CAMAS BUSINESS CENTER
TRAFFIC IMPACT ANALYSIS

Camas, WA

11/11/2021

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

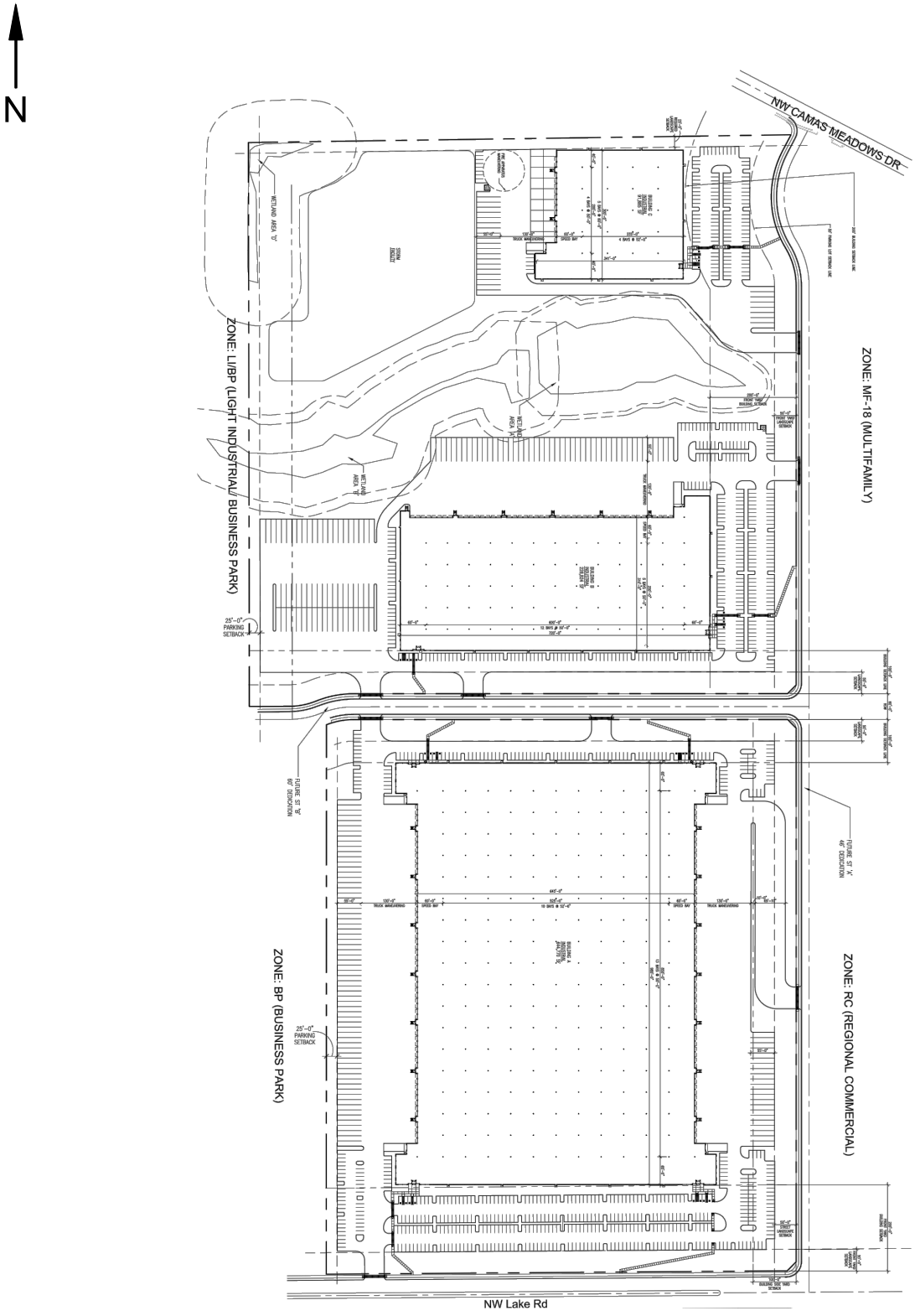
CAMAS BUSINESS CENTER
TRAFFIC IMPACT ANALYSIS

1. INTRODUCTION

The main goals of this study focus on the analysis of existing roadway conditions and forecasts of newly generated project traffic. The first task includes the review of general roadway information on the adjacent street system, baseline vehicular volumes, and entering sight distance data. Forecasts of future traffic and dispersion patterns on the street system are then determined using established trip generation and distribution techniques. As a final step, appropriate conclusions and mitigation measures are defined.

2. PROJECT DESCRIPTION

Camas Business Center proposes an industrial site comprising 963,479 square feet within three buildings located in the city of Camas. The proposed development contains a site address of 4704 NW Lake Road. The subject property is bordered to the south by NW Lake Road on a cumulative 74.06-acres within tax parcel #'s: 176155000; & 176170000. Primary access to and from the site is proposed via NW Lake Road and NW Camas Meadows Drive. Shown below in Figure 1 is an aerial vicinity map outlining the subject parcel. A site plan illustrating the proposed building layout and access configuration is presented in Figure 2 on the following page.



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SITE PLAN
FIGURE 2

3. EXISTING CONDITIONS

3.1 Existing Roadway Characteristics

Adjacent streets to the site are listed and described below:

NW Lake Road/SE 1st Street: is an east-west multi-lane arterial bordering the subject site to the south. Travel lanes are approximately 11-12 feet in width with left-turn lanes and marked crosswalks provided at major intersections. Bicycle lanes approximately 5-feet in width are provided along either side of the roadway. Shoulders are comprised of curb, gutter and detached sidewalk. The posted speed limit along the project frontage is 40-mph.

NW Camas Meadows Drive: is a northwest-southeast, 2- to 3-lane arterial abutting the northeastern corner of the subject site. The roadway cross-section at the proposed site access consists of 1 travel lane in either direction and a center two-way left-turn lane. Travel lanes are approximately 11-12 feet in width. With the exception of a segment of roadway southeast of the subject site that provides solely curb, shoulders generally consists of curb, gutter and detached sidewalk. The posted speed limit is 35-mph.

3.2 Transit Service

A review of the C-Tran regional bus schedule indicates that the nearest bus route in relation to the subject site, Routes 37, is provided in excess of 1-mile walking distance. Routes 37 – Mill Plain/Fisher's provides service from downtown Vancouver, east along Mill Plain Boulevard, terminating at Fisher's Landing Transit Center. The nearest stop in relation to the subject site is located 1.25-miles walking distance southwest at SE 192nd Avenue & Mill Plain Boulevard. Weekday service is provided from 4:47 AM – 1:10 AM with 15-minute headway frequency. Saturday service is provided from 7:15 AM – 11:37 PM with 20-minute headway frequency. Sunday/Holiday service is provided from 7:30 AM – 11:02 PM with 30-minute headway frequency. Continuous sidewalk paths are provided between the subject site and Route 37 service. Refer to C-Tran Routes for more detailed route information.

3.3 Non-Motorist Traffic

Observations for pedestrian and bicycle activity were made at the study intersections most immediate to the subject site: NW Payne Street & NW Lake Road and NE Camas Meadows Drive & NE Goodwin Road. During the PM peak hour, 1 pedestrian and 8 bicyclists were observed at NW Payne Street & NW Lake Road. No pedestrians and 12

bicyclists were observed at NE Camas Meadows Drive & NE Goodwin Road. The surrounding area offers continuous sidewalk and marked crosswalks at nearby intersections. Moreover, bike lanes are provided on NW Lake Road and additional roadways in the vicinity of the subject site. No significant increase with respect to non-motorist transport would be expected from the project given the industrial nature of the proposed development.

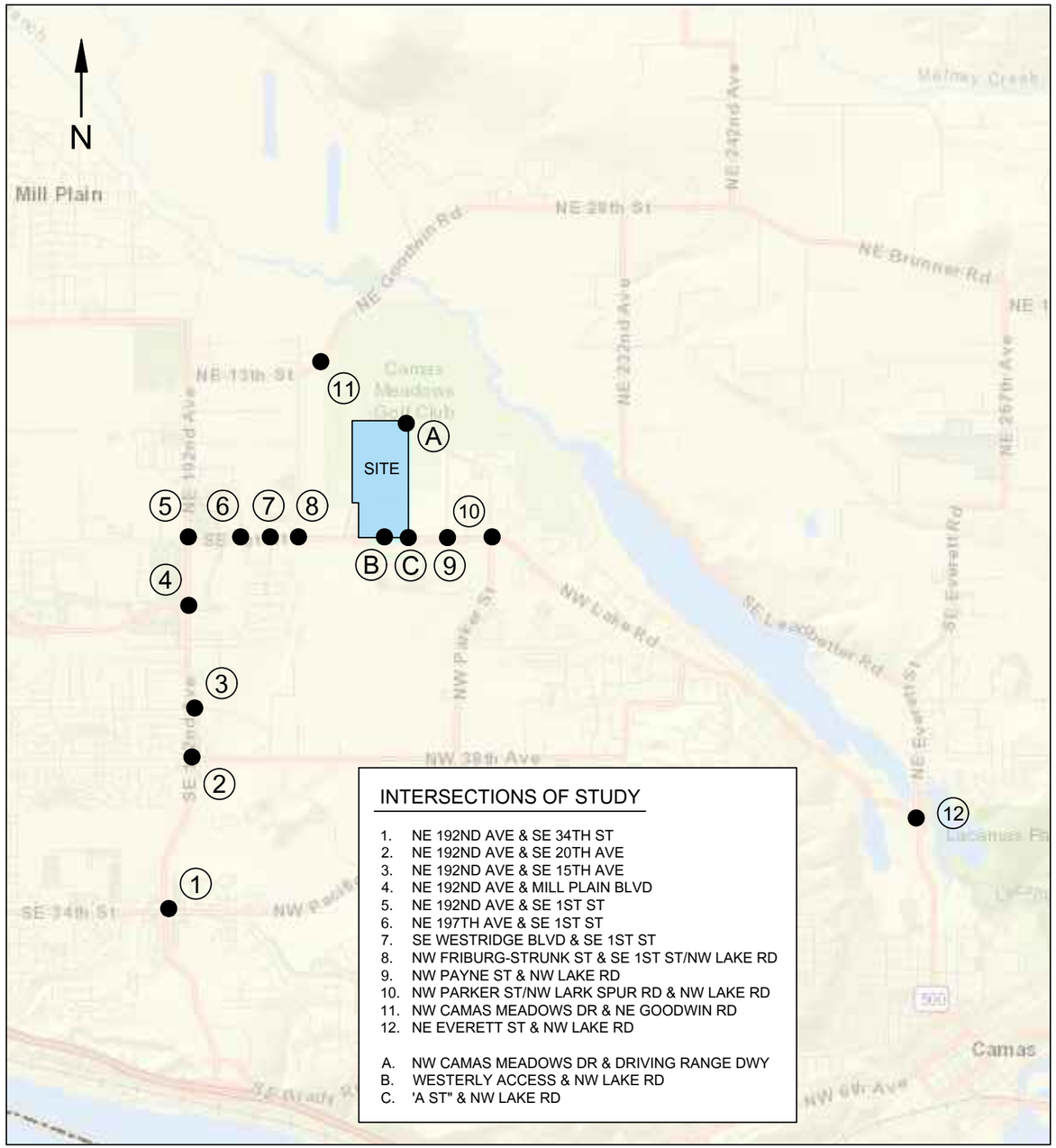
3.4 Existing Peak Hour Volumes

Field data was collected in October of 2021 to determine baseline vehicular volumes in the study area. Turning movement counts were performed at the following intersections, as directed by the city of Camas and city of Vancouver.

1. NE 192nd Ave & SE 34th St
2. NE 192nd Ave & SE 20th Ave
3. NE 192nd Ave & SE 15th Ave
4. NE 192nd Ave & Mill Plain Blvd
5. NE 192nd Ave & SE 1st St
6. NE 197th Ave & SE 1st St
7. SE Westridge Blvd & SE 1st St
8. NW Friburg-Strunk St & SE 1st St/NW Lake Rd
9. NW Payne St & NW Lake Rd
10. NW Parker St /NW Lark Spur Rd & NW Lake Rd
11. NW Camas Meadows Dr & NE Goodwin Rd
12. NE Everett St & NW Lake Rd

All study intersections were analyzed between the weekday peak period of 4:00 PM - 6:00 PM. The one hour reflecting highest overall roadway volumes (peak hour) was then derived from these counts. To determine if gathered 2021 PM peak hour count volumes should be grossed up due to potential travel skews associated with the ongoing COVID-19 pandemic, 2021 counts were compared with historic 2018 counts at several study intersections. Data indicated that 2021 volumes were higher than 2018 volumes at NE 192nd Avenue & SE 34th Street and lower at slightly lower at NE 192nd Avenue & SE 1st Street. It should be noted that travel patterns are trending towards normalization. Current traffic volumes being lower than previous years may be attributed to a handful of factors, anticipated to continue beyond the pandemic. These influences include an increase in the population share working from home, shifting peak hours and overall changes in travel behavior. Given the similar traffic volumes and the additional reasons above, no adjustments were applied to the traffic counts.

Lastly, it should be noted that the proposed NW Camas Meadows Drive & Street “A” access is located in close proximity to an existing driveway serving the Camas Meadows Driving Range. Therefore, a count was performed at this intersection in (July of 2021), which is additionally depicted in Figure. Existing PM peak hour volumes are illustrated in Figure 3. Full-count sheets have been included in the appendix.

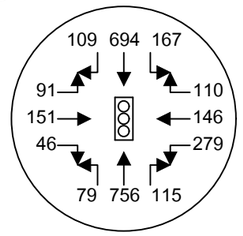


INTERSECTIONS OF STUDY

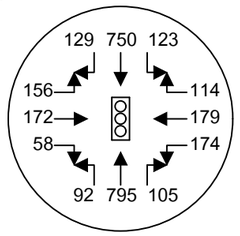
1. NE 192ND AVE & SE 34TH ST
2. NE 192ND AVE & SE 20TH AVE
3. NE 192ND AVE & SE 15TH AVE
4. NE 192ND AVE & MILL PLAIN BLVD
5. NE 192ND AVE & SE 1ST ST
6. NE 197TH AVE & SE 1ST ST
7. SE WESTRIDGE BLVD & SE 1ST ST
8. NW FRIBURG-STRUNK ST & SE 1ST ST/NW LAKE RD
9. NW PAYNE ST & NW LAKE RD
10. NW PARKER ST/NW LARK SPUR RD & NW LAKE RD
11. NW CAMAS MEADOWS DR & NE GOODWIN RD
12. NE EVERETT ST & NW LAKE RD

A. NW CAMAS MEADOWS DR & DRIVING RANGE DWY
B. WESTERLY ACCESS & NW LAKE RD
C. 'A ST" & NW LAKE RD

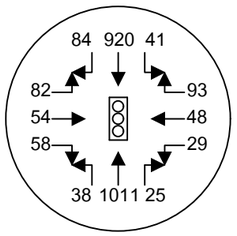
① NE 192ND AVE & SE 34TH ST



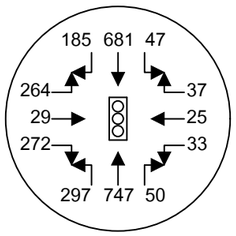
② NE 192ND AVE & SE 20TH AVE



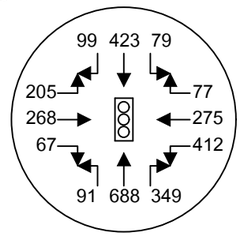
③ NE 192ND AVE & SE 15TH AVE



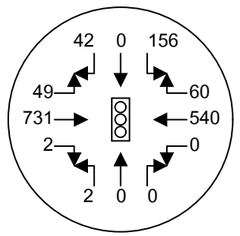
④ NE 192ND AVE & MILL PLAIN BLVD



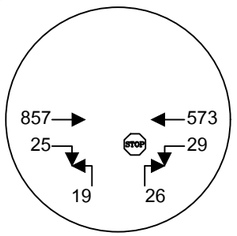
⑤ NE 192ND AVE & SE 1ST ST



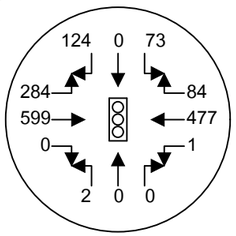
⑥ NE 197TH AVE & SE 1ST ST



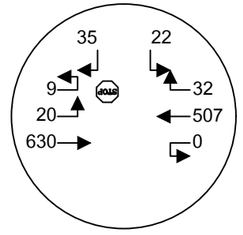
⑦ SE WESTRIDGE BLVD & SE 1ST ST



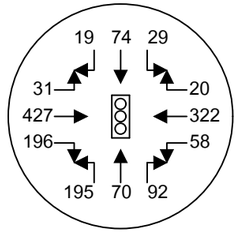
⑧ NW FRIBURG-STRNK ST & SE 1ST ST/ NW LAKE RD



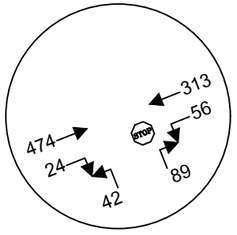
⑨ NW PAYNE ST & NW LAKE RD



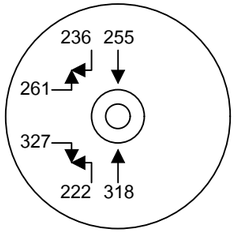
⑩ NW PARKER ST/ NW LARK SPUR RD & NW LAKE RD



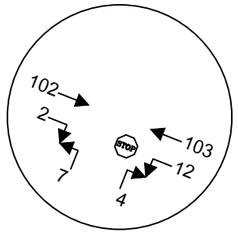
⑪ NW CAMAS MEADOWS DR & NE GOODWIN RD



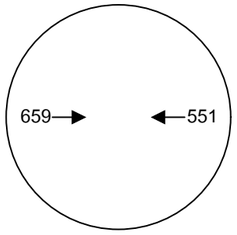
⑫ NE EVERETT ST & NW LAKE RD



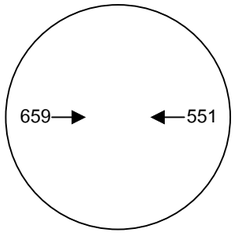
Ⓐ NW CAMAS MEADOWS DR & DRIVING RANGE DWY



Ⓑ WESTERLY ACCESS & NW LAKE RD



Ⓒ "A ST" & NW LAKE RD



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EXISTING PM PEAK HOUR VOLUMES
FIGURE 3

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3.5 Existing Level of Service

Peak hour delays were determined through the use of the *Highway Capacity Manual* 6th Edition. Capacity analysis is used to determine level of service (LOS) which is an established measure of congestion for transportation facilities. The range[1] for intersection level of service is LOS A to LOS F with the former indicating the best operating conditions with low control delays and the latter indicating saturated conditions with heavy control delays. Level of service calculations were made through the use of the *Synchro 11* analysis program and *SIDRA* (roundabouts). Signalized LOS is reported as the intersection's overall average delay. Stop-controlled is reported for the highest delays approach. Table 3 below summarizes existing LOS delays for the study intersections.

Table 1: Existing PM Peak Hour Level of Service

Delays given in seconds per vehicle

ID	Intersection	Control [2]	LOS	Delay	V/C
1	NE 192nd Ave & SE 34th St	Signal	C	24.2	0.70
2	NE 192nd Ave & SE 20th Ave	Signal	D	35.9	0.86
3	NE 192nd Ave & SE 15th Ave	Signal	B	18.7	0.56
4	NE 192nd Ave & Mill Plain Blvd	Signal	C	27.6	0.78
5	NE 192nd Ave & SE 1st St	Signal	C	31.4	0.72
6	NE 197th Ave & SE 1st St	Signal	B	10.4	0.45
7	SE Westridge Blvd & SE 1st St	Stop	C	20.8	0.14
8	NW Friburg-Strunk St & SE 1st St/NW Lake Rd	Signal	B	13.1	0.55
9	NW Payne St & NW Lake Rd	Stop	B	14.9	0.14
10	NW Parker St /NW Lark Spur Rd & NW Lake Rd	Signal	B	18.2	0.63
11	NW Camas Meadows Dr & NE Goodwin Rd	Stop	B	14.9	0.16
12	NE Everett St & NW Lake Rd	RAB	A	6.6	0.28
A	NW Camas Meadows Dr & Driving Range Dwy	Stop	A	9.6	0.20

[1] *Signalized Intersections - Level of Service*

Level of Service	Control Delay per Vehicle (sec)
A	≤10
B	> 10 and ≤20
C	> 20 and ≤35
D	> 35 and ≤55
E	> 55 and ≤80
F	> 80

Stop Controlled Intersections – Level of Service

Level of Service	Control Delay per Vehicle (sec)
A	≤10
B	> 10 and ≤15
C	> 15 and ≤25
D	> 25 and ≤35
E	> 35 and ≤50
F	> 50

Highway Capacity Manual, 6th Edition

[2] Signal timing was obtained from City of Vancouver's Public Works Traffic Engineering and Operations

All outlying study intersections currently operate with LOS D or better conditions during the critical PM peak hour.

3.6 Roadway Improvement Projects

A review of the City of Camas Six-Year Comprehensive Transportation Improvement Program (2022-2027) indicates that the following projects are currently planned in the vicinity of Camas Business Center project.

Table 2: City of Camas Transportation Improvement Projects

Name	Location	Improvement	Cost
SR-500 (Everett St/Rd) (Priority #2)	NW Lake Rd to SE 4th St	Widening, bike lanes, pedestrian access	$45,700,000
NE Goodwin Rd (Priority #5)	@ NE Ingle Rd	Traffic signal	$380,000
Lake Road (Priority #7)	NW Lacamas Ln - Lacamas Lk Lodge	Widening, sidewalk	$3,475,000
NW Lake Road (Priority #8)	@ NW Sierra St	Traffic signal	$380,000
NE Goodwin Road/28th Street (Priority #10)	NW Camas Meadows Dr - NE 232nd Ave	Widen to 5 lanes with bike lanes, sidewalk west of Ingle; Widen to 3 lanes with bike lanes, sidewalk east of Ingle	$21,670,000
North Dwyer Creek Master Plan Street "B" (Priority #17)	NW Friberg St./Strunk to NW Larkspur St.	New construction	TBD
NW Payne Street (Priority #18)	NW Lake Rd. to NW Camas Meadows Dr	Widening, bike lanes, sidewalk	TBD
North Dwyer Creek Master Plan Street "A" (Priority #20)	NW Lake Rd to NW Camas Meadows Dr	New construction	TBD
NW Leadbetter Drive (Priority #21)	NW Lake Rd to NW Fremont St	Sidewalk	CN: $66,000
NE 18th Street (Priority #33)	NE 192nd Ave to NE Goodwin Rd	New construction (potential alternate alignment)	TBD
NW Camas Meadows Drive (Priority #35)	NE 13th St to NE 18th St	New construction (potential alternate alignment)	TBD
E Goodwin Road @ NW Camas Meadows Drive (Priority #37)	Intersection	Traffic signal	$350,000

Moreover, a review of the City of Vancouver Six-Year Comprehensive Transportation Improvement Program (2022-2027) indicates that the following projects are currently planned in the vicinity of several outlying study intersections for the Camas Business Center project.

Table 3: City of Vancouver Transportation Improvement Projects

Name	Location	Improvement	Cost
SE 1st St (TRANS-268)	SE 164th Ave to SE 177th Ave	New cross section to be 3 lanes wide with improvements to include sidewalks, ADA ramps, bike facilities	$14,100,000
SE 1st St (TRANS-870)	SE 177th Ave to SE 192nd Ave	Install roundabouts and transition to a 5-lane cross-section. Improvements include sidewalks, ADA ramps, bike facilities, etc.	$11,000,000
NE 192nd Ave (TRANS-607)	SE 1st St to NE 18th St	Additional travel lanes, sidewalks, bike facilities, ADA ramps and streetlights	$20,000,000

3.7 Project Access, Vision Clearance & Driveway Spacing

Three new primary access points are proposed for site ingress and egress. Two new accesses (one westerly right-in, right-out driveway and one full turning movement Street “A” intersection) are proposed to extend north from NW Lake Road. One new access, Street “A”, is to extend southwest from NW Camas Meadows Drive. It should be noted that Street “A” is classified as a future City collector roadway, providing a new north-south connection from NW Lake Road to NW Camas Meadows Drive. In accordance with established AASHTO “Green Book” standards, a minimum entering sight distances of 475 feet and 390 feet are required based on the 40- and 35-mph posted speed limits and number of travel lanes on NW Lake Road and NW Camas Meadows Drive, respectively. Based on preliminary measurements, sight lines appear to be met at all proposed accesses. Final verification may be required upon final site plan and access locations.

Moreover, all new access intersections constructed by the proposed development are to conform with CMC 18.17.030 vision clearance standards. No vision clearance issues are identified with the development proposal, however, final verification may be required upon final site plan and access locations.

Lastly, all proposed project driveways on Street “A” and Street “B” and their respective distances to one another are illustrated in Figure A in the appendix. Figure A additionally illustrates all intersections/private driveways located in close proximity to the westerly project access on NW Lake Road, Street “A” & NW Lake Road and Street “A” & NW Camas Meadows Drive.

4. FUTURE TRAFFIC DEMAND

4.1 Trip Generation

Trip generation is defined as the number of vehicle movements that enter or exit the respective project site during a designated time period such as the PM peak hour or an entire day. The magnitude of the anticipated vehicle trip generation for the proposed project was derived from the Institute of Transportation Engineers (ITE) publication, *Trip Generation,* 11th Edition. The proposed land uses utilized for analysis are defined under ITE's Land Use Code (LUC) 154 – High-Cube Warehouse (Buildings A & B) and LUC 140 – Manufacturing (Building C). Square footage was used as the input variable and average rates were used in determining trip ends. Table 4 below summarizes anticipated vehicular movements for the average weekday daily trips (AWDT) and the AM and PM peak hours.

Table 4: Project Trip Generation

Building	Land Use	Size	AWDT	AM Peak-Hour Trips			PM Peak-Hour Trips		
				In	Out	Total	In	Out	Total
A & B	High-Cube Warehouse (LUC 154)	871,594 SF	**1220**	54	16	**70**	24	63	**87**
C	Manufacturing (LUC 140)	91,885 SF	**436**	47	15	**62**	21	47	**68**
	Total		**1656**	101	31	**132**	45	110	**155**

Based on ITE data, the proposed development is anticipated to generate 1656 average weekday daily trips with 132 AM (101 in/31 out) and 155 PM (45 in/110 out) peak hour trips. Moreover, ITE data indicates that approximately 20 AM (10 in/10 out) 12 PM (5 in/7 out) peak hour trips are anticipated to be in the form of heavy vehicle.

4.2 Trip Distribution Pattern

Trip distribution can be described as the travel routes to/from the subject site relative to the adjacent street system. The specific destinations and origins of the generated traffic primarily influence the key study intersections, which will effectively receive the bulk of project impacts. Trips generated by the project are expected to follow the general trip pattern as shown in Figure 4 for the PM peak hour. Trip distribution used herein this analysis has been approved by the City during the scoping process. Trips were disseminated between the proposed accesses on NW Lake Road (westerly access and new Street "A" intersection) and NW Camas Meadows Drive based on optimal travel

routing and parking availability on-site. It should be noted that a center median island is provided along NW Lake Road, restricting movements at the westerly access to right-in, right-out maneuvers. A left-turn pocket and receiving lane for southbound left-turn maneuvers at the Street “A” & NW Lake Road is to be constructed, permitting full turning movements at the intersection. The new intersection of Street “A” at Camas Meadows Drive is proposed for 3/4 road improvements and is assumed to allow two-way traffic flow.

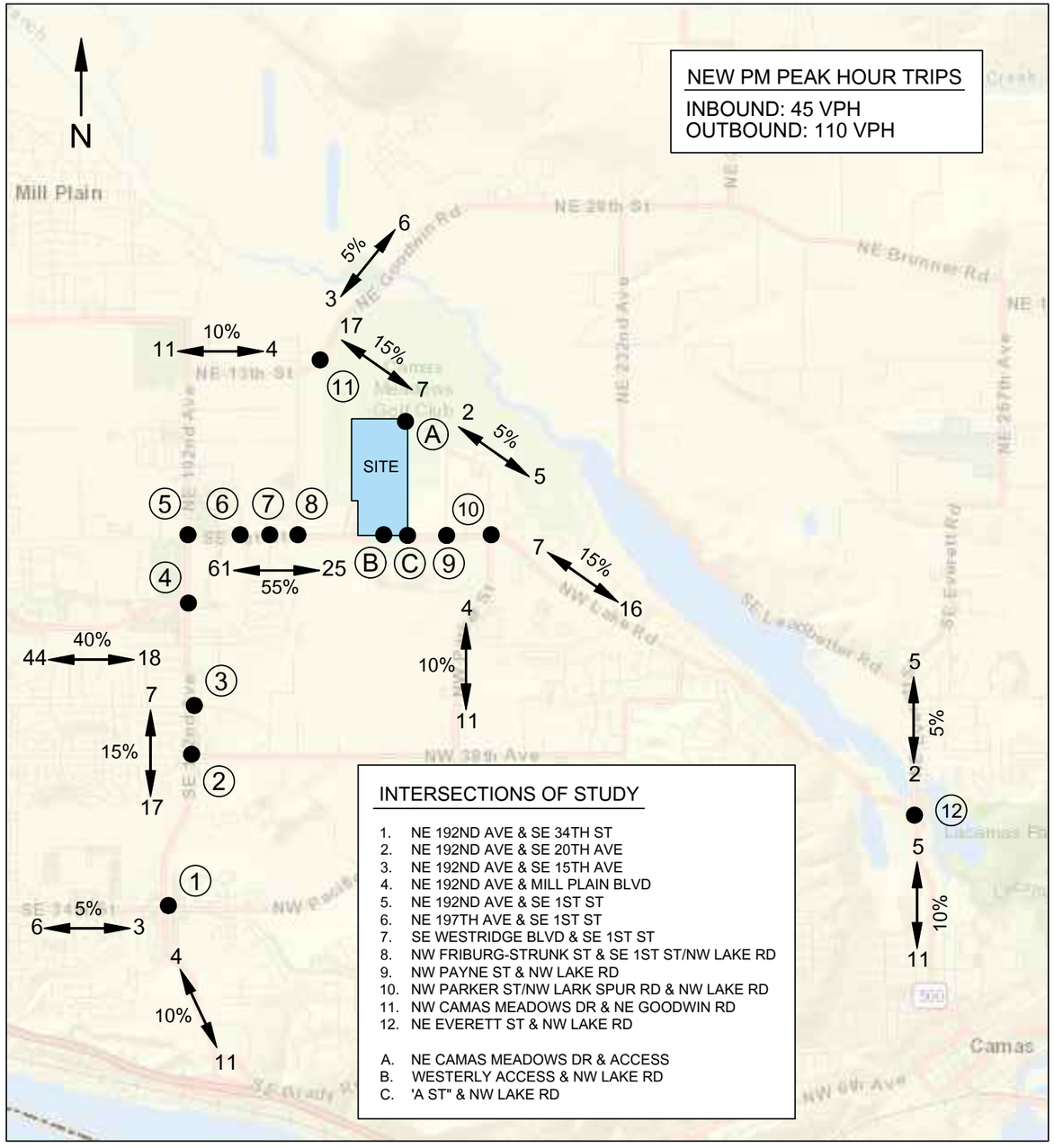
Discussion with the cities of both Camas and Vancouver during the scoping process indicated that several intersections in the vicinity of the subject site require proportional share fees for PM peak hour trip ends associated with new development. Figure B, attached in the appendix, outlines total PM peak hour trips at these intersections as requested. Moreover, as instructed in comments by the City, a diagram illustrating onsite traffic circulation showing ingress and egress in relation to future Street “A” and Street “B” is provided in the appendix in Figure C. Lastly, AM peak hour trip distribution and assignment is illustrated in Figure D in the appendix.

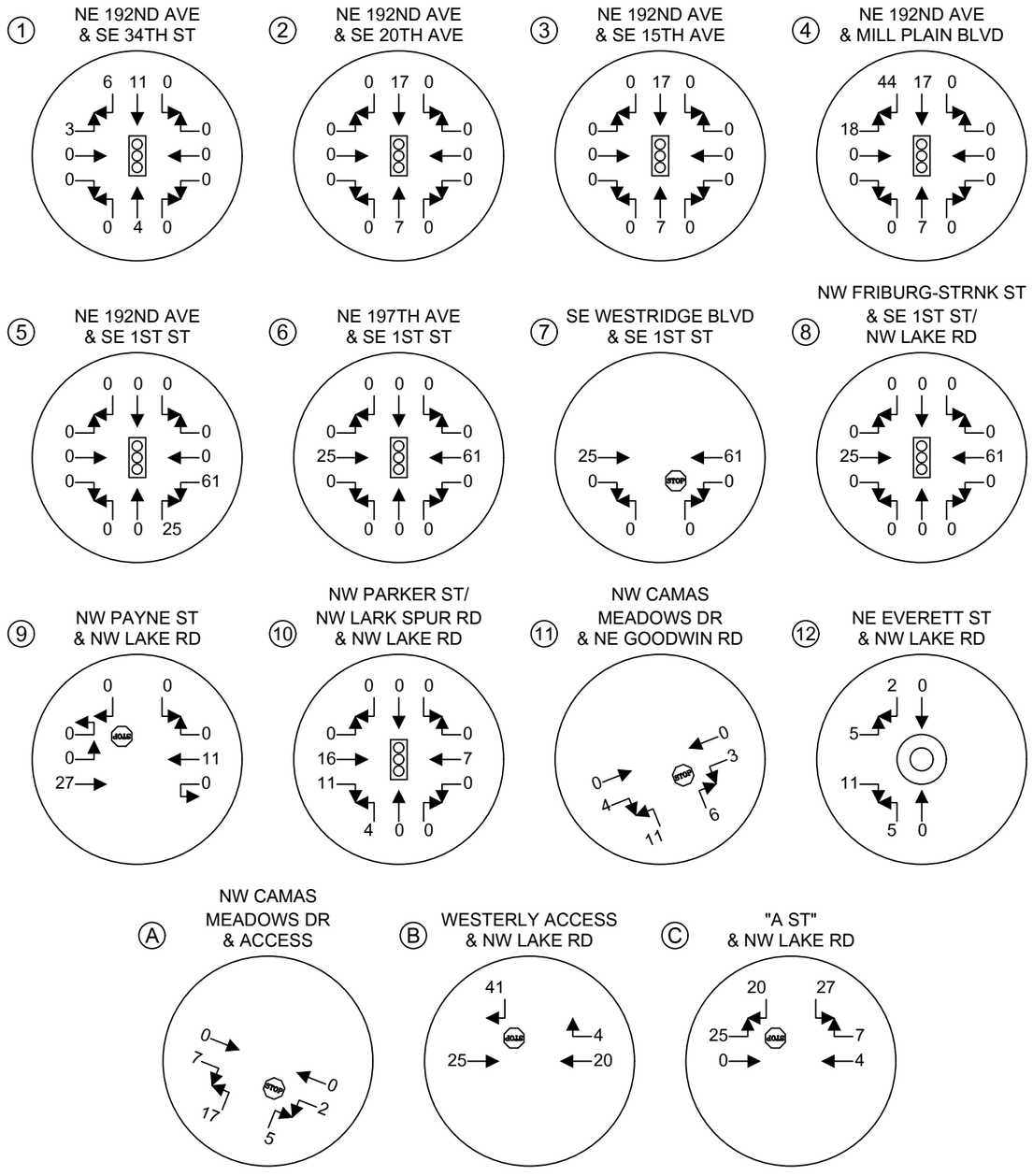
4.3 Peak Hour Volumes With and Without the Project

A 3-year horizon of 2024 was used for future traffic delay analysis. Forecast 2024 traffic volumes were derived by applying a 3.0 percent[3] compound annual growth rate to the existing PM peak hour volumes illustrated in Figure 3. Figure 5 shows future 2024 PM peak hour volumes without the project. Figure 6 shows 2024 PM peak hour volumes with the proposed project trips added to the study intersections.

