

Bowman

**Inverrary Golf Course
Redevelopment
Traffic Analysis**

Broward County, Florida

Bowman Project No. 313844-01-002

Prepared for:

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West Palm Beach, FL 33401**

January 2026

bowman.com

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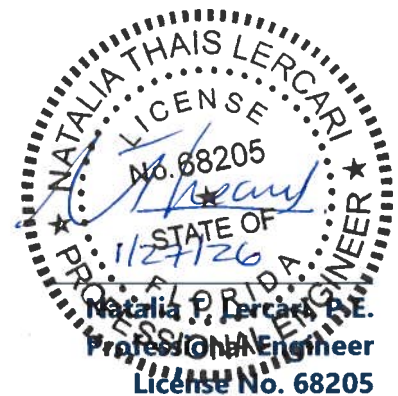
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Introduction

Bowman Consulting Group, LTD. (Bowman) prepared a traffic analysis to evaluate the redevelopment of the Inverrary golf course, in the City of Lauderhill, Florida. The site is bordered by NW 44 Street to the north, Rock Island Road to the east, a canal to the south, and Inverrary Boulevard West to the west. The site is currently a non-operational golf course. The proposed development, with a projected buildout of 2030, will include a maximum of 800 dwelling units, and an 18-hole championship golf course with a practice golf course and a driving range.

The dwelling units are proposed as a mix of single family detached houses, single family attached homes, and townhomes in six (6) separate pods. For purposes of analysis, the following pod mix has been assumed:

- Pod 1: 29 single family detached homes, 36 single family attached homes, and 4 townhomes
- Pod 2: 46 single family attached homes and 47 townhomes
- Pod 3: 40 single family detached homes, 28 single family attached homes, and 15 townhomes
- Pod 4: 313 townhomes
- Pod 5: 24 single family attached homes and 120 townhomes
- Pod 6: 23 single family detached homes, 20 single family attached homes, and 55 townhomes

This study evaluates the traffic impacts associated with the proposed development on the surrounding roadway network for three (3) scenarios: Existing (2025) conditions, Background (2030) conditions (future traffic without project traffic), and Total (2030) conditions (future traffic with project traffic). The study methodology letter is included in **Appendix A**. The site location is graphically depicted on **Figure 1**. A conceptual site plan is attached in **Appendix B** that shows the pod locations and site access connections. The unit mix per pod is still evolving and may be slightly modified from the mix proposed herein.

The study area for the project will include the following project access connections and study intersections, graphically shown on Figure 1:

- NW 44 Street at Inverrary Boulevard West (signalized)
- NW 44 Street at Inverrary Boulevard (signalized)
- NW 44 Street at Inverrary Drive (signalized)
- NW 44 Street at Rock Island Road (signalized)
- Inverrary Boulevard at Inverrary Drive (signalized)
- Inverrary Boulevard at Oakland Park Boulevard (signalized)
- Pod 1 and Pod 2 Access at Inverrary Boulevard (unsignalized)
- Pod 2 and Pod 3 Access at Inverrary Drive (unsignalized)
- Pod 4 Access at Rock Island Road (unsignalized)
- Pod 5 and Pod 6 Access at Inverrary Drive (unsignalized)

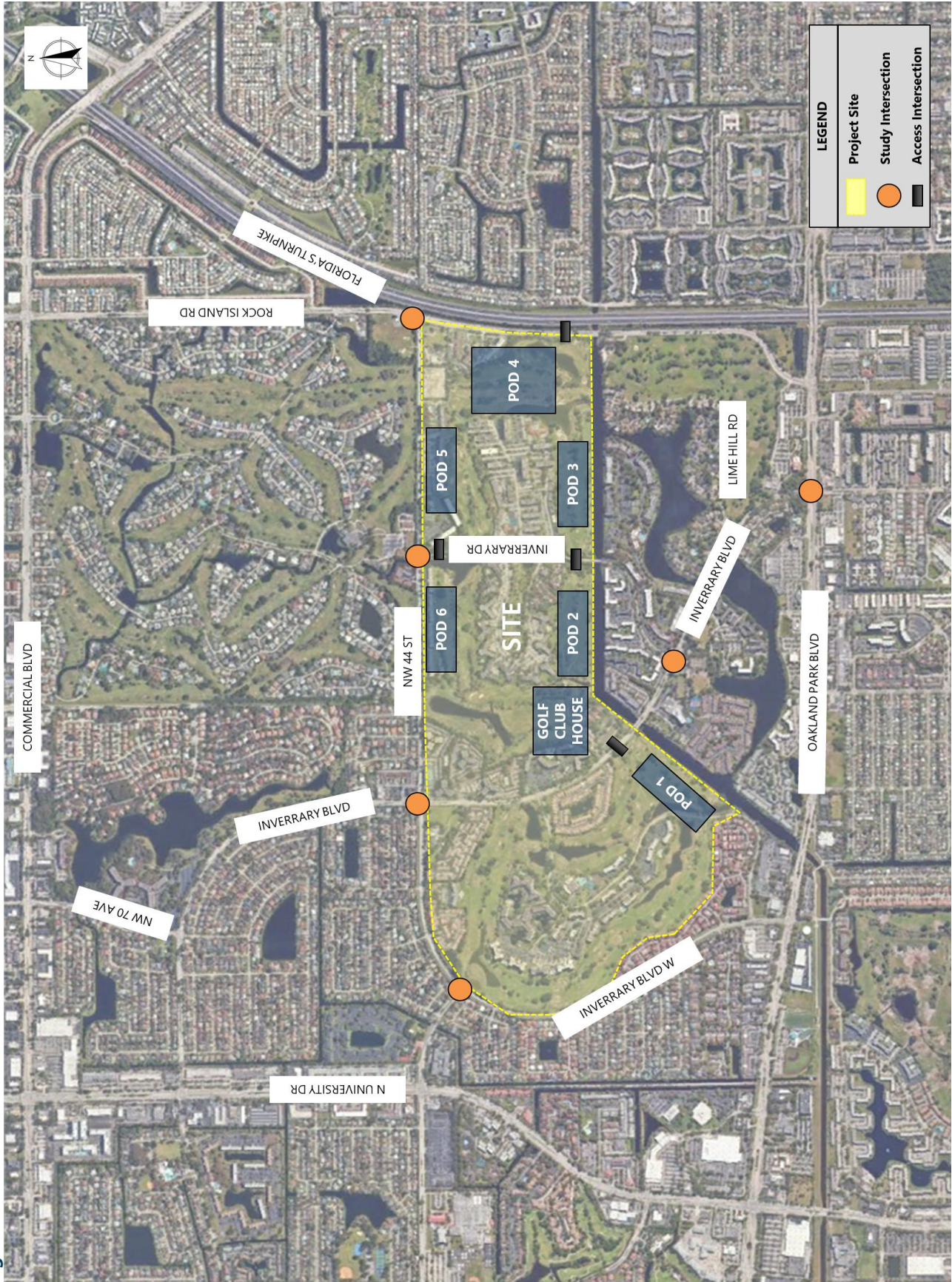


Figure 1 Site Location

Roadway Characteristics

NW 44 Street is a two-lane, two-way roadway, with sporadic striped median and a posted speed limit of 35 miles per hour (MPH).



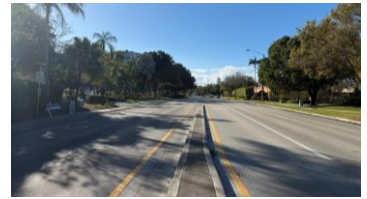
Oakland Park Boulevard is a six-lane, two-way, divided roadway with a posted speed limit of 45 MPH.



Inverrary Boulevard West is a two-lane, two-way undivided roadway with generally a posted speed limit of 30 MPH, and a posted speed limit of 35 MPH approaching NW 44 Street.



Inverrary Boulevard is a four-lane, two-way, divided roadway with a posted speed limit of 30 MPH.



Inverrary Drive is a two-lane, two-way, undivided roadway with a posted speed limit of 25 MPH.



Rock Island Road is a four-lane, two-way, divided roadway with a posted speed limit of 40 MPH.



The study intersections are currently signalized. The land use surrounding the site is mostly residential, with some retail, office, and other uses. The existing intersection geometries for the study intersections are shown on **Figure 2**.

An interchange connection is proposed for Oakland Park Boulevard and Florida’s Turnpike. A Project Development and Environment (PD&E) study has been completed and the subject interchange is scheduled to begin design in the last quarter of 2026. The project is not yet funded for construction. For purposes of this study, the potential future interchange has not been included.

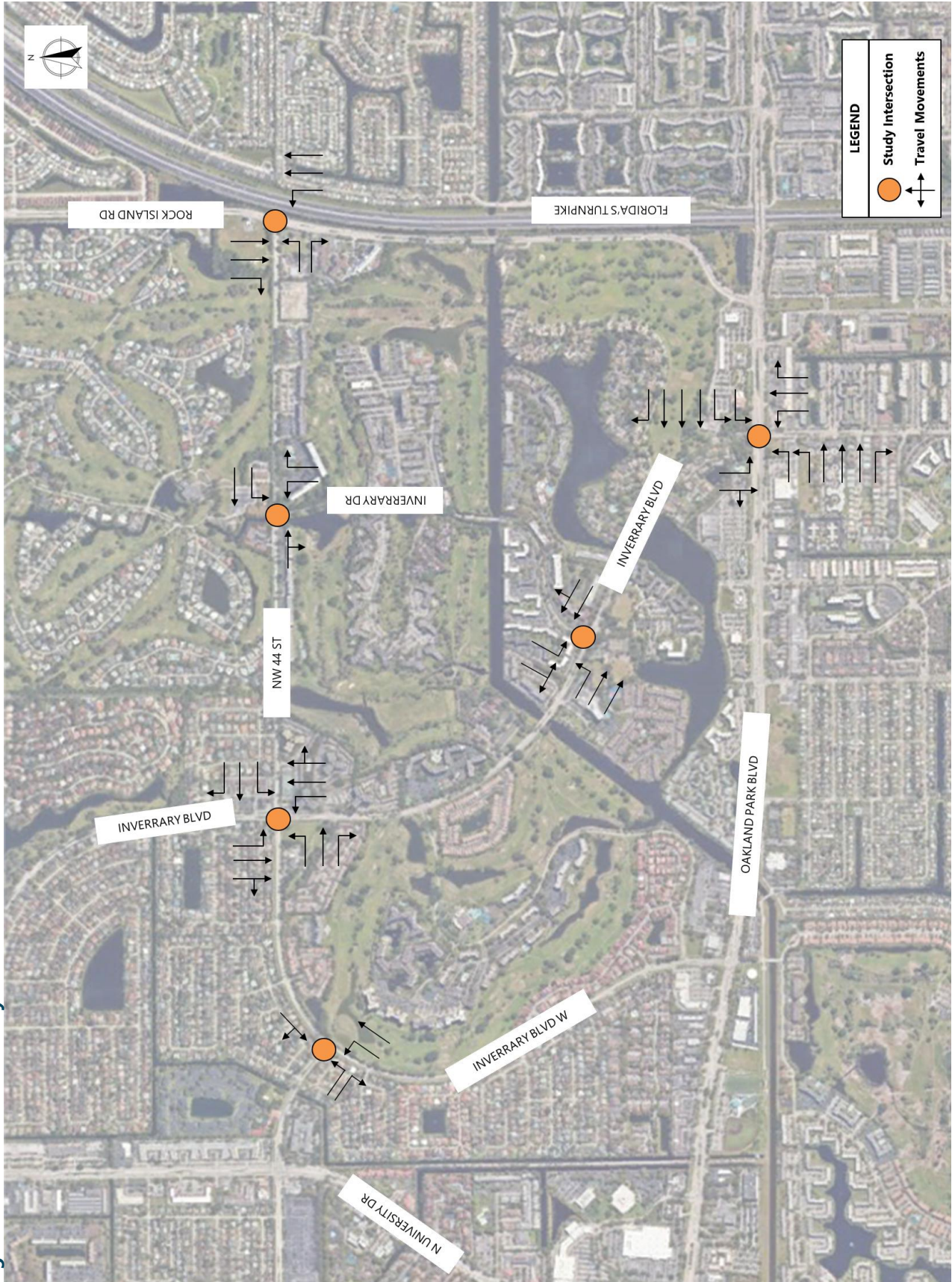


Figure 2 Intersection Geometry

Data Collection

Turning movement counts were collected at the study intersections on Wednesday, May 14, 2025, from 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM, while school was in session. Additional turning movement counts were collected for the Inverrary Boulevard/Spanish Moss Terrace intersection on Wednesday, October 15, 2025, from 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM as this intersection operates in conjunction with Inverrary Boulevard and Inverrary Drive. The data is included in **Appendix C**.

Traffic Volumes

Existing (2025) Conditions

The collected counts were adjusted to reflect peak season conditions by applying a Peak Season Conversion Factor (PSCF) of 1.00, with the exception of Inverrary Boulevard/Spanish Moss Terrace intersection where a PSCF of 1.02 was applied, obtained from the 2024 Florida Department of Transportation (FDOT) Peak Season Factor Category Report, included in Appendix C. Individual peak hours were used for the study intersections. Volumes were balanced, where appropriate. The AM and PM peak hour intersection volume development tables are included in Appendix C. Existing peak hour traffic volumes are graphically shown on **Figure 3** for the study intersections.

Background (2030) Conditions

Traffic volumes for Background (2030) traffic conditions were calculated by applying a growth rate to existing volumes based on a review of the 2015 and 2045 Southeast Regional Planning Model (SERPM) volumes, excerpts of which are included in Appendix C. Based on the growth rate calculations, summarized in **Table 1**, a growth rate of 1.00 percent was used for the analysis. The Woodlands project was included as a committed development project, information for which is attached in Appendix C. The AM and PM peak hour volume development tables are included in Appendix C. Background peak hour traffic volumes are graphically shown on **Figure 4** for the study intersections.

Table 1 Growth Rate Summary

ROADWAY	SEGMENT	SERPM 2015 VOLUME			SERPM 2045 VOLUME		
		N/E	S/W	TOTAL	N/E	S/W	TOTAL
Oakland Park Boulevard	W. of Inverrary Boulevard West	23,793	24,267	48,060	27,046	27,409	54,455
Oakland Park Boulevard	E. of Rock Island Road	34,423	35,761	70,184	40,829	42,141	82,970
NW 44 Street	E. of Inverrary Boulevard	2,371	2,224	4,595	3,455	3,456	6,911
Commercial Boulevard	East of Rock Island Road	38,250	34,650	72,900	42,900	39,432	82,332
Inverrary Boulevard West	North of Oakland Park Boulevard	2,920	2,912	5,832	3,334	3,228	6,562
Inverrary Boulevard	North of Oakland Park Boulevard	5,878	5,855	11,733	7,492	7,778	15,270
Rock Island Road	North of Oakland Park Boulevard	9,979	8,730	18,709	13,852	12,542	26,394
Total Areawide AADT		117,614	114,399	232,013	138,908	135,986	274,894
Areawide 30-Year Compound Growth Rate						CGR = 0.57%	

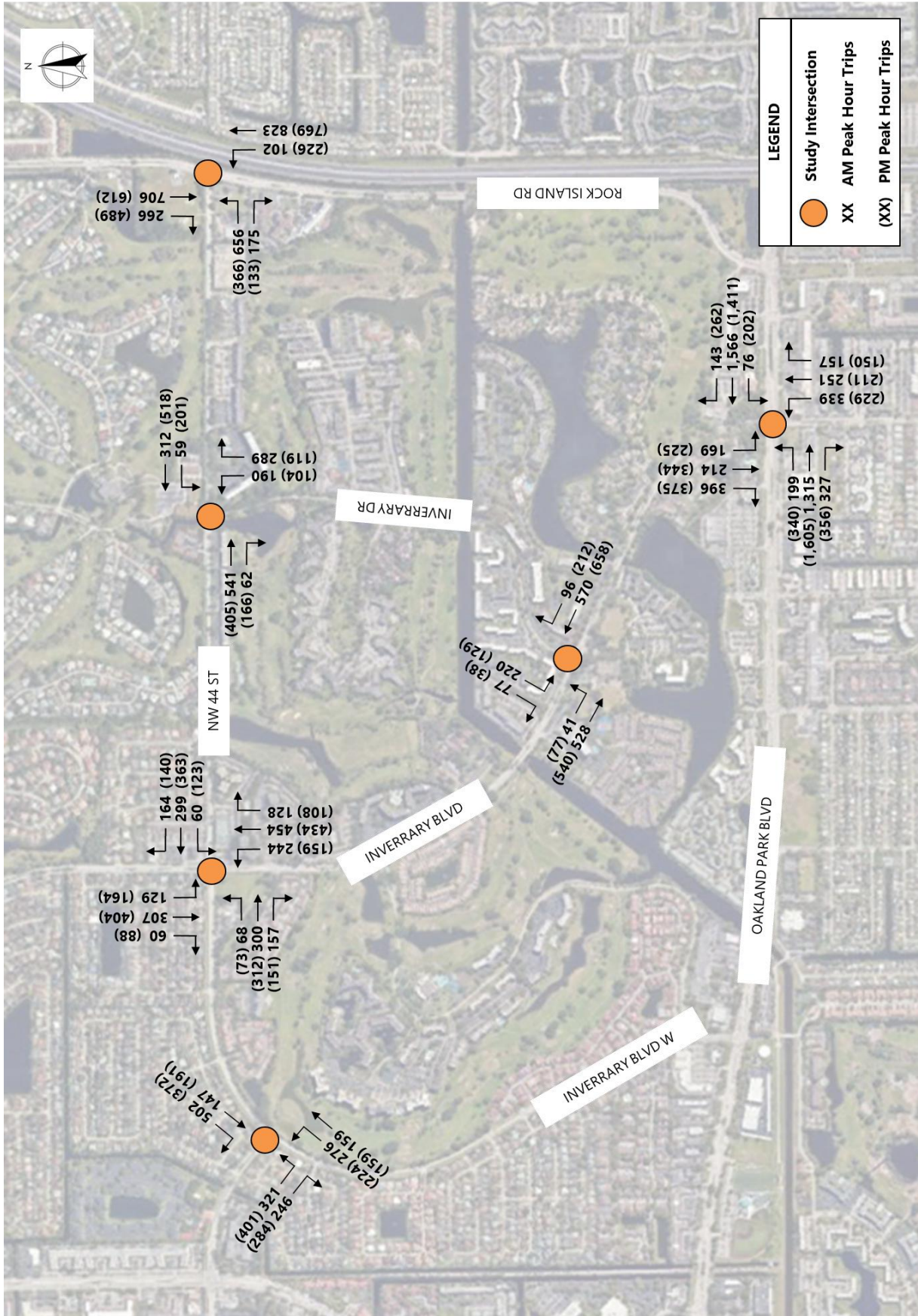
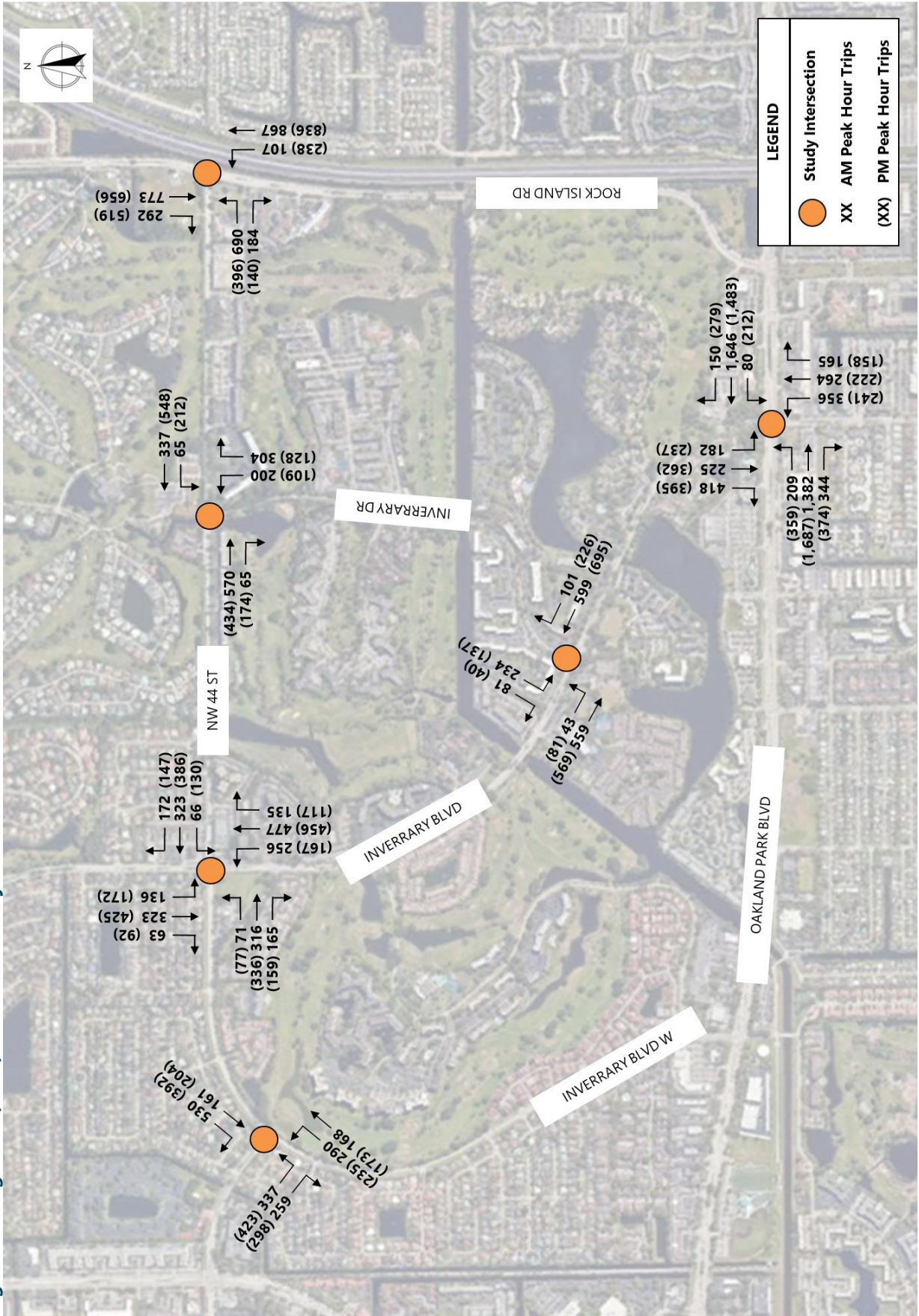


Figure 3 Existing (2025) Volumes at Study Intersections

Figure 4 Background (2030) Volumes at Study Intersections



Total (2030) Conditions

Project Driveway Access

The site will provide access to a golf course and six (6) residential pods, which will contain a mix of single family and multi-family housing. Access will be provided through several roads including Inverrary Boulevard, Inverrary Drive, and Rock Island Road. All access connections will be full access, except the Pod 4 Access at Rock Island Road which will be right-in/right-out only. Access to residential pods will be gated with all access points allowing entry to both residents and visitors.

Trip Generation Analysis

Using information obtained from the Institute of Transportation Engineers (ITE), *Trip Generation Manual*, 12th Edition, excerpts of which are attached in Appendix C, trip generation estimates were developed for the proposed development. The detailed trip generation analysis by pod is included in Appendix C. The total trip generation analysis for the site is summarized in **Table 2**. The analysis indicates that the proposed development is anticipated to generate 6,949 daily trips, 450 AM peak hour trips, and 508 PM peak hour trips.

Table 2 Trip Generation Summary

SCENARIO	IN	OUT	TOTAL
Daily	3,475	3,474	6,949
AM Peak	128	322	450
PM Peak	308	200	508

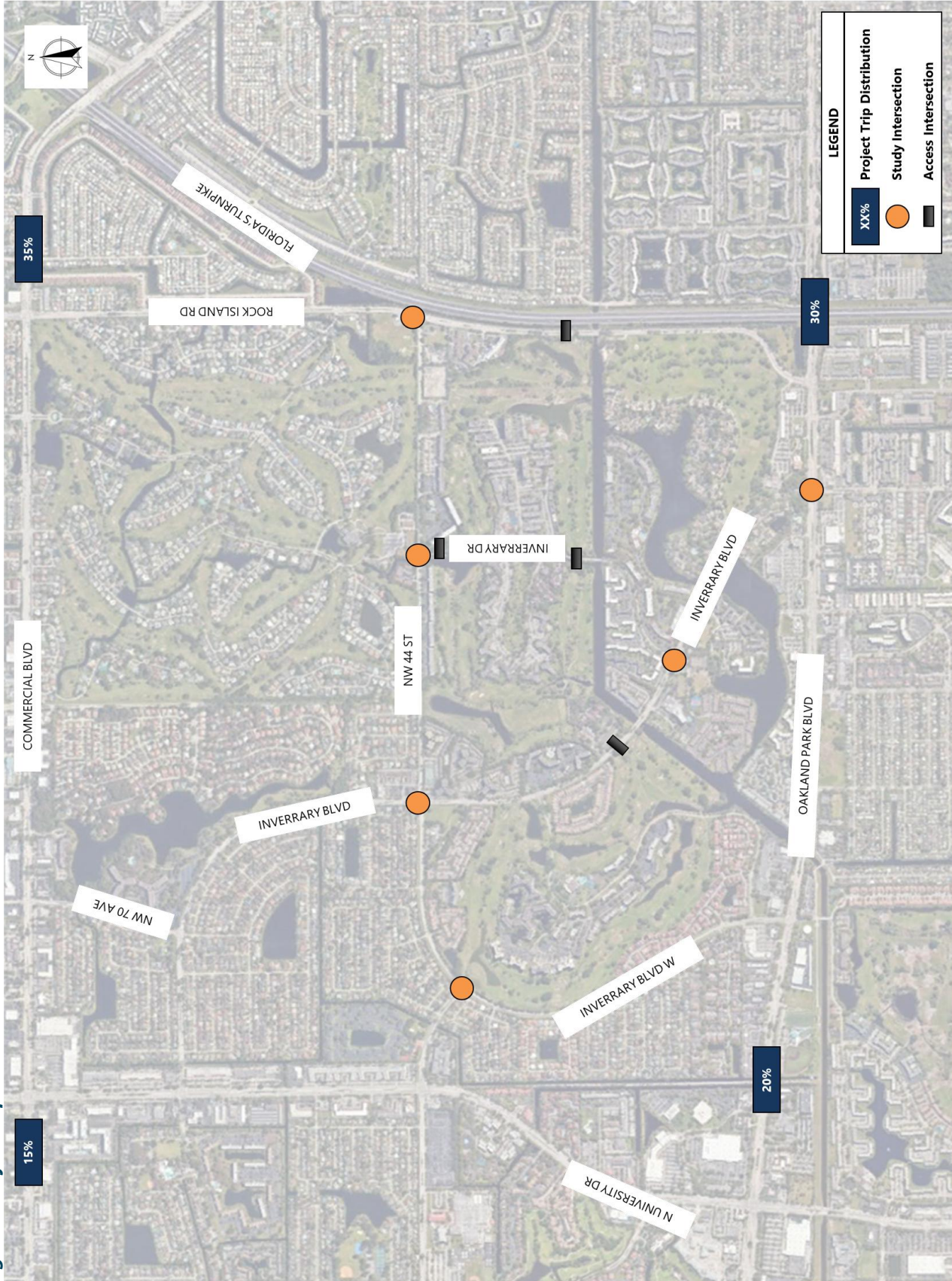
Project Trip Distribution

The project distribution was based on a review of existing traffic volumes, roadway characteristics for the surrounding roadway network, nearby land uses, and volumes from the SERPM. The majority of the county is situated to the east of the site, with major roadways such as I-95 and Florida’s Turnpike also located east of the site. The following general distribution is proposed for the site:

- To/from the north to Commercial Boulevard: 50 percent (42,900+39,432)
 - 35 percent to/from the east (42,900+39,432)
 - 15 percent to/from the west (21,328+22,672)
- To/from the south to Oakland Park Boulevard: 50 percent (40,829+42,141)
 - 30 percent to/from the east (40,829+42,141)
 - 20 percent to/from the west (28,235+28,882)

The general project distribution for the entire site is graphically shown on **Figure 5**. The detailed project distribution and trips for each pod are attached in Appendix C. The total site project trips are graphically shown on **Figure 6** for the study intersections and on **Figure 7** for the project access connections. The AM and PM peak hour volume development tables are included in Appendix C. The Total peak hour traffic volumes are graphically shown on **Figure 8** for the study intersections and on **Figure 9** for the project access connections.

Figure 5 Project Trip Distribution



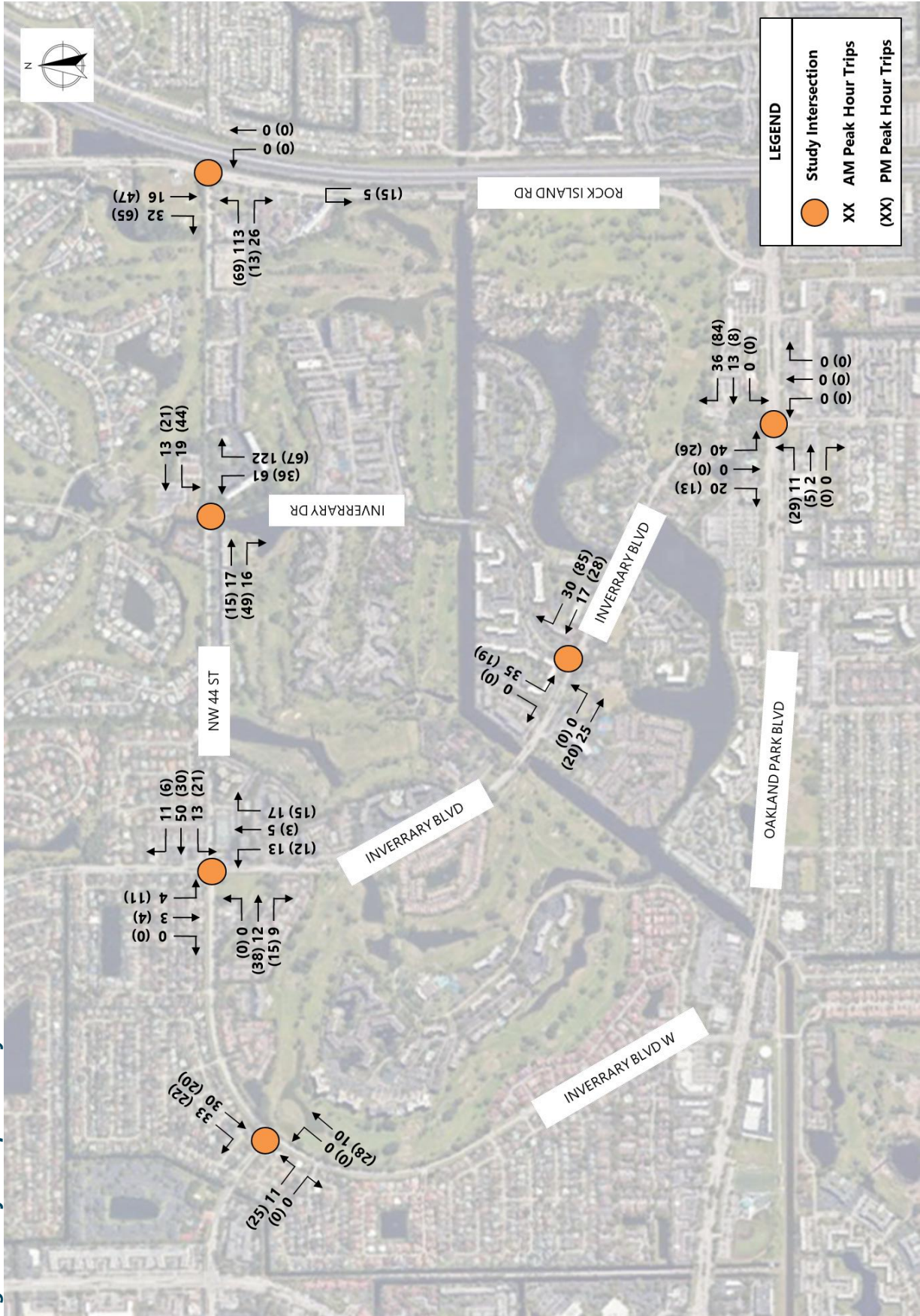


Figure 6 Project Trips at Study Intersections

Figure 7 Project Trips at Project Access Connections

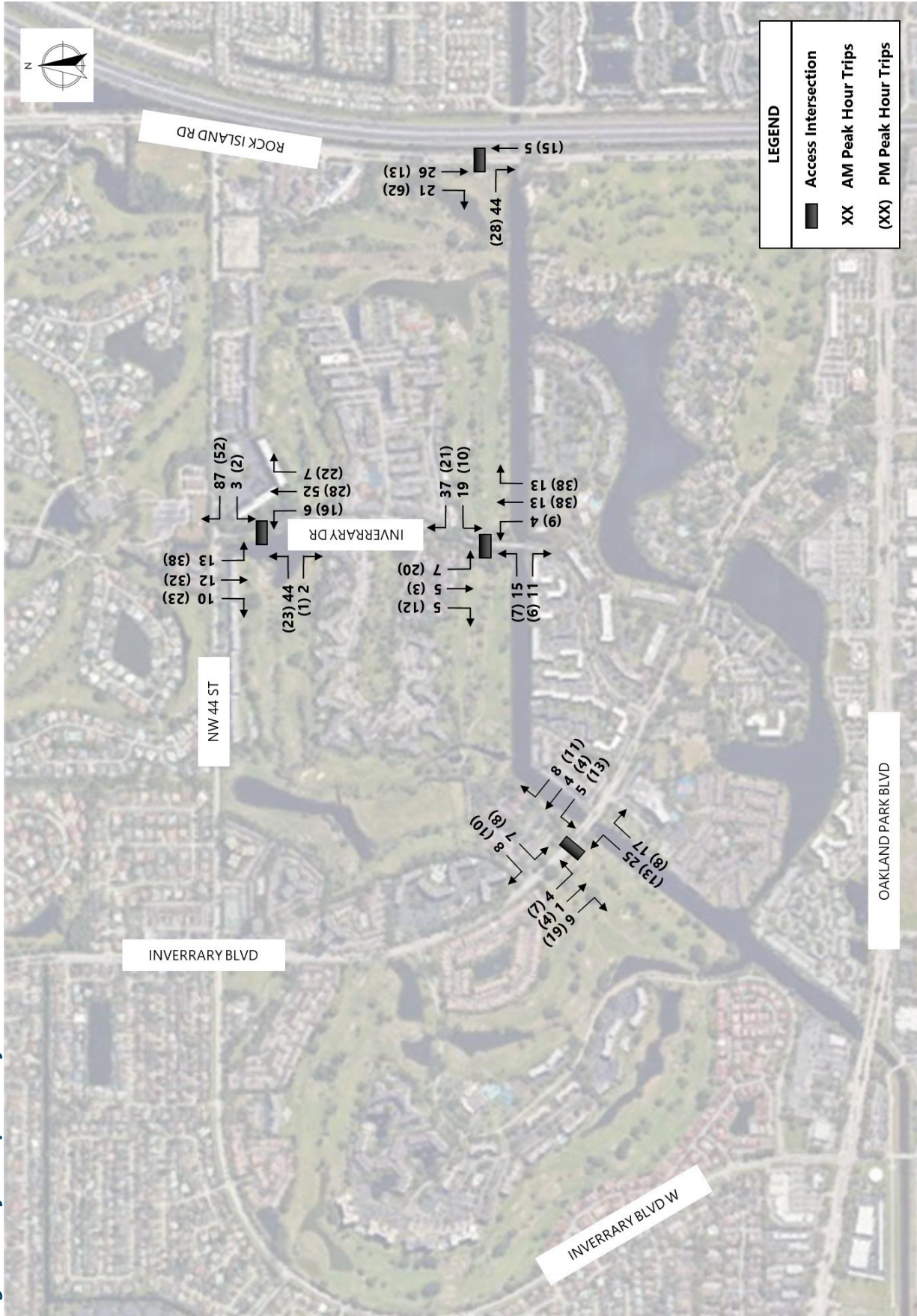


Figure 8 Total (2030) Volumes at Study Intersections

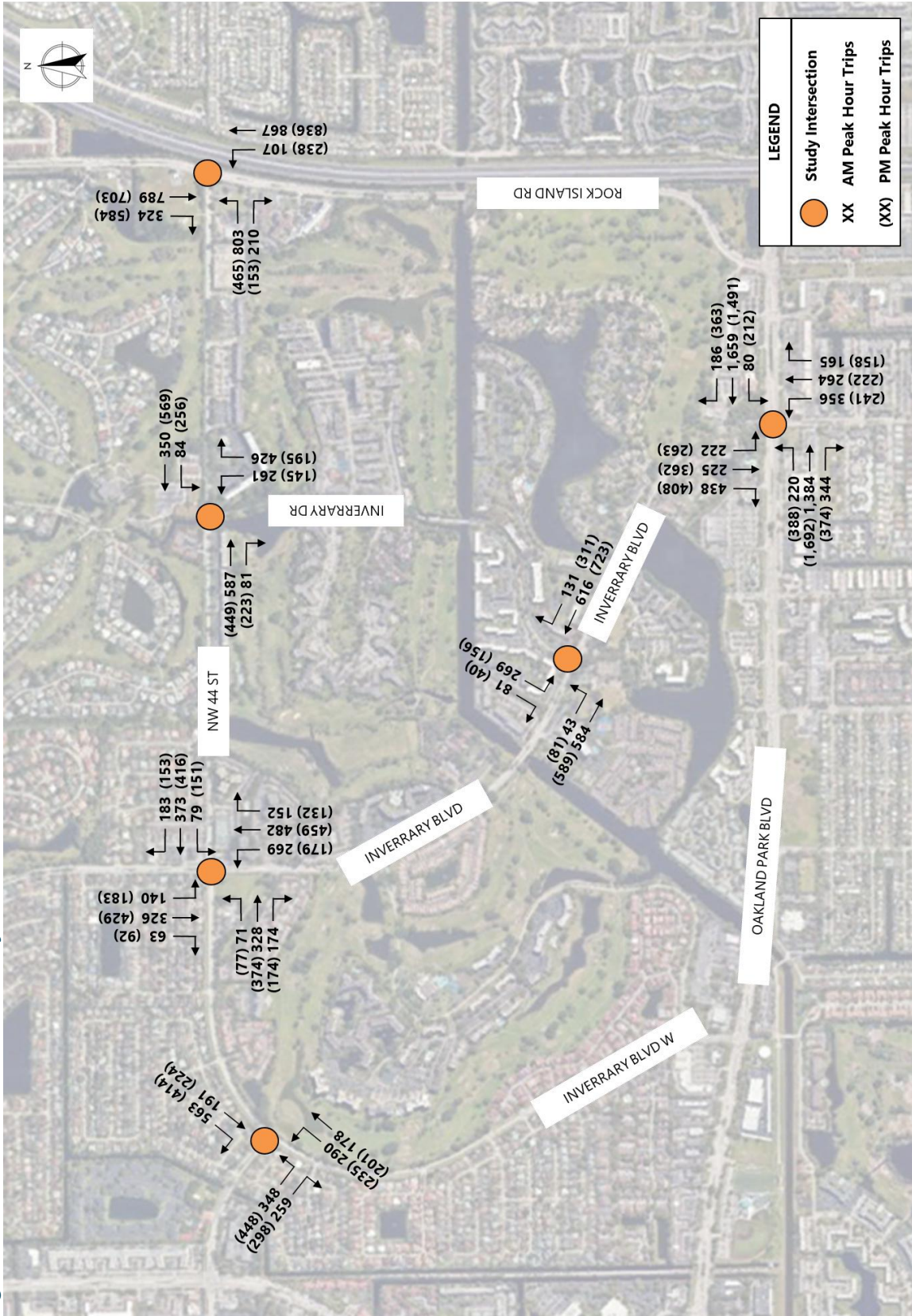
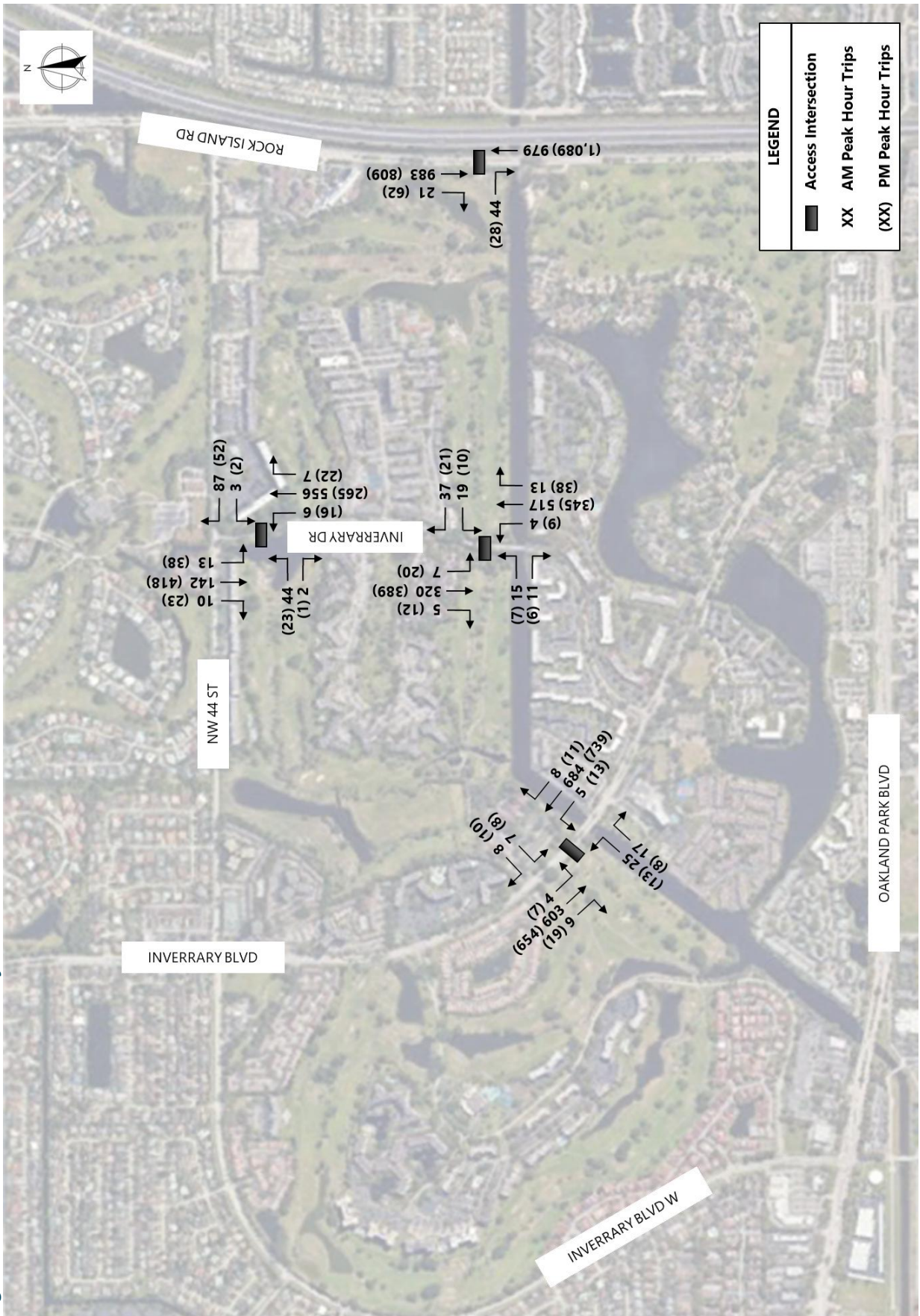


Figure 9 Total (2030) Volumes at Project Access Connections



Turn Lane Evaluation

Turn lane evaluation was performed at all project access connections with the AM peak hour volumes, which is the highest at all locations, to determine the need for exclusive left or right turn lanes into the site. This analysis was performed using the exclusive turn lane warrant criteria from the National Cooperative Highway Research Program (NCHRP) Report 457. Considerations for the left turn lane warrant include left turn volume, volume opposing the left turn movement, and advancing volume. Considerations for the right turn lane warrant include the right turn volume, major road volume, and major road speed. The worksheets are included in **Appendix D**.

Based on the analysis, an exclusive southbound right turn lane is warranted at the Rock Island Road/Pod 4 Access intersection and no left turn lanes are warranted at any site access connections.

Roadway Capacity Analysis

Peak hour, directional roadway capacity analysis was performed for the study area roadways under existing, background, and total traffic conditions during the AM and PM peak hours. The analysis was based on Level of Service (LOS) D capacity thresholds from the FDOT 2023 Multimodal Quality/Level of Service Handbook and the collected counts. Based on a review of land uses, access, and Context Classification surrounding the project site, a C4 – Urban General Context Classification was assumed for all study roadways.

Results of the analysis indicate that most roadway segments are expected to operate at an acceptable level of service with the exception of NW 44 Street eastbound from Inverrary Drive to Rock Island Road during the AM peak hour, which currently operates at LOS E and is expected to continue to operate at LOS E with the addition of the project trips. **Table 3** and **Table 4** summarize the roadway segment capacity analysis for the AM and PM peak hours, respectively.

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Table 3 AM Peak Hour Roadway Capacity Analysis

ROADWAY	FROM	TO	DIR.	LANES	LOS "D" CAPACITY	EXISTING			BACKGROUND			TOTAL		
						VOLUME	LOS	V/C	VOLUME	LOS	V/C	VOLUME	LOS	V/C
NW 44 Street	Inverrary Boulevard West	Inverrary Boulevard	EB	2LD	870	525	D	0.60	552	D	0.63	573	D	0.66
	Inverrary Boulevard	Inverrary Drive	WB	2LD	870	649	D	0.75	691	D	0.79	754	D	0.87
	Inverrary Drive	Rock Island Road	WB	2LD	870	603	D	0.69	635	D	0.73	668	D	0.77
			EB	2LD	870	523	D	0.60	561	D	0.64	635	D	0.73
Oakland Park Boulevard	Inverrary Boulevard West	Inverrary Boulevard	WB	2LD	827	831	E	1.00	874	E	1.06	1,013	E	1.22
			EB	2LD	827	371	D	0.45	402	D	0.49	434	D	0.52
	Inverrary Boulevard	Rock Island Road	EB	6LD	2,951	1,841	C	0.62	1,935	C	0.66	1,948	C	0.66
			WB	6LD	2,951	2,301	C	0.78	2,420	D	0.82	2,453	D	0.83
Inverrary Boulevard West	NW 44 Street	Oakland Park Boulevard	EB	6LD	2,951	1,641	C	0.56	1,729	C	0.59	1,771	C	0.60
			WB	6LD	2,951	1,785	C	0.60	1,876	C	0.64	1,925	C	0.65
	NW 44 Street	Pod 1 and Pod 2 Access	NB	2LD	870	435	D	0.50	458	D	0.53	468	D	0.54
			SB	2LD	870	393	D	0.45	420	D	0.48	450	D	0.52
Inverrary Boulevard	Pod 1 and Pod 2 Access	Inverrary Drive	NB	4LD	1,611	826	C	0.51	868	C	0.54	903	C	0.56
			SB	4LD	1,611	569	C	0.35	602	C	0.37	616	C	0.38
	Inverrary Drive	Oakland Park Boulevard	NB	4LD	1,611	647	C	0.40	680	C	0.42	697	C	0.43
			SB	4LD	1,611	569	C	0.35	602	C	0.37	627	C	0.39
Inverrary Drive	NW 44 Street	Pod 5 and Pod 6 Access	NB	4LD	1,611	666	C	0.41	700	C	0.43	747	C	0.46
			SB	4LD	1,611	779	C	0.48	825	C	0.51	885	C	0.55
	Pod 5 and Pod 6 Access	Pod 2 and Pod 3 Access	NB	2L	783	479	D	0.61	504	D	0.64	687	D	0.88
			SB	2L	783	121	D	0.15	130	D	0.17	165	D	0.21
Rock Island Road	Pod 2 and Pod 3 Access	Inverrary Boulevard	NB	2L	783	479	D	0.61	504	D	0.64	569	D	0.73
			SB	2L	783	297	D	0.38	315	D	0.40	332	D	0.42
	Pod 2 and Pod 3 Access	Pod 4 Access	NB	2L	783	479	D	0.61	504	D	0.64	534	D	0.68
			SB	2L	783	297	D	0.38	315	D	0.40	350	D	0.45
Rock Island Road	NW 44 Street	Oakland Park Boulevard	NB	4LD	1,611	925	C	0.57	974	C	0.60	979	C	0.61
			SB	4LD	1,611	881	C	0.55	957	C	0.59	1,004	C	0.62
	Pod 4 Access	Oakland Park Boulevard	NB	4LD	1,611	925	C	0.57	974	C	0.60	979	C	0.61
			SB	4LD	1,611	881	C	0.55	957	C	0.59	1,027	C	0.64

Table 4 PM Peak Hour Roadway Capacity Analysis

ROADWAY	FROM	TO	DIR.	LANES	LOS "D" CAPACITY	EXISTING			BACKGROUND			TOTAL			
						VOLUME	LOS	V/C	VOLUME	LOS	V/C	VOLUME	LOS	V/C	
NW 44 Street	Inverrary Boulevard West	Inverrary Boulevard	EB	2LD	870	560	D	0.64	596	D	0.69	649	D	0.75	
			WB	2LD	870	610	D	0.70	645	D	0.74	687	D	0.79	
	Inverrary Boulevard	Inverrary Drive	EB	2LD	870	584	D	0.67	625	D	0.72	689	D	0.79	
			WB	2LD	870	626	D	0.72	663	D	0.76	720	D	0.83	
	Inverrary Drive	Rock Island Road	EB	2LD	827	524	D	0.63	562	D	0.68	644	D	0.78	
			WB	2LD	827	719	D	0.87	760	D	0.92	825	D	1.00	
Oakland Park Boulevard	Inverrary Boulevard West	Inverrary Boulevard	EB	6LD	2,951	2,301	C	0.78	2,420	D	0.82	2,454	D	0.83	
			WB	6LD	2,951	2,015	C	0.68	2,119	C	0.72	2,140	C	0.73	
	Inverrary Boulevard	Rock Island Road	EB	6LD	2,951	1,980	C	0.67	2,082	C	0.71	2,113	C	0.72	
			WB	6LD	2,951	1,875	C	0.64	1,974	C	0.67	2,066	C	0.70	
	Inverrary Boulevard West	NW 44 Street	Oakland Park Boulevard	NB	2LD	870	383	D	0.44	408	D	0.47	436	D	0.50
				SB	2LD	870	475	D	0.55	502	D	0.58	522	D	0.60
Inverrary Boulevard	NW 44 Street	Pod 1 and Pod 2 Access	NB	4LD	1,611	701	C	0.44	740	C	0.46	770	C	0.48	
			SB	4LD	1,611	678	C	0.42	714	C	0.44	754	C	0.47	
	Pod 1 and Pod 2 Access	Inverrary Drive	NB	4LD	1,611	696	C	0.43	735	C	0.46	763	C	0.47	
			SB	4LD	1,611	617	C	0.38	650	C	0.40	670	C	0.42	
	Inverrary Drive	Oakland Park Boulevard	NB	4LD	1,611	870	C	0.54	921	C	0.57	1,034	C	0.64	
			SB	4LD	1,611	944	C	0.59	994	C	0.62	1,033	C	0.64	
Inverrary Drive	NW 44 Street	Pod 5 and Pod 6 Access	NB	2L	783	223	D	0.28	237	D	0.30	237	D	0.88	
			SB	2L	783	367	D	0.47	386	D	0.49	479	D	0.61	
	Pod 5 and Pod 6 Access	Pod 2 and Pod 3 Access	NB	2L	783	289	D	0.37	307	D	0.39	373	D	0.48	
			SB	2L	783	367	D	0.47	386	D	0.49	421	D	0.54	
	Pod 2 and Pod 3 Access	Inverrary Boulevard	NB	2L	783	289	D	0.37	307	D	0.39	392	D	0.50	
			SB	2L	783	367	D	0.47	386	D	0.49	405	D	0.52	
Rock Island Road	NW 44 Street	Pod 4 Access	NB	4LD	1,611	995	C	0.62	1,074	C	0.67	1,089	C	0.68	
			SB	4LD	1,611	745	C	0.46	796	C	0.49	871	C	0.54	
	Pod 4 Access	Oakland Park Boulevard	NB	4LD	1,611	995	C	0.62	1,074	C	0.67	1,089	C	0.68	
			SB	4LD	1,611	745	C	0.46	796	C	0.49	837	C	0.52	

Intersection Capacity Analysis

Intersection capacity analysis was performed for AM and PM peak hours at the study intersections under Existing, Background, and Total conditions. Project access connections were analyzed for Total conditions only. The analysis was performed, using the Synchro 12 software. The Synchro output was used in lieu of HCM output for various reasons. At the NW 44 Street/Inverrary Boulevard West intersection and the Inverrary Boulevard/Inverrary Drive intersection, the signal phasings are not compatible with HCM. For NW 44 Street/Inverrary Drive intersection, NW 44 Street/Rock Island Road intersection, and Inverrary Boulevard/Oakland Park Boulevard intersection, field observed queues were similar to the Synchro results, while the HCM output yielded unrealistic results. For these reasons, and for consistency amongst intersections, the Synchro output results were used for all study intersections. Peak hour factors and heavy vehicle percentages were based on the collected data. Signal timing information was obtained from Broward County and is attached in **Appendix E**. The intersection capacity analysis worksheets are provided in Appendix E.

Results of the AM and PM peak hour intersection capacity analyses are summarized in **Table 5**, and the 95th percentile queues are summarized in **Table 6**. The level of service (LOS) standard for all roadways is LOS D.

NW 44 Street at Inverrary Boulevard West

The intersection currently operates, and is expected to continue to operate, at an overall unacceptable LOS during the AM peak hour, and at an overall acceptable LOS during the PM peak hour. For Total traffic conditions, most movements are expected to operate at an acceptable LOS, with the exception of the southbound through plus right turn, and the northbound left turn during the AM peak hour, similar to Background traffic conditions. Most 95th percentile queues are expected to be contained within the available turn lane storage, except for the northbound left turn, similar to Background traffic conditions.

NW 44 Street at Inverrary Boulevard

The intersection currently operates, and is expected to continue to operate, at an overall acceptable LOS during the AM and PM peak hours. For Total traffic conditions, all movements are expected to operate at an acceptable LOS. Most 95th percentile queues are expected to be contained within the available turn lane storage, except for the southbound left turn, similar to Background traffic conditions.

NW 44 Street at Inverrary Drive

The intersection currently operates, and is expected to continue to operate, at an overall acceptable LOS during the AM and PM peak hours. For Total traffic conditions, all movements are expected to operate at an acceptable LOS. Most 95th percentile queues are contained within the available turn lane storage, except for the northbound right turn during the AM peak hour, similar to Background traffic conditions, and the westbound left turn and northbound right turn during the PM peak hour, which occur only under Total traffic conditions.

Table 5 Intersection Capacity Analysis Summary

INTERSECTION	SCENARIO	TIME PERIOD	Overall		EB		WB		NB		SB	
			LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY	LOS	DELAY
NW 44 Street at Inverrary Boulevard West	Existing	AM	E	64.4	C	27.4	-	-	E	74.2	F	95.4
		PM	C	29.1	C	28.9	-	-	B	19.3	D	36.2
	Background	AM	F	82.1	C	28.3	-	-	F	90.2	F	130.2
		PM	D	35.3	C	28.3	-	-	C	32.6	D	45.4
	Total	AM	F	96.1	C	34.5	-	-	F	88.3	F	156.9
		PM	D	41.8	D	36.0	-	-	C	33.4	D	54.4
NW 44 Street at Inverrary Boulevard	Existing	AM	C	27.1	C	26.0	C	26.6	C	27.5	C	27.8
		PM	C	29.7	C	28.1	C	26.5	C	32.1	C	31.7
	Background	AM	C	28.4	C	26.9	C	27.9	C	29.3	C	29.1
		PM	C	31.3	C	30.3	C	28.1	C	33.6	C	33.1
	Total	AM	C	29.9	C	28.7	C	32.6	C	29.3	C	29.0
		PM	C	33.5	C	33.8	C	29.5	D	35.7	D	35.1
NW 44 Street at Inverrary Drive	Existing	AM	C	20.1	C	23.5	A	7.3	C	25.1	-	-
		PM	B	17.5	C	27.3	A	7.6	C	23.0	-	-
	Background	AM	C	22.9	C	27.5	A	7.2	C	29.1	-	-
		PM	B	19.1	C	29.9	A	8.6	C	23.9	-	-
	Total	AM	C	27.7	C	33.2	B	10.1	C	32.8	-	-
		PM	C	26.4	D	40.1	B	12.5	C	31.9	-	-
NW 44 Street at Rock Island Road	Existing	AM	E	67.6	F	197.5	-	-	B	12.0	B	15.6
		PM	C	20.4	D	50.7	-	-	B	11.5	B	13.3
	Background	AM	E	74.7	F	223.0	-	-	B	12.3	B	16.5
		PM	C	22.2	E	56.5	-	-	B	12.4	B	14.1
	Total	AM	E	60.6	F	142.6	-	-	B	19.7	C	25.8
		PM	C	23.8	D	43.3	-	-	B	19.2	B	17.5
Inverrary Boulevard at Inverrary Drive	Existing	AM	C	23.8	-	-	D	49.2	A	0.5	D	36.0
		PM	B	17.7	-	-	D	47.4	A	0.8	C	31.4
	Background	AM	C	24.5	-	-	D	50.9	A	0.6	D	36.6
		PM	B	18.3	-	-	D	47.6	A	0.9	C	33.0
	Total	AM	C	25.5	-	-	D	51.0	A	0.6	D	39.1
		PM	B	19.2	-	-	D	54.3	A	1.2	C	34.6
Inverrary Boulevard at Oakland Park Boulevard	Existing	AM	F	93.5	D	44.0	D	54.1	F	232.1	F	152.7
		PM	F	105.0	D	53.1	D	51.9	E	62.9	F	343.5
	Background	AM	F	104.5	D	44.5	E	55.6	F	277.2	F	173.5
		PM	F	116.6	E	55.0	D	52.7	E	67.9	F	400.6
	Total	AM	F	106.6	D	46.3	D	54.3	F	278.8	F	182.2
		PM	F	122.8	D	53.5	D	51.2	E	69.4	F	437.3
Pod 1 and Pod 2 Access at Inverrary Boulevard	Total	AM	A	1.0	C	22.6	C	19.4	A	0.1	A	0.1
		PM	A	0.9	D	25.2	C	21.9	A	0.3	A	0.2
Pod 2 and Pod 3 Access at Inverrary Drive	Total	AM	A	1.6	C	17.8	C	16.7	A	0.1	A	0.2
		PM	A	1.0	C	15.7	B	14.0	A	0.2	A	0.4
Pod 4 Access at Rock Island Drive	Total	AM	A	0.3	B	13.3	-	-	A	0.0	A	0.0
		PM	A	0.2	B	12.1	-	-	A	0.0	A	0.0
Pod 5 and Pod 6 Access at Inverrary Drive	Total	AM	A	2.9	C	23.4	B	14.3	A	0.1	A	0.7
		PM	A	1.8	C	21.8	B	10.7	A	0.4	A	0.6

Table 6 95th Percentile Queues Summary

INTERSECTION	SCENARIO	TIME PERIOD	EBLT	EBRT	WBLT	WBRT	NBLT	NBRT	SBLT	SBRT
NW 44 Street at Inverrary Boulevard West	Storage Length				-	-	150'	-	-	
	Existing	AM	283'	33'	-	-	356'	-	-	
		PM	358'	66'	-	-	183'	-	-	
	Background	AM	300'	41'	-	-	382'	-	-	
		PM	383'	78'	-	-	255'	-	-	
	Total	AM	321'	50'	-	-	382'	-	-	
PM		482'	100'	-	-	265'	-	-		
NW 44 Street at Inverrary Boulevard	Storage Length		195'	185'	160'	230'	220'		90'	
	Existing	AM	62'	50'	57'	53'	182'		98'	
		PM	64'	52'	101'	47'	121'		136'	
	Background	AM	65'	51'	62'	53'	198'		106'	
		PM	68'	62'	107'	52'	128'		142'	
	Total	AM	65'	76'	72'	74'	197'		104'	
PM		70'	80'	126'	60'	140'		154'		
NW 44 Street at Inverrary Drive	Storage Length		-	-	100'	-		50'	-	-
	Existing	AM	-	-	26'	-	181'	136'	-	-
		PM	-	-	65'	-	104'	24'	-	-
	Background	AM	-	-	28'	-	190'	152'	-	-
		PM	-	-	92'	-	107'	28'	-	-
	Total	AM	-	-	48'	-	216'	209'	-	-
PM		-	-	172'	-	138'	62'	-	-	
NW 44 Street at Rock Island Road	Storage Length			130'	-	-	140'	-	-	140'
	Existing	AM	899'	127'	-	-	55'	-	-	58'
		PM	424'	74'	-	-	111'	-	-	63'
	Background	AM	958'	136'	-	-	57'	-	-	74'
		PM	476'	81'	-	-	117'	-	-	64'
	Total	AM	1013'	129'	-	-	74'	-	-	139'
PM		459'	76'	-	-	177'	-	-	130'	
Inverrary Boulevard at Inverrary Drive	Storage Length		-	-	150'				165'	-
	Existing	AM	-	-	181'				53'	-
		PM	-	-	104'				86'	-
	Background	AM	-	-	194'				55'	-
		PM	-	-	110'				92'	-
	Total	AM	-	-	210'				58'	-
PM		-	-	131'				92'	-	
Inverrary Boulevard at Oakland Park Boulevard	Storage Length		340'	370'	355'	300'	185'			
	Existing	AM	177'	67'	78'	58'	893'	120'	210'	
		PM	296'	132'	170'	118'	442'	132'	289'	
	Background	AM	185'	86'	81'	65'	940'	140'	225'	
		PM	322'	156'	176'	137'	473'	150'	305'	
	Total	AM	226'	87'	81'	103'	941'	144'	276'	
PM		338'	155'	176'	176'	458'	159'	348'		

NW 44 Street at Rock Island Road

The intersection currently operates, and is expected to continue to operate, at an overall unacceptable LOS during the AM peak hour, and at an overall acceptable LOS during the PM peak hour. For Total traffic conditions, most movements are expected to operate at an acceptable LOS, with the exception of the eastbound left turn during the AM peak hour, similar to Background traffic conditions. Most 95th percentile queues are expected to be contained within the available turn lane storage, except for the northbound left turn during the PM peak hour under Total traffic conditions.

Inverrary Boulevard at Inverrary Drive

The intersection currently operates, and is expected to continue to operate, at an overall acceptable LOS during the AM and PM peak hours. For Total traffic conditions, all movements are expected to operate at an acceptable LOS. Most 95th percentile queues are expected to be contained within the available turn lane storage, except for the westbound left turn during the AM peak hour, similar to Background traffic conditions.

Inverrary Boulevard at Oakland Park Boulevard

The intersection currently operates, and is expected to continue to operate, at an overall unacceptable LOS during the AM and PM peak hours. For Total traffic conditions, most movements are expected to operate at an acceptable LOS, with the exception of the eastbound, westbound, and northbound left turn; and northbound and southbound through movements during the AM and PM peak hours, and the westbound through movement during the AM peak hour, similar to Background traffic conditions. Most 95th percentile queues are expected to be contained within the available turn lane storage, except for the northbound left turn, similar to Background traffic conditions.

Access Intersections

All access intersections are expected to operate at an overall acceptable LOS during the AM and PM peak hours for Total traffic conditions. All movements are expected to operate at an acceptable LOS with minimal queues.

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Gate Queueing Analysis

The site will provide access to a golf course and six (6) residential pods. Access to residential pods will be gated and will include one (1) inbound lane for residents and one (1) inbound lane for visitors. The gate identification numbers are graphically depicted on **Figure 10**.

Figure 10 Gate Identification



Trip generation analysis was performed for the peak hour of the generator during weekday AM, weekday PM, Saturday peak and Sunday peak to determine the highest inbound volume per pod, based on the ITE, *Trip Generation Manual*, 12th Edition. The trip generation tables per pod and excerpts from the ITE are attached in **Appendix F**. The distribution per pod is included in Appendix C. The highest inbound volume is expected to occur during the PM peak hour for all pods and is summarized in **Table 7**. An assumption was made that 90 percent of the vehicles entering the development during the peak period would be residents, and the remaining 10 percent would be visitors.

Table 7 Inbound Gate Volume Summary

	GATE 1	GATE 2	GATE 3	GATE 4	GATE 5	GATE 6	GATE 7
Total Inbound Trips	39	11	26	73	72	77	49
Resident Trips	35	10	23	66	65	70	44
Visitor Trips	4	1	3	7	7	7	5

The queue analysis was performed based on the methodology outlined in *Transportation and Land Development*, 1988, published by ITE, excerpts of which are attached in Appendix F. All gates will include one (1) inbound lane for residents and one (1) inbound lane for visitors. Processing times were determined for the resident and visitor lanes. Residents will be required to use a card reader to open the gate. The assumed processing time for residents is 15 seconds (0.25 minutes) per vehicle. Visitors will be required to stop at an Envera virtual guard gate and show identification. Guards may be required to contact the resident if the visitor is not already on a list. The assumed visitor processing time, based on actual processing times for a similar community utilizing Envera, is 38.1 seconds (0.635 minutes).

Based on the gate queueing analysis worksheets, included in Appendix F, the site will accommodate the expected queue stacking for all gates. The available vehicle stacking and maximum expected queues at each gate including the vehicle being serviced is summarized in **Table 8** for resident and visitor lanes. For purposes of analysis, a vehicle length of 25 feet was used.

Table 8 Gate Stacking Summary

LANE	GATE 1		GATE 2		GATE 3		GATE 4		GATE 5		GATE 6		GATE 7	
	R	V	R	V	R	V	R	V	R	V	R	V	R	V
Available Stacking - Distance (ft)	139	139	1,230	1,230	121	121	135	135	148	148	149	149	147	147
Available Stacking - Vehicles	5	5	49	49	4	4	5	5	5	5	5	5	5	5
Expected Queue - Vehicles	1	1	1	1	1	1	1	2	1	1	2	1	1	1

Multimodal Facilities

The study roadways and intersections were inventoried to determine the need to upgrade the pedestrian or bicycle facilities, such as crosswalks, pedestrian detectors, signs, detectable warning surfaces, and nearby transit facilities.

Roadway Segments

- Along NW 44 Street, sidewalk exists on both sides of the roadway between Inverrary Boulevard West and Inverrary Drive, and on the south side of the roadway between Inverrary Drive and Rock Island Road. Bicycle lanes exist along both sides of this roadway. Broward County Transit (BCT) Route #81, with several stops, exists along the roadway between Inverrary Boulevard and Inverrary Drive.
- Along Oakland Park Boulevard, sidewalk exists on both sides of the roadway. No bicycle lanes exist along the roadway. BCT Routes #72 and Route #81, with several stops, exist along this roadway.
- Along Inverrary Boulevard West, sidewalk and bicycle lanes exist on both sides of the roadway.
- Along Inverrary Boulevard, sidewalk exists on both sides of the roadway between NW 44 Street and Inverrary Drive, on the west side of the roadway between Inverrary Drive and Lime Hill Road, and on the east side of the roadway between Lime Hill Road and Oakland Park Boulevard. Bicycle lanes exist along both sides of the roadway. BCT Route #81, with several stops, exists along the roadway.

- Along Inverrary Drive, sidewalk exists sporadically along the west side of this roadway. No bicycle lanes exist along this roadway. BCT #81, with several stops, exists along this roadway.
- Along Rock Island Road, sidewalk exists along the west side of this roadway. Bicycle lanes do not exist along this roadway.

Intersections

- At the intersection of NW 44 Street at Inverrary Boulevard West, standard crosswalks exist across the north and west legs. The crosswalk across the north leg is in good condition, and the crosswalk across the west leg is in fair to poor condition. Most pedestrian signal heads are countdown, with the exception of the northeast corner. Pedestrian detectors exist for crossing both legs. All pedestrian detectors are operational, and all pedestrian detector signs are in good condition. Yellow detectable warnings do not exist on any corner of the intersection.
- At the intersection of NW 44 Street at Inverrary Boulevard, colored, stamped asphalt crosswalks exist across all four legs. The crosswalk markings are in good condition; however, the red colored stamped asphalt is faded. Countdown pedestrian signal heads and pedestrian detectors exist for all four legs. All pedestrian detectors are operational, and all pedestrian detector signs are in good condition. The pedestrian signal head at the northwest corner for the west leg crosswalk is not parallel to the road. Yellow detectable warnings do not exist on any corner of the intersection.
- At the intersection of NW 44 Street at Inverrary Drive, a standard crosswalk exists across the south leg, which is in good condition. Non-countdown pedestrian signal heads and pedestrian detectors exist for the crosswalk. All pedestrian detectors are operational, and the pedestrian detector signs are painted on the mast arm post. Yellow detectable warnings do not exist for the crosswalk.
- At the intersection of NW 44 Street at Rock Island Road, a standard crosswalk exists across the west leg, which is in good condition. Countdown pedestrian signal heads and pedestrian detectors exist for the crosswalk. All pedestrian detectors are operational, and all pedestrian detector signs are in good condition. Yellow detectable warnings exist for the crosswalk.
- At the intersection of Inverrary Boulevard at Inverrary Drive, a colored, stamped asphalt crosswalk exists across the north leg. The crosswalk markings are in good condition; however, the red colored stamped asphalt is faded. Pedestrian signal heads and pedestrian detectors do not exist for the crosswalk. Yellow detectable warnings exist at the northwest corner of the intersection.
- At the intersection of Inverrary Boulevard at Oakland Park Boulevard, special emphasis pedestrian crosswalks exist across all four legs and are in good condition. Countdown pedestrian signal heads and pedestrian detectors exist for all four legs. All pedestrian detectors are operational, and all pedestrian detector signs are in good condition. Audible pedestrian signals exist to cross the north leg crosswalk from both directions, the south leg crosswalk only from the east, the east leg crosswalk only from the south, and the west leg crosswalk only from the north. Yellow detectable warnings exist on all corners of the intersection.

Conclusion

Bowman prepared a traffic analysis to evaluate the redevelopment of the Inverrary golf course, in the City of Lauderdale, Florida. The site is currently a non-operational golf course. The proposed development, with a projected buildout of 2030, will include a maximum of 800 dwelling units, and an 18-hole championship golf course with a practice golf course and a driving range. The dwelling units are proposed as a mix of single family detached houses, single family attached homes, and townhomes in six (6) separate pods. Results of the analysis include the following:

- The trip generation analysis indicates that the proposed development is anticipated to generate 6,949 daily trips, 450 AM peak hour trips, and 508 PM peak hour trips.
- The turn lane evaluation analysis indicates that a southbound right turn lane is warranted at the Rock Island Road/Pod 4 Access intersection and no left turn lanes are warranted at the site access connections.
- The roadway capacity analysis indicates that most roadway segments are expected to operate at an acceptable level of service with the exception of NW 44 Street eastbound from Inverrary Drive to Rock Island Road during the AM peak hour, which currently operates at LOS E and is expected to continue to operate at LOS E with the addition of the project trips.
- The intersection capacity analysis indicates that some intersections currently operate, and will continue to operate, at an acceptable LOS, while others currently operate, and will continue to operate, at an unacceptable LOS. For these intersections where the LOS is unacceptable, the level of service grades (A-F) for future conditions with the addition of project trips (total conditions) are the same as the level of service grades for future conditions without project trips (background conditions) at all the study intersections. All access intersections are expected to operate at an overall acceptable LOS during the AM and PM peak hours.
- The 95th percentile queue analysis indicates that most exclusive turn lanes queues are contained, and will continue to be contained, within the available storage areas at the study intersections, with a few exceptions. In those instances where turn lanes queues are expected to exceed the available storage lengths for future conditions with the addition of project trips (total conditions), the queues also exceed the available storage lengths for future conditions without the addition of project trips (background conditions) in most cases. The few instances where the 95th percentile queues are only exceeded in total traffic conditions include the following:
 - NW 44 Street at Inverrary Drive: Westbound left turn and northbound right turn during the PM peak hour
 - NW 44 Street at Rock Island Road: Northbound left turn during the PM peak hour
- The gate queueing analysis for the residential pods indicates that the site will accommodate the expected queue stacking for all gates.

- The multimodal analysis indicates that most intersections have crosswalks where appropriate and have pedestrian detectors and signs; however, in some cases, the crosswalks are not special emphasis, the pedestrian signals are not countdown, and the colored, stamped asphalt is faded. All equipment was determined to be operational. Yellow detectable warning surfaces are not provided at some intersections.

Based on the analysis herein, the proposed development is not anticipated to cause any operational failures that do not currently exist at the study intersections. As a public benefit and to mitigate the impacts of traffic generated by the proposed development, we will coordinate with City staff to determine appropriate traffic mitigation.



Appendix A

Traffic Methodology Letter

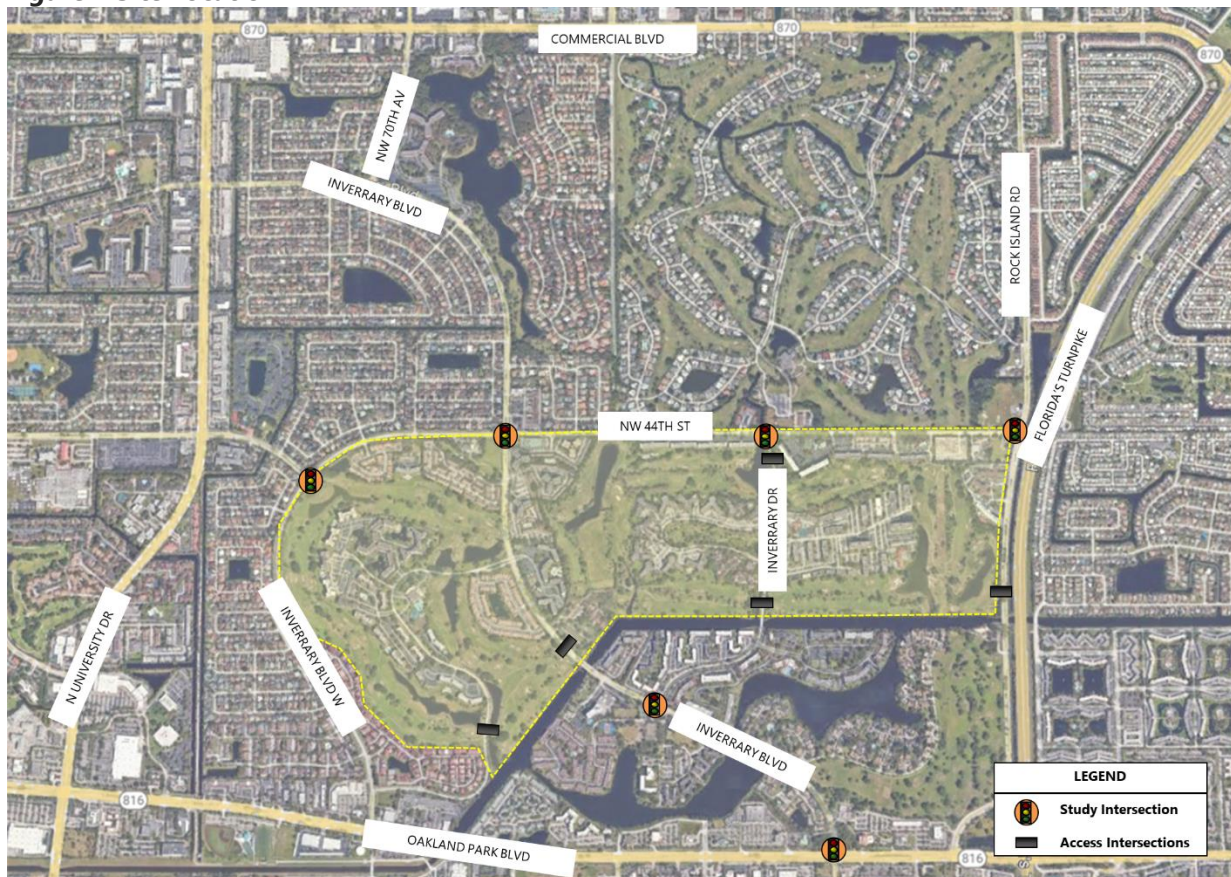
May 26, 2025

Aimee Craig Carlson, AICP
Director of Land Planning & Entitlement
Pulte Group
1475 Centrepark Blvd, Suite 140
West Palm Beach, FL 33401

**RE: Inverrary Golf Course Traffic Methodology
Bowman Project No. 313844-01-002**

Please accept this Traffic Methodology Letter to be used for the proposed redevelopment of the Inverrary golf course, in the City of Lauderhill, Florida. The site is bordered by NW 44th Street to the north, Rock Island Road to the east, a canal to the south, and Inverrary Boulevard West to the west. The site is currently a golf course. The proposed development, with a projected buildout of 2030, will include approximately 800 dwelling units, and an 18-hole championship golf course with a practice golf course and a driving range. **Figure 1** graphically depicts the site location.

Figure 1 Site Location



Study Area

The study area for the project will include all access intersections and the following study intersections, graphically shown on Figure 1:

- NW 44 Street at Inverrary Boulevard West (signalized)
- NW 44 Street at Inverrary Boulevard (signalized)
- NW 44 Street at Inverrary Drive (signalized)
- NW 44 Street at Rock Island Road (signalized)
- Inverrary Boulevard at Inverrary Drive (signalized)
- Inverrary Boulevard at Oakland Park Boulevard (signalized)

Data Collection

Turning movement counts were collected on Tuesday, May 14, 2025, during peak hour conditions (7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM) for the study intersections while school was still in session.

Existing Conditions Analysis

Collected counts will be adjusted to reflect peak season, AM and PM peak hour traffic volumes, by applying a peak-season conversion factor obtained from the 2024 FDOT *Peak Season Factor Category Report*. Intersection capacity analyses will be evaluated for the access and study intersections using the Synchro Software. The HCM output will be used, if available. Alternatively, the Synchro output will be used. The adopted level of service criteria will be Level of Service D. Synchro queues will be compared against the available storage lengths for the exclusive turn lanes at the study intersections. Roadway segment analysis will also be conducted for NW 44 Street, Inverrary Boulevard West, Inverrary Boulevard, Inverrary Drive, and Rock Island Road near the project site.

Future Conditions Analysis – Background Traffic Conditions

Traffic volumes for Background traffic conditions will be calculated by applying a growth rate to existing volumes and adding any appropriate volumes from the Woodlands project. This is the only committed project that will be included. The growth rate will be based on a review of the 2015 and 2045 Southeast Regional Planning Model (SERPM) volumes, excerpts of which are included in **Attachment A**. Based on the growth rate calculations, summarized in **Table 1**, a growth rate of 1.00 percent will be used for the analysis.

Table 1 Growth Rate Summary

ROADWAY	SEGMENT	SERPM 2015 VOLUME			SERPM 2045 VOLUME		
		N/E	S/W	TOTAL	N/E	S/W	TOTAL
Oakland Park Boulevard	W. of Inverrary Boulevard West	23,793	24,267	48,060	27,046	27,409	54,455
Oakland Park Boulevard	E. of Rock Island Road	34,423	35,761	70,184	40,829	42,141	82,970
NW 44 Street	E. of Inverrary Boulevard	2,371	2,224	4,595	3,455	3,456	6,911
Commercial Boulevard	East of Rock Island Road	38,250	34,650	72,900	42,900	39,432	82,332
Inverrary Boulevard West	North of Oakland Park Boulevard	2,920	2,912	5,832	3,334	3,228	6,562
Inverrary Boulevard	North of Oakland Park Boulevard	5,878	5,855	11,733	7,492	7,778	15,270
Rock Island Road	North of Oakland Park Boulevard	9,979	8,730	18,709	13,852	12,542	26,394
Total Areawide AADT		117,614	114,399	232,013	138,908	135,986	274,894
Areawide 30-Year Compound Growth Rate						CGR = 0.57%	

Intersection capacity analyses will be performed for the access and study intersections. Truck factors and peak hour factors will be based on existing data, which will be collected as part of the data collection effort. Synchro queues will be compared against the available storage lengths for the exclusive turn lanes at the study intersections. Roadway segment analysis will also be conducted for NW 44 Street, Inverrary Boulevard West, Inverrary Boulevard, Inverrary Drive, and Rock Island Road near the project site.

Project Trip Generation

Using trip generation information obtained from the Institute of Transportation Engineers (ITE), *Trip Generation Manual*, 11th Edition, trip generation estimates will be developed for the proposed land uses.

Project Access

The site will provide access to a golf course and six (6) different residential pods, which will contain a mix of single family and multi-family housing. Access will be provided through several roads including Environ Boulevard, Inverrary Boulevard, Inverrary Drive, and Rock Island Road. Access to residential pods is expected to be gated with most access points allowing entry to both residents and visitors. It is anticipated that some access points will be for residents only.

Project Trip Distribution

The project distribution was based on a review of existing traffic volumes, roadway characteristics for the surrounding roadway network, nearby land uses and volumes from the SERPM. The majority of the county is situated to the east of the site, with major roadways such as I-95 and Florida's Turnpike also located east of the site. The following distribution is proposed for project trips:

- To/from the north to Commercial Boulevard: 50 percent (42,900+39,432)
 - 35 percent to/from the east (42,900+39,432)
 - 15 percent to/from the west (21,328+22,672)
- To/from the south to Oakland Park Boulevard: 50 percent (40,829+42,141)
 - 30 percent to/from the east (40,829+42,141)
 - 20 percent to/from the west (28,235+28,882)

Future Conditions Analysis – Total Traffic Conditions

Future total traffic volumes will be determined by summing together project trips with background traffic volumes. Intersection capacity analyses will be performed for the access and study intersections. Truck factors and peak hour factors will be based on existing data, which will be collected as part of the data collection effort. Traffic mitigation will be proposed, if necessary. Synchro queues will be compared against the available storage lengths for the exclusive turn lanes at the study intersections. Roadway segment analysis will also be conducted for NW 44 Street, Inverrary Boulevard West, Inverrary Boulevard, Inverrary Drive, and Rock Island Road near the project site.

Turn Lane Evaluation

Turn lane evaluation will be performed for the driveway connections based on NCHRP 457, Broward County guidelines, and guidelines outlined in the Florida Department of Transportation (FDOT) Multimodal Access Management Guidebook, October 2023.

Gate Queuing Analysis

A gate queuing analysis will be performed for the residential gate access to the pods. The analysis will be based on the peak hour time period for vehicles entering the site. Trip generation analysis will be performed for the peak hour of the generator during weekday AM, weekday PM, Saturday peak and Sunday peak of the generator to determine the peak period for the site, based on the ITE, *Trip Generation Manual*, 11th Edition. Queue analyses will also be performed based on the *Transportation and Land Development*, 1988, published by ITE. Results of the analysis will be summarized and used to determine the recommended storage length at the residential gates.

Multimodal Facilities

An inventory will be performed of the pedestrian, bicycle, and transit facilities along the study roadways and at the study intersections. Proposed facilities within the site will also be documented.

Report

The study methodology and findings will be summarized in a report.

Should you have any questions or comments regarding this methodology, please do not hesitate to call me.

Sincerely,



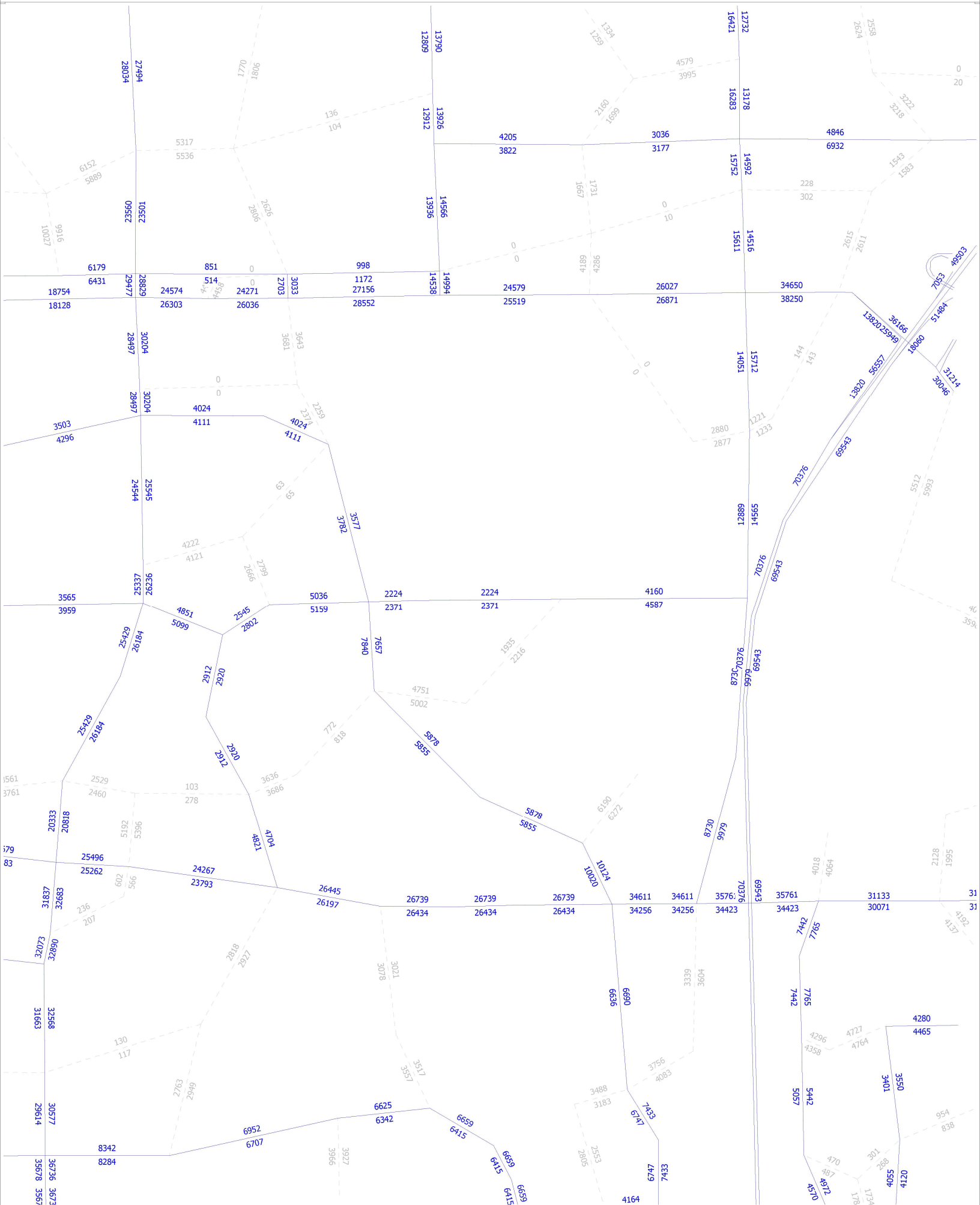
Natalia T. Lercari, P.E.
Senior Project Manager

NTL - Attachment

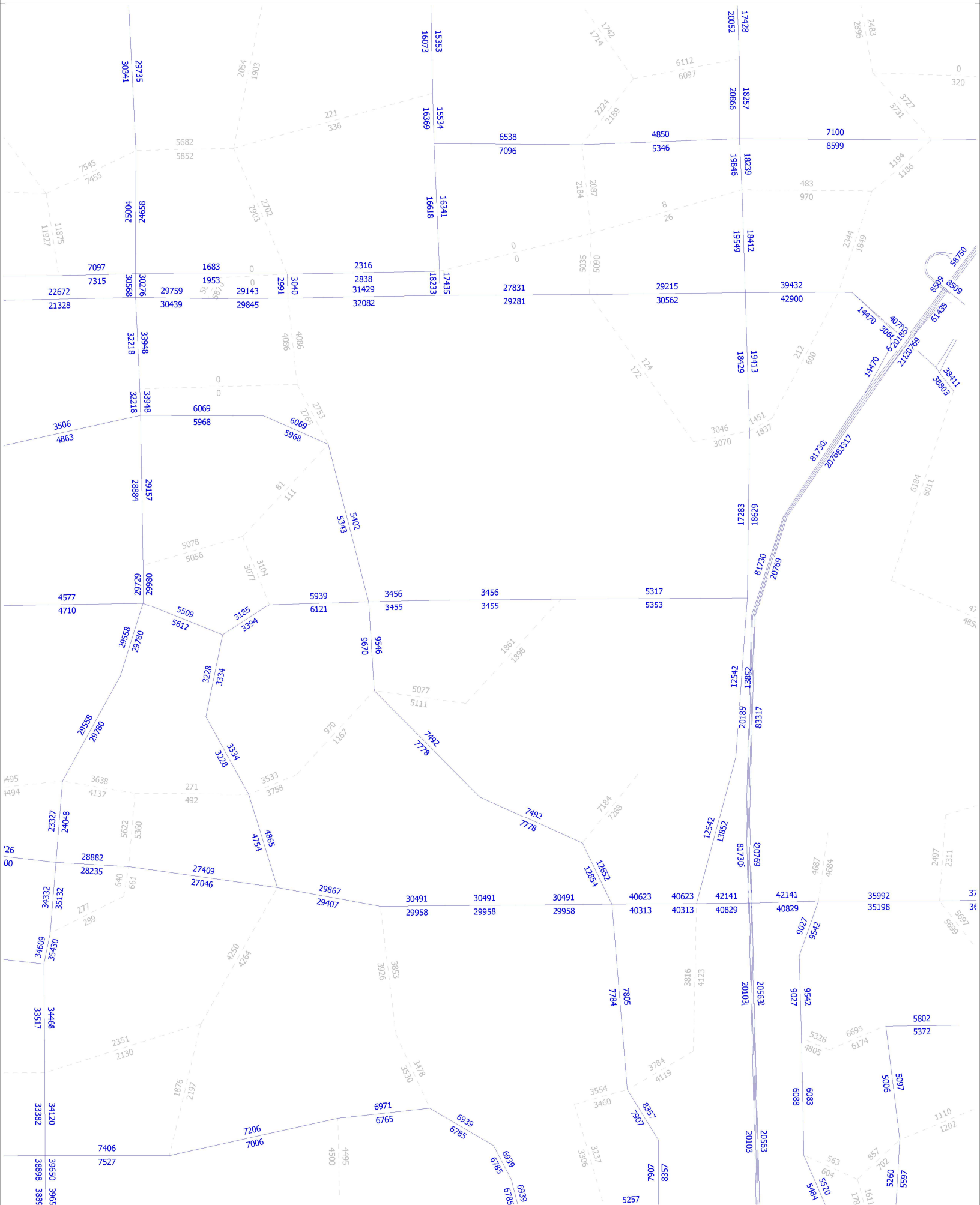
Attachment A

SERPM Volumes

NERPM 8.543 2015 Loaded Network



NERPM 8.543 2045 Loaded Network





Appendix B

Site Plan

Site Data

Total Gross Site Area	294.82 Ac.
Total Gross Number of Residential Units	688 D.U.
Total Single Family Detached Dwelling Units 22%	167 D.U.
Total Single Family Attached Dwelling Units 78%	681 D.U.
Total Gross Density	3.01 D.U./Ac.
Total Net Density (Total Gross Site Area Residential Areas)	6.87 D.U./Ac.
Proposed Land Use Designation	Residential Irregular (R)
Existing Land Use Designation	Commercial Recreation - C.R.
Proposed Zoning District Designation	Planned Unit Development - P.U.D.
Total Gross Site Area Traditional Residential Areas (Affected Area P.U.D. Rezoning)	129.23 Ac.
Pod 1 Total Gross Site Area Traditional Mixed Residential Dwelling Unit Pod	11.55 Ac.
Total Mixed Residential Dwelling Units	80 D.U.
Total Single Family Attached Dwelling Units 94%	75 D.U.
Total Single Family Detached Dwelling Units 6%	5 D.U.
Density	6.92 D.U./Ac.
Pod 2 Total Gross Site Area Traditional Mixed Residential Dwelling Unit Pod (Includes Greenway)	4.56 D.U./Ac.
Total Mixed Residential Dwelling Units	138 R.U.
Total Single Family Detached Dwelling Units 51%	53 D.U.
Total Single Family Attached Dwelling Units 49%	77 D.U.
Density	30.35 D.U./Ac.
Pod 3 Total Gross Site Area Traditional Mixed Residential Dwelling Unit Pod (Includes Greenway)	24.75 Ac.
Total Mixed Residential Units	181 D.U.
Total Single Family Detached Dwelling Units 37%	67 D.U.
Total Single Family Attached Dwelling Units 63%	114 D.U.
Density	7.31 D.U./Ac.

