For Sat Flow		1		1.0	1.0		
Sat Flow		1500		1500.0	1500.0		

Lane	Enter Intersection: Headway															
1	2.1	80.3														
2	2.4	2.1	4.1	17.7	2.7	1.7	4.9	2.1	2.8	1.1	4.4	1.4	1.9	2.1	4.1	
3	2.7	3.4	3.7	2.3	2.4	2.8	6.0	1.7	4.2	6.0	3.3	5.3	2.0	5.9	4.2	4.5

Lane	Join Queue: Headway							
2	3.0	3.1	5.7	4.1	2.8	0.9	2.8	
3	-	62.1	69.2	4.2	2.9	6.7	2.9	0.4
4								16.2

Cycle Number: 18
Time: 4:46:17.0
Lane Type: Left

Lane	1	Average	Total			
Volume	2	2.0	2.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 19

Cycle Number: 19
Time: 4:40:07.5
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	7	8	0	5.0	15.0	Green	62.0
Arrived on Green	12	11	1	8.0	24.0	Yellow	4.9
Volume	19	19	1	13.0	39.0	Red	63.1
Arrival Type	4	4	6	4.7	14.0	Total	130.0
Lost Time	1.1	0.8		1.0	1.9		
# For Sat Flow	4	3		3.5	7.0		
Sat Flow	1655	1800		1727.5	3455.0		

Lane	Enter Intersection: Headway																		
1	2.9	2.5	1.8	1.8	2.6														
2	2.5	3.0	2.1	2.2	2.0	1.5	1.8	3.4	1.9	3.8	1.2	1.3	1.9	11.3	7.8	6.4	0.7	8.2	2.9
3	2.2	3.1	1.7	1.8	2.6	1.5	1.9	6.8	4.8	1.5	0.9	1.5	1.8	1.9	10.1	2.2	2.7	1.2	1.1

Lane	Join Queue: Headway							
2	-	88.8	14.8	13.1	10.6			
3	5.6	10.8	10.0	0.6	2.6	9.2	12.3	4.0
4								

Cycle Number: 19
Time: 4:48:26.2
Lane Type: Left

Lane	1	Average	Total			
Volume	5	5.0	5.0	Red		
# For Sat Flow	1	1.0	1.0			
Sat Flow	1399	1399.0	1399.0			

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 20

Cycle Number: 20
Time: 4:42:17.5
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	5	8	0	4.3	13.0	Green	58.5
Arrived on Green	10	15	3	9.3	28.0	Yellow	4.9
Volume	15	23	3	13.7	41.0	Red	68.1
Arrival Type	4	4	6	4.7	14.0	Total	131.5
Lost Time		1.2		1.2	1.2		
# For Sat Flow		5		5.0	5.0		
Sat Flow		1800		1800.0	1800.0		

Lane	Enter Intersection: Headway																							
1	2.1	2.2	2.2																					
2	2.2	3.2	3.5	1.9	1.5	5.5	4.3	1.5	5.4	3.4	2.2	9.1	7.0	5.1	3.0									
3	2.5	2.7	2.2	1.8	1.9	1.7	1.8	2.8	1.8	2.2	1.0	7.5	5.0	4.5	2.4	2.4	1.3	3.2	2.4	2.4	2.0	2.0	4.9	

Lane	Join Queue: Headway						
2	3.4	3.2	4.6	3.2	3.5	8.1	
3	-	56.5	61.4	3.8	3.2	7.3	2.4
4							40.0

Cycle Number: 20
Time: 4:50:36.2
Lane Type: Left

Lane	1	Average	Total			
Volume	3	3.0	3.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 21

Cycle Number: 21
Time: 4:44:29.0
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	6	7	0	4.3	13.0	Green	56.7
Arrived on Green	14	12	1	9.0	27.0	Yellow	4.9
Volume	20	19	1	13.3	40.0	Red	68.5
Arrival Type	5	4	6	5.0	15.0	Total	130.1
Lost Time	-1.4	2.7		0.7	1.3		
# For Sat Flow	2	2		2.0	4.0		
Sat Flow	1500	1636		1568.0	3136.0		

Lane	Enter Intersection: Headway																		
1	2.0	1.7	2.1	2.2	2.2														
2	2.8	1.6	1.6	2.2	3.6	1.2	10.3	2.7	0.9	2.4	2.2	5.2	2.6	2.9	3.1	4.2	5.9	1.1	1.6
3	2.2	2.4	2.7	4.1	2.0	2.4	1.4	2.3	1.2	2.3	2.7	1.5	2.2	4.5	1.6	1.8	4.6	12.9	3.5

Lane	Join Queue: Headway					
2	16.9	9.9	7.2	4.7		
3	3.8	5.2	5.4	3.9	2.5	11.0
4						

Cycle Number: 21
Time: 4:52:47.5
Lane Type: Left

Lane	1	Average	Total		
Volume	5	5.0	5.0	Red	
# For Sat Flow	1	1.0	1.0		
Sat Flow	1603	1603.0	1603.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 22

Cycle Number: 22
Time: 4:46:39.1
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	4	6	0	3.3	10.0	Green	58.1
Arrived on Green	10	15	3	9.3	28.0	Yellow	4.8
Volume	14	21	3	12.7	38.0	Red	67.0
Arrival Type	5	5	6	5.3	16.0	Total	129.9
Lost Time		0.1		0.1	0.1		
# For Sat Flow		2		2.0	2.0		
Sat Flow		1674		1674.0	1674.0		

Lane	Enter Intersection: Headway																				
1	2.1	1.9	2.0	2.7																	
2	1.0	2.4	2.1	2.7	15. 2	1.7	2.1	4.4	1.7	2.1	6.0	5.1	7.2	1.0							
3	3.0	1.5	2.3	1.9	2.0	2.3	10. 6	6.0	1.7	1.5	1.1	2.4	1.8	1.4	2.0	2.1	3.7	4.8	1.2	2.0	1.9

Lane	Join Queue: Headway			
2	13.6	44.9		
3	9.3	13.1	41.9	
4				

Cycle Number: 22
Time: 4:57:06.8
Lane Type: Left

Lane	1	Average	Total		
Volume	4	4.0	4.0	Red	
# For Sat Flow					
Sat Flow					

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 23

Cycle Number: 23
Time: 4:48:49.0
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	2	3	0	1.7	5.0	Green	56.5
Arrived on Green	13	14	2	9.7	29.0	Yellow	5.1
Volume	15	17	2	11.3	34.0	Red	68.2
Arrival Type	5	5	6	5.3	16.0	Total	129.8
Lost Time							
# For Sat Flow							
Sat Flow							

Lane	Enter Intersection: Headway																
1	2.9	3.3	2.1	2.1													
2	1.1	1.9	1.9	5.3	9.3	1.5	2.7	1.4	11.8	1.5	1.9	2.2	1.1	2.0	14.7		
3	2.8	1.9	2.2	12.9	1.0	1.3	3.6	1.3	2.1	8.3	0.8	1.7	1.6	2.6	3.9	4.8	6.0

Lane	Join Queue: Headway				
2	5.7	2.9	1.5	45.4	4.1
3	7.4	1.6	20.9	5.5	21.1
4					

Cycle Number: 23
Time: 4:59:15.4
Lane Type: Left

Lane	1	Average	Total		
Volume	4	4.0	4.0	Red	
# For Sat Flow					
Sat Flow					

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 24

Cycle Number: 24
Time: 4:50:58.8
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	5	5	0	3.3	10.0	Green	57.5
Arrived on Green	13	12	4	9.7	29.0	Yellow	4.7
Volume	18	17	4	13.0	39.0	Red	64.1
Arrival Type	5	5	6	5.3	16.0	Total	126.3
Lost Time	-0.9	4.3		1.7	3.4		
# For Sat Flow	1	1		1.0	2.0		
Sat Flow	1500	2250		1875.0	3750.0		

Lane	Enter Intersection: Headway																	
1	1.9	2.7	1.9	2.7														
2	2.7	1.4	2.2	2.4	2.4	3.8	10.5	5.5	1.6	3.5	1.0	1.9	2.2	2.1	3.9	1.8	2.7	3.2
3	3.6	2.4	2.4	2.3	1.6	6.8	2.1	3.1	2.9	5.2	7.0	1.3	1.5	6.9	2.2	1.5	8.0	

Lane	Join Queue: Headway			
2	63.1			
3	41.3	20.6		
4	2.4	15.4		

Cycle Number: 24
Time: 5:01:35.6
Lane Type: Left

Lane	1	Average	Total			
Volume	4	4.0	4.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 25

Cycle Number: 25
Time: 4:53:05.1
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	1	2	2	1.7	5.0	Green	60.3
Arrived on Green	15	16	1	10.7	32.0	Yellow	5.0
Volume	16	18	3	12.3	37.0	Red	63.5
Arrival Type	6	5	2	4.3	13.0	Total	128.8
Lost Time							
# For Sat Flow							
Sat Flow							

Lane	Enter Intersection: Headway																	
1	2.2	3.2	2.7															
2	3.7	1.9	4.3	5.2	2.7	1.9	5.1	3.2	1.2	1.1	14.4	1.7	3.5	7.0	3.1	1.2		
3	2.3	2.7	2.4	9.1	11.5	2.1	1.0	3.4	6.2	2.4	1.6	0.9	7.9	3.4	1.9	1.8	0.9	1.2

Lane	Join Queue: Headway			
2	1.2	13.9	8.4	
3	2.8	1.1	13.2	0.6
4				

Cycle Number: 25
Time: 5:03:36.4
Lane Type: Left

Lane	1	Average	Total			
Volume	3	3.0	3.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 26

Cycle Number: 26
Time: 4:55:13.8
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	3	4	0	2.3	7.0	Green	62.3
Arrived on Green	16	16	4	12.0	36.0	Yellow	4.8
Volume	19	20	4	14.3	43.0	Red	62.7
Arrival Type	5	5	6	5.3	16.0	Total	129.8
Lost Time		2.9		2.9	2.9		
# For Sat Flow		2		2.0	2.0		
Sat Flow		2057		2057.0	2057.0		

Lane	Enter Intersection: Headway																			
1	1.8	2.1	2.5	1.5																
2	2.3	3.1	1.5	3.8	7.0	4.3	8.5	3.0	3.2	2.9	2.0	1.4	1.6	1.2	2.6	1.7	2.7	7.2	1.4	
3	2.7	2.4	2.4	2.4	1.2	2.3	2.4	2.9	2.4	1.8	5.0	4.0	1.6	1.8	7.5	3.3	2.9	1.4	3.2	6.9

Lane	Join Queue: Headway				
2	-	73.7	3.2	49.8	
3	-	3.4	71.5	4.1	1.4
4					

Cycle Number: 26
Time: 5:05:46.4
Lane Type: Left

Lane	1	Average	Total		
Volume	4	4.0	4.0	Red	
# For Sat Flow					
Sat Flow					

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 27

Cycle Number: 27
Time: 4:57:23.6
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	4	5	0	3.0	9.0	Green	62.7
Arrived on Green	10	14	1	8.3	25.0	Yellow	4.9
Volume	14	19	1	11.3	34.0	Red	63.4
Arrival Type	4	5	6	5.0	15.0	Total	131.0
Lost Time							
# For Sat Flow							
Sat Flow							

Lane	Enter Intersection: Headway																		
1	2.8	1.9	3.7	2.7															
2	2.0	2.2	2.3	1.6	33.7	1.8	2.0	1.7	1.4	4.3	3.6	0.7	0.9	8.4					
3	2.3	2.9	3.4	4.0	6.0	3.8	13.8	4.7	0.8	4.4	1.7	2.2	1.8	1.4	1.9	2.2	2.2	3.1	2.7

Lane	Join Queue: Headway					
2	6.5	2.8	6.5	7.4		
3	7.4	2.7	0.6	20.0	17.8	3.0
4						

Cycle Number: 27
Time: 5:07:57.3
Lane Type: Left

Lane	1	Average	Total			
Volume	4	4.0	4.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 28

Cycle Number: 28
Time: 4:59:34.6
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	4	6	0	3.3	10.0	Green	60.8
Arrived on Green	14	13	2	9.7	29.0	Yellow	4.9
Volume	18	19	2	13.0	39.0	Red	71.7
Arrival Type	5	5	6	5.3	16.0	Total	137.4
Lost Time		-1.1		-1.1	-1.1		
# For Sat Flow		2		2.0	2.0		
Sat Flow		1075		1075.0	1075.0		

Lane	Enter Intersection: Headway																		
1	2.4																		
2	1.9	2.4	2.4	3.4	2.6	3.1	3.6	9.3	1.5	13.6	6.5	1.0	1.5	1.3	3.6	2.6	1.9	1.7	
3	2.6	4.0	2.7	3.0	2.9	3.8	6.5	3.6	4.1	12.6	2.7	2.7	1.4	3.1	2.3	1.0	1.5	2.8	1.0

Lane	Join Queue: Headway							
2	4.6	6.7	3.0	2.0	12.3	33.2		
3	13.2	4.2	2.7	1.7	1.4	2.5	40.5	3.7
4								

Cycle Number: 28
Time: 5:10:07.1
Lane Type: Left

Lane	1	Average	Total			
Volume	1	1.0	1.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
------	---------------------

Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 29

Cycle Number: 29
Time: 5:01:52.1
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	6	8	0	4.7	14.0	Green	54.9
Arrived on Green	9	13	2	8.0	24.0	Yellow	4.8
Volume	15	21	2	12.7	38.0	Red	66.6
Arrival Type	4	4	6	4.7	14.0	Total	126.3
Lost Time	1.9	0.0		1.0	1.9		
# For Sat Flow	2	4		3.0	6.0		
Sat Flow	2571	1674		2122.5	4245.0		

Lane	Enter Intersection: Headway																			
1	2.4																			
2	2.5	0.9	2.4	1.6	1.8	1.0	3.8	7.1	4.1	1.5	11.9	6.4	1.2	7.2	1.7					
3	2.6	2.5	1.9	1.7	3.0	1.3	1.6	2.7	1.6	6.3	3.3	2.4	3.3	3.0	3.5	2.1	1.3	1.2	1.7	1.3

Lane	Join Queue: Headway			
2	5.6	13.3	20.6	19.1
3	1.1	5.1	5.1	0.7
4				

Cycle Number: 29
Time: 5:12:16.5
Lane Type: Left

Lane	1	Average	Total		
Volume	1	1.0	1.0	Red	
# For Sat Flow					
Sat Flow					

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
------	---------------------

Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 30

Cycle Number: 30
Time: 5:03:58.4
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	4	4	0	2.7	8.0	Green	57.4
Arrived on Green	14	16	2	10.7	32.0	Yellow	4.7
Volume	18	20	2	13.3	40.0	Red	66.7
Arrival Type	5	5	6	5.3	16.0	Total	128.8
Lost Time	-3.5			-3.5	-3.5		
# For Sat Flow	1			1.0	1.0		
Sat Flow	1286			1286.0	1286.0		

Lane	Enter Intersection: Headway																			
1	2.6	2.3	2.2	2.8																
2	2.1	2.1	1.9	1.7	2.8	8.7	4.0	5.3	3.9	1.6	1.6	2.2	1.5	0.8	8.1	1.3	7.0	3.6		
3	2.3	2.4	1.8	1.8	1.5	10.6	2.2	2.6	2.1	3.6	1.3	1.5	1.5	1.5	2.9	1.9	3.7	4.8	1.3	4.7

Lane	Join Queue: Headway									
2	-	61.8	67.9	6.9	3.2	2.6	6.1	3.9	29.1	
3	2.6	0.5	13.7	2.7	3.3	25.9	7.0	4.9	4.6	1.3
4										

Cycle Number: 30
Time: 5:14:25.9
Lane Type: Left

Lane	1	Average	Total		
Volume	4	4.0	4.0	Red	
# For Sat Flow					
Sat Flow					

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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Tigard, OR 97223

File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 31

Cycle Number: 31
Time: 5:06:07.2
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	8	10	0	6.0	18.0	Green	58.0
Arrived on Green	13	12	3	9.3	28.0	Yellow	4.8
Volume	21	22	3	15.3	46.0	Red	67.0
Arrival Type	4	4	6	4.7	14.0	Total	129.8
Lost Time	3.4	-0.5		1.5	2.9		
# For Sat Flow	4	8		6.0	12.0		
Sat Flow	1895	1161		1528.0	3056.0		

Lane	Enter Intersection: Headway																					
1	2.4	1.9	2.2																			
2	3.2	3.0	2.4	2.3	1.3	1.7	3.6	1.0	4.9	2.5	2.3	0.6	1.8	5.7	1.0	2.1	1.3	3.3	2.0	9.5	1.1	
3	2.6	4.6	2.2	2.5	1.5	3.1	1.7	1.8	8.6	3.4	0.9	3.8	3.2	1.5	1.8	1.8	3.3	2.3	3.4	2.5	1.1	2.9

Lane	Join Queue: Headway									
2	- 54.0	61.8	2.8	5.0	14.4	12.5				
3	- 48.3	2.0	53.6	1.3	1.5	1.5	1.4	2.1	11.8	
4										

Cycle Number: 31
Time: 5:16:35.8
Lane Type: Left

Lane	1	Average	Total			
Volume	3	3.0	3.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
------	---------------------

Quality Counts

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File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 32

Cycle Number: 32
Time: 5:08:17.0
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	6	9	0	5.0	15.0	Green	58.4
Arrived on Green	15	14	2	10.3	31.0	Yellow	4.8
Volume	21	23	2	15.3	46.0	Red	67.1
Arrival Type	5	4	6	5.0	15.0	Total	130.3
Lost Time	3.0	-1.0		1.0	2.0		
# For Sat Flow	2	3		2.5	5.0		
Sat Flow	1946	1385		1665.5	3331.0		

Lane	Enter Intersection: Headway																						
1	2.0	2.7																					
2	3.0	2.4	3.4	1.5	2.0	1.7	1.4	7.4	1.7	1.8	1.5	2.3	6.5	4.0	1.6	4.7	0.8	3.0	2.8	1.8	1.6		
3	2.7	2.4	2.7	1.6	2.6	1.5	3.7	7.1	1.7	3.1	0.8	3.5	7.6	1.5	1.0	0.9	1.9	1.2	1.9	1.7	4.1	1.6	4.2

Lane	Join Queue: Headway									
2	-	66.5	2.5	1.2	1.7	0.5	8.3	18.1	0.7	18.0
3	5.4	6.8	3.7	1.9	3.2	3.7	14.8			
4										

Cycle Number: 32
Time: 5:20:55.8
Lane Type: Left

Lane	1	Average	Total			
Volume	2	2.0	2.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
------	---------------------

Quality Counts

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File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 33

Cycle Number: 33
Time: 5:10:27.3
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	10	7	0	5.7	17.0	Green	57.9
Arrived on Green	16	14	1	10.3	31.0	Yellow	4.8
Volume	26	21	1	16.0	48.0	Red	68.1
Arrival Type	4	5	6	5.0	15.0	Total	130.8
Lost Time	1.9	-6.4		-2.3	-4.5		
# For Sat Flow	5	3		4.0	8.0		
Sat Flow	2045	857		1451.0	2902.0		

Lane	Enter Intersection: Headway																									
1	2.3	2.9																								
2	3.9	2.1	1.7	1.2	1.5	1.0	2.4	1.8	2.1	3.1	5.2	1.6	3.1	1.5	5.1	1.9	1.5	1.1	1.9	2.3	1.5	2.0	0.8	1.7	3.3	3.0
3	4.2	2.0	2.4	1.7	1.6	1.6	9.4	4.4	3.2	1.0	1.1	1.0	2.0	1.0	2.4	7.2	2.0	1.2	2.0	5.0	4.0					

Lane	Join Queue: Headway						
2	6.8	4.6	10.5	3.4	27.9		
3	3.3	7.3	9.3	10.7	1.4	5.5	14.8
4	27.3						

Cycle Number: 33
Time: 5:23:05.7
Lane Type: Left

Lane	1	Average	Total	Red		
Volume	2	2.0	2.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 34

Cycle Number: 34
Time: 5:12:38.1
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	5	7	1	4.3	13.0	Green	57.5
Arrived on Green	12	16	3	10.3	31.0	Yellow	4.9
Volume	17	23	4	14.7	44.0	Red	66.8
Arrival Type	5	5	5	5.0	15.0	Total	129.2
Lost Time	0.9	1.5		1.2	2.4		
# For Sat Flow	1	5		3.0	6.0		
Sat Flow	2000	1856		1928.0	3856.0		

Lane	Enter Intersection: Headway																							
1	1.8	3.5	2.3																					
2	2.4	1.5	2.7	1.5	1.8	3.6	4.6	1.8	5.5	10.8	1.0	1.9	3.9	2.9	1.9	2.0	7.5							
3	2.7	2.3	2.2	2.0	1.8	1.6	3.1	1.9	1.3	2.2	2.2	1.6	4.4	4.0	1.2	1.9	2.6	1.1	2.0	1.6	1.7	0.8	9.3	

Lane	Join Queue: Headway									
2	24.3	23.5								
3	-	0.9	66.7	1.9	4.1	10.7	20.1	5.7	17.1	
4										

Cycle Number: 34
Time: 5:25:15.9
Lane Type: Left

Lane	1	Average	Total			
Volume	3	3.0	3.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
------	---------------------

Quality Counts

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File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 35

Cycle Number: 35
Time: 5:14:47.3
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	2	9	0	3.7	11.0	Green	58.3
Arrived on Green	13	13	0	8.7	26.0	Yellow	4.9
Volume	15	22	0	12.3	37.0	Red	67.1
Arrival Type	5	4		4.5	9.0	Total	130.3
Lost Time		-2.4		-2.4	-2.4		
# For Sat Flow		4		4.0	4.0		
Sat Flow		1263		1263.0	1263.0		

Lane	Enter Intersection: Headway																						
1	1.6	3.4	2.6	2.9	2.8	55.8	12.9	119.1	2.0														
2	2.8	2.6	11.3	3.7	1.5	4.8	6.1	1.2	2.9	9.3	2.7	2.7	2.3	2.5	2.3								
3	2.6	1.8	2.4	2.2	2.9	2.7	1.8	4.0	6.5	4.6	1.8	2.2	2.0	1.7	1.7	9.0	1.5	2.0	1.5	1.1	2.3	2.3	

Lane	Join Queue: Headway						
2	9.3	1.6					
3	-57.8	60.0	5.5	2.6	1.3	30.9	5.1
4							

Cycle Number: 35
Time: 5:27:25.7
Lane Type: Left

Lane	1	Average	Total			
Volume	9	9.0	9.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 36

Cycle Number: 36
Time: 5:16:57.7
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	2	7	0	3.0	9.0	Green	57.5
Arrived on Green	10	12	3	8.3	25.0	Yellow	4.9
Volume	12	19	3	11.3	34.0	Red	66.9
Arrival Type	5	4	6	5.0	15.0	Total	129.3
Lost Time		5.1		5.1	5.1		
# For Sat Flow		2		2.0	2.0		
Sat Flow		2182		2182.0	2182.0		

Lane	Enter Intersection: Headway																		
1	1.8	2.1																	
2	2.4	2.0	6.4	6.4	3.9	1.6	3.9	5.9	2.7	1.6	5.7	2.3							
3	3.1	2.2	3.2	3.2	1.3	2.0	7.4	1.4	2.5	4.4	1.2	1.9	1.8	4.4	2.9	4.5	7.1	1.6	3.2

Lane	Join Queue: Headway				
2	4.1	1.8	1.6		
3	8.3	6.3	2.0	4.1	31.0
4					

Cycle Number: 36
Time: 5:31:47.2
Lane Type: Left

Lane	1	Average	Total		
Volume	2	2.0	2.0	Red	
# For Sat Flow					
Sat Flow					

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 37

Cycle Number: 37
Time: 5:19:07.0
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	3	5	0	2.7	8.0	Green	59.1
Arrived on Green	14	14	2	10.0	30.0	Yellow	4.8
Volume	17	19	2	12.7	38.0	Red	65.8
Arrival Type	5	5	6	5.3	16.0	Total	129.7
Lost Time		1.3		1.3	1.3		
# For Sat Flow		1		1.0	1.0		
Sat Flow		1714		1714.0	1714.0		

Lane	Enter Intersection: Headway																		
1	1.9																		
2	3.2	1.7	2.6	7.7	3.2	5.4	6.3	4.1	4.7	1.3	1.5	6.0	4.9	4.4	0.9	1.1	2.0		
3	2.8	2.4	3.5	1.0	2.1	2.1	10.1	2.2	1.5	1.4	1.3	2.1	3.1	7.2	1.5	3.2	1.1	9.1	1.6

Lane	Join Queue: Headway						
2	2.3	8.2	5.1				
3	5.4	2.2	25.7	8.1	2.6	17.6	1.2
4	16.3						

Cycle Number: 37
Time: 5:33:57.6
Lane Type: Left

Lane	1	Average	Total			
Volume	1	1.0	1.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 38

Cycle Number: 38
Time: 5:21:16.7
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	3	7	1	3.7	11.0	Green	59.0
Arrived on Green	13	11	1	8.3	25.0	Yellow	4.8
Volume	16	18	2	12.0	36.0	Red	66.1
Arrival Type	5	4	3	4.0	12.0	Total	129.9
Lost Time		5.3		5.3	5.3		
# For Sat Flow		3		3.0	3.0		
Sat Flow		2512		2512.0	2512.0		

Lane	Enter Intersection: Headway																	
1	2.0	71.4																
2	3.2	2.5	2.1	6.7	1.5	1.5	9.9	1.9	2.6	5.5	6.3	2.8	0.7	0.9	10.2	4.6		
3	3.1	2.9	4.0	1.1	2.0	1.2	1.1	5.9	11.5	2.1	2.1	0.8	3.2	4.6	1.2	1.7	4.6	8.0

Lane	Join Queue: Headway			
2	7.0	4.0	6.4	
3	3.0	8.5	1.3	
4	13.8			

Cycle Number: 38
Time: 5:36:06.3
Lane Type: Left

Lane	1	Average	Total			
Volume	2	2.0	2.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 39

Cycle Number: 39
Time: 5:23:26.7
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	3	3	1	2.3	7.0	Green	59.9
Arrived on Green	10	16	1	9.0	27.0	Yellow	4.8
Volume	13	19	2	11.3	34.0	Red	66.4
Arrival Type	5	5	3	4.3	13.0	Total	131.1
Lost Time							
# For Sat Flow							
Sat Flow							

Lane	Enter Intersection: Headway																		
1	2.9	169.7	18.0	22.6															
2	2.7	2.5	2.2	13.0	2.5	6.5	4.6	2.4	5.5	6.0	4.1	3.2	6.8						
3	2.4	2.6	2.2	2.7	13.4	3.2	1.9	3.6	5.1	3.3	3.3	6.4	2.2	1.8	1.8	1.7	2.0	1.0	1.0

Lane	Join Queue: Headway			
2	4.0	28.8	3.0	
3	14.1	44.2		
4				

Cycle Number: 39
Time: 5:42:36.9
Lane Type: Left

Lane	1	Average	Total			
Volume	4	4.0	4.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 40

Cycle Number: 40
Time: 5:25:37.8
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	3	2	0	1.7	5.0	Green	57.4
Arrived on Green	16	14	5	11.7	35.0	Yellow	4.9
Volume	19	16	5	13.3	40.0	Red	66.5
Arrival Type	5	5	6	5.3	16.0	Total	128.8
Lost Time							
# For Sat Flow							
Sat Flow							

Lane	Enter Intersection: Headway																		
1	3.1	3.4	2.2																
2	1.8	2.6	3.3	2.2	2.3	1.9	2.2	8.6	1.5	1.2	1.7	2.0	1.7	1.8	1.3	9.0	4.7	10.1	1.2
3	3.0	1.6	1.6	2.8	4.6	1.4	4.8	3.3	2.0	10.6	2.2	3.0	7.4	1.6	1.7	7.8			

Lane	Join Queue: Headway				
2	17.9	14.8	2.7		
3	-	63.2	5.9	2.0	1.7
4	60.8				

Cycle Number: 40
Time: 5:46:55.5
Lane Type: Left

Lane	1	Average	Total		
Volume	3	3.0	3.0	Red	
# For Sat Flow					
Sat Flow					

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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Tigard, OR 97223

File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 41

Cycle Number: 41
Time: 5:27:46.6
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	3	5	1	3.0	9.0	Green	58.4
Arrived on Green	14	14	3	10.3	31.0	Yellow	4.8
Volume	17	19	4	13.3	40.0	Red	67.3
Arrival Type	5	5	5	5.0	15.0	Total	130.5
Lost Time							
# For Sat Flow							
Sat Flow							

Lane	Enter Intersection: Headway																		
1	2.0	1.9	2.0																
2	2.1	3.9	2.1	2.3	2.5	6.9	2.7	3.9	1.0	2.4	1.2	2.0	4.3	20.4	1.9	1.0	1.5		
3	2.3	2.0	2.2	2.8	3.4	3.6	3.3	3.2	3.9	1.2	2.2	1.2	2.4	5.1	3.0	4.6	2.9	9.6	2.7

Lane	Join Queue: Headway				
2	3.2	8.1			
3	2.5	3.8	29.3	8.7	21.8
4	10.5	5.5			

Cycle Number: 41
Time: 5:49:05.9
Lane Type: Left

Lane	1	Average	Total			
Volume	3	3.0	3.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 42

Cycle Number: 42
Time: 5:29:57.1
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	2	5	2	3.0	9.0	Green	57.8
Arrived on Green	12	9	3	8.0	24.0	Yellow	4.7
Volume	14	14	5	11.0	33.0	Red	65.9
Arrival Type	5	4	4	4.3	13.0	Total	128.4
Lost Time		3.2		3.2	3.2		
# For Sat Flow		1		1.0	1.0		
Sat Flow		2250		2250.0	2250.0		

Lane	Enter Intersection: Headway														
1	2.0	2.3	2.3	2.1	2.4										
2	2.2	2.1	2.2	4.4	8.8	1.2	5.7	2.3	2.0	11.2	1.4	7.2	1.5	6.5	
3	3.4	2.8	2.1	1.2	1.6	1.9	8.8	3.5	3.3	3.3	11.0	1.8	11.9	3.9	

Lane	Join Queue: Headway					
2	16.2	0.8	36.8	5.8		
3	10.7	14.9	11.9	13.8	7.0	
4						

Cycle Number: 42
Time: 5:51:15.5
Lane Type: Left

Lane	1	Average	Total			
Volume	5	5.0	5.0	Red		
# For Sat Flow	1	1.0	1.0			
Sat Flow	1528	1528.0	1528.0			

Lane	Enter Intersection: Headway
------	-----------------------------

Lane	Join Queue: Headway
------	---------------------

Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 43

Cycle Number: 43
Time: 5:32:05.6
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	4	5	0	3.0	9.0	Green	59.1
Arrived on Green	10	17	7	11.3	34.0	Yellow	4.8
Volume	14	22	7	14.3	43.0	Red	67.4
Arrival Type	5	5	6	5.3	16.0	Total	131.3
Lost Time		1.2		1.2	1.2		
# For Sat Flow		2		2.0	2.0		
Sat Flow		1532		1532.0	1532.0		

Lane	Enter Intersection: Headway																						
1	2.1	49.9	30.7																				
2	2.9	1.7	2.4	2.5	10.7	5.6	11.0	1.3	2.8	4.5	2.7	2.5	1.0	10.5									
3	3.2	3.6	1.8	2.1	1.9	2.8	2.1	3.0	3.5	7.2	2.2	1.1	4.8	1.0	1.2	1.7	5.6	1.3	1.5	1.6	5.7	3.2	

Lane	Join Queue: Headway					
2	4.7	3.6	3.4			
3	-	61.4	71.1	3.8	11.5	20.2
4	28.7					20.1

Cycle Number: 43
Time: 5:55:37.0
Lane Type: Left

Lane	1	Average	Total		
Volume	3	3.0	3.0	Red	
# For Sat Flow					
Sat Flow					

Lane	Enter Intersection: Headway
------	--------------------------------

Lane	Join Queue: Headway
------	---------------------

Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 44

Cycle Number: 44
Time: 5:34:17.0
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	3	6	1	3.3	10.0	Green	58.4
Arrived on Green	16	7	0	7.7	23.0	Yellow	4.7
Volume	19	13	1	11.0	33.0	Red	67.4
Arrival Type	5	4	1	3.3	10.0	Total	130.5
Lost Time		0.7		0.7	0.7		
# For Sat Flow		2		2.0	2.0		
Sat Flow		1500		1500.0	1500.0		

Lane	Enter Intersection: Headway																		
1	1.8	48.4	24.8																
2	2.2	2.4	1.7	4.3	1.8	1.5	1.7	1.6	2.1	4.9	3.1	16.4	1.9	0.7	0.8	1.1	1.2	1.5	0.9
3	2.5	2.4	2.3	3.1	3.3	1.5	1.8	2.7	2.2	4.0	13.7	6.5	14.7						

Lane	Join Queue: Headway										
2	2.2	9.3	6.8	32.2	10.9						
3	- 59.5	65.5	5.9	4.7	7.2	7.8	2.5	4.5	1.3	17.3	5.8
4											

Cycle Number: 44
Time: 5:57:46.0
Lane Type: Left

Lane	1	Average	Total		
Volume	3	3.0	3.0	Red	
# For Sat Flow					
Sat Flow					

Lane	Enter Intersection: Headway
------	--------------------------------

Lane	Join Queue: Headway
------	---------------------

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File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 45

Cycle Number: 45
Time: 5:36:27.6
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	5	11	0	5.3	16.0	Green	57.7
Arrived on Green	16	10	3	9.7	29.0	Yellow	4.8
Volume	21	21	3	15.0	45.0	Red	63.8
Arrival Type	5	3	6	4.7	14.0	Total	126.3
Lost Time	-0.2	0.5		0.2	0.3		
# For Sat Flow	1	7		4.0	8.0		
Sat Flow	2000	1826		1913.0	3826.0		

Lane	Enter Intersection: Headway																				
1																					
2	1.3	1.4	1.7	2.7	1.8	2.9	5.7	5.4	2.2	2.4	3.5	4.9	1.8	2.0	1.3	1.0	1.3	2.9	3.4	3.6	2.9
3	1.6	2.6	2.2	2.0	3.6	2.0	2.2	1.5	1.2	2.1	1.2	5.4	7.7	2.0	2.2	2.2	1.0	0.9	2.2	4.0	4.0

Lane	Join Queue: Headway					
2	5.5	2.4				
3	- 54.8	61.3	2.7	12.1	0.7	23.3
4	17.9					

Cycle Number: 46
Time: 5:38:33.9
Lane Type: Normal

Lane Type/Normal	Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	2	2	6	1	3.0	9.0	Green	61.4
Arrived on Green	10	10	16	1	9.0	27.0	Yellow	4.7
Volume	12	12	22	2	12.0	36.0	Red	76.3
Arrival Type	5	5	5	4	4.7	14.0	Total	142.4
Lost Time			-0.9		-0.9	-0.9		
# For Sat Flow			2		2.0	2.0		
Sat Flow			1532		1532.0	1532.0		

Lane	Enter Intersection: Headway																					
1																						
2	3.1	2.6	2.3	14. 1	8.2	1.8	3.8	1.4	4.4	1.1	7.9	4.2										
3	2.4	2.2	1.7	2.2	1.8	2.9	2.7	11. 2	1.4	1.6	2.4	1.9	2.9	3.7	7.3	4.0	1.9	2.0	1.4	1.2	1.4	1.1

[illegible]

Quality Counts

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Tigard, OR 97223

File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 46

Cycle Number: 47
Time: 5:40:56.3
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	6	12	1	6.3	19.0	Green	48.7
Arrived on Green	12	10	1	7.7	23.0	Yellow	4.8
Volume	18	22	2	14.0	42.0	Red	63.1
Arrival Type	5	3	4	4.0	12.0	Total	116.6
Lost Time	0.7	0.7		0.7	1.4		
# For Sat Flow	1	8		4.5	9.0		
Sat Flow	1800	1858		1829.0	3658.0		

Lane	Enter Intersection: Headway																					
1																						
2	2.1	3.1	2.0	1.6	2.0	6.9	1.6	2.5	1.9	2.0	4.1	1.3	2.0	1.1	2.3	2.0	8.5	1.7				
3	2.9	2.0	2.0	1.5	1.7	1.8	1.4	2.8	2.5	2.0	1.8	1.5	1.1	2.7	1.5	2.5	3.2	2.0	3.0	5.4	2.3	1.1

Lane	Join Queue: Headway			
2	10.2			
3	-	52.6	8.1	
4				

Cycle Number: 48
Time: 5:42:52.9
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	1	3	0	1.3	4.0	Green	0.6
Arrived on Green	-1	-3	0	-1.3	-4.0	Yellow	4.4
Volume	0	0	0	0.0	0.0	Red	40.4
Arrival Type						Total	45.4
Lost Time							
# For Sat Flow							
Sat Flow							

Lane	Enter Intersection: Headway			
1				
2				
3				

Lane	Join Queue: Headway						
2	1.5	7.0	15.4	8.1	2.4	2.2	3.4
3	22.2	2.4	0.7	1.9	1.3	1.8	
4							

Quality Counts

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File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 48

Cycle Number: 51
Time: 5:47:12.2
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	6	9	0	5.0	15.0	Green	63.0
Arrived on Green	15	9	3	9.0	27.0	Yellow	4.9
Volume	21	18	3	14.0	42.0	Red	66.5
Arrival Type	5	3	6	4.7	14.0	Total	134.4
Lost Time	1.3	2.8		2.1	4.1		
# For Sat Flow	4	5		4.5	9.0		
Sat Flow	1895	1818		1856.5	3713.0		

Lane	Enter Intersection: Headway																				
1																					
2	3.4	1.6	1.8	2.0	2.1	2.0	2.1	1.4	3.6	5.8	2.2	2.4	1.4	1.5	9.5	1.2	2.4	3.2	5.6	2.6	4.7
3	3.2	1.5	3.6	2.4	1.5	2.6	1.9	1.9	2.0	1.8	2.1	2.0	1.4	1.9	3.1	4.6	12. 9	13. 1			

Lane	Join Queue: Headway									
2	-	2.7	69.0	3.0	2.6	8.5	46.5			
3	9.0	2.9	1.6	2.6	10.9	1.1	1.6	2.7	29.8	
4										

Cycle Number: 52
Time: 5:49:26.6
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	7	9	0	5.3	16.0	Green	59.7
Arrived on Green	10	10	1	7.0	21.0	Yellow	4.7
Volume	17	19	1	12.3	37.0	Red	62.7
Arrival Type	4	3	6	4.3	13.0	Total	127.1
Lost Time	6.4	1.0		3.7	7.4		
# For Sat Flow	1	7		4.0	8.0		
Sat Flow	2769	1615		2192.0	4384.0		

Lane	Enter Intersection: Headway																			
1																				
2	2.4	2.1	4.1	2.9	1.3	2.8	10.2	1.8	6.0	1.8	1.8	1.5	1.7	1.4	2.3	2.2	13.4			
3	3.6	2.9	1.2	2.2	2.5	1.6	2.0	3.3	2.6	2.0	1.6	0.9	8.2	2.3	2.8	1.8	2.6	3.0	11.7	

