City of Arlington | Island Crossing Subarea

PLANNED ACTION DRAFT ENVIRONMENTAL IMPACT STATEMENT

Volume 2 - Appendices

DRAFT August 2025

City of Arlington

Appendices

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B Traffic Counts

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Appendix A Scoping Notice & Comment Summary

Notice of Application, Community Neighborhood Meeting, SEPA Determination of Significance, and Request for Comments on Scope of Environmental Impact Statement (EIS)

Island Crossing Subarea Plan and Planned Action EIS

Permit Number: PLN #1366

Date of Issuance: June 20, 2025

Date of Publication: June 24, 2025

Date of Application: February 2, 2024

Lead Agency: City of Arlington

Agency Contact: Amy Rusko, Deputy Director, arusko@arlingtonwa.gov, (360) 403-3551

Applicant: City of Arlington

Description of proposal: The City of Arlington is conducting a community planning process to develop a vision, plan, and implementation strategies for the Island Crossing Subarea. The City is proposing to adopt an Island Crossing Subarea Plan, development code, design standards, and Planned Action Ordinance (PAO). These will lay the groundwork for continued, coordinated, and efficient growth of the area. The subarea plan is being developed for consistency with the Growth Management Act, County-wide planning policies, and the City of Arlington Comprehensive Plan.

The Planned Action EIS will review a range of alternatives including comparing the current plan and regulations (Alternative 1: No Action, required under the State Environmental Policy Act (SEPA)) to two action alternatives (Alternative 2: Subarea Plan Partial Implementation and Alternative 3: Subarea Plan Full Implementation). Alternative 2 includes an increased height limit near I-5 for hotels, improvements to SR 530, and no public investment in a regional floodwater compensatory storage facility. Alternative 3 includes the same height limit increase and SR 530 improvements as Alternative 2, and also includes public investment in a regional floodwater compensatory storage facility and floodable park to address flooding and increase development capacity.

Location of proposal: The Island Crossing subarea is in the northwest corner of Arlington, bounded by I-5, Smokey Point Boulevard, 27th Avenue, and the northern edge of properties directly north of SR 530.

Determination: The City of Arlington as lead agency under the State Environmental Policy Act (SEPA) has determined that this proposal could potentially have a significant adverse impact on the environment. An environmental impact statement (EIS) is required under RCW 43.21C.030 (2)(c) and will be prepared under the City's direction.

The lead agency has identified the following areas for discussion in the EIS:

- Water: floods, surface water, groundwater, and wetlands
- Natural environment: Plants and animals, natural resources

- Land use and urban form: Relationship to existing plans, estimated population/ employment, and aesthetics/scenic resources
- Transportation
- Utilities: Sewer, water, stormwater, electrical power, and natural gas

Arlington Ordinance 2023-016, incorporated as AMC 20.44.032 Subarea Plans, requires that subarea plans be processed in conjunction with a Planned Action EIS. The PAO will be developed under RCW 43.21C.440 and associated SEPA rules in WAC 197-11 based on the EIS. Future proposals consistent with the Planned Action Ordinance, Subarea Plan, and development regulations would have a streamlined environmental review and permitting process.

Scoping: Agencies, affected tribes, and members of the public are invited to comment on the scope of the EIS. You may comment on alternatives, mitigation measures, probable significant adverse impacts, and licenses or other approvals that may be required. The method and deadline for giving us your comments are:

Send written comments by 5:00 pm on Tuesday, July 15, 2025 to the contact below. Email comments are preferred.

Email: arusko@arlingtonwa.gov (Subject: Island Crossing Subarea EIS Scoping Comments)

Mail: City of Arlington
Attn: Amy Rusko, Community and Economic Development Deputy Director
18204 59th Avenue NE
Arlington, WA 98233

Community Meeting: As part of the community planning process and to meet the Planned Action community meeting provisions in RCW 43.21C.440(3)(b), the City is holding a public neighborhood meeting on Wednesday, July 9, 2025 at Putnam Hall in the Community and Economic Development Office (18204 59th Avenue NE, Arlington, WA 98223), from 5:00 pm to 6:30 pm, with a presentation at 5:10 pm. If you need special accommodations for the meeting, please contact the City of Arlington at 360-403-3551.

For more information, please see the City of Arlington project website: https://www.arlingtonwa.gov/867/Island-Crossing-Subarea-Plan.

Permits and Documents Required: Subarea Plan, EIS, and Planned Action Ordinance

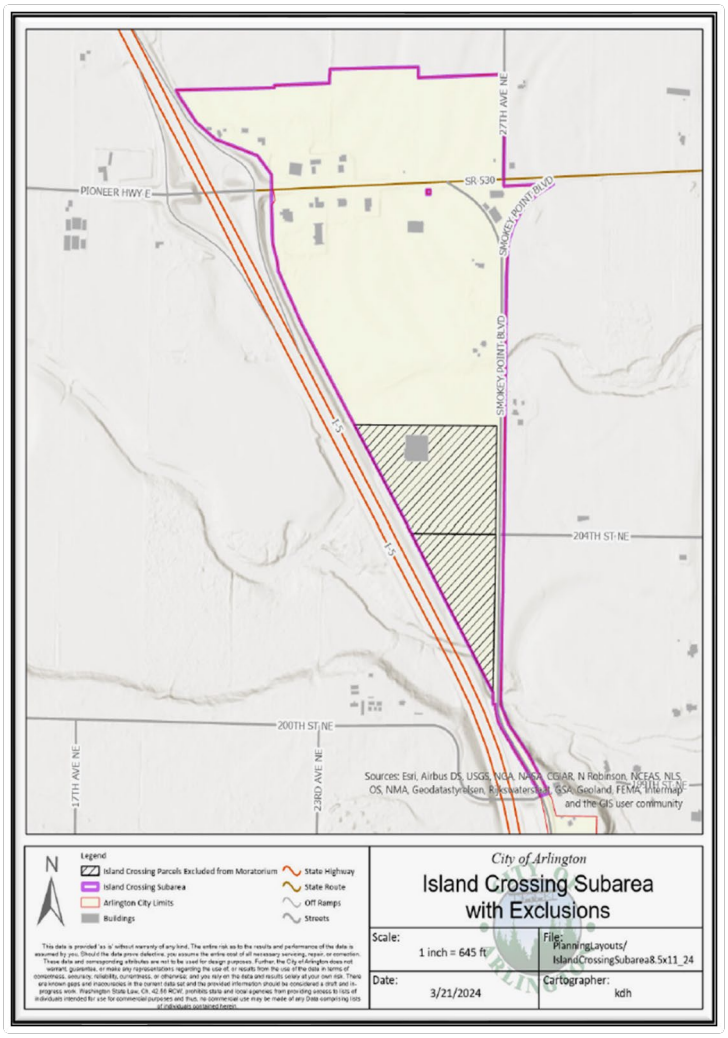
SEPA Responsible Official: Amy Rusko, Deputy Community and Economic Development Director, City of Arlington, arusko@arlingtonwa.gov, 360-403-3457

Amy Rusko — 6/20/2025

Signature — Date

Appeal Process

An agency or person may appeal the City's procedural compliance with WAC 197-11. The appeal shall meet the requirements of AMC 20.98.210, AMC 20.20, and AMC 20.24. The appeal period commences on the date of publication of notice. Any appeal to the Hearing Examiner must be addressed to the City Hearing Examiner, accompanied by an application, written findings, a filing fee (plus the actual cost of the Hearing Examiner), and be filed in writing at the City of Arlington, Community and Economic Development Department, 18204 59th Avenue NE, Arlington, WA 98223.


27TH AVE NE
SR 530
PIONEER HWY E
SMOKEY POINT BLVD
I-5
204TH ST NE
200TH ST NE
17TH AVE NE
23RD AVE NE
Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap, and the GIS user community
Legend
Island Crossing Parcels Excluded from Moratorium
Island Crossing Subarea
Arlington City Limits
Buildings
State Highway
State Route
Off Ramps
Streets
City of Arlington
Island Crossing Subarea with Exclusions
Scale: 1 inch = 645 ft
File: PlanningLayouts/IslandCrossingSubarea8.5x11_24
Date: 3/21/2024
Cartographer: kdh

Summary of Comments

From May through November 2024, the City gathered stakeholders' and community members' ideas and goals for the subarea. This engagement included workshops, surveys, and advisory group meetings with business and property owners. Additionally, technical meetings with Snohomish County representatives, the Washington State Department of Transportation (WSDOT), and Community Transit informed the design considerations for SR 530. A summary table of this plan's public engagement activities is below.

Exhibit 1-1 Engagement Summary

Event	Date	Audience	What we learned
Kick-off tour and meeting	Mar. 2024	Elected officials	▪ Flooding is a major issue, particularly flooding across 530. ▪ Herrera to research feasibility and impact of a side channel along the edge of the County-owned park property. ▪ Conversations with property owners between 530 and the river may be needed. ▪ Interventions are unlikely to get the entire area out of the floodplain. ▪ Access control along 530 is an issue; road improvements are needed. ▪ Potential to bring activity/assets to the highway frontage.
Visioning Open House	May 2024	Arlington community	▪ Flooding impacts to properties and roads are a major concern. ▪ Diverging visions for future land uses include additional auto-oriented commercial uses, preservation of agricultural land, and promotion of agritourism. ▪ Transportation challenges include truck traffic and lack of access control to businesses. Differing opinions on SR 530 design.
Community survey	May-June 2024	Arlington community	▪ Desire to preserve culturally significant farmland and agricultural scenery. ▪ Desire to maintain the subarea's current level of development to minimize impact on farmland and avoid noise, traffic, and light pollution. ▪ Appreciation for businesses that support agricultural uses and encourage agritourism. ▪ Worry that increased development could intensify flood risk and impact wildlife habitat. ▪ Using farmland for flood mitigation is viewed negatively as it reduces agricultural capacity. ▪ Concerns for traffic congestion and related safety impacts. ▪ Concerns that increased development and additional truck stops will strain infrastructure. ▪ Lack of sidewalks and crosswalks makes the area auto-oriented and uncomfortable for pedestrians and cyclists. Strong support for shared-use paths and regional bike connections.

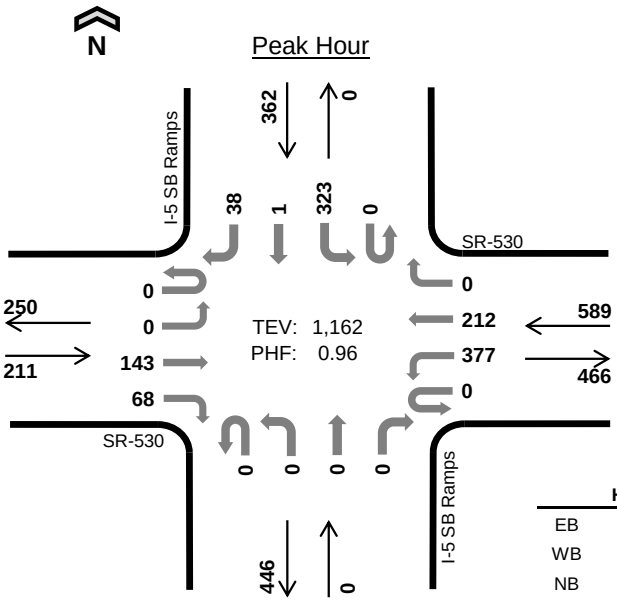
Event	Date	Audience	What we learned
Stakeholder interview	July 2024	Subarea property owner	▪ Desire for City-owned regional compensatory storage strategy. ▪ Vision for development of properties facing SR 530 included aesthetically pleasing truck stop combined with other uses. Truck stop considered an economically feasible option. ▪ Interest in an east-west path connecting Silvana to Centennial Trail for bringing community together and supporting tourism. ▪ Interest in supporting agritourism, but unsure about its feasibility if it has to pay for floodwater storage.
Advisory Groups	Aug. and Sept. 2024	Subarea property owners and other stakeholders	▪ Desire for farmland and agricultural heritage preservation and to address flooding. Mixed interest in truck-stop development. ▪ Interest in street improvements to reduce speed and improve compatibility with pedestrian and bike mobility. ▪ Design roundabouts to accommodate freight and farm vehicles. ▪ Mixed views on park-and-ride/transit station, particularly feasibility. ▪ Divided views on compensatory storage: ▪ Some interest in compensatory storage north of the subarea (and in southern tip) ▪ Several interested in individual mitigation ▪ Strong views on avoiding storage on farmland ▪ Strong interest in agritourism and hotel, recreation, restaurant, and retail/grocery/service follows ▪ North/northeastern area identified as ideal location for new development ▪ Identified “pin” locations generally align with land use options
Transportation Technical Group	July and Nov. 2024	Agency partners	▪ Traffic congestion is a major concern. ▪ Roundabouts are preferred by WSDOT rather than signalized intersections. ▪ Consolidated driveways (as opposed to frontage roads) is the preferred option which allows for piecemeal development and easier grade transition to private properties if SR 530 is elevated. ▪ The lack of population in the subarea reduces feasibility of transit service regardless of commercial growth. Microtransit is a viable alternate. ▪ Concerns with landscape maintenance.
Scoping Community Meeting	July 2025	Arlington community	▪ Relationship to Existing Land Use Plans, Transportation, and Utilities (sewer, water, stormwater, and street lighting), were considered the most important topic. ▪ Request for additional study of proposed floodable park/compensatory storage site. Consider other alternatives (Pape’s compensatory mitigation site). ▪ Consider economic viability of truck stops,

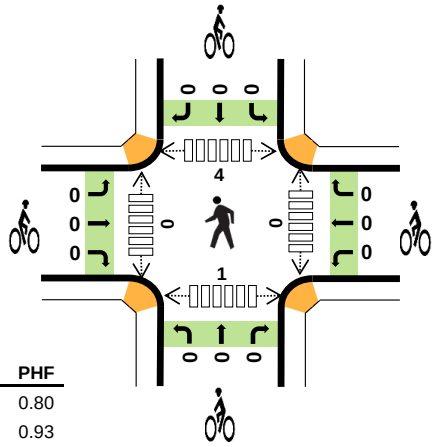
Event	Date	Audience	What we learned
			▪ Request for additional hydraulic analysis to promote balanced development while protecting floodplain habitat ▪ Continue coordination with the Tribe for the Smokey Point roundabout and future development. ▪ Strong interest in recreational facilities such as trails with views, and an event/community center

Appendix B Traffic Counts

I-5 SB Ramps
SR-530

Date: 06/02/2022
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:00 PM to 5:00 PM





