Smokey Point Industrial

Arlington, WA

Traffic Impact Analysis

March 3, 2024

Prepared for:

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FINDINGS/CONCLUSIONS

This Traffic Impact Analysis (TIA) has been prepared for the proposed Smokey Point Industrial project located on the northeast corner of 35th Ave NE and 188th Street NE in Arlington, WA.

Project Description. Full buildout of the proposed project includes up to 175,000 square feet (SF) of industrial building area on a site currently occupied by two (2) single-family homes. Both existing single-family homes are expected to be removed as part of the proposed project.

Vehicular access is proposed at three (3) locations: one (1) new full access driveway on 188th Street NE and two (2) new full access driveways on the extension of 35th Avenue NE. Full buildout and occupancy of the proposed project is anticipated to occur by 2026.

Trip Generation. The proposed project is anticipated to generate 1,228 net new weekday trips per day, with 58 net new trips occurring during the weekday AM peak hour (49 entering, 9 exiting) and 57 net new trips occurring during the weekday PM peak hour (11 entering, 46 exiting).

Intersection Level of Service (LOS). Weekday PM peak hour LOS analyses were conducted at four (4) study intersections in the vicinity of the proposed project. Each of the study intersections are anticipated to operate at LOS D or better during the weekday PM peak hour in 2026 with or without the proposed project. It should be noted that the City has plans to construct a roundabout at the existing Smokey Point Blvd/188th Street NE intersection in 2024 and therefore the future 2026 analysis of this intersection assumes completion of the City project.

Mitigation.

Off-Site Improvements. Based on the results of the LOS analysis shown in this report, all study intersections are expected to operate at acceptable levels (LOS D or better) with the full buildout of the proposed project. Therefore, no off-site traffic mitigation is proposed.

Traffic Impact Fees. The proposed project is required to pay traffic impact fees to the City of Arlington and Snohomish County based on the following:

- City of Arlington: The City of Arlington requires payment of traffic mitigation fees to help fund planned roadway improvements throughout the City. The City's currently adopted standard traffic impact fee rate is $3,355 per new PM peak hour trip. For developments within the Cascade Industrial Center (CIC), the current traffic impact fee is $5,841.39 per new PM peak hour trip. Traffic mitigation fees are due at the time of building permit issuance.

- Snohomish County: The City of Arlington and Snohomish County have adopted an interlocal agreement whereby developments in Arlington must assess potential mitigation for impacts on Snohomish County roadway facilities. The proposed Smokey Point Industrial project is located in TSA A and is not expected to impact any TSA A projects included in the Snohomish County's *Transportation Needs Report*. Therefore, the Smokey Point Industrial project would not be required to pay traffic mitigation fees to Snohomish County.

INTRODUCTION

The information provided in this Traffic Impact Analysis (TIA) is being submitted to the City of Arlington for the proposed Smokey Point Industrial project. The information provided herein includes the applicable elements included in the City of Arlington's *Traffic Analysis Procedures & Checklist*. Information in this report is provided for each of the following:

I. Project Description
II. Trip Generation
III. Trip Distribution
IV. Traffic Volumes
V. Level of Service
VI. Mitigation Recommendations

I. PROJECT DESCRIPTION

The proposed Smokey Point Industrial project is located on the northeast corner of 35th Ave NE and 188th Street NE in Arlington, WA. A project vicinity map is provided in Figure 1. Full buildout of the proposed project includes up to 175,000 square feet (SF) of industrial building area on a site currently occupied by two (2) single-family homes. Both existing single-family homes are expected to be removed as part of the proposed project.

Vehicular access is proposed at three (3) locations: one (1) new full access driveway on 188th Street NE and two (2) new full access driveways on the extension of 35th Avenue NE. A preliminary site plan is shown in Attachment A. Full buildout and occupancy of the proposed project is anticipated to occur by 2026.

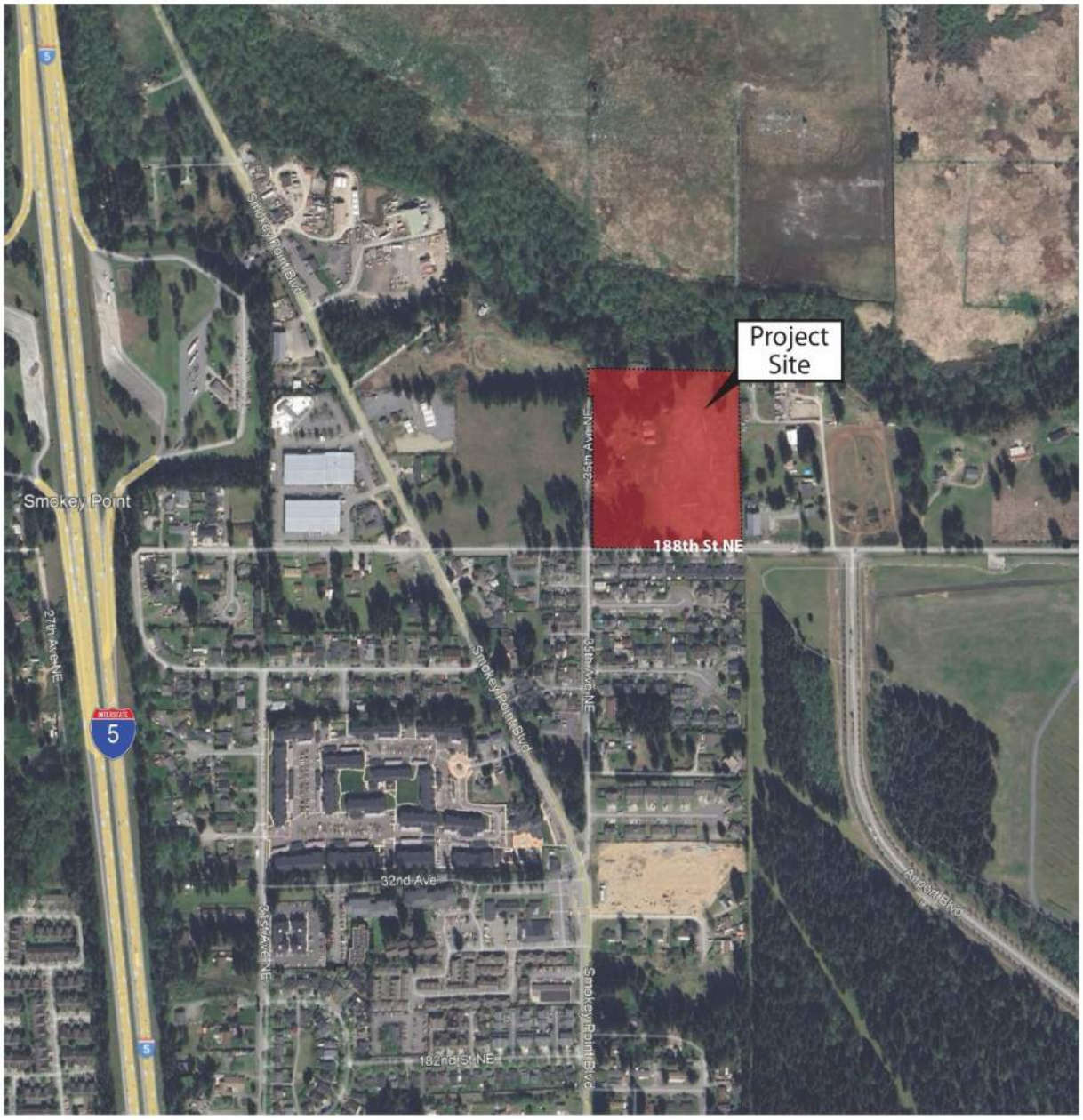

Figure 1: Project Site Vicinity

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II. TRIP GENERATION

The trip generation estimates for the proposed project were based on methodology documented in the Institute of Transportation Engineers (ITE) *Trip Generation Manual,* 11th Edition for Land Use Code (LUC) 130 (Industrial Park) and LUC 210 (Single-Family Detached Housing). The resulting net new weekday daily, AM peak hour, and PM peak hour trip generation estimates for the proposed project are shown below in Table 1 and include credit for removal of one (1) existing single-family home. The detailed trip generation calculations are included in Appendix B.

Table 1
Trip Generation Summary

	Net New Trips Generated		
Weekday Time Period	In	Out	Total
Daily	614	614	1,228
AM Peak Hour	49	9	58
PM Peak Hour	11	46	57

III. TRIP DISTRIBUTION

The distribution of project-generated vehicle trips to/from the site was estimated based on existing and anticipated travel patterns in the vicinity of the site as follows:

- 25% to/from the north on Smokey Point Blvd
- 40% to/from the south on Smokey Point Blvd
- 25% to/from the east on 188th Street NE
- 10% to/from the south on Airport Blvd

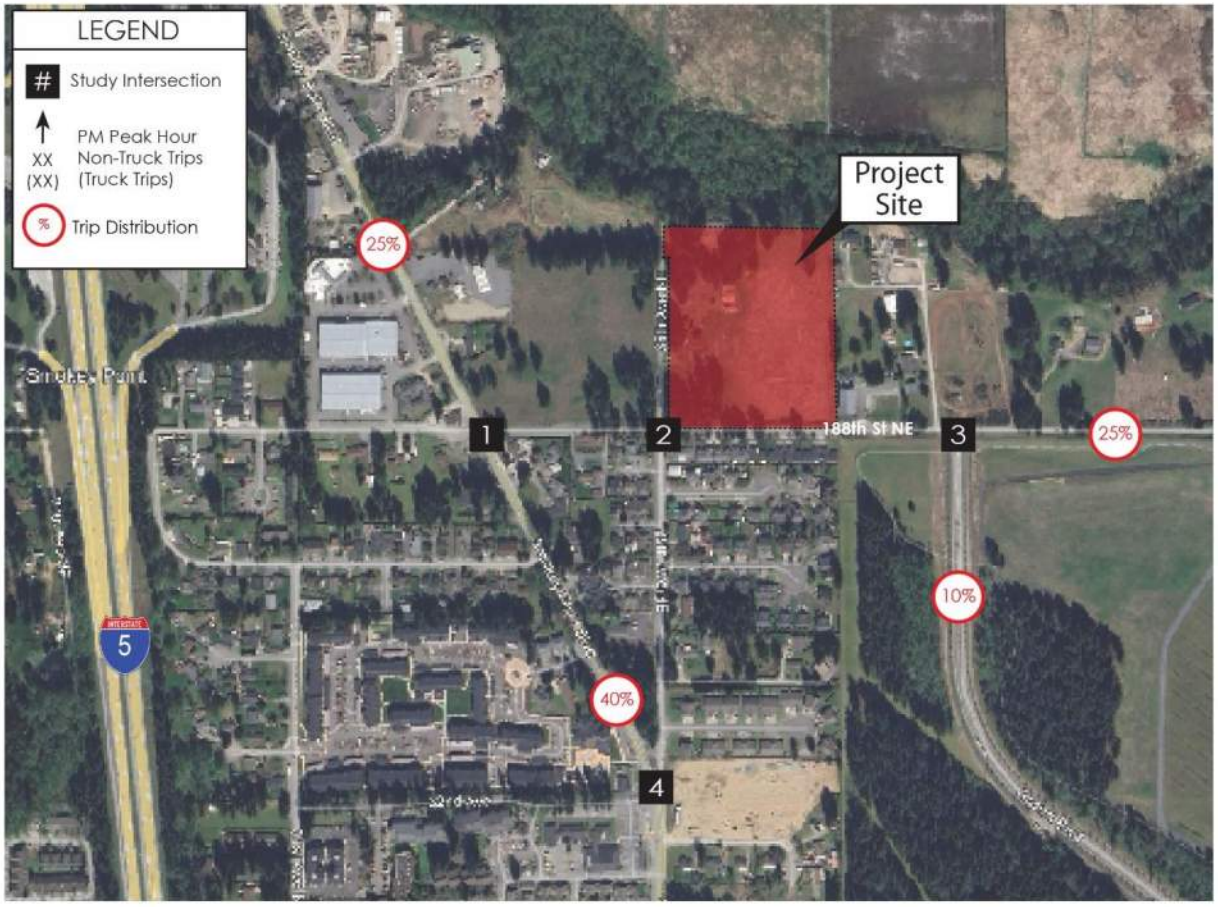
Figure 2 illustrates the resulting distribution and assignment of weekday PM peak hour project trips through the study intersections. In accordance with the *Snohomish County Traffic Worksheet and Traffic Study Requirements for Developments in the City of Arlington*, project trip impacts at Snohomish County key intersections were identified (see Appendix C). The weekday AM and PM peak hour trip assignment at key intersections impacted by three (3) or more directional trips are shown in tabular format in Tables 2 and 3.

