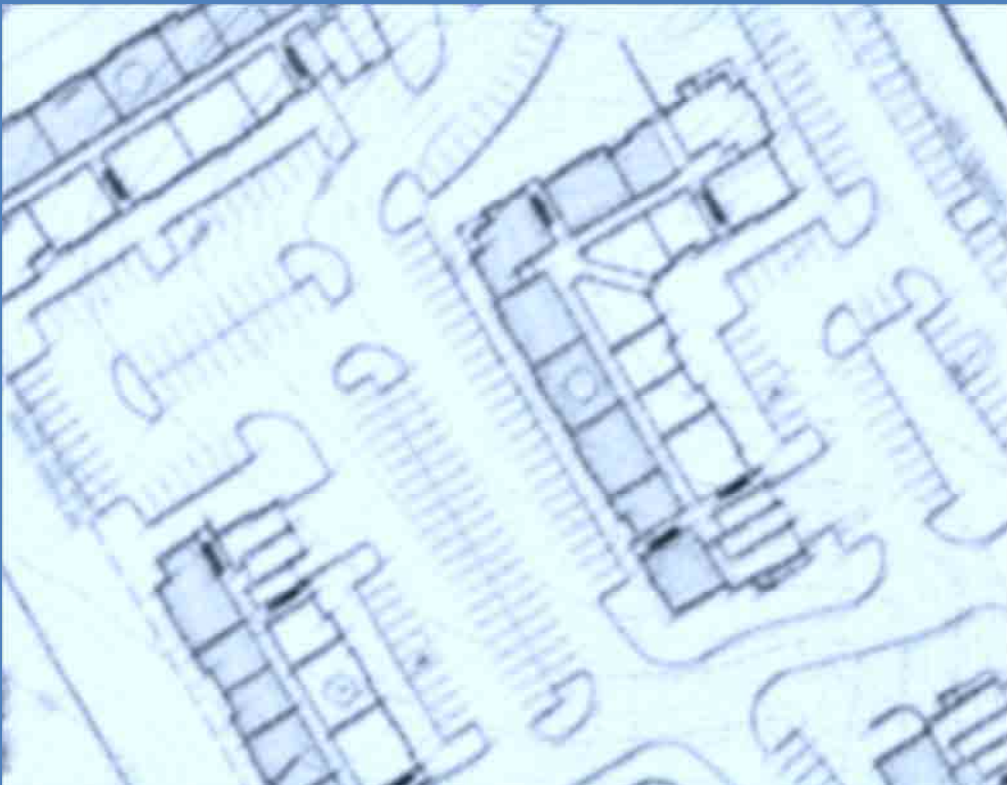


CENTENNIAL WALK

TRAFFIC IMPACT STUDY & SIGNAL WARRANT
ANALYSIS



*September
2013*

URS

CENTENNIAL WALK

TRAFFIC IMPACT ANALYSIS & SIGNAL WARRANT ANALYSIS

SEPTEMBER 2013

URS Project #: 15281441

Prepared for:

JW Homes LLC
4125 Atlanta Road SE
Smyrna, GA 30080

Prepared by:

URS Corporation
1000 Abernathy Road
Suite 900
Atlanta, GA 30328
Office: 678-808-8800
Fax: 678-808-8400
www.urs.com

EXECUTIVE SUMMARY

The purpose of this study is to determine the impacts of the proposed Centennial Walk development in Roswell, Georgia and to determine whether a traffic signal is warranted in the vicinity of the proposed project site. The study focuses on traffic conditions in the vicinity of the proposed project during the weekday AM and PM peak hour in five scenarios:

- 2013 Existing: An analysis of existing conditions in the year 2013
- 2014 Background: An analysis of conditions in the year 2014 if the project is not constructed
- 2014 Background + Project: An analysis of conditions in the year 2014 if the project is constructed.
- 2034 Background: An analysis of conditions in the year 2034 if the project is not constructed
- 2034 Background + Project: An analysis of conditions in the year 2034 if the project is constructed.

Traffic counts were conducted at several intersections in the vicinity of the project. Traffic demand in the years 2014 and 2034 was forecasted by a two percent annual growth rate (to estimate Background traffic) and then adding the traffic demand that will be generated by the proposed development (to estimate Background + Project traffic). The resulting traffic demands were then analyzed using *Highway Capacity Manual* methodology at the study area intersections to determine Level of Service (LOS) during the AM and PM peak hours of each scenario.

The study was structured to focus on whether the proposed development will have a negative impact on the transportation system, defined as an impact on traffic that would cause LOS to degrade from a LOS D or better to a LOS E or worse in the year 2014. In the case where the existing LOS is E or worse, the impact is determined by comparing the Background scenario to the Background + Project scenario.

While there are several instances of LOS E and F throughout the study area as shown in the table below, there are no instances in which a location has a LOS D or better in the 2014 Background scenario and a LOS E or worse in the 2014 Background + Project scenario. Therefore, no mitigation to offset the impact of Centennial Walk is necessary.

Level of Service Results

Intersection	ID	Traffic Control	2013		2014 Background		2034 Background		2014 Background + Project		2034 Background + Project	
			AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Holcomb Bridge Road and Scott Road	1	Eastbound Left Yield	C	C	C	C	F	F	D	C	F	F
		Southbound Stop ⁽¹⁾	F	F	F	F	F	F	F	F	F	F
Holcomb Bridge Road and Eves	2	Signalized	D	E	D	E	F	F	D	E	F	F
Scott Road and Eves Road	3	Northbound Stop ⁽¹⁾	D	C	D	C	F	F	D	C	F	F
		Westbound Left Yield	A	A	A	A	A	A	A	A	B	A
Scott Road and Old Scott Road	4	Signalized	F	C	F	C	F	D	F	C	F	D
Scott Road and Centennial Walk	D1	Westbound Stop	Not Applicable						B	B	B	B
		Southbound Left							A	A	A	A
Scott Road and Centennial Walk	D2	Northbound Stop							A	A	A	A
		Westbound Left Yield							A	A	A	A
Eves Road and Centennial Walk	D3	Northbound Left							A	A	A	A
		Eastbound Stop							A	A	A	A
Eves Road and Centennial Walk	D4	Northbound Left							A	A	A	A
		Eastbound Stop							A	B	A	B

(1) For multi-lane approaches, the worst LOS and delay is indicated

Additionally, a signal warrant analysis was conducted for 2014 Background + Project conditions at the intersection of Holcomb Bridge Road and Scott Road utilizing the Manual of Uniform Traffic Control Devices (MUTCD) methodology. The warrant analysis indicated that the intersection would not satisfy Warrants 1, 2 and 3 and therefore will not be warranted.

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The purpose of this study is to determine the impacts of the proposed Centennial Walk development in Roswell, Georgia and to determine whether a traffic signal is warranted in the vicinity of the proposed project site. The study focuses on traffic conditions in the vicinity of the proposed project during the weekday AM and PM peak hour in five scenarios:

- 2013 Existing: An analysis of existing conditions in the year 2013
- 2014 Background: An analysis of conditions in the year 2014 if the project is not constructed
- 2014 Background + Project: An analysis of conditions in the year 2014 if the project is constructed.
- 2034 Background: An analysis of conditions in the year 2034 if the project is not constructed
- 2034 Background + Project: An analysis of conditions in the year 2034 if the project is constructed.

Based on these scenarios, the study is structured to focus on whether the proposed development will have a negative impact on traffic in the year it opens, defined as an impact on traffic that would cause LOS to degrade from a LOS D or better to a LOS E or worse in the year 2014. In the case where the existing LOS is E or worse, the impact is determined by comparing the 2014 Background scenario to the 2014 Background + Project scenario. This report is organized into four sections:

- Introduction
- Study Data
- Analysis
- Conclusions

Proposed Development

The proposed development will include the following:

- 82 Single Family Homes
- 25 Townhomes
- 17,590 square feet of retail

A proposed site plan is provided in **Figure 1**.

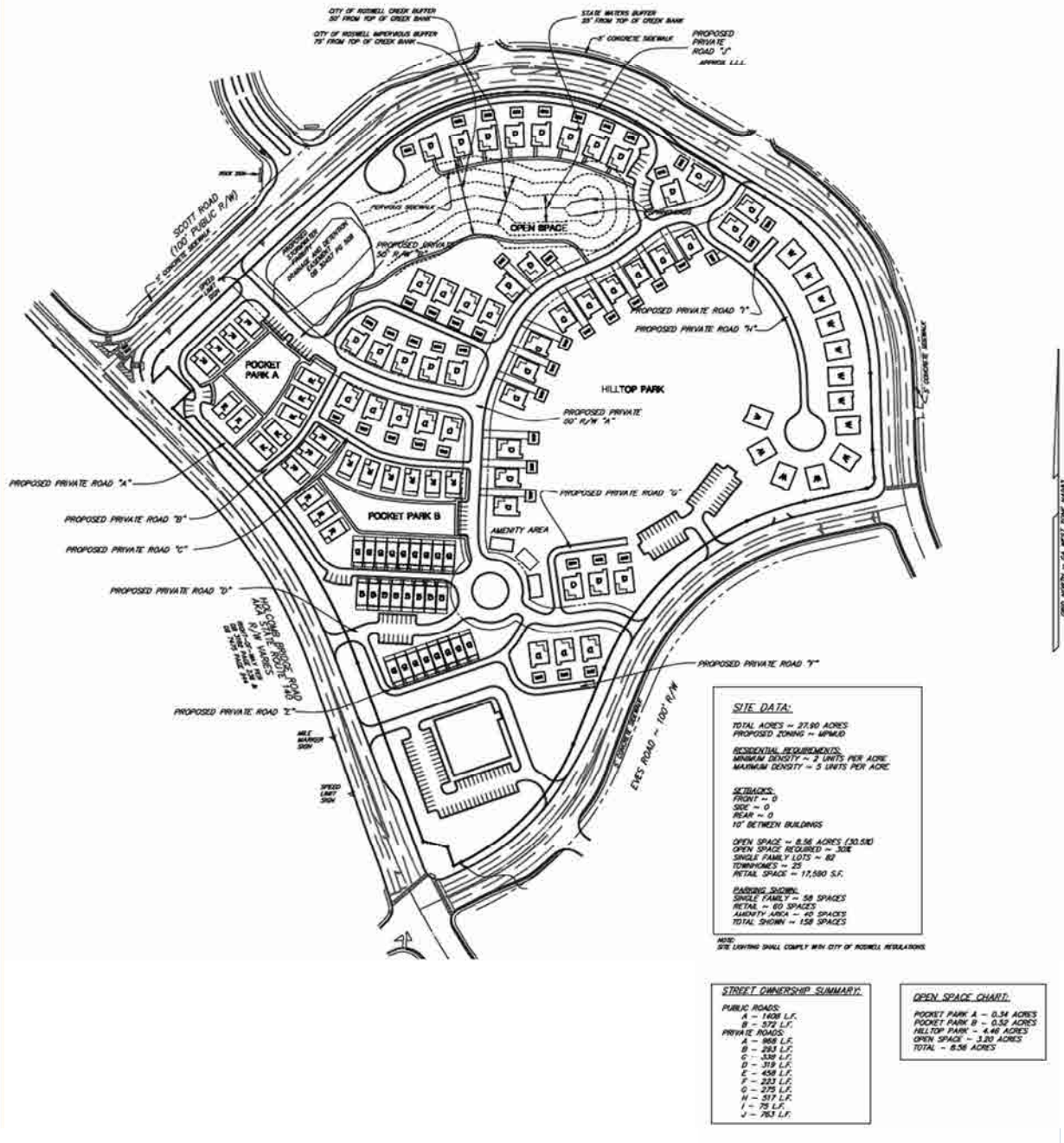
Phasing and Build-Out Schedule

The project is planned to be complete and open in the year 2014.

Site Access

The project will have multiple access points to Holcomb Bridge Road, Scott Road, and Eves Road.

FIGURE 1
Proposed Site Plan



Existing and Future Traffic Volumes

Traffic Counts

Weekday AM and PM Peak hour turning movement counts were collected at the following intersections on Thursday, September 5, 2013:

- Holcomb Bridge Road and Eves Road
- Scott Road and Eves Road
- Scott Road and Old Scott Road

Additionally, a twelve hour turning movement count was collected at Holcomb Bridge Road and Scott Road where a traffic signal is proposed. The count program is shown on **Figure 2** and **Figure 3** shows the AM and PM peak hour volumes in the year 2013. The raw counts are provided in **Appendix A**.

Growth Rates

In order to estimate future background traffic volumes, potential growth rates were investigated from historical Georgia Department of Transportation traffic counts in the vicinity of the project. This analysis is shown in **Table 1** below.

Table 1 - Historical Traffic Volumes and Growth Rates

Year	Holcomb Bridge Road, West of Scott Road (12108083) ADT
2012	41660
2011	40960
2010	42340
2009	35460
2008	72100
2007	38780
2006	38070
2005	36850
2004	40220
2003	38980
2002	39120
2001	38300
2000	35700
1999	36400
1998	37900
1997	35200
1996	34700
1995	34800
1994	38900
1993	36000
Annual Linear Growth Rate	0.59%
R ²	38.9%

Based on the lack of a strong statistical trend (indicated by the low R²) and through advisement from the City of Roswell, a two percent linear annual growth rate was selected to grow future traffic. As a result, the resulting 2 percent linear annual growth rate was applied to the 2013 volumes to estimate 2014 and 2034 Background volumes as shown in **Figures 4 and 5**.