	HV %:	PHF
EB	9.5%	0.80
WB	8.1%	0.93
NB	-	-
SB	14.9%	0.98
TOTAL	10.5%	0.96

Two-Hour Count Summaries

Interval Start		SR-530 Eastbound				SR-530 Westbound				I-5 SB Ramps Northbound				I-5 SB Ramps 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**	**38**	**16**	**0**	**105**	**54**	**0**	**0**	**0**	**0**	**0**	**0**	**80**	**0**	**9**	**302**	0
4:15 PM		**0**	**0**	**33**	**13**	**0**	**94**	**58**	**0**	**0**	**0**	**0**	**0**	**0**	**81**	**0**	**9**	**288**	0
4:30 PM		**0**	**0**	**29**	**16**	**0**	**76**	**60**	**0**	**0**	**0**	**0**	**0**	**0**	**83**	**1**	**8**	**273**	0
4:45 PM		**0**	**0**	**43**	**23**	**0**	**102**	**40**	**0**	**0**	**0**	**0**	**0**	**0**	**79**	**0**	**12**	**299**	**1,162**
5:00 PM		0	0	24	19	0	78	53	0	0	0	0	0	0	88	2	3	267	1,127
5:15 PM		0	0	32	16	0	89	44	0	0	0	0	0	0	84	1	12	278	1,117
5:30 PM		0	0	24	15	0	88	53	0	0	0	0	0	0	83	0	16	279	1,123
5:45 PM		0	0	26	17	0	84	42	0	0	0	0	0	0	84	1	8	262	1,086
Count Total		0	0	249	135	0	716	404	0	0	0	0	0	0	662	5	77	2,248	0
Peak Hour	**All**	**0**	**0**	**143**	**68**	**0**	**377**	**212**	**0**	**0**	**0**	**0**	**0**	**0**	**323**	**1**	**38**	**1,162**	**0**
	HV	**0**	**0**	**19**	**1**	**0**	**26**	**22**	**0**	**0**	**0**	**0**	**0**	**0**	**44**	**0**	**10**	**122**	**0**
	HV%	**-**	**-**	**13%**	**1%**	**-**	**7%**	**10%**	**-**	**-**	**-**	**-**	**-**	**-**	**14%**	**0%**	**26%**	**10%**	**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	**5**	**14**	**0**	**19**	***38***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:15 PM	**4**	**13**	**0**	**11**	***28***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**2**	**1**	*3*
4:30 PM	**5**	**10**	**0**	**14**	***29***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**6**	**11**	**0**	**10**	***27***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**2**	**0**	***2***
5:00 PM	6	10	0	12	*28*	0	0	0	0	*0*	0	0	0	0	*0*
5:15 PM	6	5	0	12	*23*	0	0	0	0	*0*	0	0	0	0	*0*
5:30 PM	7	4	0	11	*22*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	7	8	0	11	*26*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	46	75	0	100	*221*	0	0	0	0	*0*	0	0	4	1	*5*
Peak Hour	**20**	**48**	**0**	**54**	***122***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**4**	**1**	***5***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	SR-530 Eastbound				SR-530 Westbound				I-5 SB Ramps Northbound				I-5 SB Ramps 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**	**5**	**0**	**0**	**9**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**15**	**0**	**4**	**38**	0
4:15 PM	**0**	**0**	**4**	**0**	**0**	**6**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**1**	**28**	0
4:30 PM	**0**	**0**	**5**	**0**	**0**	**4**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**12**	**0**	**2**	**29**	0
4:45 PM	**0**	**0**	**5**	**1**	**0**	**7**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**3**	**27**	**122**
5:00 PM	0	0	3	3	0	6	4	0	0	0	0	0	0	11	0	1	28	112
5:15 PM	0	0	5	1	0	2	3	0	0	0	0	0	0	7	0	5	23	107
5:30 PM	0	0	2	5	0	2	2	0	0	0	0	0	0	8	0	3	22	100
5:45 PM	0	0	3	4	0	2	6	0	0	0	0	0	0	9	0	2	26	99
Count Total	0	0	32	14	0	38	37	0	0	0	0	0	0	79	0	21	221	0
Peak Hour	**0**	**0**	**19**	**1**	**0**	**26**	**22**	**0**	**0**	**0**	**0**	**0**	**0**	**44**	**0**	**10**	**122**	**0**

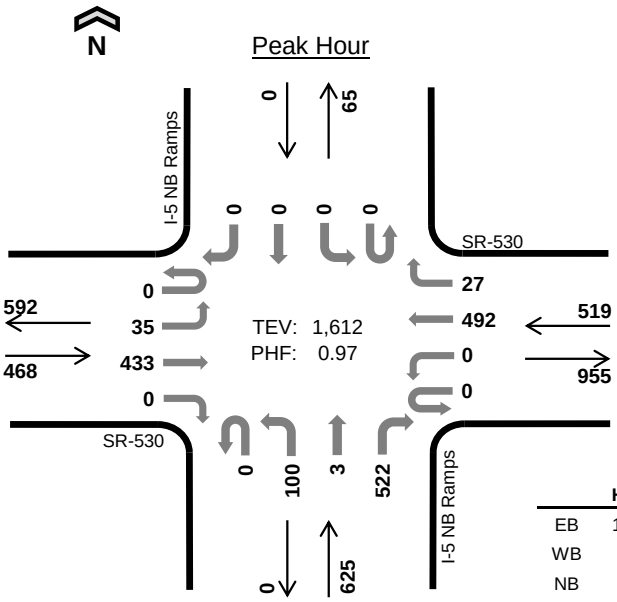
Two-Hour Count Summaries - Bikes

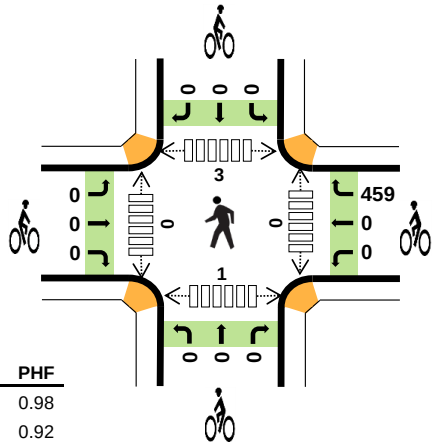
Interval Start	SR-530 Eastbound			SR-530 Westbound			I-5 SB Ramps Northbound			I-5 SB Ramps Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**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	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	0	0	0	0	0	0	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.

I-5 NB Ramps
SR-530

Date: 06/02/2022
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:00 PM to 5:00 PM





	HV %:	PHF
EB	13.7%	0.98
WB	5.0%	0.92
NB	9.0%	0.93
SB	-	-
TOTAL	9.1%	0.97

Two-Hour Count Summaries

Interval Start		SR-530 Eastbound				SR-530 Westbound				I-5 NB Ramps Northbound				I-5 NB Ramps 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**	**10**	**109**	**0**	**0**	**0**	**132**	**9**	**0**	**31**	**0**	**122**	**0**	**0**	**0**	**0**	**413**	0
4:15 PM		**0**	**7**	**110**	**0**	**0**	**0**	**124**	**7**	**0**	**25**	**2**	**141**	**0**	**0**	**0**	**0**	**416**	0
4:30 PM		**0**	**10**	**103**	**0**	**0**	**0**	**117**	**4**	**0**	**22**	**0**	**134**	**0**	**0**	**0**	**0**	**390**	0
4:45 PM		**0**	**8**	**111**	**0**	**0**	**0**	**119**	**7**	**0**	**22**	**1**	**125**	**0**	**0**	**0**	**0**	**393**	**1,612**
5:00 PM		0	6	107	0	0	0	104	4	0	29	0	116	0	0	0	0	366	1,565
5:15 PM		0	8	105	0	0	0	113	13	0	18	1	139	0	0	0	0	397	1,546
5:30 PM		0	3	109	0	0	0	119	4	0	21	0	127	0	0	0	0	383	1,539
5:45 PM		0	3	104	0	0	0	98	3	0	28	0	118	0	0	0	0	354	1,500
Count Total		0	55	858	0	0	0	926	51	0	196	4	1,022	0	0	0	0	3,112	0
Peak Hour	**All**	**0**	**35**	**433**	**0**	**0**	**0**	**492**	**27**	**0**	**100**	**3**	**522**	**0**	**0**	**0**	**0**	**1,612**	**0**
	HV	**0**	**16**	**48**	**0**	**0**	**0**	**26**	**0**	**0**	**23**	**0**	**33**	**0**	**0**	**0**	**0**	**146**	**0**
	HV%	**-**	**46%**	**11%**	**-**	**-**	**-**	**5%**	**0%**	**-**	**23%**	**0%**	**6%**	**-**	**-**	**-**	**-**	**9%**	**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	**19**	**9**	**12**	**0**	***40***	**0**	**115**	**0**	**0**	***115***	**0**	**0**	**0**	**1**	*1*
4:15 PM	**16**	**6**	**12**	**0**	***34***	**0**	**90**	**0**	**0**	***90***	**0**	**0**	**2**	**0**	*2*
4:30 PM	**17**	**4**	**14**	**0**	***35***	**0**	**133**	**0**	**0**	***133***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**12**	**7**	**18**	**0**	***37***	**0**	**121**	**0**	**0**	***121***	**0**	**0**	**1**	**0**	***1***
5:00 PM	14	6	7	0	*27*	0	117	0	0	*117*	0	0	0	0	*0*
5:15 PM	11	4	2	0	*17*	0	109	0	0	*109*	0	0	0	0	*0*
5:30 PM	10	2	2	0	*14*	0	86	0	0	*86*	0	0	0	0	*0*
5:45 PM	13	2	11	0	*26*	0	81	0	0	*81*	0	0	0	0	*0*
Count Total	112	40	78	0	*230*	0	852	0	0	*852*	0	0	3	1	*4*
Peak Hour	**64**	**26**	**56**	**0**	***146***	**0**	**459**	**0**	**0**	***459***	**0**	**0**	**3**	**1**	***4***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	SR-530 Eastbound				SR-530 Westbound				I-5 NB Ramps Northbound				I-5 NB Ramps 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**	**5**	**14**	**0**	**0**	**0**	**9**	**0**	**0**	**5**	**0**	**7**	**0**	**0**	**0**	**0**	**40**	0
4:15 PM	**0**	**4**	**12**	**0**	**0**	**0**	**6**	**0**	**0**	**7**	**0**	**5**	**0**	**0**	**0**	**0**	**34**	0
4:30 PM	**0**	**4**	**13**	**0**	**0**	**0**	**4**	**0**	**0**	**6**	**0**	**8**	**0**	**0**	**0**	**0**	**35**	0
4:45 PM	**0**	**3**	**9**	**0**	**0**	**0**	**7**	**0**	**0**	**5**	**0**	**13**	**0**	**0**	**0**	**0**	**37**	**146**
5:00 PM	0	2	12	0	0	0	6	0	0	5	0	2	0	0	0	0	27	133
5:15 PM	0	4	7	0	0	0	4	0	0	1	0	1	0	0	0	0	17	116
5:30 PM	0	2	8	0	0	0	2	0	0	1	0	1	0	0	0	0	14	95
5:45 PM	0	2	11	0	0	0	2	0	0	6	0	5	0	0	0	0	26	84
Count Total	0	26	86	0	0	0	40	0	0	36	0	42	0	0	0	0	230	0
Peak Hour	**0**	**16**	**48**	**0**	**0**	**0**	**26**	**0**	**0**	**23**	**0**	**33**	**0**	**0**	**0**	**0**	**146**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	SR-530 Eastbound			SR-530 Westbound			I-5 NB Ramps Northbound			I-5 NB Ramps 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**	**115**	**0**	**0**	**0**	**0**	**0**	**0**	**115**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**90**	**0**	**0**	**0**	**0**	**0**	**0**	**90**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**133**	**0**	**0**	**0**	**0**	**0**	**0**	**133**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**121**	**0**	**0**	**0**	**0**	**0**	**0**	**121**	**459**
5:00 PM	0	0	0	0	0	117	0	0	0	0	0	0	117	461
5:15 PM	0	0	0	0	0	109	0	0	0	0	0	0	109	480
5:30 PM	0	0	0	0	0	86	0	0	0	0	0	0	86	433
5:45 PM	0	0	0	0	0	81	0	0	0	0	0	0	81	393
Count Total	0	0	0	0	0	852	0	0	0	0	0	0	852	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**459**	**0**	**0**	**0**	**0**	**0**	**0**	**459**	**0**

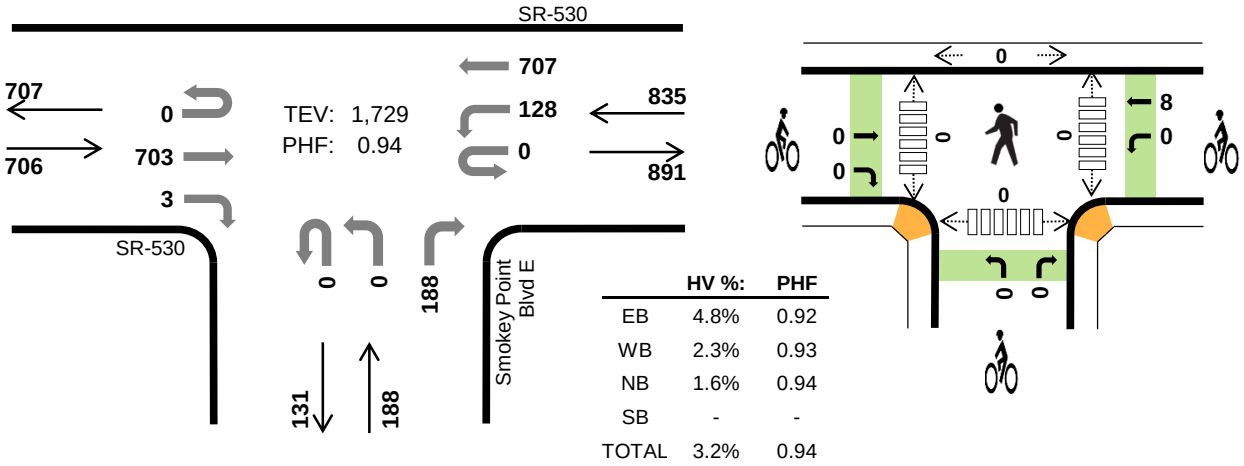
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Smokey Point Blvd E
SR-530

N

Peak Hour

Date: 06/02/2022
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM



	HV %:	PHF
EB	4.8%	0.92
WB	2.3%	0.93
NB	1.6%	0.94
SB	-	-
TOTAL	3.2%	0.94

Two-Hour Count Summaries

Interval Start		SR-530 Eastbound				SR-530 Westbound				Smokey Point Blvd E 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	167	0	0	37	184	0	0	0	0	41	0	0	0	0	429	0
4:15 PM		0	0	170	1	0	27	155	0	0	0	0	42	0	0	0	0	395	0
4:30 PM		**0**	**0**	**183**	**1**	**0**	**30**	**194**	**0**	**0**	**0**	**0**	**50**	**0**	**0**	**0**	**0**	**458**	0
4:45 PM		**0**	**0**	**180**	**0**	**0**	**30**	**187**	**0**	**0**	**0**	**0**	**48**	**0**	**0**	**0**	**0**	**445**	1,727
5:00 PM		**0**	**0**	**149**	**1**	**0**	**39**	**173**	**0**	**0**	**0**	**0**	**43**	**0**	**0**	**0**	**0**	**405**	1,703
5:15 PM		**0**	**0**	**191**	**1**	**0**	**29**	**153**	**0**	**0**	**0**	**0**	**47**	**0**	**0**	**0**	**0**	**421**	**1,729**
5:30 PM		0	0	198	0	0	29	153	0	0	0	0	43	0	0	0	0	423	1,694
5:45 PM		0	0	155	1	0	24	119	0	0	0	0	48	0	0	0	0	347	1,596
Count Total		0	0	1,393	5	0	245	1,318	0	0	0	0	362	0	0	0	0	3,323	0
Peak Hour	**All**	**0**	**0**	**703**	**3**	**0**	**128**	**707**	**0**	**0**	**0**	**0**	**188**	**0**	**0**	**0**	**0**	**1,729**	**0**
	HV	**0**	**0**	**34**	**0**	**0**	**4**	**15**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**56**	**0**
	HV%	**-**	**-**	**5%**	**0%**	**-**	**3%**	**2%**	**-**	**-**	**-**	**-**	**2%**	**-**	**-**	**-**	**-**	**3%**	**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	13	10	3	0	*26*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	9	8	0	0	*17*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	**9**	**3**	**2**	**0**	***14***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**10**	**8**	**1**	**0**	***19***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**8**	**2**	**0**	**0**	***10***	**0**	**8**	**0**	**0**	***8***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**7**	**6**	**0**	**0**	***13***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:30 PM	2	6	0	0	*8*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	4	4	1	0	*9*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	62	47	7	0	*116*	0	8	0	0	*8*	0	0	0	0	*0*
Peak Hr	**34**	**19**	**3**	**0**	***56***	**0**	**8**	**0**	**0**	***8***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	SR-530 Eastbound				SR-530 Westbound				Smokey Point Blvd E 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	13	0	0	0	10	0	0	0	0	3	0	0	0	0	26	0
4:15 PM	0	0	9	0	0	3	5	0	0	0	0	0	0	0	0	0	17	0
4:30 PM	**0**	**0**	**9**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**14**	0
4:45 PM	**0**	**0**	**10**	**0**	**0**	**4**	**4**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**19**	76
5:00 PM	**0**	**0**	**8**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	60
5:15 PM	**0**	**0**	**7**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**13**	**56**
5:30 PM	0	0	2	0	0	2	4	0	0	0	0	0	0	0	0	0	8	50
5:45 PM	0	0	4	0	0	1	3	0	0	0	0	1	0	0	0	0	9	40
Count Total	0	0	62	0	0	10	37	0	0	0	0	7	0	0	0	0	116	0
Peak Hour	**0**	**0**	**34**	**0**	**0**	**4**	**15**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**56**	**0**

