Traffic Impact Study

5540 Minor Lane

Prepared For:

Nicklies Development

Prepared By:

Adam Kirk Engineering
137 McClelland Springs Drive
Georgetown, KY 40324
859.421.2567
adam@adamkirkpe.com

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INTRODUCTION

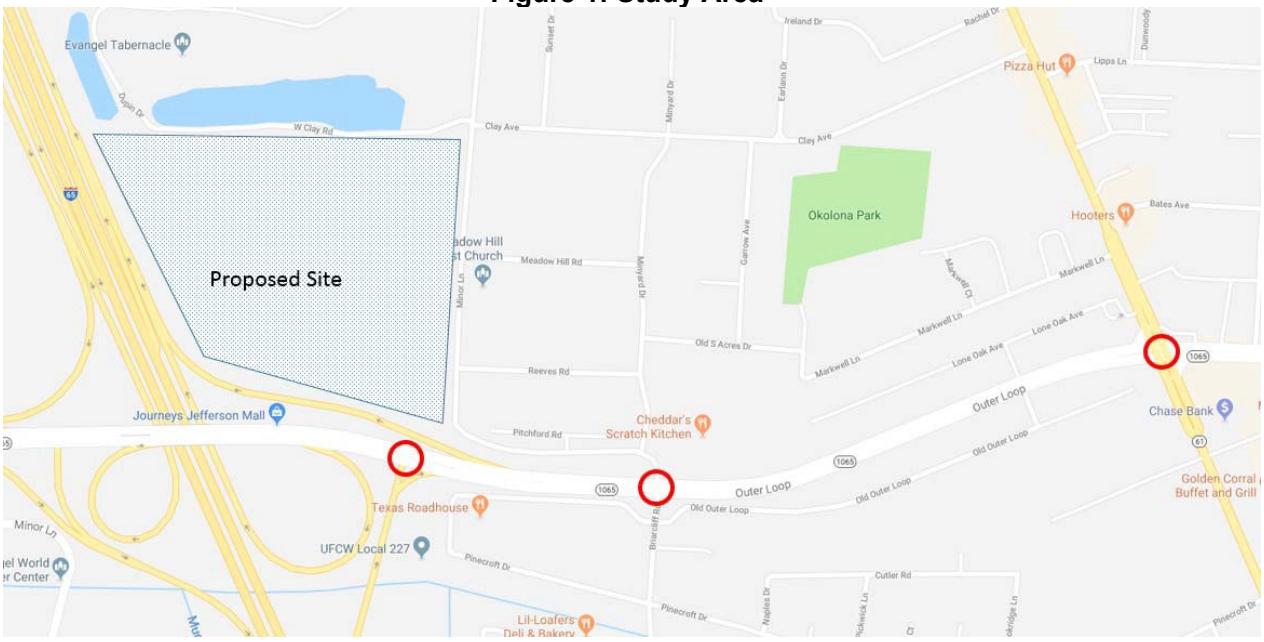
This study presents an update of the December 2018 Traffic Impact Study for 5540 Minor Lane prepared dated February 6, 2019 for the previously rezoned Logistics Airpark I (LAP I) located at 5540 Minor Lane to include the traffic impacts associated with the proposed next phase of development (Logistics Airpark II (LAPII)). Access to the proposed sites will be via the access drive proposed thru 5540 Minor Lane which intersects with Minor Lane. A location map is included in the attached figures. LAP I, which has been previously approved, provides 1.03 Million square feet of warehouse/distribution facility and supporting office space as well as 6 commercial outlots to be developed in the future. LAP II will construct an additional 1M square foot warehouse directly to the north of the previously approved development. The warehouse space is intended to serve just-in-time delivery for major manufacturers in the area, such as Ford Motor Company, or support package delivery distribution services. A site plan of the development is provided in **Appendix A**.

Access to the development is proposed to be provided via Minor Lane. This traffic study evaluates four intersections in the Vicinity of the development. the following intersections.

- Outerloop Road (KY 1065) at I-65 Northbound off-ramp
- Outerloop Road (KY 1065) at Minor Lane / Briarcliff Road
- Outerloop Road (KY 1065) at Preston Highway (KY 61)
- Minor Lane at Development Drive

Figure 1 shows the location of the proposed development and study intersections.

Figure 1: Study Area

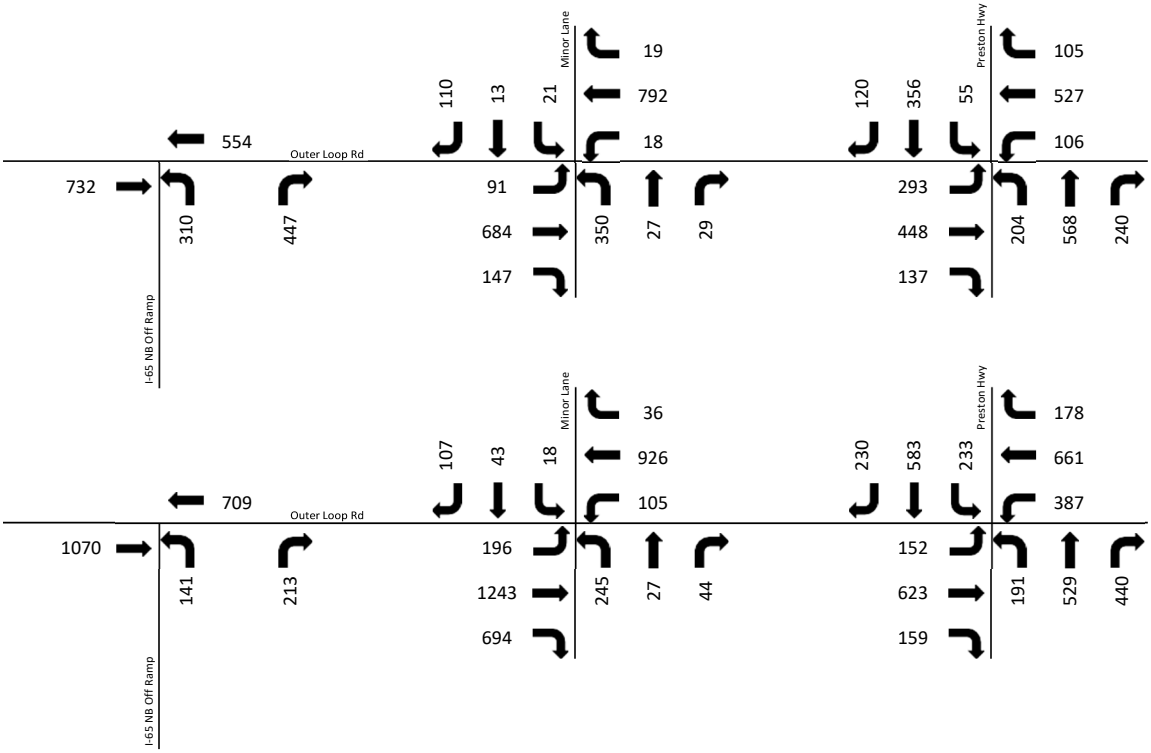


The methodology used for this study is based on the methodology used in the February 6, 2019 traffic study for the Logistics Airpark I development (Louisville Metro Planning & Design Case Number 18ZONE11049).

DATA COLLECTION

Twelve hour turning movement counts were collected for the 3 existing study intersections. Turning movement count data for the intersection of Outer Loop Road at Minor Lane was provided by Louisville Metro Public Works; intersection counts at the I-65 northbound off-ramp and Outer Loop at Preston Highway intersection were collected by Cummins Consulting Services. Raw traffic data is provided in **Appendix B**. **Figures 2a** and **2b** shows the existing AM and PM peak hour turning movement counts at these intersections.

Figures 2a and 2b; AM and PM Peak Hour Turning Movement Counts



As traffic data was collected on different days, volume imbalances exist between the Minor Lane intersection and I-65 and Preston Highway. These volumes were balanced by increasing corridor volumes to match the higher recorded volume. Adjusted traffic volumes are provided in **Appendix C**.

TRIP GENERATION

Trip generation for the proposed warehouse was estimated using the ITE Trip Generation Manual and validated through comparison of similar sites in Louisville KY. ITE Land Use Code 152 High-Cube Warehouse was chosen as the best approximate land use. According to the ITE Manual *"High Cube Warehouses are used for the storage of manufactured goods prior to their distribution to retails outlets…They are characterized by a small employment count due to a high level of mechanization, truck activities frequently outside of the peak hour of the adjacent street system, and good freeway access."* Based on this land use the 1.0 Million Square feet of warehousingis expected to generate 105 total trips (enter and exiting) during both the AM and PM peak hourof the Generator.

An independent count was conducted at the Amazon Station DKY1 at 7240 Global Drive in Louisville, KY, which provides similar uses as the proposed site. During the PM Peak hour of 4 p.m. to 5 p.m., 51 total vehicles were observed entering and exiting the site. The site in question is 177,750 s.f.. Extrapolating this trip generation to the proposed site with 1.0M square feet yields a total trip generation of **285 trips per hour**. This volume of traffic is in addition to the 294 trips per hour estimated for the Logistics Airpark I facility.

This trip rate is consistent with the trip generation used in the Logistics Airpark I and is consistent with recent studies for Fulfillment centers as documented in the ITE Journal Vol 89, Issue 7 Fulfillment Center Trip Generation, which calculated an average trip rate of 0.36 and 0.23 trips per 1000 s.f. during the AM and PM peak hours respectively as shown in the table.

Table 2 - Trip Generation Rate for Study Fulfillment Centers (June and December 2017 and April 2018 Counts).

Development	GSF	AM			PM		
Fulfillment Centers		Total Trips (Truck)		Trip Rates	Total Trips (Truck)		Trip Rates
Site B, Tracy (June 2017)	1,005,500	49	(14)	0.05	28	(7)	0.03
Site B, Tracy (December 2017)		56	(16)	0.06	36	(9)	0.04
Site B, Tracy (April 2018)		**101**	**(22)**	**0.10**	**69**	**(11)**	**0.07**
Site C, Tracy (June 2017)	403,560	25	(6)	0.06	17	(5)	0.04
Site C, Tracy (December 2017)		24	(6)	0.06	12	(4)	0.03
Site C, Tracy (April 2018)		**41**	**(20)**	**0.10**	**20**	**(7)**	**0.05**
Site E, Lathrop (April 2018)	440,000	**11**	**(5)**	**0.03**	**4**	**(4)**	**0.01**
Site F (December 2017)	390,280	40	(29)	0.10	13	(9)	0.03
Site F (April 2018)		**42**	**(17)**	**0.11**	**35**	**(21)**	**0.09**
Site G (December 2017)	1,225,680	**67**	**(6)**	**0.05**	16	(3)	0.01
Site G (April 2018)		59	(9)	0.05	**29**	**(12)**	**0.02**
Site H (December 2017)	283,603	**144**	**(35)**	**0.51**	**69**	**(11)**	**0.24**
Site A, Project Site (June 2017)	1,001,378	182	(11)	0.18	**206**	**(11)**	**0.21**
Site A, Project Site (May 2018)		**188**	**(13)**	**0.19**	180	(12)	0.18
Site I, Nearby Project Site (December 2017)	1,111,029	1,611	(39)	1.45	992	(58)	0.89
Avg. Trip rate	5,861,030	2640	(249)	0.36	1726	(199)	0.23
Average Trip Rate	4,750,001	**594**	**(118)**	**0.13**	**432**	**(77)**	**0.09**

Note: Average Trip Rate is calculated from highest trip data for each peak from June and December 2017 and April/May 2018 counts (shown in bold)

Trip generation for the proposed outlots was conducted in accordance with the ITE Trip Generation Manual, as applied by the KYTC Trip Generation Spreadsheet. The results of this analysis are provided in Tables 1a and 1b for the AM and PM peak hour, respectively. It is noted that the ITE Trip Generation manual does not provide pass-by or internal trip estimates for the AM peak period. However, due the uses proposed, such as gas stations and restaurants, have a high incidence of both types of trips during all periods. Therefore, PM peak period pass-by and internal capture rates were applied to the AM peak hour.

Internal trips between the proposed warehousing use and the outlots was not calculated or reduced from the total trip generation. It is also noted that the proposed outlot uses and warehousing use are not anticipated to have coinciding peak hours of operations. However, in order to provide a conservative estimate of traffic conditions after the proposed development, capacity analysis was conducted assuming peak traffic from both uses.

Table 1a: AM Peak Hour Trip Generation (Outlots)

AM PEAK HOUR TRIP GENERATION								
ITE Land Use Code	*Land Use Description*	*Ind. Var. (X)*	*Ind. Var. Units*	*Entering/ Exiting*	*Trips Generated*	*Internal Trips*	*Pass-by Trips*	*Primary Trips*
TOTAL	**ALL**	--	--	**Total entering**	324	62	115	147
		--	--	**Total exiting**	317	61	118	138
934	Fast-Food Restaurant with Drive-Through Window	3.5	1000 sf GFA	entering	98	18	25	54
				exiting	94	18	26	50
932	High-Turnover (Sit-Down) Restaurant	6	1000 sf GFA	entering	42	8	10	24
				exiting	39	8	12	20
881	Pharmacy/Drugstore with Drive-Through Window	13	1000 sf GFA	entering	50	9	20	21
				exiting	52	10	20	22
853	Convenience Market with Gasoline Pumps	8	Vehicle Fueling Positions	entering	69	13	36	20
				exiting	69	13	36	20
912	Drive-in Bank	4	1000 sf GFA	entering	65	13	24	29
				exiting	63	12	24	27

Table 1b: PM Peak Hour Trip Generation (Outlots)

PM PEAK HOUR TRIP GENERATION								
ITE Land Use Code	*Land Use Description*	*Ind. Var. (X)*	*Ind. Var. Units*	*Entering/ Exiting*	*Trips Generated*	*Internal Trips*	*Pass-by Trips*	*Primary Trips*
TOTAL	**ALL**	--	--	**Total entering**	388	74	139	175
		--	--	**Total exiting**	368	71	139	158
934	Fast-Food Restaurant with Drive-Through Window	3.5	1000 sf GFA	entering	85	16	22	47
				exiting	78	15	22	41
932	High-Turnover (Sit-Down) Restaurant	6	1000 sf GFA	entering	62	12	15	35
				exiting	51	10	15	26
881	Pharmacy/Drugstore with Drive-Through Window	13	1000 sf GFA	entering	55	10	22	23
				exiting	57	11	22	24
853	Convenience Market with Gasoline Pumps	8	Vehicle Fueling Positions	entering	77	15	40	22
				exiting	77	15	40	22
912	Drive-in Bank	4	1000 sf GFA	entering	109	21	40	48
				exiting	105	20	40	45

TRIP DISTRIBUTION METHODOLOGY

The location of the warehousing site in relation to I-65 will likely draw largely from a regional area.Therefore, trip distribution proportionately distributed traffic based upon the Average Daily Traffic(ADT) of surrounding roadways, so as to adequately attribute trips to I-65. Table 2 shows the ADT of roadways and the calculated origin/destination distribution.

Table 2: Warehousing Trip Distribution by ADT

Traffic Count Location	ADT	Origin / Destination %
I-65 NB (South of Outer Loop)	138,216	35%
I-65 NB (North of Outer Loop)	154,853	39%
Outer Loop Road (West of I-65)	29,500	7%
Outer Loop Road (East of Preston Hwy)	16,432	4%
Preston Highway (North of Outer Loop / Minor Lane)	26,290	7%
Preston Highway South of Outer Loop)	22,525	6%
Briarcliff Road	8,087	2%
Total	395,903	100%

Traffic generated by the proposed outlots was assumed to have a larger local influence, and therefore, traffic was distributed onto the roadway network based on frontage volumes along Outer Loop Road. This methodology produced an even 50 percent distribution to the east and tothe west.

Appendix C provides graphical identification of the trip distribution methodology for both uses.

CAPACITY ANALYSIS

Capacity analysis for the existing conditions and with the proposed Logistics Airpark II (LAP II) scenarios was completed for the study intersections during the AM and PM peak hours using HCM methodologies as applied by Synchro 9. All improvements proposed for the Logistics Airpark I were assumed to be in place. Signal timings were optimized over the existing conditions, though intersection cycle lengths were maintained. Table 3 summarizesthe LOS and delay for the existing and Full Build out scenarios. Full capacity analysis output is provided in **Appendix D**.

Table 3: Capacity Analysis Summary

Intersection	Approach	AM Peak Hour				PM Peak Hour			
		Existing		w/ LAP II		Existing		w/ LAP II	
		LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Outer Loop Road at I-65 NB Ramps	**Intersection**	**C**	**31.0**	**C**	**33.1**	**D**	**36.8**	**D**	**39.5**
	eastbound	C	33.8	D	35.2	D	35.1	D	41.3
	westbound	C	25.8	C	25.7	B	16.2	B	10.2
	northbound	C	31.9	D	36.3	E	72.4	E	77.4
Outer Loop Road at Minor Ln / Briarcliff Rd	**Intersection**	**D**	**39.3**	**D**	**45.1**	**D**	**38.5**	**D**	**36.7**
	eastbound	D	41.0	D	47.4	C	27.1	C	23.0
	westbound	B	15.6	C	25.0	D	37.2	C	28.1
	northbound	E	55.5	E	61.6	E	62.1	E	72.8
	southbound	E	67.0	E	61.6	E	69.8	E	74.9
Outer Loop Road at Preston Highway	**Intersection**	**D**	**45.4**	**D**	**46.0**	**E**	**59.4**	**D**	**52.5**
	eastbound	E	57.0	E	58.4	E	57.2	D	42.2
	westbound	C	27.1	C	28.1	C	34.4	C	33.1
	northbound	D	47.6	D	47.7	E	76.3	E	71.7
	southbound	D	46.9	D	46.9	E	73.8	E	68.4

As can be seen from the table, the proposed development does have an impact on traffic operations at the study corridor, however, proposed improvements to the intersection of Minor Lane and Outer Loop Road, mitigate impacts and result in a minimal increase in delay. **The only additional improvement identified necessary to accommodate the Logistics Airpark II traffic is the addition of a right turn overlap for the southbound right turn movement to allow southbound right turning traffic to move concurrently with the eastbound left turn phase.** This improvement may be installed with the current signal reconstruction project to support LAP I, or could be implemented prior to opening of LAP II.

Additionally, the new intersection created by the extension of Minor Lane into the proposed Development is shown to operate well as a two-way stop-controlled intersection, providing an averageof 17-19 seconds of delay on the stop controlled approach of Minor Lane from the north.