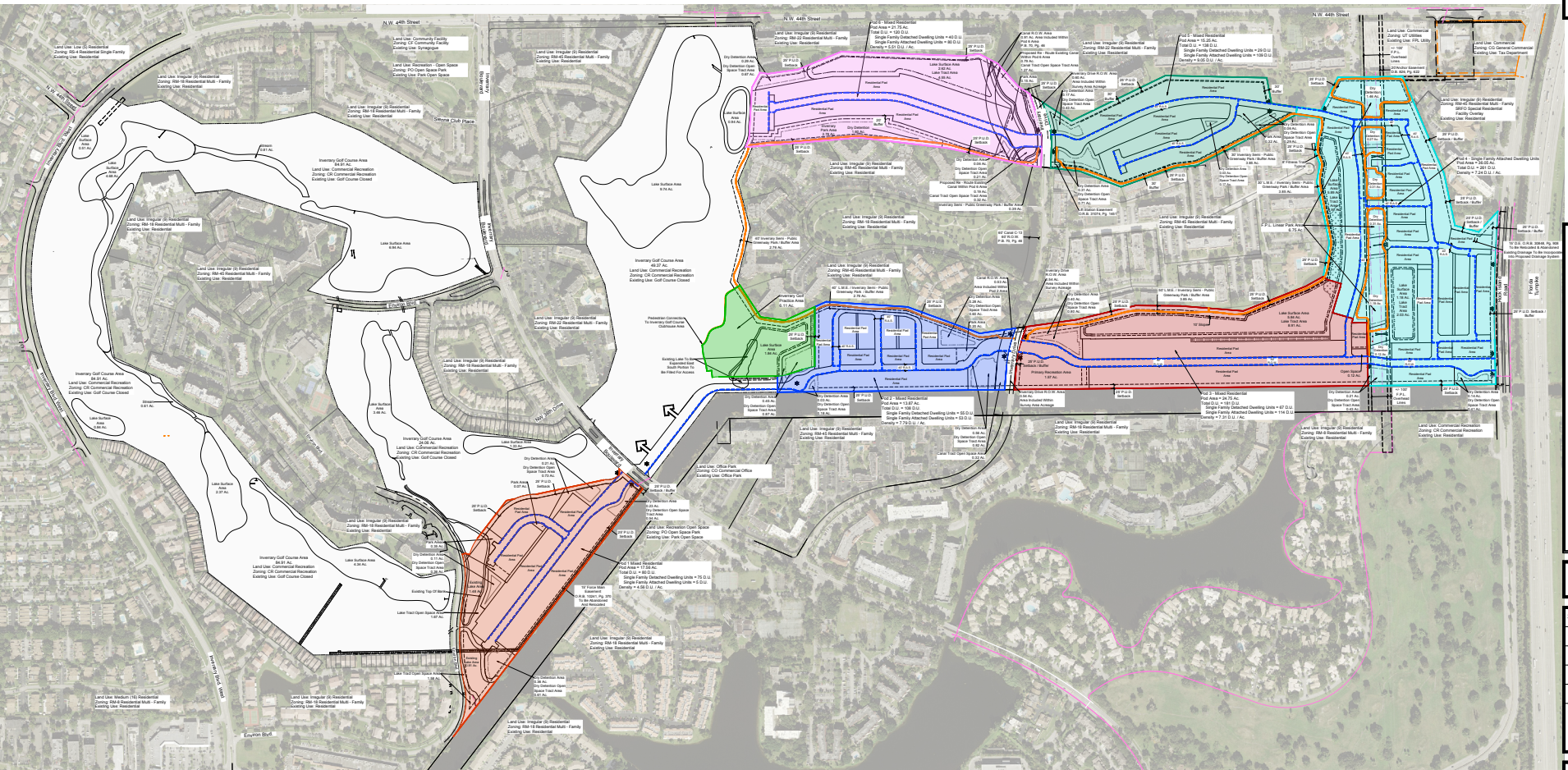
Site Data

Pod 4 Total Gross Site Area Traditional Attached Dwelling Unit Pod (Includes Greenway)	36.85 Ac.
Total Single Family Attached Dwelling Units	201 D.U.
Density	5.46 D.U./Ac.
Pod 5 Total Gross Site Area Traditional Mixed Residential Dwelling Unit Pod (Includes Greenway)	7.24 D.U./Ac.
Total Mixed Residential Units	16 Ac.
Total Mixed Residential Units	138 D.U.
Total Single Family Detached Dwelling Units 21%	29 D.U.
Total Single Family Attached Dwelling Units 79%	109 D.U.
Density	19.03 D.U./Ac.
Pod 6 Total Gross Site Area Traditional Attached Dwelling Unit Pod (Includes Greenway, And Inverrary Park Area)	21.75 Ac.
Total Mixed Residential Units	120 D.U.
Total Single Family Detached Dwelling Units 33%	40 D.U.
Total Single Family Attached Dwelling Units 67%	80 D.U.
Density	5.52 D.U./Ac.
Proposed Re-Route Canal C-13 (Area Included Within Pod 6 Area)	1.60 Ac.
Canal C-13 Existing Right Of Way Area (See Survey P.B. 70, Pg. 46)	0.91 Ac.
Minimum Required Recreational Amenities & Open Space (10% Residential Use Area)	2.12 Ac.
Proposed Recreational Amenities & Open Space (12%)	2.61 Ac.
Private Recreational Area	1.57 Ac.
P.U.D. Esplanade Linear Park / Fitness Trail Area (Top of Bank Area With Fitness Trail)	3.21 Ac.
Park Areas / Open Space	1.07 Ac.
Primary Private Amenity Area	0.98 Ac.
Inverrary Semi - Public Park Area	7.00 Ac.
Inverrary Semi - Public Park Area	7.00 Ac.
Inverrary Pod 6 Semi - Public Park Area	2.78 Ac.
Total Lake Surface Drainage Area (Includes Existing Lakes & Expansions) (21%)	62.89 Ac.
Greg Norman Inverrary Golf Course Lake Area (includes Stream Areas 1.42 Ac. - Dry Det. Areas 0.30 Ac.)	30.87 Ac.
Golf Practice Facility Lake Area	1.56 Ac.
Existing Lake Surface Area Pod 1 (Not Counted Towards Required Residential Drainage Area)	2.39 Ac.
Proposed Canal Relocation Surface Area Pod 6 (Not Counted Towards Req. Res. Drainage Area)	0.98 Ac.
Residential Development Area Drainage Area	8.80 Ac.
Lake Area	5.64 Ac.
Dry Detention Area	9.16 Ac.

Site Data

Greg Norman Inverrary Golf Course Area	31.16 Ac.
Practice Golf Course Area	21.41 Ac.
Miscellaneous Right Of Way Areas Within Property Line (Inverrary Drive R.O.W.)	11.14 Ac.
Maximum Buildable Area (Per Section 5.001 40% Gross Area)	25.66 Ac.
Buildable Area Proposed (20%)	5.13 Ac.
Open Space Tabular - Per City Code Schedule D.1 Section 5.09	Acres
Open Space Required 20% (10% + 10%)	62.37
Open Space Total Provided 30%	93.56
Primary Recreation Area (Per Section 5.001 50% Of The Land Area) 1.27 Ac.	1.27
Neighborhood Parks And Open Space Areas	20.46
P.U.D. Linear Park Open Space Areas (Includes Dry Detention Areas)	2.71
Inverrary Semi - Public Park Area (Includes Linear Greenway Buffer / Park Area)	9.78
Water Management Tracts (Not On The Area Of Water Detention Storage Units) (P.U.D. Linear Trail Area)	7.20
Water Management Tracts - Dry Detention Area Tracts (Excludes P.U.D. Linear Park Dry Detention Areas)	8.88
Existing Water Management Tracts - West of Pod 1	0.79
Linear Trail Area (Pod 2 East Side)	0.32
Canal Trail Area (Pod 3 East Side)	1.59
Perimeter Landscaping Buffers (Includes Previous Areas Within Peripheral P.U.D. Setback)	3.71
Private Residential Linear Open Space Areas (Land By Inverrary) (Proposed = 17.34 Ac.)	17.34
(Per Section 5.0005 Area Calculation Is Capped At 8% Gross Residential Site Area)	6.46

Unit Type	Minimum Lot Dimensions				Setbacks / Separation			
	Size	Width	Frontage	Depth	Front	Side	Back	Rear
Single Family Attached / 18' / 20' Townhome	1,630	18'	20'	80'	30'	7'	15'	12'
Single Family Attached / 24' Townhome	2,160	20'	20'	90'	30'	7'	15'	12'
Single Family Attached / Duplex	3,135	33'	30'	90'	30'	7'	15'	12'
Single Family Detached / 40' Width Or Less	3,600	36'	15'	Non	100'	30'	5'	10'
Single Family Detached / 60' Width Or Less	4,100	41'	15'	Non	100'	30'	5'	10'



Legend

- Indicates Pod 1 = 80 Total D.U.
- Indicates Pod 2 = 138 Total D.U.
- Indicates Pod 3 = 181 Total D.U.
- Indicates Pod 6 = 120 Total D.U.
- Indicates Golf Pitch & Put Area = 6.11 Ac.
- Indicates Pod 4 = 201 Total D.U.
- Indicates Pod 5 = 16 Total D.U.
- Indicates Pod 5 = 130 Total D.U.
- Indicates SF Pedestrian Sidewalk Locations
- Indicates Fitness Trail Locations
- Indicates Residential Community Identification
- Indicates Open Space
- Indicates Right of Way
- Indicates Recreational Access Street
- Indicates Right of Way
- Indicates Easement
- Indicates Utility Easement
- Indicates Water Management Tract
- Indicates Not To Scale
- Indicates Official Record Book

Project Notes

- Utilities are available to the site
- All internal residential vehicle access ways are private roadways & are the perpetual maintenance obligation of the new H.O.A. And C.C.D.
- Private entrances into each residential community to have vehicular access gates with Knox locks for emergency access.
- Indicates Residential Community Identification
- Sign Location: See Detail Sheet 1 For Details
- AC = Acres
- DE = Drainage Easement
- ES = Easement
- LME = Lake Management Easement
- NTS = Not To Scale
- OS = Official Record Book
- OS = Open Space
- PB = Plat Book
- RAS = Residential Access Street
- RW = Right of Way
- UE = Utility Easement
- WMT = Water Management Tract

NO.	REVISIONS	DATE
1	City DRC Comments	11.13.22

Design and Entitlement Consultants, LLC.
 1127 Royal Palm Beach Blvd., Unit 1411
 Royal Palm Beach, FL 33411
 Tel: (561) 707-3410
 Email: info@designentitlement.com



Overall Conceptual Site Plan

Inverrary Residential P. U. D. Property
 Puute Home Company, LLC.
 Inverrary Boulevard
 Lauderdale, Florida 33319

SCALE: 1"=300'
 CHECKED BY: K.D.D.
 DRAWN BY: K.D.D.
 DATE: 06.18.25
 FILE: SP.1
 SHEET
MSP.1
 16 OF 26 SHEETS





Appendix C

Traffic Volumes

AM PEAK HOUR TRAFFIC VOLUME CALCULATIONS

Intersection	Scenario	EASTBOUND			WESTBOUND			NORTHBOUND			SOUTHBOUND		
		EBLT	EBT	EBRT	WBLT	WBT	WBRT	NBLT	NBT	NBRT	SBLT	SBT	SBRT
AM PEAK HOUR													
NW 44 Street at Inverrary Boulevard West	Traffic Count (05/14/25)	321	-	246	-	-	-	276	159	-	-	147	502
	Peak Season Conversion Factor	1.00	-	1.00	-	-	-	1.00	1.00	-	-	1.00	1.00
	2025 Peak Season Traffic	321	-	246	-	-	-	276	159	-	-	147	502
	Compound Growth Rate	1.0%	-	1.0%	-	-	-	1.0%	1.0%	-	-	1.0%	1.0%
	Existing plus Background Growth	337	-	259	-	-	-	290	167	-	-	154	528
	Committed Development		-		-	-	-		1	-	-	7	2
	2030 Background Traffic	337	-	259	-	-	-	290	168	-	-	161	530
	Golf Course Trips	2	-		-	-	-		3	-	-	0	1
	Pod 1 Project Trips	2	-		-	-	-		1	-	-	4	4
	Pod 2 Project Trips	1	-		-	-	-		0	-	-	2	4
	Pod 3 Project Trips	1	-		-	-	-		1	-	-	5	5
	Pod 4 Project Trips	1	-		-	-	-		3	-	-	9	9
	Pod 5 Project Trips	2	-		-	-	-		1	-	-	5	5
	Pod 6 Project Trips	2	-		-	-	-		1	-	-	5	5
	Total Project Trips	11	-	0	-	-	-	0	10	-	-	30	33
2030 Total Traffic	348	-	259	-	-	-	290	178	-	-	191	563	
NW 44 Street at Inverrary Boulevard	Traffic Count (05/14/25)	68	300	157	60	299	164	244	454	128	129	307	60
	Peak Season Conversion Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	2025 Peak Season Traffic	68	300	157	60	299	164	244	454	128	129	307	60
	Compound Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
	Existing plus Background Growth	71	315	165	63	314	172	256	477	135	136	323	63
	Committed Development		1		3	9							
	2030 Background Traffic	71	316	165	66	323	172	256	477	135	136	323	63
	Golf Course Trips			5	8			1	1	2		1	
	Pod 1 Project Trips			3	5			8	2	15		1	
	Pod 2 Project Trips		0	1		2		4	2			1	
	Pod 3 Project Trips		2			10	2				1		
	Pod 4 Project Trips		4			18	5				1		
	Pod 5 Project Trips		3			10	2				1		
	Pod 6 Project Trips		3			10	2				1		
	Total Project Trips	0	12	9	13	50	11	13	5	17	4	3	0
2030 Total Traffic	71	328	174	79	373	183	269	482	152	140	326	63	
NW 44 Street at Inverrary Drive	Traffic Count (05/14/25)	-	541	62	59	312	-	190	-	289	-	-	-
	Peak Season Conversion Factor	-	1.00	1.00	1.00	1.00	-	1.00	-	1.00	-	-	-
	2025 Peak Season Traffic	-	541	62	59	312	-	190	-	289	-	-	-
	Compound Growth Rate	-	1.0%	1.0%	1.0%	1.0%	-	1.0%	-	1.0%	-	-	-
	Existing plus Background Growth	-	569	65	62	328	-	200	-	304	-	-	-
	Committed Development	-	1		3	9	-		-		-	-	-
	2030 Background Traffic	-	570	65	65	337	-	200	-	304	-	-	-
	Golf Course Trips	-	2			8	-		-		-	-	-
	Pod 1 Project Trips	-	15			5	-		-		-	-	-
	Pod 2 Project Trips	-		0	5		-	2	-	13	-	-	-
	Pod 3 Project Trips	-		3	3		-	12	-	16	-	-	-
	Pod 4 Project Trips	-		5			-	23	-	33	-	-	-
	Pod 5 Project Trips	-		4	5		-	12	-	28	-	-	-
	Pod 6 Project Trips	-		4	6		-	12	-	32	-	-	-
	Total Project Trips	-	17	16	19	13	-	61	-	122	-	-	-
2030 Total Traffic	-	587	81	84	350	-	261	-	426	-	-	-	

AM PEAK HOUR TRAFFIC VOLUME CALCULATIONS

Intersection	Scenario	EASTBOUND			WESTBOUND			NORTHBOUND			SOUTHBOUND		
		EBLT	EBT	EBRT	WBLT	WBT	WBRT	NBLT	NBT	NBRT	SBLT	SBT	SBRT
AM PEAK HOUR													
NW 44 Street at Rock Island Road	Traffic Count (05/14/25)	656	-	175	-	-	-	102	823	-	-	706	266
	Peak Season Conversion Factor	1.00	-	1.00	-	-	-	1.00	1.00	-	-	1.00	1.00
	2025 Peak Season Traffic	656	-	175	-	-	-	102	823	-	-	706	266
	Compound Growth Rate	1.0%	-	1.0%	-	-	-	1.0%	1.0%	-	-	1.0%	1.0%
	Existing plus Background Growth	689	-	184	-	-	-	107	865	-	-	742	280
	Committed Development	1	-		-	-	-		2	-	-	31	12
	2030 Background Traffic	690	-	184	-	-	-	107	867	-	-	773	292
	Golf Course Trips	2	-		-	-	-			-	-		8
	Pod 1 Project Trips	15	-		-	-	-			-	-		5
	Pod 2 Project Trips	13	-		-	-	-			-	-		5
	Pod 3 Project Trips	16	-		-	-	-			-	-	3	3
	Pod 4 Project Trips	33	-		-	-	-			-	-	12	
	Pod 5 Project Trips	18	-	10	-	-	-			-	-	1	5
	Pod 6 Project Trips	16	-	16	-	-	-			-	-		6
	Total Project Trips	113	-	26	-	-	-	0	0	-	-	16	32
2030 Total Traffic	803	-	210	-	-	-	107	867	-	-	789	324	
Inverrary Boulevard at Inverrary Drive	Traffic Count (05/14/25)	-	-	-	220	-	77	-	513	96	41	506	-
	Peak Season Conversion Factor	-	-	-	1.00	-	1.00	-	1.00	1.00	1.00	1.00	-
	2025 Peak Season Traffic	-	-	-	220	-	77	-	570	96	41	528	-
	Compound Growth Rate	-	-	-	1.0%	-	1.0%	-	1.0%	1.0%	1.0%	1.0%	-
	Existing plus Background Growth	-	-	-	231	-	81	-	599	101	43	555	-
	Committed Development	-	-	-	3	-		-				3	-
	2030 Background Traffic	-	-	-	234	-	81	-	599	101	43	559	-
	Golf Course Trips	-	-	-		-		-	10			2	-
	Pod 1 Project Trips	-	-	-		-		-	5			17	-
	Pod 2 Project Trips	-	-	-	11	-		-	2	4		6	-
	Pod 3 Project Trips	-	-	-	19	-		-		7			-
	Pod 4 Project Trips	-	-	-		-		-		7			-
	Pod 5 Project Trips	-	-	-	3	-		-		6			-
	Pod 6 Project Trips	-	-	-	2	-		-		6			-
	Total Project Trips	-	-	-	35	-	0	-	17	30	0	25	-
2030 Total Traffic	-	-	-	269	-	81	-	616	131	43	584	-	
Inverrary Boulevard at Spanish Moss Terrace	Traffic Count (10/15/25)	58	-	89	-	-	-	23	595	-	-	702	31
	Peak Season Conversion Factor	1.02	-	1.02	-	-	-	1.02	1.02	-	-	1.02	1.02
	2025 Peak Season Traffic	59	-	91	-	-	-	23	607	-	-	716	32
	Compound Growth Rate	1.0%	-	1.0%	-	-	-	1.0%	1.0%	-	-	1.0%	1.0%
	Existing plus Background Growth	62	-	96	-	-	-	24	638	-	-	753	34
	Committed Development		-		-	-	-			-	-	6	
	2030 Background Traffic	62	-	96	-	-	-	24	638	-	-	759	34
	Golf Course Trips		-		-	-	-		10	-	-	2	
	Pod 1 Project Trips		-		-	-	-		5	-	-	17	
	Pod 2 Project Trips		-		-	-	-		6	-	-	17	
	Pod 3 Project Trips		-		-	-	-		7	-	-	19	
	Pod 4 Project Trips		-		-	-	-		7	-	-	0	
	Pod 5 Project Trips		-		-	-	-		6	-	-	3	
	Pod 6 Project Trips		-		-	-	-		6	-	-	2	
	Total Project Trips	0	-	0	-	-	-	0	47	-	-	60	0
2030 Total Traffic	62	-	96	-	-	-	24	685	-	-	819	34	

AM PEAK HOUR TRAFFIC VOLUME CALCULATIONS

Intersection	Scenario	EASTBOUND			WESTBOUND			NORTHBOUND			SOUTHBOUND		
		EBLT	EBT	EBRT	WBLT	WBT	WBRT	NBLT	NBT	NBRT	SBLT	SBT	SBRT
AM PEAK HOUR													
Inverrary Boulevard at Oakland Park Boulevard	Traffic Count (05/14/25)	199	1,315	327	76	1,566	143	339	251	157	169	214	396
	Peak Season Conversion Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	2025 Peak Season Traffic	199	1,315	327	76	1,566	143	339	251	157	169	214	396
	Compound Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
	Existing plus Background Growth	209	1,382	344	80	1,646	150	356	264	165	178	225	416
	Committed Development										4		2
	2030 Background Traffic	209	1,382	344	80	1,646	150	356	264	165	182	225	418
	Golf Course Trips	3					7				2		0
	Pod 1 Project Trips	1					4				13		4
	Pod 2 Project Trips	2					4				11		6
	Pod 3 Project Trips	2					5				14		5
	Pod 4 Project Trips	1	2			9	6						
	Pod 5 Project Trips	1				2	5						3
	Pod 6 Project Trips	1				2	5						2
	Total Project Trips	11	2	0	0	13	36	0	0	0	40	0	20
2030 Total Traffic	220	1,384	344	80	1,659	186	356	264	165	222	225	438	
Pod 1 and Pod 2 Access at Inverrary Boulevard	Traffic Count (05/14/25)	0	0	0	0	0	0	0	590	0	0	547	0
	Peak Season Conversion Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	2025 Peak Season Traffic	0	0	0	0	0	0	0	647	0	0	569	0
	Compound Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
	Existing plus Background Growth	0	0	0	0	0	0	0	680	0	0	598	0
	Committed Development											3	
	2030 Background Traffic	0	0	0	0	0	0	0	680	0	0	602	0
	Golf Course Trips				1		2		4	6	2	1	
	Pod 1 Project Trips	25		17				5					9
	Pod 2 Project Trips				6		6			2	2		
	Pod 3 Project Trips												
	Pod 4 Project Trips												
	Pod 5 Project Trips												
	Pod 6 Project Trips												
	Total Project Trips	25	0	17	7	0	8	5	4	8	4	1	9
2030 Total Traffic	25	0	17	7	0	8	5	684	8	4	603	9	
Pod 2 and Pod 3 Access at Inverrary Drive	Traffic Count (05/14/25)	0	0	0	0	0	0	0	479	0	0	297	0
	Peak Season Conversion Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	2025 Peak Season Traffic	0	0	0	0	0	0	0	479	0	0	297	0
	Compound Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
	Existing plus Background Growth	0	0	0	0	0	0	0	504	0	0	312	0
	Committed Development											3	
	2030 Background Traffic	0	0	0	0	0	0	0	504	0	0	315	0
	Golf Course Trips												
	Pod 1 Project Trips												
	Pod 2 Project Trips	15		11				4					5
	Pod 3 Project Trips				19		28			7	6		
	Pod 4 Project Trips						9		1	6	1		
	Pod 5 Project Trips								6			3	
	Pod 6 Project Trips								6			2	
	Total Project Trips	15	0	11	19	0	37	4	13	13	7	5	5
2030 Total Traffic	15	0	11	19	0	37	4	517	13	7	320	5	

AM PEAK HOUR TRAFFIC VOLUME CALCULATIONS

Intersection	Scenario	EASTBOUND			WESTBOUND			NORTHBOUND			SOUTHBOUND		
		EBLT	EBT	EBRT	WBLT	WBT	WBRT	NBLT	NBT	NBRT	SBLT	SBT	SBRT
AM PEAK HOUR													
Pod 4 Access at Rock Island Drive	Traffic Count (05/14/25)	-	-	0	-	-	-	-	925	-	-	881	0
	Peak Season Conversion Factor	-	-	1.00	-	-	-	-	1.00	-	-	1.00	1.00
	2025 Peak Season Traffic	-	-	0	-	-	-	-	925	-	-	881	0
	Compound Growth Rate	-	-	1.0%	-	-	-	-	1.0%	-	-	1.0%	1.0%
	Existing plus Background Growth	-	-	0	-	-	-	-	972	-	-	926	0
	Committed Development	-	-		-	-	-	-	2	-	-	31	
	2030 Background Traffic	-	-	0	-	-	-	-	974	-	-	957	0
	Golf Course Trips	-	-		-	-	-	-		-	-		
	Pod 1 Project Trips	-	-		-	-	-	-		-	-		
	Pod 2 Project Trips	-	-		-	-	-	-		-	-		
	Pod 3 Project Trips	-	-		-	-	-	-		-	-		3
	Pod 4 Project Trips	-	-	37	-	-	-	-	5	-	-		17
	Pod 5 Project Trips	-	-	7	-	-	-	-		-	-	10	1
	Pod 6 Project Trips	-	-		-	-	-	-		-	-	16	
	Total Project Trips	-	-	44	-	-	-	-	5	-	-	26	21
2030 Total Traffic	-	-	44	-	-	-	-	979	-	-	983	21	
Pod 5 and Pod 6 Access at Inverrary Drive	Traffic Count (05/14/25)	0	0	0	0	0	0	0	479	0	0	121	0
	Peak Season Conversion Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	2025 Peak Season Traffic	0	0	0	0	0	0	0	479	0	0	121	0
	Compound Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
	Existing plus Background Growth	0	0	0	0	0	0	0	504	0	0	127	0
	Committed Development											3	
	2030 Background Traffic	0	0	0	0	0	0	0	504	0	0	130	0
	Golf Course Trips												
	Pod 1 Project Trips												
	Pod 2 Project Trips								15			5	
	Pod 3 Project Trips								28			6	
	Pod 4 Project Trips							47	9	1	4	1	
	Pod 5 Project Trips				3		40			6	9		
	Pod 6 Project Trips	44		2				6					10
	Total Project Trips	44	0	2	3	0	87	6	52	7	13	12	10
2030 Total Traffic	44	0	2	3	0	87	6	556	7	13	142	10	

Note: Left Turn Volumes include U-Turn Volumes.
 Balanced volumes.

PM PEAK HOUR TRAFFIC VOLUME CALCULATIONS

Intersection	Scenario	EASTBOUND			WESTBOUND			NORTHBOUND			SOUTHBOUND		
		EBLT	EBT	EBRT	WBLT	WBT	WBRT	NBLT	NBT	NBRT	SBLT	SBT	SBRT
PM PEAK HOUR													
NW 44 Street at Inverrary Boulevard West	Traffic Count (05/14/25)	401	-	284	-	-	-	224	159	-	-	191	372
	Peak Season Conversion Factor	1.00	-	1.00	-	-	-	1.00	1.00	-	-	1.00	1.00
	2025 Peak Season Traffic	401	-	284	-	-	-	224	159	-	-	191	372
	Compound Growth Rate	1.0%	-	1.0%	-	-	-	1.0%	1.0%	-	-	1.0%	1.0%
	Existing plus Background Growth	421	-	298	-	-	-	235	167	-	-	201	391
	Committed Development	2	-		-	-	-		6	-	-	3	1
	2030 Background Traffic	423	-	298	-	-	-	235	173	-	-	204	392
	Golf Course Trips	3	-		-	-	-		3	-	-	2	3
	Pod 1 Project Trips	3	-		-	-	-		3	-	-	2	3
	Pod 2 Project Trips	3	-		-	-	-		2	-	-	1	2
	Pod 3 Project Trips	4	-		-	-	-		2	-	-	3	2
	Pod 4 Project Trips	4	-		-	-	-		10	-	-	6	6
	Pod 5 Project Trips	5	-		-	-	-		4	-	-	3	3
	Pod 6 Project Trips	3	-		-	-	-		4	-	-	3	3
	Total Project Trips	25	-	0	-	-	-	0	28	-	-	20	22
2030 Total Traffic	448	-	298	-	-	-	235	201	-	-	224	414	
NW 44 Street at Inverrary Boulevard	Traffic Count (05/14/25)	73	312	151	123	363	140	159	434	108	164	404	88
	Peak Season Conversion Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	2025 Peak Season Traffic	73	312	151	123	363	140	159	434	108	164	404	88
	Compound Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
	Existing plus Background Growth	77	328	159	129	382	147	167	456	114	172	425	92
	Committed Development		8		1	4				3			
	2030 Background Traffic	77	336	159	130	386	147	167	456	117	172	425	92
	Golf Course Trips			6	10			5	1	8		1	
	Pod 1 Project Trips			6	11			5	1	7		2	
	Pod 2 Project Trips		2	3		1		2	1			1	
	Pod 3 Project Trips		6			5	1				2		
	Pod 4 Project Trips		14			12	3				5		
	Pod 5 Project Trips		9			6	1				2		
	Pod 6 Project Trips		7			6	1				2		
	Total Project Trips	0	38	15	21	30	6	12	3	15	11	4	0
2030 Total Traffic	77	374	174	151	416	153	179	459	132	183	429	92	
NW 44 Street at Inverrary Drive	Traffic Count (05/14/25)	-	405	166	201	518	-	104	-	119	-	-	-
	Peak Season Conversion Factor	-	1.00	1.00	1.00	1.00	-	1.00	-	1.00	-	-	-
	2025 Peak Season Traffic	-	405	166	201	518	-	104	-	119	-	-	-
	Compound Growth Rate	-	1.0%	1.0%	1.0%	1.0%	-	1.0%	-	1.0%	-	-	-
	Existing plus Background Growth	-	426	174	211	544	-	109	-	125	-	-	-
	Committed Development	-	8		1	4	-		-	3	-	-	-
	2030 Background Traffic	-	434	174	212	548	-	109	-	128	-	-	-
	Golf Course Trips	-	8			10	-		-		-	-	-
	Pod 1 Project Trips	-	7			11	-		-		-	-	-
	Pod 2 Project Trips	-		2	10		-	1	-	6	-	-	-
	Pod 3 Project Trips	-		8	7		-	6	-	9	-	-	-
	Pod 4 Project Trips	-		19			-	15	-	21	-	-	-
	Pod 5 Project Trips	-		11	13		-	7	-	15	-	-	-
	Pod 6 Project Trips	-		9	14		-	7	-	16	-	-	-
	Total Project Trips	-	15	49	44	21	-	36	-	67	-	-	-
2030 Total Traffic	-	449	223	256	569	-	145	-	195	-	-	-	

PM PEAK HOUR TRAFFIC VOLUME CALCULATIONS

Intersection	Scenario	EASTBOUND			WESTBOUND			NORTHBOUND			SOUTHBOUND		
		EBLT	EBT	EBRT	WBLT	WBT	WBRT	NBLT	NBT	NBRT	SBLT	SBT	SBRT
PM PEAK HOUR													
NW 44 Street at Rock Island Road	Traffic Count (05/14/25)	366	-	133	-	-	-	226	769	-	-	612	489
	Peak Season Conversion Factor	1.00	-	1.00	-	-	-	1.00	1.00	-	-	1.00	1.00
	2025 Peak Season Traffic	366	-	133	-	-	-	226	769	-	-	612	489
	Compound Growth Rate	1.0%	-	1.0%	-	-	-	1.0%	1.0%	-	-	1.0%	1.0%
	Existing plus Background Growth	385	-	140	-	-	-	238	808	-	-	643	514
	Committed Development	11	-		-	-	-		28	-	-	13	5
	2030 Background Traffic	396	-	140	-	-	-	238	836	-	-	656	519
	Golf Course Trips	8	-		-	-	-			-	-		10
	Pod 1 Project Trips	7	-		-	-	-			-	-		11
	Pod 2 Project Trips	6	-		-	-	-			-	-		10
	Pod 3 Project Trips	9	-		-	-	-			-	-	6	7
	Pod 4 Project Trips	21	-		-	-	-			-	-	39	
	Pod 5 Project Trips	10	-	5	-	-	-			-	-	2	13
	Pod 6 Project Trips	8	-	8	-	-	-			-	-		14
	Total Project Trips	69	-	13	-	-	-	0	0	-	-	47	65
2030 Total Traffic	465	-	153	-	-	-	238	836	-	-	703	584	
Inverrary Boulevard at Inverrary Drive	Traffic Count (05/14/25)	-	-	-	129	-	38	-	621	212	77	444	-
	Peak Season Conversion Factor	-	-	-	1.00	-	1.00	-	1.00	1.00	1.00	1.00	-
	2025 Peak Season Traffic	-	-	-	129	-	38	-	658	212	77	540	-
	Compound Growth Rate	-	-	-	1.0%	-	1.0%	-	1.0%	1.0%	1.0%	1.0%	-
	Existing plus Background Growth	-	-	-	136	-	40	-	692	223	81	568	-
	Committed Development	-	-	-	1	-		-	3	3		1	-
	2030 Background Traffic	-	-	-	137	-	40	-	695	226	81	569	-
	Golf Course Trips	-	-	-		-		-	11			9	-
	Pod 1 Project Trips	-	-	-		-		-	13			8	-
	Pod 2 Project Trips	-	-	-	6	-		-	4	9		3	-
	Pod 3 Project Trips	-	-	-	10	-		-		18			-
	Pod 4 Project Trips	-	-	-		-		-		25			-
	Pod 5 Project Trips	-	-	-	2	-		-		17			-
	Pod 6 Project Trips	-	-	-	1	-		-		16			-
	Total Project Trips	-	-	-	19	-	0	-	28	85	0	20	-
2030 Total Traffic	-	-	-	156	-	40	-	723	311	81	589	-	
Inverrary Boulevard at Spanish Moss Terrace	Traffic Count (10/15/25)	48	-	74	-	-	-	108	805	-	-	590	66
	Peak Season Conversion Factor	1.02	-	1.02	-	-	-	1.02	1.02	-	-	1.02	1.02
	2025 Peak Season Traffic	49	-	75	-	-	-	110	821	-	-	602	67
	Compound Growth Rate	1.0%	-	1.0%	-	-	-	1.0%	1.0%	-	-	1.0%	1.0%
	Existing plus Background Growth	51	-	79	-	-	-	116	863	-	-	633	70
	Committed Development		-		-	-	-		6	-	-	2	
	2030 Background Traffic	51	-	79	-	-	-	116	870	-	-	636	70
	Golf Course Trips		-		-	-	-		11	-	-	9	
	Pod 1 Project Trips		-		-	-	-		13	-	-	8	
	Pod 2 Project Trips		-		-	-	-		13	-	-	9	
	Pod 3 Project Trips		-		-	-	-		18	-	-	10	
	Pod 4 Project Trips		-		-	-	-		25	-	-	0	
	Pod 5 Project Trips		-		-	-	-		17	-	-	2	
	Pod 6 Project Trips		-		-	-	-		16	-	-	1	
	Total Project Trips	0	-	0	-	-	-	0	113	-	-	39	0
2030 Total Traffic	51	-	79	-	-	-	116	983	-	-	675	70	

PM PEAK HOUR TRAFFIC VOLUME CALCULATIONS

Intersection	Scenario	EASTBOUND			WESTBOUND			NORTHBOUND			SOUTHBOUND		
		EBLT	EBT	EBRT	WBLT	WBT	WBRT	NBLT	NBT	NBRT	SBLT	SBT	SBRT
PM PEAK HOUR													
Inverrary Boulevard at Oakland Park Boulevard	Traffic Count (05/14/25)	340	1,605	356	202	1,411	262	229	211	150	225	344	375
	Peak Season Conversion Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	2025 Peak Season Traffic	340	1,605	356	202	1,411	262	229	211	150	225	344	375
	Compound Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
	Existing plus Background Growth	357	1,687	374	212	1,483	275	241	222	158	236	362	394
	Committed Development	2					4				1		1
	2030 Background Traffic	359	1,687	374	212	1,483	279	241	222	158	237	362	395
	Golf Course Trips	3					8				7		2
	Pod 1 Project Trips	3					10				6		2
	Pod 2 Project Trips	4					9				6		3
	Pod 3 Project Trips	6					12				7		3
	Pod 4 Project Trips	5	5			6	20						
	Pod 5 Project Trips	4				1	13						2
	Pod 6 Project Trips	4				1	12						1
	Total Project Trips	29	5	0	0	8	84	0	0	0	26	0	13
2030 Total Traffic	388	1,692	374	212	1,491	363	241	222	158	263	362	408	
Pod 1 and Pod 2 Access at Inverrary Boulevard	Traffic Count (05/14/25)	0	0	0	0	0	0	0	659	0	0	521	0
	Peak Season Conversion Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	2025 Peak Season Traffic	0	0	0	0	0	0	0	696	0	0	617	0
	Compound Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
	Existing plus Background Growth	0	0	0	0	0	0	0	732	0	0	648	0
	Committed Development								3			1	
	2030 Background Traffic	0	0	0	0	0	0	0	735	0	0	650	0
	Golf Course Trips				5		7		4	7	3	4	
	Pod 1 Project Trips	13		8				13					19
	Pod 2 Project Trips				3		3			4	4		
	Pod 3 Project Trips												
	Pod 4 Project Trips												
	Pod 5 Project Trips												
	Pod 6 Project Trips												
	Total Project Trips	13	0	8	8	0	10	13	4	11	7	4	19
2030 Total Traffic	13	0	8	8	0	10	13	739	11	7	654	19	
Pod 2 and Pod 3 Access at Inverrary Drive	Traffic Count (05/14/25)	0	0	0	0	0	0	0	289	0	0	367	0
	Peak Season Conversion Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	2025 Peak Season Traffic	0	0	0	0	0	0	0	289	0	0	367	0
	Compound Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
	Existing plus Background Growth	0	0	0	0	0	0	0	304	0	0	385	0
	Committed Development								3			1	
	2030 Background Traffic	0	0	0	0	0	0	0	307	0	0	386	0
	Golf Course Trips												
	Pod 1 Project Trips												
	Pod 2 Project Trips	7		6				9					12
	Pod 3 Project Trips				10		15			18	15		
	Pod 4 Project Trips						6		5	20	5		
	Pod 5 Project Trips								17			2	
	Pod 6 Project Trips								16			1	
	Total Project Trips	7	0	6	10	0	21	9	38	38	20	3	12
2030 Total Traffic	7	0	6	10	0	21	9	345	38	20	389	12	

PM PEAK HOUR TRAFFIC VOLUME CALCULATIONS

Intersection	Scenario	EASTBOUND			WESTBOUND			NORTHBOUND			SOUTHBOUND		
		EBLT	EBT	EBRT	WBLT	WBT	WBRT	NBLT	NBT	NBRT	SBLT	SBT	SBRT
PM PEAK HOUR													
Pod 4 Access at Rock Island Drive	Traffic Count (05/14/25)	-	-	0	-	-	-	-	995	-	-	745	0
	Peak Season Conversion Factor	-	-	1.00	-	-	-	-	1.00	-	-	1.00	1.00
	2025 Peak Season Traffic	-	-	0	-	-	-	-	995	-	-	745	0
	Compound Growth Rate	-	-	1.0%	-	-	-	-	1.0%	-	-	1.0%	1.0%
	Existing plus Background Growth	-	-	0	-	-	-	-	1,046	-	-	783	0
	Committed Development	-	-		-	-	-	-	28	-	-	13	
	2030 Background Traffic	-	-	0	-	-	-	-	1,074	-	-	796	0
	Golf Course Trips	-	-		-	-	-	-		-	-		
	Pod 1 Project Trips	-	-		-	-	-	-		-	-		
	Pod 2 Project Trips	-	-		-	-	-	-		-	-		
	Pod 3 Project Trips	-	-		-	-	-	-		-	-		6
	Pod 4 Project Trips	-	-	24	-	-	-	-	15	-	-		54
	Pod 5 Project Trips	-	-	4	-	-	-	-		-	-	5	2
	Pod 6 Project Trips	-	-		-	-	-	-		-	-	8	
	Total Project Trips	-	-	28	-	-	-	-	15	-	-	13	62
	2030 Total Traffic	-	-	28	-	-	-	-	1,089	-	-	809	62
Pod 5 and Pod 6 Access at Inverrary Drive	Traffic Count (05/14/25)	0	0	0	0	0	0	0	223	0	0	367	0
	Peak Season Conversion Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	2025 Peak Season Traffic	0	0	0	0	0	0	0	223	0	0	367	0
	Compound Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
	Existing plus Background Growth	0	0	0	0	0	0	0	234	0	0	385	0
	Committed Development								3			1	
	2030 Background Traffic	0	0	0	0	0	0	0	237	0	0	386	0
	Golf Course Trips												
	Pod 1 Project Trips												
	Pod 2 Project Trips								7			12	
	Pod 3 Project Trips								15			15	
	Pod 4 Project Trips							30	6	5	14	5	
	Pod 5 Project Trips				2		22			17	24		
	Pod 6 Project Trips	23		1				16					23
	Total Project Trips	23	0	1	2	0	52	16	28	22	38	32	23
	2030 Total Traffic	23	0	1	2	0	52	16	265	22	38	418	23

Note: Left Turn Volumes include U-Turn Volumes.

Balanced volumes.

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TURNING MOVEMENT COUNTS

File Name : INVERRARY BLVD W & NW 44TH ST

Site Code : 01

Start Date : 5/14/2025

Page No : 1

INVERRARY BLVD W & NW 44 ST

Groups Printed- Passenger Cars - Heavy Vehicles

Start Time	INVERRARY BLVD Southbound							Westbound							INVERRARY BLVD Northbound							NW 44 ST Eastbound							Int. Total
	Right	Thru	Left	U-Turn	P CNL	B CNL	App. Total	Right	Thru	Left	U-Turn	P CEL	B CEL	App. Total	Right	Thru	Left	U-Turn	P CSL	B CSL	App. Total	Right	Thru	Left	U-Turn	P CW L	B CW L	App. Total	
07:00 AM	127	29	0	0	0	0	156	0	0	0	0	0	0	0	0	36	68	0	0	0	104	38	0	61	1	1	0	101	361
07:15 AM	156	41	0	0	0	0	197	0	0	0	0	0	0	0	0	46	75	0	0	0	121	57	0	74	0	0	0	131	449
07:30 AM	132	39	0	0	0	0	171	0	0	0	0	0	0	0	0	37	69	0	1	2	109	89	0	108	0	0	0	197	477
07:45 AM	87	38	0	0	0	0	125	0	0	0	0	0	0	0	0	40	64	0	1	0	105	62	0	77	0	0	0	139	369
Total	502	147	0	0	0	0	649	0	0	0	0	0	0	0	0	159	276	0	2	2	439	246	0	320	1	1	0	568	1656
08:00 AM	84	39	0	0	0	0	123	0	0	0	0	0	0	0	0	36	47	0	0	0	83	54	0	67	0	0	0	121	327
08:15 AM	91	41	0	0	0	0	132	0	0	0	0	0	0	0	0	26	56	0	1	2	85	58	0	66	0	0	0	124	341
08:30 AM	91	41	0	0	0	0	132	0	0	0	0	0	0	0	0	33	57	0	1	2	93	39	0	74	1	1	2	117	342
08:45 AM	78	42	0	0	1	0	121	0	0	0	0	0	0	0	0	30	54	0	0	0	84	53	0	85	1	1	2	142	347
Total	344	163	0	0	1	0	508	0	0	0	0	0	0	0	0	125	214	0	2	4	345	204	0	292	2	2	4	504	1357
*** BREAK ***																													
04:00 PM	62	35	0	0	1	0	98	0	0	0	0	0	0	0	0	35	50	0	1	2	88	48	0	81	0	1	0	130	316
04:15 PM	87	40	0	0	1	2	130	0	0	0	0	0	0	0	0	46	57	0	0	0	103	53	0	74	0	0	0	127	360
04:30 PM	72	45	0	0	0	0	117	0	0	0	0	0	0	0	0	35	42	0	0	0	77	54	0	83	1	2	2	142	336
04:45 PM	101	43	0	0	0	0	144	0	0	0	0	0	0	0	0	35	58	0	0	0	93	52	0	94	0	0	0	146	383
Total	322	163	0	0	2	2	489	0	0	0	0	0	0	0	0	151	207	0	1	2	361	207	0	332	1	3	2	545	1395
05:00 PM	92	44	0	0	0	0	136	0	0	0	0	0	0	0	0	28	61	0	0	0	89	75	0	86	1	1	0	163	388
05:15 PM	94	47	0	0	0	0	141	0	0	0	0	0	0	0	0	51	48	0	0	0	99	66	0	104	0	0	0	170	410
05:30 PM	90	48	0	0	0	0	138	0	0	0	0	0	0	0	0	32	74	0	0	0	106	74	0	101	0	0	0	175	419
05:45 PM	96	52	0	0	1	2	151	0	0	0	0	0	0	0	0	48	41	0	0	0	89	69	0	109	0	0	0	178	418
Total	372	191	0	0	1	2	566	0	0	0	0	0	0	0	0	159	224	0	0	0	383	284	0	400	1	1	0	686	1635
Grand Total	1540	664	0	0	4	4	2212	0	0	0	0	0	0	0	0	594	921	0	5	8	1528	941	0	1344	5	7	6	2303	6043
Apprch %	69.6	30	0	0	0.2	0.2		0	0	0	0	0	0	0	0	38.9	60.3	0	0.3	0.5		40.9	0	58.4	0.2	0.3	0.3		
Total %	25.5	11	0	0	0.1	0.1	36.6	0	0	0	0	0	0	0	0	9.8	15.2	0	0.1	0.1	25.3	15.6	0	22.2	0.1	0.1	0.1	38.1	
Passenger Cars	1528	651	0	0	2	2	2183	0	0	0	0	0	0	0	0	585	909	0	1	4	1499	922	0	1324	5	4	3	2258	5940
% Passenger Cars	99.2	98	0	0	50	50	98.7	0	0	0	0	0	0	0	0	98.5	98.7	0	20	50	98.1	98	0	98.5	100	57.1	50	98	98.3
Heavy Vehicles	12	13	0	0	2	2	29	0	0	0	0	0	0	0	0	9	12	0	4	4	29	19	0	20	0	3	3	45	103
% Heavy Vehicles	0.8	2	0	0	50	50	1.3	0	0	0	0	0	0	0	0	1.5	1.3	0	80	50	1.9	2	0	1.5	0	42.9	50	2	1.7

P CEL:Pedestrians Crossing East Leg - B CEL:Bicyclists Crossing East Leg

P CNL:Pedestrians Crossing North Leg - B CNL:Bicyclists Crossing North Leg

P CSL:Pedestrians Crossing South Leg - B CSL:Bicyclists Crossing South Leg

P CWL:Pedestrians Crossing West Leg - B CWL:Bicyclists Crossing West Leg

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TURNING MOVEMENT COUNTS

INVERRARY BLVD W & NW 44 ST

File Name : INVERRARY BLVD W & NW 44TH ST

Site Code : 01

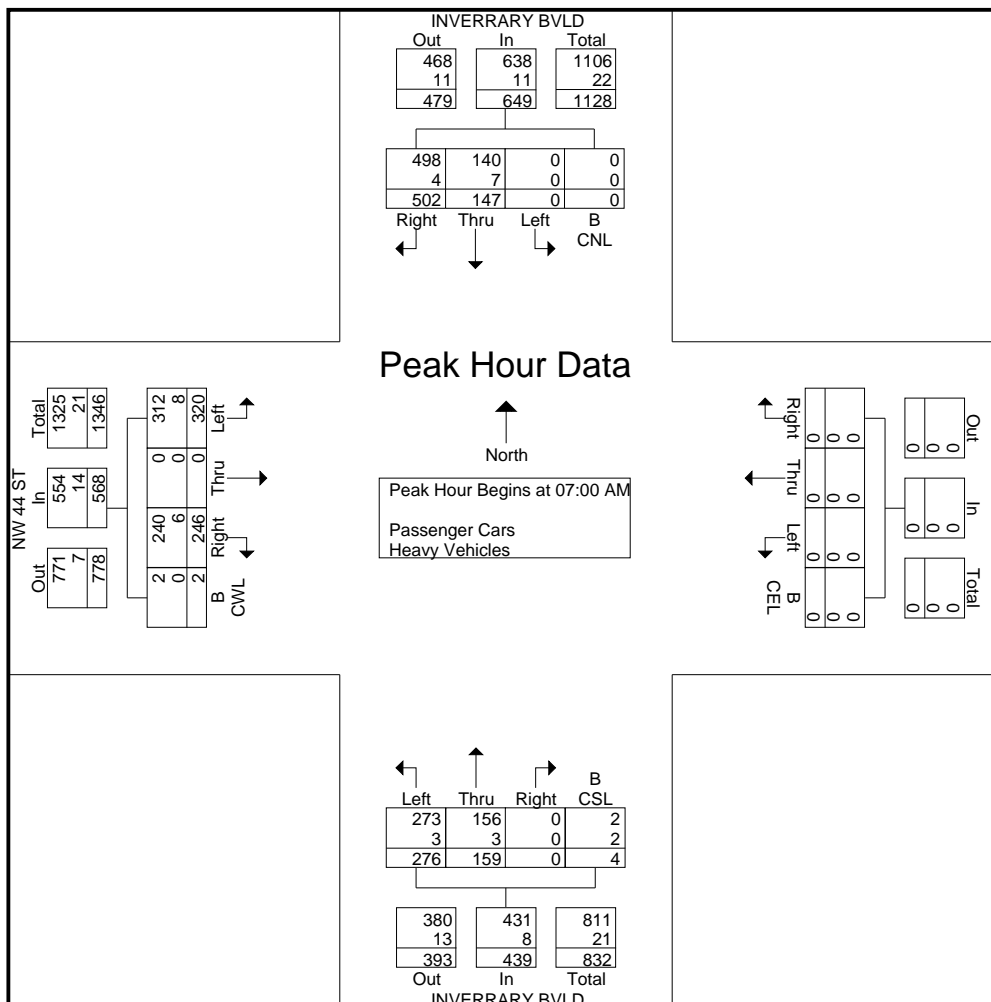
Start Date : 5/14/2025

Page No : 4

Start Time	INVERRARY BLVD Southbound							Westbound							INVERRARY BLVD Northbound							NW 44 ST Eastbound							Int. Total
	Right	Thru	Left	U-Turn	P CNL	B CNL	App. Total	Right	Thru	Left	U-Turn	P CEL	B CEL	App. Total	Right	Thru	Left	U-Turn	P CSL	B CSL	App. Total	Right	Thru	Left	U-Turn	P CW	B CW	App. Total	
07:00 AM	127	29	0	0	0	0	156	0	0	0	0	0	0	0	0	36	68	0	0	0	104	38	0	61	1	1	0	101	361
07:15 AM	156	41	0	0	0	0	197	0	0	0	0	0	0	0	0	46	75	0	0	0	121	57	0	74	0	0	0	131	449
07:30 AM	132	39	0	0	0	0	171	0	0	0	0	0	0	0	0	37	69	0	1	2	109	89	0	108	0	0	0	197	477
07:45 AM	87	38	0	0	0	0	125	0	0	0	0	0	0	0	0	40	64	0	1	0	105	62	0	77	0	0	0	139	369
Total Volume	502	147	0	0	0	0	649	0	0	0	0	0	0	0	0	159	276	0	2	2	439	246	0	320	1	1	0	568	1656
% App. Total	77.3	22.7	0	0	0	0		0	0	0	0	0	0	0	0	36.2	62.9	0	0.5	0.5		43.3	0	56.3	0.2	0.2	0		
PHF	.804	.896	.000	.000	.000	.000	.824	.000	.000	.000	.000	.000	.000	.000	.000	.864	.920	.000	.500	.250	.907	.691	.000	.741	.250	.250	.000	.721	.868
Passenger Cars	498	140	0	0	0	0	638	0	0	0	0	0	0	0	0	156	273	0	1	1	431	240	0	312	1	1	0	554	1623
% Passenger Cars	99.2	95.2	0	0	0	0	98.3	0	0	0	0	0	0	0	0	98.1	98.9	0	50.0	50.0	98.2	97.6	0	97.5	100	100	0	97.5	98.0
Heavy Vehicles	4	7	0	0	0	0	11	0	0	0	0	0	0	0	0	3	3	0	1	1	8	6	0	8	0	0	0	14	33
% Heavy Vehicles	0.8	4.8	0	0	0	0	1.7	0	0	0	0	0	0	0	0	1.9	1.1	0	50.0	50.0	1.8	2.4	0	2.5	0	0	0	2.5	2.0

Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:00 AM



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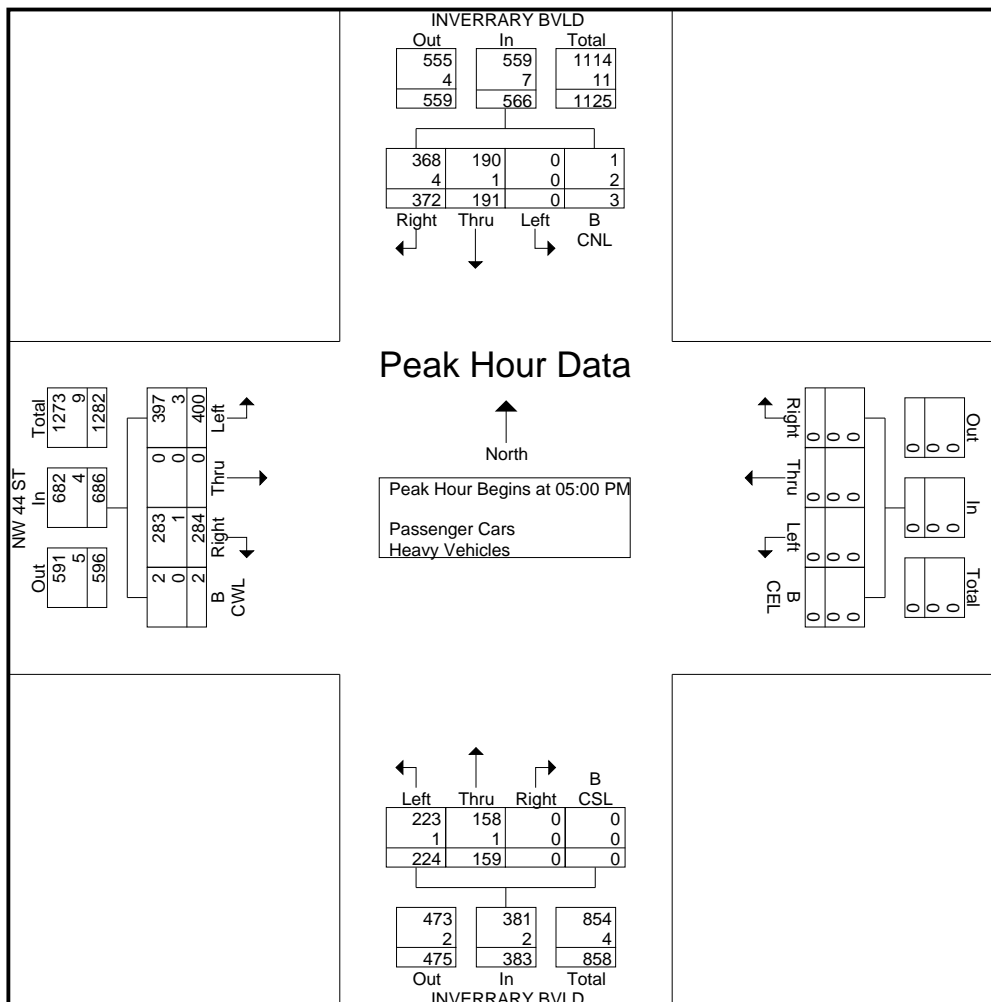
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TURNING MOVEMENT COUNTS

File Name : INVERRARY BVLD W & NW 44TH ST
 Site Code : 01
 Start Date : 5/14/2025
 Page No : 8

INVERRARY BVLD W & NW 44 ST

Start Time	INVERRARY BVLD Southbound							Westbound							INVERRARY BVLD Northbound							NW 44 ST Eastbound							Int. Total
	Right	Thru	Left	U-Turn	P CNL	B CNL	App. Total	Right	Thru	Left	U-Turn	P CEL	B CEL	App. Total	Right	Thru	Left	U-Turn	P CSL	B CSL	App. Total	Right	Thru	Left	U-Turn	P CW	B CW	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																													
Peak Hour for Entire Intersection Begins at 05:00 PM																													
05:00 PM	92	44	0	0	0	0	136	0	0	0	0	0	0	0	0	28	61	0	0	0	89	75	0	86	1	1	0	163	388
05:15 PM	94	47	0	0	0	0	141	0	0	0	0	0	0	0	0	51	48	0	0	0	99	66	0	104	0	0	0	170	410
05:30 PM	90	48	0	0	0	0	138	0	0	0	0	0	0	0	0	32	74	0	0	0	106	74	0	101	0	0	0	175	419
05:45 PM	96	52	0	0	1	2	151	0	0	0	0	0	0	0	0	48	41	0	0	0	89	69	0	109				178	418
Total Volume	372	191	0	0	1	2	566	0	0	0	0	0	0	0	0	159	224	0	0	0	383	284	0	400	1	1	0	686	1635
% App. Total	65.7	33.7	0	0	0.2	0.4		0	0	0	0	0	0	0	0	41.5	58.5	0	0	0		41.4	0	58.3	0.1	0.1	0		
PHF	.969	.918	.000	.000	.250	.250	.937	.000	.000	.000	.000	.000	.000	.000	.000	.779	.757	.000	.000	.000	.903	.947	.000	.917	.250	.250	.000	.963	.976
Passenger Cars	368	190	0	0	0	1	559	0	0	0	0	0	0	0	0	158	223	0	0	0	381	283	0	397	1	1	0	682	1622
% Passenger Cars	98.9	99.5	0	0	0	50.0	98.8	0	0	0	0	0	0	0	0	99.4	99.6	0	0	0	99.5	99.6	0	99.3	100	100	0	99.4	99.2
Heavy Vehicles	4	1	0	0	1	1	7	0	0	0	0	0	0	0	0	1	1	0	0	0	2	1	0	3	0	0	0	4	13
% Heavy Vehicles	1.1	0.5	0	0	100	50.0	1.2	0	0	0	0	0	0	0	0	0.6	0.4	0	0	0	0.5	0.4	0	0.8	0	0	0	0.6	0.8



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TURNING MOVEMENT COUNTS

File Name : INVERRARY BVLD & NW 44 ST - 4L

INVERRARY BVLD & NW 44 ST

Site Code : 01

Start Date : 5/14/2025

Page No : 1

Groups Printed- Passenger Cars - Heavy Vehicles

Start Time	INVERRARY BVLD Southbound							NW 44 ST Westbound							INVERRARY BVLD Northbound							NW 44 ST Eastbound							Int. Total
	Right	Thru	Left	U-Turn	P CNL	B CNL	App. Total	Right	Thru	Left	U-Turn	P CEL	B CEL	App. Total	Right	Thru	Left	U-Turn	P CSL	B CSL	App. Total	Right	Thru	Left	U-Turn	P CWL	B CWL	App. Total	
07:00 AM	15	54	22	0	0	0	91	36	66	13	0	1	0	116	33	90	66	0	1	0	190	25	75	16	0	2	2	120	517
07:15 AM	17	57	29	0	1	0	104	37	97	8	0	1	0	143	42	101	86	0	1	0	230	41	87	14	0	2	4	148	625
07:30 AM	10	75	31	0	2	0	118	41	86	16	0	2	0	145	31	125	70	1	1	0	228	45	81	19	0	3	0	148	639
07:45 AM	12	84	35	1	1	0	133	50	60	21	0	1	0	132	26	109	40	0	0	0	175	44	68	19	0	3	2	136	576
Total	54	270	117	1	4	0	446	164	309	58	0	5	0	536	132	425	262	1	3	0	823	155	311	68	0	10	8	552	2357
08:00 AM	21	91	33	0	0	0	145	36	56	15	0	2	0	109	29	119	47	0	2	4	201	27	64	16	0	4	8	119	574
08:15 AM	28	90	36	0	1	2	157	38	82	21	0	5	2	148	30	120	34	0	0	0	184	30	64	17	0	3	4	118	607
08:30 AM	30	77	23	0	0	0	130	22	64	9	0	1	0	96	29	117	32	0	1	0	179	27	75	15	0	1	2	120	525
08:45 AM	27	90	21	0	1	2	141	29	78	9	0	0	0	116	26	101	31	0	0	0	158	34	83	15	0	1	2	135	550
Total	106	348	113	0	2	4	573	125	280	54	0	8	2	469	114	457	144	0	3	4	722	118	286	63	0	9	16	492	2256
*** BREAK ***																													
04:00 PM	14	100	36	0	0	0	150	34	66	23	0	0	0	123	22	99	33	0	2	2	158	47	68	12	0	0	0	127	558
04:15 PM	21	86	27	0	1	0	135	31	81	27	1	0	0	140	20	105	34	0	0	0	159	26	76	15	0	3	4	124	558
04:30 PM	20	116	29	0	0	0	165	35	81	27	1	1	0	145	25	90	36	1	2	2	156	40	60	17	0	1	2	120	586
04:45 PM	20	112	30	0	0	0	162	32	88	32	0	0	0	152	16	143	41	0	1	2	203	48	64	19	0	1	2	134	651
Total	75	414	122	0	1	0	612	132	316	109	2	1	0	560	83	437	144	1	5	6	676	161	268	63	0	5	8	505	2353
05:00 PM	23	102	39	0	2	2	168	32	92	21	0	1	0	146	38	98	38	0	0	0	174	31	69	10	0	0	0	110	598
05:15 PM	16	87	38	0	2	4	147	41	91	35	0	0	0	167	23	116	39	0	1	2	181	40	86	23	0	1	2	152	647
05:30 PM	22	98	46	0	3	2	171	37	79	26	0	0	0	142	17	116	41	0	0	0	174	35	70	20	0	1	2	128	615
05:45 PM	27	117	41	0	1	0	186	30	101	41	0	4	0	176	30	104	41	0	1	2	178	45	87	20	0	0	0	152	692
Total	88	404	164	0	8	8	672	140	363	123	0	5	0	631	108	434	159	0	2	4	707	151	312	73	0	2	4	542	2552
Grand Total	323	1436	516	1	15	12	2303	561	1268	344	2	19	2	2196	437	1753	709	2	13	14	2928	585	1177	267	0	26	36	2091	9518
Apprch %	14	62.4	22.4	0	0.7	0.5		25.5	57.7	15.7	0.1	0.9	0.1		14.9	59.9	24.2	0.1	0.4	0.5		28	56.3	12.8	0	1.2	1.7		
Total %	3.4	15.1	5.4	0	0.2	0.1	24.2	5.9	13.3	3.6	0	0.2	0	23.1	4.6	18.4	7.4	0	0.1	0.1	30.8	6.1	12.4	2.8	0	0.3	0.4	22	
Passenger Cars	314	1418	506	1	9	6	2254	554	1259	333	2	18	1	2167	401	1734	703	2	6	7	2853	574	1165	262	0	8	18	2027	9301
% Passenger Cars	97.2	98.7	98.1	100	60	50	97.9	98.8	99.3	96.8	100	94.7	50	98.7	91.8	98.9	99.2	100	46.2	50	97.4	98.1	99	98.1	0	30.8	50	96.9	97.7
Heavy Vehicles	9	18	10	0	6	6	49	7	9	11	0	1	1	29	36	19	6	0	7	7	75	11	12	5	0	18	18	64	217
% Heavy Vehicles	2.8	1.3	1.9	0	40	50	2.1	1.2	0.7	3.2	0	5.3	50	1.3	8.2	1.1	0.8	0	53.8	50	2.6	1.9	1	1.9	0	69.2	50	3.1	2.3

P CEL:Pedestrians Crossing East Leg - B CEL:Bicyclists Crossing East Leg

P CNL:Pedestrians Crossing North Leg - B CNL:Bicyclists Crossing North Leg

P CSL:Pedestrians Crossing South Leg - B CSL:Bicyclists Crossing South Leg

P CWL:Pedestrians Crossing West Leg - B CWL:Bicyclists Crossing West Leg

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TURNING MOVEMENT COUNTS

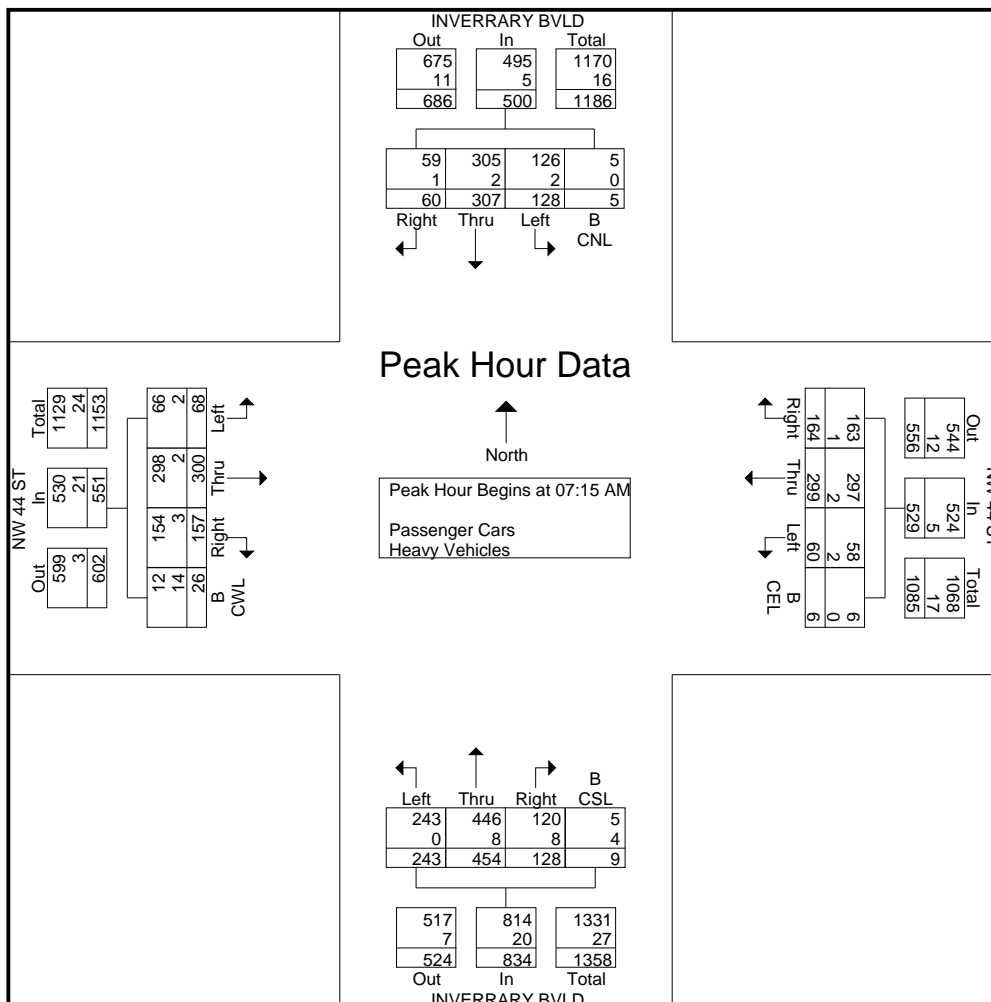
File Name : INVERRARY BVLD & NW 44 ST - 4L
 Site Code : 01
 Start Date : 5/14/2025
 Page No : 4

INVERRARY BVLD & NW 44 ST

Start Time	INVERRARY BVLD Southbound							NW 44 ST Westbound							INVERRARY BVLD Northbound							NW 44 ST Eastbound							Int. Total
	Right	Thru	Left	U-Turn	P CNL	B CNL	App. Total	Right	Thru	Left	U-Turn	P CEL	B CEL	App. Total	Right	Thru	Left	U-Turn	P CSL	B CSL	App. Total	Right	Thru	Left	U-Turn	P CW	B CW	App. Total	
07:15 AM	17	57	29	0	1	0	104	37	97	8	0	1	0	143	42	101	86	0	1	0	230	41	87	14	0	2	4	148	625
07:30 AM	10	75	31	0	2	0	118	41	86	16	0	2	0	145	31	125		1	1	0	228	45	81	19	0	3	0	148	639
07:45 AM	12	84	35	1	1	0	133	50	60	21	0	1	0	132	26	109	40	0	0	0	175	44	68	19	0	3	2	136	576
08:00 AM	21	91	33	0	0	0	145	36	56	15	0	2	0	109	29	119	47	0	2	4	201	27	64	16	0	4	8	119	574
Total Volume	60	307	128	1	4	0	500	164	299	60	0	6	0	529	128	454	243	1	4	4	834	157	300	68	0	12	14	551	2414
% App. Total	12	61.4	25.6	0.2	0.8	0		31	56.5	11.3	0	1.1	0		15.3	54.4	29.1	0.1	0.5	0.5		28.5	54.4	12.3	0	2.2	2.5		
PHF	.714	.843	.914	.250	.500	.000	.862	.820	.771	.714	.000	.750	.000	.912	.762	.908	.706	.250	.500	.250	.907	.872	.862	.895	.000	.750	.438	.931	.944
Passenger Cars	59	305	126	1	4	0	495	163	297	58	0	6	0	524	120	446	243	1	2	2	814	154	298	66	0	5	7	530	2363
% Passenger Cars	98.3	99.3	98.4	100	100	0	99.0	99.4	99.3	96.7	0	100	0	99.1	93.8	98.2	100	100	50.0	50.0	97.6	98.1	99.3	97.1	0	41.7	50.0	96.2	97.9
Heavy Vehicles	1	2	2	0	0	0	5	1	2	2	0	0	0	5	8	8	0	0	2	2	20	3	2	2	0	7	7	21	51
% Heavy Vehicles	1.7	0.7	1.6	0	0	0	1.0	0.6	0.7	3.3	0	0	0	0.9	6.3	1.8	0	0	0	50.0	2.4	1.9	0.7	2.9	0	58.3	50.0	3.8	2.1

Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:15 AM



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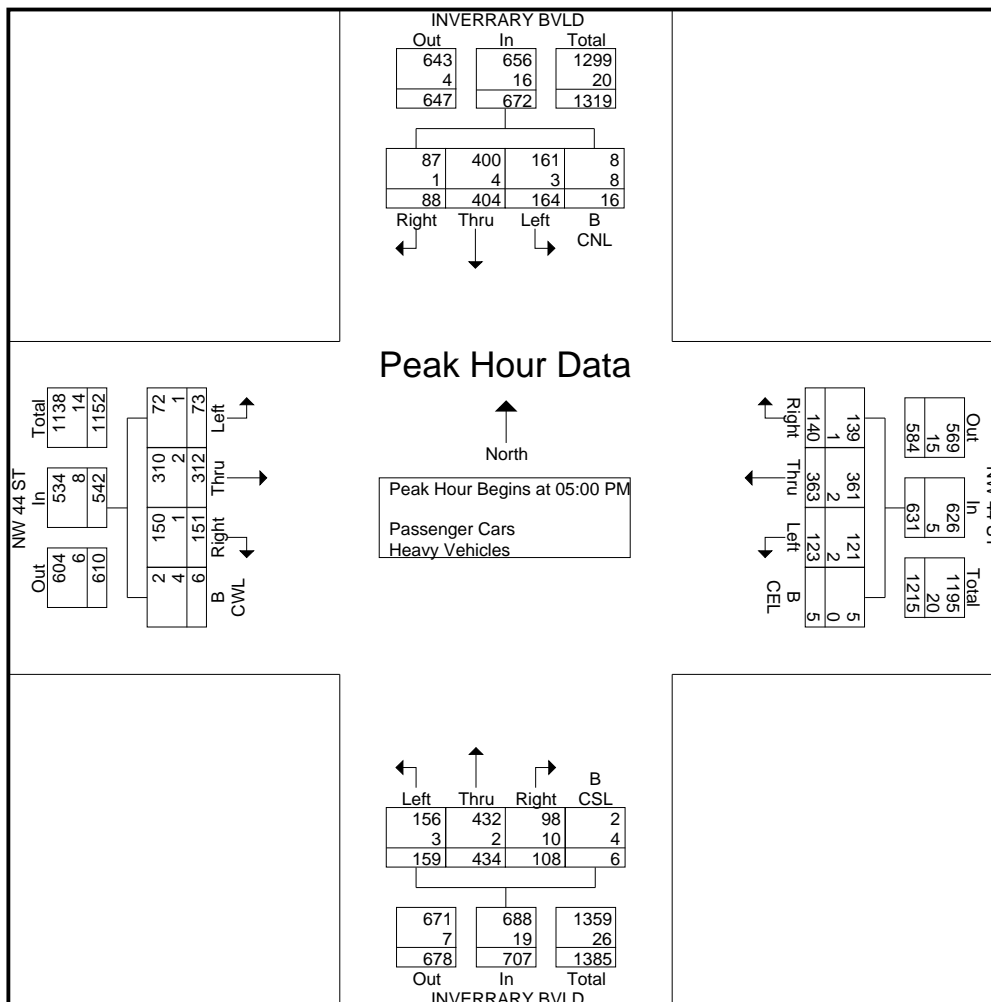
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TURNING MOVEMENT COUNTS

File Name : INVERRARY BVLD & NW 44 ST - 4L
 Site Code : 01
 Start Date : 5/14/2025
 Page No : 8

INVERRARY BVLD & NW 44 ST

Start Time	INVERRARY BVLD Southbound							NW 44 ST Westbound							INVERRARY BVLD Northbound							NW 44 ST Eastbound							Int. Total
	Right	Thru	Left	U-Turn	P CNL	B CNL	App. Total	Right	Thru	Left	U-Turn	P CEL	B CEL	App. Total	Right	Thru	Left	U-Turn	P CSL	B CSL	App. Total	Right	Thru	Left	U-Turn	P CW	B CW	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																													
Peak Hour for Entire Intersection Begins at 05:00 PM																													
05:00 PM	23	102	39	0	2	2	168	32	92	21	0	1	0	146	38	98	38	0	0	0	174	31	69	10	0	0	0	110	598
05:15 PM	16	87	38	0	2	4	147	41	91	35	0	0	0	167	23	116			1	2	181	40	86	23	0	1	2	152	647
05:30 PM	22	98	46	0	3	2	171	37	79	26	0	0	0	142	17	116	41	0	0	0	174	35	70	20	0	1	2	128	615
05:45 PM	27	117					186	30	101	41	0	4	0	176	30	104	41	0	1	2	178	45	87	20	0	0	0	152	692
Total Volume	88	404	164	0	8	8	672	140	363	123	0	5	0	631	108	434	159	0	2	4	707	151	312	73	0	2	4	542	2552
% App. Total	13.1	60.1	24.4	0	1.2	1.2		22.2	57.5	19.5	0	0.8	0		15.3	61.4	22.5	0	0.3	0.6		27.9	57.6	13.5	0	0.4	0.7		
PHF	.815	.863	.891	.000	.667	.500	.903	.854	.899	.750	.000	.313	.000	.896	.711	.935	.970	.000	.500	.500	.977	.839	.897	.793	.000	.500	.500	.891	.922
Passenger Cars	87	400	161	0	4	4	656	139	361	121	0	5	0	626	98	432	156	0	0	2	688	150	310	72	0	0	2	534	2504
% Passenger Cars	98.9	99.0	98.2	0	50.0	50.0	97.6	99.3	99.4	98.4	0	100	0	99.2	90.7	99.5	98.1	0	0	50.0	97.3	99.3	99.4	98.6	0	0	50.0	98.5	98.1
Heavy Vehicles	1	4	3	0	4	4	16	1	2	2	0	0	0	5	10	2	3	0	2	2	19	1	2	1	0	2	2	8	48
% Heavy Vehicles	1.1	1.0	1.8	0	50.0	50.0	2.4	0.7	0.6	1.6	0	0	0	0.8	9.3	0.5	1.9	0	100	50.0	2.7	0.7	0.6	1.4	0	100	50.0	1.5	1.9



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TURNING MOVEMENT COUNTS

NW 44 ST & INVERRARY DR

File Name : NW 44 ST & INVERRARY DR

Site Code : 01

Start Date : 5/14/2025

Page No : 1

Groups Printed- Passenger Cars - Heavy Vehicles

Start Time	Southbound							NW 44 ST Westbound							INVERRARY DR Northbound							NW 44 ST Eastbound							Int. Total	
	Right	Thru	Left	U-Turn	P CNL	B CNL	App. Total	Right	Thru	Left	U-Turn	P CEL	B CEL	App. Total	Right	Thru	Left	U-Turn	P CSL	B CSL	App. Total	Right	Thru	Left	U-Turn	P CW L	B CW L	App. Total		
07:00 AM	0	0	0	0	0	0	0	0	59	14	0	0	0	73	75	0	45	0	0	0	120	5	127	0	0	0	0	0	132	325
07:15 AM	0	0	0	0	0	0	0	0	85	14	0	0	0	99	92	0	50	0	0	0	142	17	153	0	0	0	0	0	170	411
07:30 AM	0	0	0	0	0	0	0	0	88	13	0	0	0	101	58	0	52	0	0	0	110	19	144	0	0	0	0	0	163	374
07:45 AM	0	0	0	0	0	0	0	0	80	18	0	0	0	98	64	0	43	0	6	0	113	21	117	0	0	0	0	0	138	349
Total	0	0	0	0	0	0	0	0	312	59	0	0	0	371	289	0	190	0	6	0	485	62	541	0	0	0	0	0	603	1459
08:00 AM	0	0	0	0	0	0	0	0	68	19	0	0	0	87	56	0	30	0	1	2	89	31	113	0	0	0	0	0	144	320
08:15 AM	0	0	0	0	0	0	0	0	86	18	0	0	0	104	51	0	47	0	1	0	99	26	113	0	0	0	0	0	139	342
08:30 AM	0	0	0	0	0	0	0	0	68	32	0	0	0	100	60	0	27	0	0	0	87	15	114	0	0	0	0	0	129	316
08:45 AM	0	0	0	0	0	0	0	0	66	18	0	0	0	84	46	0	42	0	0	0	88	26	122	0	0	0	0	0	148	320
Total	0	0	0	0	0	0	0	0	288	87	0	0	0	375	213	0	146	0	2	2	363	98	462	0	0	0	0	0	560	1298
*** BREAK ***																														
04:00 PM	0	0	0	0	0	0	0	0	104	34	0	0	0	138	25	0	16	0	1	2	44	31	85	0	0	0	0	0	116	298
04:15 PM	0	0	0	0	0	0	0	0	106	45	0	0	0	151	35	0	28	0	1	2	66	27	96	0	0	0	0	0	123	340
04:30 PM	0	0	0	0	0	0	0	0	124	46	0	0	0	170	24	0	38	0	2	2	66	27	84	0	0	0	0	0	111	347
04:45 PM	0	0	0	0	0	0	0	0	128	45	0	0	0	173	27	0	25	0	2	4	58	35	80	0	0	0	0	0	115	346
Total	0	0	0	0	0	0	0	0	462	170	0	0	0	632	111	0	107	0	6	10	234	120	345	0	0	0	0	0	465	1331
05:00 PM	0	0	0	0	0	0	0	0	124	49	0	0	0	173	32	0	21	0	1	2	56	36	113	0	0	0	0	0	149	378
05:15 PM	0	0	0	0	0	0	0	0	139	42	0	0	0	181	22	0	20	0	0	0	42	47	94	0	0	0	0	0	141	364
05:30 PM	0	0	0	0	0	0	0	0	126	44	0	0	0	170	40	0	38	0	2	2	82	39	91	0	0	0	0	0	130	382
05:45 PM	0	0	0	0	0	0	0	0	129	66	0	0	0	195	25	0	25	0	0	0	50	44	107	0	0	0	0	0	151	396
Total	0	0	0	0	0	0	0	0	518	201	0	0	0	719	119	0	104	0	3	4	230	166	405	0	0	0	0	0	571	1520
Grand Total	0	0	0	0	0	0	0	0	1580	517	0	0	0	2097	732	0	547	0	17	16	1312	446	1753	0	0	0	0	0	2199	5608
Apprch %	0	0	0	0	0	0	0	0	75.3	24.7	0	0	0		55.8	0	41.7	0	1.3	1.2		20.3	79.7	0	0	0	0	0		
Total %	0	0	0	0	0	0	0	0	28.2	9.2	0	0	0	37.4	13.1	0	9.8	0	0.3	0.3	23.4	8	31.3	0	0	0	0	0	39.2	
Passenger Cars	0	0	0	0	0	0	0	0	1562	510	0	0	0	2072	728	0	540	0	9	8	1285	417	1722	0	0	0	0	0	2139	5496
% Passenger Cars	0	0	0	0	0	0	0	0	98.9	98.6	0	0	0	98.8	99.5	0	98.7	0	52.9	50	97.9	93.5	98.2	0	0	0	0	0	97.3	98
Heavy Vehicles	0	0	0	0	0	0	0	0	18	7	0	0	0	25	4	0	7	0	8	8	27	29	31	0	0	0	0	0	60	112
% Heavy Vehicles	0	0	0	0	0	0	0	0	1.1	1.4	0	0	0	1.2	0.5	0	1.3	0	47.1	50	2.1	6.5	1.8	0	0	0	0	0	2.7	2

P CEL:Pedestrians Crossing East Leg - B CEL:Bicyclists Crossing East Leg

P CNL:Pedestrians Crossing North Leg - B CNL:Bicyclists Crossing North Leg

P CSL:Pedestrians Crossing South Leg - B CSL:Bicyclists Crossing South Leg

P CWL:Pedestrians Crossing West Leg - B CWL:Bicyclists Crossing West Leg

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TURNING MOVEMENT COUNTS

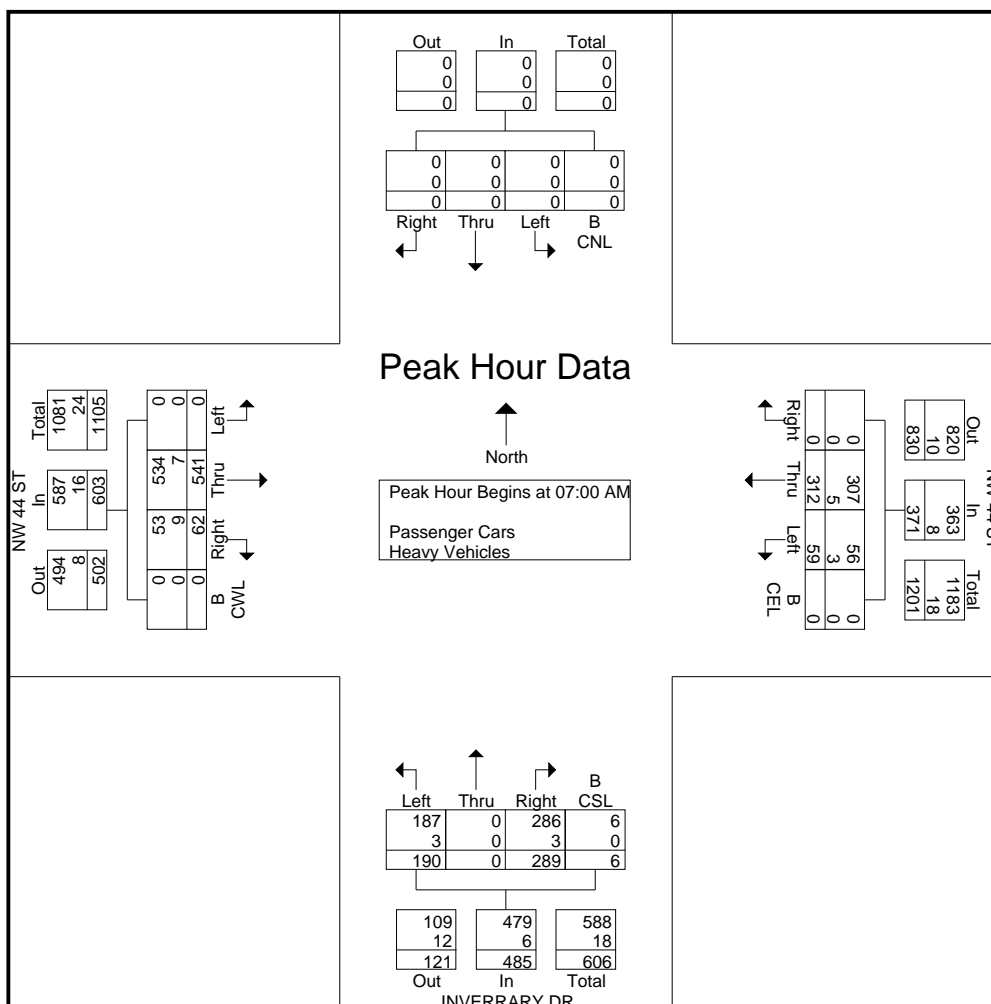
File Name : NW 44 ST & INVERRARY DR
 Site Code : 01
 Start Date : 5/14/2025
 Page No : 4

NW 44 ST & INVERRARY DR

Start Time	Southbound							NW 44 ST Westbound							INVERRARY DR Northbound							NW 44 ST Eastbound							Int. Total
	Right	Thru	Left	U-Turn	P CNL	B CNL	App. Total	Right	Thru	Left	U-Turn	P CEL	B CEL	App. Total	Right	Thru	Left	U-Turn	P CSL	B CSL	App. Total	Right	Thru	Left	U-Turn	P CW	B CW	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	59	14	0	0	0	73	75	0	45	0	0	0	120	5	127	0	0	0	0	132	325
07:15 AM	0	0	0	0	0	0	0	0	85	14	0	0	0	99	92	0	50	0	0	0	142	17	153	0	0	0	0	170	411
07:30 AM	0	0	0	0	0	0	0	0	88	13	0	0	0	101	58	0	52	0	0	0	110	19	144	0	0	0	0	163	374
07:45 AM	0	0	0	0	0	0	0	0	80	18	0	0	0	98	64	0	43	0	0	6	113	21	117	0	0	0	0	138	349
Total Volume	0	0	0	0	0	0	0	0	312	59	0	0	0	371	289	0	190	0	6	0	485	62	541	0	0	0	0	603	1459
% App. Total	0	0	0	0	0	0	0	0	84.1	15.9	0	0	0	0	59.6	0	39.2	0	1.2	0	10.3	89.7	0	0	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.886	.819	.000	.000	.000	.918	.785	.000	.913	.000	.250	.000	.854	.738	.884	.000	.000	.000	.000	.887	.887
Passenger Cars	0	0	0	0	0	0	0	0	307	56	0	0	0	363	286	0	187	0	6	0	479	53	534	0	0	0	0	587	1429
% Passenger Cars	0	0	0	0	0	0	0	0	98.4	94.9	0	0	0	97.8	99.0	0	98.4	0	100	0	98.8	85.5	98.7	0	0	0	0	97.3	97.9
Heavy Vehicles	0	0	0	0	0	0	0	0	5	3	0	0	0	8	3	0	3	0	0	0	6	9	7	0	0	0	0	16	30
% Heavy Vehicles	0	0	0	0	0	0	0	0	1.6	5.1	0	0	0	2.2	1.0	0	1.6	0	0	0	1.2	14.5	1.3	0	0	0	0	2.7	2.1

Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:00 AM



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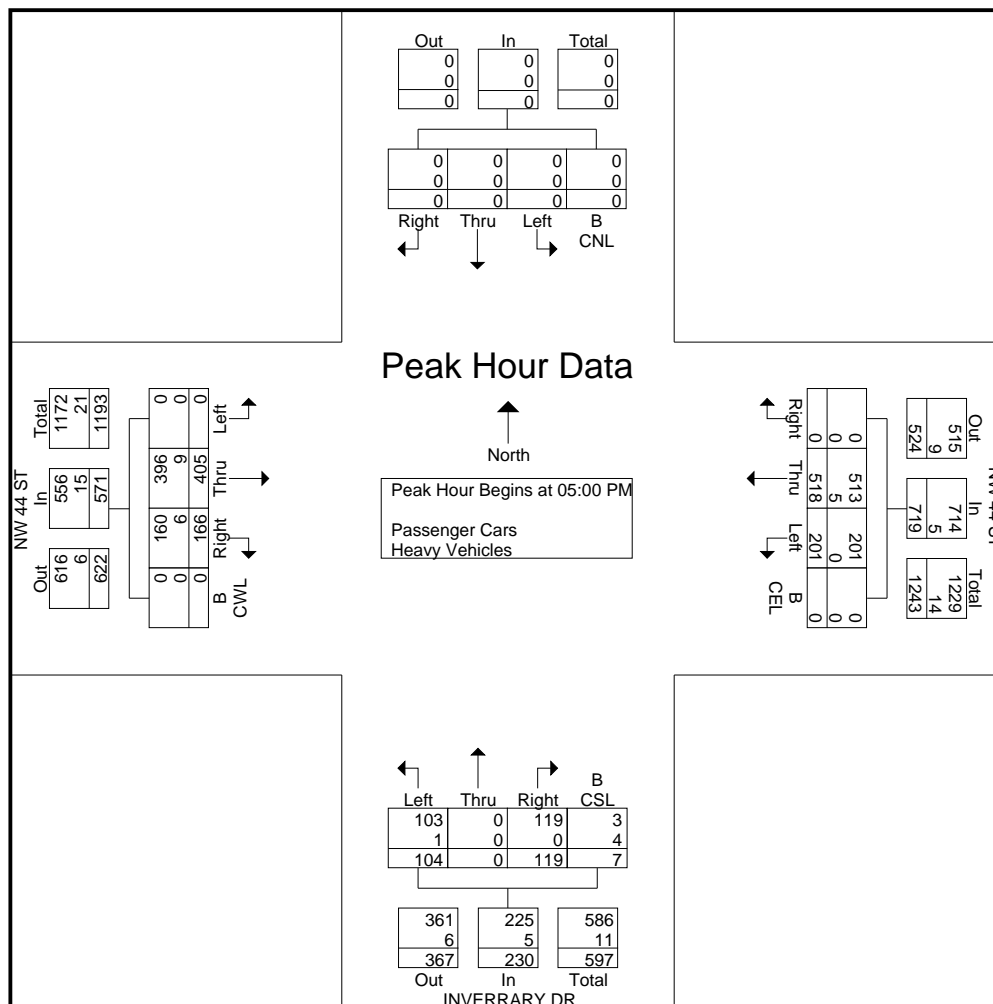
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TURNING MOVEMENT COUNTS

File Name : NW 44 ST & INVERRARY DR
 Site Code : 01
 Start Date : 5/14/2025
 Page No : 8

NW 44 ST & INVERRARY DR

Start Time	Southbound							NW 44 ST Westbound							INVERRARY DR Northbound							NW 44 ST Eastbound							Int. Total
	Right	Thru	Left	U-Turn	P CNL	B CNL	App. Total	Right	Thru	Left	U-Turn	P CEL	B CEL	App. Total	Right	Thru	Left	U-Turn	P CSL	B CSL	App. Total	Right	Thru	Left	U-Turn	P CW	B CW	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																													
Peak Hour for Entire Intersection Begins at 05:00 PM																													
05:00 PM	0	0	0	0	0	0	0	0	124	49	0	0	0	173	32	0	21	0	1	2	56	36	113	0	0	0	0	149	378
05:15 PM	0	0	0	0	0	0	0	0	139	42	0	0	0	181	22	0	20	0	0	0	42	47	94	0	0	0	0	141	364
05:30 PM	0	0	0	0	0	0	0	0	126	44	0	0	0	170	40	0	38	0	2	2	82	39	91	0	0	0	0	130	382
05:45 PM	0	0	0	0	0	0	0	0	129	66	0	0	0	195	25	0	25	0	0	0	50	44	107	0	0	0	0	151	396
Total Volume	0	0	0	0	0	0	0	0	518	201	0	0	0	719	119	0	104	0	3	4	230	166	405	0	0	0	0	571	1520
% App. Total	0	0	0	0	0	0	0	0	72	28	0	0	0	92.2	51.7	0	45.2	0	1.3	1.7	74.4	29.1	70.9	0	0	0	0	97.4	98.4
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.932	.761	.000	.000	.000	.922	.744	.000	.684	.000	.375	.500	.701	.883	.896	.000	.000	.000	.000	.945	.960
Passenger Cars	0	0	0	0	0	0	0	0	513	201	0	0	0	714	119	0	103	0	1	2	225	160	396	0	0	0	0	556	1495
% Passenger Cars	0	0	0	0	0	0	0	0	99.0	100	0	0	0	99.3	100	0	99.0	0	33.3	50.0	97.8	96.4	97.8	0	0	0	0	97.4	98.4
Heavy Vehicles	0	0	0	0	0	0	0	0	5	0	0	0	0	5	0	0	1	0	2	2	5	6	9	0	0	0	0	15	25
% Heavy Vehicles	0	0	0	0	0	0	0	0	1.0	0	0	0	0	0.7	0	0	1.0	0	66.7	50.0	2.2	3.6	2.2	0	0	0	0	2.6	1.6



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TURNING MOVEMENT COUNTS

File Name : ROCK ISLAND RD AT NW 44 ST

ROCK ISLAND RD AT NW 44 ST

Site Code : 01

Start Date : 5/14/2025

Page No : 1

Groups Printed- Passenger Cars - Heavy Vehicles

Start Time	ROCK ISLAND RD Southbound							NW 44 ST Westbound							ROCK ISLAND RD Northbound							NW 44 ST Eastbound							Int. Total
	Right	Thru	Left	U-Turn	P CNL	B CNL	App. Total	Right	Thru	Left	U-Turn	P CEL	B CEL	App. Total	Right	Thru	Left	U-Turn	P CSL	B CSL	App. Total	Right	Thru	Left	U-Turn	P CW L	B CW L	App. Total	
07:00 AM	40	133	0	0	0	0	173	0	0	0	0	0	0	0	0	154	33	0	0	0	187	51	0	151	0	0	0	202	562
07:15 AM	70	147	0	0	0	0	217	0	0	0	0	0	0	0	0	187	27	0	0	0	214	45	0	174	0	0	0	219	650
07:30 AM	62	160	0	0	0	0	222	0	0	0	0	0	0	0	0	233	30	0	0	0	263	44	0	180	0	0	0	224	709
07:45 AM	67	209	0	0	0	0	276	0	0	0	0	0	0	0	0	189	25	0	0	0	214	42	0	145	0	0	0	187	677
Total	239	649	0	0	0	0	888	0	0	0	0	0	0	0	0	763	115	0	0	0	878	182	0	650	0	0	0	832	2598
08:00 AM	67	190	0	0	0	0	257	0	0	0	0	0	0	0	0	214	20	0	0	0	234	44	0	157	0	0	0	201	692
08:15 AM	73	145	0	0	0	0	218	0	0	0	0	0	0	0	0	190	22	0	0	0	212	49	0	147	0	0	0	196	626
08:30 AM	82	167	0	0	0	0	249	0	0	0	0	0	0	0	0	163	18	0	0	0	181	30	0	147	0	0	0	177	607
08:45 AM	61	136	0	0	0	0	197	0	0	0	0	0	0	0	0	170	24	0	0	0	194	40	0	146	0	0	0	186	577
Total	283	638	0	0	0	0	921	0	0	0	0	0	0	0	0	737	84	0	0	0	821	163	0	597	0	0	0	760	2502
*** BREAK ***																													
04:00 PM	106	135	0	0	0	0	241	0	0	0	0	0	0	0	0	168	44	0	0	0	212	23	0	83	0	0	0	106	559
04:15 PM	127	178	0	0	0	0	305	0	0	0	0	0	0	0	0	177	37	0	0	0	214	35	0	96	0	0	0	131	650
04:30 PM	133	158	0	0	0	0	291	0	0	0	0	0	0	0	0	171	47	0	0	0	218	27	0	67	0	0	0	94	603
04:45 PM	127	149	0	0	0	0	276	0	0	0	0	0	0	0	0	181	40	0	0	0	221	25	0	83	0	0	0	108	605
Total	493	620	0	0	0	0	1113	0	0	0	0	0	0	0	0	697	168	0	0	0	865	110	0	329	0	0	0	439	2417
05:00 PM	122	152	0	0	0	0	274	0	0	0	0	0	0	0	0	194	53	0	0	0	247	39	0	104	0	1	2	146	667
05:15 PM	120	170	0	0	0	0	290	0	0	0	0	0	0	0	0	200	67	0	0	0	267	37	0	68	0	0	0	105	662
05:30 PM	124	152	0	0	0	0	276	0	0	0	0	0	0	0	0	206	47	0	0	0	253	29	0	97	0	0	0	126	655
05:45 PM	123	138	0	0	0	0	261	0	0	0	0	0	0	0	0	169	59	0	0	0	228	28	0	97	0	0	0	125	614
Total	489	612	0	0	0	0	1101	0	0	0	0	0	0	0	0	769	226	0	0	0	995	133	0	366	0	1	2	502	2598
Grand Total	1504	2519	0	0	0	0	4023	0	0	0	0	0	0	0	0	2966	593	0	0	0	3559	588	0	1942	0	1	2	2533	10115
Apprch %	37.4	62.6	0	0	0	0		0	0	0	0	0	0	0	0	83.3	16.7	0	0	0		23.2	0	76.7	0	0	0.1		
Total %	14.9	24.9	0	0	0	0	39.8	0	0	0	0	0	0	0	0	29.3	5.9	0	0	0	35.2	5.8	0	19.2	0	0	0	25	
Passenger Cars	1486	2493	0	0	0	0	3979	0	0	0	0	0	0	0	0	2929	586	0	0	0	3515	575	0	1916	0	0	1	2492	9986
% Passenger Cars	98.8	99	0	0	0	0	98.9	0	0	0	0	0	0	0	0	98.8	98.8	0	0	0	98.8	97.8	0	98.7	0	0	50	98.4	98.7
Heavy Vehicles	18	26	0	0	0	0	44	0	0	0	0	0	0	0	0	37	7	0	0	0	44	13	0	26	0	1	1	41	129
% Heavy Vehicles	1.2	1	0	0	0	0	1.1	0	0	0	0	0	0	0	0	1.2	1.2	0	0	0	1.2	2.2	0	1.3	0	100	50	1.6	1.3

P CEL:Pedestrians Crossing East Leg - B CEL:Bicyclists Crossing East Leg

P CNL:Pedestrians Crossing North Leg - B CNL:Bicyclists Crossing North Leg

P CSL:Pedestrians Crossing South Leg - B CSL:Bicyclists Crossing South Leg

P CWL:Pedestrians Crossing West Leg - B CWL:Bicyclists Crossing West Leg

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TURNING MOVEMENT COUNTS

ROCK ISLAND RD AT NW 44 ST

File Name : ROCK ISLAND RD AT NW 44 ST

Site Code : 01

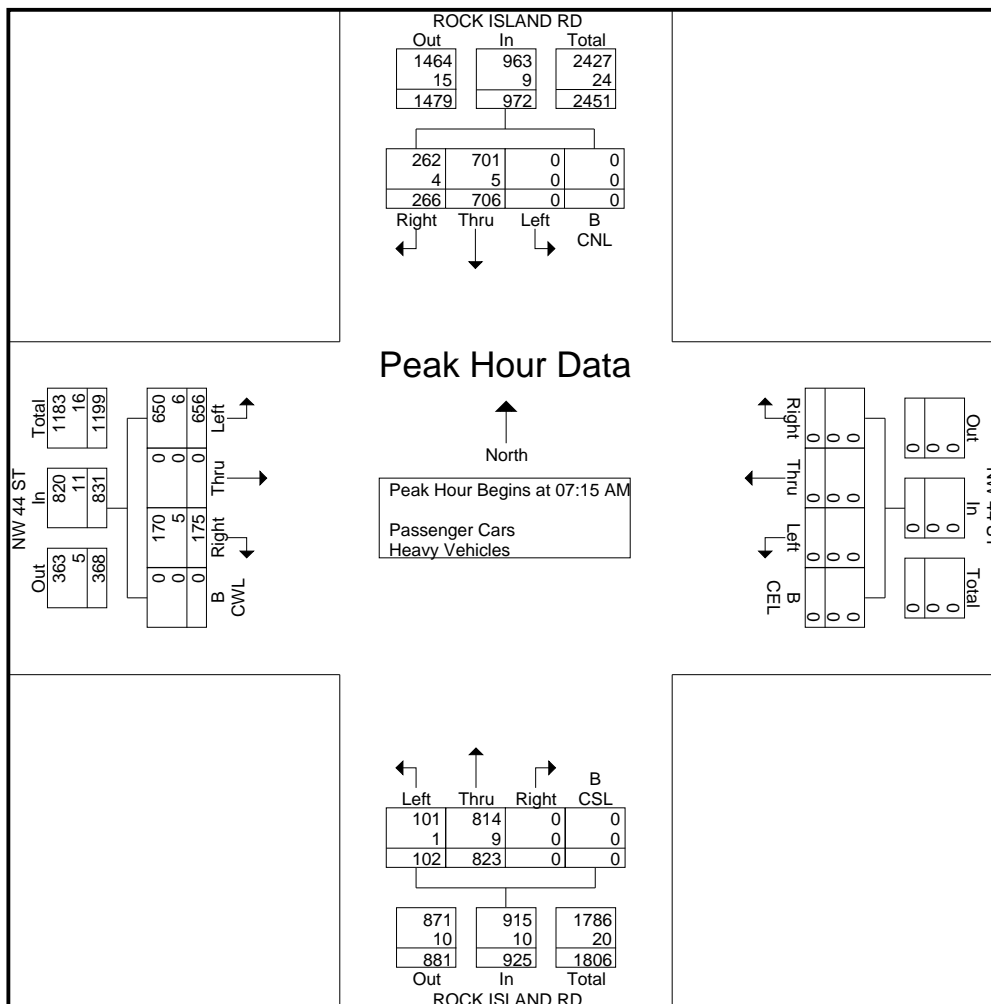
Start Date : 5/14/2025

Page No : 4

Start Time	ROCK ISLAND RD Southbound							NW 44 ST Westbound							ROCK ISLAND RD Northbound							NW 44 ST Eastbound							Int. Total
	Right	Thru	Left	U-Turn	P CNL	B CNL	App. Total	Right	Thru	Left	U-Turn	P CEL	B CEL	App. Total	Right	Thru	Left	U-Turn	P CSL	B CSL	App. Total	Right	Thru	Left	U-Turn	P CW	B CW	App. Total	
07:15 AM	70	147	0	0	0	0	217	0	0	0	0	0	0	0	0	187	27	0	0	0	214	45	0	174	0	0	0	219	650
07:30 AM	62	160	0	0	0	0	222	0	0	0	0	0	0	0	0	233	30	0	0	0	263	44	0	180	0	0	0	224	709
07:45 AM	67	209	0	0	0	0	276	0	0	0	0	0	0	0	0	189	25	0	0	0	214	42	0	145	0	0	0	187	677
08:00 AM	67	190	0	0	0	0	257	0	0	0	0	0	0	0	0	214	20	0	0	0	234	44	0	157	0	0	0	201	692
Total Volume	266	706	0	0	0	0	972	0	0	0	0	0	0	0	0	823	102	0	0	0	925	175	0	656	0	0	0	831	2728
% App. Total	27.4	72.6	0	0	0	0		0	0	0	0	0	0	0	0	89	11	0	0	0		21.1	0	78.9	0	0	0		
PHF	.950	.844	.000	.000	.000	.000	.880	.000	.000	.000	.000	.000	.000	.000	.000	.883	.850	.000	.000	.000	.879	.972	.000	.911	.000	.000	.000	.927	.962
Passenger Cars	262	701	0	0	0	0	963	0	0	0	0	0	0	0	0	814	101	0	0	0	915	170	0	650	0	0	0	820	2698
% Passenger Cars	98.5	99.3	0	0	0	0	99.1	0	0	0	0	0	0	0	0	98.9	99.0	0	0	0	98.9	97.1	0	99.1	0	0	0	98.7	98.9
Heavy Vehicles	4	5	0	0	0	0	9	0	0	0	0	0	0	0	0	9	1	0	0	0	10	5	0	6	0	0	0	11	30
% Heavy Vehicles	1.5	0.7	0	0	0	0	0.9	0	0	0	0	0	0	0	0	1.1	1.0	0	0	0	1.1	2.9	0	0.9	0	0	0	1.3	1.1

Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:15 AM



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TURNING MOVEMENT COUNTS

ROCK ISLAND RD AT NW 44 ST

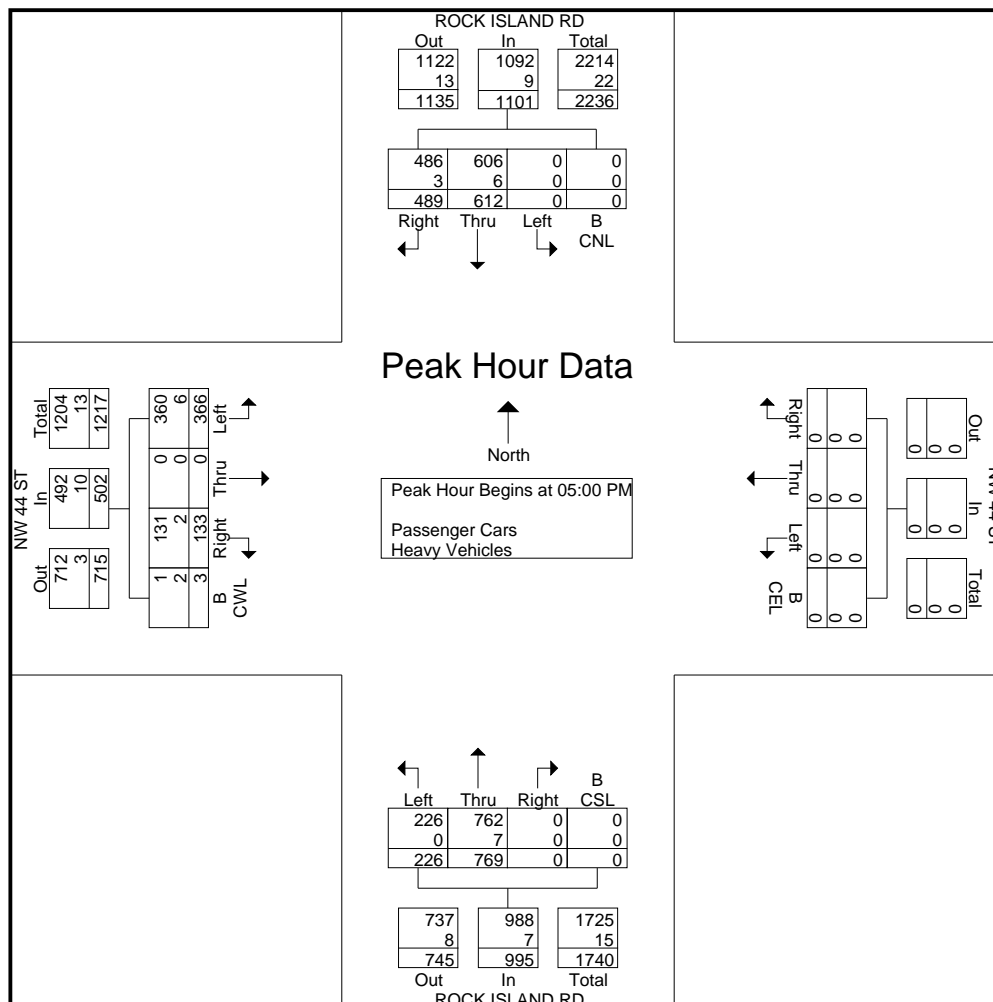
File Name : ROCK ISLAND RD AT NW 44 ST

Site Code : 01

Start Date : 5/14/2025

Page No : 8

Start Time	ROCK ISLAND RD Southbound							NW 44 ST Westbound							ROCK ISLAND RD Northbound							NW 44 ST Eastbound							Int. Total
	Right	Thru	Left	U-Turn	P CNL	B CNL	App. Total	Right	Thru	Left	U-Turn	P CEL	B CEL	App. Total	Right	Thru	Left	U-Turn	P CSL	B CSL	App. Total	Right	Thru	Left	U-Turn	P CW	B CW	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																													
Peak Hour for Entire Intersection Begins at 05:00 PM																													
05:00 PM	122	152	0	0	0	0	274	0	0	0	0	0	0	0	0	194	53	0	0	0	247	39	0	104	0	1	2	146	667
05:15 PM	120	170	0	0	0	0	290	0	0	0	0	0	0	0	0	200	67	0	0	0	267	37	0	68	0	0	0	105	662
05:30 PM	124	152	0	0	0	0	276	0	0	0	0	0	0	0	0	206	0	0	0	0	206	0	0	0	0	0	0	0	0
05:45 PM	123	138	0	0	0	0	261	0	0	0	0	0	0	0	0	169	59	0	0	0	228	28	0	97	0	0	0	125	614
Total Volume	489	612	0	0	0	0	1101	0	0	0	0	0	0	0	0	769	226	0	0	0	995	133	0	366	0	1	2	502	2598
% App. Total	44.4	55.6	0	0	0	0		0	0	0	0	0	0	0	0	77.3	22.7	0	0	0	0	26.5	0	72.9	0	0.2	0.4		
PHF	.986	.900	.000	.000	.000	.000	.949	.000	.000	.000	.000	.000	.000	.000	.000	.933	.843	.000	.000	.000	.932	.853	.000	.880	.000	.250	.250	.860	.974
Passenger Cars	486	606	0	0	0	0	1092	0	0	0	0	0	0	0	0	762	226	0	0	0	988	131	0	360	0	0	1	492	2572
% Passenger Cars	99.4	99.0	0	0	0	0	99.2	0	0	0	0	0	0	0	0	99.1	100	0	0	0	99.3	98.5	0	98.4	0	0	50.0	98.0	99.0
Heavy Vehicles	3	6	0	0	0	0	9	0	0	0	0	0	0	0	0	7	0	0	0	0	7	2	0	6	0	1	1	10	26
% Heavy Vehicles	0.6	1.0	0	0	0	0	0.8	0	0	0	0	0	0	0	0	0.9	0	0	0	0	0.7	1.5	0	1.6	0	100	50.0	2.0	1.0



TURNING MOVEMENT COUNTS

File Name : INVERRARY BLVD & INVERRARY DR - R2
 Site Code : 01
 Start Date : 5/14/2025
 Page No : 1

INVERRARY BLVD & INVERRARY DR

Groups Printed- Passenger Cars - Heavy Vehicles

Start Time	INVERRARY BLVD Southbound							INVERRARY DR Westbound							INVERRARY BLVD Northbound							INVERRARY DR Eastbound							Int. Total	
	Right	Thru	Left	U- Turn	P CW L	B CW L	App. Total	Right	Thru	Left	U- Turn	P CNL	B CNL	App. Total	Right	Thru	Left	U- Turn	P CEL	B CEL	App. Total	Right	Thru	Left	U- Turn	P CSL	B CSL	App. Total		
07:00 AM	0	90	8	0	0	0	98	10	0	65	0	0	1	76	18	111	0	0	0	0	129	0	0	0	0	0	0	0	0	303
07:15 AM	0	98	4	0	0	0	102	16	0	44	0	0	0	60	21	148	0	0	0	0	169	0	0	0	0	0	0	0	0	331
07:30 AM	0	114	5	0	0	0	119	30	0	55	0	0	0	85	27	141	0	0	0	0	168	0	0	0	0	0	0	0	0	372
07:45 AM	0	154	12	0	0	0	166	17	0	65	0	0	0	82	24	116	0	0	0	0	140	0	0	0	0	0	0	0	0	388
Total	0	456	29	0	0	0	485	73	0	229	0	0	1	303	90	516	0	0	0	0	606	0	0	0	0	0	0	0	0	1394
08:00 AM	0	119	13	0	0	0	132	18	0	50	0	1	0	69	22	112	0	0	0	0	134	0	0	0	0	0	0	0	0	335
08:15 AM	0	119	11	0	0	0	130	12	0	50	0	0	0	62	23	144	0	0	0	0	167	0	0	0	0	0	0	0	0	359
08:30 AM	0	103	7	0	0	0	110	16	0	54	0	1	0	71	22	122	0	0	0	0	144	0	0	0	0	0	0	0	0	325
08:45 AM	0	102	11	0	0	0	113	12	0	44	0	1	1	58	26	124	0	0	0	0	150	0	0	0	0	0	0	0	0	321
Total	0	443	42	0	0	0	485	58	0	198	0	3	1	260	93	502	0	0	0	0	595	0	0	0	0	0	0	0	0	1340
*** BREAK ***																														
04:00 PM	0	120	17	0	0	0	137	7	0	33	0	0	0	40	41	126	0	0	0	0	167	0	0	0	0	0	0	0	0	344
04:15 PM	0	117	9	0	0	0	126	13	0	36	0	0	0	49	46	146	0	0	0	0	192	0	0	0	0	0	0	0	0	367
04:30 PM	0	125	10	0	0	0	135	12	0	32	0	0	1	45	44	145	0	0	0	0	189	0	0	0	0	0	0	0	0	369
04:45 PM	0	133	27	0	0	0	160	9	0	30	0	0	2	41	47	152	0	0	0	0	199	0	0	0	0	0	0	0	0	400
Total	0	495	63	0	0	0	558	41	0	131	0	0	3	175	178	569	0	0	0	0	747	0	0	0	0	0	0	0	0	1480
05:00 PM	0	118	15	0	0	0	133	7	0	34	0	0	1	42	51	142	0	0	0	0	193	0	0	0	0	0	0	0	0	368
05:15 PM	0	93	17	0	0	0	110	13	0	34	0	0	0	47	61	165	0	0	0	0	226	0	0	0	0	0	0	0	0	383
05:30 PM	0	100	18	0	0	0	118	9	0	31	0	1	0	41	53	162	0	0	0	0	215	0	0	0	0	0	0	0	0	374
05:45 PM	0	135	14	0	0	0	149	6	0	48	0	0	0	54	40	142	0	0	0	0	182	0	0	0	0	0	0	0	0	385
Total	0	446	64	0	0	0	510	35	0	147	0	1	1	184	205	611	0	0	0	0	816	0	0	0	0	0	0	0	0	1510
Grand Total	0	1840	198	0	0	0	2038	207	0	705	0	4	6	922	566	2198	0	0	0	0	2764	0	0	0	0	0	0	0	0	5724
Apprch %	0	90.3	9.7	0	0	0		22.5	0	76.5	0	0.4	0.7		20.5	79.5	0	0	0	0		0	0	0	0	0	0	0		
Total %	0	32.1	3.5	0	0	0	35.6	3.6	0	12.3	0	0.1	0.1	16.1	9.9	38.4	0	0	0	0	48.3	0	0	0	0	0	0	0	0	
Passenger Cars	0	1804	192	0	0	0	1996	198	0	672	0	4	6	880	557	2155	0	0	0	0	2712	0	0	0	0	0	0	0	0	5588
% Passenger Cars	0	98	97	0	0	0	97.9	95.7	0	95.3	0	100	100	95.4	98.4	98	0	0	0	0	98.1	0	0	0	0	0	0	0	0	97.6
Heavy Vehicles	0	36	6	0	0	0	42	9	0	33	0	0	0	42	9	43	0	0	0	0	52	0	0	0	0	0	0	0	0	136
% Heavy Vehicles	0	2	3	0	0	0	2.1	4.3	0	4.7	0	0	0	4.6	1.6	2	0	0	0	0	1.9	0	0	0	0	0	0	0	0	2.4

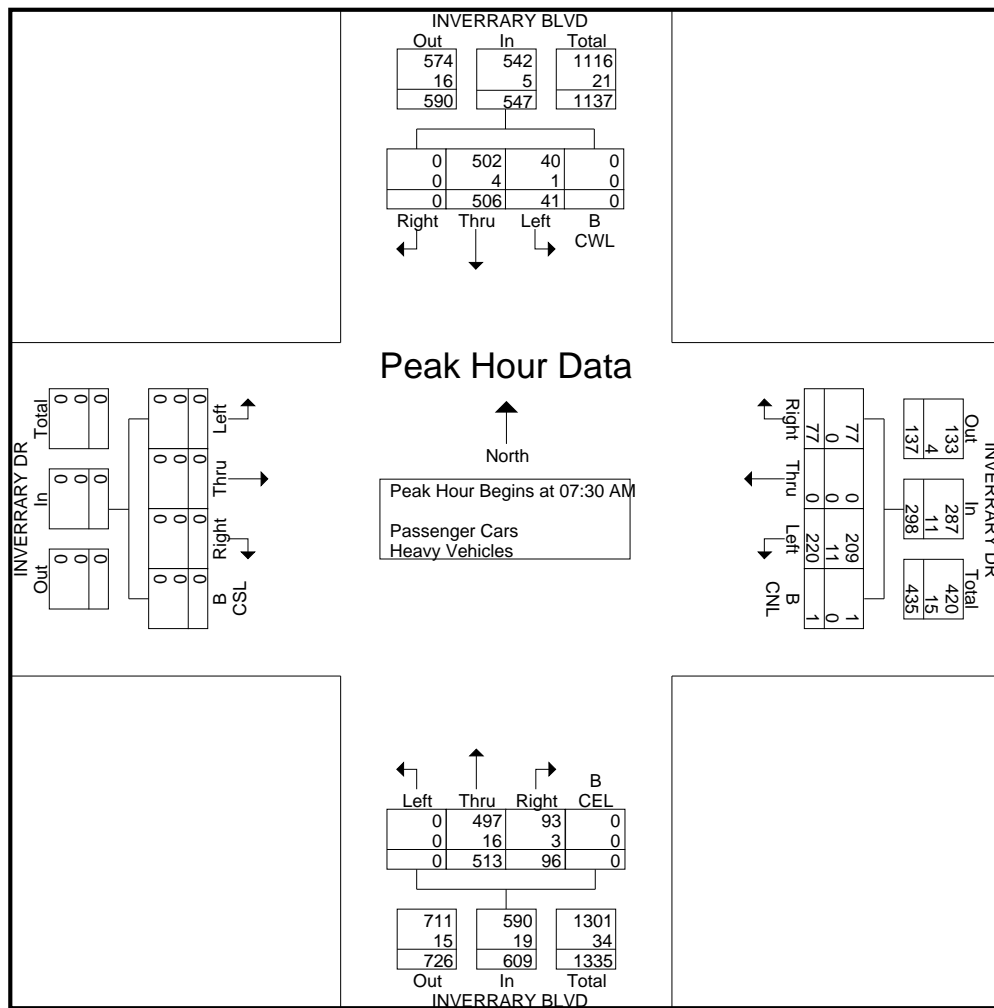
- P CEL:Pedestrians Crossing East Leg - B CEL:Bicyclists Crossing East Leg
- P CNL:Pedestrians Crossing North Leg - B CNL:Bicyclists Crossing North Leg
- P CSL:Pedestrians Crossing South Leg - B CSL:Bicyclists Crossing South Leg
- P CWL:Pedestrians Crossing West Leg - B CWL:Bicyclists Crossing West Leg

TURNING MOVEMENT COUNTS

INVERRARY BLVD & INVERRARY DR

File Name : INVERRARY BLVD & INVERRARY DR - R2
 Site Code : 01
 Start Date : 5/14/2025
 Page No : 4

Start Time	INVERRARY BLVD Southbound							INVERRARY DR Westbound							INVERRARY BLVD Northbound							INVERRARY DR Eastbound							Int. Total		
	Right	Thru	Left	U-Turn	P CW	B CW	App. Total	Right	Thru	Left	U-Turn	P CNL	B CNL	App. Total	Right	Thru	Left	U-Turn	P CEL	B CEL	App. Total	Right	Thru	Left	U-Turn	P CSL	B CSL	App. Total			
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																															
Peak Hour for Entire Intersection Begins at 07:30 AM																															
07:30 AM	0	114	5	0	0	0	119	30	0	55	0	0	0	85	27	141	0	0	0	0	168	0	0	0	0	0	0	0	0	0	372
07:45 AM	0	154					166	17	0	65	0	0	0	82	24	116	0	0	0	0	140	0	0	0	0	0	0	0	0	0	388
08:00 AM	0	119	13	0	0	0	132	18	0	50	0	1	0	69	22	112	0	0	0	0	134	0	0	0	0	0	0	0	0	0	335
08:15 AM	0	119	11	0	0	0	130	12	0	50	0	0	0	62	23	144															
Total Volume	0	506	41	0	0	0	547	77	0	220	0	1	0	298	96	513	0	0	0	0	609	0	0	0	0	0	0	0	0	0	1454
% App. Total	0	92.5	7.5	0	0	0		25.8	0	73.8	0	0.3	0		15.8	84.2	0	0	0	0		0	0	0	0	0	0	0	0	0	
PHF	.000	.821	.788	.000	.000	.000	.824	.642	.000	.846	.000	.250	.000	.876	.889	.891	.000	.000	.000	.000	.906	.000	.000	.000	.000	.000	.000	.000	.000	.000	.937
Passenger Cars	0	502	40	0	0	0	542	77	0	209	0	1	0	287	93	497	0	0	0	0	590	0	0	0	0	0	0	0	0	0	1419
% Passenger Cars	0	99.2	97.6	0	0	0	99.1	100	0	95.0	0	100	0	96.3	96.9	96.9	0	0	0	0	96.9	0	0	0	0	0	0	0	0	0	97.6
Heavy Vehicles	0	4	1	0	0	0	5	0	0	11	0	0	0	11	3	16	0	0	0	0	19	0	0	0	0	0	0	0	0	0	35
% Heavy Vehicles	0	0.8	2.4	0	0	0	0.9	0	0	5.0	0	0	0	3.7	3.1	3.1	0	0	0	0	3.1	0	0	0	0	0	0	0	0	0	2.4

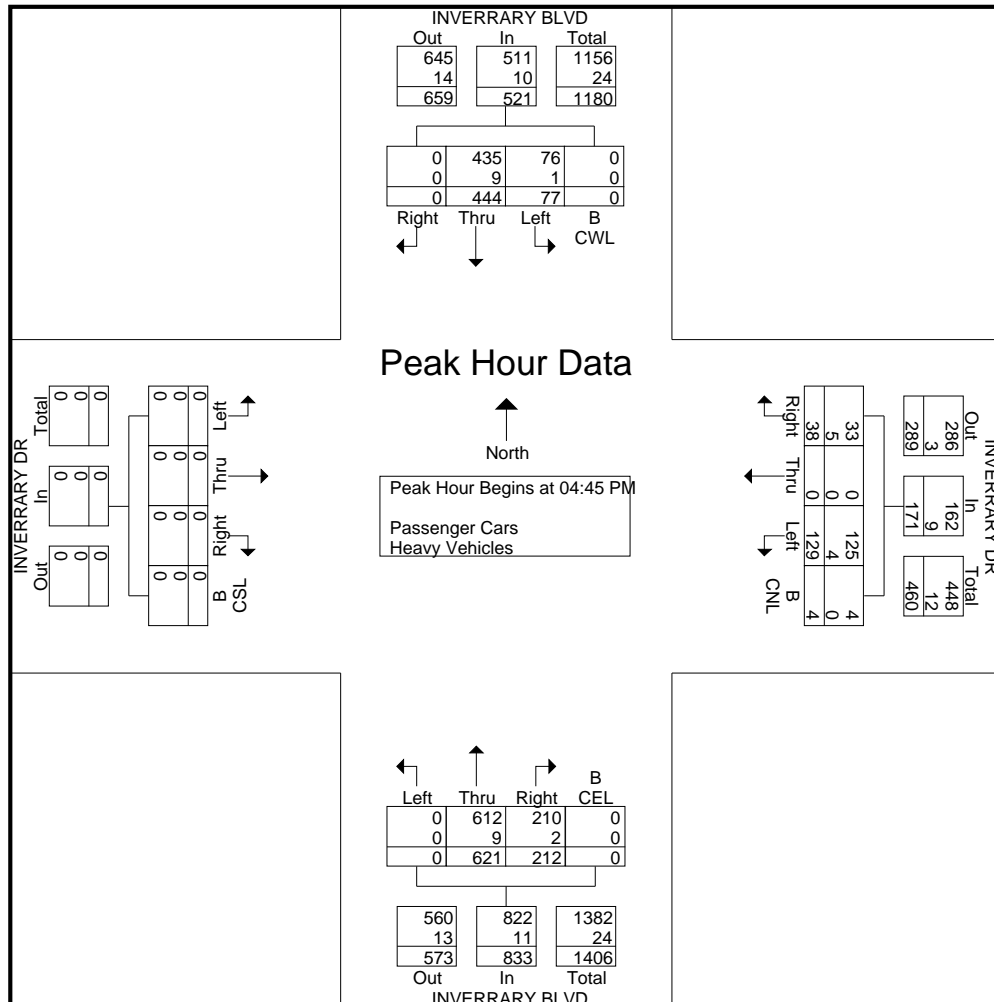


TURNING MOVEMENT COUNTS

File Name : INVERRARY BLVD & INVERRARY DR - R2
 Site Code : 01
 Start Date : 5/14/2025
 Page No : 8

INVERRARY BLVD & INVERRARY DR

Start Time	INVERRARY BLVD Southbound						INVERRARY DR Westbound						INVERRARY BLVD Northbound						INVERRARY DR Eastbound						Int. Total					
	Right	Thru	Left	U-Turn	P CW	B CW	App. Total	Right	Thru	Left	U-Turn	P CNL	B CNL	App. Total	Right	Thru	Left	U-Turn	P CEL	B CEL	App. Total	Right	Thru	Left		U-Turn	P CSL	B CSL	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																														
Peak Hour for Entire Intersection Begins at 04:45 PM																														
04:45 PM	0	133	27	0	0	0	160	9	0	30	0	0	2	41	47	152	0	0	0	0	199	0	0	0	0	0	0	0	0	400
05:00 PM	0	118	15	0	0	0	133	7	0	34	0	0	1	42	51	142	0	0	0	0	193	0	0	0	0	0	0	0	0	368
05:15 PM	0	93	17	0	0	0	110	13	0	34	0	0	0	47	61	165	0	0	0	0	226	0	0	0	0	0	0	0	0	383
05:30 PM	0	100	18	0	0	0	118	9	0	31	0	1	0	41	53	162	0	0	0	0	215	0	0	0	0	0	0	0	0	374
Total Volume	0	444	77	0	0	0	521	38	0	129	0	1	3	171	212	621	0	0	0	0	833	0	0	0	0	0	0	0	0	1525
% App. Total	0	85.2	14.8	0	0	0		22.2	0	75.4	0	0.6	1.8		25.5	74.5	0	0	0	0		0	0	0	0	0	0	0	0	
PHF	.000	.835	.713	.000	.000	.000	.814	.731	.000	.949	.000	.250	.375	.910	.869	.941	.000	.000	.000	.921	.000	.000	.000	.000	.000	.000	.000	.000	.953	
Passenger Cars	0	435	76	0	0	0	511	33	0	125	0	1	3	162	210	612	0	0	0	0	822	0	0	0	0	0	0	0	0	1495
% Passenger Cars	0	98.0	98.7	0	0	0	98.1	86.8	0	96.9	0	100	100	94.7	99.1	98.6	0	0	0	0	98.7	0	0	0	0	0	0	0	0	98.0
Heavy Vehicles	0	9	1	0	0	0	10	5	0	4	0	0	0	9	2	9	0	0	0	0	11	0	0	0	0	0	0	0	0	30
% Heavy Vehicles	0	2.0	1.3	0	0	0	1.9	13.2	0	3.1	0	0	0	5.3	0.9	1.4	0	0	0	0	1.3	0	0	0	0	0	0	0	0	2.0



Nationwide Traffic Data, LLC

Intersection Turning Movement Count

Location: Spanish Moss Terrace & Inverrary Blvd
City: Lauderhill
Control: Signalized

Project ID: 25-570112-001
Date: 10/15/2025

Data - Total

NS/EW Streets:	Spanish Moss Terrace				Spanish Moss Terrace				Inverrary Blvd				Inverrary Blvd				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	19	0	25	0	0	0	0	0	0	147	5	0	3	97	0	0	296
7:15 AM	15	0	32	0	0	0	0	0	0	159	5	0	3	142	0	0	356
7:30 AM	21	0	21	0	0	0	0	0	0	189	8	0	6	155	0	0	400
7:45 AM	14	0	15	0	0	0	0	0	0	164	12	0	7	166	0	0	378
8:00 AM	8	0	21	0	0	0	0	0	0	190	6	0	7	132	0	0	364
8:15 AM	14	0	16	0	0	0	0	0	0	174	5	0	11	129	0	0	349
8:30 AM	13	0	17	0	0	0	0	0	0	195	5	0	10	125	0	0	365
8:45 AM	11	0	12	0	0	0	0	0	0	140	7	0	7	138	0	0	315
TOTAL VOLUMES :	115	0	159	0	0	0	0	0	0	1358	53	0	54	1084	0	0	2823
APPROACH %'s :	41.97%	0.00%	58.03%	0.00%					0.00%	96.24%	3.76%	0.00%	4.75%	95.25%	0.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM									702	31	0	23	595	0	0	1498
PEAK HR VOL :	58	0	89	0	0	0	0	0	0	0.924	0.646	0.000	0.821	0.896	0.000	0.000	0.936
PEAK HR FACTOR :	0.690	0.000	0.695	0.000	0.000	0.000	0.000	0.000	0.000	0.930		0.000	0.821	0.896	0.000	0.000	0.936
			0.782								0.930				0.893		
PM	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	6	0	11	0	0	0	0	0	0	151	11	0	25	173	0	0	377
4:15 PM	17	0	12	0	0	0	0	0	0	136	22	0	19	155	0	0	361
4:30 PM	13	0	12	0	0	0	0	0	0	119	11	0	23	171	0	0	349
4:45 PM	10	0	11	0	0	0	0	0	0	125	12	0	14	179	0	0	351
5:00 PM	11	0	23	0	0	0	0	0	0	132	20	0	31	199	0	0	416
5:15 PM	12	0	15	1	0	0	0	0	0	143	16	0	30	182	0	0	399
5:30 PM	14	0	22	0	0	0	0	0	0	150	11	0	23	195	0	0	415
5:45 PM	9	0	14	1	0	0	0	0	0	165	19	0	23	229	0	1	461
TOTAL VOLUMES :	92	0	120	2	0	0	0	0	0	1121	122	0	188	1483	0	1	3129
APPROACH %'s :	42.99%	0.00%	56.07%	0.93%					0.00%	90.19%	9.81%	0.00%	11.24%	88.70%	0.00%	0.06%	
PEAK HR :	05:00 PM - 06:00 PM									590	66	0	107	805	0	1	1691
PEAK HR VOL :	46	0	74	2	0	0	0	0	0	0.894	0.825	0.000	0.863	0.879	0.000	0.250	0.917
PEAK HR FACTOR :	0.821	0.000	0.804	0.500	0.000	0.000	0.000	0.000	0.000	0.891		0.000	0.863	0.879	0.000	0.250	0.917
			0.847								0.891				0.902		

CHP Consulting Engineers Inc

9594 NW 41st Street, Suite 201 - Doral, Florida 33178
 t: (305)592-1070, 201 / f: (305)592-1078 / c: (305)542-7866

TURNING MOVEMENT COUNTS

INVERRARY BLVD & OAKLAND PARK

File Name : INVERRARY BLVD & OAKLAND PARK

Site Code : 01

Start Date : 5/14/2025

Page No : 1

Groups Printed- Passenger Cars - Heavy Vehicles

Start Time	INVERRARY BLVD Southbound							OAKLAND PARK Westbound							INVERRARY BLVD Northbound							OAKLAND PARK Eastbound							Int. Total
	Right	Thru	Left	U- Turn	P CNL	B CNL	App. Total	Right	Thru	Left	U- Turn	P CEL	B CEL	App. Total	Right	Thru	Left	U- Turn	P CSL	B CSL	App. Total	Right	Thru	Left	U- Turn	P CW	B CW	App. Total	
07:00 AM	103	44	57	1	1	0	206	17	329	5	0	2	0	353	20	42	97	0	2	0	161	57	224	36	0	0	0	317	1037
07:15 AM	115	66	35	2	1	0	219	32	367	13	4	3	0	419	43	52	74	1	2	0	172	79	342	53	0	3	0	477	1287
07:30 AM	113	58	43	0	1	0	215	37	402	17	1	2	0	459	43	57	92	0	1	2	195	90	350	48	2	3	0	493	1362
07:45 AM	81	41	40	1	6	0	169	43	403	15	2	4	0	467	43	71	100	0	5	2	221	71	348	52	0	5	6	482	1339
Total	412	209	175	4	9	0	809	129	1501	50	7	11	0	1698	149	222	363	1	10	4	749	297	1264	189	2	11	6	1769	5025
08:00 AM	87	49	45	3	1	0	185	31	394	23	1	5	0	454	28	71	72	0	6	6	183	87	275	43	1	3	2	411	1233
08:15 AM	98	69	42	1	1	0	211	42	348	16	3	3	0	412	29	72	74	0	7	2	184	53	344	53	0	3	0	453	1260
08:30 AM	100	68	50	0	5	0	223	36	350	30	3	3	0	422	48	60	71	0	5	0	184	59	311	53	1	2	0	426	1255
08:45 AM	86	55	54	1	2	0	198	45	332	28	2	4	0	411	29	69	59	0	4	2	163	63	320	57	1	2	0	443	1215
Total	371	241	191	5	9	0	817	154	1424	97	9	15	0	1699	134	272	276	0	22	10	714	262	1250	206	3	10	2	1733	4963
*** BREAK ***																													
04:00 PM	65	67	47	0	1	0	180	64	324	33	3	1	2	427	31	50	56	0	2	0	139	73	344	73	0	5	0	495	1241
04:15 PM	78	95	40	1	5	0	219	58	286	34	4	7	0	389	42	51	48	0	6	2	149	82	383	79	3	4	0	551	1308
04:30 PM	85	79	46	0	5	2	217	63	370	45	7	4	0	489	29	70	57	0	0	0	156	91	341	70	0	8	6	516	1378
04:45 PM	77	89	45	2	8	0	221	50	327	46	4	4	0	431	29	59	61	0	3	0	152	84	402	102	0	4	4	596	1400
Total	305	330	178	3	19	2	837	235	1307	158	18	16	2	1736	131	230	222	0	11	2	596	330	1470	324	3	21	10	2158	5327
05:00 PM	83	85	55	2	2	0	227	78	361	34	10	3	0	486	36	58	49	0	4	0	147	82	412	85	2	0	0	581	1441
05:15 PM	88	87	59	0	4	4	242	65	366	42	8	3	2	486	44	46	63	0	8	2	163	103	392	91	3	0	0	589	1480
05:30 PM	120	85	56	0	5	0	266	54	352	49	5	7	0	467	36	46	51	0	3	2	138	88	398	71	0	3	2	562	1433
05:45 PM	84	87	53	0	2	0	226	65	332	51	3	6	4	461	34	61	66	0	5	2	168	83	403	81	7	3	2	579	1434
Total	375	344	223	2	13	4	961	262	1411	176	26	19	6	1900	150	211	229	0	20	6	616	356	1605	328	12	6	4	2311	5788
Grand Total	1463	1124	767	14	50	6	3424	780	5643	481	60	61	8	7033	564	935	1090	1	63	22	2675	1245	5589	1047	20	48	22	7971	21103
Apprch %	42.7	32.8	22.4	0.4	1.5	0.2		11.1	80.2	6.8	0.9	0.9	0.1		21.1	35	40.7	0	2.4	0.8		15.6	70.1	13.1	0.3	0.6	0.3		
Total %	6.9	5.3	3.6	0.1	0.2	0	16.2	3.7	26.7	2.3	0.3	0.3	0	33.3	2.7	4.4	5.2	0	0.3	0.1	12.7	5.9	26.5	5	0.1	0.2	0.1	37.8	
Passenger Cars	1441	1098	758	14	47	3	3361	767	5544	469	60	57	4	6901	550	907	1058	1	52	11	2579	1223	5480	1029	20	37	11	7800	20641
% Passenger Cars	98.5	97.7	98.8	100	94	50	98.2	98.3	98.2	97.5	100	93.4	50	98.1	97.5	97	97.1	100	82.5	50	96.4	98.2	98	98.3	100	77.1	50	97.9	97.8
Heavy Vehicles	22	26	9	0	3	3	63	13	99	12	0	4	4	132	14	28	32	0	11	11	96	22	109	18	0	11	11	171	462
% Heavy Vehicles	1.5	2.3	1.2	0	6	50	1.8	1.7	1.8	2.5	0	6.6	50	1.9	2.5	3	2.9	0	17.5	50	3.6	1.8	2	1.7	0	22.9	50	2.1	2.2

P CEL:Pedestrians Crossing East Leg - B CEL:Bicyclists Crossing East Leg

P CNL:Pedestrians Crossing North Leg - B CNL:Bicyclists Crossing North Leg

P CSL:Pedestrians Crossing South Leg - B CSL:Bicyclists Crossing South Leg

P CWL:Pedestrians Crossing West Leg - B CWL:Bicyclists Crossing West Leg

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TURNING MOVEMENT COUNTS

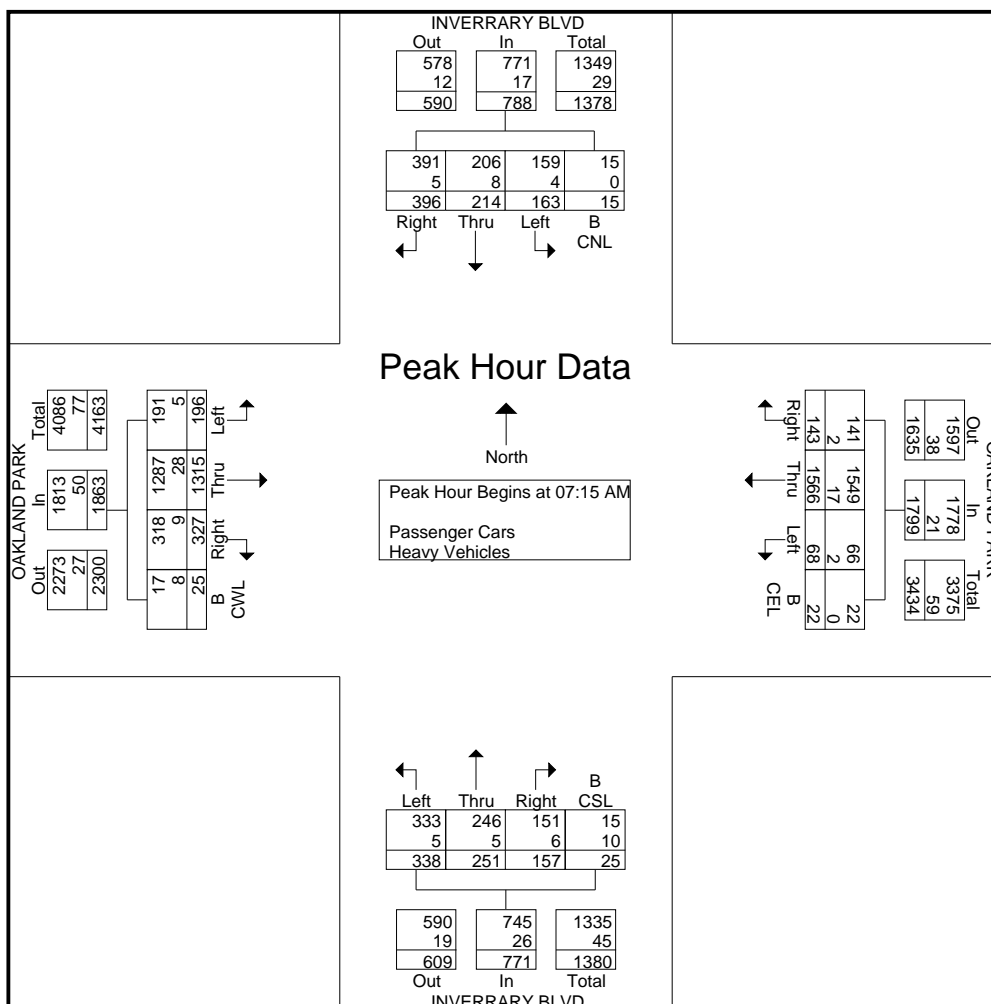
INVERRARY BLVD & OAKLAND PARK

File Name : INVERRARY BLVD & OAKLAND PARK
 Site Code : 01
 Start Date : 5/14/2025
 Page No : 4

Start Time	INVERRARY BLVD Southbound							OAKLAND PARK Westbound							INVERRARY BLVD Northbound							OAKLAND PARK Eastbound							Int. Total
	Right	Thru	Left	U-Turn	P CNL	B CNL	App. Total	Right	Thru	Left	U-Turn	P CEL	B CEL	App. Total	Right	Thru	Left	U-Turn	P CSL	B CSL	App. Total	Right	Thru	Left	U-Turn	P CW	B CW	App. Total	
07:15 AM	115	66	35	2	1	0	219	32	367	13	4	3	0	419	43	52	74	1	2	0	172	79	342	53	0	3	0	477	1287
07:30 AM	113	58	43	0	1	0	215	37	402	17	1	2	0	459	43	57	92	0	1	2	195	90	350	2	2	3	0	493	1362
07:45 AM	81	41	40	1	6	0	169	43	403					467	43	71	100				221	71	348	52	0	5	6	482	1339
08:00 AM	87	49	45	3	1	0	185	31	394	23	1	5	0	454	28	71	72	0	6	6	183	87	275	43	1	3	2	411	1233
Total Volume	396	214	163	6	9	0	788	143	1566	68	8	14	0	1799	157	251	338	1	14	10	771	327	1315	196	3	14	8	1863	5221
% App. Total	50.3	27.2	20.7	0.8	1.1	0		7.9	87	3.8	0.4	0.8	0		20.4	32.6	43.8	0.1	1.8	1.3		17.6	70.6	10.5	0.2	0.8	0.4		
PHF	.861	.811	.906	.500	.375	.000	.900	.831	.971	.739	.500	.700	.000	.963	.913	.884	.845	.250	.583	.417	.872	.908	.939	.925	.375	.700	.333	.945	.958
Passenger Cars	391	206	159	6	9	0	771	141	1549	66	8	14	0	1778	151	246	333	1	9	5	745	318	1287	191	3	10	4	1813	5107
% Passenger Cars	98.7	96.3	97.5	100	100	0	97.8	98.6	98.9	97.1	100	100	0	98.8	96.2	98.0	98.5	100	64.3	50.0	96.6	97.2	97.9	97.4	100	71.4	50.0	97.3	97.8
Heavy Vehicles	5	8	4	0	0	0	17	2	17	2	0	0	0	21	6	5	5	0	5	5	26	9	28	5	0	4	4	50	114
% Heavy Vehicles	1.3	3.7	2.5	0	0	0	2.2	1.4	1.1	2.9	0	0	0	1.2	3.8	2.0	1.5	0	35.7	50.0	3.4	2.8	2.1	2.6	0	28.6	50.0	2.7	2.2

Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:15 AM



CHP Consulting Engineers Inc

9594 NW 41st Street, Suite 201 - Doral, Florida 33178
 t: (305)592-1070, 201 / f: (305)592-1078 / c: (305)542-7866

TURNING MOVEMENT COUNTS

File Name : INVERRARY BLVD & OAKLAND PARK

INVERRARY BLVD & OAKLAND PARK

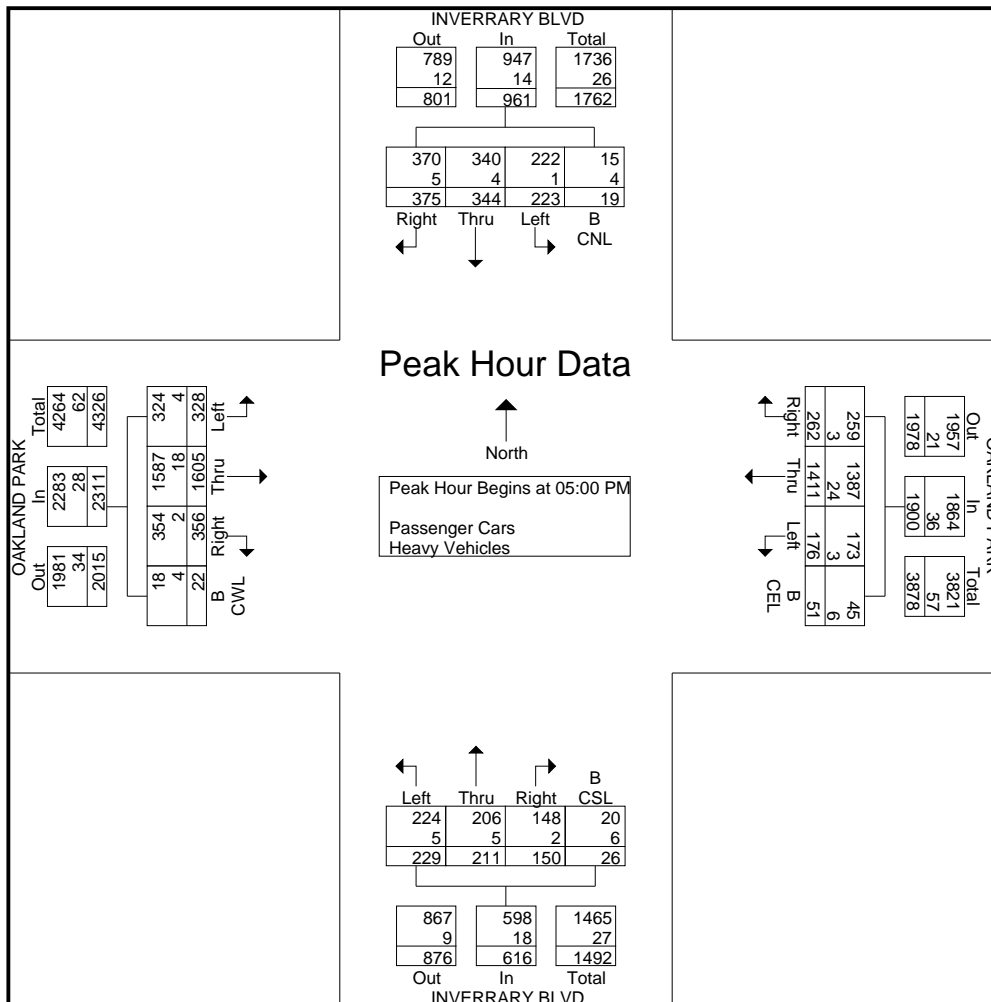
Site Code : 01

Start Date : 5/14/2025

Page No : 8

Start Time	INVERRARY BLVD Southbound							OAKLAND PARK Westbound							INVERRARY BLVD Northbound							OAKLAND PARK Eastbound							Int. Total
	Right	Thru	Left	U-Turn	P CNL	B CNL	App. Total	Right	Thru	Left	U-Turn	P CEL	B CEL	App. Total	Right	Thru	Left	U-Turn	P CSL	B CSL	App. Total	Right	Thru	Left	U-Turn	P CW	B CW	App. Total	
05:00 PM	83	85	55	2	2	0	227	78	361	34	10	3	0	486	36	58	49	0	4	0	147	82	412	85	2	0	0	581	1441
05:15 PM	88	87	59	0	4	4	242	65	366	42	8	3	2	486	44	46	63	0	8	2	163	103	392	91	3	0	0	589	1480
05:30 PM	120				5	0	266	54	352	49	5	7	0	467	36	46	51	0	3	2	138	88	398	71	0	3	2	562	1433
05:45 PM	84	87	53	0	2	0	226	65	332	51	3	6	4	461	34	61	66	0	5	2	168	83	403	81	7	3	2	579	1434
Total Volume	375	344	223	2	13	4	961	262	1411	176	26	19	6	1900	150	211	229	0	20	6	616	356	1605	328	12	6	4	2311	5788
% App. Total	39	35.8	23.2	0.2	1.4	0.4		13.8	74.3	9.3	1.4	1	0.3		24.4	34.3	37.2	0	3.2	1		15.4	69.5	14.2	0.5	0.3	0.2		
PHF	.781	.989	.945	.250	.650	.250	.903	.840	.964	.863	.650	.679	.375	.977	.852	.865	.867	.000	.625	.750	.917	.864	.974	.901	.429	.500	.500	.981	.978
Passenger Cars	370	340	222	2	11	2	947	259	1387	173	26	16	3	1864	148	206	224	0	17	3	598	354	1587	324	12	4	2	2283	5692
% Passenger Cars	98.7	98.8	99.6	100	84.6	50.0	98.5	98.9	98.3	98.3	100	84.2	50.0	98.1	98.7	97.6	97.8	0	85.0	50.0	97.1	99.4	98.9	98.8	100	66.7	50.0	98.8	98.3
Heavy Vehicles	5	4	1	0	2	2	14	3	24	3	0	3	3	36	2	5	5	0	3	3	18	2	18	4	0	2	2	28	96
% Heavy Vehicles	1.3	1.2	0.4	0	15.4	50.0	1.5	1.1	1.7	1.7	0	15.8	50.0	1.9	1.3	2.4	2.2	0	15.0	50.0	2.9	0.6	1.1	1.2	0	33.3	50.0	1.2	1.7

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 05:00 PM



2024 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
 CATEGORY: 8630 WEST-W OF US441

WEEK	DATES	SF	MOCF: 0.98 PSCF
1	01/01/2024 - 01/06/2024	1.05	1.07
2	01/07/2024 - 01/13/2024	1.04	1.06
3	01/14/2024 - 01/20/2024	1.02	1.04
4	01/21/2024 - 01/27/2024	1.00	1.02
5	01/28/2024 - 02/03/2024	0.99	1.01
6	02/04/2024 - 02/10/2024	0.98	1.00
* 7	02/11/2024 - 02/17/2024	0.97	0.99
* 8	02/18/2024 - 02/24/2024	0.97	0.99
* 9	02/25/2024 - 03/02/2024	0.97	0.99
*10	03/03/2024 - 03/09/2024	0.97	0.99
*11	03/10/2024 - 03/16/2024	0.97	0.99
*12	03/17/2024 - 03/23/2024	0.97	0.99
*13	03/24/2024 - 03/30/2024	0.98	1.00
*14	03/31/2024 - 04/06/2024	0.98	1.00
*15	04/07/2024 - 04/13/2024	0.99	1.01
*16	04/14/2024 - 04/20/2024	0.99	1.01
*17	04/21/2024 - 04/27/2024	0.99	1.01
*18	04/28/2024 - 05/04/2024	0.98	1.00
*19	05/05/2024 - 05/11/2024	0.98	1.00
20	05/12/2024 - 05/18/2024	0.98	1.00
21	05/19/2024 - 05/25/2024	0.99	1.01
22	05/26/2024 - 06/01/2024	1.00	1.02
23	06/02/2024 - 06/08/2024	1.01	1.03
24	06/09/2024 - 06/15/2024	1.03	1.05
25	06/16/2024 - 06/22/2024	1.03	1.05
26	06/23/2024 - 06/29/2024	1.04	1.06
27	06/30/2024 - 07/06/2024	1.04	1.06
28	07/07/2024 - 07/13/2024	1.05	1.07
29	07/14/2024 - 07/20/2024	1.05	1.07
30	07/21/2024 - 07/27/2024	1.04	1.06
31	07/28/2024 - 08/03/2024	1.03	1.05
32	08/04/2024 - 08/10/2024	1.01	1.03
33	08/11/2024 - 08/17/2024	1.00	1.02
34	08/18/2024 - 08/24/2024	1.00	1.02
35	08/25/2024 - 08/31/2024	1.00	1.02
36	09/01/2024 - 09/07/2024	1.00	1.02
37	09/08/2024 - 09/14/2024	1.00	1.02
38	09/15/2024 - 09/21/2024	1.00	1.02
39	09/22/2024 - 09/28/2024	1.00	1.02
40	09/29/2024 - 10/05/2024	1.00	1.02
41	10/06/2024 - 10/12/2024	1.00	1.02
42	10/13/2024 - 10/19/2024	1.00	1.02
43	10/20/2024 - 10/26/2024	1.00	1.02
44	10/27/2024 - 11/02/2024	1.00	1.02
45	11/03/2024 - 11/09/2024	1.00	1.02
46	11/10/2024 - 11/16/2024	1.00	1.02
47	11/17/2024 - 11/23/2024	1.01	1.03
48	11/24/2024 - 11/30/2024	1.02	1.04
49	12/01/2024 - 12/07/2024	1.03	1.05
50	12/08/2024 - 12/14/2024	1.04	1.06
51	12/15/2024 - 12/21/2024	1.05	1.07
52	12/22/2024 - 12/28/2024	1.04	1.06
53	12/29/2024 - 12/31/2024	1.02	1.04

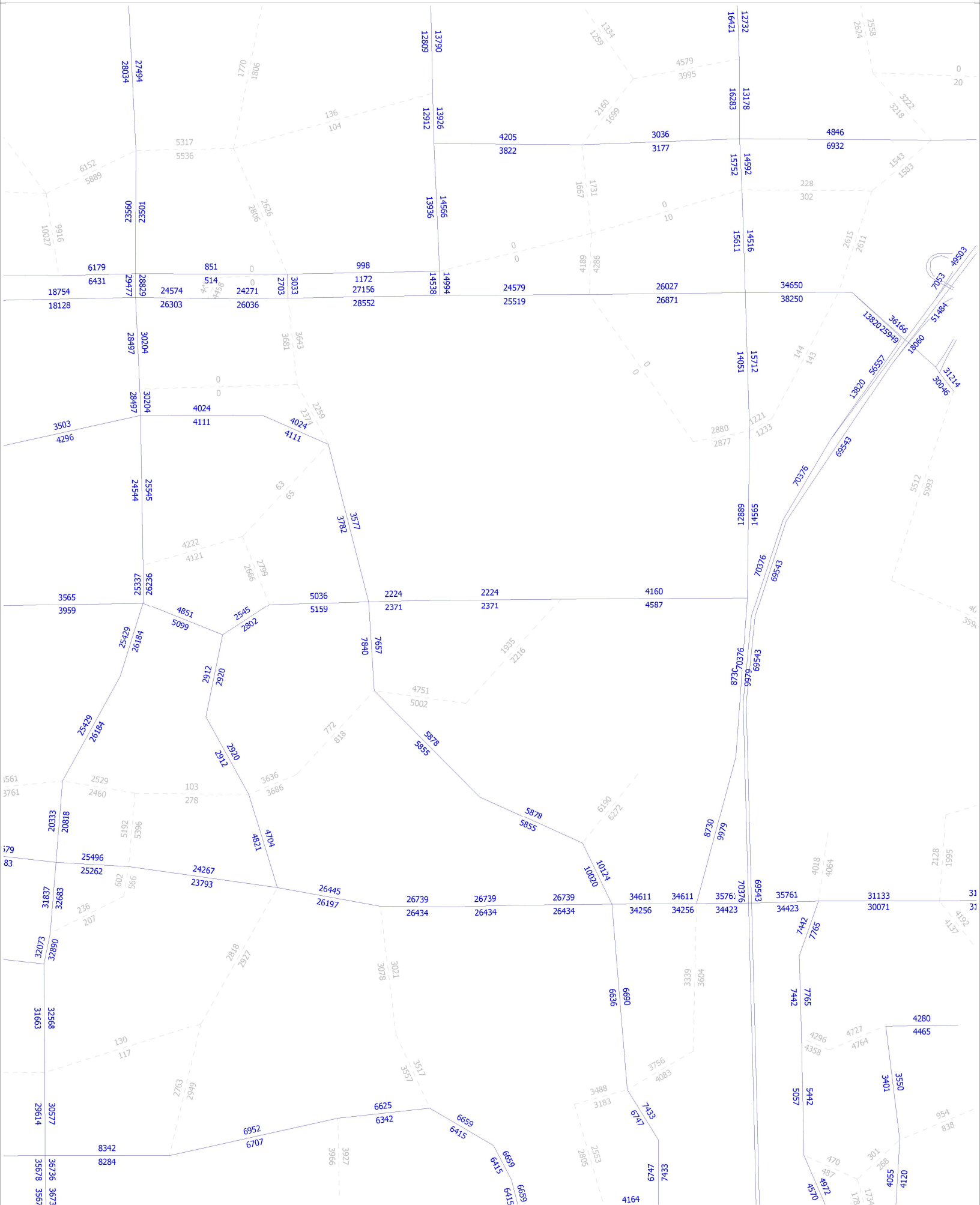
* PEAK SEASON

04-MAR-2025 16:32:53

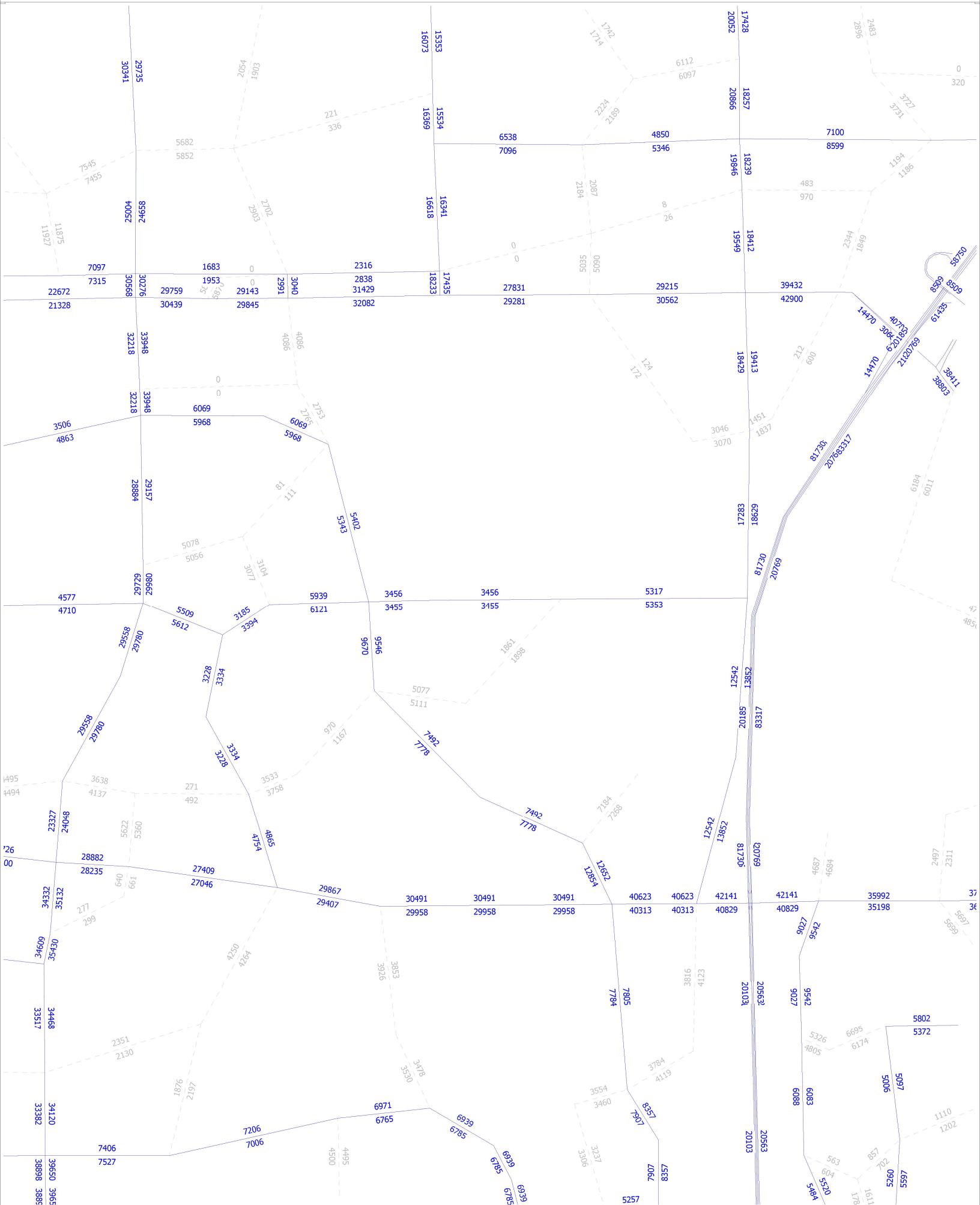
830UPD

4_8630_PKSEASON.TXT

NERPM 8.543 2015 Loaded Network



NERPM 8.543 2045 Loaded Network



TRAFFIC IMPACT ANALYSIS

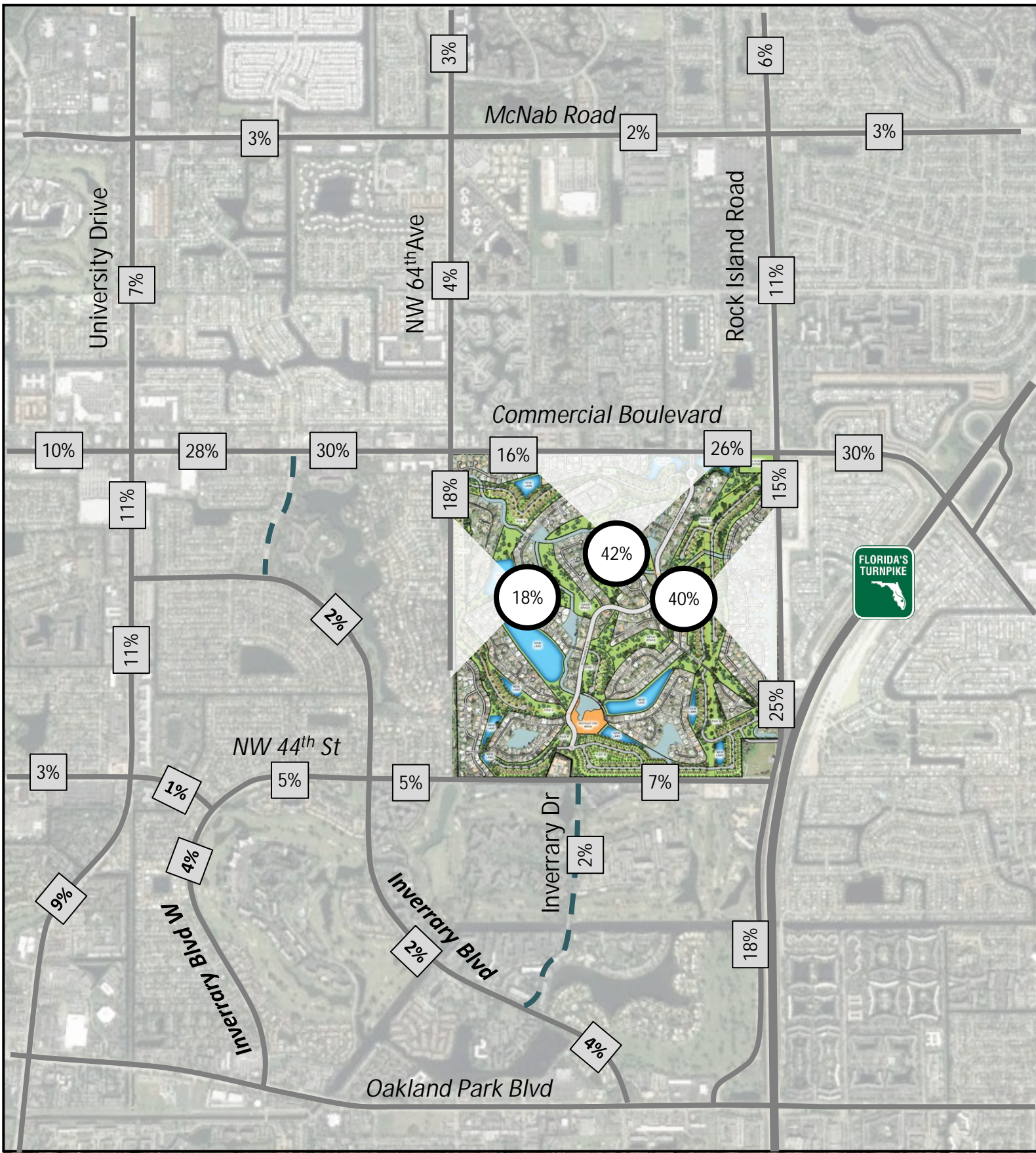
WOODLANDS TAMARAC, FL

PREPARED FOR:

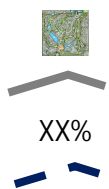
13TH FLOOR HOMES, LLC

Kimley»»Horn

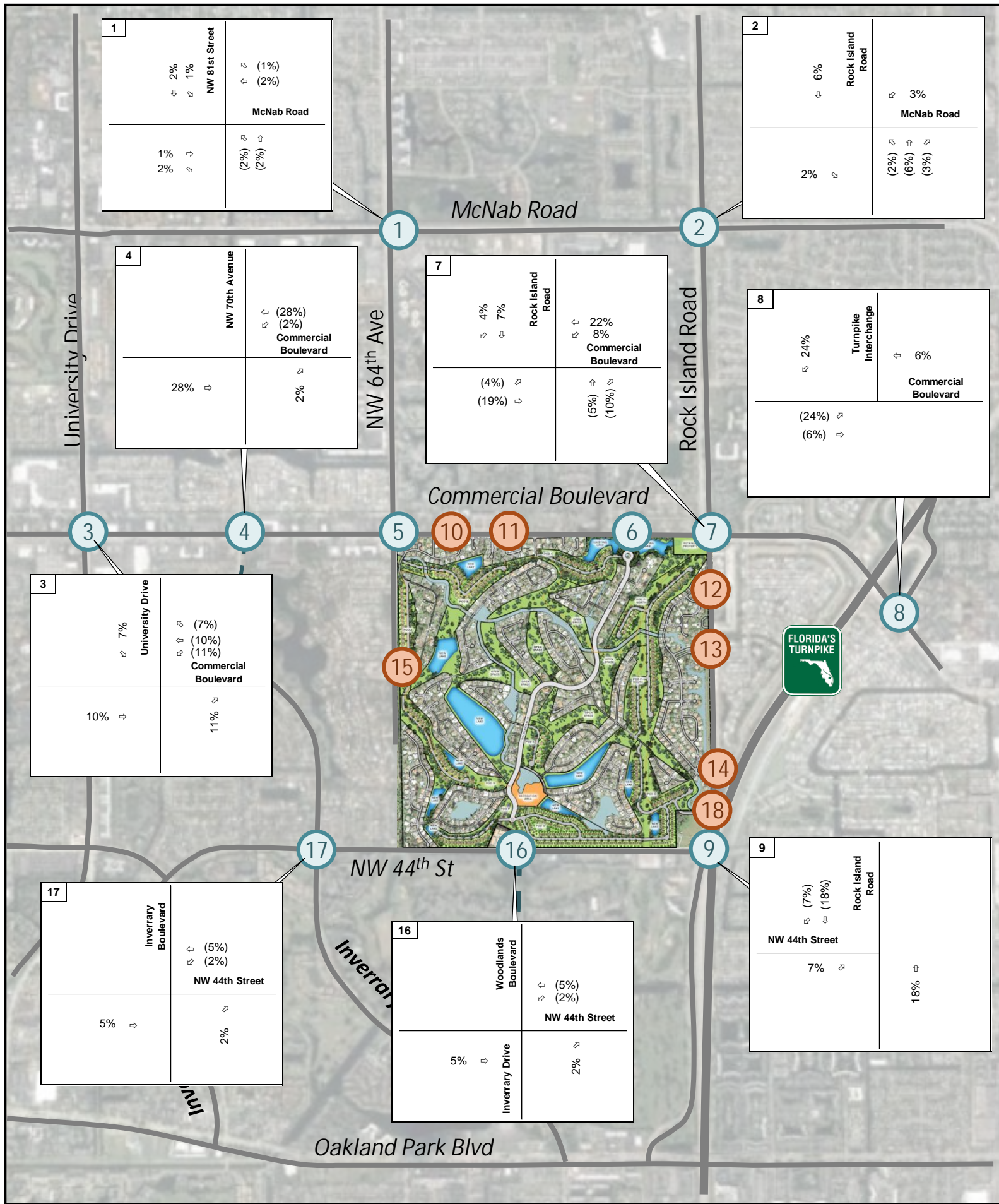
October 29, 2019
Revised February 21, 2020
Revised August 21, 2020
Revised October 14, 2020
Revised May 22, 2023
Revised September 13, 2023
Kimley-Horn Project #140248005
Registry No. 35106
Kimley-Horn and Associates, Inc.
477 S Rosemary Avenue, Suite 215
West Palm Beach, Florida 33401
561/845-0665 TEL

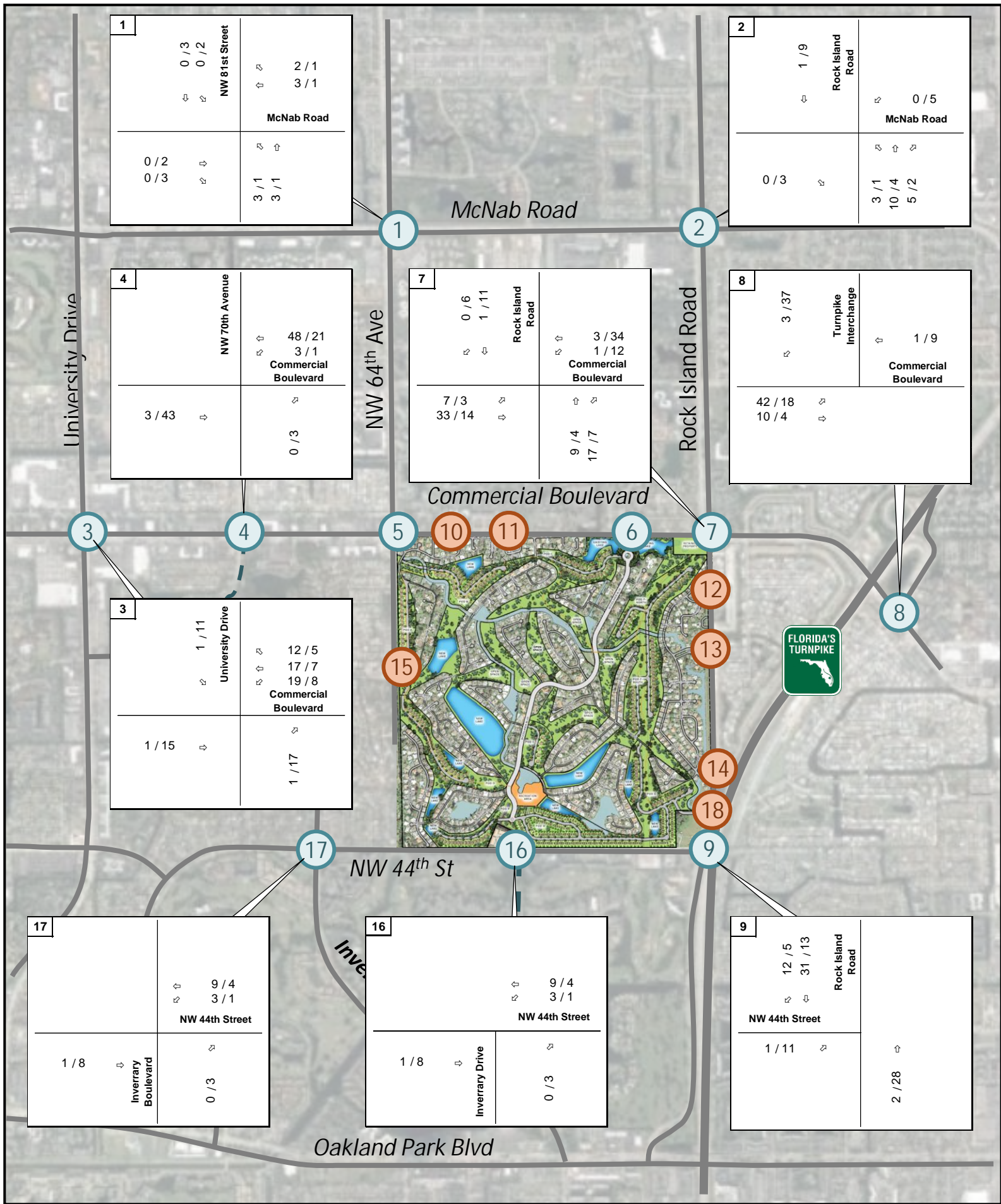


LEGEND



- AMENDMENT SITE
- TRAFFICWAYS EVALUATED
- XX% PERCENT TRAFFIC ASSIGNMENT
- NON-TRAFFICWAYS ROAD





Golf Course (430)

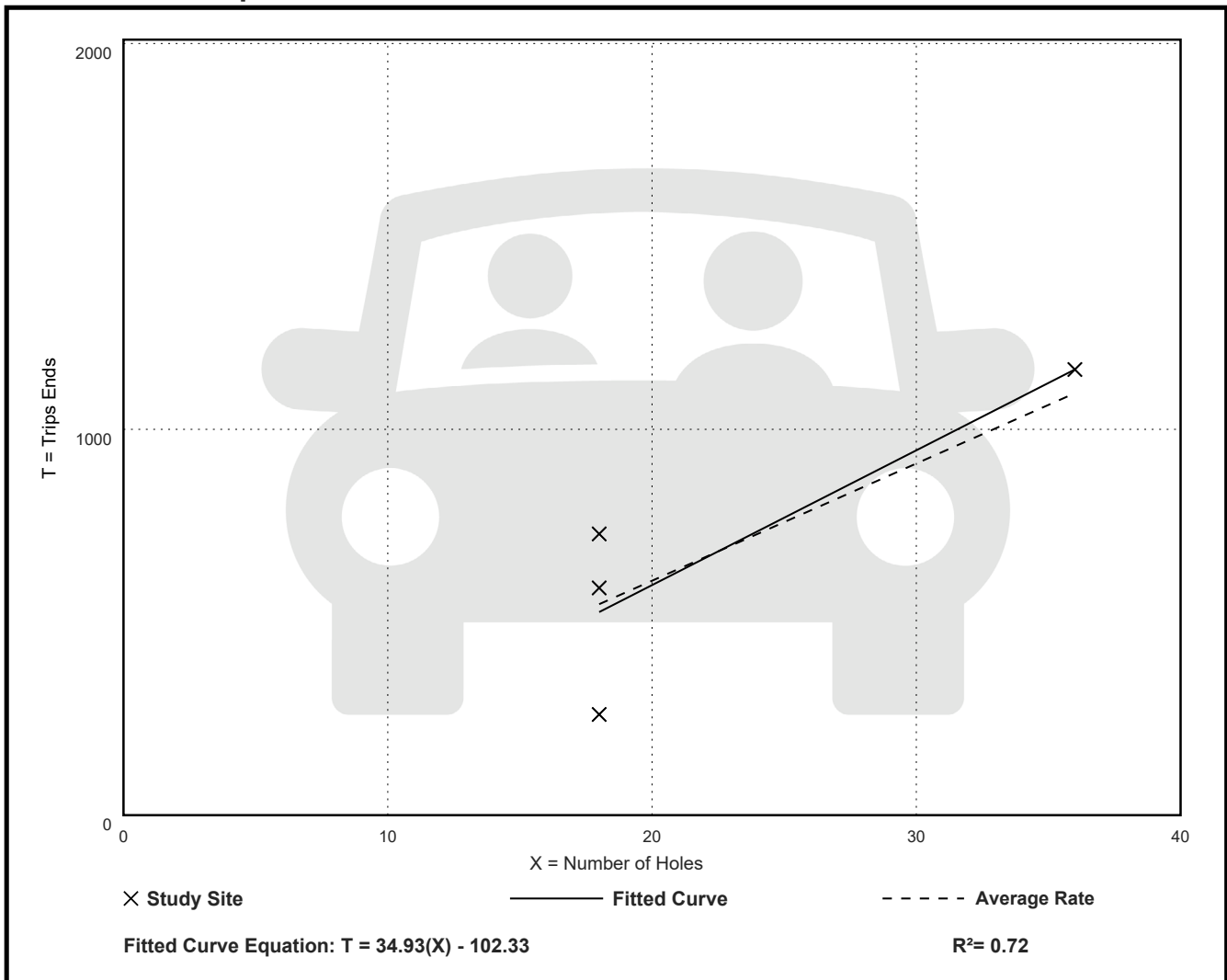
Vehicle Trip Ends vs: Holes
On a: **Weekday**

Setting/Location: General Urban/Suburban
Number of Studies: 4
Avg. Num. of Holes: 23
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Hole

Average Rate	Range of Rates	Standard Deviation
30.38	14.50 - 40.50	9.88

Data Plot and Equation



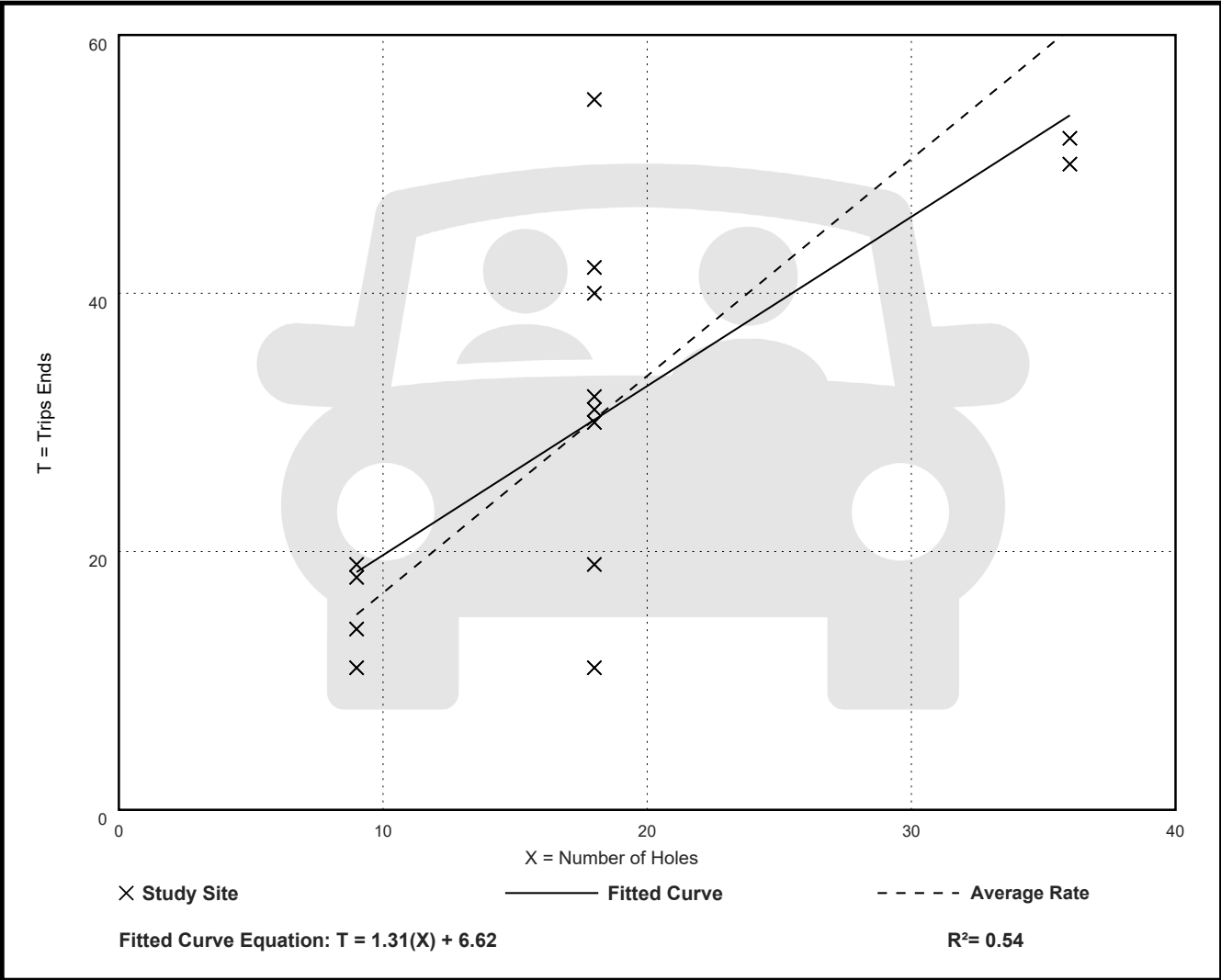
Golf Course (430)