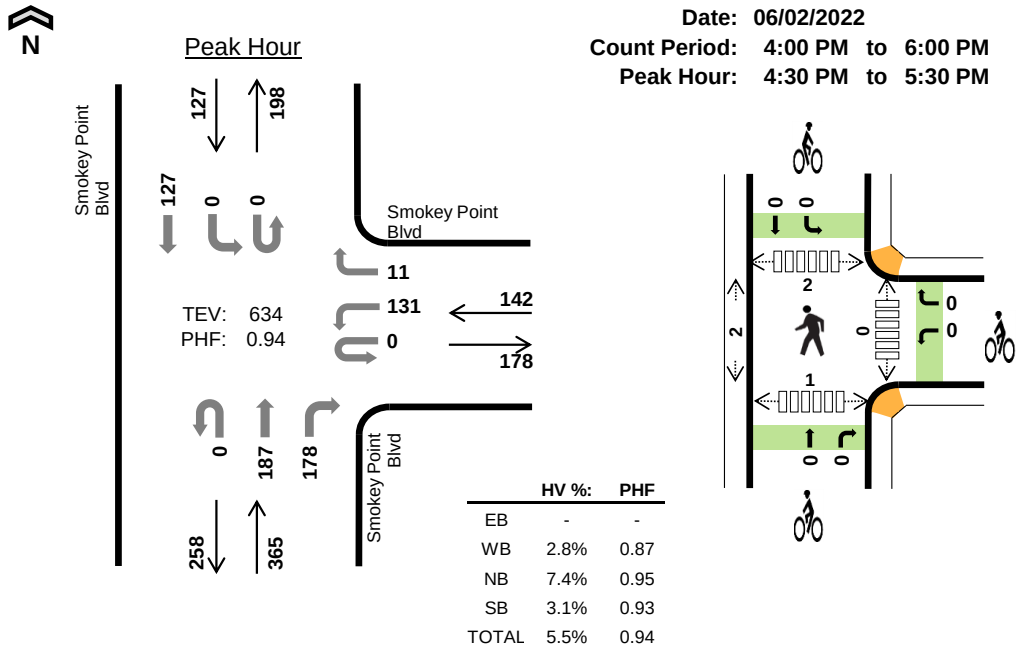
Two-Hour Count Summaries - Bikes

Interval Start	SR-530 Eastbound			SR-530 Westbound			Smokey Point Blvd E Northbound			0 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**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	8
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	8
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Count Total	0	0	0	0	8	0	0	0	0	0	0	0	8	0
Peak Hour	**0**	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**0**

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

Smokey Point Blvd
Smokey Point Blvd

Date: 06/02/2022
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM



	HV %:	PHF
EB	-	-
WB	2.8%	0.87
NB	7.4%	0.95
SB	3.1%	0.93
TOTAL	5.5%	0.94

Two-Hour Count Summaries

Interval Start		0 Eastbound				Smokey Point Blvd Westbound				Smokey Point Blvd Northbound				Smokey Point Blvd 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	0	0	36	0	1	0	0	54	42	0	0	36	0	169	0
4:15 PM		0	0	0	0	0	35	0	2	0	0	51	32	0	1	35	0	156	0
4:30 PM		**0**	**0**	**0**	**0**	**0**	**27**	**0**	**2**	**0**	**0**	**45**	**48**	**0**	**0**	**27**	**0**	**149**	0
4:45 PM		**0**	**0**	**0**	**0**	**0**	**32**	**0**	**3**	**0**	**0**	**36**	**47**	**0**	**0**	**32**	**0**	**150**	624
5:00 PM		**0**	**0**	**0**	**0**	**0**	**34**	**0**	**3**	**0**	**0**	**52**	**44**	**0**	**0**	**34**	**0**	**167**	622
5:15 PM		**0**	**0**	**0**	**0**	**0**	**38**	**0**	**3**	**0**	**0**	**54**	**39**	**0**	**0**	**34**	**0**	**168**	**634**
5:30 PM		0	0	0	0	0	31	0	1	0	0	39	35	0	0	31	0	137	622
5:45 PM		0	0	0	0	0	24	0	2	0	0	32	55	0	0	24	0	137	609
Count Total		0	0	0	0	0	257	0	17	0	0	363	342	0	1	253	0	1,233	0
Peak Hour	**All**	**0**	**0**	**0**	**0**	**0**	**131**	**0**	**11**	**0**	**0**	**187**	**178**	**0**	**0**	**127**	**0**	**634**	**0**
	HV	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**22**	**5**	**0**	**0**	**4**	**0**	**35**	**0**
	HV%	**-**	**-**	**-**	**-**	**-**	**3%**	**-**	**0%**	**-**	**-**	**12%**	**3%**	**-**	**-**	**3%**	**-**	**6%**	**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	0	1	7	1	*9*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	0	3	9	3	*15*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	**0**	**0**	**5**	**0**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**1**	**1**	*3*
4:45 PM	**0**	**4**	**8**	**4**	***16***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**1**	**0**	*2*
5:00 PM	**0**	**0**	**6**	**0**	***6***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**0**	**0**	**8**	**0**	***8***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:30 PM	0	3	1	3	*7*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	0	1	2	1	*4*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	0	12	46	12	*70*	0	0	0	0	*0*	0	2	2	1	*5*
Peak Hr	**0**	**4**	**27**	**4**	***35***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**2**	**1**	***5***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	0				Smokey Point Blvd				Smokey Point Blvd				Smokey Point Blvd				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	0	0	1	0	0	0	0	5	2	0	0	1	0	9	0
4:15 PM	0	0	0	0	0	3	0	0	0	0	9	0	0	0	3	0	15	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**2**	**0**	**0**	**0**	**0**	**5**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**6**	**2**	**0**	**0**	**4**	**0**	**16**	45
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**6**	42
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**1**	**0**	**0**	**0**	**0**	**8**	**35**
5:30 PM	0	0	0	0	0	3	0	0	0	0	1	0	0	0	3	0	7	37
5:45 PM	0	0	0	0	0	1	0	0	0	0	1	1	0	0	1	0	4	25
Count Total	0	0	0	0	0	12	0	0	0	0	38	8	0	0	12	0	70	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**22**	**5**	**0**	**0**	**4**	**0**	**35**	**0**

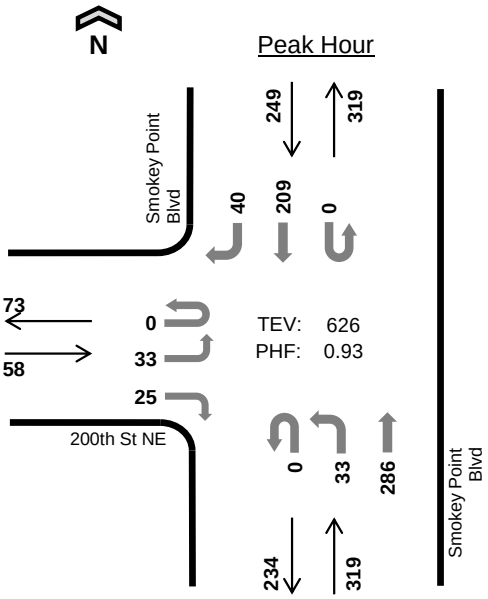
Two-Hour Count Summaries - Bikes

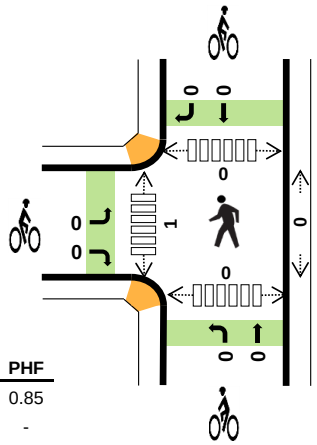
Interval Start	0			Smokey Point Blvd			Smokey Point Blvd			Smokey Point Blvd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	**0**	**0**	**0**	**0**	**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	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	0	0	0	0	0	0	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.

Smokey Point Blvd
200th St NE

Date: 06/02/2022
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM





	HV %:	PHF
EB	3.4%	0.85
WB	-	-
NB	2.8%	0.92
SB	3.6%	0.89
TOTAL	3.2%	0.93

Two-Hour Count Summaries

Interval Start		200th St NE Eastbound				0 Westbound				Smokey Point Blvd Northbound				Smokey Point Blvd 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	5	0	6	0	0	0	0	0	9	73	0	0	0	60	11	164	0
4:15 PM		**0**	**12**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**11**	**61**	**0**	**0**	**0**	**56**	**9**	**154**	0
4:30 PM		**0**	**7**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**4**	**69**	**0**	**0**	**0**	**39**	**9**	**136**	0
4:45 PM		**0**	**7**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**9**	**78**	**0**	**0**	**0**	**56**	**10**	**168**	622
5:00 PM		**0**	**7**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**9**	**78**	**0**	**0**	**0**	**58**	**12**	**168**	**626**
5:15 PM		0	6	0	7	0	0	0	0	0	12	70	0	0	0	45	3	143	615
5:30 PM		0	11	0	5	0	0	0	0	0	10	58	0	0	0	46	6	136	615
5:45 PM		0	5	0	3	0	0	0	0	0	2	70	0	0	0	37	8	125	572
Count Total		0	60	0	46	0	0	0	0	0	66	557	0	0	0	397	68	1,194	0
Peak Hour	**All**	**0**	**33**	**0**	**25**	**0**	**0**	**0**	**0**	**0**	**33**	**286**	**0**	**0**	**0**	**209**	**40**	**626**	**0**
	HV	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**0**	**0**	**0**	**8**	**1**	**20**	**0**
	HV%	**-**	**6%**	**-**	**0%**	**-**	**-**	**-**	**-**	**-**	**0%**	**3%**	**-**	**-**	**-**	**4%**	**3%**	**3%**	**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	0	0	2	2	*4*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	**1**	**0**	**2**	**2**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:30 PM	**0**	**0**	**2**	**1**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**1**	**0**	**2**	**1**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**0**	**0**	**3**	**5**	***8***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	***1***
5:15 PM	1	0	2	2	*5*	0	0	0	0	*0*	0	0	0	0	*0*
5:30 PM	0	0	1	5	*6*	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	*0*
Count Total	3	0	14	18	*35*	0	0	0	0	*0*	0	1	0	0	*1*
Peak Hr	**2**	**0**	**9**	**9**	***20***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	***1***

Two-Hour Count Summaries - Heavy Vehicles

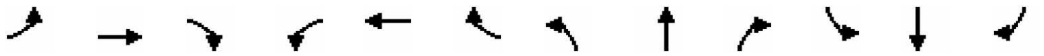
Interval Start	200th St NE				0				Smokey Point Blvd				Smokey Point Blvd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	1	4	0
4:15 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**0**	**5**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**3**	0
4:45 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**4**	16
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**4**	**1**	**8**	**20**
5:15 PM	0	1	0	0	0	0	0	0	0	0	2	0	0	0	2	0	5	20
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	5	0	6	23
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
Count Total	0	3	0	0	0	0	0	0	0	0	14	0	0	0	16	2	35	0
Peak Hour	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**0**	**0**	**0**	**8**	**1**	**20**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	200th St NE			0			Smokey Point Blvd			Smokey Point Blvd			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	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	0	0	0	0	0	0	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.

Appendix C LOS Worksheets



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	145	70	375	210	0	0	0	0	325	5	40
Future Volume (veh/h)	0	145	70	375	210	0	0	0	0	325	5	40
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1752	1752	1781	1781	0				1678	1678	1678
Adj Flow Rate, veh/h	0	151	73	391	219	0				339	5	42
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96				0.96	0.96	0.96
Percent Heavy Veh, %	0	10	10	8	8	0				15	15	15
Cap, veh/h	0	671	568	676	1039	0				372	5	46
Arrive On Green	0.00	0.38	0.38	0.14	0.58	0.00				0.30	0.27	0.30
Sat Flow, veh/h	0	1752	1483	1697	1781	0				1384	20	172
Grp Volume(v), veh/h	0	151	73	391	219	0				386	0	0
Grp Sat Flow(s),veh/h/ln	0	1752	1483	1697	1781	0				1576	0	0
Q Serve(g_s), s	0.0	5.8	3.2	13.5	5.8	0.0				23.6	0.0	0.0
Cycle Q Clear(g_c), s	0.0	5.8	3.2	13.5	5.8	0.0				23.6	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				0.88		0.11
Lane Grp Cap(c), veh/h	0	671	568	676	1039	0				424	0	0
V/C Ratio(X)	0.00	0.22	0.13	0.58	0.21	0.00				0.91	0.00	0.00
Avail Cap(c_a), veh/h	0	671	568	676	1039	0				728	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.90	0.90	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	20.8	20.0	13.7	9.9	0.0				33.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.8	0.5	1.1	0.4	0.0				13.3	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.5	1.2	5.1	2.3	0.0				10.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	21.6	20.5	14.8	10.3	0.0				47.3	0.0	0.0
LnGrp LOS		C	C	B	B					D		
Approach Vol, veh/h		224			610						386	
Approach Delay, s/veh		21.2			13.2						47.3	
Approach LOS		C			B						D	

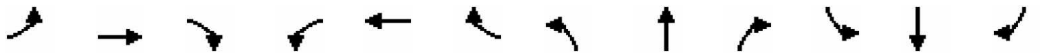
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	20.0	44.3		35.7		64.3
Change Period (Y+Rc), s	5.5	* 6		5.8		6.0
Max Green Setting (Gmax), s	14.5	* 19		49.2		39.0
Max Q Clear Time (g_c+I1), s	15.5	7.8		25.6		7.8
Green Ext Time (p_c), s	0.0	1.1		4.2		1.9