Table 2
AM Peak Hour Trip Assignment at Snohomish County Key Intersections

Key Intersection ID#	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
300	22	0	0	0	0	8	0	10	0	1	2	4
453	0	0	0	0	0	0	0	2	0	0	12	0
466	2	0	0	0	0	12	0	0	0	0	0	0

Table 3
PM Peak Hour Trip Assignment at Snohomish County Key Intersections

Key Intersection ID#	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
300	6	0	0	0	0	1	0	2	0	7	9	22
453	0	0	0	0	0	0	0	12	0	0	3	0
466	12	0	0	0	0	3	0	0	0	0	0	0



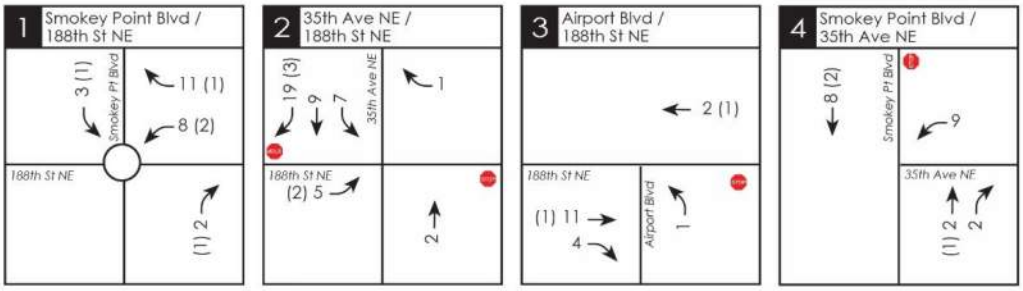


Figure 2: PM Peak Hour Project Trip Distribution and Assignment

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IV. TRAFFIC VOLUMES

Existing Traffic Volumes

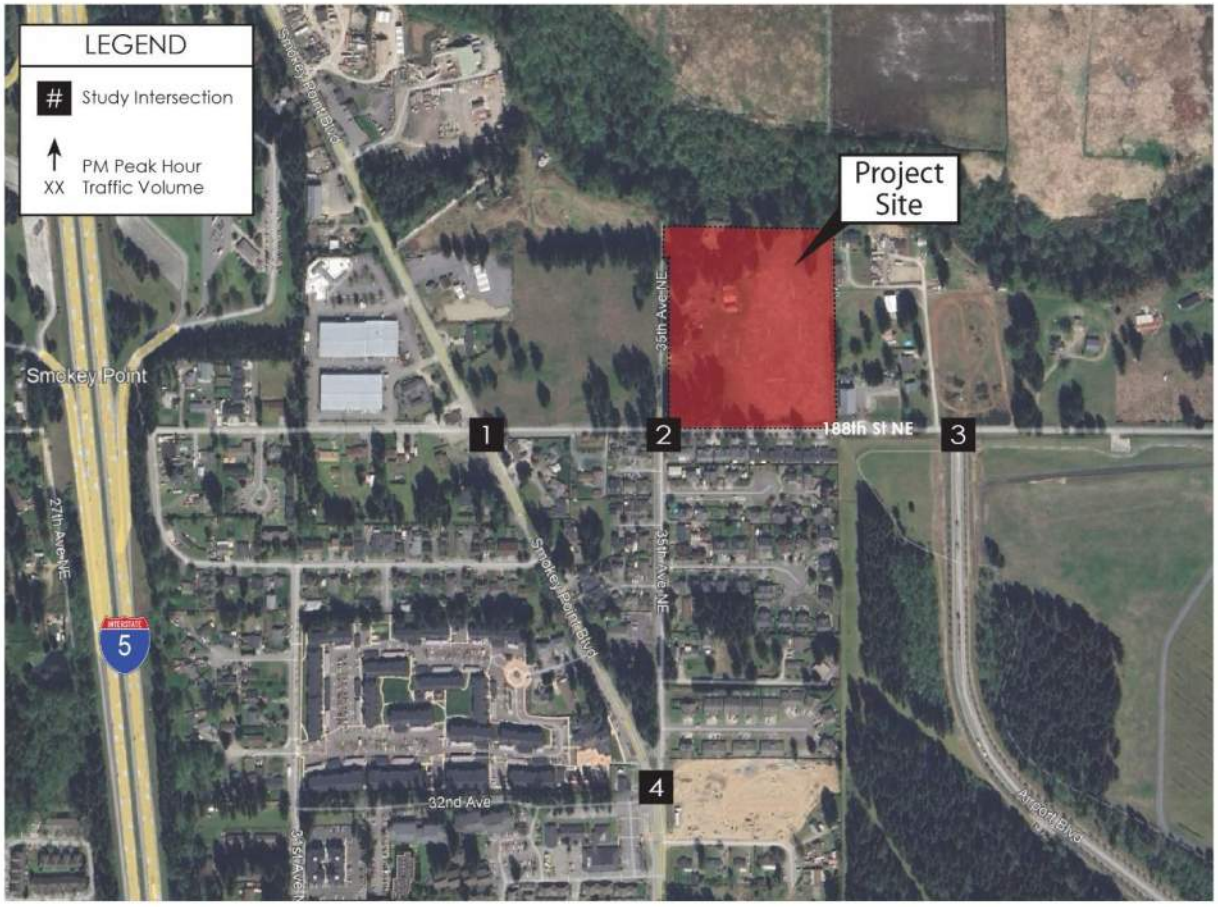
Existing weekday PM peak hour traffic volumes at the four (4) study intersections were collected by All Traffic Data in February 2024. The weekday PM peak hour represents the highest one-hour time period between 4:00 and 6:00 PM.

Figure 3 illustrates the existing 2024 weekday PM peak hour traffic volumes at the study intersections. The peak hour traffic count sheets are included in Appendix D.

Future Traffic Volumes

To estimate the future 2026 No Action (Without Project) weekday PM peak hour traffic volumes, a 5% annual background growth rate was applied to the existing volumes consistent with other projects in the City.

The resulting future 2026 No Action weekday PM peak hour traffic volumes at the study intersections are shown in Figure 4. The 2026 With Project traffic volumes were determined by adding the trip assignment from the proposed project (shown in Figure 2) to the future 2026 No Action traffic volumes (shown in Figure 4). The 2026 With Project weekday PM peak hour traffic volumes are shown in Figure 5.



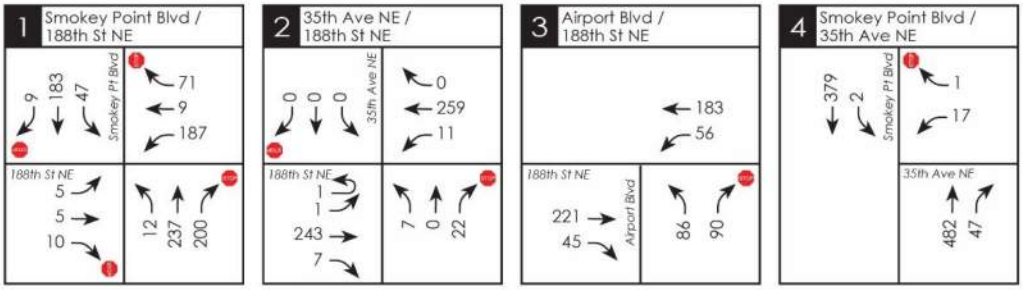


Figure 3: 2024 Existing PM Peak Hour Traffic Volumes

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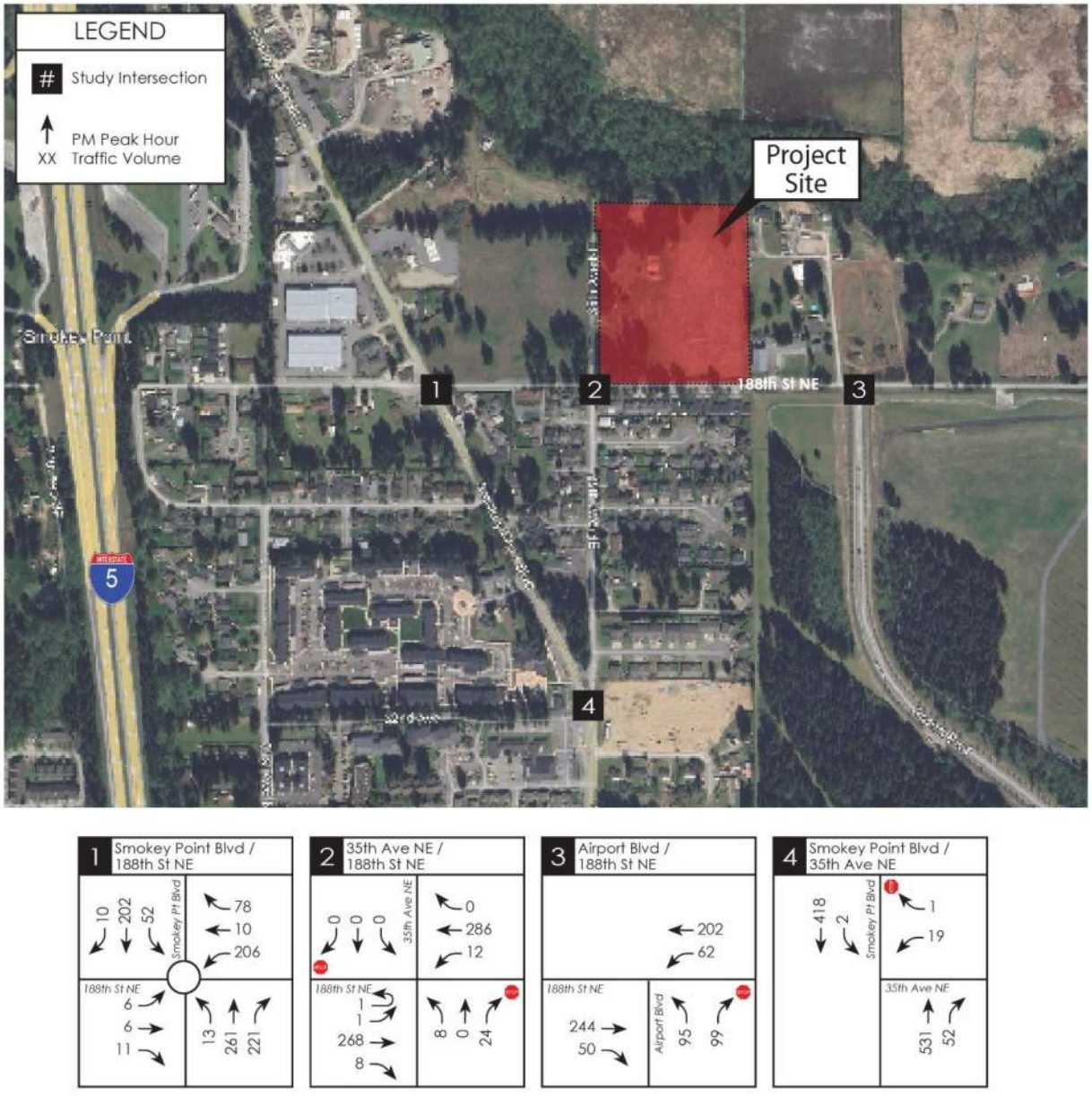

Figure 4: 2026 No Action PM Peak Hour Traffic Volumes

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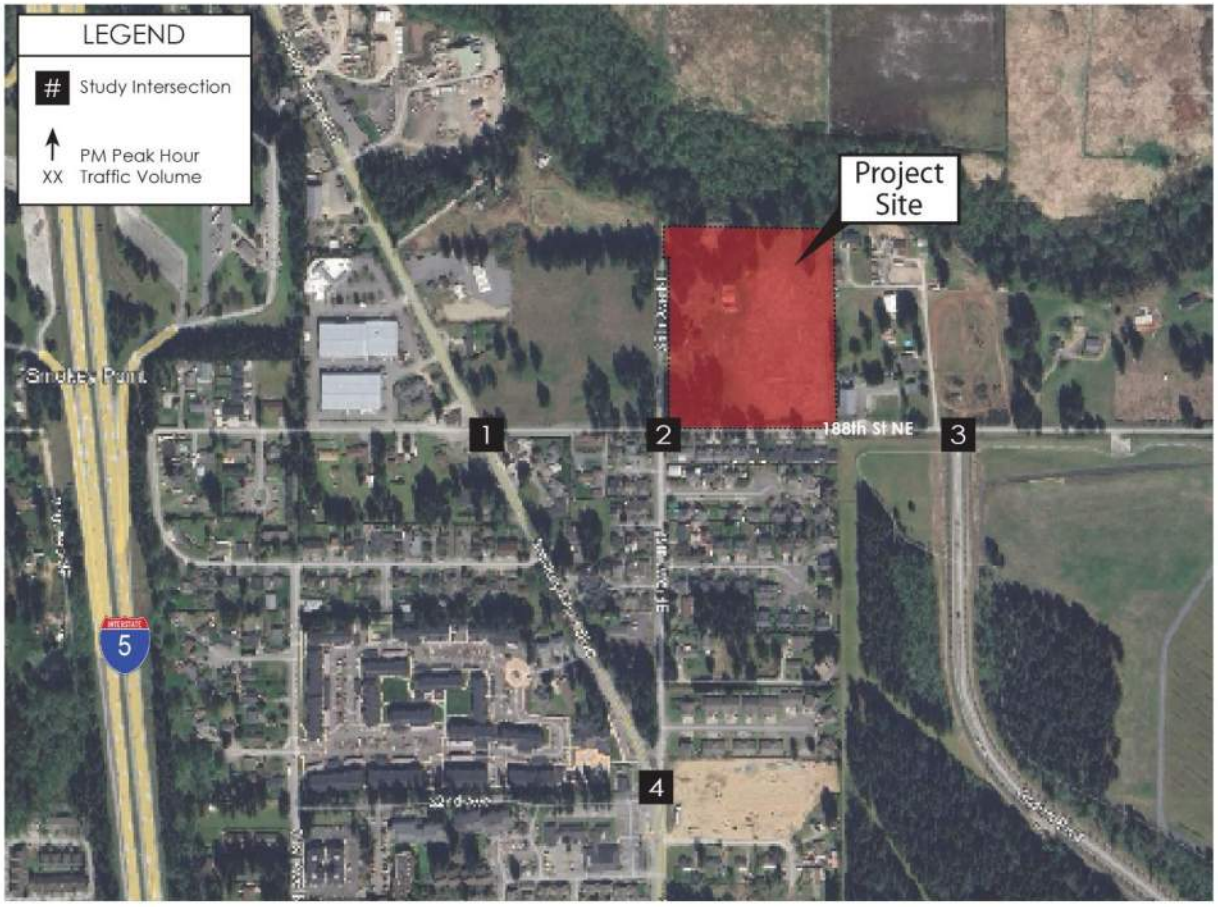

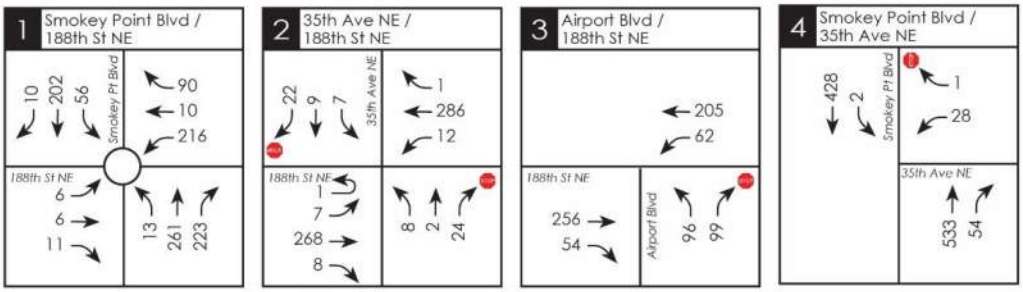

Figure 5: 2026 With Project PM Peak Hour Traffic Volumes

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V. LEVEL OF SERVICE

Existing Level of Service

Existing weekday PM peak hour level of service (LOS) analyses were conducted at the following four (4) study intersections:

1. Smokey Point Blvd/188th Street NE
2. 35th Ave NE/188th Street NE
3. Airport Blvd/188th Street NE
4. Smokey Point Blvd/35th Ave NE

Intersection LOS was calculated using the methodology and procedures outlined in the *Highway Capacity Manual* (HCM 7th Edition) using the *Synchro 12* software program. The 2024 existing weekday PM peak hour LOS analysis results for the study intersections are summarized in Table 4. The LOS methodology and 2024 Existing LOS calculations are included in Appendix E.