APPENDIX A: SITE PLAN

APPENDIX B: TURNING MOVEMENT COUNTS

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4661 Marlberry Place, Lexington, KY 40509

swcummins@windstream.net 859.361.2589

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File Name : I65NB_Ramp_at_KY1065_572278_09-07-2017
Site Code : Site 2
Start Date : 9/7/2017
Page No : 1

Groups Printed- Cars - Buses - Trucks

	KY1065 - Outer Loop From East			I65NB Off Ramp From South			KY1065 - Outer Loop From West				
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	102	102	53	31	84	0	163	0	163	349
07:15 AM	0	123	123	64	88	152	0	188	0	188	463
07:30 AM	0	155	155	100	168	268	0	202	0	202	625
07:45 AM	0	158	158	74	144	218	0	211	0	211	587
Total	0	538	538	291	431	722	0	764	0	764	2024
08:00 AM	0	118	118	72	47	119	1	131	0	132	369
08:15 AM	0	116	116	56	56	112	0	173	0	173	401
08:30 AM	0	103	103	75	47	122	1	176	0	177	402
08:45 AM	0	89	89	62	59	121	0	197	0	197	407
Total	0	426	426	265	209	474	2	677	0	679	1579
09:00 AM	0	75	75	35	46	81	1	203	0	204	360
09:15 AM	0	103	103	30	35	65	1	175	0	176	344
09:30 AM	0	91	91	33	42	75	0	176	0	176	342
09:45 AM	0	97	97	35	51	86	1	199	0	200	383
Total	0	366	366	133	174	307	3	753	0	756	1429
10:00 AM	0	103	103	25	45	70	0	181	0	181	354
10:15 AM	0	85	85	29	45	74	0	165	0	165	324
10:30 AM	0	108	108	34	48	82	0	203	0	203	393
10:45 AM	0	110	110	37	55	92	0	188	0	188	390
Total	0	406	406	125	193	318	0	737	0	737	1461
11:00 AM	0	116	116	33	43	76	0	234	0	234	426
11:15 AM	0	126	126	37	48	85	0	240	0	240	451
11:30 AM	0	131	131	41	55	96	0	270	0	270	497
11:45 AM	0	139	139	32	64	96	0	256	0	256	491
Total	0	512	512	143	210	353	0	1000	0	1000	1865
12:00 PM	0	115	115	26	58	84	3	282	0	285	484
12:15 PM	0	167	167	35	51	86	1	271	0	272	525
12:30 PM	0	163	163	34	44	78	0	272	0	272	513
12:45 PM	0	180	180	33	50	83	0	290	0	290	553
Total	0	625	625	128	203	331	4	1115	0	1119	2075
01:00 PM	0	199	199	39	68	107	0	237	0	237	543
01:15 PM	0	186	186	51	52	103	1	222	0	223	512
01:30 PM	0	156	156	62	73	135	1	217	0	218	509
01:45 PM	0	167	167	45	61	106	0	218	0	218	491
Total	0	708	708	197	254	451	2	894	0	896	2055
02:00 PM	0	211	211	51	55	106	2	253	0	255	572
02:15 PM	1	205	206	48	65	113	1	251	0	252	571
02:30 PM	0	209	209	33	38	71	0	312	0	312	592
02:45 PM	0	217	217	21	50	71	0	334	0	334	622
Total	1	842	843	153	208	361	3	1150	0	1153	2357
03:00 PM	0	228	228	25	27	52	0	330	0	330	610
03:15 PM	0	212	212	36	55	91	0	331	0	331	634
03:30 PM	0	206	206	36	83	119	2	360	0	362	687
03:45 PM	1	190	191	38	63	101	0	400	0	400	692
Total	1	836	837	135	228	363	2	1421	0	1423	2623
04:00 PM	0	187	187	36	62	98	0	339	0	339	624
04:15 PM	0	206	206	37	73	110	0	373	0	373	689
04:30 PM	0	199	199	31	87	118	0	416	0	416	733
04:45 PM	0	201	201	41	93	134	0	473	0	473	808
Total	0	793	793	145	315	460	0	1601	0	1601	2854

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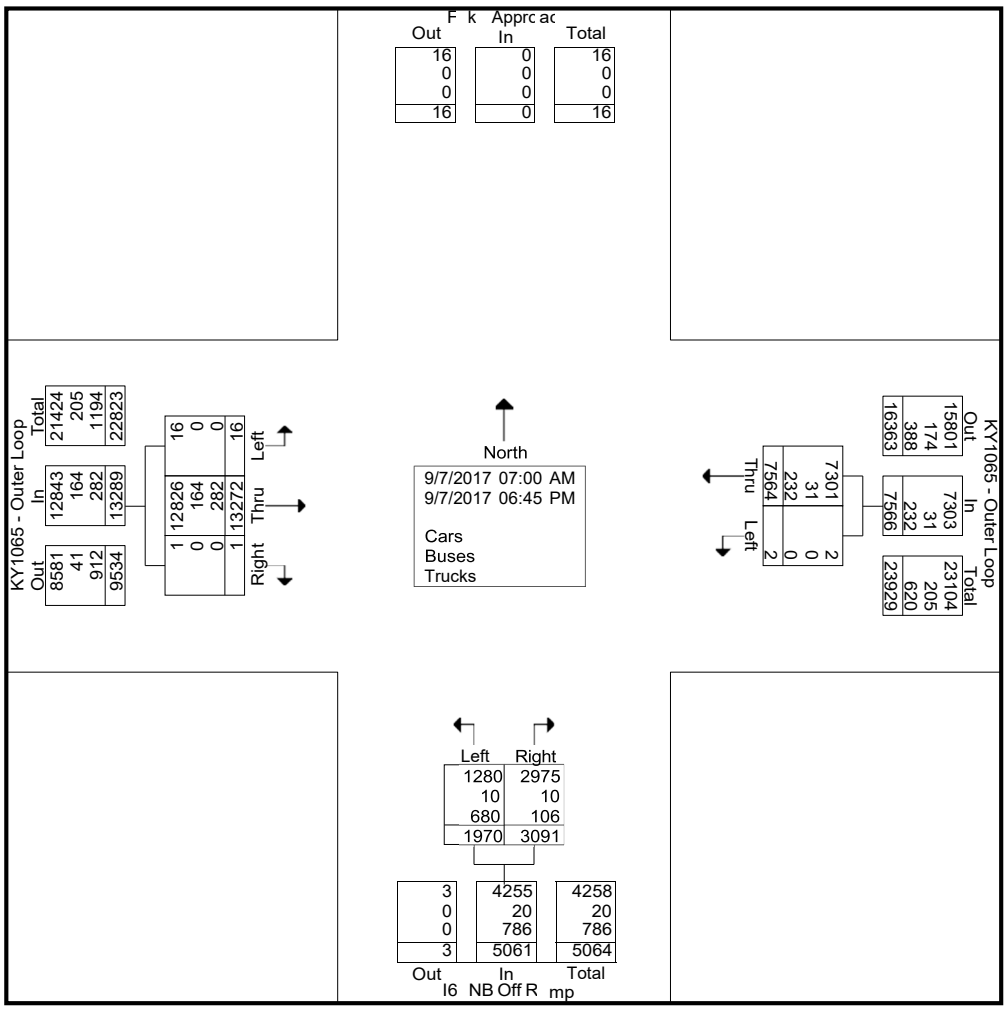
Groups Printed- Cars - Buses - Trucks

	KY1065 - Outer Loop From East			I65NB Off Ramp From South			KY1065 - Outer Loop From West				
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
05:00 PM	0	205	205	37	125	162	0	442	0	442	809
05:15 PM	0	207	207	32	107	139	0	478	0	478	824
05:30 PM	0	194	194	35	92	127	0	430	1	431	752
05:45 PM	0	157	157	49	87	136	0	427	0	427	720
Total	0	763	763	153	411	564	0	1777	1	1778	3105
06:00 PM	0	195	195	35	62	97	0	417	0	417	709
06:15 PM	0	184	184	25	70	95	0	337	0	337	616
06:30 PM	0	194	194	24	63	87	0	311	0	311	592
06:45 PM	0	176	176	18	60	78	0	318	0	318	572
Total	0	749	749	102	255	357	0	1383	0	1383	2489
Grand Total	2	7564	7566	1970	3091	5061	16	13272	1	13289	25916
Apprch %	0	100		38.9	61.1		0.1	99.9	0		
Total %	0	29.2	29.2	7.6	11.9	19.5	0.1	51.2	0	51.3	
Cars	2	7301	7303	1280	2975	4255	16	12826	1	12843	24401
% Cars	100	96.5	96.5	65	96.2	84.1	100	96.6	100	96.6	94.2
Buses	0	31	31	10	10	20	0	164	0	164	215
% Buses	0	0.4	0.4	0.5	0.3	0.4	0	1.2	0	1.2	0.8
Trucks	0	232	232	680	106	786	0	282	0	282	1300
% Trucks	0	3.1	3.1	34.5	3.4	15.5	0	2.1	0	2.1	5



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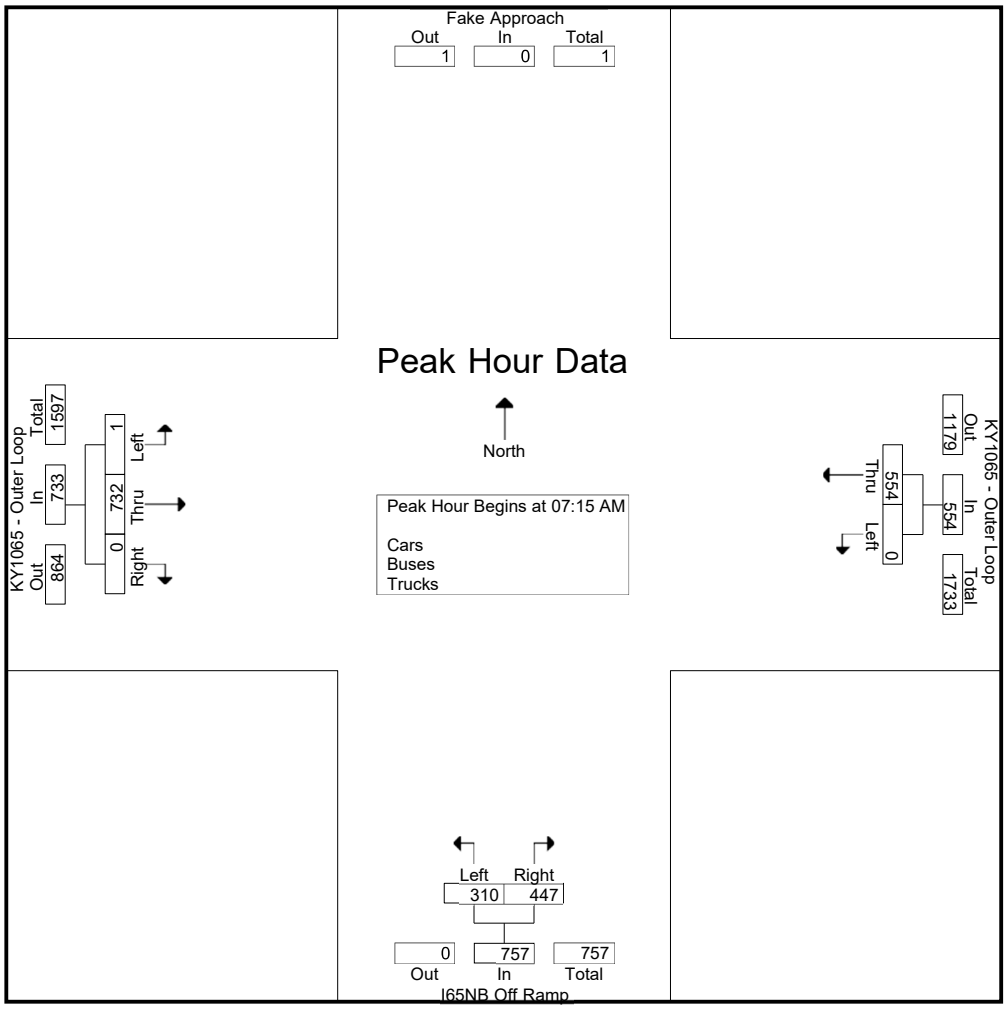
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 07:15 AM											
07:15 AM	0	123	123	64	88	152	0	188	0	188	463
07:30 AM	0	155	155	**100**	**168**	**268**	0	202	0	202	**625**
07:45 AM	0	**158**	**158**	74	144	218	0	**211**	0	**211**	587
08:00 AM	0	118	118	72	47	119	**1**	131	0	132	369
Total Volume	0	554	554	310	447	757	1	732	0	733	2044
% App. Total	0	100		41	59		0.1	99.9	0		
PHF	.000	.877	.877	.775	.665	.706	.250	.867	.000	.868	.818



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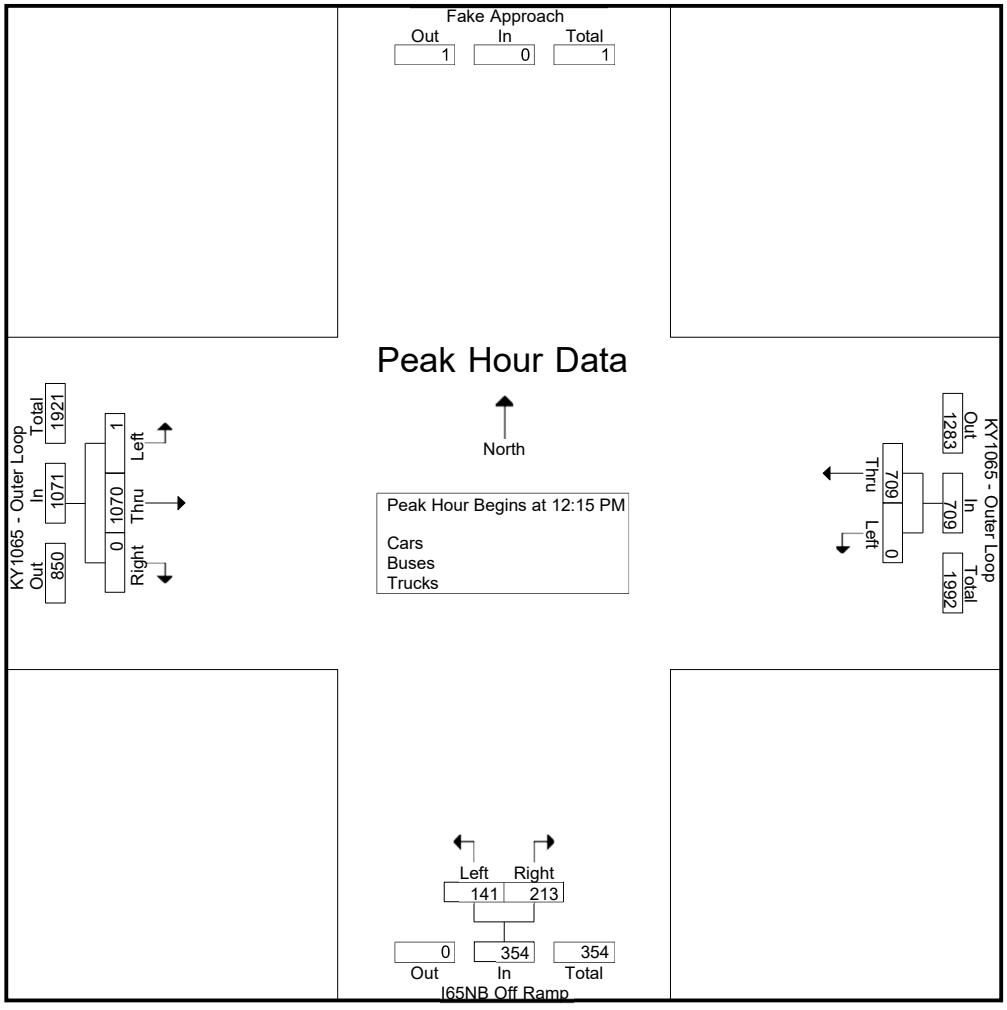
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 12:15 PM											
12:15 PM	0	167	167	35	51	86	**1**	271	0	272	525
12:30 PM	0	163	163	34	44	78	0	272	0	272	513
12:45 PM	0	180	180	33	50	83	0	**290**	0	**290**	**553**
01:00 PM	0	**199**	**199**	**39**	**68**	**107**	0	237	0	237	543
Total Volume	0	709	709	141	213	354	1	1070	0	1071	2134
% App. Total	0	100		39.8	60.2		0.1	99.9	0		
PHF	.000	.891	.891	.904	.783	.827	.250	.922	.000	.923	.965



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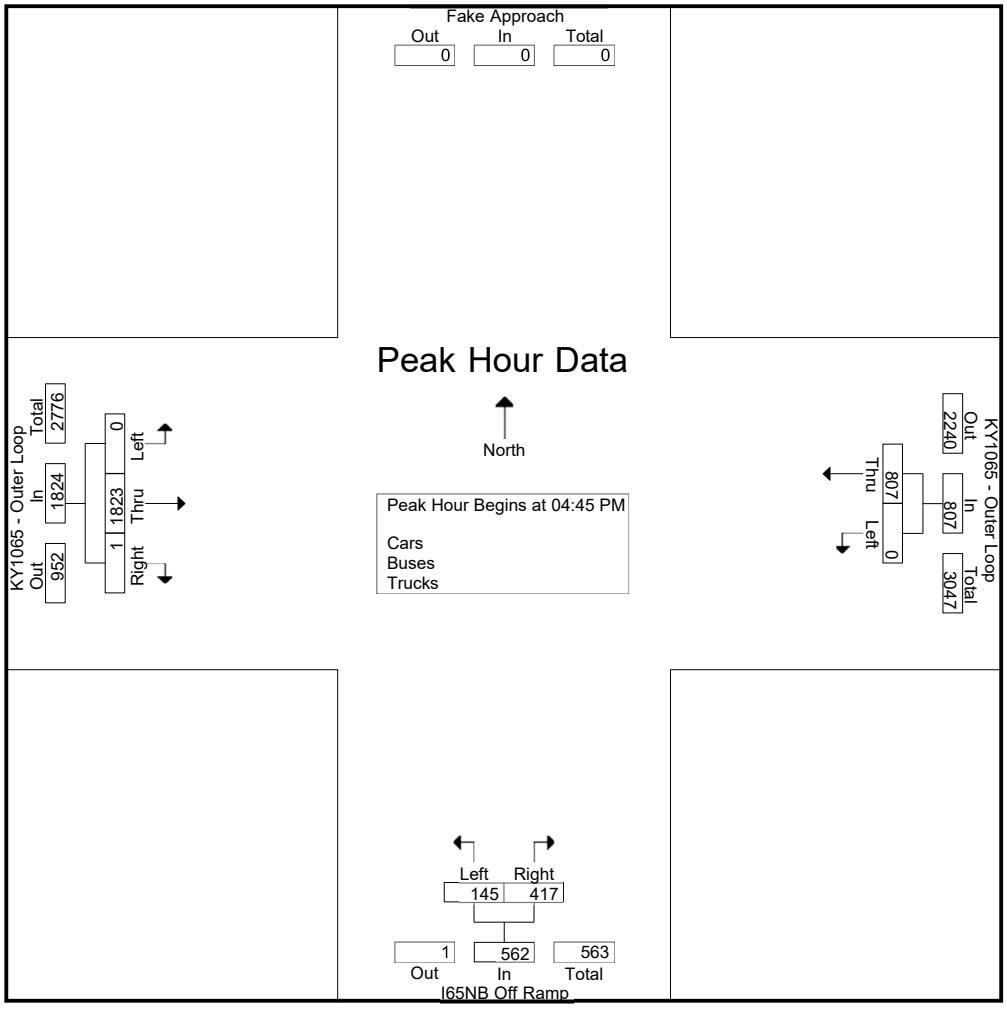
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 06:45 PM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 04:45 PM											
04:45 PM	0	201	201	**41**	93	134	0	473	0	473	808
05:00 PM	0	205	205	37	**125**	**162**	0	442	0	442	809
05:15 PM	0	**207**	**207**	32	107	139	0	**478**	0	**478**	**824**
05:30 PM	0	194	194	35	92	127	0	430	**1**	431	752
Total Volume	0	807	807	145	417	562	0	1823	1	1824	3193
% App. Total	0	100		25.8	74.2		0	99.9	0.1		
PHF	.000	.975	.975	.884	.834	.867	.000	.953	.250	.954	.969



Louisville Metro Government

Department of Public Works

Traffic Engineering & Operations

File Name : Outer Loop & Briarcliff Rd
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Groups Printed- cars - trucks - pedal bikes