Intersection Summary	
HCM 7th Control Delay, s/veh	25.5
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	435	0	0	490	485	100	5	520	0	0	0
Future Volume (veh/h)	35	435	0	0	490	485	100	5	520	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1693	1693	0	0	1826	1826	1767	1767	1767			
Adj Flow Rate, veh/h	36	448	0	0	505	500	103	5	536			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	14	14	0	0	5	5	9	9	9			
Cap, veh/h	330	1117	0	0	1045	883	357	17	332			
Arrive On Green	0.06	1.00	0.00	0.00	0.57	0.57	0.22	0.22	0.22			
Sat Flow, veh/h	1612	1693	0	0	1826	1543	1608	78	1497			
Grp Volume(v), veh/h	36	448	0	0	505	500	108	0	536			
Grp Sat Flow(s),veh/h/ln	1612	1693	0	0	1826	1543	1686	0	1497			
Q Serve(g_s), s	0.9	0.0	0.0	0.0	16.3	20.5	5.3	0.0	22.2			
Cycle Q Clear(g_c), s	0.9	0.0	0.0	0.0	16.3	20.5	5.3	0.0	22.2			
Prop In Lane	1.00		0.00	0.00		1.00	0.95		1.00			
Lane Grp Cap(c), veh/h	330	1117	0	0	1045	883	374	0	332			
V/C Ratio(X)	0.11	0.40	0.00	0.00	0.48	0.57	0.29	0.00	1.61			
Avail Cap(c_a), veh/h	383	1117	0	0	1045	883	374	0	332			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.97	0.97	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	8.7	0.0	0.0	0.0	12.6	13.5	32.3	0.0	38.9			
Incr Delay (d2), s/veh	0.1	1.0	0.0	0.0	1.6	2.6	0.7	0.0	289.3			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.3	0.3	0.0	0.0	6.7	7.3	2.2	0.0	34.7			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	8.9	1.0	0.0	0.0	14.2	16.1	33.1	0.0	328.2			
LnGrp LOS	A	A			B	B	C		F			
Approach Vol, veh/h		484			1005			644				
Approach Delay, s/veh		1.6			15.2			278.7				
Approach LOS		A			B			F				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		72.0			8.8	63.2		28.0				
Change Period (Y+Rc), s		6.0			5.6	* 6		5.8				
Max Green Setting (Gmax), s		66.0			6.4	* 54		22.2				
Max Q Clear Time (g_c+I1), s		2.0			2.9	22.5		24.2				
Green Ext Time (p_c), s		4.9			0.0	9.2		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	91.7
HCM 7th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	3.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	705	5	130	705	0	190
Future Vol, veh/h	705	5	130	705	0	190
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	350	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	5	5	2	2	2	2
Mvmt Flow	750	5	138	750	0	202

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	755	0	-	753
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	4.12	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	2.218	-	-	3.318
Pot Cap-1 Maneuver	-	-	855	-	0	410
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	855	-	-	410
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.56	22.03
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	410	-	-	855	-
HCM Lane V/C Ratio	0.493	-	-	0.162	-
HCM Control Delay (s/veh)	22	-	-	10	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	2.6	-	-	0.6	-

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	125	185	180	130	10
Future Vol, veh/h	0	125	185	180	130	10
Conflicting Peds, #/hr	2	0	0	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	3	3	7	7	3	3
Mvmt Flow	0	133	197	191	138	11

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	146	151	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.23	4.17	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.327	2.263	-	-	-
Pot Cap-1 Maneuver	0	899	1400	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	897	1397	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.71	4.05	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	912	-	897	-	-
HCM Lane V/C Ratio	0.141	-	0.148	-	-
HCM Control Delay (s/veh)	8	0	9.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.5	-	0.5	-	-

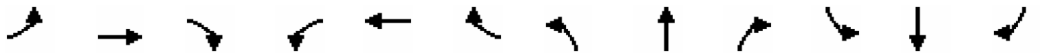
Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	35	25	35	285	210	40
Future Vol, veh/h	35	25	35	285	210	40
Conflicting Peds, #/hr	1	1	1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	3	3	3	3	4	4
Mvmt Flow	38	27	38	306	226	43

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	631	249	270	0	-	0
Stage 1	248	-	-	-	-	-
Stage 2	383	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	443	787	1288	-	-	-
Stage 1	791	-	-	-	-	-
Stage 2	687	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	427	785	1287	-	-	-
Mov Cap-2 Maneuver	427	-	-	-	-	-
Stage 1	762	-	-	-	-	-
Stage 2	687	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	12.78	0.86	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	197	-	527	-	-
HCM Lane V/C Ratio	0.029	-	0.122	-	-
HCM Control Delay (s/veh)	7.9	0	12.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	180	110	425	230	0	0	0	0	395	5	55
Future Volume (veh/h)	0	180	110	425	230	0	0	0	0	395	5	55
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1752	1752	1781	1781	0				1678	1678	1678
Adj Flow Rate, veh/h	0	188	115	443	240	0				411	5	57
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96				0.96	0.96	0.96
Percent Heavy Veh, %	0	10	10	8	8	0				15	15	15
Cap, veh/h	0	503	426	616	964	0				425	5	59
Arrive On Green	0.00	0.29	0.29	0.33	0.90	0.00				0.34	0.31	0.34
Sat Flow, veh/h	0	1752	1482	1697	1781	0				1369	17	190
Grp Volume(v), veh/h	0	188	115	443	240	0				473	0	0
Grp Sat Flow(s),veh/h/ln	0	1752	1482	1697	1781	0				1575	0	0
Q Serve(g_s), s	0.0	8.6	6.0	19.1	1.7	0.0				29.5	0.0	0.0
Cycle Q Clear(g_c), s	0.0	8.6	6.0	19.1	1.7	0.0				29.5	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				0.87		0.12
Lane Grp Cap(c), veh/h	0	503	426	616	964	0				489	0	0
V/C Ratio(X)	0.00	0.37	0.27	0.72	0.25	0.00				0.97	0.00	0.00
Avail Cap(c_a), veh/h	0	503	426	616	964	0				561	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.72	0.72	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	28.5	27.5	14.8	2.3	0.0				32.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.1	1.6	2.9	0.4	0.0				29.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.9	2.3	5.7	0.6	0.0				14.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	30.6	29.1	17.8	2.7	0.0				61.5	0.0	0.0
LnGrp LOS		C	C	B	A					E		
Approach Vol, veh/h		303			683						473	
Approach Delay, s/veh		30.0			12.5						61.5	
Approach LOS		C			B						E	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	25.4	34.7		39.9		60.1
Change Period (Y+Rc), s	5.5	* 6		5.8		6.0
Max Green Setting (Gmax), s	19.9	* 24		38.6		49.6
Max Q Clear Time (g_c+I1), s	21.1	10.6		31.5		3.7
Green Ext Time (p_c), s	0.0	1.7		2.6		2.3

Intersection Summary		
HCM 7th Control Delay, s/veh		32.0
HCM 7th LOS		C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	525	0	0	510	600	145	5	590	0	0	0
Future Volume (veh/h)	50	525	0	0	510	600	145	5	590	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1693	1693	0	0	1826	1826	1767	1767	1767			
Adj Flow Rate, veh/h	52	541	0	0	526	619	149	5	608			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	14	14	0	0	5	5	9	9	9			
Cap, veh/h	201	829	0	0	723	610	639	21	587			
Arrive On Green	0.08	0.98	0.00	0.00	0.40	0.40	0.39	0.39	0.39			
Sat Flow, veh/h	1612	1693	0	0	1826	1542	1630	55	1497			
Grp Volume(v), veh/h	52	541	0	0	526	619	154	0	608			
Grp Sat Flow(s),veh/h/ln	1612	1693	0	0	1826	1542	1685	0	1497			
Q Serve(g_s), s	1.8	1.8	0.0	0.0	24.4	39.6	6.1	0.0	39.2			
Cycle Q Clear(g_c), s	1.8	1.8	0.0	0.0	24.4	39.6	6.1	0.0	39.2			
Prop In Lane	1.00		0.00	0.00		1.00	0.97		1.00			
Lane Grp Cap(c), veh/h	201	829	0	0	723	610	661	0	587			
V/C Ratio(X)	0.26	0.65	0.00	0.00	0.73	1.01	0.23	0.00	1.04			
Avail Cap(c_a), veh/h	221	829	0	0	723	610	661	0	587			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.92	0.92	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	18.6	0.5	0.0	0.0	25.6	30.2	20.3	0.0	30.4			
Incr Delay (d2), s/veh	0.6	3.7	0.0	0.0	6.3	40.1	0.3	0.0	46.8			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.7	1.1	0.0	0.0	11.5	20.8	2.4	0.0	21.1			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	19.2	4.2	0.0	0.0	32.0	70.3	20.6	0.0	77.2			
LnGrp LOS	B	A			C	F	C		F			
Approach Vol, veh/h		593			1145			762				
Approach Delay, s/veh		5.5			52.7			65.7				
Approach LOS		A			D			E				

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		55.0			9.4	45.6		45.0				
Change Period (Y+Rc), s		6.0			5.6	* 6		5.8				
Max Green Setting (Gmax), s		49.0			5.1	* 39		39.2				
Max Q Clear Time (g_c+I1), s		3.8			3.8	41.6		41.2				
Green Ext Time (p_c), s		6.2			0.0	0.0		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	45.5
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	140	0	525	225	0
Future Vol, veh/h	0	140	0	525	225	0
Conflicting Peds, #/hr	4	3	3	0	0	4
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	3	3	7	7	3	3
Mvmt Flow	0	149	0	559	239	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	246	243	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.23	4.17	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.327	2.263	-	-	-
Pot Cap-1 Maneuver	0	790	1294	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	785	1289	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	10.66	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1289	-	785	-	-
HCM Lane V/C Ratio	-	-	0.19	-	-
HCM Ctrl Dly (s/v)	0	-	10.7	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.7	-	-

Intersection	
Int Delay, s/veh	19.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	115	110	145	400	370	190
Future Vol, veh/h	115	110	145	400	370	190
Conflicting Peds, #/hr	1	1	1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	3	3	3	3	4	4
Mvmt Flow	124	118	156	430	398	204

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1244	502	603	0	-	0
Stage 1	501	-	-	-	-	-
Stage 2	743	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	191	567	970	-	-	-
Stage 1	607	-	-	-	-	-
Stage 2	469	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	151	566	969	-	-	-
Mov Cap-2 Maneuver	151	-	-	-	-	-
Stage 1	478	-	-	-	-	-
Stage 2	468	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	111.48	2.51	0
HCM LOS	F		

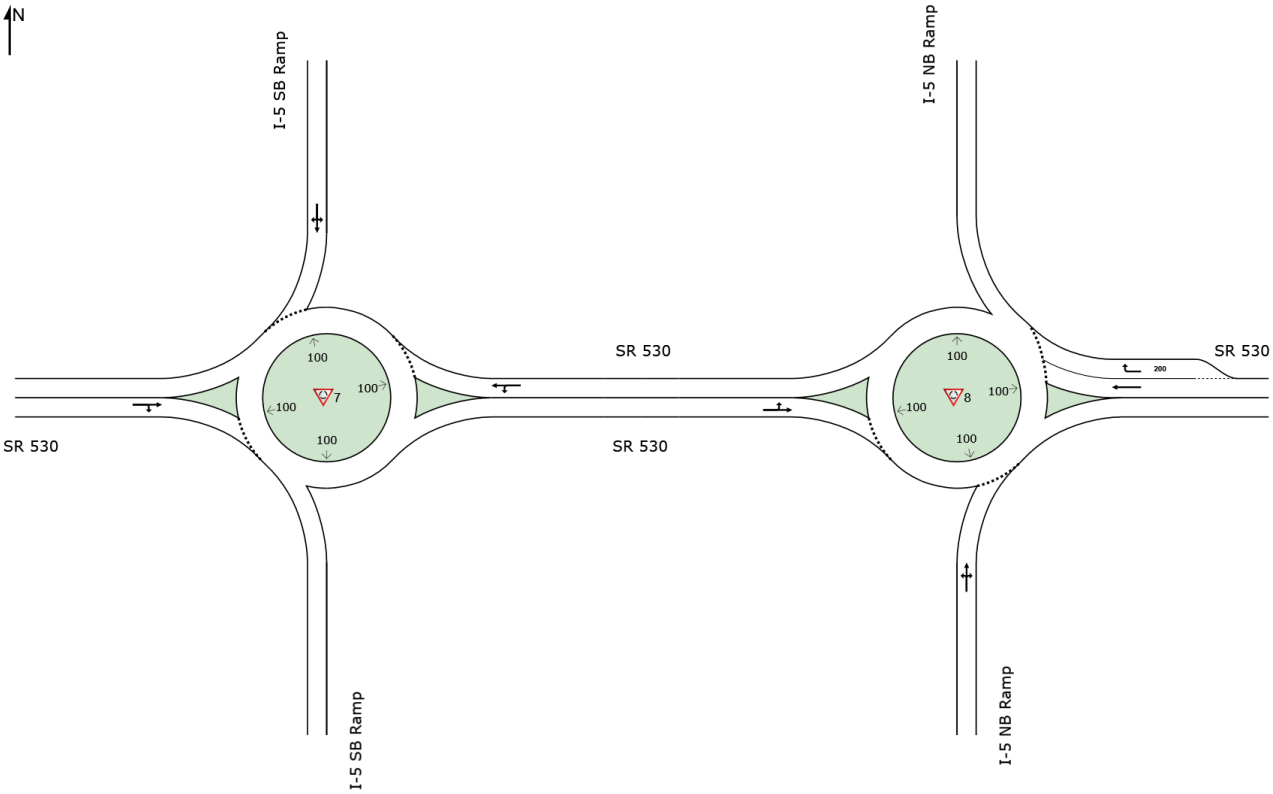
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	479	-	235	-	-
HCM Lane V/C Ratio	0.161	-	1.03	-	-
HCM Ctrl Dly (s/v)	9.4	0	111.5	-	-
HCM Lane LOS	A	A	F	-	-
HCM 95th %tile Q(veh)	0.6	-	10	-	-

NETWORK LAYOUT

Network: N101 [SR 530_I-5 Ramps Network_Alt 1 (Network Folder: General)]

New Network
Network Category: (None)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



SITES IN NETWORK		
Site ID	**CCG ID**	**Site Name**
7	NA	7. I-5 SB Ramps/SR 530
8	NA	8. I-5 NB Ramps/SR 530

Organisation: THE TRANSPO GROUP | Licence: NETWORK / 1PC | Created: Tuesday, June 10, 2025 1:14:12 PM
Project: M:\23\1.23264.01 - Island Crossing EIS\Traffic Analysis\Traffic Operations\Existing_Future_RABs.sip9

MOVEMENT SUMMARY

Site: 7 [7. I-5 SB Ramps/SR 530 (Site Folder: Future (2044) - Alternative 1)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

Network: N101 [SR 530_I-5 Ramps Network_Alt 1 (Network Folder: General)]

Future (2044) PM Peak Hour Improvement
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
East: SR 530															
1	L2	All MCs	443	8.0	443	8.0	0.500	9.8	LOS A	0.0	0.0	0.00	0.60	0.00	32.0
6	T1	All MCs	240	8.0	240	8.0	0.500	3.8	LOS A	0.0	0.0	0.00	0.60	0.00	33.0
Approach			682	8.0	682	8.0	0.500	7.7	LOS A	0.0	0.0	0.00	0.60	0.00	32.3
North: I-5 SB Ramp															
7	L2	All MCs	411	15.0	411	15.0	0.642	20.3	LOS C	5.9	166.2	0.85	0.95	1.23	24.6
4	T1	All MCs	5	15.0	5	15.0	0.642	14.2	LOS B	5.9	166.2	0.85	0.95	1.23	29.4
14	R2	All MCs	57	15.0	57	15.0	0.642	14.4	LOS B	5.9	166.2	0.85	0.95	1.23	29.1
Approach			474	15.0	474	15.0	0.642	19.5	LOS B	5.9	166.2	0.85	0.95	1.23	25.5
West: SR 530															
2	T1	All MCs	188	10.0	188	10.0	0.535	15.2	LOS B	4.5	121.9	0.94	0.91	1.21	26.3
12	R2	All MCs	115	10.0	115	10.0	0.535	15.4	LOS B	4.5	121.9	0.94	0.91	1.21	30.6
Approach			302	10.0	302	10.0	0.535	15.3	LOS B	4.5	121.9	0.94	0.91	1.21	28.4
All Vehicles			1458	10.7	1458	10.7	0.642	13.1	LOS B	5.9	166.2	0.47	0.78	0.65	29.2

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data 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 HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
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.