Vehicle Trip Ends vs: Holes
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
 Number of Studies: 14
 Avg. Num. of Holes: 18
 Directional Distribution: 79% entering, 21% exiting

Vehicle Trip Generation per Hole

Average Rate	Range of Rates	Standard Deviation
1.68	0.61 - 3.06	0.60

Data Plot and Equation



Golf Course (430)

Vehicle Trip Ends vs: Holes

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 12

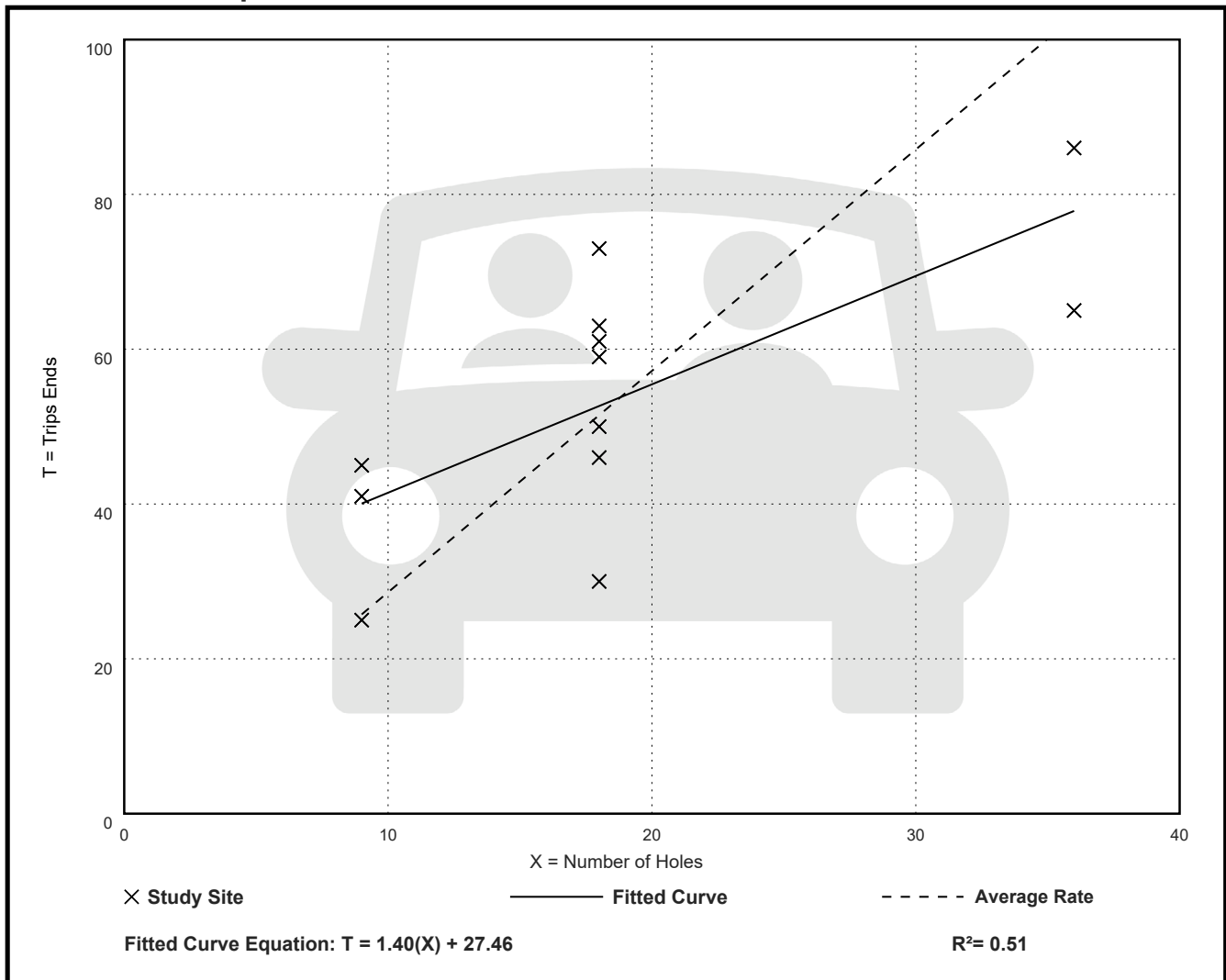
Avg. Num. of Holes: 19

Directional Distribution: 54% entering, 46% exiting

Vehicle Trip Generation per Hole

Average Rate	Range of Rates	Standard Deviation
2.86	1.67 - 5.00	0.94

Data Plot and Equation



Single-Family Detached Housing (210)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban

Number of Studies: 155

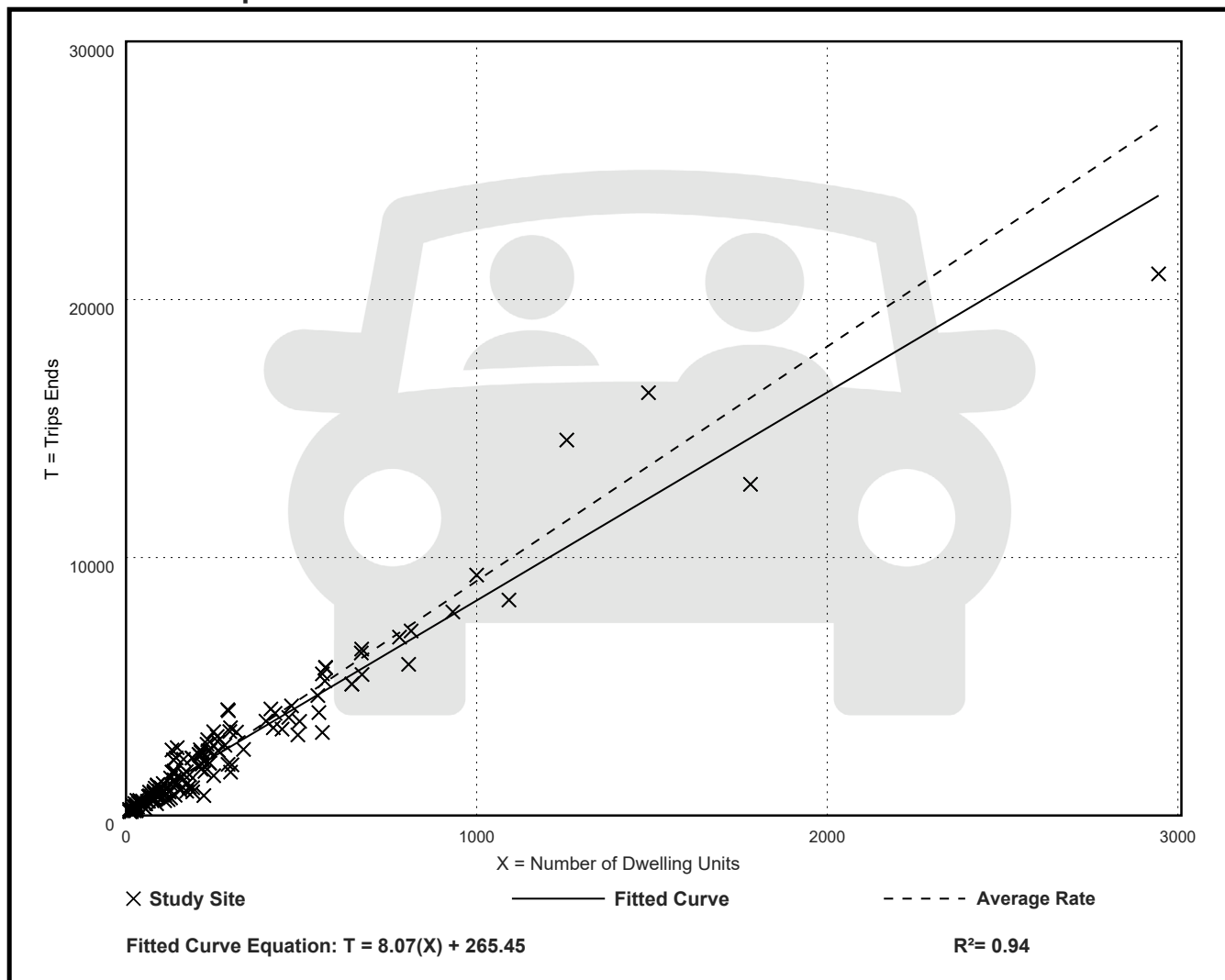
Avg. Num. of Dwelling Units: 261

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
9.09	3.47 - 23.80	2.29

Data Plot and Equation



Single-Family Detached Housing (210)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 153

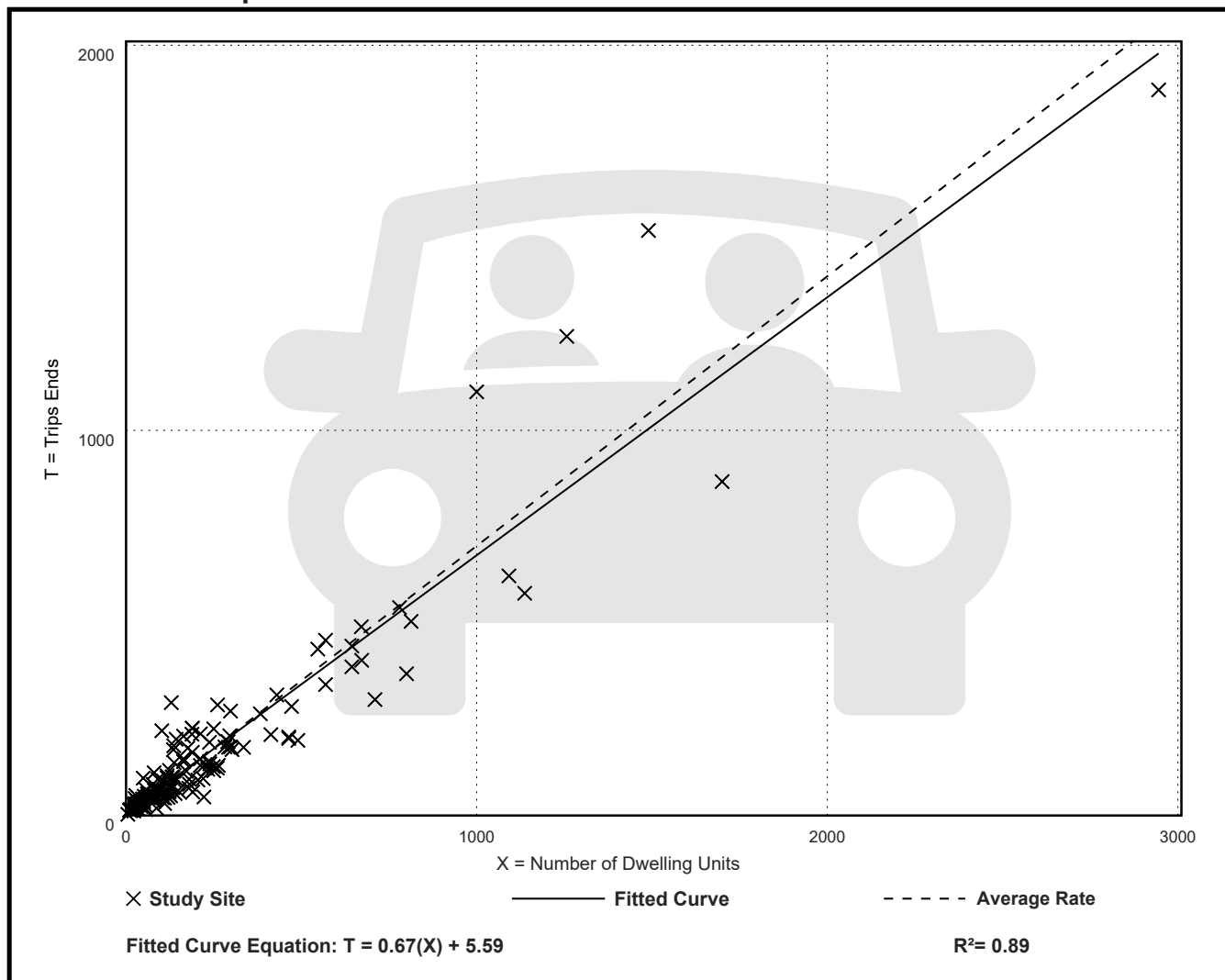
Avg. Num. of Dwelling Units: 239

Directional Distribution: 27% entering, 73% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.70	0.22 - 2.27	0.26

Data Plot and Equation



Single-Family Detached Housing (210)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 166

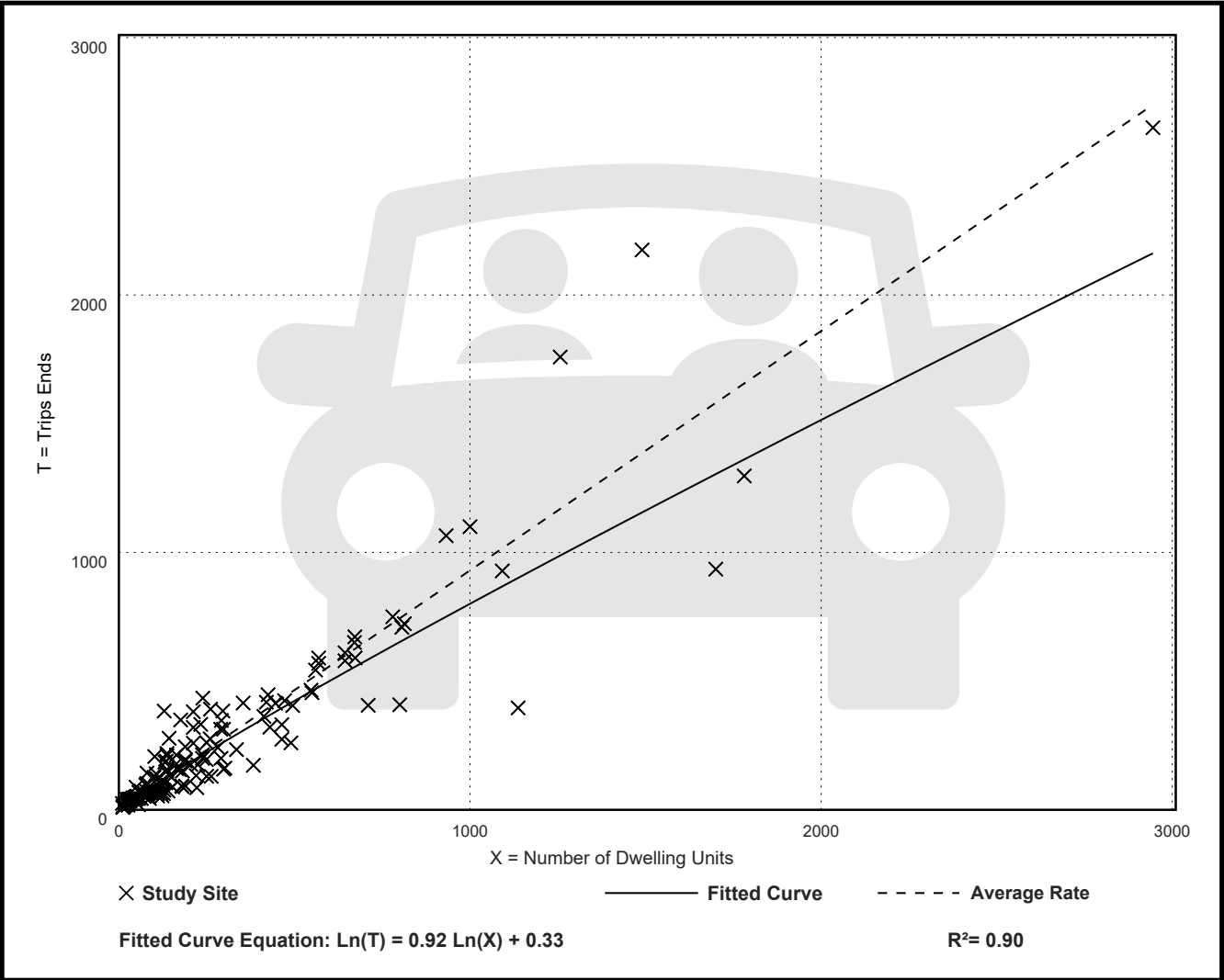
Avg. Num. of Dwelling Units: 266

Directional Distribution: 62% entering, 38% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.93	0.35 - 2.98	0.33

Data Plot and Equation



Single-Family Attached Housing (215)

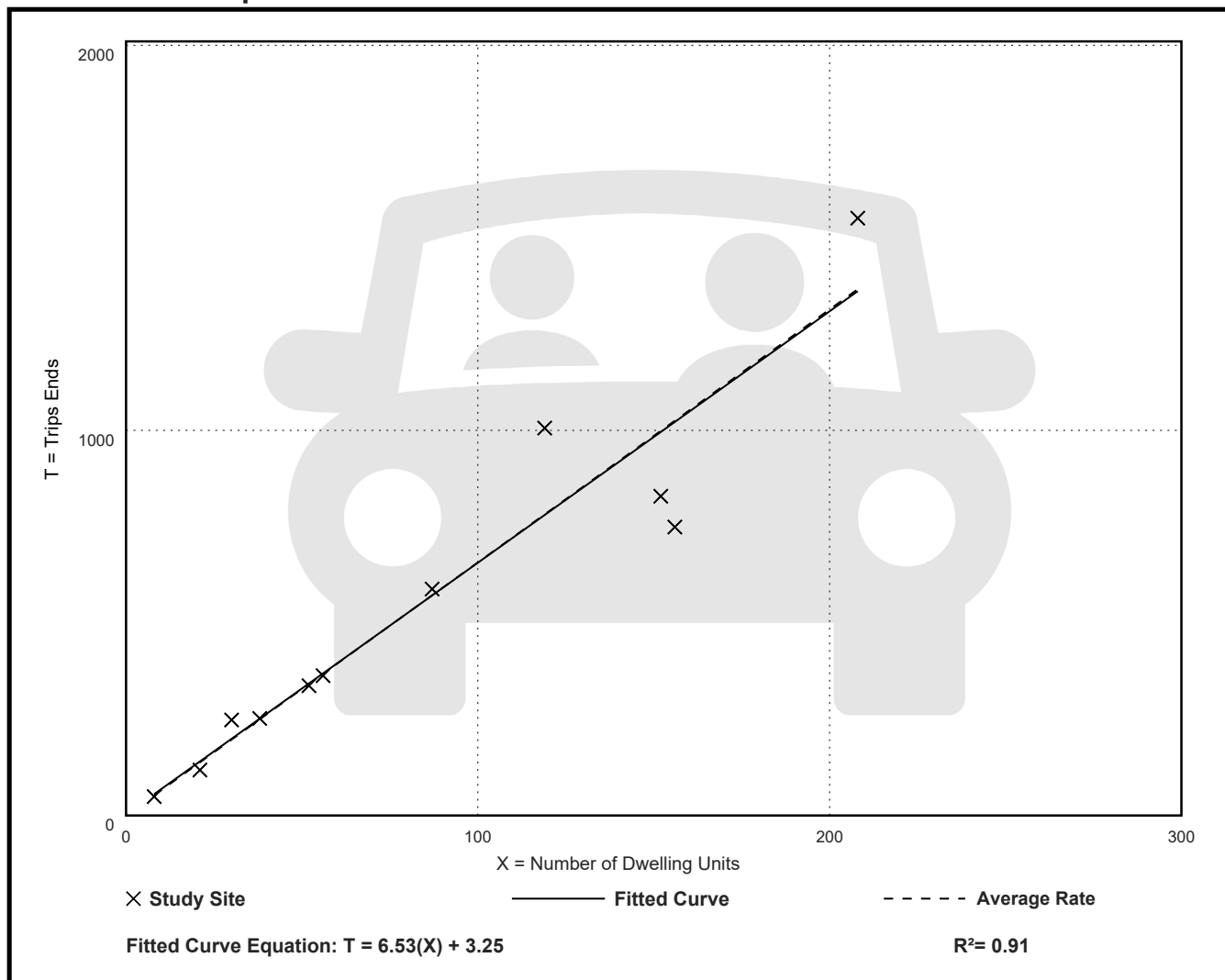
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 11
Avg. Num. of Dwelling Units: 84
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
6.57	4.80 - 8.45	1.28

Data Plot and Equation



Single-Family Attached Housing (215)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 26

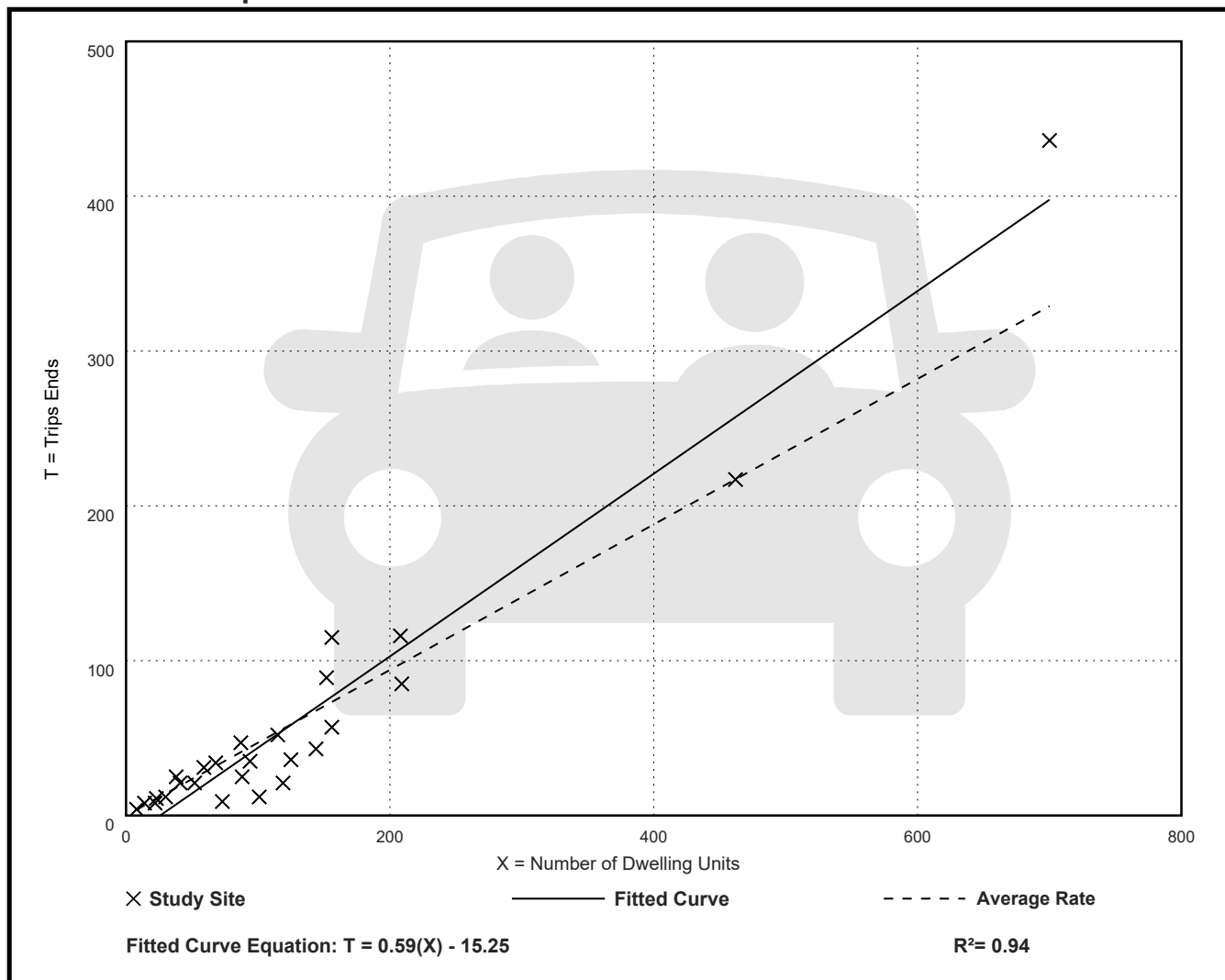
Avg. Num. of Dwelling Units: 129

Directional Distribution: 25% entering, 75% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.47	0.12 - 0.74	0.16

Data Plot and Equation



Single-Family Attached Housing (215)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 31

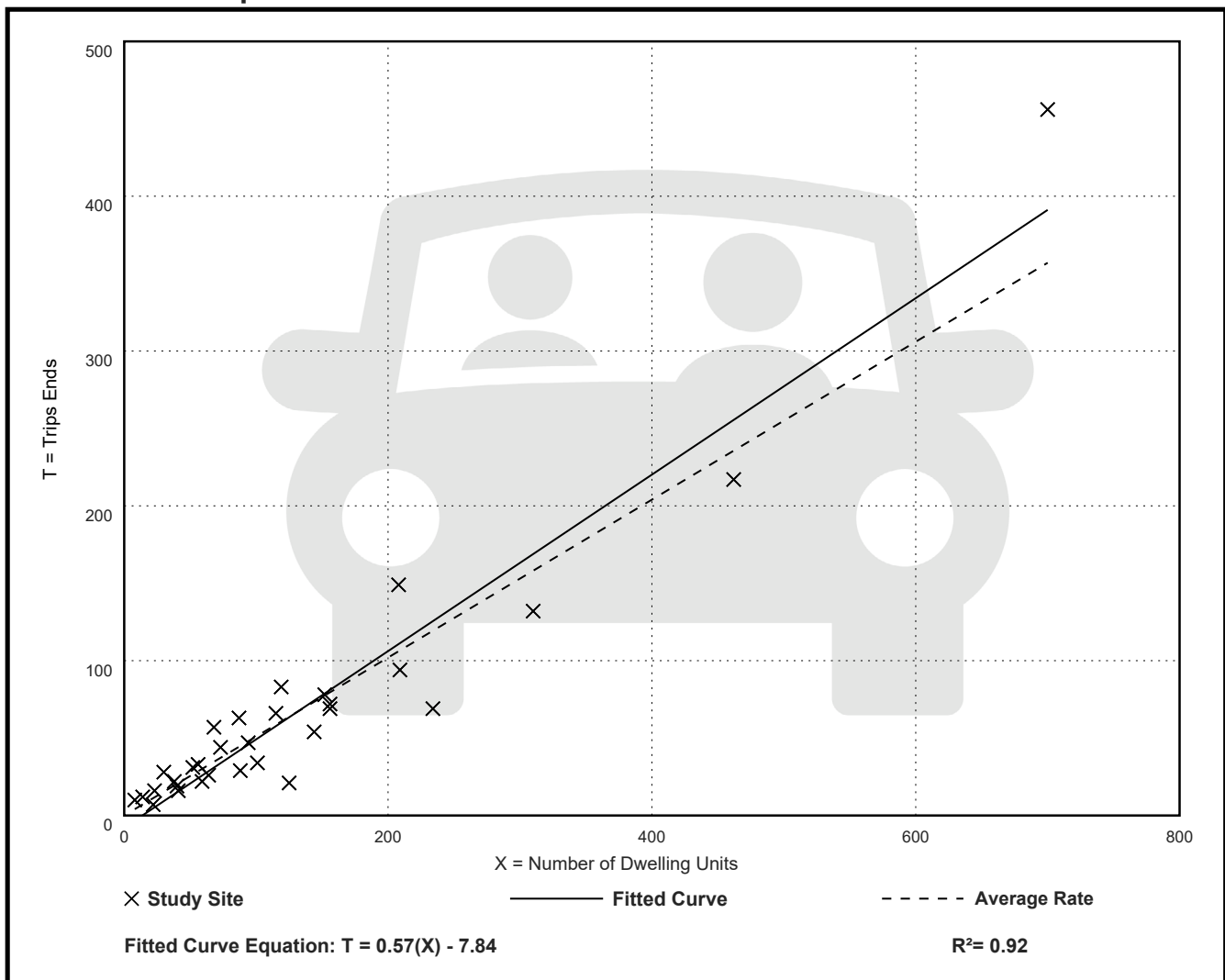
Avg. Num. of Dwelling Units: 131

Directional Distribution: 57% entering, 43% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.51	0.17 - 1.25	0.16

Data Plot and Equation



Multifamily Housing (Low-Rise) Not Close to Rail Transit (220)

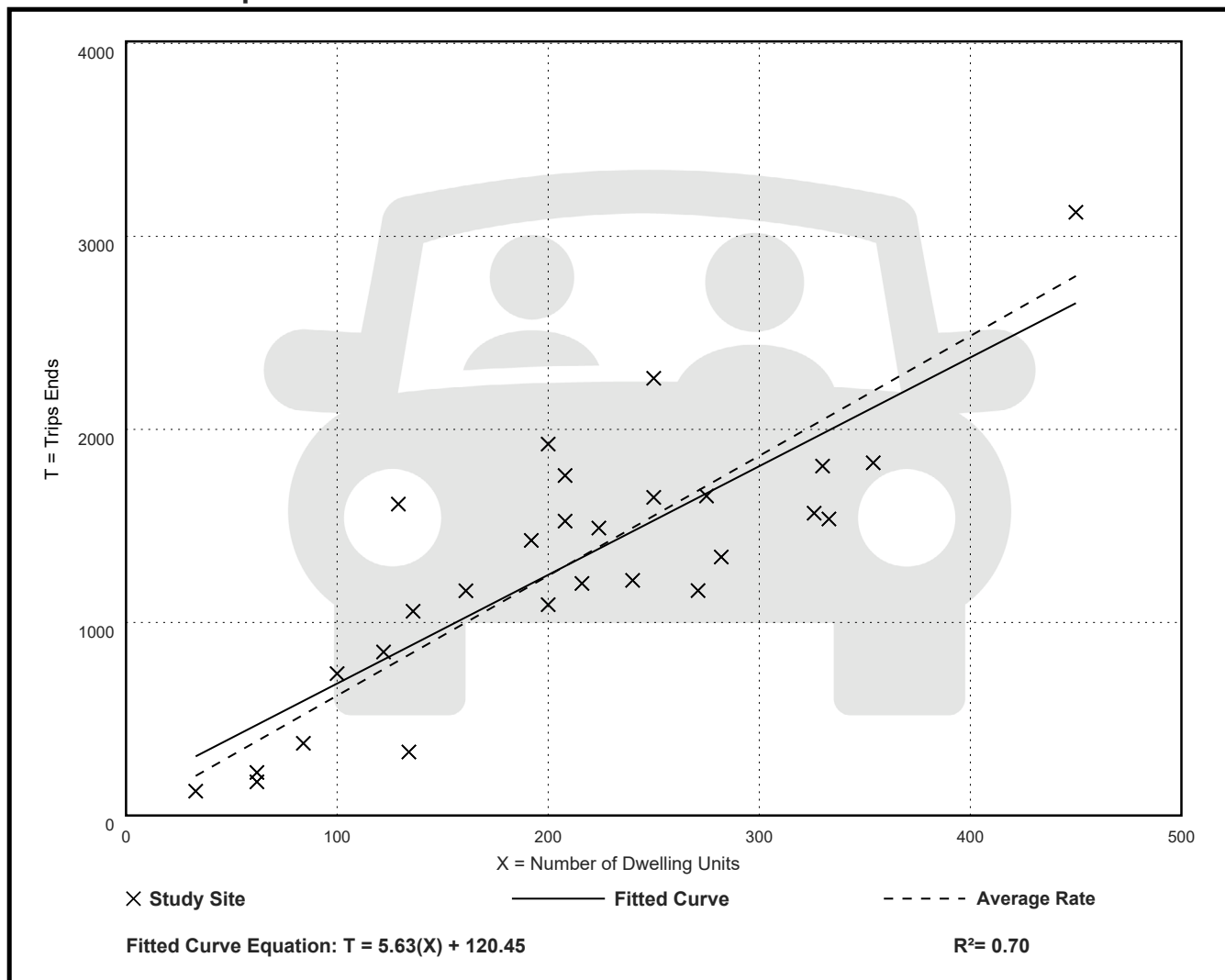
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 28
Avg. Num. of Dwelling Units: 208
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
6.21	2.46 - 12.50	1.87

Data Plot and Equation



Multifamily Housing (Low-Rise) Not Close to Rail Transit (220)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 51

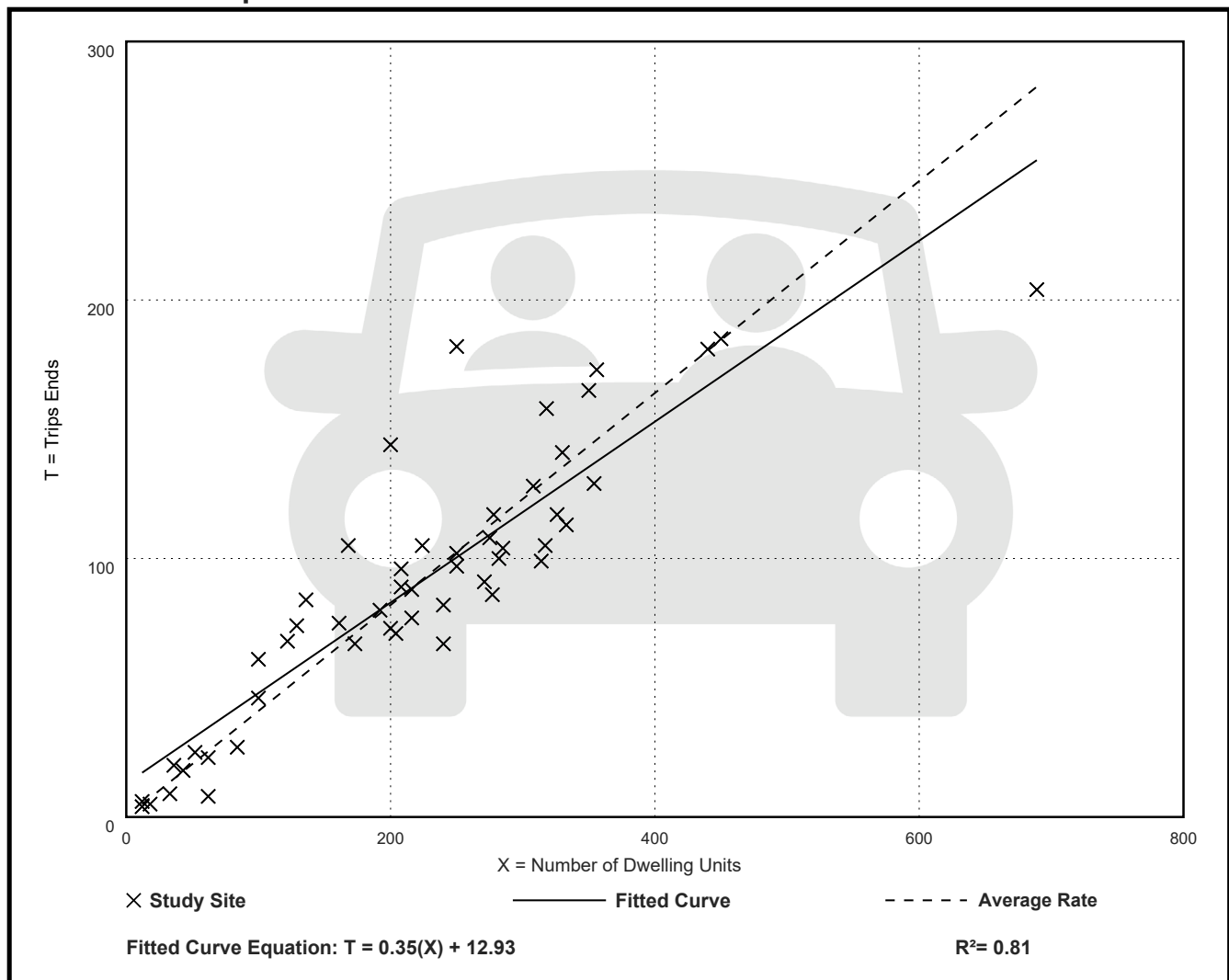
Avg. Num. of Dwelling Units: 219

Directional Distribution: 24% entering, 76% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.41	0.13 - 0.73	0.10

Data Plot and Equation



Multifamily Housing (Low-Rise) Not Close to Rail Transit (220)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 61

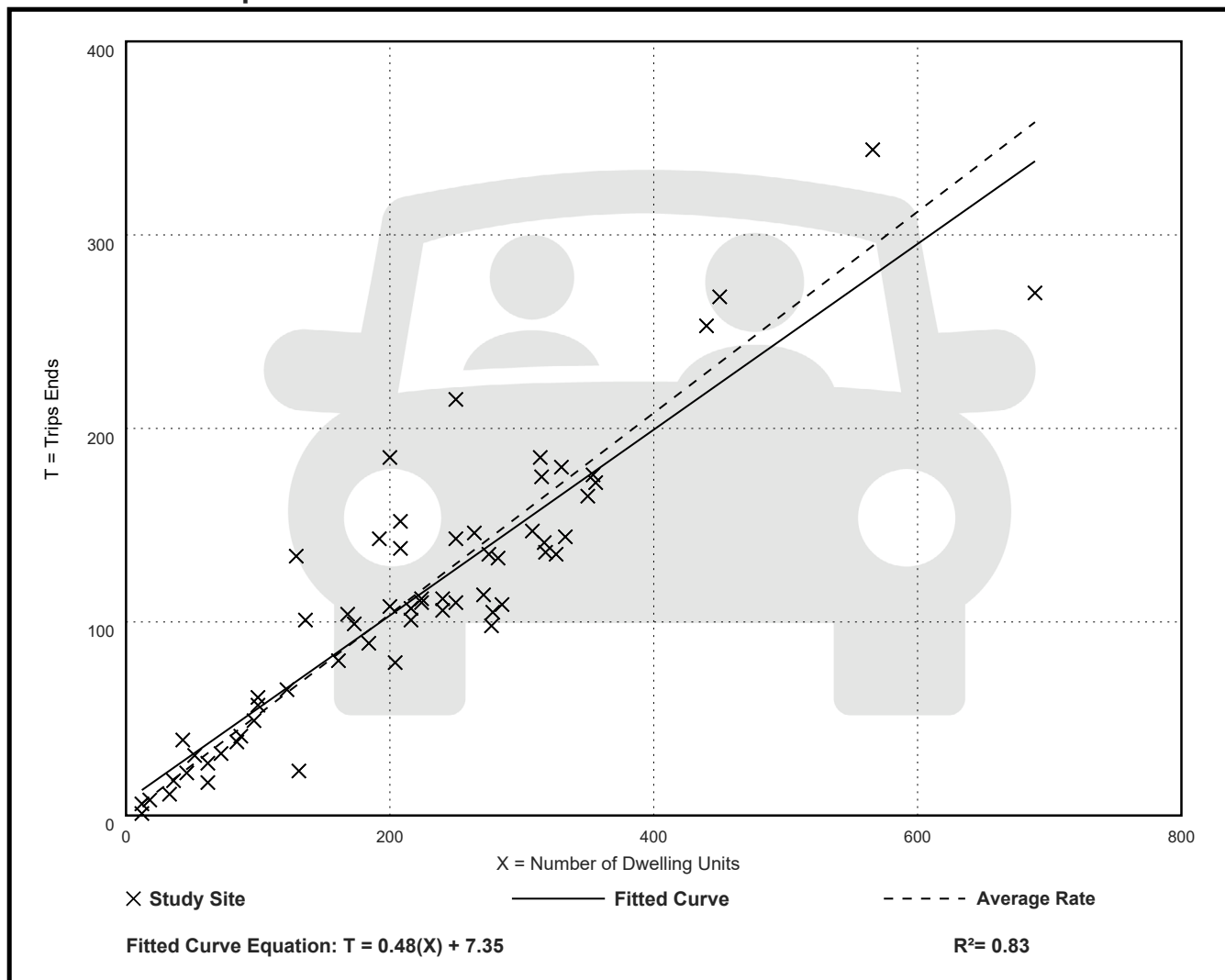
Avg. Num. of Dwelling Units: 215

Directional Distribution: 62% entering, 38% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.52	0.08 - 1.04	0.13

Data Plot and Equation



DAILY TRIP GENERATION ANALYSIS

LAND USE	ITE CODE	INTENSITY	TRIP GENERATION RATE ⁽¹⁾	IN	OUT	TOTAL TRIPS		
						IN	OUT	TOTAL
Golf Course	430	18 Holes	T= 30.38 (X)	50%	50%	274	273	547
Pod 1								
Single Family Detached	210	29 DU	T= 8.07 (X) + 265.45	50%	50%	250	249	499
Single Family Attached	215	36 DU	T= 6.53 (X) + 3.25	50%	50%	119	119	238
Townhomes	220	4 DU	T= 5.63 (X) + 120.45	50%	50%	71	72	143
POD 1 SUBTOTAL						440	440	880
Pod 2								
Single Family Attached	215	46 DU	T= 6.53 (X) + 3.25	50%	50%	152	152	304
Townhomes	220	47 DU	T= 5.63 (X) + 120.45	50%	50%	193	192	385
POD 2 SUBTOTAL						345	344	689
Pod 3								
Single Family Detached	210	40 DU	T= 8.07 (X) + 265.45	50%	50%	294	294	588
Single Family Attached	215	28 DU	T= 6.53 (X) + 3.25	50%	50%	93	93	186
Townhomes	220	15 DU	T= 5.63 (X) + 120.45	50%	50%	102	103	205
POD 3 SUBTOTAL						489	490	979
Pod 4								
Townhomes	220	313 DU	T= 5.63 (X) + 120.45	50%	50%	942	941	1,883
POD 4 SUBTOTAL						942	941	1,883
Pod 5								
Single Family Attached	215	24 DU	T= 6.53 (X) + 3.25	50%	50%	80	80	160
Townhomes	220	120 DU	T= 5.63 (X) + 120.45	50%	50%	398	398	796
POD 5 SUBTOTAL						478	478	956
Pod 6								
Single Family Detached	210	23 DU	T= 8.07 (X) + 265.45	50%	50%	225	226	451
Single Family Attached	215	20 DU	T= 6.53 (X) + 3.25	50%	50%	67	67	134
Townhomes	220	55 DU	T= 5.63 (X) + 120.45	50%	50%	215	215	430
POD 6 SUBTOTAL						507	508	1,015
Total						3,475	3,474	6,949

(1) Source: ITE Trip Generation Manual, 12th Edition.

AM PEAK HOUR TRIP GENERATION ANALYSIS

LAND USE	ITE CODE	INTENSITY	TRIP GENERATION RATE ⁽¹⁾	IN	OUT	TOTAL TRIPS		
						IN	OUT	TOTAL
Golf Course	430	18 Holes	T= 1.68 (X)	79%	21%	24	6	30
Pod 1								
Single Family Detached	210	29 DU	T= 0.67 (X) + 5.59	27%	73%	7	18	25
Single Family Attached	215	36 DU	T= 0.47 (X)	25%	75%	4	13	17
Townhomes	220	4 DU	T= 0.35 (X) + 12.93	24%	76%	3	11	14
POD 1 SUBTOTAL						14	42	56
Pod 2								
Single Family Attached	215	46 DU	T= 0.47 (X)	25%	75%	6	16	22
Townhomes	220	47 DU	T= 0.35 (X) + 12.93	24%	76%	7	22	29
POD 2 SUBTOTAL						13	38	51
Pod 3								
Single Family Detached	210	40 DU	T= 0.67 (X) + 5.59	27%	73%	9	23	32
Single Family Attached	215	28 DU	T= 0.47 (X)	25%	75%	3	10	13
Townhomes	220	15 DU	T= 0.35 (X) + 12.93	24%	76%	4	14	18
POD 3 SUBTOTAL						16	47	63
Pod 4								
Townhomes	220	313 DU	T= 0.35 (X) + 12.93	24%	76%	29	93	122
POD 4 SUBTOTAL						29	93	122
Pod 5								
Single Family Attached	215	24 DU	T= 0.47 (X)	25%	75%	3	8	11
Townhomes	220	120 DU	T= 0.35 (X) + 12.93	24%	76%	13	42	55
POD 5 SUBTOTAL						16	50	66
Pod 6								
Single Family Detached	210	23 DU	T= 0.67 (X) + 5.59	27%	73%	6	15	21
Single Family Attached	215	20 DU	T= 0.47 (X)	25%	75%	2	7	9
Townhomes	220	55 DU	T= 0.35 (X) + 12.93	24%	76%	8	24	32
POD 6 SUBTOTAL						16	46	62
Total						128	322	450

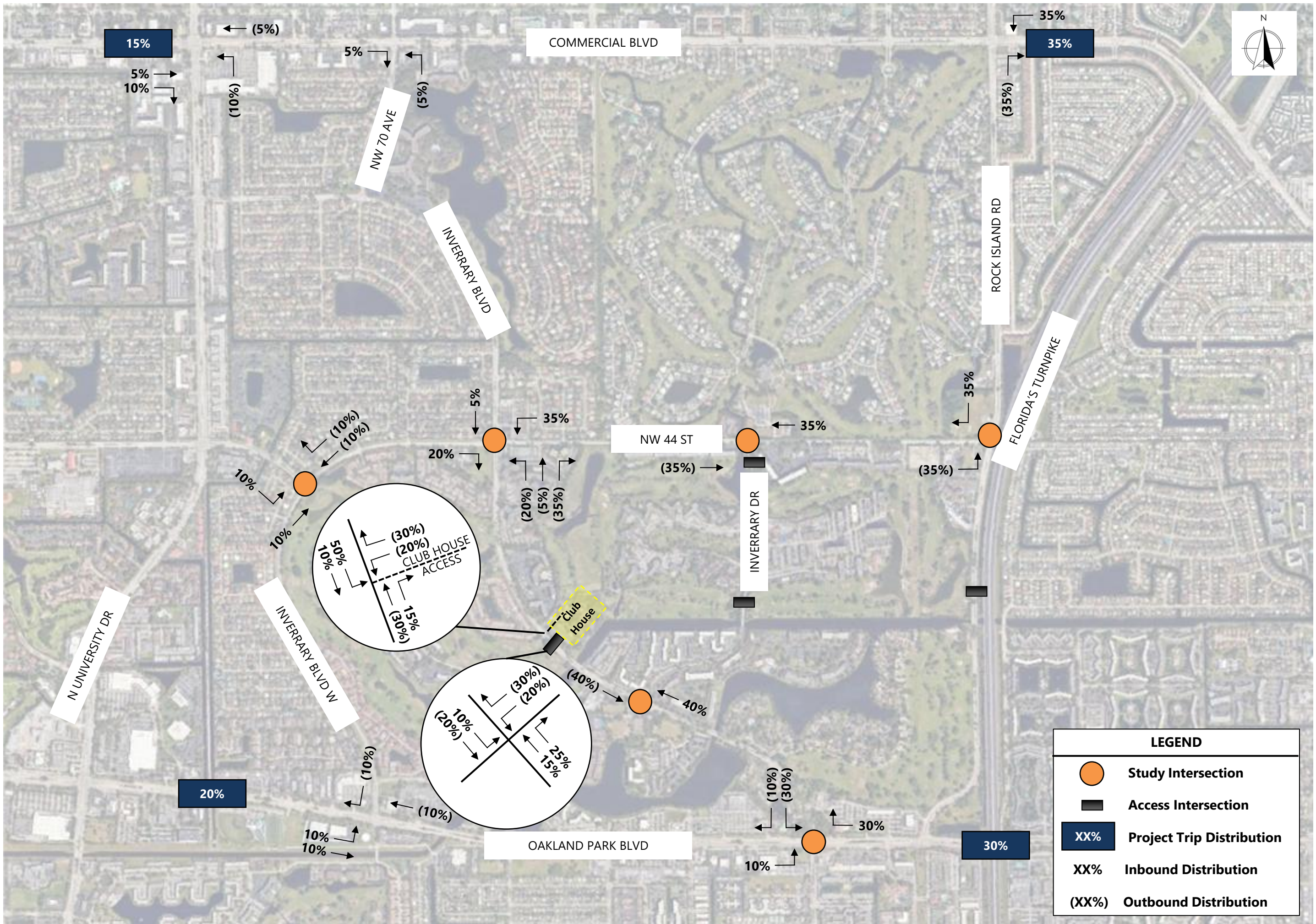
(1) Source: ITE Trip Generation Manual, 12th Edition.

PM PEAK HOUR TRIP GENERATION ANALYSIS

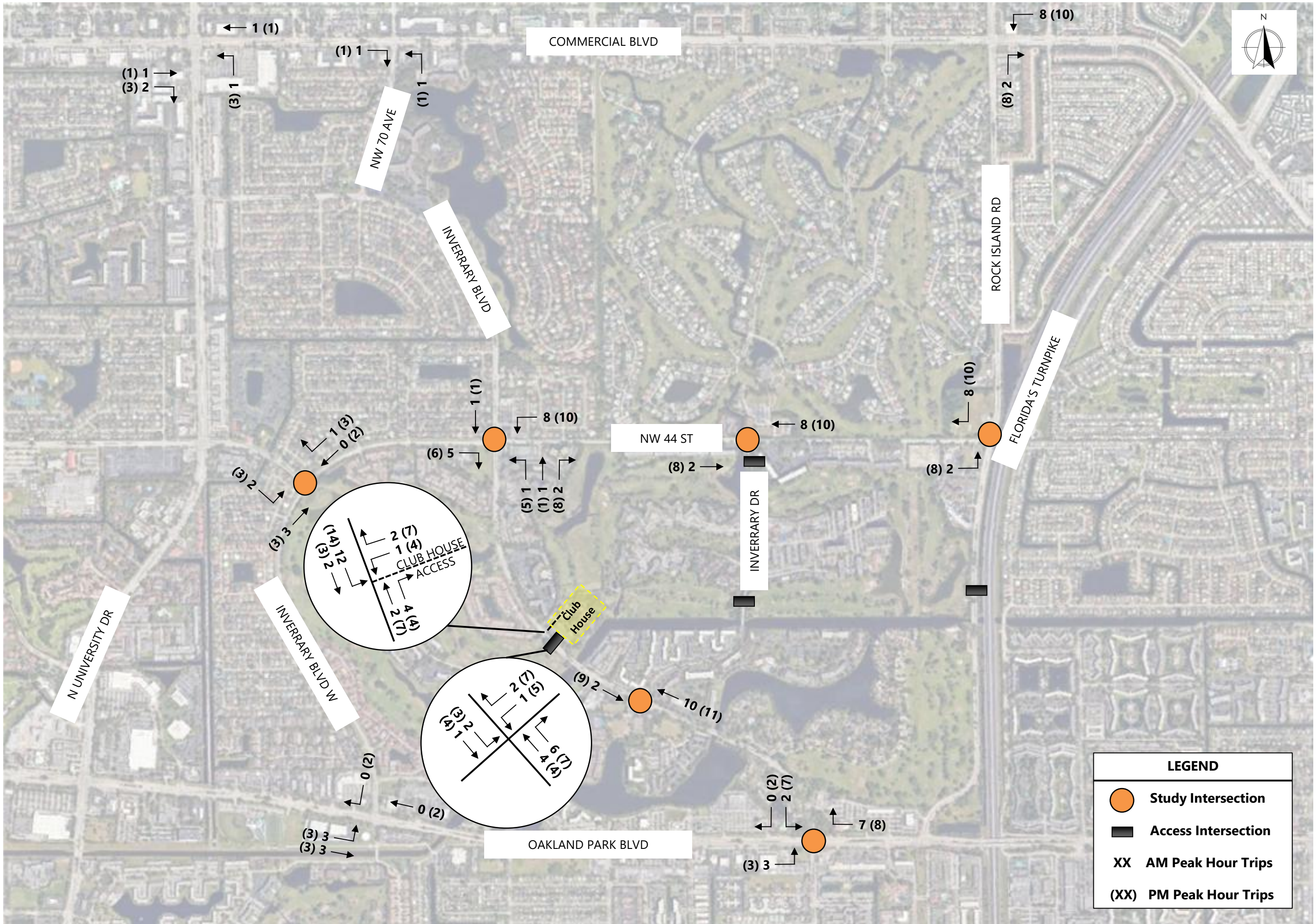
LAND USE	ITE CODE	INTENSITY	TRIP GENERATION RATE ⁽¹⁾	IN	OUT	TOTAL TRIPS		
						IN	OUT	TOTAL
Golf Course	430	18 Holes	T= 2.86 (X)	54%	46%	28	23	51
Pod 1								
Single Family Detached	210	29 DU	Ln(T)= 0.92 Ln(X) + 0.33	62%	38%	19	12	31
Single Family Attached	215	36 DU	T= 0.57 (X) - 7.84	57%	43%	7	6	13
Townhomes	220	4 DU	T= 0.48 (X) + 7.35	62%	38%	6	3	9
POD 1 SUBTOTAL						32	21	53
Pod 2								
Single Family Attached	215	46 DU	T= 0.57 (X) - 7.84	57%	43%	10	8	18
Townhomes	220	47 DU	T= 0.48 (X) + 7.35	62%	38%	19	11	30
POD 2 SUBTOTAL						29	19	48
Pod 3								
Single Family Detached	210	40 DU	Ln(T)= 0.92 Ln(X) + 0.33	62%	38%	25	16	41
Single Family Attached	215	28 DU	T= 0.57 (X) - 7.84	57%	43%	5	3	8
Townhomes	220	15 DU	T= 0.48 (X) + 7.35	62%	38%	9	6	15
POD 3 SUBTOTAL						39	25	64
Pod 4								
Townhomes	220	313 DU	T= 0.48 (X) + 7.35	62%	38%	98	60	158
POD 4 SUBTOTAL						98	60	158
Pod 5								
Single Family Attached	215	24 DU	T= 0.57 (X) - 7.84	57%	43%	3	3	6
Townhomes	220	120 DU	T= 0.48 (X) + 7.35	62%	38%	40	25	65
POD 5 SUBTOTAL						43	28	71
Pod 6								
Single Family Detached	210	23 DU	Ln(T)= 0.92 Ln(X) + 0.33	62%	38%	16	9	25
Single Family Attached	215	20 DU	T= 0.57 (X) - 7.84	57%	43%	2	2	4
Townhomes	220	55 DU	T= 0.48 (X) + 7.35	62%	38%	21	13	34
POD 6 SUBTOTAL						39	24	63
Total						308	200	508

(1) Source: ITE Trip Generation Manual, 12th Edition.

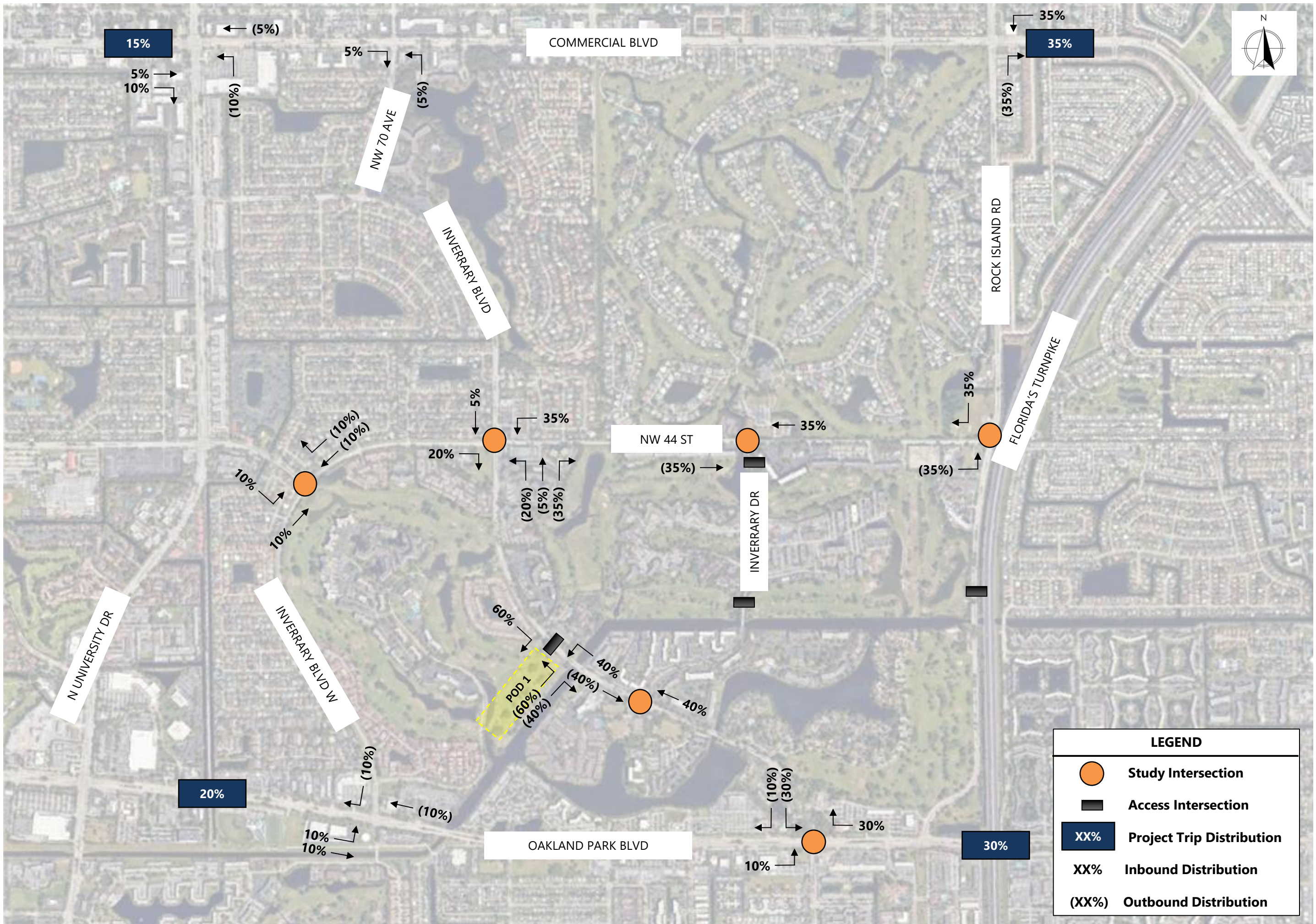
Golf Course Distribution



Golf Course Trip Assignment

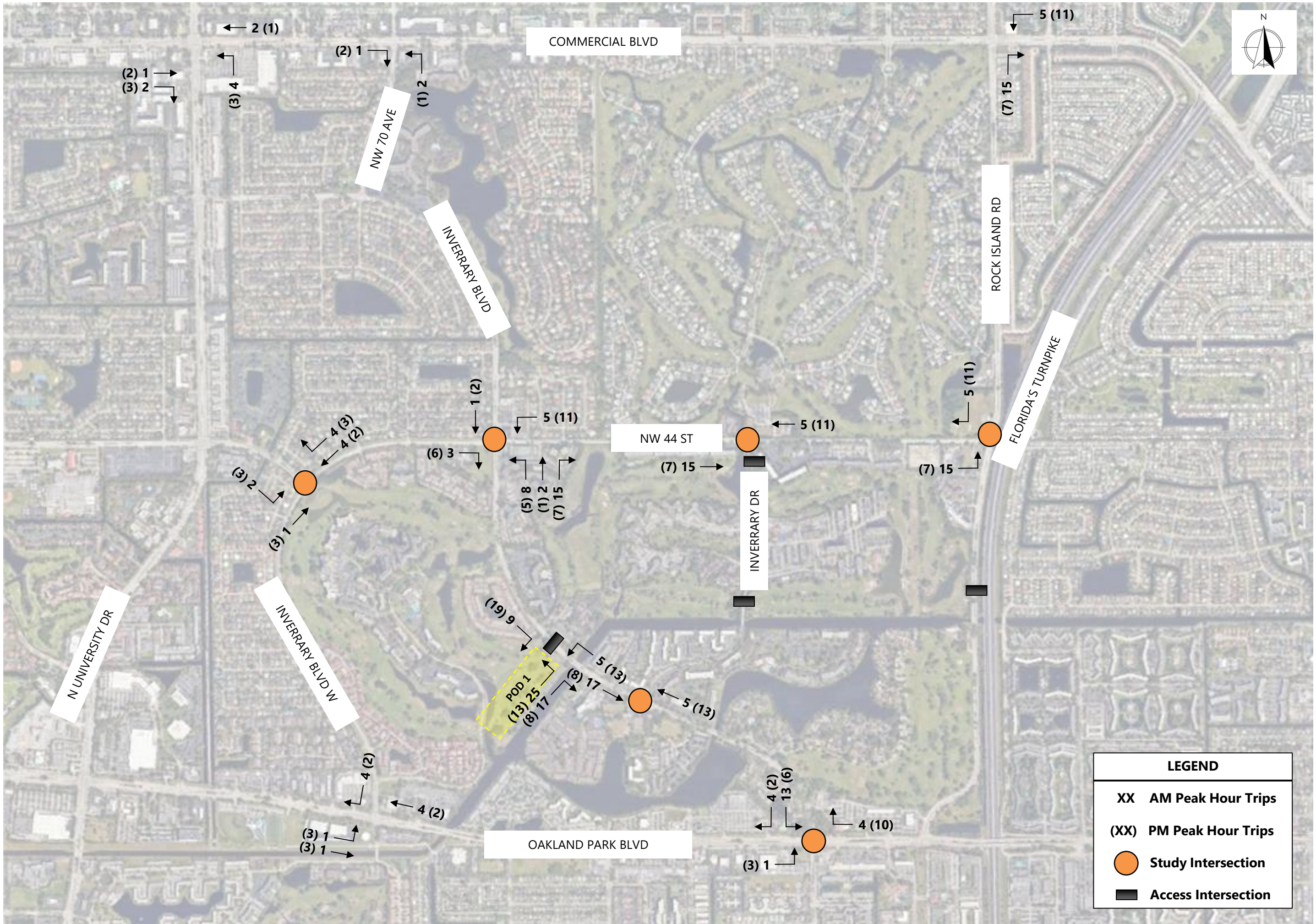


Pod 1 Distribution

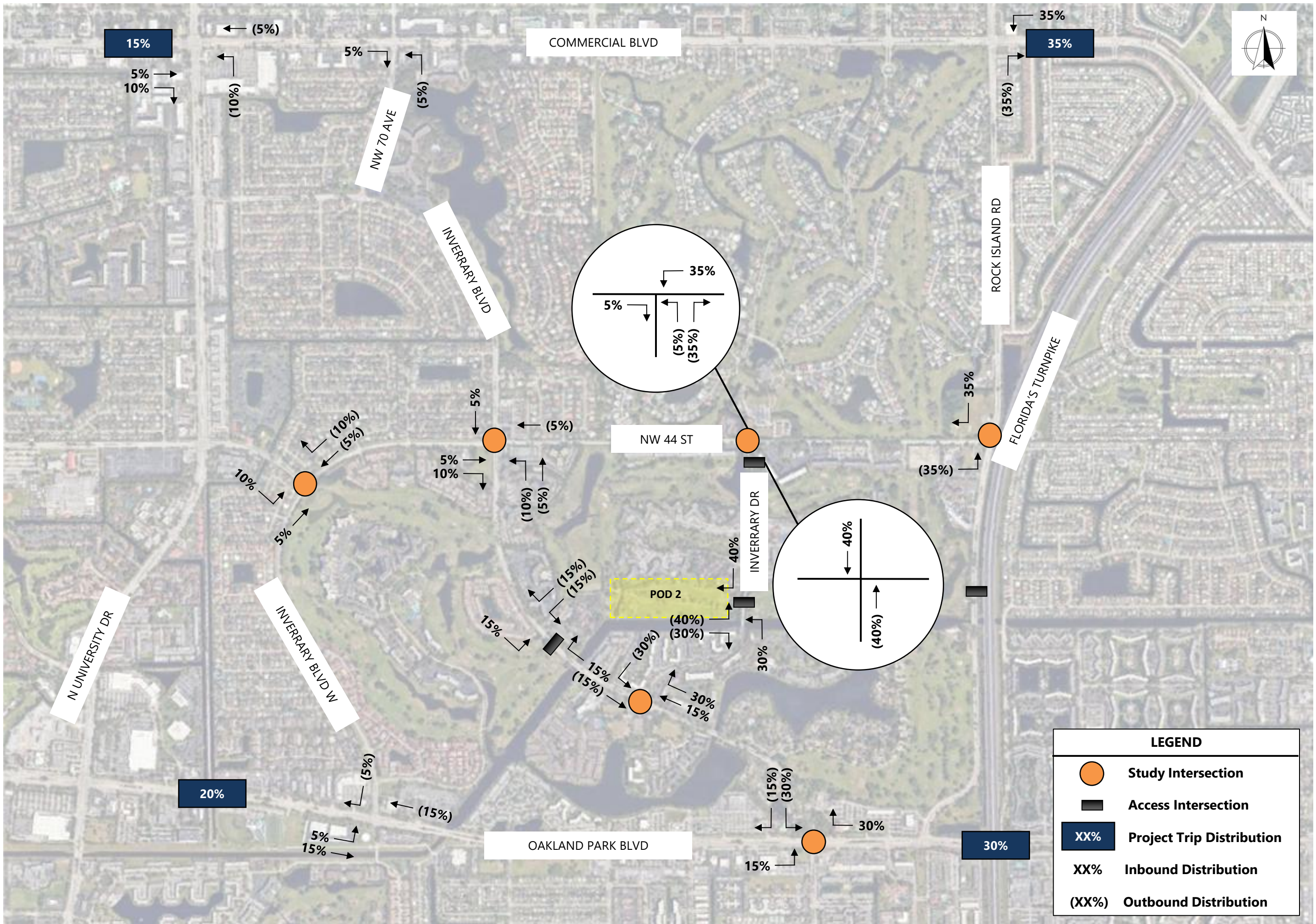


LEGEND	
	Study Intersection
	Access Intersection
	Project Trip Distribution
	Inbound Distribution
	Outbound Distribution

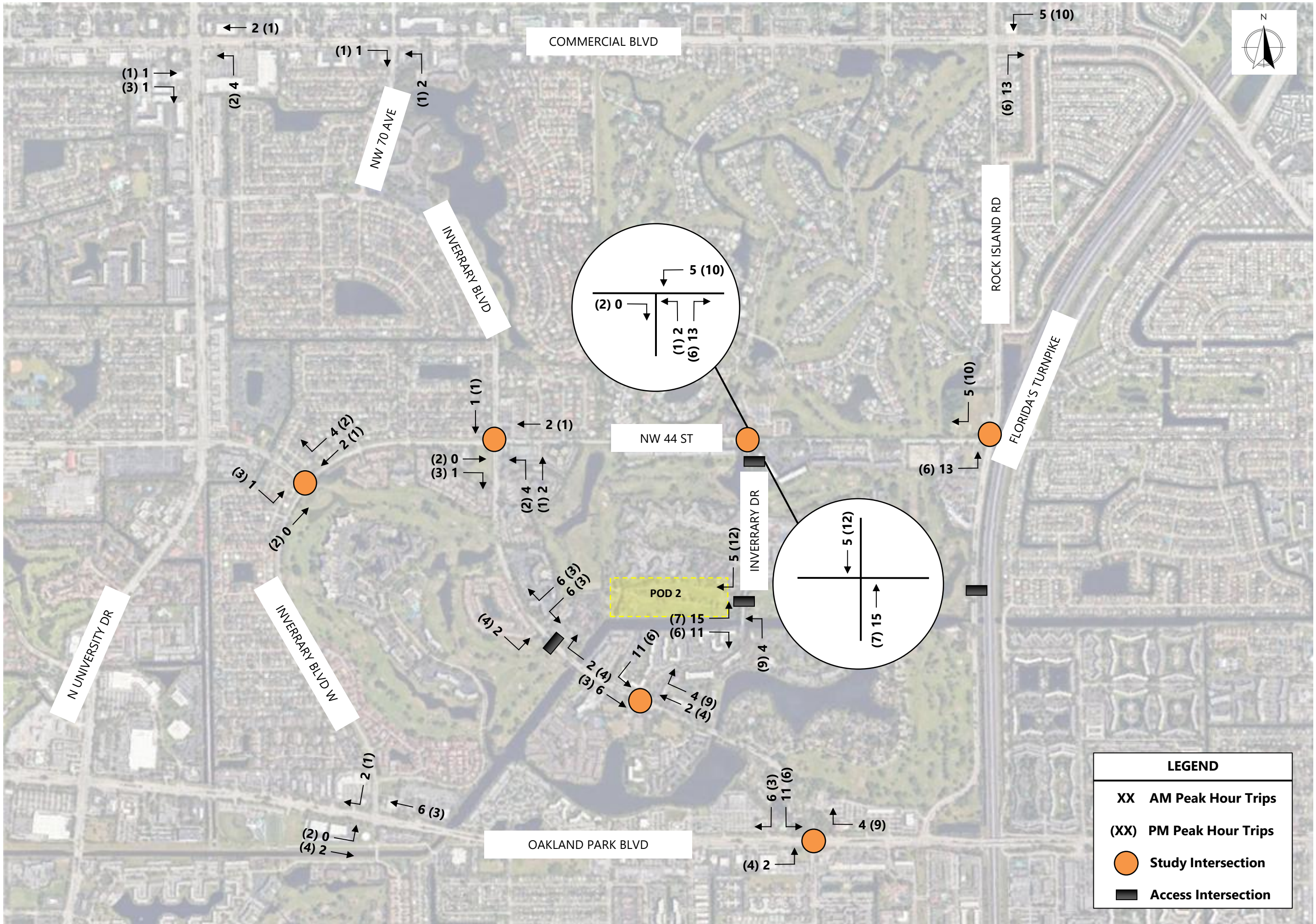
Pod 1 Trip Assignment



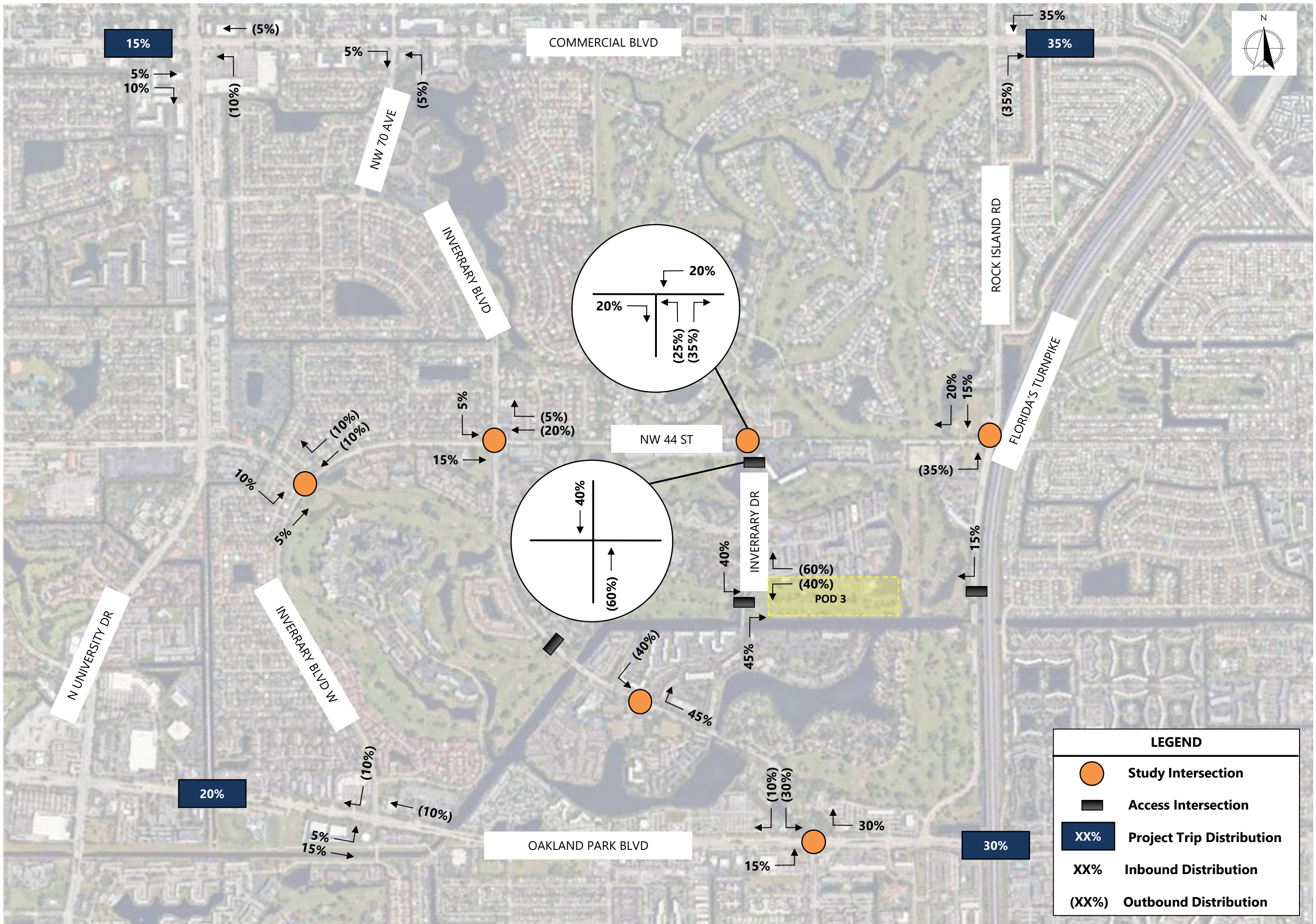
Pod 2 Distribution



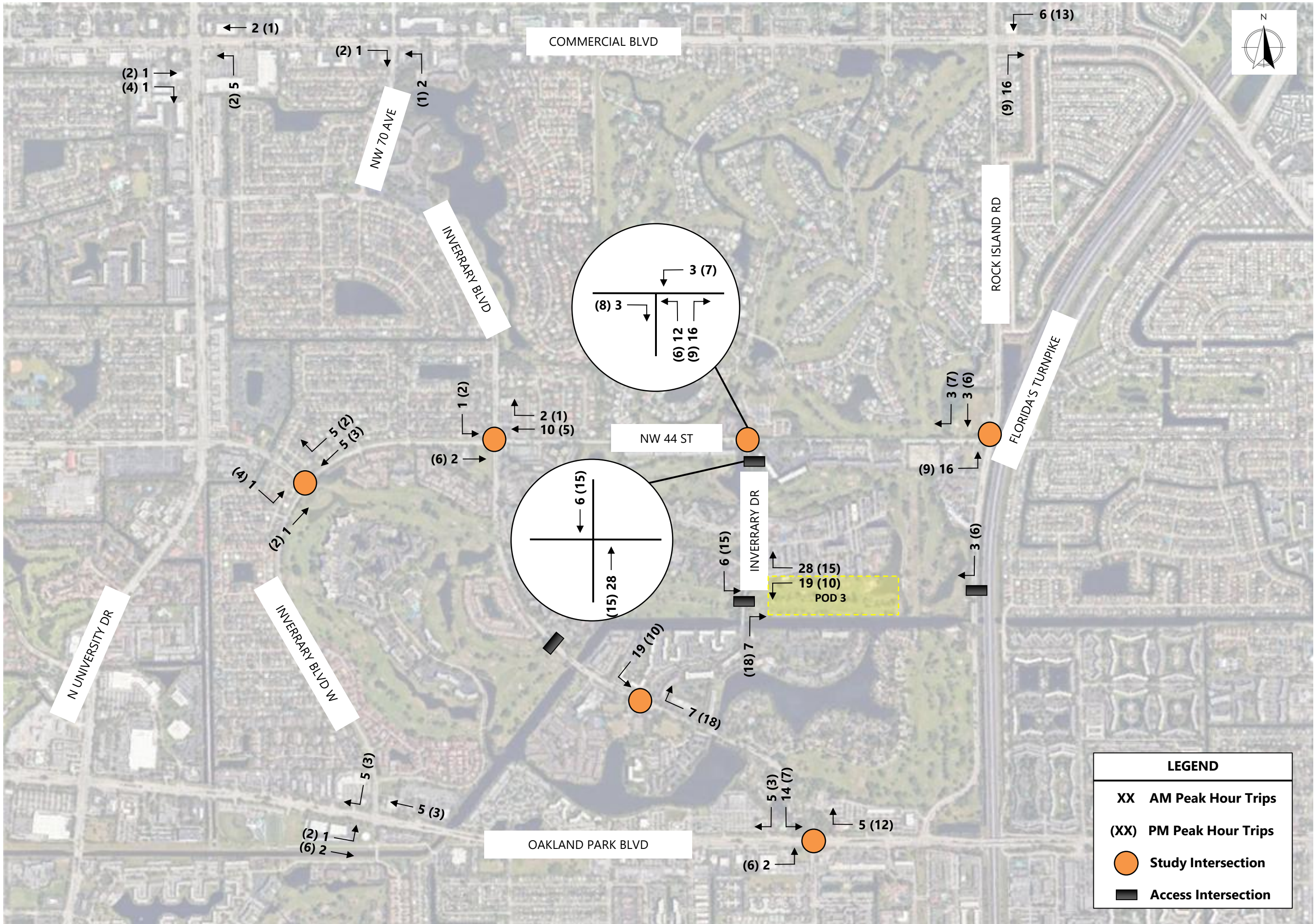
Pod 2 Trip Assignment



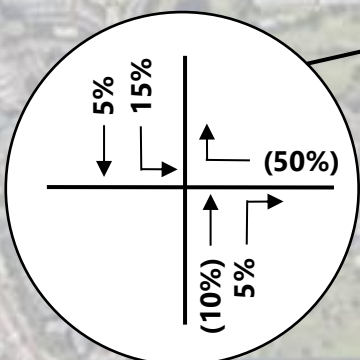
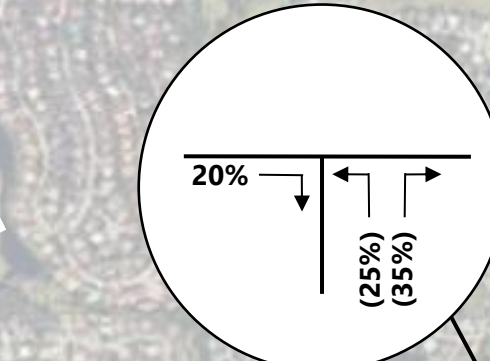
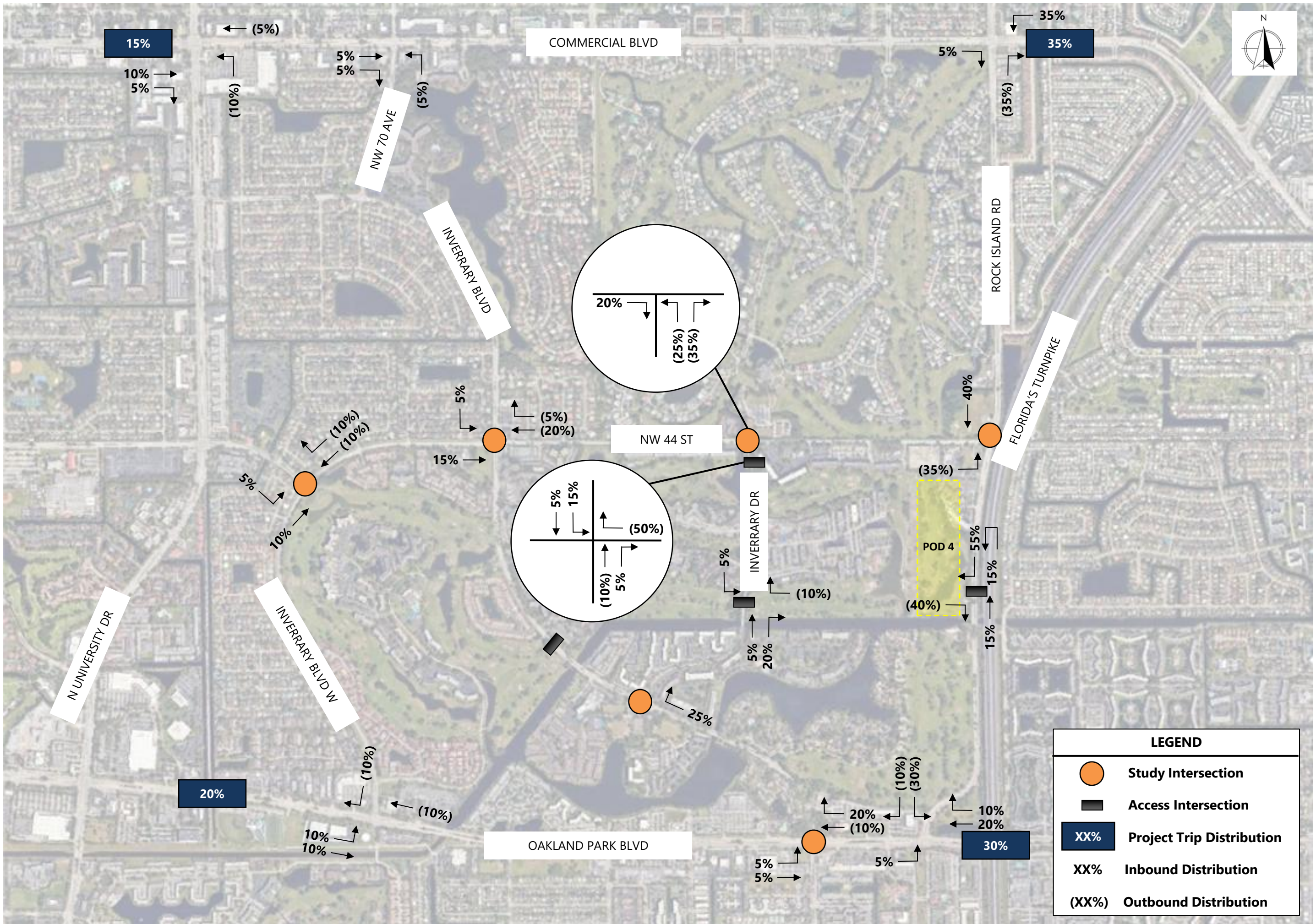
Pod 3 Distribution



Pod 3 Trip Assignment

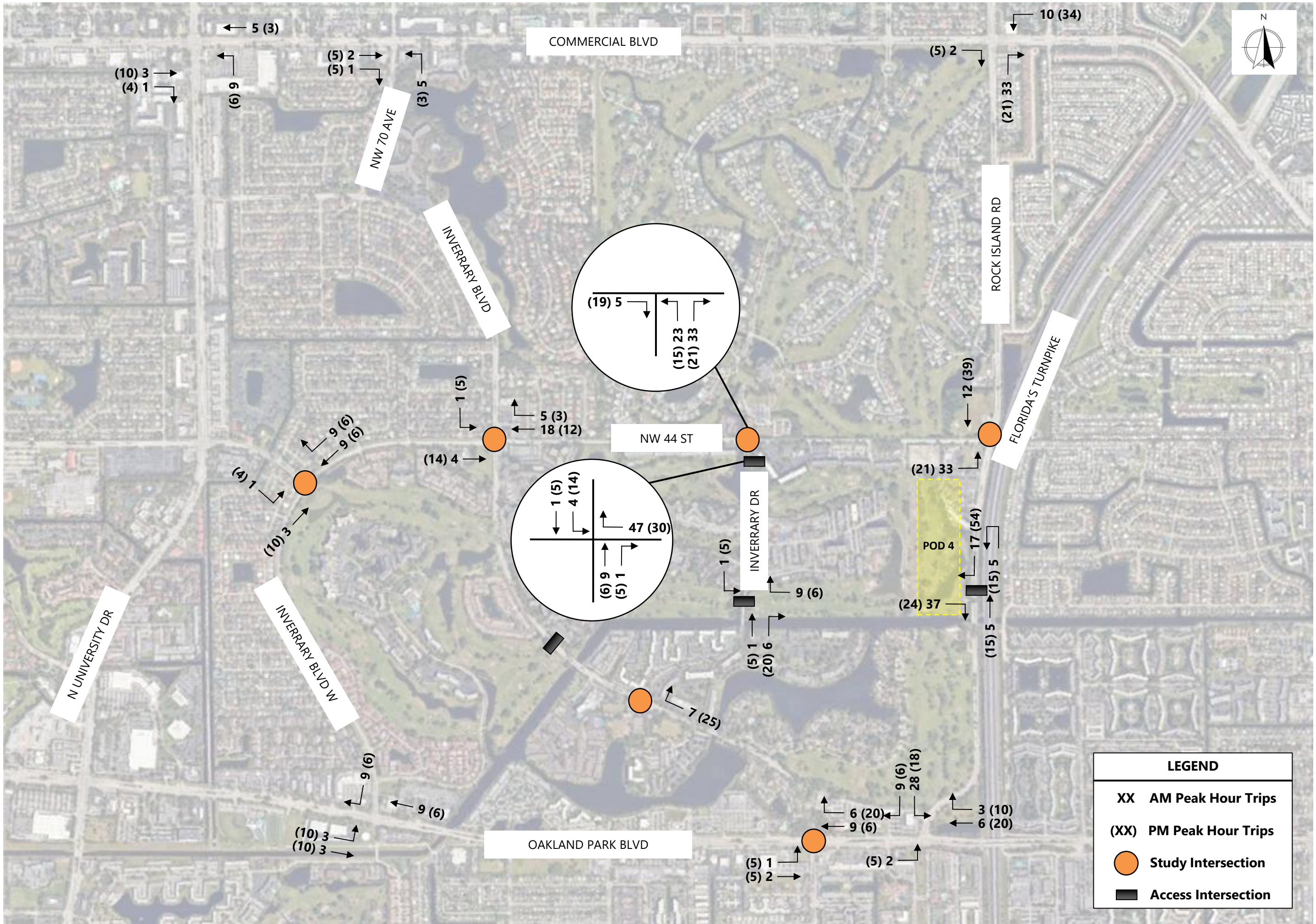


Pod 4 Distribution

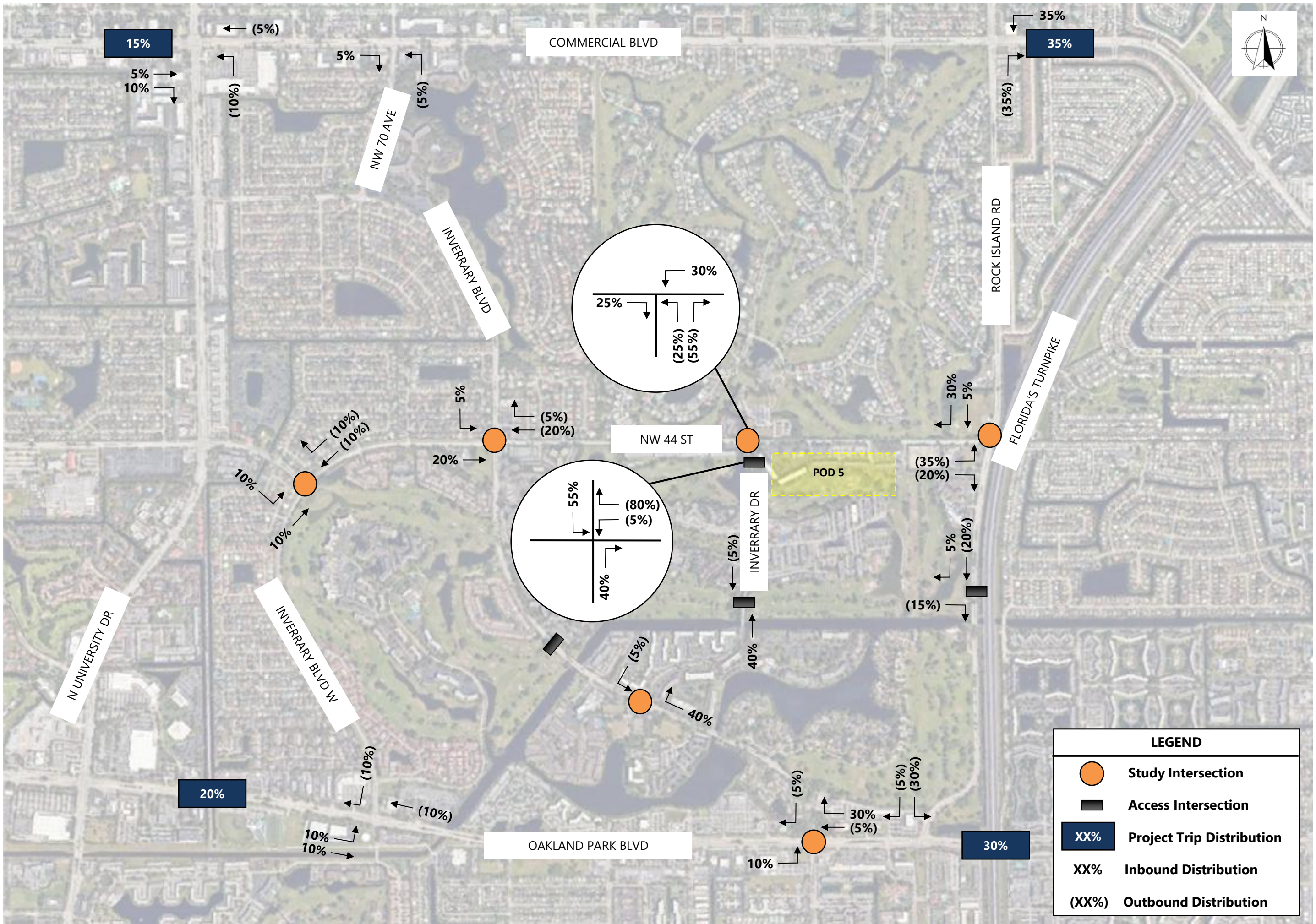


LEGEND	
	Study Intersection
	Access Intersection
	XX% Project Trip Distribution
	XX% Inbound Distribution
	(XX%) Outbound Distribution

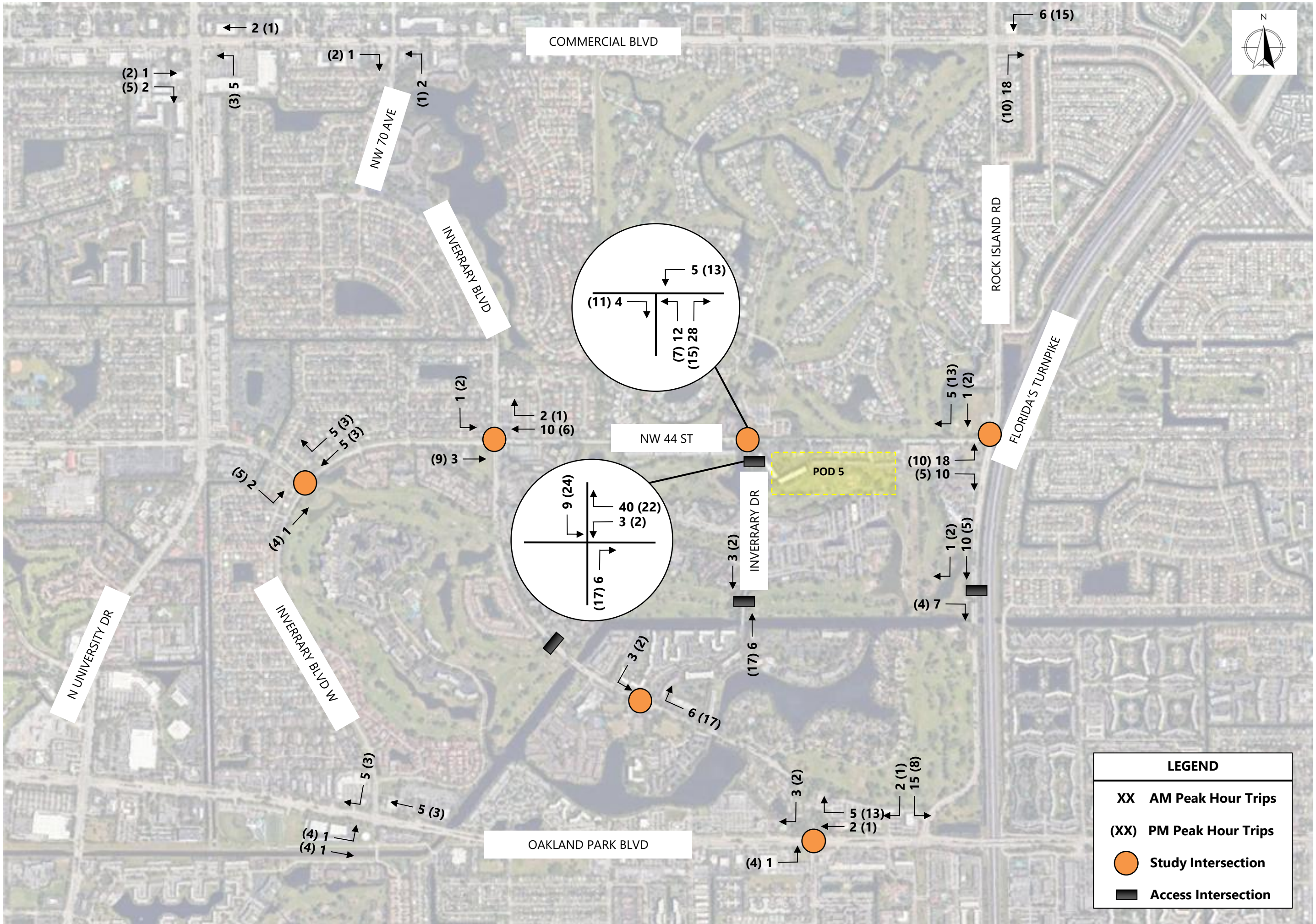
Pod 4 Trip Assignment



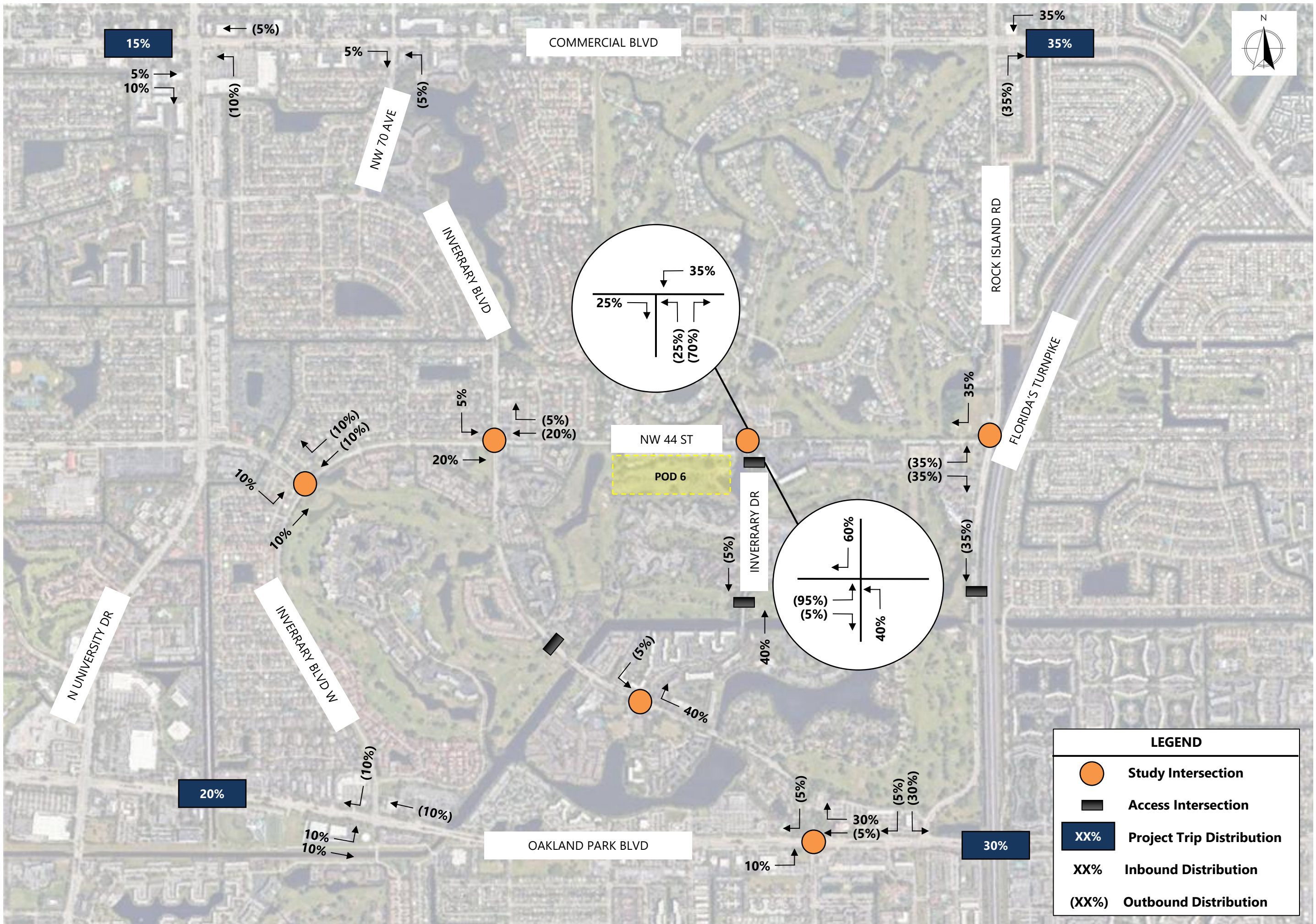
Pod 5 Distribution



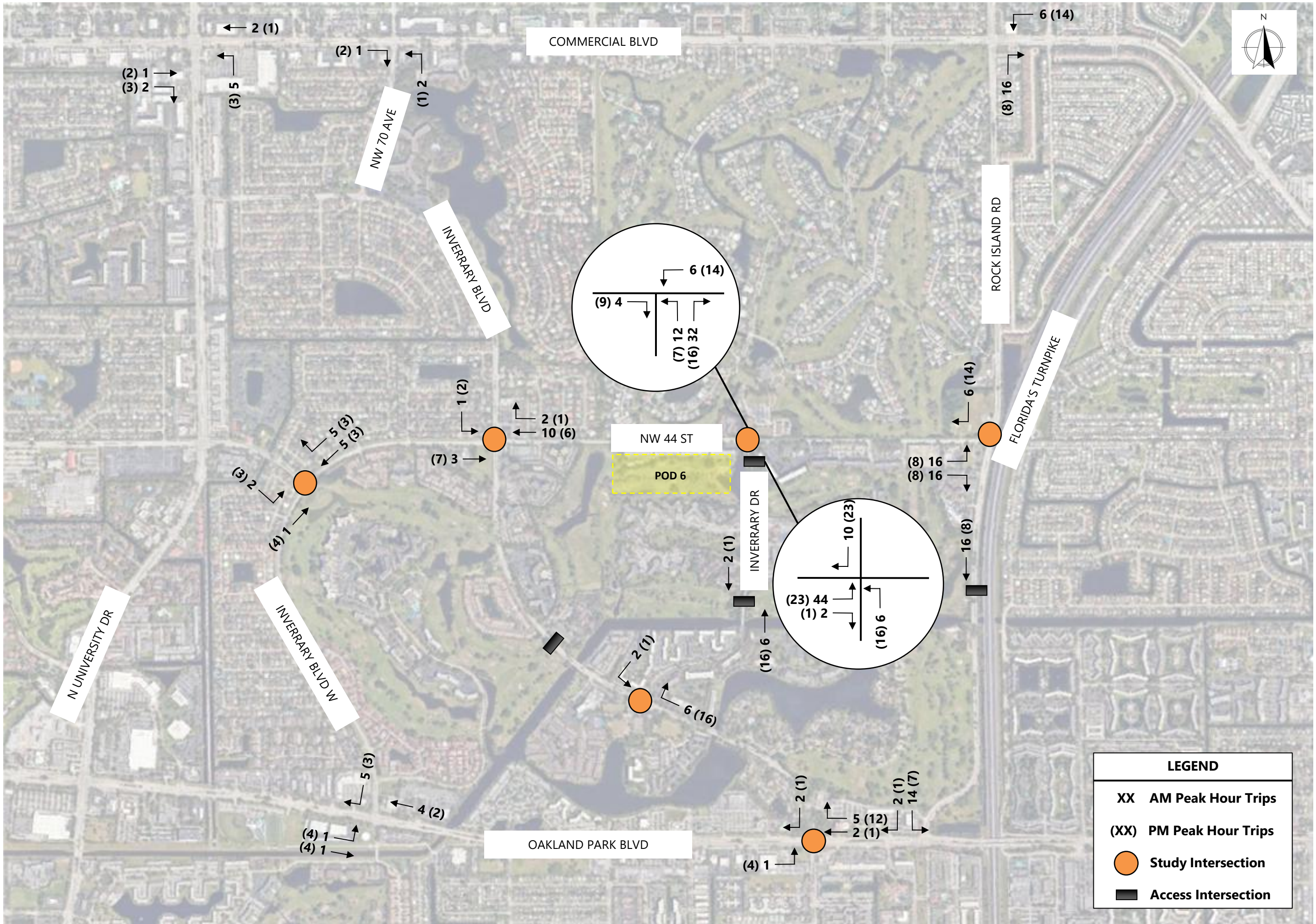
Pod 5 Trip Assignment



Pod 6 Distribution



Pod 6 Trip Assignment





Appendix D

Turn Lane Evaluation

Inverrary Boulevard at Pod 1 Access - Left Turn Warrant

Figure 2 - 5. Guideline for determining the need for a major-road left-turn bay at a two-way stop-controlled intersection.