	Minor Ln From North					Outer Loop From East					Briarcliff Rd From South					Outer Loop From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
07:00 AM	23	0	0	0	23	2	170	3	0	175	12	2	110	0	124	29	99	7	0	135	457
07:15 AM	17	4	5	0	26	1	212	4	0	217	7	3	86	0	96	35	165	26	0	226	565
07:30 AM	37	3	6	0	46	4	241	5	0	250	6	8	108	0	122	42	197	26	0	265	683
07:45 AM	38	3	6	0	47	11	186	4	0	201	10	9	80	0	99	36	172	31	0	239	586
Total	115	10	17	0	142	18	809	16	0	843	35	22	384	0	441	142	633	90	0	865	2291
08:00 AM	18	3	4	0	25	3	153	5	0	161	6	7	76	0	89	34	150	8	0	192	467
08:15 AM	29	3	1	0	33	3	134	5	0	142	7	1	86	0	94	34	156	5	0	195	464
08:30 AM	17	1	1	0	19	1	175	2	0	178	15	2	77	0	94	44	184	12	0	240	531
08:45 AM	22	2	1	0	25	3	119	2	0	124	7	6	66	0	79	41	191	16	0	248	476
Total	86	9	7	0	102	10	581	14	0	605	35	16	305	0	356	153	681	41	0	875	1938
09:00 AM	14	2	6	0	22	0	121	7	0	128	9	0	65	0	74	52	180	10	0	242	466
09:15 AM	20	1	2	0	23	4	124	3	0	131	5	3	58	0	66	34	159	10	0	203	423
09:30 AM	12	2	1	0	15	3	146	2	0	151	4	2	66	0	72	34	167	9	0	210	448
09:45 AM	9	2	0	0	11	1	123	7	0	131	7	2	60	0	69	31	199	11	0	241	452
Total	55	7	9	0	71	8	514	19	0	541	25	7	249	0	281	151	705	40	0	896	1789
10:00 AM	18	2	2	0	22	2	148	2	0	152	9	1	46	0	56	23	163	12	0	198	428
10:15 AM	17	1	1	0	19	0	142	1	0	143	6	2	50	0	58	24	184	8	0	216	436
10:30 AM	15	2	1	0	18	0	124	6	0	130	10	4	47	0	61	19	166	18	0	203	412
10:45 AM	6	2	0	0	8	5	148	7	0	160	7	3	40	0	50	46	195	16	0	257	475
Total	56	7	4	0	67	7	562	16	0	585	32	10	183	0	225	112	708	54	0	874	1751
11:00 AM	13	2	0	0	15	13	172	8	0	193	11	2	31	0	44	39	208	13	0	260	512
11:15 AM	10	3	1	0	14	11	158	6	0	175	8	1	38	0	47	41	211	28	0	280	516
11:30 AM	8	2	1	0	11	9	184	10	0	203	8	7	45	0	60	45	246	38	0	329	603
11:45 AM	19	3	0	0	22	2	183	11	0	196	7	5	37	0	49	28	270	19	0	317	584
Total	50	10	2	0	62	35	697	35	0	767	34	15	151	0	200	153	935	98	0	1186	2215
12:00 PM	19	8	2	0	29	10	208	10	0	228	6	0	36	0	42	45	263	22	0	330	629
12:15 PM	36	5	3	0	44	10	214	10	0	234	15	0	38	0	53	38	221	17	0	276	607
12:30 PM	27	4	6	0	37	12	255	6	0	273	10	0	46	0	56	44	229	29	0	302	668
12:45 PM	38	2	10	0	50	13	233	11	0	257	6	7	39	0	52	36	222	20	0	278	637
Total	120	19	21	0	160	45	910	37	0	992	37	7	159	0	203	163	935	88	0	1186	2541
01:00 PM	36	5	18	0	59	9	227	8	0	244	7	0	43	0	50	47	183	21	0	251	604
01:15 PM	16	7	9	0	32	6	235	7	0	248	9	5	52	0	66	32	233	16	0	281	627
01:30 PM	23	4	11	0	38	2	262	8	0	272	3	0	60	0	63	32	218	17	0	267	640
01:45 PM	23	7	11	0	41	6	229	9	0	244	7	3	59	0	69	52	201	17	0	270	624
Total	98	23	49	0	170	23	953	32	0	1008	26	8	214	0	248	163	835	71	0	1069	2495

Louisville Metro Government

Department of Public Works

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Groups Printed- cars - trucks - pedal bikes

	Minor Ln From North					Outer Loop From East					Briarcliff Rd From South					Outer Loop From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
02:00 PM	22	7	3	0	32	7	253	5	0	265	12	3	46	0	61	46	210	14	0	270	628
02:15 PM	20	6	6	0	32	3	236	9	0	248	3	3	41	0	47	64	217	22	0	303	630
02:30 PM	25	5	6	0	36	7	270	14	0	291	8	0	40	0	48	74	245	30	0	349	724
02:45 PM	39	10	10	0	59	6	216	14	0	236	12	8	41	0	61	74	264	31	0	369	725
Total	106	28	25	0	159	23	975	42	0	1040	35	14	168	0	217	258	936	97	0	1291	2707
03:00 PM	44	8	7	0	59	5	272	9	0	286	6	4	68	0	78	65	289	24	0	378	801
03:15 PM	30	12	4	0	46	5	244	8	0	257	11	2	53	0	66	94	259	39	0	392	761
03:30 PM	26	10	9	0	45	5	256	9	0	270	9	5	50	0	64	99	303	25	0	427	806
03:45 PM	26	6	7	0	39	5	230	27	0	262	8	2	48	0	58	109	256	26	0	391	750
Total	126	36	27	0	189	20	1002	53	0	1075	34	13	219	0	266	367	1107	114	0	1588	3118
04:00 PM	19	6	3	0	28	6	254	16	0	276	11	4	59	0	74	113	279	32	0	424	802
04:15 PM	29	7	6	0	42	5	220	25	0	250	11	6	43	0	60	134	273	29	0	436	788
04:30 PM	29	16	5	0	50	6	221	23	0	250	10	4	43	0	57	154	312	42	0	508	865
04:45 PM	26	10	3	0	39	15	217	27	0	259	11	6	43	0	60	165	288	57	0	510	868
Total	103	39	17	0	159	32	912	91	0	1035	43	20	188	0	251	566	1152	160	0	1878	3323
05:00 PM	29	9	2	0	40	12	238	24	0	274	12	4	62	0	78	191	313	71	0	575	967
05:15 PM	22	10	5	0	37	7	222	21	0	250	8	7	60	0	75	207	324	38	0	569	931
05:30 PM	30	13	8	0	51	10	234	34	0	278	8	5	56	0	69	146	316	52	0	514	912
05:45 PM	26	11	3	0	40	7	232	26	0	265	16	11	67	0	94	150	290	35	0	475	874
Total	107	43	18	0	168	36	926	105	0	1067	44	27	245	0	316	694	1243	196	0	2133	3684
06:00 PM	30	6	11	0	47	7	206	14	0	227	14	6	50	0	70	118	261	37	0	416	760
06:15 PM	24	8	4	0	36	7	240	19	0	266	8	3	55	0	66	93	193	30	0	316	684
06:30 PM	28	6	4	0	38	8	224	14	0	246	11	6	38	0	55	73	199	30	0	302	641
06:45 PM	28	3	2	0	33	9	189	9	0	207	13	1	43	0	57	77	220	40	0	337	634
Total	110	23	21	0	154	31	859	56	0	946	46	16	186	0	248	361	873	137	0	1371	2719
Grand Total	1132	254	217	0	1603	288	9700	516	0	10504	426	175	2651	0	3252	3283	10743	1186	0	15212	30571
Apprch %	70.6	15.8	13.5	0		2.7	92.3	4.9	0		13.1	5.4	81.5	0		21.6	70.6	7.8	0		
Total %	3.7	0.8	0.7	0	5.2	0.9	31.7	1.7	0	34.4	1.4	0.6	8.7	0	10.6	10.7	35.1	3.9	0	49.8	
cars	1108	246	211	0	1565	285	9361	499	0	10145	414	168	2564	0	3146	3186	10409	1159	0	14754	29610
% cars	97.9	96.9	97.2	0	97.6	99	96.5	96.7	0	96.6	97.2	96	96.7	0	96.7	97	96.9	97.7	0	97	96.9
trucks	24	8	6	0	38	3	339	17	0	359	12	7	87	0	106	97	334	27	0	458	961
% trucks	2.1	3.1	2.8	0	2.4	1	3.5	3.3	0	3.4	2.8	4	3.3	0	3.3	3	3.1	2.3	0	3	3.1
pedal bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% pedal bikes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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	Minor Ln From North					Outer Loop From East					Briarcliff Rd From South					Outer Loop From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	17	**4**	5	0	26	1	212	4	0	217	7	3	86	0	96	35	165	26	0	226	565
07:30 AM	37	3	**6**	0	46	4	**241**	**5**	0	**250**	6	8	**108**	0	**122**	**42**	**197**	26	0	**265**	**683**
07:45 AM	**38**	3	6	0	**47**	**11**	186	4	0	201	**10**	**9**	80	0	99	36	172	**31**	0	239	586
08:00 AM	18	3	4	0	25	3	153	5	0	161	6	7	76	0	89	34	150	8	0	192	467
Total Volume	110	13	21	0	144	19	792	18	0	829	29	27	350	0	406	147	684	91	0	922	2301
% App. Total	76.4	9	14.6	0		2.3	95.5	2.2	0		7.1	6.7	86.2	0		15.9	74.2	9.9	0		
PHF	.724	.813	.875	.000	.766	.432	.822	.900	.000	.829	.725	.750	.810	.000	.832	.875	.868	.734	.000	.870	.842
Peak Hour Analysis From 09:30 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:00 AM																					
11:00 AM	13	2	0	0	15	**13**	172	8	0	193	**11**	2	31	0	44	39	208	13	0	260	512
11:15 AM	10	**3**	**1**	0	14	11	158	6	0	175	8	1	38	0	47	41	211	28	0	280	516
11:30 AM	8	2	1	0	11	9	**184**	10	0	**203**	8	**7**	**45**	0	**60**	**45**	246	**38**	0	**329**	**603**
11:45 AM	**19**	3	0	0	**22**	2	183	**11**	0	196	7	5	37	0	49	28	**270**	19	0	317	584
Total Volume	50	10	2	0	62	35	697	35	0	767	34	15	151	0	200	153	935	98	0	1186	2215
% App. Total	80.6	16.1	3.2	0		4.6	90.9	4.6	0		17	7.5	75.5	0		12.9	78.8	8.3	0		
PHF	.658	.833	.500	.000	.705	.673	.947	.795	.000	.945	.773	.536	.839	.000	.833	.850	.866	.645	.000	.901	.918
Peak Hour Analysis From 12:00 PM to 02:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:00 PM																					
12:00 PM	19	**8**	2	0	29	10	208	10	0	228	6	0	36	0	42	**45**	**263**	22	0	**330**	629
12:15 PM	36	5	3	0	44	10	214	10	0	234	**15**	0	38	0	53	38	221	17	0	276	607
12:30 PM	27	4	6	0	37	12	**255**	6	0	**273**	10	0	**46**	0	**56**	44	229	**29**	0	302	**668**
12:45 PM	**38**	2	**10**	0	**50**	**13**	233	**11**	0	257	6	**7**	39	0	52	36	222	20	0	278	637
Total Volume	120	19	21	0	160	45	910	37	0	992	37	7	159	0	203	163	935	88	0	1186	2541
% App. Total	75	11.9	13.1	0		4.5	91.7	3.7	0		18.2	3.4	78.3	0		13.7	78.8	7.4	0		
PHF	.789	.594	.525	.000	.800	.865	.892	.841	.000	.908	.617	.250	.864	.000	.906	.906	.889	.759	.000	.898	.951

Louisville Metro Government

Department of Public Works

Traffic Engineering & Operations

File Name : Outer Loop & Briarcliff Rd
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	Minor Ln From North					Outer Loop From East					Briarcliff Rd From South					Outer Loop From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 02:30 PM to 04:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	19	6	3	0	28	6	**254**	16	0	**276**	**11**	4	**59**	0	**74**	113	279	32	0	424	802
04:15 PM	**29**	7	**6**	0	42	5	220	25	0	250	11	**6**	43	0	60	134	273	29	0	436	788
04:30 PM	29	**16**	5	0	**50**	6	221	23	0	250	10	4	43	0	57	154	**312**	42	0	508	865
04:45 PM	26	10	3	0	39	**15**	217	**27**	0	259	11	6	43	0	60	**165**	288	**57**	0	**510**	**868**
Total Volume	103	39	17	0	159	32	912	91	0	1035	43	20	188	0	251	566	1152	160	0	1878	3323
% App. Total	64.8	24.5	10.7	0		3.1	88.1	8.8	0		17.1	8	74.9	0		30.1	61.3	8.5	0		
PHF	.888	.609	.708	.000	.795	.533	.898	.843	.000	.938	.977	.833	.797	.000	.848	.858	.923	.702	.000	.921	.957
Peak Hour Analysis From 05:00 PM to 06:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	29	9	2	0	40	**12**	**238**	24	0	274	12	4	62	0	78	191	313	**71**	0	**575**	**967**
05:15 PM	22	10	5	0	37	7	222	21	0	250	8	7	60	0	75	**207**	**324**	38	0	569	931
05:30 PM	**30**	**13**	**8**	0	**51**	10	234	**34**	0	**278**	8	5	56	0	69	146	316	52	0	514	912
05:45 PM	26	11	3	0	40	7	232	26	0	265	**16**	**11**	**67**	0	**94**	150	290	35	0	475	874
Total Volume	107	43	18	0	168	36	926	105	0	1067	44	27	245	0	316	694	1243	196	0	2133	3684
% App. Total	63.7	25.6	10.7	0		3.4	86.8	9.8	0		13.9	8.5	77.5	0		32.5	58.3	9.2	0		
PHF	.892	.827	.563	.000	.824	.750	.973	.772	.000	.960	.688	.614	.914	.000	.840	.838	.959	.690	.000	.927	.952

Cummins Consulting Services

4661 Marlberry Place, Lexington, KY 40509

swcummins@windstream.net 859.361.2589

"simplifying Data Collection since 2004"

Dry - 75 Degrees
Schools in Session

File Name : KY61_at_KY1065_572277_09-07-2017
Site Code : Site 1
Start Date : 9/7/2017
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Groups Printed- Cars - Buses - Trucks - Pedestrians

	KY61 - Preston Hwy From North					KY1065 - Outer Loop From East					KY61 - Preston Hwy From South					KY1065 - Outer Loop From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	19	75	21	0	115	23	130	16	2	171	43	117	43	0	203	33	95	22	0	150	639
07:15 AM	11	130	31	0	172	24	138	16	0	178	56	150	67	0	273	66	96	42	0	204	827
07:30 AM	10	83	34	0	127	26	148	32	0	206	64	145	67	0	276	85	122	37	0	244	853
07:45 AM	15	68	34	0	117	33	111	41	0	185	41	156	63	0	260	109	135	36	1	281	843
Total	55	356	120	0	531	106	527	105	2	740	204	568	240	0	1012	293	448	137	1	879	3162
08:00 AM	12	51	27	0	90	20	107	20	2	149	34	127	44	0	205	54	84	34	0	172	616
08:15 AM	20	67	29	1	117	34	106	15	2	157	36	123	48	0	207	44	87	34	0	165	646
08:30 AM	28	68	30	0	126	39	95	25	3	162	55	136	52	1	244	37	106	30	0	173	705
08:45 AM	37	79	21	1	138	40	78	26	0	144	28	124	73	1	226	62	107	42	0	211	719
Total	97	265	107	2	471	133	386	86	7	612	153	510	217	2	882	197	384	140	0	721	2686
09:00 AM	21	61	24	0	106	32	72	20	0	124	26	114	68	0	208	32	115	44	0	191	629
09:15 AM	21	79	31	0	131	39	82	17	0	138	42	111	65	0	218	29	106	40	0	175	662
09:30 AM	32	70	25	0	127	50	92	25	0	167	35	121	80	0	236	27	116	34	0	177	707
09:45 AM	35	88	26	0	149	71	79	21	0	171	30	105	87	0	222	28	139	32	1	200	742
Total	109	298	106	0	513	192	325	83	0	600	133	451	300	0	884	116	476	150	1	743	2740
10:00 AM	37	91	37	0	165	51	78	26	0	155	37	85	74	0	196	23	117	46	0	186	702
10:15 AM	29	86	26	0	141	63	87	23	2	175	34	82	70	0	186	27	130	37	0	194	696
10:30 AM	43	110	31	0	184	76	103	31	0	210	26	97	72	0	195	26	157	38	0	221	810
10:45 AM	35	125	39	0	199	58	84	34	1	177	37	124	98	0	259	43	103	44	1	191	826
Total	144	412	133	0	689	248	352	114	3	717	134	388	314	0	836	119	507	165	1	792	3034
11:00 AM	51	107	41	2	201	64	105	32	1	202	46	123	96	1	266	38	146	41	3	228	897
11:15 AM	42	119	48	0	209	85	105	30	0	220	38	127	109	1	275	42	142	39	0	223	927
11:30 AM	47	117	40	0	204	83	114	43	0	240	37	121	92	1	251	39	157	54	0	250	945
11:45 AM	55	134	46	2	237	87	114	30	3	234	45	79	101	0	225	28	167	49	0	244	940
Total	195	477	175	4	851	319	438	135	4	896	166	450	398	3	1017	147	612	183	3	945	3709
12:00 PM	62	152	42	0	256	82	133	32	1	248	48	163	97	0	308	51	178	39	1	269	1081
12:15 PM	49	138	52	0	239	80	145	46	1	272	55	140	93	0	288	41	168	32	1	242	1041
12:30 PM	73	145	58	0	276	108	162	40	0	310	46	141	117	0	304	41	158	32	0	231	1121
12:45 PM	44	149	56	2	251	108	167	36	0	311	41	134	108	0	283	35	181	47	0	263	1108
Total	228	584	208	2	1022	378	607	154	2	1141	190	578	415	0	1183	168	685	150	2	1005	4351
01:00 PM	59	136	62	0	257	84	171	48	0	303	46	114	96	0	256	36	158	35	0	229	1045
01:15 PM	57	153	54	0	264	87	161	54	1	303	58	140	119	1	318	40	126	45	2	213	1098
01:30 PM	40	139	58	0	237	96	165	31	1	293	51	131	95	0	277	33	142	49	2	226	1033
01:45 PM	52	151	42	0	245	96	152	34	0	282	40	109	79	0	228	51	125	37	0	213	968
Total	208	579	216	0	1003	363	649	167	2	1181	195	494	389	1	1079	160	551	166	4	881	4144
02:00 PM	47	150	75	0	272	86	186	40	3	315	62	139	91	1	293	48	135	60	0	243	1123
02:15 PM	33	143	53	0	229	92	152	24	0	268	43	142	90	1	276	51	151	53	0	255	1028
02:30 PM	50	146	90	0	286	94	171	34	0	299	54	164	112	0	330	37	176	39	2	254	1169
02:45 PM	48	148	69	1	266	85	174	33	0	292	47	146	101	0	294	38	183	45	1	267	1119
Total	178	587	287	1	1053	357	683	131	3	1174	206	591	394	2	1193	174	645	197	3	1019	4439
03:00 PM	41	147	73	1	262	94	196	32	1	323	43	125	124	1	293	36	175	42	1	254	1132
03:15 PM	58	163	55	0	276	87	165	39	2	293	56	130	92	2	280	43	181	54	0	278	1127
03:30 PM	49	186	67	1	303	105	131	32	0	268	50	122	82	0	254	61	173	53	2	289	1114
03:45 PM	57	158	66	0	281	82	168	39	8	297	50	129	83	3	265	59	181	64	1	305	1148
Total	205	654	261	2	1122	368	660	142	11	1181	199	506	381	6	1092	199	710	213	4	1126	4521
04:00 PM	49	199	67	0	315	112	154	36	0	302	47	146	101	0	294	49	177	58	0	284	1195
04:15 PM	43	184	76	0	303	95	160	36	0	291	44	162	103	0	309	52	202	63	1	318	1221
04:30 PM	69	181	74	1	325	90	180	26	2	298	38	139	87	3	267	39	222	65	1	327	1217
04:45 PM	50	201	61	0	312	121	142	26	1	290	50	165	110	0	325	48	258	84	0	390	1317
Total	211	765	278	1	1255	418	636	124	3	1181	179	612	401	3	1195	188	859	270	2	1319	4950