MOVEMENT SUMMARY

Site: 8 [8. I-5 NB Ramps/SR 530 (Site Folder: Future (2044) - Alternative 1)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

Network: N101 [SR 530_I-5 Ramps Network_Alt 1 (Network Folder: General)]

Future (2044) PM Peak Hour Improvement
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: I-5 NB Ramp															
3	L2	All MCs	149	9.0	149	9.0	0.906	31.1	LOS D	17.9	478.6	1.00	1.36	2.17	20.9
8	T1	All MCs	5	9.0	5	9.0	0.906	25.1	LOS D	17.9	478.6	1.00	1.36	2.17	26.8
18	R2	All MCs	608	9.0	608	9.0	0.906	25.2	LOS D	17.9	478.6	1.00	1.36	2.17	24.1
Approach			763	9.0	763	9.0	0.906	26.3	LOS C	17.9	478.6	1.00	1.36	2.17	23.7
East: SR 530															
6	T1	All MCs	526	5.0	526	5.0	0.451	5.1	LOS A	3.2	84.2	0.54	0.49	0.54	28.7
16	R2	All MCs	619	5.0	619	5.0	0.444	5.2	LOS A	3.3	86.4	0.51	0.53	0.51	33.6
Approach			1144	5.0	1144	5.0	0.451	5.1	LOS A	3.3	86.4	0.52	0.51	0.52	32.2
West: SR 530															
5	L2	All MCs	52	14.0	52	14.0	0.459	9.9	LOS A	0.0	0.0	0.00	0.41	0.00	33.7
2	T1	All MCs	541	14.0	541	14.0	0.459	3.9	LOS A	0.0	0.0	0.00	0.41	0.00	32.1
Approach			593	14.0	593	14.0	0.459	4.4	LOS A	0.0	0.0	0.00	0.41	0.00	32.2
All Vehicles			2500	8.4	2500	8.4	0.906	11.4	LOS B	17.9	478.6	0.54	0.75	0.90	28.4

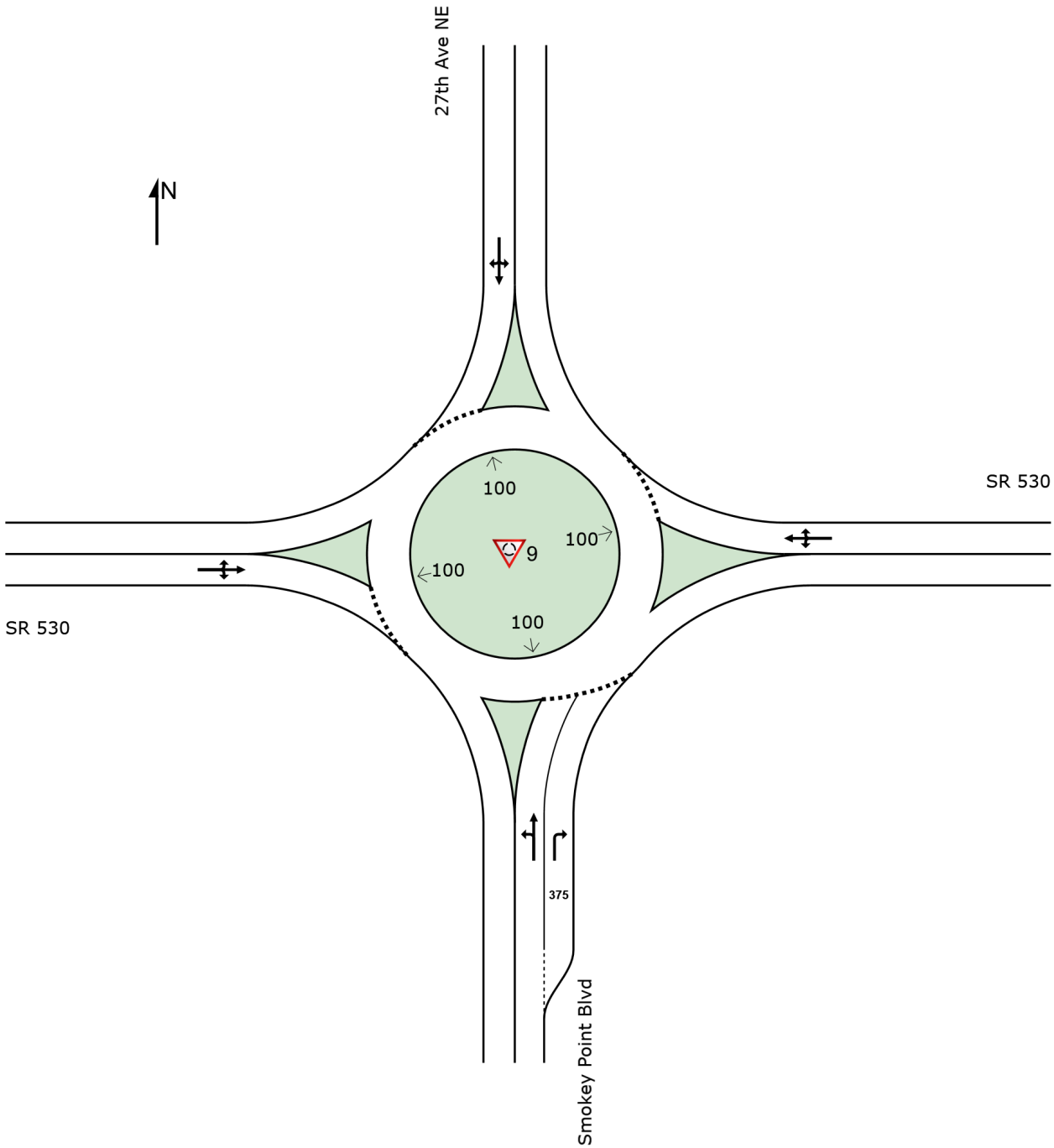
Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
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.

SITE LAYOUT

Site: 9 [9. Smokey Point Blvd/SR 530 (Site Folder: Future (2044) - Alternative 1)]

Future (2044) PM Peak Hour
Site Category: (None)
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Organisation: THE TRANSPO GROUP | Licence: NETWORK / 1PC | Created: Tuesday, June 10, 2025 1:15:02 PM
Project: M:\23\1.23264.01 - Island Crossing EIS\Traffic Analysis\Traffic Operations\Existing_Future_RABs.sip9

MOVEMENT SUMMARY

Site: 9 [9. Smokey Point Blvd/SR 530 (Site Folder: Future (2044) - Alternative 1)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

Future (2044) 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	239	2.0	239	2.0	0.601	24.2	LOS C	5.9	149.7	1.00	0.99	1.30	26.3
8	T1	All MCs	21	2.0	21	2.0	0.601	18.2	LOS B	5.9	149.7	1.00	0.99	1.30	28.1
18	R2	All MCs	298	2.0	298	2.0	0.499	13.0	LOS B	5.1	130.4	1.00	0.88	1.12	31.6
Approach			559	2.0	559	2.0	0.601	18.0	LOS B	5.9	149.7	1.00	0.93	1.20	29.1
East: SR 530															
1	L2	All MCs	223	2.0	223	2.0	1.034	41.2	LOS F	42.6	1082.6	1.00	1.68	2.33	23.8
6	T1	All MCs	915	2.0	915	2.0	1.034	35.2	LOS F	42.6	1082.6	1.00	1.68	2.33	22.8
16	R2	All MCs	16	2.0	16	2.0	1.034	35.3	LOS F	42.6	1082.6	1.00	1.68	2.33	24.0
Approach			1154	2.0	1154	2.0	1.034	36.4	LOS D	42.6	1082.6	1.00	1.68	2.33	23.0
North: 27th Ave NE															
7	L2	All MCs	11	2.0	11	2.0	0.205	26.7	LOS C	1.6	41.1	1.00	0.88	1.00	27.9
4	T1	All MCs	21	2.0	21	2.0	0.205	20.7	LOS C	1.6	41.1	1.00	0.88	1.00	28.4
14	R2	All MCs	21	2.0	21	2.0	0.205	20.8	LOS C	1.6	41.1	1.00	0.88	1.00	26.9
Approach			53	2.0	53	2.0	0.205	22.0	LOS C	1.6	41.1	1.00	0.88	1.00	27.8
West: SR 530															
5	L2	All MCs	21	5.0	21	5.0	0.845	15.8	LOS B	14.5	378.0	0.97	0.78	1.17	31.9
2	T1	All MCs	910	5.0	910	5.0	0.845	9.8	LOS A	14.5	378.0	0.97	0.78	1.17	32.7
12	R2	All MCs	5	5.0	5	5.0	0.845	10.0	LOS A	14.5	378.0	0.97	0.78	1.17	32.3
Approach			936	5.0	936	5.0	0.845	10.0	LOS A	14.5	378.0	0.97	0.78	1.17	32.6
All Vehicles			2702	3.0	2702	3.0	1.034	23.1	LOS C	42.6	1082.6	0.99	1.20	1.67	27.0

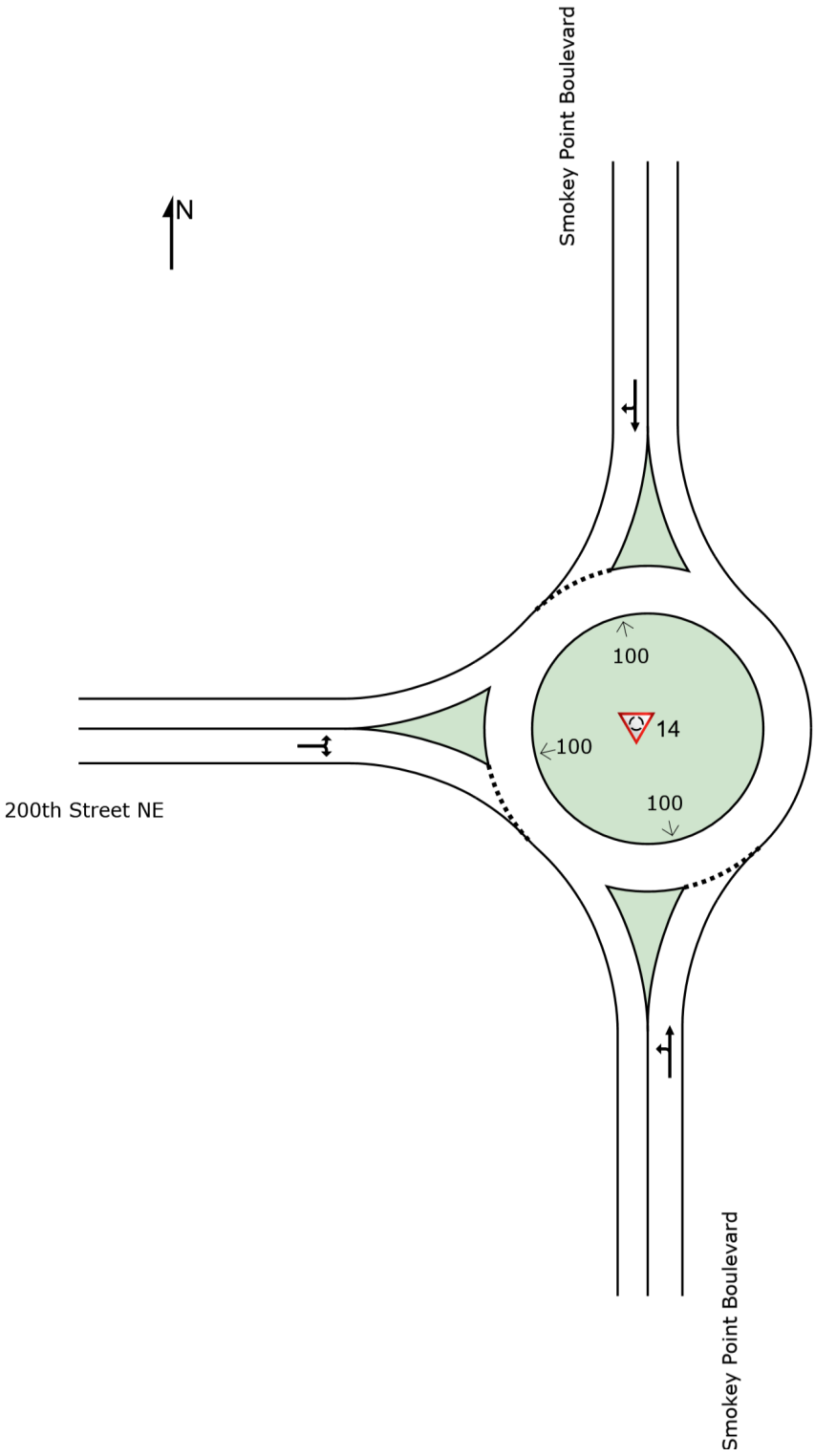
Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per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

SITE LAYOUT

Site: 14 [14. Smokey Point Boulevard/200th Street NE (Site Folder: Future (2044) - Alternative 1)]

Future (2044) PM Peak Hour Improvement
Site Category: (None)
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



MOVEMENT SUMMARY

Site: 14 [14. Smokey Point Boulevard/200th Street NE (Site Folder: Future (2044) - Alternative 1)]

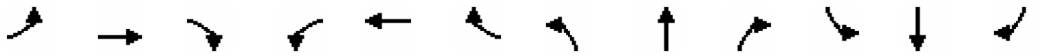
Output produced by SIDRA INTERSECTION Version: 9.1.3.210

Future (2044) PM Peak Hour Improvement
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 Boulevard															
3	L2	All MCs	156	3.0	156	3.0	0.456	10.5	LOS B	3.3	84.2	0.40	0.49	0.40	34.0
8	T1	All MCs	430	3.0	430	3.0	0.456	4.5	LOS A	3.3	84.2	0.40	0.49	0.40	34.8
Approach			586	3.0	586	3.0	0.456	6.1	LOS A	3.3	84.2	0.40	0.49	0.40	34.6
North: Smokey Point Boulevard															
4	T1	All MCs	398	4.0	398	4.0	0.484	4.8	LOS A	3.4	88.4	0.44	0.47	0.44	35.3
14	R2	All MCs	204	4.0	204	4.0	0.484	4.9	LOS A	3.4	88.4	0.44	0.47	0.44	35.0
Approach			602	4.0	602	4.0	0.484	4.8	LOS A	3.4	88.4	0.44	0.47	0.44	35.2
West: 200th Street NE															
5	L2	All MCs	124	3.0	124	3.0	0.231	11.6	LOS B	1.3	33.2	0.54	0.64	0.54	33.2
12	R2	All MCs	118	3.0	118	3.0	0.231	5.8	LOS A	1.3	33.2	0.54	0.64	0.54	33.6
Approach			242	3.0	242	3.0	0.231	8.8	LOS A	1.3	33.2	0.54	0.64	0.54	33.4
All Vehicles			1430	3.4	1430	3.4	0.484	6.0	LOS A	3.4	88.4	0.44	0.51	0.44	34.6