4-lane roadway

INPUT

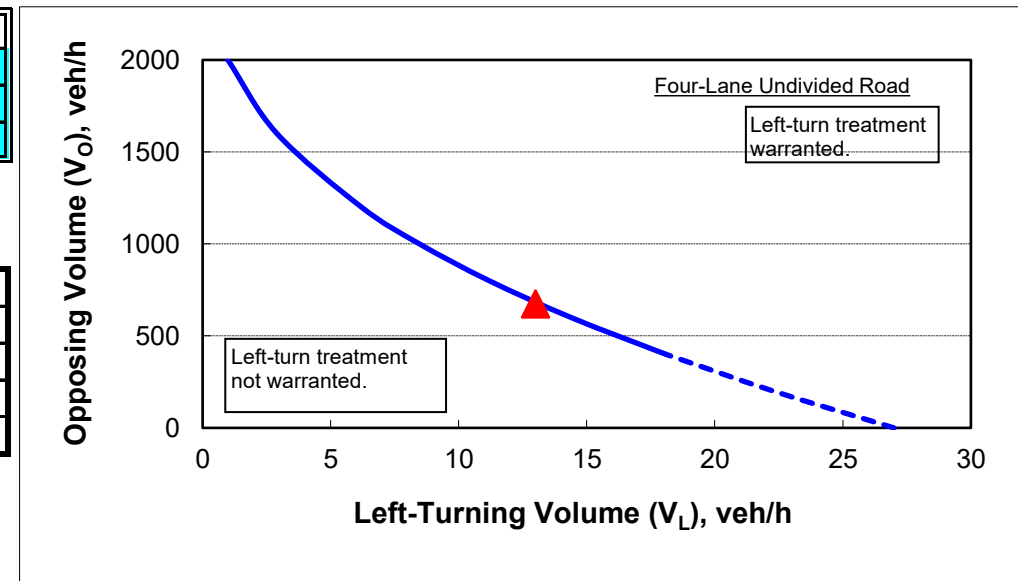
Variable	Value
Left-turning volume (V_L), veh/h:	13
Advancing volume (V_A), veh/h:	763
Opposing volume (V_O), veh/h:	673

OUTPUT

Variable	Message
Opposing volume (V_O) check:	O.K.
Combined volume (V_A and V_O) check:	O.K.
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	4.0
Critical headway, s:	6.0



Note: When $V_O < 400$ veh/h (dashed line), a left-turn lane is not normally warranted unless the advancing volume (V_A) in the same direction as the left-turning traffic exceeds 400 veh/h ($V_A > 400$ veh/h).

Inverrary Boulevard at Pod 1 Access - Right Turn Warrant

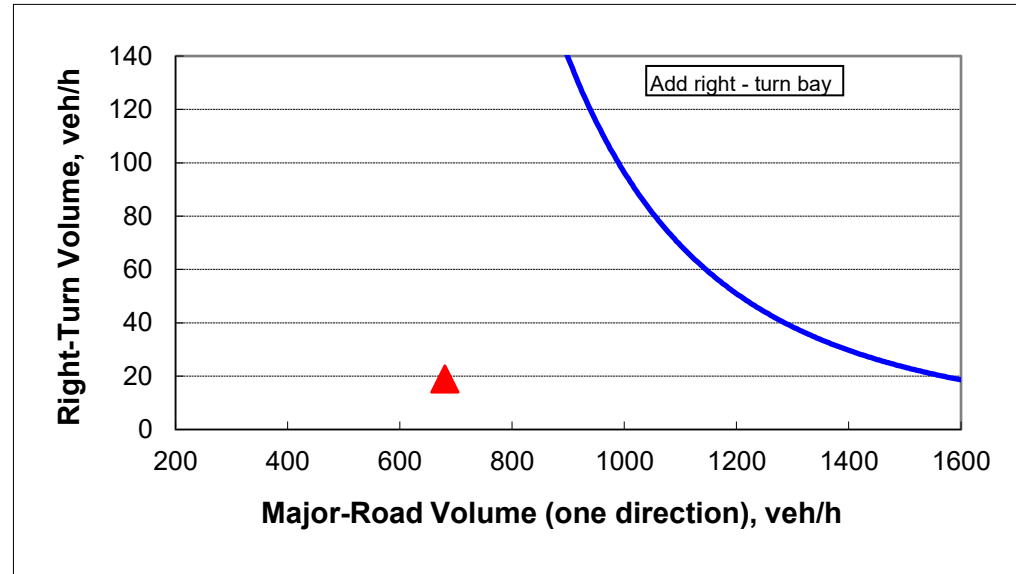
Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	4-lane roadway
Variable	Value
Major-road speed, mph:	30
Major-road volume (one direction), veh/h:	680
Right-turn volume, veh/h:	19

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	371
Guidance for determining the need for a major-road right-turn bay for a 4-lane roadway:	
Do NOT add right-turn bay.	



Inverrary Boulevard at Pod 2 Access - Left Turn Warrant

Figure 2 - 5. Guideline for determining the need for a major-road left-turn bay at a two-way stop-controlled intersection.

4-lane roadway

INPUT

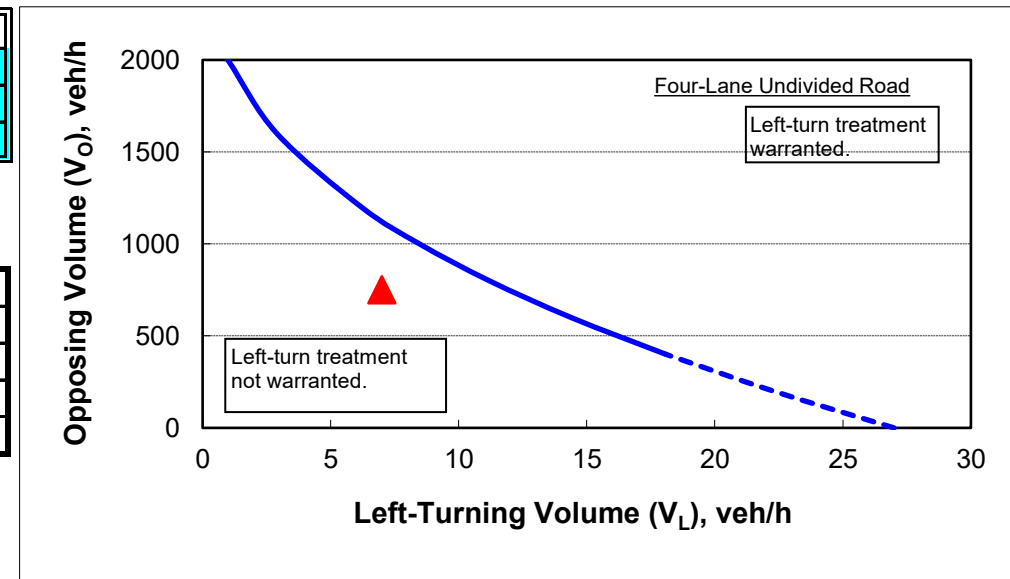
Variable	Value
Left-turning volume (V_L), veh/h:	7
Advancing volume (V_A), veh/h:	680
Opposing volume (V_O), veh/h:	750

OUTPUT

Variable	Message
Opposing volume (V_O) check:	O.K.
Combined volume (V_A and V_O) check:	O.K.
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	4.0
Critical headway, s:	6.0



Note: When $V_O < 400$ veh/h (dashed line), a left-turn lane is not normally warranted unless the advancing volume (V_A) in the same direction as the left-turning traffic exceeds 400 veh/h ($V_A > 400$ veh/h).

Inverrary Boulevard at Pod 2 Access - Right Turn Warrant

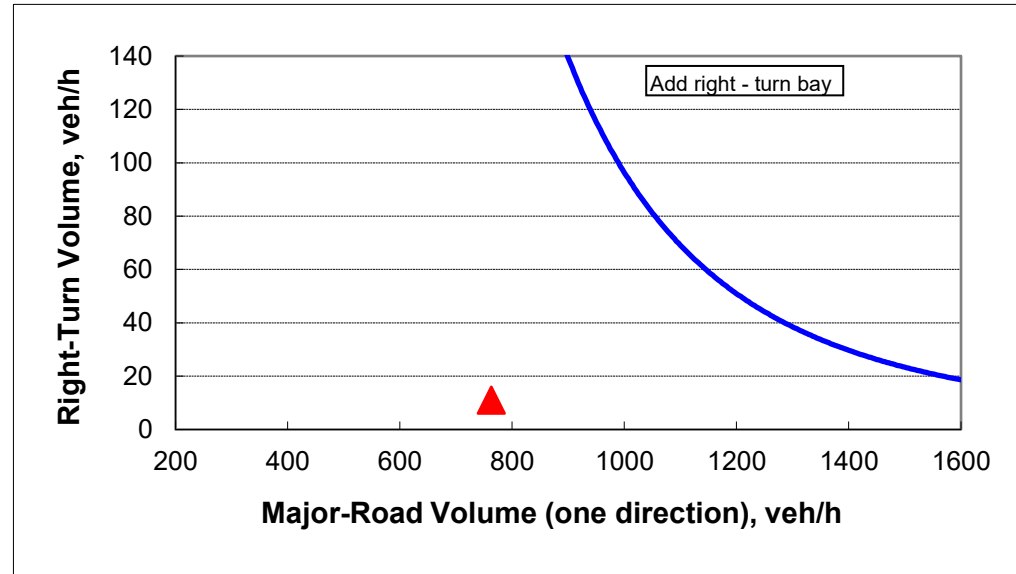
Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	4-lane roadway
Variable	Value
Major-road speed, mph:	30
Major-road volume (one direction), veh/h:	763
Right-turn volume, veh/h:	11

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	248
Guidance for determining the need for a major-road right-turn bay for a 4-lane roadway:	
Do NOT add right-turn bay.	



Inverrary Drive at Pod 2 Access - Left Turn Warrant

Figure 2 - 5. Guideline for determining the need for a major-road left-turn bay at a two-way stop-controlled intersection.

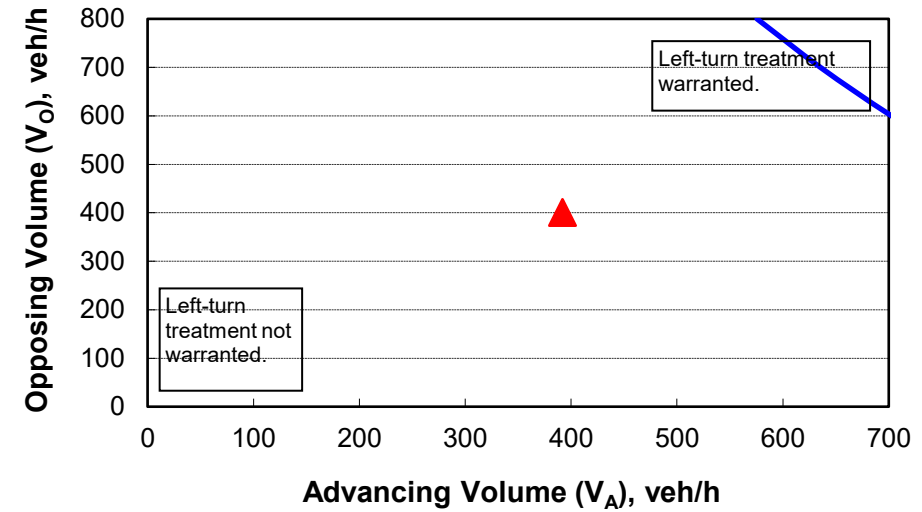
2-lane roadway (English)

INPUT

Variable	Value
85 th percentile speed, mph:	25
Percent of left-turns in advancing volume (V_A), %:	2%
Advancing volume (V_A), veh/h:	392
Opposing volume (V_O), veh/h:	401

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	863
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Inverrary Drive at Pod 2 Access - Right Turn Warrant

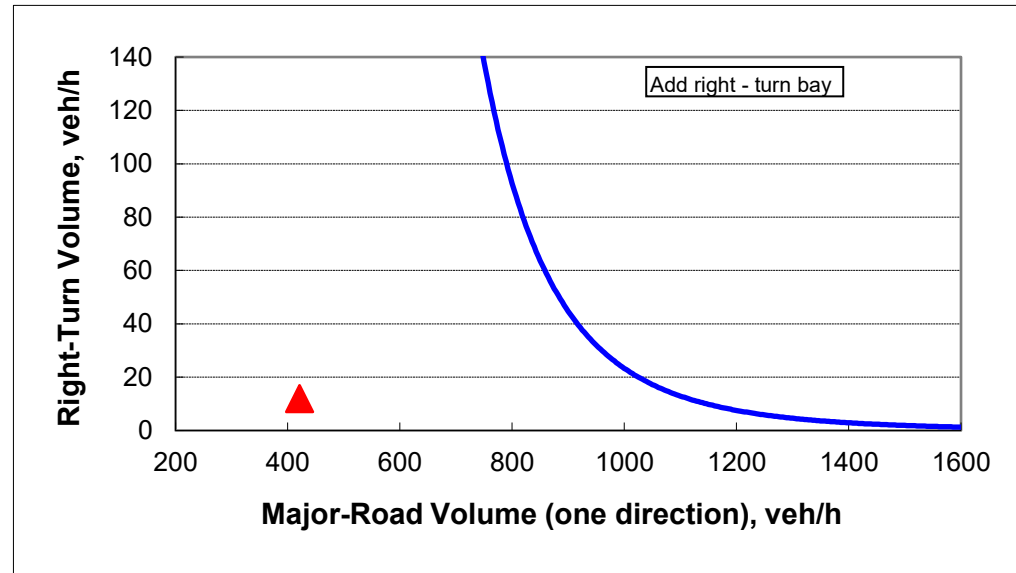
Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	2-lane roadway
Variable	Value
Major-road speed, mph:	25
Major-road volume (one direction), veh/h:	421
Right-turn volume, veh/h:	12

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	4926
Guidance for determining the need for a major-road right-turn bay for a 2-lane roadway:	
Do NOT add right-turn bay.	



Inverry Drive at Pod 3 Access - Left Turn Warrant

Figure 2 - 5. Guideline for determining the need for a major-road left-turn bay at a two-way stop-controlled intersection.

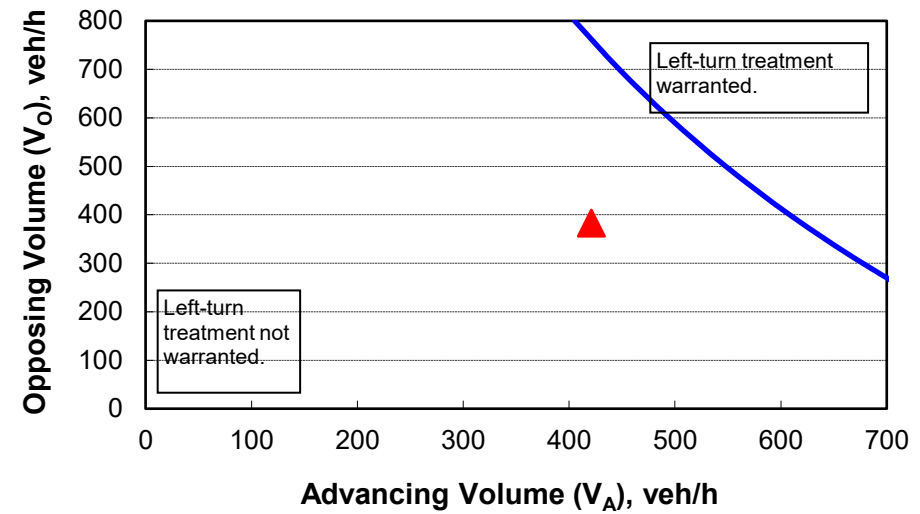
2-lane roadway (English)

INPUT

Variable	Value
85 th percentile speed, mph:	25
Percent of left-turns in advancing volume (V_A), %:	5%
Advancing volume (V_A), veh/h:	421
Opposing volume (V_O), veh/h:	383

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	619
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Inverrary Drive at Pod 3 Access - Right Turn Warrant

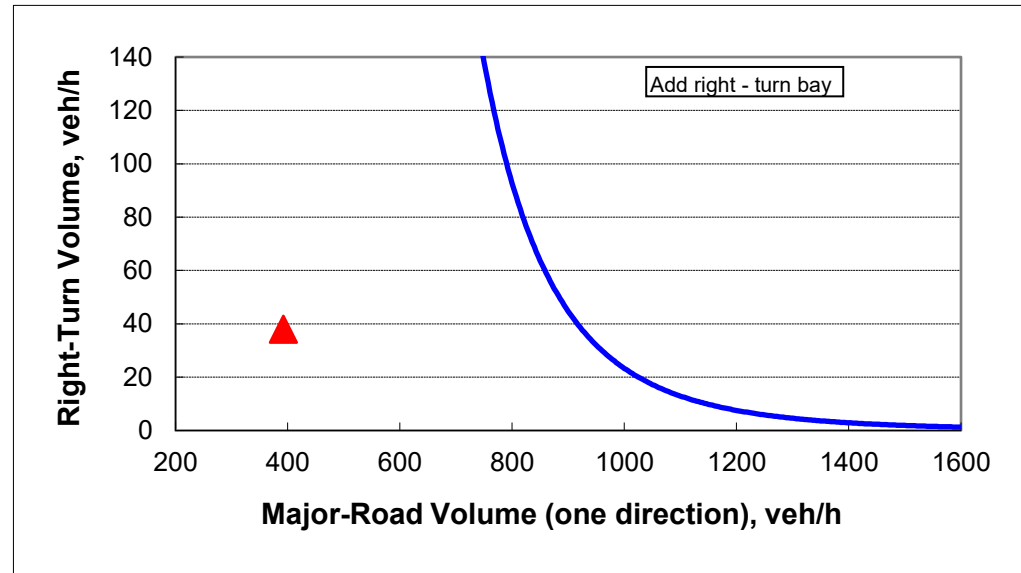
Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	2-lane roadway
Variable	Value
Major-road speed, mph:	25
Major-road volume (one direction), veh/h:	392
Right-turn volume, veh/h:	38

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	7661
Guidance for determining the need for a major-road right-turn bay for a 2-lane roadway:	
Do NOT add right-turn bay.	



Rock Island Road at Pod 4 Access - Right Turn Warrant

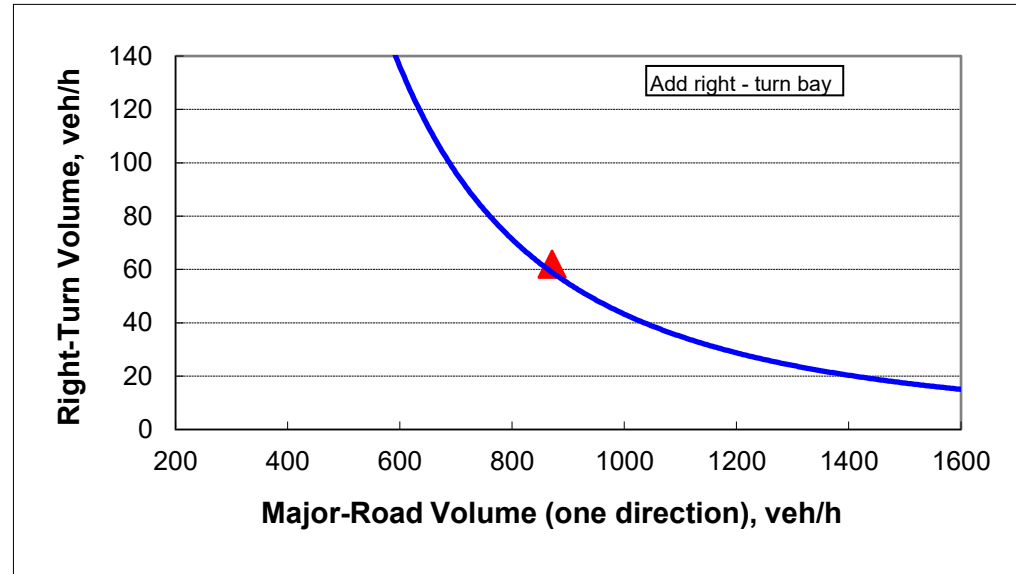
Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	4-lane roadway
Variable	Value
Major-road speed, mph:	40
Major-road volume (one direction), veh/h:	871
Right-turn volume, veh/h:	62

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	59
Guidance for determining the need for a major-road right-turn bay for a 4-lane roadway:	
Add right-turn bay.	



Inverrary Drive at Pod 5 Access - Left Turn Warrant

Figure 2 - 5. Guideline for determining the need for a major-road left-turn bay at a two-way stop-controlled intersection.

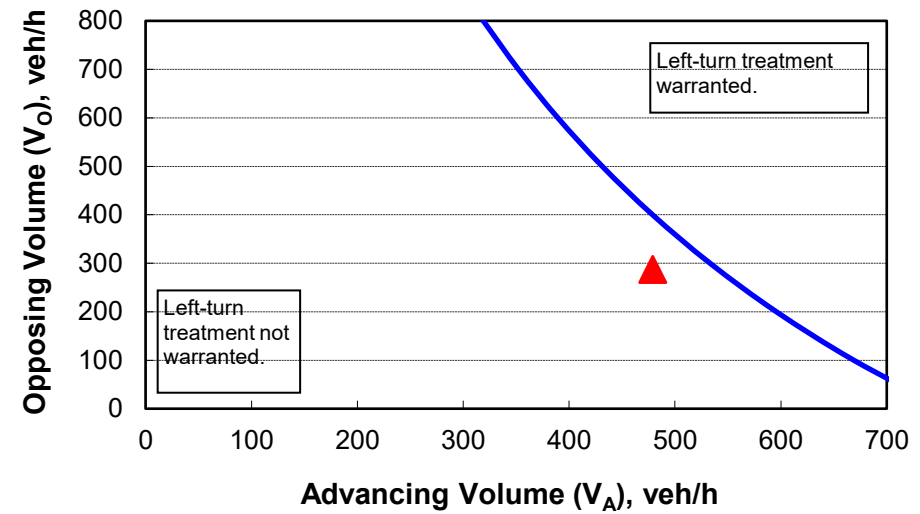
2-lane roadway (English)

INPUT

Variable	Value
85 th percentile speed, mph:	25
Percent of left-turns in advancing volume (V_A), %:	8%
Advancing volume (V_A), veh/h:	479
Opposing volume (V_O), veh/h:	287

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	541
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Inverrary Drive at Pod 5 Access - Right Turn Warrant

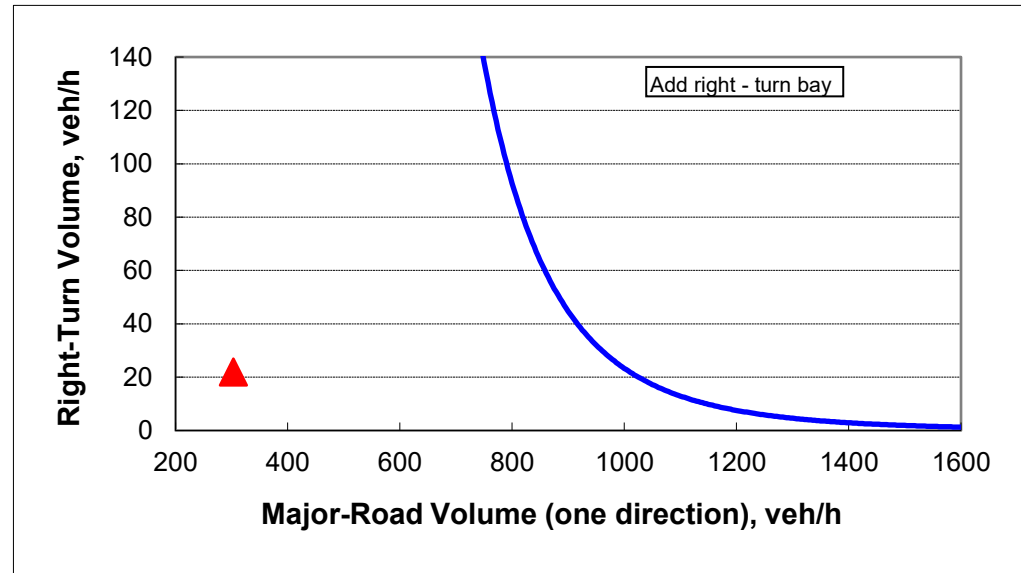
Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	2-lane roadway
Variable	Value
Major-road speed, mph:	25
Major-road volume (one direction), veh/h:	303
Right-turn volume, veh/h:	22

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	37713
Guidance for determining the need for a major-road right-turn bay for a 2-lane roadway:	
Do NOT add right-turn bay.	



Inverrary Drive at Pod 6 Access - Left Turn Warrant

Figure 2 - 5. Guideline for determining the need for a major-road left-turn bay at a two-way stop-controlled intersection.

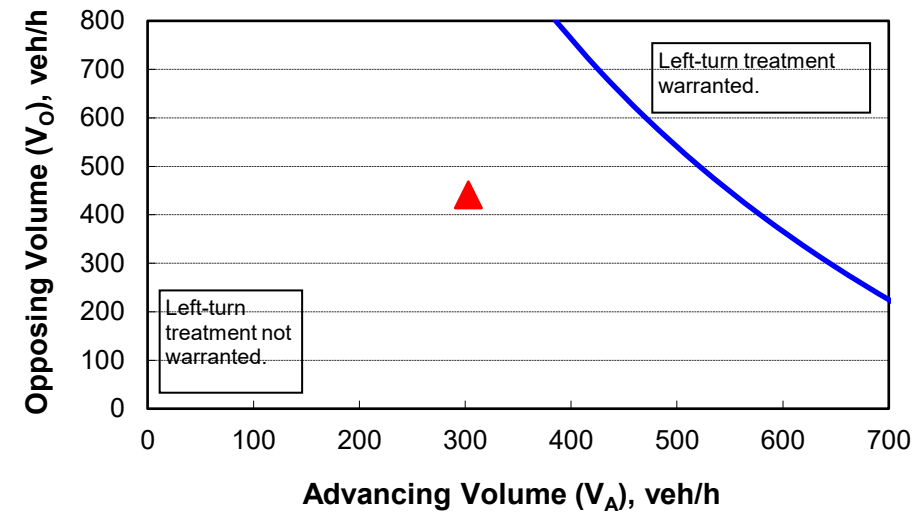
2-lane roadway (English)

INPUT

Variable	Value
85 th percentile speed, mph:	25
Percent of left-turns in advancing volume (V_A), %:	5%
Advancing volume (V_A), veh/h:	303
Opposing volume (V_O), veh/h:	441

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	554
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Inverrary Drive at Pod 6 Access - Right Turn Warrant

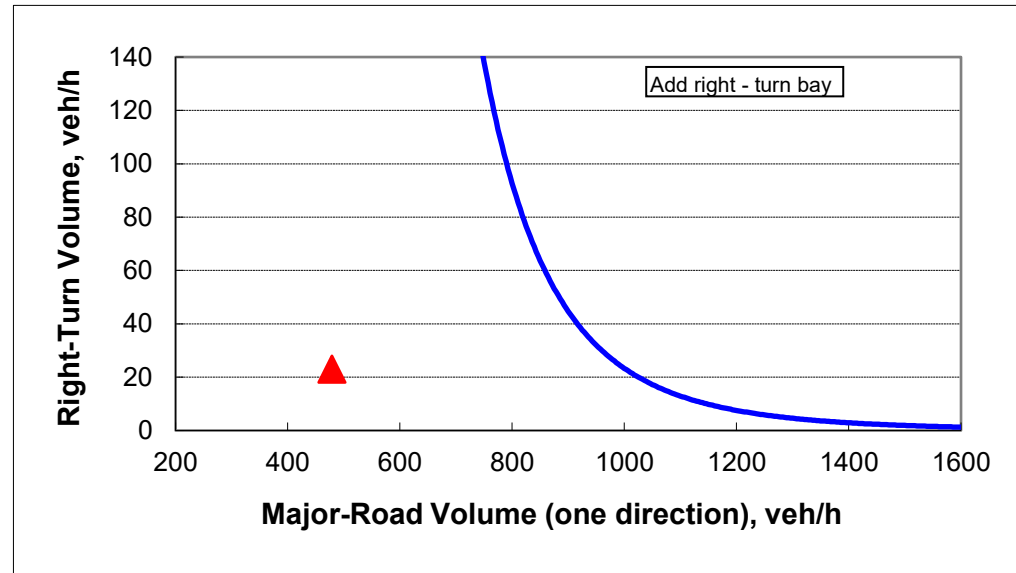
Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	2-lane roadway
Variable	Value
Major-road speed, mph:	25
Major-road volume (one direction), veh/h:	479
Right-turn volume, veh/h:	23

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	2216
Guidance for determining the need for a major-road right-turn bay for a 2-lane roadway:	
Do NOT add right-turn bay.	





Appendix E

Intersection Capacity Analysis

Station : 1496 - NW 44 St & Inverrary Blvd W (Standard File)

Phase	1 (EL)	2 (WT)	3	4	5	6 (ET)	7	8 (ST)	9	10	11	12	13	14	15	16
Walk		7					10									
Ped Clearance		22					16									
Min Green	4	12				12	10	6								
Gap Ext	1.5	2.5				2.5		2								
Max1	12	40				40	26	35								
Max2																
Yellow Clr	4	4				4	4	4	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clr	2	2				2		2	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Red Revert																
Added Initial																
Max Initial																
Time Before Reduce																
Cars Before Reduce																
Time To Reduce																
Reduce By																
Min Gap																
Dynamic Max Limit																
Dynamic Max Step																
Enable	ON	ON				ON	ON	ON								
Auto Flash Entry								ON								
Auto Flash Exit		ON				ON										
Non-Actuated 1																
Non-Actuated 2																
Lock Call									ON	ON	ON	ON	ON	ON	ON	ON
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry																
Sim Gap Enable									ON	ON	ON	ON	ON	ON	ON	ON
Guar Passage																
Rest In Walk		ON				ON										
Cond Service																
Add Init Calc																

Preemption

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Auto Flash					ON	
Override Higher Preempt					ON	ON
Flash in Dwell						
Link to Preempt						
Delay						
Min Duration						
Min Green	6	6	6	6	6	6
Min Walk						
Ped Clear						
Track Green						
Min Dwell	8	8	8	8	8	8
Max Presence	180	180	180	180		
Track Veh 1						
Track Veh 2						
Track Veh 3						
Track Veh 4						
Dwell Cyc Veh 1						
Dwell Cyc Veh 2						
Dwell Cyc Veh 3						
Dwell Cyc Veh 4						
Dwell Cyc Veh 5						
Dwell Cyc Veh 6						
Dwell Cyc Veh 7						
Dwell Cyc Veh 8						
Dwell Cyc Veh 9						
Dwell Cyc Veh 10						
Dwell Cyc Veh 11						
Dwell Cyc Veh 12						
Dwell Cyc Ped1						
Dwell Cyc Ped2						
Dwell Cyc Ped3						

Preempt LP

Channel	1	2	3	4
Min				
Max				
Enable				
Lock Mode	MAX	MAX	MAX	MAX
Coord in Preempt				
No Skip				
Priority P1				
Priority P2				
Priority P3				
Priority P4				
Lock				
Headway				
Group Lock				

Dwell Cyc Ped4						
Dwell Cyc Ped5						
Dwell Cyc Ped6						
Dwell vPed7						
Dwell Cyc Ped8						
Exit 1						
Exit 2						
Exit 3						
Exit 4						

Queue Jump				
Free Mode				
Alt Table				

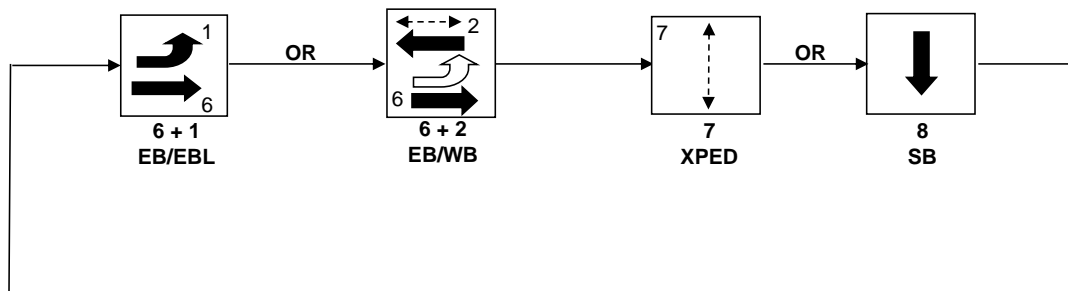
Prepared By

Date Implemented

Reviewed By

Traffic Engineer

Sequence of Operation for NW 44 Street/Inverrary W. and Inverrary Boulevard West (1496) Lauderhill



←-----→ Denotes pedestrian crosswalk signal

↪ Denotes permissive left turn



BROWARD COUNTY TRAFFIC ENGINEERING
ACTUATED TRAFFIC SIGNAL TIMING SHEET

Intersection Number	1496	Initial Operation Date	06/12/02
Controller Type	2070 LN	System Number	
Modification Number	3	Modification Date	09/16/2019
Drawing/Project No	DWG 01051002	FPL Grid Number	86984461800
Intersection	NW 44 STREET/INVERRARY W. and INVERRARY BOULEVARD WEST		
Municipality	LAUDERHILL		

Controller Phase	1	2	3	4	5	6	7	8
Face Number	1	2				6	P4	8
Direction	EBL	WB				EB	XPED	SB
Initial Green(MIN)	4	12				12	10	6
Vehicle Ext.(GAP)	1.5	2.5				2.5	0.0	2.0
Maximum Green I	12	40				40	26	35
Maximum Green II								
Yellow Clearance	4.0	4.0				4.0	4.0	4.0
All Red Clearance	2.0	2.0				2.0		2.0
Phase Recall	OFF	MIN				MIN	OFF	OFF
Detector Delay								20-RT
Walk		7					10	
Pedestrian Clearance		22					16	
Permissive	5-SECT							
Flash Operation		RED				RED		RED

Attachment

NOTES:

1. NW 44 ST./INVERRARY BLVD. W. IS EAST/WEST (PHASES 2+6).
2. ANTI-BACKDOWN EASTBOUND: PHASES 2+6 ON--->OMIT PHASE 1.
3. PHASE 7 IS AN EXCLUSIVE PEDESTRIAN SIGNAL.
4. PHASE 7 YELLOW PROVIDES ADDITIONAL CLEARANCE, DISPLAYS AS ALL RED.
5. MOD. 3 UPDATES PHASE 2 AND PHASE 7 (XPED) VALUES.

Submitted By _____ Approved By _____

Station : 1224 - Inverrary Blvd & NW 44 St (Standard File)

Phase	1 (SL)	2 (NT)	3 (WL)	4 (ET)	5 (NL)	6 (ST)	7 (EL)	8 (WT)	9	10	11	12	13	14	15	16
Walk		7		7		7		7								
Ped Clearance		21		24		21		24								
Min Green	4	12	4	12	4	12	4	12								
Gap Ext	1.5	3	1.5	2	1.5	3	1.5	2								
Max1	15	35	15	35	15	35	15	35								
Max2																
Yellow Clr	4	4	4	4	4	4	4	4	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clr	2	2	2	2	2	2	2	2	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Red Revert																
Added Initial																
Max Initial																
Time Before Reduce																
Cars Before Reduce																
Time To Reduce																
Reduce By																
Min Gap																
Dynamic Max Limit																
Dynamic Max Step																
Enable	ON	ON	ON	ON	ON	ON	ON	ON								
Auto Flash Entry				ON				ON								
Auto Flash Exit		ON						ON								
Non-Actuated 1																
Non-Actuated 2																
Lock Call									ON	ON	ON	ON	ON	ON	ON	ON
Min Recall		ON						ON								
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry				ON				ON								
Sim Gap Enable				ON				ON	ON	ON	ON	ON	ON	ON	ON	ON
Guar Passage																
Rest In Walk		ON						ON								
Cond Service																
Add Init Calc																

Preemption

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Auto Flash					ON	ON
Override Higher Preempt					ON	ON
Flash in Dwell						
Link to Preempt						
Delay						
Min Duration						
Min Green	6	6	6	6	6	6
Min Walk						
Ped Clear						
Track Green						
Min Dwell	8	8	8	8	8	8
Max Presence	180					
Track Veh 1						
Track Veh 2						
Track Veh 3						
Track Veh 4						
Dwell Cyc Veh 1	2					
Dwell Cyc Veh 2	6					
Dwell Cyc Veh 3	1					
Dwell Cyc Veh 4	5					
Dwell Cyc Veh 5						
Dwell Cyc Veh 6						
Dwell Cyc Veh 7						
Dwell Cyc Veh 8						
Dwell Cyc Veh 9						
Dwell Cyc Veh 10						
Dwell Cyc Veh 11						
Dwell Cyc Veh 12						
Dwell Cyc Ped1						
Dwell Cyc Ped2						
Dwell Cyc Ped3						

Preempt LP

Channel	1	2	3	4
Min				
Max				
Enable				
Lock Mode	MAX	MAX	MAX	MAX
Coord in Preempt				
No Skip				
Priority P1				
Priority P2				
Priority P3				
Priority P4				
Lock				
Headway				
Group Lock				

Dwell Cyc Ped4						
Dwell Cyc Ped5						
Dwell Cyc Ped6						
Dwell vPed7						
Dwell Cyc Ped8						
Exit 1	4					
Exit 2	8					
Exit 3						
Exit 4						

Queue Jump				
Free Mode				
Alt Table				

Prepared By

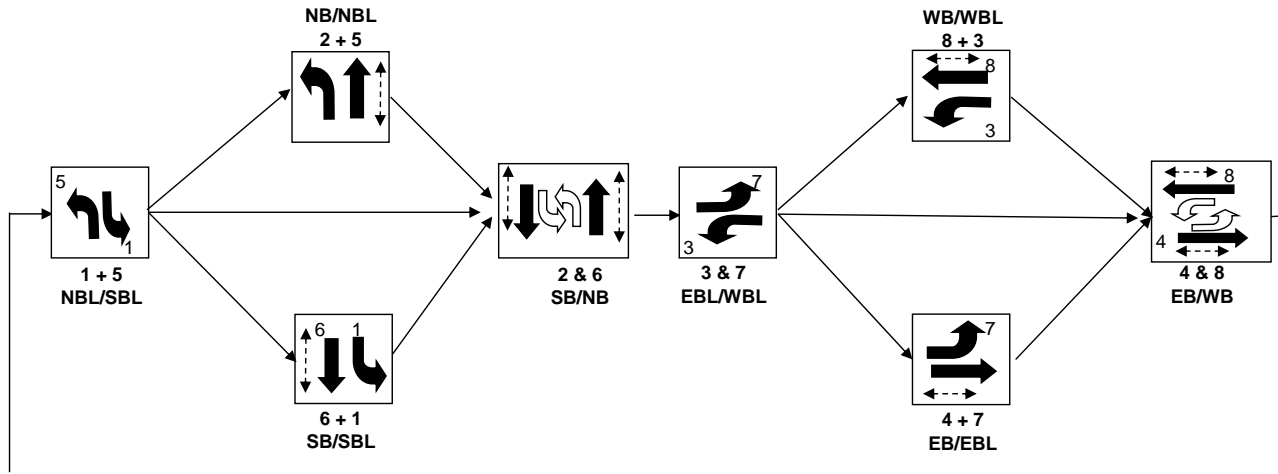
Date Implemented

Reviewed By

Traffic Engineer

Sequence of Operation for (1224) Inverrary Blvd. and NW 44 Street Lauderhill

Mod- 4 & higher



Denotes permissive left turn
 Denotes pedestrian crosswalk signal



BROWARD COUNTY TRAFFIC ENGINEERING
ACTUATED TRAFFIC SIGNAL TIMING SHEET

Intersection Number	1224	Initial Operation Date	4/12/94
Controller Type	2070 LN	System Number	
Modification Number	9	Modification Date	12/15/2022
Drawing/Project No		FPL Grid Number	99999999999
Intersection	INVERRARY BLVD. and NW 44 STREET		
Municipality	LAUDERHILL		

Controller Phase	1	2	3	4	5	6	7	8
Face Number	1	2	3	4	5	6	7	8
Direction	SBL	NB	WBL	EB	NBL	SB	EBL	WB
Initial Green(MIN)	4	12	4	12	4	12	4	12
Vehicle Ext.(GAP)	1.5	3.0	1.5	2.0	1.5	3.0	1.5	2.0
Maximum Green I	15	35	15	35	15	35	15	35
Maximum Green II								
Yellow Clearance	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Phase Recall	OFF	MIN	OFF	OFF	OFF	MIN	OFF	OFF
Detector Delay								
Walk		7		7		7		7
Pedestrian Clearance		21		24		21		24
Permissive	5 SECT		5-SECT		5 SECT		5-SECT	
Flash Operation		YELLOW		RED		YELLOW		RED

Attachment

NOTES:

1. DUAL ENTRY HARDWIRED EAST/WEST.
2. ANTI-BACKDOWN NORTH/SOUTH: PHASES 2+6 ON--->OMIT PHASES 1+5.
3. PED RECALL 18:00-20:00 FRIDAYS, 08:45-14:00 AND 17:00-20:00 SATURDAYS.
4. UPDATE PED RECALL TIME FRAME.

Submitted By _____ **Approved By** _____

Station : 1490 - NW 44 St & Inverrary Dr (Standard File)

Phase	1	2 (WT)	3	4 (NT)	5 (WL)	6 (ET)	7	8	9	10	11	12	13	14	15	16
Walk						7										
Ped Clearance						20										
Min Green		12		6	4	12			3		3		3		3	
Gap Ext		3		2	1.5	3										
Max1		45		20	12	45										
Max2																
Yellow Clr	4	4	4	4	4	4	4	4	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clr		2		2	2	2			1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Red Revert																
Added Initial																
Max Initial																
Time Before Reduce																
Cars Before Reduce																
Time To Reduce																
Reduce By																
Min Gap																
Dynamic Max Limit																
Dynamic Max Step																
Enable		ON		ON	ON	ON										
Auto Flash Entry				ON												
Auto Flash Exit		ON				ON										
Non-Actuated 1																
Non-Actuated 2																
Lock Call																
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry																
Sim Gap Enable																
Guar Passage																
Rest In Walk		ON				ON										
Cond Service																
Add Init Calc																

Preemption

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Auto Flash						
Override Higher Preempt						
Flash in Dwell						
Link to Preempt						
Delay						
Min Duration						
Min Green	6	6	6	6	6	6
Min Walk						
Ped Clear						
Track Green						
Min Dwell	8	8	8	8	8	8
Max Presence	180	180	180	180	180	180
Track Veh 1						
Track Veh 2						
Track Veh 3						
Track Veh 4						
Dwell Cyc Veh 1						
Dwell Cyc Veh 2						
Dwell Cyc Veh 3						
Dwell Cyc Veh 4						
Dwell Cyc Veh 5						
Dwell Cyc Veh 6						
Dwell Cyc Veh 7						
Dwell Cyc Veh 8						
Dwell Cyc Veh 9						
Dwell Cyc Veh 10						
Dwell Cyc Veh 11						
Dwell Cyc Veh 12						
Dwell Cyc Ped1						
Dwell Cyc Ped2						
Dwell Cyc Ped3						

Preempt LP

Channel	1	2	3	4
Min				
Max				
Enable				
Lock Mode	MAX	MAX	MAX	MAX
Coord in Preempt				
No Skip				
Priority P1				
Priority P2				
Priority P3				
Priority P4				
Lock				
Headway				
Group Lock				

Dwell Cyc Ped4						
Dwell Cyc Ped5						
Dwell Cyc Ped6						
Dwell vPed7						
Dwell Cyc Ped8						
Exit 1						
Exit 2						
Exit 3						
Exit 4						

Queue Jump				
Free Mode				
Alt Table				

Prepared By

Date Implemented

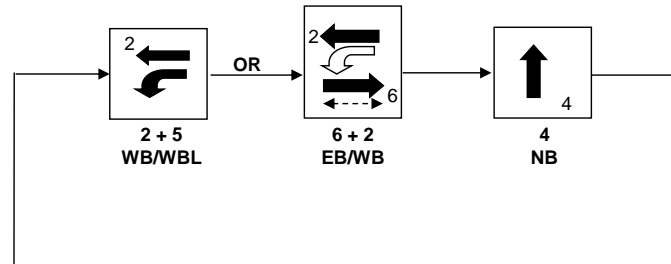
Reviewed By



Traffic Engineer

Sequence of Operation for NW 44 Street and Inverrary Drive (1490)

Lauderhill

Modification #1



 Denotes permissive left turn
 Denotes pedestrian crosswalk signal



BROWARD COUNTY TRAFFIC ENGINEERING
ACTUATED TRAFFIC SIGNAL TIMING SHEET

Intersection Number	1490	Initial Operation Date	03/29/01
Controller Type	2070 LN	System Number	
Modification Number	4	Modification Date	06/30/2020
Drawing/Project No	00100301	FPL Grid Number	86984963105
Intersection	NW 44 STREET and INVERRARY DRIVE		
Municipality	LAUDERHILL		

Controller Phase	2	4	5	6
Face Number	2	4	5	6
Direction	WB	NB	WBL	EB
Initial Green(MIN)	12	6	4	12
Vehicle Ext.(GAP)	3.0	2.0	1.5	3.0
Maximum Green I	45	20	12	45
Maximum Green II				
Yellow Clearance	4.0	4.0	4.0	4.0
All Red Clearance	2.0	2.0	2.0	2.0
Phase Recall	MIN	OFF	OFF	MIN
Detector Delay				
Walk				7
Pedestrian Clearance				20
Permissive			5-SECT	
Flash Operation	RED	RED		RED

Attachment

NOTES:

1. ANTI-BACKDOWN WESTBOUND: PHASES 2+6 ON--->OMIT PHASE 5.
2. MOD. 4 UPDATES ALL RED CLEARANCE VALUES.

Submitted By _____ **Approved By** _____

Station : 1202 - Rock Island Rd & NW 44 St (Standard File)

Phase	1	2 (NT)	3	4 (ET)	5 (NL)	6 (ST)	7	8	9	10	11	12	13	14	15	16
Walk		7				7										
Ped Clearance						12										
Min Green		7		6	4	7										
Gap Ext		3		3	1.5	3										
Max1		45		30	15	45										
Max2																
Yellow Clr	3	4.5	3	4	4.5	4.5	3	3	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clr		2		2	2	2			1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Red Revert																
Added Initial																
Max Initial																
Time Before Reduce																
Cars Before Reduce																
Time To Reduce																
Reduce By																
Min Gap																
Dynamic Max Limit				65												
Dynamic Max Step				35												
Enable		ON		ON	ON	ON										
Auto Flash Entry				ON												
Auto Flash Exit		ON				ON										
Non-Actuated 1																
Non-Actuated 2																
Lock Call									ON	ON	ON	ON	ON	ON	ON	ON
Min Recall																
Max Recall		ON				ON										
Ped Recall																
Soft Recall																
Dual Entry				ON				ON								
Sim Gap Enable	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
Guar Passage																
Rest In Walk		ON				ON										
Cond Service																
Add Init Calc																

Preemption

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Auto Flash						
Override Higher Preempt						
Flash in Dwell						
Link to Preempt						
Delay						
Min Duration						
Min Green	6	6	6		6	6
Min Walk						
Ped Clear						
Track Green						
Min Dwell	8	8	8		8	8
Max Presence	180	180	180		180	180
Track Veh 1						
Track Veh 2						
Track Veh 3						
Track Veh 4						
Dwell Cyc Veh 1	2	4	6		2	4
Dwell Cyc Veh 2	6				5	
Dwell Cyc Veh 3						
Dwell Cyc Veh 4						
Dwell Cyc Veh 5						
Dwell Cyc Veh 6						
Dwell Cyc Veh 7						
Dwell Cyc Veh 8						
Dwell Cyc Veh 9						
Dwell Cyc Veh 10						
Dwell Cyc Veh 11						
Dwell Cyc Veh 12						
Dwell Cyc Ped1						
Dwell Cyc Ped2						
Dwell Cyc Ped3						

Preempt LP

Channel	1	2	3	4
Min				
Max				
Enable				
Lock Mode	MAX	MAX	MAX	MAX
Coord in Preempt				
No Skip				
Priority P1				
Priority P2				
Priority P3				
Priority P4				
Lock				
Headway				
Group Lock				

Dwell Cyc Ped4						
Dwell Cyc Ped5						
Dwell Cyc Ped6						
Dwell vPed7						
Dwell Cyc Ped8						
Exit 1	4	2	2		2	2
Exit 2		5	6		6	5
Exit 3						
Exit 4						

Queue Jump				
Free Mode				
Alt Table				

Prepared By

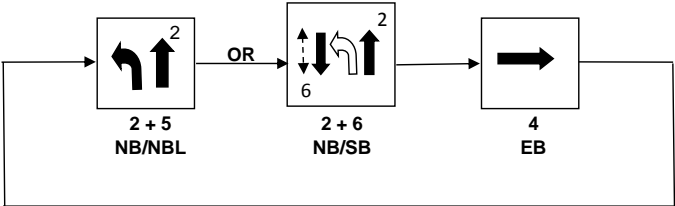
Date Implemented


Reviewed By


Traffic Engineer

Sequence of Operation for (1202) Rock island Road and NW 44 Street

Lauderhill



 Denotes permissive left turn

 Denotes pedestrian signal



BROWARD COUNTY TRAFFIC ENGINEERING
ACTUATED TRAFFIC SIGNAL TIMING SHEET

Intersection Number	1202	Initial Operation Date	12/18/78
Controller Type	2070 LN	System Number	
Modification Number	8	Modification Date	04/01/2015
Drawing/Project No	N1030013P1	FPL Grid Number	87184052805
Intersection	ROCK ISLAND ROAD and NW 44 STREET		
Municipality	LAUDERHILL		

Controller Phase	2	4	5	6
Face Number	2	4	5	6
Direction	NB	EB	NBL	SB
Initial Green(MIN)	7	6	4	7
Vehicle Ext.(GAP)	3.0	3.0	1.5	3.0
Maximum Green I	45	30	15	45
Maximum Green II				
Yellow Clearance	4.5	4.0	4.5	4.5
All Red Clearance	2.0	2.0	2.0	2.0
Phase Recall	MAX	OFF	OFF	MAX
Detector Delay		20-RT		
Walk				7
Pedestrian Clearance				12
Permissive			YES	
Flash Operation	YELLOW	RED		YELLOW

Attachment

NOTES:

1. ANTI-BACKDOWN- PHASE 2 & 6 ON ---> OMIT PHASE 5.
2. MOD. 8 DEPLOYS SIGNAL ONTO ATMS.NOW.

Submitted By _____ **Approved By** _____

Station : 1183 - Inverrary Blvd & Inverrary Dr (Standard File)

Phase	1 (SL)	2 (NT)	3 (ER)	4 (WR)	5 (NL)	6 (ST)	7	8	9	10	11	12	13	14	15	16
Walk																
Ped Clearance																
Min Green	4	10	6	13	4	10										
Gap Ext	1.5	3	2	2	1.5	3										
Max1	10	40	15	25	10	40										
Max2																
Yellow Clr	4	4	4	4	4	4	4	4	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clr	2			2	1				1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Red Revert																
Added Initial																
Max Initial																
Time Before Reduce																
Cars Before Reduce																
Time To Reduce																
Reduce By																
Min Gap																
Dynamic Max Limit																
Dynamic Max Step																
Enable	ON	ON	ON	ON	ON	ON										
Auto Flash Entry				ON				ON								
Auto Flash Exit		ON				ON										
Non-Actuated 1																
Non-Actuated 2																
Lock Call									ON	ON	ON	ON	ON	ON	ON	ON
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry		ON				ON										
Sim Gap Enable	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
Guar Passage																
Rest In Walk		ON				ON										
Cond Service																
Add Init Calc																

Preemption

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Auto Flash		ON	ON	ON	ON	ON
Override Higher Preempt		ON	ON	ON	ON	ON
Flash in Dwell						
Link to Preempt						
Delay						
Min Duration						
Min Green						
Min Walk						
Ped Clear						
Track Green						
Min Dwell						
Max Presence						
Track Veh 1						
Track Veh 2						
Track Veh 3						
Track Veh 4						
Dwell Cyc Veh 1						
Dwell Cyc Veh 2						
Dwell Cyc Veh 3						
Dwell Cyc Veh 4						
Dwell Cyc Veh 5						
Dwell Cyc Veh 6						
Dwell Cyc Veh 7						
Dwell Cyc Veh 8						
Dwell Cyc Veh 9						
Dwell Cyc Veh 10						
Dwell Cyc Veh 11						
Dwell Cyc Veh 12						
Dwell Cyc Ped1						
Dwell Cyc Ped2						
Dwell Cyc Ped3						

Preempt LP

Channel	1	2	3	4
Min				
Max				
Enable				
Lock Mode	MAX	MAX	MAX	MAX
Coord in Preempt				
No Skip				
Priority P1				
Priority P2				
Priority P3				
Priority P4				
Lock				
Headway				
Group Lock				

Dwell Cyc Ped4						
Dwell Cyc Ped5						
Dwell Cyc Ped6						
Dwell vPed7						
Dwell Cyc Ped8						
Exit 1						
Exit 2						
Exit 3						
Exit 4						

Queue Jump				
Free Mode				
Alt Table				


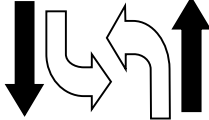






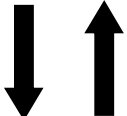
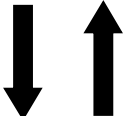



Prepared By

Date Implemented

Reviewed By

Traffic Engineer

Sequence of Operation
 Inverrary Blvd & Inverrary Dr (A183)
WITH MODIFICATION - 1 AND HIGHER

	ϕ 1 SBL 6, 6A, 1 SEQUENCE 1	ϕ 2 N/S 6, 6A, 2, 2A SEQUENCE 2	Internal Clearance	ϕ 5 NBL 2, 2A, 5 SEQUENCE 3	ϕ 3 EB SEQUENCE 4	Internal Clearance	ϕ 4 WB SEQUENCE 5
Inverrary Dr							
Racket Club Condo							



BROWARD COUNTY TRAFFIC ENGINEERING
ACTUATED TRAFFIC SIGNAL TIMING SHEET

Intersection Number	1183	Initial Operation Date	4/12/94
Controller Type	2070 LN	System Number	
Modification Number	5	Modification Date	09/13/2021
Drawing/Project No		FPL Grid Number	87083366000
Intersection	INVERRARY BLVD. and INVERRARY DRIVE		
Municipality	LAUDERHILL		

Controller Phase	1	2	3	4	5	6
Face Number	1	2,2A	4	8	5	6,6A
Direction	SBL	NB	EB	WB	NBL	SB
Initial Green(MIN)	4	10	6	13	4	10
Vehicle Ext.(GAP)	1.5	3.0	2.0	2.0	1.5	3.0
Maximum Green I	10	40	15	25	10	40
Maximum Green II						
Yellow Clearance	4.0	4.0	4.0	4.0	4.0	4.0
All Red Clearance	2.0			2.0	1.0	
Phase Recall	OFF	MIN	OFF	OFF	OFF	MIN
Detector Delay				20-RT		
Walk						
Pedestrian Clearance						
Permissive	5-SECT			5-SECT		
Flash Operation		YELLOW	RED	RED		YELLOW

Attachment **A-183.pdf**

NOTES:

1. HALF-QUAD PLUS SEQUENTIAL OPERATION WITH LEADING SBL AND LAGGING NBL.
2. DOUBLE CLEARANCE SOUTHBOUND: 3 GREEN, 4 YELLOW, 1 ALL RED.
3. DOUBLE CLEARANCE EASTBOUND: 4 GREEN, 4 YELLOW, 1 ALL RED.
4. SEQUENCE OF OPERATION ATTACHED AND IN SIGNAL FILE.
5. MOD. 5 UPDATES PHASE 4 INITIAL AND ALL REDS.

Submitted By _____ **Approved By** _____

Station : 1123 - Oakland Park & NW 56/Inverrary (Standard File)

Phase	1 (EL)	2 (WT)	3 (SL)	4 (NT)	5 (WL)	6 (ET)	7 (NL)	8 (ST)	9	10	11	12	13	14	15	16
Walk		7		7		7		7								
Ped Clearance		24		34		24		34								
Min Green	5	15	4	6	5	15	4	6								
Gap Ext	1.5	3	1.5	2	1.5	3	1.5	2								
Max1	18	55	12	25	18	55	12	25								
Max2																
Yellow Clr	5	5	4	4	5	5	4	4	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clr	2	2	2	3	2	2	2	3	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Red Revert																
Added Initial																
Max Initial																
Time Before Reduce																
Cars Before Reduce																
Time To Reduce																
Reduce By																
Min Gap																
Dynamic Max Limit																
Dynamic Max Step																
Enable	ON	ON	ON	ON	ON	ON	ON	ON								
Auto Flash Entry				ON				ON								
Auto Flash Exit		ON				ON										
Non-Actuated 1																
Non-Actuated 2																
Lock Call	ON		ON		ON		ON		ON	ON	ON	ON	ON	ON	ON	ON
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry				ON				ON								
Sim Gap Enable									ON	ON	ON	ON	ON	ON	ON	ON
Guar Passage																
Rest In Walk		ON				ON										
Cond Service																
Add Init Calc																

Preemption

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Auto Flash						
Override Higher Preempt						
Flash in Dwell						
Link to Preempt						
Delay						
Min Duration						
Min Green	6	6	6	6	6	6
Min Walk						
Ped Clear						
Track Green						
Min Dwell	8	8	8	8	8	8
Max Presence	180	180	180	180	180	180
Track Veh 1						
Track Veh 2						
Track Veh 3						
Track Veh 4						
Dwell Cyc Veh 1	4	2	3	2	4	1
Dwell Cyc Veh 2	8	6	8	5	7	6
Dwell Cyc Veh 3						
Dwell Cyc Veh 4						
Dwell Cyc Veh 5						
Dwell Cyc Veh 6						
Dwell Cyc Veh 7						
Dwell Cyc Veh 8						
Dwell Cyc Veh 9						
Dwell Cyc Veh 10						
Dwell Cyc Veh 11						
Dwell Cyc Veh 12						
Dwell Cyc Ped1						
Dwell Cyc Ped2						
Dwell Cyc Ped3						

Preempt LP

Channel	1	2	3	4
Min				
Max		200		200
Enable				
Lock Mode	MAX	MAX	MAX	MAX
Coord in Preempt		ON		ON
No Skip				
Priority P1		2		6
Priority P2				
Priority P3				
Priority P4				
Lock				
Headway				
Group Lock				

Dwell Cyc Ped4						
Dwell Cyc Ped5						
Dwell Cyc Ped6						
Dwell vPed7						
Dwell Cyc Ped8						
Exit 1	1	3	4	2	4	2
Exit 2	5	7	8	6	8	6
Exit 3						
Exit 4						

Queue Jump				
Free Mode				
Alt Table				

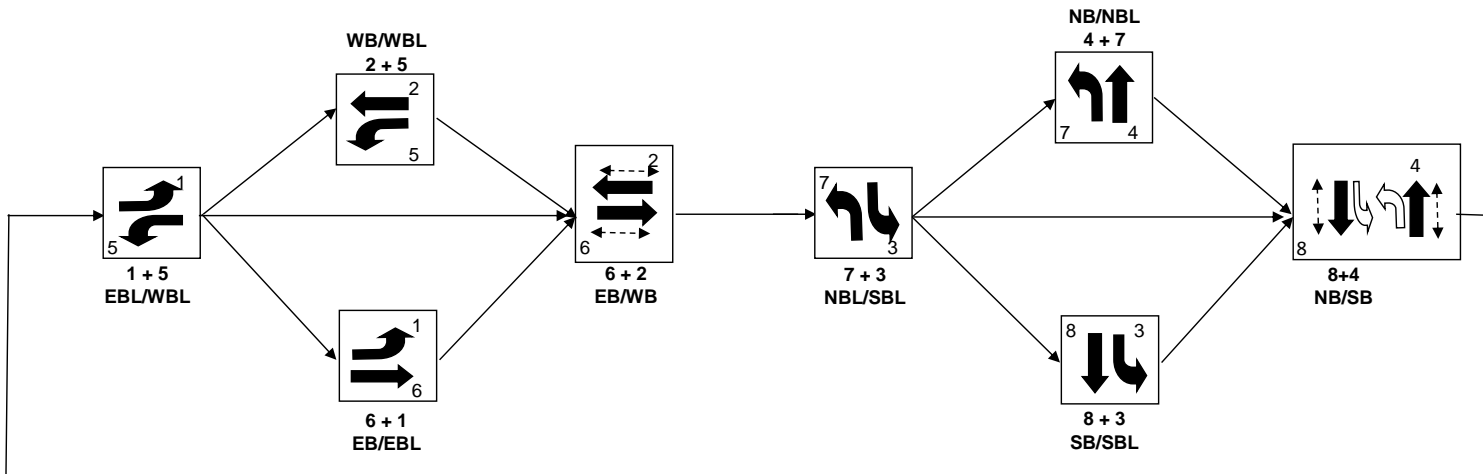
Prepared By

Date Implemented

Reviewed By

Traffic Engineer

**Sequence of Operation for (1123), Oakland Park Blvd (SR811) and NW 56 Ave/Inverrary Blvd
Lauderhill**





BROWARD COUNTY TRAFFIC ENGINEERING
ACTUATED TRAFFIC SIGNAL TIMING SHEET

Intersection Number	1123	Initial Operation Date	9/72
Controller Type	2070 LN	System Number	1123
Modification Number	25	Modification Date	03/12/2015
Drawing/Project No	228157-1-52-01	FPL Grid Number	87083802501
Intersection	OAKLAND PARK BLVD (SR 816) and NW 56 AVE./INVERRARY BLVD		
Municipality	LAUDERHILL		

Controller Phase	1	2	3	4	5	6	7	8
Face Number	1	2	3	4	5,4R	6	7	8
Direction	EBL	WB	SBL	NB	WBL	EB	NBL	SB
Initial Green(MIN)	5	15	4	6	5	15	4	6
Vehicle Ext.(GAP)	1.5	3.0	1.5	2.0	1.5	3.0	1.5	2.0
Maximum Green I	18	55	12	25	18	55	12	25
Maximum Green II								
Yellow Clearance	5.0	5.0	4.0	4.0	5.0	5.0	4.0	4.0
All Red Clearance	2.0	2.0	2.0	3.0	2.0	2.0	2.0	3.0
Phase Recall	OFF	MIN	OFF	OFF	OFF	MIN	OFF	OFF
Detector Delay								
Walk		7+A		7+A		7+A		7+A
Pedestrian Clearance		24		34		24		34
Permissive	DUAL		5 SECT		DUAL		5 SECT	
Flash Operation	RED	YELLOW		RED	RED	YELLOW		RED

Attachment

NOTES:

1. NBR (HEAD 4R) HARDWIRED WITH WBL (PHASE 5).
2. DUAL ENTRY HARDWIRED NORTH/SOUTH.
3. AUDIBLE PED SIGNALS: E/W BEEP, N/S TONE.
4. MOD. 25 UPDATES YELLOW CLEARANCE VALUES PER FDOT STANDARDS.

Submitted By _____ **Approved By** _____

Inverrary Golf Course Traffic Analysis
 1: Inverrary Blvd W & NW 44 St

Existing (2025)
 Timing Plan: AM Peak Hour



Lane Group	SEL	SER	NEL	NET	SWT	SWR	Ø7
Lane Configurations							
Traffic Volume (vph)	321	246	276	159	147	502	
Future Volume (vph)	321	246	276	159	147	502	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	
Grade (%)	0%			0%	0%		
Storage Length (ft)	0	0	150			0	
Storage Lanes	1	1	1			0	
Taper Length (ft)	25		25				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Ped Bike Factor		0.97			0.98		
Frt		0.850			0.896		
Flt Protected	0.950		0.950				
Satd. Flow (prot)	1752	1568	1770	1863	1640	0	
Flt Permitted	0.950		0.087				
Satd. Flow (perm)	1752	1526	162	1863	1640	0	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)		304			130		
Link Speed (mph)	35			35	35		
Link Distance (ft)	896			1527	2641		
Travel Time (s)	17.5			29.7	51.4		
Confl. Peds. (#/hr)		2	1			1	
Confl. Bikes (#/hr)		2					
Peak Hour Factor	0.72	0.72	0.91	0.91	0.82	0.82	
Growth Factor	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	
Parking (#/hr)							
Mid-Block Traffic (%)	0%			0%	0%		
Adj. Flow (vph)	446	342	303	175	179	612	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	446	342	303	175	791	0	
Turn Type	Prot	Perm	pm+pt	NA	NA		
Protected Phases	8		1	6	2	7	
Permitted Phases		8	6				
Detector Phase	8	8	1	6	2		
Switch Phase							
Minimum Initial (s)	6.0	6.0	4.0	12.0	12.0	10.0	
Minimum Split (s)	12.0	12.0	10.0	18.0	35.0	30.0	
Total Split (s)	41.0	41.0	18.0	64.0	46.0	30.0	
Total Split (%)	30.4%	30.4%	13.3%	47.4%	34.1%	22%	
Maximum Green (s)	35.0	35.0	12.0	58.0	40.0	26.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	0.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		
Lead/Lag	Lag	Lag	Lead		Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	1.5	2.5	2.5	0.2	

Inverrary Golf Course Traffic Analysis
 1: Inverrary Blvd W & NW 44 St

Existing (2025)
 Timing Plan: AM Peak Hour

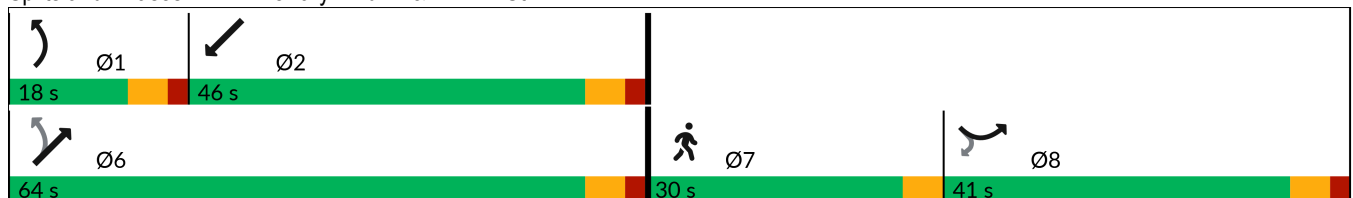


Lane Group	SEL	SER	NEL	NET	SWT	SWR	Ø7
Minimum Gap (s)	2.0	2.0	1.5	2.5	2.5		0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0		0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0		0.0
Recall Mode	None	None	None	Min	Min		None
Walk Time (s)					7.0		10.0
Flash Don't Walk (s)					22.0		16.0
Pedestrian Calls (#/hr)					1		0
Act Effct Green (s)	33.7	33.7	58.0	58.0	40.0		
Actuated g/C Ratio	0.32	0.32	0.56	0.56	0.39		
v/c Ratio	0.78	0.49	1.10	0.17	1.11		
Control Delay (s/veh)	42.8	7.2	110.2	11.9	95.4		
Queue Delay	0.0	0.0	0.0	0.0	0.0		
Total Delay (s/veh)	42.8	7.2	110.2	11.9	95.4		
LOS	D	A	F	B	F		
Approach Delay (s/veh)	27.4			74.2	95.4		
Approach LOS	C			E	F		
Queue Length 50th (ft)	266	17	~183	55	~559		
Queue Length 95th (ft)	283	33	#356	91	#673		
Internal Link Dist (ft)	816			1447	2561		
Turn Bay Length (ft)			150				
Base Capacity (vph)	591	716	276	1042	712		
Starvation Cap Reductn	0	0	0	0	0		
Spillback Cap Reductn	0	0	0	0	0		
Storage Cap Reductn	0	0	0	0	0		
Reduced v/c Ratio	0.75	0.48	1.10	0.17	1.11		

Intersection Summary

























Area Type: Other
 Cycle Length: 135
 Actuated Cycle Length: 103.7
 Natural Cycle: 150
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 1.11
 Intersection Signal Delay (s/veh): 64.4 Intersection LOS: E
 Intersection Capacity Utilization 86.8% ICU Level of Service E
 Analysis Period (min) 15
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1: Inverrary Blvd W & NW 44 St



Inverrary Golf Course Traffic Analysis
2: Inverrary Blvd & NW 44 St

Existing (2025)
Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	68	300	157	60	299	164	244	454	128	129	307	60
Future Volume (vph)	68	300	157	60	299	164	244	454	128	129	307	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	195		185	160		230	220		0	90		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00		0.98	1.00		0.98	0.99	0.99		1.00	0.99	
Frt			0.850			0.850		0.967			0.975	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1736	1827	1553	1770	1863	1583	1770	3398	0	1770	3415	0
Flt Permitted	0.342			0.382			0.354			0.332		
Satd. Flow (perm)	623	1827	1522	710	1863	1557	651	3398	0	616	3415	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			169			180		29			18	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		2641			3355			1289			1075	
Travel Time (s)		51.4			65.4			29.3			24.4	
Confl. Peds. (#/hr)	4		4	4		4	12		6	6		12
Confl. Bikes (#/hr)			4									14
Peak Hour Factor	0.93	0.93	0.93	0.91	0.91	0.91	0.91	0.91	0.91	0.86	0.86	0.86
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	73	323	169	66	329	180	268	499	141	150	357	70
Shared Lane Traffic (%)												
Lane Group Flow (vph)	73	323	169	66	329	180	268	640	0	150	427	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	7	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	12.0	12.0	4.0	12.0	12.0	4.0	12.0		4.0	12.0	
Minimum Split (s)	10.0	37.0	37.0	10.0	37.0	37.0	10.0	34.0		10.0	34.0	
Total Split (s)	21.0	41.0	41.0	21.0	41.0	41.0	21.0	41.0		21.0	41.0	
Total Split (%)	16.9%	33.1%	33.1%	16.9%	33.1%	33.1%	16.9%	33.1%		16.9%	33.1%	
Maximum Green (s)	15.0	35.0	35.0	15.0	35.0	35.0	15.0	35.0		15.0	35.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	2.0	2.0	1.5	2.0	2.0	1.5	3.0		1.5	3.0	

Inverrary Golf Course Traffic Analysis
 2: Inverrary Blvd & NW 44 St

Existing (2025)
 Timing Plan: AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Gap (s)	1.5	2.0	2.0	1.5	2.0	2.0	1.5	3.0		1.5	3.0	
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recall Mode	None	None	None	None	None	None	None	Min		None	Min	
Walk Time (s)		7.0	7.0		7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		24.0	24.0		24.0	24.0		21.0			21.0	
Pedestrian Calls (#/hr)		4	4		4	4		6			12	
Act Effct Green (s)	26.5	21.1	21.1	25.3	20.5	20.5	35.6	22.9		27.7	19.0	
Actuated g/C Ratio	0.33	0.26	0.26	0.31	0.25	0.25	0.44	0.28		0.34	0.23	
v/c Ratio	0.25	0.68	0.33	0.22	0.70	0.34	0.59	0.66		0.45	0.53	
Control Delay (s/veh)	19.8	37.6	6.6	19.5	39.0	6.7	21.6	29.9		20.3	30.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	19.8	37.6	6.6	19.5	39.0	6.7	21.6	29.9		20.3	30.5	
LOS	B	D	A	B	D	A	C	C		C	C	
Approach Delay (s/veh)		26.0			26.6			27.5			27.8	
Approach LOS		C			C			C			C	
Queue Length 50th (ft)	23	148	0	20	153	0	84	143		44	98	
Queue Length 95th (ft)	62	301	50	57	308	53	182	266		98	167	
Internal Link Dist (ft)		2561			3275			1209			995	
Turn Bay Length (ft)	195		185	160		230	220			90		
Base Capacity (vph)	461	848	797	483	864	819	520	1593		492	1595	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.16	0.38	0.21	0.14	0.38	0.22	0.52	0.40		0.30	0.27	

Intersection Summary

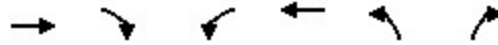
Area Type: Other
 Cycle Length: 124
 Actuated Cycle Length: 81.5
 Natural Cycle: 95
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.70
 Intersection Signal Delay (s/veh): 27.1
 Intersection LOS: C
 Intersection Capacity Utilization 69.1%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 2: Inverrary Blvd & NW 44 St



Inverrary Golf Course Traffic Analysis
 3: Inverrary Dr & NW 44 St

Existing (2025)
 Timing Plan: AM Peak Hour



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	541	62	59	312	190	289
Future Volume (vph)	541	62	59	312	190	289
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	100		0	50
Storage Lanes		0	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00					
Frt	0.986					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1813	0	1770	1863	1770	1583
Flt Permitted			0.170		0.950	
Satd. Flow (perm)	1813	0	317	1863	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	8					219
Link Speed (mph)	35			35	25	
Link Distance (ft)	3355			3195	800	
Travel Time (s)	65.4			62.2	21.8	
Confl. Peds. (#/hr)		6	6			
Confl. Bikes (#/hr)						
Peak Hour Factor	0.89	0.89	0.92	0.92	0.85	0.85
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	608	70	64	339	224	340
Shared Lane Traffic (%)						
Lane Group Flow (vph)	678	0	64	339	224	340
Turn Type	NA		pm+pt	NA	Prot	Perm
Protected Phases	6		5	2	4	
Permitted Phases			2			4
Detector Phase	6		5	2	4	4
Switch Phase						
Minimum Initial (s)	12.0		4.0	12.0	6.0	6.0
Minimum Split (s)	33.0		10.0	18.0	12.0	12.0
Total Split (s)	51.0		18.0	69.0	26.0	26.0
Total Split (%)	53.7%		18.9%	72.6%	27.4%	27.4%
Maximum Green (s)	45.0		12.0	63.0	20.0	20.0
Yellow Time (s)	4.0		4.0	4.0	4.0	4.0
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0		6.0	6.0	6.0	6.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		1.5	3.0	2.0	2.0

Inverrary Golf Course Traffic Analysis
 3: Inverrary Dr & NW 44 St

Existing (2025)
 Timing Plan: AM Peak Hour



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Gap (s)	3.0		1.5	3.0	2.0	2.0
Time Before Reduce (s)	0.0		0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0		0.0	0.0	0.0	0.0
Recall Mode	Min		None	Min	None	None
Walk Time (s)	7.0					
Flash Don't Walk (s)	20.0					
Pedestrian Calls (#/hr)	6					
Act Effect Green (s)	30.9		37.6	37.6	13.8	13.8
Actuated g/C Ratio	0.47		0.58	0.58	0.21	0.21
v/c Ratio	0.79		0.19	0.32	0.60	0.67
Control Delay (s/veh)	23.5		6.8	7.4	35.0	18.5
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay (s/veh)	23.5		6.8	7.4	35.0	18.5
LOS	C		A	A	D	B
Approach Delay (s/veh)	23.5			7.3	25.1	
Approach LOS	C			A	C	
Queue Length 50th (ft)	238		9	57	88	45
Queue Length 95th (ft)	448		26	115	181	136
Internal Link Dist (ft)	3275			3115	720	
Turn Bay Length (ft)			100			50
Base Capacity (vph)	1312		490	1619	625	701
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.52		0.13	0.21	0.36	0.49

Intersection Summary

Area Type:	Other
Cycle Length:	95
Actuated Cycle Length:	65.2
Natural Cycle:	60
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.79
Intersection Signal Delay (s/veh):	20.1
Intersection LOS:	C
Intersection Capacity Utilization:	61.2%
ICU Level of Service:	B
Analysis Period (min):	15

Splits and Phases: 3: Inverrary Dr & NW 44 St



Inverrary Golf Course Traffic Analysis
4: Rock Island Rd & NW 44 St

Existing (2025)
Timing Plan: AM Peak Hour



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	656	175	102	823	706	266
Future Volume (vph)	656	175	102	823	706	266
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	130	140			140
Storage Lanes	1	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor						
Flt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	1583	1770	3539	3539	1583
Flt Permitted	0.950		0.248			
Satd. Flow (perm)	1770	1583	462	3539	3539	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		75				266
Link Speed (mph)	35			40	40	
Link Distance (ft)	3195			2200	2000	
Travel Time (s)	62.2			37.5	34.1	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.93	0.93	0.88	0.88	0.88	0.88
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	705	188	116	935	802	302
Shared Lane Traffic (%)						
Lane Group Flow (vph)	705	188	116	935	802	302
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	6.0	6.0	4.0	7.0	7.0	7.0
Minimum Split (s)	12.0	12.0	10.5	13.5	25.5	25.5
Total Split (s)	36.0	36.0	21.5	73.0	51.5	51.5
Total Split (%)	33.0%	33.0%	19.7%	67.0%	47.2%	47.2%
Maximum Green (s)	30.0	30.0	15.0	66.5	45.0	45.0
Yellow Time (s)	4.0	4.0	4.5	4.5	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.5	6.5	6.5	6.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0	3.0	1.5	3.0	3.0	3.0

Inverrary Golf Course Traffic Analysis
 4: Rock Island Rd & NW 44 St

Existing (2025)
 Timing Plan: AM Peak Hour



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Minimum Gap (s)	3.0	3.0	1.5	3.0	3.0	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	Max	Max	Max
Walk Time (s)					7.0	7.0
Flash Don't Walk (s)					12.0	12.0
Pedestrian Calls (#/hr)					0	0
Act Effct Green (s)	30.0	30.0	66.5	66.5	53.0	53.0
Actuated g/C Ratio	0.28	0.28	0.61	0.61	0.49	0.49
v/c Ratio	1.45	0.38	0.32	0.43	0.47	0.33
Control Delay (s/veh)	244.4	21.5	11.3	12.0	19.9	4.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	244.4	21.5	11.3	12.0	19.9	4.2
LOS	F	C	B	B	B	A
Approach Delay (s/veh)	197.5			12.0	15.6	
Approach LOS	F			B	B	
Queue Length 50th (ft)	~673	62	32	169	189	13
Queue Length 95th (ft)	#899	127	55	206	245	58
Internal Link Dist (ft)	3115			2120	1920	
Turn Bay Length (ft)		130	140			140
Base Capacity (vph)	487	490	461	2159	1721	906
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.45	0.38	0.25	0.43	0.47	0.33