Lane	Join Queue: Headway					
2	14.4	11.7	32.3			
3	-	6.2	60.5	7.6	7.2	30.3
4						

Quality Counts

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File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 49

Cycle Number: 53
Time: 5:51:33.7
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	3	6	0	3.0	9.0	Green	61.1
Arrived on Green	9	7	1	5.7	17.0	Yellow	4.8
Volume	12	13	1	8.7	26.0	Red	57.2
Arrival Type	5	3	6	4.7	14.0	Total	123.1
Lost Time							
# For Sat Flow							
Sat Flow							

Lane	Enter Intersection: Headway												
1													
2	2.7	1.7	3.0	12.8	4.4	4.1	1.6	7.2	1.5	2.3	2.2	12.5	
3	2.9	3.6	1.9	2.4	8.2	1.6	5.2	1.7	10.1	2.6	7.9	1.9	4.7

Lane	Join Queue: Headway			
2	28.7			
3	1.8	15.6	3.3	12.5
4				

Cycle Number: 54
Time: 5:53:36.8
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	1	4	0	1.7	5.0	Green	67.7
Arrived on Green	10	15	1	8.7	26.0	Yellow	4.9
Volume	11	19	1	10.3	31.0	Red	68.6
Arrival Type	5	5	6	5.3	16.0	Total	141.2
Lost Time							
# For Sat Flow							
Sat Flow							

Lane	Enter Intersection: Headway																		
1																			
2	3.3	7.0	15.2	0.7	3.4	13.5	6.3	1.2	7.3	0.6	3.1								
3	3.1	2.1	2.9	3.3	2.4	3.5	9.3	4.1	2.0	9.4	1.5	1.6	2.3	1.7	5.5	0.5	1.5	1.5	8.2

Lane	Join Queue: Headway			
2	4.1			
3	15.6	9.8		
4				

Quality Counts

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File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 50

Cycle Number: 55

Time: 5:55:57.9

Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	1	2	0	1.0	3.0	Green	60.0
Arrived on Green	10	12	4	8.7	26.0	Yellow	4.7
Volume	11	14	4	9.7	29.0	Red	57.1
Arrival Type	5	5	6	5.3	16.0	Total	121.8
Lost Time							
# For Sat Flow							
Sat Flow							

Lane	Enter Intersection: Headway														
1															
2	2.1	21.9	1.0	1.3	1.5	5.9	6.2	1.7	7.3	8.8	3.4				
3	2.7	2.2	2.4	16.0	2.1	1.5	2.9	1.4	1.2	5.9	9.4	0.4	2.9	4.3	

Lane	Join Queue: Headway					
2	10.0	9.4	3.0			
3	-	61.6	71.0	1.7	5.8	1.5
4	-2.2	14.0				

Cycle Number: 56

Time: 5:57:59.7

Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	3	6	2	3.7	11.0	Green	65.1
Arrived on Green	11	9	0	6.7	20.0	Yellow	4.9
Volume	14	15	2	10.3	31.0	Red	37.0
Arrival Type	4	3	1	2.7	8.0	Total	107.0
Lost Time		-4.1		-4.1	-4.1		
# For Sat Flow		1		1.0	1.0		
Sat Flow		1385		1385.0	1385.0		

Lane	Enter Intersection: Headway														
1															
2	1.6	1.5	1.4	9.8	1.2	12.5	1.0	2.7	8.9	0.7	2.2	1.0	12.6	11.6	
3	1.7	1.2	1.7	1.6	2.6	8.9	11.2	1.3	7.7	3.2	4.0	5.2	2.0	9.9	4.8

Lane	Join Queue: Headway					
2	28.0					
3	6.8	2.0	1.0	5.4	1.3	20.6
4						

Quality Counts

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File Name : 14721402
Site Code : 14721402
Start Date : 5/30/2018
Page No : 51

Cycle Number: Summary
Time: 4:00:00.0 to 5:59:46.8
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	4.1	5.9	0.5	3.5	10.5	Green	57.3
Arrived on Green	12.5	12.8	2.2	9.2	27.5	Yellow	4.9
Volume	16.3	18.4	2.4	12.4	37.1	Red	65.4
Arrival Type	4.8	4.4	5.0	4.7	14.2	Total	127.6
Lost Time	0.5	1.0	0.0	0.5	1.5		
# For Sat Flow	0.9	2.3	0.0	1.1	3.2		
Sat Flow	1850.4	1668.8		1759.6	3519.2		

Lane	Enter Intersection: Headway																											
2	2.5	3.0	3.4	4.1	4.5	3.7	4.5	3.4	3.3	3.3	3.3	3.3	3.3	3.3	2.7	3.3	3.3	3.3	3.3	2.3	1.6	2.9	1.6	3.1	2.5	1.0	5.3	
3	2.8	2.7	2.5	3.2	3.1	3.1	4.1	3.3	3.3	3.2	2.2	3.3	3.3	2.3	3.3	3.3	2.3	3.3	3.3	1.1	4.4	3.9	2.6	1.6				
4	35.2	27.1	14.3	19.2	8.9	1.7	41.2																					

Lane	Join Queue: Headway													
2	-1.1	18.1	9.7	11.7	11.7	8.8	11.7	22.3	2.1	11.2	6.9	4.0	4.2	
3	-8.5	18.4	12.4	5.7	8.4	10.7	12.5	6.4	11.5	9.1	5.3	5.9	4.3	12.7
4	20.4	10.5	8.2											

Cycle Number: Summary
Time: 4:00:00.0 to 5:59:46.8
Lane Type: Left

Lane	1	Average	Total			
Volume	2.6	2.6	2.6	Red		
# For Sat Flow	0.3	0.3	0.3			
Sat Flow	1822.7	1822.7	1822.7			

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
------	---------------------

Quality Counts

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Tigard, OR 97223

Battle Creek Rd SE & Kubeler Blvd SE (WB Approach)

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 1

Cycle Number: 1
Time: 4:00:50.2
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	0	0	0	0.0	0.0	Green	77.7
Arrived on Green	27	19	3	16.3	49.0	Yellow	4.9
Volume	27	19	3	16.3	49.0	Red	46.1
Arrival Type						Total	128.7
Lost Time	1.6	-1.3		0.2	0.3		
# For Sat Flow	6	1		3.5	7.0		
Sat Flow	1831	1500		1665.5	3331.0		

Lane	Enter Intersection: Headway																			
1	1.8	1.5	2.4	1.3	2.7	3.3	0.9	0.7	1.6	1.5	4.4									
2	2.4	1.8	3.7	1.4	1.4	3.8	1.1	1.4	2.9	1.5	2.1	1.4	3.0	2.5	3.4	6.0	1.0	4.6	1.2	3.1
3	2.2	1.9	2.0	2.2	2.4	1.8	2.6	2.7	1.1	1.7	3.0	1.2	1.6	2.7	2.10	5.8	1.5			

Lane	Join Queue: Headway									
2	-75.2	88.5	4.4	4.7	1.4	5.4	2.3	1.6	6.2	5.9
3	-75.7	94.0	1.7	6.2						
4										

Cycle Number: 1
Time: 4:00:39.9
Lane Type: Left

Lane	1	Average	Total		
Volume	11	11.0	11.0	Red	
# For Sat Flow	5	5.0	5.0		
Sat Flow	1967	1967.0	1967.0		

Lane	Enter Intersection: Headway
------	-----------------------------

Lane	Join Queue: Headway
------	---------------------

Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 2

Cycle Number: 2
Time: 4:02:58.9
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	10	4	0	4.7	14.0	Green	76.9
Arrived on Green	17	13	4	11.3	34.0	Yellow	4.8
Volume	27	17	4	16.0	48.0	Red	53.5
Arrival Type	3	4	5	4.0	12.0	Total	135.2
Lost Time	-0.7			-0.7	-0.7		
# For Sat Flow	10			10.0	10.0		
Sat Flow	1565			1565.0	1565.0		

Lane	Enter Intersection: Headway																										
1	2. 3	0. 9	2. 5	0. 8	72 .8																						
2	2. 0	1. 6	2. 8	2. 2	2. 5	2. 7	2. 8	2. 2	1. 4	1. 7	1. 7	2. 8	1. 5	3. 7	2. 5	3. 2	2. 8	3. 2	4. 3	5. 7	1. 3	2. 9	5. 1	10 .4	1. 8	1. 6	2. 0
3	1. 7	2. 1	2. 9	1. 6	2. 3	1. 7	1. 6	2. 9	3. 7	4. 3	16 .4	2. 2	2. 5	3. 3	2. 2	16 .1	9. 0										

Lane	Join Queue: Headway											
2	-	74.0	2.7	2.0	0.8	0.8	71.8	2.4	14.2	11.7	5.0	12.5
3	4.9	12.1	8.4	6.1	4.1	16.7						
4												

Cycle Number: 2
Time: 4:02:59.0
Lane Type: Left

Lane	1	Average	Total		
Volume	5	5.0	5.0	Red	
# For Sat Flow					
Sat Flow					

Lane	Enter Intersection: Headway
------	-----------------------------

Lane	Join Queue: Headway
------	---------------------

Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 3

Cycle Number: 3
Time: 4:05:14.1
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	11	6	0	5.7	17.0	Green	71.0
Arrived on Green	4	12	3	6.3	19.0	Yellow	4.9
Volume	15	18	3	12.0	36.0	Red	58.7
Arrival Type	2	4	5	3.7	11.0	Total	134.6
Lost Time	-0.3	1.3		0.5	1.0		
# For Sat Flow	4	3		3.5	7.0		
Sat Flow	1636	1742		1689.0	3378.0		

Lane	Enter Intersection: Headway																	
1	1.9	1.4	2.0	2.9	20.5	29.2												
2	2.5	1.8	2.2	2.0	2.5	2.2	3.0	1.1	3.7	28.0	9.9	0.9	7.2	5.1	2.3			
3	2.2	3.4	1.9	2.0	3.0	1.4	1.8	1.8	2.4	3.9	3.5	10.6	5.4	5.9	7.8	0.8	3.4	11.2

Lane	Join Queue: Headway										
2	- 75.0	4.9	76.1	8.2	1.2	2.8	14.1	1.0	18.3	3.1	2.3
3	- 73.0	82.7	13.5	6.1	6.6						
4											

Cycle Number: 3
Time: 4:05:04.7
Lane Type: Left

Lane	1	Average	Total		
Volume	6	6.0	6.0	Red	
# For Sat Flow					
Sat Flow					

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 4

Cycle Number: 4
Time: 4:07:28.7
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	11	5	0	5.3	16.0	Green	70.7
Arrived on Green	17	18	6	13.7	41.0	Yellow	4.7
Volume	28	23	6	19.0	57.0	Red	42.9
Arrival Type	3	4	5	4.0	12.0	Total	118.3
Lost Time	0.8	1.9		1.4	2.7		
# For Sat Flow	7	1		4.0	8.0		
Sat Flow	1895	2571		2233.0	4466.0		

Lane	Enter Intersection: Headway																										
1	1.5	1.4	2.8	2.6	1.9	3.7	2.8	1.0	59.8																		
2	2.1	3.3	1.9	1.1	1.8	2.2	2.1	1.9	1.7	2.4	1.9	2.5	2.9	2.2	1.5	1.5	1.8	2.3	2.5	1.9	11.0	1.4	2.2	2.8	2.2	1.9	5.3
3	1.7	2.7	1.2	1.9	1.4	3.1	1.4	3.3	1.7	1.2	2.4	2.0	2.3	1.2	4.3	1.3	2.4	4.9	2.0	11.7	1.9	1.7	8.2				

Lane	Join Queue: Headway						
2	-69.2	5.6	64.1	24.3	17.9		
3	-74.2	75.6	10.0	3.5	12.1	0.7	0.8
4	20.0						

Cycle Number: 4
Time: 4:07:18.1
Lane Type: Left

Lane	1	Average	Total		
Volume	9	9.0	9.0	Red	
# For Sat Flow	4	4.0	4.0		
Sat Flow	1538	1538.0	1538.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 5

Cycle Number: 5
Time: 4:09:27.0
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	5	7	1	4.3	13.0	Green	79.7
Arrived on Green	26	22	5	17.7	53.0	Yellow	4.8
Volume	31	29	6	22.0	66.0	Red	58.6
Arrival Type	5	4	4	4.3	13.0	Total	143.1
Lost Time		5.3		5.3	5.3		
# For Sat Flow		2		2.0	2.0		
Sat Flow		2483		2483.0	2483.0		

Lane	Enter Intersection: Headway																														
1	3.2	2.5	2.0	2.3	2.4	2.4	1.8																								
2	2.0	1.5	2.7	3.2	1.9	4.0	1.6	1.4	1.7	1.6	7.2	3.2	1.5	1.5	9.7	1.3	0.6	3.6	1.1	2.8	2.2	1.9	2.2	4.2	1.9	2.4	0.7	3.4	1.3	7.3	1.3
3	1.8	2.1	1.9	5.4	2.1	0.8	1.6	3.2	1.6	2.2	1.2	2.8	2.2	8.8	3.2	4.3	1.0	1.0	1.1	4.0	2.0	6.3	3.6	4.4	2.7	3.6	2.4	0.5			

Lane	Join Queue: Headway									
2	15.7	6.1	0.7	6.5	12.1	3.0	0.8	5.2		
3	2.9	5.7	3.7	0.8	7.7	0.7	19.1	4.3	6.8	
4	18.2	5.3	3.3							

Cycle Number: 5
Time: 4:09:27.0
Lane Type: Left

Lane	1	Average	Total		
Volume	7	7.0	7.0	Red	
# For Sat Flow	3	3.0	3.0		
Sat Flow	1637	1637.0	1637.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 6

Cycle Number: 6
Time: 4:11:50.1
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	8	9	3	6.7	20.0	Green	67.4
Arrived on Green	16	13	-1	9.3	28.0	Yellow	4.7
Volume	24	22	2	16.0	48.0	Red	53.4
Arrival Type	4	3	1	2.7	8.0	Total	125.5
Lost Time	-0.3	-2.6		-1.5	-2.9		
# For Sat Flow	9	7		8.0	16.0		
Sat Flow	1723	1416		1569.5	3139.0		

Lane	Enter Intersection: Headway																							
1	1.9	2.6	2.4	2.6																				
2	2.0	2.4	2.0	1.6	1.8	2.4	2.0	1.4	2.3	3.1	2.1	1.9	1.8	1.3	2.7	1.9	0.9	2.2	2.3	1.9	1.1	1.8	3.7	5.0
3	1.8	2.3	1.7	1.9	4.2	2.2	1.4	2.4	3.5	2.1	2.0	4.6	6.3	1.5	1.1	1.5	4.4	5.9	2.7	1.9	3.1	2.1		

Lane	Join Queue: Headway								
2	-	0.7	7.1	1.3	1.6	83.5	4.3	13.1	10.2
3	-	10.5	76.5	2.7	32.5				
4									

Cycle Number: 6
Time: 4:11:35.6
Lane Type: Left

Lane	1	Average	Total			
Volume	4	4.0	4.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 7

Cycle Number: 7
Time: 4:13:55.6
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	9	5	0	4.7	14.0	Green	71.7
Arrived on Green	17	19	6	14.0	42.0	Yellow	4.7
Volume	26	24	6	18.7	56.0	Red	54.4
Arrival Type	4	4	5	4.3	13.0	Total	130.8
Lost Time	2.2	0.5		1.4	2.7		
# For Sat Flow	5	2		3.5	7.0		
Sat Flow	2222	1946		2084.0	4168.0		

Lane	Enter Intersection: Headway																									
1	1. 7	2. 9	1. 8	3. 6	0. 9	2. 4	2. 9																			
2	2. 5	2. 0	1. 4	2. 8	2. 1	1. 1	1. 2	1. 8	1. 9	1. 6	2. 2	3. 1	2. 8	0. 9	3. 8	4. 7	3. 8	1. 0	2. 6	2. 1	3. 5	5. 9	5. 9	7. 2	0. 9	2. 1
3	2. 1	2. 7	0. 9	2. 2	1. 0	2. 7	1. 1	1. 5	1. 5	2. 8	3. 3	2. 2	2. 1	4. 8	2. 6	6. 5	3. 5	2. 1	2. 4	4. 0	4. 7	2. 0	1. 7	2. 0		

Lane	Join Queue: Headway										
2	- 75.2	1.9	1.3	3.4	5.3	68.5	13.6	3.5	2.8	1.3	5.8
3	- 74.5	1.7	6.0	3.1	67.6	5.9	5.5	5.2	7.4	2.0	
4											

Cycle Number: 7
Time: 4:13:48.9
Lane Type: Left

Lane	1	Average	Total		
Volume	7	7.0	7.0	Red	
# For Sat Flow	1	1.0	1.0		
Sat Flow	3846	3846.0	3846.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 8

Cycle Number: 8
Time: 4:16:06.4
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	11	10	0	7.0	21.0	Green	69.5
Arrived on Green	21	21	4	15.3	46.0	Yellow	4.8
Volume	32	31	4	22.3	67.0	Red	61.0
Arrival Type	4	4	5	4.3	13.0	Total	135.3
Lost Time	0.8	-1.7		-0.5	-0.9		
# For Sat Flow	2	2		2.0	4.0		
Sat Flow	1800	1532		1666.0	3332.0		

Lane	Enter Intersection: Headway																															
1	1.7	1.3	1.5	1.5	1.5	2.0	0.7	5.6	1.4	1.6																						
2	1.8	2.4	2.2	2.3	2.0	2.0	1.7	2.3	1.9	2.0	2.7	1.4	2.2	2.7	1.8	1.5	3.0	1.7	1.3	0.9	0.9	2.5	1.1	2.1	3.1	2.0	2.7	1.3	1.8	1.3	5.4	2.9
3	2.1	1.3	1.4	2.9	2.8	1.9	1.7	2.9	2.1	1.4	2.7	1.2	5.0	4.9	1.3	1.1	2.1	2.2	2.2	4.9	1.6	1.3	2.0	3.3	2.1	1.8	2.3	1.7	2.9	2.0		

Lane	Join Queue: Headway						
2	3.3	7.0	0.7	3.7	3.1	1.5	41.1
3	5.9	19.4	34.5				
4							

Cycle Number: 8
Time: 4:15:57.6
Lane Type: Left

Lane	1	Average	Total			
Volume	10	10.0	10.0	Red		
# For Sat Flow	6	6.0	6.0			
Sat Flow	1693	1693.0	1693.0			

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 9

Cycle Number: 9
Time: 4:18:21.7
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	7	3	0	3.3	10.0	Green	65.2
Arrived on Green	21	18	7	15.3	46.0	Yellow	4.8
Volume	28	21	7	18.7	56.0	Red	60.0
Arrival Type	4	5	5	4.7	14.0	Total	130.0
Lost Time	-0.6			-0.6	-0.6		
# For Sat Flow	9			9.0	9.0		
Sat Flow	1733			1733.0	1733.0		

Lane	Enter Intersection: Headway																											
1	1. 9	2. 8	1. 9	1. 6	2. 1	1. 3	2. 3	2. 1	2. 2	20 .9	36 .2	1. 5																
2	2. 3	2. 3	1. 2	1. 9	1. 8	2. 6	2. 4	2. 9	0. 8	2. 2	1. 0	3. 6	1. 4	1. 3	1. 8	2. 0	2. 1	1. 1	4. 8	1. 4	5. 1	1. 4	5. 9	5. 5	1. 1	2. 7	3. 3	2. 0
3	4. 8	1. 2	1. 8	1. 9	2. 2	2. 8	3. 7	7. 6	3. 2	3. 4	1. 8	1. 9	6. 5	1. 5	3. 2	1. 2	2. 7	0. 9	2. 4	4. 3	3. 7							

Lane	Join Queue: Headway														
2	- 67.6	1.4	1.1	0.7	4.6	4.8	63.0	5.0	3.0	2.5	3.1	0.9	3.3	5.5	26.5
3	- 62.5	71.0	5.0	3.3	2.1	2.1	3.3	3.7							
4	4.2	13.6	14.8	0.9											

Cycle Number: 9
Time: 4:18:07.2
Lane Type: Left

Lane	1	Average	Total			
Volume	12	12.0	12.0	Red		
# For Sat Flow	4	4.0	4.0			
Sat Flow	1854	1854.0	1854.0			

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 10

Cycle Number: 10
Time: 4:20:31.6
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	15	8	4	9.0	27.0	Green	65.3
Arrived on Green	11	16	0	9.0	27.0	Yellow	4.6
Volume	26	24	4	18.0	54.0	Red	60.7
Arrival Type	2	4	1	2.3	7.0	Total	130.6
Lost Time	-0.3	2.3		1.0	2.0		
# For Sat Flow	9	4		6.5	13.0		
Sat Flow	1790	1946		1868.0	3736.0		

Lane	Enter Intersection: Headway																								
1	2.2	1.0	1.9	2.5	1.7	2.3	24.0	18.8	15.8																
2	2.3	2.0	1.8	1.6	1.7	1.9	1.9	2.0	2.5	1.8	1.7	2.4	2.2	2.0	2.5	1.3	3.6	2.1	4.9	2.0	7.2	1.6	3.6	2.8	4.2
3	4.4	2.0	2.2	1.1	2.3	1.6	2.0	1.5	2.2	2.3	1.9	2.2	2.0	1.7	7.7	1.6	6.3	4.2	3.2	1.3	3.4	1.7	2.1		

Lane	Join Queue: Headway												
2	-69.1	4.1	4.6	1.6	61.3	9.8	0.6	1.2	5.4	9.0	1.0	23.0	2.6
3	-63.7	73.1	6.0	3.4	3.4	28.9	6.1						
4													

Cycle Number: 10
Time: 4:20:18.3
Lane Type: Left

Lane	1	Average	Total			
Volume	9	9.0	9.0	Red		
# For Sat Flow	2	2.0	2.0			
Sat Flow	1789	1789.0	1789.0			

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 11

Cycle Number: 11
Time: 4:22:42.2
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	13	7	0	6.7	20.0	Green	64.6
Arrived on Green	16	15	8	13.0	39.0	Yellow	4.8
Volume	29	22	8	19.7	59.0	Red	59.7
Arrival Type	3	4	5	4.0	12.0	Total	129.1
Lost Time	-0.7	-1.3		-1.0	-2.0		
# For Sat Flow	8	3		5.5	11.0		
Sat Flow	1582	1565		1573.5	3147.0		

Lane	Enter Intersection: Headway																												
1	3.1	2.2	2.9	2.0	1.9	1.6	2.3	1.7	4.8	1.4																			
2	1.9	3.4	1.4	1.7	3.5	2.5	1.9	1.9	1.8	2.8	2.1	1.7	1.8	1.6	1.5	0.9	1.2	1.9	3.0	4.9	2.2	1.0	7.3	1.8	2.7	1.7	3.2	2.1	1.8
3	2.1	1.7	1.9	2.2	2.9	2.3	1.7	2.5	2.2	1.5	6.5	2.8	1.5	2.1	2.7	2.0	1.1	5.8	4.0	1.9	5.7	5.6							

Lane	Join Queue: Headway						
2	-65.5	1.9	3.8	62.9	6.8	3.3	10.0
3	-66.8	82.6	6.1	10.3	4.6		
4	21.1						

Cycle Number: 11
Time: 4:22:26.1
Lane Type: Left

Lane	1	Average	Total		
Volume	10	10.0	10.0	Red	
# For Sat Flow	4	4.0	4.0		
Sat Flow	1947	1947.0	1947.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 12

Cycle Number: 12
Time: 4:24:51.3
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	7	5	1	4.3	13.0	Green	63.6
Arrived on Green	23	22	8	17.7	53.0	Yellow	4.8
Volume	30	27	9	22.0	66.0	Red	61.1
Arrival Type	5	5	5	5.0	15.0	Total	129.5
Lost Time	2.8	-2.9		-0.1	-0.1		
# For Sat Flow	2	1		1.5	3.0		
Sat Flow	2057	1241		1649.0	3298.0		

Lane	Enter Intersection: Headway																												
1	2.0	1.4	2.7	2.2	2.4	1.2	1.9	3.7	1.9	1.5	2.7																		
2	1.8	4.2	1.5	2.2	1.7	1.8	2.6	1.8	1.9	1.4	2.7	1.7	1.5	1.0	2.9	0.7	2.2	1.7	5.4	1.9	2.1	2.2	2.3	1.0	2.9	1.6	1.5	4.4	1.6
3	1.9	2.8	2.5	1.6	2.9	1.8	3.1	1.5	1.7	1.8	1.8	2.2	1.5	1.7	6.4	2.4	1.5	2.3	1.5	1.1	2.3	2.8	1.0	4.6	5.7	1.0			

Lane	Join Queue: Headway								
2	-66.1	3.7	67.3	7.9	3.1	1.5	1.5	5.4	
3	-66.8	75.3	2.6	4.4	1.6	2.9	1.8	34.5	1.5
4	5.4								

Cycle Number: 12
Time: 4:24:38.3
Lane Type: Left

Lane	1	Average	Total		
Volume	11	11.0	11.0	Red	
# For Sat Flow	4	4.0	4.0		
Sat Flow	1571	1571.0	1571.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 13

Cycle Number: 13
Time: 4:27:00.8
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	8	9	1	6.0	18.0	Green	65.0
Arrived on Green	18	18	6	14.0	42.0	Yellow	4.7
Volume	26	27	7	20.0	60.0	Red	56.3
Arrival Type	4	4	5	4.3	13.0	Total	126.0
Lost Time	0.4	1.6		1.0	2.0		
# For Sat Flow	6	6		6.0	12.0		
Sat Flow	1612	1831		1721.5	3443.0		

Lane	Enter Intersection: Headway																										
1	1. 9	2. 0	1. 7	1. 7	2. 7	2. 0	2. 4	2. 5	2. 0	2. 5	13 .7	2. 2	1. 3	25 .1													
2	3. 2	1. 7	2. 5	1. 9	3. 4	1. 8	2. 2	1. 9	2. 7	1. 4	1. 7	1. 2	1. 1	1. 1	4. 0	1. 7	1. 2	1. 5	1. 8	4. 9	2. 7	2. 9	2. 1	1. 8	4. 9	6. 8	
3	3. 3	1. 4	2. 5	2. 2	1. 8	1. 8	2. 2	2. 2	2. 1	1. 7	3. 6	1. 8	3. 0	2. 5	3. 1	1. 9	2. 7	1. 8	1. 7	1. 0	1. 7	3. 3	3. 9	5. 6	3. 9	2. 1	2. 8

Lane	Join Queue: Headway									
2	- 69.5	11.4	4.2	5.3	55.9	6.5	6.0	3.3	7.2	1.1
3	- 67.0	9.7	64.9	3.4	4.1	5.3				
4	25.9	3.4	4.1	0.5						

Cycle Number: 13
Time: 4:26:47.5
Lane Type: Left

Lane	1	Average	Total		
Volume	14	14.0	14.0	Red	
# For Sat Flow	6	6.0	6.0		
Sat Flow	1538	1538.0	1538.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 14

Cycle Number: 14
Time: 4:29:06.8
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	10	6	4	6.7	20.0	Green	69.1
Arrived on Green	19	20	3	14.0	42.0	Yellow	4.6
Volume	29	26	7	20.7	62.0	Red	58.9
Arrival Type	4	4	2	3.3	10.0	Total	132.6
Lost Time	0.8			0.8	0.8		
# For Sat Flow	4			4.0	4.0		
Sat Flow	1694			1694.0	1694.0		

Lane	Enter Intersection: Headway																												
1	1.9	1.1	1.6	3.8	1.1	1.1.6																							
2	2.7	2.4	2.5	1.6	2.1	3.1	1.7	1.6	1.9	1.9	2.4	2.8	2.6	3.2	1.2	4.2	3.0	2.3	1.8	3.4	1.5	1.9	2.0	1.8	3.1	2.3	1.9	2.7	4.4
3	2.6	2.2	2.5	1.9	1.8	3.4	1.1	2.3	1.4	1.1	2.7	1.9	2.3	10.6	3.3	1.9	1.2	1.2	3.5	1.5	3.7	1.2	2.5	3.6	3.2	5.2			

Lane	Join Queue: Headway									
2	- 65.6	2.4	71.5	3.0	5.4	3.5	0.6	1.6	1.1	6.5
3	18.9	16.4	1.7	4.9	2.7					
4										

Cycle Number: 14
Time: 4:28:59.1
Lane Type: Left

Lane	1	Average	Total		
Volume	6	6.0	6.0	Red	
# For Sat Flow					
Sat Flow					

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 15

Cycle Number: 15
Time: 4:31:19.4
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	10	5	0	5.0	15.0	Green	66.6
Arrived on Green	15	14	6	11.7	35.0	Yellow	4.8
Volume	25	19	6	16.7	50.0	Red	61.2
Arrival Type	4	4	5	4.3	13.0	Total	132.6
Lost Time	2.4	1.8		2.1	4.2		
# For Sat Flow	6	2		4.0	8.0		
Sat Flow	1742	1565		1653.5	3307.0		

Lane	Enter Intersection: Headway																								
1	1. 9	2. 4	2. 5	1. 7	1. 9	1. 4	1. 7	2. 3	68 .2																
2	2. 8	3. 0	2. 4	2. 5	2. 7	2. 0	2. 4	2. 4	1. 5	1. 4	2. 8	1. 1	2. 0	1. 5	1. 8	2. 0	2. 0	1. 9	2. 7	4. 8	6. 5	2. 1	6. 0	7. 3	1. 4
3	2. 5	2. 2	3. 7	2. 7	2. 1	2. 5	2. 0	2. 3	3. 5	5. 2	3. 2	1. 6	10 .3	2. 9	1. 5	1. 7	3. 4	6. 6	5. 2						

Lane	Join Queue: Headway								
2	- 62.6	2.0	63.8	17.3	0.6	9.0	0.6	4.3	
3	- 67.9	80.0	2.5	2.2	2.4	4.9	0.5	6.6	0.5
4									

Cycle Number: 15
Time: 4:31:07.3
Lane Type: Left

Lane	1	Average	Total			
Volume	9	9.0	9.0	Red		
# For Sat Flow	3	3.0	3.0			
Sat Flow	2163	2163.0	2163.0			

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 16

Cycle Number: 16
Time: 4:33:32.0
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	8	9	0	5.7	17.0	Green	64.4
Arrived on Green	13	16	7	12.0	36.0	Yellow	4.6
Volume	21	25	7	17.7	53.0	Red	57.3
Arrival Type	4	4	5	4.3	13.0	Total	126.3
Lost Time	2.3	0.3		1.3	2.6		
# For Sat Flow	3	5		4.0	8.0		
Sat Flow	1770	1765		1767.5	3535.0		

Lane	Enter Intersection: Headway																								
1	1. 7	1. 8	1. 7	2. 0	2. 5	1. 8	1. 4	2. 3	1. 7	1. 2	1. 0	1. 4	1. 8	1. 0	1. 6	1. 3	44 .7								
2	2. 2	3. 0	1. 7	3. 5	2. 5	1. 8	1. 8	2. 0	2. 4	2. 1	2. 1	1. 7	6. 4	1. 7	1. 3	2. 8	4. 9	3. 9	3. 3	10 .0	5. 5				
3	2. 0	3. 0	2. 2	1. 2	2. 5	0. 9	2. 5	2. 3	2. 0	2. 3	1. 5	2. 3	1. 2	2. 1	2. 6	4. 3	4. 4	5. 5	2. 4	0. 8	2. 1	5. 8	3. 4	3. 6	2. 2

Lane	Join Queue: Headway									
2	- 58.2	67.2	6.1	2.1	2.0	5.2	30.0			
3	- 61.3	66.7	1.0	5.5	6.1	2.6	5.7	1.5	20.8	6.2
4										

Cycle Number: 16
Time: 4:33:19.5
Lane Type: Left

Lane	1	Average	Total		
Volume	17	17.0	17.0	Red	
# For Sat Flow	12	12.0	12.0		
Sat Flow	2296	2296.0	2296.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 17

Cycle Number: 17
Time: 4:35:38.3
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	7	10	0	5.7	17.0	Green	67.4
Arrived on Green	15	15	4	11.3	34.0	Yellow	4.7
Volume	22	25	4	17.0	51.0	Red	61.6
Arrival Type	4	4	5	4.3	13.0	Total	133.7
Lost Time	-1.0	-1.8		-1.4	-2.8		
# For Sat Flow	3	6		4.5	9.0		
Sat Flow	1636	1785		1710.5	3421.0		

Lane	Enter Intersection: Headway																								
1	3.9	2.2	3.5	3.3	2.3	2.2	1.8	11.6	2.3	1.9															
2	1.8	3.2	1.1	1.7	2.0	1.8	2.8	1.1	1.5	7.9	1.9	1.1	1.7	1.5	3.1	2.6	12.4	8.3	1.4	6.3	2.7	1.0			
3	1.6	1.4	1.8	1.5	2.3	1.5	2.4	2.5	1.8	1.6	1.1	2.5	2.0	1.5	1.7	3.2	3.7	3.7	2.2	4.6	1.6	1.7	2.8	6.7	8.1

Lane	Join Queue: Headway									
2	-63.6	68.5	5.9	1.7	11.2	3.0	7.5	1.1	21.2	
3	-56.8	60.4	2.9	5.1	1.9	2.3	7.6	4.5	11.5	17.7
4										

Cycle Number: 17
Time: 4:35:27.5
Lane Type: Left

Lane	1	Average	Total		
Volume	10	10.0	10.0	Red	
# For Sat Flow	3	3.0	3.0		
Sat Flow	1714	1714.0	1714.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 18

Cycle Number: 18
Time: 4:37:52.0
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	9	10	0	6.3	19.0	Green	64.2
Arrived on Green	20	16	6	14.0	42.0	Yellow	4.8
Volume	29	26	6	20.3	61.0	Red	45.3
Arrival Type	4	3	5	4.0	12.0	Total	114.3
Lost Time	0.3	0.3		0.3	0.6		
# For Sat Flow	7	5		6.0	12.0		
Sat Flow	1813	1429		1621.0	3242.0		

Lane	Enter Intersection: Headway																										
1	2.2	2.1	1.4	1.8	1.7	1.9	1.8	2.4	1.4	1.0	2.7																
2	2.3	1.9	2.0	2.0	1.2	1.3	2.0	1.7	2.9	2.1	2.7	1.9	2.1	2.4	1.5	2.4	1.5	2.1	2.5	1.3	2.8	1.6	3.0	4.7	1.3	3.9	2.6
3	2.2	2.3	3.7	2.2	2.1	3.5	2.7	2.6	1.7	1.9	2.2	1.2	1.5	2.3	3.5	2.8	2.0	2.1	2.6	1.1	1.7	3.4	2.1	4.2	0.7	7.8	

Lane	Join Queue: Headway										
2	-	4.7	1.2	59.9	3.8	2.6	1.8	9.0	6.7	5.0	
3	64.3	4.5	5.4	8.7	11.8						
4	6.0	5.5	2.8								
	22.1										

Cycle Number: 18
Time: 4:37:37.1
Lane Type: Left

Lane	1	Average	Total			
Volume	11	11.0	11.0	Red		
# For Sat Flow	6	6.0	6.0			
Sat Flow	2137	2137.0	2137.0			

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 19

Cycle Number: 19
Time: 4:39:46.3
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	10	5	3	6.0	18.0	Green	57.9
Arrived on Green	13	13	-1	8.3	25.0	Yellow	4.9
Volume	23	18	2	14.3	43.0	Red	12.6
Arrival Type	2	3	1	2.0	6.0	Total	75.4
Lost Time	0.3	1.2		0.8	1.5		
# For Sat Flow	3	1		2.0	4.0		
Sat Flow	1588	1714		1651.0	3302.0		

Lane	Enter Intersection: Headway																							
1	3.4	1.5	1.1	2.5	1.9	2.1	1.0	3.1	71.4															
2	3.1	3.6	1.4	1.2	2.2	2.7	1.9	1.7	1.8	1.6	2.3	1.6	1.5	2.5	1.8	1.1	1.5	2.3	1.7	2.6	6.3	1.3	1.8	
3	1.7	2.4	2.8	2.6	2.1	2.8	8.2	2.5	1.7	2.3	4.0	1.5	1.7	2.9	5.2	2.8	2.6	2.0						

Lane	Join Queue: Headway				
2	2.1	2.7	0.7	6.7	
3	2.6	2.5	0.6		
4					

Cycle Number: 19
Time: 4:39:46.4
Lane Type: Left

Lane	1	Average	Total		
Volume	9	9.0	9.0	Red	
# For Sat Flow	4	4.0	4.0		
Sat Flow	1778	1778.0	1778.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 20

Cycle Number: 20
Time: 4:41:01.7
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	4	3	0	2.3	7.0	Green	8.4
Arrived on Green	-2	-2	0	-1.3	-4.0	Yellow	4.7
Volume	2	1	0	1.0	3.0	Red	43.7
Arrival Type	1	1		1.0	2.0	Total	56.8
Lost Time							
# For Sat Flow							
Sat Flow							

Lane	Enter Intersection: Headway			
1	2.1	1.0	1.4	2.3
2	4.1	2.0		
3	4.4			

Lane	Join Queue: Headway						
2	- 11.0	11.0	6.3	7.2	5.0	8.1	16.4
3	- 12.5	1.2	11.6	7.8	7.1	6.9	15.6
4	32.0						

Cycle Number: 20
Time: 4:41:58.5
Lane Type: Left

Lane	1	Average	Total			
Volume	8	8.0	8.0	Red		
# For Sat Flow	4	4.0	4.0			
Sat Flow	2002	2002.0	2002.0			

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 21

Cycle Number: 21
Time: 4:41:58.5
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	7	7	1	5.0	15.0	Green	77.7
Arrived on Green	28	26	6	20.0	60.0	Yellow	4.6
Volume	35	33	7	25.0	75.0	Red	60.2
Arrival Type	4	4	5	4.3	13.0	Total	142.5
Lost Time	-1.8	0.3		-0.8	-1.5		
# For Sat Flow	6	5		5.5	11.0		
Sat Flow	1742	1500		1621.0	3242.0		

Lane	Enter Intersection: Headway																												
1	2 . 0	1 . 2	2 . 7	1 . 6	2 . 0	2 . 5	1 . 6	1 . 3	1 . 5	2 . 0	6 6 2																		
2	1 . 8	1 . 0	2 . 5	1 . 2	2 . 2	1 . 5	2 . 2	2 . 9	2 . 1	1 . 5	2 . 4	3 . 7	1 . 3	1 . 8	2 . 4	1 . 9	2 . 6	3 . 8	1 . 6	1 . 4	4 . 3	1 . 5	2 . 0	1 . 3	1 . 4	2 . 3	1 . 0	1 . 7	1 . 5
3	2 . 7	2 . 7	1 . 1	3 . 4	1 . 4	3 . 1	2 . 9	2 . 5	2 . 1	1 . 3	3 . 4	2 . 2	2 . 3	3 . 1	2 . 2	2 . 4	1 . 9	2 . 1	0 . 3	1 . 7	1 . 5	1 . 4	2 . 6	1 . 5	1 . 7	1 . 5	2 . 3	1 . 8	