Cummins Consulting Services

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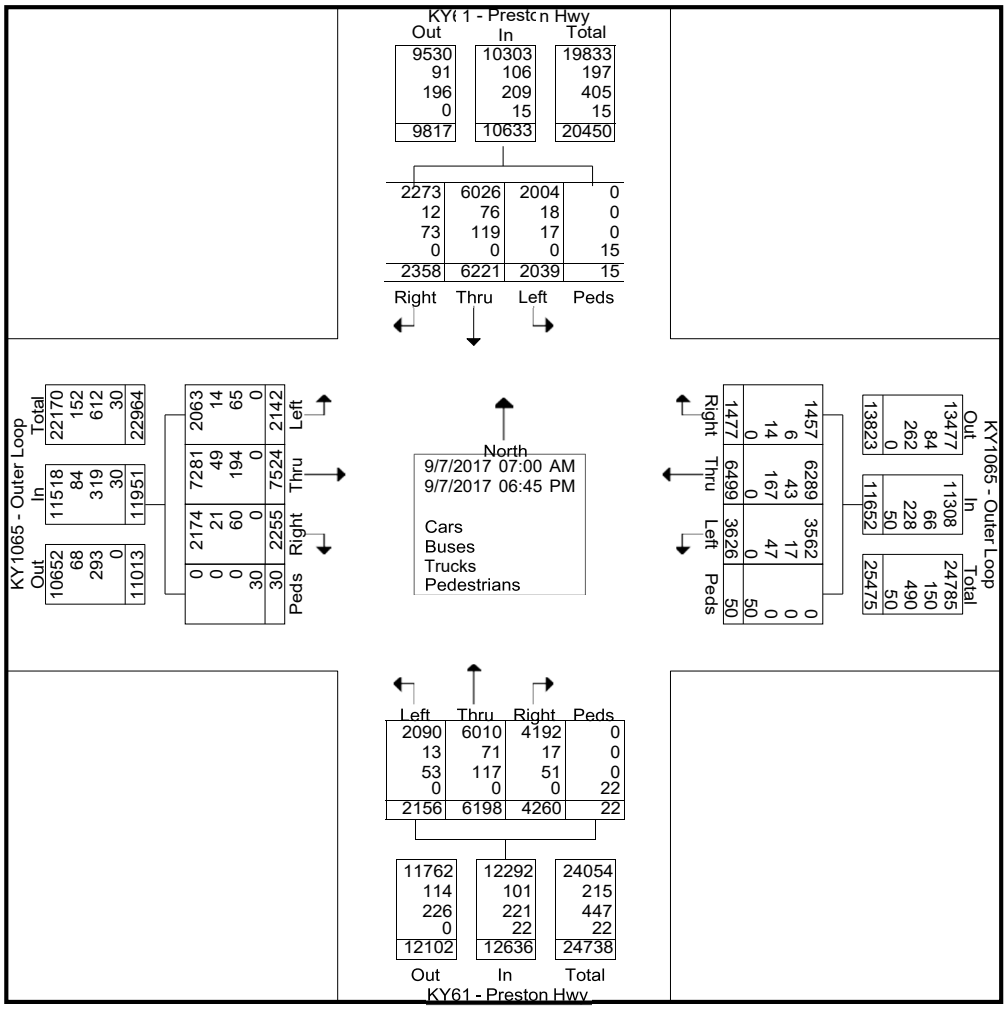
swcummins@windstream.net 859.361.2589

"simplifying Data Collection since 2004"

File Name : KY61_at_KY1065_572277_09-07-2017
Site Code : Site 1
Start Date : 9/7/2017

Groups Printed- Cars - Buses - Trucks - Pedestrians

	KY61 - Preston Hwy From North					KY1065 - Outer Loop From East					KY61 - Preston Hwy From South					KY1065 - Outer Loop From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
05:00 PM	63	142	58	0	263	91	177	23	3	294	55	115	107	0	277	51	246	74	0	371	1205
05:15 PM	47	136	67	3	253	86	152	30	4	272	57	165	111	2	335	61	249	62	0	372	1232
05:30 PM	47	177	53	0	277	134	157	30	1	322	46	173	104	1	324	48	213	90	2	353	1276
05:45 PM	67	163	57	0	287	83	142	24	1	250	49	115	97	0	261	27	245	90	0	362	1160
Total	224	618	235	3	1080	394	628	107	9	1138	207	568	419	3	1197	187	953	316	2	1458	4873
06:00 PM	56	196	66	0	318	106	155	31	0	292	31	130	104	0	265	59	157	51	0	267	1142
06:15 PM	39	177	59	0	275	102	145	30	2	279	55	113	93	1	262	44	220	39	3	306	1122
06:30 PM	41	119	53	0	213	68	166	33	2	269	58	125	99	1	283	57	182	40	2	281	1046
06:45 PM	49	134	54	0	237	74	142	35	0	251	46	114	96	0	256	34	135	38	2	209	953
Total	185	626	232	0	1043	350	608	129	4	1091	190	482	392	2	1066	194	694	168	7	1063	4263
Grand Total	2039	6221	2358	15	10633	3626	6499	1477	50	11652	2156	6198	4260	22	12636	2142	7524	2255	30	11951	46872
Apprch %	19.2	58.5	22.2	0.1		31.1	55.8	12.7	0.4		17.1	49.1	33.7	0.2		17.9	63	18.9	0.3		
Total %	4.4	13.3	5	0	22.7	7.7	13.9	3.2	0.1	24.9	4.6	13.2	9.1	0	27	4.6	16.1	4.8	0.1	25.5	
Cars	2004	6026	2273	0	10303	3562	6289	1457	0	11308	2090	6010	4192	0	12292	2063	7281	2174	0	11518	45421
% Cars	98.3	96.9	96.4	0	96.9	98.2	96.8	98.6	0	97	96.9	97	98.4	0	97.3	96.3	96.8	96.4	0	96.4	96.9
Buses	18	76	12	0	106	17	43	6	0	66	13	71	17	0	101	14	49	21	0	84	357
% Buses	0.9	1.2	0.5	0	1	0.5	0.7	0.4	0	0.6	0.6	1.1	0.4	0	0.8	0.7	0.7	0.9	0	0.7	0.8
Trucks	17	119	73	0	209	47	167	14	0	228	53	117	51	0	221	65	194	60	0	319	977
% Trucks	0.8	1.9	3.1	0	2	1.3	2.6	0.9	0	2	2.5	1.9	1.2	0	1.7	3	2.6	2.7	0	2.7	2.1
Pedestrians	0	0	0	15	15	0	0	0	50	50	0	0	0	22	22	0	0	0	30	30	117
% Pedestrians	0	0	0	100	0.1	0	0	0	100	0.4	0	0	0	100	0.2	0	0	0	100	0.3	0.2



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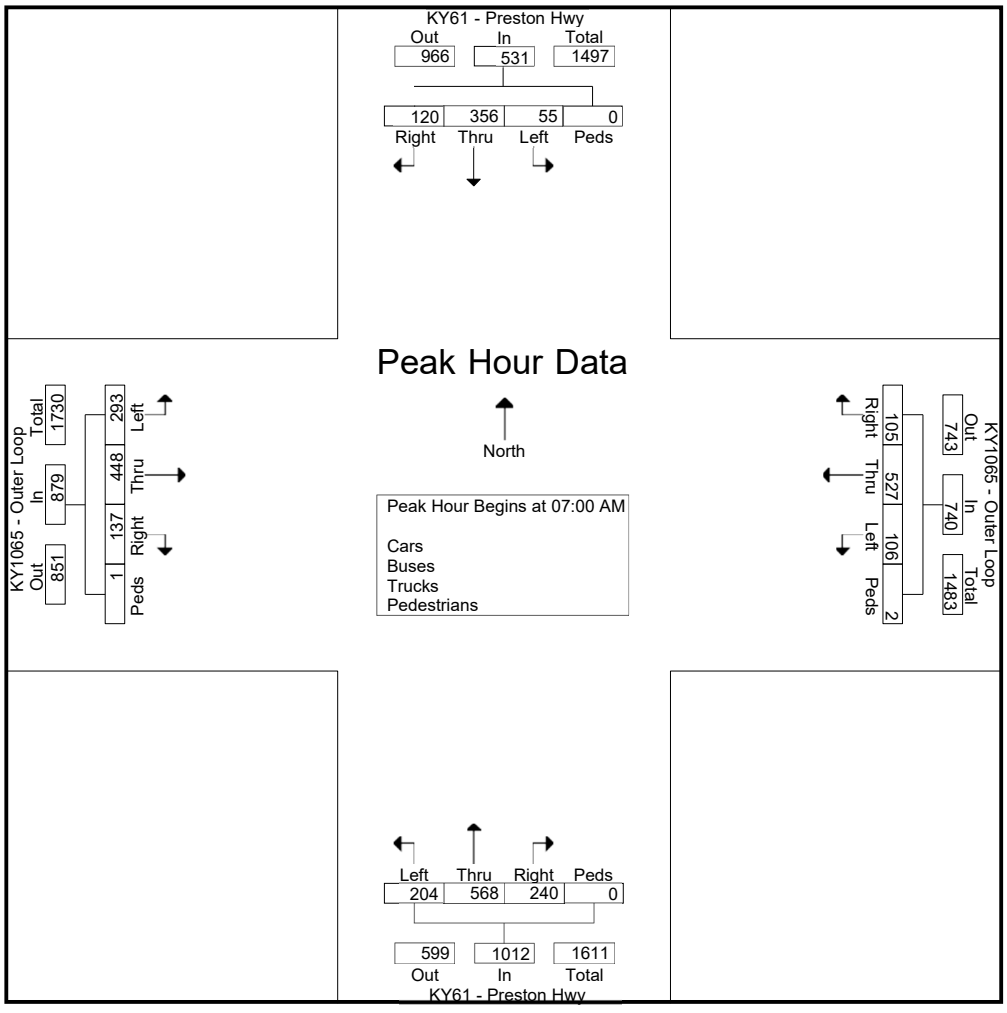
"simplifying Data Collection since 2004"

File Name : KY61_at_KY1065_572277_09-07-2017
Site Code : Site 1
Start Date : 9/7/2017
Page No : 3

	KY61 - Preston Hwy From North					KY1065 - Outer Loop From East					KY61 - Preston Hwy From South					KY1065 - Outer Loop From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
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																					
07:00 AM	**19**	75	21	0	115	23	130	16	**2**	171	43	117	43	0	203	33	95	22	0	150	639
07:15 AM	11	**130**	31	0	**172**	24	138	16	0	178	56	150	**67**	0	273	66	96	**42**	0	204	827
07:30 AM	10	83	**34**	0	127	26	**148**	32	0	**206**	**64**	145	67	0	**276**	85	122	37	0	244	**853**
07:45 AM	15	68	34	0	117	**33**	111	**41**	0	185	41	**156**	63	0	260	**109**	**135**	36	**1**	**281**	843
Total Volume	55	356	120	0	531	106	527	105	2	740	204	568	240	0	1012	293	448	137	1	879	3162
% App. Total	10.4	67	22.6	0		14.3	71.2	14.2	0.3		20.2	56.1	23.7	0		33.3	51	15.6	0.1		
PHF	.724	.685	.882	.000	.772	.803	.890	.640	.250	.898	.797	.910	.896	.000	.917	.672	.830	.815	.250	.782	.927



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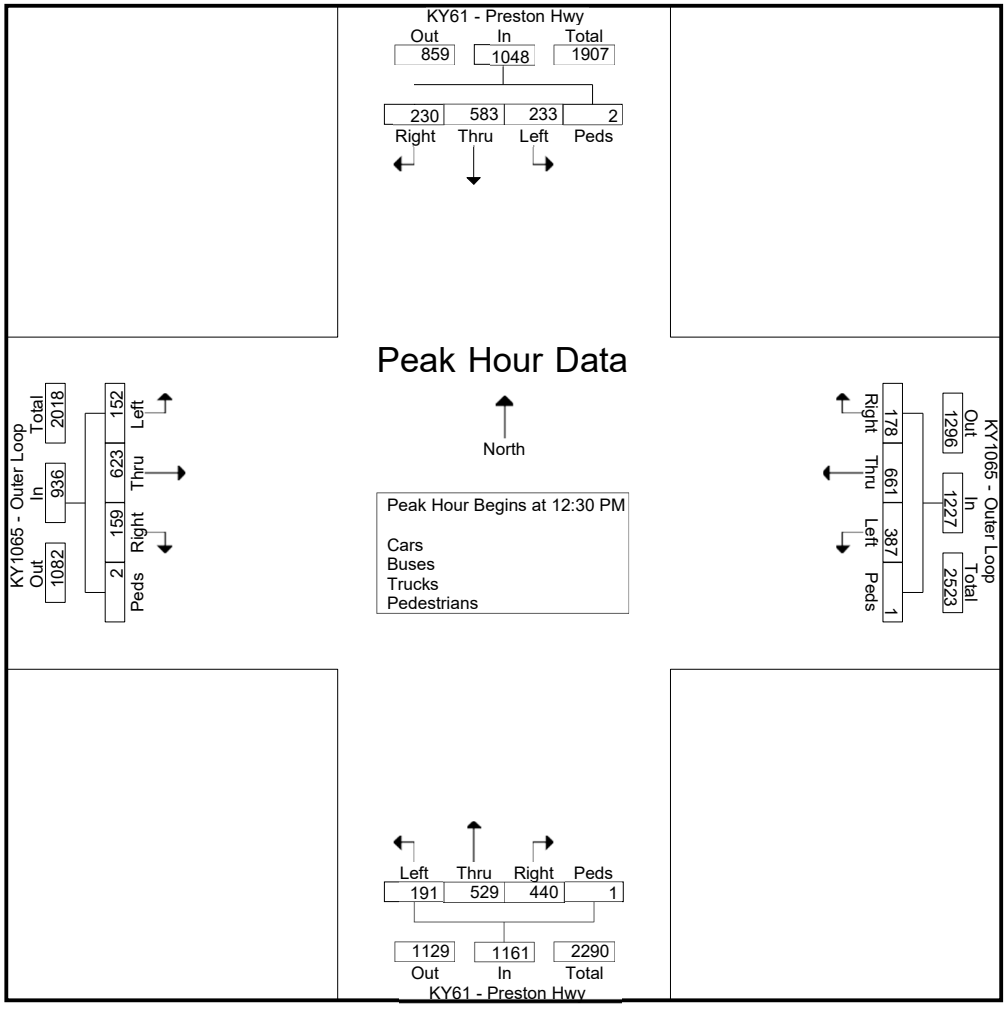
File Name : KY61_at_KY1065_572277_09-07-2017
Site Code : Site 1
Start Date : 9/7/2017
Page No : 4

	KY61 - Preston Hwy From North					KY1065 - Outer Loop From East					KY61 - Preston Hwy From South					KY1065 - Outer Loop From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:30 PM																					
12:30 PM	**73**	145	58	0	**276**	**108**	162	40	0	310	46	**141**	117	0	304	**41**	158	32	0	231	**1121**
12:45 PM	44	149	56	**2**	251	108	167	36	0	**311**	41	134	108	0	283	35	**181**	**47**	0	**263**	1108
01:00 PM	59	136	**62**	0	257	84	**171**	48	0	303	46	114	96	0	256	36	158	35	0	229	1045
01:15 PM	57	**153**	54	0	264	87	161	**54**	**1**	303	**58**	140	**119**	**1**	**318**	40	126	45	**2**	213	1098
Total Volume	233	583	230	2	1048	387	661	178	1	1227	191	529	440	1	1161	152	623	159	2	936	4372
% App. Total	22.2	55.6	21.9	0.2		31.5	53.9	14.5	0.1		16.5	45.6	37.9	0.1		16.2	66.6	17	0.2		
PHF	.798	.953	.927	.250	.949	.896	.966	.824	.250	.986	.823	.938	.924	.250	.913	.927	.860	.846	.250	.890	.975



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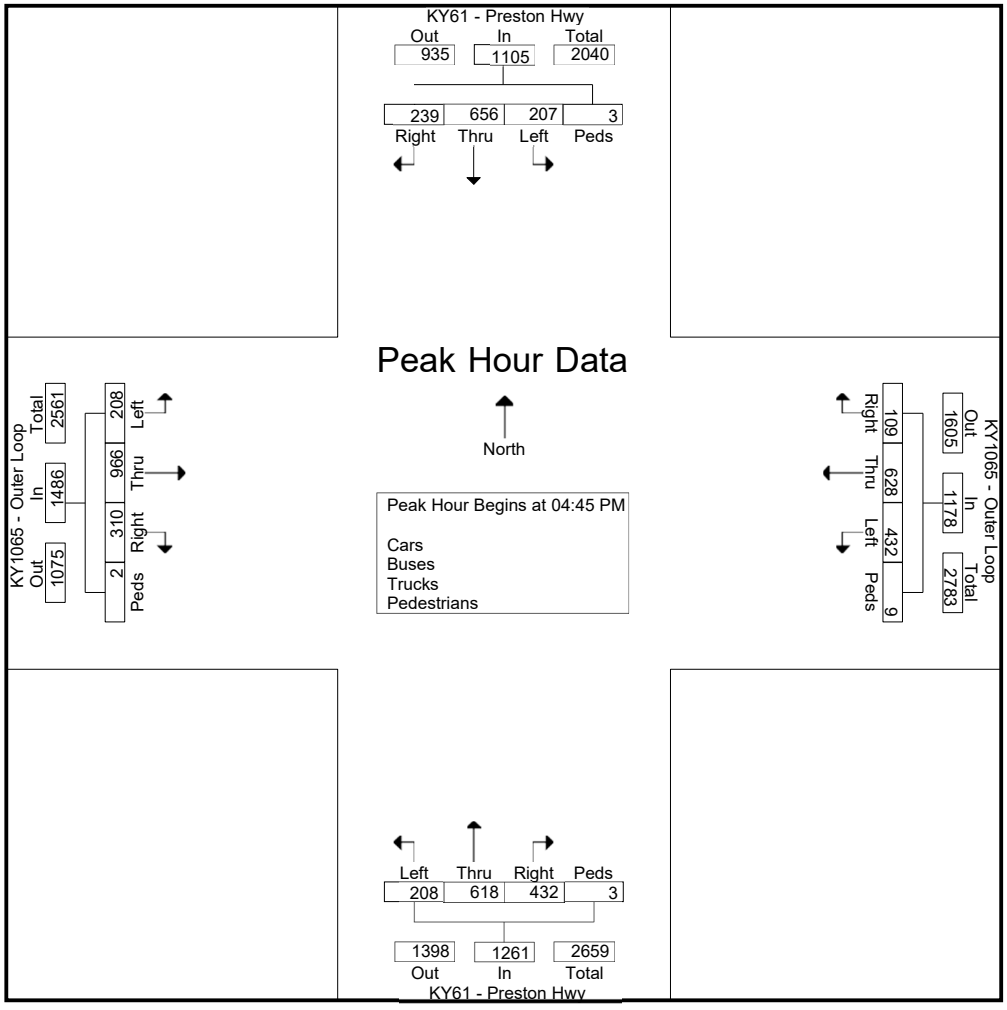
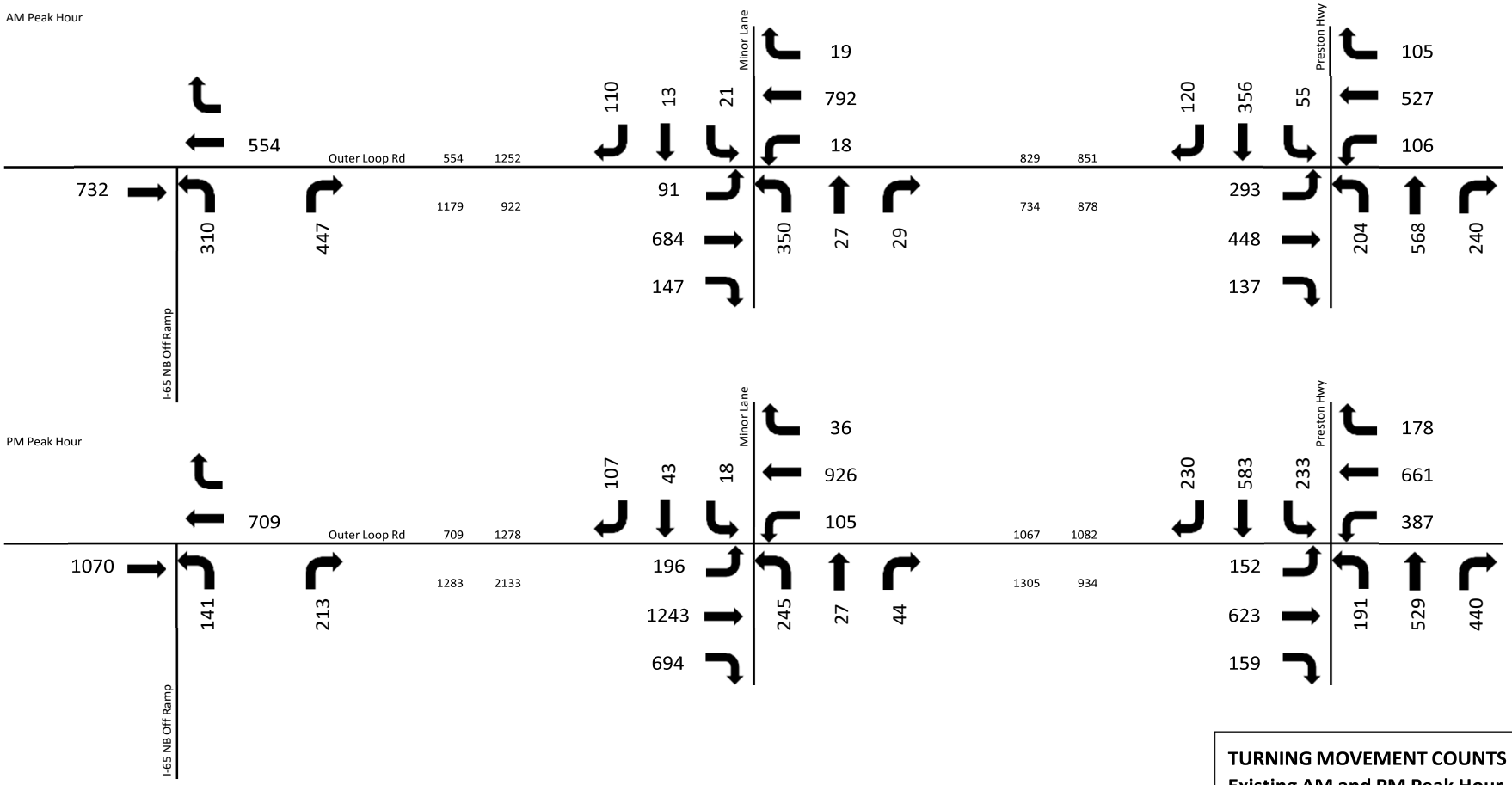
File Name : KY61_at_KY1065_572277_09-07-2017
Site Code : Site 1
Start Date : 9/7/2017
Page No : 5