Intersection Summary















Area Type: Other
 Cycle Length: 109
 Actuated Cycle Length: 109
 Natural Cycle: 80
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 1.45
 Intersection Signal Delay (s/veh): 67.6
 Intersection LOS: E
 Intersection Capacity Utilization 77.3%
 ICU Level of Service D
 Analysis Period (min) 15
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 4: Rock Island Rd & NW 44 St



Inverrary Golf Course Traffic Analysis
 5: Inverrary Blvd & Inverrary Dr

Existing (2025)
 Timing Plan: AM Peak Hour

							Ø2	Ø3	Ø5	Ø20	Ø21	Ø22
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT						
Lane Configurations	 		 		 	 						
Traffic Volume (vph)	220	77	570	96	41	528						
Future Volume (vph)	220	77	570	96	41	528						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Lane Width (ft)	12	12	12	12	12	12						
Grade (%)	0%		0%			0%						
Storage Length (ft)	150	0		0	165							
Storage Lanes	1	0		0	1							
Taper Length (ft)	25				25							
Lane Util. Factor	0.97	0.95	0.95	0.95	1.00	0.95						
Ped Bike Factor	0.99											
Frt	0.961		0.978									
Flt Protected	0.964				0.950							
Satd. Flow (prot)	3264	0	3428	0	1770	3539						
Flt Permitted	0.964				0.208							
Satd. Flow (perm)	3264	0	3428	0	387	3539						
Right Turn on Red		Yes		Yes								
Satd. Flow (RTOR)	31		26									
Link Speed (mph)	25		30			30						
Link Distance (ft)	1000		175			1000						
Travel Time (s)	27.3		4.0			22.7						
Confl. Peds. (#/hr)		1										
Confl. Bikes (#/hr)												
Peak Hour Factor	0.88	0.88	0.91	0.91	0.82	0.82						
Growth Factor	100%	100%	100%	100%	100%	100%						
Heavy Vehicles (%)	4%	4%	3%	3%	2%	2%						
Bus Blockages (#/hr)	0	0	0	0	0	0						
Parking (#/hr)												
Mid-Block Traffic (%)	0%		0%			0%						
Adj. Flow (vph)	250	88	626	105	50	644						
Shared Lane Traffic (%)												
Lane Group Flow (vph)	338	0	731	0	50	644						
Turn Type	Prot		NA		pm+pt	NA						
Protected Phases	4	2 21 22 24			1	6	2	3	5	20	21	22
Permitted Phases			3		6							
Detector Phase	4	2 21 22 24			1	6						
Switch Phase												
Minimum Initial (s)	13.0				4.0	10.0	10.0	10.0	4.0	4.0	4.0	4.0
Minimum Split (s)	19.0				10.0	16.0	14.0	14.0	9.0	8.0	8.0	9.0
Total Split (s)	31.0				16.0	60.0	44.0	19.0	15.0	8.0	8.0	9.0
Total Split (%)	21.8%				11.3%	42.3%	31%	13%	11%	6%	6%	6%
Maximum Green (s)	25.0				10.0	54.0	40.0	15.0	10.0	4.0	4.0	4.0
Yellow Time (s)	4.0				4.0	4.0	4.0	4.0	4.0	3.0	3.0	4.0
All-Red Time (s)	2.0				2.0	2.0	0.0	0.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0				0.0	0.0						
Total Lost Time (s)	6.0				6.0	6.0						
Lead/Lag					Lead		Lag	Lead				Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0				1.5	3.0	3.0	2.0	1.5	1.5	1.5	1.5

Lane Group	Ø24
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	24
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	10.0
Minimum Split (s)	15.0
Total Split (s)	15.0
Total Split (%)	11%
Maximum Green (s)	10.0
Yellow Time (s)	4.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0

Inverrary Golf Course Traffic Analysis
 5: Inverrary Blvd & Inverrary Dr

Existing (2025)
 Timing Plan: AM Peak Hour

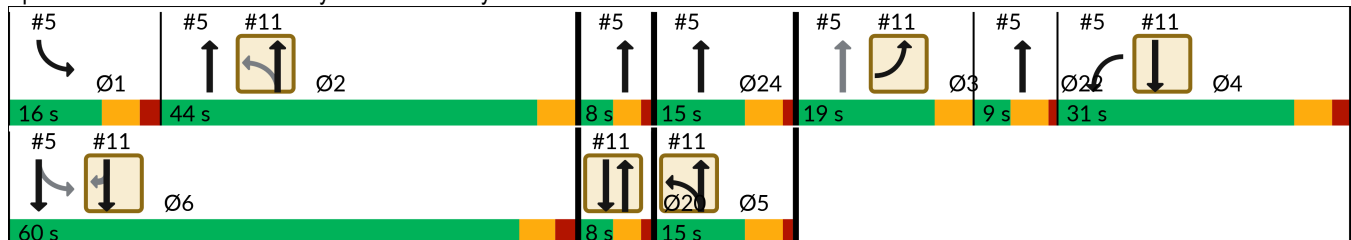


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø2	Ø3	Ø5	Ø20	Ø21	Ø22
Minimum Gap (s)	2.0				1.5	3.0	3.0	2.0	1.5	1.5	1.5	1.5
Time Before Reduce (s)	0.0				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None				None	Min	Min	None	None	None	None	None
Walk Time (s)												
Flash Don't Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	20.9		83.2		40.2	40.2						
Actuated g/C Ratio	0.17		0.67		0.32	0.32						
v/c Ratio	0.59		0.32		0.26	0.56						
Control Delay (s/veh)	49.2		0.3		32.0	36.3						
Queue Delay	0.0		0.2		0.0	0.0						
Total Delay (s/veh)	49.2		0.5		32.0	36.3						
LOS	D		A		C	D						
Approach Delay (s/veh)	49.2		0.5			36.0						
Approach LOS	D		A			D						
Queue Length 50th (ft)	121		0		28	224						
Queue Length 95th (ft)	181		0		53	262						
Internal Link Dist (ft)	920		95			920						
Turn Bay Length (ft)	150				165							
Base Capacity (vph)	694		2293		238	1569						
Starvation Cap Reductn	0		740		0	0						
Spillback Cap Reductn	0		0		0	0						
Storage Cap Reductn	0		0		0	0						
Reduced v/c Ratio	0.49		0.47		0.21	0.41						

Intersection Summary

Area Type:	Other
Cycle Length:	142
Actuated Cycle Length:	124.1
Natural Cycle:	90
Control Type:	Semi Act-Uncoord
Maximum v/c Ratio:	0.84
Intersection Signal Delay (s/veh):	23.8
Intersection LOS:	C
Intersection Capacity Utilization:	46.3%
ICU Level of Service:	A
Analysis Period (min):	15








































Splits and Phases: 5: Inverrary Blvd & Inverrary Dr



Lane Group	Ø24
Minimum Gap (s)	3.0
Time Before Reduce (s)	0.0
Time To Reduce (s)	0.0
Recall Mode	None
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

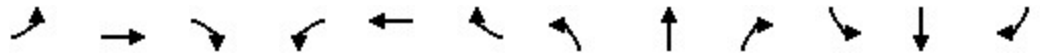
Inverrary Golf Course Traffic Analysis
6: Inverrary Blvd & Oakland Park Blvd

Existing (2025)
Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  	 	  	  	 	 	 	 	 	 	 
Traffic Volume (vph)	199	1315	327	76	1566	143	339	251	157	169	214	396
Future Volume (vph)	199	1315	327	76	1566	143	339	251	157	169	214	396
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%				0%
Storage Length (ft)	340		370	355		300	185		0	0		0
Storage Lanes	2		1	2		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00		0.96	0.99		0.97	1.00		0.97	0.99	0.98	
Frt			0.850			0.850			0.850		0.903	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3400	5036	1568	3433	5085	1583	1752	1845	1568	1770	1643	0
Flt Permitted	0.950			0.950			0.073			0.404		
Satd. Flow (perm)	3390	5036	1503	3413	5085	1540	134	1845	1521	746	1643	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			348			139			106		53	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		4035			1460			1000			1000	
Travel Time (s)		61.1			22.1			22.7			22.7	
Confl. Peds. (#/hr)	9		14	14		9	14		14	14		14
Confl. Bikes (#/hr)			10									8
Peak Hour Factor	0.94	0.94	0.94	0.96	0.96	0.96	0.87	0.87	0.87	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	212	1399	348	79	1631	149	390	289	180	188	238	440
Shared Lane Traffic (%)												
Lane Group Flow (vph)	212	1399	348	79	1631	149	390	289	180	188	678	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	1	6		5	2		7	4	5	3	8	
Permitted Phases			6			2	4		4	8		
Detector Phase	1	6	6	5	2	2	7	4	5	3	8	
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	4.0	6.0	5.0	4.0	6.0	
Minimum Split (s)	12.0	38.0	38.0	12.0	38.0	38.0	10.0	48.0	12.0	10.0	48.0	
Total Split (s)	23.0	76.0	76.0	23.0	76.0	76.0	20.0	48.0	23.0	33.0	61.0	
Total Split (%)	12.8%	42.2%	42.2%	12.8%	42.2%	42.2%	11.1%	26.7%	12.8%	18.3%	33.9%	
Maximum Green (s)	16.0	69.0	69.0	16.0	69.0	69.0	14.0	41.0	16.0	27.0	54.0	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	4.0	4.0	5.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	2.0	2.0	3.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	6.0	7.0	7.0	6.0	7.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	1.5	3.0	3.0	1.5	3.0	3.0	1.5	2.0	1.5	1.5	2.0	

Inverrary Golf Course Traffic Analysis
6: Inverrary Blvd & Oakland Park Blvd

Existing (2025)
Timing Plan: AM Peak Hour

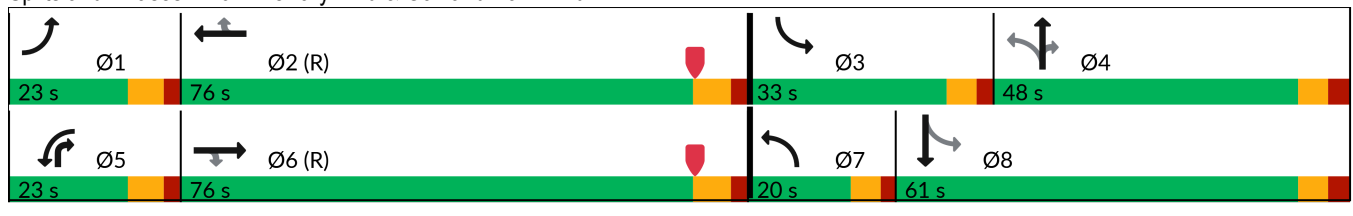


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Gap (s)	1.5	3.0	3.0	1.5	3.0	3.0	1.5	2.0	1.5	1.5	2.0	
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	
Walk Time (s)		7.0	7.0		7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		24.0	24.0		24.0	24.0		34.0			34.0	
Pedestrian Calls (#/hr)		14	14		9	9		14			14	
Act Effect Green (s)	14.2	74.1	74.1	8.1	67.9	67.9	70.7	54.5	62.6	70.8	54.0	
Actuated g/C Ratio	0.08	0.41	0.41	0.05	0.38	0.38	0.39	0.30	0.35	0.39	0.30	
v/c Ratio	0.79	0.68	0.42	0.51	0.85	0.22	1.92	0.52	0.30	0.49	1.28	
Control Delay (s/veh)	102.0	45.0	4.5	95.4	56.4	7.0	460.2	57.8	17.8	38.1	184.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	102.0	45.0	4.5	95.4	56.4	7.0	460.2	57.8	17.8	38.1	184.5	
LOS	F	D	A	F	E	A	F	E	B	D	F	
Approach Delay (s/veh)		44.0			54.1			232.1			152.7	
Approach LOS		D			D			F			F	
Queue Length 50th (ft)	128	478	0	47	635	7	~696	291	58	145	~968	
Queue Length 95th (ft)	177	545	67	78	703	58	#893	400	120	210	#1227	
Internal Link Dist (ft)		3955			1380			920			920	
Turn Bay Length (ft)	340		370	355		300	185					
Base Capacity (vph)	302	2072	823	305	1954	677	203	558	664	473	530	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.70	0.68	0.42	0.26	0.83	0.22	1.92	0.52	0.27	0.40	1.28	

Intersection Summary

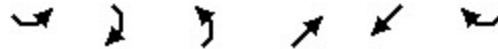
Area Type: Other
 Cycle Length: 180
 Actuated Cycle Length: 180
 Offset: 36 (20%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
 Natural Cycle: 140
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.92
 Intersection Signal Delay (s/veh): 93.5 Intersection LOS: F
 Intersection Capacity Utilization 113.7% ICU Level of Service H
 Analysis Period (min) 15
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 6: Inverrary Blvd & Oakland Park Blvd



Inverrary Golf Course Traffic Analysis
 1: Inverrary Blvd W & NW 44 St

Existing (2025)
 Timing Plan: PM Peak Hour



Lane Group	SEL	SER	NEL	NET	SWT	SWR	Ø7
Lane Configurations							
Traffic Volume (vph)	401	284	224	159	191	372	
Future Volume (vph)	401	284	224	159	191	372	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	
Grade (%)	0%			0%	0%		
Storage Length (ft)	0	0	150			0	
Storage Lanes	1	1	1			0	
Taper Length (ft)	25		25				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Ped Bike Factor	1.00				0.99		
Frt		0.850			0.911		
Flt Protected	0.950		0.950				
Satd. Flow (prot)	1770	1583	1770	1863	1672	0	
Flt Permitted	0.950		0.157				
Satd. Flow (perm)	1766	1583	292	1863	1672	0	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)		280			74		
Link Speed (mph)	35			35	35		
Link Distance (ft)	896			1527	2641		
Travel Time (s)	17.5			29.7	51.4		
Confl. Peds. (#/hr)	1		1			1	
Confl. Bikes (#/hr)							
Peak Hour Factor	0.96	0.96	0.90	0.90	0.94	0.94	
Growth Factor	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	
Parking (#/hr)							
Mid-Block Traffic (%)	0%			0%	0%		
Adj. Flow (vph)	418	296	249	177	203	396	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	418	296	249	177	599	0	
Turn Type	Prot	Perm	pm+pt	NA	NA		
Protected Phases	8		1	6	2	7	
Permitted Phases		8	6				
Detector Phase	8	8	1	6	2		
Switch Phase							
Minimum Initial (s)	6.0	6.0	4.0	12.0	12.0	10.0	
Minimum Split (s)	12.0	12.0	10.0	18.0	35.0	30.0	
Total Split (s)	41.0	41.0	18.0	64.0	46.0	30.0	
Total Split (%)	30.4%	30.4%	13.3%	47.4%	34.1%	22%	
Maximum Green (s)	35.0	35.0	12.0	58.0	40.0	26.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	0.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		
Lead/Lag	Lag	Lag	Lead		Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	1.5	2.5	2.5	0.2	

Inverrary Golf Course Traffic Analysis
 1: Inverrary Blvd W & NW 44 St

Existing (2025)
 Timing Plan: PM Peak Hour

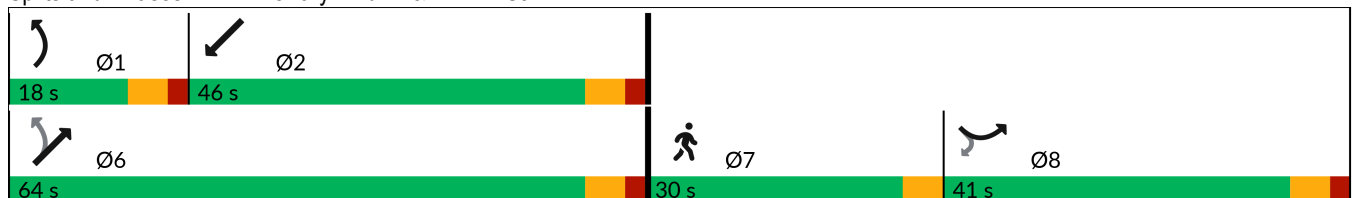


Lane Group	SEL	SER	NEL	NET	SWT	SWR	Ø7
Minimum Gap (s)	2.0	2.0	1.5	2.5	2.5		0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0		0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0		0.0
Recall Mode	None	None	None	Min	Min		None
Walk Time (s)					7.0		10.0
Flash Don't Walk (s)					22.0		16.0
Pedestrian Calls (#/hr)					1		0
Act Effct Green (s)	29.3	29.3	58.1	58.1	40.1		
Actuated g/C Ratio	0.29	0.29	0.58	0.58	0.40		
v/c Ratio	0.80	0.45	0.71	0.16	0.83		
Control Delay (s/veh)	45.0	6.2	25.3	10.8	36.2		
Queue Delay	0.0	0.0	0.0	0.0	0.0		
Total Delay (s/veh)	45.0	6.2	25.3	10.8	36.2		
LOS	D	A	C	B	D		
Approach Delay (s/veh)	28.9			19.3	36.2		
Approach LOS	C			B	D		
Queue Length 50th (ft)	243	7	73	50	305		
Queue Length 95th (ft)	358	66	#183	92	#545		
Internal Link Dist (ft)	816			1447	2561		
Turn Bay Length (ft)			150				
Base Capacity (vph)	624	739	349	1089	718		
Starvation Cap Reductn	0	0	0	0	0		
Spillback Cap Reductn	0	0	0	0	0		
Storage Cap Reductn	0	0	0	0	0		
Reduced v/c Ratio	0.67	0.40	0.71	0.16	0.83		

Intersection Summary

























Area Type: Other
 Cycle Length: 135
 Actuated Cycle Length: 99.4
 Natural Cycle: 140
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.83
 Intersection Signal Delay (s/veh): 29.1 Intersection LOS: C
 Intersection Capacity Utilization 82.6% ICU Level of Service E
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1: Inverrary Blvd W & NW 44 St



Inverrary Golf Course Traffic Analysis
 2: Inverrary Blvd & NW 44 St

Existing (2025)
 Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	73	312	151	123	363	140	159	434	108	164	404	88
Future Volume (vph)	73	312	151	123	363	140	159	434	108	164	404	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	195		185	160		230	220		0	90		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00		0.98	1.00		0.97	1.00	0.99		1.00	0.99	
Frt			0.850			0.850		0.970			0.973	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1752	3379	0	1770	3425	0
Flt Permitted	0.335			0.309			0.306			0.292		
Satd. Flow (perm)	622	1863	1556	575	1863	1540	564	3379	0	542	3425	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			165			156		25			21	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		2641			3355			1289			1075	
Travel Time (s)		51.4			65.4			29.3			24.4	
Confl. Peds. (#/hr)	8		2	2		8	2		5	5		2
Confl. Bikes (#/hr)			4			8						4
Peak Hour Factor	0.89	0.89	0.89	0.90	0.90	0.90	0.98	0.98	0.98	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	82	351	170	137	403	156	162	443	110	182	449	98
Shared Lane Traffic (%)												
Lane Group Flow (vph)	82	351	170	137	403	156	162	553	0	182	547	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	7	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	12.0	12.0	4.0	12.0	12.0	4.0	12.0		4.0	12.0	
Minimum Split (s)	10.0	37.0	37.0	10.0	37.0	37.0	10.0	34.0		10.0	34.0	
Total Split (s)	21.0	41.0	41.0	21.0	41.0	41.0	21.0	41.0		21.0	41.0	
Total Split (%)	16.9%	33.1%	33.1%	16.9%	33.1%	33.1%	16.9%	33.1%		16.9%	33.1%	
Maximum Green (s)	15.0	35.0	35.0	15.0	35.0	35.0	15.0	35.0		15.0	35.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	2.0	2.0	1.5	2.0	2.0	1.5	3.0		1.5	3.0	

Inverrary Golf Course Traffic Analysis
 2: Inverrary Blvd & NW 44 St

Existing (2025)
 Timing Plan: PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Gap (s)	1.5	2.0	2.0	1.5	2.0	2.0	1.5	3.0		1.5	3.0	
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recall Mode	None	None	None	None	None	None	None	Min		None	Min	
Walk Time (s)		7.0	7.0		7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		24.0	24.0		24.0	24.0		21.0			21.0	
Pedestrian Calls (#/hr)		2	2		8	8		5			2	
Act Effct Green (s)	29.6	22.6	22.6	33.9	27.1	27.1	30.7	20.6		31.1	20.8	
Actuated g/C Ratio	0.34	0.26	0.26	0.39	0.31	0.31	0.35	0.24		0.36	0.24	
v/c Ratio	0.27	0.73	0.32	0.41	0.70	0.27	0.48	0.68		0.54	0.66	
Control Delay (s/veh)	19.0	40.3	7.0	20.5	36.5	5.9	22.7	34.8		24.0	34.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	19.0	40.3	7.0	20.5	36.5	5.9	22.7	34.8		24.0	34.3	
LOS	B	D	A	C	D	A	C	C		C	C	
Approach Delay (s/veh)		28.1			26.5			32.1			31.7	
Approach LOS		C			C			C			C	
Queue Length 50th (ft)	25	170	2	44	198	0	53	134		60	133	
Queue Length 95th (ft)	64	329	52	101	374	47	121	246		136	244	
Internal Link Dist (ft)		2561			3275			1209			995	
Turn Bay Length (ft)	195		185	160		230	220			90		
Base Capacity (vph)	469	789	754	462	799	750	445	1446		444	1464	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.17	0.44	0.23	0.30	0.50	0.21	0.36	0.38		0.41	0.37	

Intersection Summary

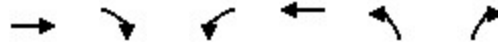
Area Type:	Other
Cycle Length:	124
Actuated Cycle Length:	87.2
Natural Cycle:	95
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.73
Intersection Signal Delay (s/veh):	29.7
Intersection LOS:	C
Intersection Capacity Utilization:	70.6%
ICU Level of Service:	C
Analysis Period (min):	15

Splits and Phases: 2: Inverrary Blvd & NW 44 St



Inverrary Golf Course Traffic Analysis
 3: Inverrary Dr & NW 44 St

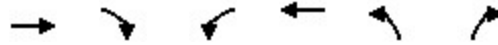
Existing (2025)
 Timing Plan: PM Peak Hour



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	405	166	201	518	104	119
Future Volume (vph)	405	166	201	518	104	119
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	100		0	50
Storage Lanes		0	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99		1.00			
Frt	0.961					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1758	0	1770	1863	1770	1583
Flt Permitted			0.182		0.950	
Satd. Flow (perm)	1758	0	339	1863	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	30					164
Link Speed (mph)	35			35	25	
Link Distance (ft)	3355			3195	800	
Travel Time (s)	65.4			62.2	21.8	
Confl. Peds. (#/hr)		3	3			
Confl. Bikes (#/hr)		4				
Peak Hour Factor	0.94	0.94	0.92	0.92	0.70	0.70
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	431	177	218	563	149	170
Shared Lane Traffic (%)						
Lane Group Flow (vph)	608	0	218	563	149	170
Turn Type	NA		pm+pt	NA	Prot	Perm
Protected Phases	6		5	2	4	
Permitted Phases			2			4
Detector Phase	6		5	2	4	4
Switch Phase						
Minimum Initial (s)	12.0		4.0	12.0	6.0	6.0
Minimum Split (s)	33.0		10.0	18.0	12.0	12.0
Total Split (s)	51.0		18.0	69.0	26.0	26.0
Total Split (%)	53.7%		18.9%	72.6%	27.4%	27.4%
Maximum Green (s)	45.0		12.0	63.0	20.0	20.0
Yellow Time (s)	4.0		4.0	4.0	4.0	4.0
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0		6.0	6.0	6.0	6.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		1.5	3.0	2.0	2.0

Inverrary Golf Course Traffic Analysis
 3: Inverrary Dr & NW 44 St

Existing (2025)
 Timing Plan: PM Peak Hour



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Gap (s)	3.0		1.5	3.0	2.0	2.0
Time Before Reduce (s)	0.0		0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0		0.0	0.0	0.0	0.0
Recall Mode	Min		None	Min	None	None
Walk Time (s)	7.0					
Flash Don't Walk (s)	20.0					
Pedestrian Calls (#/hr)	3					
Act Effct Green (s)	27.6		44.2	44.2	10.5	10.5
Actuated g/C Ratio	0.41		0.66	0.66	0.16	0.16
v/c Ratio	0.82		0.50	0.46	0.54	0.44
Control Delay (s/veh)	27.3		8.7	7.1	37.5	10.3
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay (s/veh)	27.3		8.7	7.1	37.5	10.3
LOS	C		A	A	D	B
Approach Delay (s/veh)	27.3			7.6	23.0	
Approach LOS	C			A	C	
Queue Length 50th (ft)	204		28	90	57	2
Queue Length 95th (ft)	376		65	188	104	24
Internal Link Dist (ft)	3275			3115	720	
Turn Bay Length (ft)			100			50
Base Capacity (vph)	1253		492	1659	557	610
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.49		0.44	0.34	0.27	0.28

Intersection Summary

Area Type:	Other
Cycle Length:	95
Actuated Cycle Length:	67.4
Natural Cycle:	60
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.82
Intersection Signal Delay (s/veh):	17.5
Intersection LOS:	B
Intersection Capacity Utilization:	63.4%
ICU Level of Service:	B
Analysis Period (min):	15

Splits and Phases: 3: Inverrary Dr & NW 44 St



Inverrary Golf Course Traffic Analysis
4: Rock Island Rd & NW 44 St

Existing (2025)
Timing Plan: PM Peak Hour



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	366	133	226	769	612	489
Future Volume (vph)	366	133	226	769	612	489
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	130	140			140
Storage Lanes	1	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor			1.00			0.98
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	1583	1770	3539	3539	1583
Flt Permitted	0.950		0.310			
Satd. Flow (perm)	1770	1583	577	3539	3539	1544
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		103				515
Link Speed (mph)	35			40	40	
Link Distance (ft)	3195			2200	2000	
Travel Time (s)	62.2			37.5	34.1	
Confl. Peds. (#/hr)			1			1
Confl. Bikes (#/hr)						2
Peak Hour Factor	0.86	0.86	0.93	0.93	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	426	155	243	827	644	515
Shared Lane Traffic (%)						
Lane Group Flow (vph)	426	155	243	827	644	515
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	6.0	6.0	4.0	7.0	7.0	7.0
Minimum Split (s)	12.0	12.0	10.5	13.5	25.5	25.5
Total Split (s)	36.0	36.0	21.5	73.0	51.5	51.5
Total Split (%)	33.0%	33.0%	19.7%	67.0%	47.2%	47.2%
Maximum Green (s)	30.0	30.0	15.0	66.5	45.0	45.0
Yellow Time (s)	4.0	4.0	4.5	4.5	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.5	6.5	6.5	6.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0	3.0	1.5	3.0	3.0	3.0

Inverrary Golf Course Traffic Analysis
 4: Rock Island Rd & NW 44 St

Existing (2025)
 Timing Plan: PM Peak Hour

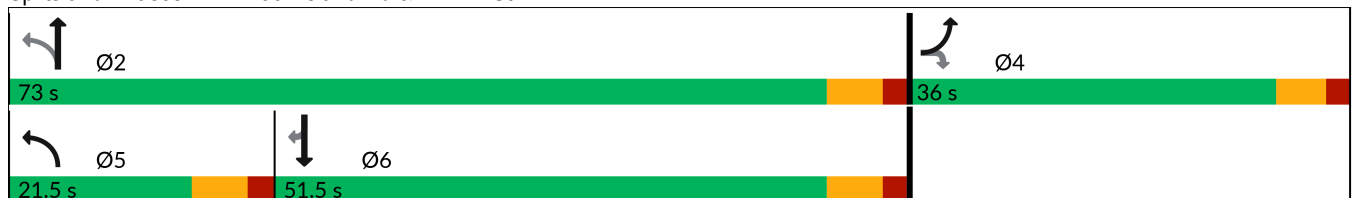


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Minimum Gap (s)	3.0	3.0	1.5	3.0	3.0	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	Max	Max	Max
Walk Time (s)					7.0	7.0
Flash Don't Walk (s)					12.0	12.0
Pedestrian Calls (#/hr)					1	1
Act Effct Green (s)	28.2	28.2	66.5	66.5	49.4	49.4
Actuated g/C Ratio	0.26	0.26	0.62	0.62	0.46	0.46
v/c Ratio	0.91	0.32	0.51	0.38	0.40	0.52
Control Delay (s/veh)	64.2	13.7	13.4	11.0	20.9	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	64.2	13.7	13.4	11.0	20.9	3.9
LOS	E	B	B	B	C	A
Approach Delay (s/veh)	50.7			11.5	13.3	
Approach LOS	D			B	B	
Queue Length 50th (ft)	284	27	71	144	154	0
Queue Length 95th (ft)	#424	74	111	183	216	63
Internal Link Dist (ft)	3115			2120	1920	
Turn Bay Length (ft)		130	140			140
Base Capacity (vph)	495	517	524	2195	1629	988
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.86	0.30	0.46	0.38	0.40	0.52

Intersection Summary















Area Type: Other
 Cycle Length: 109
 Actuated Cycle Length: 107.3
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.91
 Intersection Signal Delay (s/veh): 20.4 Intersection LOS: C
 Intersection Capacity Utilization 65.5% ICU Level of Service C
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 4: Rock Island Rd & NW 44 St



Inverrary Golf Course Traffic Analysis
 5: Inverrary Blvd & Inverrary Dr

Existing (2025)
 Timing Plan: PM Peak Hour

							Ø2	Ø3	Ø5	Ø20	Ø21	Ø22
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT						
Lane Configurations	 		 		 	 						
Traffic Volume (vph)	129	38	658	212	77	540						
Future Volume (vph)	129	38	658	212	77	540						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Lane Width (ft)	12	12	12	12	12	12						
Grade (%)	0%		0%			0%						
Storage Length (ft)	150	0		0	165							
Storage Lanes	1	0		0	1							
Taper Length (ft)	25				25							
Lane Util. Factor	0.97	0.95	0.95	0.95	1.00	0.95						
Ped Bike Factor	0.99											
Frt	0.966		0.963									
Flt Protected	0.963				0.950							
Satd. Flow (prot)	3244	0	3408	0	1770	3539						
Flt Permitted	0.963				0.148							
Satd. Flow (perm)	3244	0	3408	0	276	3539						
Right Turn on Red		Yes		Yes								
Satd. Flow (RTOR)	24		61									
Link Speed (mph)	25		30			30						
Link Distance (ft)	1000		175			1000						
Travel Time (s)	27.3		4.0			22.7						
Confl. Peds. (#/hr)		1										
Confl. Bikes (#/hr)		3										
Peak Hour Factor	0.91	0.91	0.92	0.92	0.81	0.81						
Growth Factor	100%	100%	100%	100%	100%	100%						
Heavy Vehicles (%)	5%	5%	2%	2%	2%	2%						
Bus Blockages (#/hr)	0	0	0	0	0	0						
Parking (#/hr)												
Mid-Block Traffic (%)	0%		0%			0%						
Adj. Flow (vph)	142	42	715	230	95	667						
Shared Lane Traffic (%)												
Lane Group Flow (vph)	184	0	945	0	95	667						
Turn Type	Prot		NA		pm+pt	NA						
Protected Phases	4	2 21 22 24			1	6	2	3	5	20	21	22
Permitted Phases			3		6							
Detector Phase	4	2 21 22 24			1	6						
Switch Phase												
Minimum Initial (s)	13.0				4.0	10.0	10.0	10.0	4.0	4.0	4.0	4.0
Minimum Split (s)	19.0				10.0	16.0	14.0	14.0	9.0	8.0	8.0	9.0
Total Split (s)	31.0				16.0	60.0	44.0	19.0	15.0	8.0	8.0	9.0
Total Split (%)	21.8%				11.3%	42.3%	31%	13%	11%	6%	6%	6%
Maximum Green (s)	25.0				10.0	54.0	40.0	15.0	10.0	4.0	4.0	4.0
Yellow Time (s)	4.0				4.0	4.0	4.0	4.0	4.0	3.0	3.0	4.0
All-Red Time (s)	2.0				2.0	2.0	0.0	0.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0				0.0	0.0						
Total Lost Time (s)	6.0				6.0	6.0						
Lead/Lag					Lead		Lag	Lead				Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0				1.5	3.0	3.0	2.0	1.5	1.5	1.5	1.5

Lane Group	Ø24
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	24
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	10.0
Minimum Split (s)	15.0
Total Split (s)	15.0
Total Split (%)	11%
Maximum Green (s)	10.0
Yellow Time (s)	4.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0

Inverrary Golf Course Traffic Analysis
 5: Inverrary Blvd & Inverrary Dr

Existing (2025)
 Timing Plan: PM Peak Hour

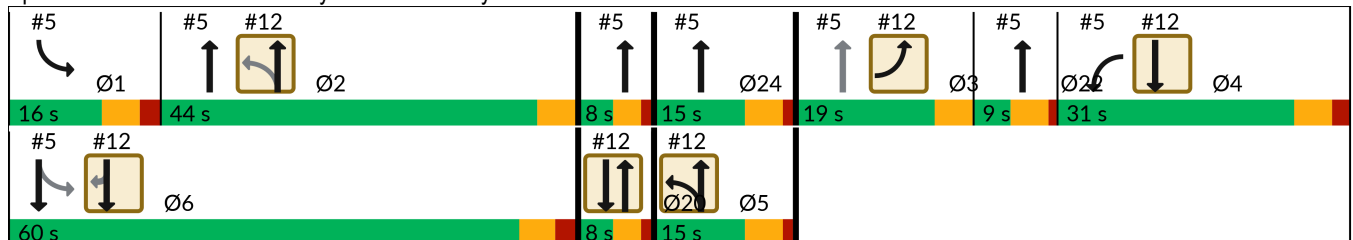


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø2	Ø3	Ø5	Ø20	Ø21	Ø22
Minimum Gap (s)	2.0				1.5	3.0	3.0	2.0	1.5	1.5	1.5	1.5
Time Before Reduce (s)	0.0				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None				None	Min	Min	None	None	None	None	None
Walk Time (s)												
Flash Don't Walk (s)												
Pedestrian Calls (#/hr)												
Act Effect Green (s)	17.3		86.9		50.3	50.3						
Actuated g/C Ratio	0.13		0.68		0.39	0.39						
v/c Ratio	0.40		0.41		0.47	0.48						
Control Delay (s/veh)	47.4		0.6		34.0	31.1						
Queue Delay	0.0		0.2		0.0	0.0						
Total Delay (s/veh)	47.4		0.8		34.0	31.1						
LOS	D		A		C	C						
Approach Delay (s/veh)	47.4		0.8			31.4						
Approach LOS	D		A			C						
Queue Length 50th (ft)	64		4		50	216						
Queue Length 95th (ft)	104		0		86	261						
Internal Link Dist (ft)	920		95			920						
Turn Bay Length (ft)	150				165							
Base Capacity (vph)	655		2309		225	1498						
Starvation Cap Reductn	0		527		0	0						
Spillback Cap Reductn	0		0		0	0						
Storage Cap Reductn	0		0		0	0						
Reduced v/c Ratio	0.28		0.53		0.42	0.45						

Intersection Summary

Area Type:	Other
Cycle Length:	142
Actuated Cycle Length:	128.4
Natural Cycle:	90
Control Type:	Semi Act-Uncoord
Maximum v/c Ratio:	0.73
Intersection Signal Delay (s/veh):	17.7
Intersection LOS:	B
Intersection Capacity Utilization:	53.4%
ICU Level of Service:	A
Analysis Period (min):	15

Splits and Phases: 5: Inverrary Blvd & Inverrary Dr



Lane Group	Ø24
Minimum Gap (s)	3.0
Time Before Reduce (s)	0.0
Time To Reduce (s)	0.0
Recall Mode	None
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Inverrary Golf Course Traffic Analysis
6: Inverrary Blvd & Oakland Park Blvd

Existing (2025)
Timing Plan: PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	340	1605	356	202	1411	262	229	211	150	225	344	375
Future Volume (vph)	340	1605	356	202	1411	262	229	211	150	225	344	375
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	340		370	355		300	185		0	0		0
Storage Lanes	2		1	2		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99		0.95	0.99		0.96	1.00		0.96	0.98	0.99	
Frt			0.850			0.850			0.850		0.922	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	1752	1845	1568	1770	1696	0
Flt Permitted	0.950			0.950			0.086			0.489		
Satd. Flow (perm)	3416	5085	1505	3413	5085	1526	158	1845	1505	897	1696	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			307			212			75			28
Link Speed (mph)		45			45			30				30
Link Distance (ft)		4035			1460			1000				1000
Travel Time (s)		61.1			22.1			22.7				22.7
Confl. Peds. (#/hr)	13		20	20		13	6		19	19		6
Confl. Bikes (#/hr)			6			4			6			4
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.92	0.92	0.92	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	347	1638	363	206	1440	267	249	229	163	250	382	417
Shared Lane Traffic (%)												
Lane Group Flow (vph)	347	1638	363	206	1440	267	249	229	163	250	799	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	1	6		5	2		7	4	5	3	8	
Permitted Phases			6			2	4		4	8		
Detector Phase	1	6	6	5	2	2	7	4	5	3	8	
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	4.0	6.0	5.0	4.0	6.0	
Minimum Split (s)	12.0	38.0	38.0	12.0	38.0	38.0	10.0	48.0	12.0	10.0	48.0	
Total Split (s)	28.0	75.0	75.0	28.0	75.0	75.0	29.0	48.0	28.0	29.0	48.0	
Total Split (%)	15.6%	41.7%	41.7%	15.6%	41.7%	41.7%	16.1%	26.7%	15.6%	16.1%	26.7%	
Maximum Green (s)	21.0	68.0	68.0	21.0	68.0	68.0	23.0	41.0	21.0	23.0	41.0	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	4.0	4.0	5.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	2.0	2.0	3.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	6.0	7.0	7.0	6.0	7.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	3.0	3.0	1.5	3.0	3.0	1.5	2.0	1.5	1.5	2.0	

Inverrary Golf Course Traffic Analysis
6: Inverrary Blvd & Oakland Park Blvd

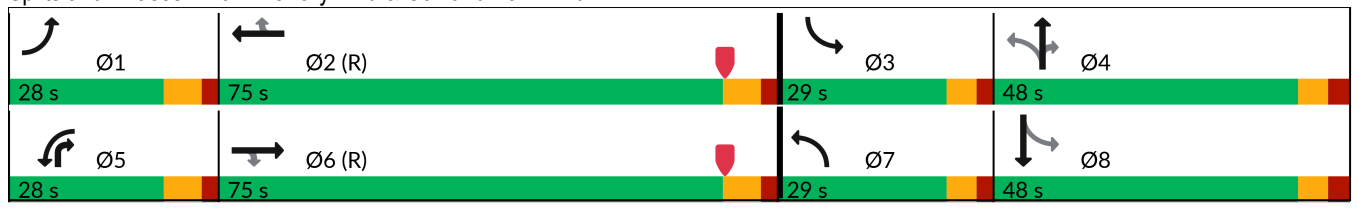
Existing (2025)
Timing Plan: PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Gap (s)	1.5	3.0	3.0	1.5	3.0	3.0	1.5	2.0	1.5	1.5	2.0	
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	
Walk Time (s)		7.0	7.0		7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		24.0	24.0		24.0	24.0		34.0			34.0	
Pedestrian Calls (#/hr)		20	20		13	13		19			6	
Act Effect Green (s)	20.1	71.7	71.7	14.7	66.3	66.3	70.2	46.6	61.3	64.0	43.0	
Actuated g/C Ratio	0.11	0.40	0.40	0.08	0.37	0.37	0.39	0.26	0.34	0.36	0.24	
v/c Ratio	0.90	0.81	0.46	0.74	0.77	0.38	0.92	0.48	0.29	0.60	1.88	
Control Delay (s/veh)	105.4	51.9	8.6	96.2	53.3	10.6	90.1	62.2	22.5	44.6	437.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	105.4	51.9	8.6	96.2	53.3	10.6	90.1	62.2	22.5	44.6	437.1	
LOS	F	D	A	F	D	B	F	E	C	D	F	
Approach Delay (s/veh)		53.1			51.9			62.9			343.5	
Approach LOS		D			D			E			F	
Queue Length 50th (ft)	211	613	40	124	541	42	249	240	72	208	~1439	
Queue Length 95th (ft)	#296	700	132	170	599	118	#442	339	132	289	#1703	
Internal Link Dist (ft)		3955			1380			920			920	
Turn Bay Length (ft)	340		370	355		300	185					
Base Capacity (vph)	400	2026	784	400	1921	708	271	477	619	445	425	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.87	0.81	0.46	0.52	0.75	0.38	0.92	0.48	0.26	0.56	1.88	

Intersection Summary

Area Type: Other
 Cycle Length: 180
 Actuated Cycle Length: 180
 Offset: 29 (16%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
 Natural Cycle: 130
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.88
 Intersection Signal Delay (s/veh): 105.0 Intersection LOS: F
 Intersection Capacity Utilization 113.5% ICU Level of Service H
 Analysis Period (min) 15
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 6: Inverrary Blvd & Oakland Park Blvd



Inverrary Golf Course Traffic Analysis
 1: Inverrary Blvd W & NW 44 St

Background (2030)
 Timing Plan: AM Peak Hour



Lane Group	SEL	SER	NEL	NET	SWT	SWR	Ø7
Lane Configurations							
Traffic Volume (vph)	337	259	290	168	161	530	
Future Volume (vph)	337	259	290	168	161	530	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	
Grade (%)	0%			0%	0%		
Storage Length (ft)	0	0	150			0	
Storage Lanes	1	1	1			0	
Taper Length (ft)	25		25				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Ped Bike Factor		0.97			0.98		
Frt		0.850			0.896		
Flt Protected	0.950		0.950				
Satd. Flow (prot)	1752	1568	1770	1863	1640	0	
Flt Permitted	0.950		0.087				
Satd. Flow (perm)	1752	1526	162	1863	1640	0	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)		305			125		
Link Speed (mph)	35			35	35		
Link Distance (ft)	896			1527	2641		
Travel Time (s)	17.5			29.7	51.4		
Confl. Peds. (#/hr)		2	1			1	
Confl. Bikes (#/hr)		2					
Peak Hour Factor	0.72	0.72	0.91	0.91	0.82	0.82	
Growth Factor	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	
Parking (#/hr)							
Mid-Block Traffic (%)	0%			0%	0%		
Adj. Flow (vph)	468	360	319	185	196	646	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	468	360	319	185	842	0	
Turn Type	Prot	Perm	pm+pt	NA	NA		
Protected Phases	8		1	6	2	7	
Permitted Phases		8	6				
Detector Phase	8	8	1	6	2		
Switch Phase							
Minimum Initial (s)	6.0	6.0	4.0	12.0	12.0	10.0	
Minimum Split (s)	12.0	12.0	10.0	18.0	35.0	30.0	
Total Split (s)	41.0	41.0	18.0	64.0	46.0	30.0	
Total Split (%)	30.4%	30.4%	13.3%	47.4%	34.1%	22%	
Maximum Green (s)	35.0	35.0	12.0	58.0	40.0	26.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	0.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		
Lead/Lag	Lag	Lag	Lead		Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	1.5	2.5	2.5	0.2	

Inverrary Golf Course Traffic Analysis
 1: Inverrary Blvd W & NW 44 St

Background (2030)
 Timing Plan: AM Peak Hour

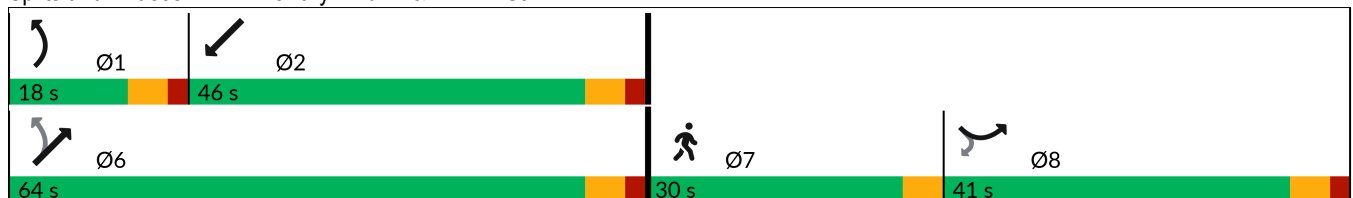


Lane Group	SEL	SER	NEL	NET	SWT	SWR	Ø7
Minimum Gap (s)	2.0	2.0	1.5	2.5	2.5		0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0		0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0		0.0
Recall Mode	None	None	None	Min	Min		None
Walk Time (s)					7.0		10.0
Flash Don't Walk (s)					22.0		16.0
Pedestrian Calls (#/hr)					1		0
Act Effct Green (s)	35.0	35.0	58.0	58.0	40.0		
Actuated g/C Ratio	0.33	0.33	0.55	0.55	0.38		
v/c Ratio	0.80	0.51	1.17	0.18	1.20		
Control Delay (s/veh)	43.9	8.0	135.4	12.3	130.2		
Queue Delay	0.0	0.0	0.0	0.0	0.0		
Total Delay (s/veh)	43.9	8.0	135.4	12.3	130.2		
LOS	D	A	F	B	F		
Approach Delay (s/veh)	28.3			90.2	130.2		
Approach LOS	C			F	F		
Queue Length 50th (ft)	284	25	~205	59	~636		
Queue Length 95th (ft)	300	41	#382	95	#747		
Internal Link Dist (ft)	816			1447	2561		
Turn Bay Length (ft)			150				
Base Capacity (vph)	584	712	273	1029	702		
Starvation Cap Reductn	0	0	0	0	0		
Spillback Cap Reductn	0	0	0	0	0		
Storage Cap Reductn	0	0	0	0	0		
Reduced v/c Ratio	0.80	0.51	1.17	0.18	1.20		

Intersection Summary

Area Type: Other
 Cycle Length: 135
 Actuated Cycle Length: 105
 Natural Cycle: 150
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 1.20
 Intersection Signal Delay (s/veh): 82.1 Intersection LOS: F
 Intersection Capacity Utilization 90.9% ICU Level of Service E
 Analysis Period (min) 15
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1: Inverrary Blvd W & NW 44 St



Inverrary Golf Course Traffic Analysis
2: Inverrary Blvd & NW 44 St

Background (2030)
Timing Plan: AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	71	316	165	66	323	172	256	477	135	136	323	63
Future Volume (vph)	71	316	165	66	323	172	256	477	135	136	323	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	195		185	160		230	220		0	90		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00		0.98	1.00		0.98	0.99	0.99		1.00	0.99	
Frt			0.850			0.850		0.967			0.976	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1736	1827	1553	1770	1863	1583	1770	3398	0	1770	3418	0
Flt Permitted	0.307			0.354			0.332			0.303		
Satd. Flow (perm)	560	1827	1522	658	1863	1557	611	3398	0	562	3418	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			177			189		29			18	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		2641			3355			1289			1075	
Travel Time (s)		51.4			65.4			29.3			24.4	
Confl. Peds. (#/hr)	4		4	4		4	12		6	6		12
Confl. Bikes (#/hr)			4									14
Peak Hour Factor	0.93	0.93	0.93	0.91	0.91	0.91	0.91	0.91	0.91	0.86	0.86	0.86
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	76	340	177	73	355	189	281	524	148	158	376	73
Shared Lane Traffic (%)												
Lane Group Flow (vph)	76	340	177	73	355	189	281	672	0	158	449	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	7	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	12.0	12.0	4.0	12.0	12.0	4.0	12.0		4.0	12.0	
Minimum Split (s)	10.0	37.0	37.0	10.0	37.0	37.0	10.0	34.0		10.0	34.0	
Total Split (s)	21.0	41.0	41.0	21.0	41.0	41.0	21.0	41.0		21.0	41.0	
Total Split (%)	16.9%	33.1%	33.1%	16.9%	33.1%	33.1%	16.9%	33.1%		16.9%	33.1%	
Maximum Green (s)	15.0	35.0	35.0	15.0	35.0	35.0	15.0	35.0		15.0	35.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	2.0	2.0	1.5	2.0	2.0	1.5	3.0		1.5	3.0	

Inverrary Golf Course Traffic Analysis
 2: Inverrary Blvd & NW 44 St

Background (2030)
 Timing Plan: AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Gap (s)	1.5	2.0	2.0	1.5	2.0	2.0	1.5	3.0		1.5	3.0	
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recall Mode	None	None	None	None	None	None	None	Min		None	Min	
Walk Time (s)		7.0	7.0		7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		24.0	24.0		24.0	24.0		21.0			21.0	
Pedestrian Calls (#/hr)		4	4		4	4		6			12	
Act Effct Green (s)	27.9	22.5	22.5	27.0	22.0	22.0	37.3	24.1		29.2	20.1	
Actuated g/C Ratio	0.33	0.27	0.27	0.32	0.26	0.26	0.44	0.28		0.34	0.24	
v/c Ratio	0.27	0.70	0.33	0.25	0.73	0.35	0.63	0.68		0.49	0.55	
Control Delay (s/veh)	20.5	39.0	6.5	20.2	40.9	6.5	23.9	31.6		21.8	31.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	20.5	39.0	6.5	20.2	40.9	6.5	23.9	31.6		21.8	31.6	
LOS	C	D	A	C	D	A	C	C		C	C	
Approach Delay (s/veh)		26.9			27.9			29.3			29.1	
Approach LOS		C			C			C			C	
Queue Length 50th (ft)	25	165	0	24	175	0	94	161		49	110	
Queue Length 95th (ft)	65	323	51	62	338	53	198	290		106	181	
Internal Link Dist (ft)		2561			3275			1209			995	
Turn Bay Length (ft)	195		185	160		230	220			90		
Base Capacity (vph)	443	821	781	468	836	802	502	1541		471	1544	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.17	0.41	0.23	0.16	0.42	0.24	0.56	0.44		0.34	0.29	

Intersection Summary

Area Type: Other
 Cycle Length: 124
 Actuated Cycle Length: 84.8
 Natural Cycle: 95
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.73
 Intersection Signal Delay (s/veh): 28.4 Intersection LOS: C
 Intersection Capacity Utilization 71.4% ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 2: Inverrary Blvd & NW 44 St



Inverrary Golf Course Traffic Analysis
 3: Inverrary Dr & NW 44 St

Background (2030)
 Timing Plan: AM Peak Hour



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	570	65	65	337	200	304
Future Volume (vph)	570	65	65	337	200	304
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	100		0	50
Storage Lanes		0	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00					
Frt	0.986					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1813	0	1770	1863	1770	1583
Flt Permitted			0.147		0.950	
Satd. Flow (perm)	1813	0	274	1863	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	8					219
Link Speed (mph)	35			35	25	
Link Distance (ft)	3355			3195	800	
Travel Time (s)	65.4			62.2	21.8	
Confl. Peds. (#/hr)		6	6			
Confl. Bikes (#/hr)						
Peak Hour Factor	0.89	0.89	0.92	0.92	0.85	0.85
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	640	73	71	366	235	358
Shared Lane Traffic (%)						
Lane Group Flow (vph)	713	0	71	366	235	358
Turn Type	NA		pm+pt	NA	Prot	Perm
Protected Phases	6		5	2	4	
Permitted Phases			2			4
Detector Phase	6		5	2	4	4
Switch Phase						
Minimum Initial (s)	12.0		4.0	12.0	6.0	6.0
Minimum Split (s)	33.0		10.0	18.0	12.0	12.0
Total Split (s)	51.0		18.0	69.0	26.0	26.0
Total Split (%)	53.7%		18.9%	72.6%	27.4%	27.4%
Maximum Green (s)	45.0		12.0	63.0	20.0	20.0
Yellow Time (s)	4.0		4.0	4.0	4.0	4.0
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0		6.0	6.0	6.0	6.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		1.5	3.0	2.0	2.0

Inverrary Golf Course Traffic Analysis
 3: Inverrary Dr & NW 44 St

Background (2030)
 Timing Plan: AM Peak Hour



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Gap (s)	3.0		1.5	3.0	2.0	2.0
Time Before Reduce (s)	0.0		0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0		0.0	0.0	0.0	0.0
Recall Mode	Min		None	Min	None	None
Walk Time (s)	7.0					
Flash Don't Walk (s)	20.0					
Pedestrian Calls (#/hr)	6					
Act Effct Green (s)	33.4		43.1	43.1	14.3	14.3
Actuated g/C Ratio	0.47		0.61	0.61	0.20	0.20
v/c Ratio	0.83		0.23	0.32	0.66	0.72
Control Delay (s/veh)	27.5		7.1	7.2	39.7	22.1
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay (s/veh)	27.5		7.1	7.2	39.7	22.1
LOS	C		A	A	D	C
Approach Delay (s/veh)	27.5			7.2	29.1	
Approach LOS	C			A	C	
Queue Length 50th (ft)	271		11	66	103	58
Queue Length 95th (ft)	489		28	126	190	152
Internal Link Dist (ft)	3275			3115	720	
Turn Bay Length (ft)			100			50
Base Capacity (vph)	1200		452	1573	564	654
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.59		0.16	0.23	0.42	0.55

Intersection Summary

Area Type: Other
 Cycle Length: 95
 Actuated Cycle Length: 71
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.83
 Intersection Signal Delay (s/veh): 22.9
 Intersection LOS: C
 Intersection Capacity Utilization 63.7%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 3: Inverrary Dr & NW 44 St



Inverrary Golf Course Traffic Analysis
 4: Rock Island Rd & NW 44 St

Background (2030)
 Timing Plan: AM Peak Hour



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	690	184	107	867	773	292
Future Volume (vph)	690	184	107	867	773	292
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	130	140			140
Storage Lanes	1	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor						
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	1583	1770	3539	3539	1583
Flt Permitted	0.950		0.218			
Satd. Flow (perm)	1770	1583	406	3539	3539	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		75				267
Link Speed (mph)	35			40	40	
Link Distance (ft)	3195			2200	2000	
Travel Time (s)	62.2			37.5	34.1	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.93	0.93	0.88	0.88	0.88	0.88
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	742	198	122	985	878	332
Shared Lane Traffic (%)						
Lane Group Flow (vph)	742	198	122	985	878	332
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	6.0	6.0	4.0	7.0	7.0	7.0
Minimum Split (s)	12.0	12.0	10.5	13.5	25.5	25.5
Total Split (s)	36.0	36.0	21.5	73.0	51.5	51.5
Total Split (%)	33.0%	33.0%	19.7%	67.0%	47.2%	47.2%
Maximum Green (s)	30.0	30.0	15.0	66.5	45.0	45.0
Yellow Time (s)	4.0	4.0	4.5	4.5	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.5	6.5	6.5	6.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0	3.0	1.5	3.0	3.0	3.0

Inverrary Golf Course Traffic Analysis
 4: Rock Island Rd & NW 44 St

Background (2030)
 Timing Plan: AM Peak Hour

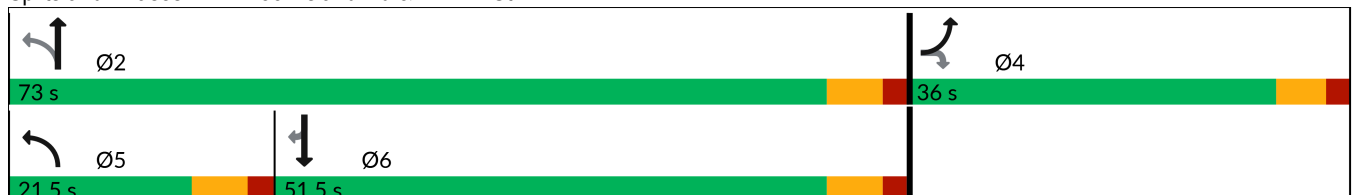


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Minimum Gap (s)	3.0	3.0	1.5	3.0	3.0	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	Max	Max	Max
Walk Time (s)					7.0	7.0
Flash Don't Walk (s)					12.0	12.0
Pedestrian Calls (#/hr)					0	0
Act Effct Green (s)	30.0	30.0	66.5	66.5	52.8	52.8
Actuated g/C Ratio	0.28	0.28	0.61	0.61	0.48	0.48
v/c Ratio	1.52	0.40	0.36	0.46	0.51	0.37
Control Delay (s/veh)	276.5	22.4	12.0	12.3	20.8	5.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	276.5	22.4	12.0	12.3	20.8	5.2
LOS	F	C	B	B	C	A
Approach Delay (s/veh)	223.0			12.3	16.5	
Approach LOS	F			B	B	
Queue Length 50th (ft)	~727	68	33	182	214	24
Queue Length 95th (ft)	#958	136	57	221	274	74
Internal Link Dist (ft)	3115			2120	1920	
Turn Bay Length (ft)		130	140			140
Base Capacity (vph)	487	490	435	2159	1715	904
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.52	0.40	0.28	0.46	0.51	0.37

Intersection Summary















Area Type: Other
 Cycle Length: 109
 Actuated Cycle Length: 109
 Natural Cycle: 90
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 1.52
 Intersection Signal Delay (s/veh): 74.7
 Intersection LOS: E
 Intersection Capacity Utilization 81.4%
 ICU Level of Service D
 Analysis Period (min) 15
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 4: Rock Island Rd & NW 44 St



Inverrary Golf Course Traffic Analysis
 5: Inverrary Blvd & Inverrary Dr

Background (2030)
 Timing Plan: AM Peak Hour

							Ø2	Ø3	Ø5	Ø20	Ø21	Ø22
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT						
Lane Configurations	 		 		 	 						
Traffic Volume (vph)	234	81	599	101	43	559						
Future Volume (vph)	234	81	599	101	43	559						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Lane Width (ft)	12	12	12	12	12	12						
Grade (%)	0%		0%			0%						
Storage Length (ft)	150	0		0	165							
Storage Lanes	1	0		0	1							
Taper Length (ft)	25				25							
Lane Util. Factor	0.97	0.95	0.95	0.95	1.00	0.95						
Ped Bike Factor	0.99											
Frt	0.961		0.978									
Flt Protected	0.964				0.950							
Satd. Flow (prot)	3264	0	3428	0	1770	3539						
Flt Permitted	0.964				0.197							
Satd. Flow (perm)	3264	0	3428	0	367	3539						
Right Turn on Red		Yes		Yes								
Satd. Flow (RTOR)	30		27									
Link Speed (mph)	25		30			30						
Link Distance (ft)	1000		175			1000						
Travel Time (s)	27.3		4.0			22.7						
Confl. Peds. (#/hr)		1										
Confl. Bikes (#/hr)												
Peak Hour Factor	0.88	0.88	0.91	0.91	0.82	0.82						
Growth Factor	100%	100%	100%	100%	100%	100%						
Heavy Vehicles (%)	4%	4%	3%	3%	2%	2%						
Bus Blockages (#/hr)	0	0	0	0	0	0						
Parking (#/hr)												
Mid-Block Traffic (%)	0%		0%			0%						
Adj. Flow (vph)	266	92	658	111	52	682						
Shared Lane Traffic (%)												
Lane Group Flow (vph)	358	0	769	0	52	682						
Turn Type	Prot		NA		pm+pt	NA						
Protected Phases	4	2 21 22 24			1	6	2	3	5	20	21	22
Permitted Phases			3		6							
Detector Phase	4	2 21 22 24			1	6						
Switch Phase												
Minimum Initial (s)	13.0				4.0	10.0	10.0	10.0	4.0	4.0	4.0	4.0
Minimum Split (s)	19.0				10.0	16.0	14.0	14.0	9.0	8.0	8.0	9.0
Total Split (s)	31.0				16.0	60.0	44.0	19.0	15.0	8.0	8.0	9.0
Total Split (%)	21.8%				11.3%	42.3%	31%	13%	11%	6%	6%	6%
Maximum Green (s)	25.0				10.0	54.0	40.0	15.0	10.0	4.0	4.0	4.0
Yellow Time (s)	4.0				4.0	4.0	4.0	4.0	4.0	3.0	3.0	4.0
All-Red Time (s)	2.0				2.0	2.0	0.0	0.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0				0.0	0.0						
Total Lost Time (s)	6.0				6.0	6.0						
Lead/Lag					Lead		Lag	Lead				Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0				1.5	3.0	3.0	2.0	1.5	1.5	1.5	1.5

Lane Group	Ø24
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	24
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	10.0
Minimum Split (s)	15.0
Total Split (s)	15.0
Total Split (%)	11%
Maximum Green (s)	10.0
Yellow Time (s)	4.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0

Inverrary Golf Course Traffic Analysis
 5: Inverrary Blvd & Inverrary Dr

Background (2030)
 Timing Plan: AM Peak Hour

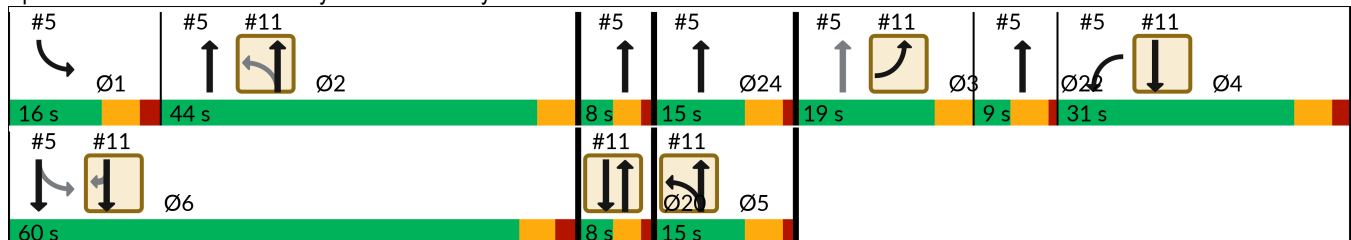


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø2	Ø3	Ø5	Ø20	Ø21	Ø22
Minimum Gap (s)	2.0				1.5	3.0	3.0	2.0	1.5	1.5	1.5	1.5
Time Before Reduce (s)	0.0				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None				None	Min	Min	None	None	None	None	None
Walk Time (s)												
Flash Don't Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	21.9		85.5		42.5	42.5						
Actuated g/C Ratio	0.17		0.67		0.33	0.33						
v/c Ratio	0.61		0.33		0.27	0.58						
Control Delay (s/veh)	50.9		0.4		32.3	36.9						
Queue Delay	0.0		0.2		0.0	0.0						
Total Delay (s/veh)	50.9		0.6		32.3	36.9						
LOS	D		A		C	D						
Approach Delay (s/veh)	50.9		0.6			36.6						
Approach LOS	D		A			D						
Queue Length 50th (ft)	135		1		30	247						
Queue Length 95th (ft)	194		0		55	278						
Internal Link Dist (ft)	920		95			920						
Turn Bay Length (ft)	150				165							
Base Capacity (vph)	672		2296		233	1519						
Starvation Cap Reductn	0		676		0	0						
Spillback Cap Reductn	0		0		0	0						
Storage Cap Reductn	0		0		0	0						
Reduced v/c Ratio	0.53		0.47		0.22	0.45						

Intersection Summary

Area Type:	Other
Cycle Length:	142
Actuated Cycle Length:	127.6
Natural Cycle:	90
Control Type:	Semi Act-Uncoord
Maximum v/c Ratio:	0.88
Intersection Signal Delay (s/veh):	24.5
Intersection LOS:	C
Intersection Capacity Utilization:	47.3%
ICU Level of Service:	A
Analysis Period (min):	15

































Splits and Phases: 5: Inverrary Blvd & Inverrary Dr



Lane Group	Ø24
Minimum Gap (s)	3.0
Time Before Reduce (s)	0.0
Time To Reduce (s)	0.0
Recall Mode	None
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

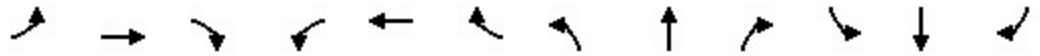
Inverrary Golf Course Traffic Analysis
6: Inverrary Blvd & Oakland Park Blvd

Background (2030)
Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  		  	  					 		
Traffic Volume (vph)	209	1382	344	80	1646	150	356	264	165	182	225	418
Future Volume (vph)	209	1382	344	80	1646	150	356	264	165	182	225	418
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	340		370	355		300	185		0	0		0
Storage Lanes	2		1	2		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00		0.96	0.99		0.97	1.00		0.97	0.99	0.98	
Frt			0.850			0.850			0.850		0.903	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3400	5036	1568	3433	5085	1583	1752	1845	1568	1770	1643	0
Flt Permitted	0.950			0.950			0.077			0.353		
Satd. Flow (perm)	3392	5036	1503	3415	5085	1540	142	1845	1521	652	1643	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			349			139			97		53	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		4035			1460			1000			1000	
Travel Time (s)		61.1			22.1			22.7			22.7	
Confl. Peds. (#/hr)	9		14	14		9	14		14	14		14
Confl. Bikes (#/hr)			10									8
Peak Hour Factor	0.94	0.94	0.94	0.96	0.96	0.96	0.87	0.87	0.87	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	222	1470	366	83	1715	156	409	303	190	202	250	464
Shared Lane Traffic (%)												
Lane Group Flow (vph)	222	1470	366	83	1715	156	409	303	190	202	714	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	1	6		5	2		7	4	5	3	8	
Permitted Phases			6			2	4		4	8		
Detector Phase	1	6	6	5	2	2	7	4	5	3	8	
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	4.0	6.0	5.0	4.0	6.0	
Minimum Split (s)	12.0	38.0	38.0	12.0	38.0	38.0	10.0	48.0	12.0	10.0	48.0	
Total Split (s)	23.0	76.0	76.0	23.0	76.0	76.0	20.0	48.0	23.0	33.0	61.0	
Total Split (%)	12.8%	42.2%	42.2%	12.8%	42.2%	42.2%	11.1%	26.7%	12.8%	18.3%	33.9%	
Maximum Green (s)	16.0	69.0	69.0	16.0	69.0	69.0	14.0	41.0	16.0	27.0	54.0	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	4.0	4.0	5.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	2.0	2.0	3.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	6.0	7.0	7.0	6.0	7.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	1.5	3.0	3.0	1.5	3.0	3.0	1.5	2.0	1.5	1.5	2.0	

Inverrary Golf Course Traffic Analysis
6: Inverrary Blvd & Oakland Park Blvd

Background (2030)
Timing Plan: AM Peak Hour

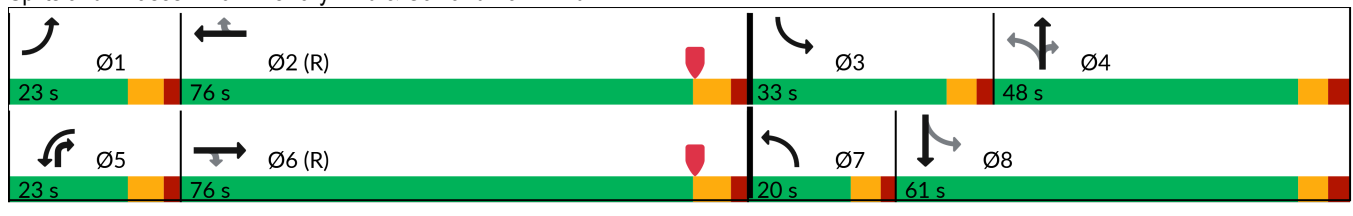


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Gap (s)	1.5	3.0	3.0	1.5	3.0	3.0	1.5	2.0	1.5	1.5	2.0	
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	
Walk Time (s)		7.0	7.0		7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		24.0	24.0		24.0	24.0		34.0			34.0	
Pedestrian Calls (#/hr)		14	14		9	9		14			14	
Act Effect Green (s)	14.5	75.2	75.2	8.3	69.0	69.0	67.7	52.0	60.3	71.7	54.0	
Actuated g/C Ratio	0.08	0.42	0.42	0.05	0.38	0.38	0.38	0.29	0.34	0.40	0.30	
v/c Ratio	0.81	0.70	0.44	0.53	0.88	0.23	2.14	0.57	0.33	0.55	1.35	
Control Delay (s/veh)	103.3	45.3	5.5	95.5	58.1	7.8	556.1	61.1	21.5	40.3	211.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	103.3	45.3	5.5	95.5	58.1	7.8	556.1	61.1	21.5	40.3	211.2	
LOS	F	D	A	F	E	A	F	E	C	D	F	
Approach Delay (s/veh)		44.5			55.6			277.2			173.5	
Approach LOS		D			E			F			F	
Queue Length 50th (ft)	134	513	12	50	689	13	~739	311	75	157	~1057	
Queue Length 95th (ft)	185	584	86	81	756	65	#940	425	140	225	#1319	
Internal Link Dist (ft)		3955			1380			920			920	
Turn Bay Length (ft)	340		370	355		300	185					
Base Capacity (vph)	302	2104	831	305	1960	679	191	532	638	444	530	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.74	0.70	0.44	0.27	0.88	0.23	2.14	0.57	0.30	0.45	1.35	

Intersection Summary

Area Type: Other
 Cycle Length: 180
 Actuated Cycle Length: 180
 Offset: 36 (20%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
 Natural Cycle: 140
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 2.14
 Intersection Signal Delay (s/veh): 104.5 Intersection LOS: F
 Intersection Capacity Utilization 118.4% ICU Level of Service H
 Analysis Period (min) 15
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 6: Inverrary Blvd & Oakland Park Blvd



Inverrary Golf Course Traffic Analysis
 1: Inverrary Blvd W & NW 44 St

Background (2030)
 Timing Plan: PM Peak Hour



Lane Group	SEL	SER	NEL	NET	SWT	SWR	Ø7
Lane Configurations							
Traffic Volume (vph)	423	298	235	173	204	392	
Future Volume (vph)	423	298	235	173	204	392	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	
Grade (%)	0%			0%	0%		
Storage Length (ft)	0	0	150				0
Storage Lanes	1	1	1				0
Taper Length (ft)	25		25				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Ped Bike Factor	1.00				0.99		
Frt		0.850			0.911		
Flt Protected	0.950		0.950				
Satd. Flow (prot)	1770	1583	1770	1863	1672	0	
Flt Permitted	0.950		0.113				
Satd. Flow (perm)	1766	1583	210	1863	1672	0	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)		278			73		
Link Speed (mph)	35			35	35		
Link Distance (ft)	896			1527	2641		
Travel Time (s)	17.5			29.7	51.4		
Confl. Peds. (#/hr)	1		1			1	
Confl. Bikes (#/hr)							
Peak Hour Factor	0.96	0.96	0.90	0.90	0.94	0.94	
Growth Factor	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	
Parking (#/hr)							
Mid-Block Traffic (%)	0%			0%	0%		
Adj. Flow (vph)	441	310	261	192	217	417	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	441	310	261	192	634	0	
Turn Type	Prot	Perm	pm+pt	NA	NA		
Protected Phases	8		1	6	2	7	
Permitted Phases		8	6				
Detector Phase	8	8	1	6	2		
Switch Phase							
Minimum Initial (s)	6.0	6.0	4.0	12.0	12.0	10.0	
Minimum Split (s)	12.0	12.0	10.0	18.0	35.0	30.0	
Total Split (s)	41.0	41.0	18.0	64.0	46.0	30.0	
Total Split (%)	30.4%	30.4%	13.3%	47.4%	34.1%	22%	
Maximum Green (s)	35.0	35.0	12.0	58.0	40.0	26.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	0.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		
Lead/Lag	Lag	Lag	Lead		Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	1.5	2.5	2.5	0.2	

Inverrary Golf Course Traffic Analysis
 1: Inverrary Blvd W & NW 44 St

Background (2030)
 Timing Plan: PM Peak Hour

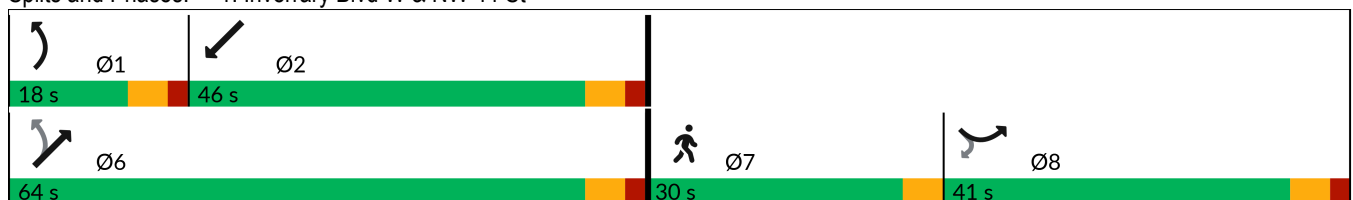


Lane Group	SEL	SER	NEL	NET	SWT	SWR	Ø7
Minimum Gap (s)	2.0	2.0	1.5	2.5	2.5		0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0		0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0		0.0
Recall Mode	None	None	None	Min	Min		None
Walk Time (s)					7.0		10.0
Flash Don't Walk (s)					22.0		16.0
Pedestrian Calls (#/hr)					1		0
Act Effct Green (s)	32.2	32.2	58.1	58.1	40.0		
Actuated g/C Ratio	0.31	0.31	0.57	0.57	0.39		
v/c Ratio	0.79	0.45	0.86	0.18	0.91		
Control Delay (s/veh)	43.4	6.8	47.9	11.7	45.4		
Queue Delay	0.0	0.0	0.0	0.0	0.0		
Total Delay (s/veh)	43.4	6.8	47.9	11.7	45.4		
LOS	D	A	D	B	D		
Approach Delay (s/veh)	28.3			32.6	45.4		
Approach LOS	C			C	D		
Queue Length 50th (ft)	261	15	104	59	359		
Queue Length 95th (ft)	383	78	#255	99	#599		
Internal Link Dist (ft)	816			1447	2561		
Turn Bay Length (ft)			150				
Base Capacity (vph)	606	725	302	1057	699		
Starvation Cap Reductn	0	0	0	0	0		
Spillback Cap Reductn	0	0	0	0	0		
Storage Cap Reductn	0	0	0	0	0		
Reduced v/c Ratio	0.73	0.43	0.86	0.18	0.91		

Intersection Summary

























Area Type: Other
 Cycle Length: 135
 Actuated Cycle Length: 102.3
 Natural Cycle: 150
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.91
 Intersection Signal Delay (s/veh): 35.3 Intersection LOS: D
 Intersection Capacity Utilization 86.3% ICU Level of Service E
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1: Inverrary Blvd W & NW 44 St



Inverrary Golf Course Traffic Analysis
 2: Inverrary Blvd & NW 44 St

Background (2030)
 Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	77	336	159	130	386	147	167	456	117	172	425	92
Future Volume (vph)	77	336	159	130	386	147	167	456	117	172	425	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	195		185	160		230	220		0	90		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00		0.98	1.00		0.97	1.00	0.99		1.00	0.99	
Frt			0.850			0.850		0.969			0.973	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1752	3375	0	1770	3426	0
Flt Permitted	0.304			0.270			0.284			0.268		
Satd. Flow (perm)	564	1863	1556	502	1863	1540	523	3375	0	497	3426	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			161			157		26			21	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		2641			3355			1289			1075	
Travel Time (s)		51.4			65.4			29.3			24.4	
Confl. Peds. (#/hr)	8		2	2		8	2		5	5		2
Confl. Bikes (#/hr)			4			8						4
Peak Hour Factor	0.89	0.89	0.89	0.90	0.90	0.90	0.98	0.98	0.98	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	87	378	179	144	429	163	170	465	119	191	472	102
Shared Lane Traffic (%)												
Lane Group Flow (vph)	87	378	179	144	429	163	170	584	0	191	574	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	7	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	12.0	12.0	4.0	12.0	12.0	4.0	12.0		4.0	12.0	
Minimum Split (s)	10.0	37.0	37.0	10.0	37.0	37.0	10.0	34.0		10.0	34.0	
Total Split (s)	21.0	41.0	41.0	21.0	41.0	41.0	21.0	41.0		21.0	41.0	
Total Split (%)	16.9%	33.1%	33.1%	16.9%	33.1%	33.1%	16.9%	33.1%		16.9%	33.1%	
Maximum Green (s)	15.0	35.0	35.0	15.0	35.0	35.0	15.0	35.0		15.0	35.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	2.0	2.0	1.5	2.0	2.0	1.5	3.0		1.5	3.0	

Inverrary Golf Course Traffic Analysis
 2: Inverrary Blvd & NW 44 St

Background (2030)
 Timing Plan: PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Gap (s)	1.5	2.0	2.0	1.5	2.0	2.0	1.5	3.0		1.5	3.0	
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recall Mode	None	None	None	None	None	None	None	Min		None	Min	
Walk Time (s)		7.0	7.0		7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		24.0	24.0		24.0	24.0		21.0			21.0	
Pedestrian Calls (#/hr)		2	2		8	8		5			2	
Act Effct Green (s)	31.7	24.5	24.5	36.4	29.2	29.2	32.8	22.3		33.3	22.6	
Actuated g/C Ratio	0.35	0.27	0.27	0.40	0.32	0.32	0.36	0.24		0.36	0.25	
v/c Ratio	0.30	0.76	0.34	0.45	0.72	0.27	0.52	0.69		0.58	0.67	
Control Delay (s/veh)	20.1	43.0	8.4	22.0	38.4	6.5	24.3	36.2		26.0	35.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	20.1	43.0	8.4	22.0	38.4	6.5	24.3	36.2		26.0	35.5	
LOS	C	D	A	C	D	A	C	D		C	D	
Approach Delay (s/veh)		30.3			28.1			33.6			33.1	
Approach LOS		C			C			C			C	
Queue Length 50th (ft)	29	196	8	49	225	2	60	153		68	150	
Queue Length 95th (ft)	68	366	62	107	413	52	128	263		142	259	
Internal Link Dist (ft)		2561			3275			1209			995	
Turn Bay Length (ft)	195		185	160		230	220			90		
Base Capacity (vph)	446	749	722	434	760	721	425	1373		423	1390	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.20	0.50	0.25	0.33	0.56	0.23	0.40	0.43		0.45	0.41	

Intersection Summary

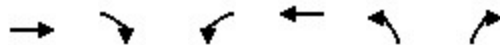
Area Type:	Other
Cycle Length:	124
Actuated Cycle Length:	91.6
Natural Cycle:	95
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.76
Intersection Signal Delay (s/veh):	31.3
Intersection LOS:	C
Intersection Capacity Utilization:	72.9%
ICU Level of Service:	C
Analysis Period (min):	15

Splits and Phases: 2: Inverrary Blvd & NW 44 St



Inverrary Golf Course Traffic Analysis
3: Inverrary Dr & NW 44 St

Background (2030)
Timing Plan: PM Peak Hour



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	434	174	212	548	109	128
Future Volume (vph)	434	174	212	548	109	128
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	100		0	50
Storage Lanes		0	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99					
Frt	0.961					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1758	0	1770	1863	1770	1583
Flt Permitted			0.160		0.950	
Satd. Flow (perm)	1758	0	298	1863	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	29					169
Link Speed (mph)	35			35	25	
Link Distance (ft)	3355			3195	800	
Travel Time (s)	65.4			62.2	21.8	
Confl. Peds. (#/hr)		3	3			
Confl. Bikes (#/hr)		4				
Peak Hour Factor	0.94	0.94	0.92	0.92	0.70	0.70
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	462	185	230	596	156	183
Shared Lane Traffic (%)						
Lane Group Flow (vph)	647	0	230	596	156	183
Turn Type	NA		pm+pt	NA	Prot	Perm
Protected Phases	6		5	2	4	
Permitted Phases			2			4
Detector Phase	6		5	2	4	4
Switch Phase						
Minimum Initial (s)	12.0		4.0	12.0	6.0	6.0
Minimum Split (s)	33.0		10.0	18.0	12.0	12.0
Total Split (s)	51.0		18.0	69.0	26.0	26.0
Total Split (%)	53.7%		18.9%	72.6%	27.4%	27.4%
Maximum Green (s)	45.0		12.0	63.0	20.0	20.0
Yellow Time (s)	4.0		4.0	4.0	4.0	4.0
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0		6.0	6.0	6.0	6.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		1.5	3.0	2.0	2.0

Inverrary Golf Course Traffic Analysis
 3: Inverrary Dr & NW 44 St

Background (2030)
 Timing Plan: PM Peak Hour



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Gap (s)	3.0		1.5	3.0	2.0	2.0
Time Before Reduce (s)	0.0		0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0		0.0	0.0	0.0	0.0
Recall Mode	Min		None	Min	None	None
Walk Time (s)	7.0					
Flash Don't Walk (s)	20.0					
Pedestrian Calls (#/hr)	3					
Act Effct Green (s)	29.5		46.4	46.4	11.0	11.0
Actuated g/C Ratio	0.42		0.66	0.66	0.16	0.16
v/c Ratio	0.85		0.55	0.48	0.57	0.47
Control Delay (s/veh)	29.9		11.6	7.5	38.8	11.2
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay (s/veh)	29.9		11.6	7.5	38.8	11.2
LOS	C		B	A	D	B
Approach Delay (s/veh)	29.9			8.6	23.9	
Approach LOS	C			A	C	
Queue Length 50th (ft)	234		31	102	63	5
Queue Length 95th (ft)	423		92	211	107	28
Internal Link Dist (ft)	3275			3115	720	
Turn Bay Length (ft)			100			50
Base Capacity (vph)	1203		463	1623	534	595
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.54		0.50	0.37	0.29	0.31

Intersection Summary

Area Type:	Other
Cycle Length:	95
Actuated Cycle Length:	70.1
Natural Cycle:	55
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.85
Intersection Signal Delay (s/veh):	19.1
Intersection LOS:	B
Intersection Capacity Utilization:	66.3%
ICU Level of Service:	C
Analysis Period (min):	15

Splits and Phases: 3: Inverrary Dr & NW 44 St



Inverrary Golf Course Traffic Analysis
4: Rock Island Rd & NW 44 St

Background (2030)
Timing Plan: PM Peak Hour



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	396	140	238	836	656	519
Future Volume (vph)	396	140	238	836	656	519
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	130	140			140
Storage Lanes	1	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor			1.00			0.98
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	1583	1770	3539	3539	1583
Flt Permitted	0.950		0.283			
Satd. Flow (perm)	1770	1583	527	3539	3539	1544
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		100				546
Link Speed (mph)	35			40	40	
Link Distance (ft)	3195			2200	2000	
Travel Time (s)	62.2			37.5	34.1	
Confl. Peds. (#/hr)			1			1
Confl. Bikes (#/hr)						2
Peak Hour Factor	0.86	0.86	0.93	0.93	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	460	163	256	899	691	546
Shared Lane Traffic (%)						
Lane Group Flow (vph)	460	163	256	899	691	546
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	6.0	6.0	4.0	7.0	7.0	7.0
Minimum Split (s)	12.0	12.0	10.5	13.5	25.5	25.5
Total Split (s)	36.0	36.0	21.5	73.0	51.5	51.5
Total Split (%)	33.0%	33.0%	19.7%	67.0%	47.2%	47.2%
Maximum Green (s)	30.0	30.0	15.0	66.5	45.0	45.0
Yellow Time (s)	4.0	4.0	4.5	4.5	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.5	6.5	6.5	6.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0	3.0	1.5	3.0	3.0	3.0

Inverrary Golf Course Traffic Analysis
 4: Rock Island Rd & NW 44 St

Background (2030)
 Timing Plan: PM Peak Hour

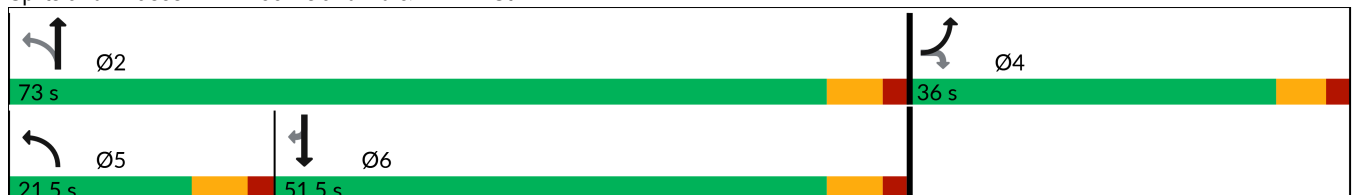


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Minimum Gap (s)	3.0	3.0	1.5	3.0	3.0	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	Max	Max	Max
Walk Time (s)					7.0	7.0
Flash Don't Walk (s)					12.0	12.0
Pedestrian Calls (#/hr)					1	1
Act Effct Green (s)	29.5	29.5	66.5	66.5	48.9	48.9
Actuated g/C Ratio	0.27	0.27	0.61	0.61	0.45	0.45
v/c Ratio	0.96	0.32	0.57	0.41	0.43	0.55
Control Delay (s/veh)	71.3	14.9	14.9	11.7	22.0	4.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	71.3	14.9	14.9	11.7	22.0	4.1
LOS	E	B	B	B	C	A
Approach Delay (s/veh)	56.5			12.4	14.1	
Approach LOS	E			B	B	
Queue Length 50th (ft)	315	33	76	161	170	0
Queue Length 95th (ft)	#476	81	117	203	235	64
Internal Link Dist (ft)	3115			2120	1920	
Turn Bay Length (ft)		130	140			140
Base Capacity (vph)	489	510	494	2169	1593	995
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.94	0.32	0.52	0.41	0.43	0.55

Intersection Summary















Area Type: Other
 Cycle Length: 109
 Actuated Cycle Length: 108.5
 Natural Cycle: 65
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.96
 Intersection Signal Delay (s/veh): 22.2
 Intersection LOS: C
 Intersection Capacity Utilization 69.1%
 ICU Level of Service C
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 4: Rock Island Rd & NW 44 St



Inverrary Golf Course Traffic Analysis
5: Inverrary Blvd & Inverrary Dr

Background (2030)
Timing Plan: PM Peak Hour

							Ø2	Ø3	Ø5	Ø20	Ø21	Ø22
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT						
Lane Configurations	 		 		 	 						
Traffic Volume (vph)	137	40	695	226	81	569						
Future Volume (vph)	137	40	695	226	81	569						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Lane Width (ft)	12	12	12	12	12	12						
Grade (%)	0%		0%			0%						
Storage Length (ft)	150	0		0	165							
Storage Lanes	1	0		0	1							
Taper Length (ft)	25				25							
Lane Util. Factor	0.97	0.95	0.95	0.95	1.00	0.95						
Ped Bike Factor	0.99											
Frt	0.966		0.963									
Flt Protected	0.963				0.950							
Satd. Flow (prot)	3244	0	3408	0	1770	3539						
Flt Permitted	0.963				0.127							
Satd. Flow (perm)	3244	0	3408	0	237	3539						
Right Turn on Red		Yes		Yes								
Satd. Flow (RTOR)	24		62									
Link Speed (mph)	25		30			30						
Link Distance (ft)	1000		175			1000						
Travel Time (s)	27.3		4.0			22.7						
Confl. Peds. (#/hr)		1										
Confl. Bikes (#/hr)		3										
Peak Hour Factor	0.91	0.91	0.92	0.92	0.81	0.81						
Growth Factor	100%	100%	100%	100%	100%	100%						
Heavy Vehicles (%)	5%	5%	2%	2%	2%	2%						
Bus Blockages (#/hr)	0	0	0	0	0	0						
Parking (#/hr)												
Mid-Block Traffic (%)	0%		0%			0%						
Adj. Flow (vph)	151	44	755	246	100	702						
Shared Lane Traffic (%)												
Lane Group Flow (vph)	195	0	1001	0	100	702						
Turn Type	Prot		NA		pm+pt	NA						
Protected Phases	4	2 21 22 24			1	6	2	3	5	20	21	22
Permitted Phases			3		6							
Detector Phase	4	2 21 22 24			1	6						
Switch Phase												
Minimum Initial (s)	13.0				4.0	10.0	10.0	10.0	4.0	4.0	4.0	4.0
Minimum Split (s)	19.0				10.0	16.0	14.0	14.0	9.0	8.0	8.0	9.0
Total Split (s)	31.0				16.0	60.0	44.0	19.0	15.0	8.0	8.0	9.0
Total Split (%)	21.8%				11.3%	42.3%	31%	13%	11%	6%	6%	6%
Maximum Green (s)	25.0				10.0	54.0	40.0	15.0	10.0	4.0	4.0	4.0
Yellow Time (s)	4.0				4.0	4.0	4.0	4.0	4.0	3.0	3.0	4.0
All-Red Time (s)	2.0				2.0	2.0	0.0	0.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0				0.0	0.0						
Total Lost Time (s)	6.0				6.0	6.0						
Lead/Lag					Lead		Lag	Lead				Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0				1.5	3.0	3.0	2.0	1.5	1.5	1.5	1.5

Lane Group	Ø24
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	24
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	10.0
Minimum Split (s)	15.0
Total Split (s)	15.0
Total Split (%)	11%
Maximum Green (s)	10.0
Yellow Time (s)	4.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0

Inverrary Golf Course Traffic Analysis
 5: Inverrary Blvd & Inverrary Dr

Background (2030)
 Timing Plan: PM Peak Hour

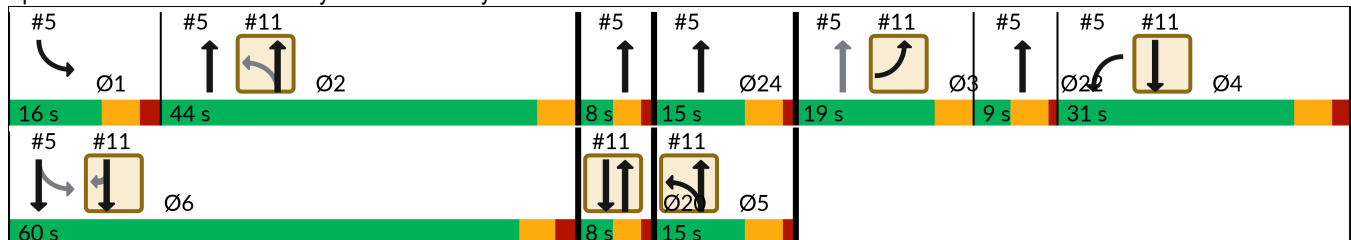


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø2	Ø3	Ø5	Ø20	Ø21	Ø22
Minimum Gap (s)	2.0				1.5	3.0	3.0	2.0	1.5	1.5	1.5	1.5
Time Before Reduce (s)	0.0				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None				None	Min	Min	None	None	None	None	None
Walk Time (s)												
Flash Don't Walk (s)												
Pedestrian Calls (#/hr)												
Act Effect Green (s)	18.7		87.9		51.1	51.1						
Actuated g/C Ratio	0.14		0.67		0.39	0.39						
v/c Ratio	0.40		0.43		0.53	0.51						
Control Delay (s/veh)	47.6		0.7		37.5	32.4						
Queue Delay	0.0		0.2		0.0	0.0						
Total Delay (s/veh)	47.6		0.9		37.5	32.4						
LOS	D		A		D	C						
Approach Delay (s/veh)	47.6		0.9			33.0						
Approach LOS	D		A			C						
Queue Length 50th (ft)	70		5		55	237						
Queue Length 95th (ft)	110		0		92	283						
Internal Link Dist (ft)	920		95			920						
Turn Bay Length (ft)	150				165							
Base Capacity (vph)	642		2308		210	1467						
Starvation Cap Reductn	0		532		0	0						
Spillback Cap Reductn	0		0		0	0						
Storage Cap Reductn	0		0		0	0						
Reduced v/c Ratio	0.30		0.56		0.48	0.48						