Lane	Join Queue: Headway										
2	- 77.1	81.6	5.6	2.5	5.2	1.5	1.4	4.2	4.3	4.8	2.0
3	4.8	5.8	2.8	1.1	0.5	6.2	3.2	2.5			
4	47.4										

Cycle Number: 21
Time: 4:44:07.1
Lane Type: Left

Lane	1	Average	Total		
Volume	11	11.0	11.0	Red	
# For Sat Flow	6	6.0	6.0		
Sat Flow	1981	1981.0	1981.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 22

Cycle Number: 22
Time: 4:44:20.9
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	11	8	1	6.7	20.0	Green	65.6
Arrived on Green	20	20	2	14.0	42.0	Yellow	4.6
Volume	31	28	3	20.7	62.0	Red	54.1
Arrival Type	4	4	4	4.0	12.0	Total	124.3
Lost Time	1.7	3.5		2.6	5.2		
# For Sat Flow	7	5		6.0	12.0		
Sat Flow	2032	2022		2027.0	4054.0		

Lane	Enter Intersection: Headway																												
1	2.7	2.5	2.0	1.7	2.6	1.1	2.3	1.0	1.9	1.7	1.4	1.6 7	2.7	2.4	2.4 5	5.6													
2	2.0	2.1	2.4	2.3	1.5	1.8	1.4	1.5	2.4	1.9	1.9	1.5	1.5	2.4	1.8	2.7	2.6	1.4	3.1	3.9	2.1	1.9	1.7	0.8	3.7	1.9	1.0	1.5	2.2
3	2.1	2.6	2.6	3.2	1.2	2.1	2.2	1.6	1.8	2.0	2.5	1.4	1.6	2.2	3.5	2.2	2.7	2.4	1.3	3.8	1.5	2.7	1.5	3.0	5.0	1.5	3.4		

Lane	Join Queue: Headway								
2	- 60.6	62.0	2.8	1.7	6.8	5.2	3.4	6.3	14.1
3	- 63.0	66.4	3.5	4.2	7.7	5.0	7.1	6.2	8.7
4									

Cycle Number: 22
Time: 4:46:16.1
Lane Type: Left

Lane	1	Average	Total		
Volume	16	16.0	16.0	Red	
# For Sat Flow	7	7.0	7.0		
Sat Flow	2128	2128.0	2128.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 23

Cycle Number: 23
Time: 4:46:25.2
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	9	9	0	6.0	18.0	Green	71.1
Arrived on Green	22	21	2	15.0	45.0	Yellow	4.6
Volume	31	30	2	21.0	63.0	Red	60.0
Arrival Type	4	4	5	4.3	13.0	Total	135.7
Lost Time	-1.9	0.4		-0.8	-1.5		
# For Sat Flow	8	5		6.5	13.0		
Sat Flow	1565	1488		1526.5	3053.0		

Lane	Enter Intersection: Headway																														
1	2.4	2.6	1.6	2.7	2.1	1.9	2.0	2.0	1.8	6.5																					
2	1.9	1.3	2.5	1.6	2.5	2.5	2.4	2.2	0.8	4.3	2.2	1.5	2.4	2.4	1.6	2.0	3.7	1.5	0.5	1.9	3.7	3.4	2.6	1.1	1.9	5.4	2.5	2.5	1.6	1.7	4.6
3	1.7	1.3	4.5	2.6	1.8	2.7	4.0	1.9	1.7	1.6	1.5	1.7	2.2	3.3	2.5	2.8	2.7	2.3	1.8	1.6	1.6	1.3	3.7	1.9	1.8	2.9	1.4	4.4	2.5	4.2	

Lane	Join Queue: Headway									
2	-68.5	0.9	2.7	1.6	65.9	4.1	12.7	11.7	0.5	14.4
3	-61.7	64.9	3.0	4.3	5.0	19.3				
4	26.4	1.2	2.6							

Cycle Number: 23
Time: 4:48:27.0
Lane Type: Left

Lane	1	Average	Total		
Volume	10	10.0	10.0	Red	
# For Sat Flow	4	4.0	4.0		
Sat Flow	1765	1765.0	1765.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 24

Cycle Number: 24
Time: 4:48:40.9
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	10	6	3	6.3	19.0	Green	65.5
Arrived on Green	20	20	5	15.0	45.0	Yellow	4.8
Volume	30	26	8	21.3	64.0	Red	58.1
Arrival Type	4	5	4	4.3	13.0	Total	128.4
Lost Time	1.5	-1.9		-0.2	-0.4		
# For Sat Flow	6	1		3.5	7.0		
Sat Flow	1687	1286		1486.5	2973.0		

Lane	Enter Intersection: Headway																													
1	1.8	2.0	2.5	2.2	2.0	1.8	2.2	1.3	2.3	1.0																				
2	2.0	3.7	1.1	3.4	1.9	2.5	1.8	1.1	1.1	3.1	1.1	3.0	3.9	0.3	2.3	1.2	1.7	0.9	2.5	3.5	1.0	3.4	3.0	1.2	1.3	4.7	2.2	2.1	2.0	3.9
3	2.1	3.7	1.3	2.2	2.8	2.1	2.2	1.8	2.9	1.5	2.8	2.3	3.8	7.3	1.3	1.2	1.1	4.3	3.3	1.7	1.3	1.1	3.8	3.5	2.4	2.2				

Lane	Join Queue: Headway														
2	- 69.3	0.5	10.6	1.0	61.8	3.1	1.6	4.3	0.9	1.9	2.3	8.4	1.7	27.1	
3	5.1	3.2	1.6	2.8	0.4	1.8	4.5	4.2	1.4	11.1	15.8				
4	37.8														

Cycle Number: 24
Time: 4:50:37.8
Lane Type: Left

Lane	1	Average	Total			
Volume	10	10.0	10.0	Red		
# For Sat Flow	5	5.0	5.0			
Sat Flow	1873	1873.0	1873.0			

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 25

Cycle Number: 25
Time: 4:50:49.3
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	14	11	1	8.7	26.0	Green	64.9
Arrived on Green	14	16	6	12.0	36.0	Yellow	4.9
Volume	28	27	7	20.7	62.0	Red	63.9
Arrival Type	3	4	5	4.0	12.0	Total	133.7
Lost Time	3.2	-0.6		1.3	2.6		
# For Sat Flow	9	9		9.0	18.0		
Sat Flow	1988	1841		1914.5	3829.0		

Lane	Enter Intersection: Headway																											
1	1.8	2.0	3.1	1.5	2.3	1.5	40.8																					
2	1.4	3.6	2.1	3.4	1.2	2.7	1.1	2.2	2.5	2.2	2.5	1.7	1.7	1.3	1.4	2.4	6.2	0.9	1.3	2.0	1.2	1.6	3.6	2.1	4.8	3.1	2.0	7.1
3	1.5	1.1	2.6	2.1	1.4	3.3	2.5	2.0	0.8	2.1	2.0	1.9	1.6	1.7	2.6	1.7	1.8	2.8	1.8	0.8	2.7	0.7	5.3	9.6	2.8	3.2	2.8	

Lane	Join Queue: Headway									
2	-67.8	16.7	0.6	55.3	5.3	2.1	5.7	2.8	42.3	0.5
3	-67.4	0.7	75.2	2.0	1.3	1.7	4.0	2.6		
4	3.3									

Cycle Number: 25
Time: 4:52:47.3
Lane Type: Left

Lane	1	Average	Total		
Volume	7	7.0	7.0	Red	
# For Sat Flow	1	1.0	1.0		
Sat Flow	1581	1581.0	1581.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
------	---------------------

Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 26

Cycle Number: 26
Time: 4:53:03.0
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	10	8	1	6.3	19.0	Green	63.2
Arrived on Green	21	18	6	15.0	45.0	Yellow	4.8
Volume	31	26	7	21.3	64.0	Red	45.1
Arrival Type	4	4	5	4.3	13.0	Total	113.1
Lost Time	-1.2	1.9		0.4	0.7		
# For Sat Flow	8	2		5.0	10.0		
Sat Flow	1973	2000		1986.5	3973.0		

Lane	Enter Intersection: Headway																													
1	4.0	3.5	3.1	1.9	60.2	1.7																								
2	1.0	1.3	2.3	1.4	2.2	2.4	1.7	1.4	1.9	1.6	1.5	1.9	1.4	1.6	1.1	2.2	2.9	2.1	0.3	1.9	2.0	3.9	2.4	2.0	1.5	2.1	1.6	1.8	3.5	4.2
3	1.1	1.4	5.7	0.9	1.3	2.3	1.3	2.2	3.3	2.9	1.2	1.7	3.4	2.3	2.2	0.8	2.4	1.8	1.3	6.9	2.5	2.6	3.2	2.9	5.0					

Lane	Join Queue: Headway						
2	-67.0	3.7	2.7	5.9	2.2	58.1	26.0
3	9.3						
4	44.6						

Cycle Number: 26
Time: 4:54:56.0
Lane Type: Left

Lane	1	Average	Total		
Volume	6	6.0	6.0	Red	
# For Sat Flow					
Sat Flow					

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 27

Cycle Number: 27
Time: 4:54:56.0
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	7	1	1	3.0	9.0	Green	79.2
Arrived on Green	26	22	11	19.7	59.0	Yellow	4.7
Volume	33	23	12	22.7	68.0	Red	61.5
Arrival Type	4	5	5	4.7	14.0	Total	145.4
Lost Time							
# For Sat Flow							
Sat Flow							

Lane	Enter Intersection: Headway																																
1	2.2	2.1	1.3	1.1	1.1	1.3	7.4	3.7.4																									
2	2.8	2.2	2.2	2.1	0.8	2.1	1.9	4.8	1.3	4.8	0.9	1.9	4.0	7.1	3.4	0.9	1.1	1.5	1.1	4.2	1.0.8	1.3	2.1	1.8	1.3	1.3	1.3	2.9	1.1	4.1	1.6	1.1	1.4
3	2.9	7.0	2.0	2.2	1.6	8.1	1.5	3.2	2.4	1.4	1.4	4.3	4.1	7.8	3.9	2.7	2.9	4.2	7.3	0.7	3.0	3.1											

Lane	Join Queue: Headway									
2	3.0	5.7	13.7	0.7	7.1	6.8	0.7	0.6	0.6	0.7
3	5.9	14.2	9.2	3.9	8.2	14.7	4.6			
4	25.0	3.2								

Cycle Number: 27
Time: 4:57:07.0
Lane Type: Left

Lane	1	Average	Total		
Volume	8	8.0	8.0	Red	
# For Sat Flow	2	2.0	2.0		
Sat Flow	2997	2997.0	2997.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721406
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Start Date : 5/30/2018
Page No : 28

Cycle Number: 28
Time: 4:57:21.4
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	10	7	2	6.3	19.0	Green	65.0
Arrived on Green	19	19	7	15.0	45.0	Yellow	4.8
Volume	29	26	9	21.3	64.0	Red	60.7
Arrival Type	4	4	5	4.3	13.0	Total	130.5
Lost Time	0.2	1.8		1.0	2.0		
# For Sat Flow	9	4		6.5	13.0		
Sat Flow	1841	1735		1788.0	3576.0		

Lane	Enter Intersection: Headway																												
1	2.1	1.9	2.2	1.7	1.5	1.6	1.2	3.9	3.8.0	2.8																			
2	1.7	1.6	2.9	2.0	2.4	2.4	1.5	1.8	1.8	1.8	2.6	1.3	2.0	1.0	2.6	2.2	4.1	1.4	2.8	0.7	2.0	1.3	2.5	2.3	5.6	3.0	2.1	2.5	2.7
3	2.5	2.5	3.8	1.3	2.5	1.9	1.7	2.2	1.8	2.2	1.3	2.1	3.7	3.1	9.1	2.2	3.0	1.5	1.9	3.6	1.5	2.4	1.2	1.7	4.1	1.2			

Lane	Join Queue: Headway											
2	- 69.1	5.7	6.8	63.9	2.1	1.7	5.6	1.4	11.0	21.0	4.6	1.2
3	- 65.1	69.8	4.4	1.3	2.1	2.4	4.0	1.6	1.9	3.0	13.0	
4	26.4	2.0										

Cycle Number: 28
Time: 4:59:16.5
Lane Type: Left

Lane	1	Average	Total		
Volume	10	10.0	10.0	Red	
# For Sat Flow	4	4.0	4.0		
Sat Flow	1748	1748.0	1748.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 29

Cycle Number: 29
Time: 4:59:31.9
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	12	11	2	8.3	25.0	Green	64.0
Arrived on Green	18	16	6	13.3	40.0	Yellow	4.6
Volume	30	27	8	21.7	65.0	Red	70.9
Arrival Type	4	4	5	4.3	13.0	Total	139.5
Lost Time	0.9	0.3		0.6	1.2		
# For Sat Flow	8	7		7.5	15.0		
Sat Flow	1800	1636		1718.0	3436.0		

Lane	Enter Intersection: Headway																												
1	2.0	1.5	2.0	2.2	0.9	3.3																							
2	2.2	2.0	2.3	2.5	1.7	2.2	3.4	2.0	1.1	1.6	2.2	1.8	1.7	2.5	2.7	1.6	1.5	5.4	1.9	3.7	1.8	3.9	2.5	1.7	1.9	1.4	2.1	2.4	1.3
3	2.3	2.9	2.6	1.4	1.9	2.5	1.0	2.1	2.9	3.3	1.7	2.1	2.0	1.3	3.5	1.6	1.8	2.8	8.0	2.5	1.4	1.7	1.9	4.2	1.7	1.8	4.3		

Lane	Join Queue: Headway													
2	-68.5	12.8	2.2	58.3	3.1	4.3	9.3	5.6	2.8	8.9	22.2	1.9	2.4	1.6
3	-67.3	69.8	3.9	2.7	4.1	2.0	7.1	5.8	7.5	2.4	26.2			
4	17.7	2.8	3.6											

Cycle Number: 29
Time: 5:01:36.7
Lane Type: Left

Lane	1	Average	Total			
Volume	6	6.0	6.0	Red		
# For Sat Flow	2	2.0	2.0			
Sat Flow	1722	1722.0	1722.0			

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 30

Cycle Number: 30
Time: 5:01:51.4
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	14	11	3	9.3	28.0	Green	53.4
Arrived on Green	14	17	1	10.7	32.0	Yellow	4.9
Volume	28	28	4	20.0	60.0	Red	60.2
Arrival Type	3	4	2	3.0	9.0	Total	118.5
Lost Time	0.8	0.7		0.8	1.5		
# For Sat Flow	9	7		8.0	16.0		
Sat Flow	2000	1895		1947.5	3895.0		

Lane	Enter Intersection: Headway																							
1	2.0	2.8	2.9	2.1	1.7	2.2	1.5	1.5	1.5	1.7	3.8													
2	1.6	2.7	1.8	1.9	1.9	1.2	1.7	1.4	1.4	1.9	2.5	2.1	2.1	2.2	2.0	1.5	2.3	2.2	1.7	4.1	1.2	1.1	1.7	2.2
3	2.6	1.9	2.2	1.6	1.9	1.2	4.0	1.1	1.1	1.1	1.1	3.1	1.4	2.0	1.8	2.3	1.5	3.7	1.8	1.3	1.1	1.1	3.9	1.1

Lane	Join Queue: Headway											
2	-	57.9	11.0	50.3	1.2	6.9	2.7	3.4	3.5	7.3	1.3	9.5
3	-	54.5	58.2	4.6	3.5	1.0	3.7	2.5	4.0	4.9	1.1	18.9
4	48.0	6.0										

Cycle Number: 30
Time: 5:03:37.4
Lane Type: Left

Lane	1	Average	Total		
Volume	11	11.0	11.0	Red	
# For Sat Flow	5	5.0	5.0		
Sat Flow	2161	2161.0	2161.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 31

Cycle Number: 31
Time: 5:03:49.9
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	12	11	2	8.3	25.0	Green	66.1
Arrived on Green	16	16	12	14.7	44.0	Yellow	4.6
Volume	28	27	14	23.0	69.0	Red	60.7
Arrival Type	3	4	5	4.0	12.0	Total	131.4
Lost Time	2.3	4.3		3.3	6.6		
# For Sat Flow	9	9		9.0	18.0		
Sat Flow	1780	2038		1909.0	3818.0		

Lane	Enter Intersection: Headway																											
1	2.0	2.1	2.2	3.6	1.9	1.7	1.6	1.6	1.7																			
2	1.7	3.6	1.6	3.5	2.1	1.9	1.6	1.7	2.0	2.1	2.0	1.5	3.3	2.0	1.5	1.5	1.7	1.8	1.7	2.0	2.5	3.6	4.1	2.1	1.2	5.0	1.5	5.2
3	1.8	5.3	2.4	1.8	1.4	1.8	1.6	1.7	2.1	1.7	2.2	1.1	1.1	1.1	1.1	2.5	3.4	5.0	2.8	4.8	2.5	2.4	1.2	2.5	2.3	6.5	3.7	

Lane	Join Queue: Headway										
2	- 67.4	8.5	7.0	58.1	2.3	4.4	2.8	8.4	7.3	1.5	15.1
3	- 66.9	8.7	6.7	56.5	4.8	4.1	3.3	3.6	5.8	20.7	
4	38.9	1.3									

Cycle Number: 31
Time: 5:05:48.2
Lane Type: Left

Lane	1	Average	Total			
Volume	9	9.0	9.0	Red		
# For Sat Flow	5	5.0	5.0			
Sat Flow	2121	2121.0	2121.0			

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 32

Cycle Number: 32
Time: 5:06:01.3
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	11	10	2	7.7	23.0	Green	62.7
Arrived on Green	18	15	4	12.3	37.0	Yellow	4.7
Volume	29	25	6	20.0	60.0	Red	62.1
Arrival Type	4	4	4	4.0	12.0	Total	129.5
Lost Time	0.7	-2.7		-1.0	-2.0		
# For Sat Flow	8	5		6.5	13.0		
Sat Flow	2014	1475		1744.5	3489.0		

Lane	Enter Intersection: Headway																												
1	2.0	3.4	1.7	2.1	1.5	1.8	2.7	1.7																					
2	1.0	2.0	3.4	1.4	1.3	1.9	2.5	1.9	1.5	1.5	2.3	1.4	2.4	1.7	1.5	2.2	3.5	2.9	0.8	2.1	1.9	2.2	3.2	2.2	1.3	4.2	6.0	2.6	2.8
3	0.9	1.9	2.7	1.5	1.7	3.2	2.1	2.5	2.7	2.0	2.3	1.6	2.8	1.6	5.0	1.5	1.8	2.1	1.3	2.1	4.5	10.7	2.7	2.2	2.2				

Lane	Join Queue: Headway									
2	-66.0	3.7	7.2	3.4	54.9	1.3	2.4	1.9	5.6	7.2
3	-65.2	14.0	54.7	1.4	5.3	4.7	5.3	19.6	17.1	
4										

Cycle Number: 32
Time: 5:07:56.7
Lane Type: Left

Lane	1	Average	Total		
Volume	8	8.0	8.0	Red	
# For Sat Flow	4	4.0	4.0		
Sat Flow	1842	1842.0	1842.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 33

Cycle Number: 33
Time: 5:08:10.8
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	10	9	0	6.3	19.0	Green	63.2
Arrived on Green	17	14	11	14.0	42.0	Yellow	4.9
Volume	27	23	11	20.3	61.0	Red	55.8
Arrival Type	4	4	5	4.3	13.0	Total	123.9
Lost Time	-0.1	-2.6		-1.4	-2.7		
# For Sat Flow	18	13		15.5	31.0		
Sat Flow	1543	1235		1389.0	2778.0		

Lane	Enter Intersection: Headway																										
1	2. 1	2. 6	1. 8	2. 4	2. 3	1. 7	1. 8	1. 0	1. 0	2. 0	65 .6																
2	3. 3	1. 5	2. 2	2. 3	3. 5	2. 3	2. 6	1. 9	1. 0	3. 6	2. 8	1. 5	3. 5	1. 5	2. 1	1. 1	2. 4	2. 2	1. 7	1. 6	4. 3	2. 4	1. 8	1. 2	7. 0	2. 1	3. 8
3	2. 1	2. 6	1. 5	2. 8	2. 7	3. 5	2. 6	1. 5	1. 7	2. 5	1. 7	3. 8	1. 6	2. 5	9. 5	2. 2	2. 1	3. 1	6. 3	0. 7	1. 9	3. 6	1. 0				

Lane	Join Queue: Headway											
2	- 57.3	0.5	4.1	10.0	46.8	4.1	1.5	5.1	3.2	5.9	5.2	6.0
3	- 56.1	58.5	2.4	8.5	2.9	1.6	5.5	5.7	1.8	2.4	16.1	
4	5.9	1.7										

Cycle Number: 33
Time: 5:10:06.8
Lane Type: Left

Lane	1	Average	Total		
Volume	11	11.0	11.0	Red	
# For Sat Flow	6	6.0	6.0		
Sat Flow	2215	2215.0	2215.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 34

Cycle Number: 34
Time: 5:10:14.7
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	12	11	2	8.3	25.0	Green	71.0
Arrived on Green	18	19	3	13.3	40.0	Yellow	4.7
Volume	30	30	5	21.7	65.0	Red	55.0
Arrival Type	3	4	3	3.3	10.0	Total	130.7
Lost Time	-1.1	-3.0		-2.1	-4.1		
# For Sat Flow	6	7		6.5	13.0		
Sat Flow	1394	1416		1405.0	2810.0		

Lane	Enter Intersection: Headway																													
1	2.1	2.0	3.2	2.4	2.8	1.8	5.6	9.8																						
2	1.4	4.9	1.0	1.8	2.2	2.7	3.7	1.7	2.2	3.0	1.9	1.7	3.6	2.2	1.6	2.2	2.2	1.5	2.1	1.7	2.0	1.9	1.5	1.7	2.8	2.9	4.6	2.0	4.7	3.1
3	1.6	2.2	2.4	1.1	2.2	6.8	1.5	2.3	1.7	1.2	2.1	2.0	3.1	2.9	2.1	1.8	4.6	5.3	1.8	4.1	2.3	1.5	0.8	2.2	1.8	2.7	1.8	1.9	1.4	6.6

Lane	Join Queue: Headway									
2	-66.4	9.0	59.0	2.3	2.8	2.2	7.6	6.0	15.1	5.9
3	-54.9	56.9	3.2	6.0	3.5	2.9	11.1	11.3	0.6	1.4
4	47.6									

Cycle Number: 34
Time: 5:12:17.0
Lane Type: Left

Lane	1	Average	Total		
Volume	8	8.0	8.0	Red	
# For Sat Flow	2	2.0	2.0		
Sat Flow	1564	1564.0	1564.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 35

Cycle Number: 35
Time: 5:12:25.4
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	10	10	1	7.0	21.0	Green	70.2
Arrived on Green	23	20	5	16.0	48.0	Yellow	4.7
Volume	33	30	6	23.0	69.0	Red	61.0
Arrival Type	4	4	5	4.3	13.0	Total	135.9
Lost Time	0.0	-0.1		-0.1	-0.1		
# For Sat Flow	6	7		6.5	13.0		
Sat Flow	2097	1491		1794.0	3588.0		

Lane	Enter Intersection: Headway																															
1	2.0	2.9	1.6	2.7	2.4	1.9	1.9	2.4																								
2	1.8	1.8	2.0	1.3	1.7	2.5	1.6	1.7	1.2	1.6	1.7	1.9	1.6	3.4	2.5	2.9	1.9	2.9	4.1	2.9	1.6	2.2	1.6	1.8	1.5	2.4	2.3	1.4	4.4	1.4	4.0	3.5
3	1.9	4.4	1.4	1.8	2.1	3.4	2.4	3.1	1.7	2.6	1.1	1.6	1.9	2.1	1.2	1.1	3.5	1.9	2.0	1.9	1.5	4.6	2.9	1.4	1.1	5.1	1.2	1.6				

Lane	Join Queue: Headway										
2	-73.9	0.7	83.1	2.3	5.6	2.3	4.4	1.5	2.2	5.8	15.6
3	-67.3	1.2	70.7	1.0	1.3	0.9	1.6	3.8	8.1	10.4	
4	24.2										

Cycle Number: 35
Time: 5:14:27.0
Lane Type: Left

Lane	1	Average	Total		
Volume	8	8.0	8.0	Red	
# For Sat Flow	4	4.0	4.0		
Sat Flow	1666	1666.0	1666.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 36

Cycle Number: 36

Time: 5:14:41.4

Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	11	10	1	7.3	22.0	Green	62.2
Arrived on Green	19	21	0	13.3	40.0	Yellow	5.0
Volume	30	31	1	20.7	62.0	Red	58.7
Arrival Type	4	4	1	3.0	9.0	Total	125.9
Lost Time	5.6	-1.1		2.3	4.5		
# For Sat Flow	7	6		6.5	13.0		
Sat Flow	2154	1543		1848.5	3697.0		

Lane	Enter Intersection: Headway																													
1	2.2	1.2	3.1	2.7	0.8	2.0	1.1	1.8	2.3	1.1	5.2																			
2	3.9	4.1	1.9	2.3	0.6	1.6	1.5	1.7	2.5	1.8	2.0	1.8	2.0	1.4	1.8	2.6	1.9	2.4	2.4	1.7	1.9	1.8	3.0	1.7	1.6	1.5	5.3	1.1	1.7	
3	2.8	1.3	1.6	2.5	1.9	3.0	2.0	1.8	2.3	3.0	1.5	1.7	1.7	2.4	1.8	1.5	1.4	2.6	1.5	1.9	2.7	3.5	1.1	3.6	1.9	2.4	1.8	2.2	1.7	

Lane	Join Queue: Headway											
2	-	15.7	53.7	3.3	4.7	3.1	6.3	5.5	5.7			
3	-	15.9	53.4	0.6	3.9	1.1	6.2	4.0	3.2	4.4	2.0	1.0
4												

Cycle Number: 36

Time: 5:16:36.1

Lane Type: Left

Lane	1	Average	Total		
Volume	11	11.0	11.0	Red	
# For Sat Flow	6	6.0	6.0		
Sat Flow	2343	2343.0	2343.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 37

Cycle Number: 37
Time: 5:16:47.3
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	9	12	0	7.0	21.0	Green	67.8
Arrived on Green	24	17	9	16.7	50.0	Yellow	4.8
Volume	33	29	9	23.7	71.0	Red	46.4
Arrival Type	4	3	5	4.0	12.0	Total	119.0
Lost Time	0.5	2.1		1.3	2.6		
# For Sat Flow	6	9		7.5	15.0		
Sat Flow	1815	1770		1792.5	3585.0		

Lane	Enter Intersection: Headway																																
1	1.7	1.7	2.0	2.2	1.5	1.8	1.6	1.0	2.1	1.1	2.1	3.8.2																					
2	2.6	2.0	2.2	1.6	2.0	1.7	2.1	1.7	1.3	2.2	2.0	2.6	3.4	2.7	1.4	2.0	2.1	1.2	1.8	2.0	1.3	4.0	1.1	1.5	2.7	1.5	2.5	2.4	2.3	3.2	1.4	0.9	2.1
3	2.7	2.0	2.2	3.3	1.7	3.2	2.2	2.2	1.3	2.2	1.1	1.2	2.5	1.9	2.3	2.5	3.6	2.7	1.8	1.3	2.1	3.4	4.4	0.0	5.2	5.7	2.4	3.4	2.0	2.3			

Lane	Join Queue: Headway												
2	-	63.7	0.4	6.6	59.5	5.8	8.3	4.7	6.4	6.8	2.2	2.1	
3	-	61.3	0.8	4.6	61.5	3.5	1.8	2.1	8.1	4.9	9.6	2.0	2.1
4	-	60.4	89.6										

Cycle Number: 37
Time: 5:18:46.3
Lane Type: Left

Lane	1	Average	Total		
Volume	12	12.0	12.0	Red	
# For Sat Flow	4	4.0	4.0		
Sat Flow	2404	2404.0	2404.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 38

Cycle Number: 38
Time: 5:18:46.3
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	11	13	2	8.7	26.0	Green	79.0
Arrived on Green	25	19	9	17.7	53.0	Yellow	4.7
Volume	36	32	11	26.3	79.0	Red	56.5
Arrival Type	4	3	4	3.7	11.0	Total	140.2
Lost Time	4.0	1.4		2.7	5.4		
# For Sat Flow	5	6		5.5	11.0		
Sat Flow	1935	1674		1804.5	3609.0		

Lane	Enter Intersection: Headway																																			
1	2	1	2	1	3	1	2	3	2	2	6																									
	0	6	1	8	3	6	0	1	1	0	1																									
2	4	2	3	1	1	1	1	2	2	2	1	1	2	1	1	1	1	2	2	2	1	1	3	2	1	2	2	5	1	1	2	2	3	3		
	4	5	0	5	5	9	3	4	2	0	5	7	7	0	9	9	4	5	3	0	1	4	7	0	9	0	6	5	5	5	0	7	1	6	0	9
3	4	1	2	2	3	2	1	2	2	2	2	1	2	2	6	3	4	2	1	1	1	1	2	2	4	1	2	6	1	2	3	2				
	6	0	3	1	0	2	0	4	2	1	0	7	1	5	7	0	2	3	3	9	3	7	5	1	4	1	1	1	7	2	5	0				

Lane	Join Queue: Headway													
2	-	86.4	8.6	1.7	1.1	2.7	1.8	0.7	1.5	3.6	4.1	3.4	8.7	
3	82.1	4.5	2.3	2.1	5.9	1.7	2.2	4.6	4.0	6.8				
4	29.1	7.7												

Cycle Number: 38
Time: 5:20:56.4
Lane Type: Left

Lane	1	Average	Total		
Volume	11	11.0	11.0	Red	
# For Sat Flow	4	4.0	4.0		
Sat Flow	1438	1438.0	1438.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 39

Cycle Number: 39
Time: 5:21:06.5
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	13	9	2	8.0	24.0	Green	67.8
Arrived on Green	19	21	3	14.3	43.0	Yellow	4.8
Volume	32	30	5	22.3	67.0	Red	57.1
Arrival Type	3	4	3	3.3	10.0	Total	129.7
Lost Time	-1.4	0.3		-0.6	-1.1		
# For Sat Flow	10	7		8.5	17.0		
Sat Flow	1667	1762		1714.5	3429.0		

Lane	Enter Intersection: Headway																															
1	1.8	2.2	1.5	4.8	1.2	2.1	2.3	2.2	9.3	5.1																						
2	1.8	1.3	3.1	1.1	2.4	1.0	3.1	1.7	2.5	0.8	4.1	1.5	1.8	2.7	1.1	1.4	0.9	4.5	1.4	3.1	1.4	1.8	1.4	1.6	5.2	2.7	5.3	0.7	3.6	3.5	2.8	1.1
3	1.9	3.7	0.6	2.2	2.2	2.4	1.7	1.3	2.6	2.2	1.9	1.2	1.4	1.6	1.9	3.0	2.8	2.1	1.4	1.5	1.8	1.4	1.1	1.0	3.9	3.1	1.9	4.2	2.3	3.8		

Lane	Join Queue: Headway									
2	-67.0	3.0	71.7	6.2	2.2	3.5	4.2	3.9	3.5	
3	-66.3	2.9	75.2	6.2	2.8	6.7	5.9	0.7	1.5	20.0
4										

Cycle Number: 39
Time: 5:23:06.6
Lane Type: Left

Lane	1	Average	Total		
Volume	10	10.0	10.0	Red	
# For Sat Flow	4	4.0	4.0		
Sat Flow	1839	1839.0	1839.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 40

Cycle Number: 40
Time: 5:23:16.2
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	9	10	0	6.3	19.0	Green	68.8
Arrived on Green	17	20	3	13.3	40.0	Yellow	4.7
Volume	26	30	3	19.7	59.0	Red	59.4
Arrival Type	4	4	5	4.3	13.0	Total	132.9
Lost Time	3.2	1.8		2.5	5.0		
# For Sat Flow	7	6		6.5	13.0		
Sat Flow	1669	1756		1712.5	3425.0		

Lane	Enter Intersection: Headway																											
1	1.9	2.6	2.3	2.2	1.9	1.4	2.0	1.4																				
2	2.4	4.5	2.2	2.7	2.6	4.6	1.6	1.3	1.1	1.5	1.6	1.6	2.9	2.3	2.3	1.9	2.3	1.9	4.3	1.5	3.4	2.0	2.9	4.7	1.7	2.4		
3	2.4	2.8	2.1	2.7	1.7	2.2	1.6	1.8	2.8	3.0	2.2	2.4	1.9	1.5	1.1	3.1	1.8	1.1	1.1	2.1	2.2	2.1	1.1	1.3	3.2	2.0	5.7	1.7

Lane	Join Queue: Headway									
2	- 71.5	3.5	2.1	16.3	54.6	12.0	0.5	0.6	8.6	2.6
3	- 65.3	5.8	65.0	2.5	3.7	11.9				
4										

Cycle Number: 40
Time: 5:25:16.2
Lane Type: Left

Lane	1	Average	Total		
Volume	8	8.0	8.0	Red	
# For Sat Flow	3	3.0	3.0		
Sat Flow	2024	2024.0	2024.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
------	---------------------

Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 41

Cycle Number: 41
Time: 5:25:29.1
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	10	6	0	5.3	16.0	Green	65.7
Arrived on Green	21	18	7	15.3	46.0	Yellow	4.8
Volume	31	24	7	20.7	62.0	Red	60.3
Arrival Type	4	4	5	4.3	13.0	Total	130.8
Lost Time	-0.4			-0.4	-0.4		
# For Sat Flow	5			5.0	5.0		
Sat Flow	1698			1698.0	1698.0		

Lane	Enter Intersection: Headway																														
1	2.4	3.2	1.7	3.2	1.2	2.4	1.8	1.3	5.4.1																						
2	2.4	2.4	2.0	1.4	2.4	1.3	1.7	2.7	2.5	2.6	1.3	1.9	2.8	2.1	2.6	3.4	1.1	2.4	2.0	1.3	2.4	1.6	2.6	1.3	1.4	5.2	1.4	3.0	1.0	4.3	0.7
3	2.5	2.1	2.0	1.6	2.1	1.3	2.1	5.2	5.4	0.9	3.4	4.3	3.2	1.8	3.0	2.6	3.2	1.6	1.4	2.9	2.0	3.0	4.0	2.4							

Lane	Join Queue: Headway									
2	-	65.4	5.6	4.1	63.5	3.1	11.2	2.0	4.8	30.9
3	8.1	6.3	7.9	2.2	4.6	21.5	9.5			
4	4.4									

Cycle Number: 41
Time: 5:27:26.1
Lane Type: Left

Lane	1	Average	Total		
Volume	9	9.0	9.0	Red	
# For Sat Flow	4	4.0	4.0		
Sat Flow	2147	2147.0	2147.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 42

Cycle Number: 42
Time: 5:27:39.9
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	9	7	1	5.7	17.0	Green	63.1
Arrived on Green	17	16	3	12.0	36.0	Yellow	4.5
Volume	26	23	4	17.7	53.0	Red	47.8
Arrival Type	4	4	4	4.0	12.0	Total	115.4
Lost Time	-0.4	2.4		1.0	2.0		
# For Sat Flow	6	5		5.5	11.0		
Sat Flow	1662	2000		1831.0	3662.0		

Lane	Enter Intersection: Headway																									
1	2.3	2.2	3.5	2.2	1.9	1.2	2.1	1.3	2.0	18.1	2.3	14.9	2.4	1.8	8.4	1.9	8.6									
2	2.4	2.5	1.4	1.9	3.1	1.6	1.6	2.1	2.0	2.6	2.6	3.2	0.6	2.3	6.1	2.1	2.3	2.1	2.4	3.3	1.7	1.6	6.0	3.0	4.0	1.3
3	4.8	1.3	2.2	1.2	2.3	2.0	2.2	0.7	1.8	1.4	3.1	1.7	3.0	4.4	1.7	2.0	3.5	2.2	1.6	3.0	5.5	9.1	3.6			

Lane	Join Queue: Headway						
2	- 65.7	1.7	2.5	5.2	65.8	3.8	4.5
3	- 65.3	4.2	65.3	5.6	2.8	6.4	
4							

Cycle Number: 42
Time: 5:29:35.3
Lane Type: Left

Lane	1	Average	Total			
Volume	17	17.0	17.0	Red		
# For Sat Flow	5	5.0	5.0			
Sat Flow	2106	2106.0	2106.0			

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 43

Cycle Number: 43
Time: 5:29:35.3
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	7	6	0	4.3	13.0	Green	79.1
Arrived on Green	26	21	4	17.0	51.0	Yellow	4.8
Volume	33	27	4	21.3	64.0	Red	57.5
Arrival Type	4	4	5	4.3	13.0	Total	141.4
Lost Time		-1.3		-1.3	-1.3		
# For Sat Flow		1		1.0	1.0		
Sat Flow		1286		1286.0	1286.0		

Lane	Enter Intersection: Headway																																
1	2.0	2.0	1.4	1.7	1.8	1.4	3.5.3																										
2	1.9	3.0	1.5	3.0	2.0	1.3	1.6	3.0	1.2	2.9	1.3	1.7	2.9	2.3	1.8	2.9	1.8	3.1	1.3	3.7	1.9	3.8	4.2	1.1	3.2	0.9	3.0	1.6	2.8	1.8	6.0	5.3	2.4
3	1.6	3.4	2.4	2.5	2.8	5.5	1.6	2.3	1.3	1.5	3.2	5.2	2.4	1.9	2.6	7.4	4.3	2.3	4.3	2.8	1.6	2.7	2.9	6.9	1.0	2.4	2.8						

Lane	Join Queue: Headway				
2	- 75.7	81.7	5.5	1.7	5.9
3	- 79.9	87.6	6.1	3.2	
4					

Cycle Number: 43
Time: 5:31:45.9
Lane Type: Left

Lane	1	Average	Total		
Volume	7	7.0	7.0	Red	
# For Sat Flow	2	2.0	2.0		
Sat Flow	2262	2262.0	2262.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 44

Cycle Number: 44
Time: 5:31:56.7
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	5	4	0	3.0	9.0	Green	68.1
Arrived on Green	22	18	5	15.0	45.0	Yellow	4.7
Volume	27	22	5	18.0	54.0	Red	55.5
Arrival Type	5	5	5	5.0	15.0	Total	128.3
Lost Time	-3.8			-3.8	-3.8		
# For Sat Flow	1			1.0	1.0		
Sat Flow	1091			1091.0	1091.0		