	KY61 - Preston Hwy From North					KY1065 - Outer Loop From East					KY61 - Preston Hwy From South					KY1065 - Outer Loop From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 06:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	50	**201**	61	0	**312**	121	142	26	1	290	50	165	110	0	325	48	**258**	84	0	**390**	**1317**
05:00 PM	**63**	142	58	0	263	91	**177**	23	3	294	55	115	107	0	277	51	246	74	0	371	1205
05:15 PM	47	136	**67**	**3**	253	86	152	**30**	**4**	272	**57**	165	**111**	**2**	**335**	**61**	249	62	0	372	1232
05:30 PM	47	177	53	0	277	**134**	157	30	1	**322**	46	**173**	104	1	324	48	213	**90**	**2**	353	1276
Total Volume	207	656	239	3	1105	432	628	109	9	1178	208	618	432	3	1261	208	966	310	2	1486	5030
% App. Total	18.7	59.4	21.6	0.3		36.7	53.3	9.3	0.8		16.5	49	34.3	0.2		14	65	20.9	0.1		
PHF	.821	.816	.892	.250	.885	.806	.887	.908	.563	.915	.912	.893	.973	.375	.941	.852	.936	.861	.250	.953	.955

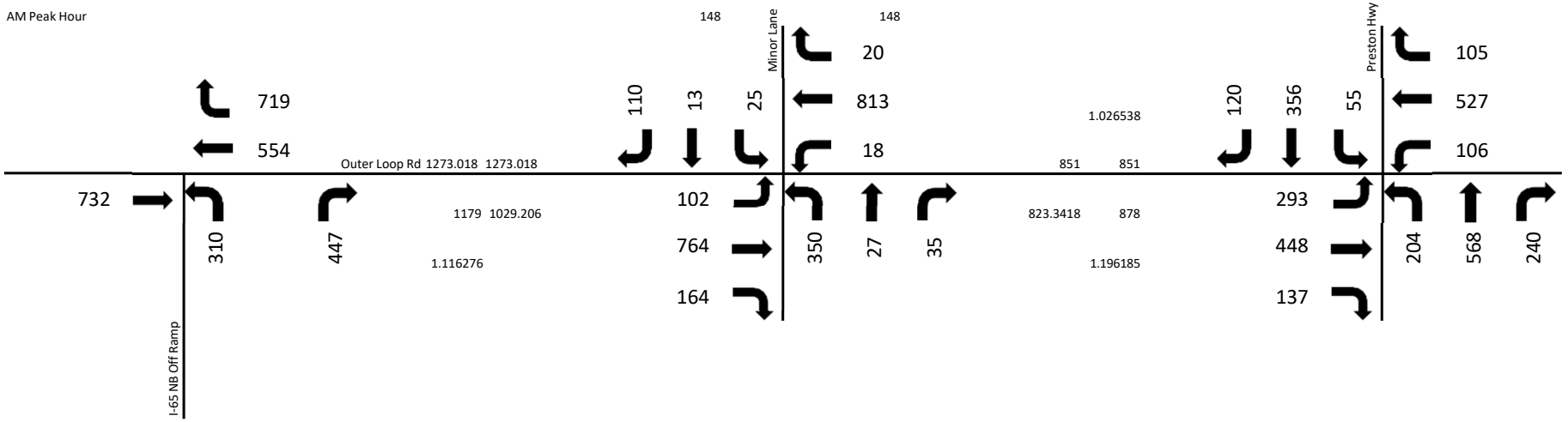


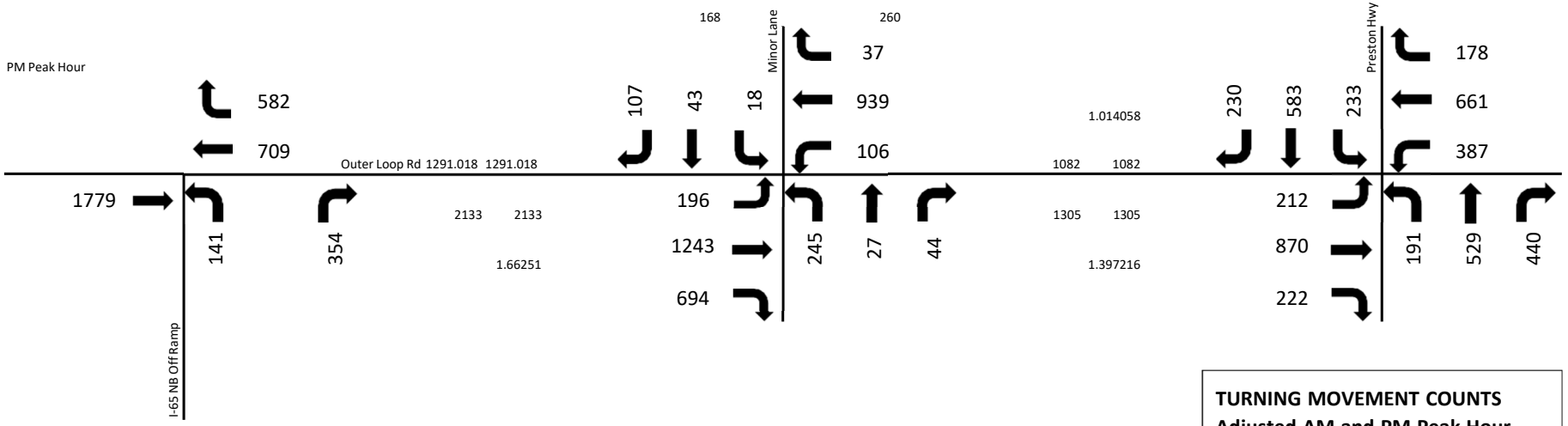
APPENDIX C: TRIP DISTRIBUTION FIGURES



TURNING MOVEMENT COUNTS
Existing AM and PM Peak Hour
5540 Minor Lane

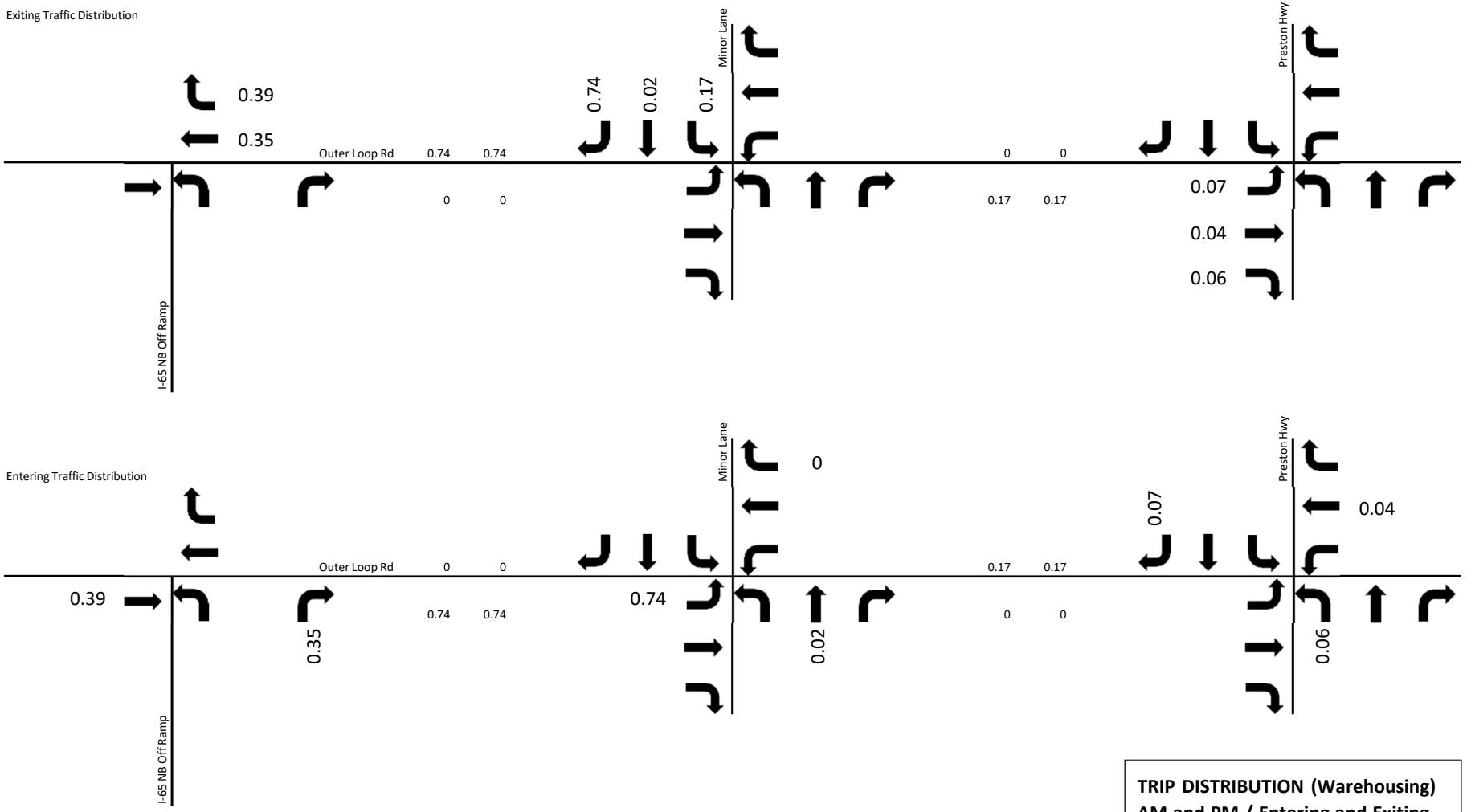
adam kirk engineering





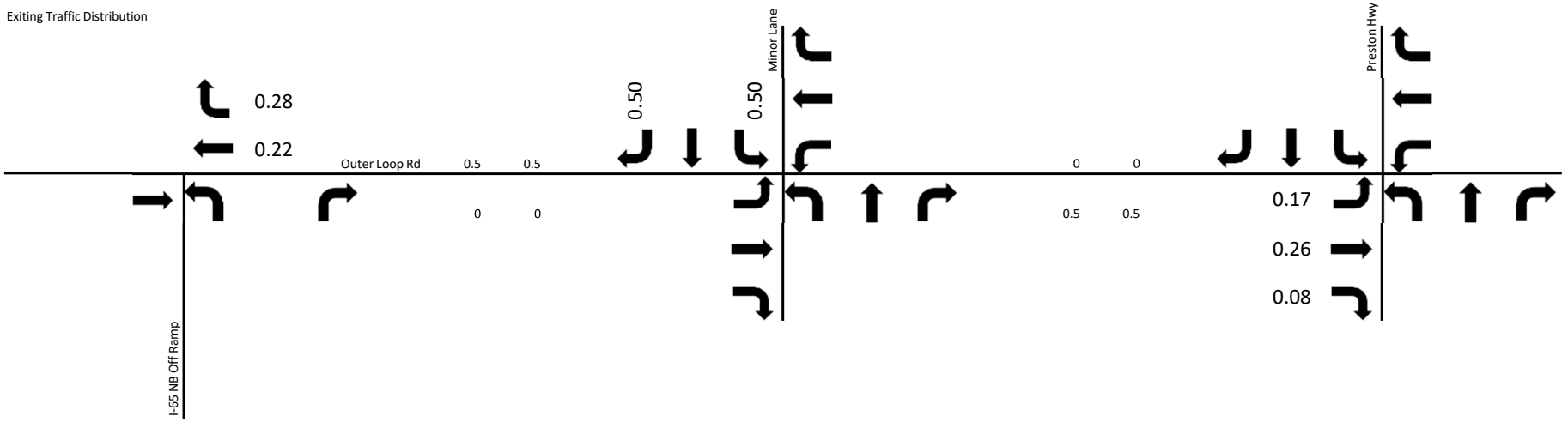
TURNING MOVEMENT COUNTS
Adjusted AM and PM Peak Hour
5540 Minor Lane