Table 4
Existing 2024 Weekday PM Peak Hour LOS Summary

Study Intersection/Movement	LOS	Delay (sec)
All-Way Stop-Controlled:		
1. Smokey Point Blvd/188th Street NE	B	14.1
Two-Way Stop-Controlled:		
2. 35th Ave NE/188th Street NE		
Northbound Shared Left-Thru	B	13.2
Northbound Right-Turn	A	9.7
Eastbound Left-Turn	A	7.8
Westbound Left-Turn	A	7.8
Southbound Approach	A	0.0
3. Airport Blvd/188th Street NE		
Northbound Left-Turn	B	14.5
Northbound Right-Turn	B	10.2
Westbound Left-Turn	A	7.9
4. Smokey Point Blvd/35th Ave NE		
Westbound Approach	C	18.1
Southbound Left-Turn	A	8.6

As shown in Table 4, each of the study intersections currently operate at LOS C or better during the weekday PM peak hour in 2024.

The currently adopted level of service standard from the City of Arlington's *2017 Comprehensive Plan* (Chapter 8: Transportation Element) is LOS D for all city arterials and LOS C for all other city streets.

Future Level of Service

Future year (2026) weekday PM peak hour LOS analysis was conducted at the four (4) intersections for future No Action (without project) and With Project conditions.

Based on review of the current City of Arlington *Six Year Transportation Improvement Plan* (2024-2029), there are several planned improvements in the study area:

- Project #I-2 (Smokey Point Blvd & 188th Roundabout) – This project will construct a new roundabout at the existing Smokey Point Blvd/188th Street NE intersection including sidewalk, RRFB pedestrian crossings, pedestrian/streetlights, landscaping, artwork, and street amenities. This project is expected to be constructed in 2024.
- Project #R-30 (Smokey Pt Blvd Corridor Design & ROW) – This project includes preliminary planning, public outreach, engineering design, and ROW plan for corridor improvements to expand Smokey Point Blvd's current 2-lane roadway between 174th Ave and 200th Ave. This includes construction of new roundabout intersections at 174th Street, 180th Street, 183rd Street, and 188th Street between 2024 and 2026. Portions of Smokey Point Blvd between the new roundabouts will be phased in as new development occurs.

Because the new roundabout at Smokey Point Blvd/188th Street NE (intersection #1) is expected to be constructed in 2024, future analysis of this intersection assumes a single lane roundabout.

The LOS results at the study intersections without and with the proposed project are summarized in Table 5. The detailed LOS worksheets are included in Appendix E.

Table 5
Future 2026 Weekday PM Peak Hour LOS Summary

	No Action		With Project	
Study Intersection	LOS	Delay (sec)	LOS	Delay (sec)
Roundabout:				
1. Smokey Point Blvd/188th Street NE	A	5.9	A	6.0
Two-Way Stop-Controlled:				
2. 35th Ave NE/188th Street NE				
Northbound Shared Left-Thru	B	14.0	B	14.7
Northbound Right-Turn	A	9.9	A	9.9
Eastbound Left-Turn	A	7.8	A	7.9
Westbound Left-Turn	A	7.9	A	7.9
Southbound Approach	A	0.0	B	12.1
3. Airport Blvd/188th Street NE				
Northbound Left-Turn	C	15.8	C	16.2
Northbound Right-Turn	B	10.4	B	10.6
Westbound Left-Turn	A	8.0	A	8.1
4. Smokey Point Blvd/35th Ave NE				
Westbound Approach	C	20.3	C	21.4
Southbound Left-Turn	A	8.8	A	8.8

As shown in Table 5, each of the study intersections are anticipated to operate at LOS C or better during the weekday PM peak hour in 2026 without or with the proposed Smokey Point Industrial project.

VI. MITIGATION RECOMMENDATIONS

The following measures have been identified to mitigate the transportation impacts of the proposed Smokey Point Industrial project.

Off-Site Improvements

Based on the results of the LOS analysis shown in this report, all study intersections are expected to operate at LOS C or better with the proposed Smokey Point Industrial project. Therefore, no off-site improvements are proposed.

City of Arlington Mitigation

The City of Arlington requires payment of traffic mitigation fees to help fund planned roadway improvements throughout the City. The City's currently adopted standard traffic impact fee rate is $3,355 per new PM peak hour trip. For developments within the Cascade Industrial Center (CIC), the current traffic impact fee is $5,841.39 per new PM peak hour trip. Traffic mitigation fees are due at the time of building permit issuance.

Snohomish County

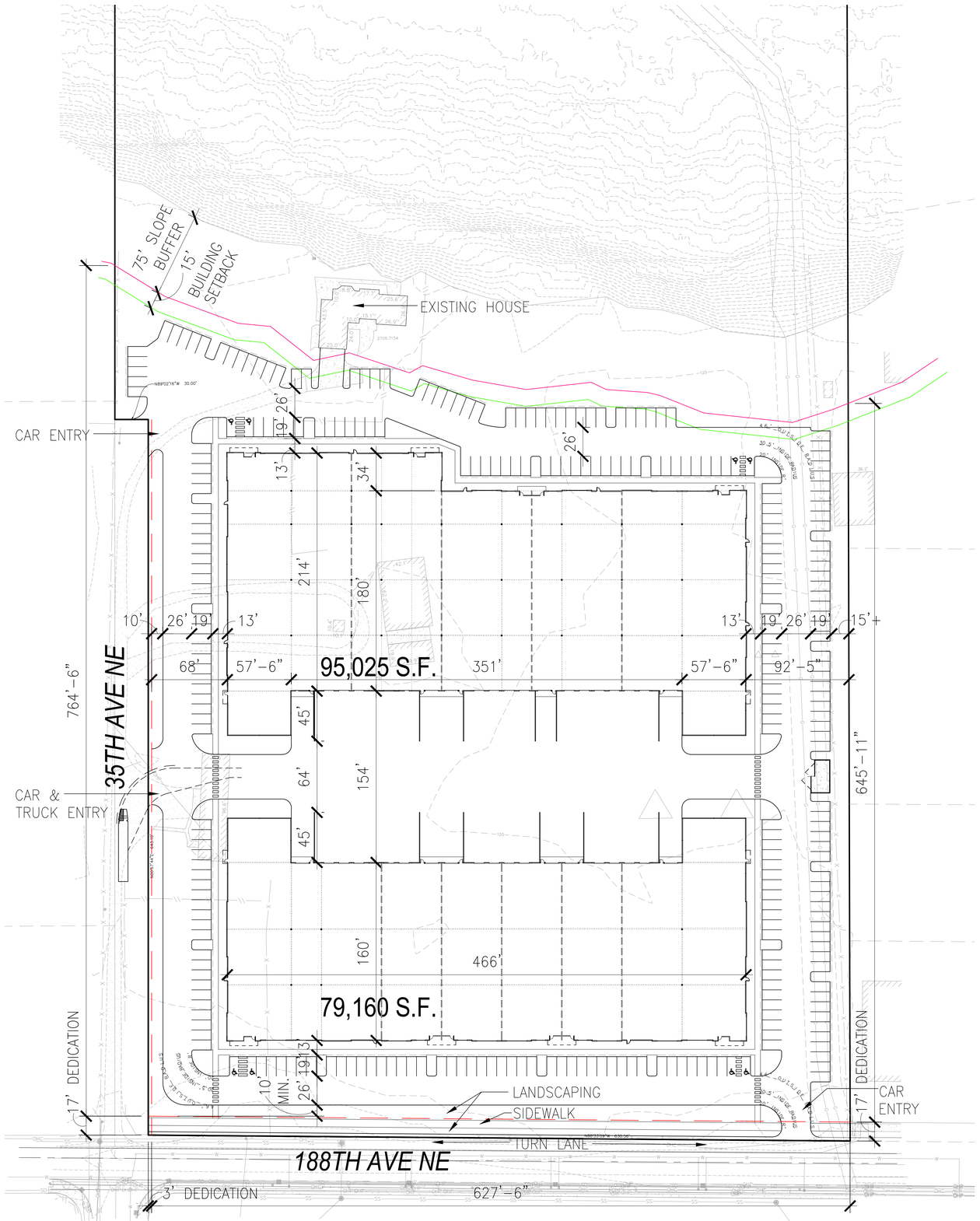
The City of Arlington and Snohomish County have adopted an interlocal agreement whereby developments in Arlington must assess potential mitigation for impacts on Snohomish County roadway facilities. The Smokey Point Industrial project is located in TSA A and is not expected to impact any TSA A projects included in the Snohomish County's *Transportation Needs Report* (see snip below). Therefore, the Smokey Point Industrial project would not be required to pay traffic mitigation fees to Snohomish County.

TNR Appendix D: Impact Fee Cost Basis

Road Name	Limits	Column 1 Project Cost ($1,000s)	Column 2 CO %	Source of Cost Estimate	Project Type	TNR ID##
TSA A						
67 Ave NE/152 St NE intersection		$5,394	100%	TNR Cost Model	Major Intersection	INT-007
88 St NE	Marysville C/L to Marysville C/L	$2,855	100%	Marysville Interlocal Agreement	Major Widening	W-017
140 St NE/23 Ave NE intersection		$3,498	100%	2015 TE Costs	Major Intersection	INT-006
Subtotal TSA A			**$11,747**			

Appendix A

Preliminary Site Plan



PRELIMINARY SITE PLAN
Scale: 1"=50'-0"

	date
	revision
	no.
job no.	
drawn	
checked	
date	

Preliminary Site Plan for
Smartcap
Smokey Point Industrial
3505 188th Ave. NE
Arlington, Washington