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 Signalised Intersections.
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: SIDRA HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
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.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	180	105	425	230	0	0	0	0	410	5	55
Future Volume (veh/h)	0	180	105	425	230	0	0	0	0	410	5	55
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1752	1752	1781	1781	0				1678	1678	1678
Adj Flow Rate, veh/h	0	188	109	443	240	0				427	5	57
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96				0.96	0.96	0.96
Percent Heavy Veh, %	0	10	10	8	8	0				15	15	15
Cap, veh/h	0	511	432	598	947	0				441	5	59
Arrive On Green	0.00	0.29	0.29	0.31	0.89	0.00				0.35	0.32	0.35
Sat Flow, veh/h	0	1752	1482	1697	1781	0				1376	16	184
Grp Volume(v), veh/h	0	188	109	443	240	0				489	0	0
Grp Sat Flow(s),veh/h/ln	0	1752	1482	1697	1781	0				1576	0	0
Q Serve(g_s), s	0.0	8.5	5.6	18.5	2.0	0.0				30.5	0.0	0.0
Cycle Q Clear(g_c), s	0.0	8.5	5.6	18.5	2.0	0.0				30.5	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				0.87		0.12
Lane Grp Cap(c), veh/h	0	511	432	598	947	0				505	0	0
V/C Ratio(X)	0.00	0.37	0.25	0.74	0.25	0.00				0.97	0.00	0.00
Avail Cap(c_a), veh/h	0	511	432	598	947	0				570	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.68	0.68	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	28.1	27.1	16.2	2.7	0.0				32.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.0	1.4	3.4	0.4	0.0				29.3	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.8	2.1	6.0	0.7	0.0				15.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	30.2	28.5	19.5	3.2	0.0				61.3	0.0	0.0
LnGrp LOS		C	C	B	A					E		
Approach Vol, veh/h		297			683						489	
Approach Delay, s/veh		29.5			13.8						61.3	
Approach LOS		C			B						E	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	24.0	35.2		40.8		59.2
Change Period (Y+Rc), s	5.5	* 6		5.8		6.0
Max Green Setting (Gmax), s	18.5	* 25		39.2		49.0
Max Q Clear Time (g_c+I1), s	20.5	10.5		32.5		4.0
Green Ext Time (p_c), s	0.0	1.7		2.5		2.3

Intersection Summary		
HCM 7th Control Delay, s/veh		32.8
HCM 7th LOS		C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	540	0	0	510	630	145	5	610	0	0	0
Future Volume (veh/h)	50	540	0	0	510	630	145	5	610	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1693	1693	0	0	1826	1826	1767	1767	1767			
Adj Flow Rate, veh/h	52	557	0	0	526	649	149	5	629			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	14	14	0	0	5	5	9	9	9			
Cap, veh/h	193	812	0	0	704	595	655	22	602			
Arrive On Green	0.08	0.96	0.00	0.00	0.39	0.39	0.40	0.40	0.40			
Sat Flow, veh/h	1612	1693	0	0	1826	1541	1630	55	1497			
Grp Volume(v), veh/h	52	557	0	0	526	649	154	0	629			
Grp Sat Flow(s),veh/h/ln	1612	1693	0	0	1826	1541	1685	0	1497			
Q Serve(g_s), s	1.8	3.9	0.0	0.0	24.9	38.6	6.0	0.0	40.2			
Cycle Q Clear(g_c), s	1.8	3.9	0.0	0.0	24.9	38.6	6.0	0.0	40.2			
Prop In Lane	1.00		0.00	0.00		1.00	0.97		1.00			
Lane Grp Cap(c), veh/h	193	812	0	0	704	595	677	0	602			
V/C Ratio(X)	0.27	0.69	0.00	0.00	0.75	1.09	0.23	0.00	1.05			
Avail Cap(c_a), veh/h	214	812	0	0	704	595	677	0	602			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.91	0.91	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	19.2	1.1	0.0	0.0	26.5	30.7	19.7	0.0	29.9			
Incr Delay (d2), s/veh	0.7	4.3	0.0	0.0	7.1	64.3	0.3	0.0	49.0			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.7	1.5	0.0	0.0	11.9	24.3	2.4	0.0	22.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	19.9	5.4	0.0	0.0	33.6	95.0	20.0	0.0	78.9			
LnGrp LOS	B	A			C	F	B		F			
Approach Vol, veh/h		609			1175			783				
Approach Delay, s/veh		6.6			67.5			67.3				
Approach LOS		A			E			E				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		54.0			9.4	44.6		46.0				
Change Period (Y+Rc), s		6.0			5.6	* 6		5.8				
Max Green Setting (Gmax), s		48.0			5.1	* 38		40.2				
Max Q Clear Time (g_c+I1), s		5.9			3.8	40.6		42.2				
Green Ext Time (p_c), s		6.4			0.0	0.0		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	53.0
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	140	0	540	225	0
Future Vol, veh/h	0	140	0	540	225	0
Conflicting Peds, #/hr	4	3	3	0	0	4
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	3	3	7	7	3	3
Mvmt Flow	0	149	0	574	239	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	246	243	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.23	4.17	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.327	2.263	-	-	-
Pot Cap-1 Maneuver	0	790	1294	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	785	1289	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	10.66	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1289	-	785	-	-
HCM Lane V/C Ratio	-	-	0.19	-	-
HCM Ctrl Dly (s/v)	0	-	10.7	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.7	-	-

Intersection	
Int Delay, s/veh	18.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	115	110	145	395	360	185
Future Vol, veh/h	115	110	145	395	360	185
Conflicting Peds, #/hr	1	1	1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	3	3	3	3	4	4
Mvmt Flow	124	118	156	425	387	199

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1225	489	587	0	-	0
Stage 1	488	-	-	-	-	-
Stage 2	738	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	197	577	983	-	-	-
Stage 1	615	-	-	-	-	-
Stage 2	471	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	155	576	982	-	-	-
Mov Cap-2 Maneuver	155	-	-	-	-	-
Stage 1	487	-	-	-	-	-
Stage 2	471	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	102.02	2.51	0
HCM LOS	F		

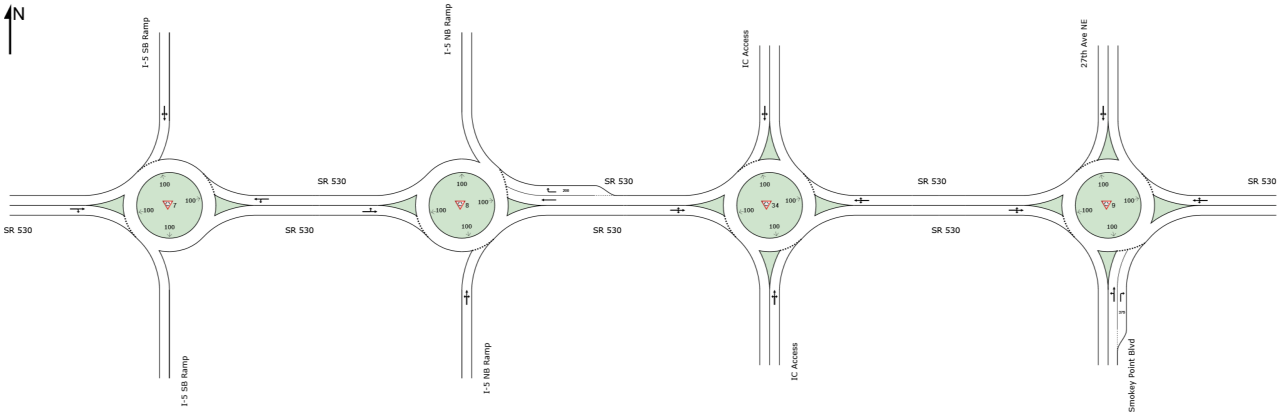
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	483	-	242	-	-
HCM Lane V/C Ratio	0.159	-	1.001	-	-
HCM Ctrl Dly (s/v)	9.4	0	102	-	-
HCM Lane LOS	A	A	F	-	-
HCM 95th %tile Q(veh)	0.6	-	9.5	-	-

NETWORK LAYOUT

Network: N101 [SR 530 Network_Alt 2 (Network Folder: General)]

New Network
Network Category: (None)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



SITES IN NETWORK		
Site ID	**CCG ID**	**Site Name**
7	NA	7. I-5 SB Ramps/SR 530
8	NA	8. I-5 NB Ramps/SR 530
34	NA	34. IC Access/SR 530
9	NA	9. Smokey Point Blvd/SR 530

MOVEMENT SUMMARY

Site: 7 [7. I-5 SB Ramps/SR 530 (Site Folder: Future (2044) - Alternative 2)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

Network: N101 [SR 530 Network_Alt 2 (Network Folder: General)]

Future (2044) PM Peak Hour Improvement
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
East: SR 530															
1	L2	All MCs	443	8.0	430	8.2	0.487	9.8	LOS A	0.0	0.0	0.00	0.60	0.00	32.0
6	T1	All MCs	240	8.0	233	8.2	0.487	3.8	LOS A	0.0	0.0	0.00	0.60	0.00	33.0
Approach			682	8.0	663	8.2	0.487	7.7	LOS A	0.0	0.0	0.00	0.60	0.00	32.3
North: I-5 SB Ramp															
7	L2	All MCs	427	15.0	427	15.0	0.654	20.2	LOS C	6.2	172.6	0.85	0.96	1.23	24.6
4	T1	All MCs	5	15.0	5	15.0	0.654	14.1	LOS B	6.2	172.6	0.85	0.96	1.23	29.5
14	R2	All MCs	57	15.0	57	15.0	0.654	14.3	LOS B	6.2	172.6	0.85	0.96	1.23	29.2
Approach			490	15.0	490	15.0	0.654	19.4	LOS B	6.2	172.6	0.85	0.96	1.23	25.5
West: SR 530															
2	T1	All MCs	188	10.0	188	10.0	0.532	15.3	LOS B	4.5	120.9	0.94	0.91	1.21	26.2
12	R2	All MCs	109	10.0	109	10.0	0.532	15.4	LOS B	4.5	120.9	0.94	0.91	1.21	30.6
Approach			297	10.0	297	10.0	0.532	15.3	LOS B	4.5	120.9	0.94	0.91	1.21	28.4
All Vehicles			1469	10.7	1449	10.9	0.654	13.2	LOS B	6.2	172.6	0.48	0.78	0.66	29.1

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data 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 HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
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.

MOVEMENT SUMMARY

Site: 8 [8. I-5 NB Ramps/SR 530 (Site Folder: Future (2044) - Alternative 2)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

Network: N101 [SR 530 Network_Alt 2 (Network Folder: General)]

Future (2044) PM Peak Hour Improvement
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: I-5 NB Ramp															
3	L2	All MCs	149	9.0	149	9.0	0.942	36.3	LOS D	21.5	575.5	1.00	1.53	2.49	19.1
8	T1	All MCs	5	9.0	5	9.0	0.942	30.3	LOS D	21.5	575.5	1.00	1.53	2.49	25.2
18	R2	All MCs	629	9.0	629	9.0	0.942	30.4	LOS D	21.5	575.5	1.00	1.53	2.49	19.1
Approach			784	9.0	784	9.0	0.942	31.6	LOS C	21.5	575.5	1.00	1.53	2.49	19.2
East: SR 530															
6	T1	All MCs	526	5.0	506	5.1	0.436	5.1	LOS A	3.1	80.2	0.53	0.49	0.53	28.8
16	R2	All MCs	649	5.0	625	5.1	0.449	5.2	LOS A	3.4	88.0	0.51	0.53	0.51	33.6
Approach			1175	5.0	1131	5.1	0.449	5.1	LOS A	3.4	88.0	0.52	0.51	0.52	32.2
West: SR 530															
5	L2	All MCs	52	14.0	52	14.0	0.471	9.9	LOS A	0.0	0.0	0.00	0.41	0.00	33.8
2	T1	All MCs	557	14.0	557	14.0	0.471	3.9	LOS A	0.0	0.0	0.00	0.41	0.00	30.6
Approach			608	14.0	608	14.0	0.471	4.4	LOS A	0.0	0.0	0.00	0.41	0.00	31.2
All Vehicles			2567	8.4	2523	8.5	0.942	13.2	LOS B	21.5	575.5	0.54	0.80	1.01	26.2

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data 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 HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
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.

MOVEMENT SUMMARY

Site: 34 [34. IC Access/SR 530 (Site Folder: Future (2044) - Alternative 2)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

Network: N101 [SR 530 Network_Alt 2 (Network Folder: General)]

Future (2044) 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: IC Access															
3	L2	All MCs	68	2.0	68	2.0	0.245	18.6	LOS B	1.8	46.5	0.97	0.81	0.97	25.9
8	T1	All MCs	1	2.0	1	2.0	0.245	12.7	LOS B	1.8	46.5	0.97	0.81	0.97	30.7
18	R2	All MCs	42	2.0	42	2.0	0.245	12.8	LOS B	1.8	46.5	0.97	0.81	0.97	25.9
Approach			112	2.0	112	2.0	0.245	16.4	LOS B	1.8	46.5	0.97	0.81	0.97	26.0
East: SR 530															
1	L2	All MCs	47	2.0	45	2.0	0.804	11.7	LOS B	10.7	271.4	0.75	0.54	0.75	32.7
6	T1	All MCs	984	2.0	940	2.0	0.804	5.7	LOS A	10.7	271.4	0.75	0.54	0.75	29.0
16	R2	All MCs	47	2.0	45	2.0	0.804	5.8	LOS A	10.7	271.4	0.75	0.54	0.75	33.2
Approach			1079	2.0	1031	2.0	0.804	6.0	LOS A	10.7	271.4	0.75	0.54	0.75	29.6
North: IC Access															
7	L2	All MCs	42	2.0	42	2.0	0.230	17.8	LOS B	1.7	43.1	0.95	0.80	0.95	27.0
4	T1	All MCs	1	2.0	1	2.0	0.230	11.8	LOS B	1.7	43.1	0.95	0.80	0.95	31.5
14	R2	All MCs	68	2.0	68	2.0	0.230	11.9	LOS B	1.7	43.1	0.95	0.80	0.95	27.0
Approach			112	2.0	112	2.0	0.230	14.1	LOS B	1.7	43.1	0.95	0.80	0.95	27.1
West: SR 530															
5	L2	All MCs	74	2.0	74	2.0	0.842	11.1	LOS B	13.7	348.2	0.73	0.48	0.73	32.2
2	T1	All MCs	979	2.0	979	2.0	0.842	5.2	LOS A	13.7	348.2	0.73	0.48	0.73	27.3
12	R2	All MCs	74	2.0	74	2.0	0.842	5.3	LOS A	13.7	348.2	0.73	0.48	0.73	32.7
Approach			1126	2.0	1126	2.0	0.842	5.6	LOS A	13.7	348.2	0.73	0.48	0.73	28.5
All Vehicles			2428	2.0	2380	2.0	0.842	6.6	LOS A	13.7	348.2	0.76	0.54	0.76	28.8

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data 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 HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
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.