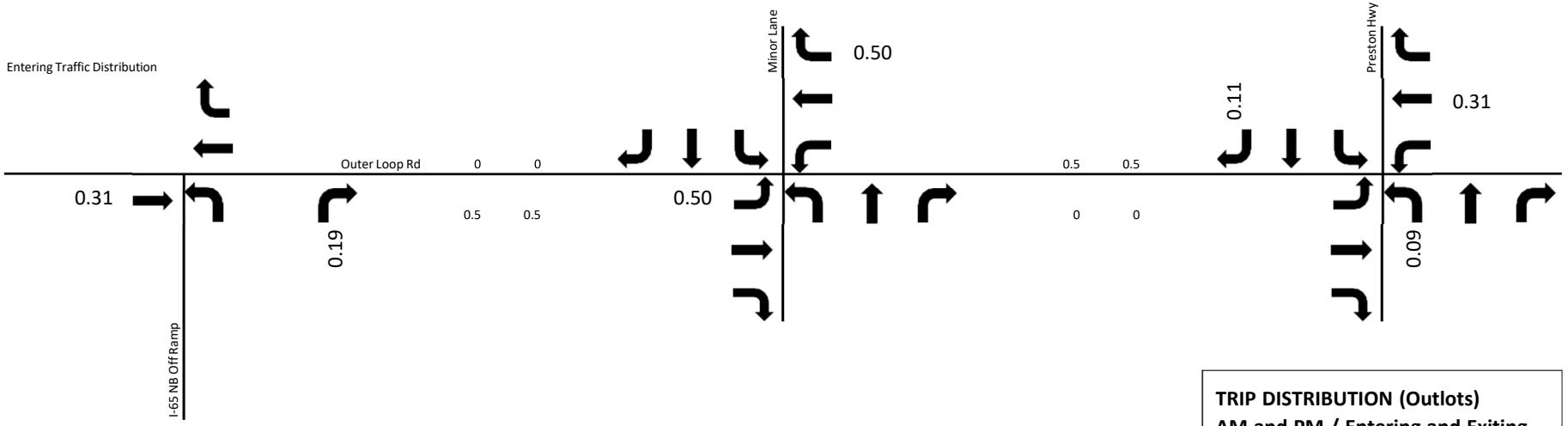
adam kirk engineering



TRIP DISTRIBUTION (Warehousing)
AM and PM / Entering and Exiting
5540 Minor Lane

adam kirk engineering



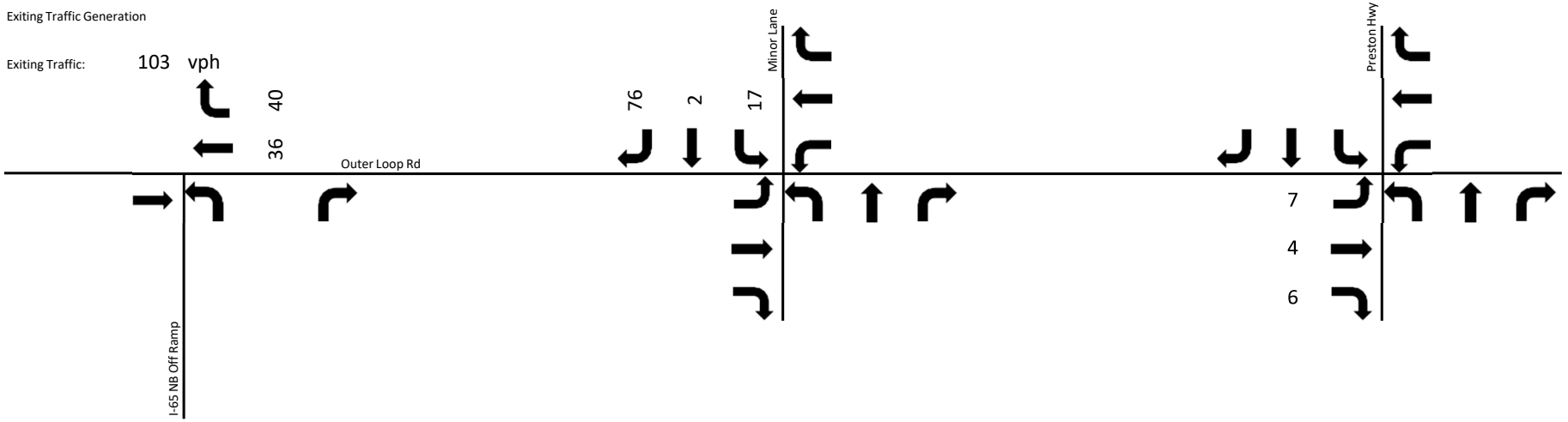


TRIP DISTRIBUTION (Outlots)
AM and PM / Entering and Exiting
5540 Minor Lane

adam kirk engineering

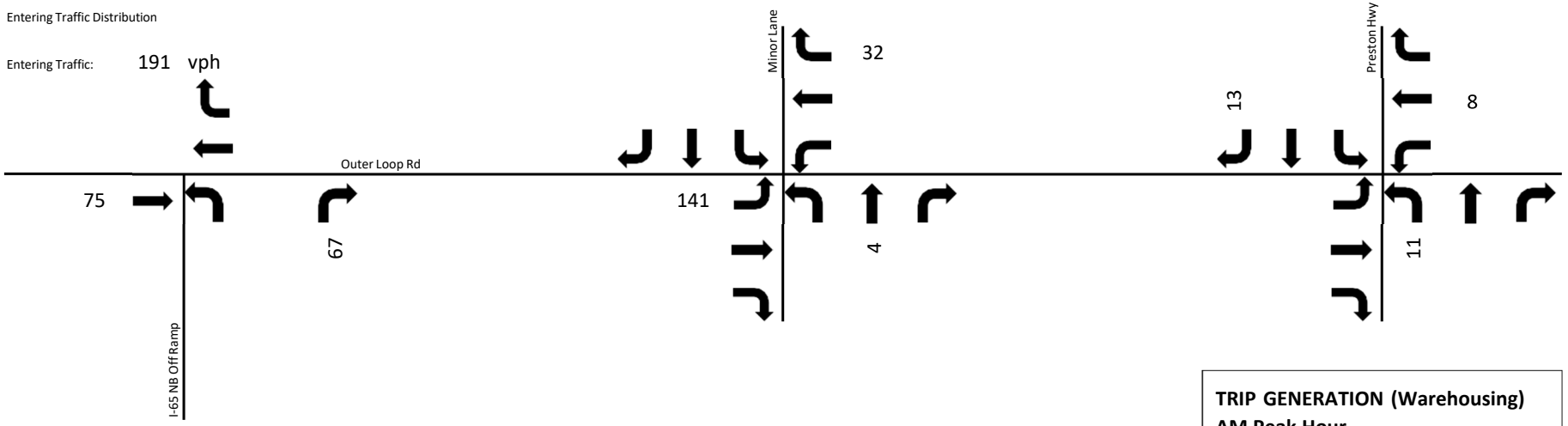
Exiting Traffic Generation

Exiting Traffic: 103 vph



Entering Traffic Distribution

Entering Traffic: 191 vph

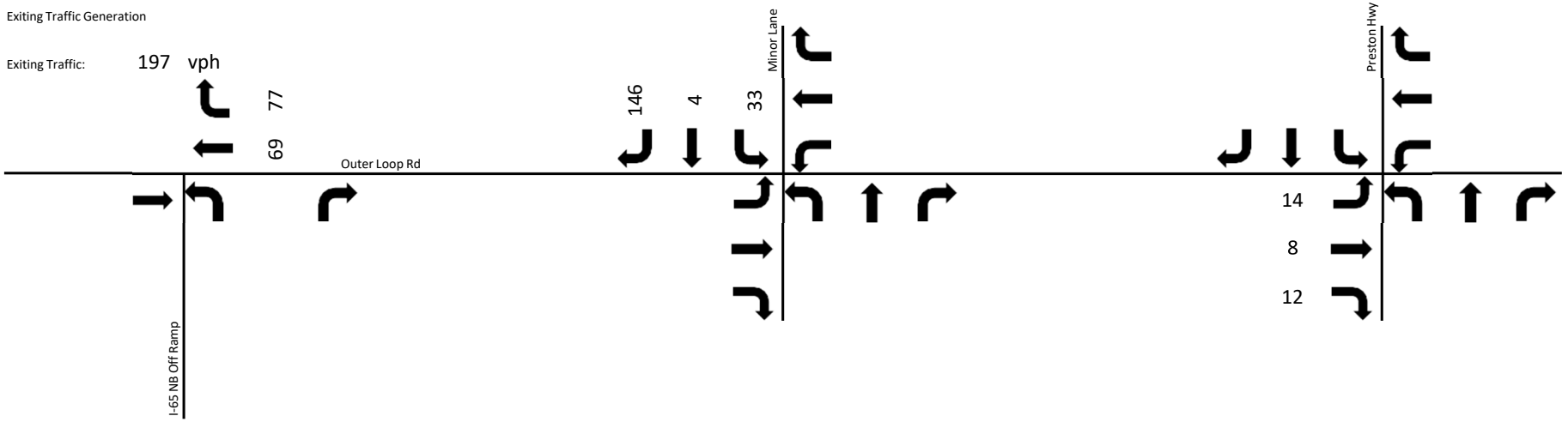


TRIP GENERATION (Warehousing)
AM Peak Hour
5540 Minor Lane

adam kirk engineering

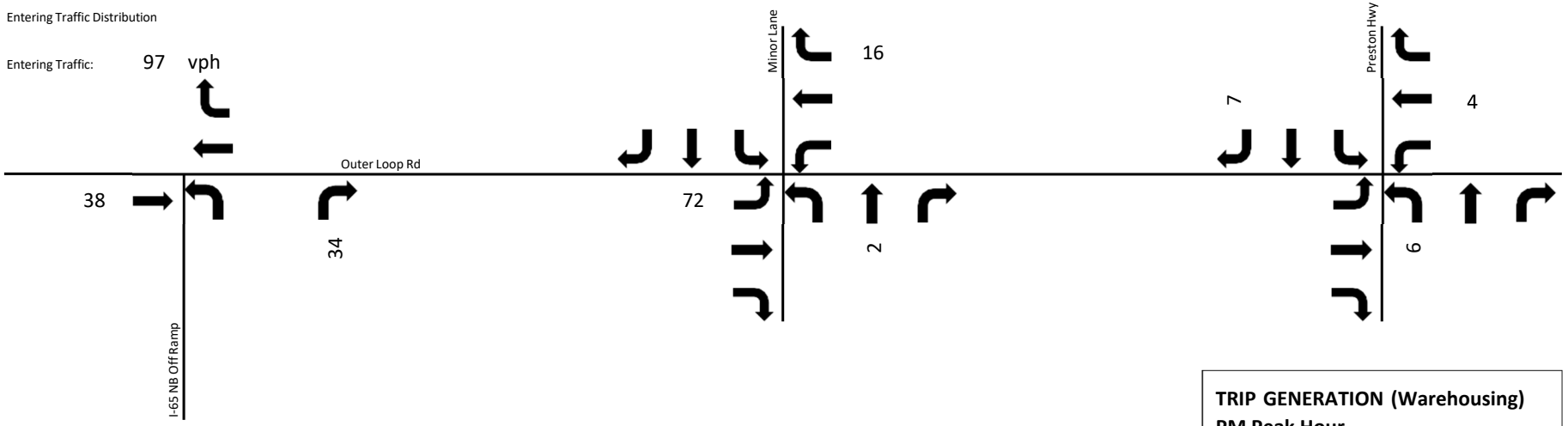
Exiting Traffic Generation

Exiting Traffic: 197 vph



Entering Traffic Distribution

Entering Traffic: 97 vph

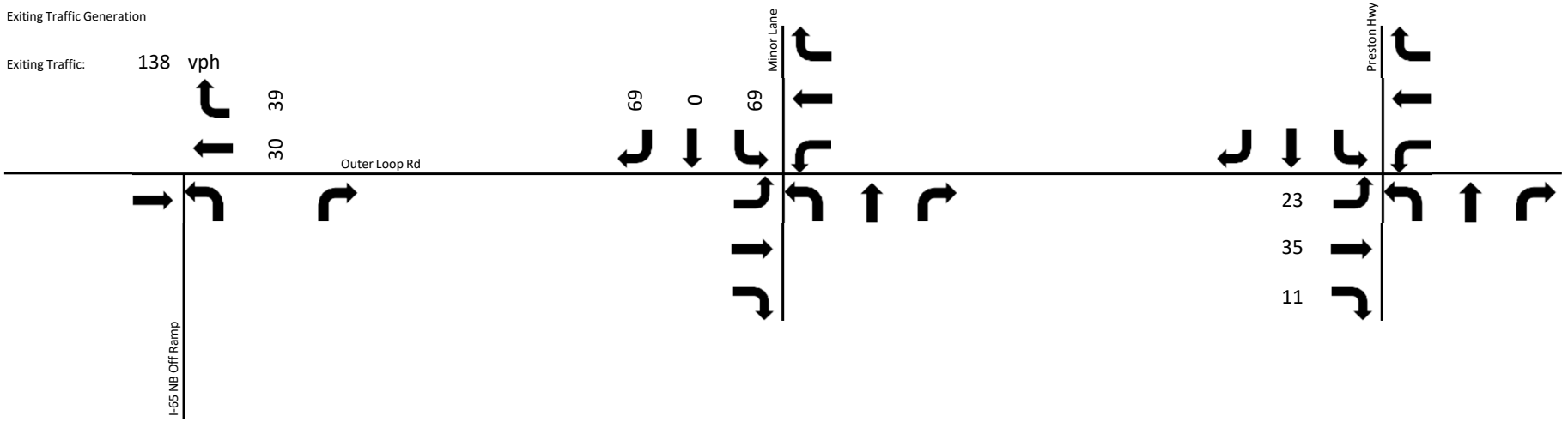


TRIP GENERATION (Warehousing)
PM Peak Hour
5540 Minor Lane

adam kirk engineering

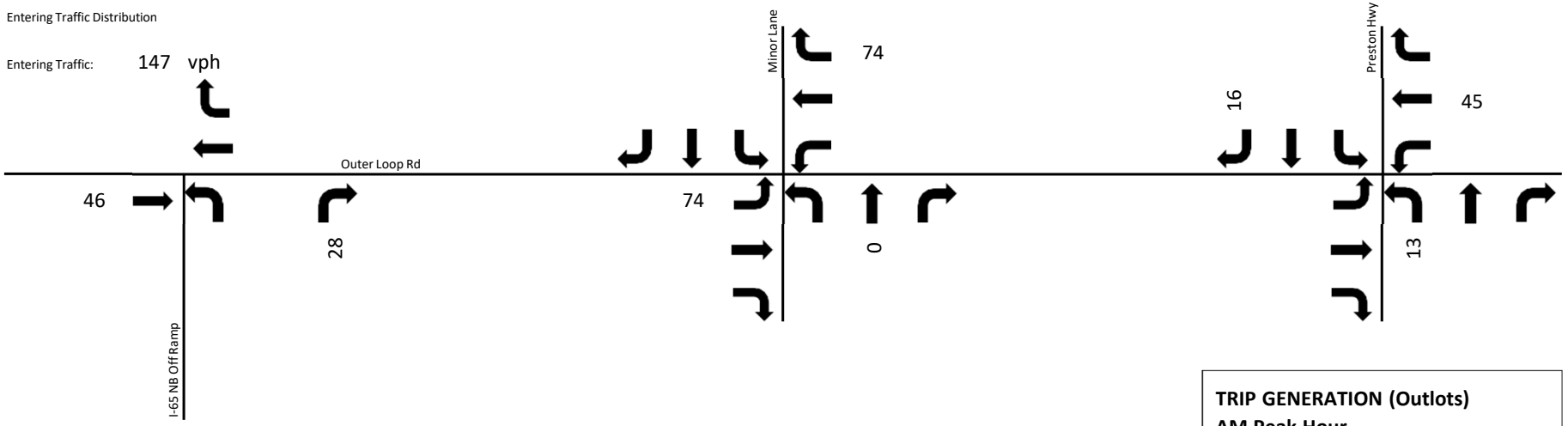
Exiting Traffic Generation

Exiting Traffic: 138 vph



Entering Traffic Distribution

Entering Traffic: 147 vph

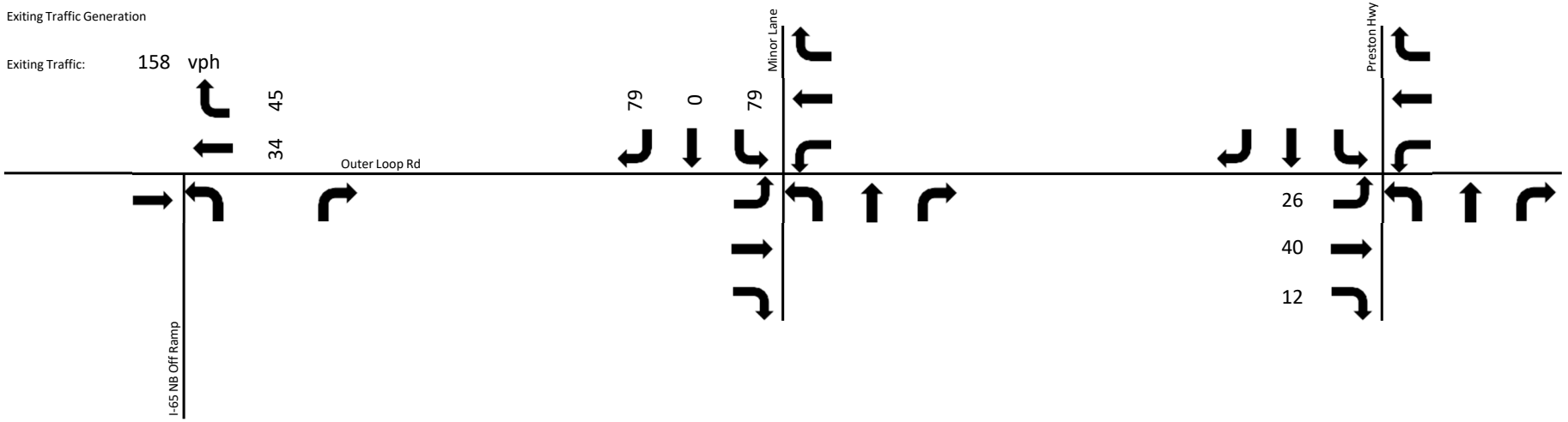


TRIP GENERATION (Outlots)
AM Peak Hour
5540 Minor Lane

adam kirk engineering

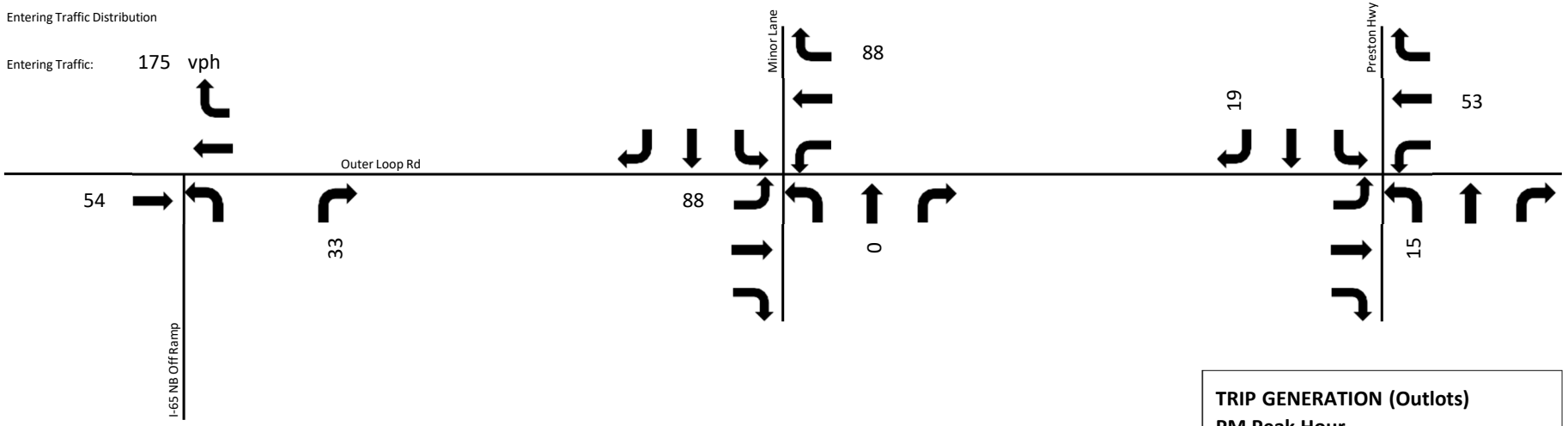
Exiting Traffic Generation

Exiting Traffic: 158 vph



Entering Traffic Distribution

Entering Traffic: 175 vph

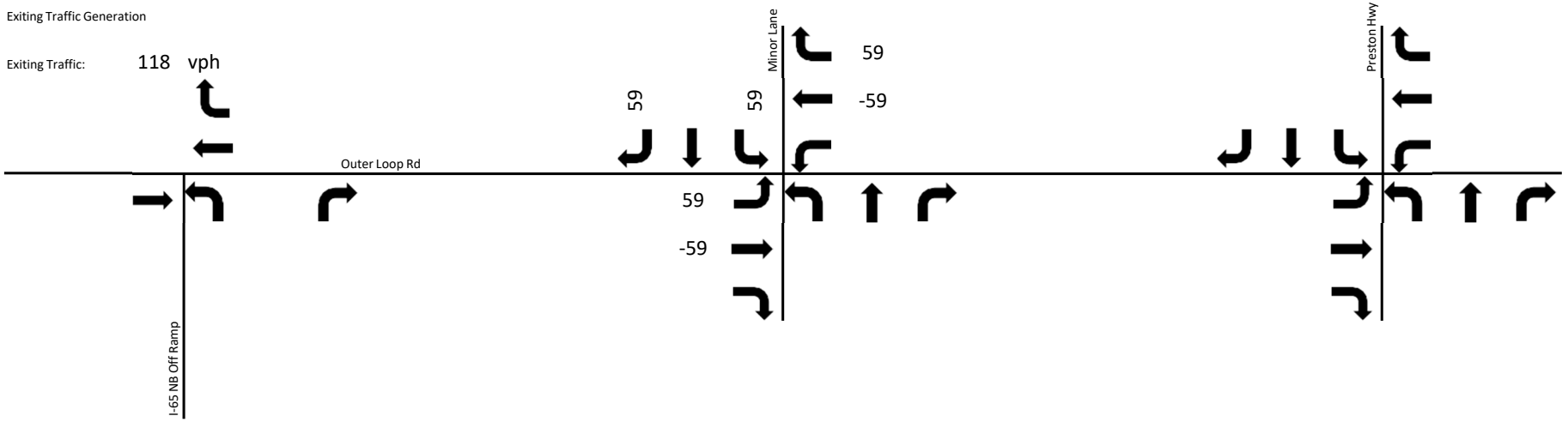


TRIP GENERATION (Outlots)
PM Peak Hour
5540 Minor Lane

adam kirk engineering

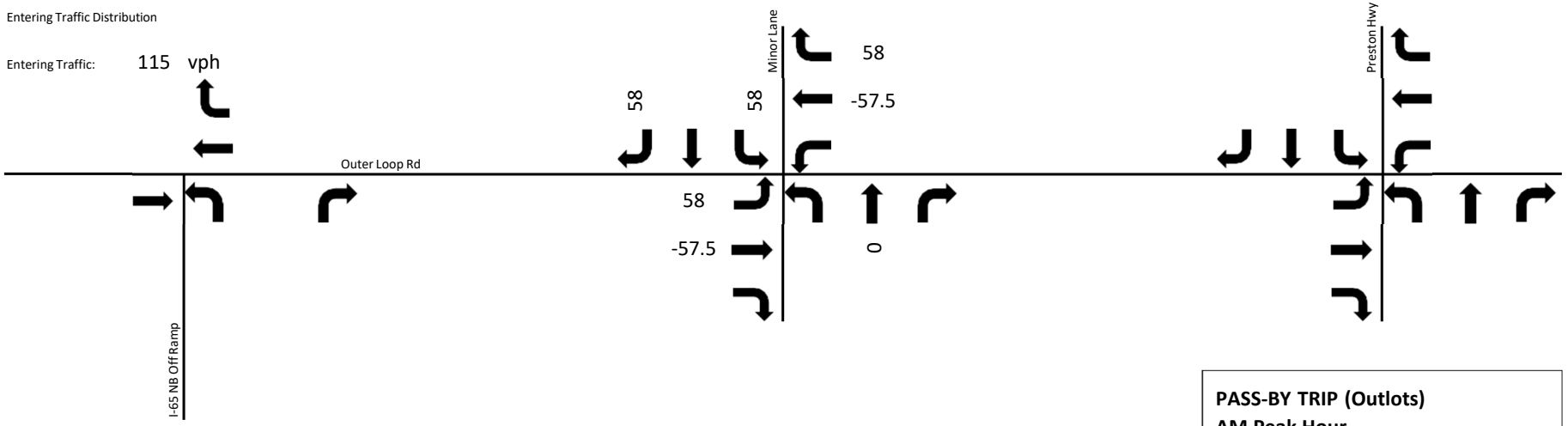
Exiting Traffic Generation

Exiting Traffic: 118 vph



Entering Traffic Distribution

Entering Traffic: 115 vph

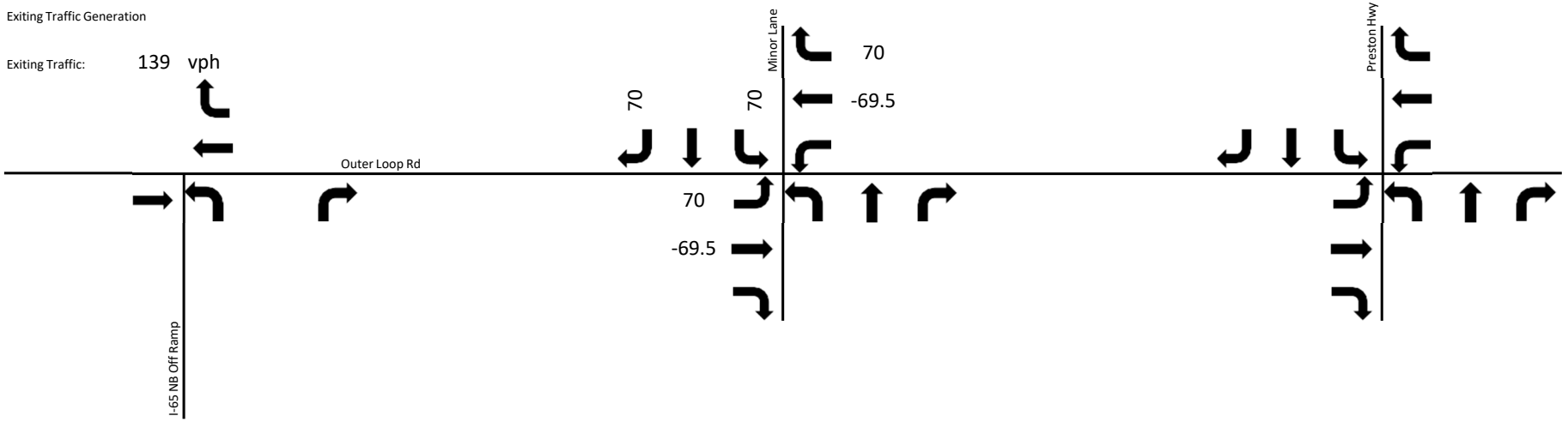


PASS-BY TRIP (Outlots)
AM Peak Hour
5540 Minor Lane

adam kirk engineering

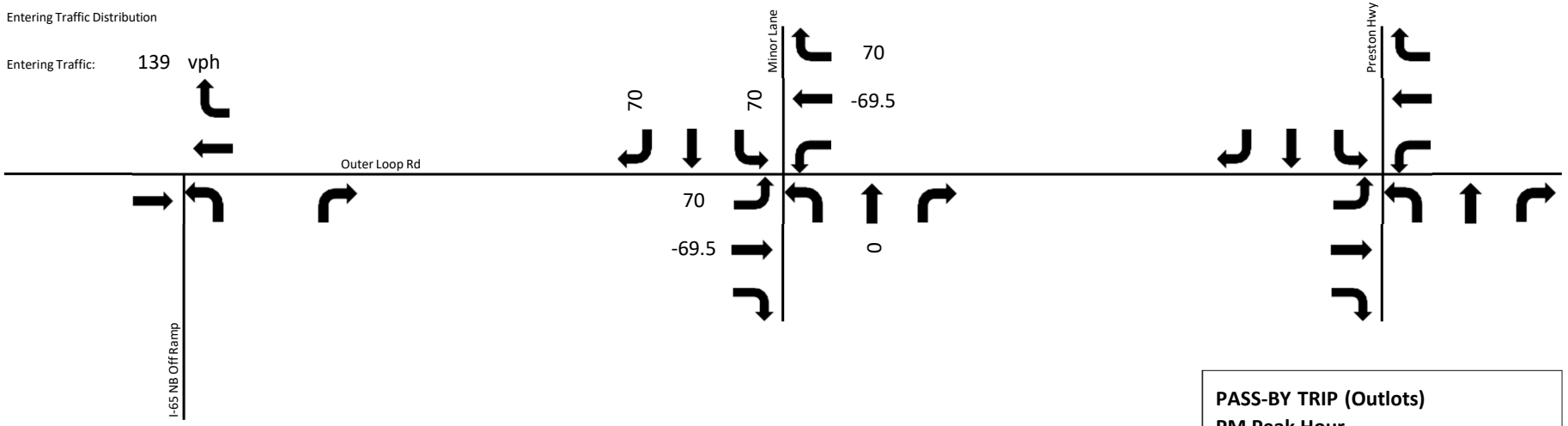
Exiting Traffic Generation

Exiting Traffic: 139 vph



Entering Traffic Distribution

Entering Traffic: 139 vph



PASS-BY TRIP (Outlots)
PM Peak Hour
5540 Minor Lane

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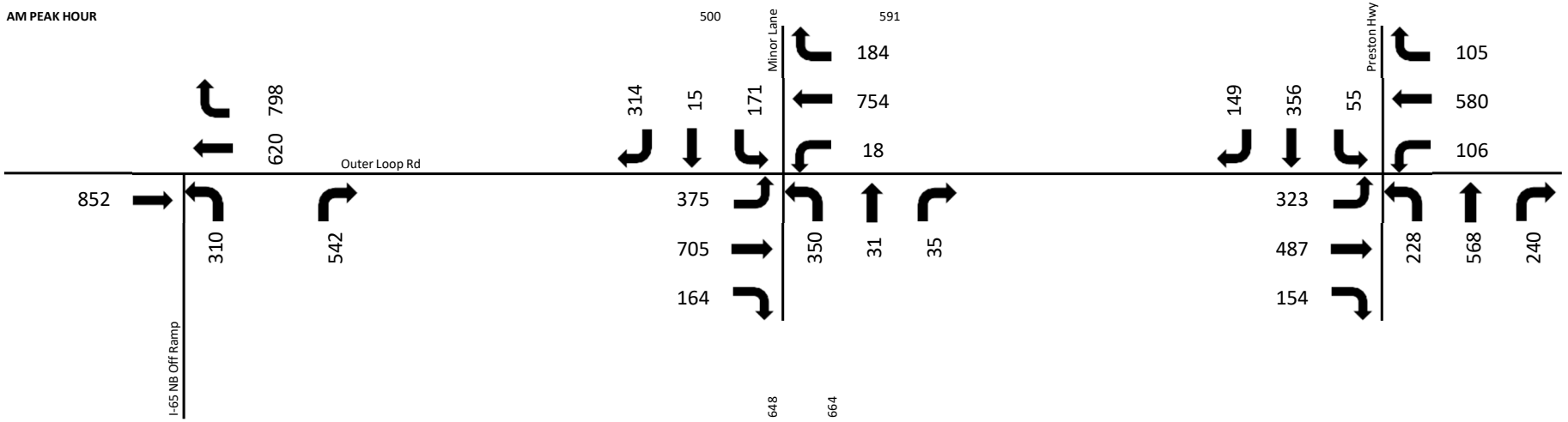
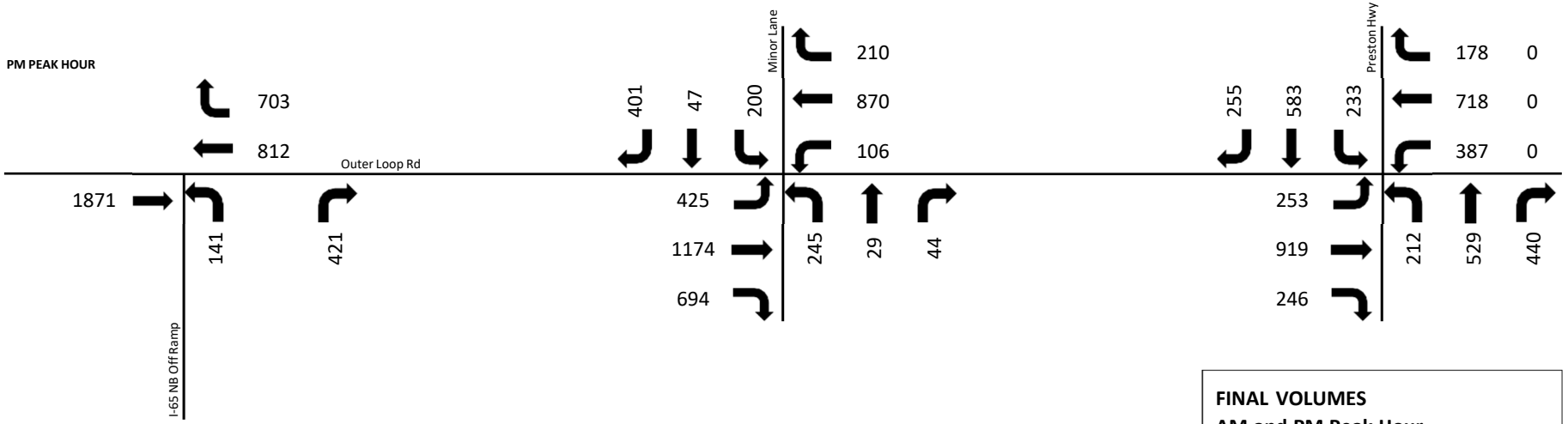




FINAL VOLUMES
AM and PM Peak Hour
5540 Minor Lane

adam kirk engineering

APPENDIX D: CAPACITY ANALYSIS OUTPUT

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	293	448	137	106	527	105	204	568	240	55	356	120
Future Volume (vph)	293	448	137	106	527	105	204	568	240	55	356	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.3	7.3	7.3	7.3	7.3		7.3	7.3	7.3	7.3	7.3	7.3
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		0.97	0.95	1.00	0.97	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3451		3433	3539	1583	3433	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3451		3433	3539	1583	3433	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	318	487	149	115	573	114	222	617	261	60	387	130
RTOR Reduction (vph)	0	0	94	0	11	0	0	0	182	0	0	96
Lane Group Flow (vph)	318	487	55	115	676	0	222	617	79	60	387	34
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	21.7	55.6	55.6	9.8	43.7		16.7	45.3	45.3	10.1	38.7	38.7
Effective Green, g (s)	21.7	55.6	55.6	9.8	43.7		16.7	45.3	45.3	10.1	38.7	38.7
Actuated g/C Ratio	0.14	0.37	0.37	0.07	0.29		0.11	0.30	0.30	0.07	0.26	0.26
Clearance Time (s)	7.3	7.3	7.3	7.3	7.3		7.3	7.3	7.3	7.3	7.3	7.3
Lane Grp Cap (vph)	496	1311	586	224	1005		382	1068	478	231	913	408
v/s Ratio Prot	c0.09	0.14		0.03	c0.20		0.06	c0.17		0.02	c0.11	
v/s Ratio Perm			0.03						0.05			0.02
v/c Ratio	0.64	0.37	0.09	0.51	0.67		0.58	0.58	0.16	0.26	0.42	0.08
Uniform Delay, d1	60.5	34.4	30.8	67.8	46.8		63.3	44.3	38.5	66.4	46.4	42.2
Progression Factor	0.53	0.25	0.67	0.56	0.38		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.5	0.7	0.3	7.9	3.5		6.3	2.3	0.7	2.7	1.4	0.4
Delay (s)	37.8	9.2	20.8	45.6	21.3		69.7	46.5	39.2	69.1	47.8	42.6
Level of Service	D	A	C	D	C		E	D	D	E	D	D
Approach Delay (s)		20.5			24.8			49.5			48.8	
Approach LOS		C			C			D			D	

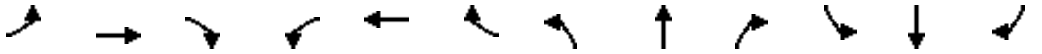
Intersection Summary			
HCM 2000 Control Delay	35.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	29.2
Intersection Capacity Utilization	74.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	732	0	0	554	310	447
Future Volume (vph)	732	0	0	554	310	447
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3			5.3	5.4	5.4
Lane Util. Factor	0.95			0.95	1.00	1.00
Frt	1.00			1.00	1.00	0.85
Flt Protected	1.00			1.00	0.95	1.00
Satd. Flow (prot)	3539			3539	1770	1583
Flt Permitted	1.00			1.00	0.95	1.00
Satd. Flow (perm)	3539			3539	1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	796	0	0	602	337	486
RTOR Reduction (vph)	0	0	0	0	0	128
Lane Group Flow (vph)	796	0	0	602	337	358
Turn Type	NA			NA	Prot	Perm
Protected Phases	2			2	4	
Permitted Phases						4
Actuated Green, G (s)	89.7			89.7	49.6	49.6
Effective Green, g (s)	89.7			89.7	49.6	49.6
Actuated g/C Ratio	0.60			0.60	0.33	0.33
Clearance Time (s)	5.3			5.3	5.4	5.4
Lane Grp Cap (vph)	2116			2116	585	523
v/s Ratio Prot	c0.22			0.17	0.19	
v/s Ratio Perm						c0.23
v/c Ratio	0.38			0.28	0.58	0.68
Uniform Delay, d1	15.6			14.6	41.5	43.4
Progression Factor	1.00			0.43	1.00	1.00
Incremental Delay, d2	0.5			0.2	4.1	7.1
Delay (s)	16.2			6.5	45.6	50.6
Level of Service	B			A	D	D
Approach Delay (s)	16.2			6.5	48.5	
Approach LOS	B			A	D	

Intersection Summary			