PRELIMINARY SITE PLAN

LANCE MUELLER & ASSOCIATES
ARCHITECTS AIA
130 LAKESIDE • SUITE 250 • SEATTLE, WA 98122 • (206) 325-2553

sheet
SD-2

Appendix B

Trip Generation Calculations

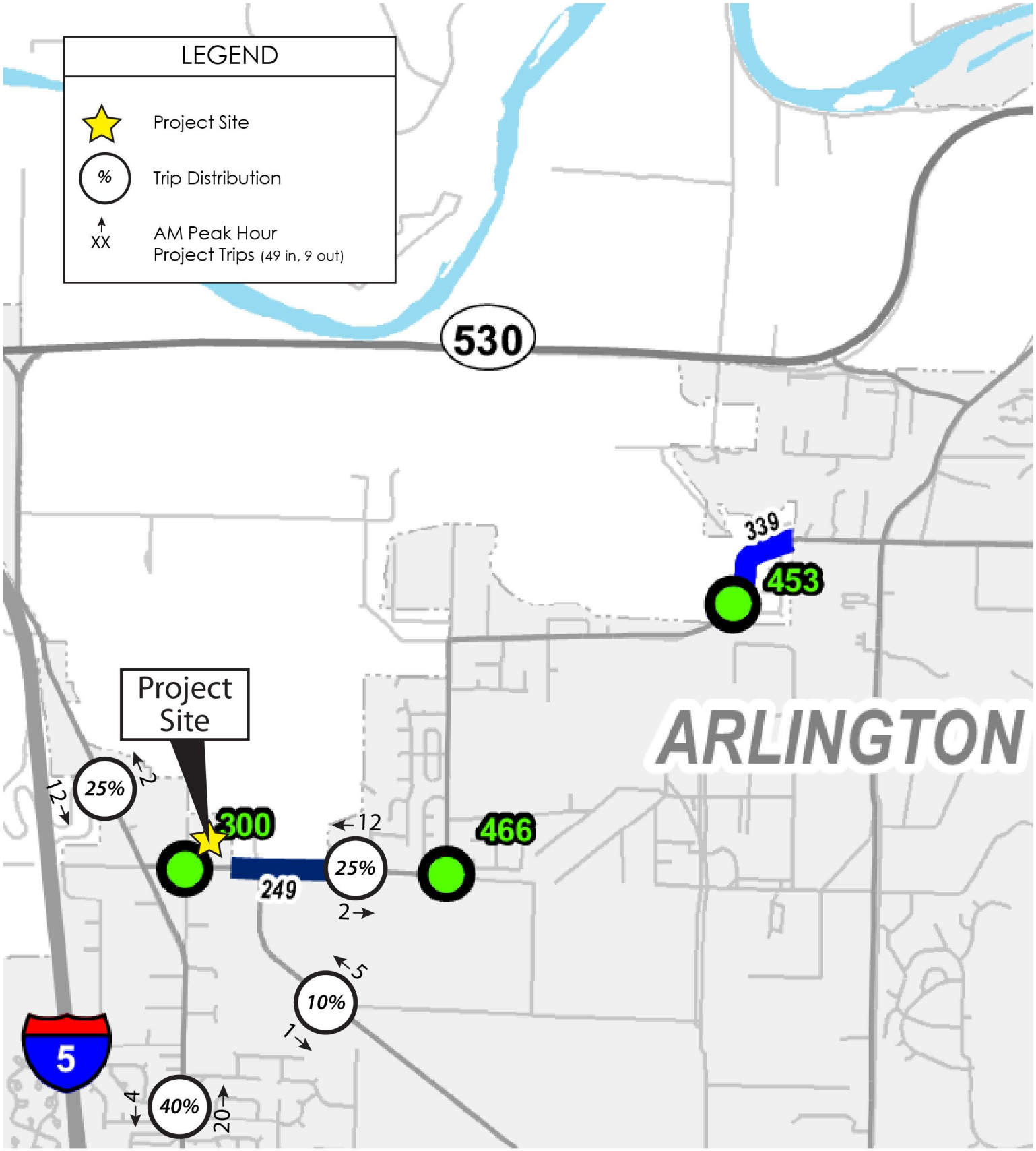
Smokey Point Industrial (Arlington)
Weekday Trip Generation Summary

Land Use	Units [1]	ITE LUC [2]	Trip Rate or Equation [2]	Directional Distribution In	Directional Distribution Out	Trips Generated In	Trips Generated Out	Trips Generated Total	TRUCKS Trip Rate [2]	TRUCKS Distribution In	TRUCKS Distribution Out	TRUCKS Truck Trips Generated In	TRUCKS Truck Trips Generated Out	TRUCKS Truck Trips Generated Total	Non-Truck Trips Generated In	Non-Truck Trips Generated Out	Non-Truck Trips Generated Total
DAILY																	
Proposed Use:																	
Industrial Park	175,000 GFA	130	Ln(T) = 0.52 Ln(X) + 4.45	50%	50%	628	628	1,256	0.57	50%	50%	50	50	100	578	578	1,156
Existing Use:																	
Single-Family Home	2 DU	210	Ln(T) = 0.92 Ln(X) + 2.68	50%	50%	-14	-14	-28							-14	-14	-28
					New Daily Trips =	**614**	**614**	**1,228**				**50**	**50**	**100**	**564**	**564**	**1,128**
AM PEAK HOUR																	
Proposed Use:																	
Industrial Park	175,000 GFA	130	0.34	81%	19%	49	11	60	0.04	45%	55%	3	4	7	46	7	53
Existing Use:																	
Single-Family Home	2 DU	210	Ln(T) = 0.91 Ln(X) + 0.12	25%	75%	0	-2	-2							0	-2	-2
					New AM Peak Hour Trips =	**49**	**9**	**58**				**3**	**4**	**7**	**46**	**5**	**51**
PM PEAK HOUR																	
Proposed Use:																	
Industrial Park	175,000 GFA	130	0.34	22%	78%	13	47	60	0.04	38%	62%	3	4	7	10	43	53
Existing Use:																	
Single-Family Home	2 DU	210	Ln(T) = 0.94 Ln(X) + 0.27	63%	37%	-2	-1	-3							-2	-1	-3
					New PM Peak Hour Trips =	**11**	**46**	**57**				**3**	**4**	**7**	**8**	**42**	**50**

Notes:
[1] GFA = Gross Floor Area. DU = Dwelling Units.
[2] Based on Institute of Transportation Engineers (ITE) *Trip Generation* Manual, 11th Edition, 2021.

Appendix C

Weekday Project Trip Distribution and Assignment for Snohomish County



Appendix C1: AM Peak Hour Project Trip Distribution and Assignment

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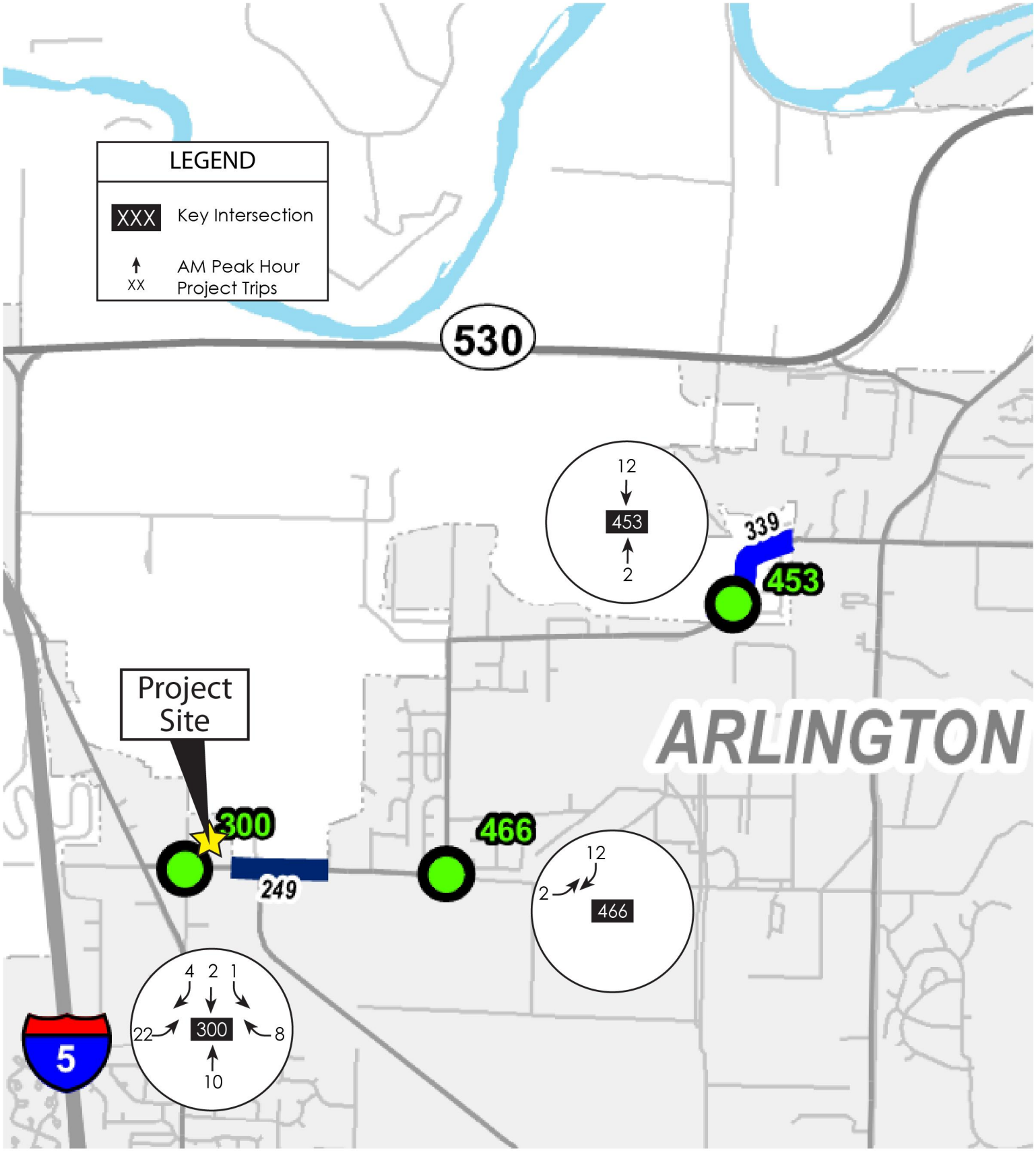
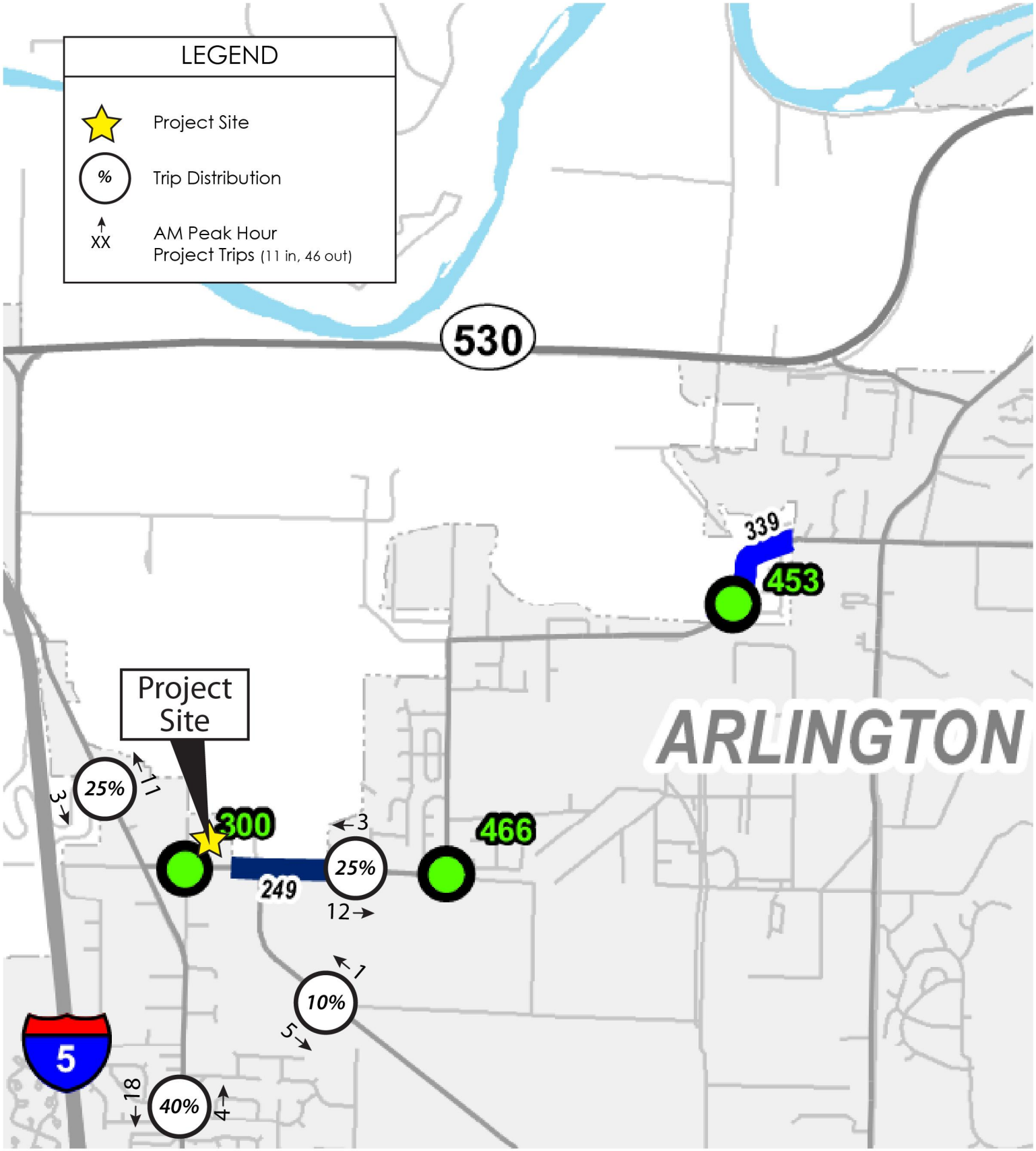


Appendix C2: AM Peak Hour Project Trip Assignment at Snohomish County Key Intersections