Intersection Summary

Area Type:	Other
Cycle Length:	142
Actuated Cycle Length:	130.9
Natural Cycle:	90
Control Type:	Semi Act-Uncoord
Maximum v/c Ratio:	0.75
Intersection Signal Delay (s/veh):	18.3
Intersection LOS:	B
Intersection Capacity Utilization:	55.1%
ICU Level of Service:	B
Analysis Period (min):	15

Splits and Phases: 5: Inverrary Blvd & Inverrary Dr



Lane Group	Ø24
Minimum Gap (s)	3.0
Time Before Reduce (s)	0.0
Time To Reduce (s)	0.0
Recall Mode	None
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Inverrary Golf Course Traffic Analysis
6: Inverrary Blvd & Oakland Park Blvd

Background (2030)
Timing Plan: PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	359	1687	374	212	1483	279	241	222	158	237	362	395
Future Volume (vph)	359	1687	374	212	1483	279	241	222	158	237	362	395
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%				0%
Storage Length (ft)	340		370	355		300	185		0	0		0
Storage Lanes	2		1	2		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00		0.95	0.99		0.96	1.00		0.96	0.99	0.99	
Frt			0.850			0.850			0.850		0.922	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	1752	1845	1568	1770	1696	0
Flt Permitted	0.950			0.950			0.089			0.453		
Satd. Flow (perm)	3417	5085	1505	3415	5085	1526	164	1845	1505	831	1696	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			308			215			66			28
Link Speed (mph)		45			45			30				30
Link Distance (ft)		4035			1460			1000				1000
Travel Time (s)		61.1			22.1			22.7				22.7
Confl. Peds. (#/hr)	13		20	20		13	6		19	19		6
Confl. Bikes (#/hr)			6			4			6			4
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.92	0.92	0.92	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%				0%
Adj. Flow (vph)	366	1721	382	216	1513	285	262	241	172	263	402	439
Shared Lane Traffic (%)												
Lane Group Flow (vph)	366	1721	382	216	1513	285	262	241	172	263	841	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	1	6		5	2		7	4	5	3	8	
Permitted Phases			6			2	4		4	8		
Detector Phase	1	6	6	5	2	2	7	4	5	3	8	
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	4.0	6.0	5.0	4.0	6.0	
Minimum Split (s)	12.0	38.0	38.0	12.0	38.0	38.0	10.0	48.0	12.0	10.0	48.0	
Total Split (s)	28.0	75.0	75.0	28.0	75.0	75.0	29.0	48.0	28.0	29.0	48.0	
Total Split (%)	15.6%	41.7%	41.7%	15.6%	41.7%	41.7%	16.1%	26.7%	15.6%	16.1%	26.7%	
Maximum Green (s)	21.0	68.0	68.0	21.0	68.0	68.0	23.0	41.0	21.0	23.0	41.0	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	4.0	4.0	5.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	2.0	2.0	3.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	6.0	7.0	7.0	6.0	7.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	3.0	3.0	1.5	3.0	3.0	1.5	2.0	1.5	1.5	2.0	

Inverrary Golf Course Traffic Analysis
6: Inverrary Blvd & Oakland Park Blvd

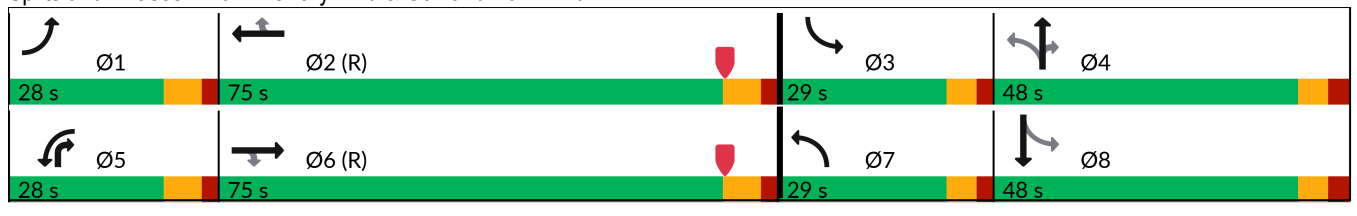
Background (2030)
Timing Plan: PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Gap (s)	1.5	3.0	3.0	1.5	3.0	3.0	1.5	2.0	1.5	1.5	2.0	
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	
Walk Time (s)		7.0	7.0		7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		24.0	24.0		24.0	24.0		34.0			34.0	
Pedestrian Calls (#/hr)		20	20		13	13		19			6	
Act Effect Green (s)	20.6	72.5	72.5	15.2	67.1	67.1	68.2	44.6	59.8	63.1	41.4	
Actuated g/C Ratio	0.11	0.40	0.40	0.08	0.37	0.37	0.38	0.25	0.33	0.35	0.23	
v/c Ratio	0.93	0.84	0.48	0.75	0.80	0.41	0.96	0.53	0.31	0.66	2.05	
Control Delay (s/veh)	109.5	53.4	10.0	96.2	54.2	11.9	98.3	64.7	26.1	47.7	510.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	109.5	53.4	10.0	96.2	54.2	11.9	98.3	64.7	26.1	47.7	510.9	
LOS	F	D	B	F	D	B	F	E	C	D	F	
Approach Delay (s/veh)		55.0			52.7			67.9			400.6	
Approach LOS		E			D			E			F	
Queue Length 50th (ft)	224	663	54	130	580	54	267	256	89	221	~1542	
Queue Length 95th (ft)	#322	756	156	176	640	137	#473	358	150	305	#1810	
Internal Link Dist (ft)		3955			1380			920			920	
Turn Bay Length (ft)	340		370	355		300	185					
Base Capacity (vph)	400	2046	789	400	1921	710	273	457	598	422	410	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.92	0.84	0.48	0.54	0.79	0.40	0.96	0.53	0.29	0.62	2.05	

Intersection Summary

Area Type: Other
 Cycle Length: 180
 Actuated Cycle Length: 180
 Offset: 29 (16%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
 Natural Cycle: 140
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 2.05
 Intersection Signal Delay (s/veh): 116.6 Intersection LOS: F
 Intersection Capacity Utilization 118.3% ICU Level of Service H
 Analysis Period (min) 15
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 6: Inverrary Blvd & Oakland Park Blvd



Inverrary Golf Course Traffic Analysis
 1: Inverrary Blvd W & NW 44 St

Total (2030)
 Timing Plan: AM Peak Hour



Lane Group	SEL	SER	NEL	NET	SWT	SWR	Ø7
Lane Configurations							
Traffic Volume (vph)	348	259	290	178	191	563	
Future Volume (vph)	348	259	290	178	191	563	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	
Grade (%)	0%			0%	0%		
Storage Length (ft)	0	0	150			0	
Storage Lanes	1	1	1			0	
Taper Length (ft)	25		25				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Ped Bike Factor		0.97			0.98		
Frt		0.850			0.899		
Flt Protected	0.950		0.950				
Satd. Flow (prot)	1752	1568	1770	1863	1647	0	
Flt Permitted	0.950		0.083				
Satd. Flow (perm)	1752	1526	155	1863	1647	0	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)		289			114		
Link Speed (mph)	35			35	35		
Link Distance (ft)	896			1527	2641		
Travel Time (s)	17.5			29.7	51.4		
Confl. Peds. (#/hr)		2	1			1	
Confl. Bikes (#/hr)		2					
Peak Hour Factor	0.72	0.72	0.91	0.91	0.82	0.82	
Growth Factor	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	
Parking (#/hr)							
Mid-Block Traffic (%)	0%			0%	0%		
Adj. Flow (vph)	483	360	319	196	233	687	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	483	360	319	196	920	0	
Turn Type	Prot	Perm	pm+pt	NA	NA		
Protected Phases	8		1	6	2	7	
Permitted Phases		8	6				
Detector Phase	8	8	1	6	2		
Switch Phase							
Minimum Initial (s)	6.0	6.0	4.0	12.0	12.0	10.0	
Minimum Split (s)	12.0	12.0	10.0	18.0	35.0	30.0	
Total Split (s)	39.0	39.0	18.0	66.0	48.0	30.0	
Total Split (%)	28.9%	28.9%	13.3%	48.9%	35.6%	22%	
Maximum Green (s)	33.0	33.0	12.0	60.0	42.0	26.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	0.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		
Lead/Lag	Lag	Lag	Lead		Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	1.5	2.5	2.5	0.2	

Inverrary Golf Course Traffic Analysis
 1: Inverrary Blvd W & NW 44 St

Total (2030)
 Timing Plan: AM Peak Hour

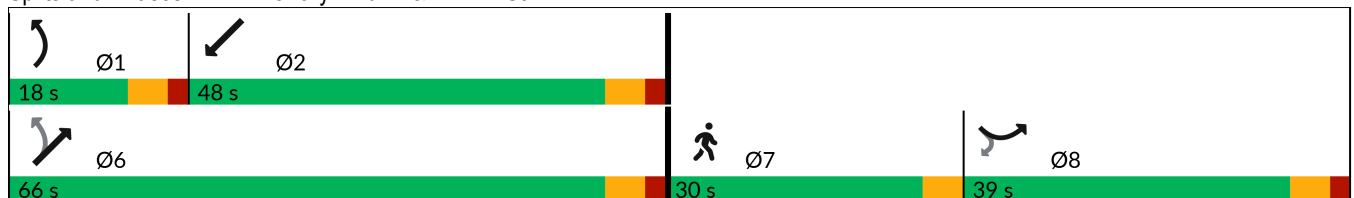


Lane Group	SEL	SER	NEL	NET	SWT	SWR	Ø7
Minimum Gap (s)	2.0	2.0	1.5	2.5	2.5		0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0		0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0		0.0
Recall Mode	None	None	None	Min	Min		None
Walk Time (s)					7.0		10.0
Flash Don't Walk (s)					22.0		16.0
Pedestrian Calls (#/hr)					1		0
Act Effct Green (s)	33.0	33.0	60.0	60.0	42.0		
Actuated g/C Ratio	0.31	0.31	0.57	0.57	0.40		
v/c Ratio	0.88	0.53	1.17	0.18	1.27		
Control Delay (s/veh)	53.0	9.7	135.7	11.3	156.9		
Queue Delay	0.0	0.0	0.0	0.0	0.0		
Total Delay (s/veh)	53.0	9.7	135.7	11.3	156.9		
LOS	D	A	F	B	F		
Approach Delay (s/veh)	34.5			88.3	156.9		
Approach LOS	C			F	F		
Queue Length 50th (ft)	306	34	~206	59	~736		
Queue Length 95th (ft)	321	50	#382	96	#842		
Internal Link Dist (ft)	816			1447	2561		
Turn Bay Length (ft)			150				
Base Capacity (vph)	550	677	273	1064	727		
Starvation Cap Reductn	0	0	0	0	0		
Spillback Cap Reductn	0	0	0	0	0		
Storage Cap Reductn	0	0	0	0	0		
Reduced v/c Ratio	0.88	0.53	1.17	0.18	1.27		

Intersection Summary

Area Type: Other
 Cycle Length: 135
 Actuated Cycle Length: 105
 Natural Cycle: 150
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 1.27
 Intersection Signal Delay (s/veh): 96.1 Intersection LOS: F
 Intersection Capacity Utilization 95.1% ICU Level of Service F
 Analysis Period (min) 15
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1: Inverrary Blvd W & NW 44 St



Inverrary Golf Course Traffic Analysis

Total (2030)

2: Inverrary Blvd & NW 44 St

Timing Plan: AM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	71	328	174	79	373	183	269	482	152	140	326	63
Future Volume (vph)	71	328	174	79	373	183	269	482	152	140	326	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	195		185	160		230	220		0	90		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00		0.98	1.00		0.98	0.99	0.99		1.00	0.99	
Frt			0.850			0.850		0.964			0.976	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1736	1827	1553	1770	1863	1583	1770	3385	0	1770	3419	0
Flt Permitted	0.240			0.329			0.317			0.282		
Satd. Flow (perm)	438	1827	1518	612	1863	1557	583	3385	0	523	3419	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			154			173		34			18	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		2641			3355			1289			1075	
Travel Time (s)		51.4			65.4			29.3			24.4	
Confl. Peds. (#/hr)	4		4	4		4	12		6	6		12
Confl. Bikes (#/hr)			4									14
Peak Hour Factor	0.93	0.93	0.93	0.91	0.91	0.91	0.91	0.91	0.91	0.86	0.86	0.86
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	76	353	187	87	410	201	296	530	167	163	379	73
Shared Lane Traffic (%)												
Lane Group Flow (vph)	76	353	187	87	410	201	296	697	0	163	452	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	7	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	12.0	12.0	4.0	12.0	12.0	4.0	12.0		4.0	12.0	
Minimum Split (s)	10.0	37.0	37.0	10.0	37.0	37.0	10.0	34.0		10.0	34.0	
Total Split (s)	36.0	26.0	26.0	36.0	26.0	26.0	21.0	41.0		21.0	41.0	
Total Split (%)	29.0%	21.0%	21.0%	29.0%	21.0%	21.0%	16.9%	33.1%		16.9%	33.1%	
Maximum Green (s)	30.0	20.0	20.0	30.0	20.0	20.0	15.0	35.0		15.0	35.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	2.0	2.0	1.5	2.0	2.0	1.5	3.0		1.5	3.0	

Inverrary Golf Course Traffic Analysis
 2: Inverrary Blvd & NW 44 St

Total (2030)
 Timing Plan: AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Gap (s)	1.5	2.0	2.0	1.5	2.0	2.0	1.5	3.0		1.5	3.0	
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recall Mode	None	None	None	None	None	None	None	Min		None	Min	
Walk Time (s)		7.0	7.0		7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		24.0	24.0		24.0	24.0		21.0			21.0	
Pedestrian Calls (#/hr)		4	4		4	4		6			12	
Act Effct Green (s)	28.2	22.7	22.7	28.1	22.6	22.6	36.7	23.6		27.8	19.1	
Actuated g/C Ratio	0.34	0.27	0.27	0.33	0.27	0.27	0.44	0.28		0.33	0.23	
v/c Ratio	0.30	0.72	0.36	0.29	0.82	0.37	0.67	0.72		0.54	0.57	
Control Delay (s/veh)	21.4	40.1	10.2	20.9	46.5	9.3	24.6	31.4		22.3	31.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	21.4	40.1	10.2	20.9	46.5	9.3	24.6	31.4		22.3	31.4	
LOS	C	D	B	C	D	A	C	C		C	C	
Approach Delay (s/veh)		28.7			32.6			29.3			29.0	
Approach LOS		C			C			C			C	
Queue Length 50th (ft)	24	171	13	28	206	11	96	161		48	108	
Queue Length 95th (ft)	65	342	76	72	#427	74	197	287		104	174	
Internal Link Dist (ft)		2561			3275			1209			995	
Turn Bay Length (ft)	195		185	160		230	220			90		
Base Capacity (vph)	671	493	522	693	502	546	484	1498		449	1504	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.11	0.72	0.36	0.13	0.82	0.37	0.61	0.47		0.36	0.30	

Intersection Summary

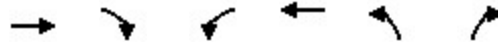
Area Type: Other
 Cycle Length: 124
 Actuated Cycle Length: 83.9
 Natural Cycle: 95
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.82
 Intersection Signal Delay (s/veh): 29.9 Intersection LOS: C
 Intersection Capacity Utilization 74.5% ICU Level of Service D
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 2: Inverrary Blvd & NW 44 St



Inverrary Golf Course Traffic Analysis
 3: Inverrary Dr & NW 44 St

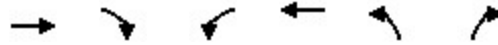
Total (2030)
 Timing Plan: AM Peak Hour



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	587	81	84	350	261	426
Future Volume (vph)	587	81	84	350	261	426
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	100		0	50
Storage Lanes		0	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00					
Frt	0.984					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1808	0	1770	1863	1770	1583
Flt Permitted			0.123		0.950	
Satd. Flow (perm)	1808	0	229	1863	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	9					275
Link Speed (mph)	35			35	25	
Link Distance (ft)	3355			3195	800	
Travel Time (s)	65.4			62.2	21.8	
Confl. Peds. (#/hr)		6	6			
Confl. Bikes (#/hr)						
Peak Hour Factor	0.89	0.89	0.92	0.92	0.85	0.85
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	660	91	91	380	307	501
Shared Lane Traffic (%)						
Lane Group Flow (vph)	751	0	91	380	307	501
Turn Type	NA		pm+pt	NA	Prot	Perm
Protected Phases	6		5	2	4	
Permitted Phases			2			4
Detector Phase	6		5	2	4	4
Switch Phase						
Minimum Initial (s)	12.0		4.0	12.0	6.0	6.0
Minimum Split (s)	33.0		10.0	18.0	12.0	12.0
Total Split (s)	44.0		14.0	58.0	37.0	37.0
Total Split (%)	46.3%		14.7%	61.1%	38.9%	38.9%
Maximum Green (s)	38.0		8.0	52.0	31.0	31.0
Yellow Time (s)	4.0		4.0	4.0	4.0	4.0
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0		6.0	6.0	6.0	6.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		1.5	3.0	2.0	2.0

Inverrary Golf Course Traffic Analysis
 3: Inverrary Dr & NW 44 St

Total (2030)
 Timing Plan: AM Peak Hour

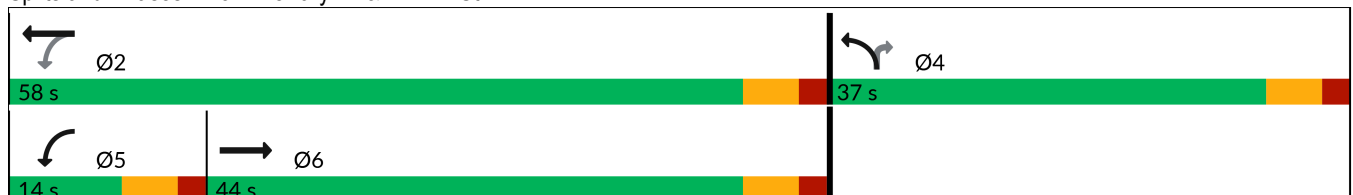


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Gap (s)	3.0		1.5	3.0	2.0	2.0
Time Before Reduce (s)	0.0		0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0		0.0	0.0	0.0	0.0
Recall Mode	Min		None	Min	None	None
Walk Time (s)	7.0					
Flash Don't Walk (s)	20.0					
Pedestrian Calls (#/hr)	6					
Act Effct Green (s)	38.9		49.1	49.1	18.9	18.9
Actuated g/C Ratio	0.48		0.61	0.61	0.24	0.24
v/c Ratio	0.85		0.34	0.33	0.74	0.86
Control Delay (s/veh)	33.2		11.5	9.8	39.7	28.5
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay (s/veh)	33.2		11.5	9.8	39.7	28.5
LOS	C		B	A	D	C
Approach Delay (s/veh)	33.2			10.1	32.8	
Approach LOS	C			B	C	
Queue Length 50th (ft)	331		16	80	149	116
Queue Length 95th (ft)	#699		48	185	216	209
Internal Link Dist (ft)	3275			3115	720	
Turn Bay Length (ft)			100			50
Base Capacity (vph)	881		297	1235	699	792
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.85		0.31	0.31	0.44	0.63

Intersection Summary

Area Type: Other
 Cycle Length: 95
 Actuated Cycle Length: 80.3
 Natural Cycle: 80
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.86
 Intersection Signal Delay (s/veh): 27.7
 Intersection LOS: C
 Intersection Capacity Utilization 72.3%
 ICU Level of Service C
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 3: Inverrary Dr & NW 44 St



Inverrary Golf Course Traffic Analysis
4: Rock Island Rd & NW 44 St

Total (2030)
Timing Plan: AM Peak Hour



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	803	210	107	867	789	324
Future Volume (vph)	803	210	107	867	789	324
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	130	140			140
Storage Lanes	1	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor						
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	1583	1770	3539	3539	1583
Flt Permitted	0.950		0.156			
Satd. Flow (perm)	1770	1583	291	3539	3539	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		86				247
Link Speed (mph)	35			40	40	
Link Distance (ft)	3195			2200	2000	
Travel Time (s)	62.2			37.5	34.1	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.93	0.93	0.88	0.88	0.88	0.88
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	863	226	122	985	897	368
Shared Lane Traffic (%)						
Lane Group Flow (vph)	863	226	122	985	897	368
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	6.0	6.0	4.0	7.0	7.0	7.0
Minimum Split (s)	12.0	12.0	10.5	13.5	25.5	25.5
Total Split (s)	47.0	47.0	21.5	62.0	40.5	40.5
Total Split (%)	43.1%	43.1%	19.7%	56.9%	37.2%	37.2%
Maximum Green (s)	41.0	41.0	15.0	55.5	34.0	34.0
Yellow Time (s)	4.0	4.0	4.5	4.5	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.5	6.5	6.5	6.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0	3.0	1.5	3.0	3.0	3.0

Inverrary Golf Course Traffic Analysis
 4: Rock Island Rd & NW 44 St

Total (2030)
 Timing Plan: AM Peak Hour



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Minimum Gap (s)	3.0	3.0	1.5	3.0	3.0	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	Max	Max	Max
Walk Time (s)					7.0	7.0
Flash Don't Walk (s)					12.0	12.0
Pedestrian Calls (#/hr)					0	0
Act Effct Green (s)	41.0	41.0	55.5	55.5	41.0	41.0
Actuated g/C Ratio	0.38	0.38	0.51	0.51	0.38	0.38
v/c Ratio	1.30	0.35	0.48	0.55	0.67	0.49
Control Delay (s/veh)	175.7	16.4	20.6	19.6	31.9	11.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	175.7	16.4	20.6	19.6	31.9	11.1
LOS	F	B	C	B	C	B
Approach Delay (s/veh)	142.6			19.7	25.8	
Approach LOS	F			B	C	
Queue Length 50th (ft)	~774	66	43	236	272	56
Queue Length 95th (ft)	#1013	129	74	287	348	139
Internal Link Dist (ft)	3115			2120	1920	
Turn Bay Length (ft)		130	140			140
Base Capacity (vph)	665	649	351	1801	1332	749
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.30	0.35	0.35	0.55	0.67	0.49

Intersection Summary

Area Type: Other
 Cycle Length: 109
 Actuated Cycle Length: 109
 Natural Cycle: 90
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 1.30
 Intersection Signal Delay (s/veh): 60.6
 Intersection LOS: E
 Intersection Capacity Utilization 88.1%
 ICU Level of Service E
 Analysis Period (min) 15
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 4: Rock Island Rd & NW 44 St



Inverrary Golf Course Traffic Analysis
5: Inverrary Blvd & Inverrary Dr

Total (2030)
Timing Plan: AM Peak Hour

							Ø2	Ø3	Ø5	Ø20	Ø21	Ø22
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT						
Lane Configurations												
Traffic Volume (vph)	269	81	616	131	43	584						
Future Volume (vph)	269	81	616	131	43	584						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Lane Width (ft)	12	12	12	12	12	12						
Grade (%)	0%		0%			0%						
Storage Length (ft)	150	0		0	165							
Storage Lanes	1	0		0	1							
Taper Length (ft)	25				25							
Lane Util. Factor	0.97	0.95	0.95	0.95	1.00	0.95						
Ped Bike Factor	0.99											
Frt	0.965		0.974									
Flt Protected	0.963				0.950							
Satd. Flow (prot)	3277	0	3414	0	1770	3539						
Flt Permitted	0.963				0.168							
Satd. Flow (perm)	3277	0	3414	0	313	3539						
Right Turn on Red		Yes		Yes								
Satd. Flow (RTOR)	26		33									
Link Speed (mph)	25		30			30						
Link Distance (ft)	1000		175			1000						
Travel Time (s)	27.3		4.0			22.7						
Confl. Peds. (#/hr)		1										
Confl. Bikes (#/hr)												
Peak Hour Factor	0.88	0.88	0.91	0.91	0.82	0.82						
Growth Factor	100%	100%	100%	100%	100%	100%						
Heavy Vehicles (%)	4%	4%	3%	3%	2%	2%						
Bus Blockages (#/hr)	0	0	0	0	0	0						
Parking (#/hr)												
Mid-Block Traffic (%)	0%		0%			0%						
Adj. Flow (vph)	306	92	677	144	52	712						
Shared Lane Traffic (%)												
Lane Group Flow (vph)	398	0	821	0	52	712						
Turn Type	Prot		NA		pm+pt	NA						
Protected Phases	4	2 21 22 24			1	6	2	3	5	20	21	22
Permitted Phases			3		6							
Detector Phase	4	2 21 22 24			1	6						
Switch Phase												
Minimum Initial (s)	13.0				4.0	10.0	10.0	10.0	4.0	4.0	4.0	4.0
Minimum Split (s)	19.0				10.0	16.0	14.0	14.0	9.0	8.0	8.0	9.0
Total Split (s)	35.0				16.0	56.0	40.0	19.0	15.0	8.0	8.0	9.0
Total Split (%)	24.6%				11.3%	39.4%	28%	13%	11%	6%	6%	6%
Maximum Green (s)	29.0				10.0	50.0	36.0	15.0	10.0	4.0	4.0	4.0
Yellow Time (s)	4.0				4.0	4.0	4.0	4.0	4.0	3.0	3.0	4.0
All-Red Time (s)	2.0				2.0	2.0	0.0	0.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0				0.0	0.0						
Total Lost Time (s)	6.0				6.0	6.0						
Lead/Lag					Lead		Lag	Lead				Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0				1.5	3.0	3.0	2.0	1.5	1.5	1.5	1.5

Inverrary Golf Course Traffic Analysis
 5: Inverrary Blvd & Inverrary Dr

Total (2030)
 Timing Plan: AM Peak Hour

Lane Group	Ø24
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	24
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	10.0
Minimum Split (s)	15.0
Total Split (s)	15.0
Total Split (%)	11%
Maximum Green (s)	10.0
Yellow Time (s)	4.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0

Inverrary Golf Course Traffic Analysis
 5: Inverrary Blvd & Inverrary Dr

Total (2030)
 Timing Plan: AM Peak Hour

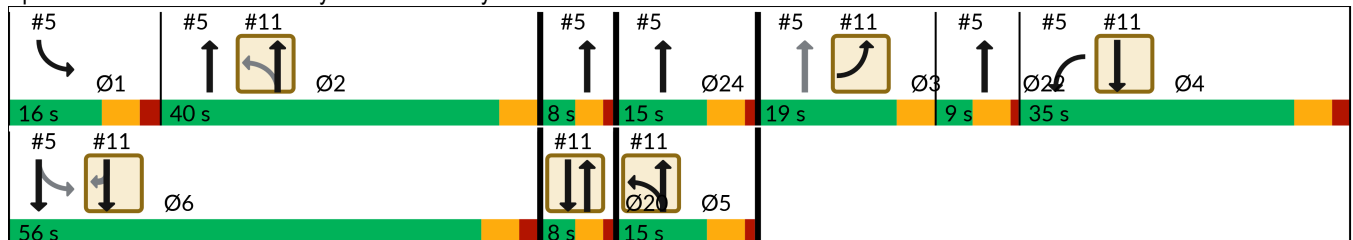


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø2	Ø3	Ø5	Ø20	Ø21	Ø22
Minimum Gap (s)	2.0				1.5	3.0	3.0	2.0	1.5	1.5	1.5	1.5
Time Before Reduce (s)	0.0				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None				None	Min	Min	None	None	None	None	None
Walk Time (s)												
Flash Don't Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	24.6		85.8		42.9	42.9						
Actuated g/C Ratio	0.19		0.66		0.33	0.33						
v/c Ratio	0.62		0.36		0.30	0.61						
Control Delay (s/veh)	51.0		0.5		35.0	39.4						
Queue Delay	0.0		0.2		0.0	0.0						
Total Delay (s/veh)	51.0		0.6		35.0	39.4						
LOS	D		A		C	D						
Approach Delay (s/veh)	51.0		0.6			39.1						
Approach LOS	D		A			D						
Queue Length 50th (ft)	156		1		31	269						
Queue Length 95th (ft)	210		m0		58	306						
Internal Link Dist (ft)	920		95			920						
Turn Bay Length (ft)	150				165							
Base Capacity (vph)	756		2242		215	1370						
Starvation Cap Reductn	0		535		0	0						
Spillback Cap Reductn	0		0		0	0						
Storage Cap Reductn	0		0		0	0						
Reduced v/c Ratio	0.53		0.48		0.24	0.52						

Intersection Summary

Area Type: Other
 Cycle Length: 142
 Actuated Cycle Length: 130.7
 Natural Cycle: 90
 Control Type: Semi Act-Uncoord
 Maximum v/c Ratio: 0.89
 Intersection Signal Delay (s/veh): 25.5 Intersection LOS: C
 Intersection Capacity Utilization 48.7% ICU Level of Service A
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Inverrary Blvd & Inverrary Dr



Lane Group	Ø24
Minimum Gap (s)	3.0
Time Before Reduce (s)	0.0
Time To Reduce (s)	0.0
Recall Mode	None
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Inverrary Golf Course Traffic Analysis
6: Inverrary Blvd & Oakland Park Blvd

Total (2030)
Timing Plan: AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	220	1384	344	80	1659	186	356	264	165	222	225	438
Future Volume (vph)	220	1384	344	80	1659	186	356	264	165	222	225	438
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	340		370	355		300	185		0	0		0
Storage Lanes	2		1	2		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00		0.96	0.99		0.97	1.00		0.97	0.99	0.98	
Frt			0.850			0.850			0.850		0.901	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3400	5036	1568	3433	5085	1583	1752	1845	1568	1770	1639	0
Flt Permitted	0.950			0.950			0.082			0.310		
Satd. Flow (perm)	3392	5036	1503	3415	5085	1540	151	1845	1521	573	1639	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			348			139			97		56	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		4035			1460			1000			1000	
Travel Time (s)		61.1			22.1			22.7			22.7	
Confl. Peds. (#/hr)	9		14	14		9	14		14	14		14
Confl. Bikes (#/hr)			10									8
Peak Hour Factor	0.94	0.94	0.94	0.96	0.96	0.96	0.87	0.87	0.87	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	234	1472	366	83	1728	194	409	303	190	247	250	487
Shared Lane Traffic (%)												
Lane Group Flow (vph)	234	1472	366	83	1728	194	409	303	190	247	737	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	1	6		5	2		7	4	5	3	8	
Permitted Phases			6			2	4		4	8		
Detector Phase	1	6	6	5	2	2	7	4	5	3	8	
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	4.0	6.0	5.0	4.0	6.0	
Minimum Split (s)	12.0	38.0	38.0	12.0	38.0	38.0	10.0	48.0	12.0	10.0	48.0	
Total Split (s)	21.0	76.0	76.0	23.0	78.0	78.0	20.0	48.0	23.0	33.0	61.0	
Total Split (%)	11.7%	42.2%	42.2%	12.8%	43.3%	43.3%	11.1%	26.7%	12.8%	18.3%	33.9%	
Maximum Green (s)	14.0	69.0	69.0	16.0	71.0	71.0	14.0	41.0	16.0	27.0	54.0	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	4.0	4.0	5.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	2.0	2.0	3.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	6.0	7.0	7.0	6.0	7.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	1.5	3.0	3.0	1.5	3.0	3.0	1.5	2.0	1.5	1.5	2.0	

Inverrary Golf Course Traffic Analysis
 6: Inverrary Blvd & Oakland Park Blvd

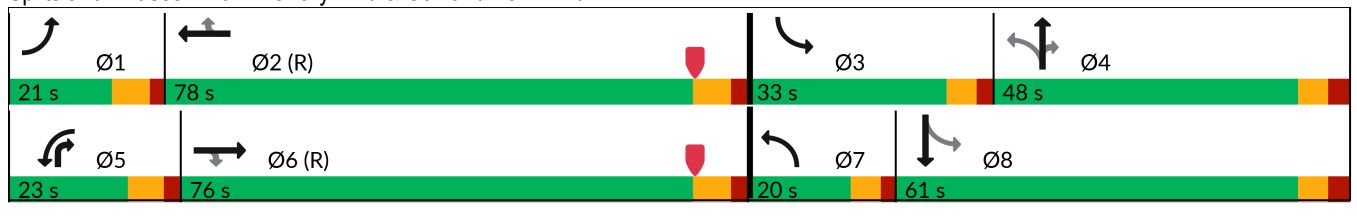
Total (2030)
 Timing Plan: AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Gap (s)	1.5	3.0	3.0	1.5	3.0	3.0	1.5	2.0	1.5	1.5	2.0	
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	
Walk Time (s)		7.0	7.0		7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		24.0	24.0		24.0	24.0		34.0			34.0	
Pedestrian Calls (#/hr)		14	14		9	9		14			14	
Act Effect Green (s)	13.7	75.3	75.3	8.3	69.8	69.8	64.9	48.7	57.0	73.3	54.0	
Actuated g/C Ratio	0.08	0.42	0.42	0.05	0.39	0.39	0.36	0.27	0.32	0.41	0.30	
v/c Ratio	0.90	0.70	0.44	0.53	0.88	0.28	2.14	0.61	0.35	0.67	1.39	
Control Delay (s/veh)	116.7	45.2	5.5	95.5	57.1	12.0	556.1	65.1	22.9	44.6	228.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	116.7	45.2	5.5	95.5	57.1	12.0	556.1	65.1	22.9	44.6	228.3	
LOS	F	D	A	F	E	B	F	E	C	D	F	
Approach Delay (s/veh)		46.3			54.3			278.8			182.2	
Approach LOS		D			D			F			F	
Queue Length 50th (ft)	143	514	12	50	686	41	~740	320	78	197	~1110	
Queue Length 95th (ft)	#226	585	87	81	750	103	#941	435	144	276	#1372	
Internal Link Dist (ft)		3955			1380			920			920	
Turn Bay Length (ft)	340		370	355		300	185					
Base Capacity (vph)	264	2106	831	305	2005	691	191	499	613	422	530	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.89	0.70	0.44	0.27	0.86	0.28	2.14	0.61	0.31	0.59	1.39	

Intersection Summary

















Area Type: Other
 Cycle Length: 180
 Actuated Cycle Length: 180
 Offset: 36 (20%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
 Natural Cycle: 150
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 2.14
 Intersection Signal Delay (s/veh): 106.6 Intersection LOS: F
 Intersection Capacity Utilization 120.2% ICU Level of Service H
 Analysis Period (min) 15
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 6: Inverrary Blvd & Oakland Park Blvd



Inverrary Golf Course Traffic Analysis
 7: Inverrary Blvd & Pod 1 and Pod 2 Access

Total (2030)
 Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	0	17	7	0	8	5	684	8	4	603	9
Future Volume (vph)	25	0	17	7	0	8	5	684	8	4	603	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		500			500			1000			691	
Travel Time (s)		11.4			11.4			22.7			15.7	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												

Intersection Summary

Area Type: Other

Inverrary Golf Course Traffic Analysis
 7: Inverrary Blvd & Pod 1 and Pod 2 Access

Total (2030)
 Timing Plan: AM Peak Hour

Intersection												
Int Delay, s/veh	1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	25	0	17	7	0	8	5	684	8	4	603	9
Future Vol, veh/h	25	0	17	7	0	8	5	684	8	4	603	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	27	0	18	8	0	9	5	743	9	4	655	10

















Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1052	1432	333	1095	1433	376	665	0	0	752	0	0
Stage 1	669	669	-	759	759	-	-	-	-	-	-	-
Stage 2	383	763	-	336	674	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	181	133	663	168	133	621	920	-	-	853	-	-
Stage 1	413	454	-	365	413	-	-	-	-	-	-	-
Stage 2	612	411	-	651	452	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	176	131	663	161	131	621	920	-	-	853	-	-
Mov Cap-2 Maneuver	176	131	-	161	131	-	-	-	-	-	-	-
Stage 1	411	451	-	362	410	-	-	-	-	-	-	-
Stage 2	599	408	-	629	449	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	22.55		19.39		0.13		0.12	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	25	-	-	250	266	23	-	-
HCM Lane V/C Ratio	0.006	-	-	0.182	0.061	0.005	-	-
HCM Ctrl Dly (s/v)	8.9	0.1	-	22.6	19.4	9.2	0.1	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.7	0.2	0	-	-

Inverrary Golf Course Traffic Analysis
 8: Inverrary Dr & Pod 2 and Pod 3 Access

Total (2030)
 Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	0	11	19	0	37	4	517	13	7	320	5
Future Volume (vph)	15	0	11	19	0	37	4	517	13	7	320	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		500			500			500			1750	
Travel Time (s)		11.4			11.4			13.6			47.7	
Confl. Peds. (#/hr)	5											
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												

Intersection Summary

Area Type: Other

Inverrary Golf Course Traffic Analysis
 8: Inverrary Dr & Pod 2 and Pod 3 Access

Total (2030)
 Timing Plan: AM Peak Hour

Intersection												
Int Delay, s/veh	1.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	15	0	11	19	0	37	4	517	13	7	320	5
Future Vol, veh/h	15	0	11	19	0	37	4	517	13	7	320	5
Conflicting Peds, #/hr	5	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	0	12	21	0	40	4	562	14	8	348	5

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	941	951	351	941	946	574	353	0	0	576	0	0
Stage 1	366	366	-	578	578	-	-	-	-	-	-	-
Stage 2	576	585	-	363	368	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	243	260	693	243	261	518	1205	-	-	997	-	-
Stage 1	654	623	-	502	501	-	-	-	-	-	-	-
Stage 2	503	498	-	656	621	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	220	256	693	236	258	516	1205	-	-	997	-	-
Mov Cap-2 Maneuver	220	256	-	236	258	-	-	-	-	-	-	-
Stage 1	647	617	-	499	499	-	-	-	-	-	-	-
Stage 2	459	495	-	638	615	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	17.81		16.73		0.06		0.18	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	13	-	-	309	368	38	-	-
HCM Lane V/C Ratio	0.004	-	-	0.091	0.166	0.008	-	-
HCM Ctrl Dly (s/v)	8	0	-	17.8	16.7	8.6	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.6	0	-	-

Inverrary Golf Course Traffic Analysis
 9: Rock Island Rd & Pod 4 Access

Total (2030)
 Timing Plan: AM Peak Hour



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	44	0	979	983	21
Future Volume (vph)	0	44	0	979	983	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	0	1	0			0
Taper Length (ft)	25		25			
Link Speed (mph)	30			40	40	
Link Distance (ft)	970			1690	2200	
Travel Time (s)	22.0			28.8	37.5	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						

Intersection Summary

Area Type: Other

Inverrary Golf Course Traffic Analysis
 9: Rock Island Rd & Pod 4 Access

Total (2030)
 Timing Plan: AM Peak Hour

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑	↑↑	
Traffic Vol, veh/h	0	44	0	979	983	21
Future Vol, veh/h	0	44	0	979	983	21
Conflicting Peds, #/hr	0	0	0	0	0	0
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	48	0	1064	1068	23

















Major/Minor	Minor2	Major1	Major2		
Conflicting Flow All	-	546	-	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-
Pot Cap-1 Maneuver	0	482	0	-	-
Stage 1	0	-	0	-	-
Stage 2	0	-	0	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	-	482	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	13.29	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	482	-	-
HCM Lane V/C Ratio	-	0.099	-	-
HCM Ctrl Dly (s/v)	-	13.3	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.3	-	-

Inverrary Golf Course Traffic Analysis
 10: Inverrary Dr & Pod 5 and Pod 6 Access

Total (2030)
 Timing Plan: AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	0	2	3	0	87	6	556	7	13	142	10
Future Volume (vph)	44	0	2	3	0	87	6	556	7	13	142	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		500			500			1750			800	
Travel Time (s)		11.4			11.4			47.7			21.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												

Intersection Summary

Area Type: Other

Inverrary Golf Course Traffic Analysis
 10: Inverrary Dr & Pod 5 and Pod 6 Access

Total (2030)
 Timing Plan: AM Peak Hour

Intersection												
Int Delay, s/veh	2.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	44	0	2	3	0	87	6	556	7	13	142	10
Future Vol, veh/h	44	0	2	3	0	87	6	556	7	13	142	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	48	0	2	3	0	95	7	604	8	14	154	11

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	805	813	160	804	815	608	165	0	0	612	0	0
Stage 1	188	188	-	621	621	-	-	-	-	-	-	-
Stage 2	617	625	-	183	193	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	301	313	885	301	312	496	1413	-	-	967	-	-
Stage 1	814	744	-	475	479	-	-	-	-	-	-	-
Stage 2	477	477	-	819	740	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	238	305	885	294	305	496	1413	-	-	967	-	-
Mov Cap-2 Maneuver	238	305	-	294	305	-	-	-	-	-	-	-
Stage 1	801	732	-	472	476	-	-	-	-	-	-	-
Stage 2	383	474	-	804	729	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	23.38		14.3		0.08		0.69	
HCM LOS	C		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	19	-	-	245	484	140	-	-
HCM Lane V/C Ratio	0.005	-	-	0.204	0.202	0.015	-	-
HCM Ctrl Dly (s/v)	7.6	0	-	23.4	14.3	8.8	0	-
HCM Lane LOS	A	A	-	C	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.7	0.7	0	-	-

Inverrary Golf Course Traffic Analysis
 1: Inverrary Blvd W & NW 44 St

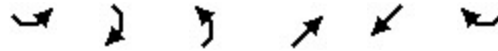
Total (2030)
 Timing Plan: PM Peak Hour



Lane Group	SEL	SER	NEL	NET	SWT	SWR	Ø7
Lane Configurations							
Traffic Volume (vph)	448	298	235	201	224	414	
Future Volume (vph)	448	298	235	201	224	414	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	
Grade (%)	0%			0%	0%		
Storage Length (ft)	0	0	150			0	
Storage Lanes	1	1	1			0	
Taper Length (ft)	25		25				
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Ped Bike Factor	1.00				0.99		
Frt		0.850			0.912		
Flt Protected	0.950		0.950				
Satd. Flow (prot)	1770	1583	1770	1863	1674	0	
Flt Permitted	0.950		0.083				
Satd. Flow (perm)	1766	1583	155	1863	1674	0	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)		255			72		
Link Speed (mph)	35			35	35		
Link Distance (ft)	896			1527	2641		
Travel Time (s)	17.5			29.7	51.4		
Confl. Peds. (#/hr)	1		1			1	
Confl. Bikes (#/hr)							
Peak Hour Factor	0.96	0.96	0.90	0.90	0.94	0.94	
Growth Factor	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	
Parking (#/hr)							
Mid-Block Traffic (%)	0%			0%	0%		
Adj. Flow (vph)	467	310	261	223	238	440	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	467	310	261	223	678	0	
Turn Type	Prot	Perm	pm+pt	NA	NA		
Protected Phases	8		1	6	2	7	
Permitted Phases		8	6				
Detector Phase	8	8	1	6	2		
Switch Phase							
Minimum Initial (s)	6.0	6.0	4.0	12.0	12.0	10.0	
Minimum Split (s)	12.0	12.0	10.0	18.0	35.0	30.0	
Total Split (s)	38.0	38.0	20.0	68.0	48.0	29.0	
Total Split (%)	28.1%	28.1%	14.8%	50.4%	35.6%	21%	
Maximum Green (s)	32.0	32.0	14.0	62.0	42.0	25.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	0.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		
Lead/Lag	Lag	Lag	Lead		Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.0	2.0	1.5	2.5	2.5	0.2	

Inverrary Golf Course Traffic Analysis
 1: Inverrary Blvd W & NW 44 St

Total (2030)
 Timing Plan: PM Peak Hour

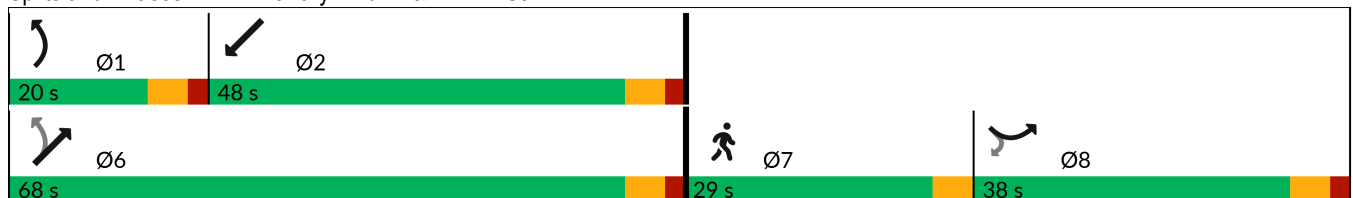


Lane Group	SEL	SER	NEL	NET	SWT	SWR	Ø7
Minimum Gap (s)	2.0	2.0	1.5	2.5	2.5		0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0		0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0		0.0
Recall Mode	None	None	None	Min	Min		None
Walk Time (s)					7.0		10.0
Flash Don't Walk (s)					22.0		16.0
Pedestrian Calls (#/hr)					1		0
Act Effct Green (s)	32.0	32.0	62.0	62.0	42.0		
Actuated g/C Ratio	0.30	0.30	0.58	0.58	0.40		
v/c Ratio	0.87	0.47	0.86	0.20	0.96		
Control Delay (s/veh)	54.0	9.0	52.5	11.0	54.4		
Queue Delay	0.0	0.0	0.0	0.0	0.0		
Total Delay (s/veh)	54.0	9.0	52.5	11.0	54.4		
LOS	D	A	D	B	D		
Approach Delay (s/veh)	36.0			33.4	54.4		
Approach LOS	D			C	D		
Queue Length 50th (ft)	300	27	122	67	405		
Queue Length 95th (ft)	#482	100	#265	105	#654		
Internal Link Dist (ft)	816			1447	2561		
Turn Bay Length (ft)			150				
Base Capacity (vph)	534	655	303	1089	706		
Starvation Cap Reductn	0	0	0	0	0		
Spillback Cap Reductn	0	0	0	0	0		
Storage Cap Reductn	0	0	0	0	0		
Reduced v/c Ratio	0.87	0.47	0.86	0.20	0.96		

Intersection Summary

Area Type: Other
 Cycle Length: 135
 Actuated Cycle Length: 106
 Natural Cycle: 150
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.96
 Intersection Signal Delay (s/veh): 41.8 Intersection LOS: D
 Intersection Capacity Utilization 90.1% ICU Level of Service E
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1: Inverrary Blvd W & NW 44 St

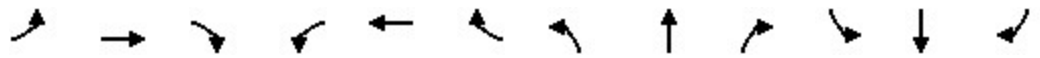


Inverrary Golf Course Traffic Analysis

Total (2030)

2: Inverrary Blvd & NW 44 St

Timing Plan: PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	77	374	174	151	416	153	179	459	132	183	429	92
Future Volume (vph)	77	374	174	151	416	153	179	459	132	183	429	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	195		185	160		230	220		0	90		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00		0.98	1.00		0.97	1.00	0.99		1.00	0.99	
Frt			0.850			0.850		0.966			0.974	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1752	3362	0	1770	3429	0
Flt Permitted	0.281			0.219			0.274			0.245		
Satd. Flow (perm)	522	1863	1556	408	1863	1540	505	3362	0	455	3429	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			159			152		30			20	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		2641			3355			1289			1075	
Travel Time (s)		51.4			65.4			29.3			24.4	
Confl. Peds. (#/hr)	8		2	2		8	2		5	5		2
Confl. Bikes (#/hr)			4			8						4
Peak Hour Factor	0.89	0.89	0.89	0.90	0.90	0.90	0.98	0.98	0.98	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	87	420	196	168	462	170	183	468	135	203	477	102
Shared Lane Traffic (%)												
Lane Group Flow (vph)	87	420	196	168	462	170	183	603	0	203	579	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	7	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	4.0	12.0	12.0	4.0	12.0	12.0	4.0	12.0		4.0	12.0	
Minimum Split (s)	10.0	37.0	37.0	10.0	37.0	37.0	10.0	34.0		10.0	34.0	
Total Split (s)	21.0	41.0	41.0	21.0	41.0	41.0	21.0	41.0		21.0	41.0	
Total Split (%)	16.9%	33.1%	33.1%	16.9%	33.1%	33.1%	16.9%	33.1%		16.9%	33.1%	
Maximum Green (s)	15.0	35.0	35.0	15.0	35.0	35.0	15.0	35.0		15.0	35.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	2.0	2.0	1.5	2.0	2.0	1.5	3.0		1.5	3.0	

Inverrary Golf Course Traffic Analysis
 2: Inverrary Blvd & NW 44 St

Total (2030)
 Timing Plan: PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Gap (s)	1.5	2.0	2.0	1.5	2.0	2.0	1.5	3.0		1.5	3.0	
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recall Mode	None	None	None	None	None	None	None	Min		None	Min	
Walk Time (s)		7.0	7.0		7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		24.0	24.0		24.0	24.0		21.0			21.0	
Pedestrian Calls (#/hr)		2	2		8	8		5			2	
Act Effct Green (s)	34.1	26.9	26.9	40.7	32.6	32.6	34.6	23.5		35.3	23.9	
Actuated g/C Ratio	0.35	0.28	0.28	0.42	0.34	0.34	0.36	0.24		0.36	0.25	
v/c Ratio	0.32	0.81	0.36	0.55	0.74	0.27	0.57	0.72		0.63	0.67	
Control Delay (s/veh)	20.9	47.5	10.2	24.7	39.3	7.5	26.7	38.4		29.1	37.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	20.9	47.5	10.2	24.7	39.3	7.5	26.7	38.4		29.1	37.2	
LOS	C	D	B	C	D	A	C	D		C	D	
Approach Delay (s/veh)		33.8			29.5			35.7			35.1	
Approach LOS		C			C			D			D	
Queue Length 50th (ft)	30	236	16	61	256	8	70	171		79	163	
Queue Length 95th (ft)	70	#435	80	126	460	60	140	275		154	265	
Internal Link Dist (ft)		2561			3275			1209			995	
Turn Bay Length (ft)	195		185	160		230	220			90		
Base Capacity (vph)	426	706	688	401	732	697	404	1293		396	1312	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.20	0.59	0.28	0.42	0.63	0.24	0.45	0.47		0.51	0.44	

Intersection Summary

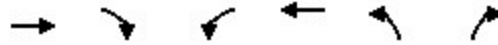
Area Type: Other
 Cycle Length: 124
 Actuated Cycle Length: 96.8
 Natural Cycle: 95
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.81
 Intersection Signal Delay (s/veh): 33.5 Intersection LOS: C
 Intersection Capacity Utilization 76.6% ICU Level of Service D
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 2: Inverrary Blvd & NW 44 St



Inverrary Golf Course Traffic Analysis
 3: Inverrary Dr & NW 44 St

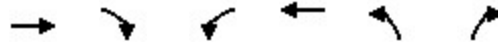
Total (2030)
 Timing Plan: PM Peak Hour



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	449	223	256	569	145	195
Future Volume (vph)	449	223	256	569	145	195
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	100		0	50
Storage Lanes		0	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99					
Frt	0.955					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1745	0	1770	1863	1770	1583
Flt Permitted			0.113		0.950	
Satd. Flow (perm)	1745	0	210	1863	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	32					194
Link Speed (mph)	35			35	25	
Link Distance (ft)	3355			3195	800	
Travel Time (s)	65.4			62.2	21.8	
Confl. Peds. (#/hr)		3	3			
Confl. Bikes (#/hr)		4				
Peak Hour Factor	0.94	0.94	0.92	0.92	0.70	0.70
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	478	237	278	618	207	279
Shared Lane Traffic (%)						
Lane Group Flow (vph)	715	0	278	618	207	279
Turn Type	NA		pm+pt	NA	Prot	Perm
Protected Phases	6		5	2	4	
Permitted Phases			2			4
Detector Phase	6		5	2	4	4
Switch Phase						
Minimum Initial (s)	12.0		4.0	12.0	6.0	6.0
Minimum Split (s)	33.0		10.0	18.0	12.0	12.0
Total Split (s)	45.0		24.0	69.0	26.0	26.0
Total Split (%)	47.4%		25.3%	72.6%	27.4%	27.4%
Maximum Green (s)	39.0		18.0	63.0	20.0	20.0
Yellow Time (s)	4.0		4.0	4.0	4.0	4.0
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0		6.0	6.0	6.0	6.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		1.5	3.0	2.0	2.0

Inverrary Golf Course Traffic Analysis
 3: Inverrary Dr & NW 44 St

Total (2030)
 Timing Plan: PM Peak Hour

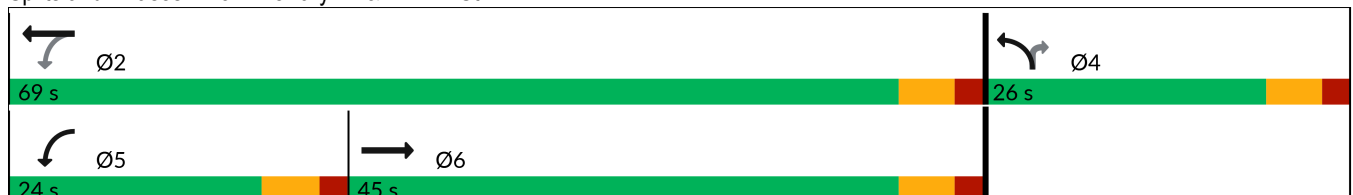


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Gap (s)	3.0		1.5	3.0	2.0	2.0
Time Before Reduce (s)	0.0		0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0		0.0	0.0	0.0	0.0
Recall Mode	Min		None	Min	None	None
Walk Time (s)	7.0					
Flash Don't Walk (s)	20.0					
Pedestrian Calls (#/hr)	3					
Act Effct Green (s)	37.2		58.2	58.2	13.9	13.9
Actuated g/C Ratio	0.44		0.69	0.69	0.16	0.16
v/c Ratio	0.91		0.66	0.48	0.71	0.66
Control Delay (s/veh)	40.1		22.3	8.0	48.4	19.6
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay (s/veh)	40.1		22.3	8.0	48.4	19.6
LOS	D		C	A	D	B
Approach Delay (s/veh)	40.1			12.5	31.9	
Approach LOS	D			B	C	
Queue Length 50th (ft)	342		71	129	110	42
Queue Length 95th (ft)	#649		172	244	138	62
Internal Link Dist (ft)	3275			3115	720	
Turn Bay Length (ft)			100			50
Base Capacity (vph)	840		484	1419	428	530
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.85		0.57	0.44	0.48	0.53

Intersection Summary

Area Type: Other
 Cycle Length: 95
 Actuated Cycle Length: 84.3
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.91
 Intersection Signal Delay (s/veh): 26.4 Intersection LOS: C
 Intersection Capacity Utilization 74.5% ICU Level of Service D
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 3: Inverrary Dr & NW 44 St



Inverrary Golf Course Traffic Analysis
4: Rock Island Rd & NW 44 St

Total (2030)
Timing Plan: PM Peak Hour



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	465	153	238	836	703	584
Future Volume (vph)	465	153	238	836	703	584
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	130	140			140
Storage Lanes	1	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor			1.00			0.98
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	1583	1770	3539	3539	1583
Flt Permitted	0.950		0.238			
Satd. Flow (perm)	1770	1583	443	3539	3539	1544
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		106				557
Link Speed (mph)	35			40	40	
Link Distance (ft)	3195			2200	2000	
Travel Time (s)	62.2			37.5	34.1	
Confl. Peds. (#/hr)			1			1
Confl. Bikes (#/hr)						2
Peak Hour Factor	0.86	0.86	0.93	0.93	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	541	178	256	899	740	615
Shared Lane Traffic (%)						
Lane Group Flow (vph)	541	178	256	899	740	615
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	6.0	6.0	4.0	7.0	7.0	7.0
Minimum Split (s)	12.0	12.0	10.5	13.5	25.5	25.5
Total Split (s)	46.0	46.0	15.0	63.0	48.0	48.0
Total Split (%)	42.2%	42.2%	13.8%	57.8%	44.0%	44.0%
Maximum Green (s)	40.0	40.0	8.5	56.5	41.5	41.5
Yellow Time (s)	4.0	4.0	4.5	4.5	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.5	6.5	6.5	6.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0	3.0	1.5	3.0	3.0	3.0

Inverrary Golf Course Traffic Analysis
 4: Rock Island Rd & NW 44 St

Total (2030)
 Timing Plan: PM Peak Hour

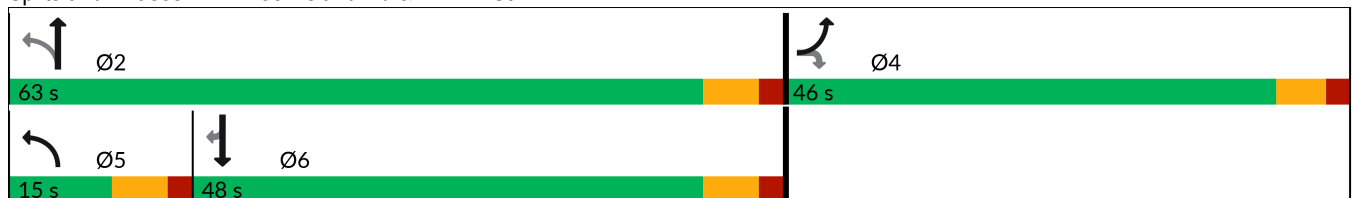


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Minimum Gap (s)	3.0	3.0	1.5	3.0	3.0	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	Max	Max	Max
Walk Time (s)					7.0	7.0
Flash Don't Walk (s)					12.0	12.0
Pedestrian Calls (#/hr)					1	1
Act Effct Green (s)	35.1	35.1	56.7	56.7	41.7	41.7
Actuated g/C Ratio	0.34	0.34	0.54	0.54	0.40	0.40
v/c Ratio	0.91	0.30	0.74	0.47	0.52	0.65
Control Delay (s/veh)	53.7	11.7	29.4	16.3	26.2	7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	53.7	11.7	29.4	16.3	26.2	7.0
LOS	D	B	C	B	C	A
Approach Delay (s/veh)	43.3			19.2	17.5	
Approach LOS	D			B	B	
Queue Length 50th (ft)	341	33	93	197	204	25
Queue Length 95th (ft)	#459	76	#177	258	270	130
Internal Link Dist (ft)	3115			2120	1920	
Turn Bay Length (ft)		130	140			140
Base Capacity (vph)	680	674	349	1922	1415	951
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.80	0.26	0.73	0.47	0.52	0.65

Intersection Summary















Area Type: Other
 Cycle Length: 109
 Actuated Cycle Length: 104.3
 Natural Cycle: 75
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.91
 Intersection Signal Delay (s/veh): 23.8 Intersection LOS: C
 Intersection Capacity Utilization 74.2% ICU Level of Service D
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 4: Rock Island Rd & NW 44 St



Inverrary Golf Course Traffic Analysis
 5: Inverrary Blvd & Inverrary Dr

Total (2030)
 Timing Plan: PM Peak Hour

												
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø2	Ø3	Ø5	Ø20	Ø21	Ø22
Lane Configurations	 		 		 	 						
Traffic Volume (vph)	156	40	723	311	81	589						
Future Volume (vph)	156	40	723	311	81	589						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Lane Width (ft)	12	12	12	12	12	12						
Grade (%)	0%		0%			0%						
Storage Length (ft)	150	0		0	165							
Storage Lanes	1	0		0	1							
Taper Length (ft)	25				25							
Lane Util. Factor	0.97	0.95	0.95	0.95	1.00	0.95						
Ped Bike Factor	0.99											
Frt	0.969		0.955									
Flt Protected	0.962				0.950							
Satd. Flow (prot)	3251	0	3380	0	1770	3539						
Flt Permitted	0.962				0.093							
Satd. Flow (perm)	3251	0	3380	0	173	3539						
Right Turn on Red		Yes		Yes								
Satd. Flow (RTOR)	19		106									
Link Speed (mph)	25		30			30						
Link Distance (ft)	1000		175			1000						
Travel Time (s)	27.3		4.0			22.7						
Confl. Peds. (#/hr)		1										
Confl. Bikes (#/hr)		3										
Peak Hour Factor	0.91	0.91	0.92	0.92	0.81	0.81						
Growth Factor	100%	100%	100%	100%	100%	100%						
Heavy Vehicles (%)	5%	5%	2%	2%	2%	2%						
Bus Blockages (#/hr)	0	0	0	0	0	0						
Parking (#/hr)												
Mid-Block Traffic (%)	0%		0%			0%						
Adj. Flow (vph)	171	44	786	338	100	727						
Shared Lane Traffic (%)												
Lane Group Flow (vph)	215	0	1124	0	100	727						
Turn Type	Prot		NA		pm+pt	NA						
Protected Phases	4	2 21 22 24			1	6	2	3	5	20	21	22
Permitted Phases			3		6							
Detector Phase	4	2 21 22 24			1	6						
Switch Phase												
Minimum Initial (s)	13.0				4.0	10.0	10.0	10.0	4.0	4.0	4.0	4.0
Minimum Split (s)	19.0				10.0	16.0	14.0	14.0	9.0	8.0	8.0	9.0
Total Split (s)	24.0				17.0	60.0	43.0	22.0	19.0	8.0	8.0	9.0
Total Split (%)	16.9%				12.0%	42.3%	30%	15%	13%	6%	6%	6%
Maximum Green (s)	18.0				11.0	54.0	39.0	18.0	14.0	4.0	4.0	4.0
Yellow Time (s)	4.0				4.0	4.0	4.0	4.0	4.0	3.0	3.0	4.0
All-Red Time (s)	2.0				2.0	2.0	0.0	0.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0				0.0	0.0						
Total Lost Time (s)	6.0				6.0	6.0						
Lead/Lag					Lead		Lag	Lead				Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0				1.5	3.0	3.0	2.0	1.5	1.5	1.5	1.5

Inverrary Golf Course Traffic Analysis
 5: Inverrary Blvd & Inverrary Dr

Total (2030)
 Timing Plan: PM Peak Hour

Lane Group	Ø24
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	24
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	10.0
Minimum Split (s)	15.0
Total Split (s)	19.0
Total Split (%)	13%
Maximum Green (s)	14.0
Yellow Time (s)	4.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0

Inverrary Golf Course Traffic Analysis
 5: Inverrary Blvd & Inverrary Dr

Total (2030)
 Timing Plan: PM Peak Hour

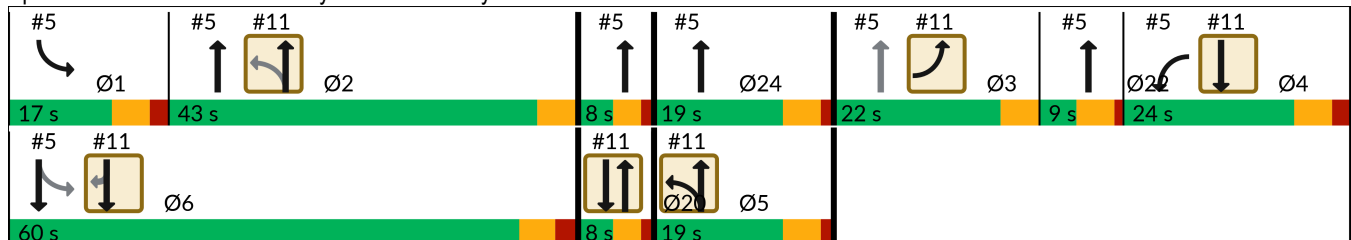


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø2	Ø3	Ø5	Ø20	Ø21	Ø22
Minimum Gap (s)	2.0				1.5	3.0	3.0	2.0	1.5	1.5	1.5	1.5
Time Before Reduce (s)	0.0				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None				None	Min	Min	None	None	None	None	None
Walk Time (s)												
Flash Don't Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	17.1		91.4		51.7	51.7						
Actuated g/C Ratio	0.13		0.69		0.39	0.39						
v/c Ratio	0.50		0.48		0.59	0.53						
Control Delay (s/veh)	54.3		0.9		42.0	33.6						
Queue Delay	0.0		0.3		0.0	0.0						
Total Delay (s/veh)	54.3		1.2		42.0	33.6						
LOS	D		A		D	C						
Approach Delay (s/veh)	54.3		1.2			34.6						
Approach LOS	D		A			C						
Queue Length 50th (ft)	82		8		56	255						
Queue Length 95th (ft)	131		0		92	295						
Internal Link Dist (ft)	920		95			920						
Turn Bay Length (ft)	150				165							
Base Capacity (vph)	457		2323		199	1440						
Starvation Cap Reductn	0		550		0	0						
Spillback Cap Reductn	0		0		0	0						
Storage Cap Reductn	0		0		0	0						
Reduced v/c Ratio	0.47		0.63		0.50	0.50						

Intersection Summary

Area Type:	Other
Cycle Length:	142
Actuated Cycle Length:	133.1
Natural Cycle:	90
Control Type:	Semi Act-Uncoord
Maximum v/c Ratio:	0.73
Intersection Signal Delay (s/veh):	19.2
Intersection LOS:	B
Intersection Capacity Utilization:	58.6%
ICU Level of Service:	B
Analysis Period (min):	15

Splits and Phases: 5: Inverrary Blvd & Inverrary Dr



Lane Group	Ø24
Minimum Gap (s)	3.0
Time Before Reduce (s)	0.0
Time To Reduce (s)	0.0
Recall Mode	None
Walk Time (s)	
Flash Don't Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Inverrary Golf Course Traffic Analysis
 6: Inverrary Blvd & Oakland Park Blvd

Total (2030)
 Timing Plan: PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	388	1692	374	212	1491	363	241	222	158	263	362	408
Future Volume (vph)	388	1692	374	212	1491	363	241	222	158	263	362	408
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%				0%
Storage Length (ft)	340		370	355		300	185		0	0		0
Storage Lanes	2		1	2		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00		0.95	0.99		0.96	1.00		0.96	0.99	0.99	
Frt			0.850			0.850			0.850		0.921	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	1752	1845	1568	1770	1694	0
Flt Permitted	0.950			0.950			0.098			0.411		
Satd. Flow (perm)	3417	5085	1505	3415	5085	1526	181	1845	1505	754	1694	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			306			278			61		29	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		4035			1460			1000			1000	
Travel Time (s)		61.1			22.1			22.7			22.7	
Confl. Peds. (#/hr)	13		20	20		13	6		19	19		6
Confl. Bikes (#/hr)			6			4			6			4
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.92	0.92	0.92	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	396	1727	382	216	1521	370	262	241	172	292	402	453
Shared Lane Traffic (%)												
Lane Group Flow (vph)	396	1727	382	216	1521	370	262	241	172	292	855	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	1	6		5	2		7	4	5	3	8	
Permitted Phases			6			2	4		4	8		
Detector Phase	1	6	6	5	2	2	7	4	5	3	8	
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	4.0	6.0	5.0	4.0	6.0	
Minimum Split (s)	12.0	38.0	38.0	12.0	38.0	38.0	10.0	48.0	12.0	10.0	48.0	
Total Split (s)	30.0	75.0	75.0	30.0	75.0	75.0	30.0	45.0	30.0	30.0	45.0	
Total Split (%)	16.7%	41.7%	41.7%	16.7%	41.7%	41.7%	16.7%	25.0%	16.7%	16.7%	25.0%	
Maximum Green (s)	23.0	68.0	68.0	23.0	68.0	68.0	24.0	38.0	23.0	24.0	38.0	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	4.0	4.0	5.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	2.0	2.0	3.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	6.0	7.0	7.0	6.0	7.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	1.5	3.0	3.0	1.5	3.0	3.0	1.5	2.0	1.5	1.5	2.0	

Inverrary Golf Course Traffic Analysis
6: Inverrary Blvd & Oakland Park Blvd

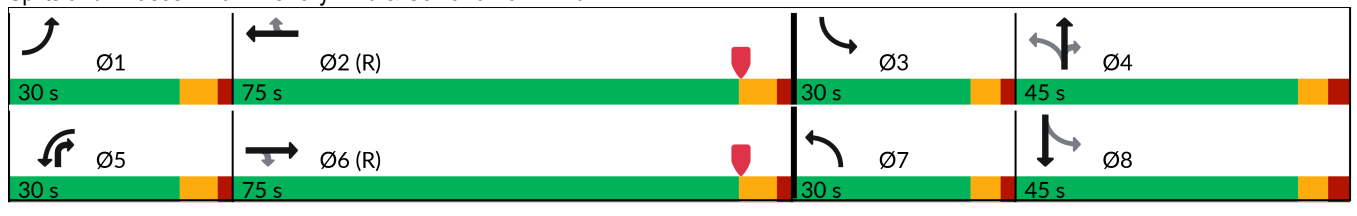
Total (2030)
Timing Plan: PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Gap (s)	1.5	3.0	3.0	1.5	3.0	3.0	1.5	2.0	1.5	1.5	2.0	
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	
Walk Time (s)		7.0	7.0		7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		24.0	24.0		24.0	24.0		34.0			34.0	
Pedestrian Calls (#/hr)		20	20		13	13		19			6	
Act Effect Green (s)	22.4	74.4	74.4	15.2	67.2	67.2	65.8	41.0	56.2	62.6	39.3	
Actuated g/C Ratio	0.12	0.41	0.41	0.08	0.37	0.37	0.37	0.23	0.31	0.35	0.22	
v/c Ratio	0.93	0.82	0.48	0.75	0.80	0.50	0.95	0.57	0.33	0.75	2.18	
Control Delay (s/veh)	105.8	51.1	9.8	96.2	54.2	12.6	96.1	69.1	29.1	54.8	567.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	105.8	51.1	9.8	96.2	54.2	12.6	96.1	69.1	29.1	54.8	567.9	
LOS	F	D	A	F	D	B	F	E	C	D	F	
Approach Delay (s/veh)		53.5			51.2			69.4			437.3	
Approach LOS		D			D			E			F	
Queue Length 50th (ft)	241	653	55	130	584	74	263	262	96	255	~1610	
Queue Length 95th (ft)	#338	746	155	176	645	176	#458	366	159	348	#1877	
Internal Link Dist (ft)		3955			1380			920			920	
Turn Bay Length (ft)	340		370	355		300	185					
Base Capacity (vph)	438	2103	801	438	1921	749	275	420	582	405	392	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.90	0.82	0.48	0.49	0.79	0.49	0.95	0.57	0.30	0.72	2.18	

Intersection Summary

















Area Type: Other
 Cycle Length: 180
 Actuated Cycle Length: 180
 Offset: 29 (16%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
 Natural Cycle: 150
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 2.18
 Intersection Signal Delay (s/veh): 122.8 Intersection LOS: F
 Intersection Capacity Utilization 120.1% ICU Level of Service H
 Analysis Period (min) 15
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 6: Inverrary Blvd & Oakland Park Blvd



Inverrary Golf Course Traffic Analysis
 7: Inverrary Blvd & Pod 1 and Pod 2 Access

Total (2030)
 Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	0	8	8	0	10	13	739	11	7	654	19
Future Volume (vph)	13	0	8	8	0	10	13	739	11	7	654	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		500			500			1000			691	
Travel Time (s)		11.4			11.4			22.7			15.7	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												

Intersection Summary

Area Type: Other

Inverrary Golf Course Traffic Analysis
 7: Inverrary Blvd & Pod 1 and Pod 2 Access

Total (2030)
 Timing Plan: PM Peak Hour

Intersection												
Int Delay, s/veh	0.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	13	0	8	8	0	10	13	739	11	7	654	19
Future Vol, veh/h	13	0	8	8	0	10	13	739	11	7	654	19
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	0	9	9	0	11	14	803	12	8	711	21

















Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1166	1580	366	1208	1584	408	732	0	0	815	0	0
Stage 1	736	736	-	838	838	-	-	-	-	-	-	-
Stage 2	430	843	-	371	747	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	149	108	631	139	107	593	869	-	-	808	-	-
Stage 1	377	423	-	327	380	-	-	-	-	-	-	-
Stage 2	574	378	-	622	418	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	142	105	631	132	104	593	869	-	-	808	-	-
Mov Cap-2 Maneuver	142	105	-	132	104	-	-	-	-	-	-	-
Stage 1	372	418	-	320	372	-	-	-	-	-	-	-
Stage 2	551	370	-	606	413	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	25.21		21.87		0.34		0.2	
HCM LOS	D		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	60	-	-	201	233	36	-	-
HCM Lane V/C Ratio	0.016	-	-	0.114	0.084	0.009	-	-
HCM Ctrl Dly (s/v)	9.2	0.2	-	25.2	21.9	9.5	0.1	-
HCM Lane LOS	A	A	-	D	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.3	0	-	-

Inverrary Golf Course Traffic Analysis
 8: Inverrary Dr & Pod 2 and Pod 3 Access

Total (2030)
 Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	0	6	10	0	21	9	345	38	20	389	12
Future Volume (vph)	7	0	6	10	0	21	9	345	38	20	389	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		500			500			500			1750	
Travel Time (s)		11.4			11.4			13.6			47.7	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												

Intersection Summary

Area Type: Other

Inverrary Golf Course Traffic Analysis
 8: Inverrary Dr & Pod 2 and Pod 3 Access

Total (2030)
 Timing Plan: PM Peak Hour

Intersection												
Int Delay, s/veh	1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	0	6	10	0	21	9	345	38	20	389	12
Future Vol, veh/h	7	0	6	10	0	21	9	345	38	20	389	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	0	7	11	0	23	10	375	41	22	423	13

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	867	909	429	882	895	396	436	0	0	416	0	0
Stage 1	473	473	-	415	415	-	-	-	-	-	-	-
Stage 2	395	436	-	466	479	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	273	275	626	267	280	654	1124	-	-	1143	-	-
Stage 1	572	558	-	615	592	-	-	-	-	-	-	-
Stage 2	631	580	-	577	555	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	254	265	626	255	270	654	1124	-	-	1143	-	-
Mov Cap-2 Maneuver	254	265	-	255	270	-	-	-	-	-	-	-
Stage 1	558	544	-	608	586	-	-	-	-	-	-	-
Stage 2	602	573	-	556	541	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	15.72		13.99		0.19		0.39	
HCM LOS	C		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	41	-	-	350	434	85	-	-
HCM Lane V/C Ratio	0.009	-	-	0.04	0.078	0.019	-	-
HCM Ctrl Dly (s/v)	8.2	0	-	15.7	14	8.2	0	-
HCM Lane LOS	A	A	-	C	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.3	0.1	-	-

Inverrary Golf Course Traffic Analysis
 9: Rock Island Rd & Pod 4 Access

Total (2030)
 Timing Plan: PM Peak Hour



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	28	0	1089	809	62
Future Volume (vph)	0	28	0	1089	809	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	0	1	0			0
Taper Length (ft)	25		25			
Link Speed (mph)	30			40	40	
Link Distance (ft)	970			1690	2200	
Travel Time (s)	22.0			28.8	37.5	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						

Intersection Summary

Area Type: Other

Inverrary Golf Course Traffic Analysis
 9: Rock Island Rd & Pod 4 Access

Total (2030)
 Timing Plan: PM Peak Hour

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑	↑↑	
Traffic Vol, veh/h	0	28	0	1089	809	62
Future Vol, veh/h	0	28	0	1089	809	62
Conflicting Peds, #/hr	0	0	0	0	0	0
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	30	0	1184	879	67

















Major/Minor	Minor2	Major1	Major2		
Conflicting Flow All	-	473	-	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-
Pot Cap-1 Maneuver	0	537	0	-	-
Stage 1	0	-	0	-	-
Stage 2	0	-	0	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	-	537	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	12.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	537	-	-
HCM Lane V/C Ratio	-	0.057	-	-
HCM Ctrl Dly (s/v)	-	12.1	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.2	-	-

Inverrary Golf Course Traffic Analysis
 10: Inverrary Dr & Pod 5 and Pod 6 Access

Total (2030)
 Timing Plan: PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	0	1	2	0	52	16	265	22	38	418	23
Future Volume (vph)	23	0	1	2	0	52	16	265	22	38	418	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		500			500			1750			800	
Travel Time (s)		11.4			11.4			47.7			21.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												

Intersection Summary

Area Type: Other

Inverrary Golf Course Traffic Analysis
 10: Inverrary Dr & Pod 5 and Pod 6 Access

Total (2030)
 Timing Plan: PM Peak Hour

Intersection												
Int Delay, s/veh	1.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	23	0	1	2	0	52	16	265	22	38	418	23
Future Vol, veh/h	23	0	1	2	0	52	16	265	22	38	418	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	25	0	1	2	0	57	17	288	24	41	454	25

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	872	896	467	872	897	300	479	0	0	312	0	0
Stage 1	549	549	-	335	335	-	-	-	-	-	-	-
Stage 2	323	347	-	537	562	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	271	280	596	271	279	740	1083	-	-	1248	-	-
Stage 1	520	516	-	679	643	-	-	-	-	-	-	-
Stage 2	689	635	-	528	510	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	234	262	596	253	262	740	1083	-	-	1248	-	-
Mov Cap-2 Maneuver	234	262	-	253	262	-	-	-	-	-	-	-
Stage 1	496	493	-	666	630	-	-	-	-	-	-	-
Stage 2	624	623	-	503	486	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	21.8		10.7		0.44		0.63	
HCM LOS	C		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	94	-	-	240	690	141	-	-
HCM Lane V/C Ratio	0.016	-	-	0.109	0.085	0.033	-	-
HCM Ctrl Dly (s/v)	8.4	0	-	21.8	10.7	8	0	-
HCM Lane LOS	A	A	-	C	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.3	0.1	-	-



Attachment F

Gate Queueing Analysis Information

INBOUND GATE VOLUME PER POD

		POD 1	POD 2	POD 3	POD 4	POD 5	POD 6	TOTAL
GATE 1	Distribution	100%						
	Total Inbound	39						39
	Resident	35						35
	Visitor	4						4
GATE 2	Distribution		30%					
	Total Inbound		11					11
	Resident		10					10
	Visitor		1					1
GATE 3	Distribution		70%					
	Total Inbound		26					26
	Resident		23					23
	Visitor		3					3
GATE 4	Distribution			90%	25%			
	Total Inbound			44	29			73
	Resident			40	26			66
	Visitor			4	3			7
GATE 5	Distribution			10%	55%	5%		
	Total Inbound			5	64	3		72
	Resident			4	58	3		65
	Visitor			1	6	0		7
GATE 6	Distribution				20%	95%		
	Total Inbound				23	54		77
	Resident				21	49		70
	Visitor				2	5		7
GATE 7	Distribution						100%	
	Total Inbound						49	49
	Resident						44	44
	Visitor						5	5

GATE TRIP GENERATION ANALYSIS - POD 1

LAND USE	ITE CODE	INTENSITY	TRIP GENERATION RATE ⁽¹⁾	IN	OUT	TOTAL TRIPS		
						IN	OUT	TOTAL
AM PEAK GENERATOR								
Single-Family Detached Housing	210	29 DU	$T = 0.71 (X) + 8.84$	27%	73%	8	21	29
Single Family Attached	215	36 DU	$\ln(T) = 0.86 \ln(X) + 0.01$	23%	77%	5	17	22
Multifamily Housing (Low-Rise)	220	4 DU	$T = 0.43 (X) + 6.30$	27%	73%	2	6	8
TOTAL						15	44	59
PM PEAK GENERATOR								
Single-Family Detached Housing	210	29 DU	$\ln(T) = 0.90 \ln(X) + 0.48$	63%	37%	21	12	33
Single Family Attached	215	36 DU	$\ln(T) = 0.66 \ln(X) + 0.89$	62%	38%	16	10	26
Multifamily Housing (Low-Rise)	220	4 DU	$T = 0.61 (X) + 1.61$	60%	40%	2	2	4
TOTAL						39	24	63
SATURDAY GENERATOR								
Single-Family Detached Housing	210	29 DU	$T = 0.90 (X) + 10.97$	53%	47%	20	17	37
Single Family Attached	215	36 DU	$T = 0.47 (X)$	48%	52%	8	9	17
Multifamily Housing (Low-Rise)	220	4 DU	$T = 0.49 (X)$	38%	62%	1	1	2
TOTAL						29	27	56
SUNDAY GENERATOR								
Single-Family Detached Housing	210	29 DU	$T = 0.86 (X) + 6.71$	53%	47%	17	15	32
Single Family Attached ⁽²⁾	215	36 DU	$T = 0.86 (X) + 6.71$	53%	47%	20	18	38
Multifamily Housing (Low-Rise) ⁽³⁾	220	4 DU	$T = 0.36 (X)$	53%	47%	1	0	1
TOTAL						38	33	71

(1) Source: ITE Trip Generation Manual, 12th Edition.

(2) Sunday generator is not available for LUC 215, assumed to be the same as LUC 210.

(3) Sunday directional distribution is not available for LUC 220, assumed to be the same as LUC 210.

GATE TRIP GENERATION ANALYSIS - POD 2

LAND USE	ITE CODE	INTENSITY	TRIP GENERATION RATE ⁽¹⁾	IN	OUT	TOTAL TRIPS		
						IN	OUT	TOTAL
AM PEAK GENERATOR								
Single-Family Detached Housing	210	0 DU	$T = 0.71 (X) + 8.84$	27%	73%	0	0	0
Single Family Attached	215	46 DU	$\ln(T) = 0.86 \ln(X) + 0.01$	23%	77%	6	21	27
Multifamily Housing (Low-Rise)	220	47 DU	$T = 0.43 (X) + 6.30$	27%	73%	7	20	27
TOTAL						13	41	54
PM PEAK GENERATOR								
Single-Family Detached Housing	210	0 DU	$\ln(T) = 0.90 \ln(X) + 0.48$	63%	37%	0	0	0
Single Family Attached	215	46 DU	$\ln(T) = 0.66 \ln(X) + 0.89$	62%	38%	19	11	30
Multifamily Housing (Low-Rise)	220	47 DU	$T = 0.61 (X) + 1.61$	60%	40%	18	12	30
TOTAL						37	23	60
SATURDAY GENERATOR								
Single-Family Detached Housing	210	0 DU	$T = 0.90 (X) + 10.97$	53%	47%	0	0	0
Single Family Attached	215	46 DU	$T = 0.47 (X)$	48%	52%	11	11	22
Multifamily Housing (Low-Rise)	220	47 DU	$T = 0.49 (X)$	38%	62%	9	14	23
TOTAL						20	25	45
SUNDAY GENERATOR								
Single-Family Detached Housing	210	0 DU	$T = 0.86 (X) + 6.71$	53%	47%	0	0	0
Single Family Attached ⁽²⁾	215	46 DU	$T = 0.86 (X) + 6.71$	53%	47%	24	22	46
Multifamily Housing (Low-Rise) ⁽³⁾	220	47 DU	$T = 0.36 (X)$	53%	47%	9	8	17
TOTAL						33	30	63

(1) Source: ITE Trip Generation Manual, 12th Edition.

(2) Sunday generator is not available for LUC 215, assumed to be the same as LUC 210.

(3) Sunday directional distribution is not available for LUC 220, assumed to be the same as LUC 210.

GATE TRIP GENERATION ANALYSIS - POD 3

LAND USE	ITE CODE	INTENSITY	TRIP GENERATION RATE ⁽¹⁾	IN	OUT	TOTAL TRIPS		
						IN	OUT	TOTAL
AM PEAK GENERATOR								
Single-Family Detached Housing	210	40 DU	$T = 0.71(X) + 8.84$	27%	73%	10	27	37
Single Family Attached	215	28 DU	$\ln(T) = 0.86 \ln(X) + 0.01$	23%	77%	4	14	18
Multifamily Housing (Low-Rise)	220	15 DU	$T = 0.43(X) + 6.30$	27%	73%	4	9	13
TOTAL						18	50	68
PM PEAK GENERATOR								
Single-Family Detached Housing	210	40 DU	$\ln(T) = 0.90 \ln(X) + 0.48$	63%	37%	28	17	45
Single Family Attached	215	28 DU	$\ln(T) = 0.66 \ln(X) + 0.89$	62%	38%	14	8	22
Multifamily Housing (Low-Rise)	220	15 DU	$T = 0.61(X) + 1.61$	60%	40%	7	4	11
TOTAL						49	29	78
SATURDAY GENERATOR								
Single-Family Detached Housing	210	40 DU	$T = 0.90(X) + 10.97$	53%	47%	25	22	47
Single Family Attached	215	28 DU	$T = 0.47(X)$	48%	52%	6	7	13
Multifamily Housing (Low-Rise)	220	15 DU	$T = 0.49(X)$	38%	62%	3	4	7
TOTAL						34	33	67
SUNDAY GENERATOR								
Single-Family Detached Housing	210	40 DU	$T = 0.86(X) + 6.71$	53%	47%	22	19	41
Single Family Attached ⁽²⁾	215	28 DU	$T = 0.86(X) + 6.71$	53%	47%	16	15	31
Multifamily Housing (Low-Rise) ⁽³⁾	220	15 DU	$T = 0.36(X)$	53%	47%	3	2	5
TOTAL						41	36	77

(1) Source: ITE Trip Generation Manual, 12th Edition.

(2) Sunday generator is not available for LUC 215, assumed to be the same as LUC 210.

(3) Sunday directional distribution is not available for LUC 220, assumed to be the same as LUC 210.

GATE TRIP GENERATION ANALYSIS - POD 4

LAND USE	ITE CODE	INTENSITY	TRIP GENERATION RATE ⁽¹⁾	IN	OUT	TOTAL TRIPS		
						IN	OUT	TOTAL
AM PEAK GENERATOR								
Single-Family Detached Housing	210	0 DU	$T = 0.71 (X) + 8.84$	27%	73%	0	0	0
Single Family Attached	215	0 DU	$\ln(T) = 0.86 \ln(X) + 0.01$	23%	77%	0	0	0
Multifamily Housing (Low-Rise)	220	313 DU	$T = 0.43 (X) + 6.30$	27%	73%	38	103	141
TOTAL						38	103	141
PM PEAK GENERATOR								
Single-Family Detached Housing	210	0 DU	$\ln(T) = 0.90 \ln(X) + 0.48$	63%	37%	0	0	0
Single Family Attached	215	0 DU	$\ln(T) = 0.66 \ln(X) + 0.89$	62%	38%	0	0	0
Multifamily Housing (Low-Rise)	220	313 DU	$T = 0.61 (X) + 1.61$	60%	40%	116	77	193
TOTAL						116	77	193
SATURDAY GENERATOR								
Single-Family Detached Housing	210	0 DU	$T = 0.90 (X) + 10.97$	53%	47%	0	0	0
Single Family Attached	215	0 DU	$T = 0.47 (X)$	48%	52%	0	0	0
Multifamily Housing (Low-Rise)	220	313 DU	$T = 0.49 (X)$	38%	62%	58	95	153
TOTAL						58	95	153
SUNDAY GENERATOR								
Single-Family Detached Housing	210	0 DU	$T = 0.86 (X) + 6.71$	53%	47%	0	0	0
Single Family Attached ⁽²⁾	215	0 DU	$T = 0.86 (X) + 6.71$	53%	47%	0	0	0
Multifamily Housing (Low-Rise) ⁽³⁾	220	313 DU	$T = 0.36 (X)$	53%	47%	60	53	113
TOTAL						60	53	113

(1) Source: ITE Trip Generation Manual, 12th Edition.

(2) Sunday generator is not available for LUC 215, assumed to be the same as LUC 210.

(3) Sunday directional distribution is not available for LUC 220, assumed to be the same as LUC 210.

GATE TRIP GENERATION ANALYSIS - POD 5

LAND USE	ITE CODE	INTENSITY	TRIP GENERATION RATE ⁽¹⁾	IN	OUT	TOTAL TRIPS		
						IN	OUT	TOTAL
AM PEAK GENERATOR								
Single-Family Detached Housing	210	0 DU	$T = 0.71(X) + 8.84$	27%	73%	0	0	0
Single Family Attached	215	24 DU	$\ln(T) = 0.86 \ln(X) + 0.01$	23%	77%	4	12	16
Multifamily Housing (Low-Rise)	220	120 DU	$T = 0.43(X) + 6.30$	27%	73%	16	42	58
TOTAL						20	54	74
PM PEAK GENERATOR								
Single-Family Detached Housing	210	0 DU	$\ln(T) = 0.90 \ln(X) + 0.48$	63%	37%	0	0	0
Single Family Attached	215	24 DU	$\ln(T) = 0.66 \ln(X) + 0.89$	62%	38%	12	8	20
Multifamily Housing (Low-Rise)	220	120 DU	$T = 0.61(X) + 1.61$	60%	40%	45	30	75
TOTAL						57	38	95
SATURDAY GENERATOR								
Single-Family Detached Housing	210	0 DU	$T = 0.90(X) + 10.97$	53%	47%	0	0	0
Single Family Attached	215	24 DU	$T = 0.47(X)$	48%	52%	5	6	11
Multifamily Housing (Low-Rise)	220	120 DU	$T = 0.49(X)$	38%	62%	22	37	59
TOTAL						27	43	70
SUNDAY GENERATOR								
Single-Family Detached Housing	210	0 DU	$T = 0.86(X) + 6.71$	53%	47%	0	0	0
Single Family Attached ⁽²⁾	215	24 DU	$T = 0.86(X) + 6.71$	53%	47%	14	13	27
Multifamily Housing (Low-Rise) ⁽³⁾	220	120 DU	$T = 0.36(X)$	53%	47%	23	20	43
TOTAL						37	33	70

(1) Source: ITE Trip Generation Manual, 12th Edition.

(2) Sunday generator is not available for LUC 215, assumed to be the same as LUC 210.