Lane	Enter Intersection: Headway																										
1	2.1	1.5	2.2	1.3	2.2	1.4	1.0	1.5	2.1	1.3	4.4	1.7	5.0	5.8													
2	1.7	4.6	1.4	1.8	3.3	2.3	2.2	1.2	2.0	2.5	3.0	1.9	1.7	4.4	1.4	1.3	1.8	2.4	2.0	6.2	1.1	2.3	3.9	2.7	4.0	3.2	2.8
3	1.9	4.7	4.7	2.9	1.2	6.4	2.1	1.5	3.3	3.3	2.7	1.4	2.7	1.4	1.1	3.5	2.0	2.0	2.5	3.6	8.6	6.7					

Lane	Join Queue: Headway			
2	-70.3	73.5	0.6	2.5
3	4.8	3.6	5.8	4.4
4				

Cycle Number: 44
Time: 5:33:56.7
Lane Type: Left

Lane	1	Average	Total		
Volume	14	14.0	14.0	Red	
# For Sat Flow	4	4.0	4.0		
Sat Flow	2355	2355.0	2355.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
------	---------------------

Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 45

Cycle Number: 45
Time: 5:34:05.0
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	4	4	0	2.7	8.0	Green	69.8
Arrived on Green	22	17	8	15.7	47.0	Yellow	4.7
Volume	26	21	8	18.3	55.0	Red	57.1
Arrival Type	5	5	5	5.0	15.0	Total	131.6
Lost Time	4.7			4.7	4.7		
# For Sat Flow	1			1.0	1.0		
Sat Flow	2400			2400.0	2400.0		

Lane	Enter Intersection: Headway																									
1	2.7	2.9	1.4	2.5	64.8	0.9																				
2	3.9	2.8	2.3	1.7	1.5	1.8	2.1	2.1	2.2	2.3	1.3	4.2	1.4	2.9	6.7	6.2	1.8	0.8	2.7	2.1	1.6	2.6	1.6	2.2	1.4	6.0
3	2.0	2.1	1.9	2.9	2.0	3.3	2.2	2.2	2.1	1.2	2.2	5.1	3.4	1.2	5.8	8.5	5.2	7.6	3.4	1.9	4.2					

Lane	Join Queue: Headway									
2	- 73.3	3.5	76.6	1.6	14.7	3.4	4.1	1.2	18.0	7.2
3	7.2	2.4	1.0	9.8	1.3	3.7	4.7	24.1		
4	50.4	1.9								

Cycle Number: 45
Time: 5:36:07.7
Lane Type: Left

Lane	1	Average	Total		
Volume	6	6.0	6.0	Red	
# For Sat Flow					
Sat Flow					

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
------	---------------------

Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 46

Cycle Number: 46
Time: 5:36:16.6
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	10	8	2	6.7	20.0	Green	68.3
Arrived on Green	16	21	0	12.3	37.0	Yellow	4.8
Volume	26	29	2	19.0	57.0	Red	45.7
Arrival Type	3	4	1	2.7	8.0	Total	118.8
Lost Time	-0.1	1.0		0.5	0.9		
# For Sat Flow	7	6		6.5	13.0		
Sat Flow	1938	1756		1847.0	3694.0		

Lane	Enter Intersection: Headway																											
1	1.8	2.9	2.1	1.9	2.9	1.0	2.2	4.5																				
2	2.2	1.1	1.9	2.1	1.7	1.5	1.2	1.4	1.9	2.9	2.4	1.3	2.2	2.1	2.7	2.0	2.6	2.3	4.4	6.1	5.8	5.4	1.7	6.8	1.0	3.1		
3	2.3	2.1	2.4	2.3	1.6	2.3	1.3	2.5	2.9	1.7	2.2	3.1	1.2	2.1	2.3	1.7	2.2	3.2	1.7	2.1	0.8	2.0	1.1	2.3	1.4	3.4	2.4	1.8

Lane	Join Queue: Headway						
2	-68.3	0.7	2.9	71.2	5.8	1.6	5.0
3	-70.0	0.8	76.0	1.7	4.3	6.6	22.0
4							

Cycle Number: 46
Time: 5:38:15.2
Lane Type: Left

Lane	1	Average	Total		
Volume	8	8.0	8.0	Red	
# For Sat Flow	2	2.0	2.0		
Sat Flow	1853	1853.0	1853.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 47

Cycle Number: 47
Time: 5:38:15.4
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	7	7	0	4.7	14.0	Green	79.9
Arrived on Green	21	19	6	15.3	46.0	Yellow	4.7
Volume	28	26	6	20.0	60.0	Red	55.9
Arrival Type	4	4	5	4.3	13.0	Total	140.5
Lost Time		5.4		5.4	5.4		
# For Sat Flow		1		1.0	1.0		
Sat Flow		3000		3000.0	3000.0		

Lane	Enter Intersection: Headway																											
1	2.6	1.1	1.9	2.3	2.5	1.2	2.6	1.8																				
2	3.3	1.7	2.1	1.9	2.4	1.4	2.8	1.0	6.2	1.2	0.9	2.2	3.1	2.1	9.9	2.0	5.0	6.0	2.9	3.0	1.5	1.7	1.7	4.2	4.0	2.7	2.3	2.7
3	3.4	1.8	3.1	1.8	1.2	1.6	2.6	1.1	2.2	1.4	2.0	1.2	5.7	1.5	3.9	4.7	1.2	2.1	0.8	1.2	1.7	4.1	1.6	17.9	7.8	4.7		

Lane	Join Queue: Headway			
2	8.1			
3	13.8			
4				

Cycle Number: 47
Time: 5:40:35.9
Lane Type: Left

Lane	1	Average	Total		
Volume	8	8.0	8.0	Red	
# For Sat Flow	4	4.0	4.0		
Sat Flow	1792	1792.0	1792.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 48

Cycle Number: 48
Time: 5:40:35.9
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	1	1	0	0.7	2.0	Green	69.1
Arrived on Green	17	18	5	13.3	40.0	Yellow	4.6
Volume	18	19	5	14.0	42.0	Red	54.5
Arrival Type	5	5	5	5.0	15.0	Total	128.2
Lost Time							
# For Sat Flow							
Sat Flow							

Lane	Enter Intersection: Headway																		
1	2.2	1.1	2.3	1.5	1.8														
2	2.3	2.8	5.9	6.9	2.3	3.6	5.6	3.5	4.0	1.6	1.4	1.6	1.5	1.0	1.2	8.1	4.7	12.2	
3	2.2	2.2	1.8	2.2	1.2	2.8	4.0	2.4	1.9	2.6	1.4	10.4	3.1	8.5	6.0	1.8	4.6	9.0	3.3

Lane	Join Queue: Headway								
2	12.4	9.7	3.0	1.1	5.4	20.3			
3	11.1	6.0	5.3	2.9	1.2	0.9	2.4	2.8	19.8
4	2.2	11.6							

Cycle Number: 48
Time: 5:42:36.5
Lane Type: Left

Lane	1	Average	Total			
Volume	5	5.0	5.0	Red		
# For Sat Flow	1	1.0	1.0			
Sat Flow	1989	1989.0	1989.0			

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 49

Cycle Number: 49
Time: 5:42:44.1
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	6	9	2	5.7	17.0	Green	7.6
Arrived on Green	-3	-5	-1	-3.0	-9.0	Yellow	4.7
Volume	3	4	1	2.7	8.0	Red	33.4
Arrival Type	1	1	1	1.0	3.0	Total	45.7
Lost Time							
# For Sat Flow							
Sat Flow							

Lane	Enter Intersection: Headway				
1	2.5	3.2	2.8		
2	2.2	4.5	2.1		
3	2.4	2.7	2.4	1.8	

Lane	Join Queue: Headway					
2	- 11.1	1.8	2.8	10.5	4.5	1.1
3	- 10.6	7.1	9.8	21.9		
4						

Cycle Number: 49
Time: 5:43:29.7
Lane Type: Left

Lane	1	Average	Total			
Volume	3	3.0	3.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
------	---------------------

Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 50

Cycle Number: 50
Time: 5:43:29.8
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	6	4	0	3.3	10.0	Green	25.0
Arrived on Green	8	8	1	5.7	17.0	Yellow	4.5
Volume	14	12	1	9.0	27.0	Red	47.1
Arrival Type	5	6	6	5.7	17.0	Total	76.6
Lost Time	2.9	0.7		1.8	3.6		
# For Sat Flow	9	7		8.0	16.0		
Sat Flow	2132	1585		1858.5	3717.0		

Lane	Enter Intersection: Headway													
1	1.8	2.6	3.5	2.7	1.5	3.0	1.3	63.6						
2	2.2	1.4	1.5	4.6	1.4	0.9	1.9	1.8	1.7	1.8	1.2	3.3	1.2	1.4
3	2.2	1.9	2.0	3.6	1.7	1.5	2.3	1.9	2.9	3.6	2.0	2.1		

Lane	Join Queue: Headway																	
2	- 28.0	4.7	1.0	2.9	21.7	1.8	3.4	2.3	1.7	1.9	0.7	1.0	1.0	0.7	6.0	1.2	0.6	0.6
3	- 28.8	7.6	24.0	3.0	1.3	2.3	3.1	1.4	1.0	1.0	6.3	3.9	1.9	16.8				
4	30.3																	

Cycle Number: 50
Time: 5:44:46.4
Lane Type: Left

Lane	1	Average	Total			
Volume	8	8.0	8.0	Red		
# For Sat Flow	3	3.0	3.0			
Sat Flow	1861	1861.0	1861.0			

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 51

Cycle Number: 51
Time: 5:44:46.4
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	18	14	1	11.0	33.0	Green	78.7
Arrived on Green	15	11	2	9.3	28.0	Yellow	4.6
Volume	33	25	3	20.3	61.0	Red	59.3
Arrival Type	2	2	4	2.7	8.0	Total	142.6
Lost Time	3.2	1.5		2.4	4.7		
# For Sat Flow	13	9		11.0	22.0		
Sat Flow	2062	1831		1946.5	3893.0		

Lane	Enter Intersection: Headway																															
1	2.0	1.7	1.5	2.7	5.4																											
2	3.9	2.1	2.6	1.7	2.2	1.9	1.7	1.5	1.5	1.0	2.4	1.5	1.0	1.3	2.8	2.6	1.5	1.0	2.4	8.6	3.0	3.9	2.2	1.8	6.9	0.8	1.7	1.9	2.0	1.4	4.1	3.5
3	4.0	0.8	1.3	3.2	3.3	1.8	2.0	1.5	1.5	2.2	2.4	1.2	1.1	1.2	2.6	6.7	1.8	5.1	1.9	1.5	5.3	2.7	9.4	3.3								

Lane	Join Queue: Headway						
2	-79.3	1.6	8.4	79.1	4.5	6.6	37.1
3	-68.6	80.1	1.4	3.4	37.6	5.0	
4							

Cycle Number: 51
Time: 5:46:56.4
Lane Type: Left

Lane	1	Average	Total		
Volume	5	5.0	5.0	Red	
# For Sat Flow					
Sat Flow					

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
------	---------------------

Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 52

Cycle Number: 52
Time: 5:47:08.9
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	7	6	0	4.3	13.0	Green	65.8
Arrived on Green	21	15	8	14.7	44.0	Yellow	4.5
Volume	28	21	8	19.0	57.0	Red	57.3
Arrival Type	4	4	5	4.3	13.0	Total	127.6
Lost Time	1.2	-1.6		-0.2	-0.4		
# For Sat Flow	4	2		3.0	6.0		
Sat Flow	1778	1200		1489.0	2978.0		

Lane	Enter Intersection: Headway																											
1	2.1	1.5	1.9	2.1	1.7	1.3	1.2	1.5	0.8	1.5	3.7	49.5	3.4	2.0														
2	2.1	3.6	2.5	1.1	2.8	1.6	2.3	1.4	1.6	1.9	1.7	1.6	2.9	4.0	1.7	1.2	3.0	5.3	2.5	1.8	1.6	2.0	1.7	3.1	1.5	4.6	4.5	2.6
3	2.2	2.9	3.2	2.1	2.6	3.4	3.0	13.5	5.5	4.2	0.8	3.2	0.5	3.1	1.7	1.8	2.8	4.6	2.8	2.0	2.5							

Lane	Join Queue: Headway										
2	-70.1	3.4	2.8	1.0	68.3	4.6	3.7	7.3	0.7	3.2	29.3
3	-64.4	72.5	11.8	2.8	4.4	7.6	4.0	9.3	4.4		
4	6.3	18.7	5.8	2.9							

Cycle Number: 52
Time: 5:49:06.5
Lane Type: Left

Lane	1	Average	Total		
Volume	14	14.0	14.0	Red	
# For Sat Flow	5	5.0	5.0		
Sat Flow	2794	2794.0	2794.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 53

Cycle Number: 53
Time: 5:49:16.5
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	11	9	4	8.0	24.0	Green	67.5
Arrived on Green	19	18	-1	12.0	36.0	Yellow	4.9
Volume	30	27	3	20.0	60.0	Red	60.7
Arrival Type	4	4	1	3.0	9.0	Total	133.1
Lost Time	1.0	1.9		1.5	2.9		
# For Sat Flow	7	8		7.5	15.0		
Sat Flow	1895	1725		1810.0	3620.0		

Lane	Enter Intersection: Headway																												
1	1.9	3.0	3.2	2.9	1.8	4.1	1.6	6.1																					
2	2.7	1.7	2.4	1.8	1.5	2.5	2.4	0.7	3.9	1.1	2.2	1.4	1.5	2.8	1.2	2.8	1.7	1.5	2.3	2.7	1.6	4.2	2.4	1.6	5.9	1.7	2.2	2.0	4.0
3	2.8	1.7	2.7	3.2	1.5	2.6	2.0	2.6	0.9	2.3	2.6	2.1	1.2	5.4	1.7	1.3	2.4	3.2	4.7	1.1	2.2	5.9	3.7	2.0	1.6	1.4			

Lane	Join Queue: Headway																			
2	- 71.3	4.8	5.1	1.4	63.1	2.9	2.2	4.5	10.7	4.3	2.6	0.5	1.9	1.4	3.0	0.7	0.8	5.2	1.9	13.8
3	- 69.4	1.6	0.9	5.0	72.2	8.8	3.2	2.6	2.1	2.0	24.0	4.8								
4																				

Cycle Number: 53
Time: 5:51:15.4
Lane Type: Left

Lane	1	Average	Total		
Volume	8	8.0	8.0	Red	
# For Sat Flow					
Sat Flow					

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 54

Cycle Number: 54
Time: 5:51:29.6
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	20	12	0	10.7	32.0	Green	65.7
Arrived on Green	12	17	3	10.7	32.0	Yellow	4.8
Volume	32	29	3	21.3	64.0	Red	44.9
Arrival Type	2	3	5	3.3	10.0	Total	115.4
Lost Time	1.8	0.4		1.1	2.2		
# For Sat Flow	14	6		10.0	20.0		
Sat Flow	1961	1624		1792.5	3585.0		

Lane	Enter Intersection: Headway																															
1	3. 7	3. 4	3 7. 8																													
2	2. 8	2. 1	2. 2	2. 1	1. 5	1. 8	1. 9	1. 2	1. 4	2. 5	3. 6	1. 6	1. 5	1. 1	1. 9	1. 9	2. 1	1. 7	1. 8	1. 8	1. 9	1. 8	1. 0	1. 1	2. 5	2. 2	2. 5	3. 3	5. 8	1. 1	1. 5	2. 6
3	2. 6	2. 1	2. 1	2. 4	2. 0	1. 3	1. 9	2. 6	2. 5	3. 0	1. 9	1. 6	1. 1	2. 7	2. 2	1. 2	1. 7	1. 9	3. 2	4. 4	1. 5	1. 4	1. 8	6. 2	2. 9	2. 5	1. 2	1. 5	1. 0			

Lane	Join Queue: Headway							
2	-70.2	14.2	63.1	20.5	8.6	4.4	3.7	
3	-65.9	3.6	72.1	6.2	7.0	3.8	5.6	4.8
4								

Cycle Number: 54
Time: 5:53:25.0
Lane Type: Left

Lane	1	Average	Total		
Volume	3	3.0	3.0	Red	
# For Sat Flow					
Sat Flow					

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 55

Cycle Number: 55
Time: 5:53:25.0
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	7	8	0	5.0	15.0	Green	79.5
Arrived on Green	11	10	5	8.7	26.0	Yellow	4.8
Volume	18	18	5	13.7	41.0	Red	55.5
Arrival Type	3	3	5	3.7	11.0	Total	139.8
Lost Time	2.9	2.2		2.6	5.1		
# For Sat Flow	3	4		3.5	7.0		
Sat Flow	2118	1870		1994.0	3988.0		

Lane	Enter Intersection: Headway																		
1	1.6	2.2	2.0	2.0	3.3	1.5	1.7	16.1	8.2										
2	2.3	3.2	2.9	1.4	1.2	1.9	2.0	5.3	1.5	3.9	13.2	3.6	6.4	2.4	3.9	12.6	3.6	8.5	
3	2.4	2.8	2.9	1.8	1.5	2.2	1.8	2.2	3.0	1.2	1.5	6.9	5.2	13.3	3.2	4.3	3.6	16.4	

Lane	Join Queue: Headway			
2	-	6.4	87.7	
3	-	1.4	89.3	22.4
4				

Cycle Number: 55
Time: 5:55:37.4
Lane Type: Left

Lane	1	Average	Total		
Volume	9	9.0	9.0	Red	
# For Sat Flow	3	3.0	3.0		
Sat Flow	1664	1664.0	1664.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 56

Cycle Number: 56
Time: 5:55:44.8
Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	3	4	0	2.3	7.0	Green	69.8
Arrived on Green	13	13	3	9.7	29.0	Yellow	4.9
Volume	16	17	3	12.0	36.0	Red	53.8
Arrival Type	4	4	5	4.3	13.0	Total	128.5
Lost Time							
# For Sat Flow							
Sat Flow							

Lane	Enter Intersection: Headway																
1	1.7	2.3	68.4														
2	1.8	2.2	1.7	1.5	1.5	1.9	4.3	1.1	13.9	2.3	1.4	20.3	5.2	3.6	5.7	2.9	
3	1.9	2.2	3.2	2.0	1.9	0.9	2.6	1.3	4.0	5.0	2.1	2.5	10.7	15.0	5.7	3.5	6.3

Lane	Join Queue: Headway												
2	- 73.1	1.9	73.8	1.9	4.6	4.0	2.8	1.4	2.8	0.7	3.1	15.9	6.1
3	- 72.5	2.3	75.6	1.3	8.3	4.5	8.9	5.0	13.7				
4													

Cycle Number: 56
Time: 5:57:46.5
Lane Type: Left

Lane	1	Average	Total			
Volume	3	3.0	3.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
------	---------------------

Quality Counts

7409 SW Tech Center Dr Ste 150
Tigard, OR 97223

File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 57

Cycle Number: 57

Time: 5:57:53.3

Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	13	9	0	7.3	22.0	Green	71.9
Arrived on Green	14	13	2	9.7	29.0	Yellow	4.9
Volume	27	22	2	17.0	51.0	Red	32.8
Arrival Type	2	3	5	3.3	10.0	Total	109.6
Lost Time	1.4	0.4		0.9	1.8		
# For Sat Flow	9	5		7.0	14.0		
Sat Flow	1929	1765		1847.0	3694.0		

Lane	Enter Intersection: Headway																									
1																										
2	2.1	2.3	1.9	2.6	1.6	3.1	2.1	0.8	2.2	1.5	1.4	2.5	1.6	1.1	2.2	2.1	1.7	1.9	8	7.8	4.5	1.5	3.8	1.5	4.7	3.2
3	2.5	2.1	2.0	1.9	1.7	3.1	2.4	1.3	1.1	1.4	2.2	3.1	11.3	11.2	1.5	4.0	3.0	2.6	2.6	6.1	4.3					

Lane	Join Queue: Headway					
2	-	65.1	5.9	66.4	13.2	6.8
3	-	76.4	13.0	84.2	4.4	5.2
4						

Cycle Number: Summary

Time: 4:00:00.0 to 5:59:49.5

Lane Type: Normal

Lane	2	3	4	Average	Total	Phase	Timing
Arrived On Red	9.3	7.5	1.0	5.9	17.8	Green	65.8
Arrived on Green	17.6	16.7	4.6	13.0	38.9	Yellow	4.7
Volume	26.3	23.6	5.3	18.4	55.2	Red	54.6
Arrival Type	3.6	3.9	4.2	3.9	11.7	Total	125.1
Lost Time	1.0	0.9	0.0	0.6	1.9		
# For Sat Flow	5.9	3.9	0.0	3.3	9.8		
Sat Flow	1817.3	1722.5		1769.9	3539.8		

Lane	Enter Intersection: Headway																																			
2	2	2	2	2	2	2	2	1	2	2	2	2	2	2	2	2	2	2	3	2	2	3	2	2	3	2	2	2	2	2	2	2	2	3		
	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
	3	5	2	1	0	1	1	9	2	7	4	4	4	2	6	5	7	7	2	2	8	6	1	8	5	0	6	7	5	8	5	8	3	1	2	9
3	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	2	3	3	2	2	2	2	2	4	3	3	2	2	2	2	2	2	1			
	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	4	4	3	2	1	6	3	5	3	5	5	8	9	4	6	8	1	6	8	4	8	8	7	1	1	0	5	8	4	8	2	1	8			
4	2	2	1	1	1	1	1	1	1	1	1	9	5	1																						
	0	0	3	3	5	3	5	5	0	2	5	.	.	2																						
	7	6	8	9	6	9	0	0	5	4	5	2	3	8																						

Lane	Join Queue: Headway																			
2	- 58. 1	15. 2	21. 4	15. 7	15. 7	9.7	8.1	4.4	8.4	4.8	7.5	6.4	3.5	7.2	11. 8	1.0	0.7	2.9	1.9	13. 8
3	- 43. 4	30. 3	22. 7	6.9	8.2	5.8	5.9	6.6	6.5	7.2	13. 8	3.0	3.7	16. 8						

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[illegible]

Quality Counts

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File Name : 14721406
Site Code : 14721406
Start Date : 5/30/2018
Page No : 59

Cycle Number: Summary
Time: 4:00:00.0 to 5:59:49.5
Lane Type: Left

Lane	1	Average	Total			
Volume	8.7	8.7	8.7	Red		
# For Sat Flow	3.3	3.3	3.3			
Sat Flow	1993.4	1993.4	1993.4			

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
------	---------------------

Quality Counts

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File Name : 14721403
Site Code : 14721403
Start Date : 6/13/2018
Page No : 1

I-5 SB Ramp & Kubeler Blvd SE (SB Approach)

Cycle Number: 2

Time: 4:02:50.7

Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	7	7	7.0	14.0	Green	25.3
Arrived on Green	3	16	9.5	19.0	Yellow	3.8
Volume	10	23	16.5	33.0	Red	100.5
Arrival Type	5	6	5.5	11.0	Total	129.6
Lost Time						
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway															
1	2.1	4.9	6.2	5.9	3.1											
2	2.9	3.5	2.6	2.4	1.3	14.0	17.3	30.8	38.8	4.4						

Lane	Join Queue: Headway							
2	12.7	6.1	52.7	6.1	19.4			
3	7.2	1.0	5.2	60.4	2.1	3.5	1.2	1.0

Cycle Number: 2

Time: 4:02:50.8

Lane Type: Left

Lane	1	Average	Total		
Volume	5	5.0	5.0	Red	
# For Sat Flow					
Sat Flow					

Lane	Enter Intersection: Headway
------	-----------------------------

Lane	Join Queue: Headway
------	---------------------

Quality Counts

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File Name : 14721403
Site Code : 14721403
Start Date : 6/13/2018
Page No : 2

Cycle Number: 3
Time: 4:05:00.2
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	5	9	7.0	14.0	Green	11.8
Arrived on Green	0	4	2.0	4.0	Yellow	4.0
Volume	5	13	9.0	18.0	Red	114.4
Arrival Type	1	6	3.5	7.0	Total	130.2
Lost Time						
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway												
1	2.4	2.4	2.5	1.9									
2	2.2	3.1	36.1	75.5	5.2								

Lane	Join Queue: Headway																		
2	4.9	65.3	1.9	2.6	12.4	0.6	0.7	4.2	7.2	11.7									
3	- 11.4	13.7	1.4	1.6	4.5	19.4	13.4	26.6	7.3	1.2	1.3	1.0	0.9	0.9	1.6	3.2	4.9	10.0	1.3

Cycle Number: 3
Time: 4:05:00.2
Lane Type: Left

Lane	1	Average	Total			
Volume	4	4.0	4.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
------	--------------------------------

Lane	Join Queue: Headway
------	---------------------

Quality Counts

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File Name : 14721403
Site Code : 14721403
Start Date : 6/13/2018
Page No : 3

Cycle Number: 4
Time: 4:07:10.3
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	10	19	14.5	29.0	Green	35.8
Arrived on Green	12	6	9.0	18.0	Yellow	3.9
Volume	22	25	23.5	47.0	Red	90.3
Arrival Type	5	3	4.0	8.0	Total	130.0
Lost Time	4.7	-0.1	2.3	4.6		
# For Sat Flow	3	7	5.0	10.0		
Sat Flow	1929	1448	1688.5	3377.0		

Lane	Enter Intersection: Headway																							
1	2.5	4.4	2.5	2.3	4.5	6.5	2.4	1.5																
2	1.8	2.9	3.8	3.7	1.3	2.9	1.4	2.2	2.1	1.5	2.1	2.5	2.6	1.7	1.6	3.4	47.2	5.3	8.8	6.5	10.0	10.0		

Lane	Join Queue: Headway																
2	4.3	1.4	3.2	7.4	24.0	21.4	11.2										
3	- 39.3	45.6	1.7	1.6	1.0	2.0	4.9	1.9	1.5	11.5	2.0	28.4	1.5	4.2	2.0	12.0	6.4

Cycle Number: 4
Time: 4:09:20.4
Lane Type: Left

Lane	1	Average	Total			
Volume	8	8.0	8.0	Red		
# For Sat Flow	2	2.0	2.0			
Sat Flow	655	655.0	655.0			

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
------	---------------------

Quality Counts

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File Name : 14721403
Site Code : 14721403
Start Date : 6/13/2018
Page No : 4

Cycle Number: 5
Time: 4:09:20.3
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	7	17	12.0	24.0	Green	25.9
Arrived on Green	11	5	8.0	16.0	Yellow	4.1
Volume	18	22	20.0	40.0	Red	100.0
Arrival Type	6	3	4.5	9.0	Total	130.0
Lost Time		0.5	0.5	0.5		
# For Sat Flow		4	4.0	4.0		
Sat Flow		1548	1548.0	1548.0		

Lane	Enter Intersection: Headway																				
1	2.4	2.5	2.9	1.8	2.6	3.1	1.8	2.3	3.0												
2	1.2	2.2	2.5	5.7	8.7	2.0	1.3	36.5	19.5	4.8	6.2	5.4	3.2	2.8	5.6	3.8	4.3	9.4			

Lane	Join Queue: Headway																								
2	- 27 .2	35 .5	3. 4	3. 3	4. 9	12 .1	19 .2	6. 7	36 .6	1. 7															
3	- 23 .5	2. 7	29 .5	1. 1	4. 5	6. 2	1. 0	5. 1	7. 0	15 .1	1. 2	0. 8	1. 2	0. 7	0. 6	10 .8	3. 0	3. 1	1. 6	1. 5	2. 5	2. 6	11 .0	4. 3	4. 5

Cycle Number: 5
Time: 4:11:30.5
Lane Type: Left

Lane	1	Average	Total		
Volume	9	9.0	9.0	Red	
# For Sat Flow	2	2.0	2.0		
Sat Flow	1271	1271.0	1271.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721403
Site Code : 14721403
Start Date : 6/13/2018
Page No : 5

Cycle Number: 6
Time: 4:11:30.4
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	10	25	17.5	35.0	Green	24.4
Arrived on Green	-4	-3	-3.5	-7.0	Yellow	3.9
Volume	6	22	14.0	28.0	Red	101.8
Arrival Type	1	1	1.0	2.0	Total	130.1
Lost Time		1.0	1.0	1.0		
# For Sat Flow		7	7.0	7.0		
Sat Flow		1527	1527.0	1527.0		

Lane	Enter Intersection: Headway																		
1	2.8	1.9	3.6	3.3	3.4	2.7	2.4	2.1	2.6										
2	0.5	3.2	3.2	7.8	108.7	3.9													

Lane	Join Queue: Headway																		
2	5.4	4.3	0.6	4.9	0.6	0.6	0.7	2.7	12.1	1.5	4.2	9.9	4.1	14.6	0.8	1.3	17.5	2.2	7.3
3	4.1	3.9	1.2	1.7	0.6	0.7	0.7	0.7	7.3	6.8	8.5	17.3	5.7	0.7	1.9	8.3	7.3	2.8	1.9

Cycle Number: 6
Time: 4:15:50.1
Lane Type: Left

Lane	1	Average	Total		
Volume	9	9.0	9.0	Red	
# For Sat Flow	1	1.0	1.0		
Sat Flow	1063	1063.0	1063.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721403
Site Code : 14721403
Start Date : 6/13/2018
Page No : 6

Cycle Number: 7
Time: 4:13:40.5
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	19	24	21.5	43.0	Green	35.6
Arrived on Green	5	2	3.5	7.0	Yellow	3.9
Volume	24	26	25.0	50.0	Red	90.0
Arrival Type	2	1	1.5	3.0	Total	129.5
Lost Time	-0.6	2.7	1.1	2.1		
# For Sat Flow	14	12	13.0	26.0		
Sat Flow	1860	1728	1794.0	3588.0		

Lane	Enter Intersection: Headway																								
1	3. 0	2. 3	2. 4	1. 5																					
2	0. 6	3. 0	1. 3	2. 2	2. 3	1. 8	1. 7	2. 2	1. 4	2. 3	1. 9	1. 6	2. 7	1. 7	1. 2	2. 0	2. 1	2. 2	25 .6	29 .1	7. 6	3. 1	11 .7	9. 9	

Lane	Join Queue: Headway																									
2	- 36 .1	1. 8	41 .6	0. 6	1. 1	1. 3	2. 6	6. 0	1. 8	2. 0	18 .8	14 .1	0. 8	11 .1	9. 8	2. 2										
3	- 37 .3	6. 3	1. 3	4. 7	0. 6	2. 2	29 .1	0. 7	1. 0	1. 2	1. 3	0. 7	0. 6	2. 6	9. 9	12 .2	0. 9	1. 4	10 .8	1. 9	9. 8	6. 1	6. 0	2. 2	5. 9	3. 1

Cycle Number: 7
Time: 4:20:10.3
Lane Type: Left

Lane	1	Average	Total		
Volume	4	4.0	4.0	Red	
# For Sat Flow					
Sat Flow					

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721403
Site Code : 14721403
Start Date : 6/13/2018
Page No : 7

Cycle Number: 8
Time: 4:15:50.0
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	16	26	21.0	42.0	Green	47.3
Arrived on Green	7	4	5.5	11.0	Yellow	3.8
Volume	23	30	26.5	53.0	Red	79.1
Arrival Type	2	1	1.5	3.0	Total	130.2
Lost Time	0.4	-0.5	-0.1	-0.1		
# For Sat Flow	7	11	9.0	18.0		
Sat Flow	1636	1529	1582.5	3165.0		

Lane	Enter Intersection: Headway																							
1	2.2	4.2	3.4																					
2	1.7	2.2	2.7	2.6	2.2	2.5	2.9	1.6	2.7	2.0	1.5	2.2	1.4	1.6	2.3	1.8	2.0	2.1	1.9	6.4	4.2	3.1	2.6	

Lane	Join Queue: Headway							
2	-45.7	9.1	42.8	6.8	46.8			
3	-47.8	53.7	0.8	4.0	18.1	32.2	0.8	17.1

Cycle Number: 8
Time: 4:22:20.4
Lane Type: Left

Lane	1	Average	Total			
Volume	3	3.0	3.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
------	--------------------------------

Lane	Join Queue: Headway
------	---------------------

Quality Counts

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File Name : 14721403
Site Code : 14721403
Start Date : 6/13/2018
Page No : 8

Cycle Number: 9
Time: 4:18:00.3
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	5	8	6.5	13.0	Green	35.1
Arrived on Green	10	15	12.5	25.0	Yellow	3.8
Volume	15	23	19.0	38.0	Red	91.0
Arrival Type	6	6	6.0	12.0	Total	129.9
Lost Time						
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway																			
1	2.2	2.0	1.9	4.0	3.4	4.9														
2	3.5	2.0	1.9	4.5	3.0	2.0	2.6	7.6	40.4	18.1	4.6	8.2	13.9	5.6	7.7					

Lane	Join Queue: Headway															
2	7.9	1.7	0.8	4.9	3.6	8.5	1.3	26.8	14.8	8.9	6.1					
3	8.7	2.1	5.8	1.1	5.9	1.4	1.0	5.9	4.5	2.7	17.0	3.4	3.0	5.3	11.8	3.0

Cycle Number: 9
Time: 4:24:31.2
Lane Type: Left

Lane	1	Average	Total		
Volume	6	6.0	6.0	Red	
# For Sat Flow	1	1.0	1.0		
Sat Flow	1049	1049.0	1049.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721403
Site Code : 14721403
Start Date : 6/13/2018
Page No : 9

Cycle Number: 10
Time: 4:20:10.2
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	11	16	13.5	27.0	Green	48.8
Arrived on Green	10	10	10.0	20.0	Yellow	3.7
Volume	21	26	23.5	47.0	Red	77.7
Arrival Type	4	3	3.5	7.0	Total	130.2
Lost Time	-2.4	2.4	0.0	0.0		
# For Sat Flow	1	2	1.5	3.0		
Sat Flow	1385	1895	1640.0	3280.0		

Lane	Enter Intersection: Headway																							
1	9.8	5.6	1.9																					
2	0.4	3.1	2.2	2.4	2.6	2.1	1.7	1.9	2.2	1.9	1.8	1.2	1.6	2.2	7.1	1.5	4.7	5.6	46.8	7.3	5.6			

Lane	Join Queue: Headway												
2	-46.7	57.1	2.8	2.4	14.4	0.7	39.1	3.4					
3	-52.2	59.4	1.0	8.6	5.8	2.6	1.2	1.1	1.1	0.9	11.6	34.6	1.0

Cycle Number: 10
Time: 4:26:40.6
Lane Type: Left

Lane	1	Average	Total			
Volume	3	3.0	3.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
------	--------------------------------

Lane	Join Queue: Headway
------	---------------------

Quality Counts

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File Name : 14721403
Site Code : 14721403
Start Date : 6/13/2018
Page No : 10

Cycle Number: 11
Time: 4:22:20.3
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	8	13	10.5	21.0	Green	46.7
Arrived on Green	9	15	12.0	24.0	Yellow	3.8
Volume	17	28	22.5	45.0	Red	80.3
Arrival Type	4	5	4.5	9.0	Total	130.8
Lost Time	-1.8	-0.1	-1.0	-1.9		
# For Sat Flow	3	3	3.0	6.0		
Sat Flow	1565	1612	1588.5	3177.0		

Lane	Enter Intersection: Headway																			
1	2.6	3.2	3.1	3.0	3.5	4.7														
2	1.8	2.1	1.9	1.6	1.7	2.5	2.7	6.6	3.3	3.2	2.8	7.6	7.8	28.5	14.5	8.1	18.0			

Lane	Join Queue: Headway																	
2	13.0	15.2	4.7	0.7	0.7	11.1	14.1	0.9	8.0	7.5								
3	-45.3	3.2	57.2	2.6	19.0	1.0	9.6	0.9	9.8	0.6	0.7	1.3	0.6	0.6	2.7	0.9	5.4	5.7

Cycle Number: 11
Time: 4:28:50.3
Lane Type: Left

Lane	1	Average	Total			
Volume	6	6.0	6.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
------	-----------------------------

Lane	Join Queue: Headway
------	---------------------

Quality Counts

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File Name : 14721403
Site Code : 14721403
Start Date : 6/13/2018
Page No : 11

Cycle Number: 12
Time: 4:24:31.1
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	10	18	14.0	28.0	Green	40.5
Arrived on Green	5	2	3.5	7.0	Yellow	3.6
Volume	15	20	17.5	35.0	Red	85.3
Arrival Type	3	1	2.0	4.0	Total	129.4
Lost Time	1.4	-2.2	-0.4	-0.8		
# For Sat Flow	4	5	4.5	9.0		
Sat Flow	1674	1406	1540.0	3080.0		

Lane	Enter Intersection: Headway															
1	1.9	3.0	5.0													
2	2.8	3.1	1.6	2.5	1.3	1.8	2.7	2.8	1.8	2.5	2.1	2.5	9.6	1.6	81.0	

Lane	Join Queue: Headway													
2	- 41.3	10.1	67.4	1.5	2.5	5.7	5.7	4.1	10.5					
3	- 37.8	52.2	3.3	2.1	13.0	1.9	14.4	0.9	7.2	1.7	2.9	2.6	6.4	3.9

Cycle Number: 12
Time: 4:31:00.2
Lane Type: Left

Lane	1	Average	Total			
Volume	3	3.0	3.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
------	---------------------

Quality Counts

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File Name : 14721403
Site Code : 14721403
Start Date : 6/13/2018
Page No : 12

Cycle Number: 13
Time: 4:26:40.5
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	9	14	11.5	23.0	Green	45.3
Arrived on Green	9	9	9.0	18.0	Yellow	3.8
Volume	18	23	20.5	41.0	Red	80.7
Arrival Type	4	3	3.5	7.0	Total	129.8
Lost Time	0.2	0.0	0.1	0.2		
# For Sat Flow	4	4	4.0	8.0		
Sat Flow	1618	1636	1627.0	3254.0		

Lane	Enter Intersection: Headway																		
1	2.8	3.3	4.8	6.3	2.6	1.8													
2	1.6	2.8	2.8	1.8	2.1	2.0	1.9	2.9	1.5	2.7	1.9	2.4	7.8	8.8	50.2	4.8	5.0	9.2	

Lane	Join Queue: Headway									
2	-	0.7	55.6	27.4	2.3	6.3	12.5	10.2	1.0	5.7
3	28.0	7.3	3.5	7.1	1.8	24.6	0.6	0.8	1.0	1.5

Cycle Number: 13
Time: 4:33:10.8
Lane Type: Left

Lane	1	Average	Total		
Volume	6	6.0	6.0	Red	
# For Sat Flow	1	1.0	1.0		
Sat Flow	567	567.0	567.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721403
Site Code : 14721403
Start Date : 6/13/2018
Page No : 13

Cycle Number: 14
Time: 4:28:50.3
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	10	10	10.0	20.0	Green	21.8
Arrived on Green	6	14	10.0	20.0	Yellow	3.8
Volume	16	24	20.0	40.0	Red	104.3
Arrival Type	6	6	6.0	12.0	Total	129.9
Lost Time		-1.0	-1.0	-1.0		
# For Sat Flow		4	4.0	4.0		
Sat Flow		1346	1346.0	1346.0		

Lane	Enter Intersection: Headway																			
1	2.7																			
2	0.5	1.9	2.4	2.0	2.8	5.3	9.0	1.4	39.9	8.6	20.2	6.0	12.3	6.2	3.6	6.2				