Appendix C3: PM Peak Hour Project Trip Distribution and Assignment

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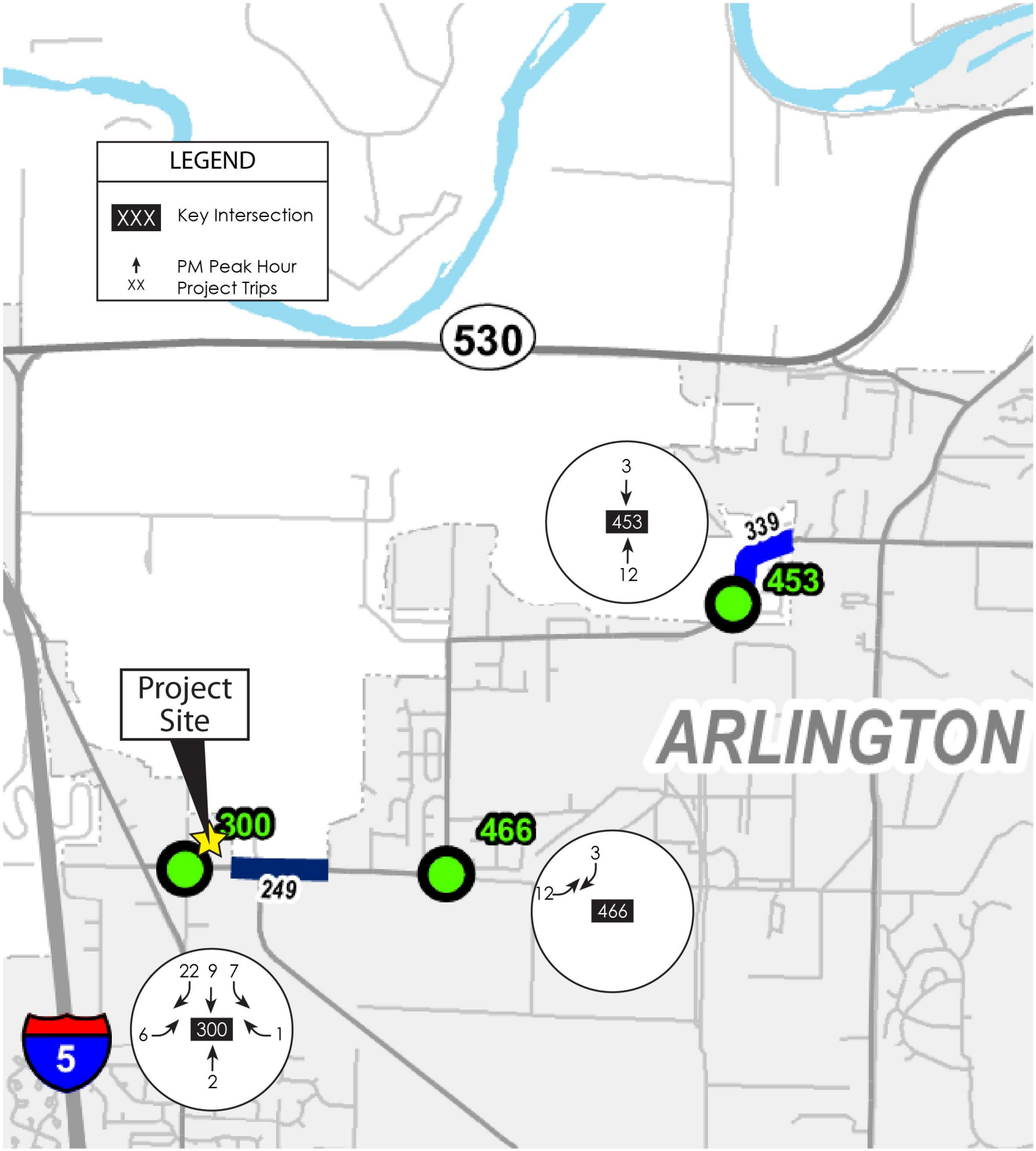
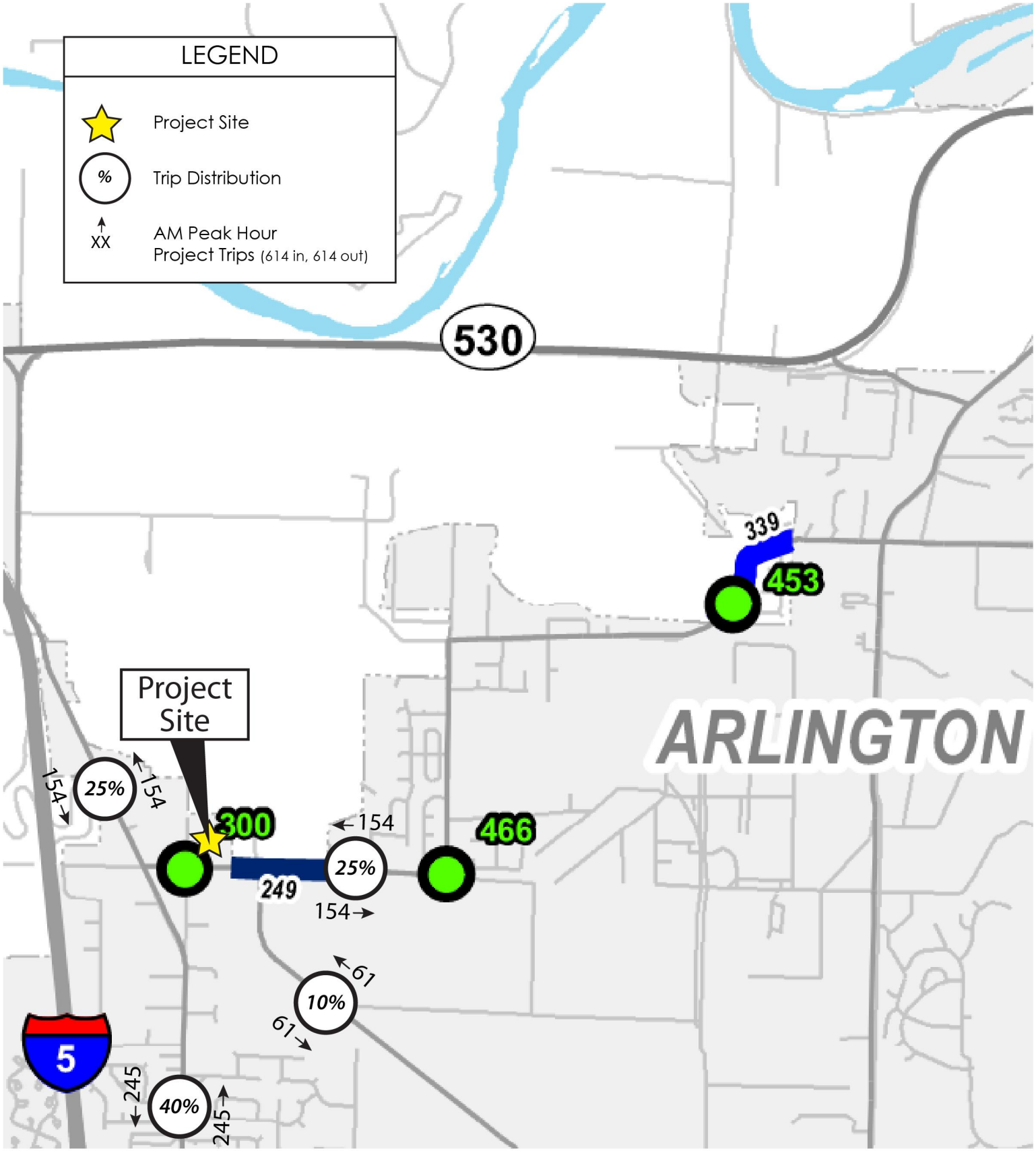


Appendix C4: PM Peak Hour Project Trip Assignment at Snohomish County Key Intersections



Appendix C5: Daily Project Trip Distribution and Assignment

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Appendix D

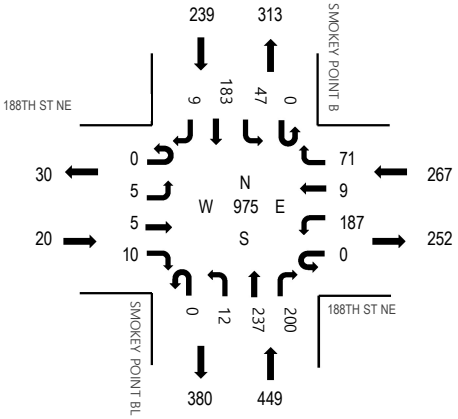
Existing Traffic Counts

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

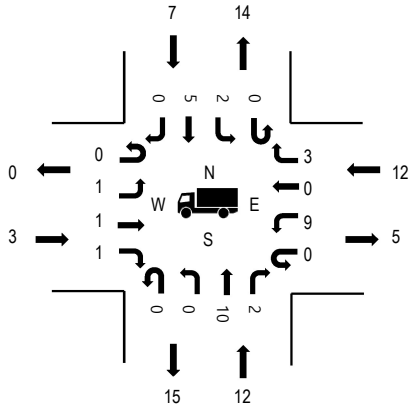
Location: 1 SMOKEY POINT BLVD & 188TH ST NE PM
Date: Tuesday, February 27, 2024
Peak Hour: 04:00 PM - 05:00 PM

Peak Hour

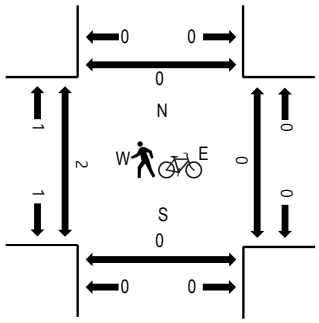
Motorized Vehicles



Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



	HV%	PHF
EB	15.0%	0.56
WB	4.5%	0.94
NB	2.7%	0.97
SB	2.9%	0.96
All	3.5%	0.98

Traffic Counts - Motorized Vehicles

Interval Start Time	188TH ST NE Eastbound				188TH ST NE Westbound				SMOKEY POINT BLVD Northbound				SMOKEY POINT BLVD Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
4:00 PM	0	2	0	3	0	50	0	17	0	4	64	48	0	12	49	1	250	975
4:15 PM	0	1	2	0	0	48	2	17	0	4	51	56	0	10	46	0	237	960
4:30 PM	0	0	1	2	0	38	5	19	0	1	73	42	0	15	41	5	242	945
4:45 PM	0	2	2	5	0	51	2	18	0	3	49	54	0	10	47	3	246	900
5:00 PM	0	1	3	1	0	41	1	22	0	1	60	45	0	12	48	0	235	841
5:15 PM	0	0	0	1	0	46	1	18	0	2	48	60	0	12	34	0	222	
5:30 PM	0	3	1	2	0	35	4	10	0	1	41	51	0	10	38	1	197	
5:45 PM	0	3	3	1	0	38	4	8	0	3	27	46	0	17	35	2	187	
Count Total	0	12	12	15	0	347	19	129	0	19	413	402	0	98	338	12	1,816	
Peak Hour	0	5	5	10	0	187	9	71	0	12	237	200	0	47	183	9	975	

Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

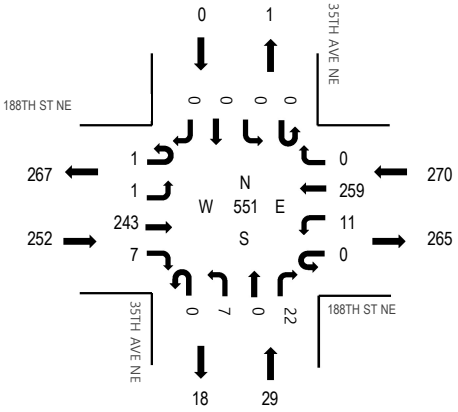
Interval Start Time	Heavy Vehicles					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	2	1	5	3	11	4:00 PM	1	0	0	0	1
4:15 PM	0	4	5	2	11	4:15 PM	1	0	0	0	1
4:30 PM	1	4	1	0	6	4:30 PM	0	0	0	0	0
4:45 PM	0	3	1	2	6	4:45 PM	0	0	0	0	0
5:00 PM	0	1	2	2	5	5:00 PM	0	0	0	0	0
5:15 PM	0	4	0	2	6	5:15 PM	0	0	0	0	0
5:30 PM	0	2	0	1	3	5:30 PM	0	0	0	0	0
5:45 PM	0	1	0	3	4	5:45 PM	1	0	0	0	1
Count Total	3	20	14	15	52	Count Total	3	0	0	0	3
Peak Hour	3	12	12	7	34	Peak Hour	2	0	0	0	2

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

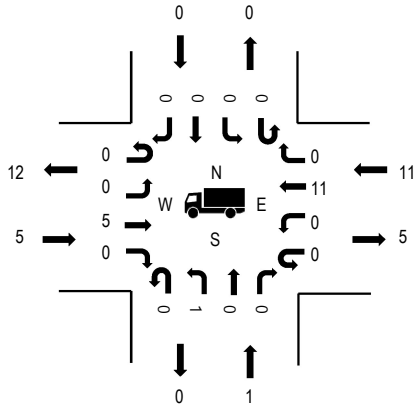
Location: 2 35TH AVE NE & 188TH ST NE PM
Date: Tuesday, February 27, 2024
Peak Hour: 04:00 PM - 05:00 PM

Peak Hour

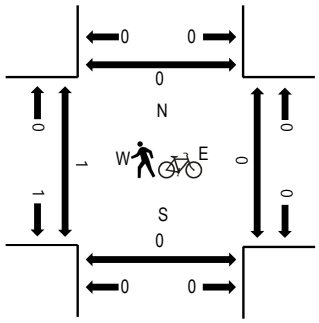
Motorized Vehicles



Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



	HV%	PHF
EB	2.0%	0.91
WB	4.1%	0.95
NB	3.4%	0.66
SB	0.0%	0.00
All	3.1%	0.98

Traffic Counts - Motorized Vehicles

Interval Start Time	188TH ST NE Eastbound				188TH ST NE Westbound				35TH AVE NE Northbound				35TH AVE NE Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
4:00 PM	0	0	57	3	0	5	66	0	0	3	0	7	0	0	0	0	141	551
4:15 PM	0	1	64	1	0	2	62	0	0	3	0	8	0	0	0	0	141	543
4:30 PM	0	0	56	1	0	2	63	0	0	0	0	6	0	0	0	0	128	543
4:45 PM	1	0	66	2	0	2	68	0	0	1	0	1	0	0	0	0	141	540
5:00 PM	0	0	59	0	0	2	66	0	0	0	0	6	0	0	0	0	133	523
5:15 PM	0	0	68	3	0	1	63	0	0	0	0	6	0	0	0	0	141	
5:30 PM	0	0	63	0	0	4	48	0	0	3	0	7	0	0	0	0	125	
5:45 PM	0	0	61	6	0	1	45	0	0	3	0	8	0	0	0	0	124	
Count Total	1	1	494	16	0	19	481	0	0	13	0	49	0	0	0	0	1,074	
Peak Hour	1	1	243	7	0	11	259	0	0	7	0	22	0	0	0	0	551	

Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

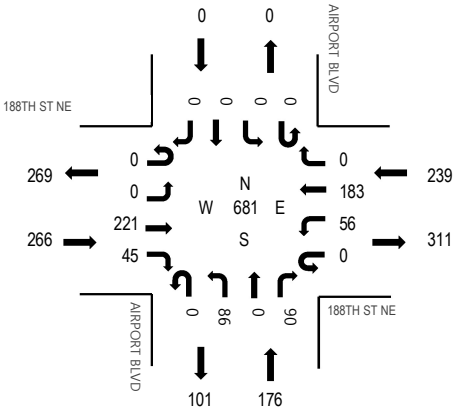
Interval Start Time	Heavy Vehicles					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	1	1	4	0	6	4:00 PM	1	0	0	0	1
4:15 PM	2	0	5	0	7	4:15 PM	0	0	0	0	0
4:30 PM	1	0	1	0	2	4:30 PM	0	0	0	0	0
4:45 PM	1	0	1	0	2	4:45 PM	0	0	0	0	0
5:00 PM	0	1	2	0	3	5:00 PM	0	0	0	0	0
5:15 PM	4	0	0	0	4	5:15 PM	0	0	0	0	0
5:30 PM	2	0	0	0	2	5:30 PM	0	0	0	0	0
5:45 PM	1	0	0	0	1	5:45 PM	0	0	0	0	0
Count Total	12	2	13	0	27	Count Total	1	0	0	0	1
Peak Hour	5	1	11	0	17	Peak Hour	1	0	0	0	1

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

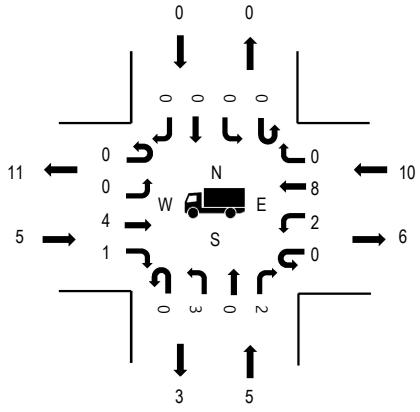
Location: 3 AIRPORT BLVD & 188TH ST NE PM
Date: Tuesday, February 27, 2024
Peak Hour: 04:00 PM - 05:00 PM

Peak Hour

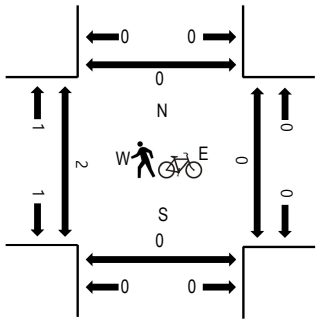
Motorized Vehicles



Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



	HV%	PHF
EB	1.9%	0.90
WB	4.2%	0.85
NB	2.8%	0.77
SB	0.0%	0.00
All	2.9%	0.98

Traffic Counts - Motorized Vehicles

Interval Start Time	188TH ST NE Eastbound				188TH ST NE Westbound				AIRPORT BLVD Northbound				AIRPORT BLVD Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
4:00 PM	0	0	56	10	0	19	51	0	0	20	0	18	0	0	0	0	174	681
4:15 PM	0	0	59	15	0	13	48	0	0	15	0	16	0	0	0	0	166	664
4:30 PM	0	0	45	14	0	13	40	0	0	28	0	29	0	0	0	0	169	665
4:45 PM	0	0	61	6	0	11	44	0	0	23	0	27	0	0	0	0	172	643
5:00 PM	0	0	53	11	0	14	39	0	0	27	0	13	0	0	0	0	157	613
5:15 PM	0	0	60	9	0	16	44	0	0	21	0	17	0	0	0	0	167	
5:30 PM	0	0	56	15	0	10	37	0	0	12	0	17	0	0	0	0	147	
5:45 PM	0	0	53	15	0	13	40	0	0	7	0	14	0	0	0	0	142	
Count Total	0	0	443	95	0	109	343	0	0	153	0	151	0	0	0	0	1,294	
Peak Hour	0	0	221	45	0	56	183	0	0	86	0	90	0	0	0	0	681	

Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

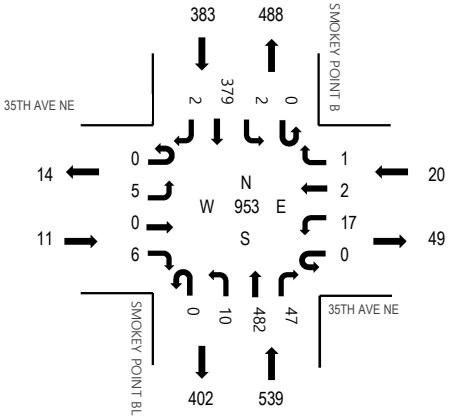
Interval Start Time	Heavy Vehicles					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	1	1	3	0	5	4:00 PM	1	0	0	0	1
4:15 PM	1	2	5	0	8	4:15 PM	0	0	0	0	0
4:30 PM	1	0	2	0	3	4:30 PM	1	0	0	0	1
4:45 PM	2	2	0	0	4	4:45 PM	0	0	0	0	0
5:00 PM	1	1	1	0	3	5:00 PM	0	0	0	0	0
5:15 PM	4	0	0	0	4	5:15 PM	0	0	0	0	0
5:30 PM	2	1	1	0	4	5:30 PM	0	0	0	0	0
5:45 PM	1	0	0	0	1	5:45 PM	0	0	0	0	0
Count Total	13	7	12	0	32	Count Total	2	0	0	0	2
Peak Hour	5	5	10	0	20	Peak Hour	2	0	0	0	2

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

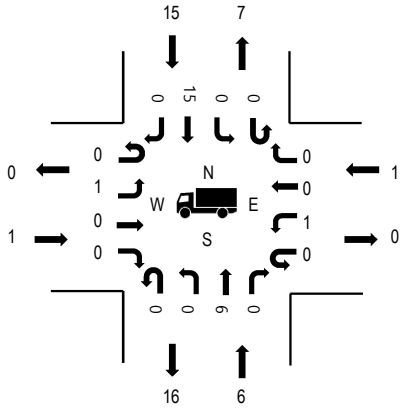
Location: 4 SMOKEY POINT BLVD & 35TH AVE NE PM
Date: Tuesday, February 27, 2024
Peak Hour: 04:00 PM - 05:00 PM

Peak Hour

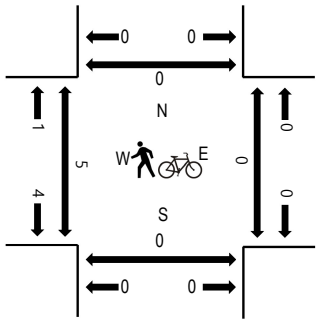
Motorized Vehicles



Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



	HV%	PHF
EB	9.1%	0.55
WB	5.0%	0.83
NB	1.1%	0.98
SB	3.9%	0.91
All	2.4%	0.94

Traffic Counts - Motorized Vehicles

Interval Start Time	35TH AVE NE Eastbound				35TH AVE NE Westbound				SMOKEY POINT BLVD Northbound				SMOKEY POINT BLVD Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
4:00 PM	0	2	0	3	0	5	1	0	0	1	122	14	0	1	103	1	253	953
4:15 PM	0	1	0	2	0	4	0	0	0	1	116	18	0	0	91	1	234	936
4:30 PM	0	0	0	0	0	4	1	1	0	3	125	4	0	1	82	0	221	918
4:45 PM	0	2	0	1	0	4	0	0	0	5	119	11	0	0	103	0	245	897
5:00 PM	0	1	0	1	0	4	0	0	0	0	115	15	0	0	98	2	236	832
5:15 PM	0	0	0	0	0	3	0	1	0	5	121	11	0	0	74	1	216	
5:30 PM	0	0	0	0	0	1	0	2	0	0	103	13	0	0	81	0	200	
5:45 PM	0	0	0	0	0	2	0	1	0	3	87	9	1	0	77	0	180	
Count Total	0	6	0	7	0	27	2	5	0	18	908	95	1	2	709	5	1,785	
Peak Hour	0	5	0	6	0	17	2	1	0	10	482	47	0	2	379	2	953	

Traffic Counts - Heavy Vehicles and Pedestrians/Bicycles in Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	0	0	1	7	8	4:00 PM	1	0	0	0	1
4:15 PM	1	0	0	6	7	4:15 PM	1	0	0	0	1
4:30 PM	0	5	0	1	6	4:30 PM	1	0	0	0	1
4:45 PM	0	1	0	1	2	4:45 PM	2	0	0	0	2
5:00 PM	0	2	0	2	4	5:00 PM	0	0	0	0	0
5:15 PM	0	3	0	0	3	5:15 PM	1	0	0	0	1
5:30 PM	0	2	0	1	3	5:30 PM	1	0	0	0	1
5:45 PM	0	1	0	2	3	5:45 PM	2	0	0	0	2
Count Total	1	14	1	20	36	Count Total	9	0	0	0	9
Peak Hour	1	6	1	15	23	Peak Hour	5	0	0	0	5

Appendix E

Level of Service (LOS) Methodology and Calculations

Level of Service Methodology

Level of Service (LOS) generally refers to the degree of congestion at an intersection. It is a measure of vehicle operating speed, travel time, travel delays, and driving comfort. A letter scale from A to F generally describes intersection LOS.

Signalized Intersection LOS represents the average control delay (sec/veh) and can be reported for the overall intersection, for each approach, and for each lane group (additional v/c ratio criteria apply to lane group LOS only). The table below outlines the HCM (7th Edition) LOS criteria for signalized intersections.

LOS Criteria for Signalized Intersections [1]

Control Delay (sec/veh)	Level of Service [2]	General Description [3]
≤ 10	A	Exceptionally Favorable Progression (or very short cycle lengths) – Most vehicles arrive during the green indication and travel through the intersection without stopping.
> 10 to ≤ 20	B	Highly Favorable Progression (or short cycle lengths) – While more vehicles than LOS A stop, most vehicles still pass through the intersection without stopping.
> 20 to ≤ 35	C	Favorable Progression (or moderate cycle lengths) – Individual cycle failures begin to appear, but many vehicles still pass through the intersection without stopping.
> 35 to ≤ 55	D	Ineffective Progression (or long cycle lengths) – Many vehicles stop and individual cycle failures are noticeable.
> 55 to ≤ 80	E	Unfavorable Progression (and long cycle lengths) – Individual cycle failures are frequent.
> 80	F	Very Poor Progression (and long cycle lengths) – Most cycles fail to clear the queue at this level.

1 Source: Highway Capacity Manual 7th Edition, Transportation Research Board, 2022.
2 If the volume-to-capacity (v/c) ratio for a lane group exceeds 1.0, LOS F is assigned to the individual lane group. For approach-based and intersection-wide assessments at signals, LOS is defined solely by control delay.
3 Individual cycle failures: one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle.

Synchro 12 and/or HCM 2000 LOS methodology may be used when HCM 7th Edition methodology is not supported at an intersection (i.e., intersection geometry and/or custom phasing) or jurisdictional standards require use of an alternative methodology.

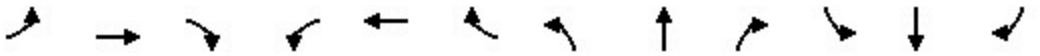
Unsignalized Intersection LOS (two-way stop control, all-way stop control, and roundabouts) is based on the average control delay. For two-way stop-controlled intersections, the LOS criteria apply to each controlled minor-street approach, controlled minor-street lane group, and controlled major-street movement (additional v/c ratio criteria apply to lane group LOS only). LOS is not calculated for major-street approaches or for the intersection as a whole at two-way stop-controlled intersections. For all-way stop-controlled intersections and roundabouts, LOS can be reported for the overall intersection, for each approach, and for each lane group (additional v/c ratio criteria apply to lane group LOS only). The table below outlines the HCM (7th Edition) LOS criteria for unsignalized intersections based on these methodologies.

LOS Criteria for Unsignalized Intersections[1]

Control Delay (sec/veh)	Level of Service [2]
≤ 10	A
> 10 to ≤ 15	B
> 15 to ≤ 25	C
> 25 to ≤ 35	D
> 35 to ≤ 50	E
> 50	F

1 Source: Highway Capacity Manual 7th Edition, Transportation Research Board, 2022.
2 If the volume-to-capacity (v/c) ratio for a lane group exceeds 1.0, LOS F is assigned to the individual lane group. For approach-based and intersection-wide assessments at unsignalized intersections, LOS is defined solely by control delay.