FIGURE 2
Traffic Count Locations

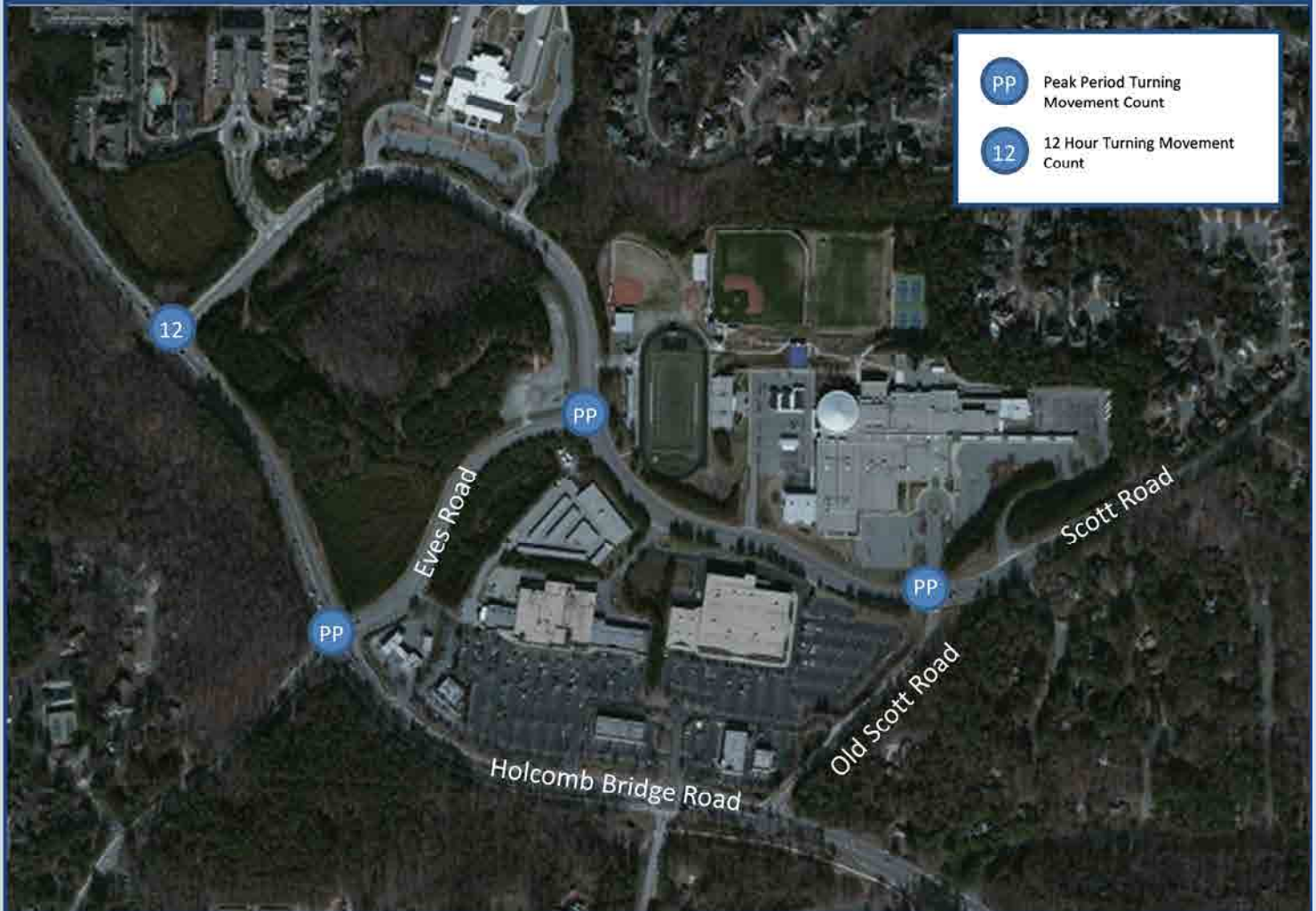


FIGURE 3
2013 AM/PM Peak Hour Traffic Volumes

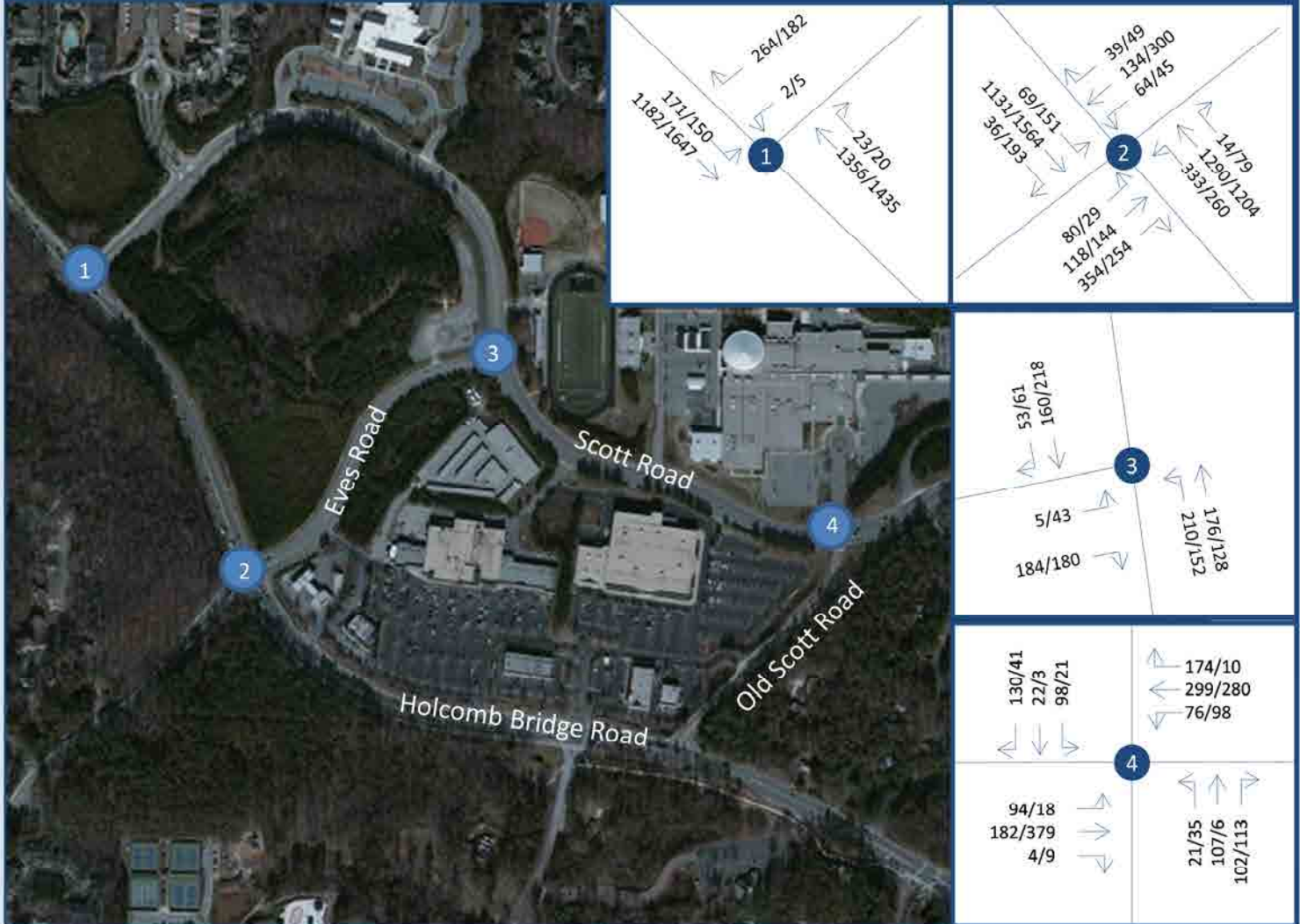


FIGURE 4
2014 Background AM/PM Peak Hour Traffic Volumes

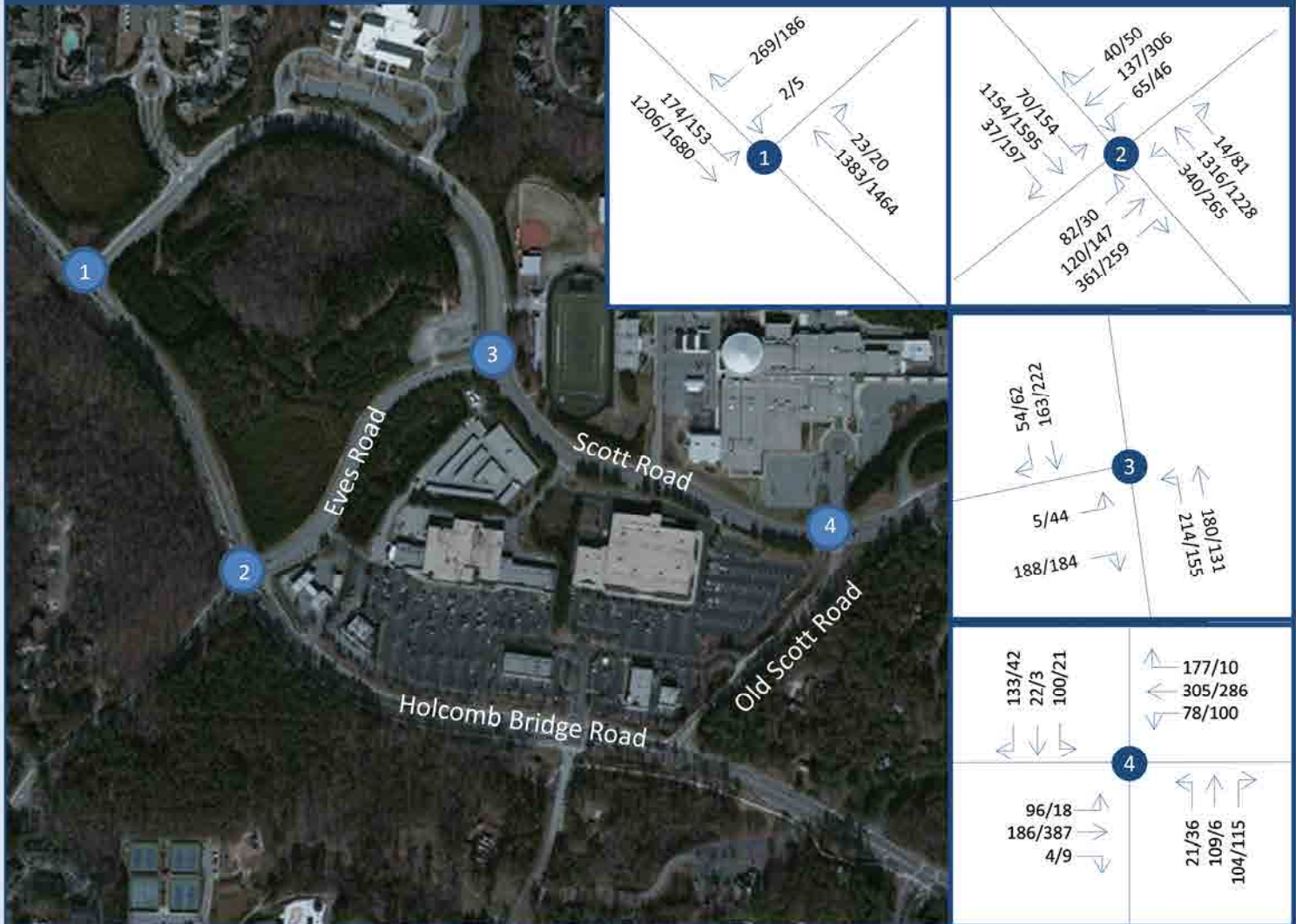
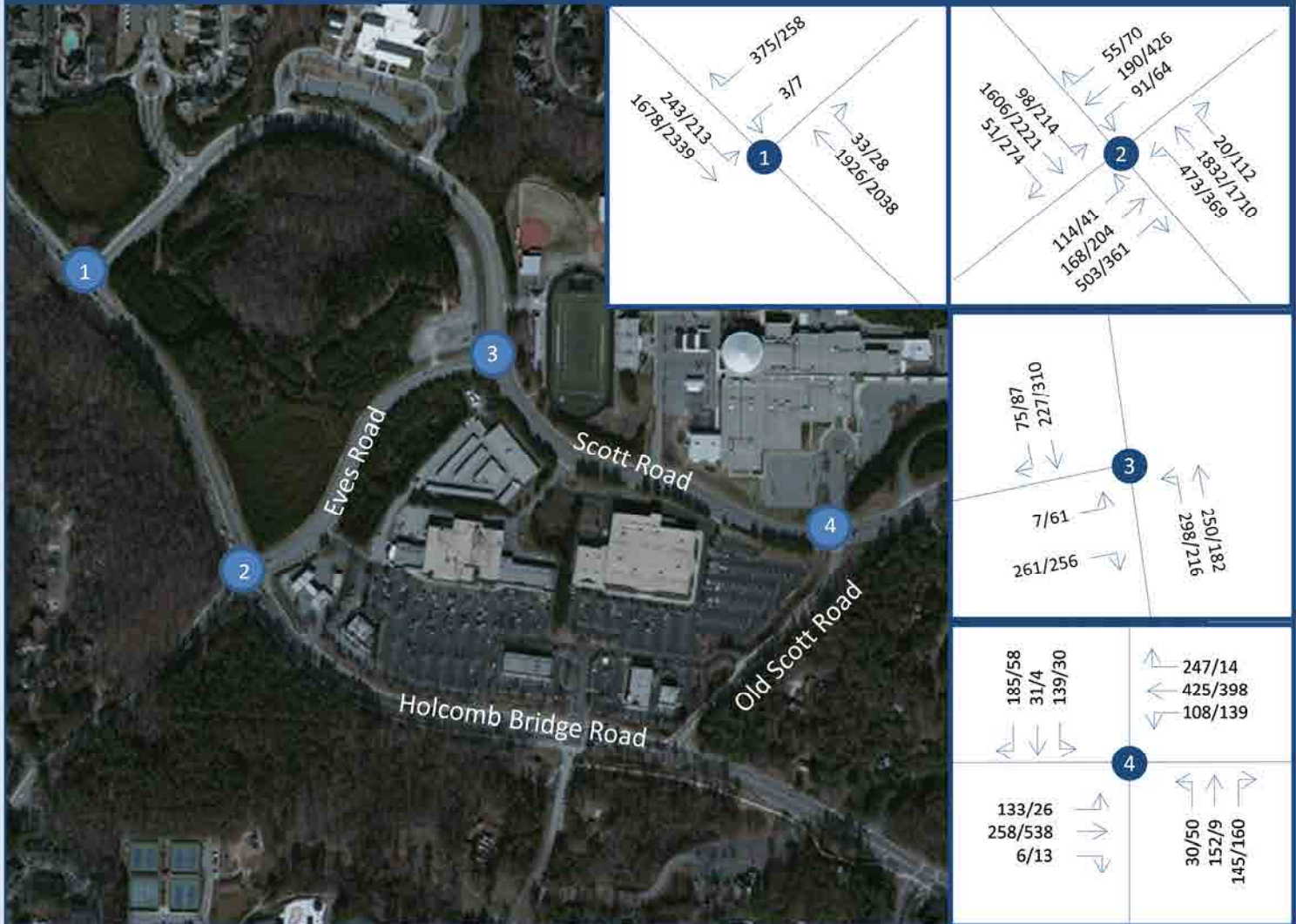


FIGURE 5
2034 Background AM/PM Peak Hour Traffic Volumes



Trip Generation and Assignment

A trip generation analysis was conducted based on the *Institute of Traffic Engineers (ITE) Trip Generation Handbook, Volume 9* to determine the traffic volumes likely to be generated by the proposed development. The results are shown in **Table 2** below.

Table 2 – Trip Generation

Land Use	Units		ITE Code	Daily In	Daily Out	AM In	AM Out	PM In	PM Out
Single Family Housing	82	Homes	210	391	391	15	46	52	30
Townhomes	25	Homes	230	73	73	2	9	9	4
Retail	17,590	SF	820	376	376	22	14	21	22
Total				839	839	39	69	82	56

The new trips associated with the proposed development were distributed through the study area based on existing traffic distributions determined from the turning movement counts as shown in **Figure 6**. The resulting assignment of project trips is shown in **Figure 7**. The project trips were then added to the 2014 and 2034 Background volumes to estimate the 2014 and 2034 Background + Project Volumes. The resulting forecasts are shown in **Figures 8 and 9**.

Signal Timing Data

Signal timing data for the signalized intersections in the study area was provided by the City of Roswell. The raw signal timing data is provided in **Appendix B**.

FIGURE 6
Project Traffic Distribution



FIGURE 7
Project AM/PM Peak Hour Traffic Volumes



FIGURE 8
2014 Background + Project AM/PM Peak Hour Traffic Volumes



FIGURE 9

2034 Background + Project AM/PM Peak Hour Traffic Volumes



Analysis Methodology

The standard approach to defining traffic congestion is the use of Level of Service (LOS), a quantifiable measure of congestion that is correlated to the delay experienced by the average vehicle. LOS is measured on a letter grade scale from A to F, with LOS A indicating free-flow conditions and LOS F indicating severe congestion as shown in the graphic below.



The *Highway Capacity Manual* (HCM) defines LOS at an unsignalized intersection by average control delay per vehicle which includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. Several factors affect the controlled delay for unsignalized intersections, such as availability and distribution of gaps in the conflicting traffic stream, critical gaps, and follow-up time for a vehicle in the queue. For signalized intersections, LOS for a signalized intersection is defined in terms of average control delay per vehicle, which is composed of initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. **Table 3** presents LOS thresholds unsignalized and signalized intersections.

Table 3 – Highway Capacity Manual LOS Criteria

Level of Service	Unsignalized Average Control Delay (sec/veh)	Signalized Average Control Delay (sec/veh)
A	≤ 10.0	≤ 10.0
B	> 10.0 and ≤ 15.0	> 10.0 and ≤ 20.0
C	> 15.0 and ≤ 25.0	> 20.0 and ≤ 35.0
D	> 25.0 and ≤ 35.0	> 35.0 and ≤ 55.0
E	> 35.0 and ≤ 50.0	> 55.0 and ≤ 80.0
F	> 50.0	> 80.0

Source: 2010 Highway Capacity Manual

Capacity Analysis Results

Analysis of the intersection was conducted utilizing Synchro 8.0, which utilizes HCM methodology, assuming existing traffic control, signal timing, and roadway geometry for all scenarios. **Tables 4 and 5** present the Level of Service and Control Delay (average delay in seconds per vehicle) for each scenario. Synchro output from the analysis is provided in **Appendix C**. Despite several instances of LOS E and F throughout the study area, there are no instances in which a location has a LOS D or better in the 2014 Background scenario and a LOS E or worse in the 2014 Background + Project scenario. Therefore, no mitigation to offset the impact of Centennial Walk is necessary.

Table 4 – Level of Service Results

Intersection	ID	Traffic Control	2013		2014 Background		2034 Background		2014 Background + Project		2034 Background + Project	
			AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Holcomb Bridge Road and Scott Road	1	Eastbound Left Yield	C	C	C	C	F	F	D	C	F	F
		Southbound Stop ⁽¹⁾	F	F	F	F	F	F	F	F	F	F
Holcomb Bridge Road and Eves	2	Signalized	D	E	D	E	F	F	D	E	F	F
Scott Road and Eves Road	3	Northbound Stop ⁽¹⁾	D	C	D	C	F	F	D	C	F	F
		Westbound Left Yield	A	A	A	A	A	A	A	A	B	A
Scott Road and Old Scott Road	4	Signalized	F	C	F	C	F	D	F	C	F	D
Scott Road and Centennial Walk	D1	Westbound Stop	Not Applicable						B	B	B	B
		Southbound Left							A	A	A	A
Scott Road and Centennial Walk	D2	Northbound Stop							A	A	A	A
		Westbound Left Yield							A	A	A	A
Eves Road and Centennial Walk	D3	Northbound Left							A	A	A	A
		Eastbound Stop							A	A	A	A
Eves Road and Centennial Walk	D4	Northbound Left							A	A	A	A
		Eastbound Stop							A	B	A	B

(2) For multi-lane approaches, the worst LOS and delay is indicated

Table 5 – Control Delay (average seconds per vehicle) Results

Intersection	ID	Traffic Control	2013		2014 Background		2034 Background		2014 Background + Project		2034 Background + Project	
			AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Holcomb Bridge Road and Scott Road	1	Eastbound Left Yield	23.1	19.2	24.7	20.1	251.0	114.4	25.8	22.0	268.0	152.6
		Southbound Stop ⁽¹⁾	680.0	970.9	799.1	1124.6	2493.3	6532.7	960.8	1323.8	2493.3	6532.7
Holcomb Bridge Road and Eves	2	Signalized	44.0	65.6	46.8	69.9	179.5	178.1	48.8	71.3	186.9	181.0
Scott Road and Eves Road	3	Northbound Stop ⁽¹⁾	29.2	22.5	30.2	23.2	72.5	70.6	31.1	24.0	76.4	75.9
		Westbound Left Yield	8.7	8.5	8.8	8.5	9.9	9.5	8.8	8.6	10.0	9.5
Scott Road and Old Scott Road	4	Signalized	98.9	30.6	102.2	30.8	215.6	36.1	101.5	30.9	214.4	36.3
Scott Road and Centennial Walk	D1	Westbound Stop	Not Applicable						11.1	10.5	12.6	11.5
		Southbound Left							0.0	0.0	0.0	0.0
Scott Road and Centennial Walk	D2	Northbound Stop							9.0	9.2	9.3	9.6
		Westbound Left Yield							7.7	7.9	7.9	8.2
Eves Road and Centennial Walk	D3	Northbound Left							7.9	7.8	8.2	8.0
		Eastbound Stop							0.0	0.0	0.0	0.0
Eves Road and Centennial Walk	D4	Northbound Left							7.9	8.3	8.2	8.9
		Eastbound Stop							9.4	10.4	9.8	11.5

(1) For multi-lane approaches, the worst LOS and delay is indicated

Signal Warrant Analysis

Additionally, a signal warrant analysis was conducted for the intersection of Holcomb Bridge Road and Scott Road in the 2014 Background + Project scenario. Overall, traffic volumes were developed in the same manner as described earlier, using existing count data (in this instance 12 hours of turning movement data), applying a 2 percent growth rate to estimate 2014 background volumes, and incorporating the anticipated project traffic. In order to forecast 12 hours of anticipated project traffic data, the 12 hour variation of traffic into and out of Scott Road was applied to the daily trip generation, conservatively assuming that all of the daily Centennial Walk traffic will traverse the roadway network in only a 12 hour period. The resulting traffic volumes are shown in **Table 6**. Additionally, the forecasting process is provided in **Appendix D**.

Table 6 – Estimated Twelve Hour 2014 Background + Project Volumes at Holcomb Bridge Road and Scott Road

Start Time	Holcomb Bridge Road Eastbound			Holcomb Bridge Road Westbound			Northbound			Scott Road Southbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right ⁽¹⁾
7AM	180	1212			1388	23				2		274
8AM	94	1237			1182	30				7		199
9AM	66	1049			1162	8				4		139
10AM	59	919			1072	11				8		105
11AM	74	1031			1052	17				7		114
12PM	90	1087			1084	23				11		111
1PM	93	1180			1159	11				3		105
2PM	119	1299			1225	11				5		118
3PM	161	1517			1400	22				8		154
4PM	180	1766			1407	43				3		170
5PM	201	1822			1220	75				4		120
6PM	246	1708			1288	37				4		157

(1) Per right turn reduction method (removing side street right turns served by an exclusive turn lane) these volumes were not utilized as part of the signal warrant analysis

The signal warrant analysis was based on criteria established in the 2009 *Manual on Uniform Traffic Control Devices* (MUTCD) utilizing the full volume requirement and right turn reduction for the minor approach on Scott Road. The analysis was performed utilizing HCS2010 software (v6.3). For warrants 1, 2, and 3 the results, as indicated in the table below, indicate that the signal will not be warranted in the 2014 Background + Project condition. A more detailed description of the analysis of the three signal warrants evaluated are described on the following pages and in **Appendix D**.

**Table 7 – Signal Warrant Analysis
at Holcomb Bridge Road and Scott Road**

Warrant 1, Eight-Hour Vehicular Volume		
Warrant 1	Not Satisfied	
Condition A	Not Satisfied	
	100 % of Volume	0 Hours
Condition B	Not Satisfied	
	100 % of Volume	0 Hours
Warrant 2, Four-Hour Vehicular Volume		
Warrant 2	Not Satisfied	0 Hours
Warrant 3, Peak Hour		
Warrant 3	Not Satisfied	
Condition A	Not Evaluated	
Condition B	Not Satisfied	0 Hours

Warrant 1 – Eight Hour Vehicular Volume**WARRANT 1 – Eight Hour of Volume****Standard 1 (100%)**

Number of hours required traffic is present for Condition A: 0

Number of hours required traffic is present for Condition B: 0

Standard 2 (80%)

Number of hours required traffic is present for Condition A: 0

Number of hours required traffic is present for Condition B: 0

The need for a traffic control signal shall be considered if an engineering study finds that one of the following conditions exist for each of any 8 hours of an average day:

A. The vehicles per hour given in both of the 100 percent columns of Condition A in Table 4C-1 exist on the major-street and the higher-volume minor-street approaches,

respectively, to the intersection; or

- B. The vehicles per hour given in both of the 100 percent columns of Condition B in Table 4C-1 exist on the major-street and the higher-volume minor-street approaches, respectively, to the intersection. In applying each condition the major-street and minor-street volumes shall be for the same 8 hours. On the minor street, the higher volume shall not be required to be on the same approach during each of these 8 hours.

Table 4C-1. Warrant 1, Eight-Hour Vehicular Volume**Condition A—Minimum Vehicular Volume**

Number of lanes for moving traffic on each approach		Vehicles per hour on major street (total of both approaches)				Vehicles per hour on higher-volume minor-street approach (one direction only)			
Major Street	Minor Street	100% ^a	80% ^b	70% ^c	56% ^d	100% ^a	80% ^b	70% ^c	56% ^d
1	1	500	400	350	280	150	120	105	84
2 or more	1	600	480	420	336	150	120	105	84
2 or more	2 or more	600	480	420	336	200	160	140	112
1	2 or more	500	400	350	280	200	160	140	112

Condition B—Interruption of Continuous Traffic

Number of lanes for moving traffic on each approach		Vehicles per hour on major street (total of both approaches)				Vehicles per hour on higher-volume minor-street approach (one direction only)			
Major Street	Minor Street	100% ^a	80% ^b	70% ^c	56% ^d	100% ^a	80% ^b	70% ^c	56% ^d
1	1	750	600	525	420	75	60	53	42
2 or more	1	900	720	630	504	75	60	53	42
2 or more	2 or more	900	720	630	504	100	80	70	56
1	2 or more	750	600	525	420	100	80	70	56

^a Basic minimum hourly volume

^b Used for combination of Conditions A and B after adequate trial of other remedial measures

^c May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000

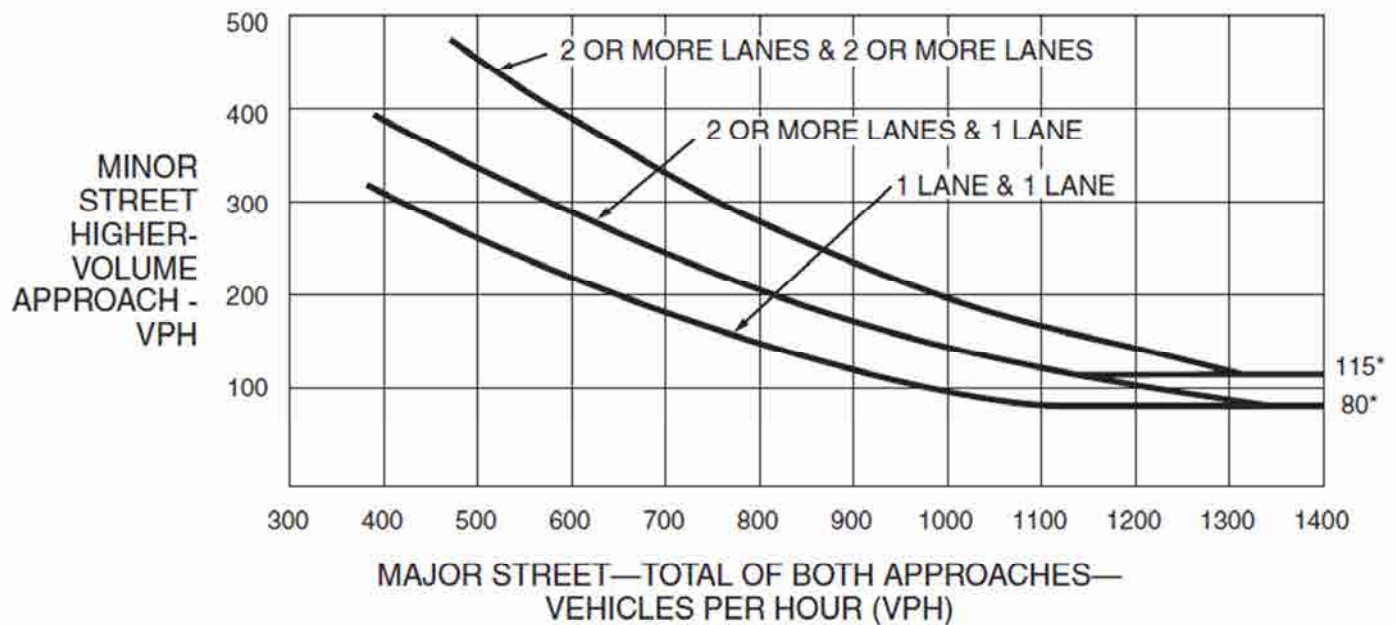
^d May be used for combination of Conditions A and B after adequate trial of other remedial measures when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000

Warrant 2 – Four Hour Vehicular Volume**WARRANT 2 – Four Hour Vehicular Volume**

Number of hours required traffic is present: 0

The Four-Hour Vehicular Volume signal warrant conditions are intended to be applied where the volume of intersecting traffic is the principal reason to consider installing a traffic control signal. The need for a traffic control signal shall be considered if an engineering study finds that, for each of any 4 hours of an average day, the plotted points representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher-volume minor-street approach (one direction only) all fall above the applicable curve in Figure 4C-1 for the existing combination of approach lanes. On the minor street, the higher volume shall not be required to be on the same approach during each of these 4 hours.

The Four-Hour Vehicular Volume signal warrant conditions are intended to be applied where the volume of intersecting traffic is the principal reason to consider installing a traffic control signal.

Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume

*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane.

Warrant 3 – Peak Hour**WARRANT 3 – Peak Hour Vehicular Volume**

Condition A: Not Evaluated

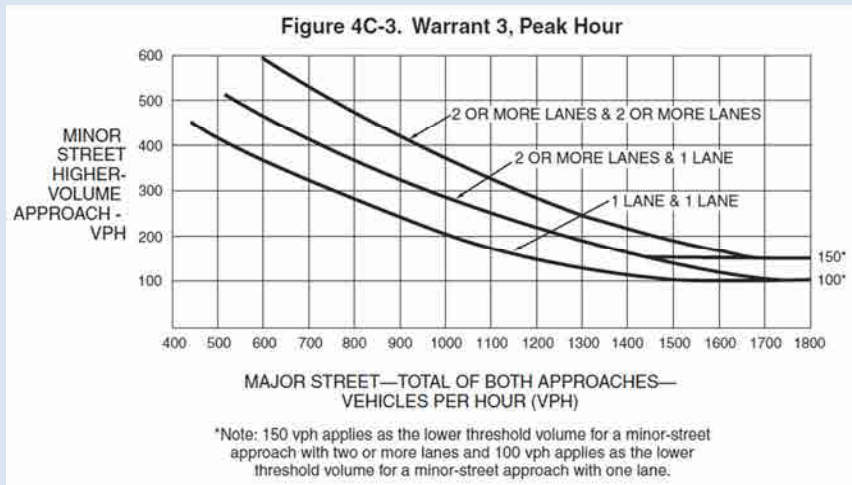
Condition B:

Number of hours required traffic is present: 0

vehicles over a short time. The need for a traffic control signal shall be considered if an engineering study finds that the criteria in either of the following two categories are met:

- A. If all three of the following conditions exist for the same 1 hour (any four consecutive 15-minute periods) of an average day:
 1. The total stopped time delay experienced by the traffic on one minor-street approach (one direction only) controlled by a STOP sign equals or exceeds: 4 vehicle-hours for a one-lane approach or 5 vehicle-hours for a two-lane approach; and
 2. The volume on the same minor-street approach (one direction only) equals or exceeds 100 vehicles per hour for one moving lane of traffic or 150 vehicles per hour for two moving lanes; and
 3. The total entering volume serviced during the hour equals or exceeds 650 vehicles per hour for intersections with three approaches or 800 vehicles per hour for intersections with four or more approaches.
- B. The plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher-volume minor-street approach (one direction only) for 1 hour (any four consecutive 15-minute periods) of an average day falls above the applicable curve in Figure 4C-3 for the existing combination of approach lanes.

The Peak Hour signal warrant is applied where traffic conditions are heavy during a minimum of one hour for an average day, causing undue delay during this time period to side street volumes entering or crossing the major street. The MUTCD states that this warrant is intended for application where a land use attracts or discharges a large number of



IV

CONCLUSIONS

The study was structured to focus on whether the proposed development will have a negative impact on the transportation system, defined as an impact on traffic that would cause LOS to degrade from a LOS D or better to a LOS E or worse in the year 2014. In this case, the impact is determined specifically by comparing the 2014 Background scenario to the 2014 Background + Project scenario. While there are several instances of LOS E and F throughout the study area as shown in the replicated LOS results in **Table 8** below, there are no instances in which a location has a LOS D or better in the 2014 Background scenario and a LOS E or worse in the 2014 Background + Project scenario. Therefore, no mitigation to offset the impact of Centennial Walk is necessary.

Table 8 – Level of Service Results

Intersection	ID	Traffic Control	2013		2014 Background		2034 Background		2014 Background + Project		2034 Background + Project	
			AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Holcomb Bridge Road and Scott Road	1	Eastbound Left Yield	C	C	C	C	F	F	D	C	F	F
		Southbound Stop ⁽¹⁾	F	F	F	F	F	F	F	F	F	F
Holcomb Bridge Road and Eves	2	Signalized	D	E	D	E	F	F	D	E	F	F
Scott Road and Eves Road	3	Northbound Stop ⁽¹⁾	D	C	D	C	F	F	D	C	F	F
		Westbound Left Yield	A	A	A	A	A	A	A	A	B	A
Scott Road and Old Scott Road	4	Signalized	F	C	F	C	F	D	F	C	F	D
Scott Road and Centennial Walk	D1	Westbound Stop	Not Applicable						B	B	B	B
		Southbound Left							A	A	A	A
Scott Road and Centennial Walk	D2	Northbound Stop							A	A	A	A
		Westbound Left Yield							A	A	A	A
Eves Road and Centennial Walk	D3	Northbound Left							A	A	A	A
		Eastbound Stop							A	A	A	A
Eves Road and Centennial Walk	D4	Northbound Left							A	A	A	A
		Eastbound Stop							A	B	A	B

(3) For multi-lane approaches, the worst LOS and delay is indicated

Additionally, a signal warrant analysis was conducted for 2014 Background + Project conditions at the intersection of Holcomb Bridge Road and Scott Road utilizing the Manual of Uniform Traffic Control Devices (MUTCD) methodology. The warrant analysis indicated that the intersection would not satisfy Warrants 1, 2 and 3 and therefore will not be warranted.



APPENDIX A

Traffic Counts

All Traffic Data Services, Inc

1336 Farmer Road

Conyers, Ga 30012

404-374-1283

File Name : #1 HolcombBrdgRd@ScottRd

Site Code :

Start Date : 9/5/2013

Page No : 1

Groups Printed- Cars - Trucks

	HOLCOMB BRIDGE ROAD Southbound					SCOTT ROAD Westbound					HOLCOMB BRIDGE ROAD Northbound					SCOTT ROAD Eastbound					
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	36	324	0	0	360	0	0	52	0	52	0	313	6	0	319	0	0	0	0	0	731
07:15 AM	43	277	0	0	320	1	0	70	0	71	0	365	4	0	369	0	0	0	0	0	760
07:30 AM	67	282	0	0	349	1	0	90	0	91	0	359	3	0	362	0	0	0	0	0	802
07:45 AM	25	299	0	0	324	0	0	52	1	53	0	319	10	0	329	0	0	0	0	0	706
Total	171	1182	0	0	1353	2	0	264	1	267	0	1356	23	0	1379	0	0	0	0	0	2999
08:00 AM	31	321	0	0	352	1	0	44	0	45	0	299	7	0	306	0	0	0	0	0	703
08:15 AM	27	269	0	0	296	2	0	52	0	54	0	271	9	0	280	0	0	0	0	0	630
08:30 AM	9	326	0	0	335	2	0	35	0	37	0	303	8	0	311	0	0	0	0	0	683
08:45 AM	13	286	0	0	299	2	0	43	0	45	0	268	5	0	273	0	0	0	0	0	617
Total	80	1202	0	0	1282	7	0	174	0	181	0	1141	29	0	1170	0	0	0	0	0	2633
09:00 AM	18	257	0	0	275	1	0	29	1	31	0	254	3	0	257	0	0	0	0	0	563
09:15 AM	15	281	0	0	296	1	0	34	0	35	0	296	3	0	299	0	0	0	0	0	630
09:30 AM	10	209	0	0	219	2	0	24	0	26	0	309	1	0	310	0	0	0	0	0	555
09:45 AM	15	275	0	0	290	0	0	35	1	36	0	268	1	0	269	0	0	0	0	0	595
Total	58	1022	0	0	1080	4	0	122	2	128	0	1127	8	0	1135	0	0	0	0	0	2343
10:00 AM	8	252	0	0	260	3	0	24	2	29	0	266	2	0	268	0	0	0	0	0	557
10:15 AM	9	207	0	0	216	3	0	25	2	30	0	226	2	0	228	0	0	0	0	0	474
10:30 AM	14	229	0	0	243	1	0	23	1	25	0	290	6	0	296	0	0	0	0	0	564
10:45 AM	20	207	0	0	227	1	0	19	0	20	0	259	1	0	260	0	0	0	0	0	507
Total	51	895	0	0	946	8	0	91	5	104	0	1041	11	0	1052	0	0	0	0	0	2102
11:00 AM	9	243	0	0	252	2	0	23	0	25	0	242	5	0	247	0	0	0	0	0	524
11:15 AM	19	245	0	0	264	1	0	20	0	21	0	269	1	0	270	0	0	0	0	0	555
11:30 AM	18	251	0	0	269	3	0	26	0	29	0	251	7	0	258	0	0	0	0	0	556
11:45 AM	18	264	0	0	282	1	0	30	0	31	0	260	4	0	264	0	0	0	0	0	577
Total	64	1003	0	0	1067	7	0	99	0	106	0	1022	17	0	1039	0	0	0	0	0	2212
12:00 PM	16	255	0	0	271	1	0	20	0	21	0	255	6	0	261	0	0	0	0	0	553
12:15 PM	22	240	0	0	262	3	0	33	0	36	0	266	6	0	272	0	0	0	0	0	570
12:30 PM	18	263	0	0	281	5	0	24	1	30	0	239	5	0	244	0	0	0	0	0	555
12:45 PM	21	298	0	0	319	2	0	21	0	23	0	293	6	0	299	0	0	0	0	0	641
Total	77	1056	0	0	1133	11	0	98	1	110	0	1053	23	0	1076	0	0	0	0	0	2319
01:00 PM	23	286	0	0	309	2	0	25	0	27	0	252	1	0	253	0	0	0	0	0	589
01:15 PM	23	281	0	0	304	1	0	22	0	23	0	285	4	0	289	0	0	0	0	0	616
01:30 PM	17	301	0	0	318	0	0	16	0	16	0	284	4	0	288	0	0	0	0	0	622
01:45 PM	18	280	0	0	298	0	0	29	0	29	0	306	2	0	308	0	0	0	0	0	635
Total	81	1148	0	0	1229	3	0	92	0	95	0	1127	11	0	1138	0	0	0	0	0	2462
02:00 PM	30	300	0	0	330	1	0	16	0	17	0	303	3	0	306	0	0	0	0	0	653
02:15 PM	20	335	0	0	355	0	0	28	0	28	0	285	4	0	289	0	0	0	0	0	672
02:30 PM	33	330	0	0	363	1	0	32	2	35	0	314	2	0	316	0	0	0	0	0	714
02:45 PM	21	298	0	0	319	3	0	27	0	30	0	288	2	0	290	0	0	0	0	0	639
Total	104	1263	0	0	1367	5	0	103	2	110	0	1190	11	0	1201	0	0	0	0	0	2678
03:00 PM	31	355	0	0	386	2	0	23	1	26	0	278	2	0	280	0	0	0	0	0	692
03:15 PM	32	349	0	0	381	3	0	23	1	27	0	394	11	0	405	0	0	0	0	0	813
03:30 PM	43	388	0	0	431	0	0	26	0	26	0	336	4	0	340	0	0	0	0	0	797
03:45 PM	34	380	0	0	414	3	0	62	1	66	0	351	5	0	356	0	0	0	0	0	836
Total	140	1472	0	0	1612	8	0	134	3	145	0	1359	22	0	1381	0	0	0	0	0	3138
04:00 PM	40	413	0	0	453	0	0	57	0	57	0	327	6	0	333	0	0	0	0	0	843
04:15 PM	44	455	0	0	499	2	0	31	0	33	0	376	6	0	382	0	0	0	0	0	914
04:30 PM	32	399	0	0	431	0	0	32	0	32	0	381	3	0	384	0	0	0	0	0	847
04:45 PM	39	446	0	0	485	1	0	29	0	30	0	281	27	0	308	0	0	0	0	0	823
Total	155	1713	0	0	1868	3	0	149	0	152	0	1365	42	0	1407	0	0	0	0	0	3427
05:00 PM	27	439	0	0	466	1	0	23	0	24	0	259	21	0	280	0	0	0	0	0	770

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File Name : #1 HolcombBrdgRd@ScottRd

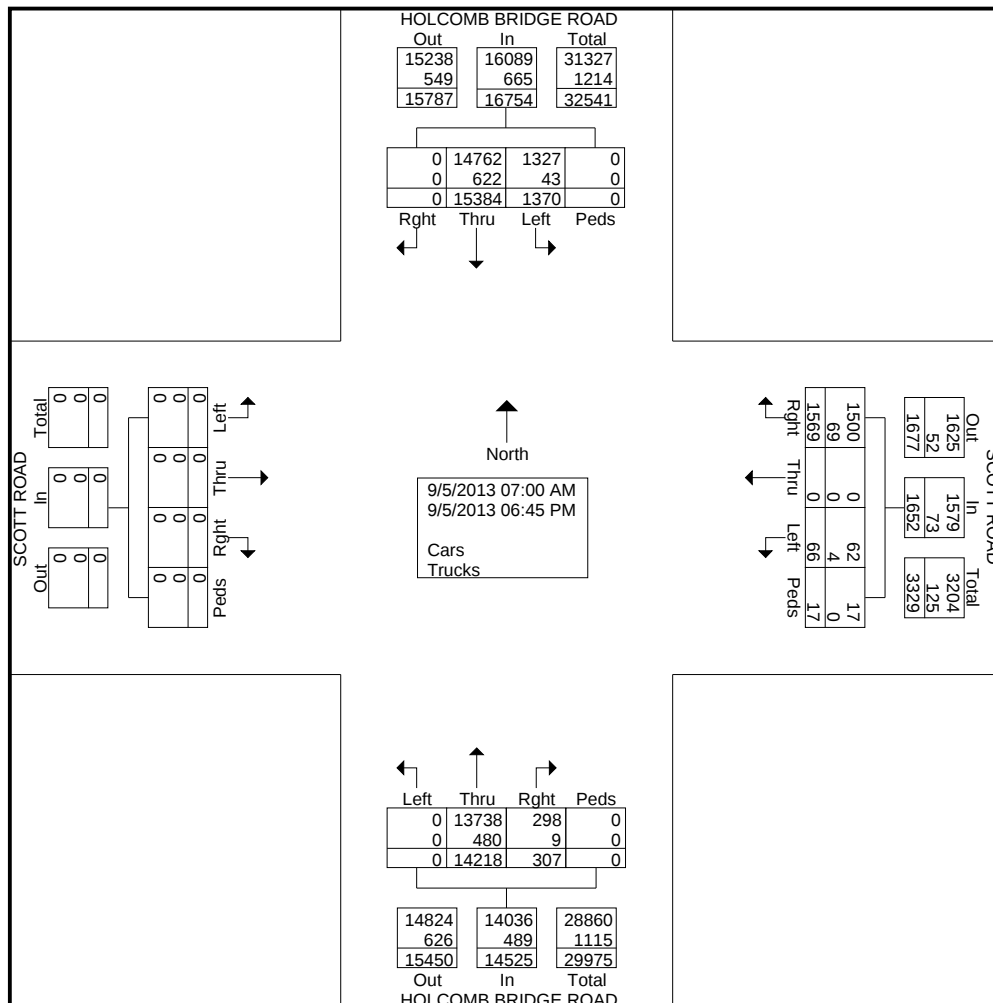
Site Code :

Start Date : 9/5/2013

Page No : 2

Groups Printed- Cars - Trucks

	HOLCOMB BRIDGE ROAD Southbound					SCOTT ROAD Westbound					HOLCOMB BRIDGE ROAD Northbound					SCOTT ROAD Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
05:15 PM	46	415	0	0	461	1	0	32	0	33	0	330	11	0	341	0	0	0	0	0	835
05:30 PM	44	501	0	0	545	1	0	27	0	28	0	276	23	0	299	0	0	0	0	0	872
05:45 PM	58	423	0	0	481	1	0	24	1	26	0	323	19	0	342	0	0	0	0	0	849
Total	175	1778	0	0	1953	4	0	106	1	111	0	1188	74	0	1262	0	0	0	0	0	3326
06:00 PM	58	390	0	0	448	1	0	32	0	33	0	323	9	0	332	0	0	0	0	0	813
06:15 PM	63	416	0	0	479	0	0	41	0	41	0	320	8	0	328	0	0	0	0	0	848
06:30 PM	52	427	0	0	479	2	0	41	1	44	0	304	12	0	316	0	0	0	0	0	839
06:45 PM	41	417	0	0	458	1	0	23	1	25	0	302	7	0	309	0	0	0	0	0	792
Total	214	1650	0	0	1864	4	0	137	2	143	0	1249	36	0	1285	0	0	0	0	0	3292
Grand Total	1370	15384	0	0	16754	66	0	1569	17	1652	0	14218	307	0	14525	0	0	0	0	0	32931
Apprch %	8.2	91.8	0	0		4	0	95	1		0	97.9	2.1	0		0	0	0	0	0	
Total %	4.2	46.7	0	0	50.9	0.2	0	4.8	0.1	5	0	43.2	0.9	0	44.1	0	0	0	0	0	
Cars	1327	14762	0	0	16089	62	0	1500	17	1579	0	13738	298	0	14036	0	0	0	0	0	31704
% Cars	96.9	96	0	0	96	93.9	0	95.6	100	95.6	0	96.6	97.1	0	96.6	0	0	0	0	0	96.3
Trucks	43	622	0	0	665	4	0	69	0	73	0	480	9	0	489	0	0	0	0	0	1227
% Trucks	3.1	4	0	0	4	6.1	0	4.4	0	4.4	0	3.4	2.9	0	3.4	0	0	0	0	0	3.7



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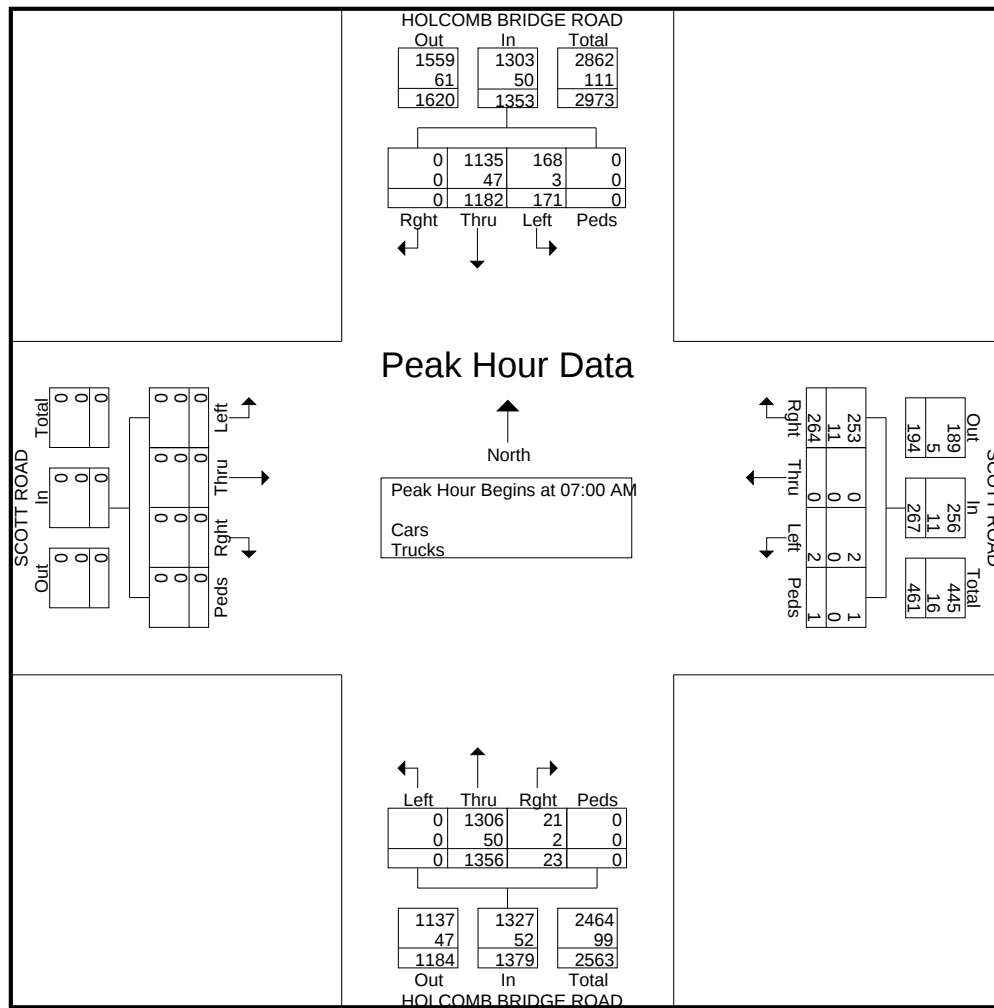
File Name : #1 HolcombBrdgRd@ScottRd

Site Code :

Start Date : 9/5/2013

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	HOLCOMB BRIDGE ROAD Southbound					SCOTT ROAD Westbound					HOLCOMB BRIDGE ROAD Northbound					SCOTT ROAD Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	36	324	0	0	360	0	0	52	0	52	0	313	6	0	319	0	0	0	0	0	731
07:15 AM	43	277	0	0	320	1	0	70	0	71	0	365	4	0	369	0	0	0	0	0	760
07:30 AM	67	282	0	0	349	1	0	90	0	91	0	359	3	0	362	0	0	0	0	0	802
07:45 AM	25	299	0	0	324	0	0	52	1	53	0	319	10	0	329	0	0	0	0	0	706
Total Volume	171	1182	0	0	1353	2	0	264	1	267	0	1356	23	0	1379	0	0	0	0	0	2999
% App. Total	12.6	87.4	0	0		0.7	0	98.9	0.4		0	98.3	1.7	0		0	0	0	0		
PHF	.638	.912	.000	.000	.940	.500	.000	.733	.250	.734	.000	.929	.575	.000	.934	.000	.000	.000	.000	.000	.935
Cars	168	1135										1306									
% Cars	98.2	96.0	0	0	96.3	100	0	95.8	100	95.9	0	96.3	91.3	0	96.2	0	0	0	0	0	96.2
Trucks	3	47	0	0	50	0	0	11	0	11	0	50	2	0	52	0	0	0	0	0	113
% Trucks	1.8	4.0	0	0	3.7	0	0	4.2	0	4.1	0	3.7	8.7	0	3.8	0	0	0	0	0	3.8



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File Name : #1 HolcombBrdgRd@ScottRd

Site Code :

Start Date : 9/5/2013

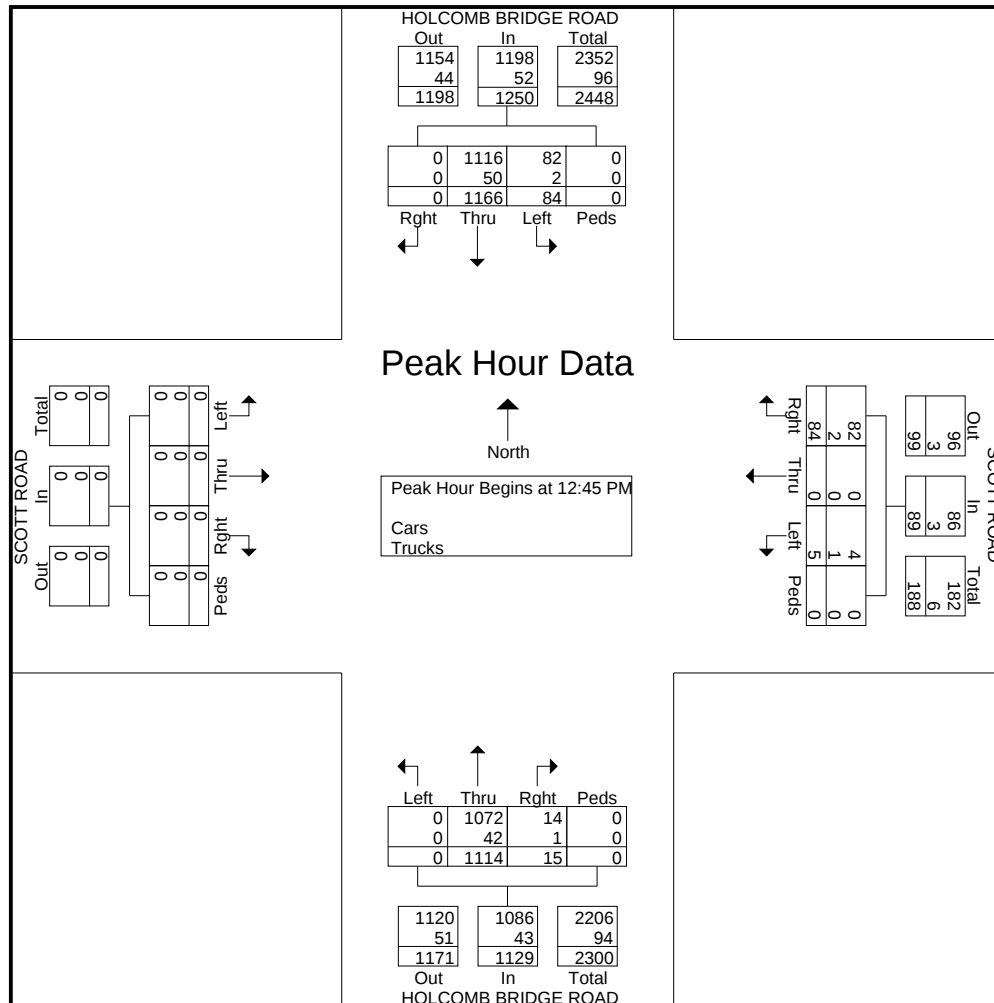
Page No : 4

	HOLCOMB BRIDGE ROAD Southbound					SCOTT ROAD Westbound					HOLCOMB BRIDGE ROAD Northbound					SCOTT ROAD Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total

Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 12:45 PM

12:45 PM	21	298	0	0	319	2	0	21	0	23	0	293	6	0	299	0	0	0	0	0	641
01:00 PM	23	286	0	0	309	2	0	25	0	27	0	252	1	0	253	0	0	0	0	0	589
01:15 PM	23	281	0	0	304	1	0	22	0	23	0	285	4	0	289	0	0	0	0	0	616
01:30 PM	17	301	0	0	318	0	0	16	0	16	0	284	4	0	288	0	0	0	0	0	622
Total Volume	84	1166	0	0	1250	5	0	84	0	89	0	1114	15	0	1129	0	0	0	0	0	2468
% App. Total	6.7	93.3	0	0		5.6	0	94.4	0		0	98.7	1.3	0		0	0	0	0	0	
PHF	.913	.968	.000	.000	.980	.625	.000	.840	.000	.824	.000	.951	.625	.000	.944	.000	.000	.000	.000	.000	.963
Cars	82	1116										1072									
% Cars	97.6	95.7	0	0	95.8	80.0	0	97.6	0	96.6	0	96.2	93.3	0	96.2	0	0	0	0	0	96.0
Trucks	2	50	0	0	52	1	0	2	0	3	0	42	1	0	43	0	0	0	0	0	98
% Trucks	2.4	4.3	0	0	4.2	20.0	0	2.4	0	3.4	0	3.8	6.7	0	3.8	0	0	0	0	0	4.0



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File Name : #1 HolcombBrdgRd@ScottRd

Site Code :

Start Date : 9/5/2013

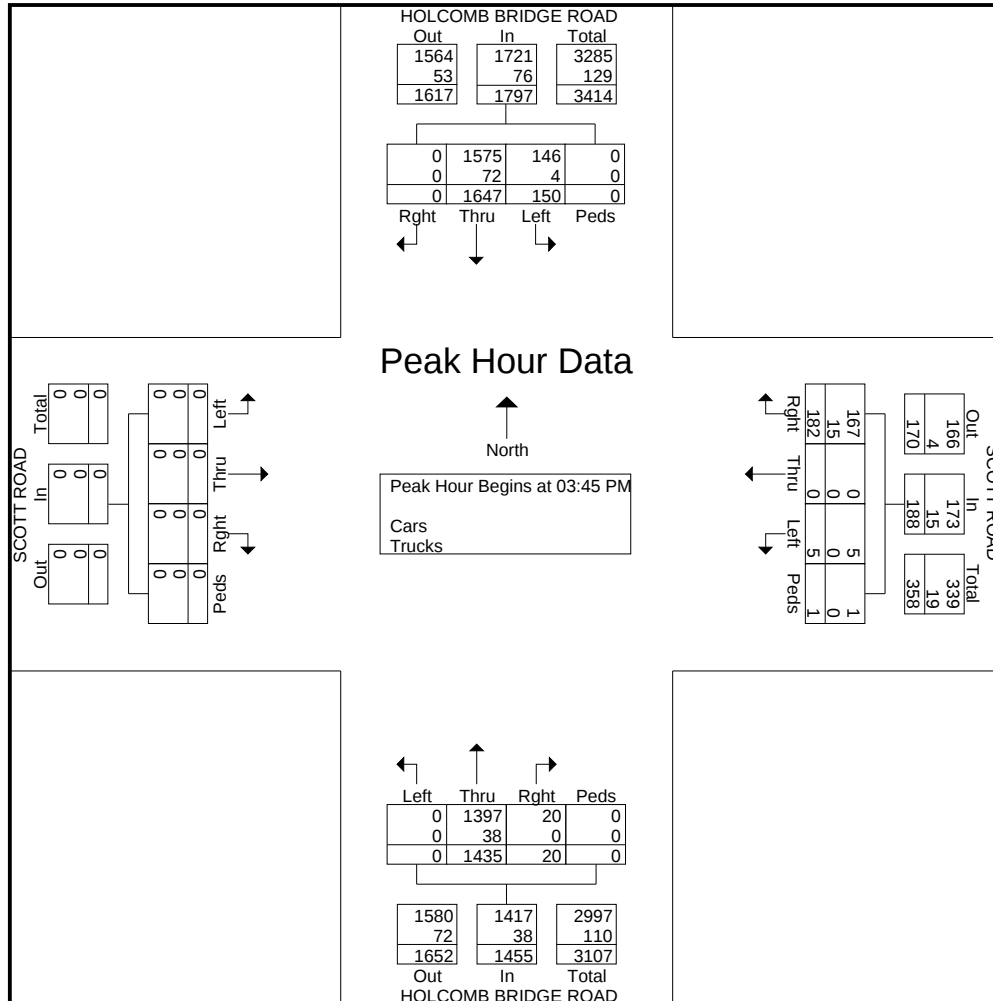
Page No : 5

	HOLCOMB BRIDGE ROAD Southbound					SCOTT ROAD Westbound					HOLCOMB BRIDGE ROAD Northbound					SCOTT ROAD Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total

Peak Hour Analysis From 02:00 PM to 06:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 03:45 PM

03:45 PM	34	380	0	0	414	3	0	62	1	66	0	351	5	0	356	0	0	0	0	0	836
04:00 PM	40	413	0	0	453	0	0	57	0	57	0	327	6	0	333	0	0	0	0	0	843
04:15 PM	44	455	0	0	499	2	0	31	0	33	0	376	6	0	382	0	0	0	0	0	914
04:30 PM	32	399	0	0	431	0	0	32	0	32	0	381	3	0	384	0	0	0	0	0	847
Total Volume	150	1647	0	0	1797	5	0	182	1	188	0	1435	20	0	1455	0	0	0	0	0	3440
% App. Total	8.3	91.7	0	0		2.7	0	96.8	0.5		0	98.6	1.4	0		0	0	0	0	0	
PHF	.852	.905	.000	.000	.900	.417	.000	.734	.250	.712	.000	.942	.833	.000	.947	.000	.000	.000	.000	.000	.941
Cars	146	1575										1397									
% Cars	97.3	95.6	0	0	95.8	100	0	91.8	100	92.0	0	97.4	100	0	97.4	0	0	0	0	0	96.3
Trucks	4	72	0	0	76	0	0	15	0	15	0	38	0	0	38	0	0	0	0	0	129
% Trucks	2.7	4.4	0	0	4.2	0	0	8.2	0	8.0	0	2.6	0	0	2.6	0	0	0	0	0	3.8



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File Name : #2 HolcombBrdgRd@EvesRdAM

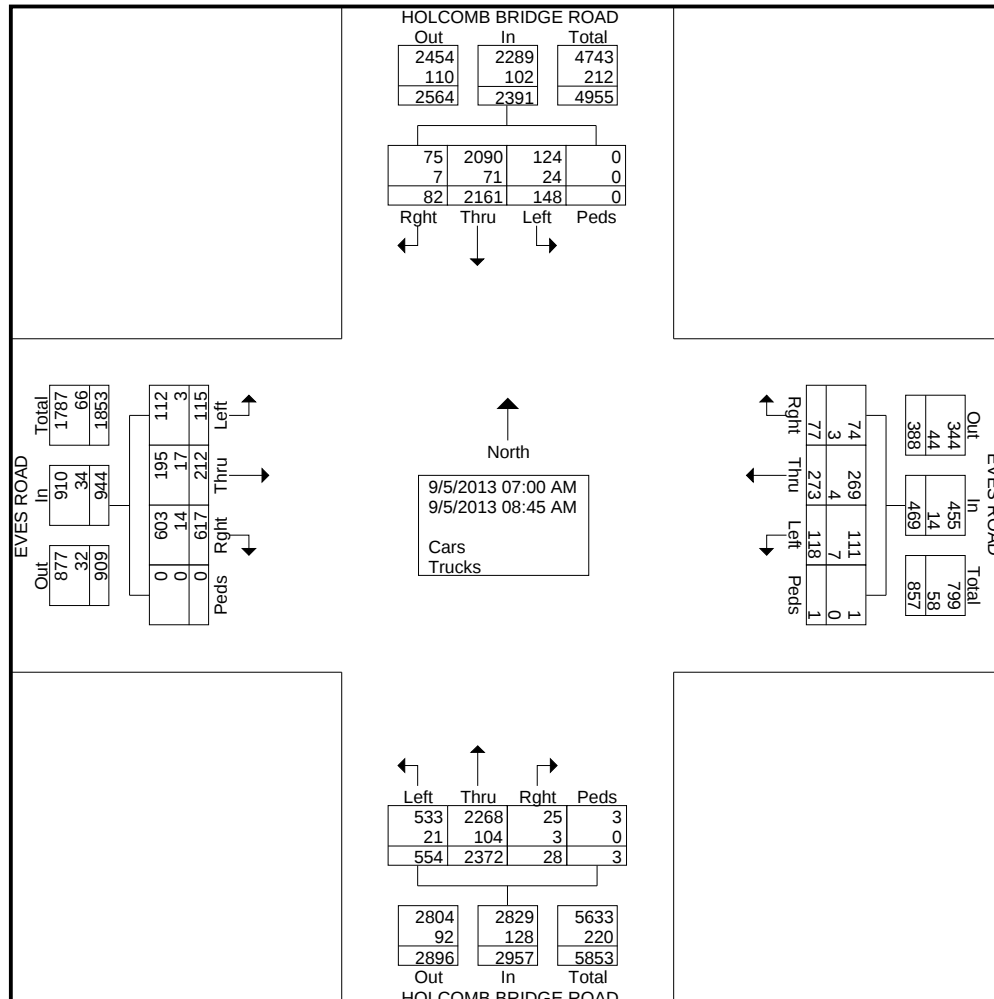
Site Code :