Lane	Join Queue: Headway															
2	13.9	8.8	56.3	7.1												
3	- 17.2	2.0	2.7	20.1	0.8	5.1	2.5	1.2	22.6	3.1	1.2	1.1	2.0	18.6	3.6	3.4

Cycle Number: 14
Time: 4:35:20.1
Lane Type: Left

Lane	1	Average	Total			
Volume	1	1.0	1.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721403
Site Code : 14721403
Start Date : 6/13/2018
Page No : 14

Cycle Number: 15
Time: 4:31:00.2
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	4	16	10.0	20.0	Green	35.9
Arrived on Green	12	10	11.0	22.0	Yellow	3.8
Volume	16	26	21.0	42.0	Red	90.8
Arrival Type	6	4	5.0	10.0	Total	130.5
Lost Time						
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway																							
1	1. 7	2. 9	2. 6																					
2	3. 1	1. 4	2. 9	5. 2	3. 3	2. 3	12 .0	2. 1	2. 1	37 .3	19 .5	5. 3	4. 4	8. 1	7. 4	5. 6								

Lane	Join Queue: Headway													
2	- 39.3	45.3	12.5	4.4	0.7	3.7	4.5	9.9	44.8	2.0				
3	8.1	1.7	1.1	11.2	3.8	5.3	2.6	4.7	31.3	1.6	3.8	1.0	1.0	5.5

Cycle Number: 15
Time: 4:37:30.6
Lane Type: Left

Lane	1	Average	Total			
Volume	3	3.0	3.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721403
Site Code : 14721403
Start Date : 6/13/2018
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Cycle Number: 16
Time: 4:33:10.8
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	10	14	12.0	24.0	Green	23.5
Arrived on Green	1	7	4.0	8.0	Yellow	3.9
Volume	11	21	16.0	32.0	Red	102.0
Arrival Type	2	5	3.5	7.0	Total	129.4
Lost Time						
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway																		
1	2.1	2.6																	
2	2.3	2.2	1.9	12.6	5.5	32.7	18.6	40.5	3.5	1.2	4.4								

Lane	Join Queue: Headway																						
2	22. 3	6.6	21. 4	0.7	8.4	1.1	7.3	3.0	2.5	1.5	5.6	10. 6	2.9										
3	3.4	1.0	9.5	0.7	1.9	0.8	0.7	0.8	10. 9	0.8	7.4	9.9	1.2	0.8	1.8	4.3	2.4	14. 4	9.7	1.0	1.5	9.9	6.2

Cycle Number: 16
Time: 4:39:40.4
Lane Type: Left

Lane	1	Average	Total		
Volume	2	2.0	2.0	Red	
# For Sat Flow					
Sat Flow					

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721403
Site Code : 14721403
Start Date : 6/13/2018
Page No : 16

Cycle Number: 17
Time: 4:35:20.2
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	13	23	18.0	36.0	Green	46.1
Arrived on Green	14	7	10.5	21.0	Yellow	3.9
Volume	27	30	28.5	57.0	Red	80.5
Arrival Type	4	2	3.0	6.0	Total	130.5
Lost Time	-1.9	2.7	0.4	0.8		
# For Sat Flow	4	11	7.5	15.0		
Sat Flow	1516	1657	1586.5	3173.0		

Lane	Enter Intersection: Headway																													
1	2.7	2.9	2.6	2.2																										
2	0.5	2.6	1.6	2.8	1.5	2.4	3.9	1.7	3.2	2.3	2.2	1.7	2.2	2.1	2.0	1.4	2.6	1.7	2.8	1.8	2.2	1.9	5.7.6	4.3	5.4	7.1	3.6			

Lane	Join Queue: Headway						
2	-49.6	50.6	28.4	9.7	29.9	2.8	0.9
3	-37.9	52.7	12.2	4.3	1.5	4.0	38.1

Cycle Number: 17
Time: 4:41:50.3
Lane Type: Left

Lane	1	Average	Total			
Volume	4	4.0	4.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721403
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Start Date : 6/13/2018
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Cycle Number: 18
Time: 4:37:30.6
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	7	7	7.0	14.0	Green	27.6
Arrived on Green	4	14	9.0	18.0	Yellow	3.8
Volume	11	21	16.0	32.0	Red	98.3
Arrival Type	5	6	5.5	11.0	Total	129.7
Lost Time						
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway															
1	1.2	2.4	2.9													
2	2.8	4.1	6.9	2.4	1.6	1.8	2.4	81.7	7.2	8.5	6.0					

Lane	Join Queue: Headway									
2	29.0	3.0	9.7	14.4	0.7	17.6				
3	42.1	2.4	1.2	2.5	3.2	1.0	2.1	3.2	0.9	5.6

Cycle Number: 18
Time: 4:44:00.3
Lane Type: Left

Lane	1	Average	Total			
Volume	3	3.0	3.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721403
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Start Date : 6/13/2018
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Cycle Number: 19
Time: 4:39:40.3
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	6	10	8.0	16.0	Green	48.0
Arrived on Green	12	16	14.0	28.0	Yellow	3.9
Volume	18	26	22.0	44.0	Red	78.1
Arrival Type	5	5	5.0	10.0	Total	130.0
Lost Time						
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway																			
1	1.8	3.8	7.2	2.9	3.5	5.1	2.9													
2	2.5	1.9	19.1	1.8	3.0	2.2	4.0	0.9	6.5	3.6	2.9	49.2	4.9	3.9	3.3	5.2	4.6	5.7		

Lane	Join Queue: Headway									
2	17.7	4.1	1.9	1.3	10.5	6.2	3.7	12.8	3.6	13.8
3	18.6	8.5	3.7	8.7	1.8	2.2	16.5			

Cycle Number: 19
Time: 4:46:10.9
Lane Type: Left

Lane	1	Average	Total		
Volume	7	7.0	7.0	Red	
# For Sat Flow	3	3.0	3.0		
Sat Flow	943	943.0	943.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721403
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Start Date : 6/13/2018
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Cycle Number: 20
Time: 4:41:50.2
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	11	7	9.0	18.0	Green	48.8
Arrived on Green	11	24	17.5	35.0	Yellow	3.7
Volume	22	31	26.5	53.0	Red	77.6
Arrival Type	4	6	5.0	10.0	Total	130.1
Lost Time	1.3		1.3	1.3		
# For Sat Flow	6		6.0	6.0		
Sat Flow	1688		1688.0	1688.0		

Lane	Enter Intersection: Headway																											
1	2.7	7.3	3.7	2.0	2.3	3.4	3.2																					
2	1.0	2.9	3.0	3.0	3.1	1.4	2.8	1.4	1.9	2.2	2.0	1.9	2.5	4.5	1.8	1.3	3.2	5.2	6.3	7.0	7.7	4.8						

Lane	Join Queue: Headway															
2	-	51.8	0.7	5.7	0.6	1.0	1.5	65.0	1.2	15.5	6.6	0.9	4.3	4.3	1.5	9.8
3	10.1	9.6	1.0	1.5	2.2	17.6	0.8	2.3	2.8	11.2	14.9					

Cycle Number: 20
Time: 4:48:20.6
Lane Type: Left

Lane	1	Average	Total		
Volume	7	7.0	7.0	Red	
# For Sat Flow	3	3.0	3.0		
Sat Flow	1210	1210.0	1210.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721403
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Start Date : 6/13/2018
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Cycle Number: 21
Time: 4:44:00.3
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	15	11	13.0	26.0	Green	48.9
Arrived on Green	1	14	7.5	15.0	Yellow	3.8
Volume	16	25	20.5	41.0	Red	77.9
Arrival Type	1	4	2.5	5.0	Total	130.6
Lost Time	-0.2		-0.2	-0.2		
# For Sat Flow	2		2.0	2.0		
Sat Flow	1532		1532.0	1532.0		

Lane	Enter Intersection: Headway																			
1																				
2	1. 4	1. 9	3. 0	2. 9	2. 3	2. 4	1. 7	1. 8	7. 6	7. 6	2. 7	4. 7	7. 2	49 .2	5. 7	12 .4				

Lane	Join Queue: Headway											
2	- 50.7	4.3	55.3	2.5	19.5	3.2	3.1	11.7	11.2	7.7	7.7	0.6
3	7.9	2.8	1.7	22.3	7.9	18.0	0.6	1.5	0.7	5.6		

Cycle Number: 21
Time: 4:52:40.6
Lane Type: Left

Lane	1	Average	Total			
Volume	0	0.0	0.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721403
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Start Date : 6/13/2018
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Cycle Number: 22
Time: 4:46:10.9
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	12	10	11.0	22.0	Green	27.2
Arrived on Green	8	17	12.5	25.0	Yellow	3.8
Volume	20	27	23.5	47.0	Red	98.6
Arrival Type	5	6	5.5	11.0	Total	129.6
Lost Time	-0.7	-1.2	-1.0	-1.9		
# For Sat Flow	4	2	3.0	6.0		
Sat Flow	1778	1532	1655.0	3310.0		

Lane	Enter Intersection: Headway																										
1	2.6	2.9	6.2	1.9	2.7	3.4	1.7																				
2	1.0	2.0	2.1	2.3	1.9	1.9	2.4	1.9	2.3	1.7	5.6	1.5	36.5	18.5	16.3	6.2	7.3	4.6	4.6	5.2							

Lane	Join Queue: Headway										
2	- 26.3	48.7	23.2	4.5	3.3	0.7	0.7	13.4	2.7	10.4	3.0
3	- 29.6	50.8	2.0	21.0	4.6	0.7	2.5				

Cycle Number: 22
Time: 4:52:40.6
Lane Type: Left

Lane	1	Average	Total		
Volume	7	7.0	7.0	Red	
# For Sat Flow	3	3.0	3.0		
Sat Flow	1396	1396.0	1396.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721403
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Start Date : 6/13/2018
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Cycle Number: 23
Time: 4:48:20.5
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	11	7	9.0	18.0	Green	25.6
Arrived on Green	8	17	12.5	25.0	Yellow	3.9
Volume	19	24	21.5	43.0	Red	100.6
Arrival Type	6	6	6.0	12.0	Total	130.1
Lost Time						
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway																							
1	2.1	3.3																						
2	0.8	1.6	2.7	1.7	2.8	11. 3	39. 2	3.1	4.0	15. 3	4.6	5.9	3.9	5.2	3.7	7.3	4.6	3.4	3.5					

Lane	Join Queue: Headway												
2	13.7	7.9	1.3	8.4	14.3	4.6	3.3	0.6	9.7	0.7	10.0		
3	6.6	2.4	3.8	3.2	3.9	4.1	2.8	27.8	0.7	0.6	0.8	9.4	3.7

Cycle Number: 23
Time: 4:54:50.8
Lane Type: Left

Lane	1	Average	Total			
Volume	2	2.0	2.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721403
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Start Date : 6/13/2018
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Cycle Number: 24
Time: 4:50:30.5
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	11	13	12.0	24.0	Green	35.1
Arrived on Green	3	8	5.5	11.0	Yellow	3.8
Volume	14	21	17.5	35.0	Red	91.2
Arrival Type	2	4	3.0	6.0	Total	130.1
Lost Time						
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway																	
1	2.4	3.3	4.2	4.8	3.2													
2	2.1	2.9	5.4	2.5	6.6	2.2	6.3	7.4	50.9	12.6	8.8	4.9	11.2	3.2				

Lane	Join Queue: Headway														
2	26.5	11.4	1.6	12.6	27.0	0.8	2.7	2.4							
3	10.0	3.9	2.3	7.3	4.2	1.0	13.2	18.1	1.3	22.7	2.0	0.8	2.1	0.6	

Cycle Number: 24
Time: 4:57:00.3
Lane Type: Left

Lane	1	Average	Total			
Volume	5	5.0	5.0	Red		
# For Sat Flow	1	1.0	1.0			
Sat Flow	1137	1137.0	1137.0			

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721403
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Start Date : 6/13/2018
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Cycle Number: 25

Time: 4:52:40.6

Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	8	14	11.0	22.0	Green	22.6
Arrived on Green	7	9	8.0	16.0	Yellow	3.7
Volume	15	23	19.0	38.0	Red	104.0
Arrival Type	6	6	6.0	12.0	Total	130.3
Lost Time		2.3	2.3	2.3		
# For Sat Flow		3	3.0	3.0		
Sat Flow		1636	1636.0	1636.0		

Lane	Enter Intersection: Headway																			
1	1.9	2.9	3.7																	
2	2.0	2.0	2.1	1.8	13.1	33.9	4.7	10.7	11.2	5.1	2.6	19.9	7.4	7.7	4.2					

Lane	Join Queue: Headway																
2	15.7	27.3	25.3	0.7	3.8	3.3	0.7	1.0	8.7	2.5	7.7						
3	- 23.7	37.1	1.3	9.0	1.3	3.5	2.3	1.6	19.8	0.7	0.9	2.5	7.9	0.6	16.7	6.0	4.5

Cycle Number: 25

Time: 5:01:21.4

Lane Type: Left

Lane	1	Average	Total			
Volume	3	3.0	3.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721403
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Cycle Number: 26
Time: 4:54:50.8
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	11	17	14.0	28.0	Green	47.3
Arrived on Green	11	15	13.0	26.0	Yellow	3.7
Volume	22	32	27.0	54.0	Red	78.5
Arrival Type	4	4	4.0	8.0	Total	129.5
Lost Time	-0.9		-0.9	-0.9		
# For Sat Flow	1		1.0	1.0		
Sat Flow	1636		1636.0	1636.0		

Lane	Enter Intersection: Headway																												
1	1.6	2.4	4.5	1.6																									
2	1.9	2.2	1.7	2.1	2.2	2.3	2.8	1.3	2.1	1.9	1.5	1.4	3.0	1.8	2.3	1.5	2.2	1.6	3.4	3.4	5.0	1.8							

Lane	Join Queue: Headway										
2	19.7	9.9	26.6	5.9	5.3	0.7	0.8	6.4	1.1		
3	5.5	1.1	22.4	29.4	0.7	0.6	6.2	0.8	2.8	3.2	5.4

Cycle Number: 26
Time: 5:03:30.7
Lane Type: Left

Lane	1	Average	Total		
Volume	4	4.0	4.0	Red	
# For Sat Flow					
Sat Flow					

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721403
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Start Date : 6/13/2018
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Cycle Number: 27
Time: 4:57:00.3
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	9	11	10.0	20.0	Green	48.7
Arrived on Green	14	15	14.5	29.0	Yellow	3.8
Volume	23	26	24.5	49.0	Red	82.5
Arrival Type	5	5	5.0	10.0	Total	135.0
Lost Time	1.4	-6.2	-2.4	-4.8		
# For Sat Flow	4	2	3.0	6.0		
Sat Flow	1636	986	1311.0	2622.0		

Lane	Enter Intersection: Headway																							
1	2.4																							
2	1.8	3.7	2.2	2.5	3.0	1.3	2.3	2.2	1.5	2.2	1.7	2.4	2.7	2.2	17.2	35.6	12.2	5.2	2.9	2.9	4.2	8.5	13.4	

Lane	Join Queue: Headway												
2	-52.2	56.9	6.8	8.8	7.6	1.8	3.2	15.5	28.1	1.3	1.6		
3	-46.6	49.5	12.9	9.3	1.8	3.7	1.4	3.0	1.4	2.0	41.5	0.9	0.7

Cycle Number: 27
Time: 5:05:40.0
Lane Type: Left

Lane	1	Average	Total			
Volume	1	1.0	1.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721403
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Start Date : 6/13/2018
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Cycle Number: 28
Time: 4:59:15.3
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	11	13	12.0	24.0	Green	29.0
Arrived on Green	10	17	13.5	27.0	Yellow	3.9
Volume	21	30	25.5	51.0	Red	93.1
Arrival Type	6	6	6.0	12.0	Total	126.0
Lost Time		0.1	0.1	0.1		
# For Sat Flow		3	3.0	3.0		
Sat Flow		1636	1636.0	1636.0		

Lane	Enter Intersection: Headway																											
1	3.4	2.6	3.2	3.0																								
2	0.6	2.7	2.3	2.3	2.2	2.5	1.8	2.8	2.4	3.4	4.3	4.6	3.0	5.2	3.5	9.5	5.5	4.5	5.3	7.7	3.9							

Lane	Join Queue: Headway									
2	- 32.2	3.5	35.8	8.4	16.0	0.9	28.0	4.9	15.9	1.7
3	- 32.8	2.2	1.2	3.6	37.5	1.5	2.9	1.1	13.0	30.6

Cycle Number: 28
Time: 5:07:50.2
Lane Type: Left

Lane	1	Average	Total			
Volume	4	4.0	4.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
------	---------------------

Quality Counts

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File Name : 14721403
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Start Date : 6/13/2018
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Cycle Number: 29
Time: 5:01:21.3
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	10	10	10.0	20.0	Green	48.2
Arrived on Green	9	19	14.0	28.0	Yellow	3.8
Volume	19	29	24.0	48.0	Red	77.4
Arrival Type	4	5	4.5	9.0	Total	129.4
Lost Time						
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway																											
1	1.4	3.3	2.5																									
2	2.9	2.4	2.5	2.0	2.2	3.3	1.5	7.4	5.7	2.7	2.5	1.6	2.3	6.2	4.8	4.4	3.3	6.5	4.6	3.5								

Lane	Join Queue: Headway											
2	- 51.8	3.0	57.3	11.6	5.0	25.1	3.9	3.5				
3	14.4	0.9	3.2	3.8	10.1	12.4	0.6	0.7	0.8	0.8	3.4	8.5

Cycle Number: 29
Time: 5:10:00.5
Lane Type: Left

Lane	1	Average	Total			
Volume	3	3.0	3.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
------	---------------------

Quality Counts

7409 SW Tech Center Dr Ste 150
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File Name : 14721403
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Start Date : 6/13/2018
Page No : 29

Cycle Number: 30
Time: 5:03:30.7
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	8	12	10.0	20.0	Green	40.9
Arrived on Green	12	17	14.5	29.0	Yellow	3.8
Volume	20	29	24.5	49.0	Red	84.6
Arrival Type	5	5	5.0	10.0	Total	129.3
Lost Time						
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway																							
1	2.6	1.9	2.7																					
2	3.1	1.7	1.8	2.7	2.0	1.9	1.7	2.2	1.7	8.1	1.9	2.3	5.6	4.3	1.5	3.1	4.4	1.8	3.9	8.2				

Lane	Join Queue: Headway										
2	-	44.2	54.7	6.7	18.5	14.0	18.0	2.8			
3	17.9	0.6	0.8	4.5	21.2	1.0	0.7	3.6	1.9	3.7	0.9

Cycle Number: 30
Time: 5:12:10.4
Lane Type: Left

Lane	1	Average	Total		
Volume	3	3.0	3.0	Red	
# For Sat Flow					
Sat Flow					

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721403
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Start Date : 6/13/2018
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Cycle Number: 31
Time: 5:05:40.0
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	7	11	9.0	18.0	Green	46.6
Arrived on Green	12	22	17.0	34.0	Yellow	3.8
Volume	19	33	26.0	52.0	Red	79.8
Arrival Type	5	5	5.0	10.0	Total	130.2
Lost Time						
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway																											
1	2.5	1.9	2.2	2.9	3.5																							
2	1.7	3.3	3.1	2.3	3.3	2.3	3.9	4.2	1.8	4.9	1.6	5.0	7.7	4.2	2.4	3.2	5.2	1.8	2.7									

Lane	Join Queue: Headway												
2	19.8	16.2	4.8	1.0	1.6	3.8	9.4						
3	8.0	8.3	6.9	6.3	2.5	1.7	5.6	0.8	4.3	1.6	1.8	5.5	

Cycle Number: 31
Time: 5:14:20.2
Lane Type: Left

Lane	1	Average	Total			
Volume	5	5.0	5.0	Red		
# For Sat Flow	1	1.0	1.0			
Sat Flow	1034	1034.0	1034.0			

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721403
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Start Date : 6/13/2018
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Cycle Number: 32
Time: 5:07:50.2
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	7	12	9.5	19.0	Green	32.6
Arrived on Green	10	13	11.5	23.0	Yellow	3.8
Volume	17	25	21.0	42.0	Red	93.9
Arrival Type	6	6	6.0	12.0	Total	130.3
Lost Time						
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway																							
1	2.1	2.9																						
2	0.6	2.3	2.0	2.2	3.0	2.0	2.7	2.2	2.1	9.9	31.0	41.8	7.5	3.1	5.7	4.4	6.9							

Lane	Join Queue: Headway																			
2	7.5	8.6	2.0	2.2	1.4	30.3	1.0	0.7	11.0	5.4	17.1									
3	6.9	2.7	3.0	0.8	1.5	4.9	2.3	2.5	15.2	2.0	2.4	1.6	2.5	8.4	5.0	1.2	2.7	5.3	7.6	9.3

Cycle Number: 32
Time: 5:16:30.3
Lane Type: Left

Lane	1	Average	Total			
Volume	2	2.0	2.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721403
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Start Date : 6/13/2018
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Cycle Number: 33
Time: 5:10:00.5
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	11	20	15.5	31.0	Green	36.8
Arrived on Green	6	6	6.0	12.0	Yellow	4.0
Volume	17	26	21.5	43.0	Red	89.1
Arrival Type	4	2	3.0	6.0	Total	129.9
Lost Time	-0.9	0.4	-0.3	-0.5		
# For Sat Flow	2	7	4.5	9.0		
Sat Flow	1800	1432	1616.0	3232.0		

Lane	Enter Intersection: Headway																					
1	2.2	3.3	3.1	2.1	2.3	2.0	2.2	2.1	1.8	1.4												
2	2.0	1.8	1.6	1.7	1.8	2.2	2.4	1.7	2.3	3.8	71.4	5.2	5.6	4.8	8.0	2.6	6.8					

Lane	Join Queue: Headway															
2	- 38.5	5.4	65.2	1.8	4.2	15.0	2.3	1.2								
3	- 37.5	0.7	1.5	44.1	0.7	4.5	4.5	0.9	1.5	1.4	16.8	7.3	1.3	9.5	8.0	8.2

Cycle Number: 33
Time: 5:20:50.9
Lane Type: Left

Lane	1	Average	Total		
Volume	10	10.0	10.0	Red	
# For Sat Flow	3	3.0	3.0		
Sat Flow	1656	1656.0	1656.0		

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721403
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Start Date : 6/13/2018
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Cycle Number: 34
Time: 5:12:10.4
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	8	16	12.0	24.0	Green	48.9
Arrived on Green	15	10	12.5	25.0	Yellow	3.6
Volume	23	26	24.5	49.0	Red	77.3
Arrival Type	5	3	4.0	8.0	Total	129.8
Lost Time						
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway																							
1	2.1	2.4	2.2	2.4	3.9																			
2	0.8	1.9	2.0	5.0	2.2	2.7	1.9	1.4	1.8	3.1	8.6	1.5	2.7	2.3	4.5	2.4	2.6	45.3	2.9	2.7	9.4	5.4	3.7	

Lane	Join Queue: Headway											
2	12.3	0.9	5.2	4.7	1.3	5.0	12.3	17.4	4.8	6.1	4.1	
3	8.8	2.3	8.9	2.3	2.6	3.6	1.6	13.3	18.2	4.1	9.6	0.7

Cycle Number: 34
Time: 5:23:00.3
Lane Type: Left

Lane	1	Average	Total			
Volume	5	5.0	5.0	Red		
# For Sat Flow	1	1.0	1.0			
Sat Flow	930	930.0	930.0			

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721403
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Start Date : 6/13/2018
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Cycle Number: 35
Time: 5:14:20.2
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	11	12	11.5	23.0	Green	47.0
Arrived on Green	15	18	16.5	33.0	Yellow	3.9
Volume	26	30	28.0	56.0	Red	79.3
Arrival Type	5	5	5.0	10.0	Total	130.2
Lost Time	-3.5	2.3	-0.6	-1.2		
# For Sat Flow	2	4	3.0	6.0		
Sat Flow	1469	1870	1669.5	3339.0		

Lane	Enter Intersection: Headway																													
1	1.8	4.0	3.0																											
2	0.6	1.7	2.4	1.7	2.0	2.9	3.5	1.5	1.9	1.1	2.3	2.1	2.0	2.2	1.6	1.8	2.1	1.5	1.9	1.9	7.3	50.2	5.0	14.9	8.7	4.6				

Lane	Join Queue: Headway																		
2	-49.6	63.8	2.3	6.5	39.5	1.2	2.4	12.7											
3	-46.8	6.2	2.2	56.2	2.5	1.9	12.7	2.4	3.3	0.8	5.4	2.3	1.4	2.1	11.5	1.0	4.4	2.3	

Cycle Number: 35
Time: 5:25:10.7
Lane Type: Left

Lane	1	Average	Total			
Volume	3	3.0	3.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721403
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Start Date : 6/13/2018
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Cycle Number: 36
Time: 5:16:30.3
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	8	18	13.0	26.0	Green	47.7
Arrived on Green	17	8	12.5	25.0	Yellow	3.8
Volume	25	26	25.5	51.0	Red	78.4
Arrival Type	5	2	3.5	7.0	Total	129.9
Lost Time	-1.4	-1.7	-1.6	-3.1		
# For Sat Flow	1	2	1.5	3.0		
Sat Flow	1385	1412	1398.5	2797.0		

Lane	Enter Intersection: Headway																								
1	2.8	3.0	2.3	4.7	7.5	2.4	1.7	2.0																	
2	1.6	1.9	2.2	3.2	2.6	1.7	2.0	1.2	2.3	1.4	4.1	1.5	4.4	4.4	2.7	1.3	2.4	0.7	1.8	6.3	44.3	4.7	16.9	2.0	9.8

Lane	Join Queue: Headway														
2	-48.1	2.8	1.7	52.1	0.6	10.0	6.4	6.2	5.4	1.9	2.0	3.6	1.1	5.8	17.2
3	7.3	2.6	10.0	2.6	12.5	7.8	6.0	1.8	12.2	0.9	1.3	12.4			

Cycle Number: 36
Time: 5:27:20.5
Lane Type: Left

Lane	1	Average	Total			
Volume	8	8.0	8.0	Red		
# For Sat Flow	4	4.0	4.0			
Sat Flow	1054	1054.0	1054.0			

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721403
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Cycle Number: 37
Time: 5:18:40.2
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	15	12	13.5	27.0	Green	35.6
Arrived on Green	5	12	8.5	17.0	Yellow	3.9
Volume	20	24	22.0	44.0	Red	91.2
Arrival Type	3	5	4.0	8.0	Total	130.7
Lost Time	1.6	0.4	1.0	2.0		
# For Sat Flow	3	4	3.5	7.0		
Sat Flow	1612	1735	1673.5	3347.0		

Lane	Enter Intersection: Headway																			
1	2.5	2.3	2.5	2.2	1.7															
2	0.7	5.9	2.3	1.7	2.3	2.6	1.8	1.8	2.5	2.6	2.2	1.8	2.3	5.0	1.7	53.5	3.9	5.6	10.8	8.8

Lane	Join Queue: Headway																			
2	4.0	0.8	4.6	0.9	9.2	0.7	1.3	4.4	4.2	6.0	4.1	2.5	1.3	1.2	4.1	5.7	10.7	13.7	8.7	
3	-34.9	39.0	1.5	2.3	2.4	2.0	2.7	2.0	1.9	1.0	6.2	10.3	4.0	0.9	2.4	4.8	3.9	3.0	2.4	3.9

Cycle Number: 37
Time: 5:29:30.5
Lane Type: Left

Lane	1	Average	Total			
Volume	5	5.0	5.0	Red		
# For Sat Flow	1	1.0	1.0			
Sat Flow	2061	2061.0	2061.0			

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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Start Date : 6/13/2018
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Cycle Number: 38
Time: 5:20:50.9
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	19	29	24.0	48.0	Green	48.6
Arrived on Green	6	1	3.5	7.0	Yellow	3.8
Volume	25	30	27.5	55.0	Red	77.0
Arrival Type	2	1	1.5	3.0	Total	129.4
Lost Time	-0.1	0.5	0.2	0.4		
# For Sat Flow	13	17	15.0	30.0		
Sat Flow	1733	1553	1643.0	3286.0		

Lane	Enter Intersection: Headway																													
1	2.1	1.8	1.7	2.9																										
2	2.3	1.9	2.0	2.1	1.8	2.4	1.8	2.8	2.0	1.6	2.2	3.1	1.7	1.1	3.1	2.0	1.4	2.4	2.3	6.1	2.2	4.3	1.5	4.9	4.7					

Lane	Join Queue: Headway																				
2	- 50.7	3.0	2.2	46.2	14.6	1.5	9.6	2.1	2.0	1.1	2.6	1.9	8.2	2.5	7.3	3.8	2.0	2.8	6.8	3.9	
3	2.4	3.6	2.1	1.7	1.9	1.1	1.0	3.7	0.8	0.7	1.7	4.7	4.7	2.9	5.0	9.9	4.7	3.2	8.9	4.8	7.5

Cycle Number: 38
Time: 5:31:41.0
Lane Type: Left

Lane	1	Average	Total			
Volume	4	4.0	4.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721403
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Start Date : 6/13/2018
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Cycle Number: 39
Time: 5:23:00.3
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	20	21	20.5	41.0	Green	48.7
Arrived on Green	10	9	9.5	19.0	Yellow	3.9
Volume	30	30	30.0	60.0	Red	77.7
Arrival Type	3	2	2.5	5.0	Total	130.3
Lost Time	1.3	1.0	1.2	2.3		
# For Sat Flow	9	11	10.0	20.0		
Sat Flow	1906	1424	1665.0	3330.0		

Lane	Enter Intersection: Headway																													
1	1.8	3.2	2.0	1.9																										
2	1.7	2.5	2.2	2.5	2.0	2.8	1.6	1.2	1.8	2.1	2.5	1.7	1.3	1.8	1.5	2.6	1.7	2.7	1.4	2.6	2.8	3.2	2.7	1.7	4.9.2	7.7	4.3	6.3	5.5	4.1

Lane	Join Queue: Headway																			
2	4.8	7.4	18.1	7.4	1.8	1.4	1.7	6.6	1.9	2.1	2.8	2.3	11.9	4.8						
3	-45.8	9.0	44.7	1.8	3.0	0.6	3.6	3.6	0.7	0.9	3.0	5.8	6.2	3.0	1.9	1.0	9.3	4.1	1.0	12.2

Cycle Number: 39
Time: 5:33:50.9
Lane Type: Left

Lane	1	Average	Total		
Volume	4	4.0	4.0	Red	
# For Sat Flow					
Sat Flow					

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721403
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Cycle Number: 40
Time: 5:25:10.6
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	14	20	17.0	34.0	Green	48.8
Arrived on Green	4	3	3.5	7.0	Yellow	3.8
Volume	18	23	20.5	41.0	Red	77.3
Arrival Type	2	1	1.5	3.0	Total	129.9
Lost Time	-1.0	-2.3	-1.7	-3.3		
# For Sat Flow	4	5	4.5	9.0		
Sat Flow	1485	1475	1480.0	2960.0		

Lane	Enter Intersection: Headway																	
1	1.7	3.4	1.9															
2	2.2	1.9	2.7	1.9	2.5	2.2	2.3	2.7	1.7	2.3	1.6	2.0	7.7	3.9	4.5	2.9	5.6	29.0

Lane	Join Queue: Headway											
2	8.0	24.6	2.2	5.9	14.9	3.1	9.1					
3	11.5	1.1	8.9	4.9	3.1	2.2	12.7	0.9	2.4	3.0	2.5	

Cycle Number: 40
Time: 5:36:00.1
Lane Type: Left

Lane	1	Average	Total			
Volume	3	3.0	3.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721403
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Start Date : 6/13/2018
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Cycle Number: 41
Time: 5:27:20.4
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	7	11	9.0	18.0	Green	26.6
Arrived on Green	13	19	16.0	32.0	Yellow	3.9
Volume	20	30	25.0	50.0	Red	99.6
Arrival Type	6	6	6.0	12.0	Total	130.1
Lost Time	2.8	1.1	2.0	3.9		
# For Sat Flow	2	7	4.5	9.0		
Sat Flow	2118	1658	1888.0	3776.0		

Lane	Enter Intersection: Headway																							
1	2.2	2.3	2.3																					
2	1.9	3.4	3.2	1.2	1.4	2.0	3.5	1.6	7.8	3.2	9.4	5.7	2.5	2.9	5.9	3.0	4.1	7.1	5.1	4.8				

Lane	Join Queue: Headway																							
2	7.1	7.2	0.9	3.7	0.7	16.4	0.7	35.4	16.6	1.6	2.4	2.4												
3	24.9	1.0	29.1	1.3	10.8	1.1	1.7	2.6	6.4	0.8	3.4	1.9	2.9	3.2	1.8	0.9	11.7	21.4	2.5	1.5	5.6	10.5		

Cycle Number: 41
Time: 5:38:10.7
Lane Type: Left

Lane	1	Average	Total			
Volume	3	3.0	3.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
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Quality Counts

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File Name : 14721403
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Cycle Number: 42
Time: 5:29:30.5
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	12	22	17.0	34.0	Green	48.7
Arrived on Green	13	4	8.5	17.0	Yellow	3.9
Volume	25	26	25.5	51.0	Red	77.9
Arrival Type	4	1	2.5	5.0	Total	130.5
Lost Time	2.7		2.7	2.7		
# For Sat Flow	2		2.0	2.0		
Sat Flow	1895		1895.0	1895.0		

Lane	Enter Intersection: Headway																								
1	3.3																								
2	2.3	1.7	3.8	2.5	2.2	1.6	2.1	2.0	2.3	1.2	2.2	2.2	3.0	4.6	2.6	2.2	2.5	7.8	47.1	5.6	4.4	2.5	3.2	8.3	5.6

Lane	Join Queue: Headway														
2	-51.3	3.0	69.3	6.2	3.3	2.5	1.8	1.3	40.2	1.4					
3	-52.1	72.5	1.7	6.9	3.0	1.9	1.7	8.3	1.8	1.3	5.4	5.1	3.1	6.0	8.2

Cycle Number: 42
Time: 5:40:20.4
Lane Type: Left

Lane	1	Average	Total			
Volume	1	1.0	1.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
------	--------------------------------

Lane	Join Queue: Headway
------	---------------------

Quality Counts

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File Name : 14721403
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Start Date : 6/13/2018
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Cycle Number: 43
Time: 5:31:41.0
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	10	15	12.5	25.0	Green	48.0
Arrived on Green	7	17	12.0	24.0	Yellow	3.9
Volume	17	32	24.5	49.0	Red	78.0
Arrival Type	3	4	3.5	7.0	Total	129.9
Lost Time		1.3	1.3	1.3		
# For Sat Flow		7	7.0	7.0		
Sat Flow		1647	1647.0	1647.0		

Lane	Enter Intersection: Headway																							
1	3.4	3.1	3.2																					
2	1.7	1.9	1.6	8.1	2.0	2.1	4.9	8.5	1.4	6.8	2.5	3.8	5.1	1.4	4.8	3.0	4.3							

Lane	Join Queue: Headway														
2	-50.2	60.7	2.7	7.4	3.9	0.7	24.4								
3	-48.4	0.9	2.2	1.7	51.7	8.8	0.8	3.8	0.6	3.4	4.1	40.5	3.2	0.8	1.1

Cycle Number: 43
Time: 5:42:30.6
Lane Type: Left

Lane	1	Average	Total			
Volume	3	3.0	3.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
------	--------------------------------

Lane	Join Queue: Headway
------	---------------------

Quality Counts

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File Name : 14721403
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Start Date : 6/13/2018
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Cycle Number: 44
Time: 5:33:50.9
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	7	15	11.0	22.0	Green	29.3
Arrived on Green	5	7	6.0	12.0	Yellow	3.7
Volume	12	22	17.0	34.0	Red	96.1
Arrival Type	5	4	4.5	9.0	Total	129.1
Lost Time		3.7	3.7	3.7		
# For Sat Flow		4	4.0	4.0		
Sat Flow		2000	2000.0	2000.0		

Lane	Enter Intersection: Headway																	
1	3.2	3.2																
2	1.4	3.2	2.2	1.8	2.1	2.0	2.4	5.7	6.4	54.0	7.2	16.4						

Lane	Join Queue: Headway										
2	-28.3	95.1									
3	-26.3	1.2	0.8	1.5	30.5	31.6	39.3	2.1	0.9	6.9	2.8

Cycle Number: 44
Time: 5:44:40.6
Lane Type: Left

Lane	1	Average	Total		
Volume	2	2.0	2.0	Red	
# For Sat Flow					
Sat Flow					

Lane	Enter Intersection: Headway
------	--------------------------------

Lane	Join Queue: Headway
------	---------------------

Quality Counts

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File Name : 14721403
Site Code : 14721403
Start Date : 6/13/2018
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Cycle Number: 45
Time: 5:36:00.0
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	2	11	6.5	13.0	Green	7.9
Arrived on Green	9	12	10.5	21.0	Yellow	3.8
Volume	11	23	17.0	34.0	Red	119.0
Arrival Type	6	6	6.0	12.0	Total	130.7
Lost Time						
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway																		
1	2.8																		
2	2.2	7.1	32.0	3.0	5.0	16.7	27.6	7.9	5.8	7.6	5.4								

Lane	Join Queue: Headway																		
2	-10.3	18.9	7.2	30.4	14.7	3.3	1.2	5.3	0.7	5.2	18.7	17.5	2.5	3.4					
3	6.0	10.3	7.6	3.1	22.1	0.9	2.0	1.0	0.9	12.9	0.6	0.6	0.7	1.1	3.9	4.4	5.9	9.7	24.4

Cycle Number: 45
Time: 5:46:51.0
Lane Type: Left

Lane	1	Average	Total			
Volume	1	1.0	1.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
------	--------------------------------

Lane	Join Queue: Headway
------	---------------------

Quality Counts

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File Name : 14721403
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Start Date : 6/13/2018
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Cycle Number: 46
Time: 5:38:10.7
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	14	19	16.5	33.0	Green	48.5
Arrived on Green	4	10	7.0	14.0	Yellow	3.7
Volume	18	29	23.5	47.0	Red	77.6
Arrival Type	2	3	2.5	5.0	Total	129.8
Lost Time	1.1	-0.1	0.5	1.0		
# For Sat Flow	1	5	3.0	6.0		
Sat Flow	2000	1513	1756.5	3513.0		

Lane	Enter Intersection: Headway																							
1	2.7	2.1	3.8	1.6																				
2	0.8	2.4	2.3	2.8	1.8	1.3	6.3	1.2	2.9	1.2	9.3	1.4	3.4	5.5	6.9	5.0	1.6	5.4						

Lane	Join Queue: Headway														
2	-47.7	80.2	6.4	5.1	29.2	1.3									
3	-51.9	0.7	0.7	3.6	0.9	53.4	4.3	17.4	10.6	1.6	3.4	25.9	2.0	2.4	1.4

Cycle Number: 46
Time: 5:49:00.8
Lane Type: Left

Lane	1	Average	Total			
Volume	4	4.0	4.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
------	--------------------------------