2024 Existing



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	5	10	187	9	71	12	237	200	47	183	9
Future Volume (vph)	5	5	10	187	9	71	12	237	200	47	183	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		320			331			347			347	
Travel Time (s)		7.3			7.5			7.9			7.9	
Confl. Peds. (#/hr)							2					2
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 (%)	15%	15%	15%	5%	5%	5%	3%	3%	3%	3%	3%	3%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other

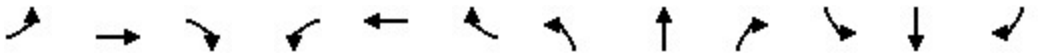
Control Type: Unsignalized

Intersection	
Intersection Delay, s/veh	14.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	5	10	187	9	71	12	237	200	47	183	9
Future Vol, veh/h	5	5	10	187	9	71	12	237	200	47	183	9
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, %	15	15	15	5	5	5	3	3	3	3	3	3
Mvmt Flow	5	5	10	191	9	72	12	242	204	48	187	9
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	9.6	13.3	16.1	11.8
HCM LOS	A	B	C	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	3%	25%	70%	20%
Vol Thru, %	53%	25%	3%	77%
Vol Right, %	45%	50%	27%	4%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	449	20	267	239
LT Vol	12	5	187	47
Through Vol	237	5	9	183
RT Vol	200	10	71	9
Lane Flow Rate	458	20	272	244
Geometry Grp	1	1	1	1
Degree of Util (X)	0.631	0.036	0.438	0.373
Departure Headway (Hd)	4.958	6.298	5.781	5.506
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	728	566	621	651
Service Time	2.998	4.366	3.826	3.553
HCM Lane V/C Ratio	0.629	0.035	0.438	0.375
HCM Control Delay, s/veh	16.1	9.6	13.3	11.8
HCM Lane LOS	C	A	B	B
HCM 95th-tile Q	4.5	0.1	2.2	1.7



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	243	7	11	259	0	7	0	22	0	0	0
Future Volume (vph)	1	243	7	11	259	0	7	0	22	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		25	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		319			688			266			318	
Travel Time (s)		6.2			5.8			5.2			6.2	
Confl. Peds. (#/hr)							1					1
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 (%)	2%	2%	2%	4%	4%	4%	3%	3%	3%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	243	7	11	259	0	7	0	22	0	0	0
Future Vol, veh/h	1	243	7	11	259	0	7	0	22	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	25	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	4	4	4	3	3	3	0	0	0
Mvmt Flow	1	248	7	11	264	0	7	0	22	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	264	0	0	255	0	0	541	540	252	537	544	265
Stage 1	-	-	-	-	-	-	254	254	-	287	287	-
Stage 2	-	-	-	-	-	-	288	287	-	250	257	-
Critical Hdwy	4.12	-	-	4.14	-	-	7.13	6.53	6.23	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.236	-	-	3.527	4.027	3.327	3.5	4	3.3
Pot Cap-1 Maneuver	1300	-	-	1298	-	-	450	447	785	458	449	778
Stage 1	-	-	-	-	-	-	749	695	-	725	678	-
Stage 2	-	-	-	-	-	-	718	673	-	759	699	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1300	-	-	1298	-	-	445	442	785	440	444	777
Mov Cap-2 Maneuver	-	-	-	-	-	-	445	442	-	440	444	-
Stage 1	-	-	-	-	-	-	748	695	-	718	671	-
Stage 2	-	-	-	-	-	-	710	666	-	736	698	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.03	0.32	10.57	0
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	445	785	7	-	-	73	-	-	-
HCM Lane V/C Ratio	0.016	0.029	0.001	-	-	0.009	-	-	-
HCM Control Delay (s/veh)	13.2	9.7	7.8	0	-	7.8	0	-	0
HCM Lane LOS	B	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0.1	0	-	-	0	-	-	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	221	45	56	183	86	90
Future Volume (vph)	221	45	56	183	86	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	35			35	35	
Link Distance (ft)	413			366	401	
Travel Time (s)	8.0			7.1	7.8	
Confl. Peds. (#/hr)					2	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	2%	4%	4%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	3.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	221	45	56	183	86	90
Future Vol, veh/h	221	45	56	183	86	90
Conflicting Peds, #/hr	0	0	0	0	2	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #0	-	-	0	0	-	
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	4	4	3	3
Mvmt Flow	226	46	57	187	88	92

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	271	0	551	248
Stage 1	-	-	-	-	248	-
Stage 2	-	-	-	-	303	-
Critical Hdwy	-	-	4.14	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.236	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	1280	-	493	788
Stage 1	-	-	-	-	791	-
Stage 2	-	-	-	-	747	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1280	-	468	788
Mov Cap-2 Maneuver	-	-	-	-	468	-
Stage 1	-	-	-	-	791	-
Stage 2	-	-	-	-	708	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.86	12.27
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	468	788	-	-	422	-
HCM Lane V/C Ratio	0.188	0.117	-	-	0.045	-
HCM Control Delay (s/veh)	14.5	10.2	-	-	7.9	0
HCM Lane LOS	B	B	-	-	A	A
HCM 95th %tile Q(veh)	0.7	0.4	-	-	0.1	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	17	1	482	47	2	379
Future Volume (vph)	17	1	482	47	2	379
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25		35			35
Link Distance (ft)	344		312			281
Travel Time (s)	9.4		6.1			7.7
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	5%	5%	1%	1%	4%	4%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	17	1	482	47	2	379
Future Vol, veh/h	17	1	482	47	2	379
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	5	5	1	1	4	4
Mvmt Flow	18	1	513	50	2	403

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	945	538	0	0	563	0
Stage 1	538	-	-	-	-	-
Stage 2	407	-	-	-	-	-
Critical Hdwy	6.45	6.25	-	-	4.14	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.345	-	-	2.236	-
Pot Cap-1 Maneuver	287	538	-	-	999	-
Stage 1	579	-	-	-	-	-
Stage 2	665	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	286	538	-	-	999	-
Mov Cap-2 Maneuver	286	-	-	-	-	-
Stage 1	579	-	-	-	-	-
Stage 2	663	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/veh	18.11	0	0.05
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	294	9	-
HCM Lane V/C Ratio	-	-	0.065	0.002	-
HCM Control Delay (s/veh)	-	-	18.1	8.6	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

2026 No Action

LANE LEVEL OF SERVICE

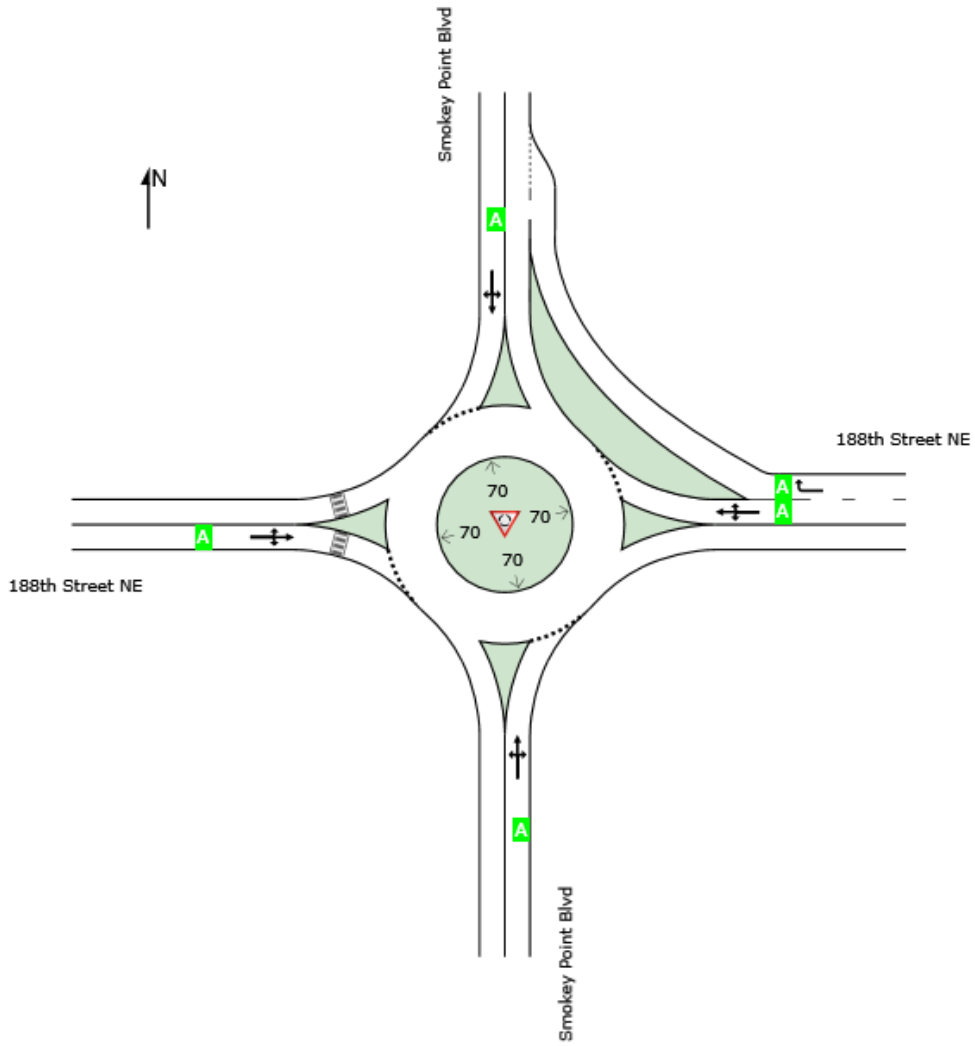
Lane Level of Service

Site: 1 [Smokey Point Blvd/188th Street NE (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

2026 No Action - PM Peak Hour
Site Category: (None)
Roundabout

	Approaches				Intersection
	South	East	North	West	
LOS	A	A	A	A	A



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

MOVEMENT SUMMARY

Site: 1 [Smokey Point Blvd/188th Street NE (Site Folder: General)]

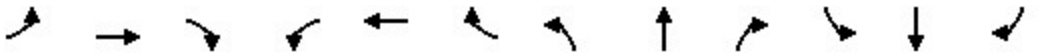
Output produced by SIDRA INTERSECTION Version: 9.1.6.228

2026 No Action - PM Peak Hour
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival 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	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Smokey Point Blvd															
3	L2	All MCs	13	3.0	13	3.0	0.404	6.6	LOS A	2.6	67.0	0.28	0.11	0.28	32.0
8	T1	All MCs	266	3.0	266	3.0	0.404	6.6	LOS A	2.6	67.0	0.28	0.11	0.28	32.6
18	R2	All MCs	226	3.0	226	3.0	0.404	6.6	LOS A	2.6	67.0	0.28	0.11	0.28	32.4
Approach			505	3.0	505	3.0	0.404	6.6	LOS A	2.6	67.0	0.28	0.11	0.28	32.5
East: 188th Street NE															
1	L2	All MCs	210	5.0	210	5.0	0.217	5.6	LOS A	0.9	23.6	0.43	0.28	0.43	30.6
6	T1	All MCs	10	5.0	10	5.0	0.217	5.6	LOS A	0.9	23.6	0.43	0.28	0.43	31.1
16	R2	All MCs	80	5.0	80	5.0	0.050	2.9	LOS A	0.0	0.0	0.00	0.00	0.00	36.2
Approach			300	5.0	300	5.0	0.217	4.9	LOS A	0.9	23.6	0.32	0.21	0.32	31.9
North: Smokey Point Blvd															
7	L2	All MCs	53	3.0	53	3.0	0.259	5.9	LOS A	1.3	32.5	0.45	0.28	0.45	31.9
4	T1	All MCs	206	3.0	206	3.0	0.259	5.9	LOS A	1.3	32.5	0.45	0.28	0.45	32.5
14	R2	All MCs	10	3.0	10	3.0	0.259	5.9	LOS A	1.3	32.5	0.45	0.28	0.45	32.3
Approach			269	3.0	269	3.0	0.259	5.9	LOS A	1.3	32.5	0.45	0.28	0.45	32.4
West: 188th Street NE															
5	L2	All MCs	6	15.0	6	15.0	0.034	5.6	LOS A	0.1	3.1	0.51	0.38	0.51	31.6
2	T1	All MCs	6	15.0	6	15.0	0.034	5.6	LOS A	0.1	3.1	0.51	0.38	0.51	32.3
12	R2	All MCs	11	15.0	11	15.0	0.034	5.6	LOS A	0.1	3.1	0.51	0.38	0.51	32.0
Approach			23	15.0	23	15.0	0.034	5.6	LOS A	0.1	3.1	0.51	0.38	0.51	32.0
All Vehicles			1098	3.8	1098	3.8	0.404	5.9	LOS A	2.6	67.0	0.34	0.18	0.34	32.3

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: Siegloch M1 implied by US HCM 6 Roundabout Capacity Model.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	268	8	12	286	0	8	0	24	0	0	0
Future Volume (vph)	1	268	8	12	286	0	8	0	24	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		25	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		319			688			266			318	
Travel Time (s)		6.2			5.8			5.2			6.2	
Confl. Peds. (#/hr)							1					1
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 (%)	2%	2%	2%	4%	4%	4%	3%	3%	3%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	268	8	12	286	0	8	0	24	0	0	0
Future Vol, veh/h	1	268	8	12	286	0	8	0	24	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	25	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	4	4	4	3	3	3	0	0	0
Mvmt Flow	1	273	8	12	292	0	8	0	24	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	292	0	0	282	0	0	597	596	278	592	600	293
Stage 1	-	-	-	-	-	-	280	280	-	316	316	-
Stage 2	-	-	-	-	-	-	317	316	-	276	284	-
Critical Hdwy	4.12	-	-	4.14	-	-	7.13	6.53	6.23	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.236	-	-	3.527	4.027	3.327	3.5	4	3.3
Pot Cap-1 Maneuver	1270	-	-	1269	-	-	413	416	759	421	417	751
Stage 1	-	-	-	-	-	-	725	678	-	699	658	-
Stage 2	-	-	-	-	-	-	692	653	-	735	680	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1270	-	-	1269	-	-	408	410	759	402	412	750
Mov Cap-2 Maneuver	-	-	-	-	-	-	408	410	-	402	412	-
Stage 1	-	-	-	-	-	-	724	677	-	691	651	-
Stage 2	-	-	-	-	-	-	683	645	-	711	680	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.03	0.32	10.93	0
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	408	759	6	-	-	72	-	-	-
HCM Lane V/C Ratio	0.02	0.032	0.001	-	-	0.01	-	-	-
HCM Control Delay (s/veh)	14	9.9	7.8	0	-	7.9	0	-	0
HCM Lane LOS	B	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0.1	0	-	-	0	-	-	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	244	50	62	202	95	99
Future Volume (vph)	244	50	62	202	95	99
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	35			35	35	
Link Distance (ft)	413			366	401	
Travel Time (s)	8.0			7.1	7.8	
Confl. Peds. (#/hr)					2	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	2%	4%	4%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	244	50	62	202	95	99
Future Vol, veh/h	244	50	62	202	95	99
Conflicting Peds, #/hr	0	0	0	0	2	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #0		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	4	4	3	3
Mvmt Flow	249	51	63	206	97	101