MOVEMENT SUMMARY

Site: 9 [9. Smokey Point Blvd/SR 530 (Site Folder: Future (2044) - Alternative 2)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

Network: N101 [SR 530 Network_Alt 2 (Network Folder: General)]

Future (2044) 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	255	2.0	255	2.0	0.654	26.4	LOS C	6.8	172.4	1.00	1.03	1.38	21.8
8	T1	All MCs	27	2.0	27	2.0	0.654	20.4	LOS C	6.8	172.4	1.00	1.03	1.38	27.4
18	R2	All MCs	298	2.0	298	2.0	0.501	13.1	LOS B	5.2	131.0	1.00	0.88	1.13	31.5
Approach			580	2.0	580	2.0	0.654	19.3	LOS B	6.8	172.4	1.00	0.96	1.25	27.5
East: SR 530															
1	L2	All MCs	218	2.0	218	2.0	1.062	51.4	LOS F	48.4	1228.6	1.00	1.89	2.81	21.5
6	T1	All MCs	926	2.0	926	2.0	1.062	45.4	LOS F	48.4	1228.6	1.00	1.89	2.81	15.6
16	R2	All MCs	16	2.0	16	2.0	1.062	45.5	LOS F	48.4	1228.6	1.00	1.89	2.81	21.7
Approach			1160	2.0	1160	2.0	1.062	46.5	LOS D	48.4	1228.6	1.00	1.89	2.81	17.2
North: 27th Ave NE															
7	L2	All MCs	16	2.0	16	2.0	0.261	26.5	LOS C	2.1	52.1	1.00	0.89	1.00	27.9
4	T1	All MCs	27	2.0	27	2.0	0.261	20.6	LOS C	2.1	52.1	1.00	0.89	1.00	28.4
14	R2	All MCs	27	2.0	27	2.0	0.261	20.7	LOS C	2.1	52.1	1.00	0.89	1.00	22.9
Approach			69	2.0	69	2.0	0.261	22.0	LOS C	2.1	52.1	1.00	0.89	1.00	26.7
West: SR 530															
5	L2	All MCs	27	5.0	27	5.0	0.843	15.8	LOS B	14.4	373.3	0.96	0.78	1.16	31.9
2	T1	All MCs	904	5.0	904	5.0	0.843	9.8	LOS A	14.4	373.3	0.96	0.78	1.16	32.7
12	R2	All MCs	5	5.0	5	5.0	0.843	9.9	LOS A	14.4	373.3	0.96	0.78	1.16	32.3
Approach			936	5.0	936	5.0	0.843	10.0	LOS A	14.4	373.3	0.96	0.78	1.16	32.7
All Vehicles			2745	3.0	2745	3.0	1.062	27.7	LOS C	48.4	1228.6	0.99	1.29	1.87	23.9

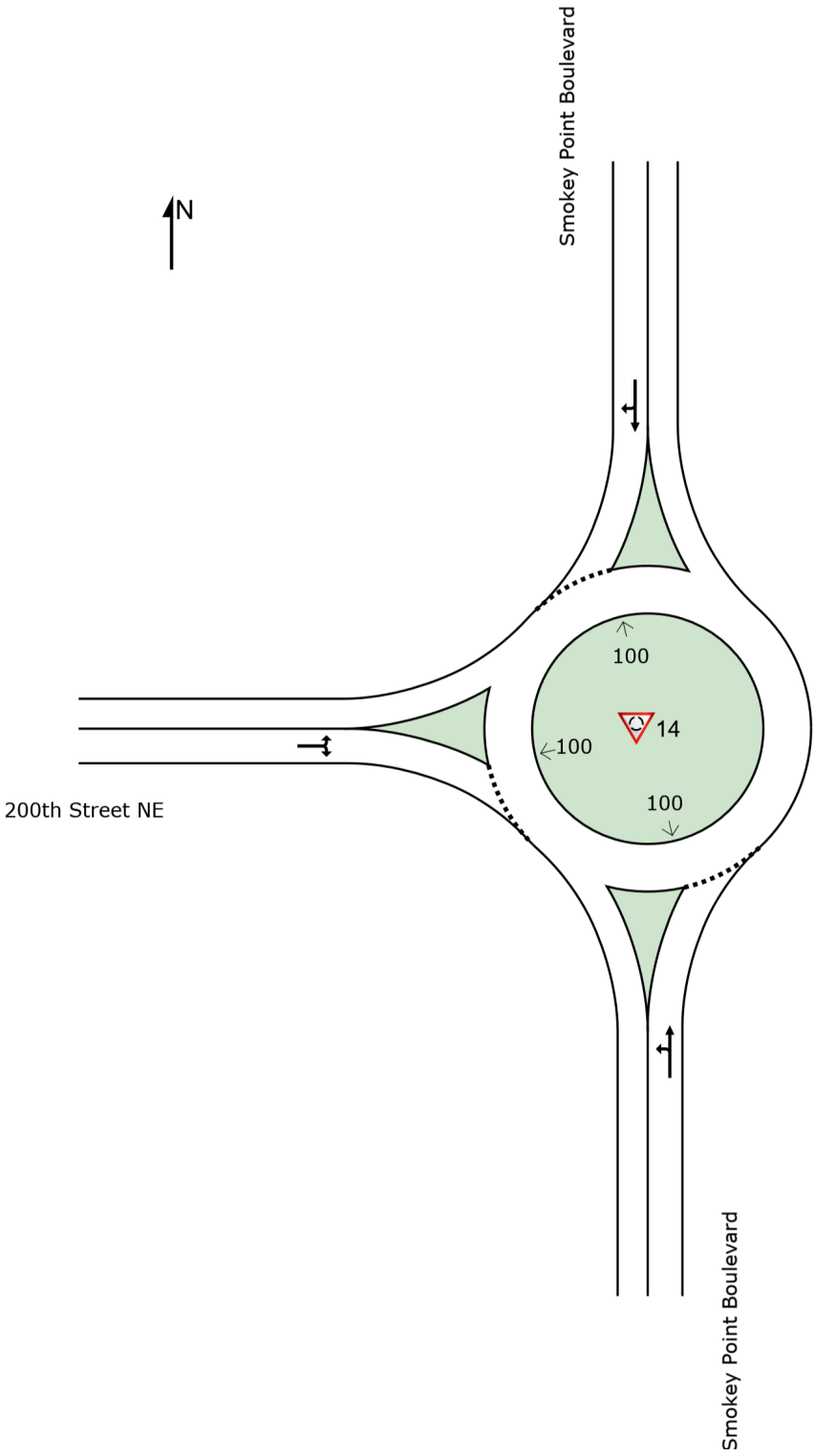
Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
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.

SITE LAYOUT

Site: 14 [14. Smokey Point Boulevard/200th Street NE (Site Folder: Future (2044) - Alternative 2)]

Future (2044) PM Peak Hour Improvement
Site Category: (None)
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



MOVEMENT SUMMARY

Site: 14 [14. Smokey Point Boulevard/200th Street NE (Site Folder: Future (2044) - Alternative 2)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

Future (2044) PM Peak Hour Improvement
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 Boulevard															
3	L2	All MCs	156	3.0	156	3.0	0.452	10.5	LOS B	3.2	82.8	0.40	0.49	0.40	34.0
8	T1	All MCs	425	3.0	425	3.0	0.452	4.5	LOS A	3.2	82.8	0.40	0.49	0.40	34.8
Approach			581	3.0	581	3.0	0.452	6.1	LOS A	3.2	82.8	0.40	0.49	0.40	34.6
North: Smokey Point Boulevard															
4	T1	All MCs	387	4.0	387	4.0	0.471	4.8	LOS A	3.3	84.5	0.44	0.47	0.44	35.3
14	R2	All MCs	199	4.0	199	4.0	0.471	4.9	LOS A	3.3	84.5	0.44	0.47	0.44	35.0
Approach			586	4.0	586	4.0	0.471	4.8	LOS A	3.3	84.5	0.44	0.47	0.44	35.2
West: 200th Street NE															
5	L2	All MCs	124	3.0	124	3.0	0.229	11.6	LOS B	1.3	32.7	0.54	0.64	0.54	33.2
12	R2	All MCs	118	3.0	118	3.0	0.229	5.7	LOS A	1.3	32.7	0.54	0.64	0.54	33.6
Approach			242	3.0	242	3.0	0.229	8.7	LOS A	1.3	32.7	0.54	0.64	0.54	33.4
All Vehicles			1409	3.4	1409	3.4	0.471	6.0	LOS A	3.3	84.5	0.44	0.51	0.44	34.6

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 Signalised Intersections.
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: SIDRA HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
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.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	205	95	435	230	0	0	0	0	405	5	70
Future Volume (veh/h)	0	205	95	435	230	0	0	0	0	405	5	70
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1752	1752	1781	1781	0				1678	1678	1678
Adj Flow Rate, veh/h	0	214	99	453	240	0				422	5	73
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96				0.96	0.96	0.96
Percent Heavy Veh, %	0	10	10	8	8	0				15	15	15
Cap, veh/h	0	504	426	577	940	0				430	5	74
Arrive On Green	0.00	0.29	0.29	0.31	0.88	0.00				0.35	0.32	0.35
Sat Flow, veh/h	0	1752	1482	1697	1781	0				1325	16	229
Grp Volume(v), veh/h	0	214	99	453	240	0				500	0	0
Grp Sat Flow(s),veh/h/ln	0	1752	1482	1697	1781	0				1570	0	0
Q Serve(g_s), s	0.0	9.9	5.1	18.5	2.1	0.0				31.5	0.0	0.0
Cycle Q Clear(g_c), s	0.0	9.9	5.1	18.5	2.1	0.0				31.5	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				0.84		0.15
Lane Grp Cap(c), veh/h	0	504	426	577	940	0				510	0	0
V/C Ratio(X)	0.00	0.42	0.23	0.79	0.26	0.00				0.98	0.00	0.00
Avail Cap(c_a), veh/h	0	504	426	577	940	0				553	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.58	0.58	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	28.9	27.2	17.3	2.9	0.0				32.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.6	1.3	4.2	0.4	0.0				33.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.5	1.9	6.5	0.7	0.0				16.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	31.5	28.5	21.5	3.3	0.0				65.0	0.0	0.0
LnGrp LOS		C	C	C	A					E		
Approach Vol, veh/h		313			693						500	
Approach Delay, s/veh		30.6			15.2						65.0	
Approach LOS		C			B						E	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	24.0	34.7		41.3		58.7
Change Period (Y+Rc), s	5.5	* 6		5.8		6.0
Max Green Setting (Gmax), s	18.5	* 26		38.2		50.0
Max Q Clear Time (g_c+I1), s	20.5	11.9		33.5		4.1
Green Ext Time (p_c), s	0.0	1.8		1.9		2.3

Intersection Summary	
HCM 7th Control Delay, s/veh	34.9
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	550	0	0	520	700	145	5	680	0	0	0
Future Volume (veh/h)	60	550	0	0	520	700	145	5	680	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1693	1693	0	0	1826	1826	1767	1767	1767			
Adj Flow Rate, veh/h	62	567	0	0	536	722	149	5	701			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	14	14	0	0	5	5	9	9	9			
Cap, veh/h	183	795	0	0	681	575	672	23	617			
Arrive On Green	0.08	0.94	0.00	0.00	0.37	0.37	0.41	0.41	0.41			
Sat Flow, veh/h	1612	1693	0	0	1826	1541	1630	55	1497			
Grp Volume(v), veh/h	62	567	0	0	536	722	154	0	701			
Grp Sat Flow(s),veh/h/ln	1612	1693	0	0	1826	1541	1685	0	1497			
Q Serve(g_s), s	2.3	6.1	0.0	0.0	26.1	37.3	5.9	0.0	41.2			
Cycle Q Clear(g_c), s	2.3	6.1	0.0	0.0	26.1	37.3	5.9	0.0	41.2			
Prop In Lane	1.00		0.00	0.00		1.00	0.97		1.00			
Lane Grp Cap(c), veh/h	183	795	0	0	681	575	694	0	617			
V/C Ratio(X)	0.34	0.71	0.00	0.00	0.79	1.26	0.22	0.00	1.14			
Avail Cap(c_a), veh/h	197	795	0	0	681	575	694	0	617			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.87	0.87	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	20.4	1.8	0.0	0.0	27.8	31.4	19.0	0.0	29.4			
Incr Delay (d2), s/veh	0.9	4.7	0.0	0.0	8.9	129.0	0.3	0.0	80.1			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.8	1.8	0.0	0.0	12.7	33.9	2.3	0.0	27.8			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	21.3	6.5	0.0	0.0	36.8	160.4	19.3	0.0	109.5			
LnGrp LOS	C	A			D	F	B		F			
Approach Vol, veh/h		629			1258			855				
Approach Delay, s/veh		7.9			107.7			93.2				
Approach LOS		A			F			F				

Timer - Assigned Phs	2	5	6	8
Phs Duration (G+Y+Rc), s	53.0	9.7	43.3	47.0
Change Period (Y+Rc), s	6.0	5.6	* 6	5.8
Max Green Setting (Gmax), s	47.0	5.0	* 37	41.2
Max Q Clear Time (g_c+I1), s	8.1	4.3	39.3	43.2
Green Ext Time (p_c), s	6.5	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	80.3
HCM 7th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	210	0	600	235	0
Future Vol, veh/h	0	210	0	600	235	0
Conflicting Peds, #/hr	4	3	3	0	0	4
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	3	3	7	7	3	3
Mvmt Flow	0	223	0	638	250	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	257	254	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.23	4.17	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.327	2.263	-	-	-
Pot Cap-1 Maneuver	0	779	1282	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	774	1278	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	11.53	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1278	-	774	-	-
HCM Lane V/C Ratio	-	-	0.289	-	-
HCM Ctrl Dly (s/v)	0	-	11.5	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	1.2	-	-

Intersection	
Int Delay, s/veh	43.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	130	105	145	460	450	195
Future Vol, veh/h	130	105	145	460	450	195
Conflicting Peds, #/hr	1	1	1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	3	3	3	3	4	4
Mvmt Flow	140	113	156	495	484	210

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1397	591	695	0	-	0
Stage 1	590	-	-	-	-	-
Stage 2	807	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	155	505	896	-	-	-
Stage 1	552	-	-	-	-	-
Stage 2	437	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 117	504	896	-	-	-
Mov Cap-2 Maneuver	~ 117	-	-	-	-	-
Stage 1	419	-	-	-	-	-
Stage 2	437	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	266.09	2.36	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	431	-	178	-	-
HCM Lane V/C Ratio	0.174	-	1.417	-	-
HCM Ctrl Dly (s/v)	9.9	0	266.1	-	-
HCM Lane LOS	A	A	F	-	-
HCM 95th %tile Q(veh)	0.6	-	15.4	-	-

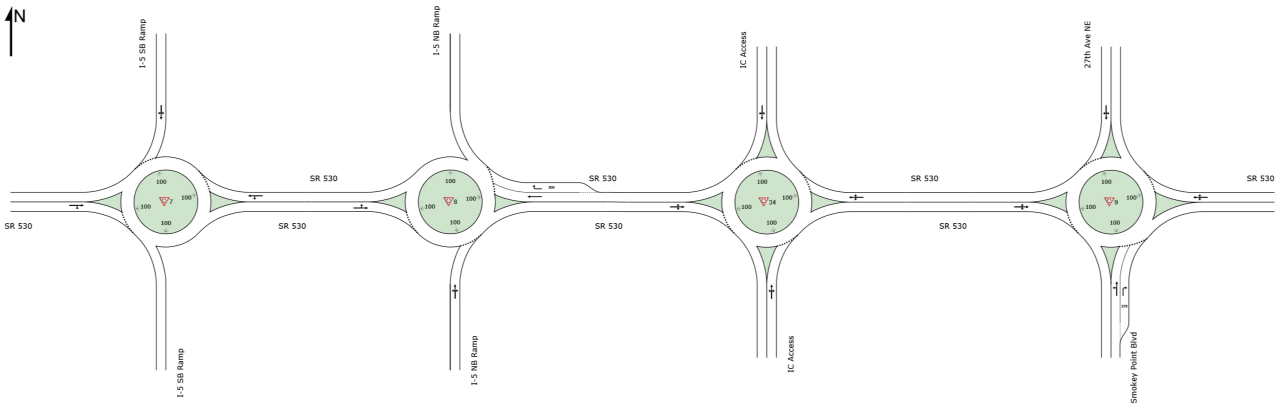
Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

NETWORK LAYOUT

Network: N101 [SR 530 Network_Alt 3 (Network Folder: General)]

New Network
Network Category: (None)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



SITES IN NETWORK		
Site ID	**CCG ID**	**Site Name**
7	NA	7. I-5 SB Ramps/SR 530
8	NA	8. I-5 NB Ramps/SR 530
34	NA	34. IC Access/SR 530
9	NA	9. Smokey Point Blvd/SR 530

MOVEMENT SUMMARY

Site: 7 [7. I-5 SB Ramps/SR 530 (Site Folder: Future (2044) - Alternative 3)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

Network: N101 [SR 530 Network_Alt 3 (Network Folder: General)]

Future (2044) PM Peak Hour Improvement
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
East: SR 530															
1	L2	All MCs	453	8.0	423	8.4	0.476	9.8	LOS A	0.0	0.0	0.00	0.60	0.00	31.9
6	T1	All MCs	240	8.0	224	8.4	0.476	3.8	LOS A	0.0	0.0	0.00	0.60	0.00	33.0
Approach			693	8.0	646	8.4	0.476	7.7	LOS A	0.0	0.0	0.00	0.60	0.00	32.3
North: I-5 SB Ramp															
7	L2	All MCs	422	15.0	422	15.0	0.660	20.0	LOS C	6.3	175.8	0.85	0.95	1.23	24.7
4	T1	All MCs	5	15.0	5	15.0	0.660	14.0	LOS B	6.3	175.8	0.85	0.95	1.23	29.6
14	R2	All MCs	73	15.0	73	15.0	0.660	14.1	LOS B	6.3	175.8	0.85	0.95	1.23	29.3
Approach			500	15.0	500	15.0	0.660	19.1	LOS B	6.3	175.8	0.85	0.95	1.23	25.8
West: SR 530															
2	T1	All MCs	214	10.0	214	10.0	0.552	15.5	LOS B	4.8	128.5	0.94	0.92	1.23	26.1
12	R2	All MCs	99	10.0	99	10.0	0.552	15.6	LOS B	4.8	128.5	0.94	0.92	1.23	30.5
Approach			313	10.0	313	10.0	0.552	15.5	LOS B	4.8	128.5	0.94	0.92	1.23	28.0
All Vehicles			1505	10.7	1459	11.1	0.660	13.3	LOS B	6.3	175.8	0.49	0.79	0.69	29.1

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data 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 HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
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.