Lane	Join Queue: Headway
------	---------------------

Quality Counts

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File Name : 14721403
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Start Date : 6/13/2018
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Cycle Number: 47
Time: 5:40:20.5
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	6	15	10.5	21.0	Green	28.5
Arrived on Green	3	8	5.5	11.0	Yellow	3.8
Volume	9	23	16.0	32.0	Red	97.7
Arrival Type	5	5	5.0	10.0	Total	130.0
Lost Time		-0.2	-0.2	-0.2		
# For Sat Flow		6	6.0	6.0		
Sat Flow		1421	1421.0	1421.0		

Lane	Enter Intersection: Headway																			
1	3.5	4.8	3.6	1.4																
2	1.9	2.3	2.2	1.5	4.8	3.7	4.2	87.8	10.1											

Lane	Join Queue: Headway																									
2	- 31 .0	1. 2	42 .0	5. 1	2. 0	7. 2	1. 0	0. 8	5. 3	4. 4	10 .0	16 .5	10 .9	20 .6												
3	- 30 .3	1. 0	0. 7	0. 8	4. 8	1. 5	50 .1	0. 9	0. 7	1. 8	0. 9	2. 2	1. 5	2. 1	1. 0	1. 2	4. 4	4. 4	5. 8	4. 9	11 .0	9. 1	4. 2	2. 5	3. 5	4. 6

Cycle Number: 47
Time: 5:51:10.9
Lane Type: Left

Lane	1	Average	Total			
Volume	4	4.0	4.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
------	--------------------------------

Lane	Join Queue: Headway
------	---------------------

Quality Counts

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File Name : 14721403
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Start Date : 6/13/2018
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Cycle Number: 48
Time: 5:42:30.5
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	14	26	20.0	40.0	Green	48.8
Arrived on Green	11	4	7.5	15.0	Yellow	3.7
Volume	25	30	27.5	55.0	Red	77.4
Arrival Type	4	1	2.5	5.0	Total	129.9
Lost Time	5.2	1.5	3.4	6.7		
# For Sat Flow	8	10	9.0	18.0		
Sat Flow	1618	1519	1568.5	3137.0		

Lane	Enter Intersection: Headway																													
1	2.2	3.7																												
2	1.6	7.4	3.0	2.0	2.1	2.1	2.8	2.6	1.7	2.2	1.8	2.5	2.9	1.3	2.0	2.9	1.5	1.0	1.6	3.5	1.5	3.6.9	5.6	5.0	2.5.6					

Lane	Join Queue: Headway																				
2	-46.4	3.9	51.6	0.7	0.8	8.2	13.1	19.0	17.2	5.1	0.7										
3	-52.3	1.6	2.8	7.2	44.5	0.7	2.6	1.2	2.0	1.1	2.3	1.2	9.7	2.2	2.2	4.8	9.5	9.2	10.2	4.4	8.4

Cycle Number: 48
Time: 5:53:20.5
Lane Type: Left

Lane	1	Average	Total		
Volume	2	2.0	2.0	Red	
# For Sat Flow					
Sat Flow					

Lane	Enter Intersection: Headway
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Lane	Join Queue: Headway
------	---------------------

Quality Counts

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File Name : 14721403
Site Code : 14721403
Start Date : 6/13/2018
Page No : 48

Cycle Number: 49
Time: 5:44:40.5
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	11	21	16.0	32.0	Green	44.1
Arrived on Green	15	9	12.0	24.0	Yellow	3.9
Volume	26	30	28.0	56.0	Red	82.4
Arrival Type	5	3	4.0	8.0	Total	130.4
Lost Time	2.5	-0.4	1.1	2.1		
# For Sat Flow	2	4	3.0	6.0		
Sat Flow	1714	1636	1675.0	3350.0		

Lane	Enter Intersection: Headway																												
1	2.4																												
2	1.0	3.2	3.2	3.6	2.4	1.8	1.4	2.1	1.7	2.2	2.2	2.7	1.5	2.1	2.2	2.4	2.4	3.1	1.6	2.67	1.20	2.2	2.01	3.0	6.5	5.8			

Lane	Join Queue: Headway												
2	-40.6	56.7	15.0	0.7	19.4	3.9	8.7						
3	-44.3	62.9	0.7	12.4	0.7	0.7	0.9	15.4	1.1	2.4	27.7	0.8	

Cycle Number: 49
Time: 5:55:30.5
Lane Type: Left

Lane	1	Average	Total			
Volume	1	1.0	1.0	Red		
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway
------	-----------------------------

Lane	Join Queue: Headway
------	---------------------

Quality Counts

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File Name : 14721403
Site Code : 14721403
Start Date : 6/13/2018
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Cycle Number: 50
Time: 5:46:51.0
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	7	12	9.5	19.0	Green	32.9
Arrived on Green	2	6	4.0	8.0	Yellow	3.7
Volume	9	18	13.5	27.0	Red	93.1
Arrival Type	3	4	3.5	7.0	Total	129.7
Lost Time						
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway																
1	2.4	3.4	3.6	2.0	1.5	3.9	115.7										
2	5.9	4.8	3.0	5.1	4.6	4.1	3.5	72.3	2.7								

Lane	Join Queue: Headway																					
2	11.9	9.2	25.5	1.2	4.1	4.5	8.0	23.3	4.5													
3	10.5	6.4	3.7	1.1	3.1	10.7	18.5	0.9	0.8	0.7	1.7	1.3	5.8	1.2	2.3	3.9	2.1	5.6	1.7	1.2	2.0	7.0

Cycle Number: 50
Time: 5:57:40.7
Lane Type: Left

Lane	1	Average	Total			
Volume	7	7.0	7.0	Red		
# For Sat Flow	1	1.0	1.0			
Sat Flow	2331	2331.0	2331.0			

Lane	Enter Intersection: Headway
------	-----------------------------

Lane	Join Queue: Headway
------	---------------------

Quality Counts

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File Name : 14721403
Site Code : 14721403
Start Date : 6/13/2018
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Cycle Number: 51
Time: 5:49:00.7
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	9	22	15.5	31.0	Green	48.8
Arrived on Green	13	8	10.5	21.0	Yellow	3.7
Volume	22	30	26.0	52.0	Red	77.6
Arrival Type	5	2	3.5	7.0	Total	130.1
Lost Time	2.8	1.7	2.3	4.5		
# For Sat Flow	5	12	8.5	17.0		
Sat Flow	1856	1721	1788.5	3577.0		

Lane	Enter Intersection: Headway																							
1																								
2	2.9	2.7	2.8	2.1	2.2	1.1	2.0	2.6	1.8	1.8	1.9	2.0	2.6	1.5	8.2	3.5	2.6	7.4	5.6	5.1	7.3	7.2		

Lane	Join Queue: Headway												
2	-	51.9	4.0	52.7	3.0	11.6	10.3	2.0	13.7	6.7	8.1	14.8	2.7
3	-	52.2	1.7	56.2	1.5	37.7	27.6	1.3	2.9				

Cycle Number: 52
Time: 5:51:10.8
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	12	8	10.0	20.0	Green	48.4
Arrived on Green	4	20	12.0	24.0	Yellow	3.8
Volume	16	28	22.0	44.0	Red	77.5
Arrival Type	2	5	3.5	7.0	Total	129.7
Lost Time	2.9	1.0	2.0	3.9		
# For Sat Flow	1	5	3.0	6.0		
Sat Flow	2250	1593	1921.5	3843.0		

Lane	Enter Intersection: Headway																							
1																								
2	1.3	2.8	2.0	3.3	1.6	2.1	2.4	1.8	2.6	11.2	8.4	45.2	9.2	4.0	8.5	12.0								

Lane	Join Queue: Headway																
2	- 48.6	56.8	6.1	17.2	1.4	12.5	8.1	4.6	6.8	3.1							
3	- 50.8	1.5	3.0	1.0	3.5	1.7	44.5	2.5	1.8	1.3	4.9	0.7	1.2	9.3	1.8	2.3	11.7

Quality Counts

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File Name : 14721403
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Cycle Number: 53
Time: 5:53:20.5
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	10	17	13.5	27.0	Green	7.8
Arrived on Green	2	5	3.5	7.0	Yellow	3.8
Volume	12	22	17.0	34.0	Red	118.3
Arrival Type	6	6	6.0	12.0	Total	129.9
Lost Time		-10.2	-10.2	-10.2		
# For Sat Flow		1	1.0	1.0		
Sat Flow		857	857.0	857.0		

Lane	Enter Intersection: Headway															
1																
2	1.7	2.0	1.8	3.9	28.3	7.3	21.8	5.4	3.8	13.6	6.5	5.6				

Lane	Join Queue: Headway													
2	5.7	0.8	12.7	2.9	54.4	27.0	9.8							
3	-11.4	19.5	1.4	5.6	1.0	2.7	1.3	0.9	2.1	28.3	24.1	31.9	9.5	

Cycle Number: 54
Time: 5:55:30.4
Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	7	13	10.0	20.0	Green	19.1
Arrived on Green	5	1	3.0	6.0	Yellow	3.7
Volume	12	14	13.0	26.0	Red	107.5
Arrival Type	6	1	3.5	7.0	Total	130.3
Lost Time						
# For Sat Flow						
Sat Flow						

Lane	Enter Intersection: Headway													
1														
2	1.7	3.6	5.1	2.7	1.9	2.1	30.3	17.7	31.7	5.6	21.1	5.5		

Lane	Join Queue: Headway															
2	19.6	4.6	35.0	12.8												
3	- 21.8	1.5	1.5	59.9	5.9	22.2	2.1	1.5	0.7	4.8	0.7	1.0	4.9	13.3	4.7	

Quality Counts

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File Name : 14721403
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Start Date : 6/13/2018
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Cycle Number: 55

Time: 5:57:40.7

Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	4	15	9.5	19.0	Green	17.5
Arrived on Green	16	15	15.5	31.0	Yellow	3.8
Volume	20	30	25.0	50.0	Red	118.9
Arrival Type	6	6	6.0	12.0	Total	140.2
Lost Time		-4.6	-4.6	-4.6		
# For Sat Flow		4	4.0	4.0		
Sat Flow		1231	1231.0	1231.0		

Lane	Enter Intersection: Headway																							
1																								
2	2.3	5.6	1.6	2.2	2.2	7.0	18.2	4.9	3.9	3.4	2.7	15.0	12.3	15.0	4.5	13.8	8.9	8.7	2.5	2.5				

Lane	Join Queue: Headway																									
2	7. 0	1. 6	2. 2	1. 9	1. 9	1. 2	27 .1	0. 8	6. 6	10 .0	14 .6	1. 0	1. 7	2. 5	26 .4	12 .5										
3	- 20 .7	28 .1	1. 5	2. 2	1. 0	2. 1	1. 2	0. 8	0. 7	2. 2	5. 2	21 .6	1. 2	0. 6	0. 8	12 .1	2. 1	1. 5	4. 0	11 .2	17 .3	0. 6	17 .7	1. 0	1. 0	0. 9

Cycle Number: Summary

Time: 4:00:00.0 to 6:00:00.9

Lane Type: Normal

Lane	2	3	Average	Total	Phase	Timing
Arrived On Red	9.7	14.8	12.3	24.5	Green	36.9
Arrived on Green	8.3	10.8	9.6	19.1	Yellow	3.8
Volume	18.0	25.5	21.8	43.5	Red	89.3
Arrival Type	4.2	3.9	4.1	8.1	Total	130.0
Lost Time	0.6	0.5	0.6	1.1		
# For Sat Flow	2.0	3.6	2.8	5.6		
Sat Flow	1714.6	1540.7	1627.7	3255.3		

Lane	Enter Intersection: Headway																							
2	1.8	2.9	4.0	4.3	6.1	4.6	6.1	9.7	7.5	6.8	7.0	9.6	6.4	8.7	8.1	6.6	6.8	8.3	7.9	7.0	12.8	12.9	15.2	6.0
3	2.1	2.5	2.4	2.3	3.5	3.1	3.4	2.8	2.8	3.2	4.6	5.3	6.7	5.8	4.2	6.5	6.3	6.7	6.9	7.1	7.3	11.5	6.7	6.2

Lane	Join Queue: Headway																							
2	-16.6	19.9	20.3	7.8	10.3	7.5	8.7	7.9	10.9	4.8	7.0	6.4	4.5	6.8	10.8	5.1	10.1	6.2	7.6	3.9				
3	-15.9	14.0	7.4	9.0	8.0	7.0	8.1	4.5	5.1	4.6	6.1	7.9	3.1	3.8	4.3	5.2	5.3	6.3	6.2	5.1	6.5	6.6	6.8	2.3

Quality Counts

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File Name : 14721403

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Start Date : 6/13/2018

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Cycle Number: Summary

Time: 4:00:00.0 to 6:00:00.9

Lane Type: Left

Lane	1	Average	Total			
Volume	3.7	3.7	3.7	Red		
# For Sat Flow	0.6	0.6	0.6			
Sat Flow	1223.8	1223.8	1223.8			

Lane	Enter Intersection: Headway
------	-----------------------------

Lane	Join Queue: Headway
------	---------------------

Appendix E: 6th Edition Operations Worksheets for Unsignalized Intersections

Intersection	
Intersection Delay, s/veh	9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	126	21	12	0	14	9	7	4	0	15	8	127
Future Vol, veh/h	126	21	12	0	14	9	7	4	0	15	8	127
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Heavy Vehicles, %	5	0	0	0	0	0	0	0	0	0	0	1
Mvmt Flow	159	27	15	0	18	11	9	5	0	19	10	161
Number of Lanes	1	1	0	0	1	0	0	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	1	2
HCM Control Delay	9.7	8.2	8.6	8.4
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	64%	100%	0%	0%	100%	0%
Vol Thru, %	36%	0%	64%	61%	0%	6%
Vol Right, %	0%	0%	36%	39%	0%	94%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	11	126	33	23	15	135
LT Vol	7	126	0	0	15	0
Through Vol	4	0	21	14	0	8
RT Vol	0	0	12	9	0	127
Lane Flow Rate	14	159	42	29	19	171
Geometry Grp	6	7	7	6	7	7
Degree of Util (X)	0.021	0.248	0.055	0.04	0.03	0.213
Departure Headway (Hd)	5.468	5.589	4.747	5.002	5.642	4.478
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	655	643	754	715	636	803
Service Time	3.499	3.318	2.476	3.039	3.361	2.197
HCM Lane V/C Ratio	0.021	0.247	0.056	0.041	0.03	0.213
HCM Control Delay	8.6	10.2	7.8	8.2	8.5	8.4
HCM Lane LOS	A	B	A	A	A	A
HCM 95th-tile Q	0.1	1	0.2	0.1	0.1	0.8

Intersection						
Int Delay, s/veh	4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	73	112	148	0	47	66
Future Vol, veh/h	73	112	148	0	47	66
Conflicting Peds, #/hr	1	0	0	1	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	0	3	2	0	0	0
Mvmt Flow	92	142	187	0	59	84
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	188	0	-	0	514	189
Stage 1	-	-	-	-	188	-
Stage 2	-	-	-	-	326	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1398	-	-	-	524	858
Stage 1	-	-	-	-	849	-
Stage 2	-	-	-	-	736	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1397	-	-	-	488	857
Mov Cap-2 Maneuver	-	-	-	-	539	-
Stage 1	-	-	-	-	792	-
Stage 2	-	-	-	-	735	-
Approach	EB	WB		SB		
HCM Control Delay, s	3.1	0		10.9		
HCM LOS	B					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1397	-	-	-	539	857
HCM Lane V/C Ratio	0.066	-	-	-	0.11	0.097
HCM Control Delay (s)	7.8	-	-	-	12.5	9.7
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.4	0.3

Intersection												
Int Delay, s/veh	7.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	108	142	0	0	145	6	0	0	0	32	0	321
Future Vol, veh/h	108	142	0	0	145	6	0	0	0	32	0	321
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	-	-	-	-	-	-	0	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	71	71	71	71	71	71	71	71	71	71	71	71
Heavy Vehicles, %	0	3	0	0	2	0	0	0	0	11	0	0
Mvmt Flow	152	200	0	0	204	8	0	0	0	45	0	452
Major/Minor	Major1		Major2			Minor1			Minor2			
Conflicting Flow All	212	0	-	-	-	0	938	716	200	712	-	208
Stage 1	-	-	-	-	-	-	504	504	-	208	-	-
Stage 2	-	-	-	-	-	-	434	212	-	504	-	-
Critical Hdwy	4.1	-	-	-	-	-	7.1	6.5	6.2	7.21	-	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.21	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.21	-	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3	3.599	-	3.3
Pot Cap-1 Maneuver	1370	-	0	0	-	-	247	358	846	336	0	837
Stage 1	-	-	0	0	-	-	554	544	-	774	0	-
Stage 2	-	-	0	0	-	-	604	731	-	534	0	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	1370	-	-	-	-	-	104	318	846	307	-	837
Mov Cap-2 Maneuver	-	-	-	-	-	-	114	383	-	387	-	-
Stage 1	-	-	-	-	-	-	493	484	-	688	-	-
Stage 2	-	-	-	-	-	-	278	731	-	475	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	3.4		0			0			14.3			
HCM LOS						A			B			
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR	SBLn1	SBLn2					
Capacity (veh/h)	-	1370	-	-	-	387	837					
HCM Lane V/C Ratio	-	0.111	-	-	-	0.116	0.54					
HCM Control Delay (s)	0	8	-	-	-	15.5	14.2					
HCM Lane LOS	A	A	-	-	-	C	B					
HCM 95th %tile Q(veh)	-	0.4	-	-	-	0.4	3.3					

Intersection	
Intersection Delay, s/veh	8.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱			↕			↕		↰	↱	
Traffic Vol, veh/h	132	9	10	0	10	7	8	5	0	7	6	66
Future Vol, veh/h	132	9	10	0	10	7	8	5	0	7	6	66
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	2	0	0	0	0	0	0	0	0	0	0	4
Mvmt Flow	165	11	13	0	13	9	10	6	0	9	8	83
Number of Lanes	1	1	0	0	1	0	0	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	1	2
HCM Control Delay	9.4	7.9	8.4	7.8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	62%	100%	0%	0%	100%	0%
Vol Thru, %	38%	0%	47%	59%	0%	8%
Vol Right, %	0%	0%	53%	41%	0%	92%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	13	132	19	17	7	72
LT Vol	8	132	0	0	7	0
Through Vol	5	0	9	10	0	6
RT Vol	0	0	10	7	0	66
Lane Flow Rate	16	165	24	21	9	90
Geometry Grp	6	7	7	6	7	7
Degree of Util (X)	0.024	0.24	0.029	0.028	0.014	0.111
Departure Headway (Hd)	5.299	5.243	4.339	4.759	5.581	4.435
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	679	676	812	755	645	813
Service Time	3.306	3.039	2.134	2.773	3.284	2.138
HCM Lane V/C Ratio	0.024	0.244	0.03	0.028	0.014	0.111
HCM Control Delay	8.4	9.7	7.3	7.9	8.4	7.7
HCM Lane LOS	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.9	0.1	0.1	0	0.4

Intersection

Int Delay, s/veh 5.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	79	91	84	0	60	80
Future Vol, veh/h	79	91	84	0	60	80
Conflicting Peds, #/hr	1	0	0	1	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	0	2	4	0	0	0
Mvmt Flow	99	114	105	0	75	100

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	106	0	0 418 107
Stage 1	-	-	- - 106 -
Stage 2	-	-	- - 312 -
Critical Hdwy	4.1	-	- - 6.4 6.2
Critical Hdwy Stg 1	-	-	- - 5.4 -
Critical Hdwy Stg 2	-	-	- - 5.4 -
Follow-up Hdwy	2.2	-	- - 3.5 3.3
Pot Cap-1 Maneuver	1498	-	- - 595 953
Stage 1	-	-	- - 923 -
Stage 2	-	-	- - 747 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1497	-	- - 555 951
Mov Cap-2 Maneuver	-	-	- - 571 -
Stage 1	-	-	- - 861 -
Stage 2	-	-	- - 746 -

Approach	EB	WB	SB
HCM Control Delay, s	3.5	0	10.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1497	-	-	-	571	951
HCM Lane V/C Ratio	0.066	-	-	-	0.131	0.105
HCM Control Delay (s)	7.6	-	-	-	12.3	9.2
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.5	0.4

Intersection												
Int Delay, s/veh	8.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑			↱			↱		↰		↱
Traffic Vol, veh/h	111	138	0	0	132	6	0	0	1	20	0	363
Future Vol, veh/h	111	138	0	0	132	6	0	0	1	20	0	363
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	-	-	-	-	-	-	0	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	70	70	70	70	70	70	70	70	70	70	70	70
Heavy Vehicles, %	0	2	0	0	4	0	0	0	0	0	0	0
Mvmt Flow	159	197	0	0	189	9	0	0	1	29	0	519

Major/Minor	Major1		Major2		Minor1		Minor2					
Conflicting Flow All	198	0	-	-	-	0	968	713	197	710	-	194
Stage 1	-	-	-	-	-	-	515	515	-	194	-	-
Stage 2	-	-	-	-	-	-	453	198	-	516	-	-
Critical Hdwy	4.1	-	-	-	-	-	7.1	6.5	6.2	7.1	-	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	-	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3	3.5	-	3.3
Pot Cap-1 Maneuver	1387	-	0	0	-	-	235	360	849	351	0	853
Stage 1	-	-	0	0	-	-	546	538	-	812	0	-
Stage 2	-	-	0	0	-	-	590	741	-	546	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1387	-	-	-	-	-	84	319	849	320	-	853
Mov Cap-2 Maneuver	-	-	-	-	-	-	65	381	-	398	-	-
Stage 1	-	-	-	-	-	-	483	476	-	719	-	-
Stage 2	-	-	-	-	-	-	231	741	-	483	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.5	0	9.2	15.5
HCM LOS			A	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	849	1387	-	-	-	398	853
HCM Lane V/C Ratio	0.002	0.114	-	-	-	0.072	0.608
HCM Control Delay (s)	9.2	7.9	-	-	-	14.7	15.5
HCM Lane LOS	A	A	-	-	-	B	C
HCM 95th %tile Q(veh)	0	0.4	-	-	-	0.2	4.2

Appendix F: Year 2016 ODOT Crash Data

OREGON DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
CRASH SUMMARIES BY YEAR BY COLLISION TYPE

Battle Creek Rd & Boone Rd
Year 2016

COLLISION TYPE	FATAL CRASHES	NON- FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER- SECTION	INTER- SECTION RELATED	OFF- ROAD
YEAR: 2016														
ANGLE	0	3	0	3	0	5	0	3	0	3	0	3	0	0
TURNING MOVEMENTS	0	0	3	3	0	0	0	3	0	1	2	3	0	0
2016 TOTAL	0	3	3	6	0	5	0	6	0	4	2	6	0	0
FINAL TOTAL	0	3	3	6	0	5	0	6	0	4	2	6	0	0

Disclaimer: A higher number of crashes may be reported as of 2011 compared to prior years. This does not reflect an increase in annual crashes. The higher numbers result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics.

OREGON DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
CRASH SUMMARIES BY YEAR BY COLLISION TYPE

Battle Creek Rd & Kuebler Blvd
Year 2016

COLLISION TYPE	FATAL CRASHES	NON- FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER- SECTION	INTER- SECTION RELATED	OFF- ROAD
YEAR: 2016														
ANGLE	0	2	0	2	0	2	0	2	0	1	1	2	0	0
REAR-END	0	2	2	4	0	2	1	3	1	4	0	4	0	0
SIDESWIPE - OVERTAKING	0	0	1	1	0	0	0	1	0	1	0	1	0	0
TURNING MOVEMENTS	0	0	2	2	0	0	0	2	0	2	0	2	0	0
2016 TOTAL	0	4	5	9	0	4	1	8	1	8	1	9	0	0
FINAL TOTAL	0	4	5	9	0	4	1	8	1	8	1	9	0	0

Disclaimer: A higher number of crashes may be reported as of 2011 compared to prior years. This does not reflect an increase in annual crashes. The higher numbers result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics.

OREGON DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
CRASH SUMMARIES BY YEAR BY COLLISION TYPE

I-5 Northbound Ramps & Kuebler Blvd
Year 2016

COLLISION TYPE	FATAL CRASHES	NON- FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER- SECTION	INTER- SECTION RELATED	OFF- ROAD
YEAR: 2016														
REAR-END	0	1	1	2	0	1	0	1	0	2	0	2	0	0
2016 TOTAL	0	1	1	2	0	1	0	1	0	2	0	2	0	0
FINAL TOTAL	0	1	1	2	0	1	0	1	0	2	0	2	0	0

Disclaimer: A higher number of crashes may be reported as of 2011 compared to prior years. This does not reflect an increase in annual crashes. The higher numbers result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics.

OREGON DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
CRASH SUMMARIES BY YEAR BY COLLISION TYPE

I-5 Southbound Ramps & Kuebler Blvd
Year 2016

COLLISION TYPE	FATAL CRASHES	NON- FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER- SECTION	INTER- SECTION RELATED	OFF- ROAD
YEAR: 2016														
REAR-END	0	1	2	3	0	1	1	1	2	1	2	3	0	0
TURNING MOVEMENTS	0	1	1	2	0	1	0	2	0	2	0	2	0	0
2016 TOTAL	0	2	3	5	0	2	1	3	2	3	2	5	0	0
FINAL TOTAL	0	2	3	5	0	2	1	3	2	3	2	5	0	0

Disclaimer: A higher number of crashes may be reported as of 2011 compared to prior years. This does not reflect an increase in annual crashes. The higher numbers result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics.

OREGON DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
 TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
 CRASH SUMMARIES BY YEAR BY COLLISION TYPE

27th Ave SE & Boone Rd
 Year 2016

COLLISION TYPE	FATAL CRASHES	NON- FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER- SECTION	INTER- SECTION RELATED	OFF- ROAD
YEAR: 2016														
SIDESWIPE - MEETING	0	0	1	1	0	0	0	1	0	0	1	1	0	0
2016 TOTAL	0	0	1	1	0	0	0	1	0	0	1	1	0	0
FINAL TOTAL	0	0	1	1	0	0	0	1	0	0	1	1	0	0

Disclaimer: A higher number of crashes may be reported as of 2011 compared to prior years. This does not reflect an increase in annual crashes. The higher numbers result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics.

OREGON DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
 TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
 CRASH SUMMARIES BY YEAR BY COLLISION TYPE

27th Ave SE & Kuebler Blvd
 Year 2016

COLLISION TYPE	FATAL CRASHES	NON- FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE KILLED	PEOPLE INJURED	TRUCKS	DRY SURF	WET SURF	DAY	DARK	INTER- SECTION	INTER- SECTION RELATED	OFF- ROAD
YEAR: 2016														
TURNING MOVEMENTS	0	0	1	1	0	0	0	0	1	1	0	1	0	0
2016 TOTAL	0	0	1	1	0	0	0	0	1	1	0	1	0	0
FINAL TOTAL	0	0	1	1	0	0	0	0	1	1	0	1	0	0

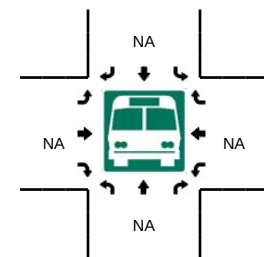
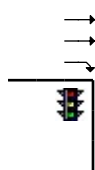
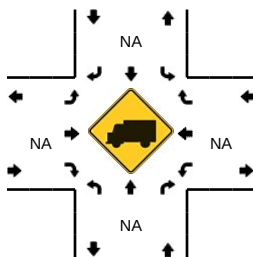
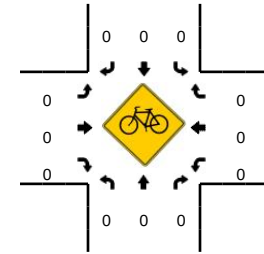
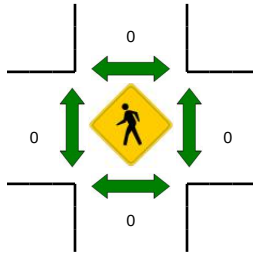
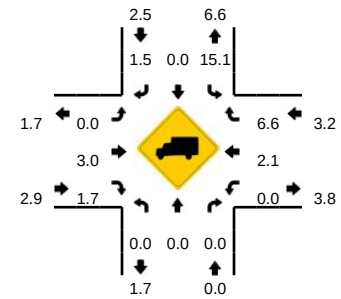
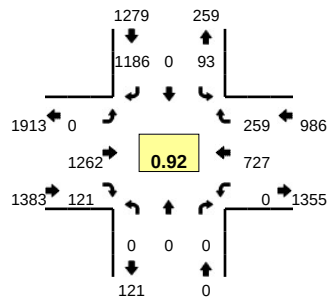
Disclaimer: A higher number of crashes may be reported as of 2011 compared to prior years. This does not reflect an increase in annual crashes. The higher numbers result from a change to an internal departmental process that allows the Crash Analysis and Reporting Unit to add previously unavailable, non-fatal crash reports to the annual data file. Please be aware of this change when comparing pre-2011 crash statistics.

Appendix G: July 2018 Traffic Count Data

LOCATION: I-5 SB Ramps -- Kuebler Blvd
CITY/STATE: Salem, OR

QC JOB #: 14747501
DATE: Tue, Jul 17 2018

Peak-Hour: 4:40 PM -- 5:40 PM
Peak 15-Min: 5:10 PM -- 5:25 PM



5-Min Count Period Beginning At	I-5 SB Ramps (Northbound)				I-5 SB Ramps (Southbound)				Kuebler Blvd (Eastbound)				Kuebler Blvd (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	11	0	83	0	0	73	11	0	0	55	22	0	255	
4:05 PM	0	0	0	0	19	0	92	0	0	94	12	0	0	51	21	0	289	
4:10 PM	0	0	0	0	8	0	80	0	0	97	6	0	0	62	24	0	277	
4:15 PM	0	0	0	0	8	0	94	0	0	78	10	0	0	66	19	1	276	
4:20 PM	0	0	0	0	16	0	109	0	0	98	13	0	0	59	14	0	309	
4:25 PM	0	0	0	0	3	0	68	0	0	119	11	0	0	56	15	0	272	
4:30 PM	0	0	0	0	9	0	78	0	0	103	8	0	0	48	18	0	264	
4:35 PM	0	0	0	0	4	0	79	0	0	101	18	0	0	55	22	0	279	
4:40 PM	0	0	0	0	12	0	99	0	0	133	15	0	0	52	26	0	337	
4:45 PM	0	0	0	0	7	0	99	0	0	120	13	0	0	63	14	0	316	
4:50 PM	0	0	0	0	9	0	98	0	0	95	13	0	0	51	18	0	284	
4:55 PM	0	0	0	0	8	0	94	0	0	85	8	0	0	55	20	0	270	3428
5:00 PM	0	0	0	0	10	0	86	0	0	65	11	0	0	72	15	0	259	3432
5:05 PM	0	0	0	0	7	0	93	0	0	112	7	0	0	61	28	0	308	3451
5:10 PM	0	0	0	0	7	0	109	0	0	121	18	0	0	51	28	0	334	3508
5:15 PM	0	0	0	0	6	0	112	0	0	116	10	0	0	55	24	0	323	3555
5:20 PM	0	0	0	0	7	0	92	0	0	122	6	0	0	69	36	0	332	3578
5:25 PM	0	0	0	0	7	0	111	0	0	88	8	0	0	66	17	0	297	3603
5:30 PM	0	0	0	0	9	0	91	0	0	110	4	0	0	64	17	0	295	3634
5:35 PM	0	0	0	0	4	0	102	0	0	95	8	0	0	68	16	0	293	3648
5:40 PM	0	0	0	0	17	0	110	0	0	100	11	0	0	41	13	0	292	3603
5:45 PM	0	0	0	0	5	0	95	0	0	99	11	0	0	51	4	0	265	3552
5:50 PM	0	0	0	0	5	0	82	0	0	75	5	0	0	73	16	0	256	3524
5:55 PM	0	0	0	0	8	0	78	0	0	94	6	0	0	42	6	0	234	3488
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	80	0	1252	0	0	1436	136	0	0	700	352	0	3956	
Heavy Trucks	0	0	0	0	8	0	16	0	0	36	0	0	0	16	12	0	88	
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Stopped Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Comments:

Appendix H: Fitted Curve Shopping Center Trip Generation Operations Results

Table 5. Estimated Trip Generation for the Proposed Retail Pads (using ITE Fitted Curve Equation)

Land Use	ITE Land Use Code	Size (Square Feet)	Daily	Weekday PM Peak Hour			Saturday Midday Peak Hour		
				Total	In	Out	Total	In	Out
Retail (PacTrust)	820	21,000 SF ft	2,463	211	101	110	317	165	152
Internal Trips (10%)			(246)	(21)	(10)	(11)	(32)	(17)	(15)
Pass-by Trips (34% Weekday, 26% Saturday)			(754)	(65)	(31)	(34)	(74)	(38)	(36)
Total Net New Trips			1,463	125	60	65	211	110	101

TRIP DISTRIBUTION AND ASSIGNMENT

The distribution of the retail trips onto the study area roadway system was based on previous TIA studies in the area, and is shown in Figure 9a.

YEAR 2019 TOTAL TRAFFIC CONDITIONS

Opening Year 2019 With-Project Conditions

The site-generated trips shown in Figures 8 and 9a were added to the year 2019 background traffic volumes in Figures 5 and 6 to estimate the year 2019 total traffic volumes.

Figures 11a and 12a illustrate the year 2019 total traffic conditions during the weekday p.m. and Saturday peak hour conditions.

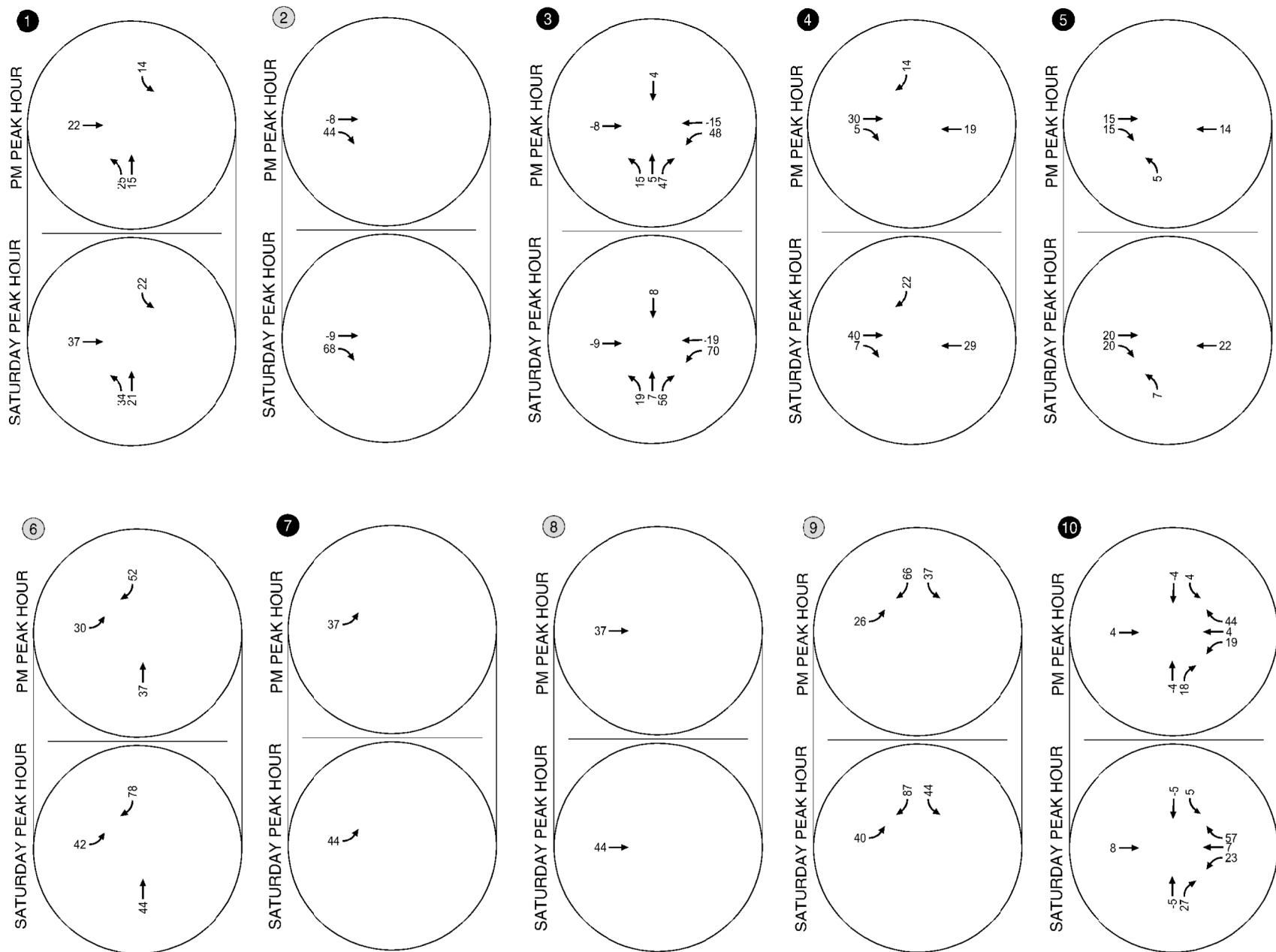
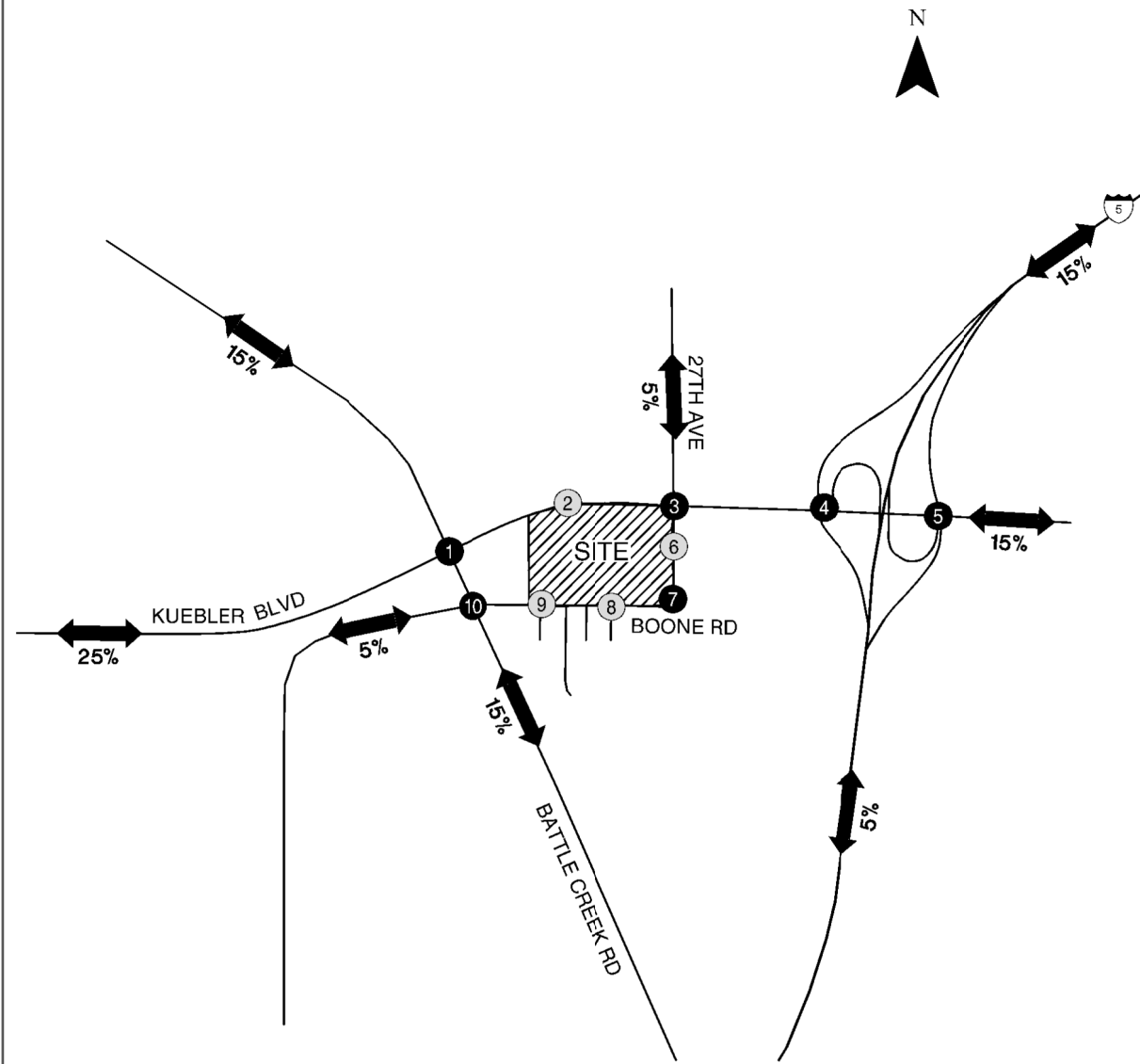


Figure 9a is in response to ODOT Review Comment 3
Retail Trips calculated using ITE land use code 820 fitted curve equation

Negative trips represent pass-by trips.

- - Study Intersections
- - Study Site Driveways

Estimated Retail Pads Trip Distribution Pattern and Assignment (Total Trips)
Weekday PM and Saturday Midday Peak Hour
Salem, OR

Figure
9a

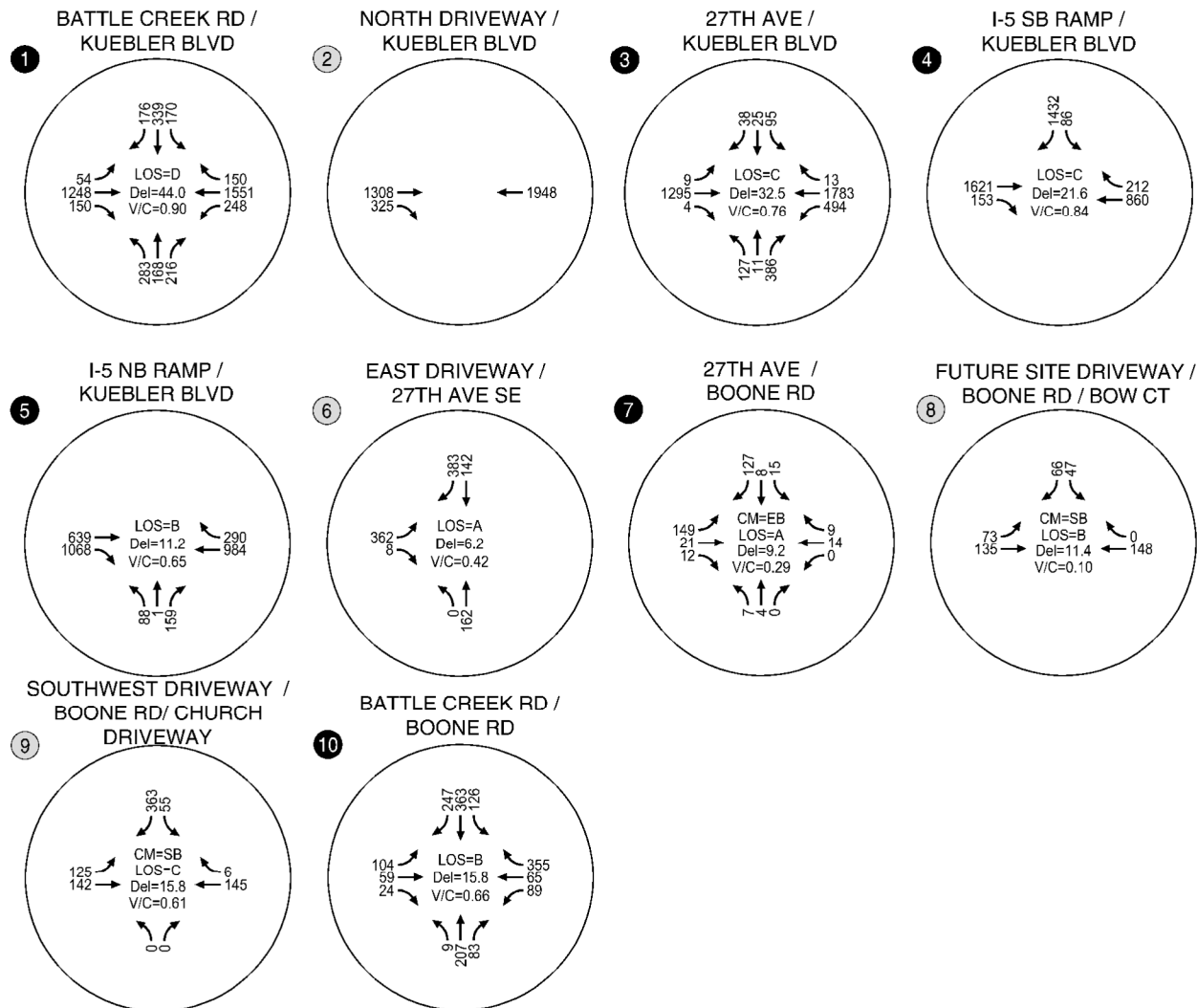
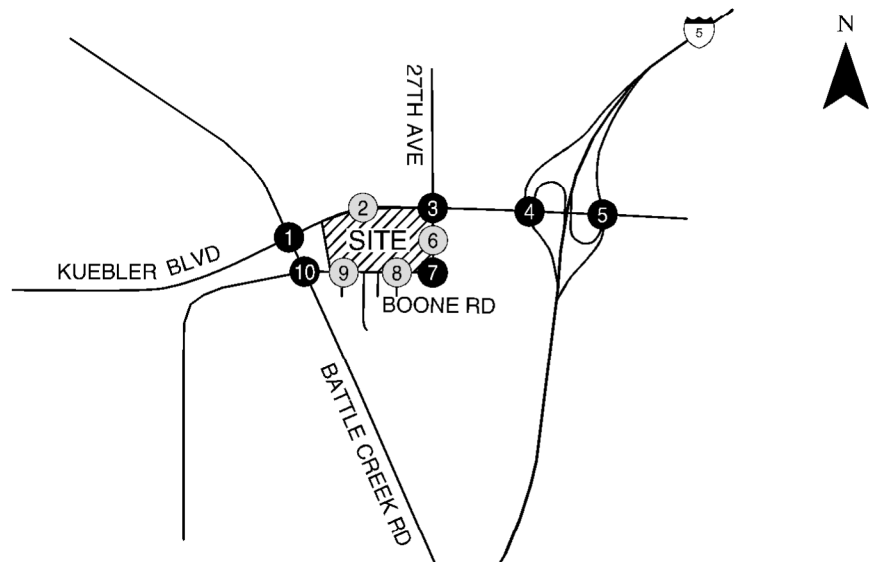


Figure 11a is in response to ODOT Review Comment 3

Retail Trips calculated using ITE land use code 820 fitted curve equation



● - Study Intersections

○ - Study Site Driveways

**2019 Total Traffic Conditions
Weekday PM Peak Hour
Salem, Oregon**

**Figure
11a**

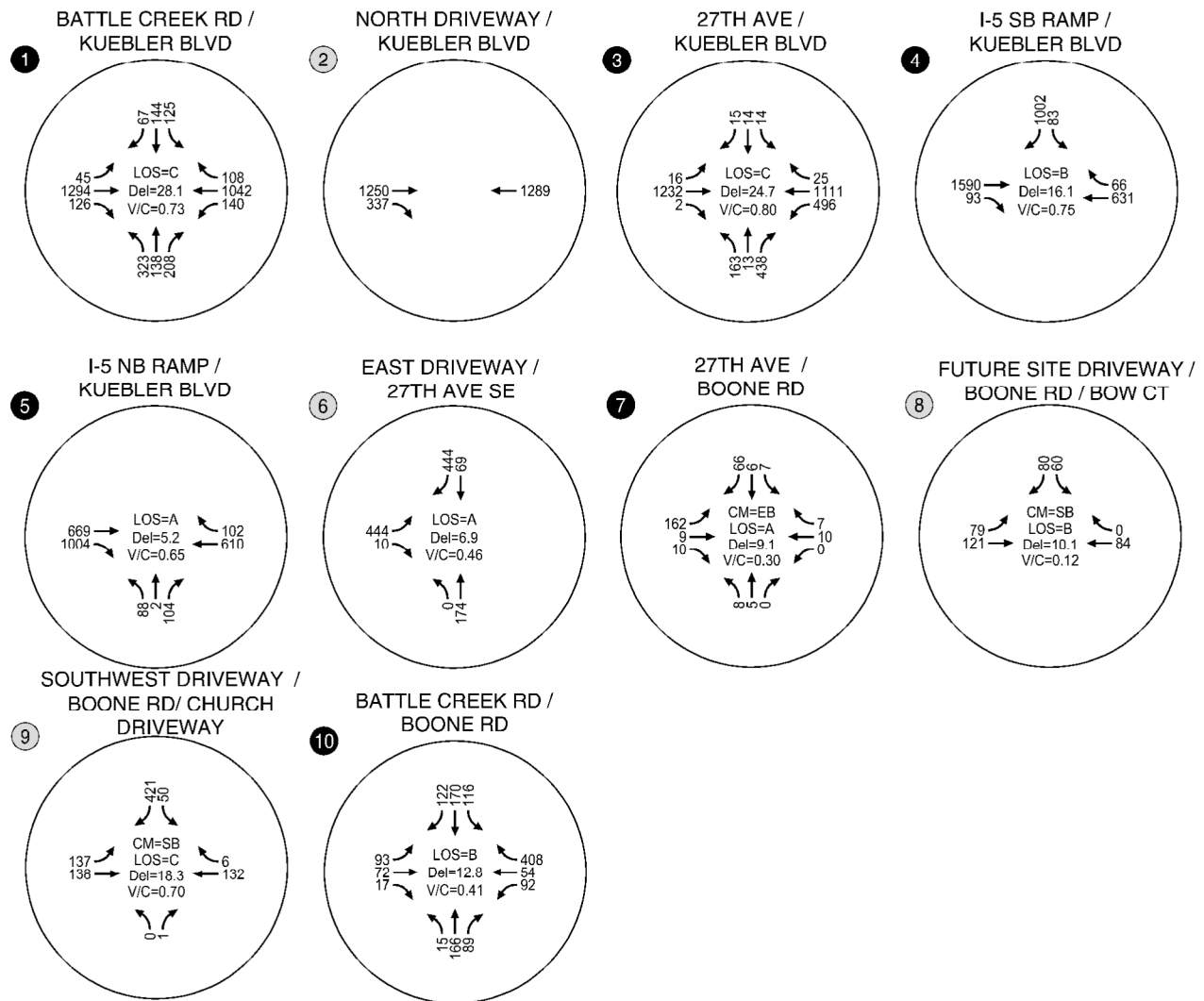
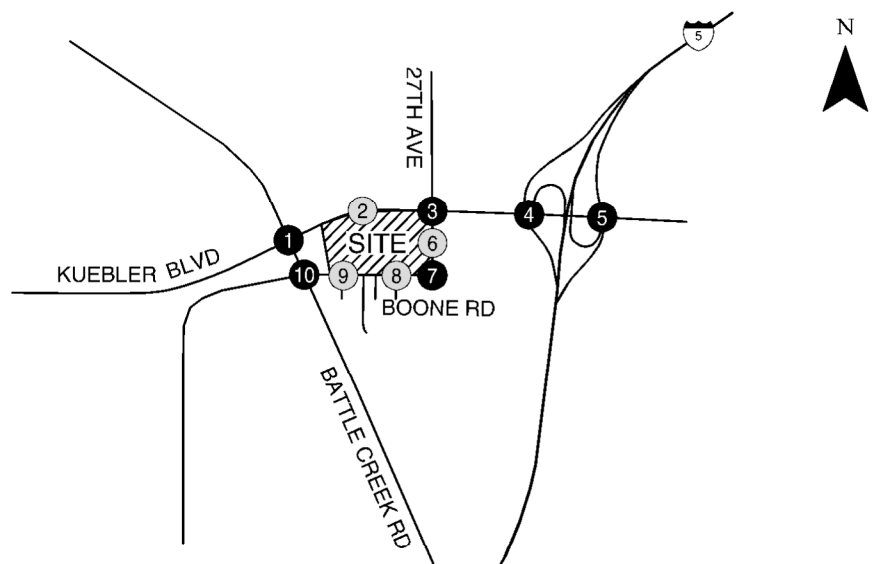


Figure 12a is in response to ODOT Review Comment 3

Retail Trips calculated using ITE land use code 820 fitted curve equation

CM = Critical Movement (Unsignalized)
LOS = Intersection Level of Service (Signalized) / Critical Movement Level of Service (Unsignalized)
Del = Intersection Average Control Delay (Signalized) / Critical Movement Control Delay (Unsignalized)
V/C = Critical Volume-to-Capacity Ratio



- # - Study Intersections
- # - Study Site Driveways

**2019 Total Traffic Conditions
Saturday Midday Peak Hour
Salem, Oregon**

**Figure
12a**

HCM Signalized Intersection Capacity Analysis

1: Battle Creek Rd SE & Kuebler Blvd

22051- Salem Costco Relocation

Total Traffic 2019 - PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	54	1248	150	248	1551	150	283	168	216	170	339	176
Future Volume (vph)	54	1248	150	248	1551	150	283	168	216	170	339	176
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			3%	
Total Lost time (s)	4.0	6.0	4.0	4.0	6.0	4.0	4.0	5.0	4.0	4.0	5.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1641	3505	1570	1787	3539	1527	3400	1827	1524	1710	1853	1575
Flt Permitted	0.08	1.00	1.00	0.07	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	135	3505	1570	137	3539	1527	3400	1827	1524	1710	1853	1575
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	56	1287	155	256	1599	155	292	173	223	175	349	181
RTOR Reduction (vph)	0	0	65	0	0	44	0	0	65	0	0	44
Lane Group Flow (vph)	56	1287	90	256	1599	111	292	173	158	175	349	137
Confl. Peds. (#/hr)	1		1	1		1						
Confl. Bikes (#/hr)			1									
Heavy Vehicles (%)	10%	3%	1%	1%	2%	4%	3%	4%	6%	4%	1%	1%
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	5
Permitted Phases	2		2	6		6			8			4
Actuated Green, G (s)	56.0	51.0	64.8	73.8	64.8	86.8	13.8	19.2	38.0	22.0	27.4	32.4
Effective Green, g (s)	56.0	51.0	64.8	73.8	64.8	86.8	13.8	19.2	38.0	22.0	27.4	32.4
Actuated g/C Ratio	0.43	0.39	0.50	0.57	0.50	0.67	0.11	0.15	0.29	0.17	0.21	0.25
Clearance Time (s)	4.0	6.0	4.0	4.0	6.0	4.0	4.0	5.0	4.0	4.0	5.0	4.0
Vehicle Extension (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lane Grp Cap (vph)	116	1375	782	316	1764	1019	360	269	445	289	390	392
v/s Ratio Prot	0.02	0.37	0.01	c0.12	c0.45	0.02	c0.09	0.09	0.05	0.10	c0.19	0.01
v/s Ratio Perm	0.19		0.05	0.34		0.05			0.05			0.07
v/c Ratio	0.48	0.94	0.11	0.81	0.91	0.11	0.81	0.64	0.35	0.61	0.89	0.35
Uniform Delay, d1	27.9	37.9	17.3	38.1	29.8	7.7	56.8	52.2	36.3	50.0	49.9	40.1
Progression Factor	1.00	1.00	1.00	0.98	0.86	0.92	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.2	13.1	0.0	10.6	6.4	0.2	12.3	3.9	0.2	9.1	21.6	0.2
Delay (s)	29.0	51.1	17.4	48.1	32.2	7.3	69.2	56.1	36.5	59.1	71.5	40.3
Level of Service	C	D	B	D	C	A	E	E	D	E	E	D
Approach Delay (s)		46.8			32.3			55.3			60.4	
Approach LOS		D			C			E			E	
Intersection Summary												
HCM 2000 Control Delay			44.0				HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio			0.90									
Actuated Cycle Length (s)			130.0				Sum of lost time (s)			19.0		
Intersection Capacity Utilization			90.0%				ICU Level of Service			E		
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

3: 27th Ave SE & Kuebler Blvd

22051- Salem Costco Relocation

Total Traffic 2019 - PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	1295	4	494	1783	13	127	11	386	95	25	38
Future Volume (vph)	9	1295	4	494	1783	13	127	11	386	95	25	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0	4.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	1.00	1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	1.00	1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.91	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1805	3471	1615	3467	3539	1376	1805	1900	1538	1787	1712	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.69	1.00	1.00	0.75	1.00	
Satd. Flow (perm)	1805	3471	1615	3467	3539	1376	1304	1900	1538	1410	1712	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	9	1363	4	520	1877	14	134	12	406	100	26	40
RTOR Reduction (vph)	0	0	2	0	0	4	0	0	68	0	36	0
Lane Group Flow (vph)	9	1363	2	520	1877	10	134	12	338	100	30	0
Confl. Bikes (#/hr)						1						1
Heavy Vehicles (%)	0%	4%	0%	1%	2%	15%	0%	0%	5%	1%	0%	0%
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	5	2	3	1	6		3	8	1	7	4	
Permitted Phases			2			6	8		8	4		
Actuated Green, G (s)	0.6	76.6	79.6	21.0	97.0	97.0	15.4	12.4	33.4	15.4	12.4	
Effective Green, g (s)	0.6	76.6	79.6	21.0	97.0	97.0	15.4	12.4	33.4	15.4	12.4	
Actuated g/C Ratio	0.00	0.59	0.61	0.16	0.75	0.75	0.12	0.10	0.26	0.12	0.10	
Clearance Time (s)	4.0	5.0	4.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lane Grp Cap (vph)	8	2045	988	560	2640	1026	166	181	442	175	163	
v/s Ratio Prot	c0.00	0.39	0.00	c0.15	c0.53		c0.02	0.01	c0.12	0.01	0.02	
v/s Ratio Perm			0.00			0.01	0.08		0.10	0.05		
v/c Ratio	1.12	0.67	0.00	0.93	0.71	0.01	0.81	0.07	0.76	0.57	0.18	
Uniform Delay, d1	64.7	18.1	9.8	53.8	8.9	4.2	55.6	53.5	44.7	53.8	54.1	
Progression Factor	1.29	1.93	1.00	1.00	0.84	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	280.9	1.0	0.0	16.9	1.2	0.0	23.0	0.1	6.9	2.8	0.2	
Delay (s)	364.3	35.8	9.8	70.7	8.7	4.2	78.5	53.6	51.6	56.6	54.3	
Level of Service	F	D	A	E	A	A	E	D	D	E	D	
Approach Delay (s)		37.8			22.0			58.2			55.7	
Approach LOS		D			C			E			E	
Intersection Summary												
HCM 2000 Control Delay			32.5				HCM 2000 Level of Service			C		
HCM 2000 Volume to Capacity ratio			0.76									
Actuated Cycle Length (s)			130.0				Sum of lost time (s)			17.0		
Intersection Capacity Utilization			77.2%				ICU Level of Service			D		
Analysis Period (min)			15									

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

4: I-5 SB Ramps & Kuebler Blvd

22051- Salem Costco Relocation

Total Traffic 2019 - PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗		↑↑	↗				↗		↗↗
Traffic Volume (vph)	0	1621	153	0	860	212	0	0	0	86	0	1432
Future Volume (vph)	0	1621	153	0	860	212	0	0	0	86	0	1432
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	4.0		5.0	4.0				4.0		1.5
Lane Util. Factor		0.95	1.00		0.95	1.00				1.00		0.88
Frpb, ped/bikes		1.00	1.00		1.00	0.98				1.00		1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00				1.00		1.00
Frt		1.00	0.85		1.00	0.85				1.00		0.85
Flt Protected		1.00	1.00		1.00	1.00				0.95		1.00
Satd. Flow (prot)		3471	1599		3539	1493				1570		2787
Flt Permitted		1.00	1.00		1.00	1.00				0.95		1.00
Satd. Flow (perm)		3471	1599		3539	1493				1570		2787
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	1689	159	0	896	221	0	0	0	90	0	1492
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	322
Lane Group Flow (vph)	0	1689	159	0	896	221	0	0	0	90	0	1170
Confl. Bikes (#/hr)						1						
Heavy Vehicles (%)	0%	4%	1%	0%	2%	6%	0%	0%	0%	15%	0%	2%
Turn Type		NA	Free		NA	Free				Perm		custom
Protected Phases		2			6							5 7 8
Permitted Phases			Free			Free				7		
Actuated Green, G (s)		78.3	130.0		59.0	130.0				11.0		62.0
Effective Green, g (s)		78.3	130.0		59.0	130.0				11.0		64.5
Actuated g/C Ratio		0.60	1.00		0.45	1.00				0.08		0.50
Clearance Time (s)		5.0			5.0					4.0		
Vehicle Extension (s)		0.5			0.5					0.5		
Lane Grp Cap (vph)		2090	1599		1606	1493				132		1382
v/s Ratio Prot		c0.49			0.25							c0.42
v/s Ratio Perm			0.10			0.15				0.06		
v/c Ratio		0.81	0.10		0.56	0.15				0.68		0.85
Uniform Delay, d1		20.0	0.0		26.0	0.0				57.8		28.4
Progression Factor		0.47	1.00		0.90	1.00				1.00		1.00
Incremental Delay, d2		2.6	0.1		1.3	0.2				11.0		4.8
Delay (s)		11.9	0.1		24.6	0.2				68.8		33.2
Level of Service		B	A		C	A				E		C
Approach Delay (s)		10.9			19.8			0.0			35.2	
Approach LOS		B			B			A			D	
Intersection Summary												
HCM 2000 Control Delay			21.6				HCM 2000 Level of Service			C		
HCM 2000 Volume to Capacity ratio			0.84									
Actuated Cycle Length (s)			130.0				Sum of lost time (s)			7.5		
Intersection Capacity Utilization			81.4%				ICU Level of Service			D		
Analysis Period (min)			15									

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

5: I-5 NB Ramps & Kuebler Blvd

22051- Salem Costco Relocation

Total Traffic 2019 - PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑	↑			
Traffic Volume (vph)	0	639	1068	0	984	290	88	1	159	0	0	0
Future Volume (vph)	0	639	1068	0	984	290	88	1	159	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-4%			4%			0%			0%	
Total Lost time (s)		5.0			5.0			4.0	4.0			
Lane Util. Factor		0.95			0.95			1.00	1.00			
Frpb, ped/bikes		0.99			1.00			1.00	1.00			
Flpb, ped/bikes		1.00			1.00			1.00	1.00			
Frt		0.91			0.97			1.00	0.85			
Flt Protected		1.00			1.00			0.95	1.00			
Satd. Flow (prot)		3145			3303			1810	1357			
Flt Permitted		1.00			1.00			0.95	1.00			
Satd. Flow (perm)		3145			3303			1810	1357			
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	687	1148	0	1058	312	95	1	171	0	0	0
RTOR Reduction (vph)	0	94	0	0	9	0	0	0	158	0	0	0
Lane Group Flow (vph)	0	1741	0	0	1361	0	0	96	13	0	0	0
Confl. Bikes (#/hr)			1									
Heavy Vehicles (%)	0%	6%	4%	0%	3%	5%	0%	0%	19%	0%	0%	0%
Turn Type		NA			NA		Split	NA	Perm			
Protected Phases		2			6		8	8				
Permitted Phases									8			
Actuated Green, G (s)		110.9			110.9			10.1	10.1			
Effective Green, g (s)		110.9			110.9			10.1	10.1			
Actuated g/C Ratio		0.85			0.85			0.08	0.08			
Clearance Time (s)		5.0			5.0			4.0	4.0			
Vehicle Extension (s)		0.5			0.5			0.5	0.5			
Lane Grp Cap (vph)		2682			2817			140	105			
v/s Ratio Prot		c0.55			0.41			c0.05				
v/s Ratio Perm									0.01			
v/c Ratio		0.65			0.48			0.69	0.13			
Uniform Delay, d1		3.1			2.4			58.4	55.8			
Progression Factor		2.97			1.00			1.00	1.00			
Incremental Delay, d2		0.8			0.6			10.5	0.2			
Delay (s)		10.1			3.0			69.0	56.0			
Level of Service		B			A			E	E			
Approach Delay (s)		10.1			3.0			60.7			0.0	
Approach LOS		B			A			E			A	
Intersection Summary												
HCM 2000 Control Delay			11.2				HCM 2000 Level of Service		B			
HCM 2000 Volume to Capacity ratio			0.65									
Actuated Cycle Length (s)			130.0				Sum of lost time (s)		9.0			
Intersection Capacity Utilization			69.4%				ICU Level of Service		C			
Analysis Period (min)			15									
c Critical Lane Group												

MOVEMENT SUMMARY

Site: 9 [Site Access East]

27th Ave and Site Drive East -PM Peak Hour
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance ft	Prop. Queued	Effective Stop Rate per veh	Average Speed mph
South: 27th Ave											
3	L2	1	1.0	0.247	6.9	LOS A	1.1	28.2	0.57	0.52	27.4
8	T1	205	2.0	0.247	6.9	LOS A	1.1	28.2	0.57	0.52	27.2
18	R2	1	1.0	0.247	6.9	LOS A	1.1	28.2	0.57	0.52	26.6
Approach		208	2.0	0.247	6.9	LOS A	1.1	28.2	0.57	0.52	27.2
East: Zone Change Lot Drive											
1	L2	1	1.0	0.006	5.3	LOS A	0.0	0.5	0.57	0.40	27.3
6	T1	1	1.0	0.006	5.3	LOS A	0.0	0.5	0.57	0.40	27.1
16	R2	1	1.0	0.006	5.3	LOS A	0.0	0.5	0.57	0.40	26.5
Approach		4	1.0	0.006	5.3	LOS A	0.0	0.5	0.57	0.40	26.9
North: 27th Ave											
7	L2	1	1.0	0.130	3.6	LOS A	0.6	14.3	0.03	0.00	28.5
4	T1	180	2.0	0.130	3.6	LOS A	0.6	14.3	0.03	0.00	28.3
14	R2	485	1.0	0.346	5.7	LOS A	2.0	50.5	0.04	0.01	26.6
Approach		666	1.3	0.346	5.1	LOS A	2.0	50.5	0.04	0.01	27.1
West: Costco Site Access East											
5	L2	458	1.0	0.415	7.5	LOS A	2.5	64.1	0.47	0.32	25.6
2	T1	1	1.0	0.415	7.5	LOS A	2.5	64.1	0.47	0.32	25.5
12	R2	10	1.0	0.415	7.5	LOS A	2.5	64.1	0.47	0.32	24.9
Approach		470	1.0	0.415	7.5	LOS A	2.5	64.1	0.47	0.32	25.6
All Vehicles		1347	1.3	0.415	6.2	LOS A	2.5	64.1	0.27	0.20	26.6

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Project: H:\22\22051 - Salem Costco Relocation\sidra\Costco Traffic only PM - retail fitted curve\Costco Traffic only PM- one lane_fitted curve.sip7

HCM Unsignalized Intersection Capacity Analysis
7: 27th Ave SE & Boone Rd SE

22051- Salem Costco Relocation

Total Traffic 2019 - PM

																		
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR						
Lane Configurations																		
Sign Control	Stop			Stop			Stop			Stop								
Traffic Volume (vph)	149	21	12	0	14	9	7	4	0	15	8	127						
Future Volume (vph)	149	21	12	0	14	9	7	4	0	15	8	127						
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79						
Hourly flow rate (vph)	189	27	15	0	18	11	9	5	0	19	10	161						
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1	SB 2												
Volume Total (vph)	189	42	29	14	19	171												
Volume Left (vph)	189	0	0	9	19	0												
Volume Right (vph)	0	15	11	0	0	161												
Hadj (s)	0.58	-0.25	-0.23	0.13	0.50	-0.64												
Departure Headway (s)	5.6	4.8	5.1	5.6	5.7	4.6												
Degree Utilization, x	0.29	0.06	0.04	0.02	0.03	0.22												
Capacity (veh/h)	617	722	669	609	597	749												
Control Delay (s)	9.7	6.9	8.3	8.7	7.7	7.6												
Approach Delay (s)	9.2		8.3	8.7	7.6													
Approach LOS	A		A	A	A													
Intersection Summary																		
Delay	8.5																	
Level of Service	A																	
Intersection Capacity Utilization	29.9%			ICU Level of Service			A											
Analysis Period (min)	15																	

HCM Unsignalized Intersection Capacity Analysis

8: Boone Rd SE & Site Drive - South

22051- Salem Costco Relocation
Total Traffic 2019 - PM

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	73	135	148	0	47	66
Future Volume (Veh/h)	73	135	148	0	47	66
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79
Hourly flow rate (vph)	92	171	187	0	59	84
Pedestrians		1			1	
Lane Width (ft)		12.0			12.0	
Walking Speed (ft/s)		4.0			4.0	
Percent Blockage		0			0	
Right turn flare (veh)						
Median type		TWLTL	TWLTL			
Median storage veh		2	2			
Upstream signal (ft)		1222				
pX, platoon unblocked						
vC, conflicting volume	188				543	189
vC1, stage 1 conf vol					188	
vC2, stage 2 conf vol					355	
vCu, unblocked vol	188				543	189
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)	2.2				3.5	3.3
p0 queue free %	93				91	90
cM capacity (veh/h)	1397				622	857
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2	
Volume Total	92	171	187	59	84	
Volume Left	92	0	0	59	0	
Volume Right	0	0	0	0	84	
cSH	1397	1700	1700	622	857	
Volume to Capacity	0.07	0.10	0.11	0.09	0.10	
Queue Length 95th (ft)	5	0	0	8	8	
Control Delay (s)	7.8	0.0	0.0	11.4	9.7	
Lane LOS	A			B	A	
Approach Delay (s)	2.7		0.0	10.4		
Approach LOS				B		
Intersection Summary						
Average Delay			3.7			
Intersection Capacity Utilization			25.7%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

9: Clinic Driveway & Boone Rd SE

22051- Salem Costco Relocation

Total Traffic 2019 - PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	142	0	0	145	6	0	0	0	55	0	363
Future Volume (Veh/h)	125	142	0	0	145	6	0	0	0	55	0	363
Sign Control	Free			Free			Stop			Stop		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
Hourly flow rate (vph)	176	200	0	0	204	8	0	0	0	77	0	511
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	TWLTL				TWLTL							
Median storage veh)	2				2							
Upstream signal (ft)	462											
pX, platoon unblocked												
vC, conflicting volume	212			200			1271	764	200	760	760	208
vC1, stage 1 conf vol							552	552		208	208	
vC2, stage 2 conf vol							719	212		552	552	
vCu, unblocked vol	212			200			1271	764	200	760	760	208
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.2	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.2	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.6	4.0	3.3
p0 queue free %	87			100			100	100	100	82	100	39
cM capacity (veh/h)	1370			1384			51	412	846	416	428	837
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1	SB 2						
Volume Total	176	200	212	0	77	511						
Volume Left	176	0	0	0	77	0						
Volume Right	0	0	8	0	0	511						
cSH	1370	1700	1700	1700	416	837						
Volume to Capacity	0.13	0.12	0.12	0.00	0.18	0.61						
Queue Length 95th (ft)	11	0	0	0	17	106						
Control Delay (s)	8.0	0.0	0.0	0.0	15.6	15.8						
Lane LOS	A			A	C	C						
Approach Delay (s)	3.8		0.0	0.0	15.8							
Approach LOS				A	C							
Intersection Summary												
Average Delay				9.1								
Intersection Capacity Utilization				37.1%	ICU Level of Service				A			
Analysis Period (min)				15								

HCM Signalized Intersection Capacity Analysis

10: Battle Creek Rd SE & Boone Rd SE

22051- Salem Costco Relocation

Total Traffic 2019 - PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	104	59	24	89	65	355	9	207	83	126	363	247
Future Volume (vph)	104	59	24	89	65	355	9	207	83	126	363	247
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	0.96		1.00	1.00	0.85	1.00	0.96		1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1703	1818		1805	1845	1615	1805	1704		1805	1760	
Flt Permitted	0.71	1.00		0.70	1.00	1.00	0.24	1.00		0.41	1.00	
Satd. Flow (perm)	1277	1818		1331	1845	1615	459	1704		783	1760	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	109	62	25	94	68	374	9	218	87	133	382	260
RTOR Reduction (vph)	0	21	0	0	0	239	0	20	0	0	32	0
Lane Group Flow (vph)	109	66	0	94	68	135	9	285	0	133	610	0
Heavy Vehicles (%)	6%	0%	0%	0%	3%	0%	0%	5%	11%	0%	1%	2%
Turn Type	pm+pt	NA		pm+pt	NA	custom	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6		8	8			4		
Actuated Green, G (s)	11.9	8.9		11.9	8.9	19.5	20.1	19.5		28.3	23.6	
Effective Green, g (s)	11.9	8.9		11.9	8.9	19.5	20.1	19.5		28.3	23.6	
Actuated g/C Ratio	0.22	0.16		0.22	0.16	0.36	0.37	0.36		0.52	0.44	
Clearance Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	304	299		319	303	582	185	614		498	767	
v/s Ratio Prot	c0.02	0.04		0.02	0.04		0.00	0.17		c0.02	c0.35	
v/s Ratio Perm	c0.06			0.05		0.08	0.02			0.12		
v/c Ratio	0.36	0.22		0.29	0.22	0.23	0.05	0.46		0.27	0.80	
Uniform Delay, d1	17.6	19.6		17.4	19.6	12.1	11.4	13.3		7.1	13.2	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.7	0.4		0.5	0.4	0.2	0.1	0.6		0.3	5.7	
Delay (s)	18.3	20.0		17.9	20.0	12.3	11.5	13.8		7.4	18.9	
Level of Service	B	B		B	B	B	B	B		A	B	
Approach Delay (s)		19.0			14.2			13.8			16.9	
Approach LOS		B			B			B			B	
Intersection Summary												
HCM 2000 Control Delay			15.8				HCM 2000 Level of Service			B		
HCM 2000 Volume to Capacity ratio			0.66									
Actuated Cycle Length (s)			54.1				Sum of lost time (s)			18.0		
Intersection Capacity Utilization			61.2%				ICU Level of Service			B		
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

22051 - Salem Costco Relocation

1: Battle Creek Rd SE & Kuebler Blvd

Total Traffic 2019 - Saturday

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	1294	126	140	1042	108	323	138	208	125	144	67
Future Volume (vph)	45	1294	126	140	1042	108	323	138	208	125	144	67
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			3%	
Total Lost time (s)	4.0	6.0	4.0	4.0	6.0	4.0	4.0	5.0	4.0	4.0	5.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1719	3505	1583	1736	3539	1523	3335	1845	1599	1760	1872	1528
Flt Permitted	0.21	1.00	1.00	0.09	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	383	3505	1583	171	3539	1523	3335	1845	1599	1760	1872	1528
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	47	1348	131	146	1085	112	336	144	217	130	150	70
RTOR Reduction (vph)	0	0	49	0	0	40	0	0	53	0	0	58
Lane Group Flow (vph)	47	1348	82	146	1085	73	336	144	164	130	150	12
Confl. Peds. (#/hr)	1					1	1					1
Heavy Vehicles (%)	5%	3%	2%	4%	2%	4%	5%	3%	1%	1%	0%	3%
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	5
Permitted Phases	2		2	6		6			8			4
Actuated Green, G (s)	59.7	56.7	68.6	68.9	61.9	71.3	11.9	16.7	24.9	9.4	14.2	17.2
Effective Green, g (s)	59.7	56.7	68.6	68.9	61.9	71.3	11.9	16.7	24.9	9.4	14.2	17.2
Actuated g/C Ratio	0.54	0.52	0.62	0.63	0.56	0.65	0.11	0.15	0.23	0.09	0.13	0.16
Clearance Time (s)	4.0	6.0	4.0	4.0	6.0	4.0	4.0	5.0	4.0	4.0	5.0	4.0
Vehicle Extension (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lane Grp Cap (vph)	244	1806	987	223	1991	987	360	280	361	150	241	238
v/s Ratio Prot	0.01	c0.38	0.01	c0.05	0.31	0.01	c0.10	0.08	0.03	0.07	c0.08	0.00
v/s Ratio Perm	0.10		0.04	0.36		0.04			0.07			0.01
v/c Ratio	0.19	0.75	0.08	0.65	0.54	0.07	0.93	0.51	0.45	0.87	0.62	0.05
Uniform Delay, d1	12.5	21.0	8.2	16.4	15.2	7.2	48.7	42.9	36.7	49.7	45.4	39.5
Progression Factor	0.47	0.77	1.34	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	2.2	0.0	5.2	1.1	0.0	30.4	0.7	0.3	36.3	3.6	0.0
Delay (s)	5.9	18.4	11.0	21.6	16.2	7.2	79.0	43.6	37.0	86.0	48.9	39.5
Level of Service	A	B	B	C	B	A	E	D	D	F	D	D
Approach Delay (s)		17.3			16.1			58.6			60.8	
Approach LOS		B			B			E			E	
Intersection Summary												
HCM 2000 Control Delay			28.1				HCM 2000 Level of Service			C		
HCM 2000 Volume to Capacity ratio			0.73									
Actuated Cycle Length (s)			110.0				Sum of lost time (s)			19.0		
Intersection Capacity Utilization			76.7%				ICU Level of Service			D		
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

3: 27th Ave SE & Kuebler Blvd

22051 - Salem Costco Relocation

Total Traffic 2019 - Saturday

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	1232	2	496	1111	25	163	13	438	14	14	15
Future Volume (vph)	16	1232	2	496	1111	25	163	13	438	14	14	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0	4.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	1.00	1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1805	3505	1615	3367	3505	1615	1805	1900	1574	1804	1753	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.52	1.00	1.00	0.75	1.00	
Satd. Flow (perm)	1805	3505	1615	3367	3505	1615	985	1900	1574	1421	1753	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	17	1297	2	522	1169	26	172	14	461	15	15	16
RTOR Reduction (vph)	0	0	1	0	0	9	0	0	60	0	15	0
Lane Group Flow (vph)	17	1297	1	522	1169	17	172	14	401	15	16	0
Confl. Peds. (#/hr)									1	1		
Heavy Vehicles (%)	0%	3%	0%	4%	3%	0%	0%	0%	2%	0%	0%	0%
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	5	2	3	1	6		3	8	1	7	4	
Permitted Phases			2			6	8		8	4		
Actuated Green, G (s)	1.6	48.4	56.0	19.3	66.1	66.1	21.1	16.1	35.4	10.5	9.5	
Effective Green, g (s)	1.6	48.4	56.0	19.3	66.1	66.1	21.1	16.1	35.4	10.5	9.5	
Actuated g/C Ratio	0.02	0.48	0.55	0.19	0.65	0.65	0.21	0.16	0.35	0.10	0.09	
Clearance Time (s)	4.0	5.0	4.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Lane Grp Cap (vph)	28	1666	888	638	2275	1048	265	300	609	150	163	
v/s Ratio Prot	0.01	c0.37	0.00	c0.16	0.33		c0.05	0.01	c0.12	0.00	0.01	
v/s Ratio Perm			0.00			0.01	0.09		0.13	0.01		
v/c Ratio	0.61	0.78	0.00	0.82	0.51	0.02	0.65	0.05	0.66	0.10	0.10	
Uniform Delay, d1	49.8	22.2	10.3	39.6	9.4	6.3	35.8	36.3	28.1	41.3	42.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	22.9	2.2	0.0	7.6	0.1	0.0	4.1	0.0	2.0	0.1	0.1	
Delay (s)	72.7	24.4	10.3	47.2	9.5	6.3	39.9	36.4	30.1	41.4	42.3	
Level of Service	E	C	B	D	A	A	D	D	C	D	D	
Approach Delay (s)		25.0			20.9			32.8			42.0	
Approach LOS		C			C			C			D	
Intersection Summary												
HCM 2000 Control Delay			24.7				HCM 2000 Level of Service		C			
HCM 2000 Volume to Capacity ratio			0.80									
Actuated Cycle Length (s)			101.8				Sum of lost time (s)		17.0			
Intersection Capacity Utilization			75.5%				ICU Level of Service		D			
Analysis Period (min)			15									

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

4: I-5 SB Ramps & Kuebler Blvd

22051 - Salem Costco Relocation

Total Traffic 2019 - Saturday

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑		↑↑	↑				↑		↑↑
Traffic Volume (vph)	0	1590	93	0	631	66	0	0	0	83	0	1002
Future Volume (vph)	0	1590	93	0	631	66	0	0	0	83	0	1002
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	4.0		5.0	4.0				4.0		1.5
Lane Util. Factor		0.95	1.00		0.95	1.00				1.00		0.88
Frt		1.00	0.85		1.00	0.85				1.00		0.85
Flt Protected		1.00	1.00		1.00	1.00				0.95		1.00
Satd. Flow (prot)		3505	1583		3471	1538				1736		2787
Flt Permitted		1.00	1.00		1.00	1.00				0.95		1.00
Satd. Flow (perm)		3505	1583		3471	1538				1736		2787
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	1639	96	0	651	68	0	0	0	86	0	1033
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	247
Lane Group Flow (vph)	0	1639	96	0	651	68	0	0	0	86	0	786
Heavy Vehicles (%)	0%	3%	2%	0%	4%	5%	0%	0%	0%	4%	0%	2%
Turn Type		NA	Free		NA	Free				Perm		custom
Protected Phases		2			6							5 7 8
Permitted Phases			Free			Free				7		
Actuated Green, G (s)		52.9	88.0		42.4	88.0				10.5		36.6
Effective Green, g (s)		52.9	88.0		42.4	88.0				10.5		39.1
Actuated g/C Ratio		0.60	1.00		0.48	1.00				0.12		0.44
Clearance Time (s)		5.0			5.0					4.0		
Vehicle Extension (s)		0.5			0.5					0.5		
Lane Grp Cap (vph)		2106	1583		1672	1538				207		1238
v/s Ratio Prot		c0.47			0.19							c0.28
v/s Ratio Perm			0.06			0.04				0.05		
v/c Ratio		0.78	0.06		0.39	0.04				0.42		0.64
Uniform Delay, d1		13.2	0.0		14.5	0.0				35.9		18.9
Progression Factor		1.00	1.00		1.00	1.00				1.00		1.00
Incremental Delay, d2		1.7	0.1		0.1	0.1				0.5		0.8
Delay (s)		14.9	0.1		14.6	0.1				36.4		19.7
Level of Service		B	A		B	A				D		B
Approach Delay (s)		14.0			13.2			0.0			21.0	
Approach LOS		B			B			A			C	
Intersection Summary												
HCM 2000 Control Delay			16.1				HCM 2000 Level of Service			B		
HCM 2000 Volume to Capacity ratio			0.75									
Actuated Cycle Length (s)			88.0				Sum of lost time (s)			9.5		
Intersection Capacity Utilization			60.0%				ICU Level of Service			B		
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

5: I-5 NB Ramps & Kuebler Blvd

22051 - Salem Costco Relocation

Total Traffic 2019 - Saturday

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑			↑	↑			
Traffic Volume (vph)	0	669	1004	0	610	102	88	2	104	0	0	0
Future Volume (vph)	0	669	1004	0	610	102	88	2	104	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-4%			4%			0%			0%	
Total Lost time (s)		5.0			5.0			4.0	4.0			
Lane Util. Factor		0.95			0.95			1.00	1.00			
Frt		0.91			0.98			1.00	0.85			
Flt Protected		1.00			1.00			0.95	1.00			
Satd. Flow (prot)		3259			3315			1777	1482			
Flt Permitted		1.00			1.00			0.95	1.00			
Satd. Flow (perm)		3259			3315			1777	1482			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	704	1057	0	642	107	93	2	109	0	0	0
RTOR Reduction (vph)	0	183	0	0	9	0	0	0	98	0	0	0
Lane Group Flow (vph)	0	1578	0	0	740	0	0	95	11	0	0	0
Heavy Vehicles (%)	0%	4%	2%	0%	4%	7%	2%	0%	9%	0%	0%	0%
Turn Type		NA			NA		Split	NA	Perm			
Protected Phases		2			6		8	8				
Permitted Phases									8			
Actuated Green, G (s)		37.2			37.2			5.2	5.2			
Effective Green, g (s)		37.2			37.2			5.2	5.2			
Actuated g/C Ratio		0.72			0.72			0.10	0.10			
Clearance Time (s)		5.0			5.0			4.0	4.0			
Vehicle Extension (s)		0.5			0.5			0.5	0.5			
Lane Grp Cap (vph)		2358			2399			179	149			
v/s Ratio Prot		c0.48			0.22			c0.05				
v/s Ratio Perm									0.01			
v/c Ratio		0.67			0.31			0.53	0.07			
Uniform Delay, d1		3.8			2.5			21.9	20.9			
Progression Factor		1.00			1.00			1.00	1.00			
Incremental Delay, d2		0.6			0.0			1.5	0.1			
Delay (s)		4.4			2.6			23.5	21.0			
Level of Service		A			A			C	C			
Approach Delay (s)		4.4			2.6			22.1			0.0	
Approach LOS		A			A			C			A	
Intersection Summary												
HCM 2000 Control Delay			5.2				HCM 2000 Level of Service		A			
HCM 2000 Volume to Capacity ratio			0.65									
Actuated Cycle Length (s)			51.4				Sum of lost time (s)		9.0			
Intersection Capacity Utilization			64.8%				ICU Level of Service		C			
Analysis Period (min)			15									

c Critical Lane Group

MOVEMENT SUMMARY

Site: 9 [Site Access East]

27th Ave and Site Drive East - Saturday Peak Hour
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate per veh	Average Speed mph
South: 27th Ave											
3	L2	1	1.0	0.292	8.1	LOS A	1.3	33.3	0.63	0.62	27.0
8	T1	220	1.0	0.292	8.1	LOS A	1.3	33.3	0.63	0.62	26.8
18	R2	1	1.0	0.292	8.1	LOS A	1.3	33.3	0.63	0.62	26.2
Approach		223	1.0	0.292	8.1	LOS A	1.3	33.3	0.63	0.62	26.8
East: Zone Change Lot Drive											
1	L2	1	1.0	0.006	6.0	LOS A	0.0	0.6	0.60	0.45	27.1
6	T1	1	1.0	0.006	6.0	LOS A	0.0	0.6	0.60	0.45	26.9
16	R2	1	1.0	0.006	6.0	LOS A	0.0	0.6	0.60	0.45	26.2
Approach		4	1.0	0.006	6.0	LOS A	0.0	0.6	0.60	0.45	26.7
North: 27th Ave											
7	L2	1	1.0	0.064	3.1	LOS A	0.3	6.5	0.03	0.00	28.7
4	T1	87	2.0	0.064	3.1	LOS A	0.3	6.5	0.03	0.00	28.5
14	R2	562	1.0	0.401	6.3	LOS A	2.5	63.8	0.05	0.01	26.4
Approach		651	1.1	0.401	5.9	LOS A	2.5	63.8	0.05	0.01	26.7
West: Costco Site Access East											
5	L2	562	1.0	0.463	7.7	LOS A	3.3	82.1	0.36	0.19	25.6
2	T1	1	1.0	0.463	7.7	LOS A	3.3	82.1	0.36	0.19	25.4
12	R2	13	1.0	0.463	7.7	LOS A	3.3	82.1	0.36	0.19	24.9
Approach		576	1.0	0.463	7.7	LOS A	3.3	82.1	0.36	0.19	25.6
All Vehicles		1453	1.1	0.463	6.9	LOS A	3.3	82.1	0.26	0.18	26.3

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Project: H:\22\22051 - Salem Costco Relocation\sidra\Costco Traffic only PM - retail fitted curve\Costco Traffic only Saturday- one lane_fitted curve.sip7

HCM Unsignalized Intersection Capacity Analysis

7: 27th Ave SE & Boone Rd SE

22051 - Salem Costco Relocation

Total Traffic 2019 - Saturday

																		
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR						
Lane Configurations																		
Sign Control	Stop			Stop			Stop			Stop								
Traffic Volume (vph)	162	9	10	0	10	7	8	5	0	7	6	66						
Future Volume (vph)	162	9	10	0	10	7	8	5	0	7	6	66						
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80						
Hourly flow rate (vph)	203	11	13	0	13	9	10	6	0	9	8	83						
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1	SB 2												
Volume Total (vph)	203	24	22	16	9	91												
Volume Left (vph)	203	0	0	10	9	0												
Volume Right (vph)	0	13	9	0	0	83												
Hadj (s)	0.53	-0.38	-0.25	0.13	0.50	-0.58												
Departure Headway (s)	5.3	4.4	4.8	5.4	5.7	4.6												
Degree Utilization, x	0.30	0.03	0.03	0.02	0.01	0.12												
Capacity (veh/h)	652	787	713	629	600	741												
Control Delay (s)	9.4	6.4	8.0	8.5	7.6	7.0												
Approach Delay (s)	9.1		8.0	8.5	7.1													
Approach LOS	A		A	A	A													
Intersection Summary																		
Delay	8.4																	
Level of Service	A																	
Intersection Capacity Utilization	29.7%			ICU Level of Service			A											
Analysis Period (min)	15																	

HCM Unsignalized Intersection Capacity Analysis

8: Site Drive - South & Boone Rd SE

22051 - Salem Costco Relocation
Total Traffic 2019 - Saturday

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	79	121	84	0	60	80
Future Volume (Veh/h)	79	121	84	0	60	80
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Hourly flow rate (vph)	99	151	105	0	75	100
Pedestrians		1			1	
Lane Width (ft)		12.0			12.0	
Walking Speed (ft/s)		4.0			4.0	
Percent Blockage		0			0	
Right turn flare (veh)						
Median type		TWLTL	TWLTL			
Median storage veh)		2	2			
Upstream signal (ft)		1172				
pX, platoon unblocked						
vC, conflicting volume	106				455	107
vC1, stage 1 conf vol					106	
vC2, stage 2 conf vol					349	
vCu, unblocked vol	106				455	107
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)	2.2				3.5	3.3
p0 queue free %	93				88	89
cM capacity (veh/h)	1497				643	951
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2	
Volume Total	99	151	105	75	100	
Volume Left	99	0	0	75	0	
Volume Right	0	0	0	0	100	
cSH	1497	1700	1700	643	951	
Volume to Capacity	0.07	0.09	0.06	0.12	0.11	
Queue Length 95th (ft)	5	0	0	10	9	
Control Delay (s)	7.6	0.0	0.0	11.3	9.2	
Lane LOS	A			B	A	
Approach Delay (s)	3.0		0.0	10.1		
Approach LOS				B		
Intersection Summary						
Average Delay			4.8			
Intersection Capacity Utilization			21.4%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

9: Clinic Driveway & Boone Rd SE

22051 - Salem Costco Relocation

Total Traffic 2019 - Saturday

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	137	138	0	0	132	6	0	0	1	50	0	421
Future Volume (Veh/h)	137	138	0	0	132	6	0	0	1	50	0	421
Sign Control	Free			Free			Stop			Stop		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Hourly flow rate (vph)	196	197	0	0	189	9	0	0	1	71	0	601
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	TWLTL				TWLTL							
Median storage veh	2				2							
Upstream signal (ft)	462											
pX, platoon unblocked												
vC, conflicting volume	198			197			1384	787	197	784	782	194
vC1, stage 1 conf vol							589	589		194	194	
vC2, stage 2 conf vol							794	198		590	589	
vCu, unblocked vol	198			197			1384	787	197	784	782	194
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	86			100			100	100	100	83	100	30
cM capacity (veh/h)	1387			1388			32	394	849	408	408	853
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1	SB 2						
Volume Total	196	197	198	1	71	601						
Volume Left	196	0	0	0	71	0						
Volume Right	0	0	9	1	0	601						
cSH	1387	1700	1700	849	408	853						
Volume to Capacity	0.14	0.12	0.12	0.00	0.17	0.70						
Queue Length 95th (ft)	12	0	0	0	16	150						
Control Delay (s)	8.0	0.0	0.0	9.2	15.7	18.6						
Lane LOS	A			A	C	C						
Approach Delay (s)	4.0		0.0	9.2	18.3							
Approach LOS				A	C							
Intersection Summary												
Average Delay	11.0											
Intersection Capacity Utilization	46.7%			ICU Level of Service					A			
Analysis Period (min)	15											

HCM Signalized Intersection Capacity Analysis

10: Battle Creek Rd SE & Boone Rd SE

22051 - Salem Costco Relocation

Total Traffic 2019 - Saturday

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	93	72	17	92	54	408	15	166	89	116	170	122
Future Volume (vph)	93	72	17	92	54	408	15	166	89	116	170	122
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	0.97		1.00	1.00	0.85	1.00	0.95		1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1788		1543	1743	1615	1805	1766		1805	1721	
Flt Permitted	0.72	1.00		0.70	1.00	1.00	0.57	1.00		0.47	1.00	
Satd. Flow (perm)	1341	1788		1130	1743	1615	1089	1766		902	1721	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	98	76	18	97	57	429	16	175	94	122	179	128
RTOR Reduction (vph)	0	15	0	0	0	293	0	31	0	0	39	0
Lane Group Flow (vph)	98	79	0	97	57	136	16	238	0	122	268	0
Confl. Bikes (#/hr)												1
Heavy Vehicles (%)	2%	4%	0%	17%	9%	0%	0%	3%	0%	0%	3%	2%
Turn Type	pm+pt	NA		pm+pt	NA	custom	pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6		8	8			4		
Actuated Green, G (s)	11.1	9.1		11.1	9.1	14.9	15.6	14.9		20.2	17.2	
Effective Green, g (s)	11.1	9.1		11.1	9.1	14.9	15.6	14.9		20.2	17.2	
Actuated g/C Ratio	0.24	0.19		0.24	0.19	0.32	0.33	0.32		0.43	0.37	
Clearance Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	334	346		284	337	511	372	559		445	629	
v/s Ratio Prot	0.01	0.04		c0.01	0.03		0.00	0.13		c0.02	c0.16	
v/s Ratio Perm	0.06			c0.07		0.08	0.01			0.10		
v/c Ratio	0.29	0.23		0.34	0.17	0.27	0.04	0.43		0.27	0.43	
Uniform Delay, d1	14.5	16.0		14.6	15.8	12.0	10.6	12.7		8.3	11.2	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.3		0.7	0.2	0.3	0.0	0.5		0.3	0.5	
Delay (s)	15.0	16.3		15.4	16.0	12.3	10.6	13.2		8.7	11.7	
Level of Service	B	B		B	B	B	B	B		A	B	
Approach Delay (s)		15.7			13.1			13.0			10.8	
Approach LOS		B			B			B			B	
Intersection Summary												
HCM 2000 Control Delay			12.8			HCM 2000 Level of Service				B		
HCM 2000 Volume to Capacity ratio			0.41									
Actuated Cycle Length (s)			47.0			Sum of lost time (s)				18.0		
Intersection Capacity Utilization			55.8%			ICU Level of Service				B		
Analysis Period (min)			15									

c Critical Lane Group

Appendix I: SimTraffic Queue Analysis Results

Summary of All Intervals

Run Number	1	10	2	3	4	5	6
Start Time	4:25	4:25	4:25	4:25	4:25	4:25	4:25
End Time	5:35	5:35	5:35	5:35	5:35	5:35	5:35
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1	1
Vehs Entered	9511	9603	9501	9591	9422	9649	9572
Vehs Exited	9469	9566	9374	9568	9430	9643	9422
Starting Vehs	598	614	545	590	583	591	499
Ending Vehs	640	651	672	613	575	597	649
Denied Entry Before	2	5	2	2	4	2	0
Denied Entry After	3	7	2	5	1	5	5
Travel Distance (mi)	11657	11865	11608	11777	11578	11937	11707
Travel Time (hr)	579.3	594.1	571.4	664.3	564.3	590.4	587.7
Total Delay (hr)	265.5	274.2	257.8	346.2	252.4	267.2	271.6
Total Stops	15987	16412	15769	18718	15198	16294	16237
Fuel Used (gal)	436.6	443.5	431.2	458.3	428.4	443.5	436.5

Summary of All Intervals

Run Number	7	8	9	Avg
Start Time	4:25	4:25	4:25	4:25
End Time	5:35	5:35	5:35	5:35
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	9704	9541	9559	9562
Vehs Exited	9684	9510	9572	9520
Starting Vehs	579	557	607	570
Ending Vehs	599	588	594	615
Denied Entry Before	2	2	3	1
Denied Entry After	2	2	4	1
Travel Distance (mi)	11926	11723	11801	11758
Travel Time (hr)	608.8	578.0	578.8	591.7
Total Delay (hr)	286.2	260.7	260.6	274.2
Total Stops	17064	15861	15818	16335
Fuel Used (gal)	448.7	437.3	438.9	440.3

Interval #0 Information Seeding

Start Time	4:25
End Time	4:35
Total Time (min)	10
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	4:35
End Time	5:35
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	10	2	3	4	5	6
Vehs Entered	9511	9603	9501	9591	9422	9649	9572
Vehs Exited	9469	9566	9374	9568	9430	9643	9422
Starting Vehs	598	614	545	590	583	591	499
Ending Vehs	640	651	672	613	575	597	649
Denied Entry Before	2	5	2	2	4	2	0
Denied Entry After	3	7	2	5	1	5	5
Travel Distance (mi)	11657	11865	11608	11777	11578	11937	11707
Travel Time (hr)	579.3	594.1	571.4	664.3	564.3	590.4	587.7
Total Delay (hr)	265.5	274.2	257.8	346.2	252.4	267.2	271.6
Total Stops	15987	16412	15769	18718	15198	16294	16237
Fuel Used (gal)	436.6	443.5	431.2	458.3	428.4	443.5	436.5

Interval #1 Information Recording

Start Time	4:35
End Time	5:35
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	7	8	9	Avg
Vehs Entered	9704	9541	9559	0
Vehs Exited	9684	9510	9572	0
Starting Vehs	579	557	607	0
Ending Vehs	599	588	594	0
Denied Entry Before	2	2	3	0
Denied Entry After	2	2	4	0
Travel Distance (mi)	11926	11723	11801	0
Travel Time (hr)	608.8	578.0	578.8	0.0
Total Delay (hr)	286.2	260.7	260.6	0.0
Total Stops	17064	15861	15818	0
Fuel Used (gal)	448.7	437.3	438.9	0.0

Queuing and Blocking Report
Total Traffic 2019 - PM

07/24/2018

Intersection: 3: 27th Ave SE & Kuebler Blvd

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	R	L	L	T	T	R	L	T	R
Maximum Queue (ft)	35	332	348	11	326	415	531	508	25	171	143	334
Average Queue (ft)	6	122	135	0	157	207	184	184	1	85	10	166
95th Queue (ft)	24	251	272	6	282	346	382	371	11	152	83	285
Link Distance (ft)		876	876				1352	1352	1352		390	
Upstream Blk Time (%)											0	
Queuing Penalty (veh)											0	
Storage Bay Dist (ft)	250			200	375	375				200		290
Storage Blk Time (%)		1	3		0	0	1			0		1
Queuing Penalty (veh)		0	0		1	1	4			0		1

Intersection: 3: 27th Ave SE & Kuebler Blvd

Movement	SB	SB
Directions Served	L	TR
Maximum Queue (ft)	143	126
Average Queue (ft)	67	38
95th Queue (ft)	123	88
Link Distance (ft)		5252
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	125	
Storage Blk Time (%)	2	0
Queuing Penalty (veh)	1	0

Intersection: 4: I-5 SB Ramps & Kuebler Blvd

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	T	T	R	L	R	R
Maximum Queue (ft)	540	550	225	425	389	292	308	706	599
Average Queue (ft)	304	318	74	292	250	25	87	367	306
95th Queue (ft)	485	496	248	393	359	165	236	585	539
Link Distance (ft)	1352	1352		712	712		1446	1446	1446
Upstream Blk Time (%)							0	0	
Queuing Penalty (veh)							0	0	
Storage Bay Dist (ft)			150			250			
Storage Blk Time (%)		27			5				
Queuing Penalty (veh)		40			10				

Queuing and Blocking Report
Total Traffic 2019 - PM

07/24/2018

Intersection: 5: I-5 NB Ramps & Kuebler Blvd

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	T	T	TR	LT	R
Maximum Queue (ft)	118	137	173	144	144	140
Average Queue (ft)	35	41	39	34	58	58
95th Queue (ft)	91	98	121	94	113	105
Link Distance (ft)	712	712			941	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)				150		150
Storage Blk Time (%)			0	0	0	0
Queuing Penalty (veh)			0	1	1	0

Summary of All Intervals

Run Number	1	10	2	3	4	5	6
Start Time	4:25	4:25	4:25	4:25	4:25	4:25	4:25
End Time	5:35	5:35	5:35	5:35	5:35	5:35	5:35
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1	1
Vehs Entered	9559	9512	9712	9503	9551	9530	9514
Vehs Exited	9451	9539	9582	9432	9337	9474	9447
Starting Vehs	592	613	626	654	550	563	613
Ending Vehs	700	586	756	725	764	619	680
Denied Entry Before	5	4	5	4	0	4	6
Denied Entry After	1	4	5	0	3	4	4
Travel Distance (mi)	11622	11641	11787	11681	11642	11492	11607
Travel Time (hr)	670.4	629.1	665.9	697.4	640.1	590.6	613.0
Total Delay (hr)	356.0	313.8	347.4	381.0	326.5	279.2	299.5
Total Stops	19755	18414	20198	20497	18557	17010	17522
Fuel Used (gal)	454.5	448.8	457.4	463.2	447.1	433.0	441.2

Summary of All Intervals

Run Number	7	8	9	Avg
Start Time	4:25	4:25	4:25	4:25
End Time	5:35	5:35	5:35	5:35
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	9584	9609	9521	9559
Vehs Exited	9457	9321	9349	9437
Starting Vehs	578	518	514	581
Ending Vehs	705	806	686	702
Denied Entry Before	0	2	3	0
Denied Entry After	2	4	1	2
Travel Distance (mi)	11719	11593	11549	11633
Travel Time (hr)	647.0	695.1	603.0	645.2
Total Delay (hr)	330.0	382.3	291.5	330.7
Total Stops	18661	21326	17252	18923
Fuel Used (gal)	452.1	457.0	438.1	449.2

Interval #0 Information Seeding

Start Time	4:25
End Time	4:35
Total Time (min)	10
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	4:35
End Time	5:35
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	10	2	3	4	5	6
Vehs Entered	9559	9512	9712	9503	9551	9530	9514
Vehs Exited	9451	9539	9582	9432	9337	9474	9447
Starting Vehs	592	613	626	654	550	563	613
Ending Vehs	700	586	756	725	764	619	680
Denied Entry Before	5	4	5	4	0	4	6
Denied Entry After	1	4	5	0	3	4	4
Travel Distance (mi)	11622	11641	11787	11681	11642	11492	11607
Travel Time (hr)	670.4	629.1	665.9	697.4	640.1	590.6	613.0
Total Delay (hr)	356.0	313.8	347.4	381.0	326.5	279.2	299.5
Total Stops	19755	18414	20198	20497	18557	17010	17522
Fuel Used (gal)	454.5	448.8	457.4	463.2	447.1	433.0	441.2

Interval #1 Information Recording

Start Time	4:35
End Time	5:35
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	7	8	9	Avg
Vehs Entered	9584	9609	9521	9559
Vehs Exited	9457	9321	9349	9437
Starting Vehs	578	518	514	581
Ending Vehs	705	806	686	702
Denied Entry Before	0	2	3	0
Denied Entry After	2	4	1	2
Travel Distance (mi)	11719	11593	11549	11633
Travel Time (hr)	647.0	695.1	603.0	645.2
Total Delay (hr)	330.0	382.3	291.5	330.7
Total Stops	18661	21326	17252	18923
Fuel Used (gal)	452.1	457.0	438.1	449.2

Queuing and Blocking Report

Total Traffic 2019 - PM

07/24/2018

Intersection: 3: 27th Ave SE & Kuebler Blvd

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	R	L	L	T	T	R	L	T	R
Maximum Queue (ft)	53	384	431	40	364	436	679	612	32	212	176	334
Average Queue (ft)	6	128	145	1	193	247	233	242	2	93	10	178
95th Queue (ft)	31	325	351	28	334	383	490	471	15	173	86	306
Link Distance (ft)		876	876				1352	1352	1352		390	
Upstream Blk Time (%)		0	0								0	
Queuing Penalty (veh)		1	1								0	
Storage Bay Dist (ft)	250			200	375	375				200		290
Storage Blk Time (%)		2	3		0	1	2			1		2
Queuing Penalty (veh)		0	0		1	5	10			3		2

Intersection: 3: 27th Ave SE & Kuebler Blvd

Movement	SB	SB
Directions Served	L	TR
Maximum Queue (ft)	171	147
Average Queue (ft)	74	47
95th Queue (ft)	133	109
Link Distance (ft)		5252
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	125	
Storage Blk Time (%)	3	1
Queuing Penalty (veh)	2	1

Intersection: 4: I-5 SB Ramps & Kuebler Blvd

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	T	T	R	L	R	R
Maximum Queue (ft)	541	552	225	460	440	292	367	1019	730
Average Queue (ft)	315	331	91	328	289	37	106	483	403
95th Queue (ft)	495	507	272	433	419	206	270	820	681
Link Distance (ft)	1352	1352		712	712		1446	1446	1446
Upstream Blk Time (%)							0	0	
Queuing Penalty (veh)							0	0	
Storage Bay Dist (ft)			150			250			
Storage Blk Time (%)		29			8				
Queuing Penalty (veh)		43			17				

Queuing and Blocking Report
Total Traffic 2019 - PM

07/24/2018

Intersection: 5: I-5 NB Ramps & Kuebler Blvd

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	T	T	TR	LT	R
Maximum Queue (ft)	129	138	237	195	156	134
Average Queue (ft)	39	45	58	47	68	61
95th Queue (ft)	99	108	151	131	131	105
Link Distance (ft)	712	712			941	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)				150		150
Storage Blk Time (%)			0	1	1	0
Queuing Penalty (veh)			3	3	1	0

Summary of All Intervals

Run Number	31	32	33	34	35	36	37
Start Time	12:50	12:50	12:50	12:50	12:50	12:50	12:50
End Time	2:00	2:00	2:00	2:00	2:00	2:00	2:00
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1	1
Vehs Entered	7895	7795	7866	7930	8000	7914	8071
Vehs Exited	7828	7769	7834	7852	7969	7846	7992
Starting Vehs	375	418	430	399	407	374	422
Ending Vehs	442	444	462	477	438	442	501
Denied Entry Before	1	2	2	2	6	1	2
Denied Entry After	261	253	235	215	105	144	153
Travel Distance (mi)	9283	9253	9206	9245	9312	9182	9510
Travel Time (hr)	522.7	549.4	585.6	536.4	466.5	501.5	496.5
Total Delay (hr)	271.4	299.7	337.4	286.6	214.9	253.1	240.1
Total Stops	12603	12644	12319	12552	12888	12456	12934
Fuel Used (gal)	364.6	369.0	374.8	365.2	351.5	354.9	363.1

Summary of All Intervals

Run Number	38	39	40	Avg
Start Time	12:50	12:50	12:50	12:50
End Time	2:00	2:00	2:00	2:00
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	7926	7953	8065	7938
Vehs Exited	7905	7880	8033	7890
Starting Vehs	449	414	433	404
Ending Vehs	470	487	465	460
Denied Entry Before	3	2	3	0
Denied Entry After	155	301	30	184
Travel Distance (mi)	9355	9365	9307	9302
Travel Time (hr)	515.3	593.7	473.0	524.1
Total Delay (hr)	263.2	341.0	222.0	272.9
Total Stops	13013	12636	12729	12679
Fuel Used (gal)	362.8	382.1	350.9	363.9

Interval #0 Information Seeding

Start Time	12:50
End Time	1:00
Total Time (min)	10
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

SimTraffic Simulation Summary
Total Traffic 2019 - Saturday

07/24/2018

Interval #1 Information Recording

Start Time	1:00
End Time	2:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	31	32	33	34	35	36	37
Vehs Entered	7895	7795	7866	7930	8000	7914	8071
Vehs Exited	7828	7769	7834	7852	7969	7846	7992
Starting Vehs	375	418	430	399	407	374	422
Ending Vehs	442	444	462	477	438	442	501
Denied Entry Before	1	2	2	2	6	1	2
Denied Entry After	261	253	235	215	105	144	153
Travel Distance (mi)	9283	9253	9206	9245	9312	9182	9510
Travel Time (hr)	522.7	549.4	585.6	536.4	466.5	501.5	496.5
Total Delay (hr)	271.4	299.7	337.4	286.6	214.9	253.1	240.1
Total Stops	12603	12644	12319	12552	12888	12456	12934
Fuel Used (gal)	364.6	369.0	374.8	365.2	351.5	354.9	363.1

Interval #1 Information Recording

Start Time	1:00
End Time	2:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	38	39	40	Avg
Vehs Entered	7926	7953	8065	7938
Vehs Exited	7905	7880	8033	7890
Starting Vehs	449	414	433	404
Ending Vehs	470	487	465	460
Denied Entry Before	3	2	3	0
Denied Entry After	155	301	30	184
Travel Distance (mi)	9355	9365	9307	9302
Travel Time (hr)	515.3	593.7	473.0	524.1
Total Delay (hr)	263.2	341.0	222.0	272.9
Total Stops	13013	12636	12729	12679
Fuel Used (gal)	362.8	382.1	350.9	363.9

Queuing and Blocking Report
Total Traffic 2019 - Saturday

07/24/2018

Intersection: 3: 27th Ave SE & Kuebler Blvd

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	R	L	L	T	T	R	L	T	R
Maximum Queue (ft)	70	426	431	93	365	396	449	385	18	160	25	272
Average Queue (ft)	9	178	195	4	170	214	139	137	3	72	4	128
95th Queue (ft)	44	354	373	57	335	354	343	304	12	134	16	229
Link Distance (ft)		875	875				1353	1353	1353		414	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	250			200	375	375				200		290
Storage Blk Time (%)		4	8		1	1	0			0		0
Queuing Penalty (veh)		1	0		3	5	2			0		0

Intersection: 3: 27th Ave SE & Kuebler Blvd

Movement	SB	SB
Directions Served	L	TR
Maximum Queue (ft)	40	52
Average Queue (ft)	9	14
95th Queue (ft)	31	38
Link Distance (ft)		5252
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	125	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 4: I-5 SB Ramps & Kuebler Blvd

Movement	EB	EB	EB	WB	WB	SB	SB	SB
Directions Served	T	T	R	T	T	L	R	R
Maximum Queue (ft)	472	496	225	295	270	143	448	325
Average Queue (ft)	231	252	37	164	123	60	183	73
95th Queue (ft)	430	443	173	260	227	115	383	263
Link Distance (ft)	1353	1353		712	712	1446	1446	1446
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			150					
Storage Blk Time (%)		16			0			
Queuing Penalty (veh)		14			0			

Queuing and Blocking Report
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Intersection: 5: I-5 NB Ramps & Kuebler Blvd

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	T	T	TR	LT	R
Maximum Queue (ft)	102	121	98	75	83	75
Average Queue (ft)	25	31	31	17	34	36
95th Queue (ft)	70	80	73	51	64	63
Link Distance (ft)	712	712			941	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)				150		150
Storage Blk Time (%)			0	0		
Queuing Penalty (veh)			0	0		

Summary of All Intervals

Run Number	1	10	2	3	4	5	6
Start Time	12:50	12:50	12:50	12:50	12:50	12:50	12:50
End Time	2:00	2:00	2:00	2:00	2:00	2:00	2:00
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1	1
Vehs Entered	7795	7669	7903	7964	7952	7914	7758
Vehs Exited	7772	7658	7884	7940	7928	7863	7722
Starting Vehs	448	426	439	401	437	406	407
Ending Vehs	471	437	458	425	461	457	443
Denied Entry Before	1	0	2	1	3	1	4
Denied Entry After	284	326	128	38	86	219	349
Travel Distance (mi)	9124	9050	9355	9217	9217	9146	9117
Travel Time (hr)	570.9	526.7	505.5	443.1	469.6	557.0	602.7
Total Delay (hr)	323.8	282.8	252.6	193.3	219.6	309.5	356.4
Total Stops	12455	12397	12979	12930	12696	12439	12220
Fuel Used (gal)	369.8	358.7	362.0	342.1	349.4	367.6	377.0

Summary of All Intervals

Run Number	7	8	9	Avg
Start Time	12:50	12:50	12:50	12:50
End Time	2:00	2:00	2:00	2:00
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	7836	7716	7752	7824
Vehs Exited	7773	7672	7725	7793
Starting Vehs	418	418	422	413
Ending Vehs	481	462	449	446
Denied Entry Before	2	1	0	0
Denied Entry After	227	234	302	218
Travel Distance (mi)	9189	8966	9004	9138
Travel Time (hr)	541.9	542.3	531.3	529.1
Total Delay (hr)	294.1	299.5	288.3	282.0
Total Stops	12569	12466	12638	12578
Fuel Used (gal)	364.5	360.1	358.3	361.0

Interval #0 Information Seeding

Start Time	12:50
End Time	1:00
Total Time (min)	10
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	1:00
End Time	2:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	10	2	3	4	5	6
Vehs Entered	7795	7669	7903	7964	7952	7914	7758
Vehs Exited	7772	7658	7884	7940	7928	7863	7722
Starting Vehs	448	426	439	401	437	406	407
Ending Vehs	471	437	458	425	461	457	443
Denied Entry Before	1	0	2	1	3	1	4
Denied Entry After	284	326	128	38	86	219	349
Travel Distance (mi)	9124	9050	9355	9217	9217	9146	9117
Travel Time (hr)	570.9	526.7	505.5	443.1	469.6	557.0	602.7
Total Delay (hr)	323.8	282.8	252.6	193.3	219.6	309.5	356.4
Total Stops	12455	12397	12979	12930	12696	12439	12220
Fuel Used (gal)	369.8	358.7	362.0	342.1	349.4	367.6	377.0

Interval #1 Information Recording

Start Time	1:00
End Time	2:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	7	8	9	Avg
Vehs Entered	7836	7716	7752	7824
Vehs Exited	7773	7672	7725	7793
Starting Vehs	418	418	422	413
Ending Vehs	481	462	449	446
Denied Entry Before	2	1	0	0
Denied Entry After	227	234	302	218
Travel Distance (mi)	9189	8966	9004	9138
Travel Time (hr)	541.9	542.3	531.3	529.1
Total Delay (hr)	294.1	299.5	288.3	282.0
Total Stops	12569	12466	12638	12578
Fuel Used (gal)	364.5	360.1	358.3	361.0

Queuing and Blocking Report
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Intersection: 3: 27th Ave SE & Kuebler Blvd

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	R	L	L	T	T	R	L	T	R
Maximum Queue (ft)	76	407	398	66	337	390	394	355	16	165	24	265
Average Queue (ft)	10	176	192	3	161	208	129	131	3	78	4	123
95th Queue (ft)	47	342	355	40	316	341	298	271	11	141	16	223
Link Distance (ft)		875	875				1353	1353	1353		414	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	250			200	375	375				200		290
Storage Blk Time (%)		4	9		0	0	0			0		0
Queuing Penalty (veh)		1	0		0	2	1			1		0

Intersection: 3: 27th Ave SE & Kuebler Blvd

Movement	SB	SB
Directions Served	L	TR
Maximum Queue (ft)	48	46
Average Queue (ft)	11	12
95th Queue (ft)	35	33
Link Distance (ft)		5252
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	125	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 4: I-5 SB Ramps & Kuebler Blvd

Movement	EB	EB	EB	WB	WB	SB	SB	SB
Directions Served	T	T	R	T	T	L	R	R
Maximum Queue (ft)	481	484	225	285	252	146	366	335
Average Queue (ft)	231	250	48	156	114	60	172	73
95th Queue (ft)	432	447	199	249	209	118	355	259
Link Distance (ft)	1353	1353		712	712	1446	1446	1446
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			150					
Storage Blk Time (%)		16			0			
Queuing Penalty (veh)		14			0			

Queuing and Blocking Report
Total Traffic 2019 - Saturday

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Intersection: 5: I-5 NB Ramps & Kuebler Blvd

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	T	T	TR	LT	R
Maximum Queue (ft)	100	124	99	72	76	74
Average Queue (ft)	30	36	30	15	33	36
95th Queue (ft)	77	90	71	46	60	63
Link Distance (ft)	712	712			941	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)				150		150
Storage Blk Time (%)			0			
Queuing Penalty (veh)			0			