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	300	0	609	274
Stage 1	-	-	-	-	274	-
Stage 2	-	-	-	-	335	-
Critical Hdwy	-	-	4.14	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.236	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	1250	-	457	762
Stage 1	-	-	-	-	769	-
Stage 2	-	-	-	-	723	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1250	-	430	762
Mov Cap-2 Maneuver	-	-	-	-	430	-
Stage 1	-	-	-	-	769	-
Stage 2	-	-	-	-	680	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.89	13.07
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	430	762	-	-	423	-
HCM Lane V/C Ratio	0.226	0.133	-	-	0.051	-
HCM Control Delay (s/veh)	15.8	10.4	-	-	8	0
HCM Lane LOS	C	B	-	-	A	A
HCM 95th %tile Q(veh)	0.9	0.5	-	-	0.2	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	19	1	531	52	2	418
Future Volume (vph)	19	1	531	52	2	418
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25		35			35
Link Distance (ft)	344		312			281
Travel Time (s)	9.4		6.1			7.7
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	5%	5%	1%	1%	4%	4%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	19	1	531	52	2	418
Future Vol, veh/h	19	1	531	52	2	418
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	5	5	1	1	4	4
Mvmt Flow	20	1	565	55	2	445

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1041	593	0	0	620	0
Stage 1	593	-	-	-	-	-
Stage 2	449	-	-	-	-	-
Critical Hdwy	6.45	6.25	-	-	4.14	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.345	-	-	2.236	-
Pot Cap-1 Maneuver	251	500	-	-	951	-
Stage 1	547	-	-	-	-	-
Stage 2	637	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	251	500	-	-	951	-
Mov Cap-2 Maneuver	251	-	-	-	-	-
Stage 1	547	-	-	-	-	-
Stage 2	635	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/veh	20.27	0	0.04
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	257	9	-
HCM Lane V/C Ratio	-	-	0.083	0.002	-
HCM Control Delay (s/veh)	-	-	20.3	8.8	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0	-

2026 With Project

LANE LEVEL OF SERVICE

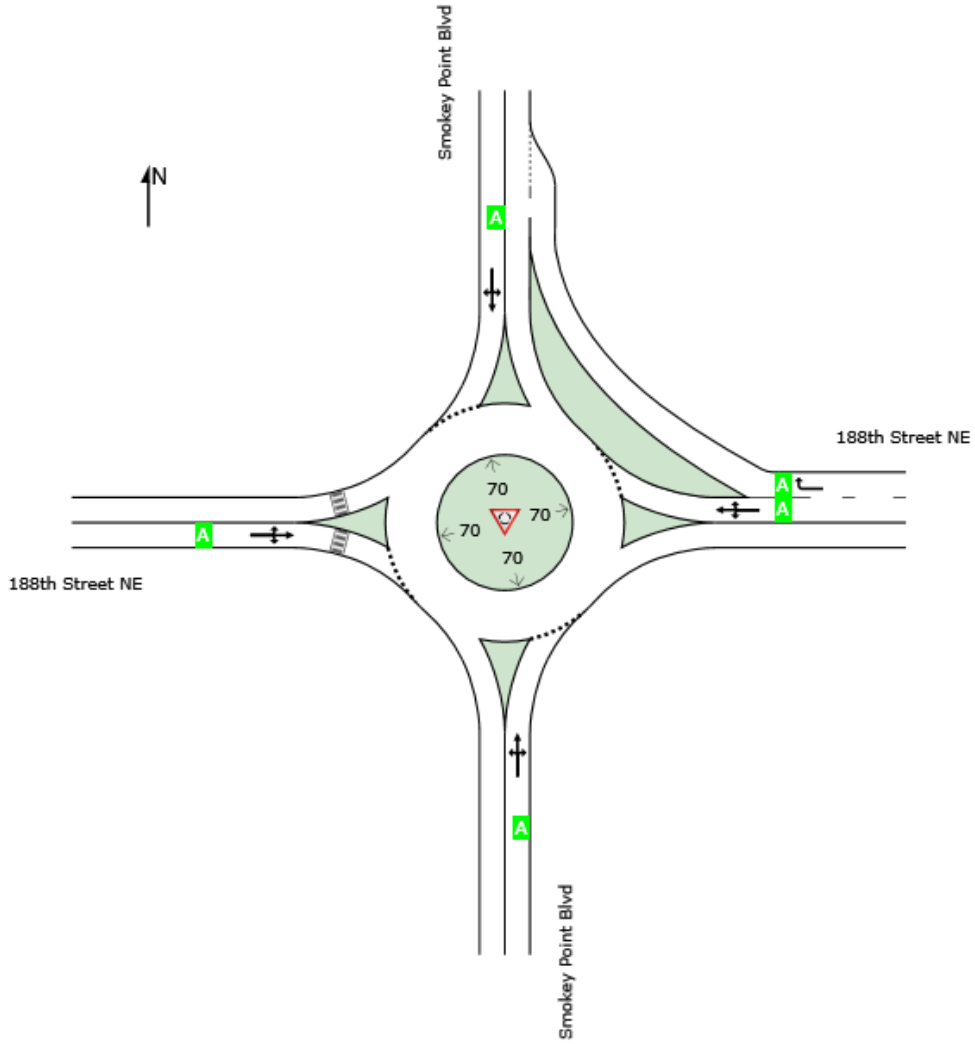
Lane Level of Service

Site: 1 [Smokey Point Blvd/188th Street NE (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

2026 With Project - PM Peak Hour
Site Category: (None)
Roundabout

	Approaches				Intersection
	South	East	North	West	
LOS	A	A	A	A	A



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

MOVEMENT SUMMARY

Site: 1 [Smokey Point Blvd/188th Street NE (Site Folder: General)]

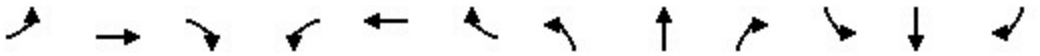
Output produced by SIDRA INTERSECTION Version: 9.1.6.228

2026 With Project - PM Peak Hour
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival 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	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Smokey Point Blvd															
3	L2	All MCs	13	3.0	13	3.0	0.408	6.7	LOS A	2.6	67.7	0.29	0.12	0.29	32.0
8	T1	All MCs	266	3.0	266	3.0	0.408	6.7	LOS A	2.6	67.7	0.29	0.12	0.29	32.6
18	R2	All MCs	228	3.0	228	3.0	0.408	6.7	LOS A	2.6	67.7	0.29	0.12	0.29	32.3
Approach			507	3.0	507	3.0	0.408	6.7	LOS A	2.6	67.7	0.29	0.12	0.29	32.4
East: 188th Street NE															
1	L2	All MCs	220	5.0	220	5.0	0.227	5.7	LOS A	1.0	24.9	0.43	0.28	0.43	30.5
6	T1	All MCs	10	5.0	10	5.0	0.227	5.7	LOS A	1.0	24.9	0.43	0.28	0.43	31.1
16	R2	All MCs	92	5.0	92	5.0	0.058	3.0	LOS A	0.0	0.0	0.00	0.00	0.00	36.2
Approach			322	5.0	322	5.0	0.227	4.9	LOS A	1.0	24.9	0.31	0.20	0.31	31.9
North: Smokey Point Blvd															
7	L2	All MCs	57	3.0	57	3.0	0.266	6.1	LOS A	1.3	33.5	0.46	0.29	0.46	31.9
4	T1	All MCs	206	3.0	206	3.0	0.266	6.1	LOS A	1.3	33.5	0.46	0.29	0.46	32.4
14	R2	All MCs	10	3.0	10	3.0	0.266	6.1	LOS A	1.3	33.5	0.46	0.29	0.46	32.2
Approach			273	3.0	273	3.0	0.266	6.1	LOS A	1.3	33.5	0.46	0.29	0.46	32.3
West: 188th Street NE															
5	L2	All MCs	6	15.0	6	15.0	0.035	5.7	LOS A	0.1	3.2	0.51	0.39	0.51	31.6
2	T1	All MCs	6	15.0	6	15.0	0.035	5.7	LOS A	0.1	3.2	0.51	0.39	0.51	32.3
12	R2	All MCs	11	15.0	11	15.0	0.035	5.7	LOS A	0.1	3.2	0.51	0.39	0.51	32.0
Approach			23	15.0	23	15.0	0.035	5.7	LOS A	0.1	3.2	0.51	0.39	0.51	31.9
All Vehicles			1127	3.8	1127	3.8	0.408	6.0	LOS A	2.6	67.7	0.34	0.19	0.34	32.2

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: Siegloch M1 implied by US HCM 6 Roundabout Capacity Model.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	268	8	12	286	1	8	2	24	7	9	22
Future Volume (vph)	7	268	8	12	286	1	8	2	24	7	9	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		25	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		319			688			266			318	
Travel Time (s)		6.2			5.8			5.2			6.2	
Confl. Peds. (#/hr)							1					1
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 (%)	2%	2%	2%	4%	4%	4%	3%	3%	3%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	268	8	12	286	1	8	2	24	7	9	22
Future Vol, veh/h	7	268	8	12	286	1	8	2	24	7	9	22
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	25	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	4	4	4	3	3	3	0	0	0
Mvmt Flow	7	273	8	12	292	1	8	2	24	7	9	22

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	293	0	0	282	0	0	614	609	278	606	613	293
Stage 1	-	-	-	-	-	-	292	292	-	317	317	-
Stage 2	-	-	-	-	-	-	322	317	-	289	296	-
Critical Hdwy	4.12	-	-	4.14	-	-	7.13	6.53	6.23	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.236	-	-	3.527	4.027	3.327	3.5	4	3.3
Pot Cap-1 Maneuver	1269	-	-	1269	-	-	403	408	759	412	410	751
Stage 1	-	-	-	-	-	-	714	669	-	699	658	-
Stage 2	-	-	-	-	-	-	688	652	-	723	672	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1269	-	-	1269	-	-	375	401	759	390	403	750
Mov Cap-2 Maneuver	-	-	-	-	-	-	375	401	-	390	403	-
Stage 1	-	-	-	-	-	-	709	665	-	691	650	-
Stage 2	-	-	-	-	-	-	650	645	-	693	667	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.19	0.32	11.33	12.1
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	380	759	44	-	-	72	-	-	546
HCM Lane V/C Ratio	0.027	0.032	0.006	-	-	0.01	-	-	0.071
HCM Control Delay (s/veh)	14.7	9.9	7.9	0	-	7.9	0	-	12.1
HCM Lane LOS	B	A	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0.1	0	-	-	0	-	-	0.2

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	256	54	62	205	96	99
Future Volume (vph)	256	54	62	205	96	99
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	35			35	35	
Link Distance (ft)	413			366	401	
Travel Time (s)	8.0			7.1	7.8	
Confl. Peds. (#/hr)					2	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	2%	4%	4%	3%	3%
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	256	54	62	205	96	99
Future Vol, veh/h	256	54	62	205	96	99
Conflicting Peds, #/hr	0	0	0	0	2	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #0		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	4	4	3	3
Mvmt Flow	261	55	63	209	98	101

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	316	0	626	289
Stage 1	-	-	-	-	289	-
Stage 2	-	-	-	-	338	-
Critical Hdwy	-	-	4.14	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.236	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	1233	-	446	748
Stage 1	-	-	-	-	758	-
Stage 2	-	-	-	-	720	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1233	-	419	748
Mov Cap-2 Maneuver	-	-	-	-	419	-
Stage 1	-	-	-	-	758	-
Stage 2	-	-	-	-	677	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.88	13.33
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	419	748	-	-	418	-
HCM Lane V/C Ratio	0.234	0.135	-	-	0.051	-
HCM Control Delay (s/veh)	16.2	10.6	-	-	8.1	0
HCM Lane LOS	C	B	-	-	A	A
HCM 95th %tile Q(veh)	0.9	0.5	-	-	0.2	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	28	1	533	54	2	428
Future Volume (vph)	28	1	533	54	2	428
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	25		35			35
Link Distance (ft)	344		312			281
Travel Time (s)	9.4		6.1			7.7
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	5%	5%	1%	1%	4%	4%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	28	1	533	54	2	428
Future Vol, veh/h	28	1	533	54	2	428
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	5	5	1	1	4	4
Mvmt Flow	30	1	567	57	2	455

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1055	596	0	0	624	0
Stage 1	596	-	-	-	-	-
Stage 2	460	-	-	-	-	-
Critical Hdwy	6.45	6.25	-	-	4.14	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.345	-	-	2.236	-
Pot Cap-1 Maneuver	247	498	-	-	947	-
Stage 1	545	-	-	-	-	-
Stage 2	630	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	246	498	-	-	947	-
Mov Cap-2 Maneuver	246	-	-	-	-	-
Stage 1	545	-	-	-	-	-
Stage 2	628	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	21.41	0	0.04
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	250	8	-
HCM Lane V/C Ratio	-	-	0.123	0.002	-
HCM Control Delay (s/veh)	-	-	21.4	8.8	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0	-