HCM 2000 Control Delay	25.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	10.7
Intersection Capacity Utilization	74.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	102	764	164	18	813	20	350	27	35	25	13	110
Future Volume (vph)	102	764	164	18	813	20	350	27	35	25	13	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	5.6	6.6	6.0	5.6			6.6	6.6		6.6	6.6
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95			1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00			1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.96	1.00		0.97	1.00
Satd. Flow (prot)	1770	3539	1583	1770	3526			1780	1583		1803	1583
Flt Permitted	0.18	1.00	1.00	0.21	1.00			0.96	1.00		0.97	1.00
Satd. Flow (perm)	335	3539	1583	397	3526			1780	1583		1803	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	111	830	178	20	884	22	380	29	38	27	14	120
RTOR Reduction (vph)	0	0	64	0	1	0	0	0	29	0	0	108
Lane Group Flow (vph)	111	830	114	20	905	0	0	409	9	0	41	12
Turn Type	D.P+P	NA	pm+ov	D.P+P	NA		Split	NA	Perm	Split	NA	Perm
Protected Phases	1	6	8	5	2		8	8		4	4	
Permitted Phases	2		6	6					8			4
Actuated Green, G (s)	76.4	61.4	95.8	76.4	61.4			34.4	34.4		14.4	14.4
Effective Green, g (s)	76.4	61.4	95.8	76.4	61.4			34.4	34.4		14.4	14.4
Actuated g/C Ratio	0.51	0.41	0.64	0.51	0.41			0.23	0.23		0.10	0.10
Clearance Time (s)	6.0	5.6	6.6	6.0	5.6			6.6	6.6		6.6	6.6
Lane Grp Cap (vph)	314	1448	1011	339	1443			408	363		173	151
v/s Ratio Prot	0.04	c0.23	0.03	0.01	c0.26			c0.23			c0.02	
v/s Ratio Perm	0.14		0.05	0.02					0.01			0.01
v/c Ratio	0.35	0.57	0.11	0.06	0.63			1.00	0.02		0.24	0.08
Uniform Delay, d1	41.1	34.2	10.5	20.1	35.2			57.8	44.8		62.7	61.7
Progression Factor	0.74	0.76	0.62	0.17	0.22			1.00	1.00		1.00	1.00
Incremental Delay, d2	2.7	1.4	0.2	0.3	1.7			45.2	0.1		3.2	1.0
Delay (s)	32.9	27.5	6.7	3.8	9.6			103.0	44.9		65.9	62.7
Level of Service	C	C	A	A	A			F	D		E	E
Approach Delay (s)		24.7			9.4			98.0			63.5	
Approach LOS		C			A			F			E	

Intersection Summary			
HCM 2000 Control Delay	34.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	24.8
Intersection Capacity Utilization	71.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	212	870	222	387	661	178	191	529	440	233	583	230
Future Volume (vph)	212	870	222	387	661	178	191	529	440	233	583	230
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.3	7.3	7.3	7.3	7.3		7.3	7.3	7.3	7.3	7.3	7.3
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		0.97	0.95	1.00	0.97	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3427		3433	3539	1583	3433	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3427		3433	3539	1583	3433	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	230	946	241	421	718	193	208	575	478	253	634	250
RTOR Reduction (vph)	0	0	116	0	14	0	0	0	271	0	0	186
Lane Group Flow (vph)	230	946	125	421	897	0	208	575	207	253	634	64
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	15.8	52.7	52.7	28.7	65.6		15.8	39.7	39.7	19.7	43.6	43.6
Effective Green, g (s)	15.8	52.7	52.7	28.7	65.6		15.8	39.7	39.7	19.7	43.6	43.6
Actuated g/C Ratio	0.09	0.31	0.31	0.17	0.39		0.09	0.23	0.23	0.12	0.26	0.26
Clearance Time (s)	7.3	7.3	7.3	7.3	7.3		7.3	7.3	7.3	7.3	7.3	7.3
Vehicle Extension (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	319	1097	490	579	1322		319	826	369	397	907	405
v/s Ratio Prot	0.07	c0.27		0.12	c0.26		0.06	c0.16		0.07	c0.18	
v/s Ratio Perm			0.08						0.13			0.04
v/c Ratio	0.72	0.86	0.26	0.73	0.68		0.65	0.70	0.56	0.64	0.70	0.16
Uniform Delay, d1	75.0	55.2	43.9	66.9	43.4		74.4	59.6	57.4	71.7	57.3	49.0
Progression Factor	0.94	0.38	0.24	0.61	0.48		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.2	5.7	0.8	4.3	2.5		5.2	4.8	6.0	3.8	4.5	0.8
Delay (s)	75.4	26.5	11.3	45.3	23.5		79.7	64.5	63.5	75.5	61.7	49.8
Level of Service	E	C	B	D	C		E	E	E	E	E	D
Approach Delay (s)		31.9			30.4			66.6			62.2	
Approach LOS		C			C			E			E	

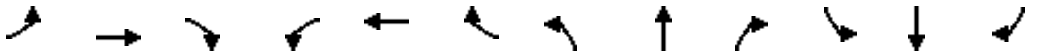
Intersection Summary			
HCM 2000 Control Delay	46.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	170.0	Sum of lost time (s)	29.2
Intersection Capacity Utilization	82.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↰	↱
Traffic Volume (vph)	1779	0	0	709	141	354
Future Volume (vph)	1779	0	0	709	141	354
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3			5.3	5.4	5.4
Lane Util. Factor	0.95			0.95	1.00	1.00
Frt	1.00			1.00	1.00	0.85
Flt Protected	1.00			1.00	0.95	1.00
Satd. Flow (prot)	3539			3539	1770	1583
Flt Permitted	1.00			1.00	0.95	1.00
Satd. Flow (perm)	3539			3539	1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1934	0	0	771	153	385
RTOR Reduction (vph)	0	0	0	0	0	9
Lane Group Flow (vph)	1934	0	0	771	153	376
Turn Type	NA			NA	Prot	Perm
Protected Phases	2			2	4	
Permitted Phases						4
Actuated Green, G (s)	103.7			103.7	55.6	55.6
Effective Green, g (s)	103.7			103.7	55.6	55.6
Actuated g/C Ratio	0.61			0.61	0.33	0.33
Clearance Time (s)	5.3			5.3	5.4	5.4
Vehicle Extension (s)	4.0			4.0	4.0	4.0
Lane Grp Cap (vph)	2158			2158	578	517
v/s Ratio Prot	c0.55			0.22	0.09	
v/s Ratio Perm						c0.24
v/c Ratio	0.90			0.36	0.26	0.73
Uniform Delay, d1	28.5			16.5	42.1	50.5
Progression Factor	1.00			0.38	1.00	1.00
Incremental Delay, d2	6.3			0.4	1.1	8.6
Delay (s)	34.9			6.7	43.3	59.1
Level of Service	C			A	D	E
Approach Delay (s)	34.9			6.7	54.6	
Approach LOS	C			A	D	