MOVEMENT SUMMARY

Site: 8 [8. I-5 NB Ramps/SR 530 (Site Folder: Future (2044) - Alternative 3)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

Network: N101 [SR 530 Network_Alt 3 (Network Folder: General)]

Future (2044) PM Peak Hour Improvement
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: I-5 NB Ramp															
3	L2	All MCs	149	9.0	149	9.0	1.046	60.7	LOS F	36.3	973.1	1.00	2.14	3.85	13.6
8	T1	All MCs	5	9.0	5	9.0	1.046	54.7	LOS F	36.3	973.1	1.00	2.14	3.85	19.8
18	R2	All MCs	701	9.0	701	9.0	1.046	54.8	LOS F	36.3	973.1	1.00	2.14	3.85	13.6
Approach			856	9.0	856	9.0	1.046	55.8	LOS E	36.3	973.1	1.00	2.14	3.85	13.6
East: SR 530															
6	T1	All MCs	536	5.0	496	5.2	0.435	5.2	LOS A	3.0	78.4	0.53	0.50	0.53	28.8
16	R2	All MCs	722	5.0	668	5.2	0.483	5.2	LOS A	3.7	96.7	0.53	0.54	0.53	33.5
Approach			1258	5.0	1164	5.2	0.483	5.2	LOS A	3.7	96.7	0.53	0.52	0.53	32.3
West: SR 530															
5	L2	All MCs	62	14.0	62	14.0	0.487	9.9	LOS A	0.0	0.0	0.00	0.41	0.00	33.7
2	T1	All MCs	567	14.0	567	14.0	0.487	3.9	LOS A	0.0	0.0	0.00	0.41	0.00	30.5
Approach			629	14.0	629	14.0	0.487	4.4	LOS A	0.0	0.0	0.00	0.41	0.00	31.2
All Vehicles			2742	8.3	2649	8.6	1.046	21.4	LOS C	36.3	973.1	0.56	1.02	1.48	22.0

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data 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 HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
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.

MOVEMENT SUMMARY

Site: 34 [34. IC Access/SR 530 (Site Folder: Future (2044) - Alternative 3)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

Network: N101 [SR 530 Network_Alt 3 (Network Folder: General)]

Future (2044) 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: IC Access															
3	L2	All MCs	137	2.0	137	2.0	0.673	33.7	LOS C	7.3	184.9	1.00	1.09	1.46	19.6
8	T1	All MCs	1	2.0	1	2.0	0.673	27.7	LOS C	7.3	184.9	1.00	1.09	1.46	25.6
18	R2	All MCs	105	2.0	105	2.0	0.673	27.8	LOS C	7.3	184.9	1.00	1.09	1.46	19.6
Approach			243	2.0	243	2.0	0.673	31.1	LOS C	7.3	184.9	1.00	1.09	1.46	19.6
East: SR 530															
1	L2	All MCs	111	2.0	99	2.0	0.898	18.3	LOS D	18.6	473.7	1.00	0.92	1.34	30.5
6	T1	All MCs	937	2.0	843	2.0	0.898	12.4	LOS D	18.6	473.7	1.00	0.92	1.34	25.4
16	R2	All MCs	111	2.0	99	2.0	0.898	12.5	LOS D	18.6	473.7	1.00	0.92	1.34	30.9
Approach			1158	2.0	1042	2.0	0.898	12.9	LOS B	18.6	473.7	1.00	0.92	1.34	27.0
North: IC Access															
7	L2	All MCs	100	2.0	100	2.0	0.572	25.2	LOS C	5.6	141.2	1.00	0.99	1.29	23.0
4	T1	All MCs	1	2.0	1	2.0	0.572	19.2	LOS B	5.6	141.2	1.00	0.99	1.29	28.5
14	R2	All MCs	137	2.0	137	2.0	0.572	19.3	LOS B	5.6	141.2	1.00	0.99	1.29	23.0
Approach			238	2.0	238	2.0	0.572	21.8	LOS C	5.6	141.2	1.00	0.99	1.29	23.0
West: SR 530															
5	L2	All MCs	137	2.0	134	2.0	0.961	21.6	LOS E	29.1	739.8	1.00	1.08	1.40	28.2
2	T1	All MCs	932	2.0	910	2.0	0.961	15.6	LOS E	29.1	739.8	1.00	1.08	1.40	21.0
12	R2	All MCs	137	2.0	134	2.0	0.961	15.7	LOS E	29.1	739.8	1.00	1.08	1.40	28.6
Approach			1205	2.0	1177	2.0	0.961	16.3	LOS B	29.1	739.8	1.00	1.08	1.40	23.6
All Vehicles			2844	2.0	2700	2.1	0.961	16.8	LOS B	29.1	739.8	1.00	1.01	1.37	24.3

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data 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 HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
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.

MOVEMENT SUMMARY

Site: 9 [9. Smokey Point Blvd/SR 530 (Site Folder: Future (2044) - Alternative 3)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

Network: N101 [SR 530 Network_Alt 3 (Network Folder: General)]

Future (2044) 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	293	2.0	293	2.0	0.537	19.3	LOS B	5.8	146.1	1.00	0.91	1.18	25.0
8	T1	All MCs	37	2.0	37	2.0	0.537	13.3	LOS B	5.8	146.1	1.00	0.91	1.18	29.9
18	R2	All MCs	309	2.0	309	2.0	0.693	22.1	LOS C	7.6	192.4	1.00	1.07	1.46	27.9
Approach			638	2.0	638	2.0	0.693	20.3	LOS C	7.6	192.4	1.00	0.98	1.31	27.0
East: SR 530															
1	L2	All MCs	218	2.0	218	2.0	1.156	89.9	LOS F	71.2	1807.2	1.00	2.64	4.49	15.8
6	T1	All MCs	952	2.0	952	2.0	1.156	83.9	LOS F	71.2	1807.2	1.00	2.64	4.49	10.4
16	R2	All MCs	27	2.0	27	2.0	1.156	84.0	LOS F	71.2	1807.2	1.00	2.64	4.49	15.9
Approach			1197	2.0	1197	2.0	1.156	85.0	LOS F	71.2	1807.2	1.00	2.64	4.49	11.7
North: 27th Ave NE															
7	L2	All MCs	21	2.0	21	2.0	0.348	25.6	LOS C	2.8	70.0	1.00	0.89	1.00	28.3
4	T1	All MCs	37	2.0	37	2.0	0.348	19.6	LOS B	2.8	70.0	1.00	0.89	1.00	28.8
14	R2	All MCs	43	2.0	43	2.0	0.348	19.7	LOS B	2.8	70.0	1.00	0.89	1.00	23.4
Approach			101	2.0	101	2.0	0.348	20.9	LOS C	2.8	70.0	1.00	0.89	1.00	27.0
West: SR 530															
5	L2	All MCs	43	5.0	42	5.1	0.828	15.3	LOS B	13.3	346.6	0.93	0.75	1.10	31.9
2	T1	All MCs	894	5.0	877	5.1	0.828	9.3	LOS A	13.3	346.6	0.93	0.75	1.10	32.7
12	R2	All MCs	5	5.0	5	5.1	0.828	9.4	LOS A	13.3	346.6	0.93	0.75	1.10	32.4
Approach			941	5.0	924	5.1	0.828	9.6	LOS A	13.3	346.6	0.93	0.75	1.10	32.7
All Vehicles			2878	3.0	2860	3.0	1.156	43.9	LOS D	71.2	1807.2	0.98	1.60	2.56	19.4

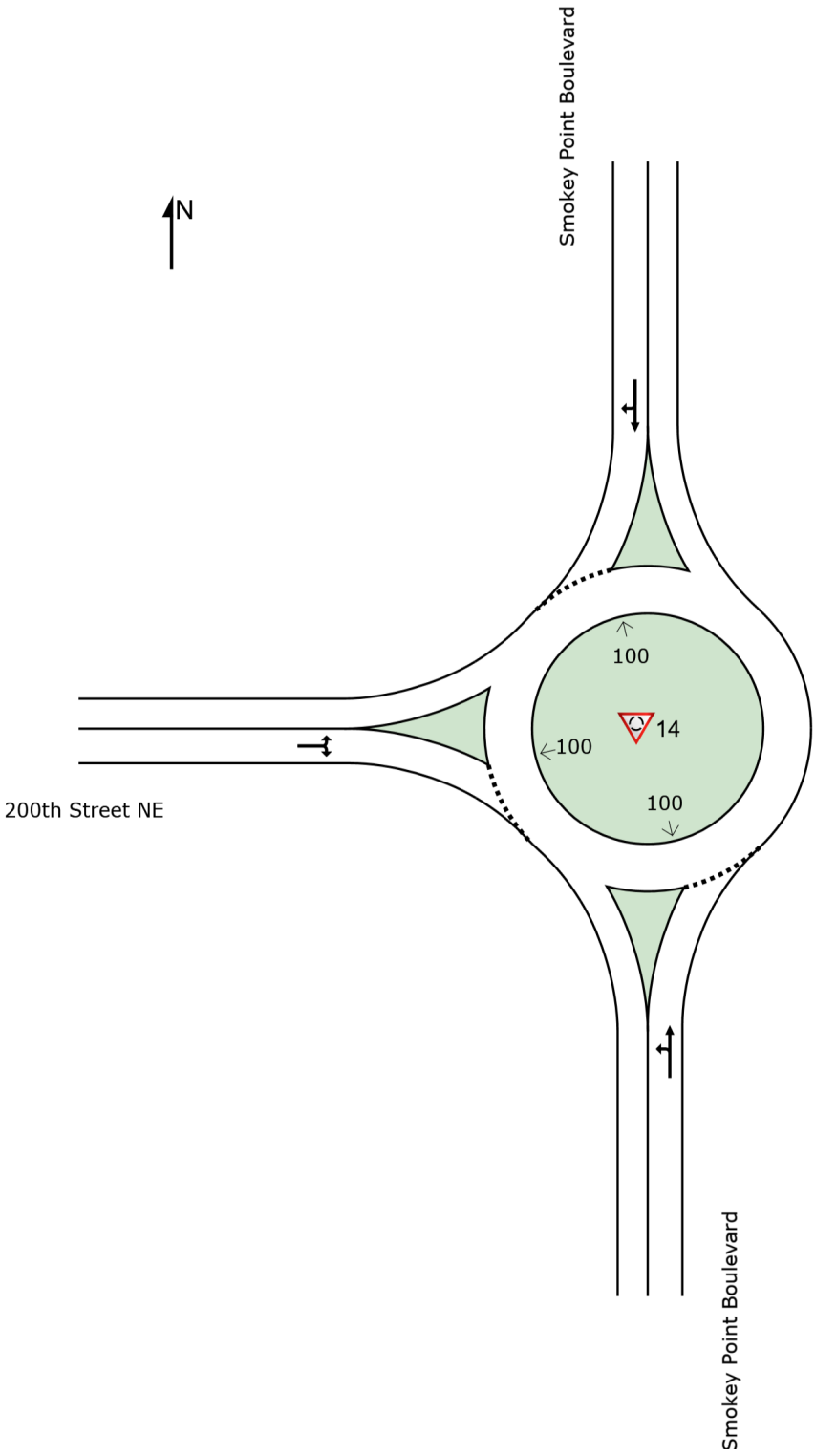
Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
Intersection and Approach LOS values are based on average delay for all movements (v/c not used).
Roundabout Capacity Model: SIDRA HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
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.

SITE LAYOUT

Site: 14 [14. Smokey Point Boulevard/200th Street NE (Site Folder: Future (2044) - Alternative 3)]

Future (2044) PM Peak Hour Improvement
Site Category: (None)
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



MOVEMENT SUMMARY

Site: 14 [14. Smokey Point Boulevard/200th Street NE (Site Folder: Future (2044) - Alternative 3)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

Future (2044) PM Peak Hour Improvement
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 Boulevard															
3	L2	All MCs	156	3.0	156	3.0	0.515	10.7	LOS B	4.1	103.7	0.46	0.50	0.46	33.9
8	T1	All MCs	495	3.0	495	3.0	0.515	4.7	LOS A	4.1	103.7	0.46	0.50	0.46	34.7
Approach			651	3.0	651	3.0	0.515	6.1	LOS A	4.1	103.7	0.46	0.50	0.46	34.5
North: Smokey Point Boulevard															
4	T1	All MCs	484	4.0	484	4.0	0.560	4.9	LOS A	4.5	114.8	0.50	0.48	0.50	35.1
14	R2	All MCs	210	4.0	210	4.0	0.560	5.0	LOS A	4.5	114.8	0.50	0.48	0.50	34.8
Approach			694	4.0	694	4.0	0.560	5.0	LOS A	4.5	114.8	0.50	0.48	0.50	35.0
West: 200th Street NE															
5	L2	All MCs	140	3.0	140	3.0	0.261	12.2	LOS B	1.5	39.6	0.62	0.67	0.62	32.9
12	R2	All MCs	113	3.0	113	3.0	0.261	6.3	LOS A	1.5	39.6	0.62	0.67	0.62	33.3
Approach			253	3.0	253	3.0	0.261	9.6	LOS A	1.5	39.6	0.62	0.67	0.62	33.1
All Vehicles			1597	3.4	1597	3.4	0.560	6.2	LOS A	4.5	114.8	0.50	0.52	0.50	34.5

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 Signalised Intersections.
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: SIDRA HCM.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
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.