(3) Sunday directional distribution is not available for LUC 220, assumed to be the same as LUC 210.

GATE TRIP GENERATION ANALYSIS - POD 6

LAND USE	ITE CODE	INTENSITY	TRIP GENERATION RATE ⁽¹⁾	IN	OUT	TOTAL TRIPS		
						IN	OUT	TOTAL
AM PEAK GENERATOR								
Single-Family Detached Housing	210	23 DU	T= 0.71 (X) + 8.84	27%	73%	7	18	25
Single Family Attached	215	20 DU	Ln(T)= 0.86 Ln(X) + 0.01	23%	77%	3	10	13
Multifamily Housing (Low-Rise)	220	55 DU	T= 0.43 (X) + 6.30	27%	73%	8	22	30
TOTAL						18	50	68
PM PEAK GENERATOR								
Single-Family Detached Housing	210	23 DU	Ln(T)= 0.90 Ln(X) + 0.48	63%	37%	17	10	27
Single Family Attached	215	20 DU	Ln(T)= 0.66 Ln(X) + 0.89	62%	38%	11	7	18
Multifamily Housing (Low-Rise)	220	55 DU	T= 0.61 (X) + 1.61	60%	40%	21	14	35
TOTAL						49	31	80
SATURDAY GENERATOR								
Single-Family Detached Housing	210	23 DU	T= 0.90 (X) + 10.97	53%	47%	17	15	32
Single Family Attached	215	20 DU	T= 0.47 (X)	48%	52%	4	5	9
Multifamily Housing (Low-Rise)	220	55 DU	T= 0.49 (X)	38%	62%	10	17	27
TOTAL						31	37	68
SUNDAY GENERATOR								
Single-Family Detached Housing	210	23 DU	T= 0.86 (X) + 6.71	53%	47%	14	12	26
Single Family Attached ⁽²⁾	215	20 DU	T= 0.86 (X) + 6.71	53%	47%	13	11	24
Multifamily Housing (Low-Rise) ⁽³⁾	220	55 DU	T= 0.36 (X)	53%	47%	11	9	20
TOTAL						38	32	70

(1) Source: ITE Trip Generation Manual, 12th Edition.

(2) Sunday generator is not available for LUC 215, assumed to be the same as LUC 210.

(3) Sunday directional distribution is not available for LUC 220, assumed to be the same as LUC 210.

**Inverrary Golf Course Redevelopment Gate Queueing Analysis
Gate 1 (Residents)**

Required Storage:

$$M = \frac{[\ln P(x > M) - \ln Q_M]}{\ln \rho} - 1$$

coefficient of utilization:

$$\rho = q/NQ$$

$$\rho = \frac{35}{(1) 240} = 0.1458$$

Required Storage with 95% confidence level [P(x > M)]:

$$M = \frac{\ln (.05) - \ln (0.1458)}{\ln(0.1458)} - 1 = 0 \text{ vehicles}$$

without rounding = -0.44 vehicles

q is the demand rate. For this analysis,

$$q = 35.0 \text{ veh/hr.}$$

N is the number of attendants. For this analysis,

$$N = 1 \text{ lane}$$

Q is the processing rate per hour for each attendant. For this analysis,

$$\text{Processing Time: } 15 \text{ sec} * 1 \text{ min}/60 \text{ sec} = 0.25 \text{ min}$$

Total Time: 0.25 min

$$Q = \frac{1 \text{ process}}{\text{process time}} * \frac{60 \text{ min}}{1 \text{ hr}} \Rightarrow \frac{1 \text{ process} * 60 \text{ min}}{0.25} \Rightarrow 240 \text{ processes/hr}$$

Q_M is a table value obtained from Table 8-11 based on ρ and N.

[Table 8-11 \(page 6 of pdf\)](#)

From Table:	N = 1	and	ρ = 0.1000	=>	0.1000
From Table:	N = 1	and	ρ = 0.2000	=>	0.2000

$$Q_M = 0.1000 + \frac{(0.2000 - 0.1000) * (0.1458 - 0.1000)}{(0.2000 - 0.1000)} = 0.1458$$

**Inverrary Golf Course Redevelopment Gate Queueing Analysis
Gate 1 (Visitors)**

Required Storage:

$$M = \frac{[\ln P(x > M) - \ln Q_M]}{\ln \rho} - 1$$

coefficient of utilization:

$$\rho = q/NQ$$

$$\rho = \frac{4}{(1) 93.8} = 0.0426$$

Required Storage with 95% confidence level [P(x > M)]:

$$M = \frac{\ln (.05) - \ln (0.0426)}{\ln (0.0426)} - 1 = 0 \text{ vehicles}$$

without rounding = -1.05 vehicles

q is the demand rate. For this analysis,

$$q = 4 \text{ veh/hr.}$$

N is the number of attendants. For this analysis,

$$N = 1 \text{ lane}$$

Q is the processing rate per hour for each attendant. For this analysis,

$$\text{Processing Time: } 38.1 \text{ sec} * 1 \text{ min}/60 \text{ sec} = 0.635 \text{ min}$$

Total Time: 0.64 min

$$Q = \frac{1 \text{ process}}{\text{process time}} * \frac{60 \text{ min}}{1 \text{ hr}} \Rightarrow \frac{1 \text{ process} * 60 \text{ min}}{0.64} \Rightarrow 93.8 \text{ processes/hr}$$

Q_M is a table value obtained from Table 8-11 based on ρ and N.

[Table 8-11 \(page 6 of pdf\)](#)

From Table:	N = 1	and	ρ = 0.0000	=>	0.0000
From Table:	N = 1	and	ρ = 0.1000	=>	0.1000

$$Q_M = 0.0000 + \frac{(0.1000 - 0.0000) * (0.0426 - 0.0000)}{(0.1000 - 0.0000)} = 0.0426$$

Inverrary Golf Course Redevelopment Gate Queueing Analysis
Gate 2 (Residents)

Required Storage:

$$M = \frac{[\ln P(x > M) - \ln Q_M]}{\ln \rho} - 1$$

coefficient of utilization:

$$\rho = q/NQ$$

$$\rho = \frac{10}{(1) 240} = 0.0417$$

Required Storage with 95% confidence level [P(x>M)]:

$$M = \frac{\ln (.05) - \ln (0.0417)}{\ln (0.0417)} - 1 = -1 \text{ vehicles}$$

without rounding = -1.06 vehicles

q is the demand rate. For this analysis,

$$q = 10 \text{ veh/hr.}$$

N is the number of attendants. For this analysis,

$$N = 1 \text{ lane}$$

Q is the processing rate per hour for each attendant. For this analysis,

$$\text{Processing Time: } 15 \text{ sec} * 1 \text{ min}/60 \text{ sec} = 0.25 \text{ min}$$

Total Time: 0.25 min

$$Q = \frac{1 \text{ process}}{\text{process time}} * \frac{60 \text{ min}}{1 \text{ hr}} \Rightarrow \frac{1 \text{ process} * 60 \text{ min}}{0.25} \Rightarrow 240 \text{ processes/hr}$$

Q_M is a table value obtained from Table 8-11 based on ρ and N.

[Table 8-11 \(page 6 of pdf\)](#)

From Table:	N = 1	and	ρ = 0.0000	=>	0.0000
From Table:	N = 1	and	ρ = 0.1000	=>	0.1000

$$Q_M = 0.0000 + \frac{(0.1000 - 0.0000) * (0.0417 - 0.0000)}{(0.1000 - 0.0000)} = 0.0417$$

Inverrary Golf Course Redevelopment Gate Queueing Analysis
Gate 2 (Visitors)

Required Storage:

$$M = \frac{[\ln P(x > M) - \ln Q_M]}{\ln \rho} - 1$$

coefficient of utilization:

$$\rho = q/NQ$$

$$\rho = \frac{1}{(1) 93.8} = 0.0107$$

Required Storage with 95% confidence level [P(x > M)]:

$$M = \frac{\ln (.05) - \ln (0.0107)}{\ln(0.0107)} - 1 = 0 \text{ vehicles}$$

without rounding = -1.34 vehicles

q is the demand rate. For this analysis,

$$q = 1 \text{ veh/hr.}$$

N is the number of attendants. For this analysis,

$$N = 1 \text{ lane}$$

Q is the processing rate per hour for each attendant. For this analysis,

$$\text{Processing Time: } 38.1 \text{ sec} * 1 \text{ min}/60 \text{ sec} = 0.635 \text{ min}$$

Total Time: 0.64 min

$$Q = \frac{1 \text{ process}}{\text{process time}} * \frac{60 \text{ min}}{1 \text{ hr}} \Rightarrow \frac{1 \text{ process} * 60 \text{ min}}{0.64} \Rightarrow 93.8 \text{ processes/hr}$$

Q_M is a table value obtained from Table 8-11 based on ρ and N.

[Table 8-11 \(page 6 of pdf\)](#)

From Table:	N = 1	and	ρ = 0.0000	=>	0.0000
From Table:	N = 1	and	ρ = 0.1000	=>	0.1000

$$Q_M = 0.0000 + \frac{(0.1000 - 0.0000) * (0.0107 - 0.0000)}{(0.1000 - 0.0000)} = 0.0107$$

Inverrary Golf Course Redevelopment Gate Queueing Analysis
Gate 3 (Residents)

Required Storage:

$$M = \frac{[\ln P(x > M) - \ln Q_M]}{\ln \rho} - 1$$

coefficient of utilization:

$$\rho = q/NQ$$

$$\rho = \frac{23}{(1) 240} = 0.0958$$

Required Storage with 95% confidence level [P(x > M)]:

$$M = \frac{\ln (.05) - \ln (0.0958)}{\ln (0.0958)} - 1 = 0 \text{ vehicles}$$

without rounding = -0.72 vehicles

q is the demand rate. For this analysis,

$$q = 23 \text{ veh/hr.}$$

N is the number of attendants. For this analysis,

$$N = 1 \text{ lane}$$

Q is the processing rate per hour for each attendant. For this analysis,

$$\text{Processing Time: } 15 \text{ sec} * 1 \text{ min}/60 \text{ sec} = 0.25 \text{ min}$$

Total Time: 0.25 min

$$Q = \frac{1 \text{ process}}{\text{process time}} * \frac{60 \text{ min}}{1 \text{ hr}} \Rightarrow \frac{1 \text{ process} * 60 \text{ min}}{0.25} \Rightarrow 240 \text{ processes/hr}$$

Q_M is a table value obtained from Table 8-11 based on ρ and N.

[Table 8-11 \(page 6 of pdf\)](#)

From Table:	N = 1	and	ρ = 0.0000	=>	0.0000
From Table:	N = 1	and	ρ = 0.1000	=>	0.1000

$$Q_M = 0.0000 + \frac{(0.1000 - 0.0000) * (0.0958 - 0.0000)}{(0.1000 - 0.0000)} = 0.0958$$

Inverrary Golf Course Redevelopment Gate Queueing Analysis
Gate 3 (Visitors)

Required Storage:

$$M = \frac{[\ln P(x > M) - \ln Q_M]}{\ln \rho} - 1$$

coefficient of utilization:

$$\rho = q/NQ$$

$$\rho = \frac{3}{(1) 93.8} = 0.0320$$

Required Storage with 95% confidence level [P(x > M)]:

$$M = \frac{\ln (.05) - \ln (0.032)}{\ln (0.0320)} - 1 = 0 \text{ vehicles}$$

without rounding = -1.13 vehicles

q is the demand rate. For this analysis,

$$q = 3 \text{ veh/hr.}$$

N is the number of attendants. For this analysis,

$$N = 1 \text{ lane}$$

Q is the processing rate per hour for each attendant. For this analysis,

$$\text{Processing Time: } 38.1 \text{ sec} * 1 \text{ min}/60 \text{ sec} = 0.635 \text{ min}$$

Total Time: 0.64 min

$$Q = \frac{1 \text{ process}}{\text{process time}} * \frac{60 \text{ min}}{1 \text{ hr}} \Rightarrow \frac{1 \text{ process} * 60 \text{ min}}{0.64} \Rightarrow 93.8 \text{ processes/hr}$$

Q_M is a table value obtained from Table 8-11 based on ρ and N.

[Table 8-11 \(page 6 of pdf\)](#)

From Table:	N = 1	and	ρ = 0.0000	=>	0.0000
From Table:	N = 1	and	ρ = 0.1000	=>	0.1000

$$Q_M = 0.0000 + \frac{(0.1000 - 0.0000) * (0.0320 - 0.0000)}{(0.1000 - 0.0000)} = 0.032$$

**Inverrary Golf Course Redevelopment Gate Queueing Analysis
Gate 4 (Residents)**

Required Storage:

$$M = \frac{[\ln P(x > M) - \ln Q_M]}{\ln \rho} - 1$$

coefficient of utilization:

$$\rho = q/NQ$$

$$\rho = \frac{66}{(1) 240} = 0.2750$$

Required Storage with 95% confidence level [P(x > M)]:

$$M = \frac{\ln (.05) - \ln (0.275)}{\ln (0.2750)} - 1 = 0 \text{ vehicles}$$

without rounding = 0.32 vehicles

q is the demand rate. For this analysis,

$$q = 66 \text{ veh/hr.}$$

N is the number of attendants. For this analysis,

$$N = 1 \text{ lane}$$

Q is the processing rate per hour for each attendant. For this analysis,

$$\text{Processing Time: } 15 \text{ sec} * 1 \text{ min}/60 \text{ sec} = 0.25 \text{ min}$$

Total Time: 0.25 min

$$Q = \frac{1 \text{ process}}{\text{process time}} * \frac{60 \text{ min}}{1 \text{ hr}} \Rightarrow \frac{1 \text{ process} * 60 \text{ min}}{0.25} \Rightarrow 240 \text{ processes/hr}$$

Q_M is a table value obtained from Table 8-11 based on ρ and N.

[Table 8-11 \(page 6 of pdf\)](#)

From Table:	N = 1	and	ρ = 0.2000	=>	0.2000
From Table:	N = 1	and	ρ = 0.3000	=>	0.3000

$$Q_M = 0.2000 + \frac{(0.3000 - 0.2000) * (0.2750 - 0.2000)}{(0.3000 - 0.2000)} = 0.275$$

Inverrary Golf Course Redevelopment Gate Queueing Analysis
Gate 4 (Visitors)

Required Storage:

$$M = \frac{[\ln P(x > M) - \ln Q_M]}{\ln \rho} - 1$$

coefficient of utilization:

$$\rho = q/NQ$$

$$\rho = \frac{7}{(1) 93.8} = 0.0746$$

Required Storage with 95% confidence level [P(x > M)]:

$$M = \frac{\ln (.05) - \ln (0.0746)}{\ln (0.0746)} - 1 = 1 \text{ vehicles}$$

without rounding = -0.85 vehicles

q is the demand rate. For this analysis,

$$q = 7 \text{ veh/hr.}$$

N is the number of attendants. For this analysis,

$$N = 1 \text{ lane}$$

Q is the processing rate per hour for each attendant. For this analysis,

$$\text{Processing Time: } 38.1 \text{ sec} * 1 \text{ min}/60 \text{ sec} = 0.635 \text{ min}$$

Total Time: 0.64 min

$$Q = \frac{1 \text{ process}}{\text{process time}} * \frac{60 \text{ min}}{1 \text{ hr}} \Rightarrow \frac{1 \text{ process} * 60 \text{ min}}{0.64} \Rightarrow 93.8 \text{ processes/hr}$$

Q_M is a table value obtained from Table 8-11 based on ρ and N.

[Table 8-11 \(page 6 of pdf\)](#)

From Table:	N = 1	and	ρ = 0.0000	=>	0.0000
From Table:	N = 1	and	ρ = 0.1000	=>	0.1000

$$Q_M = 0.0000 + \frac{(0.1000 - 0.0000) * (0.0746 - 0.0000)}{(0.1000 - 0.0000)} = 0.0746$$

**Inverrary Golf Course Redevelopment Gate Queueing Analysis
Gate 5 (Residents)**

Required Storage:

$$M = \frac{[\ln P(x > M) - \ln Q_M]}{\ln \rho} - 1$$

coefficient of utilization:

$$\rho = q/NQ$$

$$\rho = \frac{65}{(1) 240} = 0.2708$$

Required Storage with 95% confidence level [P(x > M)]:

$$M = \frac{\ln (.05) - \ln (0.2708)}{\ln (0.2708)} - 1 = 0 \text{ vehicles}$$

without rounding = 0.29 vehicles

q is the demand rate. For this analysis,

$$q = 65 \text{ veh/hr.}$$

N is the number of attendants. For this analysis,

$$N = 1 \text{ lane}$$

Q is the processing rate per hour for each attendant. For this analysis,

$$\text{Processing Time: } 15 \text{ sec} * 1 \text{ min}/60 \text{ sec} = 0.25 \text{ min}$$

Total Time: 0.25 min

$$Q = \frac{1 \text{ process}}{\text{process time}} * \frac{60 \text{ min}}{1 \text{ hr}} \Rightarrow \frac{1 \text{ process} * 60 \text{ min}}{0.25} \Rightarrow 240 \text{ processes/hr}$$

Q_M is a table value obtained from Table 8-11 based on ρ and N.

[Table 8-11 \(page 6 of pdf\)](#)

From Table:	N = 1	and	ρ = 0.2000	=>	0.2000
From Table:	N = 1	and	ρ = 0.3000	=>	0.3000

$$Q_M = 0.2000 + \frac{(0.3000 - 0.2000) * (0.2708 - 0.2000)}{(0.3000 - 0.2000)} = 0.2708$$

Inverrary Golf Course Redevelopment Gate Queueing Analysis
Gate 5 (Visitors)

Required Storage:

$$M = \frac{[\ln P(x > M) - \ln Q_M]}{\ln \rho} - 1$$

coefficient of utilization:

$$\rho = q/NQ$$

$$\rho = \frac{7}{(1) 93.8} = 0.0746$$

Required Storage with 95% confidence level [P(x > M)]:

$$M = \frac{\ln (.05) - \ln (0.0746)}{\ln (0.0746)} - 1 = 0 \text{ vehicles}$$

without rounding = -0.85 vehicles

q is the demand rate. For this analysis,

$$q = 7 \text{ veh/hr.}$$

N is the number of attendants. For this analysis,

$$N = 1 \text{ lane}$$

Q is the processing rate per hour for each attendant. For this analysis,

$$\text{Processing Time: } 38.1 \text{ sec} * 1 \text{ min}/60 \text{ sec} = 0.635 \text{ min}$$

Total Time: 0.64 min

$$Q = \frac{1 \text{ process}}{\text{process time}} * \frac{60 \text{ min}}{1 \text{ hr}} \Rightarrow \frac{1 \text{ process} * 60 \text{ min}}{0.64} \Rightarrow 93.8 \text{ processes/hr}$$

Q_M is a table value obtained from Table 8-11 based on ρ and N.

[Table 8-11 \(page 6 of pdf\)](#)

From Table:	N = 1	and	ρ = 0.0000	=>	0.0000
From Table:	N = 1	and	ρ = 0.1000	=>	0.1000

$$Q_M = 0.0000 + \frac{(0.1000 - 0.0000) * (0.0746 - 0.0000)}{(0.1000 - 0.0000)} = 0.0746$$

**Inverrary Golf Course Redevelopment Gate Queueing Analysis
Gate 6 (Residents)**

Required Storage:

$$M = \frac{[\ln P(x > M) - \ln Q_M]}{\ln \rho} - 1$$

coefficient of utilization:

$$\rho = q/NQ$$

$$\rho = \frac{70}{(1) 240} = 0.2917$$

Required Storage with 95% confidence level [P(x > M)]:

$$M = \frac{\ln (.05) - \ln (0.2917)}{\ln (0.2917)} - 1 = 1 \text{ vehicles}$$

without rounding = 0.43 vehicles

q is the demand rate. For this analysis,

$$q = 70 \text{ veh/hr.}$$

N is the number of attendants. For this analysis,

$$N = 1 \text{ lane}$$

Q is the processing rate per hour for each attendant. For this analysis,

$$\text{Processing Time: } 15 \text{ sec} * 1 \text{ min}/60 \text{ sec} = 0.25 \text{ min}$$

Total Time: 0.25 min

$$Q = \frac{1 \text{ process}}{\text{process time}} * \frac{60 \text{ min}}{1 \text{ hr}} \Rightarrow \frac{1 \text{ process} * 60 \text{ min}}{0.25} \Rightarrow 240 \text{ processes/hr}$$

Q_M is a table value obtained from Table 8-11 based on ρ and N.

[Table 8-11 \(page 6 of pdf\)](#)

From Table:	N = 1	and	ρ = 0.2000	=>	0.2000
From Table:	N = 1	and	ρ = 0.3000	=>	0.3000

$$Q_M = 0.2000 + \frac{(0.3000 - 0.2000) * (0.2917 - 0.2000)}{(0.3000 - 0.2000)} = 0.2917$$

**Inverrary Golf Course Redevelopment Gate Queueing Analysis
Gate 6 (Visitors)**

Required Storage:

$$M = \frac{[\ln P(x > M) - \ln Q_M]}{\ln \rho} - 1$$

coefficient of utilization:

$$\rho = q/NQ$$

$$\rho = \frac{7}{(1) 93.8} = 0.0746$$

Required Storage with 95% confidence level [P(x > M)]:

$$M = \frac{\ln (.05) - \ln (0.0746)}{\ln (0.0746)} - 1 = 0 \text{ vehicles}$$

without rounding = -0.85 vehicles

q is the demand rate. For this analysis,

$$q = 7 \text{ veh/hr.}$$

N is the number of attendants. For this analysis,

$$N = 1 \text{ lane}$$

Q is the processing rate per hour for each attendant. For this analysis,

$$\text{Processing Time: } 38.1 \text{ sec} * 1 \text{ min}/60 \text{ sec} = 0.635 \text{ min}$$

Total Time: 0.64 min

$$Q = \frac{1 \text{ process}}{\text{process time}} * \frac{60 \text{ min}}{1 \text{ hr}} \Rightarrow \frac{1 \text{ process} * 60 \text{ min}}{0.64} \Rightarrow 93.8 \text{ processes/hr}$$

Q_M is a table value obtained from Table 8-11 based on ρ and N.

[Table 8-11 \(page 6 of pdf\)](#)

From Table:	N = 1	and	ρ = 0.0000	=>	0.0000
From Table:	N = 1	and	ρ = 0.1000	=>	0.1000

$$Q_M = 0.0000 + \frac{(0.1000 - 0.0000) * (0.0746 - 0.0000)}{(0.1000 - 0.0000)} = 0.0746$$

**Inverrary Golf Course Redevelopment Gate Queueing Analysis
Gate 7 (Residents)**

Required Storage:

$$M = \frac{[\ln P(x > M) - \ln Q_M]}{\ln \rho} - 1$$

coefficient of utilization:

$$\rho = q/NQ$$

$$\rho = \frac{44}{(1) 240} = 0.1833$$

Required Storage with 95% confidence level [P(x>M)]:

$$M = \frac{\ln (.05) - \ln (0.1833)}{\ln(0.1833)} - 1 = -1 \text{ vehicles}$$

without rounding = -0.23 vehicles

q is the demand rate. For this analysis,

$$q = 44 \text{ veh/hr.}$$

N is the number of attendants. For this analysis,

$$N = 1 \text{ lane}$$

Q is the processing rate per hour for each attendant. For this analysis,

$$\text{Processing Time: } 15 \text{ sec} * 1 \text{ min}/60 \text{ sec} = 0.25 \text{ min}$$

Total Time: 0.25 min

$$Q = \frac{1 \text{ process}}{\text{process time}} * \frac{60 \text{ min}}{1 \text{ hr}} \Rightarrow \frac{1 \text{ process} * 60 \text{ min}}{0.25} \Rightarrow 240 \text{ processes/hr}$$

Q_M is a table value obtained from Table 8-11 based on ρ and N.

[Table 8-11 \(page 6 of pdf\)](#)

From Table:	N = 1	and	ρ = 0.1000	=>	0.1000
From Table:	N = 1	and	ρ = 0.2000	=>	0.2000

$$Q_M = 0.1000 + \frac{(0.2000 - 0.1000) * (0.1833 - 0.1000)}{(0.2000 - 0.1000)} = 0.1833$$

Inverrary Golf Course Redevelopment Gate Queueing Analysis
Gate 7 (Visitors)

Required Storage:

$$M = \frac{[\ln P(x > M) - \ln Q_M]}{\ln \rho} - 1$$

coefficient of utilization:

$$\rho = q/NQ$$

$$\rho = \frac{5}{(1) 93.8} = 0.0533$$

Required Storage with 95% confidence level [P(x > M)]:

$$M = \frac{\ln (.05) - \ln (0.0533)}{\ln (0.0533)} - 1 = 0 \text{ vehicles}$$

without rounding = -0.98 vehicles

q is the demand rate. For this analysis,

$$q = 5 \text{ veh/hr.}$$

N is the number of attendants. For this analysis,

$$N = 1 \text{ lane}$$

Q is the processing rate per hour for each attendant. For this analysis,

$$\text{Processing Time: } 38.1 \text{ sec} * 1 \text{ min}/60 \text{ sec} = 0.635 \text{ min}$$

Total Time: 0.64 min

$$Q = \frac{1 \text{ process}}{\text{process time}} * \frac{60 \text{ min}}{1 \text{ hr}} \Rightarrow \frac{1 \text{ process} * 60 \text{ min}}{0.64} \Rightarrow 93.8 \text{ processes/hr}$$

Q_M is a table value obtained from Table 8-11 based on ρ and N.

[Table 8-11 \(page 6 of pdf\)](#)

From Table:	N = 1	and	ρ = 0.0000	=>	0.0000
From Table:	N = 1	and	ρ = 0.1000	=>	0.1000

$$Q_M = 0.0000 + \frac{(0.1000 - 0.0000) * (0.0533 - 0.0000)}{(0.1000 - 0.0000)} = 0.0533$$

Single-Family Detached Housing (210)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,
AM Peak Hour of Generator

Setting/Location: General Urban/Suburban

Number of Studies: 132

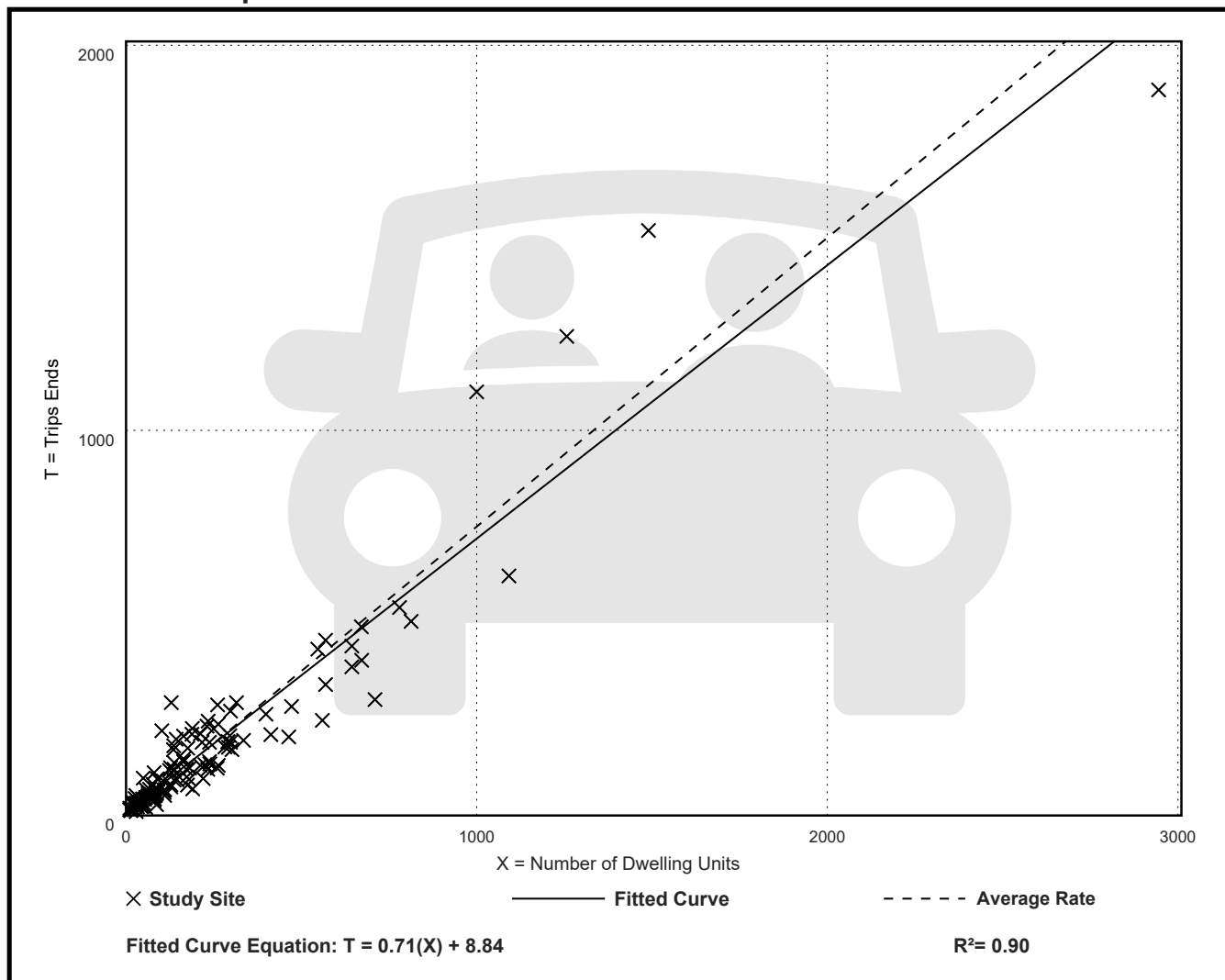
Avg. Num. of Dwelling Units: 232

Directional Distribution: 27% entering, 73% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.75	0.32 - 2.27	0.26

Data Plot and Equation



Single-Family Detached Housing (210)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

PM Peak Hour of Generator

Setting/Location: General Urban/Suburban

Number of Studies: 138

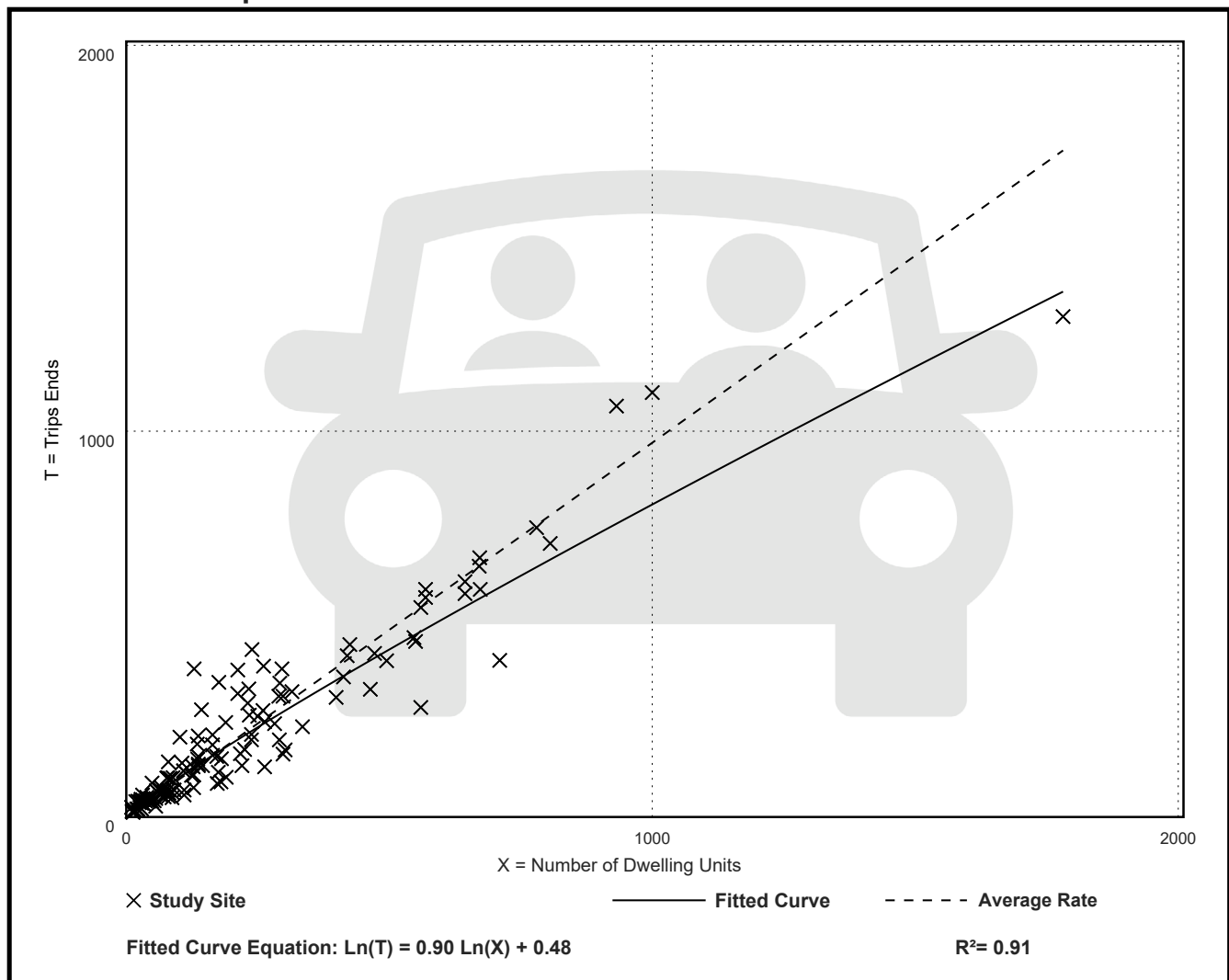
Avg. Num. of Dwelling Units: 214

Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.97	0.49 - 2.98	0.32

Data Plot and Equation



Single-Family Detached Housing (210)

Vehicle Trip Ends vs: Dwelling Units

On a: Saturday, Peak Hour of Generator

Setting/Location: General Urban/Suburban

Number of Studies: 33

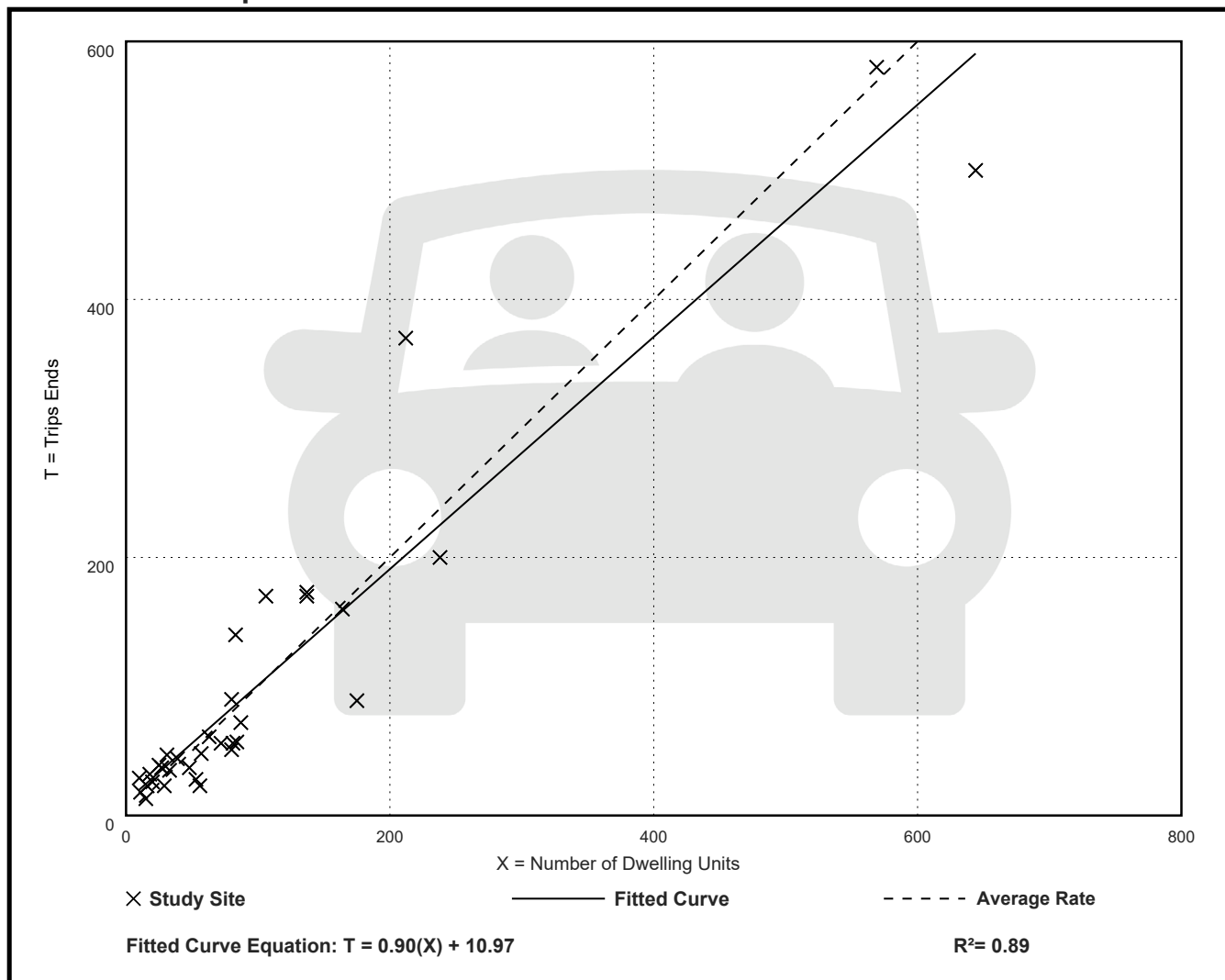
Avg. Num. of Dwelling Units: 106

Directional Distribution: 53% entering, 47% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
1.00	0.41 - 2.90	0.36

Data Plot and Equation



Single-Family Detached Housing (210)

Vehicle Trip Ends vs: Dwelling Units

On a: Sunday, Peak Hour of Generator

Setting/Location: General Urban/Suburban

Number of Studies: 26

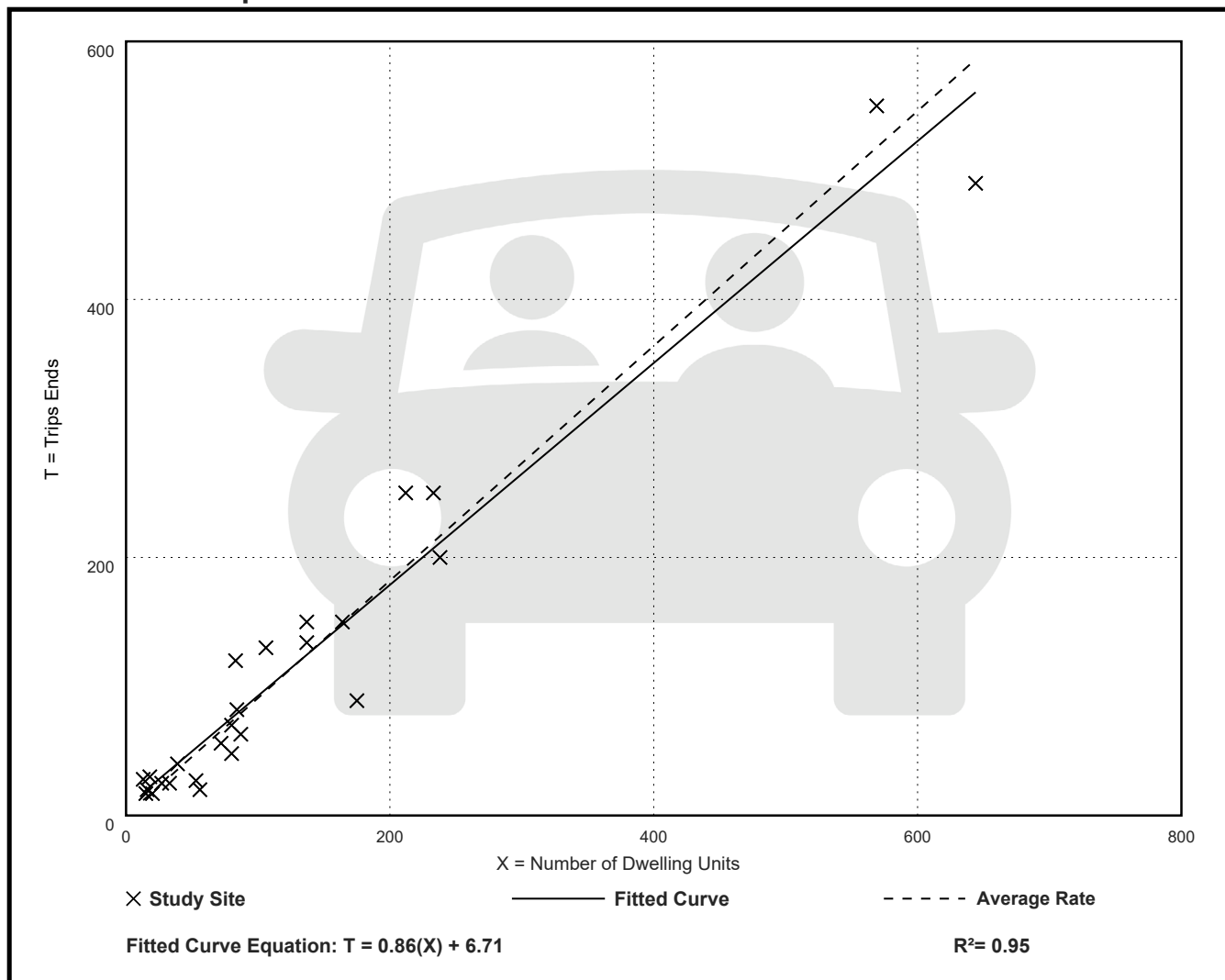
Avg. Num. of Dwelling Units: 130

Directional Distribution: 53% entering, 47% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.91	0.36 - 2.15	0.23

Data Plot and Equation



Single-Family Attached Housing (215)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,
AM Peak Hour of Generator

Setting/Location: General Urban/Suburban

Number of Studies: 10

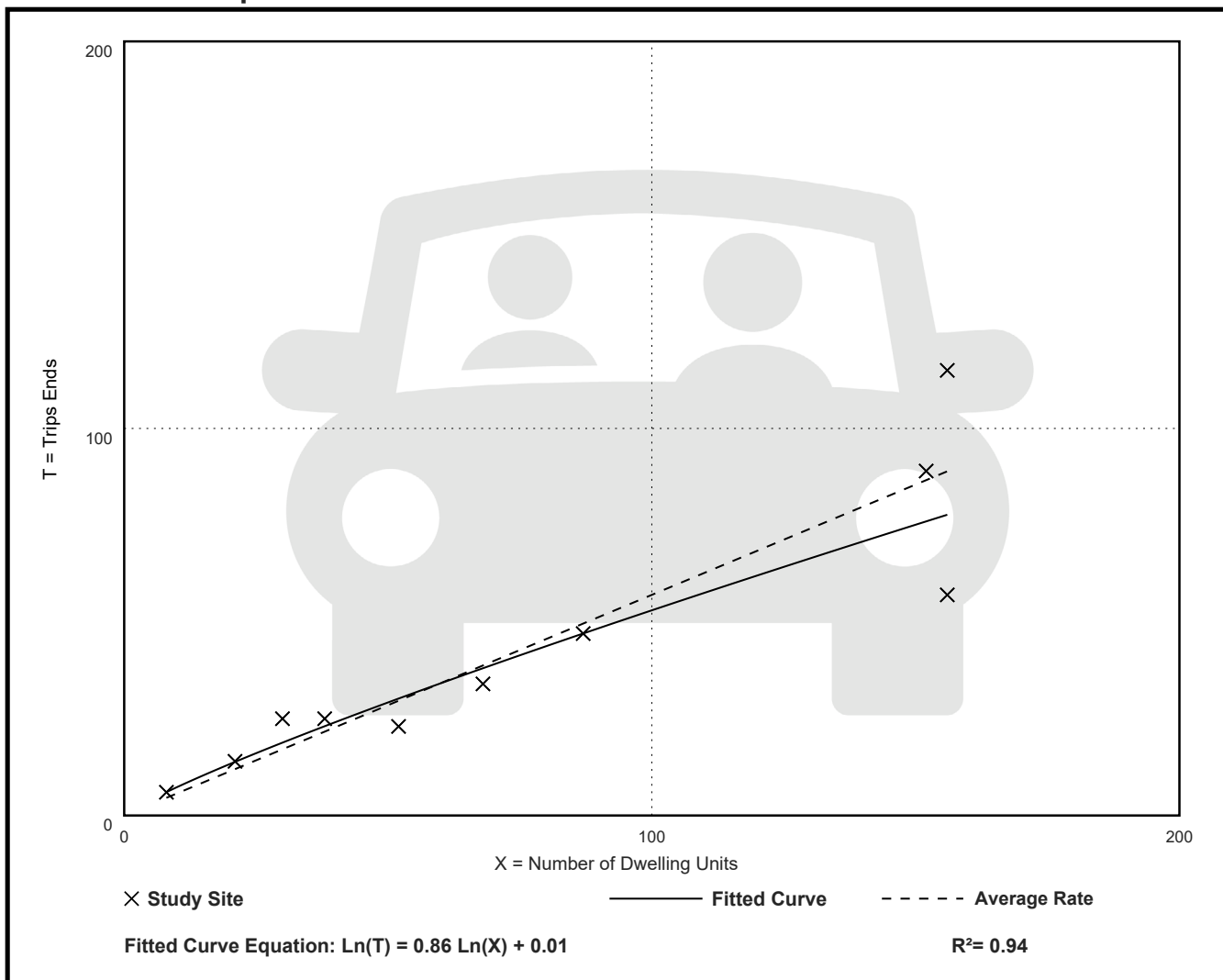
Avg. Num. of Dwelling Units: 77

Directional Distribution: 23% entering, 77% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.57	0.37 - 0.83	0.15

Data Plot and Equation



Single-Family Attached Housing (215)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

PM Peak Hour of Generator

Setting/Location: General Urban/Suburban

Number of Studies: 13

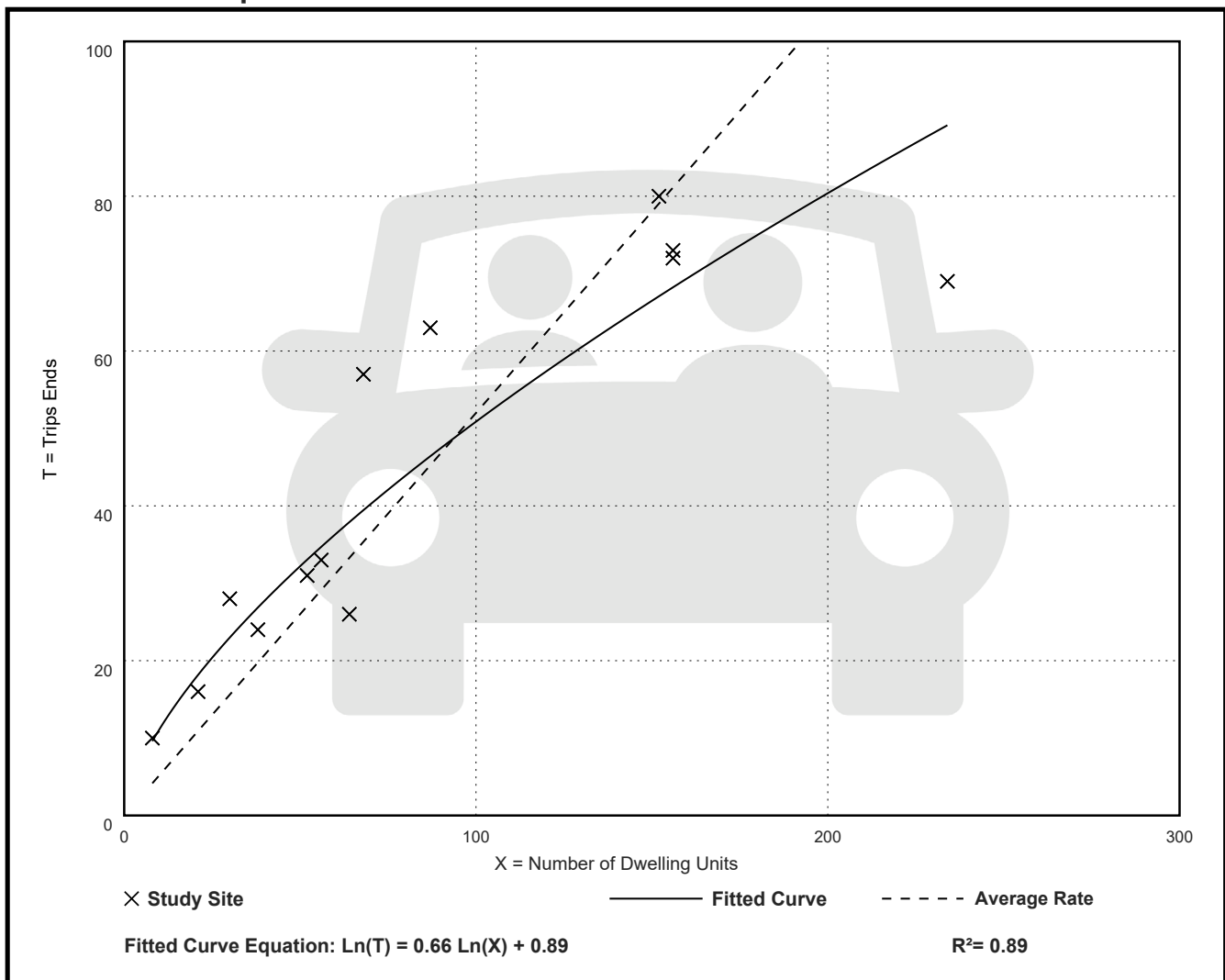
Avg. Num. of Dwelling Units: 86

Directional Distribution: 62% entering, 38% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.52	0.29 - 1.25	0.19

Data Plot and Equation



Single-Family Attached Housing (215)

Vehicle Trip Ends vs: Dwelling Units

On a: Saturday, Peak Hour of Generator

Setting/Location: General Urban/Suburban

Number of Studies: 2

Avg. Num. of Dwelling Units: 386

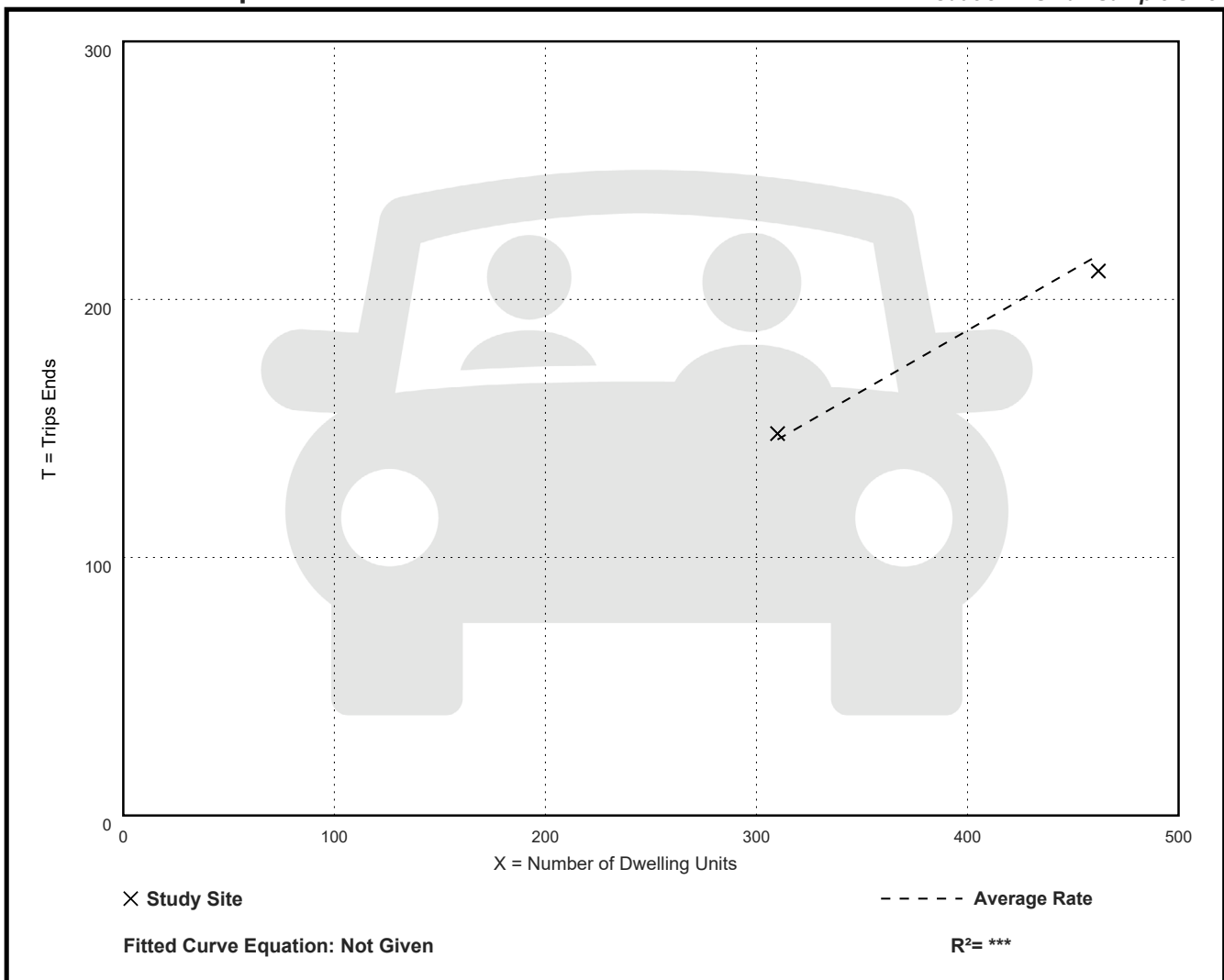
Directional Distribution: 48% entering, 52% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.47	0.46 - 0.48	***

Data Plot and Equation

Caution – Small Sample Size



Multifamily Housing (Low-Rise) Not Close to Rail Transit (220)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

AM Peak Hour of Generator

Setting/Location: General Urban/Suburban

Number of Studies: 25

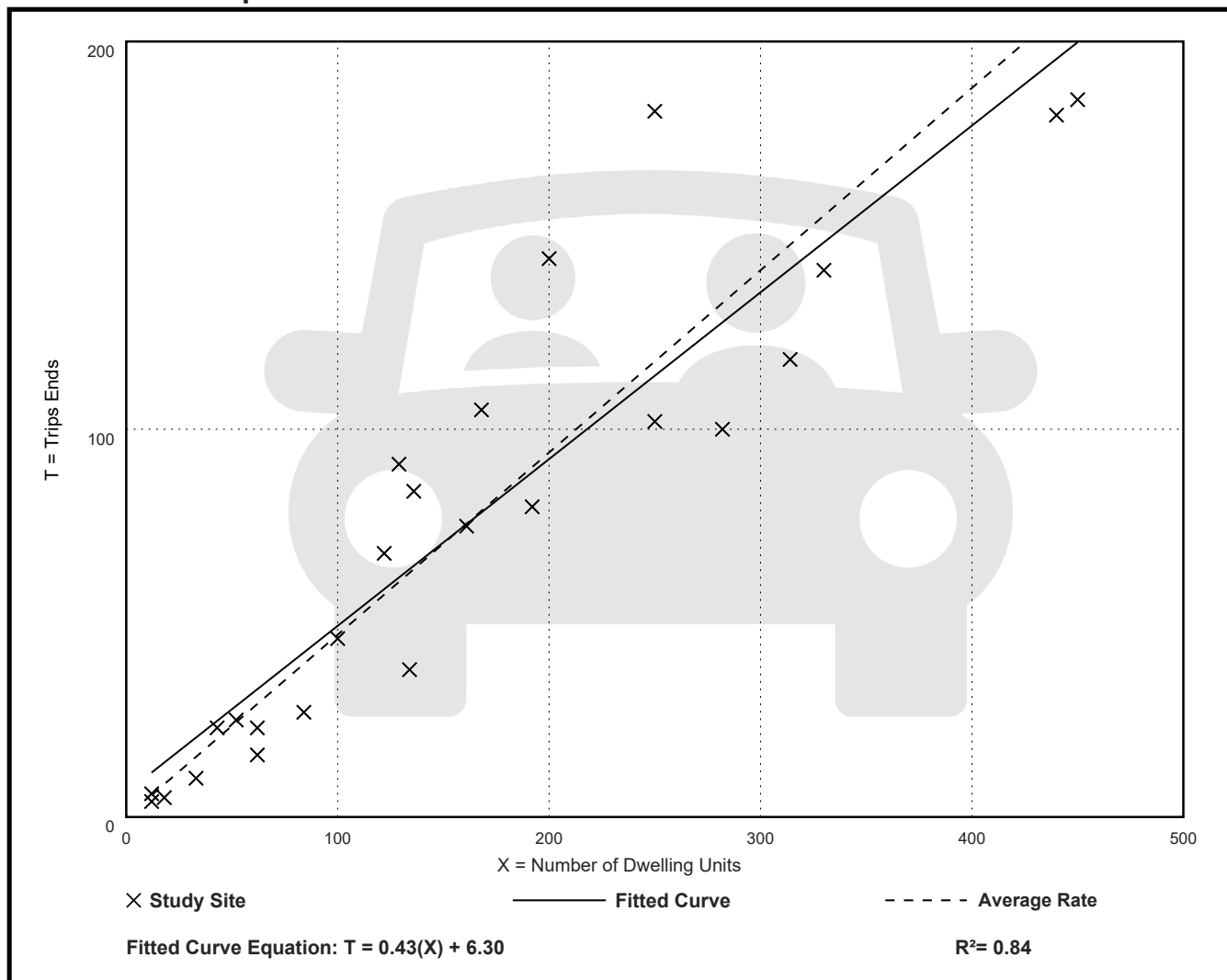
Avg. Num. of Dwelling Units: 161

Directional Distribution: 27% entering, 73% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.47	0.26 - 0.73	0.13

Data Plot and Equation



Multifamily Housing (Low-Rise) Not Close to Rail Transit (220)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

PM Peak Hour of Generator

Setting/Location: General Urban/Suburban

Number of Studies: 24

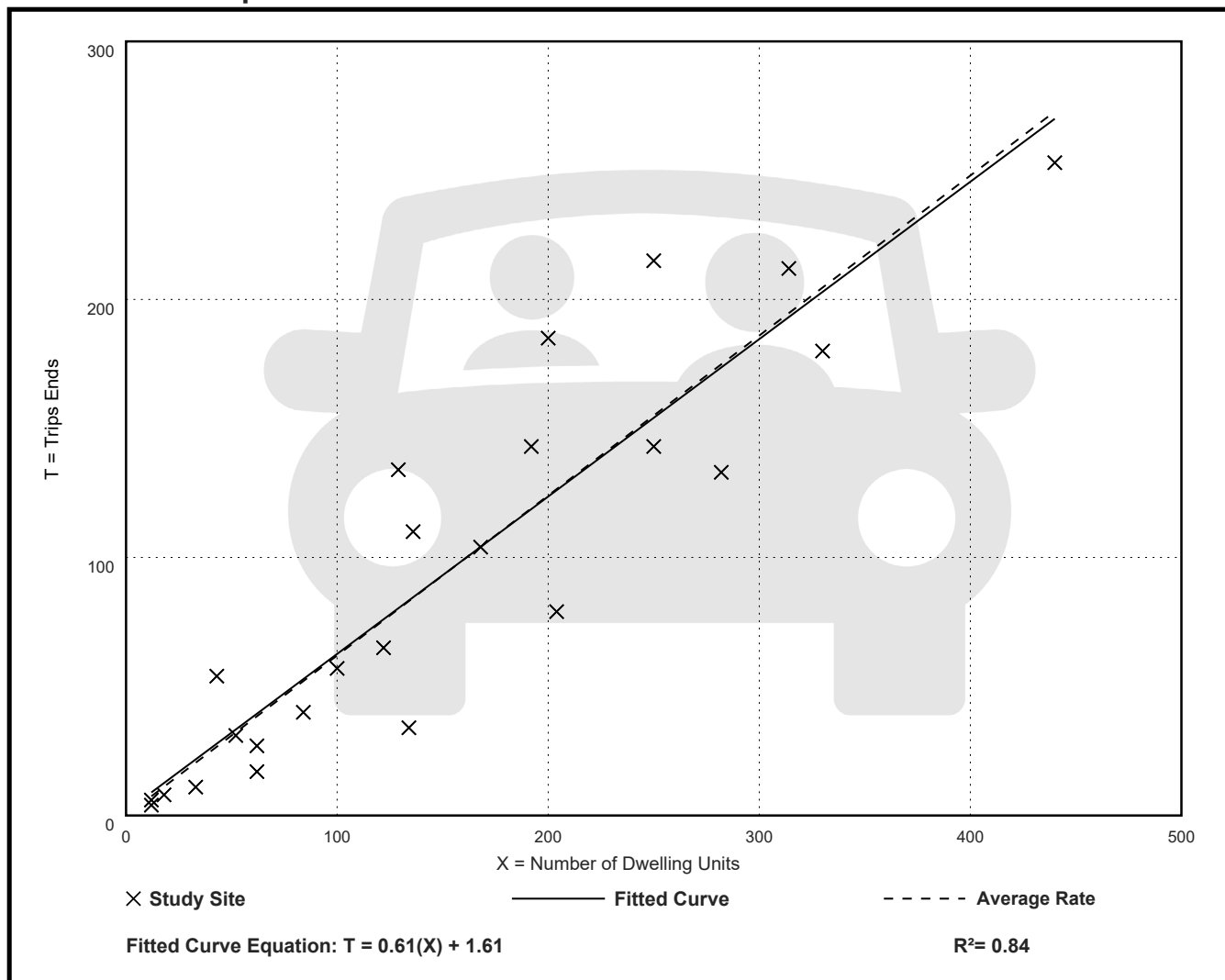
Avg. Num. of Dwelling Units: 151

Directional Distribution: 60% entering, 40% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.62	0.25 - 1.26	0.20

Data Plot and Equation



Multifamily Housing (Low-Rise) Not Close to Rail Transit (220)

Vehicle Trip Ends vs: Dwelling Units

On a: Saturday, Peak Hour of Generator

Setting/Location: General Urban/Suburban

Number of Studies: 2

Avg. Num. of Dwelling Units: 167

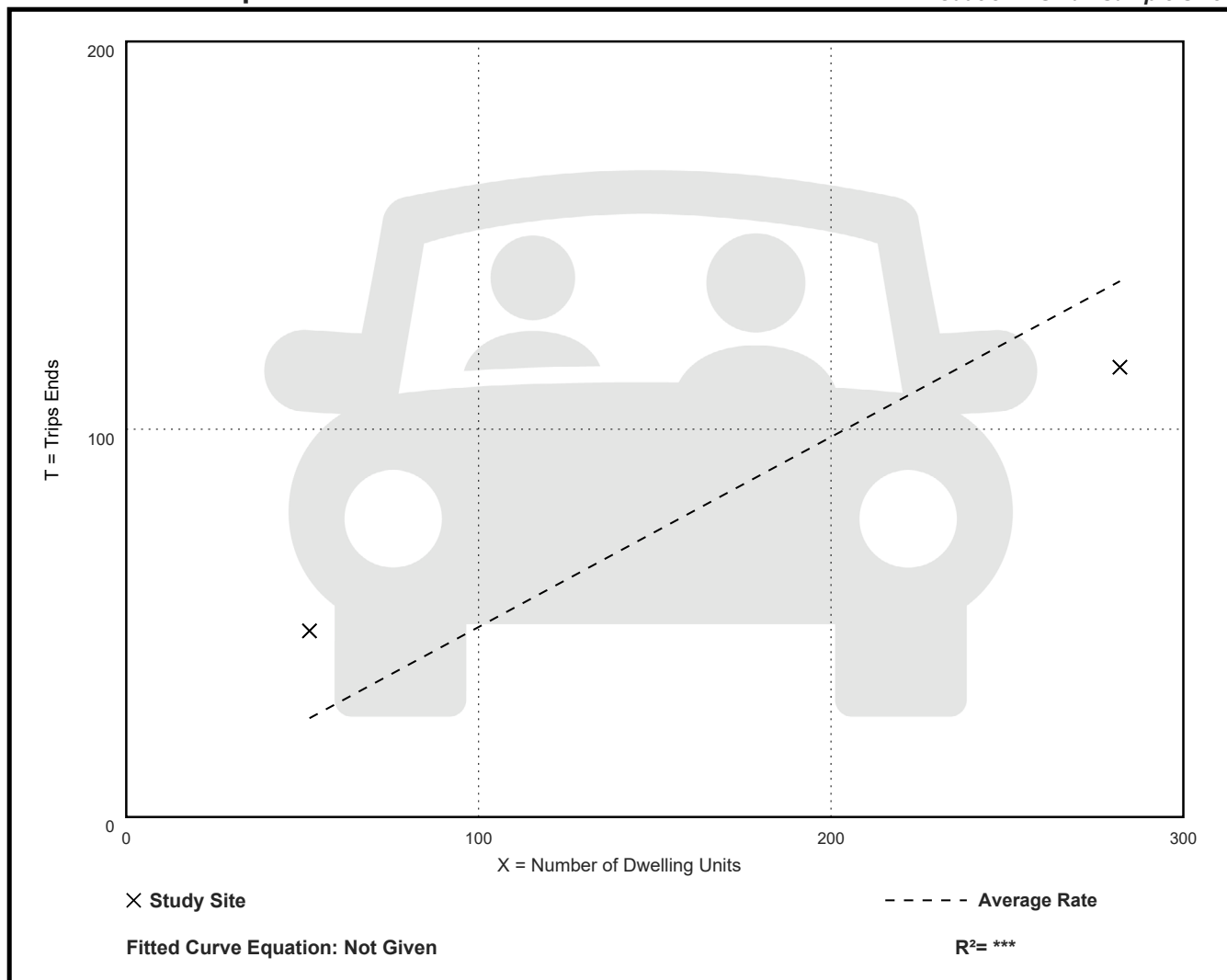
Directional Distribution: 38% entering, 62% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.49	0.41 - 0.92	***

Data Plot and Equation

Caution – Small Sample Size



Multifamily Housing (Low-Rise) Not Close to Rail Transit (220)

Vehicle Trip Ends vs: Dwelling Units

On a: Sunday, Peak Hour of Generator

Setting/Location: General Urban/Suburban

Number of Studies: 1

Avg. Num. of Dwelling Units: 282

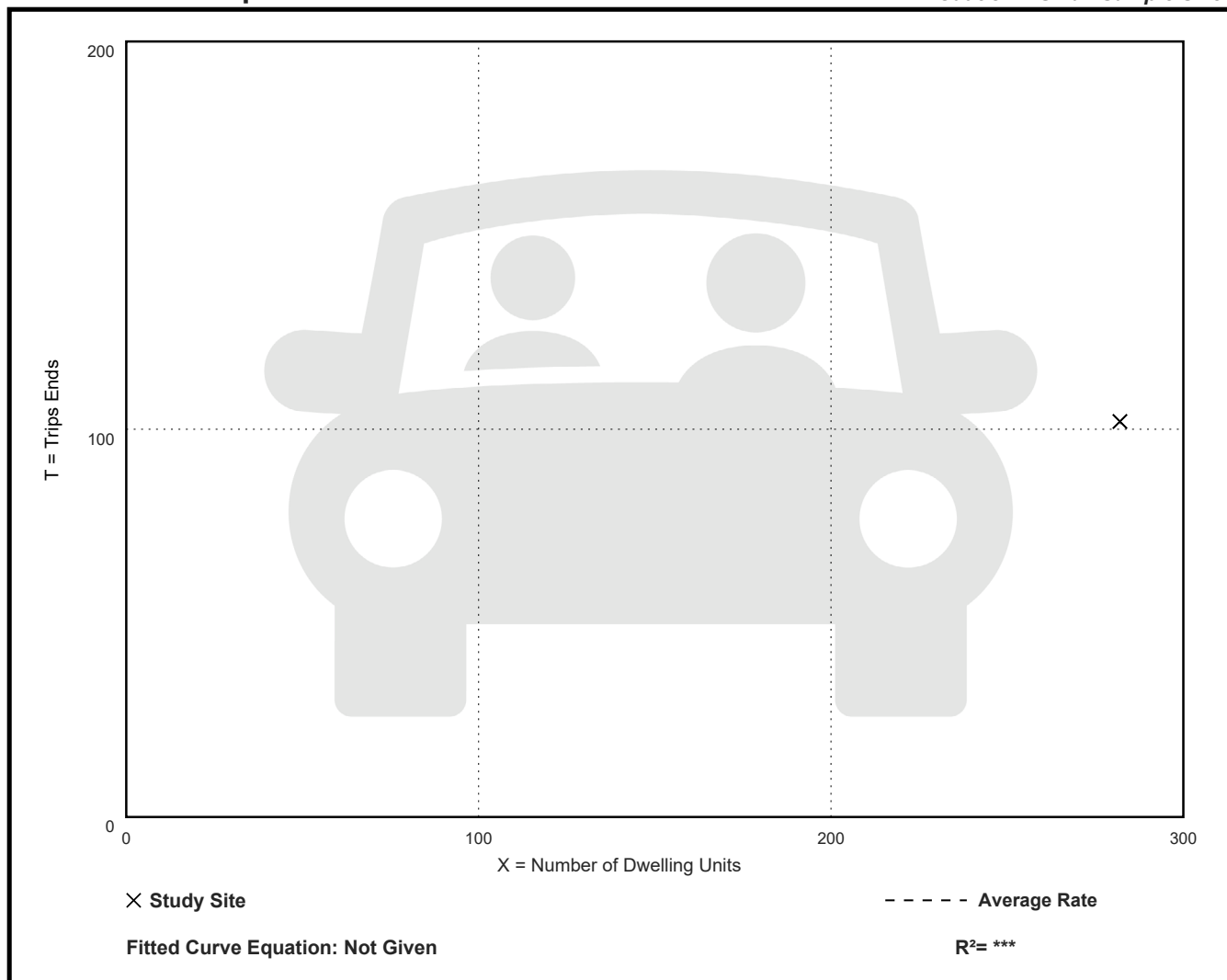
Directional Distribution: Not Available

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.36	0.36 - 0.36	***

Data Plot and Equation

Caution – Small Sample Size



Transportation
and
Land
Development

Vergil G. Stover / Frank J. Koepke



Institute of Transportation Engineers

TABLE 8-1
Design-Hour Lobby Traffic Generation for Banks with Drive-In Windows

<i>Gross Floor Area Used by Bank</i>	<i>Hourly One-Way Traffic Generation (per 1,000 sq. ft.)</i>
5,000 to 20,000 sq. ft.	15 to 20 vehicles
20,000 to 40,000 sq. ft.	10 to 15 vehicles
Over 40,000 sq. ft.	5 to 10 vehicles

SOURCE: Peter N. Scifres [8].

Parking. It is desirable to have as much traffic as possible use the drive-in windows. Petersen [7] reported a 50-50 split between lobby and drive-thru customers when the drive-thru facilities are not unduly congested. Customer parking duration averages about 15 to 20 minutes. During the peak period, parking demand should not exceed 90% of the parking capacity if customers are to be able to find a parking space without excessive delay. Scifres [8] reported customer parking requirements as given in Table 8-2.

TABLE 8-2
Design-Hour Lobby Customer Parking Requirements for Banks with Drive-In Windows

<i>Gross Floor Area Used by Bank</i>	<i>Customer Parking Requirements (per 1,000 sq. ft.)</i>
5,000 to 20,000 sq. ft.	2.0 to 2.5 Spaces
20,000 to 40,000 sq. ft.	1.5 to 2.0 Spaces
Over 40,000 sq. ft.	1.0 to 1.5 Spaces

SOURCE: Peter N. Scifres [8].

Drive-In Window Requirements. The number of service positions required is a function of the average service time and the demand. The technique contained in the section "Analysis of Service Times," presented later in this chapter, can be used to calculate the average time in the system and the average time in the queue for different operating conditions (number of service positions, number of tellers, average service time, and demand) in order to help evaluate proposed designs.

Bank officials commonly underestimate service and waiting time; therefore the average service time should be obtained through observation of similar facilities in the local area, since wait time and, theoretically, storage requirements are fairly sensitive to the parameter.

Table 8-3 gives guidelines for the number of drive-in windows as a function of lobby size. These guidelines assume an average service time of approximately 2 minutes and that 50% of the bank customers will use the drive-in windows. These typical values might be used where a more detailed (and expensive) analysis is not warranted.

TABLE 8-3
Lobby Size Versus Drive-In Window Requirements

<i>Lobby Sizes (sq. ft.)</i>	<i>Number of Drive-In Windows</i>
5,000 to 10,000	2 to 3
10,000 to 20,000	3 to 4
20,000 to 30,000	4 to 5
30,000 to 40,000	6 to 8
40,000 to 50,000	8 to 10

SOURCE: Peter N. Scifres [8].

APPLICATIONS OF QUEUEING ANALYSIS

Providing an adequate and well-defined storage area for drive-thru traffic is particularly critical, especially at fast-food restaurants and drive-thru bank facilities where queues can, and do, become quite long. Waiting vehicles should be stored on private property clear of driveways so that traffic back-up does not interfere with movement on the arterial street. At fast-food restaurants, the menu board should be installed upstream of the service window to permit drive-thru customers to place their orders prior to their arrival at the service window. Preparation of their order can then begin before they reach the service window, thus minimizing their time at the service window. A well-defined storage area for the waiting traffic should be located so that the waiting vehicles do not block or impede the movement of driveway traffic.

Where a single service position is involved, the situation is referred to as a *single-channel problem*. *Multiple-channel problems* arise when two or more service positions are available. Such problems commonly arise with bank tellers (indoor as well as drive-in windows), entrances and exits at large parking lots and garages, at passenger pick-up areas at transit stations and taxi stands, truck terminals or loading/unloading areas, supermarket checkout counters, telephone calls, building entrances, and transit-station turnstiles. The assumptions of Poisson arrivals and negative exponential service time are commonly acceptable and used for both single- and multiple-channel problems. Thurgood [11] found these assumptions to be representative of drive-in facilities.

Customers arriving randomly at a drive-in facility may enter into service immediately or may have to enter the queue until they can be served. Waiting lines occur whenever the immediate demand for service exceeds the current capacity of the facility providing that service.

Basic Notation and Terminology

The following notation is employed throughout this section:

- n = number of customers in the drive-in system
- M = number of customers in the queue waiting to be served (number of customers in the system minus the number being served)
- $P(n)$ = steady-state probability that exactly n customers are in the queueing system
- $P(0)$ = probability that zero vehicles are in the queueing system
- N = number of parallel service positions
- q = mean average arrival rate of vehicles into the system (vehicles/hour)
- Q = mean average service rate per service position (vehicles/hour/position)
- Avg (t) = $\frac{60}{Q}$ = mean service time expressed in minutes per vehicle
- ρ = $\frac{q}{NQ}$ = coefficient of utilization
- $E(n)$ = expected (average) number of customers in the system
- $E(n)$ = expected (average) number of customers waiting in the queue
- $E(t)$ = expected (average) waiting time in system (includes service time)
- $E(w)$ = expected (average) waiting time in queue (excludes service time)

The equations employed in the analysis of queueing problems are given in Table 8-10.

Jones, Woods, and Thurgood [4] have developed a graph (Figure 8-6) for determining the probability that there will be no customers in the system—values for $P(0)$. They also developed graphs for determining the average number of waiting customers (Figure 8-7), the average waiting time (Figure 8-8), and average queue length (Figure 8-9). These figures avoid the necessity to perform the time-consuming, although simple, queueing-analysis calculations. See pp. 228–30.

TABLE 8-10
Queuing System Equations

Equation Number	Variable	Equation
(8-1)	Coefficient of utilization	$\rho = \frac{q}{NQ}$
(8-2)	Probability of no customers in the system	$P(0) = \left[\sum_{n=0}^{N-1} \frac{\left(\frac{q}{Q}\right)^n}{n!} + \frac{\left(\frac{q}{Q}\right)^N}{N!(1-\rho)} \right]^{-1}$
(8-3)	Mean number in the queue	$E(m) = \left[\frac{\rho \left(\frac{q}{Q}\right)^N}{N!(1-\rho)^2} \right] P(0)$
(8-4)	Mean number in the system	$E(n) = E(m) + \frac{q}{Q}$
(8-5)	Mean wait time in queue (hours)	$E(w) = \frac{E(m)}{q}$
(8-6)	Mean time in the system (hours)	$E(t) = E(w) + \frac{1}{Q}$ $= E(w) + \text{Avg}(t)$
(8-7)	Proportion of customers who wait	$P[E(w) > 0] = \left[\frac{\left(\frac{q}{Q}\right)^N}{N!(1-\rho)} \right] P(0)$
(8-8)	Probability of a queue exceeding a length M	$P(x > M) = (\rho^{N+1})P[E(w) > 0]$
(8-9a)	Queue storage required	$M = \left[\frac{\ln P(x > M) - \ln E(w) > 0}{\ln \rho} \right] - 1$
(8-9b)*	Queue storage required	$M = \left[\frac{\ln P(x > M) - \ln Q_M}{\ln \rho} \right] - 1$

* Q_M is a statistic which is a function of the utilization rate and the number of service channels (service positions); see Table 8-11. The table of Q_M values and use of Equation (8-9b) greatly simplifies the calculations compared to those using Equations (8-9a).

Use of the equations and the graphs may be illustrated by the following example of a drive-in bank.

Conditions:

Number of drive-in windows, $N = 3$

Demand on the system, $q = 70$

Service capacity per channel, $Q = 28.6$ for an average service time, $\text{Avg}(t) = 2.1$ minutes

Solution Using Graphs:

- Coefficient of utilization $= 70/(3)(28.6) = 0.816$
- Probability that there are customers waiting in the system, Figure 8-6:
 $P(0) = 0.05$
- Expected average number of customers waiting in the queue, Figure 8-7:
 $E(m)/N = 1.0$; and the average number $E(m) = (3)(1.0) = 3$

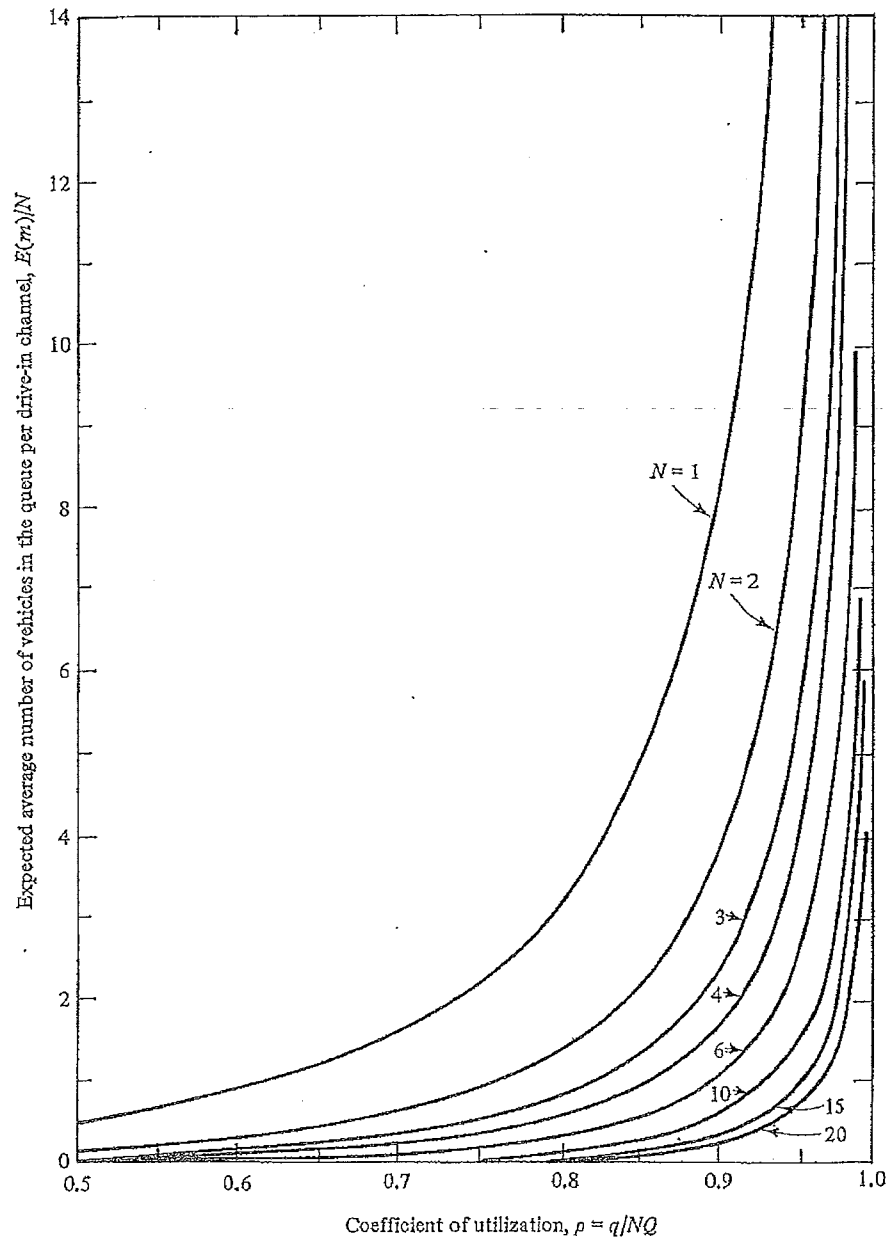


Figure 8-9 Average queue length per service position [$E(m)/N$ values], SOURCE: Jones, Woods, and Thurgood [4].

Comparison:

Variable	Graphs	Equations
$P(0)$	0.05	0.0505
$E(m)$	3	2.97
$E(w)$	2.5	2.55

Example and Case Studies of Required Storage at a Drive-In Bank

Consider the following example of a drive-in bank facility as a demonstration of the use of queuing analysis. Review of a site plan for a proposed bank shows there are six drive-in window positions plus space to store 18 vehicles waiting to be served. In view of its

location, a 5% probability of back-up onto the adjacent street is judged to be acceptable. Demand on the system for design is expected to be 110 vehicles in a 45-minute period. Average service time was expected to be 2.2 minutes. Is the queue storage adequate?

Such problems can be quickly solved using Equation (8-9b) given in Table 8-10 and repeated below for convenience.

$$M = \left[\frac{\ln P(x > M) - \ln Q_M}{\ln \rho} \right] - 1$$

where:

M = queue length which is exceeded p percent of the time

N = number of service channels (drive-in positions)

Q = service rate per channel (vehicles per hour)

$\rho = \frac{\text{demand rate}}{\text{service rate}} = \frac{q}{NQ}$ = utilization factor

q = demand rate on the system (vehicles per hour)

Q_M = tabled values of the relationship between queue length, number of channels, and utilization factor (see Table 8.11)



TABLE 8-11
Table of Q_M Values

	$N = 1$	2	3	4	6	8	10
0.0	0.0000	0.0000	0.0000	0.0000			
0.1	.1000	.0182	.0037	.0008	.0000	0.0000	0.0000
.2	.2000	.0666	.0247	.0096	.0015	.0002	.0000
.3	.3000	.1385	.0700	.0370	.0111	.0036	.0011
.4	.4000	.2286	.1411	.0907	.0400	.0185	.0088
.5	.5000	.3333	.2368	.1739	.0991	.0591	.0360
.6	.6000	.4501	.3548	.2870	.1965	.1395	.1013
.7	.7000	.5766	.4923	.4286	.3359	.2706	.2218
.8	.8000	.7111	.6472	.5964	.5178	.4576	.4093
.9	.9000	.8526	.8172	.7878	.7401	.7014	.6687
1.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

$$\rho = \frac{q}{NQ} = \frac{\text{arrival rate, total}}{\text{(number of channels)(service rate per channel)}}$$

N = number of channels (service positions)

Solution

Step 1: $Q = \frac{60 \text{ min/hr}}{2.2 \text{ min/service}} = 27.3$ services per hour

Step 2: $q = (110 \text{ veh/45 min}) \times (60 \text{ min/hr}) = 146.7$ vehicles per hour

Step 3: $\rho = \frac{q}{NQ} = \frac{146.7}{(6)(27.3)} = 0.8956$

Step 4: $Q_M = 0.7303$ by interpolation between 0.8 and 0.9 for $N = 6$ from the table of Q_M values (see Table 8-11).

Step 5: The acceptable probability of the queue, M , being longer than the storage, 18 spaces in this example, was stated to be 5%. $P(x > M) = 0.05$, and:

$$M = \left[\frac{\ln 0.05 - \ln 0.7303}{\ln 0.8956} \right] - 1 = \left[\frac{-2.996 - (-0.314)}{-0.110} \right] - 1$$

$$= 24.38 - 1 = 23.38, \text{ say } 23 \text{ vehicles.}$$

The number of vehicles in the queue would be expected to exceed 23 more than 5% of the time. Since the site plan will accommodate a queue of 18 vehicles, the storage is not sufficient for the conditions stated.

It is important to realize that, for any $P(x > M)$ value, the queue length required increases very rapidly for values of $\rho > 0.85$ (see Figure 8-9). When $\rho > 1.0$, the solution is indeterminate and the queue length theoretically becomes infinite.

Analysis of Service Times. In many instances it is effective to demonstrate that a proposed design not only is inadequate to store vehicles waiting for service but will result in unacceptable wait times as well. The necessary equations are given in Table 8-10.

For purposes of checking computations it is convenient to know that the limit of $P(0)$, as the number of channels approaches infinity (in practical terms when $N > 10$), is:

$$\lim_{N \rightarrow \infty} P(0) = e^{-\lambda} \quad \text{where } \lambda = q/Q$$

Drive-In Bank Example: Under the site-development approval requirements, representatives of a bank presented a site plan for the construction of a new bank having three service positions. Information provided by bank officials and observations at other local banks provided the following data:

- Expected average arrival rate during the design hour (4:30–5:30 p.m. on Fridays) = 70 vehicles per hour (vph)
- Average service time per customer = 2.1 minutes

Does the site plan provide for sufficient storage to accommodate all vehicles arriving 95% of the time?

$$q = 70 \text{ vph arrival rate}$$

$$Q = \frac{60 \text{ minutes per hour}}{2.1 \text{ minutes per service}} = 28.6 \text{ vph service rate}$$

$$\rho = \frac{70}{(3)(28.6)} = 0.816$$

$$\frac{q}{Q} = \frac{70}{28.6} = 2.45$$

$$Q_M = 0.674 \text{ by interpolation from Table 8-11}$$

$$P(x > M) = 1.00 - 0.95 = 0.05$$

By Equation (8-9b)

$$M = \left[\frac{\ln 0.05 - \ln 0.674}{\ln 0.816} \right] - 1 = \left[\frac{-2.996 - (-0.396)}{-0.203} \right] - 1 = 11.8, \text{ say } 12$$

Thus, it would be necessary to store 12 vehicles, exclusive of the three service positions, in order to accommodate the arriving vehicles 95% of the time; or alternatively, to have waiting vehicles extending back into the adjacent street no more than 5% of the time between 4:30 and 5:30 p.m. on Fridays. Since the site plan provides for six spaces, the site plan as submitted is inadequate and should be disapproved.

A solution to this problem would be to increase the storage, or if this is not possible add a service position in order to reduce the average service time.

Addition of a service position would reduce the number of storage spaces needed to three (three storage plus four service positions)—assuming the same arrival rate and service time:

$$M = \left[\frac{\ln 0.05 - \ln 0.301}{\ln 0.612} \right] - 1 = 2.7, \text{ say } 3$$

A redesign to provide four service positions would have the additional benefit of substantially reducing the expected waiting time (from over 4 minutes to less than $\frac{1}{2}$ minute) for the bank customers using the drive-in windows:

With Three Service Positions:

$$q = 70 \text{ vph}$$

$$Q = 28.6 \text{ vph}$$

$$\frac{q}{Q} = 2.45$$

$$\rho = \frac{70}{(3)(28.6)} = 0.816$$

$$P(0) = \left[\frac{(2.45)^0}{0!} + \frac{(2.45)^1}{1!} + \frac{(2.45)^2}{2!} + \frac{(2.45)^3}{3! \left[1 - \left(\frac{2.45}{3} \right) \right]} \right]^{-1}$$

$$= [1 + 2.45 + 3.00 + 13.37]^{-1} = 0.0505$$

$$E(n) = \left[\frac{(0.816) \left(\frac{70}{28.6} \right)^3}{3!(1 - 0.816)^2} \right] 0.0505 = 2.97$$

$$E(n) = 2.97 + 70/28.6 = 5.42$$

$$E(t) = \frac{2.97}{70} = 0.0424 \text{ hours or 2.55 minutes}$$

$$E(w) = 0.0424 + \frac{1}{28.6} = 0.0774 \text{ hours or 4.64 minutes}$$

With Four Service Positions:

$$q = 70 \text{ vph}$$

$$Q = 28.6 \text{ vph}$$

$$\frac{q}{Q} = 2.45$$

$$\rho = \frac{70}{(4)(28.6)} = 0.612$$

$$P(0) = \left[\frac{(2.45)^0}{0!} + \frac{(2.45)^1}{1!} + \frac{(2.45)^2}{2!} + \frac{(2.45)^3}{3!} + \frac{(2.45)^4}{4! \left[1 - \left(\frac{2.45}{4} \right) \right]} \right]^{-1}$$

$$= 0.0783$$

$$E(n) = \left[\frac{(0.612)(2.45)^4}{4!(1 - 0.612)^2} \right] 0.0783 = 0.48$$

$$E(n) = 0.48 + 2.45 = 2.93$$

$$E(t) = 0.007 + \frac{1}{28.6} = 0.042 \text{ hours or 2.51 minutes}$$

$$E(w) = \frac{0.48}{70} = 0.007 \text{ hours or 0.41 minutes}$$

However, the service time would increase somewhat unless an additional teller were also added. Nevertheless, an increase to 2.5 minutes, or more, would still reduce the storage space required and result in better service (less time in the system). Besides, time spent being served is less irritating to the customer than an equal time spent waiting: