

**Traffic Impact Study
DRI #2397
RP Union Station 85, LLC**

Jonesboro Rd at Shannon Way
Union City, Fulton County, Georgia



Prepared for:

RP Union Station 85, LLC
445 Bishop St, Suite 200
Atlanta, GA 30318
678-367-4210

Prepared by:

Randall Parker PE PTOE PTP AICP
3160 Main Street, Suite 100
Duluth, Georgia 30096
Telephone: 678-689-2369
randy.parker@stantec.com
www.stantec.com

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Table of Contents

EXECUTIVE SUMMARY	E-I
1.0 INTRODUCTION	1.1
2.0 EXISTING TRAFFIC CONDITIONS	2.4
2.1 EXISTING VOLUMES	2.4
2.2 EXISTING INTERSECTION CAPACTY ANALYSIS	2.7
3.0 FUTURE BACKGROUND CONDITIONS	3.8
3.1 BACKGROUND VOLUMES	3.8
3.2 BACKGROUND INTERSECTION CAPACTION ANALYSIS	3.8
4.0 PROJECT TRAFFIC	4.10
4.1 TRIP GENERATION	4.10
4.2 DIRECTIONAL DISTRIBUTION AND TRIP ASSIGNMENT	4.10
5.0 FUTURE TRAFFIC CONDITIONS	5.13
5.1 CAPACITY ANALYSIS: FUTURE WITH PROJECT TRIPS CONDITIONS	5.13
EXPLANATION OF LEVEL OF SERVICE	5.15
LIST OF TABLES	
Table 2-1 Existing Levels of Service	2.7
Table 3-1 Background Levels of Service	3.8
Table 4-1 Trip Generation	4.10
Table 5-1 Future with Project Levels of Service	5.13
LIST OF FIGURES	
Figure 1-1 Site Location	1.2
Figure 1-2 Aerial Photograph of Location	1.3
Figure 2-1 Existing Traffic Volumes	2.5
Figure 2-2 Existing Lane Configurations/Traffic Controls	2.6
Figure 3-1 Background Volumes	3.9
Figure 4-1 Trip Distribution	4.11
Figure 4-2 Project Trips	4.12
Figure 5-1 Future with Project Volumes	5.14
APPENDIX A	

Executive Summary

The additional traffic generated by the redevelopment of the 78.5-acre site located north of Jonesboro Road (SR 138), northwest of I-85 and Oakley Road, and east of Londonderry Way and south of Mall Boulevard is expected to provide adequate operating conditions when completed in 2015. The site is currently occupied by a vacant 1,562,064 square foot retail use building and associated parking areas. The redevelopment will include approximately 1,080,000 square feet of high-cube warehouse/distribution use, 20,000 square feet of restaurants, and 72,000 square feet of office space.

The proposed land use will include sufficient personal vehicle parking spaces to meet the minimum zoning code requirements and trailer parking spaces.

The warehouse/ distribution use portion of the site will be accessed by the existing Shannon Way signalized intersection and via Lancaster Lane to provide access to Jonesboro Road (SR 138) and Interstate 85 (I-85). The restaurant and office uses will access Londonderry Way and Mall Boulevard directly at three (3) site driveways. Londonderry Way, Lancaster Lane and Shannon Parkway provide access to Jonesboro Road (SR 138) and Interstate 85 (I-85) at signalized intersections. Sidewalks have previously been installed along the perimeter roadways of the site. Bike lanes exist on both sides of Londonderry Way. There is a MARTA bus stop near the site, but not adjacent to any of the site access points. A GRTA Express Bus terminal is located north of the site.

This mixed-use redevelopment does not require changes to the existing zoning and the land uses are based on recommendations included in the recent LCI study.

This traffic impact analyses assumes a single phase of development completing in 2015.

The developments are expected to generate approximately 2,690 entering and 2,690 exiting vehicles daily when completely occupied. Approximately 335 vehicles in the morning and 200 vehicles in the evening peak volume hour of the adjacent roadway are expected to enter the development on typical weekdays. Approximately 154 vehicles in the morning and 336 vehicles in the evening peak volume hour are expected to exit the development on typical weekdays. Approximately 22 entering/10 exiting trucks are expected in the morning peak hour and 13 entering/30 exiting trucks are expected in the evening peak.

Approximately 63% of these trips are expected to originate and terminate in the north, east & west of the site via I-85, while 15% are expected to use I-85 south, east and west of the site and 16% are expected to use Jonesboro Road to the east of the site. The remaining 6% of the new trips are expected to originate and terminate west of the site using Jonesboro Road and other local streets.

All of the study intersections are expected to operate at adequate Levels of Service (LOS) during both peak periods with the project traffic in 2015 with existing lane configurations and traffic controls (with shared through and turning lanes at the site driveways.)

The intersections studied can be reasonably expected to operate at adequate Levels of Service (LOS) without improvements with the additional new trips generated by the RP Union Station 85, LLC redevelopment of the site in 2015.

1.0 Introduction

RP Union Station 85, LLC is the planned redevelopment of 78.5 acres formerly occupied by a vacant 1,562,064 square foot retail use building and its associated parking areas. The site is located north of Jonesboro Road (SR 138), northwest of I-85 and Oakley Road, and east of Londonderry Way and south of Mall Boulevard in Union City, south Fulton County, Georgia.

The redevelopment of site the will include approximately 1,080,000 square feet of high-cube warehouse/distribution use, 20,000 square feet of restaurants, and 72,000 square feet of office space.

For the purpose of this traffic analysis, the redevelopment is expected to be completed in 2015 as a single phase.

The warehouse/ distribution use portion of the site will be accessed by the existing Shannon Way signalized intersection at SR 138 and from westbound SR 138 via Londonderry Way and Lancaster Lane. SR 138 provides access to and from I-85 at the adjacent signalized intersections.

The restaurant and office uses will access Londonderry Way at two (2) site driveways and one (1) site driveway on Mall Boulevard, planned to be side-street stop signed controlled. Londonderry Way, Lancaster Lane and Shannon Parkway provide access for these trips via SR 138 and I-85 at signalized intersections.

In the following sections, the analysis of traffic operations is described for existing conditions, and future conditions with the additional traffic. Finally, conclusions are presented.

The location of the site is shown in the following figures.

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DRI #2397
RP UNION STATION 85, LLC

Figure 1-1 Site Location



TRAFFIC IMPACT STUDY
DRI #2397
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Figure 1-2 Aerial Photograph of Location



2.0 Existing Traffic Conditions

SR 138 (Jonesboro Road) is a 35 mph four-lane street, functionally classified as an Urban Minor Arterial west of I-85 and as a Urban Principal Arterial east of I-85, with left and right turn storage and deceleration lanes and traffic signals at major intersections. There are sidewalks on both sides of SR 138.

I-85 is a 65 mph eight-lane Interstate Highway providing access to Atlanta and beyond to the northeast and Montgomery, AL to the southwest. A signalized intersections diamond interchange provides access at SR 138, with dual southbound exit ramp left-turn lanes to eastbound SR 138 and a free southbound right turn lane to westbound SR 138. A reconstruction of the interchange is planned with pre-construction engineering funding authorized in FY 2014. Completion of construction is estimated for 2020.

Shannon Way is a six-lane median divided north-south local street providing access between the site and SR 138 at a signalized intersection. There are sidewalks on the east side of the roadway.

Londonderry Way is a 35 mph four-lane undivided north-south local street providing access between Mall Boulevard and SR 138, with a signalized intersection at Lancaster Lane. There are sidewalks and bike lanes on both sides of Londonderry Way.

Shannon Parkway is a 35 mph four-lane flush median divided north-south local street providing access between Mall Boulevard (and points north) and SR 138 at a signalized intersection. There are sidewalks on the east side of the roadway.

Mall Boulevard is a 35 mph four-lane flush median divided east-west local street providing access between Oakley Road and beyond to the east and Shannon Parkway. There are sidewalks on the south side of the Mall Boulevard. The intersections are side-street stop sign controlled.

Lancaster Lane is a 35 mph four-lane median divided (east of Londonderry Way only) east-west local street providing access between the site and Shannon Parkway, with a signalized intersection at Londonderry Way.

The land uses along the roadways in the study area are primarily commercial or vacant.

2.1 EXISTING VOLUMES

The existing weekday morning and afternoon peak-hour turning movement counts were collected on Tuesday, May 20, 2014, when Fulton County public schools were in session, at the following intersections:

- Jonesboro Road (SR 138) at Shannon Way
- Jonesboro Road (SR 138) at Londonderry Way
- Jonesboro Road (SR 138) at Shannon Pkwy
- Jonesboro Road (SR 138) at I-85 southbound ramps
- Jonesboro Road (SR 138) at I-85 northbound ramps
- Londonderry Way at Lancaster Lane
- Londonderry Way at Mall Boulevard
- Shannon Pkwy at Lancaster Lane

Weekday 24-hour directional volume, speed, and vehicle classification counts were also collected on Tuesday, May 20, 2014 on Jonesboro Road near the site. During 24 hours, 33,506 vehicles were counted in both directions at an 85th percentile speed of 35 mph. Approximately 10.7% were trucks, with 3.2% combination units and 7.5% single units. Figures 2-1 & 2 shows the existing volumes and configurations.

TRAFFIC IMPACT STUDY
DRI #2397
RP UNION STATION 85, LLC

Figure 2-1 Existing Traffic Volumes

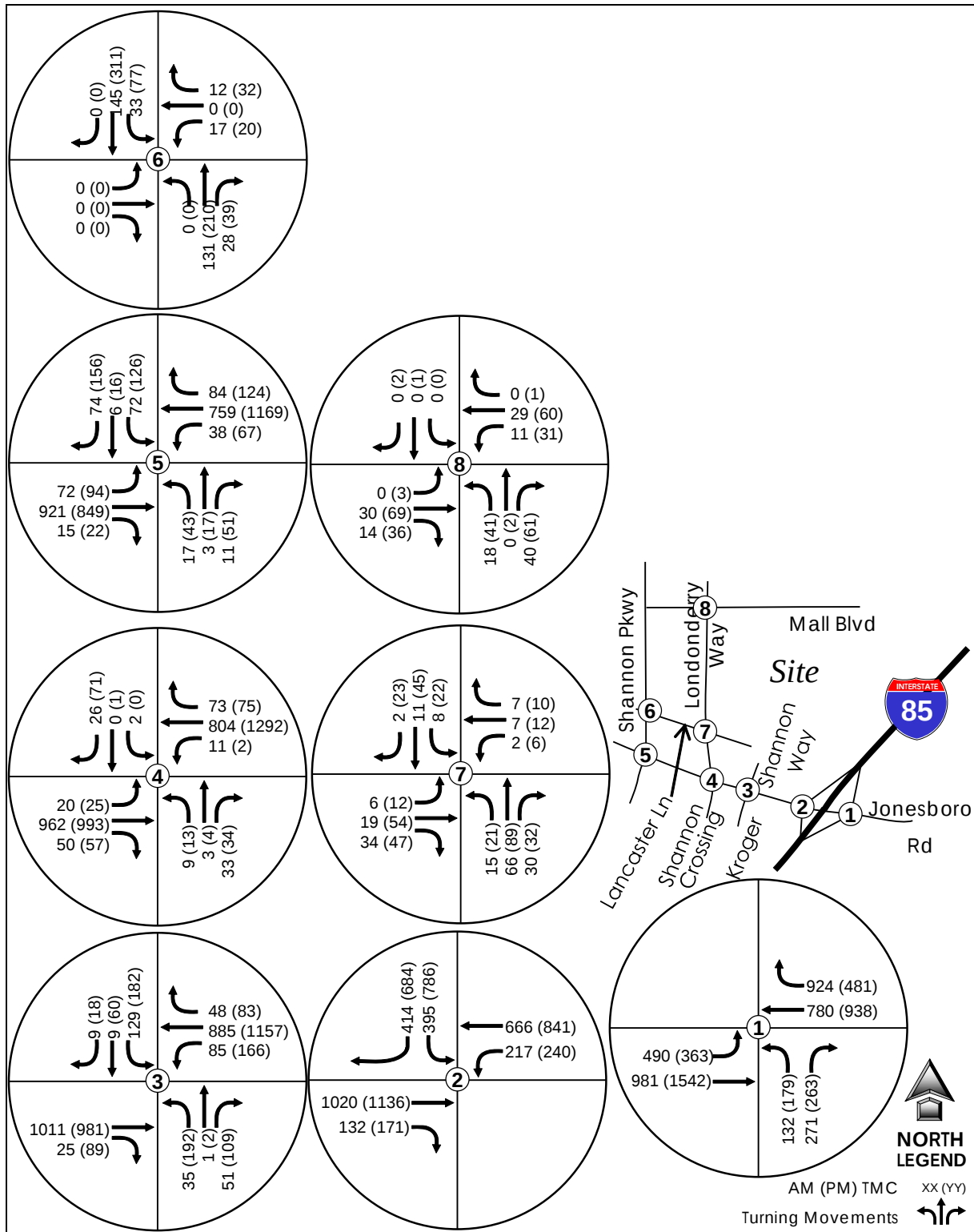
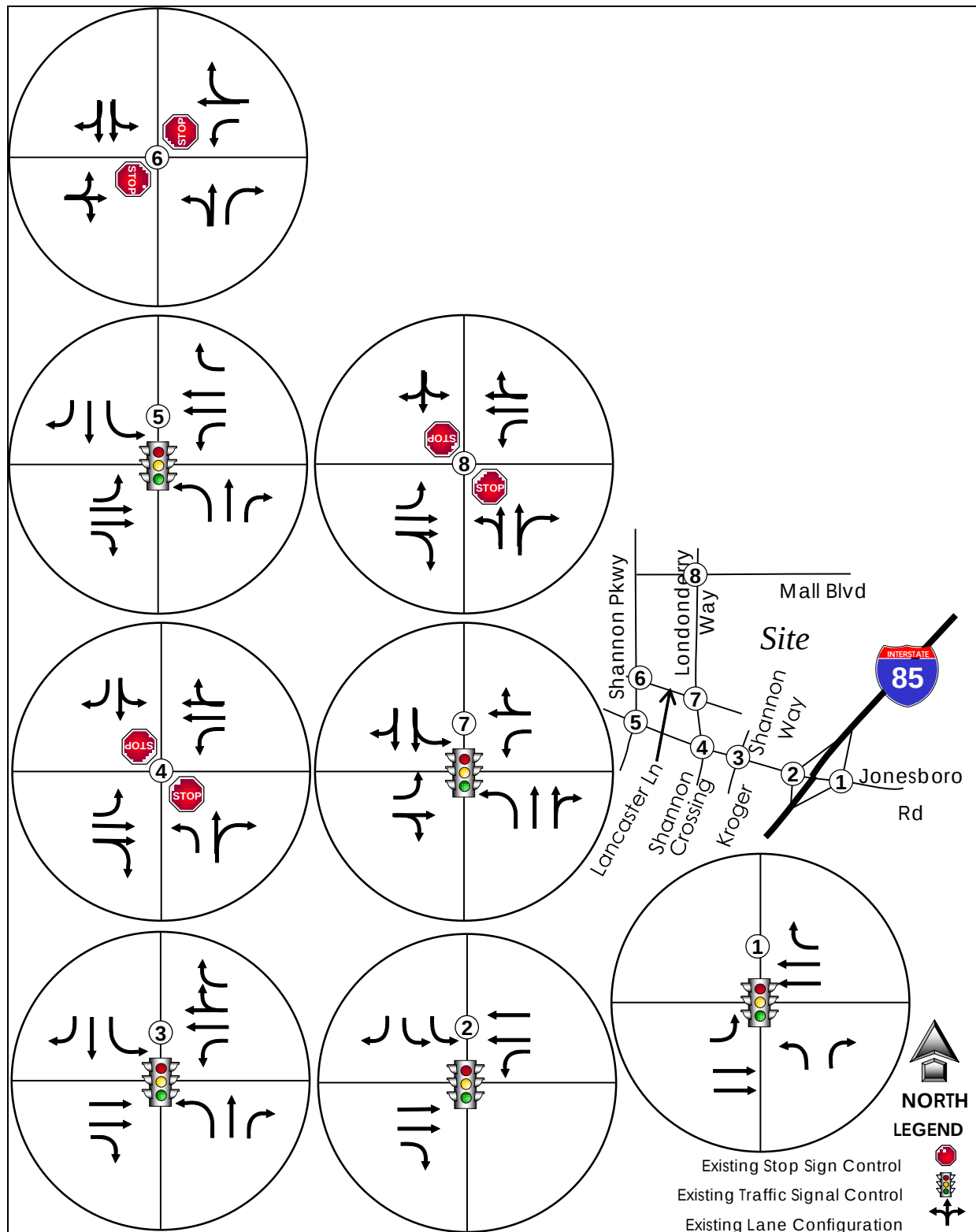


Figure 2-2 Existing Lane Configurations/Traffic Controls



2.2 EXISTING INTERSECTION CAPACTY ANALYSIS

Using the methodologies described in the EXPLANATION OF LEVEL OF SERVICE Section (near the end of this report) for the existing traffic volumes with the existing lane configurations and signal timing and phasing, the results of the capacity analysis for existing conditions, with optimized signal timing, are presented in following table.

Table 2-1 Existing Levels of Service

Intersection		Control	Approach/ Movement	Peak Period LOS	
#	Name			AM	PM
1	I-85 Northbound at (SR 138) Jonesboro Rd	Traffic Signal	Overall	B	B
2	I-85 Southbound at (SR 138) Jonesboro Rd	Traffic Signal	Overall	A	B
3	Shannon Way at (SR 138) Jonesboro Rd	Traffic Signal	Overall	A	B
4	Londonderry Way at (SR 138) Jonesboro Rd	Side Street STOP Sign	NB Left	D	F
			SB Right	A	A
			EB	B	B
			WB	B	B
5	Shannon Parkway at (SR 138) Jonesboro Rd	Traffic Signal	Overall	A	A
6	Lancaster Lane at Shannon Parkway	Side Street STOP Sign	NB	A	A
			SB	A	A
			EB	A	A
			WB	B	B
7	Lancaster Lane at Londonderry Way	Traffic Signal	Overall	B	B
8	Mall Boulevard at Londonderry Way	Side Street STOP Sign	NB	A	A
			SB	A	A
			EB	A	A
			WB	A	A

As can be seen in table above, the study intersections are currently operating at adequate Levels of Service (LOS) during both peak periods.

The capacity analysis printouts are included in the Appendix.

3.0 Future Background Conditions

3.1 BACKGROUND VOLUMES

Although no other specific approved background developments are expected to be completed before the project's build-out in 2015 were identified in the vicinity of the site, traffic volumes are expected to increase due to other developments that are not in the immediate vicinity, but that will contribute traffic to the road network (background growth). Growth of this nature can generally be determined by examining historic trends in the vicinity of the subject site, and by applying those trends to the appropriate roadways. Historical Annual Average Daily Traffic (AADT) provided by the Georgia Department of Transportation (GDOT) at counting stations in the vicinity of the site indicated a negative growth rate of 5.5 % over the past five (5) years and a negative 0.1% over the past 22 years. To provide a conservative analysis, a 1% per year growth rate was calculated and applied for one year to account for background growth, as determined by GDOT, ARC, and GRTA staff at the pre-application/methodology meeting. The future background traffic volumes are shown in Figure 3-1.

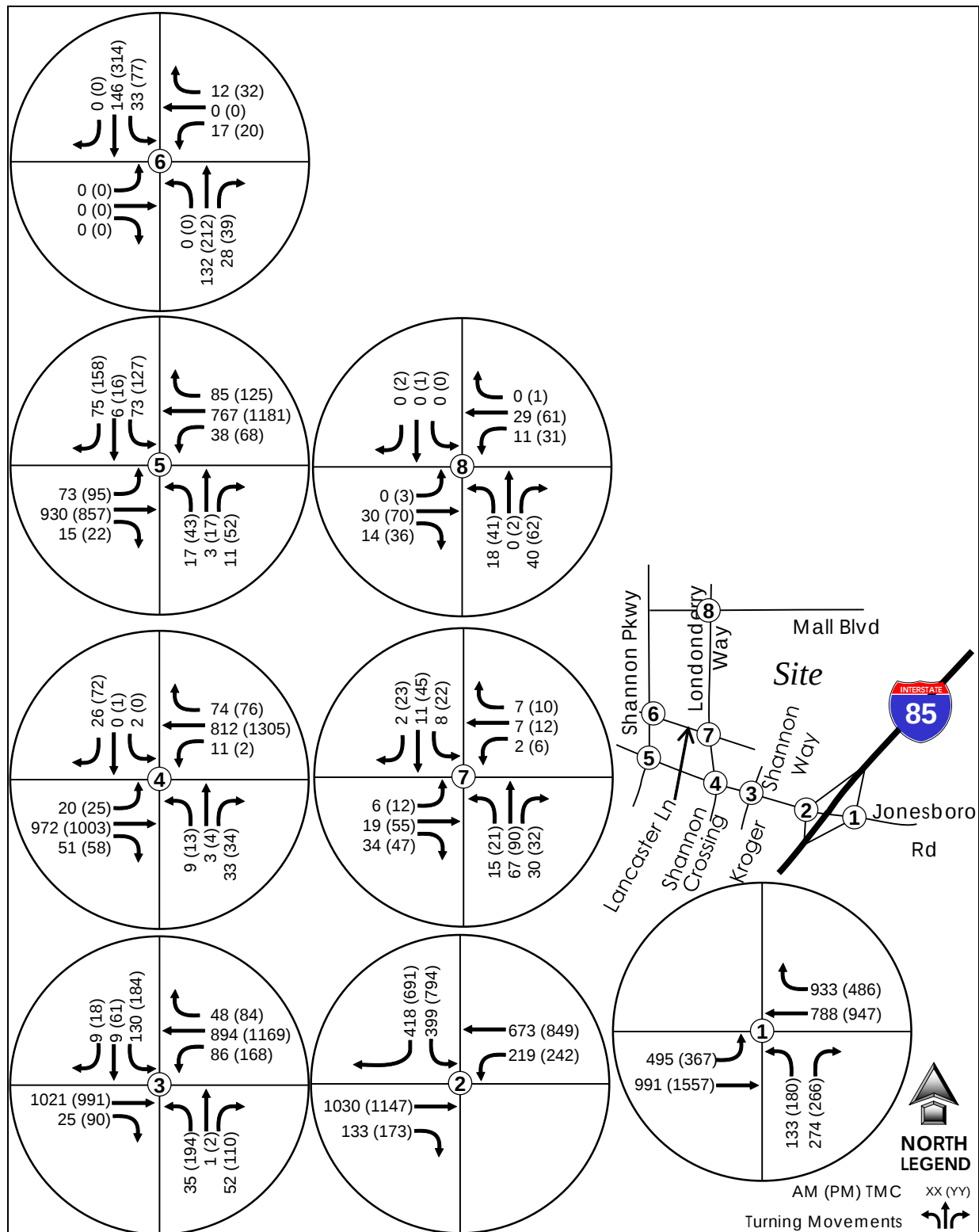
3.2 BACKGROUND INTERSECTION CAPACITY ANALYSIS

Using the methodologies described in the EXPLANATION OF LEVEL OF SERVICE Section (near the end of this report) with the existing lane configurations and controls, the results of the capacity analysis are presented in following table. The capacity analysis printouts are included in the Appendix.

Table 3-1 Background Levels of Service

#	Intersection Name	Control	Approach/ Movement	Peak Period LOS	
				AM	PM
1	I-85 Northbound at (SR 138) Jonesboro Rd	Traffic Signal	Overall	B	B
2	I-85 Southbound at (SR 138) Jonesboro Rd	Traffic Signal	Overall	B	B
3	Shannon Way at (SR 138) Jonesboro Rd	Traffic Signal	Overall	A	B
4	Londonderry Way at (SR 138) Jonesboro Rd	Side Street STOP Sign	NB Left	D	F
			SB Right	A	A
			EB	B	B
			WB	B	B
5	Shannon Parkway at (SR 138) Jonesboro Rd	Traffic Signal	Overall	A	A
6	Lancaster Lane at Shannon Parkway	Side Street STOP Sign	NB	A	A
			SB	A	A
			EB	A	A
			WB	B	B
7	Lancaster Lane at Londonderry Way	Traffic Signal	Overall	B	B
8	Mall Boulevard at Londonderry Way	Side Street STOP Sign	NB	A	A
			SB	A	A
			EB	A	A
			WB	A	A

Figure 3-1 Background Volumes



4.0 Project Traffic

The number of vehicle trips expected to be generated by the proposed development was estimated by applying the methodology, rates, and equations developed by the Institute of Transportation Engineers (ITE) as published in the *Trip Generation Manual*, 9th Edition, 2012 for the Land Use Specialty Retail Center.

4.1 TRIP GENERATION

The numbers of new trips expected to be generated has been determined for the full build-out of the project in 2015. The results of the trip generation are shown in Table 4-1.

Table 4-1 Trip Generation

Land Use	Code	Intensity	Units	Daily	AM IN	AM OUT	PM IN	PM OUT
Warehouse/Distribution	152	1,080	ksf	1,814	87	39	55	125
Office	710	72	ksf	1,022	129	18	27	132
Restaurant	932	20	ksf	2,544	119	97	118	79
Total Trips		1,026	ksf	5,380	335	154	200	336

Based on the data, rates, and methodology in the *Trip Generation Manual*, approximately 38% of the new warehouse/distribution center generated trips are expected to be trucks.

4.2 DIRECTIONAL DISTRIBUTION AND TRIP ASSIGNMENT

The expected geographic distribution of the trips to be generated by the development was determined using census tract data reflecting population within six miles of the site and the existing traffic patterns in the area. The directional distribution was approved at the pre-application/methodology meeting.

Approximately 63% of these trips are expected to originate and terminate in the north, east & west of the site via I-85, while 15% are expected to use I-85 south, east and west of the site and 16% are expected to use Jonesboro Road to the east of the site. The remaining 6% of the new trips are expected to originate and terminate west of the site using Jonesboro Road and other local streets.

The trip distribution for the project is shown in Figure 4-1. The appropriate distribution percentages were applied to the trips generated by the project as shown in Table 4-1, and the traffic volumes were assigned to the road network. The turning movement volumes expected from the project are shown in Figure 4-2.

Figure 4-1 Trip Distribution

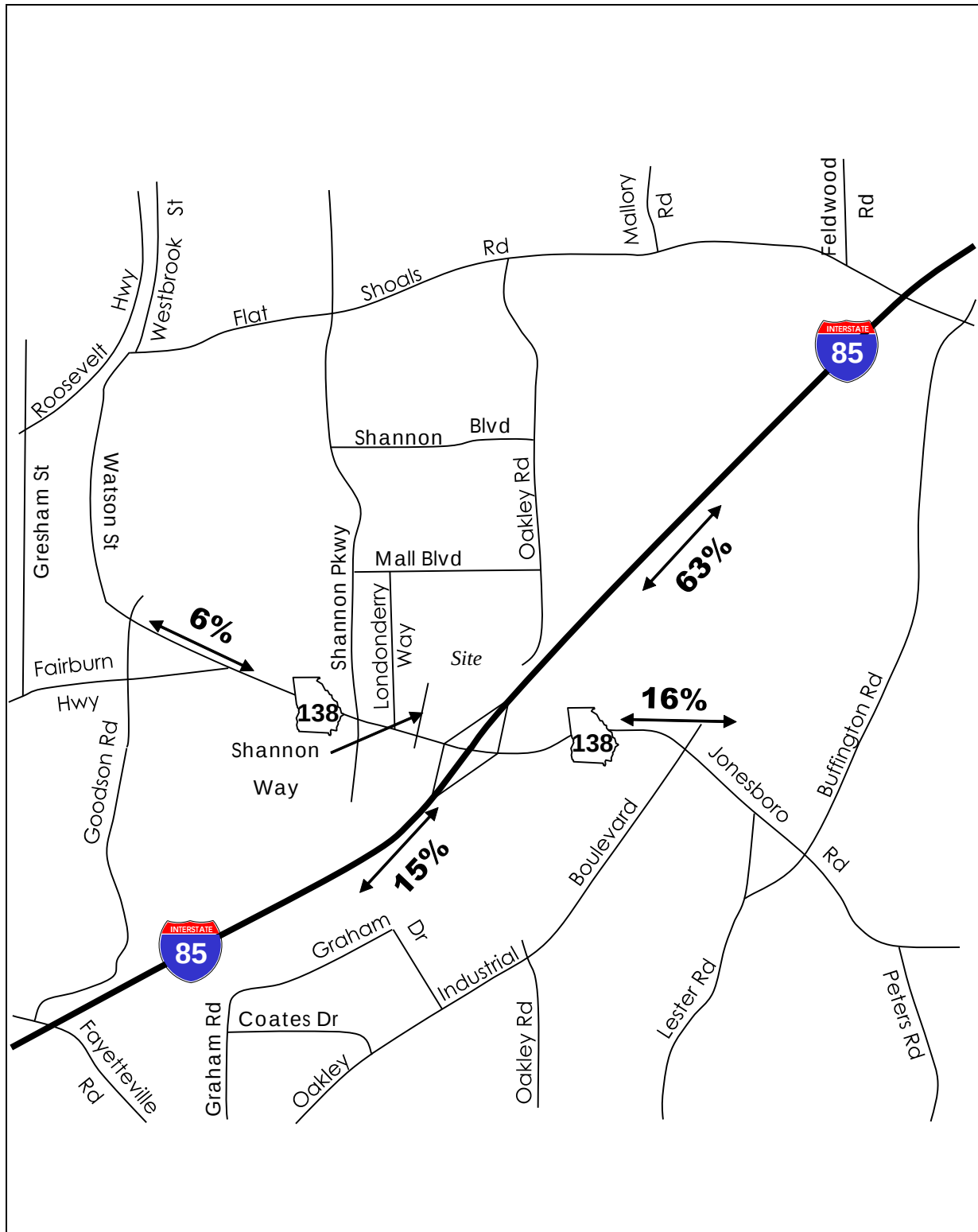
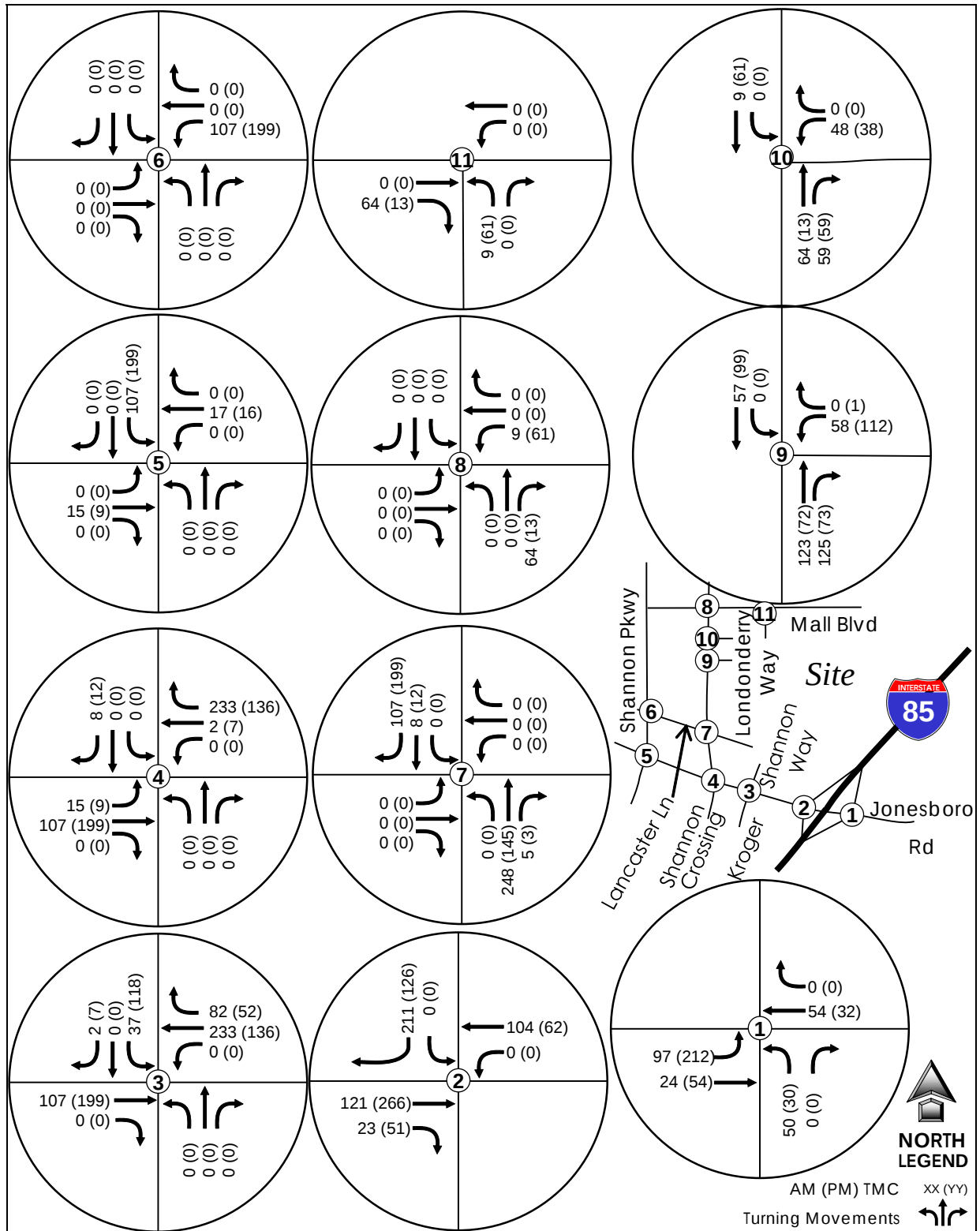


Figure 4-2 Project Trips



5.0 Future Traffic Conditions

5.1 CAPACITY ANALYSIS: FUTURE WITH PROJECT TRIPS CONDITIONS

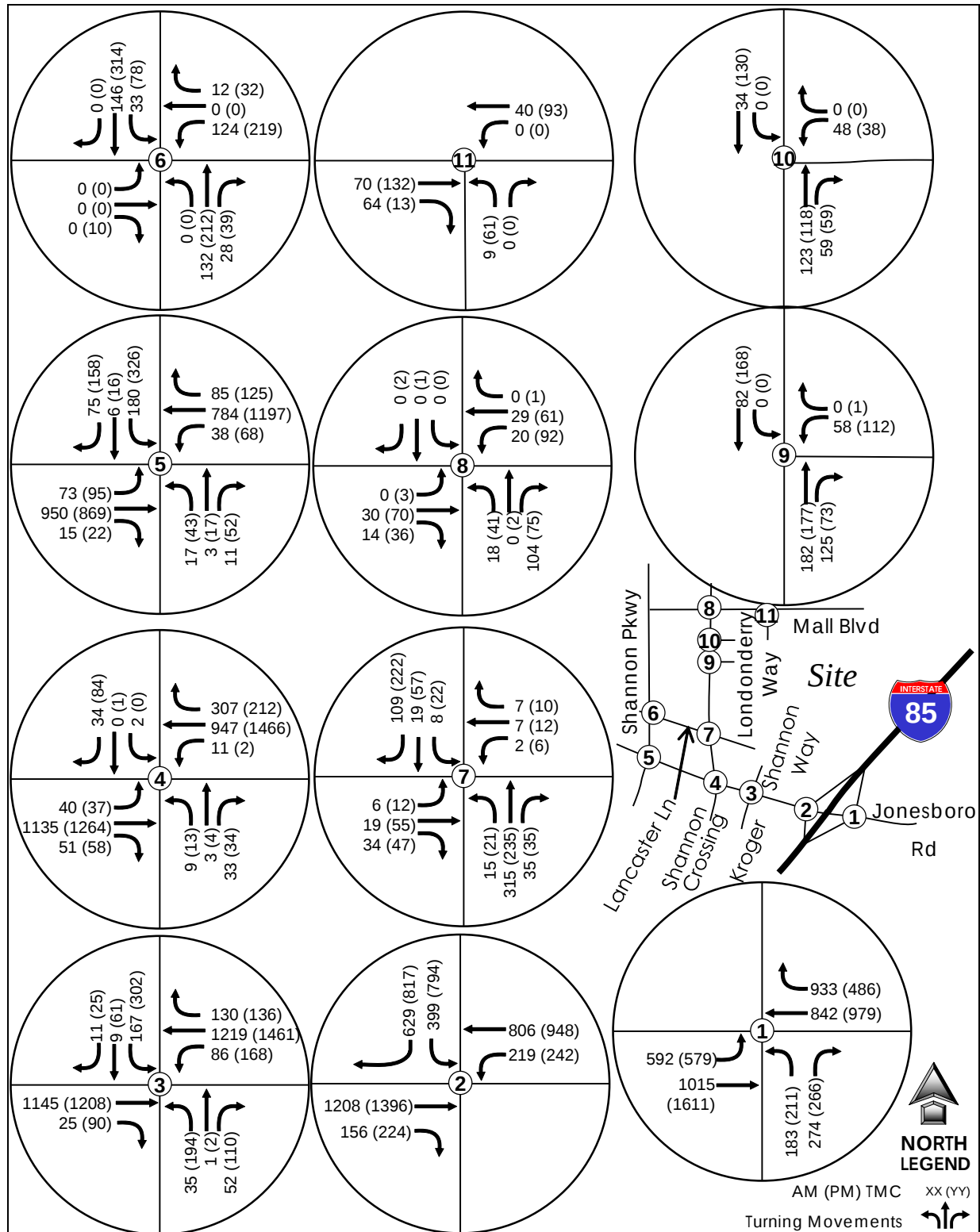
The future with project traffic volumes are shown in Figure 5-1. Using the methodologies described in the EXPLANATION OF LEVEL OF SERVICE Section, the results of the capacity analysis 2015 future with project volumes and optimized signal timings are presented in Table 5-1.

Table 5-1 Future with Project Levels of Service

#	Intersection Name	Control	Approach/ Movement	Peak Period LOS	
				AM	PM
1	I-85 Northbound at (SR 138) Jonesboro Rd	Traffic Signal	Overall	C	C
2	I-85 Southbound at (SR 138) Jonesboro Rd	Traffic Signal	Overall	B	C
3	Shannon Way at (SR 138) Jonesboro Rd	Traffic Signal	Overall	A	C
4	Londonderry Way at (SR 138) Jonesboro Rd	Side Street STOP Sign	NB Left	F	F
			SB Right	A	A
			EB	B	C
			WB	B	B
5	Shannon Parkway at (SR 138) Jonesboro Rd	Traffic Signal	Overall	B	C
6	Lancaster Lane at Shannon Parkway	Side Street STOP Sign	NB	A	A
			SB	A	A
			EB	A	A
			WB	B	D
7	Lancaster Lane at Londonderry Way	Traffic Signal	Overall	B	B
8	Mall Boulevard at Londonderry Way	Side Street STOP Sign	NB	A	B
			SB	A	A
			EB	A	A
			WB	A	A
9	Main Site Driveway at Londonderry Way	Side Street STOP Sign	NB	A	A
			SB	A	A
			WB	B	B
10	North Restaurant Driveway at Londonderry Way	Side Street STOP Sign	NB	A	A
			SB	A	A
			WB	A	B
11	North Office Driveway at Mall Boulevard	Side Street STOP Sign	NB	A	B
			EB	A	A
			WB	A	A

As can be seen in Table 5-1, all of the study intersections are expected to operate at adequate Levels of Service (LOS) during both peak periods with the project traffic in 2015 with existing lane configurations and traffic controls (with shared through and turning lanes at the site driveways.)

Figure 5-1 Future with Project Volumes



Explanation of Level of Service

Capacity analyses of the study intersections were completed using procedures in the Transportation Research Board's *Highway Capacity Manual (HCM)*. This is the usual methodology for the analysis of traffic conditions. The software program *Synchro 8* (a nationally recognized computer software package for analyzing capacities and Levels of Service) was used to perform the actual capacity analyses for the key intersections.

Operating conditions at intersections are evaluated in terms of Levels of Service (LOS). LOS A through D are generally considered adequate peak hour operations. LOS E and F are generally considered inadequate conditions.

Levels of Service for signalized intersections are reported in composite fashion, i.e., one LOS for the entire intersection, and are based on average control delay. Individual turning movements at a signalized intersection may experience inadequate LOS, particularly where those volumes are relatively low, while the intersection as a whole has an adequate LOS. This is because the major movements on the major roadway are given priority in assigning signal green time.

Traffic conditions at un-signalized intersections, with STOP sign control on the minor street only, are evaluated for the minor street approaches and for the left turns from the major street. This is because the major street traffic is assumed to have no delay since there is no control (no STOP sign). Inadequate Levels of Service for minor street approaches to un-signalized intersections are not uncommon, as the continuous flow traffic will always get the priority.

Levels of Service for all-way STOP controlled intersections are reported both for key intersection movements, and in composite fashion, i.e., one LOS for the entire intersection, and are based on average control delay.

The *Highway Capacity Manual* Level of Service criteria for signalized and un-signalized intersections are shown in the following table:

Highway Capacity Manual Intersection Level of Service Criteria

LOS	Control Delay (seconds per vehicle)	
	Signalized Intersection	Unsignalized Intersection
A	≤ 10	≤ 10
B	>10 and ≤ 20	>10 and ≤ 15
C	>20 and ≤ 35	>15 and ≤ 25
D	>35 and ≤ 55	>25 and ≤ 35
E	>55 and ≤ 80	>35 and ≤ 50
F	> 80	> 50

Source: *Highway Capacity Manual*.

Appendix A

Traffic Counts

Trip Generation

Capacity Analyses

Reliable Traffic Data Services, LLC

Tel: (770) 578-8158 | Fax: (770) 578-8159
info@reliabletraffic.org | www.reliabletraffic.org

TMC Data
Jonesboro Rd (SR138) @
I-85 NB Off-Ramp
7-9 am | 4-6 pm

File Name : 35310001
Site Code : 35310001
Start Date : 5/20/2014
Page No : 1

Groups Printed- Cars and Buses - Trucks

	I-85 NB Off-Ramp Northbound					Southbound					Jonesboro Rd (SR138) Eastbound					Jonesboro Rd (SR138) Westbound					
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	22	0	60	0	82	0	0	0	0	0	76	193	0	0	269	0	129	247	0	376	727
07:15 AM	33	0	71	0	104	0	0	0	0	0	135	227	0	0	362	0	178	227	0	405	871
07:30 AM	41	1	61	0	103	0	0	0	0	0	116	242	0	0	358	0	216	251	0	467	928
07:45 AM	26	0	70	0	96	0	0	0	0	0	133	261	0	0	394	0	175	236	0	411	901
Total	122	1	262	0	385	0	0	0	0	0	460	923	0	0	1383	0	698	961	0	1659	3427
08:00 AM	30	1	69	0	100	0	0	0	0	0	106	251	0	0	357	0	211	210	0	421	878
08:15 AM	35	0	63	0	98	0	0	0	0	0	113	186	0	0	299	0	167	214	0	381	778
08:30 AM	26	0	76	0	102	0	0	0	0	0	103	201	0	0	304	0	159	177	0	336	742
08:45 AM	36	0	55	0	91	0	0	0	0	0	98	255	0	0	353	0	137	136	0	273	717
Total	127	1	263	0	391	0	0	0	0	0	420	893	0	0	1313	0	674	737	0	1411	3115
*** BREAK ***																					
04:00 PM	40	0	51	0	91	0	0	0	0	0	98	347	0	0	445	0	207	142	0	349	885
04:15 PM	30	0	52	0	82	0	0	0	0	0	102	375	0	0	477	0	208	113	0	321	880
04:30 PM	44	0	63	0	107	0	0	0	0	0	100	380	0	0	480	0	222	120	0	342	929
04:45 PM	55	1	55	0	111	0	0	0	0	0	80	382	0	0	462	0	198	106	0	304	877
Total	169	1	221	0	391	0	0	0	0	0	380	1484	0	0	1864	0	835	481	0	1316	3571
05:00 PM	40	1	76	0	117	0	0	0	0	0	104	399	0	0	503	0	249	124	0	373	993
05:15 PM	44	0	58	0	102	0	0	0	0	0	85	401	0	0	486	0	243	130	0	373	961
05:30 PM	38	0	74	0	112	0	0	0	0	0	94	360	0	0	454	0	248	121	0	369	935
05:45 PM	24	0	55	0	79	0	0	0	0	0	75	352	0	0	427	0	257	137	0	394	900
Total	146	1	263	0	410	0	0	0	0	0	358	1512	0	0	1870	0	997	512	0	1509	3789
Grand Total	564	4	1009	0	1577	0	0	0	0	0	1618	4812	0	0	6430	0	3204	2691	0	5895	13902
Apprch %	35.8	0.3	64	0		0	0	0	0		25.2	74.8	0	0		0	54.4	45.6	0		
Total %	4.1	0	7.3	0	11.3	0	0	0	0	0	11.6	34.6	0	0	46.3	0	23	19.4	0	42.4	
Cars and Buses	552	3	976	0	1531	0	0	0	0	0	1580	4680	0	0	6260	0	3184	2555	0	5739	13530
% Cars and Buses	97.9	75	96.7	0	97.1	0	0	0	0	0	97.7	97.3	0	0	97.4	0	99.4	94.9	0	97.4	97.3
Trucks	12	1	33	0	46	0	0	0	0	0	38	132	0	0	170	0	20	136	0	156	372
% Trucks	2.1	25	3.3	0	2.9	0	0	0	0	0	2.3	2.7	0	0	2.6	0	0.6	5.1	0	2.6	2.7

Reliable Traffic Data Services, LLC

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TMC Data
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I-85 SB Off-Ramp
7-9 am | 4-6 pm

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Groups Printed- Cars and Buses - Trucks

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07:00 AM	0	0	0	0	0	105	0	77	0	182	0	227	24	0	251	34	136	0	0	170	603
07:15 AM	0	0	0	0	0	73	0	91	0	164	0	235	30	0	265	49	162	0	0	211	640
07:30 AM	0	0	0	0	0	85	1	89	0	175	0	257	37	0	294	72	172	0	0	244	713
07:45 AM	0	0	0	0	0	139	1	109	2	251	0	272	32	0	304	48	172	0	0	220	775
Total	0	0	0	0	0	402	2	366	2	772	0	991	123	0	1114	203	642	0	0	845	2731
08:00 AM	0	0	0	0	0	96	0	125	0	221	0	256	33	0	289	48	160	0	0	208	718
08:15 AM	0	0	0	0	0	84	0	98	0	182	0	241	30	0	271	67	159	0	0	226	679
08:30 AM	0	0	0	0	0	95	1	110	0	206	0	227	30	0	257	40	138	0	0	178	641
08:45 AM	0	0	0	0	0	110	1	97	0	208	0	247	33	0	280	31	137	0	0	168	656
Total	0	0	0	0	0	385	2	430	0	817	0	971	126	0	1097	186	594	0	0	780	2694
*** BREAK ***																					
04:00 PM	0	0	0	0	0	157	0	148	0	305	0	267	46	0	313	52	188	0	0	240	858
04:15 PM	0	0	0	0	0	177	2	154	1	334	0	283	53	0	336	53	200	0	0	253	923
04:30 PM	0	0	0	0	0	186	0	136	0	322	0	293	67	0	360	50	189	0	0	239	921
04:45 PM	0	0	0	0	0	190	0	172	0	362	0	297	34	0	331	59	190	0	0	249	942
Total	0	0	0	0	0	710	2	610	1	1323	0	1140	200	0	1340	214	767	0	0	981	3644
05:00 PM	0	0	0	0	0	182	0	175	0	357	0	298	45	1	344	51	215	0	0	266	967
05:15 PM	0	0	0	0	0	202	0	167	0	369	0	287	49	0	336	63	219	0	0	282	987
05:30 PM	0	0	0	0	0	212	0	170	0	382	0	254	43	0	297	67	217	0	0	284	963
05:45 PM	0	0	0	0	0	183	1	157	0	341	0	234	40	0	274	72	213	0	1	286	901
Total	0	0	0	0	0	779	1	669	0	1449	0	1073	177	1	1251	253	864	0	1	1118	3818
Grand Total	0	0	0	0	0	2276	7	2075	3	4361	0	4175	626	1	4802	856	2867	0	1	3724	12887
Apprch %	0	0	0	0	0	52.2	0.2	47.6	0.1		0	86.9	13	0		23	77	0	0		
Total %	0	0	0	0	0	17.7	0.1	16.1	0	33.8	0	32.4	4.9	0	37.3	6.6	22.2	0	0	28.9	
Cars and Buses	0	0	0	0	0	2160	6	2032	2	4200	0	4122	594	1	4717	838	2842	0	1	3681	12598
% Cars and Buses	0	0	0	0	0	94.9	85.7	97.9	66.7	96.3	0	98.7	94.9	100	98.2	97.9	99.1	0	100	98.8	97.8
Trucks	0	0	0	0	0	116	1	43	1	161	0	53	32	0	85	18	25	0	0	43	289
% Trucks	0	0	0	0	0	5.1	14.3	2.1	33.3	3.7	0	1.3	5.1	0	1.8	2.1	0.9	0	0	1.2	2.2

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Tel: (770) 578-8158 | Fax: (770) 578-8159
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TMC Data
Jonesboro Rd (SR138) @ Shannon Way/
Shannon Crossing Shop Ctr Drwy (E)
7-9 am | 4-6 pm

File Name : 35310003
Site Code : 35310003
Start Date : 5/20/2014
Page No : 1

Groups Printed- Cars and Buses - Trucks

	Shannon Crossing Shop Ctr Drwy (E) Northbound					Shannon Way Southbound					Jonesboro Rd (SR138) Eastbound					Jonesboro Rd (SR138) Westbound					
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	8	0	6	1	15	22	2	2	0	26	0	188	5	0	193	17	182	6	0	205	439
07:15 AM	7	0	17	1	25	15	0	0	0	15	0	266	1	0	267	16	227	12	0	255	562
07:30 AM	9	1	14	0	24	69	3	3	0	75	0	253	4	0	257	25	227	15	0	267	623
07:45 AM	9	0	11	2	22	23	3	2	1	29	0	242	11	1	254	24	215	13	0	252	557
Total	33	1	48	4	86	129	8	7	1	145	0	949	21	1	971	82	851	46	0	979	2181
08:00 AM	10	0	9	3	22	22	3	4	2	31	0	250	9	0	259	20	216	8	1	245	557
08:15 AM	20	0	7	0	27	22	4	2	2	30	0	230	7	0	237	22	217	15	0	254	548
08:30 AM	15	0	5	1	21	14	2	1	1	18	0	224	8	0	232	25	211	11	0	247	518
08:45 AM	9	0	12	1	22	36	6	1	3	46	0	221	12	1	234	23	201	15	1	240	542
Total	54	0	33	5	92	94	15	8	8	125	0	925	36	1	962	90	845	49	2	986	2165
*** BREAK ***																					
04:00 PM	48	0	17	3	68	40	11	3	2	56	0	243	19	0	262	36	270	21	2	329	715
04:15 PM	45	0	21	2	68	37	11	5	2	55	0	277	19	0	296	34	277	14	0	325	744
04:30 PM	45	0	21	3	69	54	12	9	1	76	0	265	16	0	281	35	288	21	0	344	770
04:45 PM	45	1	21	1	68	37	15	7	3	62	0	266	23	1	290	39	281	15	3	338	758
Total	183	1	80	9	273	168	49	24	8	249	0	1051	77	1	1129	144	1116	71	5	1336	2987
05:00 PM	43	1	25	9	78	55	19	4	2	80	0	249	17	1	267	37	284	15	0	336	761
05:15 PM	59	0	27	4	90	48	14	5	1	68	0	240	25	0	265	42	287	25	3	357	780
05:30 PM	45	0	36	3	84	42	12	2	5	61	0	226	24	0	250	48	305	28	1	382	777
05:45 PM	63	0	13	2	78	38	9	12	2	61	0	220	22	1	243	45	300	24	3	372	754
Total	210	1	101	18	330	183	54	23	10	270	0	935	88	2	1025	172	1176	92	7	1447	3072
Grand Total	480	3	262	36	781	574	126	62	27	789	0	3860	222	5	4087	488	3988	258	14	4748	10405
Apprch %	61.5	0.4	33.5	4.6		72.8	16	7.9	3.4		0	94.4	5.4	0.1		10.3	84	5.4	0.3		
Total %	4.6	0	2.5	0.3	7.5	5.5	1.2	0.6	0.3	7.6	0	37.1	2.1	0	39.3	4.7	38.3	2.5	0.1	45.6	
Cars and Buses	474	3	255	36	768	570	126	61	27	784	0	3794	218	5	4017	485	3933	255	14	4687	10256
% Cars and Buses	98.8	100	97.3	100	98.3	99.3	100	98.4	100	99.4	0	98.3	98.2	100	98.3	99.4	98.6	98.8	100	98.7	98.6
Trucks	6	0	7	0	13	4	0	1	0	5	0	66	4	0	70	3	55	3	0	61	149
% Trucks	1.2	0	2.7	0	1.7	0.7	0	1.6	0	0.6	0	1.7	1.8	0	1.7	0.6	1.4	1.2	0	1.3	1.4

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Tel: (770) 578-8158 | Fax: (770) 578-8159
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TMC Data

Jonesboro Rd (SR138) @ Londonderry Way/

Shannon Crossing Shopping Ctr Drwy (W)

7-9 am | 4-6 pm

File Name : 35310004

Site Code : 35310004

Start Date : 5/20/2014

Page No : 1

Groups Printed- Cars and Buses - Trucks

	Shannon Crossing Shop Ctr Drwy (W) Northbound					Londonderry Way Southbound					Jonesboro Rd (SR138) Eastbound					Jonesboro Rd (SR138) Westbound					
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	2	0	3	0	5	0	0	5	0	5	3	181	2	0	186	3	179	14	0	196	392
07:15 AM	1	1	5	0	7	0	0	6	0	6	2	267	16	0	285	2	193	15	0	210	508
07:30 AM	2	1	10	0	13	0	0	8	0	8	9	227	7	0	243	3	201	18	0	222	486
07:45 AM	4	0	8	0	12	0	0	5	0	5	4	237	12	0	253	4	208	21	0	233	503
Total	9	2	26	0	37	0	0	24	0	24	18	912	37	0	967	12	781	68	0	861	1889
08:00 AM	2	1	10	0	13	2	0	7	3	12	5	231	15	0	251	2	202	19	0	223	499
08:15 AM	4	0	12	0	16	0	0	9	0	9	2	217	13	0	232	2	211	17	0	230	487
08:30 AM	6	0	1	0	7	0	0	11	0	11	4	217	10	2	233	0	199	23	0	222	473
08:45 AM	0	0	8	0	8	1	0	9	2	12	5	213	9	0	227	0	186	17	0	203	450
Total	12	1	31	0	44	3	0	36	5	44	16	878	47	2	943	4	798	76	0	878	1909
*** BREAK ***																					
04:00 PM	0	0	6	0	6	0	0	17	1	18	5	253	15	0	273	2	289	13	1	305	602
04:15 PM	4	1	13	0	18	0	1	20	3	24	8	257	16	0	281	2	297	16	0	315	638
04:30 PM	6	0	7	0	13	0	0	15	0	15	6	274	29	1	310	2	308	18	2	330	668
04:45 PM	7	1	8	0	16	0	0	17	0	17	5	275	16	0	296	1	316	16	0	333	662
Total	17	2	34	0	53	0	1	69	4	74	24	1059	76	1	1160	7	1210	63	3	1283	2570
05:00 PM	2	0	11	0	13	0	0	18	1	19	8	255	18	0	281	0	324	17	1	342	655
05:15 PM	0	1	8	0	9	0	0	19	0	19	7	238	15	0	260	1	337	22	0	360	648
05:30 PM	4	2	7	0	13	0	1	17	0	18	5	225	8	3	241	0	315	20	0	335	607
05:45 PM	5	1	10	0	16	0	0	15	1	16	7	219	10	0	236	2	311	23	0	336	604
Total	11	4	36	0	51	0	1	69	2	72	27	937	51	3	1018	3	1287	82	1	1373	2514
Grand Total	49	9	127	0	185	3	2	198	11	214	85	3786	211	6	4088	26	4076	289	4	4395	8882
Apprch %	26.5	4.9	68.6	0		1.4	0.9	92.5	5.1		2.1	92.6	5.2	0.1		0.6	92.7	6.6	0.1		
Total %	0.6	0.1	1.4	0	2.1	0	0	2.2	0.1	2.4	1	42.6	2.4	0.1	46	0.3	45.9	3.3	0	49.5	
Cars and Buses	48	9	124	0	181	3	2	198	11	214	85	3726	211	6	4028	25	4028	288	4	4345	8768
% Cars and Buses	98	100	97.6	0	97.8	100	100	100	100	100	100	98.4	100	100	98.5	96.2	98.8	99.7	100	98.9	98.7
Trucks	1	0	3	0	4	0	0	0	0	0	0	60	0	0	60	1	48	1	0	50	114
% Trucks	2	0	2.4	0	2.2	0	0	0	0	0	0	1.6	0	0	1.5	3.8	1.2	0.3	0	1.1	1.3

Reliable Traffic Data Services, LLC

Tel: (770) 578-8158 | Fax: (770) 578-8159
info@reliabletraffic.org | www.reliabletraffic.org

TMC Data
Jonesboro Rd (SR138) @ Shannon Pkwy

7-9 am | 4-6 pm

File Name : 35310005
Site Code : 35310005
Start Date : 5/20/2014
Page No : 1

Groups Printed- Cars and Buses - Trucks

	Shannon Pkwy Northbound					Shannon Pkwy Southbound					Jonesboro Rd (SR138) Eastbound					Jonesboro Rd (SR138) Westbound					
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	8	2	6	0	16	16	2	9	1	28	37	153	3	0	193	13	169	17	0	199	436
07:15 AM	4	0	2	0	6	18	0	17	1	36	17	255	2	0	274	6	179	19	0	204	520
07:30 AM	3	1	2	0	6	22	2	13	0	37	22	230	3	0	255	6	191	21	0	218	516
07:45 AM	2	1	5	0	8	13	1	22	1	37	20	225	6	0	251	12	196	24	0	232	528
Total	17	4	15	0	36	69	5	61	3	138	96	863	14	0	973	37	735	81	0	853	2000
08:00 AM	8	1	2	0	11	19	3	22	0	44	13	211	4	0	228	14	193	20	0	227	510
08:15 AM	1	2	7	0	10	25	1	35	2	63	15	204	7	0	226	10	209	20	0	239	538
08:30 AM	7	2	9	0	18	14	3	21	2	40	13	197	6	0	216	10	177	20	0	207	481
08:45 AM	5	0	6	0	11	23	3	21	0	47	19	210	2	0	231	14	173	20	0	207	496
Total	21	5	24	0	50	81	10	99	4	194	60	822	19	0	901	48	752	80	0	880	2025
*** BREAK ***																					
04:00 PM	12	5	5	0	22	27	4	35	0	66	25	236	4	0	265	14	265	21	0	300	653
04:15 PM	11	7	17	0	35	29	5	37	0	71	22	226	5	0	253	24	274	17	0	315	674
04:30 PM	10	5	15	0	30	34	5	36	0	75	19	251	7	0	277	15	279	38	0	332	714
04:45 PM	13	6	15	0	34	34	4	38	0	76	25	233	4	0	262	17	259	31	0	307	679
Total	46	23	52	0	121	124	18	146	0	288	91	946	20	0	1057	70	1077	107	0	1254	2720
05:00 PM	8	2	16	0	26	29	3	37	3	72	24	216	4	0	244	9	309	31	0	349	691
05:15 PM	9	3	11	0	23	30	4	39	0	73	21	214	7	0	242	17	303	33	0	353	691
05:30 PM	13	6	9	0	28	33	5	42	0	80	24	186	7	0	217	24	298	29	0	351	676
05:45 PM	6	6	12	1	25	32	3	37	0	72	31	206	6	0	243	14	292	27	0	333	673
Total	36	17	48	1	102	124	15	155	3	297	100	822	24	0	946	64	1202	120	0	1386	2731
Grand Total	120	49	139	1	309	398	48	461	10	917	347	3453	77	0	3877	219	3766	388	0	4373	9476
Apprch %	38.8	15.9	45	0.3		43.4	5.2	50.3	1.1		9	89.1	2	0		5	86.1	8.9	0		
Total %	1.3	0.5	1.5	0	3.3	4.2	0.5	4.9	0.1	9.7	3.7	36.4	0.8	0	40.9	2.3	39.7	4.1	0	46.1	
Cars and Buses	119	49	132	1	301	393	48	461	10	912	347	3402	75	0	3824	217	3725	387	0	4329	9366
% Cars and Buses	99.2	100	95	100	97.4	98.7	100	100	100	99.5	100	98.5	97.4	0	98.6	99.1	98.9	99.7	0	99	98.8
Trucks	1	0	7	0	8	5	0	0	0	5	0	51	2	0	53	2	41	1	0	44	110
% Trucks	0.8	0	5	0	2.6	1.3	0	0	0	0.5	0	1.5	2.6	0	1.4	0.9	1.1	0.3	0	1	1.2

Reliable Traffic Data Services, LLC

Tel: (770) 578-8158 | Fax: (770) 578-8159
info@reliabletraffic.org | www.reliabletraffic.org

TMC Data
Shannon Pkwy @ Lancaster Lane

7-9 am | 4-6 pm

File Name : 35310006
Site Code : 35310006
Start Date : 5/20/2014
Page No : 1

Groups Printed- Cars and Buses - Trucks

	Shannon Pkwy Northbound					Shannon Pkwy Southbound					Private Drwy Eastbound					Lancaster Lane Westbound					
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	0	43	8	1	52	10	31	0	0	41	0	0	0	0	0	0	0	4	1	5	98
07:15 AM	0	31	3	0	34	7	33	0	0	40	0	0	0	0	0	2	0	2	0	4	78
07:30 AM	0	30	12	0	42	9	35	0	0	44	0	0	0	0	0	5	0	3	0	8	94
07:45 AM	0	36	9	0	45	6	36	0	0	42	0	0	0	0	0	4	0	3	0	7	94
Total	0	140	32	1	173	32	135	0	0	167	0	0	0	0	0	11	0	12	1	24	364
08:00 AM	0	34	4	0	38	11	41	0	0	52	0	0	0	0	0	6	0	4	1	11	101
08:15 AM	0	30	4	0	34	7	52	0	0	59	0	0	0	0	0	6	0	5	1	12	105
08:30 AM	0	29	4	0	33	8	43	0	0	51	0	0	0	0	0	3	0	3	0	6	90
08:45 AM	0	31	10	0	41	11	43	0	1	55	0	0	0	0	0	5	0	9	2	16	112
Total	0	124	22	0	146	37	179	0	1	217	0	0	0	0	0	20	0	21	4	45	408
*** BREAK ***																					
04:00 PM	0	51	11	0	62	21	56	0	0	77	0	0	0	0	0	13	0	4	3	20	159
04:15 PM	0	38	14	4	56	19	68	0	0	87	0	0	0	0	0	6	0	9	1	16	159
04:30 PM	0	54	7	0	61	23	79	0	1	103	0	0	0	0	0	6	0	3	3	12	176
04:45 PM	0	52	10	0	62	20	81	0	0	101	0	0	0	3	3	7	0	7	0	14	180
Total	0	195	42	4	241	83	284	0	1	368	0	0	0	3	3	32	0	23	7	62	674
05:00 PM	0	56	12	0	68	20	79	0	0	99	0	0	0	0	0	5	0	6	1	12	179
05:15 PM	0	51	10	0	61	23	67	0	0	90	0	0	0	5	5	4	0	11	2	17	173
05:30 PM	0	51	7	0	58	14	84	0	0	98	0	0	0	2	2	4	0	8	5	17	175
05:45 PM	0	50	11	0	61	18	70	0	0	88	0	0	0	1	1	6	0	10	0	16	166
Total	0	208	40	0	248	75	300	0	0	375	0	0	0	8	8	19	0	35	8	62	693
Grand Total	0	667	136	5	808	227	898	0	2	1127	0	0	0	11	11	82	0	91	20	193	2139
Apprch %	0	82.5	16.8	0.6		20.1	79.7	0	0.2		0	0	0	100		42.5	0	47.2	10.4		
Total %	0	31.2	6.4	0.2	37.8	10.6	42	0	0.1	52.7	0	0	0	0.5	0.5	3.8	0	4.3	0.9	9	
Cars and Buses	0	665	136	5	806	227	894	0	2	1123	0	0	0	11	11	81	0	91	20	192	2132
% Cars and Buses	0	99.7	100	100	99.8	100	99.6	0	100	99.6	0	0	0	100	100	98.8	0	100	100	99.5	99.7
Trucks	0	2	0	0	2	0	4	0	0	4	0	0	0	0	0	1	0	0	0	1	7
% Trucks	0	0.3	0	0	0.2	0	0.4	0	0	0.4	0	0	0	0	0	1.2	0	0	0	0.5	0.3

Tel: (770) 578-8158 | Fax: (770) 578-8159
info@reliabletraffic.org | www.reliabletraffic.org

7-9 am | 4-6 pm

Page No : 1

Groups - Hired - Cars and Buses - Trucks																								
	Londonderry Way Northbound					Londonderry Way Southbound					Lancaster Lane Eastbound					Lancaster Lane Westbound								
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	3	12	4	2	21	1	2	0	0	3	1	6	8	0	15	1	0	2	0	3	42			
07:15 AM	2	11	6	0	19	1	4	1	0	6	2	3	8	0	13	0	0	1	0	1	39			
07:30 AM	6	19	6	0	31	0	1	0	0	1	2	8	9	0	19	0	1	1	0	2	53			
07:45 AM	2	21	8	2	33	3	3	0	0	6	1	3	11	0	15	1	3	3	0	7	61			
Total	13	63	24	4	104	5	10	1	0	16	6	20	36	0	62	2	4	7	0	13	195			
08:00 AM	5	15	10	0	30	4	3	1	1	9	1	5	6	0	12	1	3	2	0	6	57			
08:15 AM	3	17	4	0	24	1	3	2	0	6	4	5	8	1	18	0	1	1	0	2	50			
08:30 AM	6	17	8	0	31	7	7	2	0	16	3	4	4	0	11	4	1	3	0	8	66			
08:45 AM	7	13	11	0	31	2	4	6	1	13	4	2	9	0	15	5	2	2	0	9	68			
Total	21	62	33	0	116	14	17	11	2	44	12	16	27	1	56	10	7	8	0	25	241			
*** BREAK ***																								
04:00 PM	7	11	11	0	29	5	15	5	0	25	3	8	15	0	26	0	4	4	0	8	88			
04:15 PM	8	18	13	0	39	3	12	4	1	20	5	15	14	0	34	0	1	3	0	4	97			
04:30 PM	3	20	11	0	34	9	15	3	1	28	4	8	13	0	25	2	2	4	0	8	95			
04:45 PM	2	26	2	0	30	4	10	9	0	23	5	18	11	0	34	0	2	2	0	4	91			
Total	20	75	37	0	132	21	52	21	2	96	17	49	53	0	119	2	9	13	0	24	371			
05:00 PM	4	16	6	0	26	10	11	4	0	25	3	16	13	0	32	2	4	1	0	7	90			
05:15 PM	6	28	13	0	47	1	14	5	0	20	2	11	12	2	27	2	4	6	0	12	106			
05:30 PM	9	19	11	0	39	7	10	5	0	22	2	9	11	0	22	2	2	1	0	5	88			
05:45 PM	6	25	8	0	39	1	11	3	0	15	3	6	12	0	21	0	6	0	0	6	81			
Total	25	88	38	0	151	19	46	17	0	82	10	42	48	2	102	6	16	8	0	30	365			
Grand Total	79	288	132	4	503	59	125	50	4	238	45	127	164	3	339	20	36	36	0	92	1172			
Apprch %	15.7	57.3	26.2	0.8		24.8	52.5	21	1.7		13.3	37.5	48.4	0.9		21.7	39.1	39.1	0					
Total %	6.7	24.6	11.3	0.3	42.9	5	10.7	4.3	0.3	20.3	3.8	10.8	14	0.3	28.9	1.7	3.1	3.1	0	7.8				
Cars and Buses	79	288	132	4	503	59	125	50	4	238	45	127	164	3	339	20	36	36	0	92	1172			
% Cars and Buses	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	100	100			
Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
% Trucks	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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7-9 am | 4-6 pm

Page No : 1

	Londonderry Way Northbound					Private Drwy Southbound					Mall Blvd Eastbound					Mall Blvd Westbound					
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	7	0	8	1	16	0	0	0	0	0	0	7	3	0	10	0	6	0	0	6	32
07:15 AM	3	0	7	0	10	0	0	0	0	0	0	7	2	0	9	2	9	0	0	11	30
07:30 AM	4	0	10	0	14	0	0	0	0	0	0	6	3	0	9	4	5	0	0	9	32
07:45 AM	5	0	13	0	18	0	0	0	0	0	0	6	5	0	11	3	6	0	0	9	38
Total	19	0	38	1	58	0	0	0	0	0	0	26	13	0	39	9	26	0	0	35	132
08:00 AM	6	0	10	1	17	0	0	0	0	0	0	11	4	0	15	2	9	0	0	11	43
08:15 AM	5	0	11	1	17	0	0	0	0	0	0	12	3	0	15	3	6	0	1	10	42
08:30 AM	6	1	13	0	20	0	0	0	0	0	1	9	5	0	15	6	9	0	0	15	50
08:45 AM	2	0	9	2	13	1	0	0	0	1	0	11	4	0	15	5	13	0	0	18	47
Total	19	1	43	4	67	1	0	0	0	1	1	43	16	0	60	16	37	0	1	54	182
*** BREAK ***																					
04:00 PM	6	1	10	2	19	0	1	0	0	1	0	17	8	0	25	7	16	0	0	23	68
04:15 PM	10	0	12	0	22	0	0	0	0	0	0	12	10	0	22	8	20	0	0	28	72
04:30 PM	6	0	14	0	20	1	0	0	0	1	0	13	9	0	22	10	17	0	0	27	70
04:45 PM	9	0	22	2	33	0	0	0	0	0	0	24	10	0	34	6	14	0	0	20	87
Total	31	1	58	4	94	1	1	0	0	2	0	66	37	0	103	31	67	0	0	98	297
05:00 PM	7	0	10	2	19	0	1	1	0	2	1	16	11	0	28	8	15	0	0	23	72
05:15 PM	16	0	19	0	35	0	0	0	0	0	2	19	8	0	29	7	18	0	0	25	89
05:30 PM	9	2	10	0	21	0	0	1	0	1	0	10	7	0	17	10	13	1	0	24	63
05:45 PM	4	1	16	0	21	0	0	0	0	0	1	15	5	0	21	7	15	2	0	24	66
Total	36	3	55	2	96	0	1	2	0	3	4	60	31	0	95	32	61	3	0	96	290
Grand Total	105	5	194	11	315	2	2	2	0	6	5	195	97	0	297	88	191	3	1	283	901
Apprch %	33.3	1.6	61.6	3.5		33.3	33.3	33.3	0		1.7	65.7	32.7	0		31.1	67.5	1.1	0.4		
Total %	11.7	0.6	21.5	1.2	35	0.2	0.2	0.2	0	0.7	0.6	21.6	10.8	0	33	9.8	21.2	0.3	0.1	31.4	
Cars and Buses	105	5	194	11	315	2	2	2	0	6	5	195	97	0	297	88	191	3	1	283	901
% Cars and Buses	100	100	100	100	100	100	100	100	0	100	100	100	100	0	100	100	100	100	100	100	100
Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

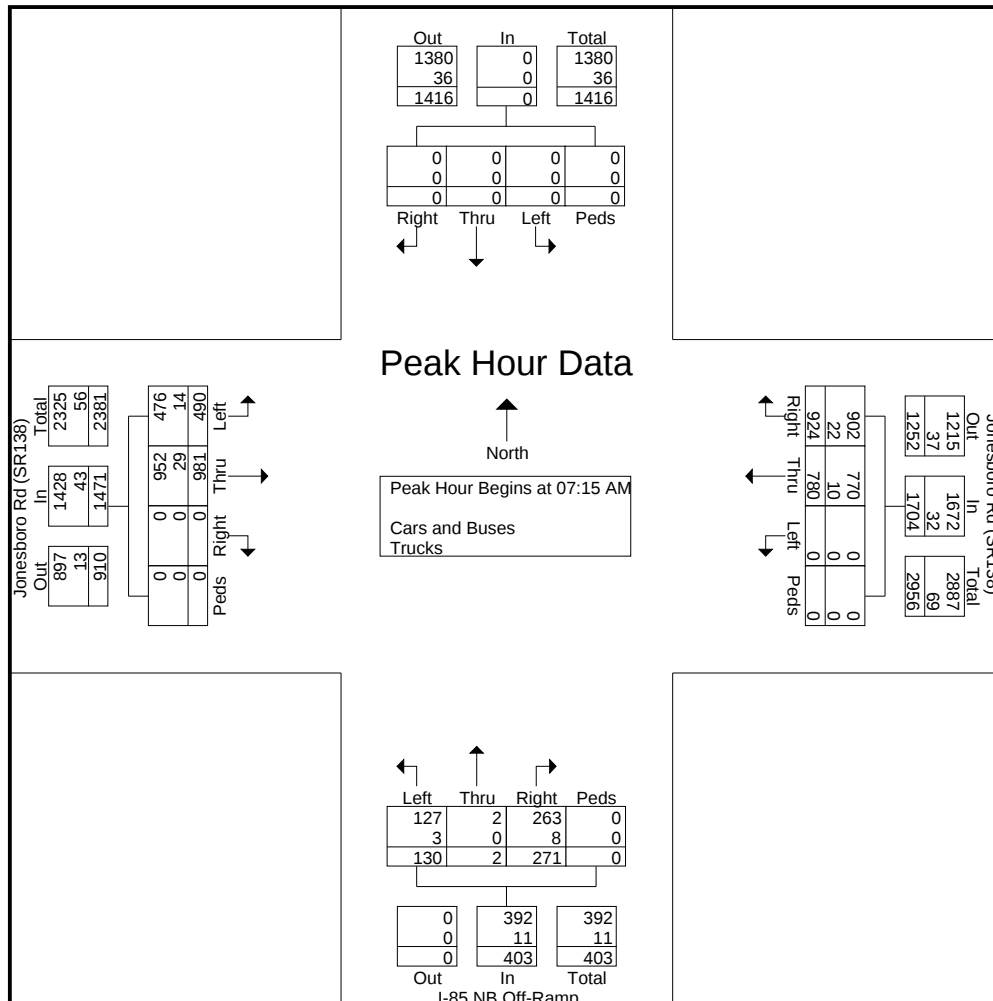
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TMC Data
Jonesboro Rd (SR138) @
I-85 NB Off-Ramp
7-9 am | 4-6 pm

File Name : 35310001
Site Code : 35310001
Start Date : 5/20/2014
Page No : 2

	I-85 NB Off-Ramp Northbound					Southbound					Jonesboro Rd (SR138) Eastbound					Jonesboro Rd (SR138) Westbound					
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 07:15 AM to 08:00 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	33	0	71	0	104	0	0	0	0	0	135	227	0	0	362	0	178	227	0	405	871
07:30 AM	41	1	61	0	103	0	0	0	0	0	116	242	0	0	358	0	216	251	0	467	928
07:45 AM	26	0	70	0	96	0	0	0	0	0	133	261	0	0	394	0	175	236	0	411	901
08:00 AM	30	1	69	0	100	0	0	0	0	0	106	251	0	0	357	0	211	210	0	421	878
Total Volume	130	2	271	0	403	0	0	0	0	0	490	981	0	0	1471	0	780	924	0	1704	3578
% App. Total	32.3	0.5	67.2	0		0	0	0	0		33.3	66.7	0	0		0	45.8	54.2	0		
PHF	.793	.500	.954	.000	.969	.000	.000	.000	.000	.000	.907	.940	.000	.000	.933	.000	.903	.920	.000	.912	.964
Cars and Buses	127	2	263	0	392	0	0	0	0	0	476	952	0	0	1428	0	770	902	0	1672	3492
% Cars and Buses	97.7	100	97.0	0	97.3	0	0	0	0	0	97.1	97.0	0	0	97.1	0	98.7	97.6	0	98.1	97.6
Trucks	3	0	8	0	11	0	0	0	0	0	14	29	0	0	43	0	10	22	0	32	86
% Trucks	2.3	0	3.0	0	2.7	0	0	0	0	0	2.9	3.0	0	0	2.9	0	1.3	2.4	0	1.9	2.4



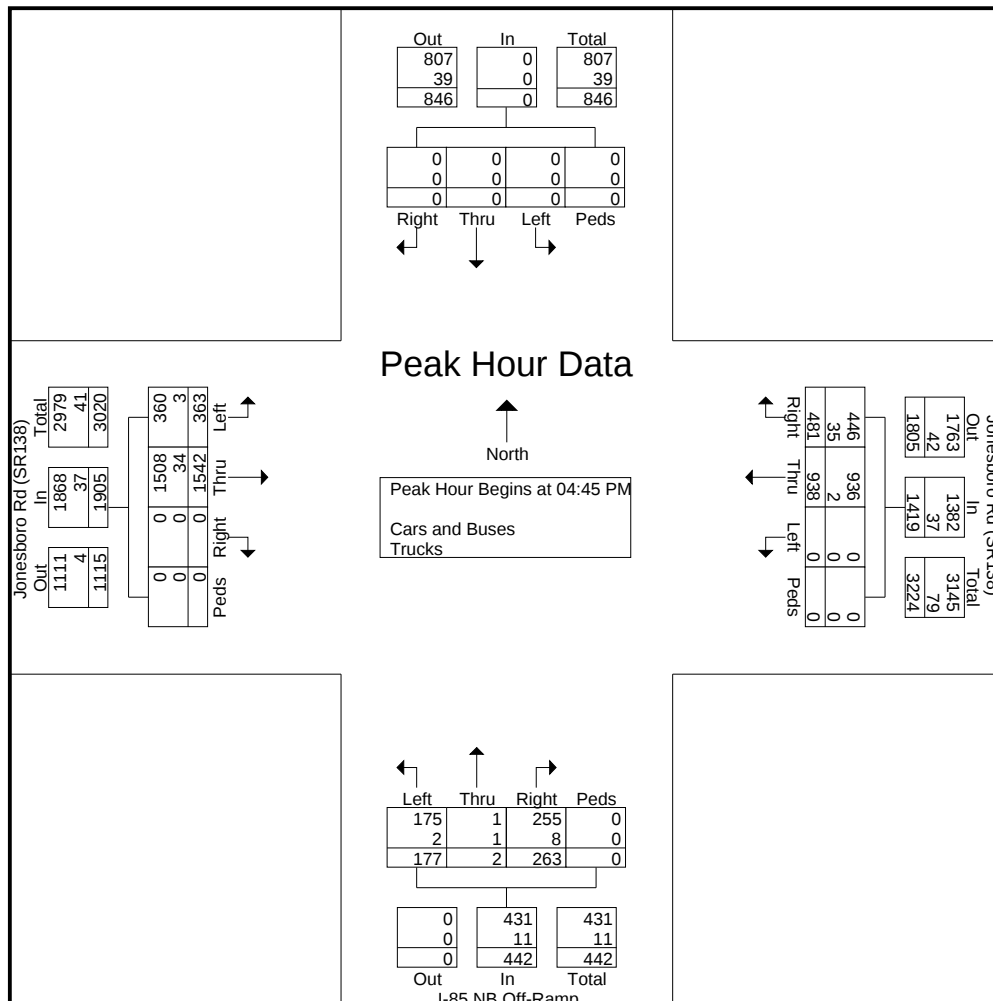
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TMC Data
Jonesboro Rd (SR138) @
I-85 NB Off-Ramp
7-9 am | 4-6 pm

File Name : 35310001
Site Code : 35310001
Start Date : 5/20/2014
Page No : 3

	I-85 NB Off-Ramp Northbound					Southbound					Jonesboro Rd (SR138) Eastbound					Jonesboro Rd (SR138) Westbound					
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 04:45 PM to 05:30 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	55	1	55	0	111	0	0	0	0	0	80	382	0	0	462	0	198	106	0	304	877
05:00 PM	40	1	76	0	117	0	0	0	0	0	104	399	0	0	503	0	249	124	0	373	993
05:15 PM	44	0	58	0	102	0	0	0	0	0	85	401	0	0	486	0	243	130	0	373	961
05:30 PM	38	0	74	0	112	0	0	0	0	0	94	360	0	0	454	0	248	121	0	369	935
Total Volume	177	2	263	0	442	0	0	0	0	0	363	1542	0	0	1905	0	938	481	0	1419	3766
% App. Total	40	0.5	59.5	0		0	0	0	0	0	19.1	80.9	0	0		0	66.1	33.9	0		
PHF	.805	.500	.865	.000	.944	.000	.000	.000	.000	.000	.873	.961	.000	.000	.947	.000	.942	.925	.000	.951	.948
Cars and Buses	175	1	255	0	431	0	0	0	0	0	360	1508	0	0	1868	0	936	446	0	1382	3681
% Cars and Buses	98.9	50.0	97.0	0	97.5	0	0	0	0	0	99.2	97.8	0	0	98.1	0	99.8	92.7	0	97.4	97.7
Trucks	2	1	8	0	11	0	0	0	0	0	3	34	0	0	37	0	2	35	0	37	85
% Trucks	1.1	50.0	3.0	0	2.5	0	0	0	0	0	0.8	2.2	0	0	1.9	0	0.2	7.3	0	2.6	2.3



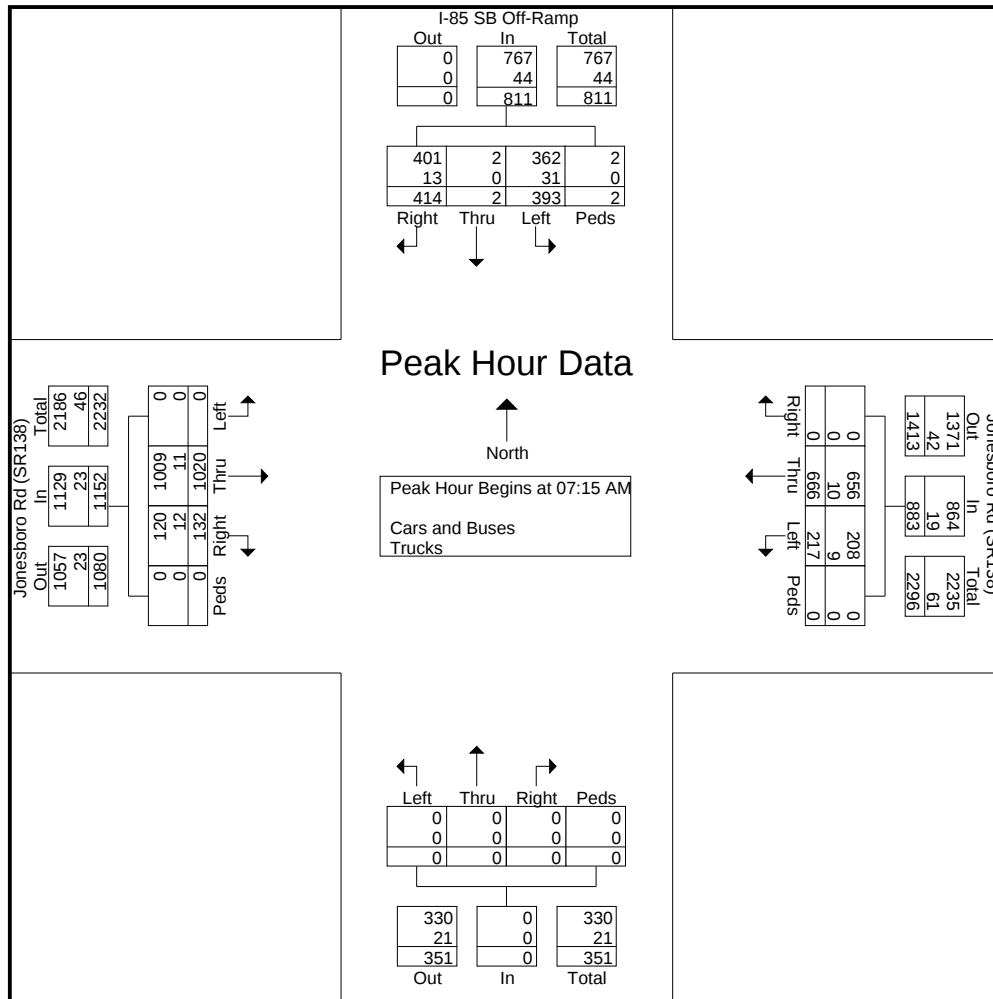
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TMC Data
Jonesboro Rd (SR138) @
I-85 SB Off-Ramp
7-9 am | 4-6 pm

File Name : 35310002
Site Code : 35310002
Start Date : 5/20/2014
Page No : 2

	Northbound					I-85 SB Off-Ramp Southbound					Jonesboro Rd (SR138) Eastbound					Jonesboro Rd (SR138) Westbound					
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 07:15 AM to 08:00 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	0	0	0	0	0	73	0	91	0	164	0	235	30	0	265	49	162	0	0	211	640
07:30 AM	0	0	0	0	0	85	1	89	0	175	0	257	37	0	294	72	172	0	0	244	713
07:45 AM	0	0	0	0	0	139	1	109	2	251	0	272	32	0	304	48	172	0	0	220	775
08:00 AM	0	0	0	0	0	96	0	125	0	221	0	256	33	0	289	48	160	0	0	208	718
Total Volume	0	0	0	0	0	393	2	414	2	811	0	1020	132	0	1152	217	666	0	0	883	2846
% App. Total	0	0	0	0	0	48.5	0.2	51	0.2		0	88.5	11.5	0		24.6	75.4	0	0		
PHF	.000	.000	.000	.000	.000	.707	.500	.828	.250	.808	.000	.938	.892	.000	.947	.753	.968	.000	.000	.905	.918
Cars and Buses	0	0	0	0	0	362	2	401	2	767	0	1009	120	0	1129	208	656	0	0	864	2760
% Cars and Buses	0	0	0	0	0	92.1	100	96.9	100	94.6	0	98.9	90.9	0	98.0	95.9	98.5	0	0	97.8	97.0
Trucks	0	0	0	0	0	31	0	13	0	44	0	11	12	0	23	9	10	0	0	19	86
% Trucks	0	0	0	0	0	7.9	0	3.1	0	5.4	0	1.1	9.1	0	2.0	4.1	1.5	0	0	2.2	3.0



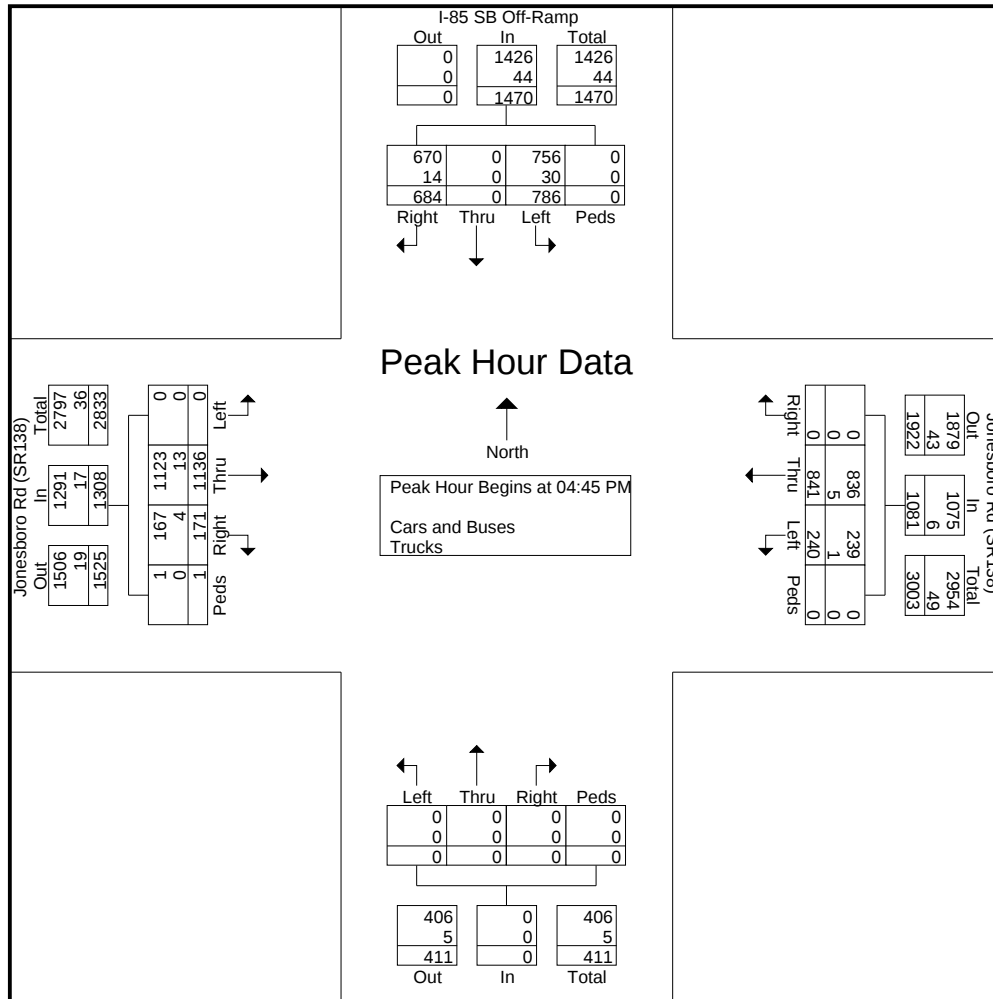
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TMC Data
Jonesboro Rd (SR138) @
I-85 SB Off-Ramp
7-9 am | 4-6 pm

File Name : 35310002
Site Code : 35310002
Start Date : 5/20/2014
Page No : 3

	Northbound					I-85 SB Off-Ramp Southbound					Jonesboro Rd (SR138) Eastbound					Jonesboro Rd (SR138) Westbound					
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 04:45 PM to 05:30 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	0	0	0	0	0	190	0	172	0	362	0	297	34	0	331	59	190	0	0	249	942
05:00 PM	0	0	0	0	0	182	0	175	0	357	0	298	45	1	344	51	215	0	0	266	967
05:15 PM	0	0	0	0	0	202	0	167	0	369	0	287	49	0	336	63	219	0	0	282	987
05:30 PM	0	0	0	0	0	212	0	170	0	382	0	254	43	0	297	67	217	0	0	284	963
Total Volume	0	0	0	0	0	786	0	684	0	1470	0	1136	171	1	1308	240	841	0	0	1081	3859
% App. Total	0	0	0	0	0	53.5	0	46.5	0		0	86.9	13.1	0.1		22.2	77.8	0	0		
PHF	.000	.000	.000	.000	.000	.927	.000	.977	.000	.962	.000	.953	.872	.250	.951	.896	.960	.000	.000	.952	.977
Cars and Buses	0	0	0	0	0	756	0	670	0	1426	0	1123	167	1	1291	239	836	0	0	1075	3792
% Cars and Buses	0	0	0	0	0	96.2	0	98.0	0	97.0	0	98.9	97.7	100	98.7	99.6	99.4	0	0	99.4	98.3
Trucks	0	0	0	0	0	30	0	14	0	44	0	13	4	0	17	1	5	0	0	6	67
% Trucks	0	0	0	0	0	3.8	0	2.0	0	3.0	0	1.1	2.3	0	1.3	0.4	0.6	0	0	0.6	1.7



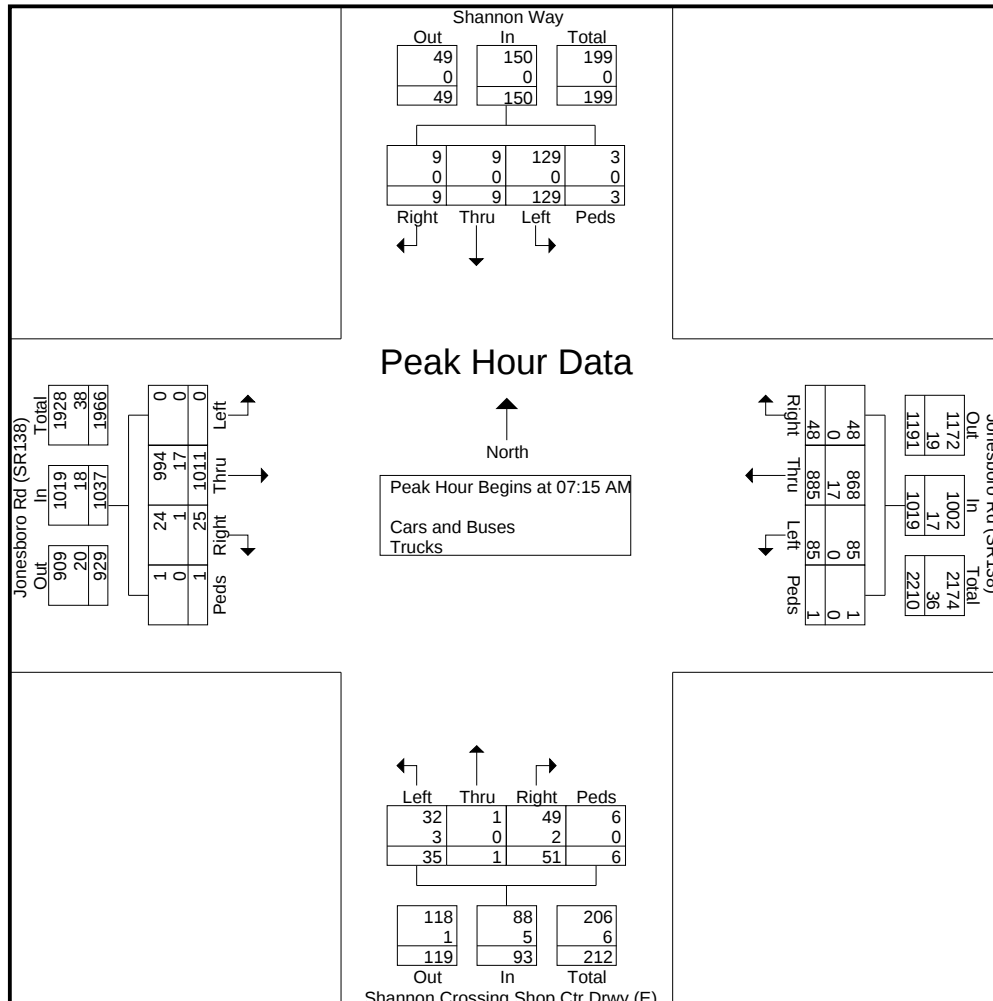
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TMC Data
Jonesboro Rd (SR138) @ Shannon Way/
Shannon Crossing Shop Ctr Drwy (E)
7-9 am | 4-6 pm

File Name : 35310003
Site Code : 35310003
Start Date : 5/20/2014
Page No : 2

	Shannon Crossing Shop Ctr Drwy (E) Northbound					Shannon Way Southbound					Jonesboro Rd (SR138) Eastbound					Jonesboro Rd (SR138) Westbound					
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 07:15 AM to 08:00 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	7	0	17	1	25	15	0	0	0	15	0	266	1	0	267	16	227	12	0	255	562
07:30 AM	9	1	14	0	24	69	3	3	0	75	0	253	4	0	257	25	227	15	0	267	623
07:45 AM	9	0	11	2	22	23	3	2	1	29	0	242	11	1	254	24	215	13	0	252	557
08:00 AM	10	0	9	3	22	22	3	4	2	31	0	250	9	0	259	20	216	8	1	245	557
Total Volume	35	1	51	6	93	129	9	9	3	150	0	1011	25	1	1037	85	885	48	1	1019	2299
% App. Total	37.6	1.1	54.8	6.5		86	6	6	2		0	97.5	2.4	0.1		8.3	86.8	4.7	0.1		
PHF	.875	.250	.750	.500	.930	.467	.750	.563	.375	.500	.000	.950	.568	.250	.971	.850	.975	.800	.250	.954	.923
Cars and Buses	32	1	49	6	88	129	9	9	3	150	0	994	24	1	1019	85	868	48	1	1002	2259
% Cars and Buses	91.4	100	96.1	100	94.6	100	100	100	100	100	0	98.3	96.0	100	98.3	100	98.1	100	100	98.3	98.3
Trucks	3	0	2	0	5	0	0	0	0	0	0	17	1	0	18	0	17	0	0	17	40
% Trucks	8.6	0	3.9	0	5.4	0	0	0	0	0	0	1.7	4.0	0	1.7	0	1.9	0	0	1.7	1.7



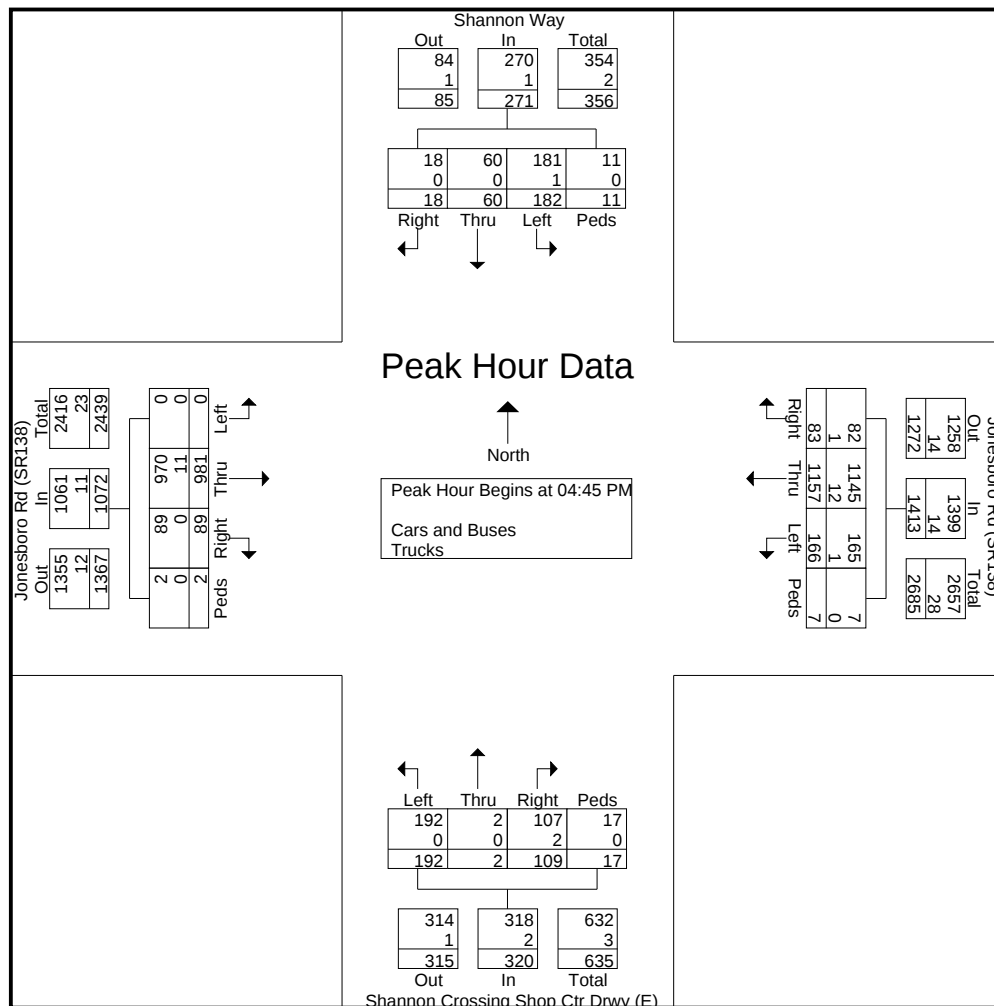
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TMC Data
Jonesboro Rd (SR138) @ Shannon Way/
Shannon Crossing Shop Ctr Drwy (E)
7-9 am | 4-6 pm

File Name : 35310003
Site Code : 35310003
Start Date : 5/20/2014
Page No : 3

	Shannon Crossing Shop Ctr Drwy (E) Northbound					Shannon Way Southbound					Jonesboro Rd (SR138) Eastbound					Jonesboro Rd (SR138) Westbound					
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 04:45 PM to 05:30 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	45	1	21	1	68	37	15	7	3	62	0	266	23	1	290	39	281	15	3	338	758
05:00 PM	43	1	25	9	78	55	19	4	2	80	0	249	17	1	267	37	284	15	0	336	761
05:15 PM	59	0	27	4	90	48	14	5	1	68	0	240	25	0	265	42	287	25	3	357	780
05:30 PM	45	0	36	3	84	42	12	2	5	61	0	226	24	0	250	48	305	28	1	382	777
Total Volume	192	2	109	17	320	182	60	18	11	271	0	981	89	2	1072	166	1157	83	7	1413	3076
% App. Total	60	0.6	34.1	5.3		67.2	22.1	6.6	4.1		0	91.5	8.3	0.2		11.7	81.9	5.9	0.5		
PHF	.814	.500	.757	.472	.889	.827	.789	.643	.550	.847	.000	.922	.890	.500	.924	.865	.948	.741	.583	.925	.986
Cars and Buses	192	2	107	17	318	181	60	18	11	270	0	970	89	2	1061	165	1145	82	7	1399	3048
% Cars and Buses	100	100	98.2	100	99.4	99.5	100	100	100	99.6	0	98.9	100	100	99.0	99.4	99.0	98.8	100	99.0	99.1
Trucks	0	0	2	0	2	1	0	0	0	1	0	11	0	0	11	1	12	1	0	14	28
% Trucks	0	0	1.8	0	0.6	0.5	0	0	0	0.4	0	1.1	0	0	1.0	0.6	1.0	1.2	0	1.0	0.9



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TMC Data

Jonesboro Rd (SR138) @ Londonderry Way/

Shannon Crossing Shopping Ctr Drwy (W)

7-9 am | 4-6 pm

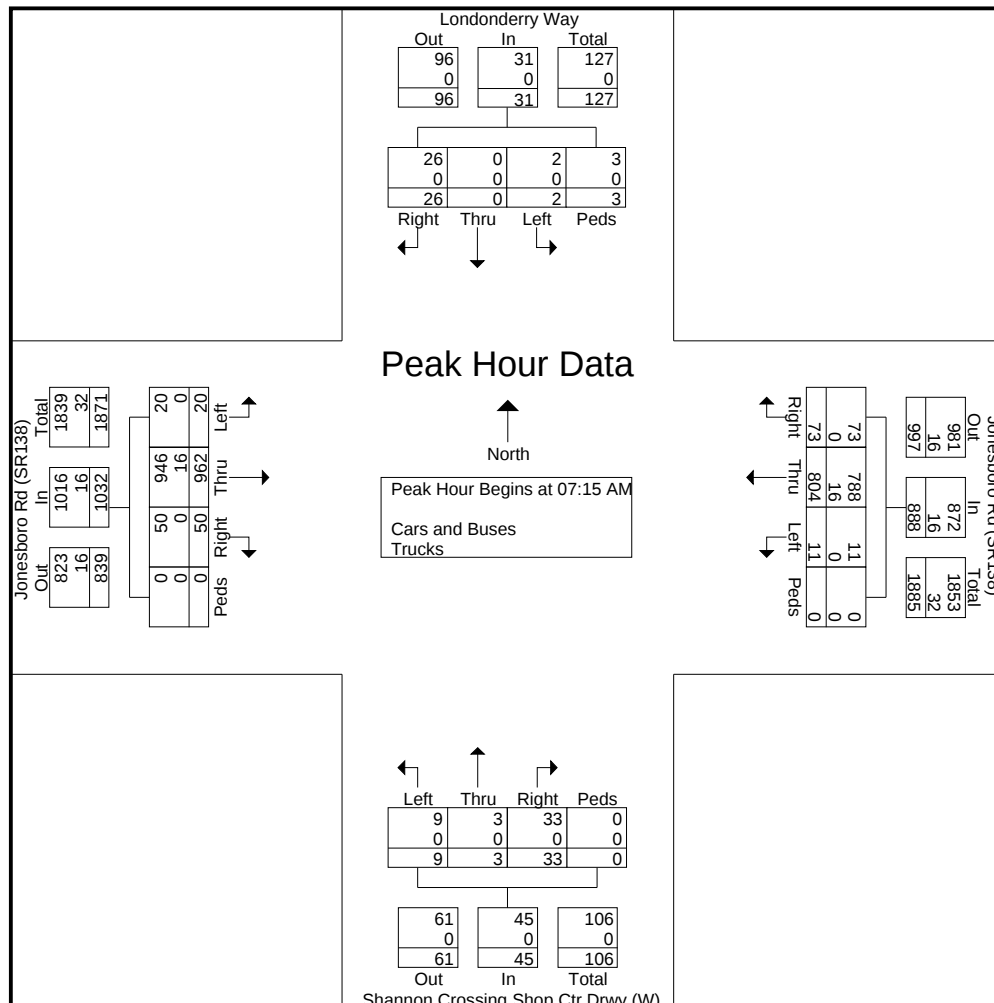
File Name : 35310004

Site Code : 35310004

Start Date : 5/20/2014

Page No : 2

	Shannon Crossing Shop Ctr Drwy (W) Northbound					Londonderry Way Southbound					Jonesboro Rd (SR138) Eastbound					Jonesboro Rd (SR138) Westbound					
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 07:15 AM to 08:00 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	1	1	5	0	7	0	0	6	0	6	2	267	16	0	285	2	193	15	0	210	508
07:30 AM	2	1	10	0	13	0	0	8	0	8	9	227	7	0	243	3	201	18	0	222	486
07:45 AM	4	0	8	0	12	0	0	5	0	5	4	237	12	0	253	4	208	21	0	233	503
08:00 AM	2	1	10	0	13	2	0	7	3	12	5	231	15	0	251	2	202	19	0	223	499
Total Volume	9	3	33	0	45	2	0	26	3	31	20	962	50	0	1032	11	804	73	0	888	1996
% App. Total	20	6.7	73.3	0		6.5	0	83.9	9.7		1.9	93.2	4.8	0		1.2	90.5	8.2	0		
PHF	.563	.750	.825	.000	.865	.250	.000	.813	.250	.646	.556	.901	.781	.000	.905	.688	.966	.869	.000	.953	.982
Cars and Buses	9	3	33	0	45	2	0	26	3	31	20	946	50	0	1016	11	788	73	0	872	1964
% Cars and Buses	100	100	100	0	100	100	0	100	100	100	100	98.3	100	0	98.4	100	98.0	100	0	98.2	98.4
Trucks	0	0	0	0	0	0	0	0	0	0	0	16	0	0	16	0	16	0	0	16	32
% Trucks	0	0	0	0	0	0	0	0	0	0	0	1.7	0	0	1.6	0	2.0	0	0	1.8	1.6



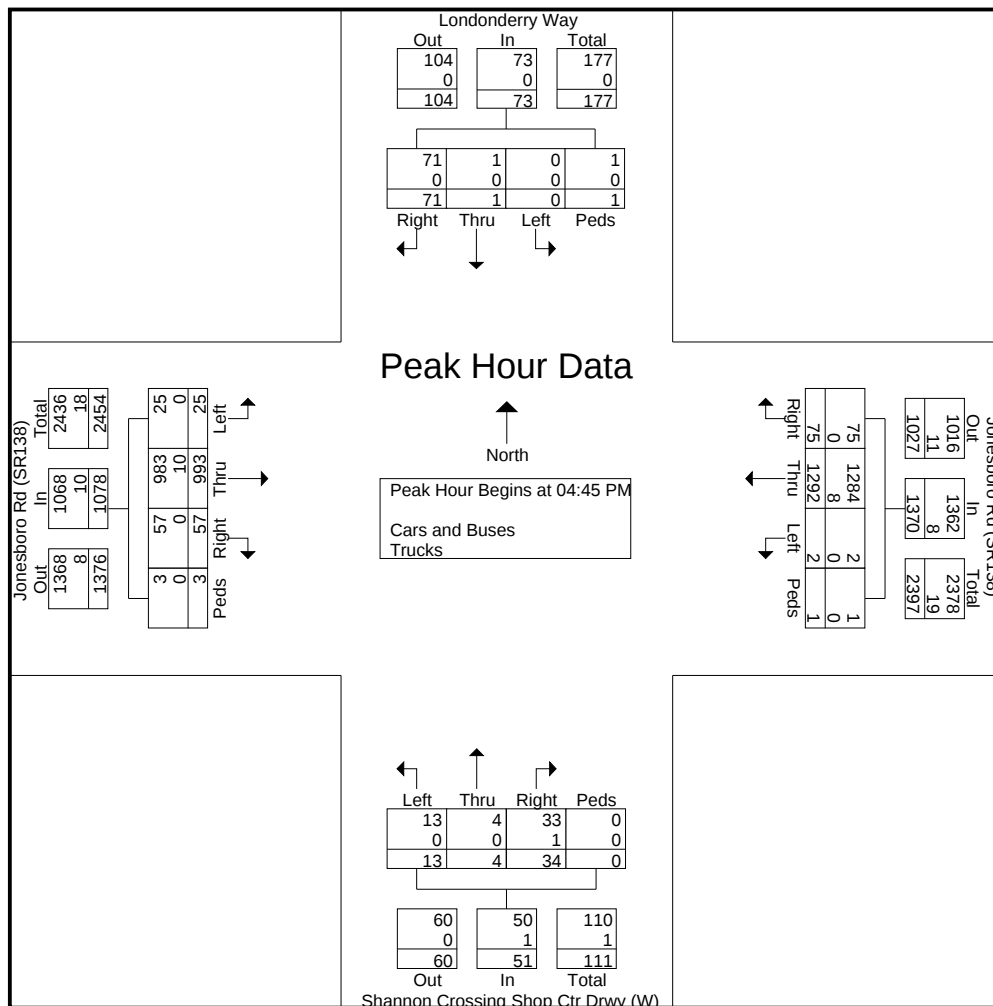
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TMC Data
Jonesboro Rd (SR138) @ Londonderry Way/
Shannon Crossing Shopping Ctr Drwy (W)
7-9 am | 4-6 pm

File Name : 35310004
Site Code : 35310004
Start Date : 5/20/2014
Page No : 3

	Shannon Crossing Shop Ctr Drwy (W) Northbound					Londonderry Way Southbound					Jonesboro Rd (SR138) Eastbound					Jonesboro Rd (SR138) Westbound					
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 04:45 PM to 05:30 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	7	1	8	0	16	0	0	17	0	17	5	275	16	0	296	1	316	16	0	333	662
05:00 PM	2	0	11	0	13	0	0	18	1	19	8	255	18	0	281	0	324	17	1	342	655
05:15 PM	0	1	8	0	9	0	0	19	0	19	7	238	15	0	260	1	337	22	0	360	648
05:30 PM	4	2	7	0	13	0	1	17	0	18	5	225	8	3	241	0	315	20	0	335	607
Total Volume	13	4	34	0	51	0	1	71	1	73	25	993	57	3	1078	2	1292	75	1	1370	2572
% App. Total	25.5	7.8	66.7	0		0	1.4	97.3	1.4		2.3	92.1	5.3	0.3		0.1	94.3	5.5	0.1		
PHF	.464	.500	.773	.000	.797	.000	.250	.934	.250	.961	.781	.903	.792	.250	.910	.500	.958	.852	.250	.951	.971
Cars and Buses	13	4	33	0	50	0	1	71	1	73	25	983	57	3	1068	2	1284	75	1	1362	2553
% Cars and Buses	100	100	97.1	0	98.0	0	100	100	100	100	100	99.0	100	100	99.1	100	99.4	100	100	99.4	99.3
Trucks	0	0	1	0	1	0	0	0	0	0	0	10	0	0	10	0	8	0	0	8	19
% Trucks	0	0	2.9	0	2.0	0	0	0	0	0	0	1.0	0	0	0.9	0	0.6	0	0	0.6	0.7



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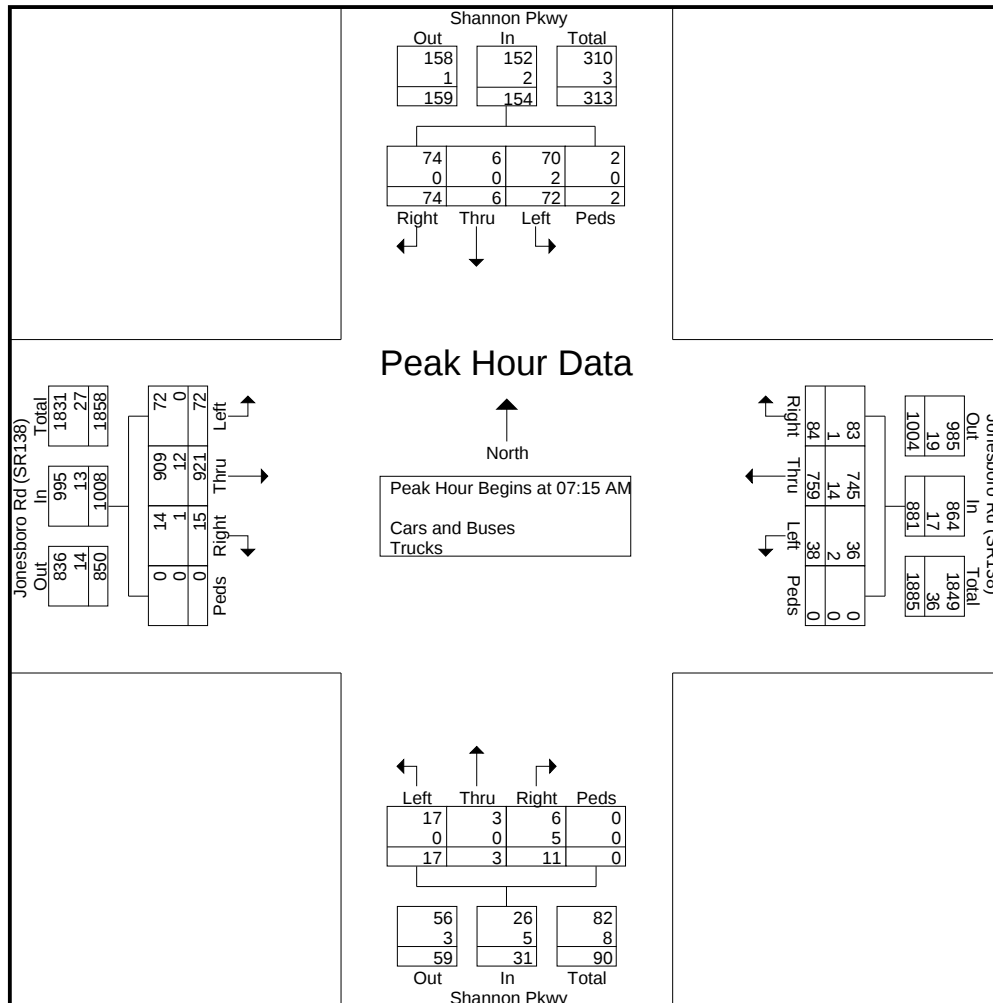
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TMC Data
Jonesboro Rd (SR138) @ Shannon Pkwy

File Name : 35310005
Site Code : 35310005
Start Date : 5/20/2014
Page No : 2

7-9 am | 4-6 pm

	Shannon Pkwy Northbound					Shannon Pkwy Southbound					Jonesboro Rd (SR138) Eastbound					Jonesboro Rd (SR138) Westbound					
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 07:15 AM to 08:00 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	4	0	2	0	6	18	0	17	1	36	17	255	2	0	274	6	179	19	0	204	520
07:30 AM	3	1	2	0	6	22	2	13	0	37	22	230	3	0	255	6	191	21	0	218	516
07:45 AM	2	1	5	0	8	13	1	22	1	37	20	225	6	0	251	12	196	24	0	232	528
08:00 AM	8	1	2	0	11	19	3	22	0	44	13	211	4	0	228	14	193	20	0	227	510
Total Volume	17	3	11	0	31	72	6	74	2	154	72	921	15	0	1008	38	759	84	0	881	2074
% App. Total	54.8	9.7	35.5	0		46.8	3.9	48.1	1.3		7.1	91.4	1.5	0		4.3	86.2	9.5	0		
PHF	.531	.750	.550	.000	.705	.818	.500	.841	.500	.875	.818	.903	.625	.000	.920	.679	.968	.875	.000	.949	.982
Cars and Buses	17	3	6	0	26	70	6	74	2	152	72	909	14	0	995	36	745	83	0	864	2037
% Cars and Buses	100	100	54.5	0	83.9	97.2	100	100	100	98.7	100	98.7	93.3	0	98.7	94.7	98.2	98.8	0	98.1	98.2
Trucks	0	0	5	0	5	2	0	0	0	2	0	12	1	0	13	2	14	1	0	17	37
% Trucks	0	0	45.5	0	16.1	2.8	0	0	0	1.3	0	1.3	6.7	0	1.3	5.3	1.8	1.2	0	1.9	1.8



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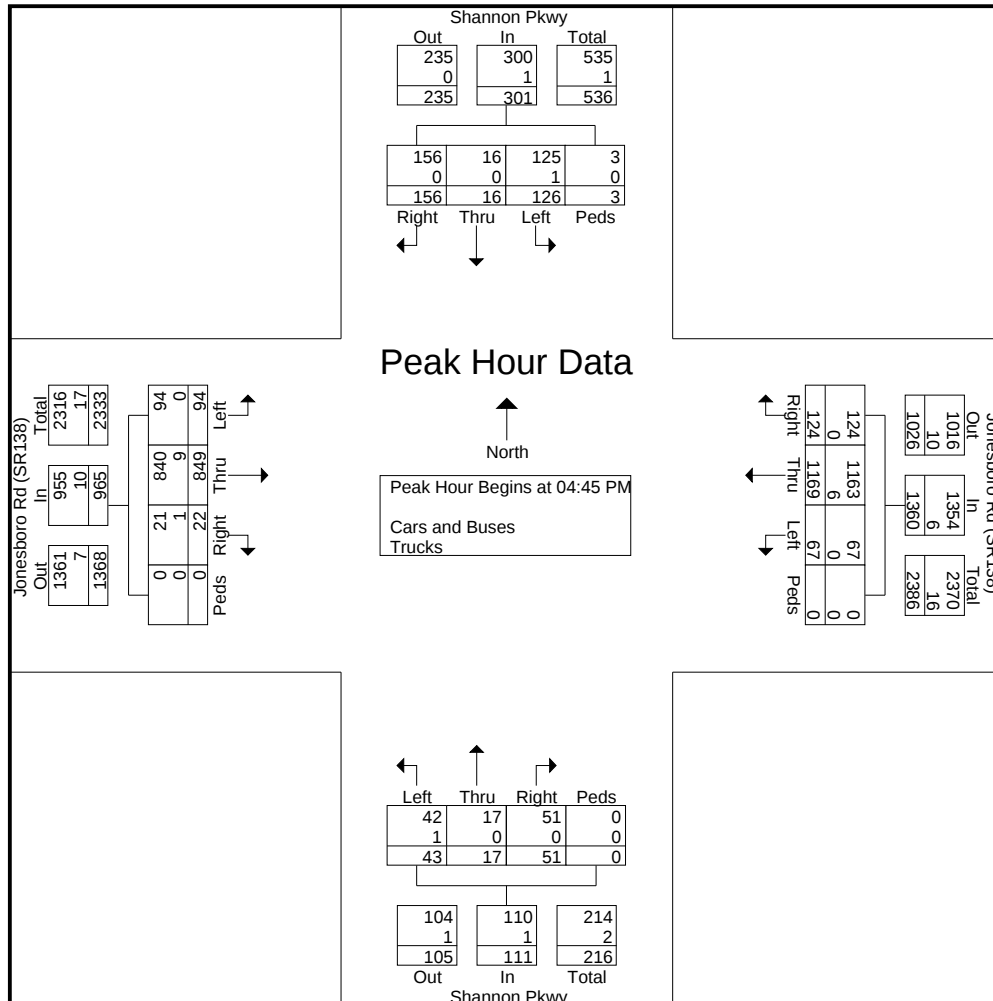
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TMC Data
Jonesboro Rd (SR138) @ Shannon Pkwy

File Name : 35310005
Site Code : 35310005
Start Date : 5/20/2014
Page No : 3

7-9 am | 4-6 pm

	Shannon Pkwy Northbound					Shannon Pkwy Southbound					Jonesboro Rd (SR138) Eastbound					Jonesboro Rd (SR138) Westbound					
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 04:45 PM to 05:30 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	13	6	15	0	34	34	4	38	0	76	25	233	4	0	262	17	259	31	0	307	679
05:00 PM	8	2	16	0	26	29	3	37	3	72	24	216	4	0	244	9	309	31	0	349	691
05:15 PM	9	3	11	0	23	30	4	39	0	73	21	214	7	0	242	17	303	33	0	353	691
05:30 PM	13	6	9	0	28	33	5	42	0	80	24	186	7	0	217	24	298	29	0	351	676
Total Volume	43	17	51	0	111	126	16	156	3	301	94	849	22	0	965	67	1169	124	0	1360	2737
% App. Total	38.7	15.3	45.9	0		41.9	5.3	51.8	1		9.7	88	2.3	0		4.9	86	9.1	0		
PHF	.827	.708	.797	.000	.816	.926	.800	.929	.250	.941	.940	.911	.786	.000	.921	.698	.946	.939	.000	.963	.990
Cars and Buses	42	17	51	0	110	125	16	156	3	300	94	840	21	0	955	67	1163	124	0	1354	2719
% Cars and Buses	97.7	100	100	0	99.1	99.2	100	100	100	99.7	100	98.9	95.5	0	99.0	100	99.5	100	0	99.6	99.3
Trucks	1	0	0	0	1	1	0	0	0	1	0	9	1	0	10	0	6	0	0	6	18
% Trucks	2.3	0	0	0	0.9	0.8	0	0	0	0.3	0	1.1	4.5	0	1.0	0	0.5	0	0	0.4	0.7



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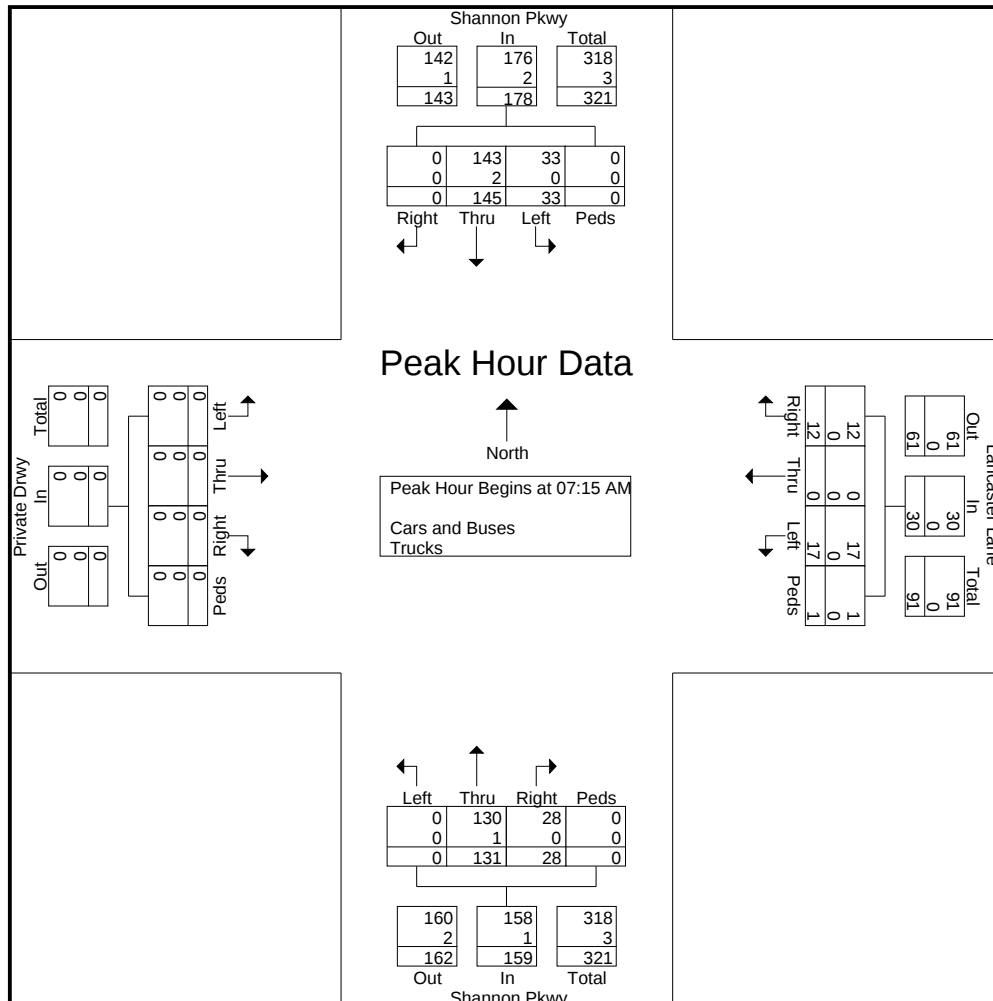
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TMC Data
Shannon Pkwy @ Lancaster Lane

File Name : 35310006
Site Code : 35310006
Start Date : 5/20/2014
Page No : 2

7-9 am | 4-6 pm

	Shannon Pkwy Northbound					Shannon Pkwy Southbound					Private Drwy Eastbound					Lancaster Lane Westbound					
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 07:15 AM to 08:00 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	0	31	3	0	34	7	33	0	0	40	0	0	0	0	0	2	0	2	0	4	78
07:30 AM	0	30	12	0	42	9	35	0	0	44	0	0	0	0	0	5	0	3	0	8	94
07:45 AM	0	36	9	0	45	6	36	0	0	42	0	0	0	0	0	4	0	3	0	7	94
08:00 AM	0	34	4	0	38	11	41	0	0	52	0	0	0	0	0	6	0	4	1	11	101
Total Volume	0	131	28	0	159	33	145	0	0	178	0	0	0	0	0	17	0	12	1	30	367
% App. Total	0	82.4	17.6	0		18.5	81.5	0	0		0	0	0	0		56.7	0	40	3.3		
PHF	.000	.910	.583	.000	.883	.750	.884	.000	.000	.856	.000	.000	.000	.000	.000	.708	.000	.750	.250	.682	.908
Cars and Buses	0	130	28	0	158	33	143	0	0	176	0	0	0	0	0	17	0	12	1	30	364
% Cars and Buses	0	99.2	100	0	99.4	100	98.6	0	0	98.9	0	0	0	0	0	100	0	100	100	100	99.2
Trucks	0	1	0	0	1	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	3
% Trucks	0	0.8	0	0	0.6	0	1.4	0	0	1.1	0	0	0	0	0	0	0	0	0	0	0.8



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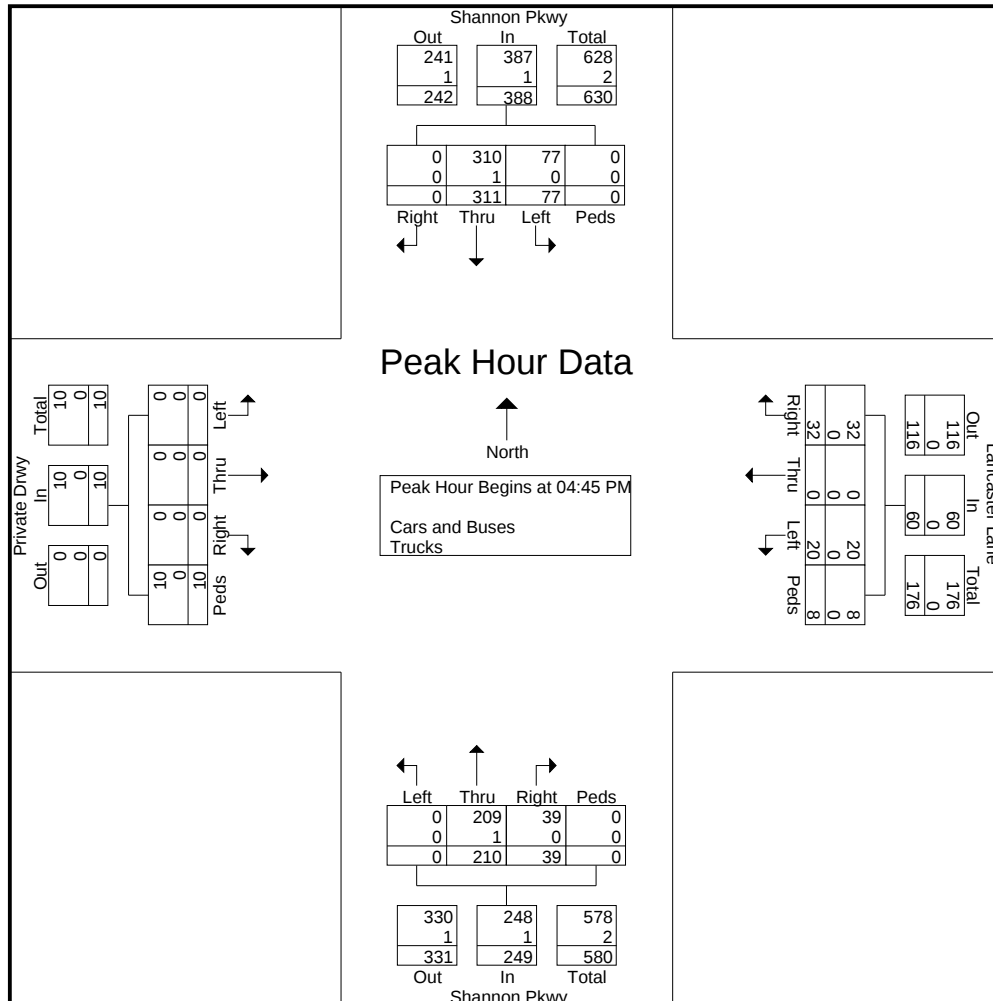
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TMC Data
Shannon Pkwy @ Lancaster Lane

File Name : 35310006
Site Code : 35310006
Start Date : 5/20/2014
Page No : 3

7-9 am | 4-6 pm

	Shannon Pkwy Northbound					Shannon Pkwy Southbound					Private Drwy Eastbound					Lancaster Lane Westbound					
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 04:45 PM to 05:30 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	0	52	10	0	62	20	81	0	0	101	0	0	0	3	3	7	0	7	0	14	180
05:00 PM	0	56	12	0	68	20	79	0	0	99	0	0	0	0	0	5	0	6	1	12	179
05:15 PM	0	51	10	0	61	23	67	0	0	90	0	0	0	5	5	4	0	11	2	17	173
05:30 PM	0	51	7	0	58	14	84	0	0	98	0	0	0	2	2	4	0	8	5	17	175
Total Volume	0	210	39	0	249	77	311	0	0	388	0	0	0	10	10	20	0	32	8	60	707
% App. Total	0	84.3	15.7	0		19.8	80.2	0	0		0	0	0	100		33.3	0	53.3	13.3		
PHF	.000	.938	.813	.000	.915	.837	.926	.000	.000	.960	.000	.000	.000	.500	.500	.714	.000	.727	.400	.882	.982
Cars and Buses	0	209	39	0	248	77	310	0	0	387	0	0	0	10	10	20	0	32	8	60	705
% Cars and Buses	0	99.5	100	0	99.6	100	99.7	0	0	99.7	0	0	0	100	100	100	0	100	100	100	99.7
Trucks	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
% Trucks	0	0.5	0	0	0.4	0	0.3	0	0	0.3	0	0	0	0	0	0	0	0	0	0	0.3



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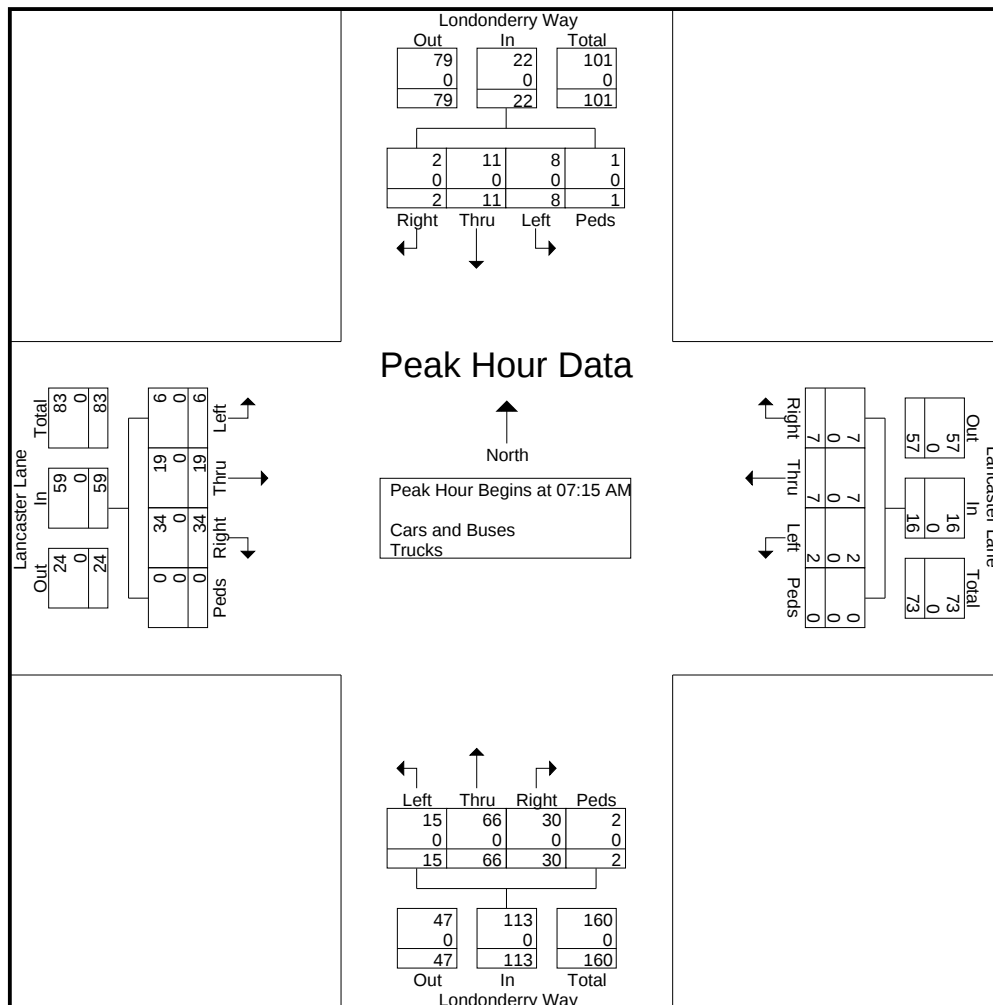
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TMC Data
Londonderry Way @ Lancaster Lane

File Name : 35310007
Site Code : 35310007
Start Date : 5/20/2014
Page No : 2

7-9 am | 4-6 pm

	Londonderry Way Northbound					Londonderry Way Southbound					Lancaster Lane Eastbound					Lancaster Lane Westbound					
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 07:15 AM to 08:00 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	2	11	6	0	19	1	4	1	0	6	2	3	8	0	13	0	0	1	0	1	39
07:30 AM	6	19	6	0	31	0	1	0	0	1	2	8	9	0	19	0	1	1	0	2	53
07:45 AM	2	21	8	2	33	3	3	0	0	6	1	3	11	0	15	1	3	3	0	7	61
08:00 AM	5	15	10	0	30	4	3	1	1	9	1	5	6	0	12	1	3	2	0	6	57
Total Volume	15	66	30	2	113	8	11	2	1	22	6	19	34	0	59	2	7	7	0	16	210
% App. Total	13.3	58.4	26.5	1.8		36.4	50	9.1	4.5		10.2	32.2	57.6	0		12.5	43.8	43.8	0		
PHF	.625	.786	.750	.250	.856	.500	.688	.500	.250	.611	.750	.594	.773	.000	.776	.500	.583	.583	.000	.571	.861
Cars and Buses	15	66	30	2	113	8	11	2	1	22	6	19	34	0	59	2	7	7	0	16	210
% Cars and Buses	100	100	100	100	100	100	100	100	100	100	100	100	100	0	100	100	100	100	0	100	100
Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Trucks	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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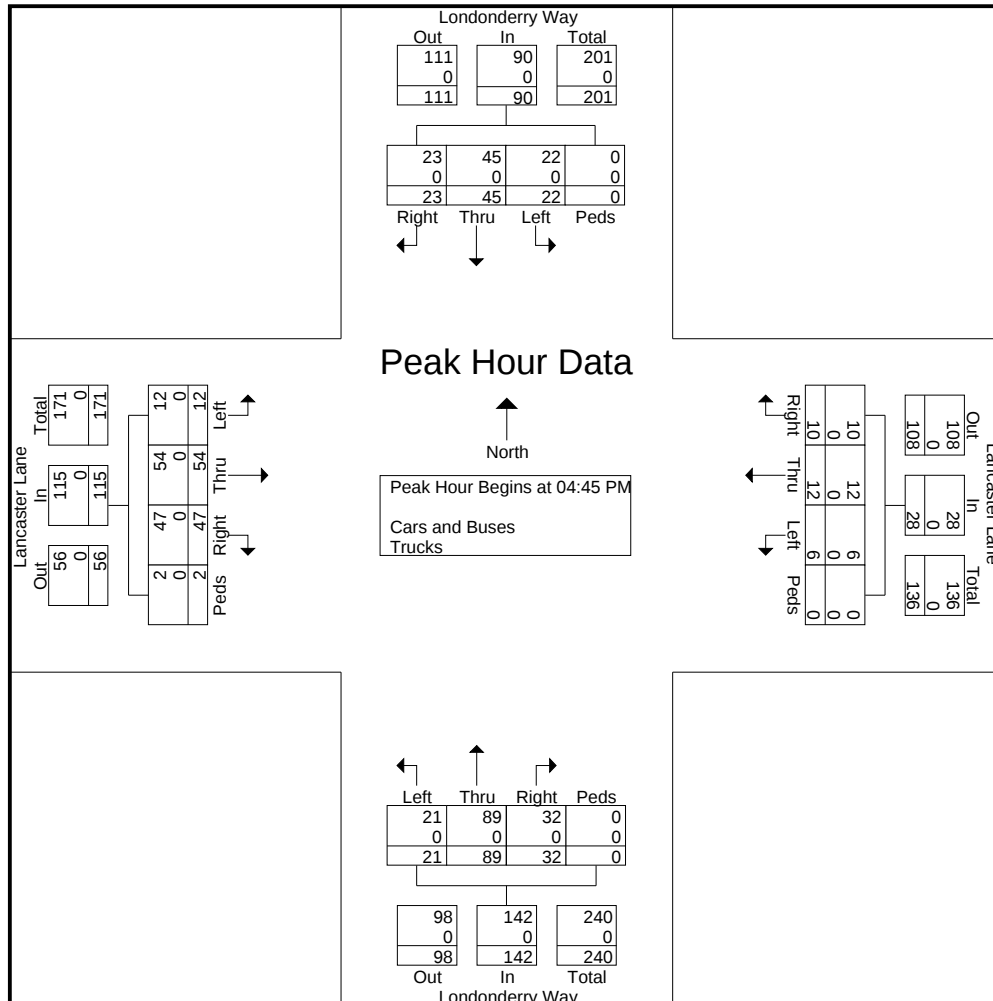
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TMC Data
Londonderry Way @ Lancaster Lane

File Name : 35310007
Site Code : 35310007
Start Date : 5/20/2014
Page No : 3

7-9 am | 4-6 pm

	Londonderry Way Northbound					Londonderry Way Southbound					Lancaster Lane Eastbound					Lancaster Lane Westbound					
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 04:45 PM to 05:30 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	2	26	2	0	30	4	10	9	0	23	5	18	11	0	34	0	2	2	0	4	91
05:00 PM	4	16	6	0	26	10	11	4	0	25	3	16	13	0	32	2	4	1	0	7	90
05:15 PM	6	28	13	0	47	1	14	5	0	20	2	11	12	2	27	2	4	6	0	12	106
05:30 PM	9	19	11	0	39	7	10	5	0	22	2	9	11	0	22	2	2	1	0	5	88
Total Volume	21	89	32	0	142	22	45	23	0	90	12	54	47	2	115	6	12	10	0	28	375
% App. Total	14.8	62.7	22.5	0		24.4	50	25.6	0		10.4	47	40.9	1.7		21.4	42.9	35.7	0		
PHF	.583	.795	.615	.000	.755	.550	.804	.639	.000	.900	.600	.750	.904	.250	.846	.750	.750	.417	.000	.583	.884
Cars and Buses	21	89	32	0	142	22	45	23	0	90	12	54	47	2	115	6	12	10	0	28	375
% Cars and Buses	100	100	100	0	100	100	100	100	0	100	100	100	100	100	100	100	100	100	0	100	100
Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Trucks	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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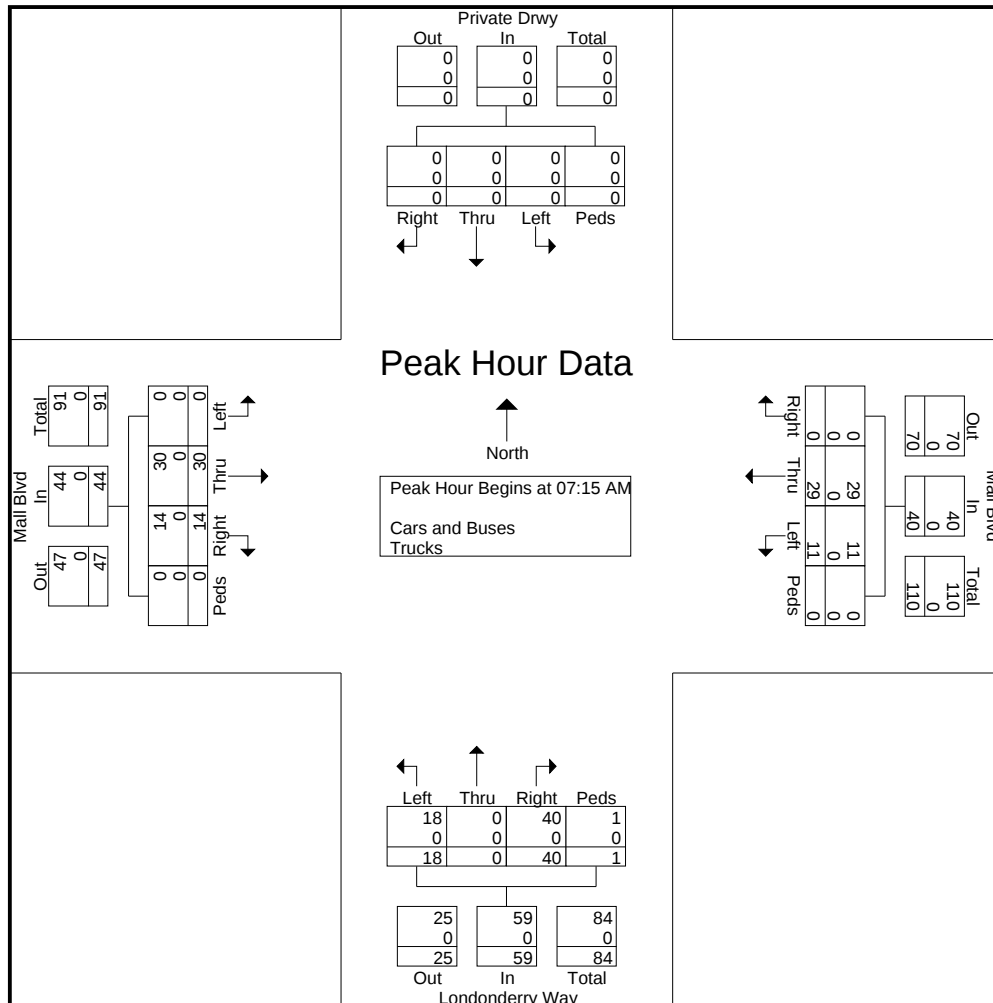
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TMC Data
Londonderry Way @ Mall Blvd

File Name : 35310008
Site Code : 35310008
Start Date : 5/20/2014
Page No : 2

7-9 am | 4-6 pm

	Londonderry Way Northbound					Private Drwy Southbound					Mall Blvd Eastbound					Mall Blvd Westbound					
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 07:15 AM to 08:00 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	3	0	7	0	10	0	0	0	0	0	0	7	2	0	9	2	9	0	0	11	30
07:30 AM	4	0	10	0	14	0	0	0	0	0	0	6	3	0	9	4	5	0	0	9	32
07:45 AM	5	0	13	0	18	0	0	0	0	0	0	6	5	0	11	3	6	0	0	9	38
08:00 AM	6	0	10	1	17	0	0	0	0	0	0	11	4	0	15	2	9	0	0	11	43
Total Volume	18	0	40	1	59	0	0	0	0	0	0	30	14	0	44	11	29	0	0	40	143
% App. Total	30.5	0	67.8	1.7		0	0	0	0		0	68.2	31.8	0		27.5	72.5	0	0		
PHF	.750	.000	.769	.250	.819	.000	.000	.000	.000	.000	.000	.682	.700	.000	.733	.688	.806	.000	.000	.909	.831
Cars and Buses	18	0	40	1	59	0	0	0	0	0	0	30	14	0	44	11	29	0	0	40	143
% Cars and Buses	100	0	100	100	100	0	0	0	0	0	0	100	100	0	100	100	100	0	0	100	100
Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Reliable Traffic Data Services, LLC

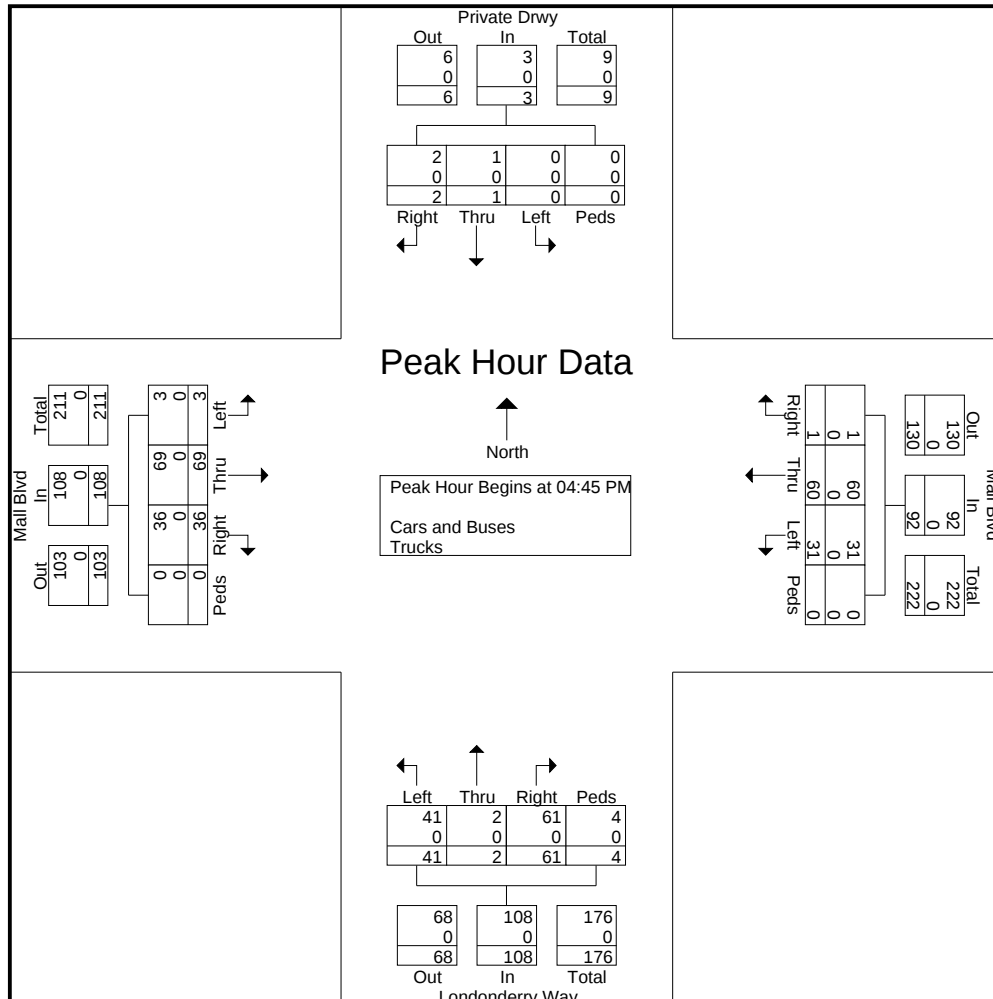
Tel: (770) 578-8158 | Fax: (770) 578-8159
info@reliabletraffic.org | www.reliabletraffic.org

TMC Data
Londonderry Way @ Mall Blvd

File Name : 35310008
Site Code : 35310008
Start Date : 5/20/2014
Page No : 3

7-9 am | 4-6 pm

	Londonderry Way Northbound					Private Drwy Southbound					Mall Blvd Eastbound					Mall Blvd Westbound					
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 04:45 PM to 05:30 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	9	0	22	2	33	0	0	0	0	0	0	24	10	0	34	6	14	0	0	20	87
05:00 PM	7	0	10	2	19	0	1	1	0	2	1	16	11	0	28	8	15	0	0	23	72
05:15 PM	16	0	19	0	35	0	0	0	0	0	2	19	8	0	29	7	18	0	0	25	89
05:30 PM	9	2	10	0	21	0	0	1	0	1	0	10	7	0	17	10	13	1	0	24	63
Total Volume	41	2	61	4	108	0	1	2	0	3	3	69	36	0	108	31	60	1	0	92	311
% App. Total	38	1.9	56.5	3.7		0	33.3	66.7	0		2.8	63.9	33.3	0		33.7	65.2	1.1	0		
PHF	.641	.250	.693	.500	.771	.000	.250	.500	.000	.375	.375	.719	.818	.000	.794	.775	.833	.250	.000	.920	.874
Cars and Buses	41	2	61	4	108	0	1	2	0	3	3	69	36	0	108	31	60	1	0	92	311
% Cars and Buses	100	100	100	100	100	0	100	100	0	100	100	100	100	0	100	100	100	100	0	100	100
Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Trucks	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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Classification Data

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Site Code: 35310101
Jonesboro Rd (SR138) west of Shannon Way

Eastbound

Start Time	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10	Class 11	Class 12	Class 13	Class 14	Total
5/20/14	0	62	4	3	2	0	0	0	0	0	0	0	0	0	71
00:15	0	45	6	0	2	2	0	0	0	0	0	0	0	0	55
00:30	0	58	3	3	3	2	0	0	2	0	0	0	0	0	71
00:45	0	44	3	0	2	0	0	0	0	0	0	0	0	0	49
01:00	0	209	16	6	9	4	0	0	2	0	0	0	0	0	246
01:15	0	54	2	0	0	0	0	0	0	0	0	0	0	0	56
01:30	0	21	2	2	0	0	0	0	0	0	0	0	0	0	25
01:45	0	28	0	0	0	0	0	0	0	0	0	0	0	0	28
02:00	0	27	4	0	0	0	0	0	0	0	0	0	0	0	31
02:15	0	130	8	2	0	0	0	0	0	0	0	0	0	0	140
02:30	0	16	4	0	3	0	0	3	2	0	0	0	0	0	28
02:45	0	38	4	0	0	0	0	0	0	0	0	0	0	0	42
03:00	0	21	3	0	0	0	0	0	0	0	0	0	0	0	24
03:15	0	27	8	0	0	0	0	2	2	0	0	0	0	0	39
03:30	0	102	19	0	3	0	0	5	4	0	0	0	0	0	133
03:45	0	27	3	0	2	0	0	2	0	0	0	0	0	0	34
04:00	0	24	2	0	2	0	0	0	2	0	0	0	0	0	30
04:15	0	38	2	0	0	2	0	0	0	0	0	0	0	0	42
04:30	0	30	8	0	2	0	0	0	2	0	0	0	0	0	42
04:45	0	119	15	0	6	2	0	2	4	0	0	0	0	0	148
05:00	0	39	2	0	0	0	0	2	0	0	0	0	0	0	43
05:15	0	40	6	3	2	2	0	3	0	0	0	0	0	0	56
05:30	0	42	3	2	3	0	0	0	0	0	0	0	0	0	50
05:45	0	38	9	0	2	2	0	0	0	0	0	0	0	0	51
06:00	0	159	20	5	7	4	0	5	0	0	0	0	0	0	200
06:15	1	63	14	3	6	0	0	2	0	0	0	0	0	0	89
06:30	0	86	14	3	15	2	0	2	0	0	0	0	0	0	122
06:45	0	87	16	28	12	0	0	3	2	0	0	0	0	0	148
07:00	0	117	26	26	14	0	0	3	2	0	0	0	0	0	188
07:15	1	353	70	60	47	2	0	10	4	0	0	0	0	0	547
07:30	0	118	21	27	24	2	2	2	0	0	0	0	0	0	196
07:45	1	134	22	44	14	2	0	3	0	0	0	0	0	0	220
08:00	1	148	33	27	12	2	0	8	0	0	0	0	0	0	231
08:15	1	156	35	3	9	2	0	3	0	0	0	0	0	0	209
08:30	3	556	111	101	59	8	2	16	0	0	0	0	0	0	856
08:45	1	161	30	3	3	2	6	2	2	2	2	2	3	0	219
09:00	1	171	33	2	4	4	0	0	2	3	2	2	4	0	228
09:15	2	184	31	7	11	2	0	4	2	0	2	2	4	0	251
09:30	1	193	25	7	15	3	0	0	0	2	2	2	11	0	261
09:45	5	709	119	19	33	11	6	6	6	7	8	8	22	0	959
10:00	1	192	19	4	8	8	0	3	0	0	2	0	4	0	241
10:15	0	193	18	2	12	4	0	0	2	3	3	2	2	0	241
10:30	1	191	32	4	8	2	0	3	0	0	0	0	0	0	241
10:45	2	179	24	5	13	4	3	4	2	0	3	2	3	0	244
11:00	4	755	93	15	41	18	3	10	4	3	8	4	9	0	967
11:15	1	157	26	4	6	3	3	3	2	0	3	0	0	0	208
11:30	0	170	22	3	10	0	2	3	2	0	2	2	4	0	220
11:45	3	122	14	9	9	3	0	6	3	2	0	0	0	0	171
12:00	1	164	27	4	21	2	0	4	4	0	0	2	2	0	231
12:15	5	613	89	20	46	8	5	16	11	2	5	4	6	0	830
12:30	0	168	26	3	12	4	2	2	3	0	0	2	2	0	224
12:45	3	136	16	2	10	3	2	0	4	0	0	2	2	0	180
13:00	1	150	27	6	9	10	2	8	0	0	2	0	0	0	215
13:15	1	139	30	4	10	4	0	2	3	0	3	0	0	0	196
13:30	5	593	99	15	41	21	6	12	10	0	5	4	4	0	815
13:45	1	134	22	3	9	0	2	3	0	0	0	2	0	0	176
14:00	3	151	19	4	10	0	2	2	2	2	0	2	4	0	201
14:15	2	150	24	14	12	2	2	2	2	2	0	2	3	0	217
14:30	6	153	20	12	10	8	3	3	3	2	3	2	4	0	229
14:45	12	588	85	33	41	10	9	10	7	6	3	8	11	0	823
Total	35	4886	744	276	333	88	31	92	52	18	29	28	52	0	6664
Percent	0.5%	73.3%	11.2%	4.1%	5.0%	1.3%	0.5%	1.4%	0.8%	0.3%	0.4%	0.4%	0.8%	0.0%	

Reliable Traffic Data Services, LLC

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Site Code: 35310101
Jonesboro Rd (SR138) west of Shannon Way

Eastbound

Start Time	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10	Class 11	Class 12	Class 13	Class 14	Total
12 PM	1	142	20	18	15	6	2	3	4	0	2	4	3	0	220
12:15	1	78	8	10	14	3	6	8	4	0	2	0	4	0	138
12:30	2	104	16	2	4	3	3	2	0	0	0	0	2	0	138
12:45	2	132	9	3	4	2	2	2	0	0	2	2	2	0	162
	6	456	53	33	37	14	13	15	8	0	6	6	11	0	658
13:00	1	120	16	3	8	0	0	4	0	0	2	0	8	0	162
13:15	2	145	22	3	9	2	0	0	0	0	0	2	3	0	188
13:30	2	70	6	9	15	9	0	2	4	0	3	2	4	0	126
13:45	1	106	15	3	6	3	2	0	2	0	0	0	0	0	138
	6	441	59	18	38	14	2	6	6	0	5	4	15	0	614
14:00	2	154	27	12	15	3	2	0	3	0	2	0	8	0	228
14:15	2	88	15	2	8	2	6	2	3	2	3	0	9	0	142
14:30	2	129	12	6	6	4	0	4	0	0	2	2	14	0	181
14:45	1	88	14	3	4	8	0	2	3	0	0	0	3	0	126
	7	459	68	23	33	17	8	8	9	2	7	2	34	0	677
15:00	2	153	21	0	6	3	2	6	4	2	3	0	2	0	204
15:15	1	155	27	2	4	2	2	2	4	2	3	0	3	0	207
15:30	2	158	35	2	10	6	2	0	0	0	0	0	6	0	221
15:45	1	132	16	9	12	6	0	3	2	0	2	3	4	0	190
	6	598	99	13	32	17	6	11	10	4	8	3	15	0	822
16:00	2	146	17	4	17	17	4	4	6	4	4	0	0	0	225
16:15	4	203	17	0	15	4	4	4	4	0	0	0	4	0	259
16:30	2	344	30	6	6	6	0	0	4	4	11	0	6	0	419
16:45	2	91	8	0	0	4	11	8	0	0	0	0	17	0	141
	10	784	72	10	38	31	19	16	14	8	15	0	27	0	1044
17:00	3	222	26	0	5	6	9	0	3	0	0	5	3	0	282
17:15	5	181	17	5	6	6	3	0	5	3	0	0	14	0	245
17:30	0	223	40	5	9	5	0	9	3	0	0	0	3	0	297
17:45	0	283	23	5	6	3	0	9	3	3	0	0	5	0	340
	8	909	106	15	26	20	12	18	14	6	0	5	25	0	1164
18:00	1	201	22	4	4	3	3	3	3	0	0	0	4	0	248
18:15	0	263	14	4	12	3	0	3	0	3	4	3	4	0	313
18:30	3	221	31	12	5	3	3	5	3	0	0	3	3	0	292
18:45	0	221	17	3	3	4	3	0	3	0	0	0	10	0	264
	4	906	84	23	24	13	9	11	9	3	4	6	21	0	1117
19:00	0	188	20	3	4	6	2	0	2	2	0	0	2	0	229
19:15	1	196	17	3	20	4	0	2	3	0	0	0	6	0	252
19:30	1	144	22	2	4	6	2	2	3	0	0	4	3	0	193
19:45	1	161	15	2	10	3	3	2	0	2	0	2	2	0	203
	3	689	74	10	38	19	7	6	8	4	0	6	13	0	877
20:00	1	202	23	4	4	3	2	2	0	0	0	0	0	0	241
20:15	4	161	28	0	4	3	2	3	3	0	0	2	0	0	210
20:30	2	180	14	0	3	3	0	0	0	0	0	0	2	0	204
20:45	1	179	11	0	4	2	0	3	0	0	2	0	2	0	204
	8	722	76	4	15	11	4	8	3	0	2	2	4	0	859
21:00	1	128	22	3	3	3	0	0	2	2	0	0	2	0	166
21:15	1	162	24	0	2	3	0	0	2	0	0	0	0	0	194
21:30	1	150	12	3	0	0	0	2	3	2	0	0	2	0	175
21:45	0	158	4	0	4	3	3	2	0	2	0	0	0	0	176
	3	598	62	6	9	9	3	4	7	6	0	0	4	0	711
22:00	1	147	12	0	3	2	0	3	0	0	0	0	0	0	168
22:15	1	152	16	0	2	0	0	0	0	0	0	0	0	0	171
22:30	1	158	10	4	2	3	2	0	0	0	0	0	0	0	180
22:45	1	122	14	2	4	2	0	3	2	0	0	0	0	0	150
	4	579	52	6	11	7	2	6	2	0	0	0	0	0	669
23:00	1	100	10	3	0	2	0	2	0	0	2	0	0	0	120
23:15	0	113	12	0	2	0	0	0	0	0	0	0	0	0	127
23:30	0	95	9	2	4	0	0	0	0	0	0	0	0	0	110
23:45	1	76	8	0	2	0	0	2	0	0	0	0	0	0	89
	2	384	39	5	8	2	0	4	0	0	2	0	0	0	446
Total	67	7525	844	166	309	174	85	113	90	33	49	34	169	0	9658
Percent	0.7%	77.9%	8.7%	1.7%	3.2%	1.8%	0.9%	1.2%	0.9%	0.3%	0.5%	0.4%	1.7%	0.0%	
Grand Total	102	12411	1588	442	642	262	116	205	142	51	78	62	221	0	16322
Percent	0.6%	76.0%	9.7%	2.7%	3.9%	1.6%	0.7%	1.3%	0.9%	0.3%	0.5%	0.4%	1.4%	0.0%	

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Jonesboro Rd (SR138) west of Shannon Way

Westbound

Start Time	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10	Class 11	Class 12	Class 13	Class 14	Total
5/20/14	0	79	5	1	1	0	0	0	0	0	0	0	0	0	86
00:15	0	52	9	1	0	1	0	0	0	0	0	0	0	0	63
00:30	1	58	5	1	2	2	0	0	0	0	0	0	0	0	69
00:45	0	51	1	0	2	0	0	0	0	0	0	0	0	0	54
01:00	1	240	20	3	5	3	0	0	0	0	0	0	0	0	272
01:15	0	38	5	1	1	0	0	0	0	0	0	0	0	0	45
01:30	0	37	0	0	2	1	0	0	2	0	0	0	0	0	42
01:45	0	39	2	0	0	0	0	1	2	0	0	0	0	0	44
02:00	0	17	6	0	0	0	0	0	0	0	0	0	0	0	23
02:15	0	131	13	1	3	1	0	1	4	0	0	0	0	0	154
02:30	0	23	1	0	0	0	0	0	2	0	0	0	0	0	26
02:45	0	25	6	1	0	0	0	0	2	0	0	0	0	0	34
03:00	0	20	7	0	0	0	0	1	0	0	0	0	0	0	28
03:15	0	26	2	0	0	0	0	0	0	0	0	0	0	0	28
03:30	0	94	16	1	0	0	0	1	4	0	0	0	0	0	116
03:45	0	25	1	0	1	0	0	0	0	0	0	0	0	0	27
04:00	0	15	0	0	1	0	0	1	1	0	0	0	0	0	18
04:15	0	20	5	0	1	0	0	0	0	0	0	0	0	0	26
04:30	0	23	5	1	0	0	0	0	1	0	0	0	1	0	31
04:45	0	83	11	1	3	0	0	1	2	0	0	0	1	0	102
05:00	0	24	1	3	0	1	0	0	0	0	0	0	0	0	29
05:15	0	29	3	1	2	0	0	0	0	0	0	0	0	0	35
05:30	0	28	5	1	1	1	0	0	0	0	0	0	0	0	36
05:45	0	46	5	1	1	0	0	1	0	0	0	0	0	0	54
06:00	0	127	14	6	4	2	0	1	0	0	0	0	0	0	154
06:15	0	78	10	1	2	0	1	0	1	0	0	0	0	0	93
06:30	0	64	11	1	7	2	0	0	1	0	0	0	0	0	86
06:45	0	82	15	2	7	1	0	0	1	0	0	0	0	0	108
07:00	0	92	30	0	1	0	0	1	0	0	0	0	0	0	124
07:15	0	316	66	4	17	3	1	1	3	0	0	0	0	0	411
07:30	0	80	10	0	6	1	0	0	1	0	0	0	0	0	98
07:45	1	86	10	0	7	0	0	0	1	0	0	0	0	0	105
08:00	0	125	17	1	2	0	0	2	1	0	0	0	0	0	148
08:15	1	149	20	3	3	1	1	1	0	0	0	1	0	0	180
08:30	2	440	57	4	18	2	1	3	3	0	0	1	0	0	531
08:45	0	135	21	1	9	0	0	2	1	0	0	0	0	0	169
09:00	0	173	20	2	6	7	0	1	0	0	0	0	0	0	209
09:15	0	169	23	3	8	3	0	1	0	1	0	0	0	0	208
09:30	1	181	29	0	9	2	0	2	1	0	1	0	1	0	227
09:45	1	658	93	6	32	12	0	6	2	1	1	0	1	0	813
10:00	2	183	26	2	11	2	0	2	0	0	2	4	2	0	236
10:15	1	172	20	11	9	7	0	1	1	0	0	0	0	0	222
10:30	0	146	21	7	16	4	1	0	2	0	1	0	7	0	205
10:45	2	150	28	4	12	1	6	4	0	0	4	0	1	0	212
11:00	5	651	95	24	48	14	7	7	3	0	7	4	10	0	875
11:15	2	124	14	3	9	3	2	2	2	0	1	0	0	0	162
11:30	2	156	19	3	8	8	3	1	1	1	0	0	1	0	203
11:45	1	135	28	3	3	0	0	0	0	0	1	0	1	0	172
12:00	3	142	21	2	9	3	0	5	8	0	2	0	0	0	195
12:15	8	557	82	11	29	14	5	8	11	1	4	0	2	0	732
12:30	2	137	24	1	11	3	1	0	0	1	1	0	2	0	183
12:45	0	161	23	2	5	2	1	3	2	1	0	0	3	0	203
13:00	0	140	22	5	9	2	1	3	8	0	1	1	0	0	192
13:15	4	181	33	1	5	3	1	0	1	0	0	1	1	0	231
13:30	6	619	102	9	30	10	4	6	11	2	2	2	6	0	809
13:45	2	188	29	1	10	3	0	2	2	0	2	1	1	0	241
14:00	1	181	26	3	9	7	0	1	3	0	3	3	5	0	242
14:15	0	162	25	0	14	5	0	0	2	0	2	2	2	0	214
14:30	3	204	23	2	9	6	0	2	2	1	2	0	1	0	255
14:45	6	735	103	6	42	21	0	5	9	1	9	6	9	0	952
Total	29	4651	672	76	231	82	18	40	52	5	23	13	29	0	5921
Percent	0.5%	78.6%	11.3%	1.3%	3.9%	1.4%	0.3%	0.7%	0.9%	0.1%	0.4%	0.2%	0.5%	0.0%	

Reliable Traffic Data Services, LLC

Classification Data

Tel: (770) 578-8158 Fax: (770) 578-8159
info@reliabletraffic.org | www.reliabletraffic.org

Site Code: 35310101
Jonesboro Rd (SR138) west of Shannon Way

Westbound

Start Time	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10	Class 11	Class 12	Class 13	Class 14	Total
12 PM	3	179	31	0	6	5	0	3	2	0	1	3	3	0	236
12:15	1	178	28	2	10	5	1	1	2	2	1	2	3	0	236
12:30	1	193	31	0	3	3	0	0	3	1	2	0	1	0	238
12:45	2	195	30	2	9	7	1	2	2	0	0	0	1	0	251
	7	745	120	4	28	20	2	6	9	3	4	5	8	0	961
13:00	2	193	28	1	8	6	1	3	1	0	0	0	1	0	244
13:15	2	194	19	5	8	8	1	0	0	0	2	6	9	0	254
13:30	0	207	16	0	3	6	1	0	3	0	0	0	2	0	238
13:45	1	191	31	6	11	2	1	3	1	0	0	0	1	0	248
	5	785	94	12	30	22	4	6	5	0	2	6	13	0	984
14:00	2	198	35	2	8	3	2	2	3	1	2	1	0	0	259
14:15	1	178	24	0	2	2	1	0	2	0	0	2	3	0	215
14:30	1	224	26	1	9	2	0	1	1	0	2	2	1	0	270
14:45	2	213	31	7	14	3	1	2	0	1	1	1	2	0	278
	6	813	116	10	33	10	4	5	6	2	5	6	6	0	1022
15:00	0	190	23	7	10	3	2	3	0	1	1	2	3	0	245
15:15	0	211	31	1	7	7	0	0	1	1	1	0	1	0	261
15:30	3	197	31	3	10	5	1	1	1	0	2	2	3	0	259
15:45	2	206	30	8	6	8	5	3	0	0	5	2	6	0	281
	5	804	115	19	33	23	8	7	2	2	9	6	13	0	1046
16:00	5	263	20	26	9	7	1	2	2	0	1	1	3	0	340
16:15	2	268	20	7	6	9	1	1	0	0	2	0	1	0	317
16:30	1	220	32	2	11	9	0	3	2	0	1	3	6	0	290
16:45	2	275	35	12	7	12	1	0	0	0	1	3	0	0	348
	10	1026	107	47	33	37	3	6	4	0	5	7	10	0	1295
17:00	2	276	33	7	12	1	0	1	0	0	0	0	1	0	333
17:15	3	259	27	2	3	12	6	3	1	2	0	2	2	0	322
17:30	2	271	25	2	3	6	1	3	2	1	0	0	7	0	323
17:45	1	260	28	3	7	3	2	2	2	1	0	0	3	0	312
	8	1066	113	14	25	22	9	9	5	4	0	2	13	0	1290
18:00	1	252	25	1	3	6	2	2	0	0	0	2	2	0	298
18:15	2	235	29	2	5	1	1	0	0	0	0	0	0	0	275
18:30	1	209	24	1	7	6	2	0	1	0	0	1	0	0	252
18:45	2	218	24	1	2	8	3	2	2	1	0	0	1	0	264
	6	914	102	5	17	21	8	4	5	1	0	3	3	0	1089
19:00	2	233	24	0	6	2	3	0	1	1	1	1	1	0	275
19:15	2	203	22	2	6	2	2	0	0	1	0	1	1	0	242
19:30	2	197	19	0	6	6	0	0	0	0	1	0	0	0	231
19:45	2	167	29	0	6	3	3	0	1	0	0	0	1	0	212
	8	800	94	2	24	13	8	0	2	2	2	2	3	0	960
20:00	1	177	16	1	6	7	1	1	1	1	1	0	1	0	214
20:15	2	196	23	1	2	6	0	0	0	0	0	0	1	0	231
20:30	0	184	18	0	2	1	0	1	1	2	0	1	3	0	213
20:45	2	174	16	0	5	3	0	0	0	1	0	1	2	0	204
	5	731	73	2	15	17	1	2	2	4	1	2	7	0	862
21:00	0	162	14	1	2	3	1	1	0	0	0	0	0	0	184
21:15	0	186	16	1	5	0	1	1	2	0	0	0	2	0	214
21:30	0	167	13	5	2	3	5	0	0	0	0	0	1	0	196
21:45	0	159	14	0	5	0	1	0	1	0	0	0	1	0	181
	0	674	57	7	14	6	8	2	3	0	0	0	4	0	775
22:00	0	137	18	0	1	1	1	1	0	0	0	0	1	0	160
22:15	1	128	11	1	0	0	0	0	0	0	0	1	0	0	142
22:30	0	141	15	0	2	1	0	1	2	0	0	0	0	0	162
22:45	0	99	7	0	0	0	0	0	3	0	0	0	0	0	109
	1	505	51	1	3	2	1	2	5	0	0	1	1	0	573
23:00	1	89	9	0	2	0	1	0	0	0	0	0	0	0	102
23:15	0	102	7	0	1	2	1	1	0	0	0	0	0	0	114
23:30	0	84	9	0	0	0	1	0	2	0	0	0	0	0	96
23:45	0	79	13	1	0	0	1	0	0	0	0	0	0	0	94
	1	354	38	1	3	2	4	1	2	0	0	0	0	0	406
Total	62	9217	1080	124	258	195	60	50	50	18	28	40	81	0	11263
Percent	0.6%	81.8%	9.6%	1.1%	2.3%	1.7%	0.5%	0.4%	0.4%	0.2%	0.2%	0.4%	0.7%	0.0%	
Grand Total	91	13868	1752	200	489	277	78	90	102	23	51	53	110	0	17184
Percent	0.5%	80.7%	10.2%	1.2%	2.8%	1.6%	0.5%	0.5%	0.6%	0.1%	0.3%	0.3%	0.6%	0.0%	

Trip Generation

ITE Trip Generation, 9th Edition (2012)

Project RP Union Station 85, LLC **Project Number** 1.78E+08
Client RP Union Station 85, LLC
Site Union City, GA **1000 Square Feet** **1080**
Land Use High-Cube Warehouse **ITE Code** 152

Weekdays

Personal Vehicles=1.68(#units)-trucks
 Trucks = 0.64 (#units)

Totals=

Trips				
Total Number	Percent		Number	
	In	Out	In	Out
1,122	50%	50%	561	561
692			346	346
Totals=	1,814		907	907

AM Peak Hour: Weekdays (peak hour of adjacent street)

Personal Vehicles=0.14(#units)-25.62-trucks
 Trucks = 0.03 (#units)

Totals=

Trips				
Total Number	Percent		Number	
	In	Out	In	Out
94	69%	31%	65	29
32			22	10
Totals=	126		87	39

PM Peak Hour: Weekdays (peak hour of adjacent street)

Personal Vehicles=0.13(#units)-3.73-trucks
 Trucks = 0.04 (#units)

Totals=

Trips				
Total Number	Percent		Number	
	In	Out	In	Out
137	31%	69%	42	95
43			13	30
Totals=	180		55	125

Trip Generation

ITE Trip Generation, 9th Edition (2012)

Project RP Union Station 85, LLC **Project Number** 178201102
Client RP Union Station 85, LLC
Site Union City, GA **Number of Units*** 72
Land Use General Office Building **ITE Code** 710

Weekdays

$$\text{Ln(Trips)} = 0.76\text{Ln}(\# \text{ units}) + 3.68$$

Trips				
Total Number	Percent		Number	
	In	Out	In	Out
1023	50%	50%	512	511

AM Peak Hour: Weekday (peak hour of generator)

$$\text{Ln(Trips)} = 0.80\text{Ln}(\# \text{ units}) + 1.57$$

Trips				
Total Number	Percent		Number	
	In	Out	In	Out
147	88%	12%	129	18

PM Peak Hour: Weekday (peak hour of generator)

$$\text{Trips} = 1.12(\# \text{ units}) + 78.45$$

Trips				
Total Number	Percent		Number	
	In	Out	In	Out
159	17%	83%	27	132

Peak Hour: Saturday (peak hour of generator)

$$\text{Trips} = 0.43(\# \text{ units})$$

Trips				
Total Number	Percent		Number	
	In	Out	In	Out
31	54%	46%	17	14

*units are 1000 Sq. Feet Gross Floor Area

Trip Generation

ITE Trip Generation, 9th Edition (2012)

Project	RP Union Station 85, LLC	Project Number	178201102
Client	RP Union Station 85, LLC		
Site	Union City, GA	Number of Units*	20
Land Use	<i>High-Turnover (Sit-Down) Restaurant</i>	ITE Code	932

Weekdays

Average Rate = 127.15 per unit

Trips				
Total Number	Percent		Number	
	In	Out	In	Out
2,543	50%	50%	1272	1272

AM Peak Hour: Weekdays (peak hour of adjacent street)

Average Rate = 10.81 per unit

Trips				
Total Number	Percent		Number	
	In	Out	In	Out
216	55%	45%	119	97

PM Peak Hour: Weekdays (peak hour of adjacent street)

Average Rate = 9.85 per unit

Trips				
Total Number	Percent		Number	
	In	Out	In	Out
197	60%	40%	118	79

Peak Hour: Saturday (peak hour of generator)

Average Rate = 14.07 per unit

Trips				
Total Number	Percent		Number	
	In	Out	In	Out
281	53%	47%	149	132

HCM 2010 Signalized Intersection Summary

1: I-85 Northbound Ramp & Jonesboro Rd (SR 138)

Synchro 8 Report

6/29/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 							
Volume (veh/h)	490	981	0	0	780	924	132	0	271	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1845	1845	0	0	1845	1845	1845	0	1845			
Adj Flow Rate, veh/h	527	1055	0	0	857	0	136	0	0			
Adj No. of Lanes	1	2	0	0	2	1	1	0	1			
Peak Hour Factor	0.93	0.93	1.00	1.00	0.91	0.91	0.97	1.00	0.97			
Percent Heavy Veh, %	3	3	0	0	3	3	3	0	3			
Cap, veh/h	614	2564	0	0	1603	717	175	0	156			
Arrive On Green	0.19	0.73	0.00	0.00	0.46	0.00	0.10	0.00	0.00			
Sat Flow, veh/h	1757	3597	0	0	3597	1568	1757	0	1568			
Grp Volume(v), veh/h	527	1055	0	0	857	0	136	0	0			
Grp Sat Flow(s),veh/h/ln	1757	1752	0	0	1752	1568	1757	0	1568			
Q Serve(g_s), s	9.9	8.2	0.0	0.0	12.5	0.0	5.4	0.0	0.0			
Cycle Q Clear(g_c), s	9.9	8.2	0.0	0.0	12.5	0.0	5.4	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	614	2564	0	0	1603	717	175	0	156			
V/C Ratio(X)	0.86	0.41	0.00	0.00	0.53	0.00	0.78	0.00	0.00			
Avail Cap(c_a), veh/h	849	2564	0	0	1603	717	395	0	353			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	10.3	3.7	0.0	0.0	13.8	0.0	31.2	0.0	0.0			
Incr Delay (d2), s/veh	6.6	0.5	0.0	0.0	1.3	0.0	7.2	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	10.1	7.2	0.0	0.0	10.3	0.0	5.3	0.0	0.0			
LnGrp Delay(d),s/veh	16.9	4.2	0.0	0.0	15.1	0.0	38.5	0.0	0.0			
LnGrp LOS	B	A			B		D					
Approach Vol, veh/h		1582			857			136				
Approach Delay, s/veh		8.4			15.1			38.5				
Approach LOS		A			B			D				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		58.0			19.5	38.5		13.1				
Change Period (Y+Rc), s		6.0			6.0	6.0		6.0				
Max Green Setting (Gmax), s		52.0			23.0	23.0		16.0				
Max Q Clear Time (g_c+I1), s		10.2			11.9	14.5		7.4				
Green Ext Time (p_c), s		36.1			1.6	8.1		0.2				
Intersection Summary												
HCM 2010 Ctrl Delay			12.2									
HCM 2010 LOS			B									

HCM 2010 Signalized Intersection Summary
2: I-85 Southbound Ramp & Jonesboro Rd (SR 138)

Synchro 8 Report

6/29/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1020	132	217	666	0	0	0	0	395	0	414
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1845	1900	1845	1845	0				1845	0	1845
Adj Flow Rate, veh/h	0	1074	0	238	732	0				488	0	0
Adj No. of Lanes	0	2	0	1	2	0				2	0	1
Peak Hour Factor	0.95	0.95	0.95	0.91	0.91	0.91				0.81	0.81	0.81
Percent Heavy Veh, %	0	3	3	3	3	0				3	0	3
Cap, veh/h	0	1620	0	485	2267	0				611	0	281
Arrive On Green	0.00	0.92	0.00	0.10	0.65	0.00				0.18	0.00	0.00
Sat Flow, veh/h	0	3689	0	1757	3597	0				3408	0	1568
Grp Volume(v), veh/h	0	1074	0	238	732	0				488	0	0
Grp Sat Flow(s),veh/h/ln	0	1752	0	1757	1752	0				1704	0	1568
Q Serve(g_s), s	0.0	4.1	0.0	4.4	6.4	0.0				9.5	0.0	0.0
Cycle Q Clear(g_c), s	0.0	4.1	0.0	4.4	6.4	0.0				9.5	0.0	0.0
Prop In Lane	0.00		0.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1620	0	485	2267	0				611	0	281
V/C Ratio(X)	0.00	0.66	0.00	0.49	0.32	0.00				0.80	0.00	0.00
Avail Cap(c_a), veh/h	0	1727	0	618	2641	0				790	0	364
HCM Platoon Ratio	1.00	2.00	2.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.81	0.00	0.65	0.65	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	1.6	0.0	7.2	5.4	0.0				27.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.8	0.0	0.5	0.2	0.0				4.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	3.1	0.0	3.9	5.5	0.0				8.5	0.0	0.0
LnGrp Delay(d),s/veh	0.0	3.3	0.0	7.7	5.7	0.0				31.6	0.0	0.0
LnGrp LOS		A		A	A					C		
Approach Vol, veh/h		1074			970						488	
Approach Delay, s/veh		3.3			6.2						31.6	
Approach LOS		A			A						C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	12.7	48.9		18.4		61.6						
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0						
Max Green Setting (Gmax), s	12.0	34.0		16.0		52.0						
Max Q Clear Time (g_c+l1), s	6.4	6.1		11.5		8.4						
Green Ext Time (p_c), s	0.4	24.5		0.9		36.2						
Intersection Summary												
HCM 2010 Ctrl Delay			9.9									
HCM 2010 LOS			A									

HCM 2010 Signalized Intersection Summary
3: Kroger Driveway/Shannon Way & Jonesboro Rd (SR 138)

Synchro 8 Report

6/29/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1011	25	85	885	48	35	1	51	129	9	9
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1845	1845	1845	1845	1845	1900	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	0	1042	0	89	932	0	38	1	0	172	12	0
Adj No. of Lanes	0	2	1	1	2	1	0	1	1	1	1	1
Peak Hour Factor	1.00	0.97	0.97	0.95	0.95	0.95	0.93	0.93	0.93	0.75	0.75	0.75
Percent Heavy Veh, %	0	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	0	1855	830	462	2425	1031	332	8	280	309	329	280
Arrive On Green	0.00	1.00	0.00	0.09	1.00	0.00	0.18	0.18	0.00	0.18	0.18	0.00
Sat Flow, veh/h	0	3597	1568	1757	3689	1568	1316	42	1568	1397	1845	1568
Grp Volume(v), veh/h	0	1042	0	89	932	0	39	0	0	172	12	0
Grp Sat Flow(s),veh/h/ln	0	1752	1568	1757	1845	1568	1359	0	1568	1397	1845	1568
Q Serve(g_s), s	0.0	0.0	0.0	1.6	0.0	0.0	1.7	0.0	0.0	8.7	0.4	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	1.6	0.0	0.0	2.1	0.0	0.0	10.8	0.4	0.0
Prop In Lane	0.00		1.00	1.00		1.00	0.97		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	1855	830	462	2425	1031	340	0	280	309	329	280
V/C Ratio(X)	0.00	0.56	0.00	0.19	0.38	0.00	0.11	0.00	0.00	0.56	0.04	0.00
Avail Cap(c_a), veh/h	0	1855	830	526	2425	1031	473	0	429	442	505	429
HCM Platoon Ratio	1.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.96	0.96	0.00	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	5.8	0.0	0.0	25.6	0.0	0.0	30.1	24.8	0.0
Incr Delay (d2), s/veh	0.0	1.2	0.0	0.2	0.4	0.0	0.1	0.0	0.0	1.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.6	0.0	1.4	0.3	0.0	1.2	0.0	0.0	6.3	0.4	0.0
LnGrp Delay(d),s/veh	0.0	1.2	0.0	6.0	0.4	0.0	25.8	0.0	0.0	31.6	24.9	0.0
LnGrp LOS		A		A	A		C			C	C	
Approach Vol, veh/h		1042			1021			39			184	
Approach Delay, s/veh		1.2			0.9			25.8			31.2	
Approach LOS		A			A			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	9.3	51.6		19.0		61.0		19.0				
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s	6.0	36.0		20.0		48.0		20.0				
Max Q Clear Time (g_c+l1), s	3.6	2.0		12.8		2.0		4.1				
Green Ext Time (p_c), s	0.0	30.5		0.4		40.0		0.6				

Intersection Summary

HCM 2010 Ctrl Delay 3.9
HCM 2010 LOS A

Notes

User approved volume balancing among the lanes for turning movement.

HCM 2010 Signalized Intersection Summary
5: Shannon Parkway & Jonesboro Rd (SR 138)

Synchro 8 Report

6/29/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	72	921	15	38	759	84	17	3	11	72	6	74
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1900	1845	1845
Adj Flow Rate, veh/h	78	1001	0	40	799	0	23	4	15	82	7	0
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.95	0.95	0.95	0.75	0.75	0.75	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	576	2082	0	401	2031	0	162	37	137	228	15	169
Arrive On Green	0.05	0.59	0.00	0.06	1.00	0.00	0.11	0.11	0.11	0.11	0.11	0.00
Sat Flow, veh/h	1757	3597	0	1757	3597	0	1389	341	1278	1166	143	1568
Grp Volume(v), veh/h	78	1001	0	40	799	0	23	0	19	89	0	0
Grp Sat Flow(s),veh/h/ln	1757	1752	0	1757	1752	0	1389	0	1619	1309	0	1568
Q Serve(g_s), s	1.2	10.9	0.0	0.6	0.0	0.0	1.1	0.0	0.7	3.9	0.0	0.0
Cycle Q Clear(g_c), s	1.2	10.9	0.0	0.6	0.0	0.0	5.7	0.0	0.7	4.6	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		0.79	0.92		1.00
Lane Grp Cap(c), veh/h	576	2082	0	401	2031	0	162	0	174	243	0	169
V/C Ratio(X)	0.14	0.48	0.00	0.10	0.39	0.00	0.14	0.00	0.11	0.37	0.00	0.00
Avail Cap(c_a), veh/h	652	2082	0	451	2031	0	384	0	433	467	0	419
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.0	7.8	0.0	5.8	0.0	0.0	31.6	0.0	27.1	29.1	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.8	0.0	0.1	0.6	0.0	0.4	0.0	0.3	0.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.0	9.2	0.0	0.5	0.3	0.0	0.8	0.0	0.6	3.0	0.0	0.0
LnGrp Delay(d),s/veh	5.1	8.6	0.0	5.9	0.6	0.0	32.0	0.0	27.4	30.0	0.0	0.0
LnGrp LOS	A	A		A	A		C		C	C		
Approach Vol, veh/h		1079			839			42			89	
Approach Delay, s/veh		8.3			0.8			29.9			30.0	
Approach LOS		A			A			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.1	58.7		13.2	9.1	57.7		13.2				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	4.0	40.0		18.0	6.0	38.0		18.0				
Max Q Clear Time (g_c+l1), s	2.6	12.9		6.6	3.2	2.0		7.7				
Green Ext Time (p_c), s	0.0	23.8		0.3	0.0	30.7		0.2				
Intersection Summary												
HCM 2010 Ctrl Delay			6.6									
HCM 2010 LOS			A									

HCM 2010 TWSC
4: Shannon Xing Dr/Londonderry Way & Jonesboro Rd (SR 138)

Synchro 8 Report

6/29/2014

Intersection

Int Delay, s/veh

1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	20	962	50	11	804	73	9	3	33
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None
Storage Length	125	-	270	135	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	95	95	95	87	87	87
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3
Mvmt Flow	22	1057	55	12	846	77	10	3	38

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	923	0	-	1057	0	0	1547	2047	529
Stage 1	-	-	-	-	-	-	1101	1101	-
Stage 2	-	-	-	-	-	-	446	946	-
Critical Hdwy	4.16	-	-	4.16	-	-	7.56	6.56	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-	6.56	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.56	5.56	-
Follow-up Hdwy	2.23	-	-	2.23	-	-	3.53	4.03	3.33
Pot Cap-1 Maneuver	730	-	0	649	-	-	77	55	492
Stage 1	-	-	0	-	-	-	224	284	-
Stage 2	-	-	0	-	-	-	559	336	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	730	-	-	649	-	-	74	52	492
Mov Cap-2 Maneuver	-	-	-	-	-	-	74	52	-
Stage 1	-	-	-	-	-	-	217	275	-
Stage 2	-	-	-	-	-	-	549	330	-

Approach	EB		WB		NB
HCM Control Delay, s	0.2		0.1		32.2
HCM LOS					D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBL	WBT	WBR
Capacity (veh/h)	183	730	-	649	-	-
HCM Lane V/C Ratio	0.283	0.03	-	0.018	-	-
HCM Control Delay (s)	32.2	10.1	-	10.6	-	-
HCM Lane LOS	D	B	-	B	-	-
HCM 95th %tile Q(veh)	1.1	0.1	-	0.1	-	-

Intersection

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	2	0	26
Conflicting Peds, #/hr	0	0	0
Sign Control	Yield	Yield	Yield
RT Channelized	-	-	Free
Storage Length	-	-	0
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	100	100	75
Heavy Vehicles, %	3	3	3
Mvmt Flow	2	0	35

Major/Minor

Conflicting Flow All

Stage 1

Stage 2

Critical Hdwy

Critical Hdwy Stg 1

Critical Hdwy Stg 2

Follow-up Hdwy

Pot Cap-1 Maneuver

Stage 1

Stage 2

Platoon blocked, %

Mov Cap-1 Maneuver

Mov Cap-2 Maneuver

Stage 1

Stage 2

Approach

HCM Control Delay, s

HCM LOS

Minor Lane/Major Mvmt

Intersection

Int Delay, s/veh 1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	0	0	0	17	0	12	0	131	28
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	75	75	75	88	88	88
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	0	0	23	0	16	0	149	32

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	394	394	84	310	394	149	169	0	0
Stage 1	245	245	-	149	149	-	-	-	-
Stage 2	149	149	-	161	245	-	-	-	-
Critical Hdwy	7.345	6.545	6.945	7.345	6.545	6.245	4.16	-	-
Critical Hdwy Stg 1	6.545	5.545	-	6.145	5.545	-	-	-	-
Critical Hdwy Stg 2	6.145	5.545	-	6.545	5.545	-	-	-	-
Follow-up Hdwy	3.5285	4.0285	3.3285	3.5285	4.0285	3.3285	2.23	-	-
Pot Cap-1 Maneuver	551	540	956	629	540	894	1399	-	-
Stage 1	735	701	-	850	771	-	-	-	-
Stage 2	850	771	-	823	701	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	530	526	956	616	526	894	1399	-	-
Mov Cap-2 Maneuver	530	526	-	616	526	-	-	-	-
Stage 1	735	682	-	850	771	-	-	-	-
Stage 2	835	771	-	801	682	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	10.3	0
HCM LOS	A	B	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1399	-	-	-	616	894	1426	-	-
HCM Lane V/C Ratio	-	-	-	-	0.037	0.018	0.027	-	-
HCM Control Delay (s)	0	-	-	0	11.1	9.1	7.6	-	-
HCM Lane LOS	A	-	-	A	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0.1	0.1	-	-

Intersection

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	33	145	0
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	100	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	86	86	86
Heavy Vehicles, %	3	3	3
Mvmt Flow	38	169	0

Major/Minor	Major2		
Conflicting Flow All	149	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.13	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.227	-	-
Pot Cap-1 Maneuver	1426	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	1426	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	SB
HCM Control Delay, s	1.4
HCM LOS	

Minor Lane/Major Mvmt

Intersection

Int Delay, s/veh 4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	0	30	14	11	29	0	18	0	40
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	91	91	91	82	82	82
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	40	19	12	32	0	22	0	49

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	32	0	0	59	0	0	89	105	29
Stage 1	-	-	-	-	-	-	49	49	-
Stage 2	-	-	-	-	-	-	40	56	-
Critical Hdwy	4.16	-	-	4.16	-	-	7.56	6.56	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-	6.56	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.56	5.56	-
Follow-up Hdwy	2.23	-	-	2.23	-	-	3.53	4.03	3.33
Pot Cap-1 Maneuver	1571	-	-	1536	-	-	883	782	1036
Stage 1	-	-	-	-	-	-	955	851	-
Stage 2	-	-	-	-	-	-	967	845	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1571	-	-	1536	-	-	878	776	1036
Mov Cap-2 Maneuver	-	-	-	-	-	-	878	776	-
Stage 1	-	-	-	-	-	-	955	851	-
Stage 2	-	-	-	-	-	-	959	838	-

Approach	EB		WB		NB
HCM Control Delay, s	0		2		8.8
HCM LOS					A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	878	1036	1571	-	-	1536	-	-	-
HCM Lane V/C Ratio	0.025	0.047	-	-	-	0.008	-	-	-
HCM Control Delay (s)	9.2	8.6	0	-	-	7.4	-	-	0
HCM Lane LOS	A	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0.1	0	-	-	0	-	-	-

Intersection

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	0	0	0
Conflicting Peds, #/hr	0	0	0
Sign Control	Stop	Stop	Stop
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	92	92	92
Heavy Vehicles, %	3	3	3
Mvmt Flow	0	0	0

Major/Minor	Minor2		
Conflicting Flow All	76	115	16
Stage 1	56	56	-
Stage 2	20	59	-
Critical Hdwy	7.56	6.56	6.96
Critical Hdwy Stg 1	6.56	5.56	-
Critical Hdwy Stg 2	6.56	5.56	-
Follow-up Hdwy	3.53	4.03	3.33
Pot Cap-1 Maneuver	902	772	1056
Stage 1	946	845	-
Stage 2	993	843	-
Platoon blocked, %			
Mov Cap-1 Maneuver	854	766	1056
Mov Cap-2 Maneuver	854	766	-
Stage 1	946	838	-
Stage 2	946	843	-

Approach	SB
HCM Control Delay, s	0
HCM LOS	A

Minor Lane/Major Mvmt

HCM 2010 Signalized Intersection Summary
7: Londonderry Way & Lancaster Lane

Synchro 8 Report

6/29/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	6	19	34	2	7	7	15	66	30	8	11	2
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1900	1845	1900
Adj Flow Rate, veh/h	8	24	44	3	9	9	17	77	35	11	15	3
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	0	2	0
Peak Hour Factor	0.78	0.78	0.78	0.75	0.75	0.75	0.86	0.86	0.86	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	683	256	469	634	371	371	651	986	423	466	693	147
Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	1376	584	1071	1315	848	848	1376	2391	1025	942	1681	356
Grp Volume(v), veh/h	8	0	68	3	0	18	17	55	57	15	0	14
Grp Sat Flow(s),veh/h/ln	1376	0	1656	1315	0	1695	1376	1752	1664	1363	0	1616
Q Serve(g_s), s	0.3	0.0	1.9	0.1	0.0	0.5	0.6	1.5	1.7	0.0	0.0	0.4
Cycle Q Clear(g_c), s	0.7	0.0	1.9	2.0	0.0	0.5	1.0	1.5	1.7	1.7	0.0	0.4
Prop In Lane	1.00		0.65	1.00		0.50	1.00		0.62	0.71		0.22
Lane Grp Cap(c), veh/h	683	0	724	634	0	742	651	723	686	639	0	666
V/C Ratio(X)	0.01	0.00	0.09	0.00	0.00	0.02	0.03	0.08	0.08	0.02	0.00	0.02
Avail Cap(c_a), veh/h	683	0	724	634	0	742	651	723	686	639	0	666
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.0	0.0	13.2	13.8	0.0	12.8	14.2	14.3	14.3	13.9	0.0	13.9
Incr Delay (d2), s/veh	0.0	0.0	0.3	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.2	0.0	1.7	0.1	0.0	0.4	0.4	1.3	1.4	0.4	0.0	0.3
LnGrp Delay(d),s/veh	13.0	0.0	13.5	13.8	0.0	12.9	14.2	14.3	14.3	14.0	0.0	14.0
LnGrp LOS	B		B	B		B	B	B	B	B		B
Approach Vol, veh/h		76			21			129			29	
Approach Delay, s/veh		13.4			13.0			14.3			14.0	
Approach LOS		B			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		39.0		41.0		39.0		41.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		33.0		35.0		33.0		35.0				
Max Q Clear Time (g_c+l1), s		3.7		3.9		3.7		4.0				
Green Ext Time (p_c), s		2.9		0.3		2.9		0.3				
Intersection Summary												
HCM 2010 Ctrl Delay			13.9									
HCM 2010 LOS			B									

HCM 2010 Signalized Intersection Summary
1: I-85 Northbound Ramp & Jonesboro Rd (SR 138)

Synchro 8 Report
6/29/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 							
Volume (veh/h)	363	1542	0	0	938	481	179	0	263	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1845	1845	0	0	1845	1845	1845	0	1845			
Adj Flow Rate, veh/h	382	1623	0	0	987	0	190	0	0			
Adj No. of Lanes	1	2	0	0	2	1	1	0	1			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.94	0.94	0.94			
Percent Heavy Veh, %	3	3	0	0	3	3	3	0	3			
Cap, veh/h	500	2536	0	0	1837	822	231	0	206			
Arrive On Green	0.13	0.72	0.00	0.00	0.52	0.00	0.13	0.00	0.00			
Sat Flow, veh/h	1757	3597	0	0	3597	1568	1757	0	1568			
Grp Volume(v), veh/h	382	1623	0	0	987	0	190	0	0			
Grp Sat Flow(s),veh/h/ln	1757	1752	0	0	1752	1568	1757	0	1568			
Q Serve(g_s), s	7.5	19.8	0.0	0.0	15.5	0.0	8.7	0.0	0.0			
Cycle Q Clear(g_c), s	7.5	19.8	0.0	0.0	15.5	0.0	8.7	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	500	2536	0	0	1837	822	231	0	206			
V/C Ratio(X)	0.76	0.64	0.00	0.00	0.54	0.00	0.82	0.00	0.00			
Avail Cap(c_a), veh/h	722	2536	0	0	1837	822	381	0	340			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	11.1	5.9	0.0	0.0	13.1	0.0	35.1	0.0	0.0			
Incr Delay (d2), s/veh	3.0	1.3	0.0	0.0	1.1	0.0	7.1	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	8.9	14.8	0.0	0.0	12.2	0.0	8.2	0.0	0.0			
LnGrp Delay(d),s/veh	14.1	7.2	0.0	0.0	14.2	0.0	42.2	0.0	0.0			
LnGrp LOS	B	A			B		D					
Approach Vol, veh/h		2005			987			190				
Approach Delay, s/veh		8.5			14.2			42.2				
Approach LOS		A			B			D				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		66.0			16.6	49.4		16.9				
Change Period (Y+Rc), s		6.0			6.0	6.0		6.0				
Max Green Setting (Gmax), s		60.0			21.0	33.0		18.0				
Max Q Clear Time (g_c+I1), s		21.8			9.5	17.5		10.7				
Green Ext Time (p_c), s		37.2			1.1	15.3		0.3				
Intersection Summary												
HCM 2010 Ctrl Delay			12.3									
HCM 2010 LOS			B									

HCM 2010 Signalized Intersection Summary
2: I-85 Southbound Ramp & Jonesboro Rd (SR 138)

Synchro 8 Report

6/29/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1136	171	240	841	0	0	0	0	786	0	684
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1845	1900	1845	1845	0				1845	0	1845
Adj Flow Rate, veh/h	0	1196	0	253	885	0				819	0	0
Adj No. of Lanes	0	2	0	1	2	0				2	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.96	0.96	0.96
Percent Heavy Veh, %	0	3	3	3	3	0				3	0	3
Cap, veh/h	0	1498	0	387	2097	0				892	0	410
Arrive On Green	0.00	0.85	0.00	0.10	0.60	0.00				0.26	0.00	0.00
Sat Flow, veh/h	0	3689	0	1757	3597	0				3408	0	1568
Grp Volume(v), veh/h	0	1196	0	253	885	0				819	0	0
Grp Sat Flow(s),veh/h/ln	0	1752	0	1757	1752	0				1704	0	1568
Q Serve(g_s), s	0.0	13.4	0.0	6.5	11.6	0.0				20.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	13.4	0.0	6.5	11.6	0.0				20.0	0.0	0.0
Prop In Lane	0.00		0.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1498	0	387	2097	0				892	0	410
V/C Ratio(X)	0.00	0.80	0.00	0.65	0.42	0.00				0.92	0.00	0.00
Avail Cap(c_a), veh/h	0	1553	0	435	2247	0				914	0	420
HCM Platoon Ratio	1.00	2.00	2.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.69	0.00	0.71	0.71	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	4.5	0.0	13.1	9.3	0.0				30.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	3.2	0.0	2.1	0.4	0.0				13.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	9.7	0.0	5.8	8.9	0.0				16.6	0.0	0.0
LnGrp Delay(d),s/veh	0.0	7.7	0.0	15.2	9.7	0.0				44.6	0.0	0.0
LnGrp LOS		A		B	A					D		
Approach Vol, veh/h		1196			1138						819	
Approach Delay, s/veh		7.7			10.9						44.6	
Approach LOS		A			B						D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	14.7	46.9		28.5		61.5						
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0						
Max Green Setting (Gmax), s	11.0	38.0		23.0		55.0						
Max Q Clear Time (g_c+l1), s	8.5	15.4		22.0		13.6						
Green Ext Time (p_c), s	0.2	21.3		0.4		37.4						
Intersection Summary												
HCM 2010 Ctrl Delay			18.4									
HCM 2010 LOS			B									

HCM 2010 Signalized Intersection Summary

3: Kroger Driveway/Shannon Way & Jonesboro Rd (SR 138)

Synchro 8 Report

6/29/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	981	89	166	1157	83	192	2	109	182	60	18
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1845	1845	1845	1845	1845	1900	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	0	1066	0	178	1244	0	216	2	0	214	71	0
Adj No. of Lanes	0	2	1	1	2	1	0	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.93	0.93	0.93	0.89	0.89	0.89	0.85	0.85	0.85
Percent Heavy Veh, %	0	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	0	1477	661	374	2091	889	434	3	470	258	553	470
Arrive On Green	0.00	0.84	0.00	0.16	1.00	0.00	0.30	0.30	0.00	0.30	0.30	0.00
Sat Flow, veh/h	0	3597	1568	1757	3689	1568	1181	11	1568	1396	1845	1568
Grp Volume(v), veh/h	0	1066	0	178	1244	0	218	0	0	214	71	0
Grp Sat Flow(s),veh/h/ln	0	1752	1568	1757	1845	1568	1192	0	1568	1396	1845	1568
Q Serve(g_s), s	0.0	11.0	0.0	5.0	0.0	0.0	13.0	0.0	0.0	11.5	2.5	0.0
Cycle Q Clear(g_c), s	0.0	11.0	0.0	5.0	0.0	0.0	15.5	0.0	0.0	27.0	2.5	0.0
Prop In Lane	0.00		1.00	1.00		1.00	0.99		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	1477	661	374	2091	889	437	0	470	258	553	470
V/C Ratio(X)	0.00	0.72	0.00	0.48	0.60	0.00	0.50	0.00	0.00	0.83	0.13	0.00
Avail Cap(c_a), veh/h	0	1477	661	432	2091	889	437	0	470	258	553	470
HCM Platoon Ratio	1.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.90	0.90	0.00	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	4.9	0.0	11.7	0.0	0.0	28.6	0.0	0.0	40.2	22.9	0.0
Incr Delay (d2), s/veh	0.0	3.1	0.0	0.8	1.1	0.0	0.9	0.0	0.0	20.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	9.2	0.0	4.3	0.6	0.0	8.4	0.0	0.0	11.0	2.3	0.0
LnGrp Delay(d),s/veh	0.0	8.0	0.0	12.6	1.1	0.0	29.5	0.0	0.0	60.2	23.0	0.0
LnGrp LOS		A		B	A		C			E	C	
Approach Vol, veh/h		1066			1422			218			285	
Approach Delay, s/veh		8.0			2.6			29.5			51.0	
Approach LOS		A			A			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	13.1	43.9		33.0		57.0		33.0				
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s	10.0	35.0		27.0		51.0		27.0				
Max Q Clear Time (g_c+l1), s	7.0	13.0		29.0		2.0		17.5				
Green Ext Time (p_c), s	0.1	21.3		0.0		45.6		1.3				

Intersection Summary

HCM 2010 Ctrl Delay 11.1
 HCM 2010 LOS B

Notes

User approved volume balancing among the lanes for turning movement.

HCM 2010 Signalized Intersection Summary
5: Shannon Parkway & Jonesboro Rd (SR 138)

Synchro 8 Report

6/29/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	94	849	22	67	1169	124	43	17	51	126	16	156
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1900	1845	1845
Adj Flow Rate, veh/h	102	923	0	70	1218	0	52	21	62	134	17	0
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.96	0.96	0.96	0.82	0.82	0.82	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	407	1915	0	380	1888	0	170	85	251	274	30	324
Arrive On Green	0.05	0.55	0.00	0.08	1.00	0.00	0.21	0.21	0.21	0.21	0.21	0.00
Sat Flow, veh/h	1757	3597	0	1757	3597	0	1377	412	1217	946	146	1568
Grp Volume(v), veh/h	102	923	0	70	1218	0	52	0	83	151	0	0
Grp Sat Flow(s),veh/h/ln	1757	1752	0	1757	1752	0	1377	0	1630	1092	0	1568
Q Serve(g_s), s	2.2	13.9	0.0	1.5	0.0	0.0	3.2	0.0	3.7	8.7	0.0	0.0
Cycle Q Clear(g_c), s	2.2	13.9	0.0	1.5	0.0	0.0	15.5	0.0	3.7	12.4	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		0.75	0.89		1.00
Lane Grp Cap(c), veh/h	407	1915	0	380	1888	0	170	0	337	305	0	324
V/C Ratio(X)	0.25	0.48	0.00	0.18	0.65	0.00	0.31	0.00	0.25	0.50	0.00	0.00
Avail Cap(c_a), veh/h	491	1915	0	415	1888	0	206	0	379	339	0	365
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	7.9	12.0	0.0	8.8	0.0	0.0	39.3	0.0	28.5	33.4	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.9	0.0	0.2	1.7	0.0	1.0	0.0	0.4	1.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.0	11.2	0.0	1.3	0.8	0.0	2.2	0.0	3.0	6.2	0.0	0.0
LnGrp Delay(d),s/veh	8.2	12.9	0.0	9.1	1.7	0.0	40.3	0.0	28.9	34.7	0.0	0.0
LnGrp LOS	A	B		A	A		D		C	C		
Approach Vol, veh/h		1025			1288			135			151	
Approach Delay, s/veh		12.4			2.1			33.3			34.7	
Approach LOS		B			A			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.2	57.0		23.8	9.9	56.3		23.8				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	5.0	47.0		20.0	8.0	44.0		20.0				
Max Q Clear Time (g_c+l1), s	3.5	15.9		14.4	4.2	2.0		17.5				
Green Ext Time (p_c), s	0.0	29.0		0.5	0.1	38.4		0.2				
Intersection Summary												
HCM 2010 Ctrl Delay			9.7									
HCM 2010 LOS			A									

Intersection

Int Delay, s/veh 2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	25	993	57	2	1292	75	13	4	34
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None
Storage Length	125	-	270	135	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	95	95	95	80	80	80
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3
Mvmt Flow	27	1091	63	2	1360	79	16	5	42

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1439	0	-	1091	0	0	1830	2589	546
Stage 1	-	-	-	-	-	-	1146	1146	-
Stage 2	-	-	-	-	-	-	684	1443	-
Critical Hdwy	4.16	-	-	4.16	-	-	7.56	6.56	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-	6.56	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.56	5.56	-
Follow-up Hdwy	2.23	-	-	2.23	-	-	3.53	4.03	3.33
Pot Cap-1 Maneuver	462	-	0	629	-	-	47	24	479
Stage 1	-	-	0	-	-	-	210	270	-
Stage 2	-	-	0	-	-	-	402	194	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	462	-	-	629	-	-	45	23	479
Mov Cap-2 Maneuver	-	-	-	-	-	-	45	23	-
Stage 1	-	-	-	-	-	-	198	254	-
Stage 2	-	-	-	-	-	-	401	193	-

Approach	EB		WB		NB
HCM Control Delay, s	0.3		0		97
HCM LOS					F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBL	WBT	WBR
Capacity (veh/h)	96	462	-	629	-	-
HCM Lane V/C Ratio	0.664	0.059	-	0.003	-	-
HCM Control Delay (s)	97	13.3	-	10.7	-	-
HCM Lane LOS	F	B	-	B	-	-
HCM 95th %tile Q(veh)	3.3	0.2	-	0	-	-

Intersection

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	0	1	71
Conflicting Peds, #/hr	0	0	0
Sign Control	Yield	Yield	Yield
RT Channelized	-	-	Free
Storage Length	-	-	0
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	96	96	96
Heavy Vehicles, %	3	3	3
Mvmt Flow	0	1	74

Major/Minor

Conflicting Flow All

Stage 1

Stage 2

Critical Hdwy

Critical Hdwy Stg 1

Critical Hdwy Stg 2

Follow-up Hdwy

Pot Cap-1 Maneuver

Stage 1

Stage 2

Platoon blocked, %

Mov Cap-1 Maneuver

Mov Cap-2 Maneuver

Stage 1

Stage 2

Approach

HCM Control Delay, s

HCM LOS

Minor Lane/Major Mvmt

Intersection

Int Delay, s/veh 1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	0	0	10	20	0	32	0	210	39
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	88	88	88	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	0	13	23	0	36	0	228	42

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	712	712	162	550	712	228	324	0	0
Stage 1	484	484	-	228	228	-	-	-	-
Stage 2	228	228	-	322	484	-	-	-	-
Critical Hdwy	7.345	6.545	6.945	7.345	6.545	6.245	4.16	-	-
Critical Hdwy Stg 1	6.545	5.545	-	6.145	5.545	-	-	-	-
Critical Hdwy Stg 2	6.145	5.545	-	6.545	5.545	-	-	-	-
Follow-up Hdwy	3.5285	4.0285	3.3285	3.5285	4.0285	3.3285	2.23	-	-
Pot Cap-1 Maneuver	332	355	852	430	355	808	1225	-	-
Stage 1	532	549	-	771	713	-	-	-	-
Stage 2	771	713	-	663	549	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	303	334	852	404	334	808	1225	-	-
Mov Cap-2 Maneuver	303	334	-	404	334	-	-	-	-
Stage 1	532	516	-	771	713	-	-	-	-
Stage 2	736	713	-	613	516	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	9.3	11.5	0
HCM LOS	A	B	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1225	-	-	852	404	808	1334	-	-
HCM Lane V/C Ratio	-	-	-	0.016	0.056	0.045	0.06	-	-
HCM Control Delay (s)	0	-	-	9.3	14.4	9.7	7.9	-	-
HCM Lane LOS	A	-	-	A	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0.1	0.2	-	-

Intersection

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	77	311	0
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	100	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	96	96	96
Heavy Vehicles, %	3	3	3
Mvmt Flow	80	324	0

Major/Minor	Major2		
Conflicting Flow All	228	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.13	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.227	-	-
Pot Cap-1 Maneuver	1334	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	1334	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	SB
HCM Control Delay, s	1.6
HCM LOS	

Minor Lane/Major Mvmt

Intersection

Int Delay, s/veh 4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	3	69	36	31	60	1	41	2	61
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	92	92	92	77	77	77
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3
Mvmt Flow	4	87	46	34	65	1	53	3	79

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	66	0	0	133	0	0	219	252	66
Stage 1	-	-	-	-	-	-	118	118	-
Stage 2	-	-	-	-	-	-	101	134	-
Critical Hdwy	4.16	-	-	4.16	-	-	7.56	6.56	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-	6.56	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.56	5.56	-
Follow-up Hdwy	2.23	-	-	2.23	-	-	3.53	4.03	3.33
Pot Cap-1 Maneuver	1527	-	-	1442	-	-	715	648	981
Stage 1	-	-	-	-	-	-	871	795	-
Stage 2	-	-	-	-	-	-	891	782	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1527	-	-	1442	-	-	698	631	981
Mov Cap-2 Maneuver	-	-	-	-	-	-	698	631	-
Stage 1	-	-	-	-	-	-	869	793	-
Stage 2	-	-	-	-	-	-	866	764	-

Approach	EB		WB		NB
HCM Control Delay, s	0.2		2.5		9.7
HCM LOS					A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	698	964	1527	-	-	1442	-	-	840
HCM Lane V/C Ratio	0.076	0.085	0.002	-	-	0.023	-	-	0.005
HCM Control Delay (s)	10.6	9.1	7.4	-	-	7.6	-	-	9.3
HCM Lane LOS	B	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.2	0.3	0	-	-	0.1	-	-	0

Intersection

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	0	1	2
Conflicting Peds, #/hr	0	0	0
Sign Control	Stop	Stop	Stop
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	75	75	75
Heavy Vehicles, %	3	3	3
Mvmt Flow	0	1	3

Major/Minor	Minor2		
Conflicting Flow All	186	274	33
Stage 1	133	133	-
Stage 2	53	141	-
Critical Hdwy	7.56	6.56	6.96
Critical Hdwy Stg 1	6.56	5.56	-
Critical Hdwy Stg 2	6.56	5.56	-
Follow-up Hdwy	3.53	4.03	3.33
Pot Cap-1 Maneuver	755	630	1030
Stage 1	854	783	-
Stage 2	950	777	-
Platoon blocked, %			
Mov Cap-1 Maneuver	678	614	1030
Mov Cap-2 Maneuver	678	614	-
Stage 1	852	765	-
Stage 2	868	775	-

Approach	SB
HCM Control Delay, s	9.3
HCM LOS	A

Minor Lane/Major Mvmt

HCM 2010 Signalized Intersection Summary

7: Londonderry Way & Lancaster Lane

Synchro 8 Report
6/29/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	12	54	47	6	12	10	21	89	32	22	45	23
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1900	1845	1900
Adj Flow Rate, veh/h	14	64	55	8	16	13	28	117	42	24	50	26
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	0	2	0
Peak Hour Factor	0.85	0.85	0.85	0.75	0.75	0.75	0.76	0.76	0.76	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	703	428	368	616	440	358	577	1024	353	310	625	335
Arrive On Green	0.47	0.47	0.47	0.47	0.47	0.47	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	1362	917	788	1255	943	766	1305	2560	882	630	1562	837
Grp Volume(v), veh/h	14	0	119	8	0	29	28	79	80	52	0	48
Grp Sat Flow(s),veh/h/ln	1362	0	1706	1255	0	1709	1305	1752	1689	1498	0	1531
Q Serve(g_s), s	0.5	0.0	3.6	0.3	0.0	0.8	1.2	2.5	2.7	0.0	0.0	1.7
Cycle Q Clear(g_c), s	1.3	0.0	3.6	3.9	0.0	0.8	3.0	2.5	2.7	2.7	0.0	1.7
Prop In Lane	1.00		0.46	1.00		0.45	1.00		0.52	0.46		0.55
Lane Grp Cap(c), veh/h	703	0	796	616	0	798	577	701	676	657	0	612
V/C Ratio(X)	0.02	0.00	0.15	0.01	0.00	0.04	0.05	0.11	0.12	0.08	0.00	0.08
Avail Cap(c_a), veh/h	703	0	796	616	0	798	577	701	676	657	0	612
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.4	0.0	13.8	14.9	0.0	13.0	17.6	17.0	17.0	16.7	0.0	16.7
Incr Delay (d2), s/veh	0.1	0.0	0.4	0.0	0.0	0.1	0.0	0.1	0.1	0.2	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.4	0.0	3.2	0.2	0.0	0.7	0.8	2.2	2.3	1.5	0.0	1.4
LnGrp Delay(d),s/veh	13.4	0.0	14.2	14.9	0.0	13.1	17.7	17.0	17.1	16.9	0.0	17.0
LnGrp LOS	B		B	B		B	B	B	B	B		B
Approach Vol, veh/h		133			37			187			100	
Approach Delay, s/veh		14.1			13.5			17.2			16.9	
Approach LOS		B			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		42.0		48.0		42.0		48.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		36.0		42.0		36.0		42.0				
Max Q Clear Time (g_c+l1), s		5.0		5.6		4.7		5.9				
Green Ext Time (p_c), s		5.8		0.6		5.9		0.6				
Intersection Summary												
HCM 2010 Ctrl Delay			15.9									
HCM 2010 LOS			B									

HCM 2010 Signalized Intersection Summary
1: I-85 Northbound Ramp & Jonesboro Rd (SR 138)

Synchro 8 Report
6/29/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	495	991	0	0	788	933	132	0	274	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1845	1845	0	0	1845	1845	1845	0	1845			
Adj Flow Rate, veh/h	532	1066	0	0	866	0	136	0	0			
Adj No. of Lanes	1	2	0	0	2	1	1	0	1			
Peak Hour Factor	0.93	0.93	1.00	1.00	0.91	0.91	0.97	1.00	0.97			
Percent Heavy Veh, %	3	3	0	0	3	3	3	0	3			
Cap, veh/h	613	2564	0	0	1596	714	175	0	156			
Arrive On Green	0.19	0.73	0.00	0.00	0.46	0.00	0.10	0.00	0.00			
Sat Flow, veh/h	1757	3597	0	0	3597	1568	1757	0	1568			
Grp Volume(v), veh/h	532	1066	0	0	866	0	136	0	0			
Grp Sat Flow(s),veh/h/ln	1757	1752	0	0	1752	1568	1757	0	1568			
Q Serve(g_s), s	10.0	8.3	0.0	0.0	12.7	0.0	5.4	0.0	0.0			
Cycle Q Clear(g_c), s	10.0	8.3	0.0	0.0	12.7	0.0	5.4	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	613	2564	0	0	1596	714	175	0	156			
V/C Ratio(X)	0.87	0.42	0.00	0.00	0.54	0.00	0.78	0.00	0.00			
Avail Cap(c_a), veh/h	844	2564	0	0	1596	714	395	0	353			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	10.5	3.7	0.0	0.0	14.0	0.0	31.2	0.0	0.0			
Incr Delay (d2), s/veh	7.3	0.5	0.0	0.0	1.3	0.0	7.2	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	10.4	7.5	0.0	0.0	10.6	0.0	5.3	0.0	0.0			
LnGrp Delay(d),s/veh	17.7	4.2	0.0	0.0	15.3	0.0	38.5	0.0	0.0			
LnGrp LOS	B	A			B		D					
Approach Vol, veh/h		1598			866			136				
Approach Delay, s/veh		8.7			15.3			38.5				
Approach LOS		A			B			D				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		58.0			19.6	38.4		13.1				
Change Period (Y+Rc), s		6.0			6.0	6.0		6.0				
Max Green Setting (Gmax), s		52.0			23.0	23.0		16.0				
Max Q Clear Time (g_c+I1), s		10.3			12.0	14.7		7.4				
Green Ext Time (p_c), s		36.2			1.6	8.0		0.2				
Intersection Summary												
HCM 2010 Ctrl Delay			12.5									
HCM 2010 LOS			B									

HCM 2010 Signalized Intersection Summary
2: I-85 Southbound Ramp & Jonesboro Rd (SR 138)

Synchro 8 Report

6/29/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1030	133	219	673	0	0	0	0	399	0	418
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1845	1900	1845	1845	0				1845	0	1845
Adj Flow Rate, veh/h	0	1084	0	241	740	0				493	0	0
Adj No. of Lanes	0	2	0	1	2	0				2	0	1
Peak Hour Factor	0.95	0.95	0.95	0.91	0.91	0.91				0.81	0.81	0.81
Percent Heavy Veh, %	0	3	3	3	3	0				3	0	3
Cap, veh/h	0	1640	0	488	2282	0				605	0	278
Arrive On Green	0.00	0.94	0.00	0.10	0.65	0.00				0.18	0.00	0.00
Sat Flow, veh/h	0	3689	0	1757	3597	0				3408	0	1568
Grp Volume(v), veh/h	0	1084	0	241	740	0				493	0	0
Grp Sat Flow(s),veh/h/ln	0	1752	0	1757	1752	0				1704	0	1568
Q Serve(g_s), s	0.0	3.6	0.0	4.5	6.5	0.0				9.7	0.0	0.0
Cycle Q Clear(g_c), s	0.0	3.6	0.0	4.5	6.5	0.0				9.7	0.0	0.0
Prop In Lane	0.00		0.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1640	0	488	2282	0				605	0	278
V/C Ratio(X)	0.00	0.66	0.00	0.49	0.32	0.00				0.81	0.00	0.00
Avail Cap(c_a), veh/h	0	1751	0	617	2651	0				730	0	336
HCM Platoon Ratio	1.00	2.00	2.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.81	0.00	0.63	0.63	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	1.3	0.0	7.1	5.4	0.0				27.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.7	0.0	0.5	0.2	0.0				6.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	2.8	0.0	4.0	5.5	0.0				8.8	0.0	0.0
LnGrp Delay(d),s/veh	0.0	3.0	0.0	7.6	5.6	0.0				33.7	0.0	0.0
LnGrp LOS		A		A	A					C		
Approach Vol, veh/h		1084			981						493	
Approach Delay, s/veh		3.0			6.1						33.7	
Approach LOS		A			A						C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	12.8	48.7		18.4		61.6						
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0						
Max Green Setting (Gmax), s	12.0	35.0		15.0		53.0						
Max Q Clear Time (g_c+l1), s	6.5	5.6		11.7		8.5						
Green Ext Time (p_c), s	0.4	25.8		0.7		37.1						
Intersection Summary												
HCM 2010 Ctrl Delay			10.1									
HCM 2010 LOS			B									

HCM 2010 Signalized Intersection Summary

3: Kroger Driveway/Shannon Way & Jonesboro Rd (SR 138)

Synchro 8 Report

6/29/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1021	25	86	894	48	35	1	52	130	9	9
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1845	1845	1845	1845	1845	1900	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	0	1053	0	91	941	0	38	1	0	173	12	0
Adj No. of Lanes	0	2	1	1	2	1	0	1	1	1	1	1
Peak Hour Factor	1.00	0.97	0.97	0.95	0.95	0.95	0.93	0.93	0.93	0.75	0.75	0.75
Percent Heavy Veh, %	0	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	0	1870	837	459	2435	1035	330	7	280	307	329	280
Arrive On Green	0.00	1.00	0.00	0.09	1.00	0.00	0.18	0.18	0.00	0.18	0.18	0.00
Sat Flow, veh/h	0	3597	1568	1757	3689	1568	1316	42	1568	1397	1845	1568
Grp Volume(v), veh/h	0	1053	0	91	941	0	39	0	0	173	12	0
Grp Sat Flow(s),veh/h/ln	0	1752	1568	1757	1845	1568	1358	0	1568	1397	1845	1568
Q Serve(g_s), s	0.0	0.0	0.0	1.6	0.0	0.0	1.7	0.0	0.0	8.9	0.4	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	1.6	0.0	0.0	2.1	0.0	0.0	11.0	0.4	0.0
Prop In Lane	0.00		1.00	1.00		1.00	0.97		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	1870	837	459	2435	1035	338	0	280	307	329	280
V/C Ratio(X)	0.00	0.56	0.00	0.20	0.39	0.00	0.12	0.00	0.00	0.56	0.04	0.00
Avail Cap(c_a), veh/h	0	1870	837	521	2435	1035	446	0	401	415	472	401
HCM Platoon Ratio	1.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.96	0.96	0.00	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	5.8	0.0	0.0	26.0	0.0	0.0	30.6	25.2	0.0
Incr Delay (d2), s/veh	0.0	1.2	0.0	0.2	0.4	0.0	0.2	0.0	0.0	1.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.6	0.0	1.4	0.3	0.0	1.3	0.0	0.0	6.4	0.4	0.0
LnGrp Delay(d),s/veh	0.0	1.2	0.0	6.0	0.4	0.0	26.2	0.0	0.0	32.2	25.3	0.0
LnGrp LOS		A		A	A		C			C	C	
Approach Vol, veh/h		1053			1032			39			185	
Approach Delay, s/veh		1.2			0.9			26.2			31.8	
Approach LOS		A			A			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	9.4	51.4		19.2		60.8		19.2				
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s	6.0	37.0		19.0		49.0		19.0				
Max Q Clear Time (g_c+l1), s	3.6	2.0		13.0		2.0		4.1				
Green Ext Time (p_c), s	0.0	31.5		0.3		41.0		0.6				

Intersection Summary

HCM 2010 Ctrl Delay 4.0
 HCM 2010 LOS A

Notes

User approved volume balancing among the lanes for turning movement.

HCM 2010 Signalized Intersection Summary
5: Shannon Parkway & Jonesboro Rd (SR 138)

Synchro 8 Report

6/29/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	73	930	15	38	767	85	17	3	11	73	6	75
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1900	1845	1845
Adj Flow Rate, veh/h	79	1011	0	40	807	0	23	4	15	83	7	0
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.95	0.95	0.95	0.75	0.75	0.75	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	573	2079	0	397	2029	0	162	37	139	229	15	170
Arrive On Green	0.05	0.59	0.00	0.06	1.00	0.00	0.11	0.11	0.11	0.11	0.11	0.00
Sat Flow, veh/h	1757	3597	0	1757	3597	0	1389	341	1278	1168	141	1568
Grp Volume(v), veh/h	79	1011	0	40	807	0	23	0	19	90	0	0
Grp Sat Flow(s),veh/h/ln	1757	1752	0	1757	1752	0	1389	0	1619	1309	0	1568
Q Serve(g_s), s	1.2	11.1	0.0	0.6	0.0	0.0	1.1	0.0	0.7	3.9	0.0	0.0
Cycle Q Clear(g_c), s	1.2	11.1	0.0	0.6	0.0	0.0	5.7	0.0	0.7	4.6	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		0.79	0.92		1.00
Lane Grp Cap(c), veh/h	573	2079	0	397	2029	0	162	0	176	245	0	170
V/C Ratio(X)	0.14	0.49	0.00	0.10	0.40	0.00	0.14	0.00	0.11	0.37	0.00	0.00
Avail Cap(c_a), veh/h	649	2079	0	447	2029	0	382	0	432	467	0	419
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.0	7.8	0.0	5.9	0.0	0.0	31.6	0.0	27.1	29.1	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.8	0.0	0.1	0.6	0.0	0.4	0.0	0.3	0.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.0	9.4	0.0	0.5	0.3	0.0	0.8	0.0	0.6	3.0	0.0	0.0
LnGrp Delay(d),s/veh	5.1	8.7	0.0	6.0	0.6	0.0	32.0	0.0	27.4	30.0	0.0	0.0
LnGrp LOS	A	A		A	A		C		C	C		
Approach Vol, veh/h		1090			847			42			90	
Approach Delay, s/veh		8.4			0.8			29.9			30.0	
Approach LOS		A			A			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.1	58.6		13.3	9.1	57.6		13.3				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	4.0	40.0		18.0	6.0	38.0		18.0				
Max Q Clear Time (g_c+l1), s	2.6	13.1		6.6	3.2	2.0		7.7				
Green Ext Time (p_c), s	0.0	23.8		0.3	0.0	30.8		0.2				
Intersection Summary												
HCM 2010 Ctrl Delay			6.7									
HCM 2010 LOS			A									

HCM 2010 TWSC
4: Shannon Xing Dr/Londonderry Way & Jonesboro Rd (SR 138)

Synchro 8 Report

6/29/2014

Intersection

Int Delay, s/veh

1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	20	972	51	11	812	74	9	3	33
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None
Storage Length	125	-	270	135	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	95	95	95	87	87	87
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3
Mvmt Flow	22	1068	56	12	855	78	10	3	38

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	933	0	-	1068	0	0	1563	2068	534
Stage 1	-	-	-	-	-	-	1112	1112	-
Stage 2	-	-	-	-	-	-	451	956	-
Critical Hdwy	4.16	-	-	4.16	-	-	7.56	6.56	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-	6.56	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.56	5.56	-
Follow-up Hdwy	2.23	-	-	2.23	-	-	3.53	4.03	3.33
Pot Cap-1 Maneuver	723	-	0	642	-	-	75	53	488
Stage 1	-	-	0	-	-	-	221	280	-
Stage 2	-	-	0	-	-	-	555	332	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	723	-	-	642	-	-	72	50	488
Mov Cap-2 Maneuver	-	-	-	-	-	-	72	50	-
Stage 1	-	-	-	-	-	-	214	271	-
Stage 2	-	-	-	-	-	-	545	326	-

Approach	EB		WB		NB
HCM Control Delay, s	0.2		0.1		33.3
HCM LOS					D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBL	WBT	WBR
Capacity (veh/h)	178	723	-	642	-	-
HCM Lane V/C Ratio	0.291	0.03	-	0.018	-	-
HCM Control Delay (s)	33.3	10.1	-	10.7	-	-
HCM Lane LOS	D	B	-	B	-	-
HCM 95th %tile Q(veh)	1.1	0.1	-	0.1	-	-

Intersection

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	2	0	26
Conflicting Peds, #/hr	0	0	0
Sign Control	Yield	Yield	Yield
RT Channelized	-	-	Free
Storage Length	-	-	0
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	100	100	75
Heavy Vehicles, %	3	3	3
Mvmt Flow	2	0	35

Major/Minor

Conflicting Flow All

Stage 1

Stage 2

Critical Hdwy

Critical Hdwy Stg 1

Critical Hdwy Stg 2

Follow-up Hdwy

Pot Cap-1 Maneuver

Stage 1

Stage 2

Platoon blocked, %

Mov Cap-1 Maneuver

Mov Cap-2 Maneuver

Stage 1

Stage 2

Approach

HCM Control Delay, s

HCM LOS

Minor Lane/Major Mvmt

Intersection

Int Delay, s/veh 1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	0	0	0	17	0	12	0	132	28
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	75	75	75	88	88	88
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	0	0	23	0	16	0	150	32

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	397	397	85	312	397	150	170	0	0
Stage 1	247	247	-	150	150	-	-	-	-
Stage 2	150	150	-	162	247	-	-	-	-
Critical Hdwy	7.345	6.545	6.945	7.345	6.545	6.245	4.16	-	-
Critical Hdwy Stg 1	6.545	5.545	-	6.145	5.545	-	-	-	-
Critical Hdwy Stg 2	6.145	5.545	-	6.545	5.545	-	-	-	-
Follow-up Hdwy	3.5285	4.0285	3.3285	3.5285	4.0285	3.3285	2.23	-	-
Pot Cap-1 Maneuver	548	538	955	627	538	893	1397	-	-
Stage 1	733	699	-	849	770	-	-	-	-
Stage 2	849	770	-	822	699	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	527	524	955	614	524	893	1397	-	-
Mov Cap-2 Maneuver	527	524	-	614	524	-	-	-	-
Stage 1	733	680	-	849	770	-	-	-	-
Stage 2	834	770	-	800	680	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	10.3	0
HCM LOS	A	B	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1397	-	-	-	614	893	1425	-	-
HCM Lane V/C Ratio	-	-	-	-	0.037	0.018	0.027	-	-
HCM Control Delay (s)	0	-	-	0	11.1	9.1	7.6	-	-
HCM Lane LOS	A	-	-	A	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0.1	0.1	-	-

Intersection

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	33	146	0
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	100	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	86	86	86
Heavy Vehicles, %	3	3	3
Mvmt Flow	38	170	0

Major/Minor	Major2		
Conflicting Flow All	150	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.13	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.227	-	-
Pot Cap-1 Maneuver	1425	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	1425	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	SB
HCM Control Delay, s	1.4
HCM LOS	

Minor Lane/Major Mvmt

Intersection

Int Delay, s/veh 4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	0	30	14	11	29	0	18	0	40
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	91	91	91	82	82	82
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	40	19	12	32	0	22	0	49

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	32	0	0	59	0	0	89	105	29
Stage 1	-	-	-	-	-	-	49	49	-
Stage 2	-	-	-	-	-	-	40	56	-
Critical Hdwy	4.16	-	-	4.16	-	-	7.56	6.56	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-	6.56	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.56	5.56	-
Follow-up Hdwy	2.23	-	-	2.23	-	-	3.53	4.03	3.33
Pot Cap-1 Maneuver	1571	-	-	1536	-	-	883	782	1036
Stage 1	-	-	-	-	-	-	955	851	-
Stage 2	-	-	-	-	-	-	967	845	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1571	-	-	1536	-	-	878	776	1036
Mov Cap-2 Maneuver	-	-	-	-	-	-	878	776	-
Stage 1	-	-	-	-	-	-	955	851	-
Stage 2	-	-	-	-	-	-	959	838	-

Approach	EB		WB		NB
HCM Control Delay, s	0		2		8.8
HCM LOS					A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	878	1036	1571	-	-	1536	-	-	-
HCM Lane V/C Ratio	0.025	0.047	-	-	-	0.008	-	-	-
HCM Control Delay (s)	9.2	8.6	0	-	-	7.4	-	-	0
HCM Lane LOS	A	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0.1	0	-	-	0	-	-	-

Intersection

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	0	0	0
Conflicting Peds, #/hr	0	0	0
Sign Control	Stop	Stop	Stop
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	92	92	92
Heavy Vehicles, %	3	3	3
Mvmt Flow	0	0	0

Major/Minor	Minor2		
Conflicting Flow All	76	115	16
Stage 1	56	56	-
Stage 2	20	59	-
Critical Hdwy	7.56	6.56	6.96
Critical Hdwy Stg 1	6.56	5.56	-
Critical Hdwy Stg 2	6.56	5.56	-
Follow-up Hdwy	3.53	4.03	3.33
Pot Cap-1 Maneuver	902	772	1056
Stage 1	946	845	-
Stage 2	993	843	-
Platoon blocked, %			
Mov Cap-1 Maneuver	854	766	1056
Mov Cap-2 Maneuver	854	766	-
Stage 1	946	838	-
Stage 2	946	843	-

Approach	SB
HCM Control Delay, s	0
HCM LOS	A

Minor Lane/Major Mvmt

HCM 2010 Signalized Intersection Summary

7: Londonderry Way & Lancaster Lane

Synchro 8 Report
6/29/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	6	19	34	2	7	7	15	67	30	8	11	2
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1900	1845	1900
Adj Flow Rate, veh/h	8	24	44	3	9	9	17	78	35	11	15	3
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	0	2	0
Peak Hour Factor	0.78	0.78	0.78	0.75	0.75	0.75	0.86	0.86	0.86	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	683	256	469	634	371	371	651	990	420	465	693	147
Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	1376	584	1071	1315	848	848	1376	2400	1017	941	1680	356
Grp Volume(v), veh/h	8	0	68	3	0	18	17	56	57	15	0	14
Grp Sat Flow(s),veh/h/ln	1376	0	1656	1315	0	1695	1376	1752	1665	1362	0	1616
Q Serve(g_s), s	0.3	0.0	1.9	0.1	0.0	0.5	0.6	1.5	1.7	0.0	0.0	0.4
Cycle Q Clear(g_c), s	0.7	0.0	1.9	2.0	0.0	0.5	1.0	1.5	1.7	1.7	0.0	0.4
Prop In Lane	1.00		0.65	1.00		0.50	1.00		0.61	0.71		0.22
Lane Grp Cap(c), veh/h	683	0	724	634	0	742	651	723	687	639	0	666
V/C Ratio(X)	0.01	0.00	0.09	0.00	0.00	0.02	0.03	0.08	0.08	0.02	0.00	0.02
Avail Cap(c_a), veh/h	683	0	724	634	0	742	651	723	687	639	0	666
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.0	0.0	13.2	13.8	0.0	12.8	14.2	14.3	14.3	13.9	0.0	13.9
Incr Delay (d2), s/veh	0.0	0.0	0.3	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.2	0.0	1.7	0.1	0.0	0.4	0.4	1.4	1.4	0.4	0.0	0.3
LnGrp Delay(d),s/veh	13.0	0.0	13.5	13.8	0.0	12.9	14.2	14.3	14.3	14.0	0.0	14.0
LnGrp LOS	B		B	B		B	B	B	B	B		B
Approach Vol, veh/h		76			21			130			29	
Approach Delay, s/veh		13.4			13.0			14.3			14.0	
Approach LOS		B			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		39.0		41.0		39.0		41.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		33.0		35.0		33.0		35.0				
Max Q Clear Time (g_c+l1), s		3.7		3.9		3.7		4.0				
Green Ext Time (p_c), s		2.9		0.3		2.9		0.3				
Intersection Summary												
HCM 2010 Ctrl Delay			13.9									
HCM 2010 LOS			B									

HCM 2010 Signalized Intersection Summary

1: I-85 Northbound Ramp & Jonesboro Rd (SR 138)

Synchro 8 Report

6/29/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	367	1557	0	0	947	486	181	0	266	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1845	1845	0	0	1845	1845	1845	0	1845			
Adj Flow Rate, veh/h	386	1639	0	0	997	0	193	0	0			
Adj No. of Lanes	1	2	0	0	2	1	1	0	1			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.94	0.94	0.94			
Percent Heavy Veh, %	3	3	0	0	3	3	3	0	3			
Cap, veh/h	497	2531	0	0	1826	817	234	0	209			
Arrive On Green	0.13	0.72	0.00	0.00	0.52	0.00	0.13	0.00	0.00			
Sat Flow, veh/h	1757	3597	0	0	3597	1568	1757	0	1568			
Grp Volume(v), veh/h	386	1639	0	0	997	0	193	0	0			
Grp Sat Flow(s),veh/h/ln	1757	1752	0	0	1752	1568	1757	0	1568			
Q Serve(g_s), s	7.6	20.3	0.0	0.0	15.8	0.0	8.9	0.0	0.0			
Cycle Q Clear(g_c), s	7.6	20.3	0.0	0.0	15.8	0.0	8.9	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	497	2531	0	0	1826	817	234	0	209			
V/C Ratio(X)	0.78	0.65	0.00	0.00	0.55	0.00	0.82	0.00	0.00			
Avail Cap(c_a), veh/h	715	2531	0	0	1826	817	381	0	340			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	11.4	6.0	0.0	0.0	13.3	0.0	35.0	0.0	0.0			
Incr Delay (d2), s/veh	3.4	1.3	0.0	0.0	1.2	0.0	7.4	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	9.1	15.2	0.0	0.0	12.5	0.0	8.4	0.0	0.0			
LnGrp Delay(d),s/veh	14.8	7.3	0.0	0.0	14.5	0.0	42.5	0.0	0.0			
LnGrp LOS	B	A			B		D					
Approach Vol, veh/h		2025			997			193				
Approach Delay, s/veh		8.8			14.5			42.5				
Approach LOS		A			B			D				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		66.0			16.7	49.3		17.1				
Change Period (Y+Rc), s		6.0			6.0	6.0		6.0				
Max Green Setting (Gmax), s		60.0			21.0	33.0		18.0				
Max Q Clear Time (g_c+I1), s		22.3			9.6	17.8		10.9				
Green Ext Time (p_c), s		36.8			1.1	15.0		0.3				
Intersection Summary												
HCM 2010 Ctrl Delay			12.6									
HCM 2010 LOS			B									

HCM 2010 Signalized Intersection Summary
 2: I-85 Southbound Ramp & Jonesboro Rd (SR 138)

Synchro 8 Report

6/29/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1147	173	242	849	0	0	0	0	794	0	691
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1845	1900	1845	1845	0				1845	0	1845
Adj Flow Rate, veh/h	0	1207	0	255	894	0				827	0	0
Adj No. of Lanes	0	2	0	1	2	0				2	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.96	0.96	0.96
Percent Heavy Veh, %	0	3	3	3	3	0				3	0	3
Cap, veh/h	0	1513	0	386	2105	0				892	0	410
Arrive On Green	0.00	0.86	0.00	0.10	0.60	0.00				0.26	0.00	0.00
Sat Flow, veh/h	0	3689	0	1757	3597	0				3408	0	1568
Grp Volume(v), veh/h	0	1207	0	255	894	0				827	0	0
Grp Sat Flow(s),veh/h/ln	0	1752	0	1757	1752	0				1704	0	1568
Q Serve(g_s), s	0.0	13.1	0.0	6.6	11.9	0.0				20.6	0.0	0.0
Cycle Q Clear(g_c), s	0.0	13.1	0.0	6.6	11.9	0.0				20.6	0.0	0.0
Prop In Lane	0.00		0.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1513	0	386	2105	0				892	0	410
V/C Ratio(X)	0.00	0.80	0.00	0.66	0.42	0.00				0.93	0.00	0.00
Avail Cap(c_a), veh/h	0	1570	0	413	2214	0				900	0	414
HCM Platoon Ratio	1.00	2.00	2.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.68	0.00	0.69	0.69	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	4.3	0.0	13.1	9.3	0.0				31.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	3.1	0.0	2.5	0.4	0.0				15.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	9.5	0.0	5.9	9.1	0.0				17.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	7.4	0.0	15.6	9.8	0.0				46.7	0.0	0.0
LnGrp LOS		A		B	A					D		
Approach Vol, veh/h		1207			1149						827	
Approach Delay, s/veh		7.4			11.0						46.7	
Approach LOS		A			B						D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	14.7	46.5		28.8		61.2						
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0						
Max Green Setting (Gmax), s	10.0	39.0		23.0		55.0						
Max Q Clear Time (g_c+l1), s	8.6	15.1		22.6		13.9						
Green Ext Time (p_c), s	0.1	22.5		0.2		37.3						
Intersection Summary												
HCM 2010 Ctrl Delay			18.9									
HCM 2010 LOS			B									

HCM 2010 Signalized Intersection Summary

3: Kroger Driveway/Shannon Way & Jonesboro Rd (SR 138)

Synchro 8 Report

6/29/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	991	90	168	1169	84	194	2	110	184	61	18
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1845	1845	1845	1845	1845	1900	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	0	1077	0	181	1257	0	218	2	0	216	72	0
Adj No. of Lanes	0	2	1	1	2	1	0	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.93	0.93	0.93	0.89	0.89	0.89	0.85	0.85	0.85
Percent Heavy Veh, %	0	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	0	1475	660	371	2091	889	433	3	470	254	553	470
Arrive On Green	0.00	0.84	0.00	0.16	1.00	0.00	0.30	0.30	0.00	0.30	0.30	0.00
Sat Flow, veh/h	0	3597	1568	1757	3689	1568	1178	11	1568	1396	1845	1568
Grp Volume(v), veh/h	0	1077	0	181	1257	0	220	0	0	216	72	0
Grp Sat Flow(s),veh/h/ln	0	1752	1568	1757	1845	1568	1189	0	1568	1396	1845	1568
Q Serve(g_s), s	0.0	11.4	0.0	5.1	0.0	0.0	13.2	0.0	0.0	11.3	2.6	0.0
Cycle Q Clear(g_c), s	0.0	11.4	0.0	5.1	0.0	0.0	15.7	0.0	0.0	27.0	2.6	0.0
Prop In Lane	0.00		1.00	1.00		1.00	0.99		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	1475	660	371	2091	889	436	0	470	254	553	470
V/C Ratio(X)	0.00	0.73	0.00	0.49	0.60	0.00	0.50	0.00	0.00	0.85	0.13	0.00
Avail Cap(c_a), veh/h	0	1475	660	408	2091	889	436	0	470	254	553	470
HCM Platoon Ratio	1.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.90	0.90	0.00	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	5.0	0.0	11.8	0.0	0.0	28.7	0.0	0.0	40.5	22.9	0.0
Incr Delay (d2), s/veh	0.0	3.2	0.0	0.9	1.2	0.0	0.9	0.0	0.0	22.7	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	9.2	0.0	4.5	0.6	0.0	8.5	0.0	0.0	11.3	2.4	0.0
LnGrp Delay(d),s/veh	0.0	8.2	0.0	12.7	1.2	0.0	29.6	0.0	0.0	63.2	23.1	0.0
LnGrp LOS		A		B	A		C			E	C	
Approach Vol, veh/h		1077			1438			220			288	
Approach Delay, s/veh		8.2			2.6			29.6			53.2	
Approach LOS		A			A			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	13.1	43.9		33.0		57.0		33.0				
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s	9.0	36.0		27.0		51.0		27.0				
Max Q Clear Time (g_c+l1), s	7.1	13.4		29.0		2.0		17.7				
Green Ext Time (p_c), s	0.1	21.9		0.0		45.8		1.3				

Intersection Summary

HCM 2010 Ctrl Delay 11.4
 HCM 2010 LOS B

Notes

User approved volume balancing among the lanes for turning movement.

HCM 2010 Signalized Intersection Summary
5: Shannon Parkway & Jonesboro Rd (SR 138)

Synchro 8 Report

6/29/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 							
Volume (veh/h)	95	857	22	68	1181	125	43	17	52	127	16	158
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1900	1845	1845
Adj Flow Rate, veh/h	103	932	0	71	1230	0	52	21	63	135	17	0
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.96	0.96	0.96	0.82	0.82	0.82	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	404	1927	0	378	1900	0	166	84	252	272	30	324
Arrive On Green	0.05	0.55	0.00	0.08	1.00	0.00	0.21	0.21	0.21	0.21	0.21	0.00
Sat Flow, veh/h	1757	3597	0	1757	3597	0	1377	407	1222	942	144	1568
Grp Volume(v), veh/h	103	932	0	71	1230	0	52	0	84	152	0	0
Grp Sat Flow(s),veh/h/ln	1757	1752	0	1757	1752	0	1377	0	1629	1086	0	1568
Q Serve(g_s), s	2.2	14.2	0.0	1.6	0.0	0.0	3.2	0.0	3.8	9.0	0.0	0.0
Cycle Q Clear(g_c), s	2.2	14.2	0.0	1.6	0.0	0.0	15.9	0.0	3.8	12.7	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		0.75	0.89		1.00
Lane Grp Cap(c), veh/h	404	1927	0	378	1900	0	166	0	336	302	0	324
V/C Ratio(X)	0.25	0.48	0.00	0.19	0.65	0.00	0.31	0.00	0.25	0.50	0.00	0.00
Avail Cap(c_a), veh/h	466	1927	0	412	1900	0	182	0	354	317	0	341
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	7.9	12.1	0.0	8.9	0.0	0.0	40.0	0.0	29.0	34.0	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.9	0.0	0.2	1.7	0.0	1.1	0.0	0.4	1.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.0	11.5	0.0	1.3	0.8	0.0	2.3	0.0	3.1	6.4	0.0	0.0
LnGrp Delay(d),s/veh	8.2	12.9	0.0	9.1	1.7	0.0	41.1	0.0	29.4	35.3	0.0	0.0
LnGrp LOS	A	B		A	A		D		C	D		
Approach Vol, veh/h		1035			1301			136			152	
Approach Delay, s/veh		12.5			2.1			33.8			35.3	
Approach LOS		B			A			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.3	56.7		24.0	9.9	56.0		24.0				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	5.0	48.0		19.0	7.0	46.0		19.0				
Max Q Clear Time (g_c+l1), s	3.6	16.2		14.7	4.2	2.0		17.9				
Green Ext Time (p_c), s	0.0	29.7		0.4	0.1	40.2		0.1				
Intersection Summary												
HCM 2010 Ctrl Delay			9.8									
HCM 2010 LOS			A									

Intersection

Int Delay, s/veh 2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	25	1003	58	2	1305	76	13	4	34
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None
Storage Length	125	-	270	135	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	95	95	95	80	80	80
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3
Mvmt Flow	27	1102	64	2	1374	80	16	5	42

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1454	0	-	1102	0	0	1848	2615	551
Stage 1	-	-	-	-	-	-	1157	1157	-
Stage 2	-	-	-	-	-	-	691	1458	-
Critical Hdwy	4.16	-	-	4.16	-	-	7.56	6.56	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-	6.56	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.56	5.56	-
Follow-up Hdwy	2.23	-	-	2.23	-	-	3.53	4.03	3.33
Pot Cap-1 Maneuver	456	-	0	623	-	-	46	24	476
Stage 1	-	-	0	-	-	-	207	267	-
Stage 2	-	-	0	-	-	-	399	191	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	456	-	-	623	-	-	44	23	476
Mov Cap-2 Maneuver	-	-	-	-	-	-	44	23	-
Stage 1	-	-	-	-	-	-	195	251	-
Stage 2	-	-	-	-	-	-	398	190	-

Approach	EB		WB		NB
HCM Control Delay, s	0.3		0		101
HCM LOS					F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBL	WBT	WBR
Capacity (veh/h)	94	456	-	623	-	-
HCM Lane V/C Ratio	0.678	0.06	-	0.003	-	-
HCM Control Delay (s)	101	13.4	-	10.8	-	-
HCM Lane LOS	F	B	-	B	-	-
HCM 95th %tile Q(veh)	3.4	0.2	-	0	-	-

Intersection

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	0	1	72
Conflicting Peds, #/hr	0	0	0
Sign Control	Yield	Yield	Yield
RT Channelized	-	-	Free
Storage Length	-	-	0
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	96	96	96
Heavy Vehicles, %	3	3	3
Mvmt Flow	0	1	75

Major/Minor

Conflicting Flow All

Stage 1

Stage 2

Critical Hdwy

Critical Hdwy Stg 1

Critical Hdwy Stg 2

Follow-up Hdwy

Pot Cap-1 Maneuver

Stage 1

Stage 2

Platoon blocked, %

Mov Cap-1 Maneuver

Mov Cap-2 Maneuver

Stage 1

Stage 2

Approach

HCM Control Delay, s

HCM LOS

Minor Lane/Major Mvmt

Intersection

Int Delay, s/veh 1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	0	0	10	20	0	32	0	212	39
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	88	88	88	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	0	13	23	0	36	0	230	42

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	720	720	164	556	720	230	327	0	0
Stage 1	490	490	-	230	230	-	-	-	-
Stage 2	230	230	-	326	490	-	-	-	-
Critical Hdwy	7.345	6.545	6.945	7.345	6.545	6.245	4.16	-	-
Critical Hdwy Stg 1	6.545	5.545	-	6.145	5.545	-	-	-	-
Critical Hdwy Stg 2	6.145	5.545	-	6.545	5.545	-	-	-	-
Follow-up Hdwy	3.5285	4.0285	3.3285	3.5285	4.0285	3.3285	2.23	-	-
Pot Cap-1 Maneuver	327	352	849	426	352	806	1222	-	-
Stage 1	527	546	-	770	711	-	-	-	-
Stage 2	770	711	-	659	546	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	298	331	849	400	331	806	1222	-	-
Mov Cap-2 Maneuver	298	331	-	400	331	-	-	-	-
Stage 1	527	513	-	770	711	-	-	-	-
Stage 2	735	711	-	609	513	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	9.3	11.5	0
HCM LOS	A	B	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1222	-	-	849	400	806	1332	-	-
HCM Lane V/C Ratio	-	-	-	0.016	0.057	0.045	0.061	-	-
HCM Control Delay (s)	0	-	-	9.3	14.5	9.7	7.9	-	-
HCM Lane LOS	A	-	-	A	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0.1	0.2	-	-

Intersection

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	78	314	0
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	100	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	96	96	96
Heavy Vehicles, %	3	3	3
Mvmt Flow	81	327	0

Major/Minor	Major2		
Conflicting Flow All	230	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.13	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.227	-	-
Pot Cap-1 Maneuver	1332	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	1332	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	SB
HCM Control Delay, s	1.6
HCM LOS	

Minor Lane/Major Mvmt

Intersection

Int Delay, s/veh 4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	3	70	36	31	61	1	41	2	62
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	92	92	92	77	77	77
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3
Mvmt Flow	4	89	46	34	66	1	53	3	81

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	67	0	0	134	0	0	220	254	67
Stage 1	-	-	-	-	-	-	119	119	-
Stage 2	-	-	-	-	-	-	101	135	-
Critical Hdwy	4.16	-	-	4.16	-	-	7.56	6.56	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-	6.56	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.56	5.56	-
Follow-up Hdwy	2.23	-	-	2.23	-	-	3.53	4.03	3.33
Pot Cap-1 Maneuver	1525	-	-	1441	-	-	714	646	979
Stage 1	-	-	-	-	-	-	870	794	-
Stage 2	-	-	-	-	-	-	891	781	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1525	-	-	1441	-	-	697	629	979
Mov Cap-2 Maneuver	-	-	-	-	-	-	697	629	-
Stage 1	-	-	-	-	-	-	868	792	-
Stage 2	-	-	-	-	-	-	866	763	-

Approach	EB		WB		NB
HCM Control Delay, s	0.2		2.5		9.7
HCM LOS					A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	697	962	1525	-	-	1441	-	-	838
HCM Lane V/C Ratio	0.076	0.086	0.002	-	-	0.023	-	-	0.005
HCM Control Delay (s)	10.6	9.1	7.4	-	-	7.6	-	-	9.3
HCM Lane LOS	B	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.2	0.3	0	-	-	0.1	-	-	0

Intersection

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	0	1	2
Conflicting Peds, #/hr	0	0	0
Sign Control	Stop	Stop	Stop
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	75	75	75
Heavy Vehicles, %	3	3	3
Mvmt Flow	0	1	3

Major/Minor	Minor2		
Conflicting Flow All	187	276	34
Stage 1	134	134	-
Stage 2	53	142	-
Critical Hdwy	7.56	6.56	6.96
Critical Hdwy Stg 1	6.56	5.56	-
Critical Hdwy Stg 2	6.56	5.56	-
Follow-up Hdwy	3.53	4.03	3.33
Pot Cap-1 Maneuver	754	628	1028
Stage 1	853	782	-
Stage 2	950	776	-
Platoon blocked, %			
Mov Cap-1 Maneuver	676	612	1028
Mov Cap-2 Maneuver	676	612	-
Stage 1	851	764	-
Stage 2	867	774	-

Approach	SB
HCM Control Delay, s	9.3
HCM LOS	A

Minor Lane/Major Mvmt

HCM 2010 Signalized Intersection Summary

7: Londonderry Way & Lancaster Lane

Synchro 8 Report
6/29/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	12	55	47	6	12	10	21	90	32	22	45	23
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1900	1845	1900
Adj Flow Rate, veh/h	14	65	55	8	16	13	28	118	42	24	50	26
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	0	2	0
Peak Hour Factor	0.85	0.85	0.85	0.75	0.75	0.75	0.76	0.76	0.76	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	718	442	374	630	451	366	562	998	341	302	607	325
Arrive On Green	0.48	0.48	0.48	0.48	0.48	0.48	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	1362	924	782	1254	943	766	1305	2566	877	627	1562	837
Grp Volume(v), veh/h	14	0	120	8	0	29	28	79	81	52	0	48
Grp Sat Flow(s),veh/h/ln	1362	0	1707	1254	0	1709	1305	1752	1690	1494	0	1531
Q Serve(g_s), s	0.5	0.0	3.6	0.3	0.0	0.8	1.2	2.6	2.8	0.0	0.0	1.8
Cycle Q Clear(g_c), s	1.3	0.0	3.6	3.9	0.0	0.8	3.0	2.6	2.8	2.8	0.0	1.8
Prop In Lane	1.00		0.46	1.00		0.45	1.00		0.52	0.46		0.55
Lane Grp Cap(c), veh/h	718	0	815	630	0	817	562	681	657	639	0	595
V/C Ratio(X)	0.02	0.00	0.15	0.01	0.00	0.04	0.05	0.12	0.12	0.08	0.00	0.08
Avail Cap(c_a), veh/h	718	0	815	630	0	817	562	681	657	639	0	595
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.8	0.0	13.2	14.3	0.0	12.5	18.3	17.6	17.7	17.3	0.0	17.3
Incr Delay (d2), s/veh	0.0	0.0	0.4	0.0	0.0	0.1	0.0	0.1	0.1	0.3	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.4	0.0	3.2	0.2	0.0	0.7	0.8	2.3	2.3	1.5	0.0	1.4
LnGrp Delay(d),s/veh	12.9	0.0	13.6	14.3	0.0	12.6	18.3	17.7	17.7	17.5	0.0	17.6
LnGrp LOS	B		B	B		B	B	B	B	B		B
Approach Vol, veh/h		134			37			188			100	
Approach Delay, s/veh		13.5			12.9			17.8			17.6	
Approach LOS		B			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		41.0		49.0		41.0		49.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		35.0		43.0		35.0		43.0				
Max Q Clear Time (g_c+l1), s		5.0		5.6		4.8		5.9				
Green Ext Time (p_c), s		5.8		0.6		5.8		0.6				
Intersection Summary												
HCM 2010 Ctrl Delay			16.1									
HCM 2010 LOS			B									

HCM 2010 Signalized Intersection Summary
1: I-85 Northbound Ramp & Jonesboro Rd (SR 138)

Synchro 8 Report

6/29/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	592	1015	0	0	842	933	183	0	274	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1845	1845	0	0	1845	1845	1845	0	1845			
Adj Flow Rate, veh/h	637	1091	0	0	925	0	189	0	0			
Adj No. of Lanes	1	2	0	0	2	1	1	0	1			
Peak Hour Factor	0.93	0.93	1.00	1.00	0.91	0.91	0.97	1.00	0.97			
Percent Heavy Veh, %	3	3	0	0	3	3	3	0	3			
Cap, veh/h	683	2555	0	0	1276	571	228	0	204			
Arrive On Green	0.29	0.73	0.00	0.00	0.36	0.00	0.13	0.00	0.00			
Sat Flow, veh/h	1757	3597	0	0	3597	1568	1757	0	1568			
Grp Volume(v), veh/h	637	1091	0	0	925	0	189	0	0			
Grp Sat Flow(s),veh/h/ln	1757	1752	0	0	1752	1568	1757	0	1568			
Q Serve(g_s), s	21.5	10.4	0.0	0.0	19.4	0.0	8.9	0.0	0.0			
Cycle Q Clear(g_c), s	21.5	10.4	0.0	0.0	19.4	0.0	8.9	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	683	2555	0	0	1276	571	228	0	204			
V/C Ratio(X)	0.93	0.43	0.00	0.00	0.73	0.00	0.83	0.00	0.00			
Avail Cap(c_a), veh/h	785	2555	0	0	1276	571	331	0	295			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	18.2	4.5	0.0	0.0	23.4	0.0	36.1	0.0	0.0			
Incr Delay (d2), s/veh	16.6	0.5	0.0	0.0	3.6	0.0	11.0	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	24.1	8.9	0.0	0.0	15.2	0.0	8.7	0.0	0.0			
LnGrp Delay(d),s/veh	34.7	5.1	0.0	0.0	27.0	0.0	47.1	0.0	0.0			
LnGrp LOS	C	A			C		D					
Approach Vol, veh/h		1728			925			189				
Approach Delay, s/veh		16.0			27.0			47.1				
Approach LOS		B			C			D				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		68.0			31.1	36.9		17.0				
Change Period (Y+Rc), s		6.0			6.0	6.0		6.0				
Max Green Setting (Gmax), s		62.0			30.0	26.0		16.0				
Max Q Clear Time (g_c+l1), s		12.4			23.5	21.4		10.9				
Green Ext Time (p_c), s		43.3			1.5	4.5		0.2				
Intersection Summary												
HCM 2010 Ctrl Delay			21.6									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary
1: I-85 Northbound Ramp & Jonesboro Rd (SR 138)

Synchro 8 Report

6/29/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	579	1611	0	0	979	486	211	0	266	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1845	1845	0	0	1845	1845	1845	0	1845			
Adj Flow Rate, veh/h	609	1696	0	0	1031	0	224	0	0			
Adj No. of Lanes	1	2	0	0	2	1	1	0	1			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.94	0.94	0.94			
Percent Heavy Veh, %	3	3	0	0	3	3	3	0	3			
Cap, veh/h	648	2606	0	0	1421	636	255	0	227			
Arrive On Green	0.28	0.74	0.00	0.00	0.41	0.00	0.15	0.00	0.00			
Sat Flow, veh/h	1757	3597	0	0	3597	1568	1757	0	1568			
Grp Volume(v), veh/h	609	1696	0	0	1031	0	224	0	0			
Grp Sat Flow(s),veh/h/ln	1757	1752	0	0	1752	1568	1757	0	1568			
Q Serve(g_s), s	26.7	25.9	0.0	0.0	26.7	0.0	13.4	0.0	0.0			
Cycle Q Clear(g_c), s	26.7	25.9	0.0	0.0	26.7	0.0	13.4	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	648	2606	0	0	1421	636	255	0	227			
V/C Ratio(X)	0.94	0.65	0.00	0.00	0.73	0.00	0.88	0.00	0.00			
Avail Cap(c_a), veh/h	756	2606	0	0	1421	636	294	0	262			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	24.9	6.9	0.0	0.0	27.0	0.0	45.1	0.0	0.0			
Incr Delay (d2), s/veh	18.1	1.3	0.0	0.0	3.3	0.0	22.7	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	28.1	18.6	0.0	0.0	19.6	0.0	12.8	0.0	0.0			
LnGrp Delay(d),s/veh	43.0	8.1	0.0	0.0	30.2	0.0	67.8	0.0	0.0			
LnGrp LOS	D	A			C		E					
Approach Vol, veh/h		2305			1031			224				
Approach Delay, s/veh		17.3			30.2			67.8				
Approach LOS		B			C			E				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		86.0			36.4	49.6		21.6				
Change Period (Y+Rc), s		6.0			6.0	6.0		6.0				
Max Green Setting (Gmax), s		80.0			37.0	37.0		18.0				
Max Q Clear Time (g_c+l1), s		27.9			28.7	28.7		15.4				
Green Ext Time (p_c), s		50.7			1.7	8.3		0.2				
Intersection Summary												
HCM 2010 Ctrl Delay			24.3									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary
2: I-85 Southbound Ramp & Jonesboro Rd (SR 138)

Synchro 8 Report

6/29/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1396	224	242	948	0	0	0	0	794	0	817
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1845	1900	1845	1845	0				1845	0	1845
Adj Flow Rate, veh/h	0	1469	0	255	998	0				827	0	0
Adj No. of Lanes	0	2	0	1	2	0				2	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.96	0.96	0.96
Percent Heavy Veh, %	0	3	3	3	3	0				3	0	3
Cap, veh/h	0	1758	0	399	2261	0				828	0	381
Arrive On Green	0.00	1.00	0.00	0.09	0.65	0.00				0.24	0.00	0.00
Sat Flow, veh/h	0	3689	0	1757	3597	0				3408	0	1568
Grp Volume(v), veh/h	0	1469	0	255	998	0				827	0	0
Grp Sat Flow(s),veh/h/ln	0	1752	0	1757	1752	0				1704	0	1568
Q Serve(g_s), s	0.0	0.0	0.0	7.1	15.1	0.0				26.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	7.1	15.1	0.0				26.0	0.0	0.0
Prop In Lane	0.00		0.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1758	0	399	2261	0				828	0	381
V/C Ratio(X)	0.00	0.84	0.00	0.64	0.44	0.00				1.00	0.00	0.00
Avail Cap(c_a), veh/h	0	1767	0	442	2357	0				828	0	381
HCM Platoon Ratio	1.00	2.00	2.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.34	0.00	0.45	0.45	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	9.7	9.4	0.0				40.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.7	0.0	1.2	0.3	0.0				31.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.8	0.0	5.6	10.3	0.0				22.3	0.0	0.0
LnGrp Delay(d),s/veh	0.0	1.7	0.0	10.9	9.7	0.0				71.6	0.0	0.0
LnGrp LOS		A		B	A					E		
Approach Vol, veh/h		1469			1253						827	
Approach Delay, s/veh		1.7			10.0						71.6	
Approach LOS		A			A						E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	15.4	62.6		32.0		78.0						
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0						
Max Green Setting (Gmax), s	12.0	54.0		26.0		72.0						
Max Q Clear Time (g_c+l1), s	9.1	2.0		28.0		17.1						
Green Ext Time (p_c), s	0.2	49.4		0.0		52.0						
Intersection Summary												
HCM 2010 Ctrl Delay			20.9									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary

3: Kroger Driveway/Shannon Way & Jonesboro Rd (SR 138)

Synchro 8 Report

6/29/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1208	90	168	1461	136	194	2	110	302	61	25
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1845	1845	1845	1845	1845	1900	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	0	1313	0	181	1571	0	218	2	0	355	72	0
Adj No. of Lanes	0	2	1	1	2	1	0	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.93	0.93	0.93	0.89	0.89	0.89	0.85	0.85	0.85
Percent Heavy Veh, %	0	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	0	1402	627	235	1945	827	505	4	570	351	671	570
Arrive On Green	0.00	0.80	0.00	0.15	1.00	0.00	0.36	0.36	0.00	0.36	0.36	0.00
Sat Flow, veh/h	0	3597	1568	1757	3689	1568	1209	11	1568	1396	1845	1568
Grp Volume(v), veh/h	0	1313	0	181	1571	0	220	0	0	355	72	0
Grp Sat Flow(s),veh/h/ln	0	1752	1568	1757	1845	1568	1220	0	1568	1396	1845	1568
Q Serve(g_s), s	0.0	32.9	0.0	6.7	0.0	0.0	14.7	0.0	0.0	22.5	2.8	0.0
Cycle Q Clear(g_c), s	0.0	32.9	0.0	6.7	0.0	0.0	17.5	0.0	0.0	40.0	2.8	0.0
Prop In Lane	0.00		1.00	1.00		1.00	0.99		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	1402	627	235	1945	827	509	0	570	351	671	570
V/C Ratio(X)	0.00	0.94	0.00	0.77	0.81	0.00	0.43	0.00	0.00	1.01	0.11	0.00
Avail Cap(c_a), veh/h	0	1402	627	235	1945	827	509	0	570	351	671	570
HCM Platoon Ratio	1.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.87	0.87	0.00	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	9.9	0.0	22.3	0.0	0.0	29.0	0.0	0.0	45.8	23.2	0.0
Incr Delay (d2), s/veh	0.0	13.0	0.0	12.7	3.3	0.0	0.6	0.0	0.0	51.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	23.9	0.0	7.0	1.6	0.0	9.2	0.0	0.0	28.1	2.6	0.0
LnGrp Delay(d),s/veh	0.0	22.9	0.0	35.0	3.3	0.0	29.6	0.0	0.0	96.9	23.2	0.0
LnGrp LOS		C		D	A		C			F	C	
Approach Vol, veh/h		1313			1752			220			427	
Approach Delay, s/veh		22.9			6.5			29.6			84.5	
Approach LOS		C			A			C			F	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	14.0	50.0		46.0		64.0		46.0				
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s	8.0	44.0		40.0		58.0		40.0				
Max Q Clear Time (g_c+l1), s	8.7	34.9		42.0		2.0		19.5				
Green Ext Time (p_c), s	0.0	9.1		0.0		54.8		2.2				

Intersection Summary

HCM 2010 Ctrl Delay	22.7
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

HCM 2010 Signalized Intersection Summary

5: Shannon Parkway & Jonesboro Rd (SR 138)

Synchro 8 Report

6/29/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	95	869	22	68	1197	125	43	17	52	326	16	158
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1900	1845	1845
Adj Flow Rate, veh/h	103	945	0	71	1247	0	52	21	63	347	17	0
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.96	0.96	0.96	0.82	0.82	0.82	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	268	1559	0	270	1516	0	145	144	432	463	20	554
Arrive On Green	0.05	0.44	0.00	0.07	0.86	0.00	0.35	0.35	0.35	0.35	0.35	0.00
Sat Flow, veh/h	1757	3597	0	1757	3597	0	1377	407	1222	1128	55	1568
Grp Volume(v), veh/h	103	945	0	71	1247	0	52	0	84	364	0	0
Grp Sat Flow(s),veh/h/ln	1757	1752	0	1757	1752	0	1377	0	1629	1184	0	1568
Q Serve(g_s), s	3.5	22.3	0.0	2.4	18.1	0.0	4.0	0.0	3.8	28.4	0.0	0.0
Cycle Q Clear(g_c), s	3.5	22.3	0.0	2.4	18.1	0.0	36.2	0.0	3.8	32.2	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		0.75	0.95		1.00
Lane Grp Cap(c), veh/h	268	1559	0	270	1516	0	145	0	576	483	0	554
V/C Ratio(X)	0.38	0.61	0.00	0.26	0.82	0.00	0.36	0.00	0.15	0.75	0.00	0.00
Avail Cap(c_a), veh/h	280	1559	0	303	1516	0	152	0	585	490	0	563
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	17.5	22.9	0.0	17.6	5.4	0.0	50.2	0.0	24.0	34.9	0.0	0.0
Incr Delay (d2), s/veh	0.9	1.8	0.0	0.5	5.2	0.0	1.5	0.0	0.1	6.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.1	16.6	0.0	2.2	13.8	0.0	2.9	0.0	3.1	16.7	0.0	0.0
LnGrp Delay(d),s/veh	18.4	24.7	0.0	18.1	10.6	0.0	51.7	0.0	24.1	41.4	0.0	0.0
LnGrp LOS	B	C		B	B		D		C	D		
Approach Vol, veh/h		1048			1318			136			364	
Approach Delay, s/veh		24.1			11.0			34.6			41.4	
Approach LOS		C			B			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.9	55.7		44.4	11.3	54.3		44.4				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	6.0	47.0		39.0	6.0	47.0		39.0				
Max Q Clear Time (g_c+l1), s	4.4	24.3		34.2	5.5	20.1		38.2				
Green Ext Time (p_c), s	0.0	21.7		0.9	0.0	25.4		0.2				
Intersection Summary												
HCM 2010 Ctrl Delay			20.8									
HCM 2010 LOS			C									

Intersection

Int Delay, s/veh 9.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	37	1264	58	2	1466	212	13	4	34
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None
Storage Length	125	-	270	135	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	95	95	95	80	80	80
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3
Mvmt Flow	41	1389	64	2	1543	223	16	5	42

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1766	0	-	1389	0	0	2246	3241	695
Stage 1	-	-	-	-	-	-	1470	1470	-
Stage 2	-	-	-	-	-	-	776	1771	-
Critical Hdwy	4.16	-	-	4.16	-	-	7.56	6.56	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-	6.56	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.56	5.56	-
Follow-up Hdwy	2.23	-	-	2.23	-	-	3.53	4.03	3.33
Pot Cap-1 Maneuver	345	-	0	484	-	-	23	9	382
Stage 1	-	-	0	-	-	-	132	188	-
Stage 2	-	-	0	-	-	-	354	133	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	345	-	-	484	-	-	21	8	382
Mov Cap-2 Maneuver	-	-	-	-	-	-	21	8	-
Stage 1	-	-	-	-	-	-	116	166	-
Stage 2	-	-	-	-	-	-	353	132	-

Approach	EB		WB		NB
HCM Control Delay, s	0.5		0		\$ 475.8
HCM LOS					F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBL	WBT	WBR
Capacity (veh/h)	42	345	-	484	-	-
HCM Lane V/C Ratio	1.518	0.118	-	0.004	-	-
HCM Control Delay (s)	\$ 475.8	16.8	-	12.5	-	-
HCM Lane LOS	F	C	-	B	-	-
HCM 95th %tile Q(veh)	6.4	0.4	-	0	-	-

Notes

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

Intersection

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	0	1	84
Conflicting Peds, #/hr	0	0	0
Sign Control	Yield	Yield	Yield
RT Channelized	-	-	Free
Storage Length	-	-	0
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	96	96	96
Heavy Vehicles, %	3	3	3
Mvmt Flow	0	1	88

Major/Minor

Conflicting Flow All

Stage 1

Stage 2

Critical Hdwy

Critical Hdwy Stg 1

Critical Hdwy Stg 2

Follow-up Hdwy

Pot Cap-1 Maneuver

Stage 1

Stage 2

Platoon blocked, %

Mov Cap-1 Maneuver

Mov Cap-2 Maneuver

Stage 1

Stage 2

Approach

HCM Control Delay, s

HCM LOS

Minor Lane/Major Mvmt

Intersection

Int Delay, s/veh 8.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	0	0	10	219	0	32	0	212	39
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	88	88	88	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	0	13	249	0	36	0	230	42

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	720	720	164	556	720	230	327	0	0
Stage 1	490	490	-	230	230	-	-	-	-
Stage 2	230	230	-	326	490	-	-	-	-
Critical Hdwy	7.345	6.545	6.945	7.345	6.545	6.245	4.16	-	-
Critical Hdwy Stg 1	6.545	5.545	-	6.145	5.545	-	-	-	-
Critical Hdwy Stg 2	6.145	5.545	-	6.545	5.545	-	-	-	-
Follow-up Hdwy	3.5285	4.0285	3.3285	3.5285	4.0285	3.3285	2.23	-	-
Pot Cap-1 Maneuver	327	352	849	426	352	806	1222	-	-
Stage 1	527	546	-	770	711	-	-	-	-
Stage 2	770	711	-	659	546	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	298	331	849	400	331	806	1222	-	-
Mov Cap-2 Maneuver	298	331	-	400	331	-	-	-	-
Stage 1	527	513	-	770	711	-	-	-	-
Stage 2	735	711	-	609	513	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	9.3	25.4	0
HCM LOS	A	D	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1222	-	-	849	400	806	1332	-	-
HCM Lane V/C Ratio	-	-	-	0.016	0.622	0.045	0.061	-	-
HCM Control Delay (s)	0	-	-	9.3	27.7	9.7	7.9	-	-
HCM Lane LOS	A	-	-	A	D	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	4.1	0.1	0.2	-	-

Intersection

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	78	314	0
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	100	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	96	96	96
Heavy Vehicles, %	3	3	3
Mvmt Flow	81	327	0

Major/Minor	Major2		
Conflicting Flow All	230	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.13	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.227	-	-
Pot Cap-1 Maneuver	1332	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	1332	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	SB
HCM Control Delay, s	1.6
HCM LOS	

Minor Lane/Major Mvmt

Intersection

Int Delay, s/veh 5.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	3	70	36	92	61	1	41	2	75
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	92	92	92	77	77	77
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3
Mvmt Flow	4	89	46	100	66	1	53	3	97

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	67	0	0	134	0	0	353	386	67
Stage 1	-	-	-	-	-	-	119	119	-
Stage 2	-	-	-	-	-	-	234	267	-
Critical Hdwy	4.16	-	-	4.16	-	-	7.56	6.56	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-	6.56	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.56	5.56	-
Follow-up Hdwy	2.23	-	-	2.23	-	-	3.53	4.03	3.33
Pot Cap-1 Maneuver	1525	-	-	1441	-	-	575	544	979
Stage 1	-	-	-	-	-	-	870	794	-
Stage 2	-	-	-	-	-	-	745	684	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1525	-	-	1441	-	-	541	505	979
Mov Cap-2 Maneuver	-	-	-	-	-	-	541	505	-
Stage 1	-	-	-	-	-	-	868	792	-
Stage 2	-	-	-	-	-	-	690	637	-

Approach	EB		WB		NB
HCM Control Delay, s	0.2		4.6		10.3
HCM LOS					B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	541	956	1525	-	-	1441	-	-	753
HCM Lane V/C Ratio	0.098	0.105	0.002	-	-	0.069	-	-	0.005
HCM Control Delay (s)	12.4	9.2	7.4	-	-	7.7	-	-	9.8
HCM Lane LOS	B	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.3	0.3	0	-	-	0.2	-	-	0

Intersection

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	0	1	2
Conflicting Peds, #/hr	0	0	0
Sign Control	Stop	Stop	Stop
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	75	75	75
Heavy Vehicles, %	3	3	3
Mvmt Flow	0	1	3

Major/Minor	Minor2		
Conflicting Flow All	320	409	34
Stage 1	267	267	-
Stage 2	53	142	-
Critical Hdwy	7.56	6.56	6.96
Critical Hdwy Stg 1	6.56	5.56	-
Critical Hdwy Stg 2	6.56	5.56	-
Follow-up Hdwy	3.53	4.03	3.33
Pot Cap-1 Maneuver	607	528	1028
Stage 1	713	684	-
Stage 2	950	776	-
Platoon blocked, %			
Mov Cap-1 Maneuver	515	490	1028
Mov Cap-2 Maneuver	515	490	-
Stage 1	711	637	-
Stage 2	850	774	-

Approach	SB
HCM Control Delay, s	9.8
HCM LOS	A

Minor Lane/Major Mvmt

HCM 2010 Signalized Intersection Summary
7: Londonderry Way & Lancaster Lane

Synchro 8 Report

6/29/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	12	55	47	6	12	10	21	235	35	22	57	222
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1900	1845	1900
Adj Flow Rate, veh/h	14	65	55	8	16	13	28	309	46	24	63	247
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	0	2	0
Peak Hour Factor	0.85	0.85	0.85	0.75	0.75	0.75	0.76	0.76	0.76	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	611	336	284	527	343	279	444	1282	189	218	526	597
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	1362	924	782	1254	943	766	1055	3066	452	322	1257	1427
Grp Volume(v), veh/h	14	0	120	8	0	29	28	175	180	87	0	247
Grp Sat Flow(s),veh/h/ln	1362	0	1707	1254	0	1709	1055	1752	1765	1579	0	1427
Q Serve(g_s), s	0.4	0.0	2.6	0.2	0.0	0.6	1.1	3.6	3.6	0.0	0.0	6.7
Cycle Q Clear(g_c), s	1.0	0.0	2.6	2.9	0.0	0.6	7.8	3.6	3.6	1.6	0.0	6.7
Prop In Lane	1.00		0.46	1.00		0.45	1.00		0.26	0.28		1.00
Lane Grp Cap(c), veh/h	611	0	621	527	0	622	444	733	738	744	0	597
V/C Ratio(X)	0.02	0.00	0.19	0.02	0.00	0.05	0.06	0.24	0.24	0.12	0.00	0.41
Avail Cap(c_a), veh/h	611	0	621	527	0	622	444	733	738	744	0	597
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.6	0.0	12.0	13.0	0.0	11.3	14.0	10.3	10.4	9.8	0.0	11.3
Incr Delay (d2), s/veh	0.1	0.0	0.7	0.1	0.0	0.1	0.1	0.2	0.2	0.3	0.0	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.3	0.0	2.4	0.2	0.0	0.6	0.6	3.1	3.2	1.6	0.0	5.3
LnGrp Delay(d),s/veh	11.7	0.0	12.7	13.0	0.0	11.5	14.0	10.5	10.5	10.1	0.0	13.4
LnGrp LOS	B		B	B		B	B	B	B	B		B
Approach Vol, veh/h		134			37			383			334	
Approach Delay, s/veh		12.6			11.8			10.8			12.5	
Approach LOS		B			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		29.0		26.0		29.0		26.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		23.0		20.0		23.0		20.0				
Max Q Clear Time (g_c+l1), s		9.8		4.6		8.7		4.9				
Green Ext Time (p_c), s		8.8		0.5		9.4		0.5				
Intersection Summary												
HCM 2010 Ctrl Delay			11.7									
HCM 2010 LOS			B									

Intersection

Int Delay, s/veh 2.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	112	0	177	73	0	168
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, %	3	3	3	3	3	3
Mvmt Flow	122	0	192	79	0	183

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	323	136	0	0	272	0
Stage 1	232	-	-	-	-	-
Stage 2	91	-	-	-	-	-
Critical Hdwy	6.86	6.96	-	-	4.16	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	-	-	2.23	-
Pot Cap-1 Maneuver	643	885	-	-	1281	-
Stage 1	782	-	-	-	-	-
Stage 2	919	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	643	885	-	-	1281	-
Mov Cap-2 Maneuver	643	-	-	-	-	-
Stage 1	782	-	-	-	-	-
Stage 2	919	-	-	-	-	-

Approach	WB		NB		SB
HCM Control Delay, s	11.9		0		0
HCM LOS	B				

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	- 643	1281	-
HCM Lane V/C Ratio	-	- 0.189	-	-
HCM Control Delay (s)	-	- 11.9	0	-
HCM Lane LOS	-	- B	A	-
HCM 95th %tile Q(veh)	-	- 0.7	0	-

Intersection

Int Delay, s/veh 1.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	38	0	118	59	0	130
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, %	3	3	3	3	3	3
Mvmt Flow	41	0	128	64	0	141

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	231	96	0	0	192	0
Stage 1	160	-	-	-	-	-
Stage 2	71	-	-	-	-	-
Critical Hdwy	6.86	6.96	-	-	4.16	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	-	-	2.23	-
Pot Cap-1 Maneuver	734	938	-	-	1372	-
Stage 1	849	-	-	-	-	-
Stage 2	941	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	734	938	-	-	1372	-
Mov Cap-2 Maneuver	734	-	-	-	-	-
Stage 1	849	-	-	-	-	-
Stage 2	941	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.2	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	734	1372	-
HCM Lane V/C Ratio	-	-	0.056	-	-
HCM Control Delay (s)	-	-	10.2	0	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection

Int Delay, s/veh 2.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	132	13	0	93	61	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	143	14	0	101	66	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	158	202
Stage 1	-	-	151
Stage 2	-	-	51
Critical Hdwy	-	4.16	6.86
Critical Hdwy Stg 1	-	-	5.86
Critical Hdwy Stg 2	-	-	5.86
Follow-up Hdwy	-	2.23	3.53
Pot Cap-1 Maneuver	-	1412	765
Stage 1	-	-	858
Stage 2	-	-	962
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1412	765
Mov Cap-2 Maneuver	-	-	756
Stage 1	-	-	858
Stage 2	-	-	962

Approach	EB	WB	NB
HCM Control Delay, s	0	0	10.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	756	-	-	1412	-
HCM Lane V/C Ratio	0.088	-	-	-	-
HCM Control Delay (s)	10.2	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0	-

HCM 2010 Signalized Intersection Summary
2: I-85 Southbound Ramp & Jonesboro Rd (SR 138)

Synchro 8 Report

6/29/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1208	156	219	806	0	0	0	0	399	0	629
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1845	1900	1845	1845	0				1845	0	1845
Adj Flow Rate, veh/h	0	1272	0	241	886	0				493	0	0
Adj No. of Lanes	0	2	0	1	2	0				2	0	1
Peak Hour Factor	0.95	0.95	0.95	0.91	0.91	0.91				0.81	0.81	0.81
Percent Heavy Veh, %	0	3	3	3	3	0				3	0	3
Cap, veh/h	0	1846	0	464	2401	0				582	0	268
Arrive On Green	0.00	1.00	0.00	0.09	0.69	0.00				0.17	0.00	0.00
Sat Flow, veh/h	0	3689	0	1757	3597	0				3408	0	1568
Grp Volume(v), veh/h	0	1272	0	241	886	0				493	0	0
Grp Sat Flow(s),veh/h/ln	0	1752	0	1757	1752	0				1704	0	1568
Q Serve(g_s), s	0.0	0.0	0.0	4.8	8.9	0.0				11.7	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	4.8	8.9	0.0				11.7	0.0	0.0
Prop In Lane	0.00		0.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1846	0	464	2401	0				582	0	268
V/C Ratio(X)	0.00	0.69	0.00	0.52	0.37	0.00				0.85	0.00	0.00
Avail Cap(c_a), veh/h	0	1846	0	587	2611	0				655	0	301
HCM Platoon Ratio	1.00	2.00	2.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.74	0.00	0.45	0.45	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	6.4	5.5	0.0				33.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.6	0.0	0.4	0.2	0.0				9.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.7	0.0	4.0	6.5	0.0				10.3	0.0	0.0
LnGrp Delay(d),s/veh	0.0	1.6	0.0	6.8	5.7	0.0				42.7	0.0	0.0
LnGrp LOS		A		A	A					D		
Approach Vol, veh/h		1272			1127						493	
Approach Delay, s/veh		1.6			6.0						42.7	
Approach LOS		A			A						D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	13.2	56.6		20.2		69.8						
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0						
Max Green Setting (Gmax), s	13.0	43.0		16.0		62.0						
Max Q Clear Time (g_c+l1), s	6.8	2.0		13.7		10.9						
Green Ext Time (p_c), s	0.4	37.7		0.5		46.1						
Intersection Summary												
HCM 2010 Ctrl Delay				10.3								
HCM 2010 LOS				B								

HCM 2010 Signalized Intersection Summary
3: Kroger Driveway/Shannon Way & Jonesboro Rd (SR 138)

Synchro 8 Report

6/29/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1145	25	86	1219	130	35	1	52	167	9	11
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1845	1845	1845	1845	1845	1900	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	0	1180	0	91	1283	0	38	1	0	223	12	0
Adj No. of Lanes	0	2	1	1	2	1	0	1	1	1	1	1
Peak Hour Factor	1.00	0.97	0.97	0.95	0.95	0.95	0.93	0.93	0.93	0.75	0.75	0.75
Percent Heavy Veh, %	0	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	0	1847	826	409	2369	1007	368	9	333	346	392	333
Arrive On Green	0.00	1.00	0.00	0.08	1.00	0.00	0.21	0.21	0.00	0.21	0.21	0.00
Sat Flow, veh/h	0	3597	1568	1757	3689	1568	1325	40	1568	1397	1845	1568
Grp Volume(v), veh/h	0	1180	0	91	1283	0	39	0	0	223	12	0
Grp Sat Flow(s),veh/h/ln	0	1752	1568	1757	1845	1568	1365	0	1568	1397	1845	1568
Q Serve(g_s), s	0.0	0.0	0.0	1.9	0.0	0.0	1.8	0.0	0.0	12.8	0.4	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	1.9	0.0	0.0	2.2	0.0	0.0	15.0	0.4	0.0
Prop In Lane	0.00		1.00	1.00		1.00	0.97		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	1847	826	409	2369	1007	376	0	333	346	392	333
V/C Ratio(X)	0.00	0.64	0.00	0.22	0.54	0.00	0.10	0.00	0.00	0.64	0.03	0.00
Avail Cap(c_a), veh/h	0	1847	826	462	2369	1007	502	0	475	473	559	475
HCM Platoon Ratio	1.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.91	0.91	0.00	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	6.9	0.0	0.0	26.6	0.0	0.0	32.6	25.8	0.0
Incr Delay (d2), s/veh	0.0	1.7	0.0	0.2	0.8	0.0	0.1	0.0	0.0	2.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.8	0.0	1.6	0.5	0.0	1.3	0.0	0.0	8.8	0.4	0.0
LnGrp Delay(d),s/veh	0.0	1.7	0.0	7.1	0.8	0.0	26.7	0.0	0.0	34.6	25.8	0.0
LnGrp LOS		A		A	A		C			C	C	
Approach Vol, veh/h		1180			1374			39			235	
Approach Delay, s/veh		1.7			1.2			26.7			34.1	
Approach LOS		A			A			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	9.5	57.0		23.5		66.5		23.5				
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s	6.0	41.0		25.0		53.0		25.0				
Max Q Clear Time (g_c+l1), s	3.9	2.0		17.0		2.0		4.2				
Green Ext Time (p_c), s	0.0	37.4		0.6		48.4		0.8				

Intersection Summary

HCM 2010 Ctrl Delay 4.5
HCM 2010 LOS A

Notes

User approved volume balancing among the lanes for turning movement.

HCM 2010 Signalized Intersection Summary

5: Shannon Parkway & Jonesboro Rd (SR 138)

Synchro 8 Report

6/29/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	95	869	22	68	1197	125	43	17	52	326	16	158
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1900	1845	1845
Adj Flow Rate, veh/h	103	945	0	71	1247	0	52	21	63	347	17	0
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.96	0.96	0.96	0.82	0.82	0.82	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	268	1559	0	270	1516	0	145	144	432	463	20	554
Arrive On Green	0.05	0.44	0.00	0.07	0.86	0.00	0.35	0.35	0.35	0.35	0.35	0.00
Sat Flow, veh/h	1757	3597	0	1757	3597	0	1377	407	1222	1128	55	1568
Grp Volume(v), veh/h	103	945	0	71	1247	0	52	0	84	364	0	0
Grp Sat Flow(s),veh/h/ln	1757	1752	0	1757	1752	0	1377	0	1629	1184	0	1568
Q Serve(g_s), s	3.5	22.3	0.0	2.4	18.1	0.0	4.0	0.0	3.8	28.4	0.0	0.0
Cycle Q Clear(g_c), s	3.5	22.3	0.0	2.4	18.1	0.0	36.2	0.0	3.8	32.2	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		0.75	0.95		1.00
Lane Grp Cap(c), veh/h	268	1559	0	270	1516	0	145	0	576	483	0	554
V/C Ratio(X)	0.38	0.61	0.00	0.26	0.82	0.00	0.36	0.00	0.15	0.75	0.00	0.00
Avail Cap(c_a), veh/h	280	1559	0	303	1516	0	152	0	585	490	0	563
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	17.5	22.9	0.0	17.6	5.4	0.0	50.2	0.0	24.0	34.9	0.0	0.0
Incr Delay (d2), s/veh	0.9	1.8	0.0	0.5	5.2	0.0	1.5	0.0	0.1	6.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.1	16.6	0.0	2.2	13.8	0.0	2.9	0.0	3.1	16.7	0.0	0.0
LnGrp Delay(d),s/veh	18.4	24.7	0.0	18.1	10.6	0.0	51.7	0.0	24.1	41.4	0.0	0.0
LnGrp LOS	B	C		B	B		D		C	D		
Approach Vol, veh/h		1048			1318			136			364	
Approach Delay, s/veh		24.1			11.0			34.6			41.4	
Approach LOS		C			B			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.9	55.7		44.4	11.3	54.3		44.4				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	6.0	47.0		39.0	6.0	47.0		39.0				
Max Q Clear Time (g_c+l1), s	4.4	24.3		34.2	5.5	20.1		38.2				
Green Ext Time (p_c), s	0.0	21.7		0.9	0.0	25.4		0.2				
Intersection Summary												
HCM 2010 Ctrl Delay			20.8									
HCM 2010 LOS			C									

Intersection

Int Delay, s/veh 1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	40	1135	51	11	947	307	9	3	33
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None
Storage Length	125	-	270	135	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	95	95	95	87	87	87
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3
Mvmt Flow	44	1247	56	12	997	323	10	3	38

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1320	0	-	1247	0	0	1857	2678	624
Stage 1	-	-	-	-	-	-	1335	1335	-
Stage 2	-	-	-	-	-	-	522	1343	-
Critical Hdwy	4.16	-	-	4.16	-	-	7.56	6.56	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-	6.56	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.56	5.56	-
Follow-up Hdwy	2.23	-	-	2.23	-	-	3.53	4.03	3.33
Pot Cap-1 Maneuver	514	-	0	549	-	-	45	21	426
Stage 1	-	-	0	-	-	-	161	219	-
Stage 2	-	-	0	-	-	-	503	217	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	514	-	-	549	-	-	41	19	426
Mov Cap-2 Maneuver	-	-	-	-	-	-	41	19	-
Stage 1	-	-	-	-	-	-	147	200	-
Stage 2	-	-	-	-	-	-	492	212	-

Approach	EB		WB		NB
HCM Control Delay, s	0.4		0.1		75.7
HCM LOS					F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBL	WBT	WBR
Capacity (veh/h)	99	514	-	549	-	-
HCM Lane V/C Ratio	0.522	0.086	-	0.021	-	-
HCM Control Delay (s)	75.7	12.7	-	11.7	-	-
HCM Lane LOS	F	B	-	B	-	-
HCM 95th %tile Q(veh)	2.3	0.3	-	0.1	-	-

Intersection

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	2	0	34
Conflicting Peds, #/hr	0	0	0
Sign Control	Yield	Yield	Yield
RT Channelized	-	-	Free
Storage Length	-	-	0
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	100	100	75
Heavy Vehicles, %	3	3	3
Mvmt Flow	2	0	45

Major/Minor

Conflicting Flow All

Stage 1

Stage 2

Critical Hdwy

Critical Hdwy Stg 1

Critical Hdwy Stg 2

Follow-up Hdwy

Pot Cap-1 Maneuver

Stage 1

Stage 2

Platoon blocked, %

Mov Cap-1 Maneuver

Mov Cap-2 Maneuver

Stage 1

Stage 2

Approach

HCM Control Delay, s

HCM LOS

Minor Lane/Major Mvmt

Intersection

Int Delay, s/veh 4.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	0	0	0	124	0	12	0	132	28
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	75	75	75	88	88	88
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	0	0	165	0	16	0	150	32

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	397	397	85	312	397	150	170	0	0
Stage 1	247	247	-	150	150	-	-	-	-
Stage 2	150	150	-	162	247	-	-	-	-
Critical Hdwy	7.345	6.545	6.945	7.345	6.545	6.245	4.16	-	-
Critical Hdwy Stg 1	6.545	5.545	-	6.145	5.545	-	-	-	-
Critical Hdwy Stg 2	6.145	5.545	-	6.545	5.545	-	-	-	-
Follow-up Hdwy	3.5285	4.0285	3.3285	3.5285	4.0285	3.3285	2.23	-	-
Pot Cap-1 Maneuver	548	538	955	627	538	893	1397	-	-
Stage 1	733	699	-	849	770	-	-	-	-
Stage 2	849	770	-	822	699	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	527	524	955	614	524	893	1397	-	-
Mov Cap-2 Maneuver	527	524	-	614	524	-	-	-	-
Stage 1	733	680	-	849	770	-	-	-	-
Stage 2	834	770	-	800	680	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	12.7	0
HCM LOS	A	B	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1397	-	-	-	614	893	1425	-	-
HCM Lane V/C Ratio	-	-	-	-	0.269	0.018	0.027	-	-
HCM Control Delay (s)	0	-	-	0	13	9.1	7.6	-	-
HCM Lane LOS	A	-	-	A	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	1.1	0.1	0.1	-	-

Intersection

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	33	146	0
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	100	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	86	86	86
Heavy Vehicles, %	3	3	3
Mvmt Flow	38	170	0

Major/Minor	Major2		
Conflicting Flow All	150	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.13	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.227	-	-
Pot Cap-1 Maneuver	1425	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	1425	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	SB
HCM Control Delay, s	1.4
HCM LOS	

Minor Lane/Major Mvmt

Intersection

Int Delay, s/veh 5.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	0	30	14	20	29	0	18	0	104
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	91	91	91	82	82	82
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	40	19	22	32	0	22	0	127

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	32	0	0	59	0	0	109	125	29
Stage 1	-	-	-	-	-	-	49	49	-
Stage 2	-	-	-	-	-	-	60	76	-
Critical Hdwy	4.16	-	-	4.16	-	-	7.56	6.56	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-	6.56	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.56	5.56	-
Follow-up Hdwy	2.23	-	-	2.23	-	-	3.53	4.03	3.33
Pot Cap-1 Maneuver	1571	-	-	1536	-	-	855	762	1036
Stage 1	-	-	-	-	-	-	955	851	-
Stage 2	-	-	-	-	-	-	941	829	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1571	-	-	1536	-	-	846	751	1036
Mov Cap-2 Maneuver	-	-	-	-	-	-	846	751	-
Stage 1	-	-	-	-	-	-	955	851	-
Stage 2	-	-	-	-	-	-	928	817	-

Approach	EB		WB		NB
HCM Control Delay, s	0		3		9.1
HCM LOS					A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	846	1036	1571	-	-	1536	-	-	-
HCM Lane V/C Ratio	0.026	0.122	-	-	-	0.014	-	-	-
HCM Control Delay (s)	9.4	9	0	-	-	7.4	-	-	0
HCM Lane LOS	A	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0.4	0	-	-	0	-	-	-

Intersection

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	0	0	0
Conflicting Peds, #/hr	0	0	0
Sign Control	Stop	Stop	Stop
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	92	92	92
Heavy Vehicles, %	3	3	3
Mvmt Flow	0	0	0

Major/Minor	Minor2		
Conflicting Flow All	96	135	16
Stage 1	76	76	-
Stage 2	20	59	-
Critical Hdwy	7.56	6.56	6.96
Critical Hdwy Stg 1	6.56	5.56	-
Critical Hdwy Stg 2	6.56	5.56	-
Follow-up Hdwy	3.53	4.03	3.33
Pot Cap-1 Maneuver	873	753	1056
Stage 1	921	829	-
Stage 2	993	843	-
Platoon blocked, %			
Mov Cap-1 Maneuver	758	742	1056
Mov Cap-2 Maneuver	758	742	-
Stage 1	921	817	-
Stage 2	871	843	-

Approach	SB
HCM Control Delay, s	0
HCM LOS	A

Minor Lane/Major Mvmt

HCM 2010 Signalized Intersection Summary
7: Londonderry Way & Lancaster Lane

Synchro 8 Report
6/29/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	6	19	34	2	7	7	15	315	35	8	19	109
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1900	1845	1900
Adj Flow Rate, veh/h	8	24	44	3	9	9	17	366	41	11	25	145
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	0	2	0
Peak Hour Factor	0.78	0.78	0.78	0.75	0.75	0.75	0.86	0.86	0.86	0.75	0.75	0.75
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	640	208	381	591	301	301	528	1202	134	228	460	539
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	1376	584	1071	1315	848	848	1198	3181	354	328	1217	1427
Grp Volume(v), veh/h	8	0	68	3	0	18	17	201	206	36	0	145
Grp Sat Flow(s),veh/h/ln	1376	0	1656	1315	0	1695	1198	1752	1782	1545	0	1427
Q Serve(g_s), s	0.2	0.0	1.2	0.1	0.0	0.3	0.4	3.6	3.7	0.0	0.0	3.2
Cycle Q Clear(g_c), s	0.5	0.0	1.2	1.3	0.0	0.3	3.6	3.6	3.7	0.6	0.0	3.2
Prop In Lane	1.00		0.65	1.00		0.50	1.00		0.20	0.31		1.00
Lane Grp Cap(c), veh/h	640	0	589	591	0	603	528	662	673	688	0	539
V/C Ratio(X)	0.01	0.00	0.12	0.01	0.00	0.03	0.03	0.30	0.31	0.05	0.00	0.27
Avail Cap(c_a), veh/h	640	0	589	591	0	603	528	662	673	688	0	539
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	9.6	0.0	9.7	10.2	0.0	9.4	10.9	9.8	9.9	8.9	0.0	9.7
Incr Delay (d2), s/veh	0.0	0.0	0.4	0.0	0.0	0.1	0.0	0.3	0.3	0.1	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	0.0	1.1	0.0	0.0	0.3	0.3	3.2	3.3	0.6	0.0	2.6
LnGrp Delay(d),s/veh	9.6	0.0	10.1	10.2	0.0	9.5	11.0	10.1	10.1	9.0	0.0	10.9
LnGrp LOS	A		B	B		A	B	B	B	A		B
Approach Vol, veh/h		76			21			424			181	
Approach Delay, s/veh		10.1			9.6			10.1			10.5	
Approach LOS		B			A			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		23.0		22.0		23.0		22.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		17.0		16.0		17.0		16.0				
Max Q Clear Time (g_c+l1), s		5.7		3.2		5.2		3.3				
Green Ext Time (p_c), s		6.9		0.2		7.1		0.2				
Intersection Summary												
HCM 2010 Ctrl Delay			10.2									
HCM 2010 LOS			B									

Intersection

Int Delay, s/veh 1.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	58	0	182	125	0	82
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, %	3	3	3	3	3	3
Mvmt Flow	63	0	198	136	0	89

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	311	167	0
Stage 1	266	-	-
Stage 2	45	-	-
Critical Hdwy	6.86	6.96	-
Critical Hdwy Stg 1	5.86	-	-
Critical Hdwy Stg 2	5.86	-	-
Follow-up Hdwy	3.53	3.33	-
Pot Cap-1 Maneuver	654	845	-
Stage 1	751	-	-
Stage 2	969	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	654	845	-
Mov Cap-2 Maneuver	654	-	-
Stage 1	751	-	-
Stage 2	969	-	-

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

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	654	1215	-
HCM Lane V/C Ratio	-	-	0.096	-	-
HCM Control Delay (s)	-	-	11.1	0	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Intersection

Int Delay, s/veh 1.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	48	0	123	59	0	34
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, %	3	3	3	3	3	3
Mvmt Flow	52	0	134	64	0	37

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	184	99	0
Stage 1	166	-	-
Stage 2	18	-	-
Critical Hdwy	6.86	6.96	-
Critical Hdwy Stg 1	5.86	-	-
Critical Hdwy Stg 2	5.86	-	-
Follow-up Hdwy	3.53	3.33	-
Pot Cap-1 Maneuver	785	934	-
Stage 1	843	-	-
Stage 2	999	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	785	934	-
Mov Cap-2 Maneuver	785	-	-
Stage 1	843	-	-
Stage 2	999	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	785	1365	-
HCM Lane V/C Ratio	-	-	0.066	-	-
HCM Control Delay (s)	-	-	9.9	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection

Int Delay, s/veh 0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	70	64	0	40	9	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	76	70	0	43	10	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	146	133
Stage 1	-	-	111
Stage 2	-	-	22
Critical Hdwy	-	4.16	6.86
Critical Hdwy Stg 1	-	-	5.86
Critical Hdwy Stg 2	-	-	5.86
Follow-up Hdwy	-	2.23	3.53
Pot Cap-1 Maneuver	-	1426	844
Stage 1	-	-	898
Stage 2	-	-	995
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1426	844
Mov Cap-2 Maneuver	-	-	807
Stage 1	-	-	898
Stage 2	-	-	995

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	807	-	-	1426	-
HCM Lane V/C Ratio	0.012	-	-	-	-
HCM Control Delay (s)	9.5	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Short Title

I-85 SOUTH AT SR 138 (JONESBORO ROAD)

GDOT Project No.

0007842

Federal ID No.

CSNHS-0007-00(842)

Status

Programmed

Service Type

Roadway / Interchange Upgrade

Sponsor

GDOT

Jurisdiction

Regional - Southwest

Analysis Level

Exempt from Air Quality Analysis (40 CFR 93)

Existing Thru Lane

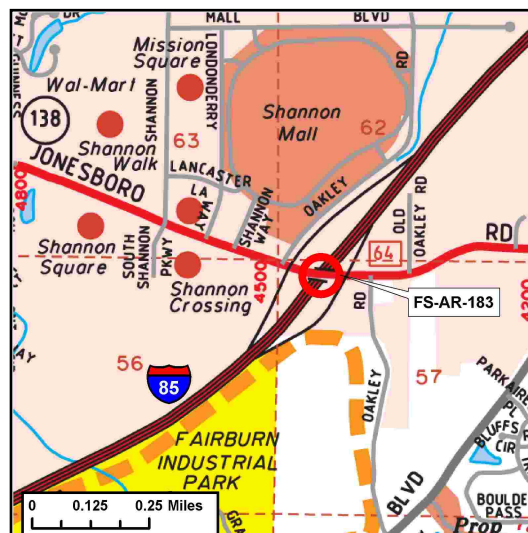
N/A

Planned Thru Lane

N/A

Detailed Description and Justification

This project involves adding turn lanes at the ends of the exit ramps and widening the SR 138 bridge to include turn lanes.



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Network Year

2030

Corridor Length

N/A miles

Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
PE	National Highway Performance Program (NHPP)	AUTH	2014	\$1,061,993	\$849,594	\$212,399	\$0,000	\$0,000
ROW	General Federal Aid - 2018-2040		LR 2018-2030	\$14,500,000	\$11,600,000	\$2,900,000	\$0,000	\$0,000
CST	General Federal Aid - 2018-2040		LR 2018-2030	\$12,500,000	\$10,000,000	\$2,500,000	\$0,000	\$0,000
				\$28,061,993	\$22,449,594	\$5,612,399	\$0,000	\$0,000

SCP: Scoping PE: Preliminary engineering / engineering / design / planning PE-OV: GDOT oversight services for engineering ROW: Right-of-way Acquisition
 UTL: Utility relocation CST: Construction / Implementation ALL: Total estimated cost, inclusive of all phases



For additional information about this project, please call (404) 463-3100 or email transportation@atlantaregional.com.