It should be noted that Street “A”, being constructed as part of site development, is anticipated to serve future development. Moreover, the new collector roadway may reroute future travel volumes a it provides a new north-south connection. Therefore, additional turn-volumes were added to the Street “A” & NW Lake Road and Street “A” & NW Camas Meadows Drive intersections. Turn volumes added at this intersections emulate those observed at NW Payne Street & NW Lake Road, as this intersection provides similar routing options to that of the proposed access intersections. Said turn-volumes were grossed up by a factor of 1.2 to present a conservative analysis. Lastly, no reductions were applied to adjacent study intersections as a result of this rerouting.

[3] City of Camas, WA-Traffic Impact Fee Update (Annualized growth rate of about 2.9% per year)





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PM PEAK HOUR TRIP DISTRIBUTION & ASSIGNMENT
FIGURE 4

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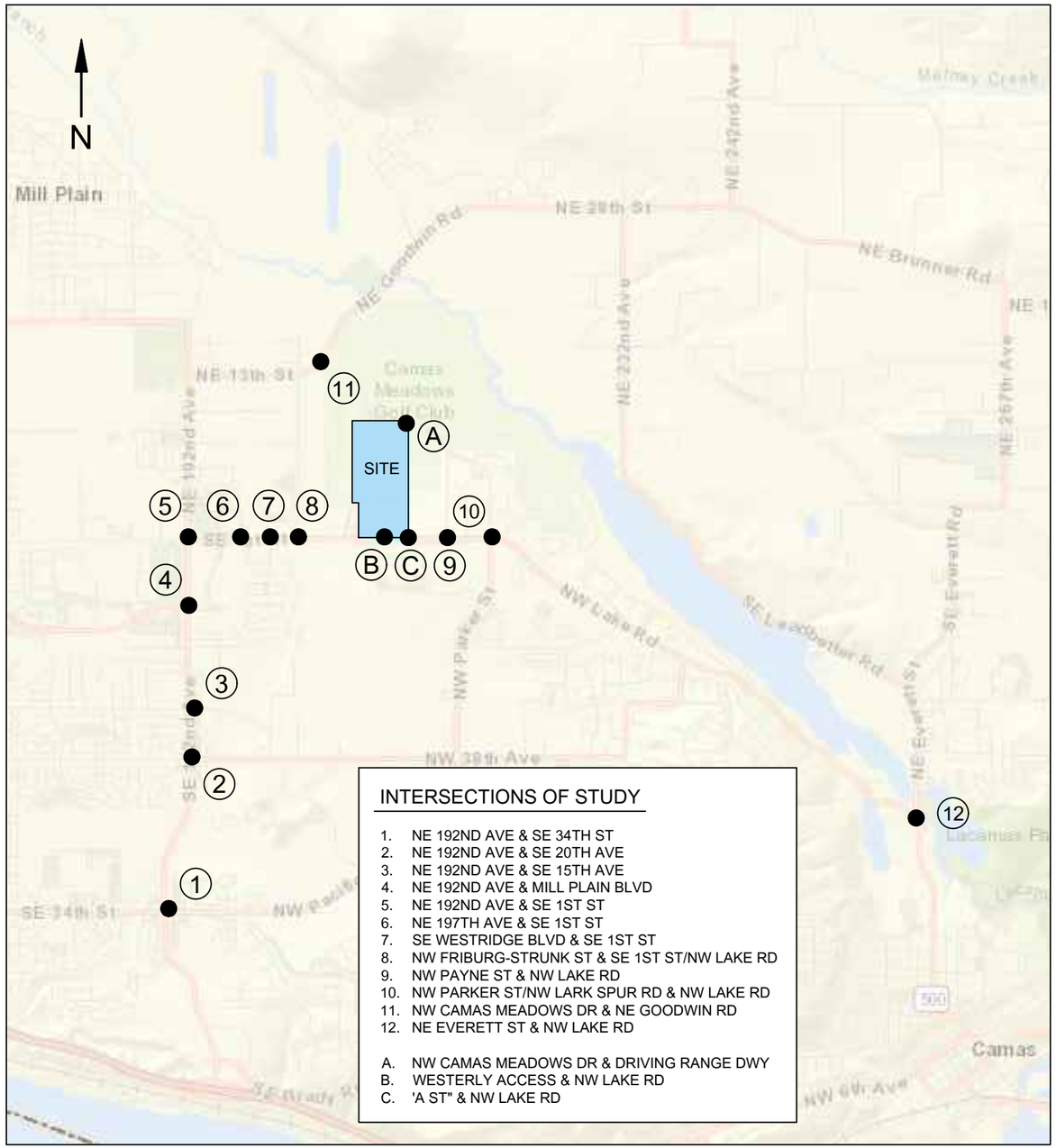

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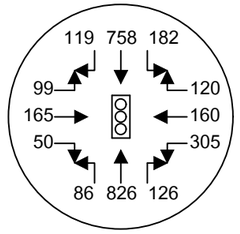
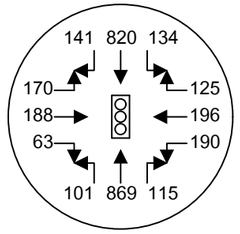
B. WESTERLY ACCESS & NW LAKE RD
C. 'A ST" & NW LAKE RD

① NE 192ND AVE & SE 34TH ST



② NE 192ND AVE & SE 20TH AVE



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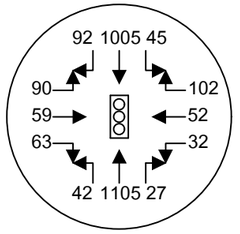

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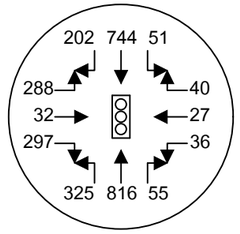

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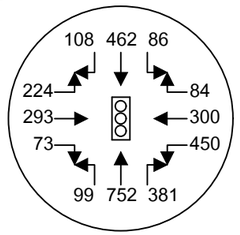

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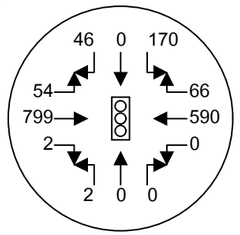

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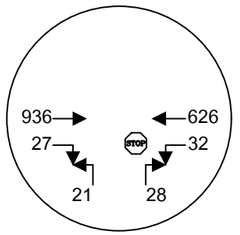

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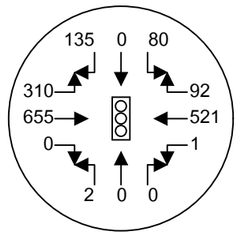

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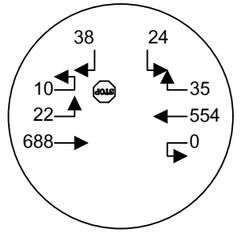

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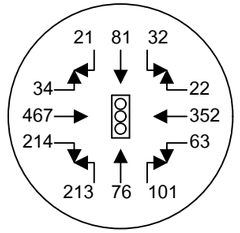

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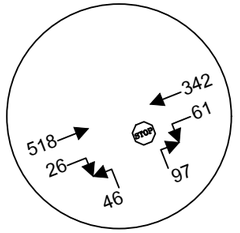

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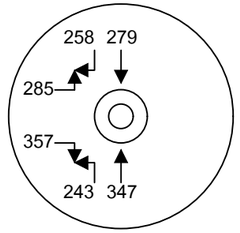

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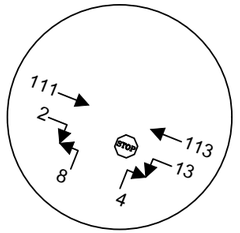
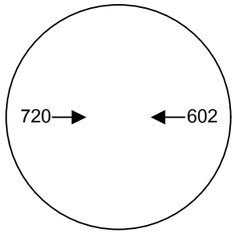
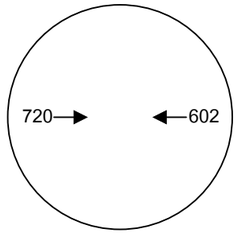


Ⓑ WESTERLY ACCESS & NW LAKE RD



Ⓒ "A ST" & NW LAKE RD



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CAMAS BUSINESS CENTER

FORECAST 2024 PM PEAK HOUR BACKGROUND VOLUMES
FIGURE 5

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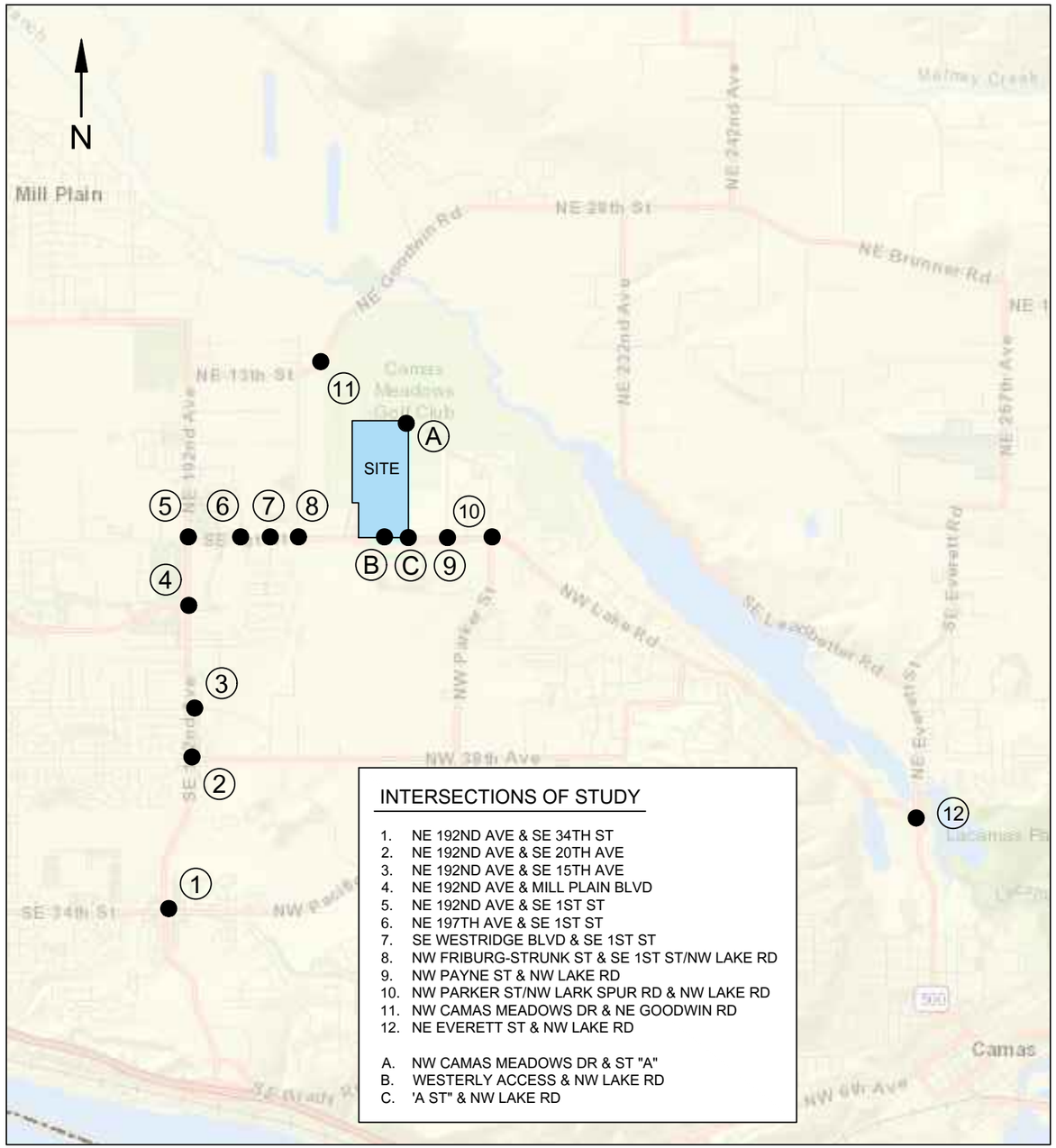

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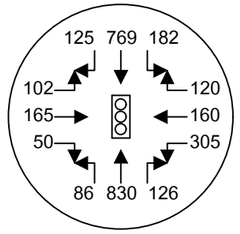

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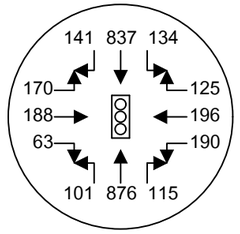

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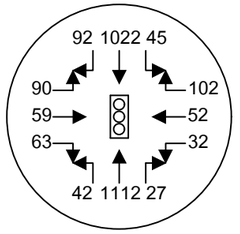

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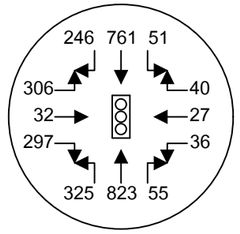

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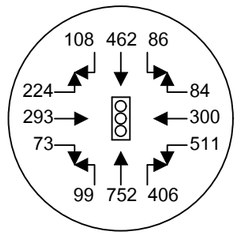

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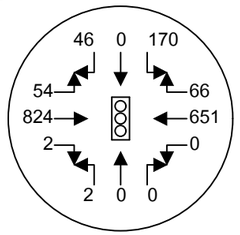
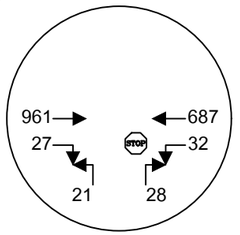
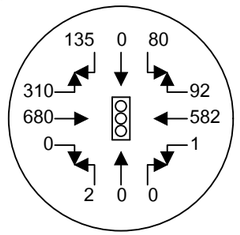


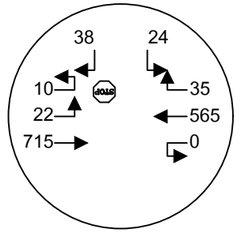
⑦ SE WESTRIDGE BLVD & SE 1ST ST



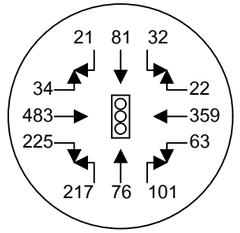
⑧ NW FRIBURG-STRNK ST & SE 1ST ST/ NW LAKE RD



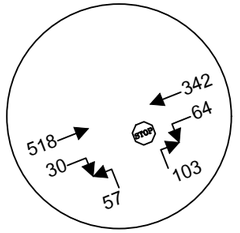
⑨ NW PAYNE ST & NW LAKE RD



⑩ NW PARKER ST/ NW LARK SPUR RD & NW LAKE RD



⑪ NW CAMAS MEADOWS DR & NE GOODWIN RD



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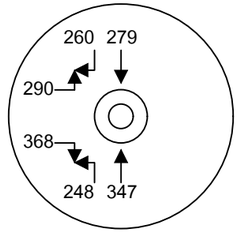

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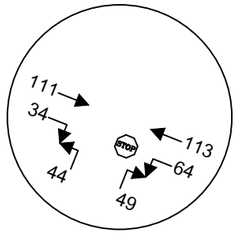

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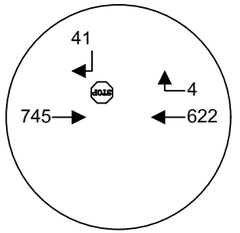
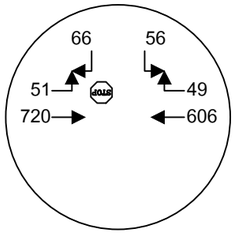


Ⓒ "A ST" & NW LAKE RD



HEATH & ASSOCIATES
TRAFFIC AND CIVIL ENGINEERING

CAMAS BUSINESS CENTER
FORECAST 2024 PM PEAK HOUR VOLUMES WITH PROJECT
FIGURE 6

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4.4 Future Level of Service

Level of service analyses were made of the PM peak hour conditions at the study intersections under the three-year horizon. Delays for the key intersections without and with the proposed Camas Business Center facility are summarized below.

Table 5: Forecast 2024 PM Peak Hour Level of Service

Delays given in seconds per vehicle

			Without Project			With Project		
ID	Intersection	Control [4]	LOS	Delay	V/C	LOS	Delay	V/C
1	NE 192nd Ave & SE 34th St	Signal	C	26.0	0.75	C	26.1	0.75
2	NE 192nd Ave & SE 20th Ave	Signal	D	39.5	0.93	D	39.6	0.93
3	NE 192nd Ave & SE 15th Ave	Signal	B	19.5	0.59	B	19.4	0.60
4	NE 192nd Ave & Mill Plain Blvd	Signal	C	29.5	0.80	C	30.7	0.84
5	NE 192nd Ave & SE 1st St	Signal	C	32.9	0.75	C	33.1	0.77
6	NE 197th Ave & SE 1st St	Signal	B	11.6	0.51	B	11.7	0.52
7	SE Westridge Blvd & SE 1st St	Stop	C	24.4	0.18	D	26.3	0.20
8	NW Friburg-Strunk St & SE 1st St/ NW Lake Rd	Signal	B	14.9	0.61	B	15.4	0.63
9	NW Payne St & NW Lake Rd	Stop	C	16.3	0.17	C	16.7	0.17
10	NW Parker St /NW Lark Spur Rd & NW Lake Rd	Signal	B	18.8	0.68	B	19.0	0.69
11	NW Camas Meadows Dr & NE Goodwin Rd	Stop	C	16.2	0.19	C	17.1	0.24
12	NE Everett St & NW Lake Rd	RAB	A	6.7	0.35	A	6.7	0.35
A	NW Camas Meadows Dr & Access	Stop	A	9.8	0.02	B	10.9	0.16
B	Westerly Access & NW Lake Rd	Stop	-	-		B	11.1	0.07
C	Street “A” & NW Lake Road	Stop	-	-		D	28.6	0.47

The outlying intersections of study are anticipated to operate with LOS D or better conditions. Moreover, the proposed accesses are anticipated to operate acceptably with LOS D or better conditions. No level of service intersection deficiencies are identified as a result of the proposed development.

[4] Signal timing was obtained from City of Vancouver’s Public Works Traffic Engineering and Operations

4.5 Turn Lane Warrants & Queuing Analysis

Turn lanes are a means of providing necessary storage space for right and left turning vehicles at intersections. It should be noted that the westerly access proposed on NW Lake Road is to be restricted to right-in, right-out maneuvers and that a center two-way left-turn lane currently exists at the proposed Street “A” & NW Camas Meadows Drive intersection. Therefore, for this impact study, procedures described by the WSDOT Design Manual Exhibit 1310-8 (left-turn) as used to ascertain storage requirements at the Street “A” & NW Lake Road intersection. Storage requirements were evaluated using forecast 2024 PM peak hour volumes with project at the access intersection as outlined in Figure 6.

Based on estimated forecast volumes, a left-turn pocket is warranted at Street “A” & NW Lake Road. The warrant nomograph indicates a 100-foot left-turn pocket length. However, assuming that approximately 10-20% of the left-turning vehicles may be in the form of heavy vehicle, Exhibit 1310-12 indicates increasing the recommended storage length to at least 125-feet. Discussion should be made with development engineering regarding final design of the left-turn pocket at the study intersection. Overall, the provision of a left-turn pocket not only enhances operations for the subject property but also benefits the City as Street “A” is a planned collector roadway. Refer to the appendix for the associated left-turn warrant nomographs.

Lastly, the city of Vancouver requested that queuing data and LOS be provided at several outlying study intersections. This data can be found in the LOS sheets attached in the appendix.

5. CONCLUSIONS AND MITIGATION

The Camas Business Center project proposes to construct a new industrial facility comprising 963,479 square feet in the city of Camas. With a site address of 4704 NW Lake Road, the subject site is comprised within 39.79-acre tax parcel #: 176155000. Access is proposed by way of NW Camas Meadows Drive and NW Lake Road. A new roadway, future Street “A” is to be constructed as a part of site development along the eastern edge of the subject parcel, providing a new north-south connection between NW Lake Road and NE Camas Meadows Drive. Moreover, a new east-west roadway (Street “B”) is to be constructed through the center of the subject site, providing a future east-west connection to future development located west of the subject parcel.

Based on ITE data, 1656 average daily weekday trips, 132 AM (101 in / 31 out) peak hour trips and 155 PM (45 in / 110 out) peak hour trips can be expected to/from the site. Existing Level of Service (LOS) was evaluated at 12 outlying intersections as directed by the cities of Camas and Vancouver. Existing PM peak hour conditions were shown to operate at LOS D or better. A three-year horizon of 2024 was evaluated at the study locations and three proposed accesses for the PM peak hour with and without the proposed development. Conditions with or without the project are shown to operate at LOS D or better for all outlying signalized intersections and proposed accesses.

Based on the findings of this report, the following mitigation is proposed for the Camas Business Center facility:

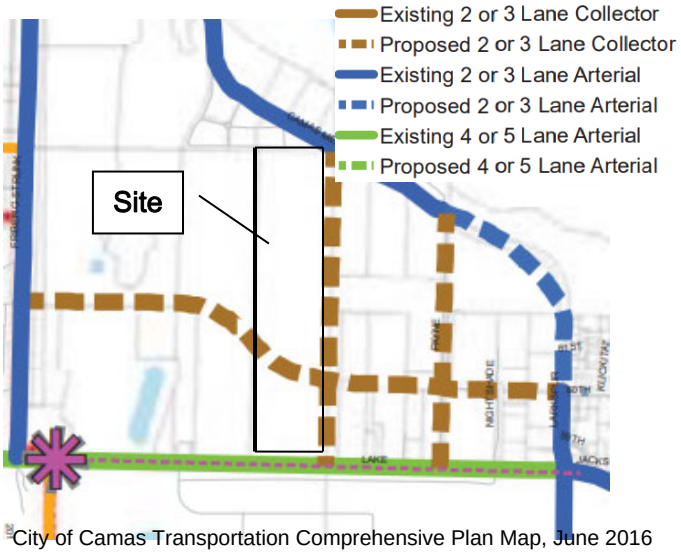
1. Modify center median along NW Lake Street to install an eastbound left-turn lane at the new proposed intersection of Street “A”. Based on WSDOT standards and potential heavy vehicle proportions, the recommended design is to comprise an approximate 125-foot eastbound storage lane. Final design should discussed and coordinated with the City.

2. Construct Streets “A” and “B” to account for the City’s future planned roadways. Design shall be consistent with City standards and is recommended to be coordinated with the City for final design.

3. Pay Traffic Impact Fees (TIF) as required by the City of Camas. According to the City of Camas 2021 Transportation Impact Fee Schedule, transportation impact fees are based on the number of new PM peak hour trips. Based on ITE data, the project is anticipated to generate 155 new PM peak hour trip ends. Therefore, the development's TIF, located in the south district, would be calculated as follows:

   $3,555.00 x 155 = $551,025.00

   Exact fees and calculations will be determined by the. Furthermore, the project may be eligible for TIF credit to apply against construction costs associated with the street improvements occurring via the new north-south Street "A" and east-west Street "B". The construction of these roadways are consistent with the City's Comprehensive Plan and future connectivity plans. Additional credit may be received for the construction of the eastbound left-turn lane at the future Street "A" & NW Lake Street as this feature would enhance the roadway's operations and would be necessary once the roadway is connected to the north.



City of Camas Transportation Comprehensive Plan Map, June 2016

   Moreover, the development would be subject to proportionate share fees for three city of Vancouver intersections per new PM peak hour trip end. Figure A in the appendix outlines the trip distribution and respective number of project-associated trips traveling through the critical intersections. The table below outlines the calculated proportionate share fees per intersection.

Table 6: City of Vancouver Proportional Share Fees

Intersection	Fee per PM Peak Hour Trip End	# of Peak Hour Trip Ends	Total Prop. Share Fee
NE 192nd Ave & NE 13th St	$400	15	$6,000.00
NE 192nd Ave & SE 34th St	$150	24	$3,600.00
NE 192nd Ave & SR-14 Ramps	$2,000	15	$30,000.00

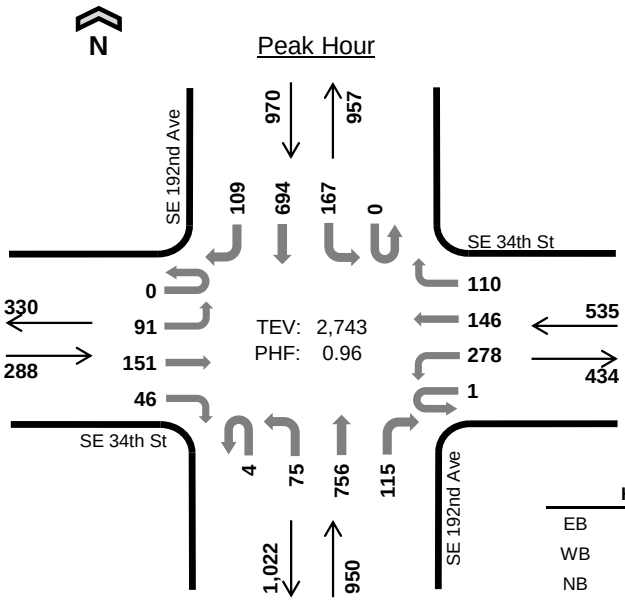
No other mitigation is identified at this time.

CAMAS BUSINESS CENTER
TRAFFIC IMPACT ANALYSIS

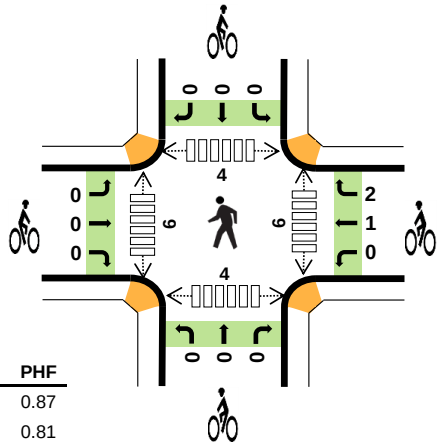
APPENDIX

INTERSECTION COUNT SHEETS

SE 192nd Ave
SE 34th St



Date: 10-19-2021
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM



	HV %:	PHF
EB	1.7%	0.87
WB	0.7%	0.81
NB	2.3%	0.98
SB	1.1%	0.92
TOTAL	1.5%	0.96

Two-Hour Count Summaries

Interval Start		SE 34th St Eastbound				SE 34th St Westbound				SE 192nd Ave Northbound				SE 192nd Ave Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	28	36	12	0	82	42	25	1	20	184	26	0	28	172	25	681	0
4:15 PM		0	26	43	13	0	58	31	17	0	19	205	33	0	40	160	27	672	0
4:30 PM		**0**	**21**	**35**	**9**	**0**	**80**	**39**	**29**	**0**	**25**	**185**	**32**	**0**	**32**	**170**	**28**	**685**	0
4:45 PM		**0**	**24**	**35**	**10**	**1**	**52**	**30**	**25**	**0**	**15**	**195**	**30**	**0**	**48**	**171**	**33**	**669**	2,707
5:00 PM		**0**	**33**	**38**	**12**	**0**	**87**	**44**	**35**	**4**	**15**	**190**	**29**	**0**	**43**	**154**	**28**	**712**	2,738
5:15 PM		**0**	**13**	**43**	**15**	**0**	**59**	**33**	**21**	**0**	**20**	**186**	**24**	**0**	**44**	**199**	**20**	**677**	**2,743**
5:30 PM		0	24	41	10	0	44	27	21	0	12	187	30	0	40	131	16	583	2,641
5:45 PM		0	16	34	19	0	42	27	22	0	7	173	23	0	39	132	21	555	2,527
Count Total		0	185	305	100	1	504	273	195	5	133	1,505	227	0	314	1,289	198	5,234	0
Peak Hour	**All**	**0**	**91**	**151**	**46**	**1**	**278**	**146**	**110**	**4**	**75**	**756**	**115**	**0**	**167**	**694**	**109**	**2,743**	**0**
	HV	**0**	**4**	**0**	**1**	**0**	**1**	**3**	**0**	**0**	**0**	**20**	**2**	**0**	**0**	**5**	**6**	**42**	**0**
	HV%	**-**	**4%**	**0%**	**2%**	**0%**	**0%**	**2%**	**0%**	**0%**	**0%**	**3%**	**2%**	**-**	**0%**	**1%**	**6%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	2	8	3	5	*18*	0	0	0	0	*0*	0	3	0	0	*3*
4:15 PM	2	2	6	3	*13*	0	0	0	0	*0*	2	2	3	0	*7*
4:30 PM	**2**	**2**	**9**	**4**	***17***	**0**	**3**	**0**	**0**	***3***	**0**	**1**	**0**	**0**	*1*
4:45 PM	**1**	**0**	**5**	**3**	***9***	**0**	**0**	**0**	**0**	***0***	**3**	**2**	**1**	**0**	*6*
5:00 PM	**2**	**2**	**6**	**2**	***12***	**0**	**0**	**0**	**0**	***0***	**1**	**2**	**1**	**1**	*5*
5:15 PM	**0**	**0**	**2**	**2**	***4***	**0**	**0**	**0**	**0**	***0***	**2**	**1**	**2**	**3**	***8***
5:30 PM	1	2	2	3	*8*	0	0	0	0	*0*	2	1	5	1	*9*
5:45 PM	0	0	4	3	*7*	0	0	0	0	*0*	1	0	1	1	*3*
Count Total	10	16	37	25	*88*	0	3	0	0	*3*	11	12	13	6	*42*
Peak Hour	**5**	**4**	**22**	**11**	***42***	**0**	**3**	**0**	**0**	***3***	**6**	**6**	**4**	**4**	***20***

Two-Hour Count Summaries - Heavy Vehicles

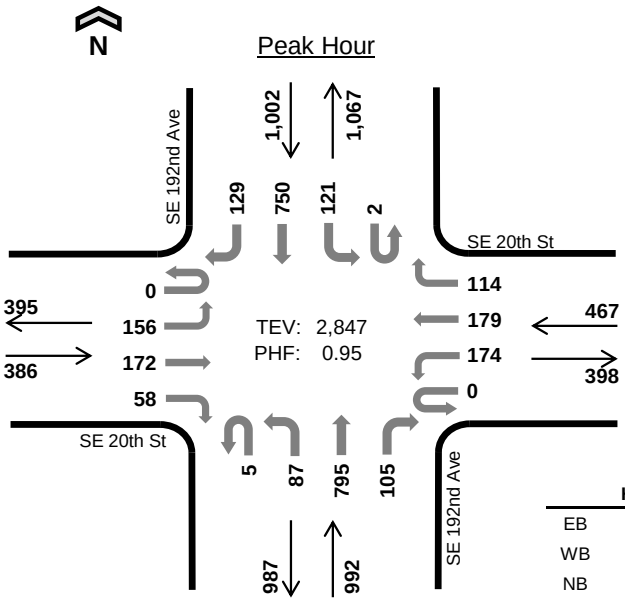
Interval Start	SE 34th St Eastbound				SE 34th St Westbound				SE 192nd Ave Northbound				SE 192nd Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	2	0	0	0	6	0	2	0	1	2	0	0	1	1	3	18	0
4:15 PM	0	0	2	0	0	0	1	1	0	0	5	1	0	0	0	3	13	0
4:30 PM	**0**	**2**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**8**	**1**	**0**	**0**	**2**	**2**	**17**	0
4:45 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**3**	**9**	57
5:00 PM	**0**	**2**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**5**	**1**	**0**	**0**	**1**	**1**	**12**	51
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**0**	**4**	**42**
5:30 PM	0	1	0	0	0	0	2	0	0	0	2	0	0	0	3	0	8	33
5:45 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	2	1	7	31
Count Total	0	7	2	1	0	7	6	3	0	1	33	3	0	1	11	13	88	0
Peak Hour	**0**	**4**	**0**	**1**	**0**	**1**	**3**	**0**	**0**	**0**	**20**	**2**	**0**	**0**	**5**	**6**	**42**	**0**

Two-Hour Count Summaries - Bikes

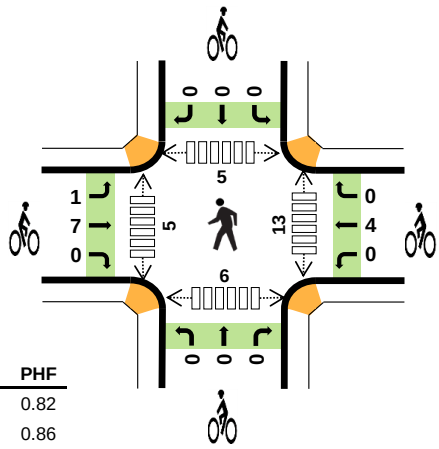
Interval Start	SE 34th St Eastbound			SE 34th St Westbound			SE 192nd Ave Northbound			SE 192nd Ave Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	**0**	**0**	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	3
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	3
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	1	2	0	0	0	0	0	0	3	0
Peak Hour	**0**	**0**	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

SE 192nd Ave
SE 20th St



Date: 10-19-2021
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM



	HV %:	PHF
EB	0.5%	0.82
WB	0.2%	0.86
NB	2.1%	0.98
SB	1.1%	0.93
TOTAL	1.2%	0.95

Two-Hour Count Summaries

Interval Start		SE 20th St Eastbound				SE 20th St Westbound				SE 192nd Ave Northbound				SE 192nd Ave Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	31	47	13	0	51	44	30	3	19	191	30	0	33	159	38	689	0
4:15 PM		0	35	34	10	0	24	44	24	2	31	196	18	0	28	192	28	666	0
4:30 PM		**0**	**34**	**43**	**16**	**0**	**38**	**44**	**27**	**1**	**21**	**203**	**22**	**0**	**32**	**179**	**39**	**699**	0
4:45 PM		**0**	**38**	**31**	**11**	**0**	**37**	**30**	**28**	**0**	**17**	**209**	**28**	**0**	**33**	**210**	**26**	**698**	2,752
5:00 PM		**0**	**44**	**33**	**18**	**0**	**45**	**54**	**28**	**2**	**20**	**202**	**27**	**2**	**28**	**170**	**28**	**701**	2,764
5:15 PM		**0**	**40**	**65**	**13**	**0**	**54**	**51**	**31**	**2**	**29**	**181**	**28**	**0**	**28**	**191**	**36**	**749**	**2,847**
5:30 PM		0	32	42	15	0	28	37	30	0	25	182	26	0	34	140	43	634	2,782
5:45 PM		0	29	42	17	0	29	36	27	0	12	189	27	0	41	149	36	634	2,718
Count Total		0	283	337	113	0	306	340	225	10	174	1,553	206	2	257	1,390	274	5,470	0
Peak Hour	**All**	**0**	**156**	**172**	**58**	**0**	**174**	**179**	**114**	**5**	**87**	**795**	**105**	**2**	**121**	**750**	**129**	**2,847**	**0**
	HV	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**18**	**2**	**0**	**0**	**10**	**1**	**35**	**0**
	HV%	**-**	**1%**	**0%**	**0%**	**-**	**1%**	**0%**	**0%**	**0%**	**1%**	**2%**	**2%**	**0%**	**0%**	**1%**	**1%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	2	0	7	5	*14*	1	0	1	1	*3*	1	0	2	0	*3*
4:15 PM	5	1	5	2	*13*	2	0	0	0	*2*	1	3	2	0	*6*
4:30 PM	**0**	**0**	**10**	**4**	***14***	**5**	**0**	**0**	**0**	***5***	**3**	**1**	**1**	**1**	*6*
4:45 PM	**1**	**0**	**4**	**4**	***9***	**2**	**0**	**0**	**0**	***2***	**6**	**3**	**3**	**2**	*14*
5:00 PM	**1**	**1**	**3**	**2**	***7***	**1**	**3**	**0**	**0**	***4***	**1**	**1**	**1**	**1**	*4*
5:15 PM	**0**	**0**	**4**	**1**	***5***	**0**	**1**	**0**	**0**	***1***	**3**	**0**	**0**	**2**	***5***
5:30 PM	0	1	2	5	*8*	0	0	0	0	*0*	1	0	1	1	*3*
5:45 PM	1	1	5	1	*8*	4	0	0	0	*4*	1	3	2	0	*6*
Count Total	10	4	40	24	*78*	15	4	1	1	*21*	17	11	12	7	*47*
Peak Hour	**2**	**1**	**21**	**11**	***35***	**8**	**4**	**0**	**0**	***12***	**13**	**5**	**5**	**6**	***29***