Intersection Summary			
HCM 2000 Control Delay	31.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	170.0	Sum of lost time (s)	10.7
Intersection Capacity Utilization	80.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	323	487	154	106	580	105	228	568	240	55	356	149
Future Volume (vph)	323	487	154	106	580	105	228	568	240	55	356	149
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.3	7.3	7.3	7.3	7.3		7.3	7.3	7.3	7.3	7.3	7.3
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		0.97	0.95	1.00	0.97	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3458		3433	3539	1583	3433	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3458		3433	3539	1583	3433	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	351	529	167	115	630	114	248	617	261	60	387	162
RTOR Reduction (vph)	0	0	107	0	10	0	0	0	176	0	0	118
Lane Group Flow (vph)	351	529	60	115	734	0	248	617	85	60	387	44
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	20.7	54.2	54.2	9.7	43.2		15.9	48.8	48.8	8.1	41.0	41.0
Effective Green, g (s)	20.7	54.2	54.2	9.7	43.2		15.9	48.8	48.8	8.1	41.0	41.0
Actuated g/C Ratio	0.14	0.36	0.36	0.06	0.29		0.11	0.33	0.33	0.05	0.27	0.27
Clearance Time (s)	7.3	7.3	7.3	7.3	7.3		7.3	7.3	7.3	7.3	7.3	7.3
Vehicle Extension (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Grp Cap (vph)	473	1278	571	222	995		363	1151	515	185	967	432
v/s Ratio Prot	c0.10	0.15		0.03	c0.21		0.07	c0.17		0.02	c0.11	
v/s Ratio Perm			0.04						0.05			0.03
v/c Ratio	0.74	0.41	0.11	0.52	0.74		0.68	0.54	0.16	0.32	0.40	0.10
Uniform Delay, d1	62.1	36.0	31.8	67.9	48.3		64.6	41.3	36.1	68.3	44.5	40.7
Progression Factor	0.87	0.83	4.22	0.59	0.41		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.1	0.9	0.3	2.6	4.7		5.7	1.8	0.7	1.4	1.2	0.5
Delay (s)	60.1	30.6	134.5	42.5	24.7		70.3	43.1	36.8	69.7	45.7	41.2
Level of Service	E	C	F	D	C		E	D	D	E	D	D
Approach Delay (s)		57.0			27.1			47.6			46.9	
Approach LOS		E			C			D			D	

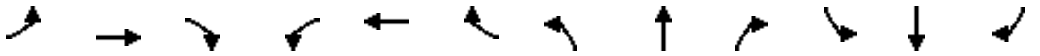
Intersection Summary			
HCM 2000 Control Delay	45.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	29.2
Intersection Capacity Utilization	77.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↰	↱
Traffic Volume (vph)	852	0	0	620	310	542
Future Volume (vph)	852	0	0	620	310	542
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3			5.3	5.4	5.4
Lane Util. Factor	0.95			0.95	1.00	1.00
Frt	1.00			1.00	1.00	0.85
Flt Protected	1.00			1.00	0.95	1.00
Satd. Flow (prot)	3539			3539	1770	1583
Flt Permitted	1.00			1.00	0.95	1.00
Satd. Flow (perm)	3539			3539	1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	926	0	0	674	337	589
RTOR Reduction (vph)	0	0	0	0	0	33
Lane Group Flow (vph)	926	0	0	674	337	556
Turn Type	NA			NA	Prot	Perm
Protected Phases	2			2	4	
Permitted Phases						4
Actuated Green, G (s)	65.7			65.7	73.6	73.6
Effective Green, g (s)	65.7			65.7	73.6	73.6
Actuated g/C Ratio	0.44			0.44	0.49	0.49
Clearance Time (s)	5.3			5.3	5.4	5.4
Vehicle Extension (s)	4.0			4.0	4.0	4.0
Lane Grp Cap (vph)	1550			1550	868	776
v/s Ratio Prot	c0.26			0.19	0.19	
v/s Ratio Perm						c0.35
v/c Ratio	0.60			0.43	0.39	0.72
Uniform Delay, d1	32.1			29.3	24.0	30.0
Progression Factor	1.00			0.86	1.00	1.00
Incremental Delay, d2	1.7			0.7	1.3	5.6
Delay (s)	33.8			25.8	25.3	35.6
Level of Service	C			C	C	D
Approach Delay (s)	33.8			25.8	31.9	
Approach LOS	C			C	C	

Intersection Summary			
HCM 2000 Control Delay	31.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	10.7
Intersection Capacity Utilization	80.0%	ICU Level of Service	D
Analysis Period (min)	15		

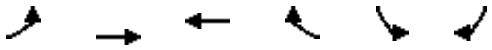
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	375	705	164	18	754	184	350	31	35	171	15	314
Future Volume (vph)	375	705	164	18	754	184	350	31	35	171	15	314
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	5.6	6.6	6.0	5.6	5.6	6.6	6.6		6.6	6.6	6.0
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.95	0.95		0.95	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.97		0.95	0.96	1.00
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	1681	1668		1681	1698	1583
Flt Permitted	0.20	1.00	1.00	0.27	1.00	1.00	0.95	0.97		0.95	0.96	1.00
Satd. Flow (perm)	721	3539	1583	509	3539	1583	1681	1668		1681	1698	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	408	766	178	20	820	200	380	34	38	186	16	341
RTOR Reduction (vph)	0	0	51	0	0	111	0	5	0	0	0	87
Lane Group Flow (vph)	408	766	127	20	820	89	228	219	0	100	102	254
Turn Type	D.P+P	NA	pm+ov	D.P+P	NA	Perm	Split	NA		Split	NA	pm+ov
Protected Phases	5	2	8	1	6		8	8		4	4	5
Permitted Phases	6		2	2		6						4
Actuated Green, G (s)	74.4	70.8	106.8	74.4	56.9	56.9	36.0	36.0		14.8	14.8	32.3
Effective Green, g (s)	74.4	70.8	106.8	74.4	56.9	56.9	36.0	36.0		14.8	14.8	32.3
Actuated g/C Ratio	0.50	0.47	0.71	0.50	0.38	0.38	0.24	0.24		0.10	0.10	0.22
Clearance Time (s)	6.0	5.6	6.6	6.0	5.6	5.6	6.6	6.6		6.6	6.6	6.0
Vehicle Extension (s)	3.5	5.0	4.0	3.5	5.0	5.0	4.0	4.0		4.0	4.0	3.5
Lane Grp Cap (vph)	674	1670	1196	282	1342	600	403	400		165	167	340
v/s Ratio Prot	0.07	0.22	0.03	0.00	c0.23		c0.14	0.13		0.06	0.06	c0.09
v/s Ratio Perm	0.23		0.05	0.03		0.06						0.07
v/c Ratio	0.61	0.46	0.11	0.07	0.61	0.15	0.57	0.55		0.61	0.61	0.75
Uniform Delay, d1	24.4	26.7	6.7	29.6	37.6	30.6	50.1	49.9		64.8	64.8	55.0
Progression Factor	1.56	1.46	7.53	0.21	0.38	0.47	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.2	0.7	0.1	0.1	1.6	0.4	5.7	5.3		7.1	7.4	8.9
Delay (s)	39.2	39.6	50.8	6.2	16.0	14.9	55.8	55.2		71.9	72.2	63.9
Level of Service	D	D	D	A	B	B	E	E		E	E	E
Approach Delay (s)		41.0			15.6			55.5			67.0	
Approach LOS		D			B			E			E	

Intersection Summary			
HCM 2000 Control Delay	39.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	24.8
Intersection Capacity Utilization	67.0%	ICU Level of Service	C
Analysis Period (min)	15		

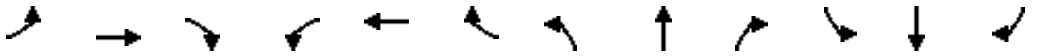
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	352	443	74	74	5
Future Volume (Veh/h)	5	352	443	74	74	5
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	383	482	80	80	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	562				724	281
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	562				724	281
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				78	99
cM capacity (veh/h)	1005				359	716

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	133	255	321	241	85
Volume Left	5	0	0	0	80
Volume Right	0	0	0	80	5
cSH	1005	1700	1700	1700	370
Volume to Capacity	0.00	0.15	0.19	0.14	0.23
Queue Length 95th (ft)	0	0	0	0	22
Control Delay (s)	0.4	0.0	0.0	0.0	17.6
Lane LOS	A				C
Approach Delay (s)	0.1		0.0		17.6
Approach LOS					C

Intersection Summary			
Average Delay	1.5		
Intersection Capacity Utilization	25.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	196	1243	694	106	939	37	245	27	44	18	43	107
Future Volume (vph)	196	1243	694	106	939	37	245	27	44	18	43	107
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	5.6	6.6	6.0	5.6			6.6	6.6		6.6	6.6
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95			1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99			1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.96	1.00		0.99	1.00
Satd. Flow (prot)	1770	3539	1583	1770	3519			1782	1583		1835	1583
Flt Permitted	0.14	1.00	1.00	0.07	1.00			0.96	1.00		0.99	1.00
Satd. Flow (perm)	268	3539	1583	129	3519			1782	1583		1835	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	213	1351	754	115	1021	40	266	29	48	20	47	116
RTOR Reduction (vph)	0	0	137	0	2	0	0	0	37	0	0	107
Lane Group Flow (vph)	213	1351	617	115	1059	0	0	295	11	0	67	9
Turn Type	D.P+P	NA	pm+ov	D.P+P	NA		Split	NA	Perm	Split	NA	Perm
Protected Phases	1	6	8	5	2		8	8		4	4	
Permitted Phases	2		6	6					8			4
Actuated Green, G (s)	92.4	80.5	120.8	92.4	77.4			40.3	40.3		12.5	12.5
Effective Green, g (s)	92.4	80.5	120.8	92.4	77.4			40.3	40.3		12.5	12.5
Actuated g/C Ratio	0.54	0.47	0.71	0.54	0.46			0.24	0.24		0.07	0.07
Clearance Time (s)	6.0	5.6	6.6	6.0	5.6			6.6	6.6		6.6	6.6
Vehicle Extension (s)	3.5	5.0	4.0	3.5	5.0			4.0	4.0		4.0	4.0
Lane Grp Cap (vph)	278	1675	1124	184	1602			422	375		134	116
v/s Ratio Prot	0.07	c0.38	0.13	0.04	0.30			c0.17			c0.04	
v/s Ratio Perm	c0.35		0.26	0.29					0.01			0.01
v/c Ratio	0.77	0.81	0.55	0.62	0.66			0.70	0.03		0.50	0.07
Uniform Delay, d1	53.3	38.1	11.7	30.8	36.1			59.3	49.8		75.7	73.4
Progression Factor	0.78	0.75	0.71	1.21	0.35			1.00	1.00		1.00	1.00
Incremental Delay, d2	8.8	3.0	1.4	5.4	1.7			9.3	0.2		4.0	0.4
Delay (s)	50.5	31.4	9.7	42.8	14.2			68.6	50.0		79.7	73.7
Level of Service	D	C	A	D	B			E	D		E	E
Approach Delay (s)		26.1			17.0			66.0			75.9	
Approach LOS		C			B			E			E	

Intersection Summary			
HCM 2000 Control Delay	29.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	170.0	Sum of lost time (s)	24.8
Intersection Capacity Utilization	77.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

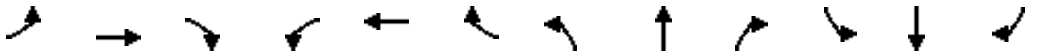
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	253	919	246	387	718	178	212	529	440	233	583	255
Future Volume (vph)	253	919	246	387	718	178	212	529	440	233	583	255
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.3	7.3	7.3	7.3	7.3		7.3	7.3	7.3	7.3	7.3	7.3
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		0.97	0.95	1.00	0.97	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3434		3433	3539	1583	3433	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3434		3433	3539	1583	3433	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	275	999	267	421	780	193	230	575	478	253	634	277
RTOR Reduction (vph)	0	0	109	0	13	0	0	0	255	0	0	220
Lane Group Flow (vph)	275	999	158	421	960	0	230	575	223	253	634	57
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	20.7	59.7	59.7	26.7	65.7		19.7	33.7	33.7	20.7	34.7	34.7
Effective Green, g (s)	20.7	59.7	59.7	26.7	65.7		19.7	33.7	33.7	20.7	34.7	34.7
Actuated g/C Ratio	0.12	0.35	0.35	0.16	0.39		0.12	0.20	0.20	0.12	0.20	0.20
Clearance Time (s)	7.3	7.3	7.3	7.3	7.3		7.3	7.3	7.3	7.3	7.3	7.3
Lane Grp Cap (vph)	418	1242	555	539	1327		397	701	313	418	722	323
v/s Ratio Prot	0.08	c0.28		0.12	c0.28		0.07	c0.16		0.07	c0.18	
v/s Ratio Perm			0.10						0.14			0.04
v/c Ratio	0.66	0.80	0.28	0.78	0.72		0.58	0.82	0.71	0.61	0.88	0.18
Uniform Delay, d1	71.3	49.9	39.8	68.8	44.4		71.2	65.3	63.6	70.8	65.6	55.8
Progression Factor	1.00	1.00	1.00	0.64	0.51		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	7.9	5.6	1.3	9.7	3.1		6.1	10.4	13.0	6.4	14.3	1.2
Delay (s)	79.1	55.5	41.0	54.0	26.0		77.3	75.6	76.6	77.2	79.9	57.0
Level of Service	E	E	D	D	C		E	E	E	E	E	E
Approach Delay (s)		57.2			34.4			76.3			73.8	
Approach LOS		E			C			E			E	

Intersection Summary			
HCM 2000 Control Delay	59.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	170.0	Sum of lost time (s)	29.2
Intersection Capacity Utilization	83.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1871	0	0	812	141	421
Future Volume (vph)	1871	0	0	812	141	421
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.3			5.3	5.4	5.4
Lane Util. Factor	0.95			0.95	1.00	1.00
Frt	1.00			1.00	1.00	0.85
Flt Protected	1.00			1.00	0.95	1.00
Satd. Flow (prot)	3539			3539	1770	1583
Flt Permitted	1.00			1.00	0.95	1.00
Satd. Flow (perm)	3539			3539	1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2034	0	0	883	153	458
RTOR Reduction (vph)	0	0	0	0	0	9
Lane Group Flow (vph)	2034	0	0	883	153	449
Turn Type	NA			NA	Prot	Prot
Protected Phases	2			2	4	4
Permitted Phases						
Actuated Green, G (s)	106.7			106.7	52.6	52.6
Effective Green, g (s)	106.7			106.7	52.6	52.6
Actuated g/C Ratio	0.63			0.63	0.31	0.31
Clearance Time (s)	5.3			5.3	5.4	5.4
Vehicle Extension (s)	4.0			4.0	4.0	4.0
Lane Grp Cap (vph)	2221			2221	547	489
v/s Ratio Prot	c0.57			0.25	0.09	c0.28
v/s Ratio Perm						
v/c Ratio	0.92			0.40	0.28	0.92
Uniform Delay, d1	27.7			15.7	44.4	56.6
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	7.4			0.5	1.3	24.7
Delay (s)	35.1			16.2	45.7	81.4
Level of Service	D			B	D	F
Approach Delay (s)	35.1			16.2	72.4	
Approach LOS	D			B	E	

Intersection Summary			
HCM 2000 Control Delay	36.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	170.0	Sum of lost time (s)	10.7
Intersection Capacity Utilization	86.7%	ICU Level of Service	E
Analysis Period (min)	15		

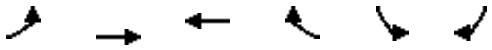
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	425	1174	694	106	870	210	245	29	44	200	47	401
Future Volume (vph)	425	1174	694	106	870	210	245	29	44	200	47	401
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	5.6	6.6	6.0	5.6	5.6	6.6	6.6		6.6	6.6	6.0
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.95	0.95		0.95	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.97		0.95	0.97	1.00
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	1681	1651		1681	1716	1583
Flt Permitted	0.16	1.00	1.00	0.09	1.00	1.00	0.95	0.97		0.95	0.97	1.00
Satd. Flow (perm)	562	3539	1583	174	3539	1583	1681	1651		1681	1716	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	462	1276	754	115	946	228	266	32	48	217	51	436
RTOR Reduction (vph)	0	0	210	0	0	92	0	9	0	0	0	68
Lane Group Flow (vph)	462	1276	544	115	946	136	176	161	0	132	136	368
Turn Type	D.P+P	NA	pm+ov	D.P+P	NA	Perm	Split	NA		Split	NA	pm+ov
Protected Phases	5	2	8	1	6		8	8		4	4	5
Permitted Phases	6		2	2		6						4
Actuated Green, G (s)	82.0	71.9	97.1	82.0	59.7	59.7	25.2	25.2		18.2	18.2	40.5
Effective Green, g (s)	82.0	71.9	97.1	82.0	59.7	59.7	25.2	25.2		18.2	18.2	40.5
Actuated g/C Ratio	0.55	0.48	0.65	0.55	0.40	0.40	0.17	0.17		0.12	0.12	0.27
Clearance Time (s)	6.0	5.6	6.6	6.0	5.6	5.6	6.6	6.6		6.6	6.6	6.0
Vehicle Extension (s)	3.5	5.0	4.0	3.5	5.0	5.0	4.0	4.0		4.0	4.0	3.5
Lane Grp Cap (vph)	733	1694	1023	202	1406	629	282	276		203	207	426
v/s Ratio Prot	0.09	c0.36	0.09	0.04	0.27		c0.10	0.10		0.08	0.08	c0.13
v/s Ratio Perm	0.25		0.25	0.27		0.09						0.10
v/c Ratio	0.63	0.75	0.53	0.57	0.67	0.22	0.62	0.58		0.65	0.66	0.86
Uniform Delay, d1	22.7	31.9	14.3	24.4	37.2	29.8	58.1	57.7		63.0	63.0	52.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.9	3.2	0.7	4.0	2.6	0.8	4.8	3.7		8.0	8.1	16.8
Delay (s)	24.6	35.1	15.0	28.3	39.8	30.6	62.9	61.3		71.0	71.1	69.0
Level of Service	C	D	B	C	D	C	E	E		E	E	E
Approach Delay (s)		27.1			37.2			62.1			69.8	
Approach LOS		C			D			E			E	

Intersection Summary			
HCM 2000 Control Delay	38.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	150.2	Sum of lost time (s)	24.8
Intersection Capacity Utilization	72.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	480	404	130	84	5
Future Volume (Veh/h)	5	480	404	130	84	5
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	522	439	141	91	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	580				780	290
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	580				780	290
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				72	99
cM capacity (veh/h)	990				330	707

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	179	348	293	287	96
Volume Left	5	0	0	0	91
Volume Right	0	0	0	141	5
cSH	990	1700	1700	1700	340
Volume to Capacity	0.01	0.20	0.17	0.17	0.28
Queue Length 95th (ft)	0	0	0	0	28
Control Delay (s)	0.3	0.0	0.0	0.0	19.7
Lane LOS	A				C
Approach Delay (s)	0.1		0.0		19.7
Approach LOS					C

Intersection Summary			
Average Delay	1.6		
Intersection Capacity Utilization	28.4%	ICU Level of Service	A
Analysis Period (min)	15		