Two-Hour Count Summaries - Heavy Vehicles

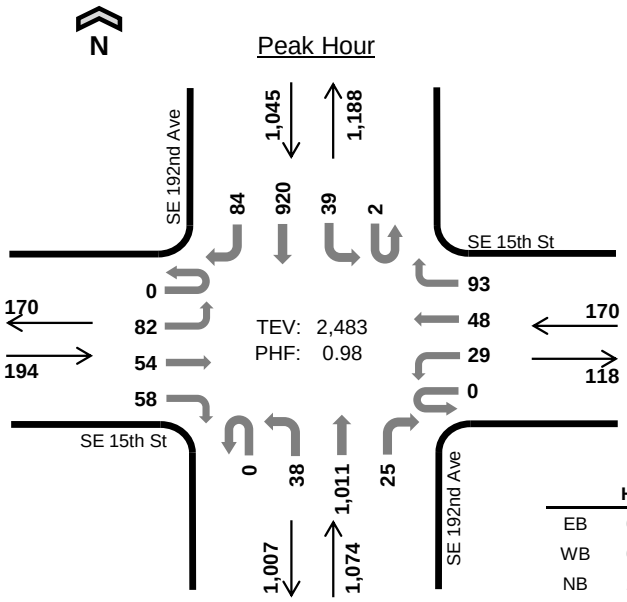
Interval Start	SE 20th St Eastbound				SE 20th St Westbound				SE 192nd Ave Northbound				SE 192nd Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	2	0	0	0	0	0	0	0	3	2	2	0	0	4	1	14	0
4:15 PM	0	3	0	2	0	0	1	0	0	1	4	0	0	0	2	0	13	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**8**	**1**	**0**	**0**	**4**	**0**	**14**	0
4:45 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**1**	**0**	**0**	**3**	**1**	**9**	50
5:00 PM	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**2**	**0**	**7**	43
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**1**	**0**	**5**	**35**
5:30 PM	0	0	0	0	0	0	0	1	0	0	2	0	0	1	3	1	8	29
5:45 PM	0	1	0	0	0	1	0	0	0	0	4	1	0	0	1	0	8	28
Count Total	0	8	0	2	0	2	1	1	0	5	30	5	0	1	20	3	78	0
Peak Hour	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**18**	**2**	**0**	**0**	**10**	**1**	**35**	**0**

Two-Hour Count Summaries - Bikes

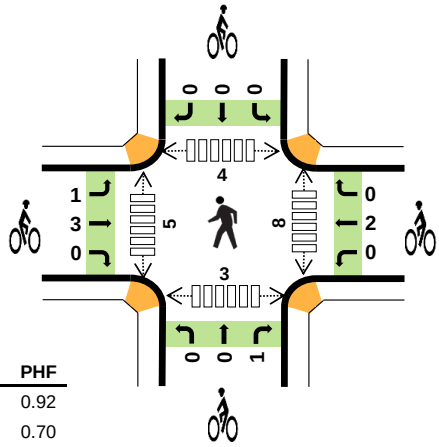
Interval Start	SE 20th St Eastbound			SE 20th St Westbound			SE 192nd Ave Northbound			SE 192nd Ave Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	1	0	0	0	0	1	0	0	0	0	1	3	0
4:15 PM	0	2	0	0	0	0	0	0	0	0	0	0	2	0
4:30 PM	**1**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	0
4:45 PM	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	12
5:00 PM	**0**	**1**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	13
5:15 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**12**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	7
5:45 PM	0	4	0	0	0	0	0	0	0	0	0	0	4	9
Count Total	1	14	0	0	4	0	1	0	0	0	0	1	21	0
Peak Hour	**1**	**7**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

SE 192nd Ave
SE 15th St



Date: 10-19-2021
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM



	HV %:	PHF
EB	0.5%	0.92
WB	0.6%	0.70
NB	2.0%	0.97
SB	1.2%	0.95
TOTAL	1.5%	0.98

Two-Hour Count Summaries

Interval Start		SE 15th St Eastbound				SE 15th St Westbound				SE 192nd Ave Northbound				SE 192nd Ave Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	15	7	18	0	7	18	21	0	17	231	7	0	14	209	26	590	0
4:15 PM		0	23	6	10	0	7	11	22	0	16	237	6	0	8	226	16	588	0
4:30 PM		**0**	**17**	**14**	**15**	**0**	**6**	**13**	**13**	**0**	**7**	**255**	**5**	**0**	**12**	**230**	**28**	**615**	0
4:45 PM		**0**	**20**	**12**	**16**	**0**	**9**	**12**	**16**	**0**	**14**	**253**	**10**	**2**	**15**	**237**	**20**	**636**	2,429
5:00 PM		**0**	**20**	**14**	**13**	**0**	**10**	**11**	**40**	**0**	**11**	**258**	**7**	**0**	**5**	**219**	**19**	**627**	2,466
5:15 PM		**0**	**25**	**14**	**14**	**0**	**4**	**12**	**24**	**0**	**6**	**245**	**3**	**0**	**7**	**234**	**17**	**605**	**2,483**
5:30 PM		0	26	18	10	0	5	15	16	0	10	227	9	0	12	195	24	567	2,435
5:45 PM		0	22	16	18	0	4	11	14	0	10	229	8	0	17	206	21	576	2,375
Count Total		0	168	101	114	0	52	103	166	0	91	1,935	55	2	90	1,756	171	4,804	0
Peak Hour	**All**	**0**	**82**	**54**	**58**	**0**	**29**	**48**	**93**	**0**	**38**	**1,011**	**25**	**2**	**39**	**920**	**84**	**2,483**	**0**
	HV	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**19**	**1**	**0**	**0**	**13**	**0**	**37**	**0**
	HV%	**-**	**1%**	**0%**	**0%**	**-**	**0%**	**0%**	**1%**	**-**	**5%**	**2%**	**4%**	**0%**	**0%**	**1%**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	1	2	3	6	*12*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	0	0	9	2	*11*	1	1	0	0	*2*	0	2	2	0	*4*
4:30 PM	**0**	**0**	**8**	**5**	***13***	**1**	**1**	**1**	**0**	***3***	**4**	**1**	**2**	**0**	*7*
4:45 PM	**0**	**1**	**5**	**3**	***9***	**1**	**1**	**0**	**0**	***2***	**4**	**2**	**0**	**1**	*7*
5:00 PM	**0**	**0**	**5**	**3**	***8***	**2**	**0**	**0**	**0**	***2***	**0**	**2**	**2**	**2**	*6*
5:15 PM	**1**	**0**	**4**	**2**	***7***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:30 PM	1	0	2	5	*8*	0	0	1	2	*3*	2	2	0	2	*6*
5:45 PM	0	0	4	2	*6*	0	1	1	0	*2*	1	1	4	0	*6*
Count Total	3	3	40	28	*74*	5	4	3	2	*14*	11	10	10	5	*36*
Peak Hour	**1**	**1**	**22**	**13**	***37***	**4**	**2**	**1**	**0**	***7***	**8**	**5**	**4**	**3**	***20***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	SE 15th St Eastbound				SE 15th St Westbound				SE 192nd Ave Northbound				SE 192nd Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	1	0	0	1	1	0	0	3	0	0	0	4	2	12	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	8	1	0	0	2	0	11	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**5**	**0**	**13**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**4**	**0**	**0**	**0**	**3**	**0**	**9**	45
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**3**	**1**	**0**	**0**	**3**	**0**	**8**	41
5:15 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**2**	**0**	**7**	**37**
5:30 PM	0	1	0	0	0	0	0	0	0	0	1	1	0	0	5	0	8	32
5:45 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	2	0	6	29
Count Total	0	2	0	1	0	0	1	2	0	2	35	3	0	0	26	2	74	0
Peak Hour	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**19**	**1**	**0**	**0**	**13**	**0**	**37**	**0**

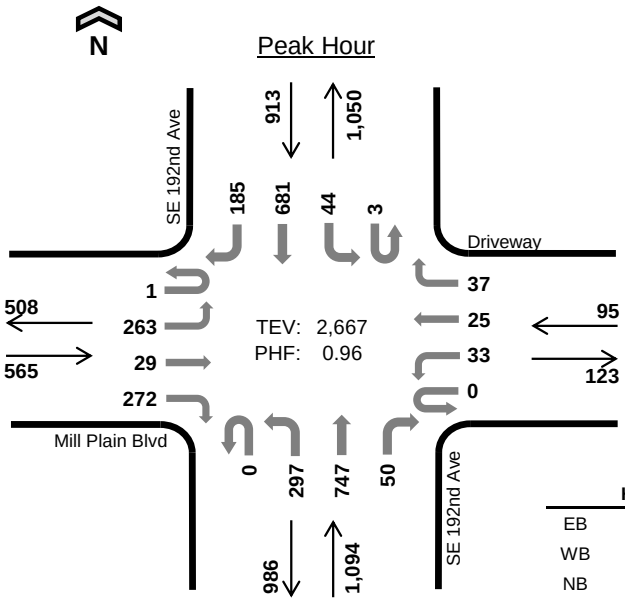
Two-Hour Count Summaries - Bikes

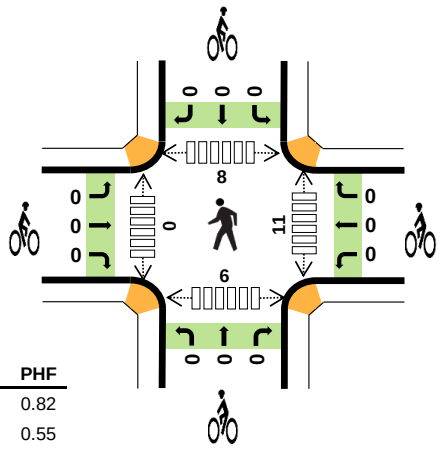
Interval Start	SE 15th St Eastbound			SE 15th St Westbound			SE 192nd Ave Northbound			SE 192nd Ave Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	1	0	1	0	0	0	0	0	0	0	2	0
4:30 PM	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**3**	0
4:45 PM	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	7
5:00 PM	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	9
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**
5:30 PM	0	0	0	0	0	0	1	0	0	0	1	1	3	7
5:45 PM	0	0	0	0	1	0	0	1	0	0	0	0	2	7
Count Total	1	3	1	0	4	0	1	1	1	0	1	1	14	0
Peak Hour	**1**	**3**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**7**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

SE 192nd Ave
Mill Plain Blvd

Date: 10-19-2021
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM





	HV %:	PHF
EB	0.5%	0.82
WB	3.2%	0.55
NB	2.2%	0.90
SB	0.9%	0.93
TOTAL	1.4%	0.96

Two-Hour Count Summaries

Interval Start		Mill Plain Blvd Eastbound				Driveway Westbound				SE 192nd Ave Northbound				SE 192nd Ave Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	62	5	77	0	5	1	4	0	77	170	6	0	0	165	61	633	0
4:15 PM		0	47	6	60	0	10	7	3	0	82	175	12	1	7	155	33	598	0
4:30 PM		**0**	**63**	**6**	**57**	**0**	**19**	**9**	**15**	**0**	**60**	**186**	**16**	**0**	**11**	**186**	**49**	**677**	0
4:45 PM		**0**	**48**	**9**	**74**	**0**	**10**	**5**	**12**	**0**	**74**	**182**	**8**	**0**	**10**	**177**	**51**	**660**	2,568
5:00 PM		**1**	**89**	**8**	**74**	**0**	**2**	**9**	**6**	**0**	**85**	**207**	**12**	**2**	**13**	**154**	**36**	**698**	2,633
5:15 PM		**0**	**63**	**6**	**67**	**0**	**2**	**2**	**4**	**0**	**78**	**172**	**14**	**1**	**10**	**164**	**49**	**632**	**2,667**
5:30 PM		0	61	3	68	0	2	1	5	0	82	172	3	0	1	161	52	611	2,601
5:45 PM		0	65	0	60	0	3	3	2	0	60	176	10	0	5	158	45	587	2,528
Count Total		1	498	43	537	0	53	37	51	0	598	1,440	81	4	57	1,320	376	5,096	0
Peak Hour	**All**	**1**	**263**	**29**	**272**	**0**	**33**	**25**	**37**	**0**	**297**	**747**	**50**	**3**	**44**	**681**	**185**	**2,667**	**0**
	HV	**0**	**0**	**0**	**3**	**0**	**2**	**1**	**0**	**0**	**3**	**19**	**2**	**0**	**0**	**8**	**0**	**38**	**0**
	HV%	**0%**	**0%**	**0%**	**1%**	**-**	**6%**	**4%**	**0%**	**-**	**1%**	**3%**	**4%**	**0%**	**0%**	**1%**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	4	0	6	5	*15*	0	0	1	0	*1*	5	0	1	0	*6*
4:15 PM	3	0	9	3	*15*	0	0	0	0	*0*	4	0	1	3	*8*
4:30 PM	**2**	**0**	**7**	**6**	***15***	**0**	**0**	**0**	**0**	***0***	**4**	**0**	**6**	**2**	*12*
4:45 PM	**0**	**3**	**7**	**0**	***10***	**0**	**0**	**0**	**0**	***0***	**4**	**0**	**2**	**4**	*10*
5:00 PM	**1**	**0**	**2**	**1**	***4***	**0**	**0**	**0**	**0**	***0***	**3**	**0**	**0**	**0**	*3*
5:15 PM	**0**	**0**	**8**	**1**	***9***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:30 PM	1	0	3	3	*7*	0	0	0	0	*0*	1	0	0	2	*3*
5:45 PM	0	0	6	1	*7*	0	0	0	0	*0*	0	0	0	2	*2*
Count Total	11	3	48	20	*82*	0	0	1	0	*1*	21	0	10	13	*44*
Peak Hour	**3**	**3**	**24**	**8**	***38***	**0**	**0**	**0**	**0**	***0***	**11**	**0**	**8**	**6**	***25***

Two-Hour Count Summaries - Heavy Vehicles

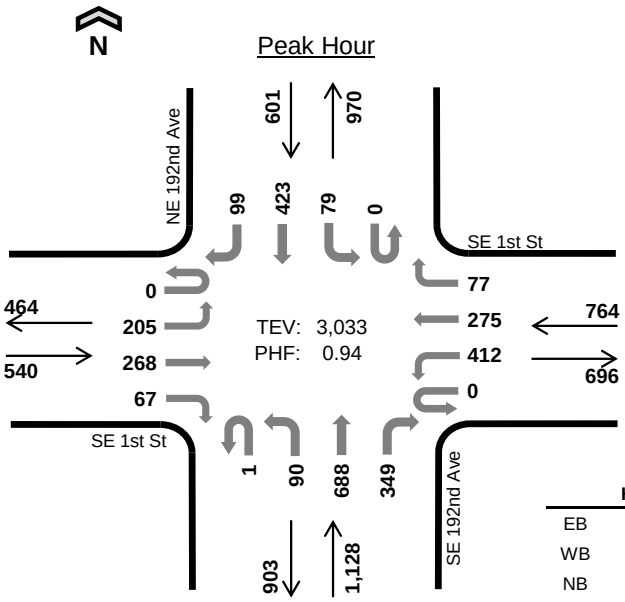
Interval Start	Mill Plain Blvd				Driveway				SE 192nd Ave				SE 192nd Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	3	0	1	0	0	0	0	0	0	6	0	0	0	5	0	15	0
4:15 PM	0	2	1	0	0	0	0	0	0	1	8	0	0	1	2	0	15	0
4:30 PM	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**5**	**1**	**0**	**0**	**6**	**0**	**15**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**1**	**6**	**0**	**0**	**0**	**0**	**0**	**10**	55
5:00 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**4**	44
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**6**	**1**	**0**	**0**	**1**	**0**	**9**	**38**
5:30 PM	0	0	0	1	0	0	0	0	0	0	3	0	0	0	3	0	7	30
5:45 PM	0	0	0	0	0	0	0	0	0	1	5	0	0	0	1	0	7	27
Count Total	0	5	1	5	0	2	1	0	0	5	41	2	0	1	19	0	82	0
Peak Hour	**0**	**0**	**0**	**3**	**0**	**2**	**1**	**0**	**0**	**3**	**19**	**2**	**0**	**0**	**8**	**0**	**38**	**0**

Two-Hour Count Summaries - Bikes

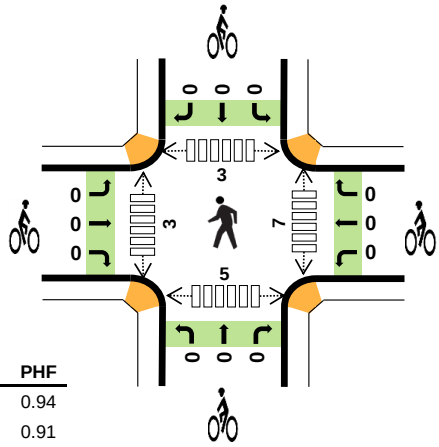
Interval Start	Mill Plain Blvd			Driveway			SE 192nd Ave			SE 192nd Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	1	0	0	0	0	1	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

SE 192nd Ave
SE 1st St



Date: 10-19-2021
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM



	HV %:	PHF
EB	0.2%	0.94
WB	0.4%	0.91
NB	1.4%	0.91
SB	1.2%	0.90
TOTAL	0.9%	0.94

Two-Hour Count Summaries

Interval Start		SE 1st St Eastbound				SE 1st St Westbound				SE 192nd Ave Northbound				NE 192nd Ave Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	47	52	15	1	122	74	9	0	25	143	71	0	10	97	29	695	0
4:15 PM		0	60	52	21	0	95	57	20	1	27	164	74	0	8	78	21	678	0
4:30 PM		**0**	**59**	**55**	**21**	**0**	**98**	**59**	**21**	**0**	**16**	**181**	**89**	**0**	**20**	**121**	**22**	**762**	0
4:45 PM		**0**	**45**	**60**	**16**	**0**	**93**	**60**	**21**	**0**	**25**	**149**	**74**	**0**	**20**	**116**	**31**	**710**	2,845
5:00 PM		**0**	**53**	**75**	**15**	**0**	**112**	**78**	**19**	**0**	**23**	**194**	**92**	**0**	**21**	**97**	**26**	**805**	2,955
5:15 PM		**0**	**48**	**78**	**15**	**0**	**109**	**78**	**16**	**1**	**26**	**164**	**94**	**0**	**18**	**89**	**20**	**756**	**3,033**
5:30 PM		0	48	85	9	0	106	67	27	0	23	124	102	0	18	89	22	720	2,991
5:45 PM		0	50	74	9	0	97	68	19	0	21	156	87	0	25	107	20	733	3,014
Count Total		0	410	531	121	1	832	541	152	2	186	1,275	683	0	140	794	191	5,859	0
Peak Hour	**All**	**0**	**205**	**268**	**67**	**0**	**412**	**275**	**77**	**1**	**90**	**688**	**349**	**0**	**79**	**423**	**99**	**3,033**	**0**
	HV	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**1**	**0**	**3**	**13**	**0**	**0**	**0**	**6**	**1**	**27**	**0**
	HV%	**-**	**0%**	**0%**	**1%**	**-**	**0%**	**1%**	**1%**	**0%**	**3%**	**2%**	**0%**	**-**	**0%**	**1%**	**1%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	2	9	7	1	*19*	0	0	1	0	*1*	4	0	0	4	*8*
4:15 PM	5	5	10	0	*20*	0	0	0	0	*0*	7	0	0	4	*11*
4:30 PM	**1**	**0**	**5**	**4**	***10***	**0**	**0**	**0**	**0**	***0***	**1**	**1**	**2**	**0**	*4*
4:45 PM	**0**	**1**	**5**	**0**	***6***	**0**	**0**	**0**	**0**	***0***	**2**	**2**	**1**	**1**	*6*
5:00 PM	**0**	**2**	**2**	**2**	***6***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**1**	*2*
5:15 PM	**0**	**0**	**4**	**1**	***5***	**0**	**0**	**0**	**0**	***0***	**3**	**0**	**0**	**3**	***6***
5:30 PM	2	0	1	1	*4*	1	0	0	0	*1*	0	0	2	2	*4*
5:45 PM	0	0	5	1	*6*	0	0	0	0	*0*	3	0	0	3	*6*
Count Total	10	17	39	10	*76*	1	0	1	0	*2*	21	3	5	18	*47*
Peak Hour	**1**	**3**	**16**	**7**	***27***	**0**	**0**	**0**	**0**	***0***	**7**	**3**	**3**	**5**	***18***

Two-Hour Count Summaries - Heavy Vehicles

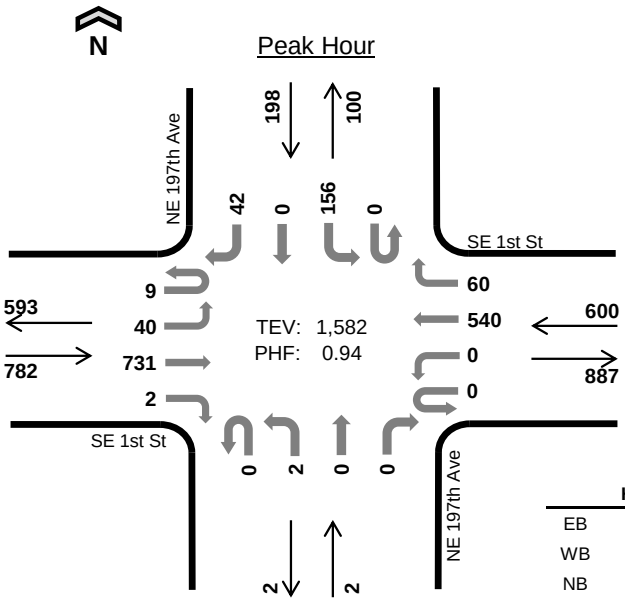
Interval Start	SE 1st St Eastbound				SE 1st St Westbound				SE 192nd Ave Northbound				NE 192nd Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	1	1	0	0	5	4	0	0	3	2	2	0	1	0	0	19	0
4:15 PM	0	0	3	2	0	0	2	3	0	1	7	2	0	0	0	0	20	0
4:30 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**4**	**0**	**0**	**0**	**4**	**0**	**10**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**4**	**0**	**0**	**0**	**0**	**0**	**6**	55
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**1**	**6**	42
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**3**	**0**	**0**	**0**	**1**	**0**	**5**	**27**
5:30 PM	0	0	1	1	0	0	0	0	0	0	1	0	0	0	1	0	4	21
5:45 PM	0	0	0	0	0	0	0	0	0	0	4	1	0	0	1	0	6	21
Count Total	0	1	5	4	0	5	8	4	0	7	27	5	0	1	8	1	76	0
Peak Hour	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**1**	**0**	**3**	**13**	**0**	**0**	**0**	**6**	**1**	**27**	**0**

Two-Hour Count Summaries - Bikes

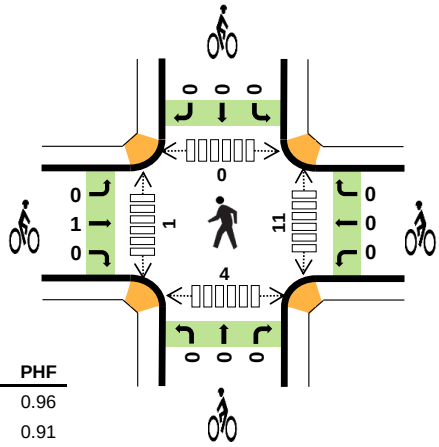
Interval Start	SE 1st St Eastbound			SE 1st St Westbound			SE 192nd Ave Northbound			NE 192nd Ave Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	1	0	0	0	0	0	1	0	0	0	0	2	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

NE 197th Ave
SE 1st St



Date: 10-19-2021
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM



	HV %:	PHF
EB	0.6%	0.96
WB	0.5%	0.91
NB	0.0%	0.50
SB	0.0%	0.74
TOTAL	0.5%	0.94

Two-Hour Count Summaries

Interval Start		SE 1st St Eastbound				SE 1st St Westbound				NE 197th Ave Northbound				NE 197th Ave Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		16	9	134	3	0	0	109	10	0	3	0	1	0	54	0	8	347	0
4:15 PM		2	8	129	3	0	0	116	18	0	3	1	0	0	44	0	7	331	0
4:30 PM		0	12	153	1	0	0	109	12	0	0	0	0	0	40	0	13	340	0
4:45 PM		4	10	147	3	0	0	104	21	0	3	0	0	0	44	0	6	342	1,360
5:00 PM		**4**	**8**	**187**	**1**	**0**	**0**	**139**	**15**	**0**	**1**	**0**	**0**	**0**	**52**	**0**	**15**	**422**	1,435
5:15 PM		**2**	**12**	**174**	**1**	**0**	**0**	**132**	**9**	**0**	**1**	**0**	**0**	**0**	**27**	**0**	**10**	**368**	1,472
5:30 PM		**3**	**8**	**192**	**0**	**0**	**0**	**146**	**18**	**0**	**0**	**0**	**0**	**0**	**35**	**0**	**9**	**411**	1,543
5:45 PM		**0**	**12**	**178**	**0**	**0**	**0**	**123**	**18**	**0**	**0**	**0**	**0**	**0**	**42**	**0**	**8**	**381**	**1,582**
Count Total		31	79	1,294	12	0	0	978	121	0	11	1	1	0	338	0	76	2,942	0
Peak Hour	**All**	**9**	**40**	**731**	**2**	**0**	**0**	**540**	**60**	**0**	**2**	**0**	**0**	**0**	**156**	**0**	**42**	**1,582**	**0**
	HV	**0**	**1**	**4**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**0**
	HV%	**0%**	**3%**	**1%**	**0%**	**-**	**-**	**0%**	**2%**	**-**	**0%**	**-**	**-**	**-**	**0%**	**-**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	3	2	4	0	*9*	0	0	0	0	*0*	25	8	0	4	*37*
4:15 PM	5	4	3	0	*12*	0	0	0	0	*0*	3	0	0	0	*3*
4:30 PM	1	0	0	0	*1*	0	0	0	0	*0*	1	0	0	1	*2*
4:45 PM	0	1	0	0	*1*	0	0	0	0	*0*	4	3	0	0	*7*
5:00 PM	**1**	**2**	**0**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	*1*
5:15 PM	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**0**	**1**	*3*
5:30 PM	**2**	**0**	**0**	**0**	***2***	**1**	**0**	**0**	**0**	***1***	**5**	**0**	**0**	**1**	*6*
5:45 PM	**1**	**1**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**3**	**1**	**0**	**2**	***6***
Count Total	14	10	7	0	*31*	1	0	0	0	*1*	44	12	0	9	*65*
Peak Hour	**5**	**3**	**0**	**0**	***8***	**1**	**0**	**0**	**0**	***1***	**11**	**1**	**0**	**4**	***16***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	SE 1st St				SE 1st St				NE 197th Ave				NE 197th Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	2	1	0	0	2	0	0	3	0	1	0	0	0	0	9	0
4:15 PM	0	0	2	3	0	0	3	1	0	2	1	0	0	0	0	0	12	0
4:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
4:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	23
5:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	17
5:15 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	6
5:30 PM	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	7
5:45 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**8**
Count Total	0	1	9	4	0	0	8	2	0	5	1	1	0	0	0	0	31	0
Peak Hour	**0**	**1**	**4**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	SE 1st St			SE 1st St			NE 197th Ave			NE 197th Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:30 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	1
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
Count Total	0	1	0	0	0	0	0	0	0	0	0	0	1	0
Peak Hour	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

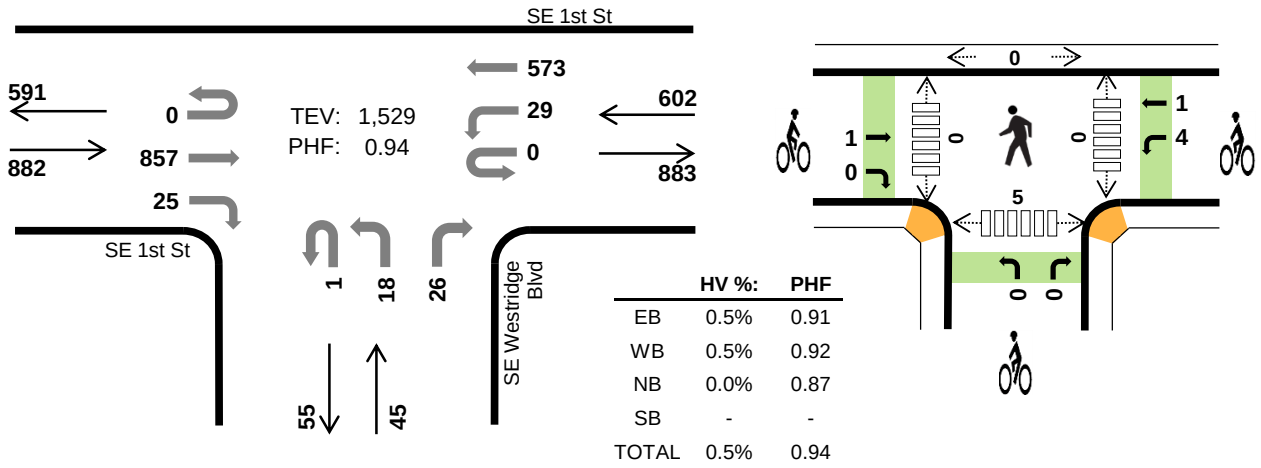
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

SE Westridge Blvd
SE 1st St

N

Peak Hour

Date: 10-19-2019
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM



Two-Hour Count Summaries

Interval Start		SE 1st St Eastbound				SE 1st St Westbound				SE Westridge Blvd Northbound				0 Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	0	180	13	0	12	118	0	0	1	0	11	0	0	0	0	335	0
4:15 PM		0	0	164	12	0	4	129	0	0	5	0	9	0	0	0	0	323	0
4:30 PM		0	0	181	13	0	11	114	0	0	3	0	12	0	0	0	0	334	0
4:45 PM		0	0	180	8	0	10	120	0	0	6	0	3	0	0	0	0	327	1,319
5:00 PM		**0**	**0**	**233**	**8**	**0**	**8**	**148**	**0**	**0**	**1**	**0**	**10**	**0**	**0**	**0**	**0**	**408**	1,392
5:15 PM		**0**	**0**	**197**	**3**	**0**	**8**	**139**	**0**	**1**	**1**	**0**	**8**	**0**	**0**	**0**	**0**	**357**	1,426
5:30 PM		**0**	**0**	**221**	**7**	**0**	**8**	**156**	**0**	**0**	**8**	**0**	**3**	**0**	**0**	**0**	**0**	**403**	1,495
5:45 PM		**0**	**0**	**206**	**7**	**0**	**5**	**130**	**0**	**0**	**8**	**0**	**5**	**0**	**0**	**0**	**0**	**361**	**1,529**
Count Total		0	0	1,562	71	0	66	1,054	0	1	33	0	61	0	0	0	0	2,848	0
Peak Hour	**All**	**0**	**0**	**857**	**25**	**0**	**29**	**573**	**0**	**1**	**18**	**0**	**26**	**0**	**0**	**0**	**0**	**1,529**	**0**
	HV	**0**	**0**	**4**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**
	HV%	**-**	**-**	**0%**	**0%**	**-**	**0%**	**1%**	**-**	**0%**	**0%**	**-**	**0%**	**-**	**-**	**-**	**-**	**0%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	4	1	0	0	*5*	0	1	0	0	*1*	0	0	0	1	*1*
4:15 PM	2	4	2	0	*8*	0	1	0	0	*1*	0	0	0	0	*0*
4:30 PM	0	0	0	0	*0*	0	1	5	0	*6*	0	0	0	0	*0*
4:45 PM	0	1	0	0	*1*	0	0	1	0	*1*	0	0	0	0	*0*
5:00 PM	**1**	**2**	**0**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**1**	**0**	**0**	**0**	***1***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**1**	*1*
5:30 PM	**2**	**0**	**0**	**0**	***2***	**1**	**3**	**0**	**0**	***4***	**0**	**0**	**0**	**2**	*2*
5:45 PM	**0**	**1**	**0**	**0**	***1***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**2**	***2***
Count Total	10	9	2	0	*21*	1	8	6	0	*15*	0	0	0	6	*6*
Peak Hr	**4**	**3**	**0**	**0**	***7***	**1**	**5**	**0**	**0**	***6***	**0**	**0**	**0**	**5**	***5***

Two-Hour Count Summaries - Heavy Vehicles

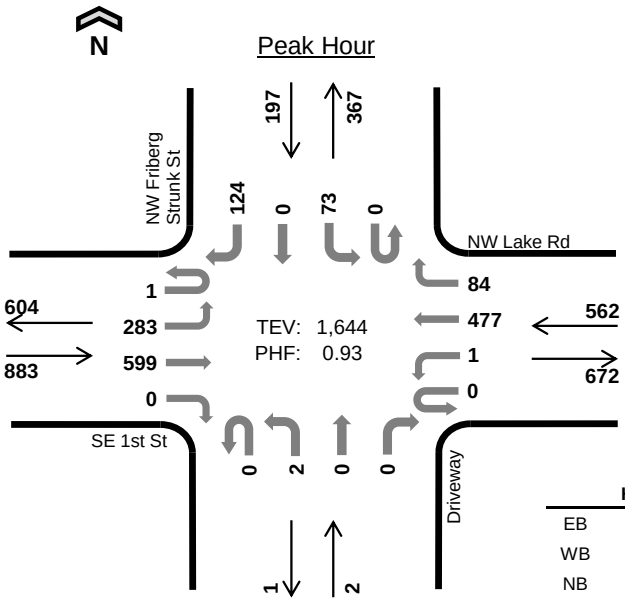
Interval Start	SE 1st St				SE 1st St				SE Westridge Blvd				0				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	5	0
4:15 PM	0	0	2	0	0	1	3	0	0	2	0	0	0	0	0	0	8	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	14
5:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	12
5:15 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	5
5:30 PM	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	7
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**7**
Count Total	0	0	10	0	0	1	8	0	0	2	0	0	0	0	0	0	21	0
Peak Hour	**0**	**0**	**4**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**

Two-Hour Count Summaries - Bikes

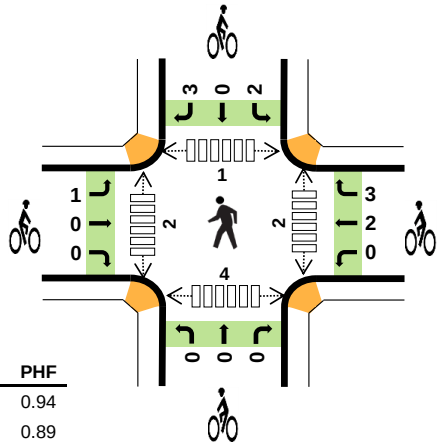
Interval Start	SE 1st St			SE 1st St			SE Westridge Blvd			0			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	1	0
4:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	1	0	0	0	0	5	0	0	0	6	0
4:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	1	9
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	8
5:15 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	8
5:30 PM	**0**	**1**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	6
5:45 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**6**
Count Total	0	1	0	6	2	0	1	0	5	0	0	0	15	0
Peak Hour	**0**	**1**	**0**	**4**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

NW Friberg Strunk St
SE 1st St



Date: 10-19-2021
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM



	HV %:	PHF
EB	0.1%	0.94
WB	0.4%	0.89
NB	0.0%	0.50
SB	0.5%	0.82
TOTAL	0.2%	0.93

Two-Hour Count Summaries

Interval Start		SE 1st St Eastbound				NW Lake Rd Westbound				Driveway Northbound				NW Friberg Strunk St Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	65	124	0	1	0	104	14	0	0	0	0	0	8	0	31	347	0
4:15 PM		0	48	123	0	0	0	105	19	0	0	0	0	0	11	0	28	334	0
4:30 PM		0	67	128	0	0	0	93	27	0	1	0	0	0	13	0	34	363	0
4:45 PM		0	62	127	0	0	0	107	27	0	0	0	0	0	19	0	24	366	1,410
5:00 PM		**1**	**88**	**147**	**0**	**0**	**0**	**134**	**23**	**0**	**1**	**0**	**0**	**0**	**15**	**0**	**23**	**432**	1,495
5:15 PM		**0**	**45**	**153**	**0**	**0**	**0**	**116**	**20**	**0**	**0**	**0**	**0**	**0**	**24**	**0**	**28**	**386**	1,547
5:30 PM		**0**	**85**	**151**	**0**	**0**	**1**	**134**	**22**	**0**	**0**	**0**	**0**	**0**	**16**	**0**	**31**	**440**	1,624
5:45 PM		**0**	**65**	**148**	**0**	**0**	**0**	**93**	**19**	**0**	**1**	**0**	**0**	**0**	**18**	**0**	**42**	**386**	**1,644**
Count Total		1	525	1,101	0	1	1	886	171	0	3	0	0	0	124	0	241	3,054	0
Peak Hour	**All**	**1**	**283**	**599**	**0**	**0**	**1**	**477**	**84**	**0**	**2**	**0**	**0**	**0**	**73**	**0**	**124**	**1,644**	**0**
	HV	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**4**	**0**
	HV%	**0%**	**0%**	**0%**	**-**	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**-**	**-**	**-**	**0%**	**-**	**1%**	**0%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	3	0	0	1	*4*	0	0	0	0	*0*	0	1	0	0	*1*
4:15 PM	2	3	0	0	*5*	0	1	0	0	*1*	0	0	0	0	*0*
4:30 PM	0	0	0	0	*0*	5	0	0	0	*5*	0	0	1	0	*1*
4:45 PM	0	2	0	0	*2*	0	0	0	0	*0*	0	0	0	1	*1*
5:00 PM	**0**	**2**	**0**	**0**	***2***	**0**	**3**	**0**	**0**	***3***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**3**	***3***	**0**	**1**	**1**	**0**	*2*
5:30 PM	**1**	**0**	**0**	**0**	***1***	**1**	**1**	**0**	**2**	***4***	**0**	**0**	**0**	**1**	*1*
5:45 PM	**0**	**0**	**0**	**1**	***1***	**0**	**1**	**0**	**0**	***1***	**2**	**1**	**0**	**3**	***6***
Count Total	6	7	0	2	*15*	6	6	0	5	*17*	2	3	2	5	*12*
Peak Hour	**1**	**2**	**0**	**1**	***4***	**1**	**5**	**0**	**5**	***11***	**2**	**2**	**1**	**4**	***9***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	SE 1st St				NW Lake Rd				Driveway				NW Friberg Strunk St				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	1	4	0
4:15 PM	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	11
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	9
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	4
5:30 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	5
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**4**
Count Total	0	2	4	0	0	0	7	0	0	0	0	0	0	0	0	2	15	0
Peak Hour	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**4**	**0**

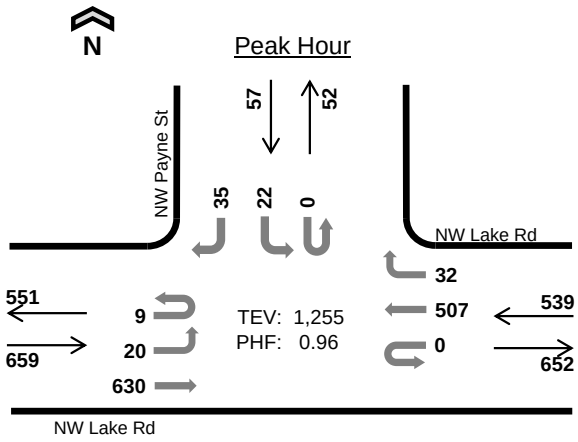
Two-Hour Count Summaries - Bikes

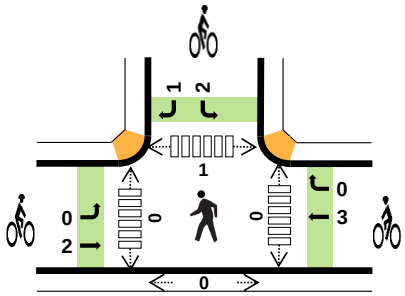
Interval Start	SE 1st St			NW Lake Rd			Driveway			NW Friberg Strunk St			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
4:30 PM	5	0	0	0	0	0	0	0	0	0	0	0	5	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	6
5:00 PM	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	9
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**1**	**3**	11
5:30 PM	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**4**	10
5:45 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**11**
Count Total	6	0	0	0	3	3	0	0	0	2	0	3	17	0
Peak Hour	**1**	**0**	**0**	**0**	**2**	**3**	**0**	**0**	**0**	**2**	**0**	**3**	**11**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

NW Payne St
NW Lake Rd

Date: 10-19-2021
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM





	HV %:	PHF
EB	0.0%	0.97
WB	0.4%	0.92
NB	-	-
SB	0.0%	0.75
TOTAL	0.2%	0.96

Two-Hour Count Summaries

Interval Start		NW Lake Rd Eastbound				NW Lake Rd Westbound				0 Northbound				NW Payne St Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		1	7	125	0	0	0	100	7	0	0	0	0	0	3	0	9	252	0
4:15 PM		7	2	117	0	0	0	120	6	0	0	0	0	0	9	0	12	273	0
4:30 PM		0	5	127	0	0	0	112	4	0	0	0	0	0	2	0	5	255	0
4:45 PM		1	6	143	0	0	0	106	11	0	0	0	0	0	5	0	6	278	1,058
5:00 PM		**1**	**6**	**146**	**0**	**0**	**0**	**133**	**8**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**7**	**306**	1,112
5:15 PM		**2**	**7**	**160**	**0**	**0**	**0**	**120**	**9**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**12**	**317**	1,156
5:30 PM		**5**	**3**	**161**	**0**	**0**	**0**	**139**	**8**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**8**	**328**	1,229
5:45 PM		**1**	**4**	**163**	**0**	**0**	**0**	**115**	**7**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**8**	**304**	**1,255**
Count Total		18	40	1,142	0	0	0	945	60	0	0	0	0	0	41	0	67	2,313	0
Peak Hour	**All**	**9**	**20**	**630**	**0**	**0**	**0**	**507**	**32**	**0**	**0**	**0**	**0**	**0**	**22**	**0**	**35**	**1,255**	**0**
	HV	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**
	HV%	**0%**	**0%**	**0%**	**-**	**-**	**-**	**0%**	**0%**	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**0%**	**0%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	2	1	0	3	*6*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	3	2	0	0	*5*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	1	2	0	0	*3*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
5:00 PM	**0**	**2**	**0**	**0**	***2***	**0**	**3**	**0**	**0**	***3***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**0**	**2**	***4***	**0**	**0**	**0**	**0**	*0*
5:30 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:45 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**1**	**0**	***1***
Count Total	6	7	0	3	*16*	2	3	0	3	*8*	0	0	1	0	*1*
Peak Hr	**0**	**2**	**0**	**0**	***2***	**2**	**3**	**0**	**3**	***8***	**0**	**0**	**1**	**0**	***1***

Two-Hour Count Summaries - Heavy Vehicles

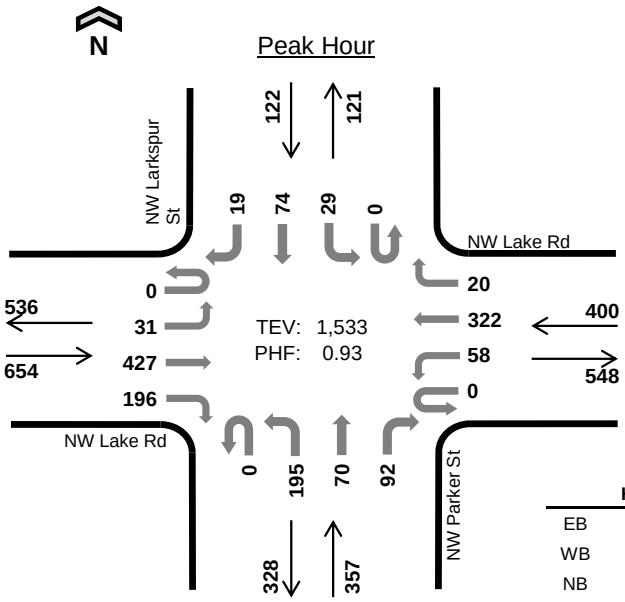
Interval Start	NW Lake Rd Eastbound				NW Lake Rd Westbound				0 Northbound				NW Payne St Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	2	0	0	0	0	1	0	0	0	0	0	1	0	2	6	0
4:15 PM	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	5	0
4:30 PM	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	10
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	5
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
Count Total	0	0	6	0	0	0	6	1	0	0	0	0	0	1	0	2	16	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**

Two-Hour Count Summaries - Bikes

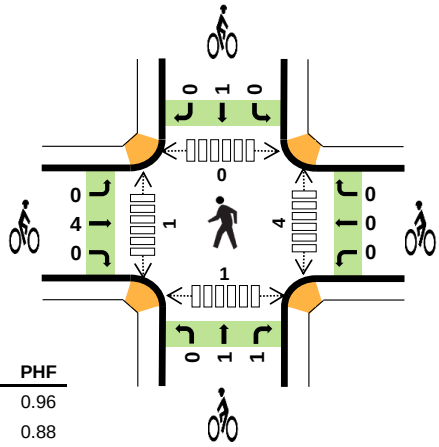
Interval Start	NW Lake Rd Eastbound			NW Lake Rd Westbound			0 Northbound			NW Payne St Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	3
5:15 PM	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**4**	7
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	7
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**8**
Count Total	0	2	0	0	3	0	0	0	0	2	0	1	8	0
Peak Hour	**0**	**2**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**2**	**0**	**1**	**8**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

NW Parker St
NW Lake Rd



Date: 10-19-2021
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM



	HV %:	PHF
EB	0.2%	0.96
WB	1.0%	0.88
NB	0.3%	0.71
SB	0.0%	0.85
TOTAL	0.4%	0.93

Two-Hour Count Summaries

Interval Start		NW Lake Rd Eastbound				NW Lake Rd Westbound				NW Parker St Northbound				NW Larkspur St Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		1	6	95	25	0	13	68	4	0	36	22	22	0	5	6	5	308	0
4:15 PM		0	6	83	30	0	9	88	3	0	33	19	8	0	5	8	3	295	0
4:30 PM		0	7	94	32	0	6	78	5	0	36	17	12	0	4	11	7	309	0
4:45 PM		1	4	102	33	0	6	75	3	0	44	17	11	0	8	6	3	313	1,225
5:00 PM		**0**	**11**	**113**	**32**	**0**	**10**	**77**	**4**	**0**	**56**	**20**	**20**	**0**	**7**	**16**	**5**	**371**	1,288
5:15 PM		**0**	**9**	**111**	**50**	**0**	**21**	**87**	**5**	**0**	**42**	**13**	**20**	**0**	**7**	**20**	**5**	**390**	1,383
5:30 PM		**0**	**5**	**94**	**61**	**0**	**15**	**81**	**6**	**0**	**60**	**24**	**42**	**0**	**8**	**16**	**2**	**414**	1,488
5:45 PM		**0**	**6**	**109**	**53**	**0**	**12**	**77**	**5**	**0**	**37**	**13**	**10**	**0**	**7**	**22**	**7**	**358**	**1,533**
Count Total		2	54	801	316	0	92	631	35	0	344	145	145	0	51	105	37	2,758	0
Peak Hour	**All**	**0**	**31**	**427**	**196**	**0**	**58**	**322**	**20**	**0**	**195**	**70**	**92**	**0**	**29**	**74**	**19**	**1,533**	**0**
	HV	**0**	**0**	**1**	**0**	**0**	**1**	**2**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**0**
	HV%	**-**	**0%**	**0%**	**0%**	**-**	**2%**	**1%**	**5%**	**-**	**1%**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**0%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	3	3	5	1	*12*	0	0	1	0	*1*	1	0	1	0	*2*
4:15 PM	3	3	0	2	*8*	0	0	1	0	*1*	0	0	0	0	*0*
4:30 PM	1	2	1	0	*4*	0	0	1	0	*1*	0	0	0	0	*0*
4:45 PM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	1	1	*2*
5:00 PM	**0**	**2**	**1**	**0**	***3***	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**0**	**1**	**0**	**0**	***1***	**4**	**0**	**0**	**0**	***4***	**0**	**0**	**0**	**1**	*1*
5:30 PM	**1**	**1**	**0**	**0**	***2***	**0**	**0**	**1**	**1**	***2***	**0**	**0**	**0**	**0**	*0*
5:45 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**4**	**1**	**0**	**0**	***5***
Count Total	8	12	7	4	*31*	4	0	5	1	*10*	5	1	2	2	*10*
Peak Hour	**1**	**4**	**1**	**0**	***6***	**4**	**0**	**2**	**1**	***7***	**4**	**1**	**0**	**1**	***6***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	NW Lake Rd Eastbound				NW Lake Rd Westbound				NW Parker St Northbound				NW Larkspur St Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	2	1	0	0	1	2	0	1	0	4	0	1	0	0	12	0
4:15 PM	0	0	3	0	0	0	3	0	0	0	0	0	0	1	1	0	8	0
4:30 PM	0	1	0	0	0	0	2	0	0	0	1	0	0	0	0	0	4	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	25
5:00 PM	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	16
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	9
5:30 PM	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	7
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**
Count Total	0	1	6	1	0	1	8	3	0	2	1	4	0	3	1	0	31	0
Peak Hour	**0**	**0**	**1**	**0**	**0**	**1**	**2**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	NW Lake Rd Eastbound			NW Lake Rd Westbound			NW Parker St Northbound			NW Larkspur St Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	1	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	0	1	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	0	1	0	0	0	1	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	3
5:15 PM	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	6
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**2**	7
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**
Count Total	0	4	0	0	0	0	0	1	4	0	1	0	10	0
Peak Hour	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**1**	**0**	**7**	**0**

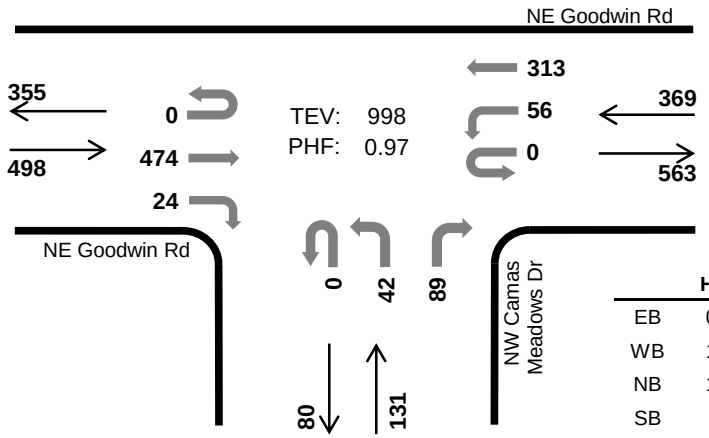
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

NW Camas Meadows Dr
NE Goodwin Rd

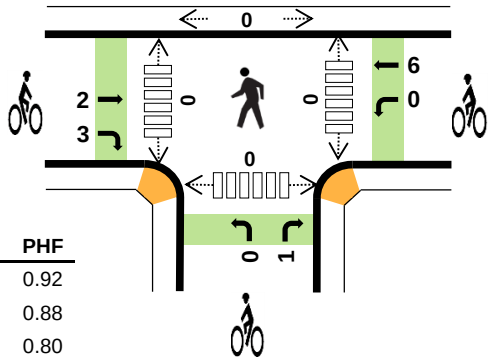
N

Peak Hour

Date: 10-19-2019
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM



	HV %:	PHF
EB	0.6%	0.92
WB	1.4%	0.88
NB	1.5%	0.80
SB	-	-
TOTAL	1.0%	0.97



Two-Hour Count Summaries

Interval Start		NE Goodwin Rd Eastbound				NE Goodwin Rd Westbound				NW Camas Meadows Dr Northbound				0 Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	0	131	6	0	7	64	0	0	4	0	26	0	0	0	0	238	0
4:15 PM		0	0	105	3	0	15	89	0	0	6	0	22	0	0	0	0	240	0
4:30 PM		0	0	118	4	0	9	82	0	0	11	0	15	0	0	0	0	239	0
4:45 PM		0	0	114	4	1	14	83	0	1	8	0	20	0	0	0	0	245	962
5:00 PM		**0**	**0**	**125**	**4**	**0**	**12**	**78**	**0**	**0**	**9**	**0**	**26**	**0**	**0**	**0**	**0**	**254**	978
5:15 PM		**0**	**0**	**105**	**6**	**0**	**13**	**81**	**0**	**0**	**12**	**0**	**18**	**0**	**0**	**0**	**0**	**235**	973
5:30 PM		**0**	**0**	**125**	**10**	**0**	**14**	**66**	**0**	**0**	**10**	**0**	**31**	**0**	**0**	**0**	**0**	**256**	990
5:45 PM		**0**	**0**	**119**	**4**	**0**	**17**	**88**	**0**	**0**	**11**	**0**	**14**	**0**	**0**	**0**	**0**	**253**	**998**
Count Total		0	0	942	41	1	101	631	0	1	71	0	172	0	0	0	0	1,960	0
Peak Hour	**All**	**0**	**0**	**474**	**24**	**0**	**56**	**313**	**0**	**0**	**42**	**0**	**89**	**0**	**0**	**0**	**0**	**998**	**0**
	HV	**0**	**0**	**3**	**0**	**0**	**0**	**5**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**10**	**0**
	HV%	**-**	**-**	**1%**	**0%**	**-**	**0%**	**2%**	**-**	**-**	**2%**	**-**	**1%**	**-**	**-**	**-**	**-**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	5	2	1	0	*8*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	4	6	3	0	*13*	0	0	0	0	*0*	0	0	0	1	*1*
4:30 PM	1	5	0	0	*6*	5	0	0	0	*5*	0	0	0	0	*0*
4:45 PM	1	1	1	0	*3*	2	0	0	0	*2*	0	0	0	0	*0*
5:00 PM	**0**	**0**	**0**	**0**	***0***	**2**	**1**	**0**	**0**	***3***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**1**	**2**	**2**	**0**	***5***	**1**	**3**	**0**	**0**	***4***	**0**	**0**	**0**	**0**	*0*
5:30 PM	**1**	**3**	**0**	**0**	***4***	**2**	**2**	**1**	**0**	***5***	**0**	**0**	**0**	**0**	*0*
5:45 PM	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
Count Total	14	19	7	0	*40*	12	6	1	0	*19*	0	0	0	1	*1*
Peak Hr	**3**	**5**	**2**	**0**	***10***	**5**	**6**	**1**	**0**	***12***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	NE Goodwin Rd				NE Goodwin Rd				NW Camas Meadows Dr				0				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	5	0	0	0	2	0	0	0	0	1	0	0	0	0	8	0
4:15 PM	0	0	4	0	0	1	5	0	0	0	0	3	0	0	0	0	13	0
4:30 PM	0	0	1	0	0	0	5	0	0	0	0	0	0	0	0	0	6	0
4:45 PM	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0	3	30
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	22
5:15 PM	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**5**	14
5:30 PM	**0**	**0**	**1**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	12
5:45 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**10**
Count Total	0	0	14	0	0	1	18	0	0	1	0	6	0	0	0	0	40	0
Peak Hour	**0**	**0**	**3**	**0**	**0**	**0**	**5**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**10**	**0**

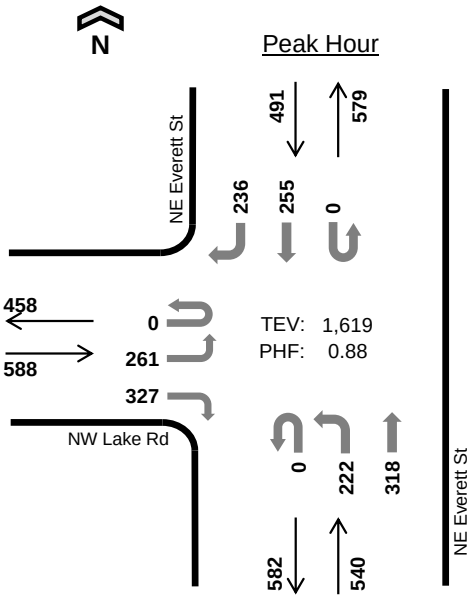
Two-Hour Count Summaries - Bikes

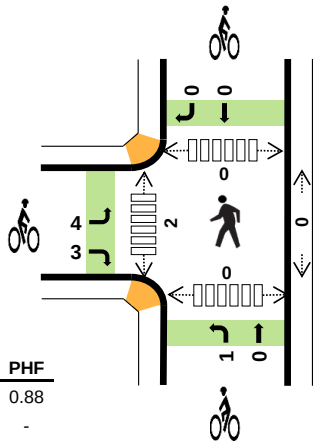
Interval Start	NE Goodwin Rd			NE Goodwin Rd			NW Camas Meadows Dr			0			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	5	0	0	0	0	0	0	0	0	0	0	5	0
4:45 PM	0	2	0	0	0	0	0	0	0	0	0	0	2	7
5:00 PM	**0**	**0**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	10
5:15 PM	**0**	**1**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	14
5:30 PM	**0**	**1**	**1**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**5**	14
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**
Count Total	0	9	3	0	6	0	0	0	1	0	0	0	19	0
Peak Hour	**0**	**2**	**3**	**0**	**6**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**12**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

NE Everett St
NW Lake Rd

Date: 10-19-2021
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM





	HV %:	PHF
EB	0.3%	0.88
WB	-	-
NB	0.0%	0.96
SB	0.4%	0.79
TOTAL	0.2%	0.88

Two-Hour Count Summaries

Interval Start		NW Lake Rd Eastbound				0 Westbound				NE Everett St Northbound				NE Everett St Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	54	0	66	0	0	0	0	0	64	79	0	0	0	72	67	402	0
4:15 PM		0	49	0	66	0	0	0	0	0	48	75	0	0	0	67	62	367	0
4:30 PM		0	43	0	58	0	0	0	0	0	53	86	0	0	0	62	58	360	0
4:45 PM		**0**	**54**	**0**	**84**	**0**	**0**	**0**	**0**	**0**	**46**	**89**	**0**	**0**	**0**	**64**	**52**	**389**	1,518
5:00 PM		**0**	**70**	**0**	**76**	**0**	**0**	**0**	**0**	**0**	**70**	**71**	**0**	**0**	**0**	**58**	**53**	**398**	1,514
5:15 PM		**0**	**80**	**0**	**87**	**0**	**0**	**0**	**0**	**0**	**61**	**75**	**0**	**0**	**0**	**70**	**85**	**458**	1,605
5:30 PM		**0**	**57**	**0**	**80**	**0**	**0**	**0**	**0**	**0**	**45**	**83**	**0**	**0**	**0**	**63**	**46**	**374**	**1,619**
5:45 PM		0	54	0	72	0	0	0	0	0	61	95	0	0	0	52	53	387	1,617
Count Total		0	461	0	589	0	0	0	0	0	448	653	0	0	0	508	476	3,135	0
Peak Hour	**All**	**0**	**261**	**0**	**327**	**0**	**0**	**0**	**0**	**0**	**222**	**318**	**0**	**0**	**0**	**255**	**236**	**1,619**	**0**
	HV	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**4**	**0**
	HV%	**-**	**0%**	**-**	**0%**	**-**	**-**	**-**	**-**	**-**	**0%**	**0%**	**-**	**-**	**-**	**1%**	**0%**	**0%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	7	0	1	1	*9*	1	0	0	0	*1*	0	0	0	0	*0*
4:15 PM	7	0	1	5	*13*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	3	0	0	8	*11*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	**1**	**0**	**0**	**0**	***1***	**4**	**0**	**0**	**0**	***4***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**1**	**0**	**0**	**2**	***3***	**1**	**0**	**0**	**2**	***3***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**1**	**0**	***3***	**0**	**2**	**0**	**0**	*2*
5:30 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:45 PM	0	0	2	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	19	0	4	16	*39*	8	0	1	2	*11*	0	2	0	0	*2*
Peak Hr	**2**	**0**	**0**	**2**	***4***	**7**	**0**	**1**	**2**	***10***	**0**	**2**	**0**	**0**	***2***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	NW Lake Rd				0				NE Everett St				NE Everett St				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	7	0	0	0	0	0	0	1	0	0	0	1	0	9	0
4:15 PM	0	2	0	5	0	0	0	0	0	0	1	0	0	0	4	1	13	0
4:30 PM	0	0	0	3	0	0	0	0	0	0	0	0	0	0	7	1	11	0
4:45 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	34
5:00 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**3**	28
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	15
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**
5:45 PM	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	5
Count Total	0	3	0	16	0	0	0	0	0	1	3	0	0	0	14	2	39	0
Peak Hour	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**4**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	NW Lake Rd			0			NE Everett St			NE Everett St			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	**2**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	5
5:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**3**	7
5:15 PM	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**3**	10
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Count Total	4	0	4	0	0	0	1	0	0	2	0	0	11	0
Peak Hour	**4**	**0**	**3**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**0**	**0**	**10**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Heath & Associates

PO Box 397
Puyallup, WA 98371

File Name : 4679a
Site Code : 00004679
Start Date : 7/27/2021
Page No : 1

Groups Printed- Passenger + - Heavy

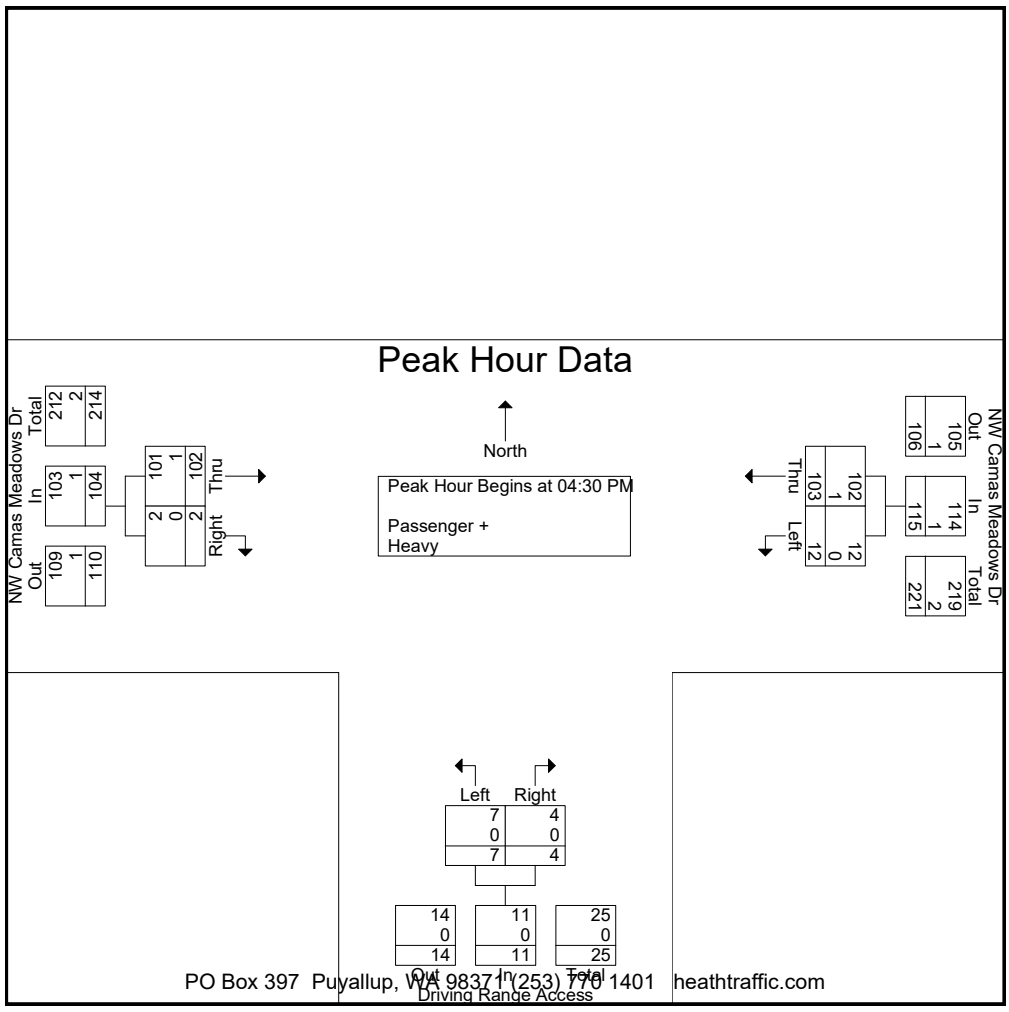
	NW Camas Meadows Dr Westbound			Driving Range Access Northbound			NW Camas Meadows Dr Eastbound			
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	App. Total	Int. Total
04:00 PM	26	4	30	3	3	6	1	22	23	59
04:15 PM	16	2	18	1	1	2	1	21	22	42
04:30 PM	29	2	31	3	0	3	1	18	19	53
04:45 PM	26	3	29	0	3	3	0	25	25	57
Total	97	11	108	7	7	14	3	86	89	211
05:00 PM	22	3	25	0	0	0	0	26	26	51
05:15 PM	26	4	30	1	4	5	1	33	34	69
05:30 PM	18	3	21	4	1	5	2	21	23	49
05:45 PM	21	4	25	2	1	3	1	14	15	43
Total	87	14	101	7	6	13	4	94	98	212
Grand Total	184	25	209	14	13	27	7	180	187	423
Apprch %	88	12		51.9	48.1		3.7	96.3		
Total %	43.5	5.9	49.4	3.3	3.1	6.4	1.7	42.6	44.2	
Passenger +	180	25	205	14	13	27	7	179	186	418
% Passenger +	97.8	100	98.1	100	100	100	100	99.4	99.5	98.8
Heavy	4	0	4	0	0	0	0	1	1	5
% Heavy	2.2	0	1.9	0	0	0	0	0.6	0.5	1.2

Heath & Associates

PO Box 397
Puyallup, WA 98371

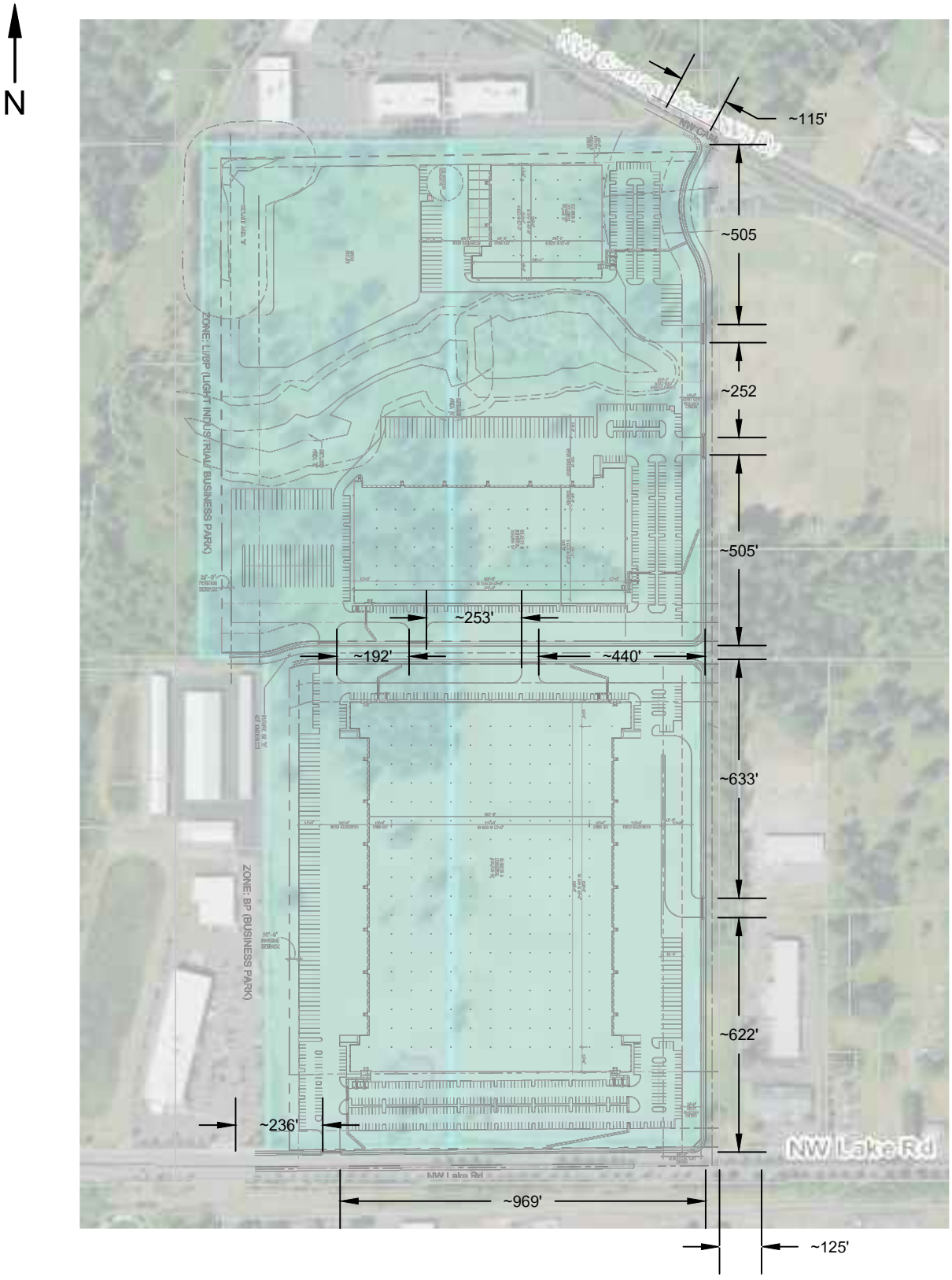
File Name : 4679a
Site Code : 00004679
Start Date : 7/27/2021
Page No : 2

	NW Camas Meadows Dr Westbound			Driving Range Access Northbound			NW Camas Meadows Dr Eastbound			
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	**29**	2	**31**	**3**	0	3	**1**	18	19	53
04:45 PM	26	3	29	0	3	3	0	25	25	57
05:00 PM	22	3	25	0	0	0	0	26	26	51
05:15 PM	26	**4**	30	1	**4**	**5**	1	**33**	**34**	**69**
Total Volume	103	12	115	4	7	11	2	102	104	230
% App. Total	89.6	10.4		36.4	63.6		1.9	98.1		
PHF	.888	.750	.927	.333	.438	.550	.500	.773	.765	.833
Passenger +	102	12	114	4	7	11	2	101	103	228
% Passenger +	99.0	100	99.1	100	100	100	100	99.0	99.0	99.1
Heavy	1	0	1	0	0	0	0	1	1	2
% Heavy	1.0	0	0.9	0	0	0	0	1.0	1.0	0.9



APPENDIX

SUPPLEMENTARY FIGURES



HEATH & ASSOCIATES

TRAFFIC AND CIVIL ENGINEERING

CAMAS BUSINESS CENTER

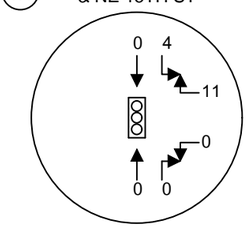
DRIVEWAY SPACING DIAGRAM
FIGURE A

N

CITY OF VANCOUVER PROPORTIONAL SHARE INTERSECTIONS

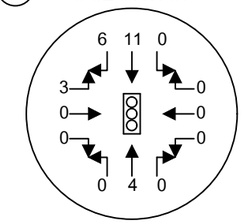
1.1 NE 192ND AVE & NE 13TH ST
2.1 NE 192ND AVE & SE 34TH ST
3.1 NE 192ND AVE & SR-14 WB RAMPS

1.1 NE 192ND AVE & NE 13TH ST



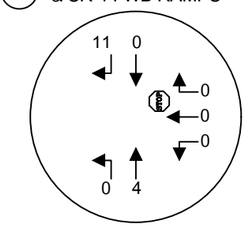
15 TOTAL TRIPS

2.1 NE 192ND AVE & SE 34TH ST

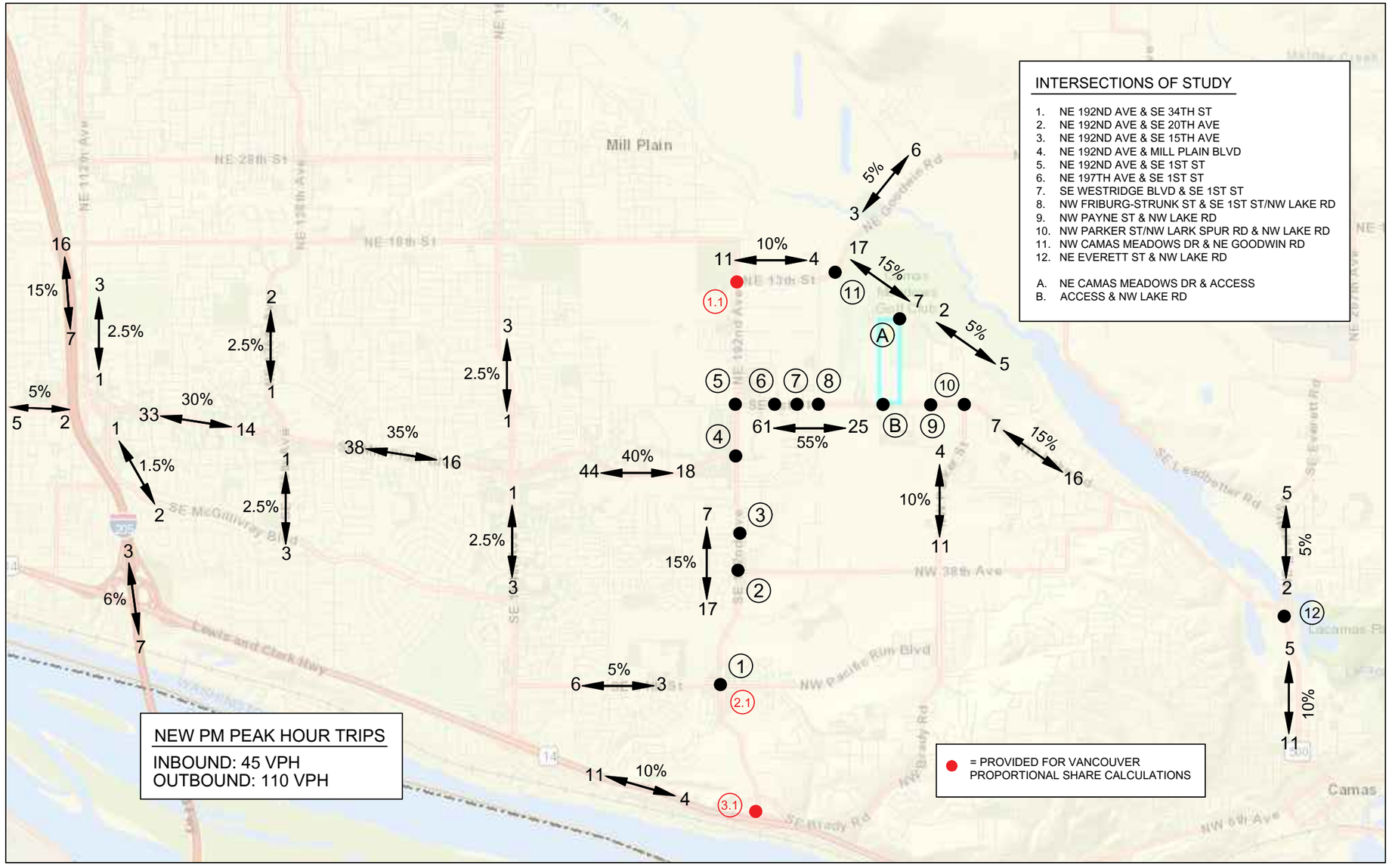


24 TOTAL TRIPS

3.1 NE 192ND AVE & SR-14 WB RAMPS



15 TOTAL TRIPS



INTERSECTIONS OF STUDY

1. NE 192ND AVE & SE 34TH ST
2. NE 192ND AVE & SE 20TH AVE
3. NE 192ND AVE & SE 15TH AVE
4. NE 192ND AVE & MILL PLAIN BLVD
5. NE 192ND AVE & SE 1ST ST
6. NE 197TH AVE & SE 1ST ST
7. SE WESTRIDGE BLVD & SE 1ST ST
8. NW FRIBURG-STRUNK ST & SE 1ST ST/NW LAKE RD
9. NW PAYNE ST & NW LAKE RD
10. NW PARKER ST/NW LARK SPUR RD & NW LAKE RD
11. NW CAMAS MEADOWS DR & NE GOODWIN RD
12. NE EVERETT ST & NW LAKE RD

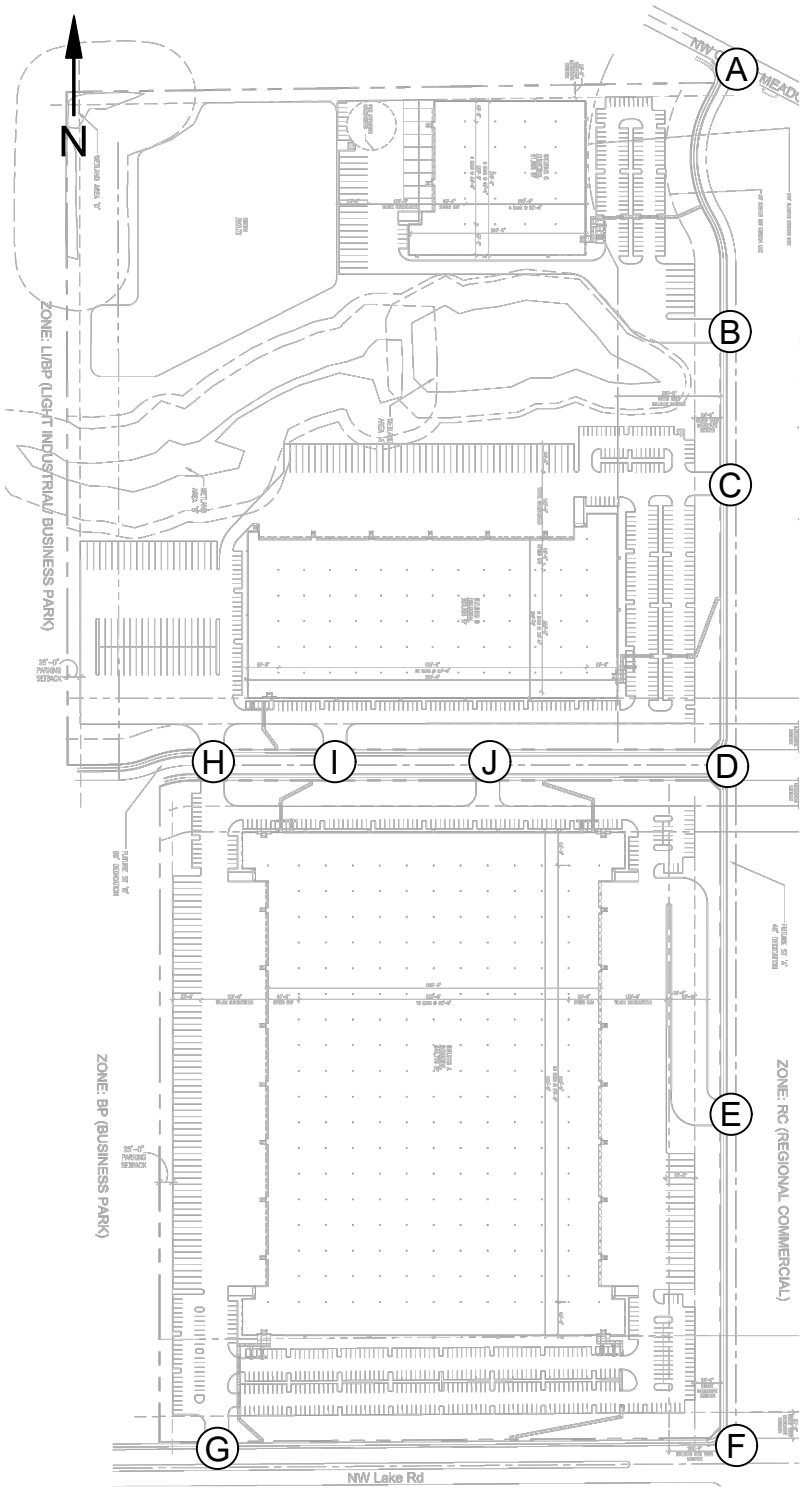
A. NE CAMAS MEADOWS DR & ACCESS
B. ACCESS & NW LAKE RD

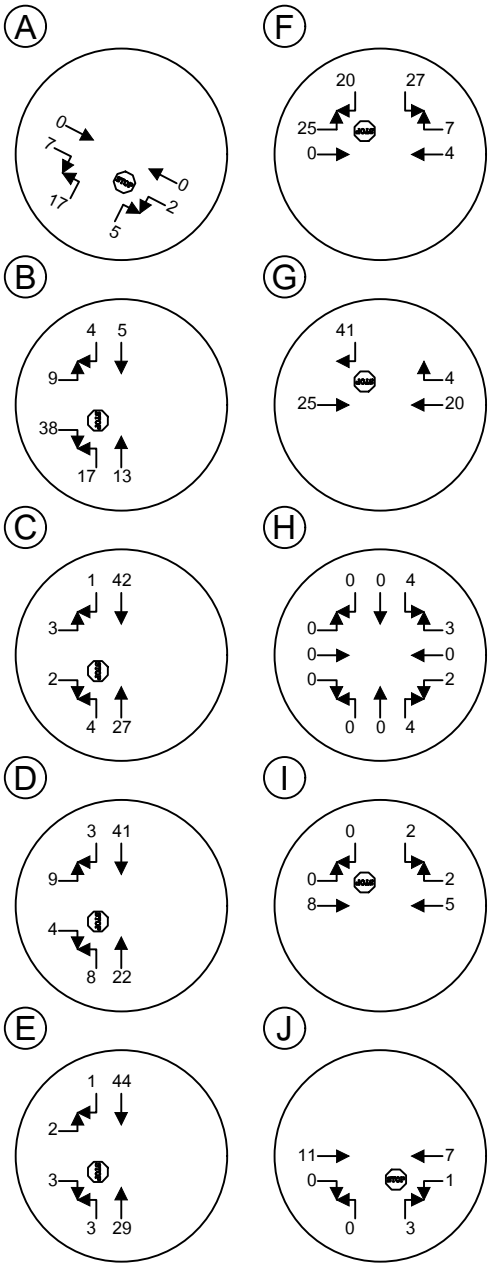
HEATH & ASSOCIATES
TRAFFIC AND CIVIL ENGINEERING

CAMAS BUSINESS CENTER

PM PEAK HOUR TRIP DISTRIBUTION & ASSIGNMENT & PROPORTIONATE SHARE TRIPS ENDS
FIGURE B

PO Box 397 Puyallup, WA 98371 (253) 770 1401 heathtraffic.com



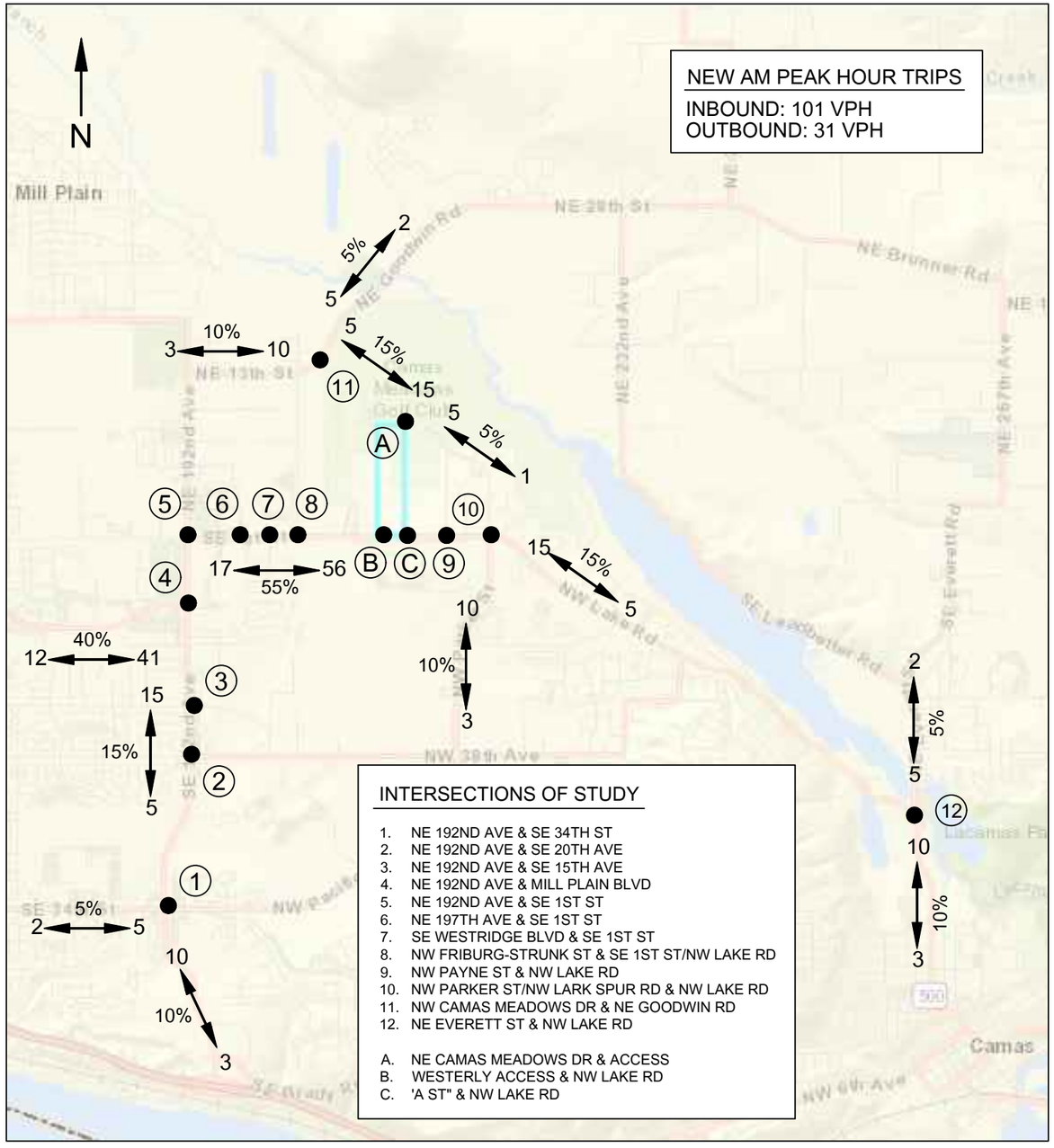


HEATH & ASSOCIATES

TRAFFIC AND CIVIL ENGINEERING

CAMAS BUSINESS CENTER

PM PEAK HOUR ONSITE TRAFFIC CIRCULATION PLAN
FIGURE C

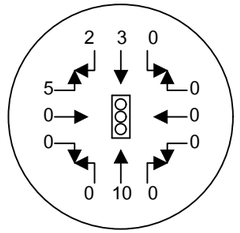


INTERSECTIONS OF STUDY

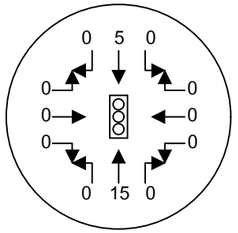
1. NE 192ND AVE & SE 34TH ST
2. NE 192ND AVE & SE 20TH AVE
3. NE 192ND AVE & SE 15TH AVE
4. NE 192ND AVE & MILL PLAIN BLVD
5. NE 192ND AVE & SE 1ST ST
6. NE 197TH AVE & SE 1ST ST
7. SE WESTRIDGE BLVD & SE 1ST ST
8. NW FRIBURG-STRUNK ST & SE 1ST ST/NW LAKE RD
9. NW PAYNE ST & NW LAKE RD
10. NW PARKER ST/NW LARK SPUR RD & NW LAKE RD
11. NW CAMAS MEADOWS DR & NE GOODWIN RD
12. NE EVERETT ST & NW LAKE RD

A. NE CAMAS MEADOWS DR & ACCESS
B. WESTERLY ACCESS & NW LAKE RD
C. 'A ST" & NW LAKE RD

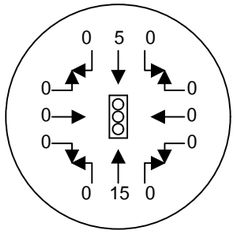
① NE 192ND AVE & SE 34TH ST



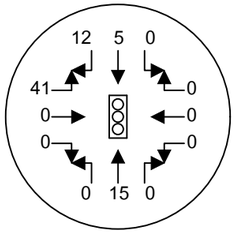
② NE 192ND AVE & SE 20TH AVE



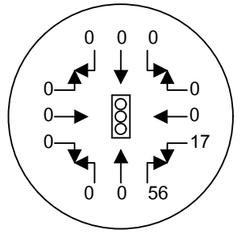
③ NE 192ND AVE & SE 15TH AVE



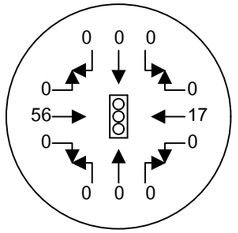
④ NE 192ND AVE & MILL PLAIN BLVD



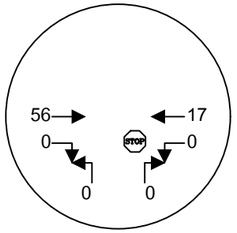
⑤ NE 192ND AVE & SE 1ST ST



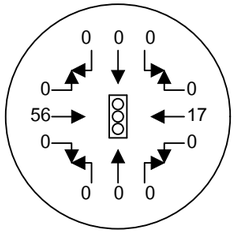
⑥ NE 197TH AVE & SE 1ST ST



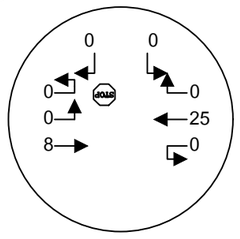
⑦ SE WESTRIDGE BLVD & SE 1ST ST



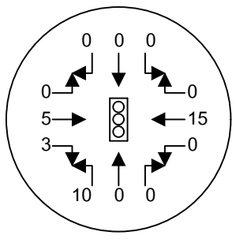
⑧ NW FRIBURG-STRNK ST & SE 1ST ST/ NW LAKE RD



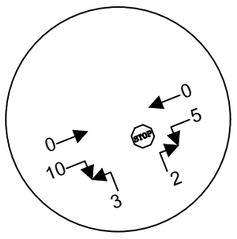
⑨ NW PAYNE ST & NW LAKE RD



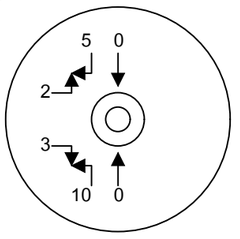
⑩ NW PARKER ST/ NW LARK SPUR RD & NW LAKE RD



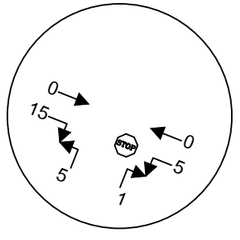
⑪ NW CAMAS MEADOWS DR & NE GOODWIN RD



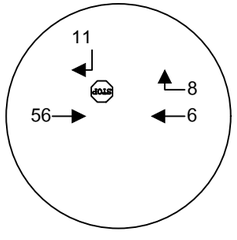
⑫ NE EVERETT ST & NW LAKE RD



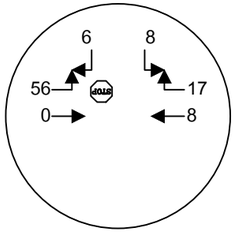
Ⓐ NW CAMAS MEADOWS DR & ACCESS



Ⓑ WESTERLY ACCESS & NW LAKE RD



Ⓒ "A ST" & NW LAKE RD



HEATH & ASSOCIATES
TRAFFIC AND CIVIL ENGINEERING

CAMAS BUSINESS CENTER

AM PEAK HOUR TRIP DISTRIBUTION & ASSIGNMENT
FIGURE D

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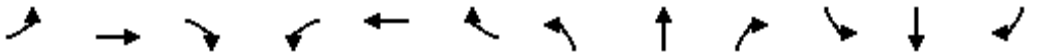
APPENDIX

LEVEL OF SERVICE



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	91	151	46	279	146	110	79	756	115	167	694	109
Future Volume (vph)	91	151	46	279	146	110	79	756	115	167	694	109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	300		375	175		0
Storage Lanes	1		0	1		0	2		1	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	0.97	0.95	1.00	0.97	0.95	0.95
Ped Bike Factor		0.99			0.98				0.97		1.00	
Frt		0.965			0.935				0.850		0.980	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3383	0	1787	3291	0	3433	3539	1583	3467	3489	0
Flt Permitted	0.587			0.448			0.950			0.950		
Satd. Flow (perm)	1093	3383	0	843	3291	0	3433	3539	1529	3467	3489	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		35			115				164		21	
Link Speed (mph)		35			40			40			40	
Link Distance (ft)		798			760			812			788	
Travel Time (s)		15.5			13.0			13.8			13.4	
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	1%	1%	1%
Adj. Flow (vph)	95	157	48	291	152	115	82	788	120	174	723	114
Shared Lane Traffic (%)												
Lane Group Flow (vph)	95	205	0	291	267	0	82	788	120	174	837	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8					2			
Detector Phase	7	4		3	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5	22.5	9.5	22.5	
Total Split (s)	11.0	23.0		23.0	35.0		10.2	39.0	39.0	15.0	43.8	
Total Split (%)	11.0%	23.0%		23.0%	35.0%		10.2%	39.0%	39.0%	15.0%	43.8%	
Maximum Green (s)	6.5	18.5		18.5	30.5		5.7	34.5	34.5	10.5	39.3	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lead	Lead	Lag	Lag	

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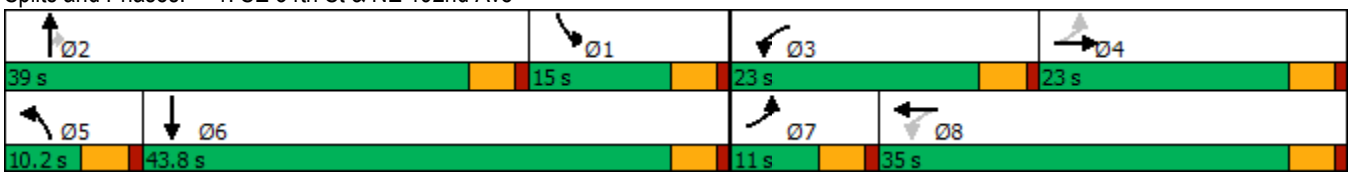
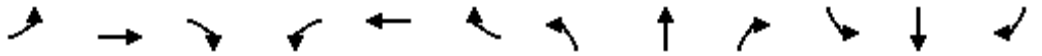
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	Min	Min	None	Min	
Walk Time (s)		7.0			7.0			7.0	7.0		7.0	
Flash Dont Walk (s)		11.0			11.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)		10			10			10	10		10	
Act Effct Green (s)	16.9	10.3		29.2	20.8		5.9	24.3	24.3	9.1	30.3	
Actuated g/C Ratio	0.22	0.13		0.38	0.27		0.08	0.32	0.32	0.12	0.40	
v/c Ratio	0.32	0.42		0.59	0.27		0.31	0.70	0.20	0.42	0.60	
Control Delay	21.4	29.9		23.9	14.8		42.4	27.5	2.3	38.4	21.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	21.4	29.9		23.9	14.8		42.4	27.5	2.3	38.4	21.5	
LOS	C	C		C	B		D	C	A	D	C	
Approach Delay		27.2			19.6			25.7			24.4	
Approach LOS		C			B			C			C	
Queue Length 50th (ft)	29	39		100	30		19	168	0	39	163	
Queue Length 95th (ft)	70	83		197	68		51	283	17	88	275	
Internal Link Dist (ft)		718			680			732			708	
Turn Bay Length (ft)	150			150			300		375	175		
Base Capacity (vph)	303	877		558	1433		266	1661	804	495	1875	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.31	0.23		0.52	0.19		0.31	0.47	0.15	0.35	0.45	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 76.7			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay: 24.2		Intersection LOS: C	
Intersection Capacity Utilization 65.9%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 1: SE 34th St & NE 192nd Ave





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	156	172	58	174	179	114	92	795	105	123	750	129
Future Volume (vph)	156	172	58	174	179	114	92	795	105	123	750	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	100		0	350		0	400		0
Storage Lanes	2		0	2		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	1.00	1.00	0.97	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor		0.99			0.98			0.99			0.99	
Frt		0.962			0.942			0.982			0.978	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3467	1792	0	3467	1745	0	1770	3452	0	1787	3471	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3467	1792	0	3467	1745	0	1770	3452	0	1787	3471	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15			29			15			21	
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1025			1210			957			1224	
Travel Time (s)		17.5			20.6			16.3			20.9	
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	2%	2%	2%	1%	1%	1%
Adj. Flow (vph)	164	181	61	183	188	120	97	837	111	129	789	136
Shared Lane Traffic (%)												
Lane Group Flow (vph)	164	242	0	183	308	0	97	948	0	129	925	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	22.6	25.4		22.6	25.4		13.4	36.6		15.4	38.6	
Total Split (%)	22.6%	25.4%		22.6%	25.4%		13.4%	36.6%		15.4%	38.6%	
Maximum Green (s)	18.1	20.9		18.1	20.9		8.9	32.1		10.9	34.1	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lag	Lag		Lead	Lead		Lead	Lead		Lag	Lag	

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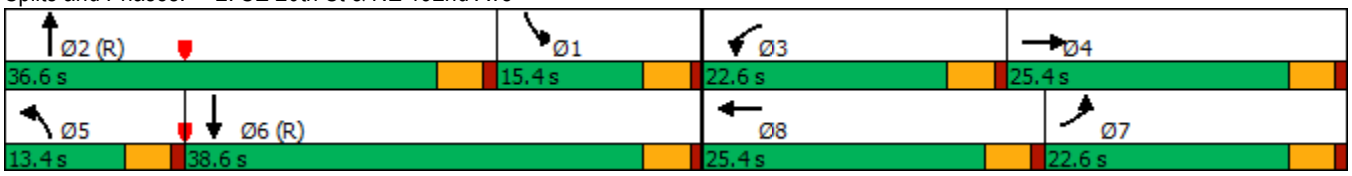
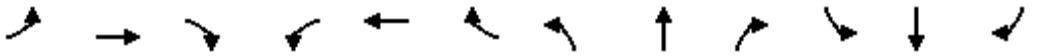
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	10	10		10	10			10			10	
Act Effct Green (s)	11.2	18.9		11.5	19.2		9.7	41.3		10.3	44.1	
Actuated g/C Ratio	0.11	0.19		0.12	0.19		0.10	0.41		0.10	0.44	
v/c Ratio	0.42	0.69		0.46	0.86		0.56	0.66		0.70	0.60	
Control Delay	43.8	46.0		44.3	58.3		56.4	27.6		64.3	25.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	43.8	46.0		44.3	58.3		56.4	27.6		64.3	25.1	
LOS	D	D		D	E		E	C		E	C	
Approach Delay		45.1			53.1			30.3			29.9	
Approach LOS		D			D			C			C	
Queue Length 50th (ft)	51	134		57	170		59	253		80	243	
Queue Length 95th (ft)	76	215		84	#304		#128	#378		#160	346	
Internal Link Dist (ft)		945			1130			877			1144	
Turn Bay Length (ft)	150			100			350			400		
Base Capacity (vph)	627	386		627	387		179	1434		194	1543	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.26	0.63		0.29	0.80		0.54	0.66		0.66	0.60	

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.86
Intersection Signal Delay: 35.9 Intersection LOS: D
Intersection Capacity Utilization 68.5% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: SE 20th St & NE 192nd Ave





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	82	54	58	29	48	93	38	1011	25	41	920	84
Future Volume (vph)	82	54	58	29	48	93	38	1011	25	41	920	84
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	125		100	175		0	475		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.922				0.850		0.996			0.987	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	1734	0	1787	1881	1599	1770	3525	0	1787	3528	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1787	1734	0	1787	1881	1599	1770	3525	0	1787	3528	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		50				164		3			12	
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		507			479			1224			918	
Travel Time (s)		9.9			9.3			20.9			15.6	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	2%	2%	2%	1%	1%	1%
Adj. Flow (vph)	84	55	59	30	49	95	39	1032	26	42	939	86
Shared Lane Traffic (%)												
Lane Group Flow (vph)	84	114	0	30	49	95	39	1058	0	42	1025	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA	pt+ov	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8	8 1	5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8	8 1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	16.0	28.0		11.0	23.0		11.5	49.0		12.0	49.5	
Total Split (%)	16.0%	28.0%		11.0%	23.0%		11.5%	49.0%		12.0%	49.5%	
Maximum Green (s)	11.5	23.5		6.5	18.5		7.0	44.5		7.5	45.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Min		None	Min	

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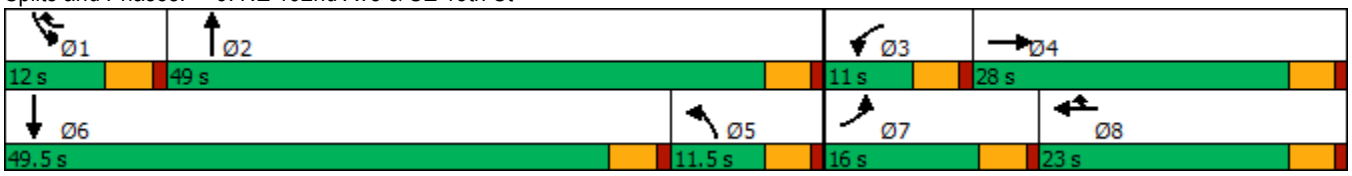
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		10			10			10			10	
Act Effct Green (s)	9.3	15.8		7.0	9.2	17.6	7.8	36.7		7.5	38.8	
Actuated g/C Ratio	0.14	0.23		0.10	0.13	0.26	0.11	0.53		0.11	0.57	
v/c Ratio	0.35	0.26		0.17	0.20	0.18	0.20	0.56		0.22	0.51	
Control Delay	38.2	18.7		39.8	34.1	1.1	38.5	18.1		39.3	16.4	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	38.2	18.7		39.8	34.1	1.1	38.5	18.1		39.3	16.4	
LOS	D	B		D	C	A	D	B		D	B	
Approach Delay		27.0			17.0			18.8			17.3	
Approach LOS		C			B			B			B	
Queue Length 50th (ft)	34	20		12	20	0	16	195		17	187	
Queue Length 95th (ft)	99	79		48	59	4	57	342		60	327	
Internal Link Dist (ft)		427			399			1144			838	
Turn Bay Length (ft)	125			125		100	175			475		
Base Capacity (vph)	346	717		195	586	643	221	2369		225	2393	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.24	0.16		0.15	0.08	0.15	0.18	0.45		0.19	0.43	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 68.6			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.56			
Intersection Signal Delay: 18.7		Intersection LOS: B	
Intersection Capacity Utilization 52.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: NE 192nd Ave & SE 15th St



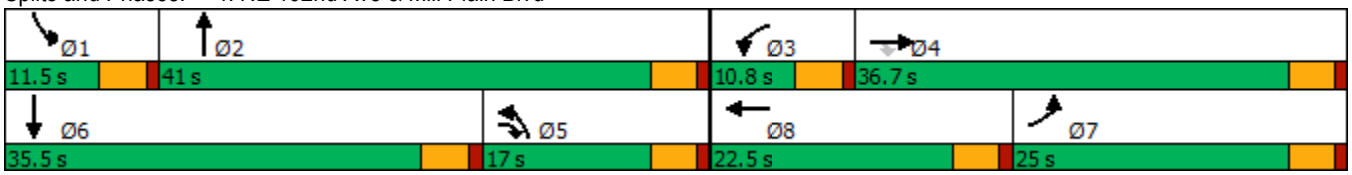
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	264	29	272	33	25	37	297	747	50	47	681	185
Future Volume (vph)	264	29	272	33	25	37	297	747	50	47	681	185
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		200	100		0	200		0	150		0
Storage Lanes	1		1	1		0	2		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor			0.97		0.98			1.00			0.99	
Frt			0.850		0.910			0.991			0.968	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	1881	1599	1752	1638	0	3433	3495	0	1787	3434	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1787	1881	1546	1752	1638	0	3433	3495	0	1787	3434	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			142		39			8			36	
Link Speed (mph)		40			25			40			40	
Link Distance (ft)		504			806			810			686	
Travel Time (s)		8.6			22.0			13.8			11.7	
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			10
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	1%	1%	1%	3%	3%	3%	2%	2%	2%	1%	1%	1%
Adj. Flow (vph)	275	30	283	34	26	39	309	778	52	49	709	193
Shared Lane Traffic (%)												
Lane Group Flow (vph)	275	30	283	34	65	0	309	830	0	49	902	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	5	3	8		5	2		1	6	
Permitted Phases			4									
Detector Phase	7	4	5	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5	9.5	9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	25.0	36.7	17.0	10.8	22.5		17.0	41.0		11.5	35.5	
Total Split (%)	25.0%	36.7%	17.0%	10.8%	22.5%		17.0%	41.0%		11.5%	35.5%	
Maximum Green (s)	20.5	32.2	12.5	6.3	18.0		12.5	36.5		7.0	31.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lag	Lag	Lag	Lead	Lead		Lag	Lag		Lead	Lead	

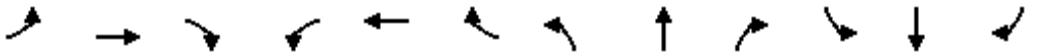
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Min		None	Min	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		10			10			10			10	
Act Effct Green (s)	17.2	21.7	33.4	6.4	8.6		11.7	37.0		6.9	26.4	
Actuated g/C Ratio	0.22	0.27	0.42	0.08	0.11		0.15	0.46		0.09	0.33	
v/c Ratio	0.71	0.06	0.38	0.24	0.31		0.61	0.51		0.32	0.78	
Control Delay	43.6	24.7	7.1	45.7	23.0		41.4	19.8		46.4	30.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	43.6	24.7	7.1	45.7	23.0		41.4	19.8		46.4	30.2	
LOS	D	C	A	D	C		D	B		D	C	
Approach Delay		25.1			30.8			25.7			31.0	
Approach LOS		C			C			C			C	
Queue Length 50th (ft)	137	13	35	18	13		81	176		25	214	
Queue Length 95th (ft)	#283	34	75	53	52		#146	293		68	348	
Internal Link Dist (ft)		424			726			730			606	
Turn Bay Length (ft)	250		200	100			200			150		
Base Capacity (vph)	489	808	765	147	423		572	1742		166	1442	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.56	0.04	0.37	0.23	0.15		0.54	0.48		0.30	0.63	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 79.9			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay: 27.6		Intersection LOS: C	
Intersection Capacity Utilization 66.0%		ICU Level of Service C	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: NE 192nd Ave & Mill Plain Blvd





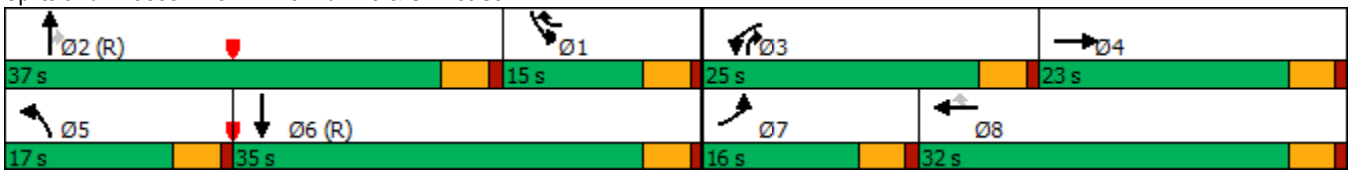
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	205	268	67	412	275	77	91	688	349	79	423	99
Future Volume (vph)	205	268	67	412	275	77	91	688	349	79	423	99
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	250		250	175		175	250		0
Storage Lanes	2		0	2		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	0.95	0.97	1.00	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor		0.99				0.97			0.97		0.99	
Frt		0.970				0.850			0.850		0.972	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3467	3439	0	3467	1881	1599	1787	3574	1599	1787	3443	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3467	3439	0	3467	1881	1545	1787	3574	1547	1787	3443	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		27				115			219		29	
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		844			1324			866			732	
Travel Time (s)		14.4			22.6			14.8			12.5	
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	218	285	71	438	293	82	97	732	371	84	450	105
Shared Lane Traffic (%)												
Lane Group Flow (vph)	218	356	0	438	293	82	97	732	371	84	555	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	
Protected Phases	7	4		3	8	1	5	2	3	1	6	
Permitted Phases						8			2			
Detector Phase	7	4		3	8	1	5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5	9.5	9.5	22.5	9.5	9.5	22.5	
Total Split (s)	16.0	23.0		25.0	32.0	15.0	17.0	37.0	25.0	15.0	35.0	
Total Split (%)	16.0%	23.0%		25.0%	32.0%	15.0%	17.0%	37.0%	25.0%	15.0%	35.0%	
Maximum Green (s)	11.5	18.5		20.5	27.5	10.5	12.5	32.5	20.5	10.5	30.5	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag	

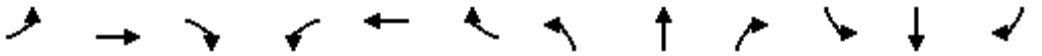
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None	None	None	C-Min	None	None	C-Min	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		10			10			10			10	
Act Effct Green (s)	10.9	14.8		17.7	21.6	30.9	10.2	42.3	60.0	9.3	41.5	
Actuated g/C Ratio	0.11	0.15		0.18	0.22	0.31	0.10	0.42	0.60	0.09	0.42	
v/c Ratio	0.58	0.67		0.71	0.72	0.15	0.53	0.48	0.36	0.51	0.38	
Control Delay	48.6	43.4		45.3	46.5	1.5	52.9	24.7	3.5	53.4	22.7	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	48.6	43.4		45.3	46.5	1.5	52.9	24.7	3.5	53.4	22.7	
LOS	D	D		D	D	A	D	C	A	D	C	
Approach Delay		45.4			41.3			20.4			26.8	
Approach LOS		D			D			C			C	
Queue Length 50th (ft)	68	105		135	173	0	59	186	21	51	128	
Queue Length 95th (ft)	107	147		183	247	10	110	270	52	100	197	
Internal Link Dist (ft)		764			1244			786			652	
Turn Bay Length (ft)	250			250		250	175		175	250		
Base Capacity (vph)	408	658		710	517	583	223	1511	1063	191	1445	
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.53	0.54		0.62	0.57	0.14	0.43	0.48	0.35	0.44	0.38	

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.72
Intersection Signal Delay: 31.4 Intersection LOS: C
Intersection Capacity Utilization 61.4% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 5: NE 192nd Ave & SE 1st St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	731	2	0	540	60	2	0	0	156	0	42
Future Volume (vph)	49	731	2	0	540	60	2	0	0	156	0	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175		0	150		0	40		0	200		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			0.99						0.96	
Frt					0.985						0.850	
Flt Protected	0.950						0.950			0.950		
Satd. Flow (prot)	1787	3574	0	1881	3502	0	1787	1881	0	1787	1528	0
Flt Permitted	0.950						0.728			0.757		
Satd. Flow (perm)	1787	3574	0	1881	3502	0	1370	1881	0	1424	1528	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					16						392	
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		1324			632			136			474	
Travel Time (s)		22.6			10.8			3.7			12.9	
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	52	778	2	0	574	64	2	0	0	166	0	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	52	780	0	0	638	0	2	0	0	166	45	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA		Perm			Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	15.0	48.5		9.5	43.0		32.0	32.0		32.0	32.0	
Total Split (%)	16.7%	53.9%		10.6%	47.8%		35.6%	35.6%		35.6%	35.6%	
Maximum Green (s)	10.5	44.0		5.0	38.5		27.5	27.5		27.5	27.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lead		Lag	Lag							

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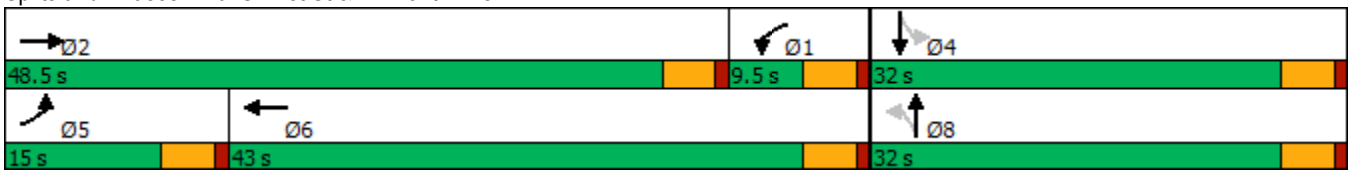
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	Min		None	Min		None	None		None	None	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		10			10		10	10		10	10	
Act Effct Green (s)	7.3	24.0			19.9		11.7			11.7	11.7	
Actuated g/C Ratio	0.16	0.53			0.44		0.26			0.26	0.26	
v/c Ratio	0.18	0.41			0.41		0.01			0.45	0.07	
Control Delay	21.3	7.3			11.7		15.0			19.7	0.2	
Queue Delay	0.0	0.0			0.0		0.0			0.0	0.0	
Total Delay	21.3	7.3			11.7		15.0			19.7	0.2	
LOS	C	A			B		B			B	A	
Approach Delay		8.1			11.7			15.0			15.5	
Approach LOS		A			B			B			B	
Queue Length 50th (ft)	8	51			38		0			23	0	
Queue Length 95th (ft)	46	108			142		5			100	0	
Internal Link Dist (ft)		1244			552			56			394	
Turn Bay Length (ft)	175						40			200		
Base Capacity (vph)	438	3240			2992		880			915	1122	
Starvation Cap Reductn	0	0			0		0			0	0	
Spillback Cap Reductn	0	0			0		0			0	0	
Storage Cap Reductn	0	0			0		0			0	0	
Reduced v/c Ratio	0.12	0.24			0.21		0.00			0.18	0.04	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 45.2			
Natural Cycle: 55			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.45			
Intersection Signal Delay: 10.4		Intersection LOS: B	
Intersection Capacity Utilization 51.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 6: SE 1st St & NE 197th Ave



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Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	857	25	29	573	19	26
Future Vol, veh/h	857	25	29	573	19	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	75
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	912	27	31	610	20	28

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	939	0	1293	470
Stage 1	-	-	-	-	926	-
Stage 2	-	-	-	-	367	-
Critical Hdwy	-	-	4.12	-	6.82	6.92
Critical Hdwy Stg 1	-	-	-	-	5.82	-
Critical Hdwy Stg 2	-	-	-	-	5.82	-
Follow-up Hdwy	-	-	2.21	-	3.51	3.31
Pot Cap-1 Maneuver	-	-	732	-	156	543
Stage 1	-	-	-	-	349	-
Stage 2	-	-	-	-	674	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	732	-	149	543
Mov Cap-2 Maneuver	-	-	-	-	149	-
Stage 1	-	-	-	-	349	-
Stage 2	-	-	-	-	646	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	20.8
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	149	543	-	-	732	-
HCM Lane V/C Ratio	0.136	0.051	-	-	0.042	-
HCM Control Delay (s)	32.9	12	-	-	10.1	-
HCM Lane LOS	D	B	-	-	B	-
HCM 95th %tile Q(veh)	0.5	0.2	-	-	0.1	-

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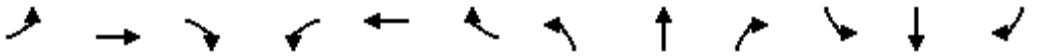

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	284	599	0	1	477	84	2	0	0	73	0	124
Future Volume (vph)	284	599	0	1	477	84	2	0	0	73	0	124
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	150		0	0		0	0		150
Storage Lanes	1		0	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					0.99							0.97
Frt					0.978							0.850
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1787	3574	0	1787	3466	0	0	1787	0	0	1787	1599
Flt Permitted	0.950			0.950				0.706			0.757	
Satd. Flow (perm)	1787	3574	0	1787	3466	0	0	1328	0	0	1424	1556
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					23							108
Link Speed (mph)		40			40			25			40	
Link Distance (ft)		687			911			123			618	
Travel Time (s)		11.7			15.5			3.4			10.5	
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	305	644	0	1	513	90	2	0	0	78	0	133
Shared Lane Traffic (%)												
Lane Group Flow (vph)	305	644	0	1	603	0	0	2	0	0	78	133
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	5	2		1	6			8			4	5
Permitted Phases							8			4		4
Detector Phase	5	2		1	6		8	8		4	4	5
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.5	22.5		9.5	22.5		22.5	22.5		22.5	22.5	9.5
Total Split (s)	34.0	56.0		10.0	32.0		24.0	24.0		24.0	24.0	34.0
Total Split (%)	37.8%	62.2%		11.1%	35.6%		26.7%	26.7%		26.7%	26.7%	37.8%
Maximum Green (s)	29.5	51.5		5.5	27.5		19.5	19.5		19.5	19.5	29.5
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5			4.5	4.5
Lead/Lag	Lead	Lag		Lead	Lag							Lead

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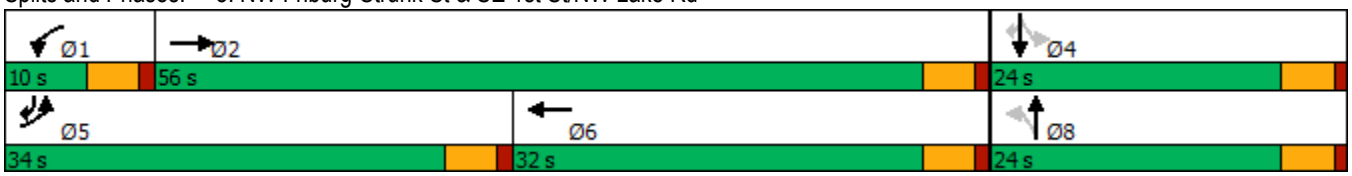
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	Min		None	Min		None	None		None	None	None
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		10			10		10	10		10	10	
Act Effct Green (s)	15.8	39.6		6.4	16.7			9.4			10.0	21.5
Actuated g/C Ratio	0.31	0.78		0.13	0.33			0.18			0.20	0.42
v/c Ratio	0.55	0.23		0.00	0.52			0.01			0.28	0.18
Control Delay	21.9	4.9		31.0	17.8			23.0			25.5	3.1
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	0.0
Total Delay	21.9	4.9		31.0	17.8			23.0			25.5	3.1
LOS	C	A		C	B			C			C	A
Approach Delay		10.4			17.8			23.0			11.4	
Approach LOS		B			B			C			B	
Queue Length 50th (ft)	81	33		0	78			1			22	3
Queue Length 95th (ft)	209	122		5	182			6			71	27
Internal Link Dist (ft)		607			831			43			538	
Turn Bay Length (ft)	250			150								150
Base Capacity (vph)	1181	3196		225	2192			595			638	1255
Starvation Cap Reductn	0	0		0	0			0			0	0
Spillback Cap Reductn	0	0		0	0			0			0	0
Storage Cap Reductn	0	0		0	0			0			0	0
Reduced v/c Ratio	0.26	0.20		0.00	0.28			0.00			0.12	0.11

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 50.9			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay: 13.1		Intersection LOS: B	
Intersection Capacity Utilization 50.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 8: NW Friburg-Strunk St & SE 1st St/NW Lake Rd



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Intersection	
Int Delay, s/veh	0.9

Movement	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Vol, veh/h	9	20	630	507	32	22	35
Future Vol, veh/h	9	20	630	507	32	22	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	None	-	None
Storage Length	-	125	-	-	-	0	-
Veh in Median Storage, #	-	-	0	0	-	0	-
Grade, %	-	-	0	0	-	0	-
Peak Hour Factor	92	96	96	96	96	96	96
Heavy Vehicles, %	2	1	1	1	1	1	1
Mvmt Flow	10	21	656	528	33	23	36

Major/Minor	Major1		Major2		Minor2		
Conflicting Flow All	561	561	0	-	0	935	281
Stage 1	-	-	-	-	-	545	-
Stage 2	-	-	-	-	-	390	-
Critical Hdwy	6.44	4.12	-	-	-	6.82	6.92
Critical Hdwy Stg 1	-	-	-	-	-	5.82	-
Critical Hdwy Stg 2	-	-	-	-	-	5.82	-
Follow-up Hdwy	2.52	2.21	-	-	-	3.51	3.31
Pot Cap-1 Maneuver	633	1013	-	-	-	266	719
Stage 1	-	-	-	-	-	548	-
Stage 2	-	-	-	-	-	656	-
Platoon blocked, %			-	-	-		
Mov Cap-1 Maneuver	832	832	-	-	-	256	719
Mov Cap-2 Maneuver	-	-	-	-	-	256	-
Stage 1	-	-	-	-	-	528	-
Stage 2	-	-	-	-	-	656	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	14.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	832	-	-	-	423
HCM Lane V/C Ratio	0.037	-	-	-	0.14
HCM Control Delay (s)	9.5	-	-	-	14.9
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5

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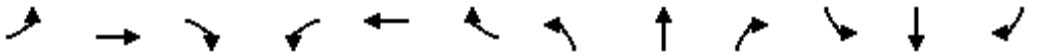

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	427	196	58	322	20	195	70	92	29	74	19
Future Volume (vph)	31	427	196	58	322	20	195	70	92	29	74	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		175	75		0	250		0	75		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99		0.95	0.99	1.00		0.99	0.97		0.98	0.99	
Frt			0.850		0.991			0.915			0.970	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	1881	1599	1787	3531	0	1787	1665	0	1787	1811	0
Flt Permitted	0.513			0.262			0.473			0.647		
Satd. Flow (perm)	951	1881	1513	489	3531	0	880	1665	0	1193	1811	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			211		9			74			12	
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		601			545			558			730	
Travel Time (s)		10.2			9.3			10.9			14.2	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Confl. Bikes (#/hr)			10			10			10			10
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	33	459	211	62	346	22	210	75	99	31	80	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	33	459	211	62	368	0	210	174	0	31	100	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Detector Phase	5	2	2	1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	9.5	40.5	40.5	10.0	41.0		17.0	30.0		9.5	22.5	
Total Split (%)	10.6%	45.0%	45.0%	11.1%	45.6%		18.9%	33.3%		10.6%	25.0%	
Maximum Green (s)	5.0	36.0	36.0	5.5	36.5		12.5	25.5		5.0	18.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lag	Lead	Lead	Lag	Lead		Lead	Lag		Lead	Lag	

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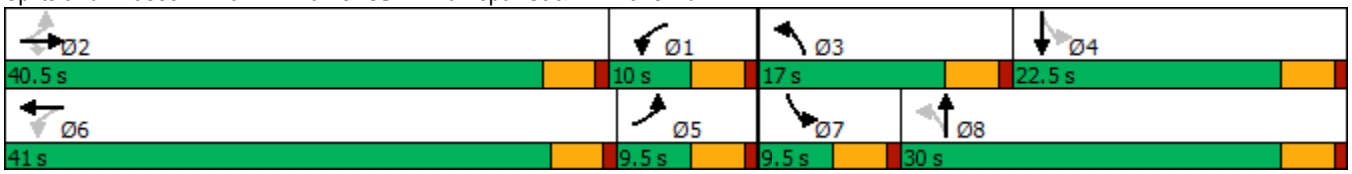
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	Min	Min	None	Min		None	None		None	None	
Walk Time (s)		7.0	7.0		7.0			7.0			7.0	
Flash Dont Walk (s)		11.0	11.0		11.0			11.0			11.0	
Pedestrian Calls (#/hr)		10	10		10			10			10	
Act Effct Green (s)	28.6	23.3	23.3	26.2	20.7		21.6	18.8		13.5	10.0	
Actuated g/C Ratio	0.47	0.39	0.39	0.43	0.34		0.36	0.31		0.22	0.17	
v/c Ratio	0.06	0.63	0.30	0.18	0.30		0.44	0.31		0.10	0.32	
Control Delay	11.7	22.5	4.0	14.5	20.9		19.0	14.5		17.0	28.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	11.7	22.5	4.0	14.5	20.9		19.0	14.5		17.0	28.0	
LOS	B	C	A	B	C		B	B		B	C	
Approach Delay		16.5			20.0			17.0			25.4	
Approach LOS		B			B			B			C	
Queue Length 50th (ft)	9	156	0	12	39		57	26		8	32	
Queue Length 95th (ft)	23	304	41	37	141		135	97		28	87	
Internal Link Dist (ft)		521			465			478			650	
Turn Bay Length (ft)	125		175	75			250			75		
Base Capacity (vph)	594	1213	1050	351	2302		575	867		325	645	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.06	0.38	0.20	0.18	0.16		0.37	0.20		0.10	0.16	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 60.4			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay: 18.2		Intersection LOS: B	
Intersection Capacity Utilization 60.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 10: NW Parker St/NW Larkspur St & NW Lake Rd



Intersection	
Int Delay, s/veh	2.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	474	24	56	313	42	89
Future Vol, veh/h	474	24	56	313	42	89
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	75	-	100	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	1	1	1	1	2	2
Mvmt Flow	489	25	58	323	43	92

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	514	0	928	489
Stage 1	-	-	-	-	489	-
Stage 2	-	-	-	-	439	-
Critical Hdwy	-	-	4.11	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.209	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1057	-	297	579
Stage 1	-	-	-	-	616	-
Stage 2	-	-	-	-	650	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1057	-	281	579
Mov Cap-2 Maneuver	-	-	-	-	281	-
Stage 1	-	-	-	-	616	-
Stage 2	-	-	-	-	614	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.3	14.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	281	579	-	-	1057	-
HCM Lane V/C Ratio	0.154	0.158	-	-	0.055	-
HCM Control Delay (s)	20.1	12.4	-	-	8.6	-
HCM Lane LOS	C	B	-	-	A	-
HCM 95th %tile Q(veh)	0.5	0.6	-	-	0.2	-

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MOVEMENT SUMMARY

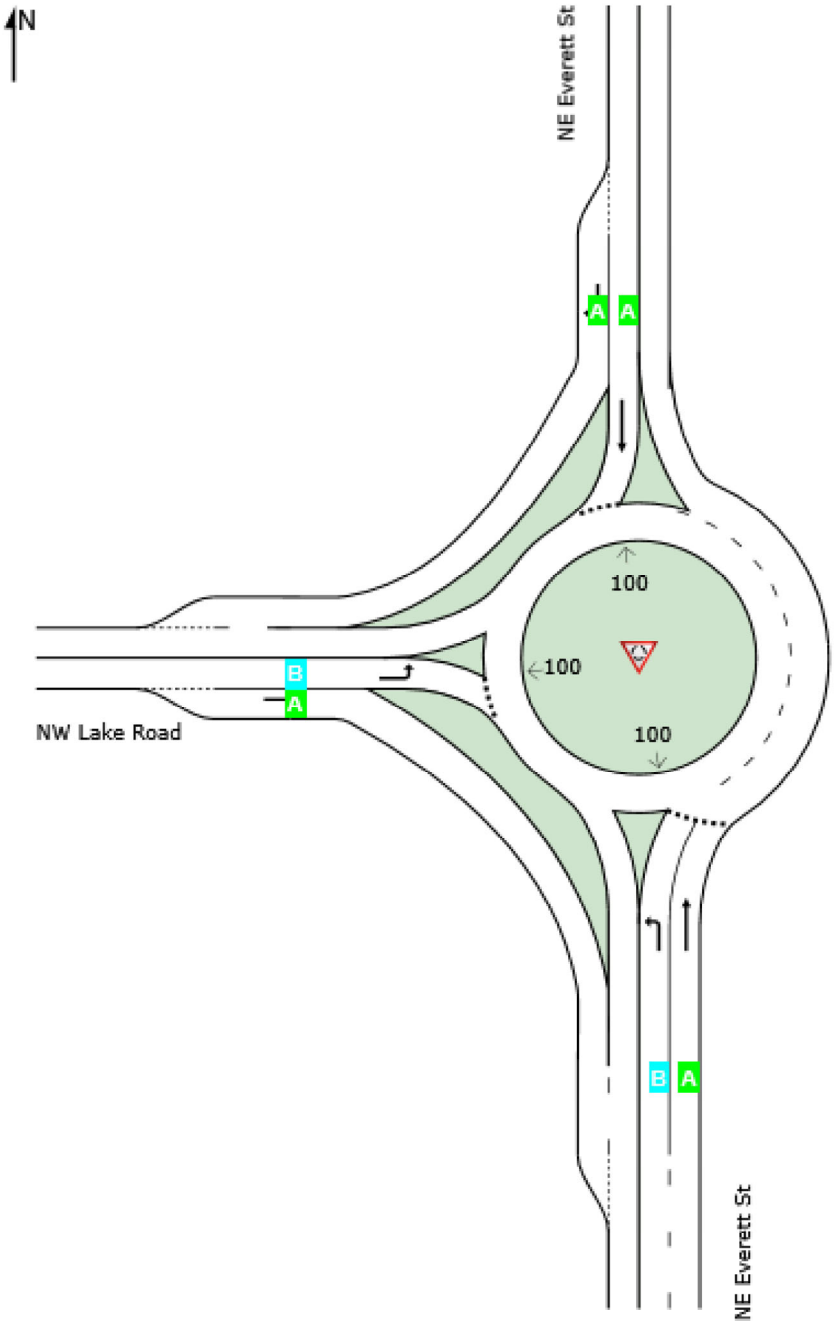
Site: 101 [Site1 (Site Folder: General)]

Existing PM Peak Hour
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: NE Everett St														
3	L2	222	1.0	252	1.0	0.237	11.4	LOS B	1.5	36.6	0.52	0.69	0.52	33.7
8	T1	318	1.0	361	1.0	0.282	5.2	LOS A	1.9	47.3	0.52	0.51	0.52	36.3
Approach		540	1.0	614	1.0	0.282	7.7	LOS A	1.9	47.3	0.52	0.58	0.52	35.2
North: NE Everett St														
4	T1	255	1.0	290	1.0	0.220	4.9	LOS A	1.4	35.1	0.46	0.48	0.46	36.5
14	R2	236	1.0	268	1.0	0.162	4.1	LOS A	0.0	0.0	0.00	0.45	0.00	37.2
Approach		491	1.0	558	1.0	0.220	4.5	LOS A	1.4	35.1	0.24	0.46	0.24	36.8
West: NW Lake Road														
5	L2	261	1.0	297	1.0	0.230	11.0	LOS B	1.5	36.7	0.49	0.67	0.49	33.8
12	R2	327	1.0	372	1.0	0.224	4.3	LOS A	0.0	0.0	0.00	0.44	0.00	37.2
Approach		588	1.0	668	1.0	0.230	7.2	LOS A	1.5	36.7	0.22	0.54	0.22	35.6
All Vehicles		1619	1.0	1840	1.0	0.282	6.6	LOS A	1.9	47.3	0.33	0.53	0.33	35.8

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.



Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used).
Delay Model: SIDRA Standard (Geometric Delay is included).

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Project: Not Saved

Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	102	2	12	103	7	4
Future Vol, veh/h	102	2	12	103	7	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	123	2	14	124	8	5

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	125	0	276	124
Stage 1	-	-	-	-	124	-
Stage 2	-	-	-	-	152	-
Critical Hdwy	-	-	4.11	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	-	-	2.209	-	3.509	3.309
Pot Cap-1 Maneuver	-	-	1468	-	716	929
Stage 1	-	-	-	-	904	-
Stage 2	-	-	-	-	878	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1468	-	709	929
Mov Cap-2 Maneuver	-	-	-	-	727	-
Stage 1	-	-	-	-	904	-
Stage 2	-	-	-	-	869	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.8	9.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	789	-	-	1468	-
HCM Lane V/C Ratio	0.017	-	-	0.01	-
HCM Control Delay (s)	9.6	-	-	7.5	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

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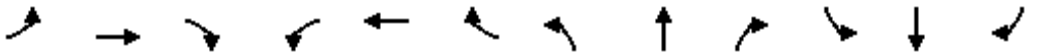

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	99	165	50	305	160	120	86	826	126	182	758	119
Future Volume (vph)	99	165	50	305	160	120	86	826	126	182	758	119
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	300		375	175		0
Storage Lanes	1		0	1		0	2		1	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	0.97	0.95	1.00	0.97	0.95	0.95
Ped Bike Factor		0.99			0.98				0.97		1.00	
Frt		0.965			0.936				0.850		0.980	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3383	0	1787	3295	0	3433	3539	1583	3467	3489	0
Flt Permitted	0.573			0.430			0.950			0.950		
Satd. Flow (perm)	1067	3383	0	809	3295	0	3433	3539	1528	3467	3489	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		35			125				164		20	
Link Speed (mph)		35			40			40			40	
Link Distance (ft)		798			760			812			788	
Travel Time (s)		15.5			13.0			13.8			13.4	
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	1%	1%	1%
Adj. Flow (vph)	103	172	52	318	167	125	90	860	131	190	790	124
Shared Lane Traffic (%)												
Lane Group Flow (vph)	103	224	0	318	292	0	90	860	131	190	914	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8					2			
Detector Phase	7	4		3	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5	22.5	9.5	22.5	
Total Split (s)	11.1	22.5		24.2	35.6		11.0	38.7	38.7	14.6	42.3	
Total Split (%)	11.1%	22.5%		24.2%	35.6%		11.0%	38.7%	38.7%	14.6%	42.3%	
Maximum Green (s)	6.6	18.0		19.7	31.1		6.5	34.2	34.2	10.1	37.8	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lead	Lead	Lag	Lag	

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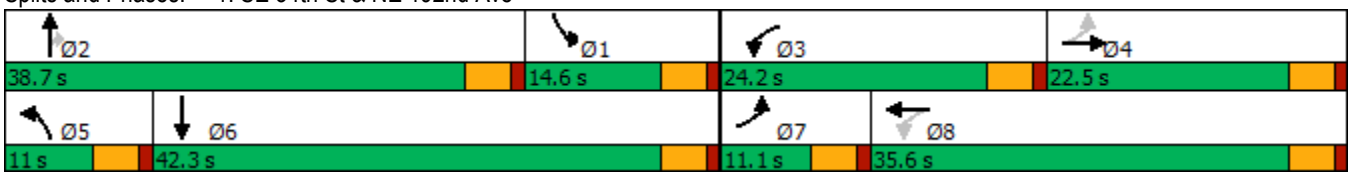
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	Min	Min	None	Min	
Walk Time (s)		7.0			7.0			7.0	7.0		7.0	
Flash Dont Walk (s)		11.0			11.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)		10			10			10	10		10	
Act Effct Green (s)	17.5	10.8		31.0	22.5		6.6	26.1	26.1	9.2	31.6	
Actuated g/C Ratio	0.22	0.13		0.39	0.28		0.08	0.33	0.33	0.11	0.39	
v/c Ratio	0.35	0.46		0.64	0.29		0.32	0.75	0.22	0.48	0.66	
Control Delay	22.6	32.0		25.7	15.0		43.3	29.5	3.0	41.0	23.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	22.6	32.0		25.7	15.0		43.3	29.5	3.0	41.0	23.9	
LOS	C	C		C	B		D	C	A	D	C	
Approach Delay		29.0			20.6			27.4			26.8	
Approach LOS		C			C			C			C	
Queue Length 50th (ft)	34	47		120	35		22	201	0	47	198	
Queue Length 95th (ft)	74	91		213	73		54	319	24	96	319	
Internal Link Dist (ft)		718			680			732			708	
Turn Bay Length (ft)	150			150			300		375	175		
Base Capacity (vph)	294	814		560	1399		288	1565	767	452	1715	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.35	0.28		0.57	0.21		0.31	0.55	0.17	0.42	0.53	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 80.3			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay: 26.0		Intersection LOS: C	
Intersection Capacity Utilization 69.8%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 1: SE 34th St & NE 192nd Ave



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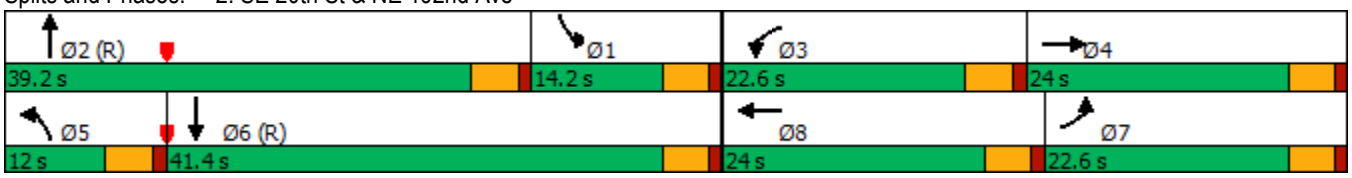
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	170	188	63	190	196	125	101	869	115	134	820	141
Future Volume (vph)	170	188	63	190	196	125	101	869	115	134	820	141
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	100		0	350		0	400		0
Storage Lanes	2		0	2		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	1.00	1.00	0.97	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor		0.99			0.98			0.99			0.99	
Frt		0.962			0.941			0.982			0.978	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3467	1792	0	3467	1743	0	1770	3452	0	1787	3471	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3467	1792	0	3467	1743	0	1770	3452	0	1787	3471	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15			29			16			22	
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1025			1210			957			1224	
Travel Time (s)		17.5			20.6			16.3			20.9	
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	2%	2%	2%	1%	1%	1%
Adj. Flow (vph)	179	198	66	200	206	132	106	915	121	141	863	148
Shared Lane Traffic (%)												
Lane Group Flow (vph)	179	264	0	200	338	0	106	1036	0	141	1011	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	22.6	24.0		22.6	24.0		12.0	39.2		14.2	41.4	
Total Split (%)	22.6%	24.0%		22.6%	24.0%		12.0%	39.2%		14.2%	41.4%	
Maximum Green (s)	18.1	19.5		18.1	19.5		7.5	34.7		9.7	36.9	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lag	Lag		Lead	Lead		Lead	Lead		Lag	Lag	

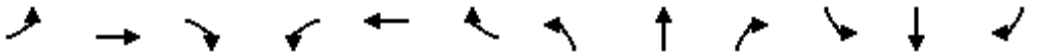
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	10	10		10	10			10			10	
Act Effct Green (s)	12.2	19.9		11.8	19.5		9.8	40.1		10.2	40.4	
Actuated g/C Ratio	0.12	0.20		0.12	0.20		0.10	0.40		0.10	0.40	
v/c Ratio	0.42	0.72		0.49	0.93		0.61	0.74		0.78	0.71	
Control Delay	42.8	47.4		44.6	69.9		59.9	30.1		72.7	28.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	42.8	47.4		44.6	69.9		59.9	30.1		72.7	28.6	
LOS	D	D		D	E		E	C		E	C	
Approach Delay		45.5			60.5			32.9			34.0	
Approach LOS		D			E			C			C	
Queue Length 50th (ft)	56	151		62	197		64	277		90	279	
Queue Length 95th (ft)	82	#259		91	#367		#161	#408		#194	372	
Internal Link Dist (ft)		945			1130			877			1144	
Turn Bay Length (ft)	150			100			350			400		
Base Capacity (vph)	627	373		627	367		174	1394		183	1416	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.29	0.71		0.32	0.92		0.61	0.74		0.77	0.71	

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.93
Intersection Signal Delay: 39.5 Intersection LOS: D
Intersection Capacity Utilization 73.4% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: SE 20th St & NE 192nd Ave





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	59	63	32	52	102	42	1105	27	45	1105	92
Future Volume (vph)	90	59	63	32	52	102	42	1105	27	45	1105	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	125		100	175		0	475		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.923				0.850		0.996			0.988	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	1736	0	1787	1881	1599	1770	3525	0	1787	3531	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1787	1736	0	1787	1881	1599	1770	3525	0	1787	3531	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		50				164		3			11	
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		507			479			1224			918	
Travel Time (s)		9.9			9.3			20.9			15.6	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	2%	2%	2%	1%	1%	1%
Adj. Flow (vph)	92	60	64	33	53	104	43	1128	28	46	1128	94
Shared Lane Traffic (%)												
Lane Group Flow (vph)	92	124	0	33	53	104	43	1156	0	46	1222	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA	pt+ov	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8	8 1	5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8	8 1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	16.4	28.2		10.8	22.6		11.4	49.6		11.4	49.6	
Total Split (%)	16.4%	28.2%		10.8%	22.6%		11.4%	49.6%		11.4%	49.6%	
Maximum Green (s)	11.9	23.7		6.3	18.1		6.9	45.1		6.9	45.1	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Min		None	Min	

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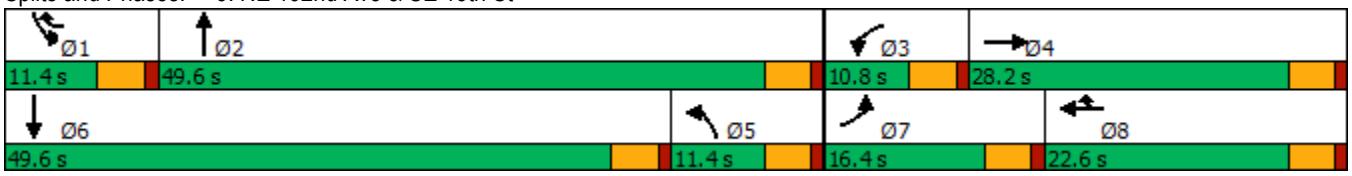
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		10			10			10			10	
Act Effct Green (s)	9.8	14.4		6.8	9.4	17.5	7.2	40.5		7.2	42.8	
Actuated g/C Ratio	0.13	0.20		0.09	0.13	0.24	0.10	0.56		0.10	0.59	
v/c Ratio	0.38	0.32		0.20	0.22	0.20	0.25	0.59		0.26	0.59	
Control Delay	40.5	22.1		42.4	36.2	1.8	42.5	18.3		42.7	17.1	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	40.5	22.1		42.4	36.2	1.8	42.5	18.3		42.7	17.1	
LOS	D	C		D	D	A	D	B		D	B	
Approach Delay		29.9			18.5			19.2			18.1	
Approach LOS		C			B			B			B	
Queue Length 50th (ft)	41	32		15	24	0	20	226		21	245	
Queue Length 95th (ft)	106	87		52	63	10	62	386		65	415	
Internal Link Dist (ft)		427			399			1144			838	
Turn Bay Length (ft)	125			125		100	175			475		
Base Capacity (vph)	335	681		177	537	605	193	2289		194	2295	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.27	0.18		0.19	0.10	0.17	0.22	0.51		0.24	0.53	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 72.6			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.59			
Intersection Signal Delay: 19.5		Intersection LOS: B	
Intersection Capacity Utilization 59.8%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 3: NE 192nd Ave & SE 15th St



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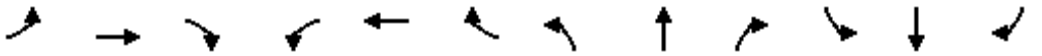

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	288	32	297	36	27	40	325	816	55	51	744	202
Future Volume (vph)	288	32	297	36	27	40	325	816	55	51	744	202
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		200	100		0	200		0	150		0
Storage Lanes	1		1	1		0	2		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor			0.97		0.98			1.00			0.99	
Frt			0.850		0.910			0.991			0.968	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	1881	1599	1752	1638	0	3433	3495	0	1787	3434	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1787	1881	1546	1752	1638	0	3433	3495	0	1787	3434	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			130		42			8			37	
Link Speed (mph)		40			25			40			40	
Link Distance (ft)		504			806			810			686	
Travel Time (s)		8.6			22.0			13.8			11.7	
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			10
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	1%	1%	1%	3%	3%	3%	2%	2%	2%	1%	1%	1%
Adj. Flow (vph)	300	33	309	38	28	42	339	850	57	53	775	210
Shared Lane Traffic (%)												
Lane Group Flow (vph)	300	33	309	38	70	0	339	907	0	53	985	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	5	3	8		5	2		1	6	
Permitted Phases			4									
Detector Phase	7	4	5	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5	9.5	9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	24.0	35.5	16.0	11.0	22.5		16.0	43.5		10.0	37.5	
Total Split (%)	24.0%	35.5%	16.0%	11.0%	22.5%		16.0%	43.5%		10.0%	37.5%	
Maximum Green (s)	19.5	31.0	11.5	6.5	18.0		11.5	39.0		5.5	33.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lag	Lag	Lag	Lead	Lead		Lag	Lag		Lead	Lead	

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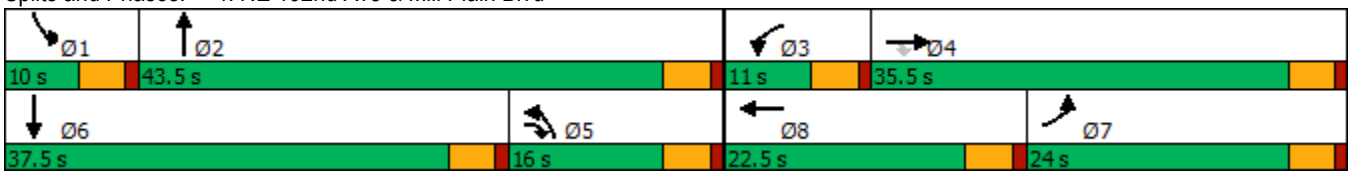
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Min		None	Min	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		10			10			10			10	
Act Effct Green (s)	18.1	22.5	34.0	6.4	8.6		11.5	37.8		5.7	29.1	
Actuated g/C Ratio	0.22	0.27	0.41	0.08	0.10		0.14	0.45		0.07	0.35	
v/c Ratio	0.77	0.06	0.43	0.28	0.34		0.72	0.57		0.43	0.80	
Control Delay	48.2	25.5	8.9	47.0	23.3		47.0	20.8		54.2	30.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	48.2	25.5	8.9	47.0	23.3		47.0	20.8		54.2	30.7	
LOS	D	C	A	D	C		D	C		D	C	
Approach Delay		28.1			31.6			27.9			31.9	
Approach LOS		C			C			C			C	
Queue Length 50th (ft)	156	14	49	20	15		94	194		29	241	
Queue Length 95th (ft)	#333	37	97	57	54		#186	313		#85	#384	
Internal Link Dist (ft)		424			726			730			606	
Turn Bay Length (ft)	250		200	100			200			150		
Base Capacity (vph)	436	730	725	142	401		494	1710		123	1440	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.69	0.05	0.43	0.27	0.17		0.69	0.53		0.43	0.68	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 83.1			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay: 29.5		Intersection LOS: C	
Intersection Capacity Utilization 70.4%		ICU Level of Service C	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: NE 192nd Ave & Mill Plain Blvd

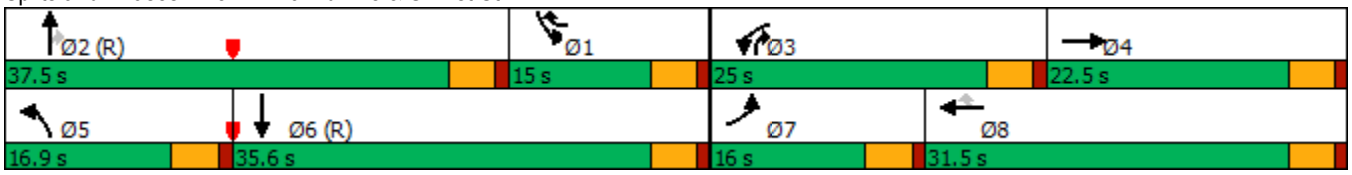


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	224	293	73	450	300	84	99	752	381	86	462	108
Future Volume (vph)	224	293	73	450	300	84	99	752	381	86	462	108
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	250		250	175		175	250		0
Storage Lanes	2		0	2		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	0.95	0.97	1.00	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor		0.99				0.97			0.97		0.99	
Frt		0.970				0.850			0.850		0.972	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3467	3439	0	3467	1881	1599	1787	3574	1599	1787	3443	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3467	3439	0	3467	1881	1544	1787	3574	1547	1787	3443	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		27				115			190		29	
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		844			1324			866			732	
Travel Time (s)		14.4			22.6			14.8			12.5	
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	238	312	78	479	319	89	105	800	405	91	491	115
Shared Lane Traffic (%)												
Lane Group Flow (vph)	238	390	0	479	319	89	105	800	405	91	606	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	
Protected Phases	7	4		3	8	1	5	2	3	1	6	
Permitted Phases						8			2			
Detector Phase	7	4		3	8	1	5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5	9.5	9.5	22.5	9.5	9.5	22.5	
Total Split (s)	16.0	22.5		25.0	31.5	15.0	16.9	37.5	25.0	15.0	35.6	
Total Split (%)	16.0%	22.5%		25.0%	31.5%	15.0%	16.9%	37.5%	25.0%	15.0%	35.6%	
Maximum Green (s)	11.5	18.0		20.5	27.0	10.5	12.4	33.0	20.5	10.5	31.1	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None	None	None	C-Min	None	None	C-Min	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		10			10			10			10	
Act Effct Green (s)	10.9	15.4		18.4	22.8	32.4	10.6	38.7	57.1	9.6	40.0	
Actuated g/C Ratio	0.11	0.15		0.18	0.23	0.32	0.11	0.39	0.57	0.10	0.40	
v/c Ratio	0.63	0.71		0.75	0.74	0.15	0.56	0.58	0.42	0.54	0.44	
Control Delay	50.4	44.5		46.5	46.6	1.8	53.6	27.7	4.8	54.5	24.3	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	50.4	44.5		46.5	46.6	1.8	53.6	27.7	4.8	54.5	24.3	
LOS	D	D		D	D	A	D	C	A	D	C	
Approach Delay		46.7			42.0			22.7			28.2	
Approach LOS		D			D			C			C	
Queue Length 50th (ft)	74	116		147	188	0	64	218	33	56	149	
Queue Length 95th (ft)	115	163		201	272	13	117	297	66	107	216	
Internal Link Dist (ft)		764			1244			786			652	
Turn Bay Length (ft)	250			250		250	175		175	250		
Base Capacity (vph)	402	641		710	507	600	223	1387	1003	191	1393	
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.59	0.61		0.67	0.63	0.15	0.47	0.58	0.40	0.48	0.44	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay: 32.9		Intersection LOS: C	
Intersection Capacity Utilization 65.3%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 5: NE 192nd Ave & SE 1st St

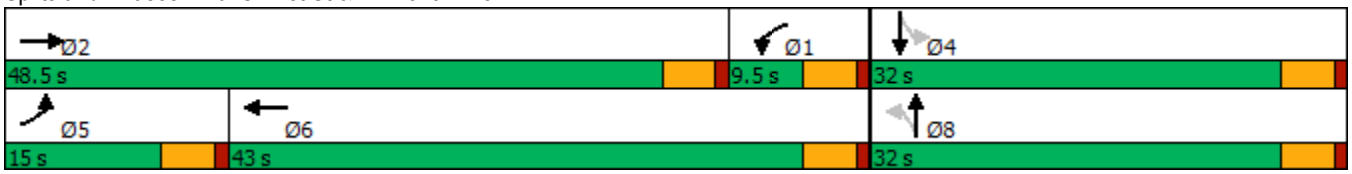


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	54	799	2	0	590	66	2	0	0	170	0	46
Future Volume (vph)	54	799	2	0	590	66	2	0	0	170	0	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175		0	150		0	40		0	200		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			0.99						0.96	
Frt					0.985						0.850	
Flt Protected	0.950						0.950			0.950		
Satd. Flow (prot)	1787	3574	0	1881	3502	0	1787	1881	0	1787	1528	0
Flt Permitted	0.950						0.725			0.757		
Satd. Flow (perm)	1787	3574	0	1881	3502	0	1364	1881	0	1424	1528	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					16						371	
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		1324			632			136			474	
Travel Time (s)		22.6			10.8			3.7			12.9	
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	57	850	2	0	628	70	2	0	0	181	0	49
Shared Lane Traffic (%)												
Lane Group Flow (vph)	57	852	0	0	698	0	2	0	0	181	49	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA		Perm			Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	15.0	48.5		9.5	43.0		32.0	32.0		32.0	32.0	
Total Split (%)	16.7%	53.9%		10.6%	47.8%		35.6%	35.6%		35.6%	35.6%	
Maximum Green (s)	10.5	44.0		5.0	38.5		27.5	27.5		27.5	27.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lead		Lag	Lag							

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	Min		None	Min		None	None		None	None	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		10			10		10	10		10	10	
Act Effct Green (s)	7.5	28.2			21.4		12.4			12.4	12.4	
Actuated g/C Ratio	0.15	0.56			0.43		0.25			0.25	0.25	
v/c Ratio	0.21	0.42			0.46		0.01			0.51	0.07	
Control Delay	24.2	7.2			13.6		16.5			23.4	0.2	
Queue Delay	0.0	0.0			0.0		0.0			0.0	0.0	
Total Delay	24.2	7.2			13.6		16.5			23.4	0.2	
LOS	C	A			B		B			C	A	
Approach Delay		8.3			13.6			16.5			18.4	
Approach LOS		A			B			B			B	
Queue Length 50th (ft)	14	60			81		1			44	0	
Queue Length 95th (ft)	51	125			162		5			117	0	
Internal Link Dist (ft)		1244			552			56			394	
Turn Bay Length (ft)	175						40			200		
Base Capacity (vph)	393	3104			2775		786			821	1038	
Starvation Cap Reductn	0	0			0		0			0	0	
Spillback Cap Reductn	0	0			0		0			0	0	
Storage Cap Reductn	0	0			0		0			0	0	
Reduced v/c Ratio	0.15	0.27			0.25		0.00			0.22	0.05	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 50.1			
Natural Cycle: 55			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.51			
Intersection Signal Delay: 11.6		Intersection LOS: B	
Intersection Capacity Utilization 53.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 6: SE 1st St & NE 197th Ave



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Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	936	27	32	626	21	28
Future Vol, veh/h	936	27	32	626	21	28
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	75
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	996	29	34	666	22	30

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1025	0	1412	513
Stage 1	-	-	-	-	1011	-
Stage 2	-	-	-	-	401	-
Critical Hdwy	-	-	4.12	-	6.82	6.92
Critical Hdwy Stg 1	-	-	-	-	5.82	-
Critical Hdwy Stg 2	-	-	-	-	5.82	-
Follow-up Hdwy	-	-	2.21	-	3.51	3.31
Pot Cap-1 Maneuver	-	-	679	-	130	509
Stage 1	-	-	-	-	315	-
Stage 2	-	-	-	-	648	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	679	-	124	509
Mov Cap-2 Maneuver	-	-	-	-	124	-
Stage 1	-	-	-	-	315	-
Stage 2	-	-	-	-	616	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	24.4
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	124	509	-	-	679	-
HCM Lane V/C Ratio	0.18	0.059	-	-	0.05	-
HCM Control Delay (s)	40.3	12.5	-	-	10.6	-
HCM Lane LOS	E	B	-	-	B	-
HCM 95th %tile Q(veh)	0.6	0.2	-	-	0.2	-

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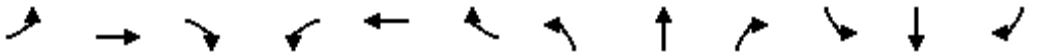

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	310	655	0	1	521	92	2	0	0	80	0	135
Future Volume (vph)	310	655	0	1	521	92	2	0	0	80	0	135
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	150		0	0		0	0		150
Storage Lanes	1		0	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					0.99							0.97
Frt					0.977							0.850
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1787	3574	0	1787	3463	0	0	1787	0	0	1787	1599
Flt Permitted	0.950			0.950				0.701			0.757	
Satd. Flow (perm)	1787	3574	0	1787	3463	0	0	1319	0	0	1424	1556
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					23							96
Link Speed (mph)		40			40			25			40	
Link Distance (ft)		687			911			123			618	
Travel Time (s)		11.7			15.5			3.4			10.5	
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	333	704	0	1	560	99	2	0	0	86	0	145
Shared Lane Traffic (%)												
Lane Group Flow (vph)	333	704	0	1	659	0	0	2	0	0	86	145
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	5	2		1	6			8			4	5
Permitted Phases							8			4		4
Detector Phase	5	2		1	6		8	8		4	4	5
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.5	22.5		9.5	22.5		22.5	22.5		22.5	22.5	9.5
Total Split (s)	34.0	57.0		10.0	33.0		23.0	23.0		23.0	23.0	34.0
Total Split (%)	37.8%	63.3%		11.1%	36.7%		25.6%	25.6%		25.6%	25.6%	37.8%
Maximum Green (s)	29.5	52.5		5.5	28.5		18.5	18.5		18.5	18.5	29.5
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5			4.5	4.5
Lead/Lag	Lead	Lag		Lead	Lag							Lead

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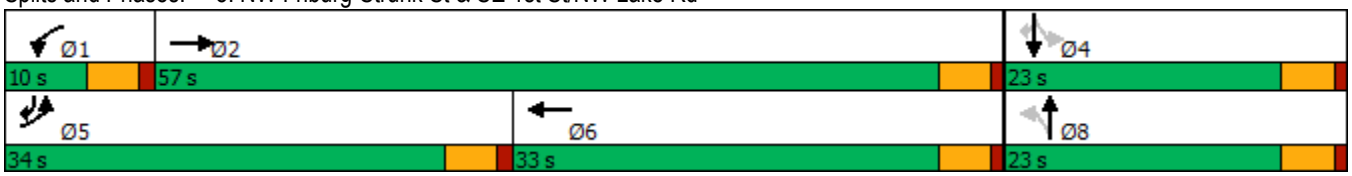
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	Min		None	Min		None	None		None	None	None
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		10			10		10	10		10	10	
Act Effct Green (s)	17.3	41.1		6.4	17.9			10.3			10.3	25.1
Actuated g/C Ratio	0.30	0.72		0.11	0.31			0.18			0.18	0.44
v/c Ratio	0.61	0.27		0.00	0.60			0.01			0.33	0.19
Control Delay	25.2	5.4		34.0	20.4			26.0			29.2	4.0
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	0.0
Total Delay	25.2	5.4		34.0	20.4			26.0			29.2	4.0
LOS	C	A		C	C			C			C	A
Approach Delay		11.7			20.4			26.0			13.4	
Approach LOS		B			C			C			B	
Queue Length 50th (ft)	95	38		0	93			1			26	7
Queue Length 95th (ft)	238	133		6	210			7			83	35
Internal Link Dist (ft)		607			831			43			538	
Turn Bay Length (ft)	250			150								150
Base Capacity (vph)	1043	3097		202	1986			502			542	1175
Starvation Cap Reductn	0	0		0	0			0			0	0
Spillback Cap Reductn	0	0		0	0			0			0	0
Storage Cap Reductn	0	0		0	0			0			0	0
Reduced v/c Ratio	0.32	0.23		0.00	0.33			0.00			0.16	0.12

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 56.9			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay: 14.9		Intersection LOS: B	
Intersection Capacity Utilization 53.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 8: NW Friburg-Strunk St & SE 1st St/NW Lake Rd



Intersection	
Int Delay, s/veh	0.9

Movement	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Vol, veh/h	10	22	688	554	35	24	38
Future Vol, veh/h	10	22	688	554	35	24	38
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	None	-	None
Storage Length	-	125	-	-	-	0	-
Veh in Median Storage, #	-	-	0	0	-	0	-
Grade, %	-	-	0	0	-	0	-
Peak Hour Factor	92	96	96	96	96	96	96
Heavy Vehicles, %	2	1	1	1	1	1	1
Mvmt Flow	11	23	717	577	36	25	40

Major/Minor	Major1			Major2		Minor2	
Conflicting Flow All	614	613	0	-	0	1022	307
Stage 1	-	-	-	-	-	595	-
Stage 2	-	-	-	-	-	427	-
Critical Hdwy	6.44	4.12	-	-	-	6.82	6.92
Critical Hdwy Stg 1	-	-	-	-	-	5.82	-
Critical Hdwy Stg 2	-	-	-	-	-	5.82	-
Follow-up Hdwy	2.52	2.21	-	-	-	3.51	3.31
Pot Cap-1 Maneuver	586	969	-	-	-	234	692
Stage 1	-	-	-	-	-	517	-
Stage 2	-	-	-	-	-	629	-
Platoon blocked, %			-	-	-		
Mov Cap-1 Maneuver	781	781	-	-	-	224	692
Mov Cap-2 Maneuver	-	-	-	-	-	224	-
Stage 1	-	-	-	-	-	494	-
Stage 2	-	-	-	-	-	629	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	16.3
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	781	-	-	-	383
HCM Lane V/C Ratio	0.043	-	-	-	0.169
HCM Control Delay (s)	9.8	-	-	-	16.3
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.6

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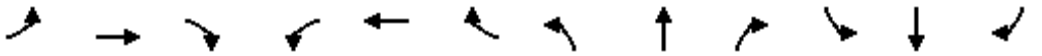

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	34	467	214	63	352	22	213	76	101	32	81	21
Future Volume (vph)	34	467	214	63	352	22	213	76	101	32	81	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		175	75		0	250		0	75		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99		0.95	0.99	1.00		0.99	0.97		0.98	0.99	
Frt			0.850		0.991			0.914			0.969	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	1881	1599	1787	3531	0	1787	1663	0	1787	1809	0
Flt Permitted	0.484			0.217			0.470			0.637		
Satd. Flow (perm)	898	1881	1514	405	3531	0	874	1663	0	1175	1809	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			230		9			74			13	
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		601			545			558			730	
Travel Time (s)		10.2			9.3			10.9			14.2	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Confl. Bikes (#/hr)			10			10			10			10
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	37	502	230	68	378	24	229	82	109	34	87	23
Shared Lane Traffic (%)												
Lane Group Flow (vph)	37	502	230	68	402	0	229	191	0	34	110	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Detector Phase	5	2	2	1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	9.5	41.3	41.3	9.8	41.6		16.4	29.4		9.5	22.5	
Total Split (%)	10.6%	45.9%	45.9%	10.9%	46.2%		18.2%	32.7%		10.6%	25.0%	
Maximum Green (s)	5.0	36.8	36.8	5.3	37.1		11.9	24.9		5.0	18.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lag	Lead	Lead	Lag	Lead		Lead	Lag		Lead	Lag	

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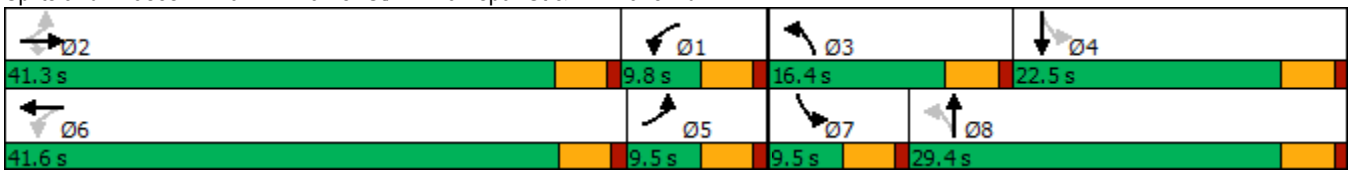
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	Min	Min	None	Min		None	None		None	None	
Walk Time (s)		7.0	7.0		7.0			7.0			7.0	
Flash Dont Walk (s)		11.0	11.0		11.0			11.0			11.0	
Pedestrian Calls (#/hr)		10	10		10			10			10	
Act Effct Green (s)	29.6	24.3	24.3	27.0	21.6		22.2	19.3		13.9	10.5	
Actuated g/C Ratio	0.48	0.39	0.39	0.44	0.35		0.36	0.31		0.22	0.17	
v/c Ratio	0.06	0.68	0.31	0.21	0.33		0.48	0.34		0.11	0.35	
Control Delay	11.6	23.5	3.9	15.9	20.6		20.4	15.8		17.6	28.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	11.6	23.5	3.9	15.9	20.6		20.4	15.8		17.6	28.9	
LOS	B	C	A	B	C		C	B		B	C	
Approach Delay		17.1			19.9			18.3			26.2	
Approach LOS		B			B			B			C	
Queue Length 50th (ft)	10	182	0	14	46		68	33		9	38	
Queue Length 95th (ft)	25	335	42	39	148		148	111		31	94	
Internal Link Dist (ft)		521			465			478			650	
Turn Bay Length (ft)	125		175	75			250			75		
Base Capacity (vph)	580	1196	1046	318	2261		557	844		322	640	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.06	0.42	0.22	0.21	0.18		0.41	0.23		0.11	0.17	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 62			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay: 18.8		Intersection LOS: B	
Intersection Capacity Utilization 63.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 10: NW Parker St/NW Larkspur St & NW Lake Rd



Intersection	
Int Delay, s/veh	2.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	518	26	61	342	46	97
Future Vol, veh/h	518	26	61	342	46	97
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	75	-	100	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	1	1	1	1	2	2
Mvmt Flow	534	27	63	353	47	100

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	561	0	1013	534
Stage 1	-	-	-	-	534	-
Stage 2	-	-	-	-	479	-
Critical Hdwy	-	-	4.11	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.209	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1015	-	265	546
Stage 1	-	-	-	-	588	-
Stage 2	-	-	-	-	623	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1015	-	249	546
Mov Cap-2 Maneuver	-	-	-	-	249	-
Stage 1	-	-	-	-	588	-
Stage 2	-	-	-	-	584	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.3	16.2
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	249	546	-	-	1015	-
HCM Lane V/C Ratio	0.19	0.183	-	-	0.062	-
HCM Control Delay (s)	22.8	13.1	-	-	8.8	-
HCM Lane LOS	C	B	-	-	A	-
HCM 95th %tile Q(veh)	0.7	0.7	-	-	0.2	-

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MOVEMENT SUMMARY

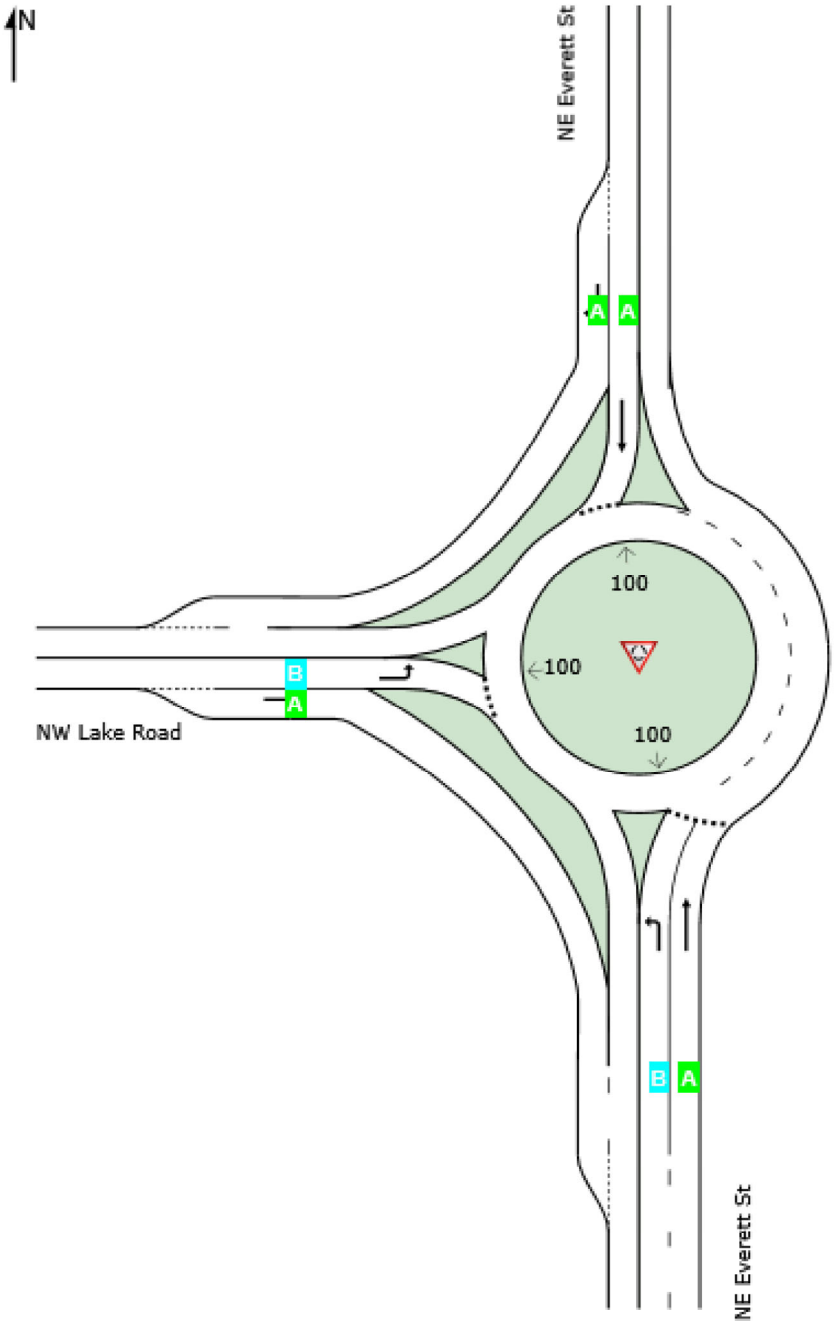
Site: 101 [Site1 (Site Folder: General)]

Forecast 2024 Background PM Peak Hour
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: NE Everett St														
3	L2	243	1.0	276	1.0	0.266	11.6	LOS B	1.7	42.4	0.56	0.71	0.56	33.6
8	T1	347	1.0	394	1.0	0.315	5.3	LOS A	2.2	54.8	0.56	0.53	0.56	36.1
Approach		590	1.0	670	1.0	0.315	7.9	LOS A	2.2	54.8	0.56	0.60	0.56	35.0
North: NE Everett St														
4	T1	279	1.0	317	1.0	0.245	5.0	LOS A	1.6	40.4	0.50	0.50	0.50	36.3
14	R2	258	1.0	293	1.0	0.177	4.2	LOS A	0.0	0.0	0.00	0.45	0.00	37.2
Approach		537	1.0	610	1.0	0.245	4.6	LOS A	1.6	40.4	0.26	0.47	0.26	36.7
West: NW Lake Road														
5	L2	285	1.0	324	1.0	0.257	11.2	LOS B	1.7	42.3	0.53	0.68	0.53	33.7
12	R2	357	1.0	406	1.0	0.245	4.4	LOS A	0.0	0.0	0.00	0.44	0.00	37.2
Approach		642	1.0	730	1.0	0.257	7.4	LOS A	1.7	42.3	0.23	0.55	0.23	35.5
All Vehicles		1769	1.0	2010	1.0	0.315	6.7	LOS A	2.2	54.8	0.35	0.54	0.35	35.7

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.



Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used).
Delay Model: SIDRA Standard (Geometric Delay is included).

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Project: T:\Sidra\4679\2. Forecast 2024 PM Peak Hour Background.sip9

Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	111	2	13	113	8	4
Future Vol, veh/h	111	2	13	113	8	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	134	2	16	136	10	5

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	136	0	303	135
Stage 1	-	-	-	-	135	-
Stage 2	-	-	-	-	168	-
Critical Hdwy	-	-	4.11	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	-	-	2.209	-	3.509	3.309
Pot Cap-1 Maneuver	-	-	1454	-	691	917
Stage 1	-	-	-	-	894	-
Stage 2	-	-	-	-	864	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1454	-	683	917
Mov Cap-2 Maneuver	-	-	-	-	710	-
Stage 1	-	-	-	-	894	-
Stage 2	-	-	-	-	854	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.8	9.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	768	-	-	1454	-
HCM Lane V/C Ratio	0.019	-	-	0.011	-
HCM Control Delay (s)	9.8	-	-	7.5	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

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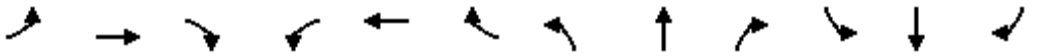

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	102	165	50	305	160	120	86	830	126	182	769	125
Future Volume (vph)	102	165	50	305	160	120	86	830	126	182	769	125
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	300		375	175		0
Storage Lanes	1		0	1		0	2		1	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	0.97	0.95	1.00	0.97	0.95	0.95
Ped Bike Factor		0.99			0.98				0.97		1.00	
Frt		0.965			0.936				0.850		0.979	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3383	0	1787	3295	0	3433	3539	1583	3467	3485	0
Flt Permitted	0.573			0.429			0.950			0.950		
Satd. Flow (perm)	1067	3383	0	807	3295	0	3433	3539	1528	3467	3485	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		35			125				164		21	
Link Speed (mph)		35			40			40			40	
Link Distance (ft)		798			760			812			788	
Travel Time (s)		15.5			13.0			13.8			13.4	
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	1%	1%	1%
Adj. Flow (vph)	106	172	52	318	167	125	90	865	131	190	801	130
Shared Lane Traffic (%)												
Lane Group Flow (vph)	106	224	0	318	292	0	90	865	131	190	931	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8					2			
Detector Phase	7	4		3	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5	22.5	9.5	22.5	
Total Split (s)	11.1	22.5		24.2	35.6		11.0	38.7	38.7	14.6	42.3	
Total Split (%)	11.1%	22.5%		24.2%	35.6%		11.0%	38.7%	38.7%	14.6%	42.3%	
Maximum Green (s)	6.6	18.0		19.7	31.1		6.5	34.2	34.2	10.1	37.8	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lead	Lead	Lag	Lag	

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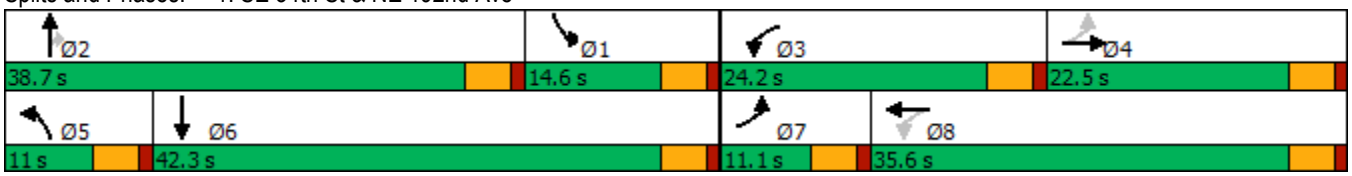
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	Min	Min	None	Min	
Walk Time (s)		7.0			7.0			7.0	7.0		7.0	
Flash Dont Walk (s)		11.0			11.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)		10			10			10	10		10	
Act Effct Green (s)	17.5	10.8		31.0	22.5		6.6	26.3	26.3	9.2	31.8	
Actuated g/C Ratio	0.22	0.13		0.39	0.28		0.08	0.33	0.33	0.11	0.40	
v/c Ratio	0.37	0.46		0.64	0.29		0.32	0.75	0.22	0.48	0.67	
Control Delay	22.9	32.0		25.8	15.0		43.4	29.5	3.0	41.1	24.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	22.9	32.0		25.8	15.0		43.4	29.5	3.0	41.1	24.1	
LOS	C	C		C	B		D	C	A	D	C	
Approach Delay		29.1			20.6			27.5			27.0	
Approach LOS		C			C			C			C	
Queue Length 50th (ft)	35	47		120	35		22	203	0	47	203	
Queue Length 95th (ft)	75	91		213	73		54	321	24	96	327	
Internal Link Dist (ft)		718			680			732			708	
Turn Bay Length (ft)	150			150			300		375	175		
Base Capacity (vph)	294	812		559	1396		288	1561	765	451	1710	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.36	0.28		0.57	0.21		0.31	0.55	0.17	0.42	0.54	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 80.5			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay: 26.1		Intersection LOS: C	
Intersection Capacity Utilization 70.3%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 1: SE 34th St & NE 192nd Ave



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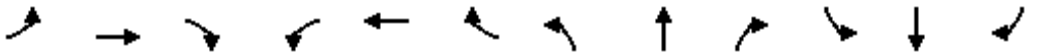

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	170	188	63	190	196	125	101	876	115	134	837	141
Future Volume (vph)	170	188	63	190	196	125	101	876	115	134	837	141
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	100		0	350		0	400		0
Storage Lanes	2		0	2		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	1.00	1.00	0.97	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor		0.99			0.98			0.99			0.99	
Frt		0.962			0.941			0.983			0.978	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3467	1792	0	3467	1743	0	1770	3456	0	1787	3472	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3467	1792	0	3467	1743	0	1770	3456	0	1787	3472	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15			29			16			21	
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		1025			1210			957			1224	
Travel Time (s)		17.5			20.6			16.3			20.9	
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	2%	2%	2%	1%	1%	1%
Adj. Flow (vph)	179	198	66	200	206	132	106	922	121	141	881	148
Shared Lane Traffic (%)												
Lane Group Flow (vph)	179	264	0	200	338	0	106	1043	0	141	1029	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	22.6	24.0		22.6	24.0		12.0	39.2		14.2	41.4	
Total Split (%)	22.6%	24.0%		22.6%	24.0%		12.0%	39.2%		14.2%	41.4%	
Maximum Green (s)	18.1	19.5		18.1	19.5		7.5	34.7		9.7	36.9	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lag	Lag		Lead	Lead		Lead	Lead		Lag	Lag	

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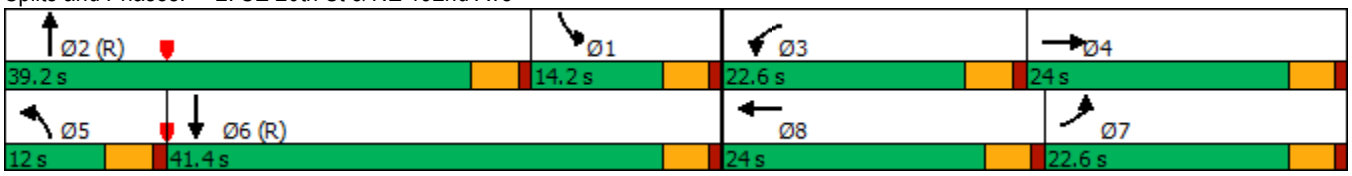
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	10	10		10	10			10			10	
Act Effct Green (s)	12.2	19.9		11.8	19.5		9.8	40.1		10.2	40.5	
Actuated g/C Ratio	0.12	0.20		0.12	0.20		0.10	0.40		0.10	0.40	
v/c Ratio	0.42	0.72		0.49	0.93		0.61	0.75		0.78	0.73	
Control Delay	42.8	47.4		44.6	70.1		59.9	30.2		72.7	29.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	42.8	47.4		44.6	70.1		59.9	30.2		72.7	29.0	
LOS	D	D		D	E		E	C		E	C	
Approach Delay		45.5			60.6			33.0			34.3	
Approach LOS		D			E			C			C	
Queue Length 50th (ft)	56	151		62	197		64	280		90	286	
Queue Length 95th (ft)	82	#259		91	#367		#161	#415		#194	381	
Internal Link Dist (ft)		945			1130			877			1144	
Turn Bay Length (ft)	150			100			350			400		
Base Capacity (vph)	627	372		627	366		174	1396		183	1417	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.29	0.71		0.32	0.92		0.61	0.75		0.77	0.73	

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.93
Intersection Signal Delay: 39.6 Intersection LOS: D
Intersection Capacity Utilization 73.6% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: SE 20th St & NE 192nd Ave



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	59	63	32	52	102	42	1112	27	45	1022	92
Future Volume (vph)	90	59	63	32	52	102	42	1112	27	45	1022	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	125		100	175		0	475		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.923				0.850		0.996			0.988	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	1736	0	1787	1881	1599	1770	3525	0	1787	3531	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1787	1736	0	1787	1881	1599	1770	3525	0	1787	3531	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		50				164		3			12	
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		507			479			1224			918	
Travel Time (s)		9.9			9.3			20.9			15.6	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	2%	2%	2%	1%	1%	1%
Adj. Flow (vph)	92	60	64	33	53	104	43	1135	28	46	1043	94
Shared Lane Traffic (%)												
Lane Group Flow (vph)	92	124	0	33	53	104	43	1163	0	46	1137	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA	pt+ov	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8	8 1	5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8	8 1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	16.6	28.4		10.8	22.6		11.4	49.2		11.6	49.4	
Total Split (%)	16.6%	28.4%		10.8%	22.6%		11.4%	49.2%		11.6%	49.4%	
Maximum Green (s)	12.1	23.9		6.3	18.1		6.9	44.7		7.1	44.9	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Min		None	Min	

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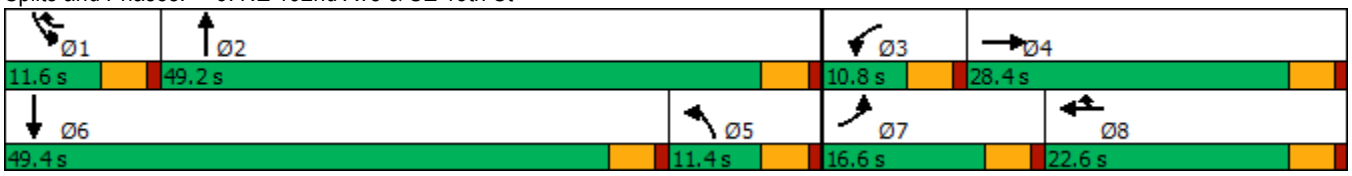
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		10			10			10			10	
Act Effct Green (s)	9.8	14.4		6.8	9.4	17.6	7.4	39.8		7.3	42.0	
Actuated g/C Ratio	0.14	0.20		0.09	0.13	0.24	0.10	0.55		0.10	0.58	
v/c Ratio	0.38	0.32		0.20	0.22	0.20	0.24	0.60		0.25	0.55	
Control Delay	40.0	21.8		42.0	35.8	1.8	41.6	18.7		42.0	16.7	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	40.0	21.8		42.0	35.8	1.8	41.6	18.7		42.0	16.7	
LOS	D	C		D	D	A	D	B		D	B	
Approach Delay		29.5			18.3			19.5			17.7	
Approach LOS		C			B			B			B	
Queue Length 50th (ft)	40	31		15	23	0	19	229		20	222	
Queue Length 95th (ft)	105	87		52	63	10	62	392		65	375	
Internal Link Dist (ft)		427			399			1144			838	
Turn Bay Length (ft)	125			125		100	175			475		
Base Capacity (vph)	344	693		179	543	612	199	2287		202	2301	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.27	0.18		0.18	0.10	0.17	0.22	0.51		0.23	0.49	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 72			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay: 19.4		Intersection LOS: B	
Intersection Capacity Utilization 59.8%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 3: NE 192nd Ave & SE 15th St



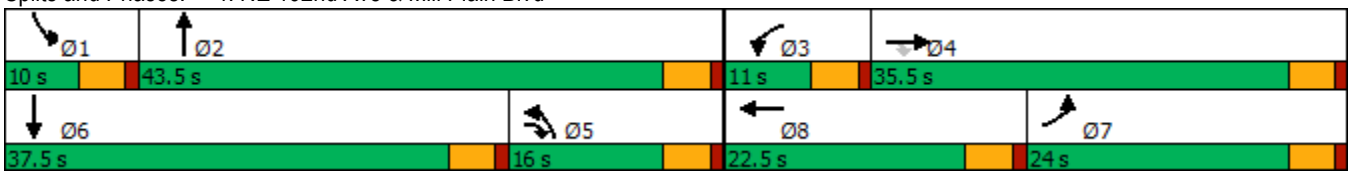
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	306	32	297	36	27	40	325	823	55	51	761	246
Future Volume (vph)	306	32	297	36	27	40	325	823	55	51	761	246
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		200	100		0	200		0	150		0
Storage Lanes	1		1	1		0	2		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor			0.97		0.98			1.00			0.99	
Frt			0.850		0.910			0.991			0.963	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	1881	1599	1752	1638	0	3433	3495	0	1787	3413	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1787	1881	1546	1752	1638	0	3433	3495	0	1787	3413	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			127		42			8			46	
Link Speed (mph)		40			25			40			40	
Link Distance (ft)		504			806			810			686	
Travel Time (s)		8.6			22.0			13.8			11.7	
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			10
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	1%	1%	1%	3%	3%	3%	2%	2%	2%	1%	1%	1%
Adj. Flow (vph)	319	33	309	38	28	42	339	857	57	53	793	256
Shared Lane Traffic (%)												
Lane Group Flow (vph)	319	33	309	38	70	0	339	914	0	53	1049	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	5	3	8		5	2		1	6	
Permitted Phases			4									
Detector Phase	7	4	5	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5	9.5	9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	24.0	35.5	16.0	11.0	22.5		16.0	43.5		10.0	37.5	
Total Split (%)	24.0%	35.5%	16.0%	11.0%	22.5%		16.0%	43.5%		10.0%	37.5%	
Maximum Green (s)	19.5	31.0	11.5	6.5	18.0		11.5	39.0		5.5	33.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lag	Lag	Lag	Lead	Lead		Lag	Lag		Lead	Lead	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	Min		None	Min	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		10			10			10			10	
Act Effct Green (s)	18.9	23.3	34.7	6.4	8.6		11.5	39.2		5.7	30.6	
Actuated g/C Ratio	0.22	0.27	0.41	0.08	0.10		0.13	0.46		0.07	0.36	
v/c Ratio	0.81	0.06	0.43	0.29	0.34		0.74	0.57		0.45	0.84	
Control Delay	51.4	25.7	9.2	47.8	23.5		48.8	20.8		55.7	32.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	51.4	25.7	9.2	47.8	23.5		48.8	20.8		55.7	32.4	
LOS	D	C	A	D	C		D	C		E	C	
Approach Delay		30.4			32.0			28.4			33.5	
Approach LOS		C			C			C			C	
Queue Length 50th (ft)	171	15	51	21	15		96	197		29	263	
Queue Length 95th (ft)	#363	37	98	57	54		#186	316		#85	#448	
Internal Link Dist (ft)		424			726			730			606	
Turn Bay Length (ft)	250		200	100			200			150		
Base Capacity (vph)	420	703	718	136	388		475	1647		118	1385	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.76	0.05	0.43	0.28	0.18		0.71	0.55		0.45	0.76	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 85.3			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 30.7		Intersection LOS: C	
Intersection Capacity Utilization 73.3%		ICU Level of Service D	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: NE 192nd Ave & Mill Plain Blvd

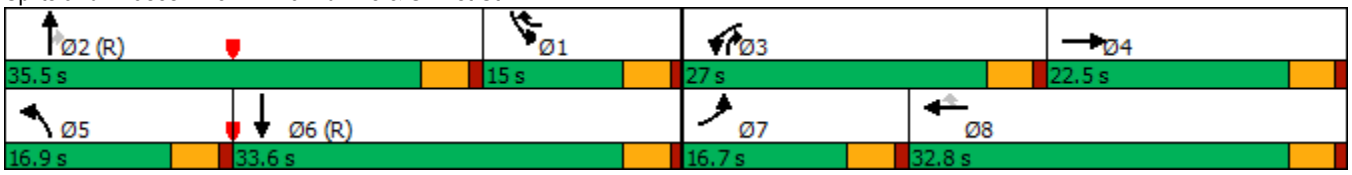


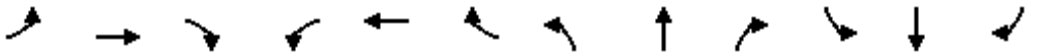
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	224	293	73	511	300	84	99	752	406	86	462	108
Future Volume (vph)	224	293	73	511	300	84	99	752	406	86	462	108
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	250		250	175		175	250		0
Storage Lanes	2		0	2		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	0.95	0.97	1.00	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor		0.99				0.97			0.97		0.99	
Frt		0.970				0.850			0.850		0.972	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3467	3439	0	3467	1881	1599	1787	3574	1599	1787	3443	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3467	3439	0	3467	1881	1545	1787	3574	1547	1787	3443	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		27				115			190		29	
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		844			1324			866			732	
Travel Time (s)		14.4			22.6			14.8			12.5	
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	238	312	78	544	319	89	105	800	432	91	491	115
Shared Lane Traffic (%)												
Lane Group Flow (vph)	238	390	0	544	319	89	105	800	432	91	606	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	
Protected Phases	7	4		3	8	1	5	2	3	1	6	
Permitted Phases						8			2			
Detector Phase	7	4		3	8	1	5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5	9.5	9.5	22.5	9.5	9.5	22.5	
Total Split (s)	16.7	22.5		27.0	32.8	15.0	16.9	35.5	27.0	15.0	33.6	
Total Split (%)	16.7%	22.5%		27.0%	32.8%	15.0%	16.9%	35.5%	27.0%	15.0%	33.6%	
Maximum Green (s)	12.2	18.0		22.5	28.3	10.5	12.4	31.0	22.5	10.5	29.1	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None	None	None	C-Min	None	None	C-Min	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		10			10			10			10	
Act Effct Green (s)	11.2	15.4		20.4	24.6	33.9	10.6	36.9	57.3	9.3	37.9	
Actuated g/C Ratio	0.11	0.15		0.20	0.25	0.34	0.11	0.37	0.57	0.09	0.38	
v/c Ratio	0.61	0.71		0.77	0.69	0.15	0.56	0.61	0.44	0.55	0.46	
Control Delay	49.4	44.5		45.3	42.2	1.7	53.6	29.4	5.1	55.7	25.9	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	49.4	44.5		45.3	42.2	1.7	53.6	29.4	5.1	55.7	25.9	
LOS	D	D		D	D	A	D	C	A	E	C	
Approach Delay		46.4			40.2			23.5			29.8	
Approach LOS		D			D			C			C	
Queue Length 50th (ft)	74	116		167	183	0	64	225	37	56	154	
Queue Length 95th (ft)	114	163		223	267	12	117	307	75	107	223	
Internal Link Dist (ft)		764			1244			786			652	
Turn Bay Length (ft)	250			250		250	175		175	250		
Base Capacity (vph)	422	641		780	532	622	223	1318	1007	187	1324	
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.56	0.61		0.70	0.60	0.14	0.47	0.61	0.43	0.49	0.46	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 33.1		Intersection LOS: C	
Intersection Capacity Utilization 67.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 5: NE 192nd Ave & SE 1st St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	54	824	2	0	651	66	2	0	0	170	0	46
Future Volume (vph)	54	824	2	0	651	66	2	0	0	170	0	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175		0	150		0	40		0	200		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00						0.96	
Frt					0.986						0.850	
Flt Protected	0.950						0.950			0.950		
Satd. Flow (prot)	1787	3574	0	1881	3507	0	1787	1881	0	1787	1528	0
Flt Permitted	0.950						0.725			0.757		
Satd. Flow (perm)	1787	3574	0	1881	3507	0	1364	1881	0	1424	1528	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					15						333	
Link Speed (mph)		40			40			25			25	
Link Distance (ft)		1324			632			136			474	
Travel Time (s)		22.6			10.8			3.7			12.9	
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	57	877	2	0	693	70	2	0	0	181	0	49
Shared Lane Traffic (%)												
Lane Group Flow (vph)	57	879	0	0	763	0	2	0	0	181	49	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA		Perm			Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	14.0	48.5		9.5	44.0		32.0	32.0		32.0	32.0	
Total Split (%)	15.6%	53.9%		10.6%	48.9%		35.6%	35.6%		35.6%	35.6%	
Maximum Green (s)	9.5	44.0		5.0	39.5		27.5	27.5		27.5	27.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lead		Lag	Lag							

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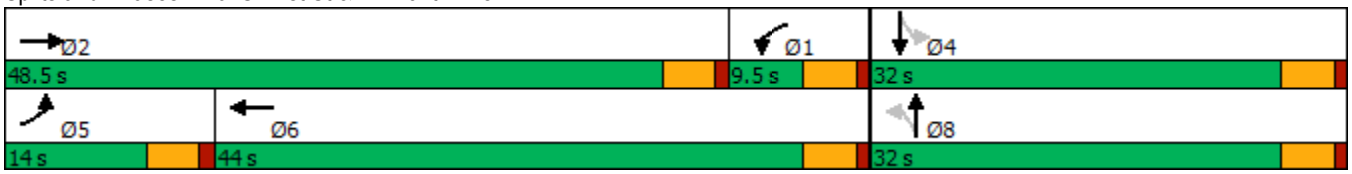
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	Min		None	Min		None	None		None	None	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		10			10		10	10		10	10	
Act Effct Green (s)	7.4	29.3			22.6		12.6			12.6	12.6	
Actuated g/C Ratio	0.14	0.57			0.44		0.25			0.25	0.25	
v/c Ratio	0.22	0.43			0.49		0.01			0.52	0.08	
Control Delay	25.4	7.3			13.7		17.0			24.1	0.2	
Queue Delay	0.0	0.0			0.0		0.0			0.0	0.0	
Total Delay	25.4	7.3			13.7		17.0			24.1	0.2	
LOS	C	A			B		B			C	A	
Approach Delay		8.4			13.7			17.0			19.0	
Approach LOS		A			B			B			B	
Queue Length 50th (ft)	15	65			93		1			47	0	
Queue Length 95th (ft)	53	131			178		5			119	0	
Internal Link Dist (ft)		1244			552			56			394	
Turn Bay Length (ft)	175						40			200		
Base Capacity (vph)	346	3047			2778		766			799	1003	
Starvation Cap Reductn	0	0			0		0			0	0	
Spillback Cap Reductn	0	0			0		0			0	0	
Storage Cap Reductn	0	0			0		0			0	0	
Reduced v/c Ratio	0.16	0.29			0.27		0.00			0.23	0.05	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 51.4			
Natural Cycle: 55			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.52			
Intersection Signal Delay: 11.7		Intersection LOS: B	
Intersection Capacity Utilization 54.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 6: SE 1st St & NE 197th Ave



Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	961	27	32	687	21	28
Future Vol, veh/h	961	27	32	687	21	28
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	75
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	1022	29	34	731	22	30

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1051	0	1471	526
Stage 1	-	-	-	-	1037	-
Stage 2	-	-	-	-	434	-
Critical Hdwy	-	-	4.12	-	6.82	6.92
Critical Hdwy Stg 1	-	-	-	-	5.82	-
Critical Hdwy Stg 2	-	-	-	-	5.82	-
Follow-up Hdwy	-	-	2.21	-	3.51	3.31
Pot Cap-1 Maneuver	-	-	664	-	119	499
Stage 1	-	-	-	-	305	-
Stage 2	-	-	-	-	624	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	664	-	113	499
Mov Cap-2 Maneuver	-	-	-	-	113	-
Stage 1	-	-	-	-	305	-
Stage 2	-	-	-	-	592	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	26.3
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	113	499	-	-	664	-
HCM Lane V/C Ratio	0.198	0.06	-	-	0.051	-
HCM Control Delay (s)	44.5	12.7	-	-	10.7	-
HCM Lane LOS	E	B	-	-	B	-
HCM 95th %tile Q(veh)	0.7	0.2	-	-	0.2	-

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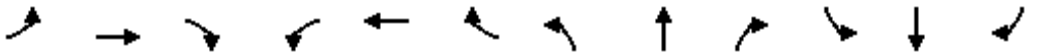

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	310	680	0	1	582	92	2	0	0	80	0	135
Future Volume (vph)	310	680	0	1	582	92	2	0	0	80	0	135
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	150		0	0		0	0		150
Storage Lanes	1		0	1		0	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					0.99							0.97
Frt					0.980							0.850
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1787	3574	0	1787	3476	0	0	1787	0	0	1787	1599
Flt Permitted	0.950			0.950				0.701			0.757	
Satd. Flow (perm)	1787	3574	0	1787	3476	0	0	1319	0	0	1424	1556
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					21							79
Link Speed (mph)		40			40			25			40	
Link Distance (ft)		687			911			123			618	
Travel Time (s)		11.7			15.5			3.4			10.5	
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	333	731	0	1	626	99	2	0	0	86	0	145
Shared Lane Traffic (%)												
Lane Group Flow (vph)	333	731	0	1	725	0	0	2	0	0	86	145
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	5	2		1	6			8			4	5
Permitted Phases							8			4		4
Detector Phase	5	2		1	6		8	8		4	4	5
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.5	22.5		9.5	22.5		22.5	22.5		22.5	22.5	9.5
Total Split (s)	33.0	57.0		10.0	34.0		23.0	23.0		23.0	23.0	33.0
Total Split (%)	36.7%	63.3%		11.1%	37.8%		25.6%	25.6%		25.6%	25.6%	36.7%
Maximum Green (s)	28.5	52.5		5.5	29.5		18.5	18.5		18.5	18.5	28.5
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5			4.5	4.5
Lead/Lag	Lead	Lag		Lead	Lag							Lead

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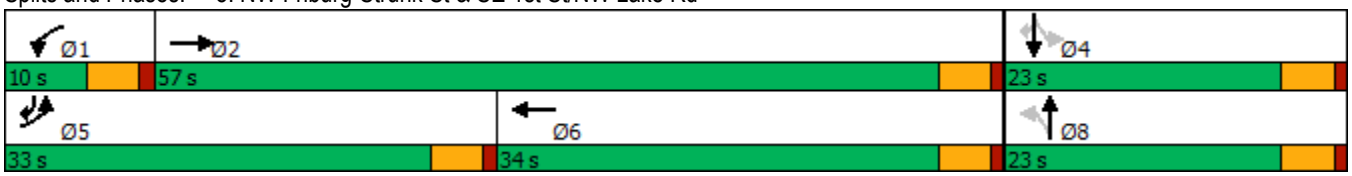
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	Min		None	Min		None	None		None	None	None
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		10			10		10	10		10	10	
Act Effct Green (s)	17.6	42.9		6.5	19.4			10.3			10.4	25.5
Actuated g/C Ratio	0.30	0.73		0.11	0.33			0.18			0.18	0.43
v/c Ratio	0.62	0.28		0.01	0.63			0.01			0.34	0.20
Control Delay	26.4	5.3		35.0	20.8			26.5			30.5	5.1
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	0.0
Total Delay	26.4	5.3		35.0	20.8			26.5			30.5	5.1
LOS	C	A		C	C			C			C	A
Approach Delay		11.9			20.8			26.5			14.6	
Approach LOS		B			C			C			B	
Queue Length 50th (ft)	103	41		0	108			1			28	11
Queue Length 95th (ft)	244	138		6	235			7			85	42
Internal Link Dist (ft)		607			831			43			538	
Turn Bay Length (ft)	250			150								150
Base Capacity (vph)	996	3033		196	1991			487			525	1126
Starvation Cap Reductn	0	0		0	0			0			0	0
Spillback Cap Reductn	0	0		0	0			0			0	0
Storage Cap Reductn	0	0		0	0			0			0	0
Reduced v/c Ratio	0.33	0.24		0.01	0.36			0.00			0.16	0.13

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 58.8			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay: 15.4		Intersection LOS: B	
Intersection Capacity Utilization 54.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 8: NW Friburg-Strunk St & SE 1st St/NW Lake Rd



Intersection	
Int Delay, s/veh	0.9

Movement	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Vol, veh/h	10	22	715	565	35	24	38
Future Vol, veh/h	10	22	715	565	35	24	38
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	None	-	None
Storage Length	-	125	-	-	-	0	-
Veh in Median Storage, #	-	-	0	0	-	0	-
Grade, %	-	-	0	0	-	0	-
Peak Hour Factor	92	96	96	96	96	96	96
Heavy Vehicles, %	2	1	1	1	1	1	1
Mvmt Flow	11	23	745	589	36	25	40

Major/Minor	Major1		Major2		Minor2		
Conflicting Flow All	625	625	0	-	0	1048	313
Stage 1	-	-	-	-	-	607	-
Stage 2	-	-	-	-	-	441	-
Critical Hdwy	6.44	4.12	-	-	-	6.82	6.92
Critical Hdwy Stg 1	-	-	-	-	-	5.82	-
Critical Hdwy Stg 2	-	-	-	-	-	5.82	-
Follow-up Hdwy	2.52	2.21	-	-	-	3.51	3.31
Pot Cap-1 Maneuver	577	959	-	-	-	225	686
Stage 1	-	-	-	-	-	509	-
Stage 2	-	-	-	-	-	619	-
Platoon blocked, %			-	-	-		
Mov Cap-1 Maneuver	771	771	-	-	-	215	686
Mov Cap-2 Maneuver	-	-	-	-	-	215	-
Stage 1	-	-	-	-	-	487	-
Stage 2	-	-	-	-	-	619	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	16.7
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	771	-	-	-	371
HCM Lane V/C Ratio	0.044	-	-	-	0.174
HCM Control Delay (s)	9.9	-	-	-	16.7
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.6

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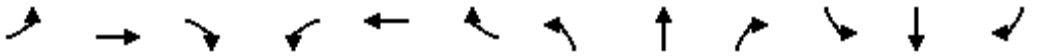

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	34	483	225	63	359	22	217	76	101	32	81	21
Future Volume (vph)	34	483	225	63	359	22	217	76	101	32	81	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		175	75		0	250		0	75		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99		0.95	0.99	1.00		0.99	0.97		0.98	0.99	
Frt			0.850		0.991			0.914			0.969	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	1881	1599	1787	3531	0	1787	1663	0	1787	1809	0
Flt Permitted	0.478			0.202			0.470			0.637		
Satd. Flow (perm)	887	1881	1514	378	3531	0	874	1663	0	1175	1809	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			242		9			73			13	
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		601			545			558			730	
Travel Time (s)		10.2			9.3			10.9			14.2	
Confl. Peds. (#/hr)	10		10	10		10	10		10	10		10
Confl. Bikes (#/hr)			10			10			10			10
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	37	519	242	68	386	24	233	82	109	34	87	23
Shared Lane Traffic (%)												
Lane Group Flow (vph)	37	519	242	68	410	0	233	191	0	34	110	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		
Detector Phase	5	2	2	1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	9.5	41.6	41.6	9.7	41.8		16.2	29.2		9.5	22.5	
Total Split (%)	10.6%	46.2%	46.2%	10.8%	46.4%		18.0%	32.4%		10.6%	25.0%	
Maximum Green (s)	5.0	37.1	37.1	5.2	37.3		11.7	24.7		5.0	18.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lag	Lead	Lead	Lag	Lead		Lead	Lag		Lead	Lag	

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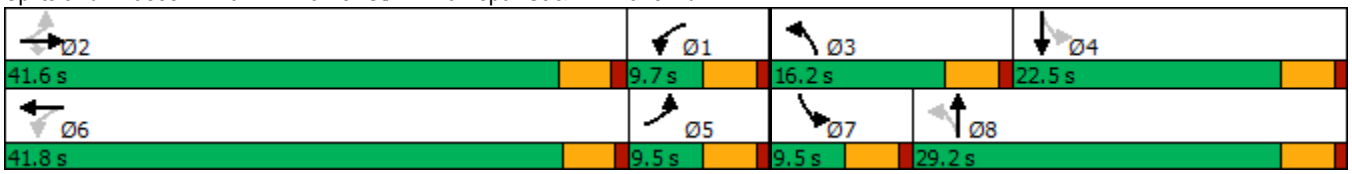
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	Min	Min	None	Min		None	None		None	None	
Walk Time (s)		7.0	7.0		7.0			7.0			7.0	
Flash Dont Walk (s)		11.0	11.0		11.0			11.0			11.0	
Pedestrian Calls (#/hr)		10	10		10			10			10	
Act Effct Green (s)	30.2	24.9	24.9	27.3	22.0		22.2	19.3		13.9	10.6	
Actuated g/C Ratio	0.48	0.40	0.40	0.44	0.35		0.35	0.31		0.22	0.17	
v/c Ratio	0.06	0.69	0.32	0.22	0.33		0.50	0.34		0.11	0.35	
Control Delay	11.4	23.6	3.8	16.6	20.6		21.1	16.2		17.9	29.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	11.4	23.6	3.8	16.6	20.6		21.1	16.2		17.9	29.3	
LOS	B	C	A	B	C		C	B		B	C	
Approach Delay		17.0			20.0			18.9			26.6	
Approach LOS		B			C			B			C	
Queue Length 50th (ft)	10	190	0	14	46		71	34		9	39	
Queue Length 95th (ft)	24	347	43	39	151		152	112		31	94	
Internal Link Dist (ft)		521			465			478			650	
Turn Bay Length (ft)	125		175	75			250			75		
Base Capacity (vph)	583	1193	1049	305	2252		547	831		319	634	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.06	0.44	0.23	0.22	0.18		0.43	0.23		0.11	0.17	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 62.6			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay: 19.0		Intersection LOS: B	
Intersection Capacity Utilization 65.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 10: NW Parker St/NW Larkspur St & NW Lake Rd



Intersection	
Int Delay, s/veh	3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	518	30	64	342	57	103
Future Vol, veh/h	518	30	64	342	57	103
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	75	-	100	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	1	1	1	1	2	2
Mvmt Flow	534	31	66	353	59	106

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	565	0	1019	534
Stage 1	-	-	-	-	534	-
Stage 2	-	-	-	-	485	-
Critical Hdwy	-	-	4.11	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.209	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1012	-	263	546
Stage 1	-	-	-	-	588	-
Stage 2	-	-	-	-	619	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1012	-	246	546
Mov Cap-2 Maneuver	-	-	-	-	246	-
Stage 1	-	-	-	-	588	-
Stage 2	-	-	-	-	579	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.4	17.1
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	246	546	-	-	1012	-
HCM Lane V/C Ratio	0.239	0.194	-	-	0.065	-
HCM Control Delay (s)	24.2	13.2	-	-	8.8	-
HCM Lane LOS	C	B	-	-	A	-
HCM 95th %tile Q(veh)	0.9	0.7	-	-	0.2	-

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MOVEMENT SUMMARY

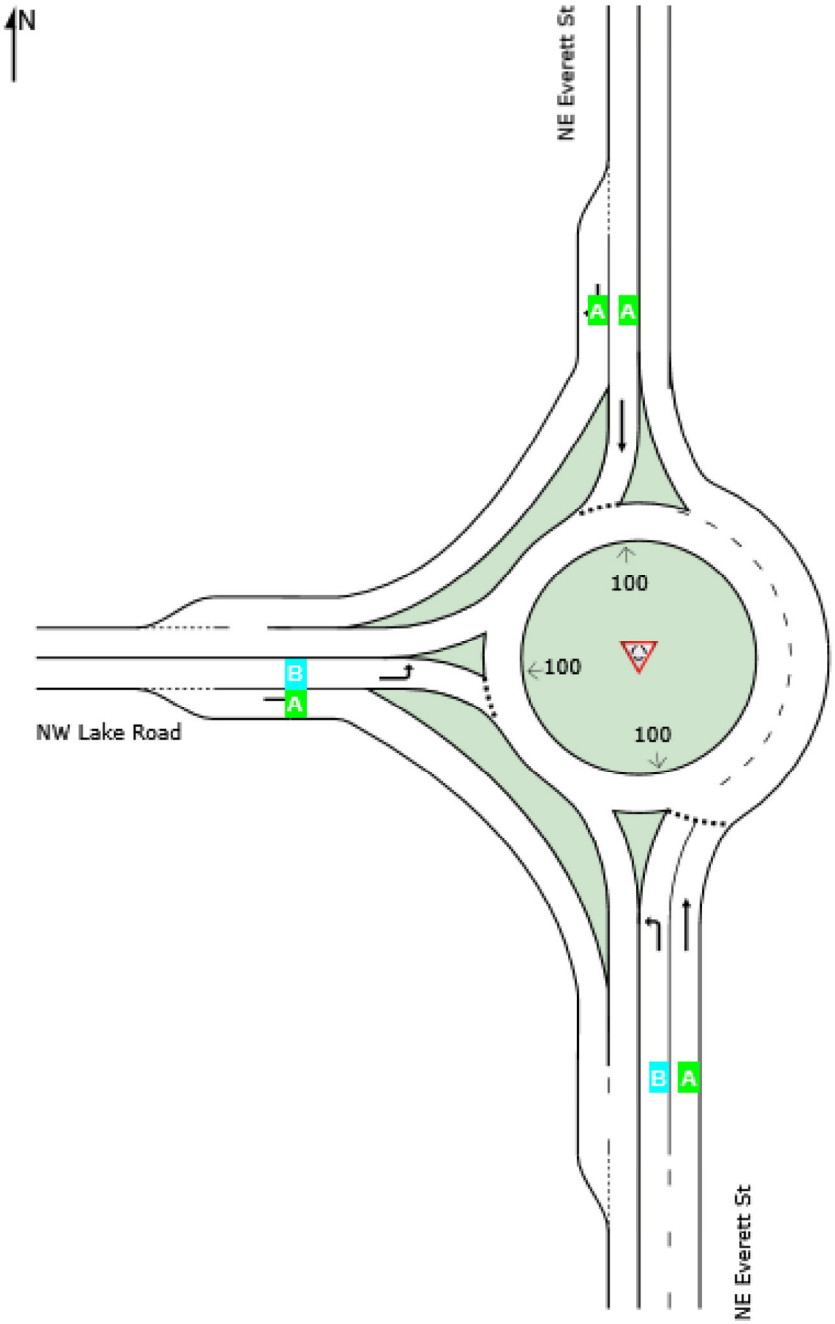
Site: 101 [Site1 (Site Folder: General)]

Forecast 2024 PM Peak Hour with Project
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: NE Everett St														
3	L2	248	1.0	282	1.0	0.272	11.7	LOS B	1.7	43.6	0.57	0.71	0.57	33.6
8	T1	347	1.0	394	1.0	0.316	5.4	LOS A	2.2	55.2	0.57	0.53	0.57	36.1
Approach		595	1.0	676	1.0	0.316	8.0	LOS A	2.2	55.2	0.57	0.61	0.57	35.0
North: NE Everett St														
4	T1	279	1.0	317	1.0	0.246	5.0	LOS A	1.6	40.7	0.50	0.50	0.50	36.3
14	R2	260	1.0	295	1.0	0.178	4.2	LOS A	0.0	0.0	0.00	0.45	0.00	37.2
Approach		539	1.0	613	1.0	0.246	4.6	LOS A	1.6	40.7	0.26	0.47	0.26	36.7
West: NW Lake Road														
5	L2	290	1.0	330	1.0	0.261	11.2	LOS B	1.7	43.3	0.53	0.68	0.53	33.7
12	R2	368	1.0	418	1.0	0.252	4.4	LOS A	0.0	0.0	0.00	0.44	0.00	37.2
Approach		658	1.0	748	1.0	0.261	7.4	LOS A	1.7	43.3	0.23	0.55	0.23	35.5
All Vehicles		1792	1.0	2036	1.0	0.316	6.7	LOS A	2.2	55.2	0.35	0.55	0.35	35.7

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.



Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used).
Delay Model: SIDRA Standard (Geometric Delay is included).

Intersection	
Int Delay, s/veh	3.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	111	34	64	113	44	49
Future Vol, veh/h	111	34	64	113	44	49
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	134	41	77	136	53	59

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	175	0	445	155
Stage 1	-	-	-	-	155	-
Stage 2	-	-	-	-	290	-
Critical Hdwy	-	-	4.11	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	-	-	2.209	-	3.509	3.309
Pot Cap-1 Maneuver	-	-	1407	-	573	893
Stage 1	-	-	-	-	876	-
Stage 2	-	-	-	-	762	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1407	-	541	893
Mov Cap-2 Maneuver	-	-	-	-	600	-
Stage 1	-	-	-	-	876	-
Stage 2	-	-	-	-	720	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.8	10.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	725	-	-	1407	-
HCM Lane V/C Ratio	0.155	-	-	0.055	-
HCM Control Delay (s)	10.9	-	-	7.7	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.5	-	-	0.2	-

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Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	745	622	4	0	41
Future Vol, veh/h	0	745	622	4	0	41
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	10	2	10
Mvmt Flow	0	810	676	4	0	45

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	340
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.4
Pot Cap-1 Maneuver	0	-	-	-	0	633
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	633
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.1
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	633
HCM Lane V/C Ratio	-	-	-	0.07
HCM Control Delay (s)	-	-	-	11.1
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.2

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Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	51	720	606	49	56	66
Future Vol, veh/h	51	720	606	49	56	66
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	55	783	659	53	61	72

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	712	0	-	0	1188	356
Stage 1	-	-	-	-	686	-
Stage 2	-	-	-	-	502	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	884	-	-	-	181	640
Stage 1	-	-	-	-	461	-
Stage 2	-	-	-	-	573	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	884	-	-	-	170	640
Mov Cap-2 Maneuver	-	-	-	-	170	-
Stage 1	-	-	-	-	432	-
Stage 2	-	-	-	-	573	-

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	28.6
HCM LOS			D

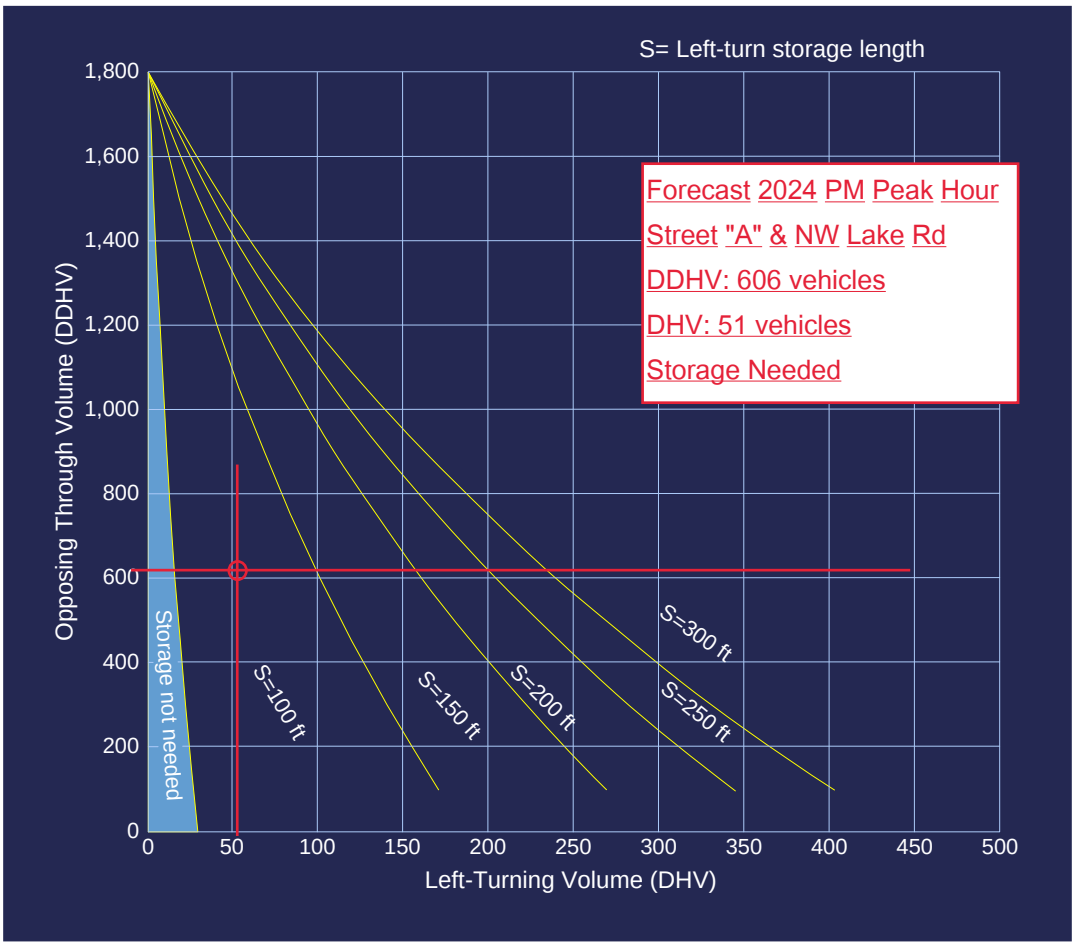
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	884	-	-	-	282
HCM Lane V/C Ratio	0.063	-	-	-	0.47
HCM Control Delay (s)	9.3	-	-	-	28.6
HCM Lane LOS	A	-	-	-	D
HCM 95th %tile Q(veh)	0.2	-	-	-	2.4

PO Box 397 Puyallup, WA 98371 (253) 770 1401 heathtraffic.com

APPENDIX

LEFT TURN WARRANT SHEET

Exhibit 1310-8 Left-Turn Storage Guidelines: Four-Lane, Unsignalized



Determine the storage length on two-lane highways by using Exhibit 1310-9 through Exhibit 1310-11. On four-lane highways, use Exhibit 1310-8. These lengths do not consider trucks. Use Exhibit 1310-12 for storage length when trucks are present.

Use turn simulation software (such as AutoTURN®) to verify that left-turn movements for the design vehicle(s) do not have conflicts. Design opposing left-turn design vehicle paths with a minimum 4-foot (12-foot desirable) clearance between opposing turning paths.

Where one-way left-turn channelization with curbing is to be provided, evaluate surface water runoff and design additional drainage facilities if needed to control the runoff.

Provide illumination at left-turn lanes in accordance with the guidelines in Chapter 1040.