Start Date : 9/5/2013

Page No : 1

Groups Printed- Cars - Trucks

	HOLCOMB BRIDGE ROAD Southbound					EVES ROAD Westbound					HOLCOMB BRIDGE ROAD Northbound					EVES ROAD Eastbound					
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	15	314	11	0	340	13	23	5	0	41	68	296	4	0	368	15	12	57	0	84	833
07:15 AM	17	238	4	0	259	19	45	12	0	76	109	352	4	1	466	32	39	117	0	188	989
07:30 AM	13	303	10	0	326	20	40	10	0	70	87	332	3	0	422	20	34	115	0	169	987
07:45 AM	24	276	11	0	311	12	26	12	1	51	69	310	3	0	382	13	33	65	0	111	855
Total	69	1131	36	0	1236	64	134	39	1	238	333	1290	14	1	1638	80	118	354	0	552	3664
08:00 AM	26	241	9	0	276	22	56	13	0	91	61	263	6	0	330	11	34	73	0	118	815
08:15 AM	20	275	9	0	304	15	36	9	0	60	66	291	5	2	364	9	28	58	0	95	823
08:30 AM	19	294	12	0	325	7	24	6	0	37	48	281	3	0	332	6	22	80	0	108	802
08:45 AM	14	220	16	0	250	10	23	10	0	43	46	247	0	0	293	9	10	52	0	71	657
Total	79	1030	46	0	1155	54	139	38	0	231	221	1082	14	2	1319	35	94	263	0	392	3097
Grand Total	148	2161	82	0	2391	118	273	77	1	469	554	2372	28	3	2957	115	212	617	0	944	6761
Apprch %	6.2	90.4	3.4	0		25.2	58.2	16.4	0.2		18.7	80.2	0.9	0.1		12.2	22.5	65.4	0		
Total %	2.2	32	1.2	0	35.4	1.7	4	1.1	0	6.9	8.2	35.1	0.4	0	43.7	1.7	3.1	9.1	0	14	
Cars	124	2090	75	0	2289	111	269	74	1	455	533	2268	25	3	2829	112	195	603	0	910	6483
% Cars	83.8	96.7	91.5	0	95.7	94.1	98.5	96.1	100	97	96.2	95.6	89.3	100	95.7	97.4	92	97.7	0	96.4	95.9
Trucks	24	71	7	0	102	7	4	3	0	14	21	104	3	0	128	3	17	14	0	34	278
% Trucks	16.2	3.3	8.5	0	4.3	5.9	1.5	3.9	0	3	3.8	4.4	10.7	0	4.3	2.6	8	2.3	0	3.6	4.1



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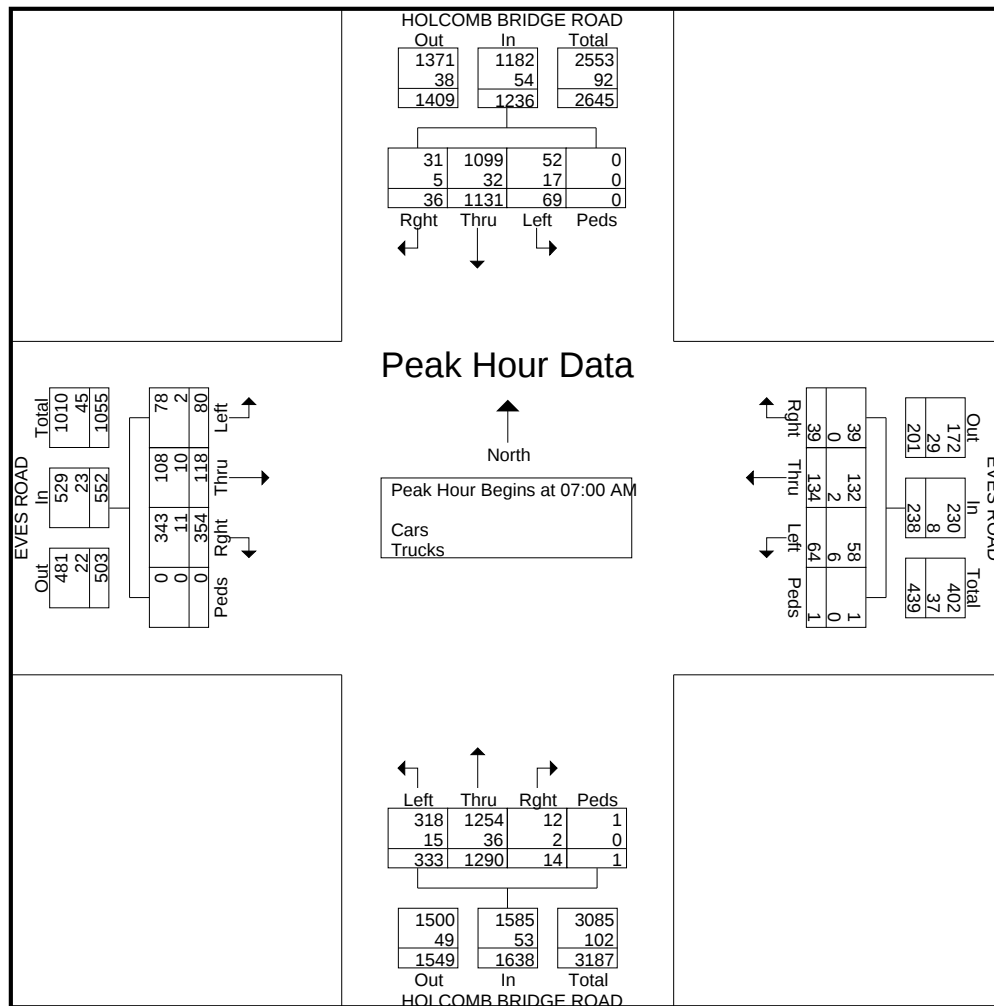
File Name : #2 HolcombBrdgRd@EvesRdAM

Site Code :

Start Date : 9/5/2013

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	HOLCOMB BRIDGE ROAD Southbound					EVES ROAD Westbound					HOLCOMB BRIDGE ROAD Northbound					EVES ROAD Eastbound					
Start Time	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	15	314	11	0	340	13	23	5	0	41	68	296	4	0	368	15	12	57	0	84	833
07:15 AM	17	238	4	0	259	19	45	12	0	76	109	352	4	1	466	32	39	117	0	188	989
07:30 AM	13	303	10	0	326	20	40	10	0	70	87	332	3	0	422	20	34	115	0	169	987
07:45 AM	24	276	11	0	311	12	26	12	1	51	69	310	3	0	382	13	33	65	0	111	855
Total Volume	69	1131	36	0	1236	64	134	39	1	238	333	1290	14	1	1638	80	118	354	0	552	3664
% App. Total	5.6	91.5	2.9	0		26.9	56.3	16.4	0.4		20.3	78.8	0.9	0.1		14.5	21.4	64.1	0		
PHF	.719	.900	.818	.000	.909	.800	.744	.813	.250	.783	.764	.916	.875	.250	.879	.625	.756	.756	.000	.734	.926
Cars	52	1099										1254									
% Cars	75.4	97.2	86.1	0	95.6	90.6	98.5	100	100	96.6	95.5	97.2	85.7	100	96.8	97.5	91.5	96.9	0	95.8	96.2
Trucks	17	32	5	0	54	6	2	0	0	8	15	36	2	0	53	2	10	11	0	23	138
% Trucks	24.6	2.8	13.9	0	4.4	9.4	1.5	0	0	3.4	4.5	2.8	14.3	0	3.2	2.5	8.5	3.1	0	4.2	3.8



All Traffic Data Services, Inc

1336 Farmer Road
Conyers, Ga 30012
404-374-1283

File Name : #2 HolcombBrdgRd@EvesRdPM

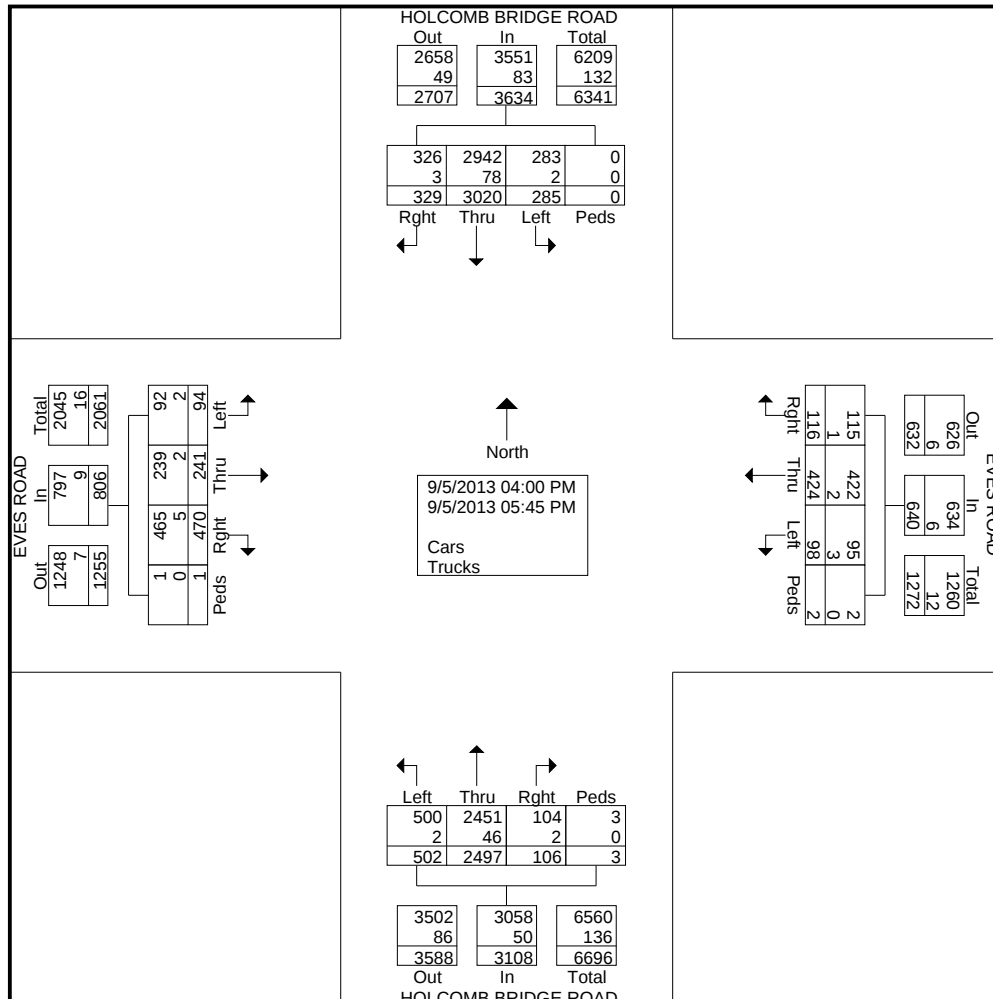
Site Code :

Start Date : 9/5/2013

Page No : 1

Groups Printed- Cars - Trucks

	HOLCOMB BRIDGE ROAD Southbound					EVES ROAD Westbound					HOLCOMB BRIDGE ROAD Northbound					EVES ROAD Eastbound					
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
04:00 PM	24	354	28	0	406	15	24	22	1	62	39	279	3	0	321	23	23	35	0	81	870
04:15 PM	34	415	26	0	475	14	22	17	0	53	59	338	4	0	401	18	27	59	0	104	1033
04:30 PM	36	295	29	0	360	15	30	16	0	61	67	365	7	0	439	8	24	58	0	90	950
04:45 PM	40	392	53	0	485	9	48	12	1	70	77	311	13	1	402	16	23	64	0	103	1060
Total	134	1456	136	0	1726	53	124	67	2	246	242	1293	27	1	1563	65	97	216	0	378	3913
05:00 PM	39	384	48	0	471	12	68	11	0	91	66	293	24	1	384	10	29	62	0	101	1047
05:15 PM	42	390	41	0	473	9	76	16	0	101	62	302	25	1	390	7	45	70	1	123	1087
05:30 PM	36	434	52	0	522	10	81	8	0	99	56	295	16	0	367	4	35	49	0	88	1076
05:45 PM	34	356	52	0	442	14	75	14	0	103	76	314	14	0	404	8	35	73	0	116	1065
Total	151	1564	193	0	1908	45	300	49	0	394	260	1204	79	2	1545	29	144	254	1	428	4275
Grand Total	285	3020	329	0	3634	98	424	116	2	640	502	2497	106	3	3108	94	241	470	1	806	8188
Apprch %	7.8	83.1	9.1	0		15.3	66.2	18.1	0.3		16.2	80.3	3.4	0.1		11.7	29.9	58.3	0.1		
Total %	3.5	36.9	4	0	44.4	1.2	5.2	1.4	0	7.8	6.1	30.5	1.3	0	38	1.1	2.9	5.7	0	9.8	
Cars	283	2942	326	0	3551	95	422	115	2	634	500	2451	104	3	3058	92	239	465	1	797	8040
% Cars	99.3	97.4	99.1	0	97.7	96.9	99.5	99.1	100	99.1	99.6	98.2	98.1	100	98.4	97.9	99.2	98.9	100	98.9	98.2
Trucks	2	78	3	0	83	3	2	1	0	6	2	46	2	0	50	2	2	5	0	9	148
% Trucks	0.7	2.6	0.9	0	2.3	3.1	0.5	0.9	0	0.9	0.4	1.8	1.9	0	1.6	2.1	0.8	1.1	0	1.1	1.8



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1336 Farmer Road
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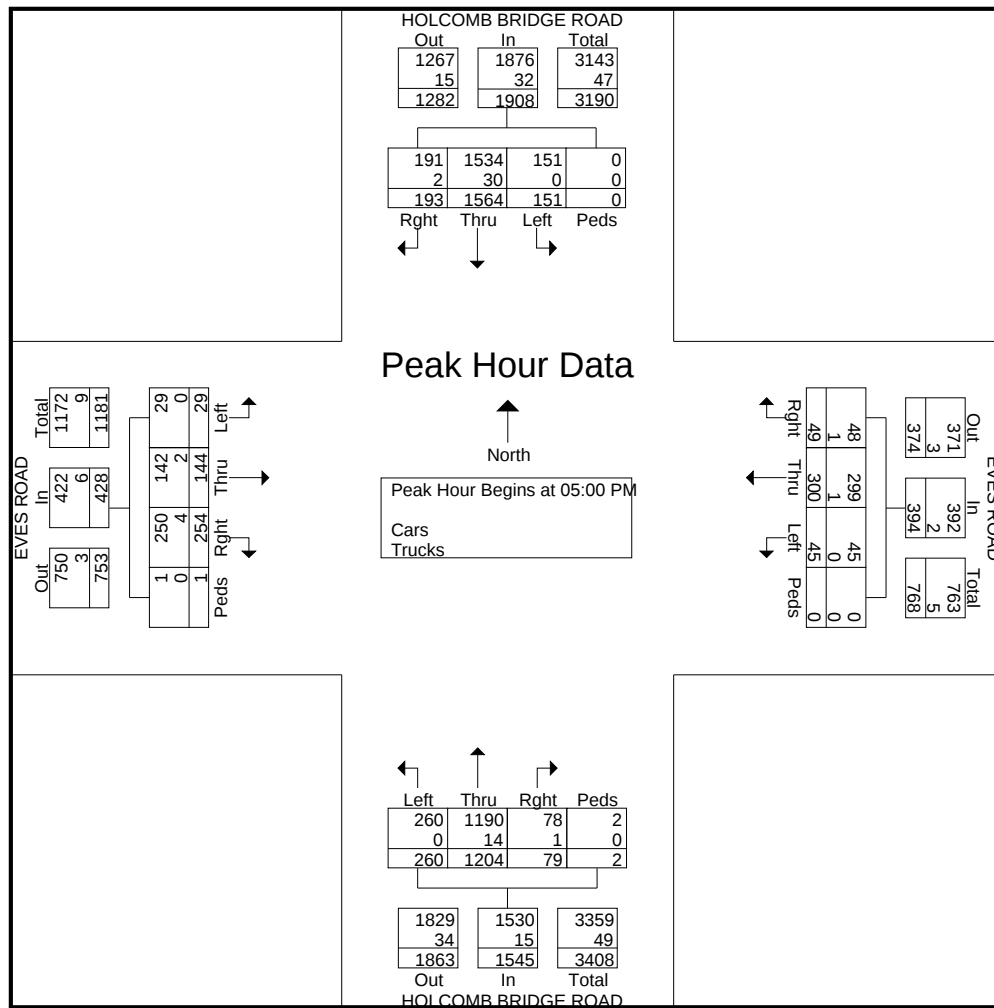
File Name : #2 HolcombBrdgRd@EvesRdPM

Site Code :

Start Date : 9/5/2013

Page No : 2

	HOLCOMB BRIDGE ROAD Southbound					EVES ROAD Westbound					HOLCOMB BRIDGE ROAD Northbound					EVES ROAD Eastbound					
Start Time	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	39	384	48	0	471	12	68	11	0	91	66	293	24	1	384	10	29	62	0	101	1047
05:15 PM	42	390	41	0	473	9	76	16	0	101	62	302	25	1	390	7	45	70	1	123	1087
05:30 PM	36	434	52	0	522	10	81	8	0	99	56	295	16	0	367	4	35	49	0	88	1076
05:45 PM	34	356	52	0	442	14	75	14	0	103	76	314	14	0	404	8	35	73	0	116	1065
Total Volume	151	1564	193	0	1908	45	300	49	0	394	260	1204	79	2	1545	29	144	254	1	428	4275
% App. Total	7.9	82	10.1	0		11.4	76.1	12.4	0		16.8	77.9	5.1	0.1		6.8	33.6	59.3	0.2		
PHF	.899	.901	.928	.000	.914	.804	.926	.766	.000	.956	.855	.959	.790	.500	.956	.725	.800	.870	.250	.870	.983
Cars	151	1534										1190									
% Cars	100	98.1	99.0	0	98.3	100	99.7	98.0	0	99.5	100	98.8	98.7	100	99.0	100	98.6	98.4	100	98.6	98.7
Trucks	0	30	2	0	32	0	1	1	0	2	0	14	1	0	15	0	2	4	0	6	55
% Trucks	0	1.9	1.0	0	1.7	0	0.3	2.0	0	0.5	0	1.2	1.3	0	1.0	0	1.4	1.6	0	1.4	1.3



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1336 Farmer Road
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404-374-1283

File Name : #3 ScottRd@EvesRdAM

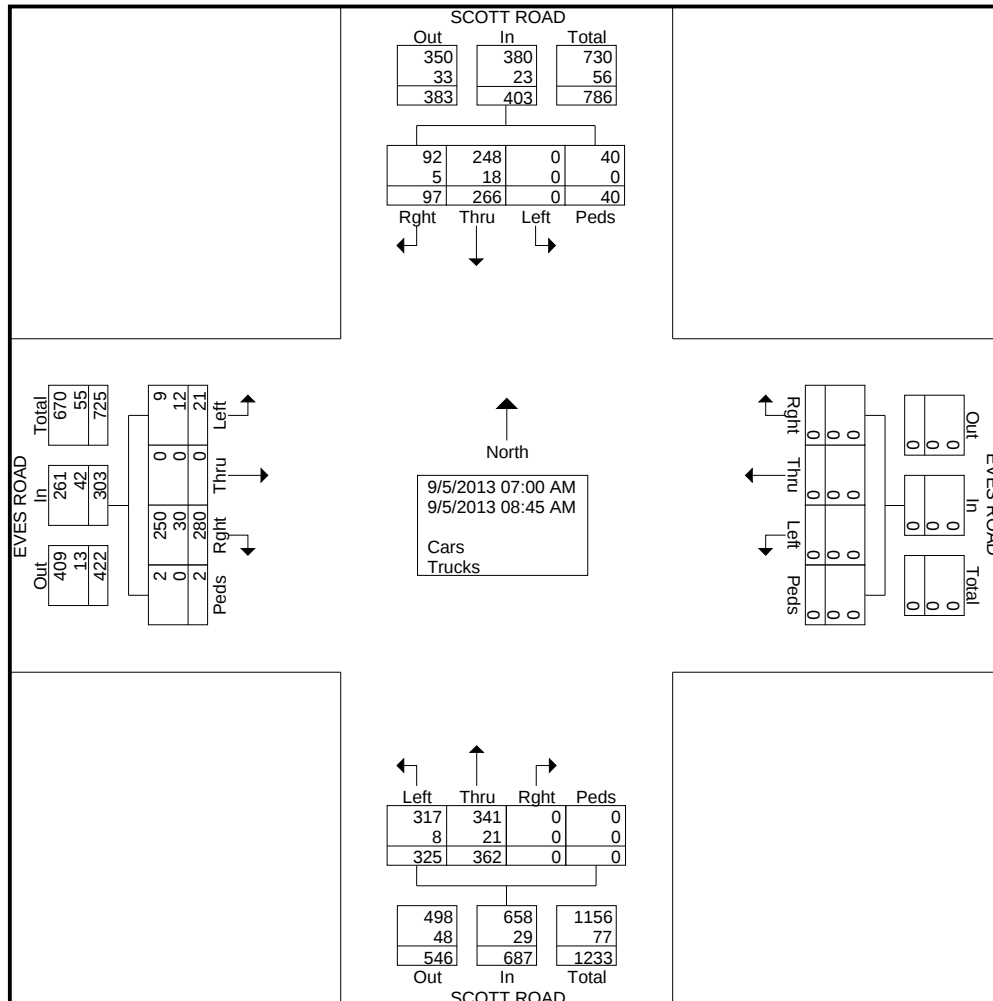
Site Code :

Start Date : 9/5/2013

Page No : 1

Groups Printed- Cars - Trucks

	SCOTT ROAD Southbound					EVES ROAD Westbound					SCOTT ROAD Northbound					EVES ROAD Eastbound					
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	29	14	0	43	0	0	0	0	0	28	71	0	0	99	10	0	16	0	26	168
07:15 AM	0	39	15	0	54	0	0	0	0	0	35	57	0	0	92	4	0	42	0	46	192
07:30 AM	0	53	13	4	70	0	0	0	0	0	44	51	0	0	95	0	0	43	0	43	208
07:45 AM	0	33	14	6	53	0	0	0	0	0	44	34	0	0	78	0	0	47	0	47	178
Total	0	154	56	10	220	0	0	0	0	0	151	213	0	0	364	14	0	148	0	162	746
08:00 AM	0	32	14	8	54	0	0	0	0	0	72	45	0	0	117	1	0	47	0	48	219
08:15 AM	0	42	12	18	72	0	0	0	0	0	50	46	0	0	96	4	0	47	0	51	219
08:30 AM	0	20	11	2	33	0	0	0	0	0	34	31	0	0	65	0	0	23	0	23	121
08:45 AM	0	18	4	2	24	0	0	0	0	0	18	27	0	0	45	2	0	15	2	19	88
Total	0	112	41	30	183	0	0	0	0	0	174	149	0	0	323	7	0	132	2	141	647
Grand Total	0	266	97	40	403	0	0	0	0	0	325	362	0	0	687	21	0	280	2	303	1393
Apprch %	0	66	24.1	9.9		0	0	0	0		47.3	52.7	0	0		6.9	0	92.4	0.7		
Total %	0	19.1	7	2.9	28.9	0	0	0	0	0	23.3	26	0	0	49.3	1.5	0	20.1	0.1	21.8	
Cars	0	248	92	40	380	0	0	0	0	0	317	341	0	0	658	9	0	250	2	261	1299
% Cars	0	93.2	94.8	100	94.3	0	0	0	0	0	97.5	94.2	0	0	95.8	42.9	0	89.3	100	86.1	93.3
Trucks	0	18	5	0	23	0	0	0	0	0	8	21	0	0	29	12	0	30	0	42	94
% Trucks	0	6.8	5.2	0	5.7	0	0	0	0	0	2.5	5.8	0	0	4.2	57.1	0	10.7	0	13.9	6.7



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1336 Farmer Road
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404-374-1283

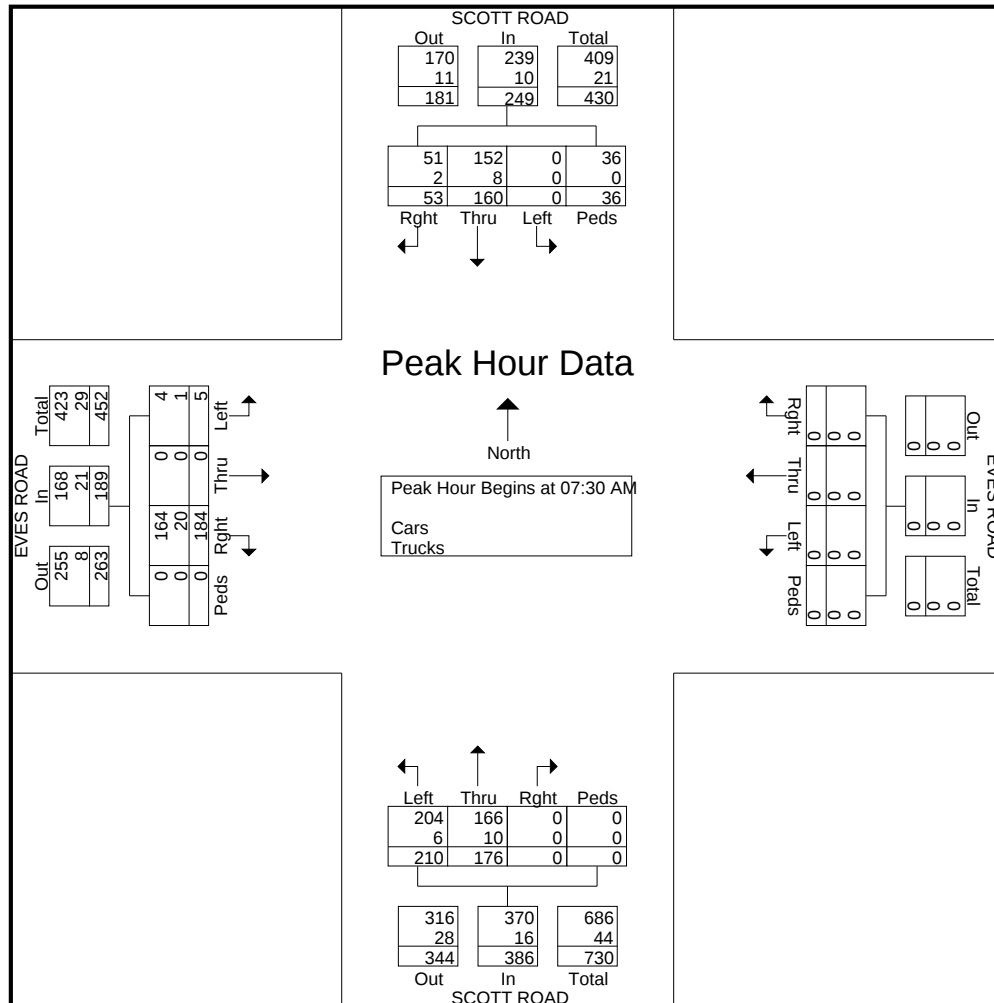
File Name : #3 ScottRd@EvesRdAM

Site Code :

Start Date : 9/5/2013

Page No : 2

	SCOTT ROAD Southbound					EVES ROAD Westbound					SCOTT ROAD Northbound					EVES ROAD Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	0	53	13	4	70	0	0	0	0	0	44	51	0	0	95	0	0	43	0	43	208
07:45 AM	0	33	14	6	53	0	0	0	0	0	44	34	0	0	78	0	0	47	0	47	178
08:00 AM	0	32	14	8	54	0	0	0	0	0	72	45	0	0	117	1	0	47	0	48	219
08:15 AM	0	42	12	18	72	0	0	0	0	0	50	46	0	0	96	4	0	47	0	51	219
Total Volume	0	160	53	36	249	0	0	0	0	0	210	176	0	0	386	5	0	184	0	189	824
% App. Total	0	64.3	21.3	14.5		0	0	0	0	0	54.4	45.6	0	0		2.6	0	97.4	0		
PHF	.000	.755	.946	.500	.865	.000	.000	.000	.000	.000	.729	.863	.000	.000	.825	.313	.000	.979	.000	.926	.941
Cars	0	152	51	36	239	0	0	0	0	0	204	166	0	0	370	4	0	164	0	168	777
% Cars	0	95.0	96.2	100	96.0	0	0	0	0	0	97.1	94.3	0	0	95.9	80.0	0	89.1	0	88.9	94.3
Trucks	0	8	2	0	10	0	0	0	0	0	6	10	0	0	16	1	0	20	0	21	47
% Trucks	0	5.0	3.8	0	4.0	0	0	0	0	0	2.9	5.7	0	0	4.1	20.0	0	10.9	0	11.1	5.7



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1336 Farmer Road
Conyers, Ga 30012
404-374-1283

File Name : #3 ScottRd@EvesRdPM

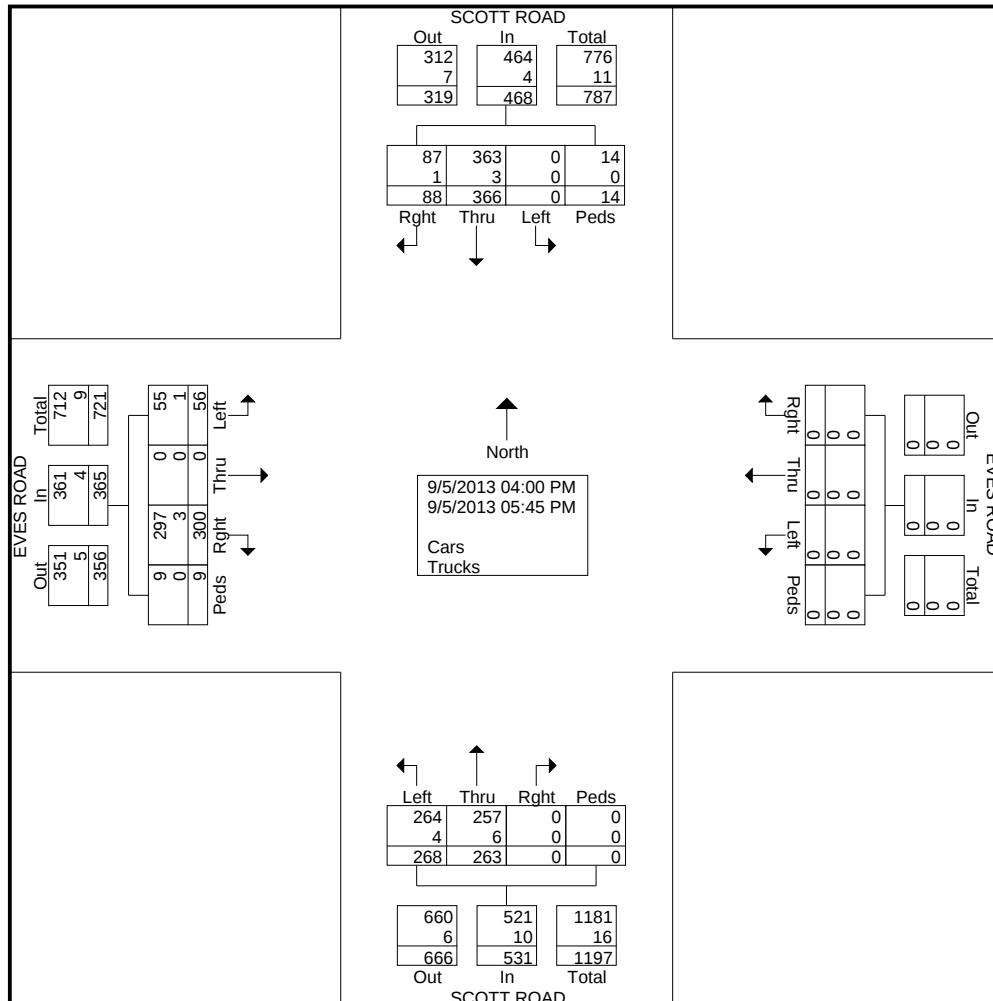
Site Code :

Start Date : 9/5/2013

Page No : 1

Groups Printed- Cars - Trucks

	SCOTT ROAD Southbound					EVES ROAD Westbound					SCOTT ROAD Northbound					EVES ROAD Eastbound					
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
04:00 PM	0	37	6	1	44	0	0	0	0	0	29	41	0	0	70	2	0	23	3	28	142
04:15 PM	0	25	5	4	34	0	0	0	0	0	31	33	0	0	64	3	0	30	0	33	131
04:30 PM	0	33	5	2	40	0	0	0	0	0	26	28	0	0	54	3	0	26	0	29	123
04:45 PM	0	53	11	0	64	0	0	0	0	0	30	33	0	0	63	5	0	41	6	52	179
Total	0	148	27	7	182	0	0	0	0	0	116	135	0	0	251	13	0	120	9	142	575
05:00 PM	0	39	22	1	62	0	0	0	0	0	27	37	0	0	64	20	0	40	0	60	186
05:15 PM	0	63	8	2	73	0	0	0	0	0	48	24	0	0	72	9	0	47	0	56	201
05:30 PM	0	58	19	0	77	0	0	0	0	0	38	37	0	0	75	5	0	42	0	47	199
05:45 PM	0	58	12	4	74	0	0	0	0	0	39	30	0	0	69	9	0	51	0	60	203
Total	0	218	61	7	286	0	0	0	0	0	152	128	0	0	280	43	0	180	0	223	789
Grand Total	0	366	88	14	468	0	0	0	0	0	268	263	0	0	531	56	0	300	9	365	1364
Apprch %	0	78.2	18.8	3		0	0	0	0		50.5	49.5	0	0		15.3	0	82.2	2.5		
Total %	0	26.8	6.5	1	34.3	0	0	0	0	0	19.6	19.3	0	0	38.9	4.1	0	22	0.7	26.8	
Cars	0	363	87	14	464	0	0	0	0	0	264	257	0	0	521	55	0	297	9	361	1346
% Cars	0	99.2	98.9	100	99.1	0	0	0	0	0	98.5	97.7	0	0	98.1	98.2	0	99	100	98.9	98.7
Trucks	0	3	1	0	4	0	0	0	0	0	4	6	0	0	10	1	0	3	0	4	18
% Trucks	0	0.8	1.1	0	0.9	0	0	0	0	0	1.5	2.3	0	0	1.9	1.8	0	1	0	1.1	1.3



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1336 Farmer Road
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404-374-1283

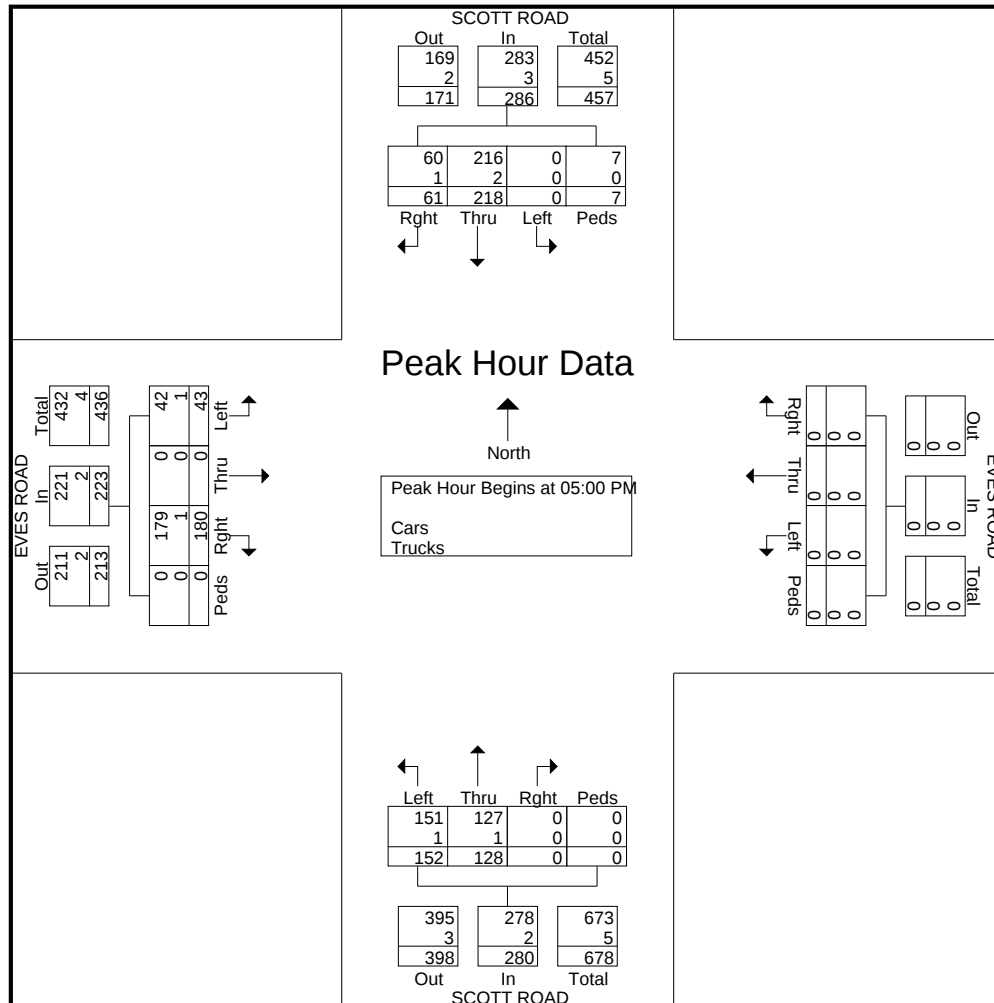
File Name : #3 ScottRd@EvesRdPM

Site Code :

Start Date : 9/5/2013

Page No : 2

	SCOTT ROAD Southbound					EVES ROAD Westbound					SCOTT ROAD Northbound					EVES ROAD Eastbound					
Start Time	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Left	Thru	Rght	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	39	22	1	62	0	0	0	0	0	27	37	0	0	64	20	0	40	0	60	186
05:15 PM	0	63	8	2	73	0	0	0	0	0	48	24	0	0	72	9	0	47	0	56	201
05:30 PM	0	58	19	0	77	0	0	0	0	0	38	37	0	0	75	5	0	42	0	47	199
05:45 PM	0	58	12	4	74	0	0	0	0	0	39	30	0	0	69	9	0	51	0	60	203
Total Volume	0	218	61	7	286	0	0	0	0	0	152	128	0	0	280	43	0	180	0	223	789
% App. Total	0	76.2	21.3	2.4		0	0	0	0	0	54.3	45.7	0	0		19.3	0	80.7	0		
PHF	.000	.865	.693	.438	.929	.000	.000	.000	.000	.000	.792	.865	.000	.000	.933	.538	.000	.882	.000	.929	.972
Cars	0	216	60	7	283	0	0	0	0	0	151	127	0	0	278	42	0	179	0	221	782
% Cars	0	99.1	98.4	100	99.0	0	0	0	0	0	99.3	99.2	0	0	99.3	97.7	0	99.4	0	99.1	99.1
Trucks	0	2	1	0	3	0	0	0	0	0	1	1	0	0	2	1	0	1	0	2	7
% Trucks	0	0.9	1.6	0	1.0	0	0	0	0	0	0.7	0.8	0	0	0.7	2.3	0	0.6	0	0.9	0.9



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1336 Farmer Road
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File Name : #4 OldSchoolRd@ScottRdAM

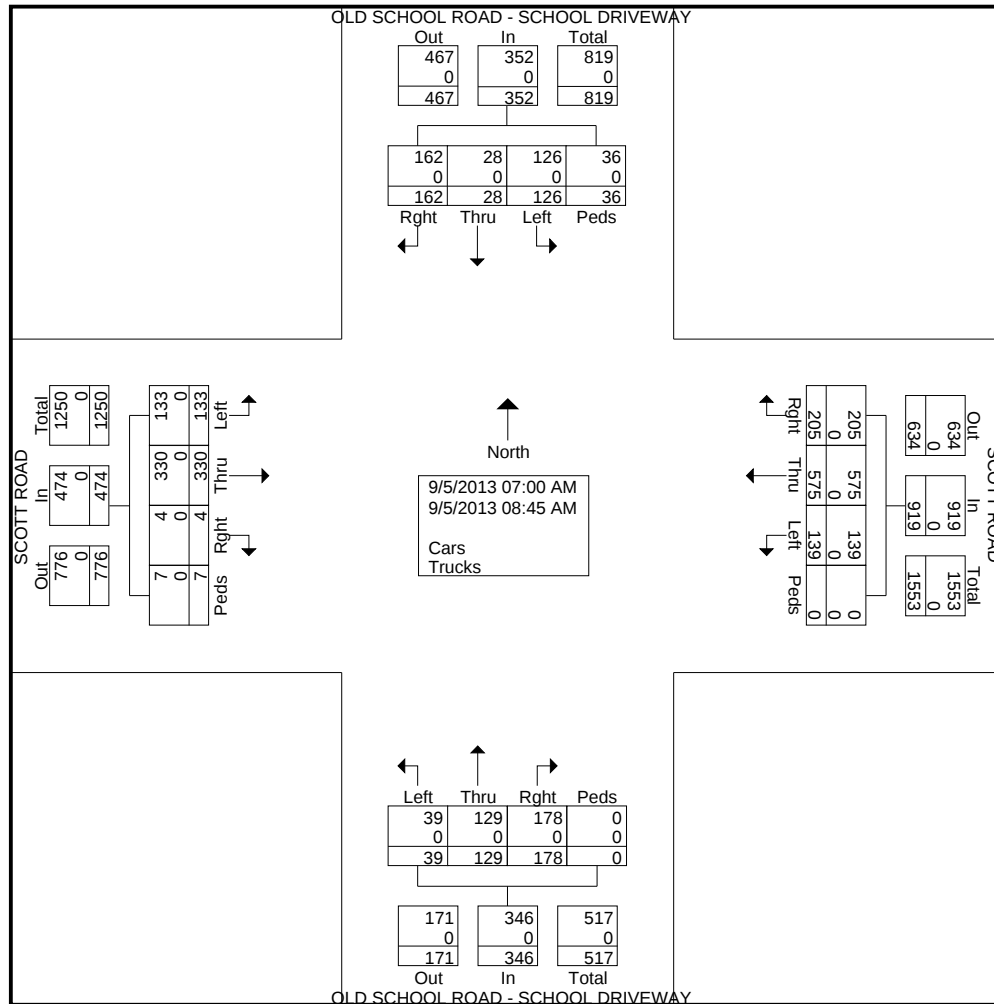
Site Code :

Start Date : 9/5/2013

Page No : 1

Groups Printed- Cars - Trucks

	OLD SCHOOL ROAD - SCHOOL DRIVEWAY Southbound					SCOTT ROAD Westbound					OLD SCHOOL ROAD - SCHOOL DRIVEWAY Northbound					SCOTT ROAD Eastbound					
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	0	5	14	19	16	101	9	0	126	9	4	10	0	23	7	42	0	0	49	217
07:15 AM	12	4	9	17	42	16	76	9	0	101	3	11	27	0	41	16	36	0	0	52	236
07:30 AM	8	5	14	1	28	21	78	30	0	129	1	14	27	0	42	24	54	1	0	79	278
07:45 AM	19	6	28	0	53	20	60	34	0	114	6	25	33	0	64	26	41	0	2	69	300
Total	39	15	56	32	142	73	315	82	0	470	19	54	97	0	170	73	173	1	2	249	1031
08:00 AM	28	6	30	4	68	21	73	52	0	146	6	35	13	0	54	24	38	1	5	68	336
08:15 AM	43	5	58	0	106	14	88	58	0	160	8	33	29	0	70	20	49	2	0	71	407
08:30 AM	12	1	15	0	28	16	45	11	0	72	6	7	13	0	26	12	42	0	0	54	180
08:45 AM	4	1	3	0	8	15	54	2	0	71	0	0	26	0	26	4	28	0	0	32	137
Total	87	13	106	4	210	66	260	123	0	449	20	75	81	0	176	60	157	3	5	225	1060
Grand Total	126	28	162	36	352	139	575	205	0	919	39	129	178	0	346	133	330	4	7	474	2091
Apprch %	35.8	8	46	10.2		15.1	62.6	22.3	0		11.3	37.3	51.4	0		28.1	69.6	0.8	1.5		
Total %	6	1.3	7.7	1.7	16.8	6.6	27.5	9.8	0	44	1.9	6.2	8.5	0	16.5	6.4	15.8	0.2	0.3	22.7	
Cars	126	28	162	36	352	139	575	205	0	919	39	129	178	0	346	133	330	4	7	474	2091
% Cars	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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1336 Farmer Road
Conyers, Ga 30012
404-374-1283

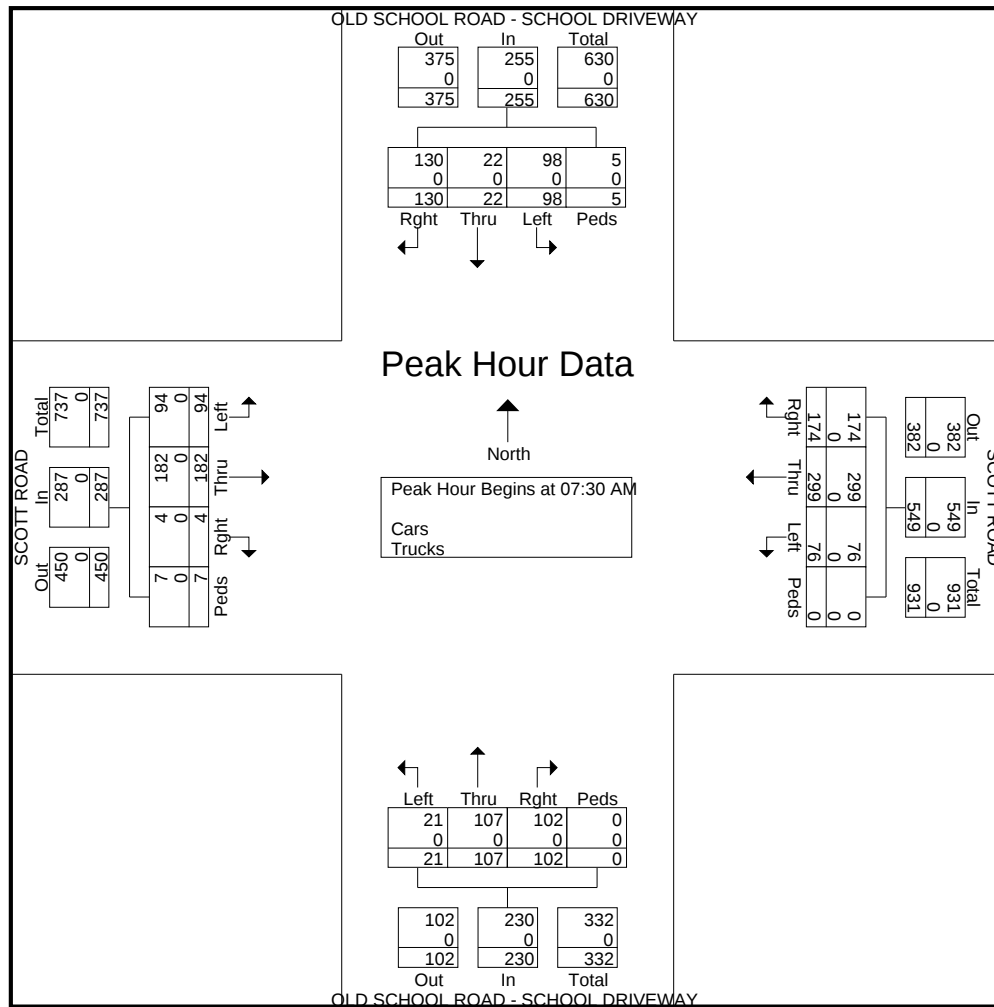
File Name : #4 OldSchoolRd@ScottRdAM

Site Code :

Start Date : 9/5/2013

Page No : 2

	OLD SCHOOL ROAD - SCHOOL DRIVEWAY Southbound					SCOTT ROAD Westbound					OLD SCHOOL ROAD - SCHOOL DRIVEWAY Northbound					SCOTT ROAD Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	8	5	14	1	28	21	78	30	0	129	1	14	27	0	42	24	54	1	0	79	278
07:45 AM	19	6	28	0	53	20	60	34	0	114	6	25	33	0	64	26	41	0	2	69	300
08:00 AM	28	6	30	4	68	21	73	52	0	146	6	35	13	0	54	24	38	1	5	68	336
08:15 AM	43	5	58	0	106	14	88	58	0	160	8	33	29	0	70	20	49	2	0	71	407
Total Volume	98	22	130	5	255	76	299	174	0	549	21	107	102	0	230	94	182	4	7	287	1321
% App. Total	38.4	8.6	51	2		13.8	54.5	31.7	0		9.1	46.5	44.3	0		32.8	63.4	1.4	2.4		
PHF	.570	.917	.560	.313	.601	.905	.849	.750	.000	.858	.656	.764	.773	.000	.821	.904	.843	.500	.350	.908	.811
Cars	98	22	130	5	255	76	299	174	0	549	21	107	102	0	230	94	182	4	7	287	1321
% Cars	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



All Traffic Data Services, Inc

1336 Farmer Road
Conyers, Ga 30012
404-374-1283

File Name : #4 OldSchoolRd@ScottRdPM

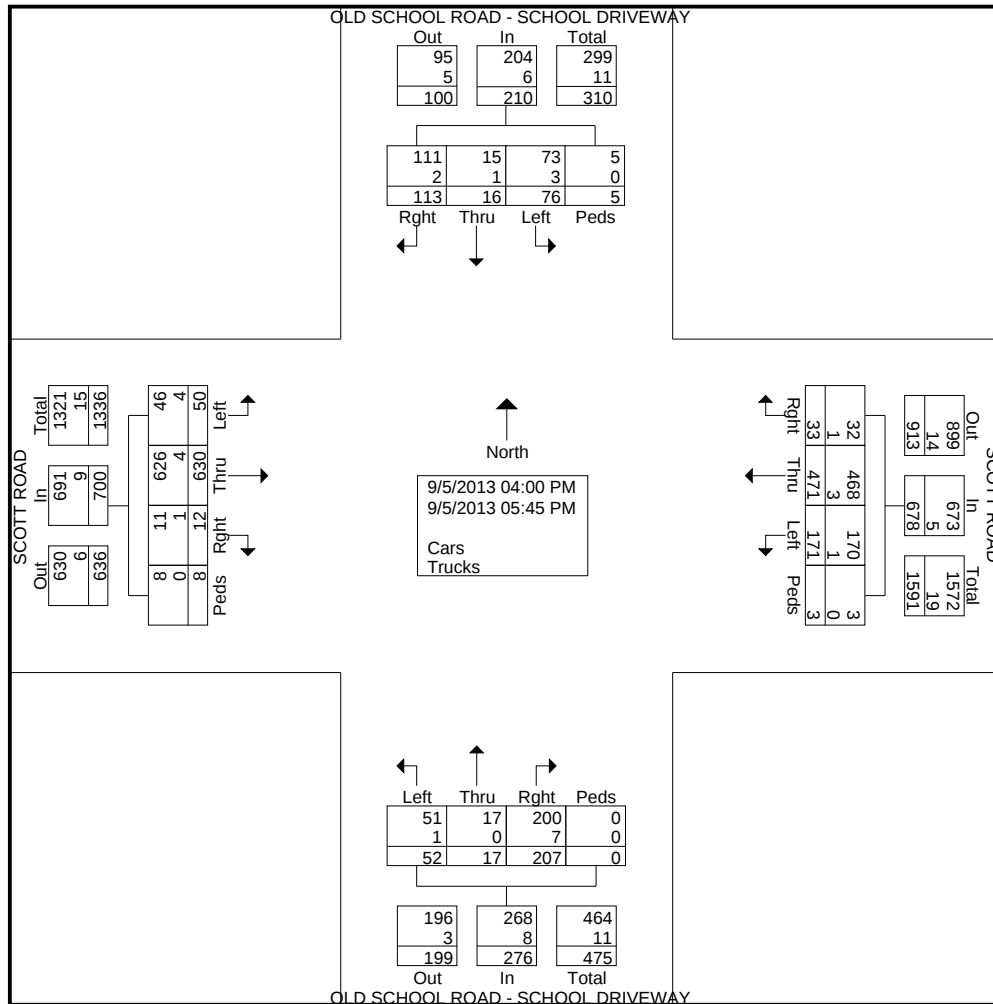
Site Code :

Start Date : 9/5/2013

Page No : 1

Groups Printed- Cars - Trucks

	OLD SCHOOL ROAD - SCHOOL DRIVEWAY Southbound					SCOTT ROAD Westbound					OLD SCHOOL ROAD - SCHOOL DRIVEWAY Northbound					SCOTT ROAD Eastbound					
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
04:00 PM	19	5	34	0	58	24	52	6	2	84	5	6	27	0	38	13	49	2	4	68	248
04:15 PM	16	3	17	0	36	21	49	8	0	78	4	3	27	0	34	6	58	0	0	64	212
04:30 PM	17	3	16	0	36	14	35	5	0	54	2	1	21	0	24	7	61	0	0	68	182
04:45 PM	3	2	5	0	10	14	55	4	0	73	6	1	19	0	26	6	83	1	1	91	200
Total	55	13	72	0	140	73	191	23	2	289	17	11	94	0	122	32	251	3	5	291	842
05:00 PM	13	1	7	1	22	14	58	1	0	73	5	3	23	0	31	3	89	1	2	95	221
05:15 PM	4	1	11	0	16	29	59	2	1	91	6	2	30	0	38	2	101	1	0	104	249
05:30 PM	2	0	10	1	13	30	82	2	0	114	8	0	34	0	42	7	90	5	0	102	271
05:45 PM	2	1	13	3	19	25	81	5	0	111	16	1	26	0	43	6	99	2	1	108	281
Total	21	3	41	5	70	98	280	10	1	389	35	6	113	0	154	18	379	9	3	409	1022
Grand Total	76	16	113	5	210	171	471	33	3	678	52	17	207	0	276	50	630	12	8	700	1864
Apprch %	36.2	7.6	53.8	2.4		25.2	69.5	4.9	0.4		18.8	6.2	75	0		7.1	90	1.7	1.1		
Total %	4.1	0.9	6.1	0.3	11.3	9.2	25.3	1.8	0.2	36.4	2.8	0.9	11.1	0	14.8	2.7	33.8	0.6	0.4	37.6	
Cars	73	15	111	5	204	170	468	32	3	673	51	17	200	0	268	46	626	11	8	691	1836
% Cars	96.1	93.8	98.2	100	97.1	99.4	99.4	97	100	99.3	98.1	100	96.6	0	97.1	92	99.4	91.7	100	98.7	98.5
Trucks	3	1	2	0	6	1	3	1	0	5	1	0	7	0	8	4	4	1	0	9	28
% Trucks	3.9	6.2	1.8	0	2.9	0.6	0.6	3	0	0.7	1.9	0	3.4	0	2.9	8	0.6	8.3	0	1.3	1.5



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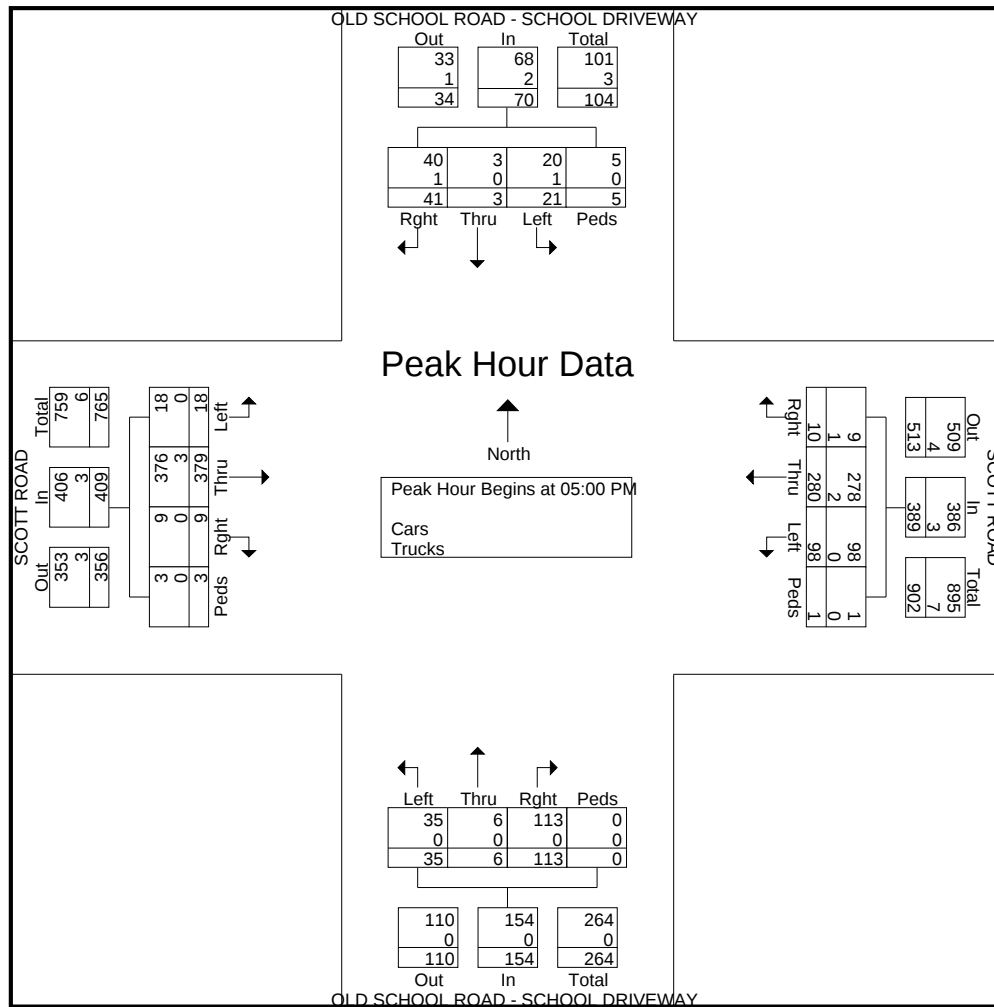
File Name : #4 OldSchoolRd@ScottRdPM

Site Code :

Start Date : 9/5/2013

Page No : 2

	OLD SCHOOL ROAD - SCHOOL DRIVEWAY Southbound					SCOTT ROAD Westbound					OLD SCHOOL ROAD - SCHOOL DRIVEWAY Northbound					SCOTT ROAD Eastbound					
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 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	13	1	7	1	22	14	58	1	0	73	5	3	23	0	31	3	89	1	2	95	221
05:15 PM	4	1	11	0	16	29	59	2	1	91	6	2	30	0	38	2	101	1	0	104	249
05:30 PM	2	0	10	1	13	30	82	2	0	114	8	0	34	0	42	7	90	5	0	102	271
05:45 PM	2	1	13	3	19	25	81	5	0	111	16	1	26	0	43	6	99	2	1	108	281
Total Volume	21	3	41	5	70	98	280	10	1	389	35	6	113	0	154	18	379	9	3	409	1022
% App. Total	30	4.3	58.6	7.1		25.2	72	2.6	0.3		22.7	3.9	73.4	0		4.4	92.7	2.2	0.7		
PHF	.404	.750	.788	.417	.795	.817	.854	.500	.250	.853	.547	.500	.831	.000	.895	.643	.938	.450	.375	.947	.909
Cars	20	3	40	5	68	98	278	9	1	386	35	6	113	0	154	18	376	9	3	406	1014
% Cars	95.2	100	97.6	100	97.1	100	99.3	90.0	100	99.2	100	100	100	0	100	100	99.2	100	100	99.3	99.2
Trucks	1	0	1	0	2	0	2	1	0	3	0	0	0	0	0	0	3	0	0	3	8
% Trucks	4.8	0	2.4	0	2.9	0	0.7	10.0	0	0.8	0	0	0	0	0	0	0.8	0	0	0.7	0.8





APPENDIX B

Signal Timing Data

Programmed EPAC Data

9/11/2013
8:12:47AM

Intersection Name: Scott @ Old Scott

Intersection Alias: Scot@Scot

Access Code: 6413 Channel: 1 Address: 0 Revision: 2.34m

Access Data

Port 2 Comm :19200 Baud

Port 3 Comm :19200 Baud

Phase Data

<u>Vehical Basic Timings</u>							<u>Vehical Density Timings</u>		Time B4	Cars	Time To	Min_Gap
Phase	Min_Grn	Passage	Max1	Max2	Yellow	All Red	Added Initial	Max_Initial	Reduction	Before	Reduce	
1	6	3.0	15	25	4.0	2.0	0.0	0	0	0	0	0.0
2	15	5.0	45	60	4.0	2.3	2.0	20	20	0	20	2.0
4	8	4.0	30	40	4.0	2.0	0.0	0	0	0	0	0.0
5	6	3.0	15	25	4.0	2.0	0.0	0	0	0	0	0.0
6	15	5.0	45	60	4.0	2.3	2.0	20	20	0	20	2.0
8	8	4.0	30	40	4.0	2.0	0.0	0	0	0	0	0.0

<u>Pedestrian Timing</u>			Extended	Actuated	<u>General Control</u>					<u>Miscellaneous</u>					No
Phase	Walk	Ped Clear	Flashing Walk	Ped Clear	Rest in Walk	Initialize	Non-Act Response	Veh Recall	Ped Recall	Recall Delay	Non Lock	Dual Entry	Last Car Passage	Conditional Service	Simultaneous Gap Out
1	0	0	No	0	No	Inactive	None	None	None	5	Yes	No	No	No	No
2	7	24	No	0	No	Green	NonActI	Min	None	0	No	Yes	No	No	No
4	7	31	No	0	No	Inactive	NonActII	None	None	5	Yes	Yes	No	No	No
5	0	0	No	0	No	Inactive	None	None	None	5	Yes	No	No	No	No
6	7	24	No	0	No	Green	NonActI	Min	None	0	No	Yes	No	No	No
8	7	31	No	0	No	Inactive	NonActII	None	None	5	Yes	Yes	No	No	No

Special Sequence				Vehical Detector Phase Assignment					
Phase	Phase Omit	Minus Yellow Phase	Omit Call		Assigned Phase	Mode	Switched Phase	Extend	Delay
1	2	0	0	Vehical Detector Channel :1	1	Veh	6	0.0	4
2	0	0	0	Vehical Detector Channel :3	2	Veh	0	0.0	0
4	0	0	0	Vehical Detector Channel :4	2	Veh	0	0.0	0
5	6	0	0	Vehical Detector Channel :5	2	Veh	0	0.0	0
6	0	0	0	Vehical Detector Channel :6	2	Veh	0	0.0	0
8	0	0	0	Vehical Detector Channel :7	2	Veh	0	0.0	0
				Vehical Detector Channel :9	3	Veh	8	0.0	4
				Vehical Detector Channel :11	4	Veh	0	0.0	4
				Vehical Detector Channel :12	4	Veh	0	0.0	4
				Vehical Detector Channel :13	4	Veh	0	0.0	4
				Vehical Detector Channel :14	4	Veh	0	0.0	4
				Vehical Detector Channel :15	4	Veh	0	0.0	0
				Vehical Detector Channel :17	1	Veh	6	0.0	0
				Vehical Detector Channel :18	3	Veh	0	0.0	4
				Vehical Detector Channel :19	5	Veh	2	0.0	4
				Vehical Detector Channel :21	6	Veh	0	0.0	0
				Vehical Detector Channel :22	6	Veh	0	0.0	0
				Vehical Detector Channel :23	6	Veh	0	0.0	0
				Vehical Detector Channel :24	6	Veh	0	0.0	0
				Vehical Detector Channel :25	6	Veh	0	0.0	0
				Vehical Detector Channel :29	7	Veh	4	0.0	4
				Vehical Detector Channel :31	8	Veh	0	0.0	4
				Vehical Detector Channel :32	8	Veh	0	0.0	4
				Vehical Detector Channel :33	8	Veh	0	0.0	4
				Vehical Detector Channel :34	8	Veh	0	0.0	4
				Vehical Detector Channel :35	8	Veh	0	0.0	0
				Vehical Detector Channel :37	5	Veh	2	0.0	0
				Vehical Detector Channel :38	7	Veh	4	0.0	0

Pedestrian Detector			Special Detector Phase Assignment					
Default Data				Assign Phase	Mode	Switched Phase	Extend	Delay
			:					
			Default Data					

Unit Data				Remote Flash			
General Control				Test A = Flash			
Startup Time: 5sec		Startup State: Flash		Red Revert: 4sec		Flash Channel	
Auto Ped Clear: No		Stop Time Reset: No		Alternate Sequence: 0		Flash Color	
ABC connector Input Modes: 0				Input		Flash	
ABC connector Output Modes: 0		Ring		Respons		Exit	
D connector Input Modes: 0		1		Ring 1		Flash Phase	
D connector Output Modes: 0		2		Ring 2		Exit Phase	
		3		None		None	
		4		None		Ring 2	

Remote Flash				Default Data - No Flash			
Test A = Flash				Default Data - No Flash			
				Default Data - No Flash			
				Default Data - No Flash			
				Default Data - No Flash			

Overlaps															
Phase(s)															
A B C D E F G H I J K L M N O P															

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Trail Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trail Yellow	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Trail Red	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plus Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minus Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring			Phase(s)																	
Phase	Ring	Next Phase	Concurrent Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
				1	2	3	4	1	1	3	3	9	10	11	12	13	14	15	16	
1	1	2																		
2	1	3		5	5	7	7	2	2	4	4									
4	1	1		6	6	8	8	5	6	7	8									
5	2	6																		
6	2	7																		
8	2	5																		

Alternate Sequences

Alternate Sequences															
Phase Pair(s)		2	3	4	5	6	7	8	9	10	11	12	13	14	15
	1	3 4	1 2	5 6	1 2	3 4	1 2	7 8	1 2	3 4	1 2	5 6	1 2	3 4	1 2
	2	0 0	3 4	0 0	5 6	5 6	3 4	0 0	7 8	7 8	3 4	7 8	5 6	5 6	3 4
	3	0 0	0 0	0 0	0 0	5 6	0 0	0 0	0 0	7 8	0 0	7 8	7 8	7 8	5 6
	4	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	7 8

Port 1 Data

BIU	Port	Message
Addr	Status	40

Default Data

Channel Assignment

Control	Channel	Hardware Pin Set		Control	Channel	Hardware Pin Set		Control	Channel	Hardware Pin Set	
Ph.1 Veh	1	1 - Ph.1 RYG	1	Ph.2 Veh	2	2 - Ph.2 RYG	2	Ph.3 Veh	3	3 - Ph.3 RYG	3
Ph.4 Veh	4	4 - Ph.4 RYG	4	Ph.5 Veh	5	5 - Ph.5 RYG	5	Ph.6 Veh	6	6 - Ph.6 RYG	6
Ph.7 Veh	7	7 - Ph.7 RYG	7	Ph.8 Veh	8	8 - Ph.8 RYG	8	Ph.2 Ped	9	10 - Ph.2 DPW	10
Ph.4 Ped	10	12 - Ph.4 DPW	12	Ph.6 Ped	11	14 - Ph.6 DPW	14	Ph.8 Ped	12	16 - Ph.8 DPW	16
Ph.1 OLP	13	17 - Ph.1 RYG	17	Ph.2 OLP	14	18 - Ph.2 RYG	18	Ph.3 OLP	15	19 - Ph.3 RYG	19
Ph.4 OLP	16	20 - Ph.4 RYG	20	Ph.1 Ped	17	9 - Ph.1 DPW	9	Ph.3 Ped	18	11 - Ph.3 DPW	11
Ph.5 Ped	19	13 - Ph.5 DPW	13	Ph.7 Ped	20	15 - Ph.7 DPW	15	Ph.5 OLP	21	21 - Ph.5 RYG	21
Ph.6 OLP	22	22 - Ph.6 RYG	22	Ph.7 OLP	23	23 - Ph.7 RYG	23	Ph.8 OLP	24	24 - Ph.8 RYG	24

Coordination Data

Dial/Split Cycle

General Coordination Data

Operation Mode: 1=Auto	Offset Mode: 0=Beg Grn	Manual Dial: 1
Coordination Mode: 0=Permissive	Force Mode: 0=Plan	Manual Split: 1
Maximun Mode: 2=Max 2	Max Dwell Time: 0	Manual Offset: 1
Correction Mode: 0=Dwell	Yield Period: 0	

Split Times and Phase Modes

Dial / Split

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
-----	--------	----------	-----	--------	----------	-----	--------	----------	-----	--------	----------

Traffic Plan Data

Plan: //	Offset Time:	Alt. Sequence:	Mode:	Rg 2 Lag Time:	Rg 3 Lag Time:	Rg 4 Lag Time:
----------	--------------	----------------	-------	----------------	----------------	----------------

Local TBC Data

Start of Daylight Saving Month: 3 Week: 2 Cycle Zero Reference Hours: 0 Min: 0
End of Daylight Saving Month: 11 Week: 1

Source		Equate Days						
Day		1	2	3	4	5	6	7
2		3	4	5	6	0	0	0

Traffic Data

					PHASE FUNCTION															
<u>Event</u>	<u>Day</u>	<u>Time</u>	<u>D/S/O</u>	<u>flash</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	<u>16</u>
1	2	6:30	0/0/0		X															
2	2	9:0	0/0/4																	
3	2	14:0	0/0/0		X															
4	2	18:30	0/0/4																	

AUX. Events

				Aux Outputs			Det. Diag.	Det. Rpt.	Det. Mult100	Special Function Outputs								
Event	Day	Hour	Min.	1	2	3	D1	D2	D3	Dimming	1	2	3	4	5	6	7	8
1	2	6	55	X														
2	2	8	45															
3	2	14	5	X														
4	2	16	25															

Default Data - No Special Day(s) or Week(s) Programmed

Special Functions

Function	SF1	SF2	SF3	SF4	SF5	SF6	SF7	SF8
Special Function 1	X							
Special Function 2		X						
Special Function 3			X					
Special Function 4				X				
Special Function 5					X			
Special Function 6						X		
Special Function 7							X	
Special Function 8								X

Phase Function

Phase Function Map	PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16

Dimming Data

Channel

Red

Yellow

Green

Alternate

Default Data - No Dimming Programmed

Preemption Data

General Preemption Data									
Ring	Min Grn/Walk Time								
1	10								
2	10								
3	10								
4	10								
Flash > Preempt 1			Preempt 2 = Preempt 3			Preempt 4 = Preempt 5			
Preempt 1 > Preempt 2			Preempt 3 = Preempt 4			Preempt 5 = Preempt 6			

Preempt	Preempt Timers								Select			Track				Dwell	Return		
	Non-Locking	Link to Preempt	Delay	Extend	Duration	MaxCall	Lock-Out		Ped Clear	Yel	Red	Grn	Ped	Yel	Red	Green	Ped Clear	Yel	Red
1	No	0	0	0	0	0	0		8	4.0	2.0	10	8	4.0	2.0	10	8	4.0	2.0
2	No	0	0	0	0	0	0		8	4.0	2.0	10	8	4.0	2.0	10	8	4.0	2.0
3	No	0	0	0	0	0	0		8	4.0	2.0	10	8	4.0	2.0	10	8	4.0	2.0
4	No	0	0	0	0	0	0		8	4.0	2.0	10	8	4.0	2.0	10	8	4.0	2.0
5	No	0	0	0	0	0	0		8	4.0	2.0	10	8	4.0	2.0	10	8	4.0	2.0
6	No	0	0	0	0	0	0		8	4.0	2.0	10	8	4.0	2.0	10	8	4.0	2.0

Preempt 1			Preempt 2			Preempt 3			Preempt 4			Preempt 5			Preempt 6		
Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls
1	No	Yes	1	No	Yes	1	No	Yes	1	No	Yes	1	No	Yes	1	No	Yes
2	Yes	Yes	2	Yes	Yes	2	Yes	Yes	2	Yes	Yes	2	Yes	Yes	2	Yes	Yes
3	No	Yes	3	No	Yes	3	No	Yes	3	No	Yes	3	No	Yes	3	No	Yes
4	No	Yes	4	No	Yes	4	No	Yes	4	No	Yes	4	No	Yes	4	No	Yes
5	No	Yes	5	No	Yes	5	No	Yes	5	No	Yes	5	No	Yes	5	No	Yes
6	Yes	Yes	6	Yes	Yes	6	Yes	Yes	6	Yes	Yes	6	Yes	Yes	6	Yes	Yes
7	No	Yes	7	No	Yes	7	No	Yes	7	No	Yes	7	No	Yes	7	No	Yes
8	No	Yes	8	No	Yes	8	No	Yes	8	No	Yes	8	No	Yes	8	No	Yes

Priority Timers									
Priority	Non-Locking	Delay	Extend	Duration	Dwell	Max_Call	Lock-Out	Skip Phases	
1	No	0	0	0	0	0	0	0=Do not Skip Phases	
2	No	0	0	0	0	0	0	0=Do not Skip Phases	
3	No	0	0	0	0	0	0	0=Do not Skip Phases	
4	No	0	0	0	0	0	0	0=Do not Skip Phases	
5	No	0	0	0	0	0	0	0=Do not Skip Phases	
6	No	0	0	0	0	0	0	0=Do not Skip Phases	

Priority 1			Priority 2			Priority 3			Priority 4			Priority 5			Priority 6		
Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls

Preempt 1									
Vehical Phases					Pedestrian Phases				
Ph.	Track	Dwell	Cycle		Ph	Track	Dwell	Cycle	

Default Data					Default Data				
--------------	--	--	--	--	--------------	--	--	--	--

Preempt 2									
Vehical Phases					Pedestrian Phases				
Ph.	Track	Dwell	Cycle		Ph.	Track	Dwell	Cycle	

Default Data					Default Data				
--------------	--	--	--	--	--------------	--	--	--	--

Preempt 3

Vehical Phases

Ph. TrackDwellCycle

Pedestrian Phases

Ph. TrackDwellCycle

Overlaps

Ovlp. TrackDwellCycle

Default Data

Default Data

Default Data

Preempt 4

Vehical Phases

Ph. TrackDwellCycle

Pedestrian Phases

Ph. TrackDwellCycle

Overlaps

Ovlp. TrackDwellCycle

Default Data

Default Data

Default Data

Preempt 5

Vehical Phases

Ph. TrackDwellCycle

Pedestrian Phases

Ph. TrackDwellCycle

Overlaps

Ovlp. TrackDwellCycle

Default Data

Default Data

Default Data

Preempt 6

Vehical Phases

Ph. TrackDwellCycle

Pedestrian Phases

Ph. TrackDwellCycle

Overlaps

Ovlp. TrackDwellCycle

Default Data

Default Data

Default Data

System/Detectors Data

Local Critical Alarms

Local Free: NoCycle Failure: NoCoord Failure: NoConflict Flash: NoRemote Flash: No

Local Fash: NoCycle Fault: NoCoord Fault: NoPreemption: NoVoltage Monitor: No

Special Status 1: NoSpecial Status 2: NoSpecial Status 3: NoSpecial Status 4: NoSpecial Status 5: NoSpecial Status 6: No

Revert to Backup: 15

1st Phone:

2nd Phone:

Traffic Responsive

System Detector

Average

Occupancy

Min

Queue 1

System

Weight

Queue 2

System

Weight

Detector Channel

Veh/Hr

Time(mins)

Correction/10

Volume %

Detectors

Detectors

Factor

Detectors

Detectors

Factor

Default Data

Default Data

Default Data

Sample Interval:

Queue: 1

Input Selection: 0=Average

Detector Failed Level : 0

Queue: 2

Input Selection: 0=Average

Detector Failed Level : 0

Level

Enter

Leave

Dial / Split / Offset

/

/

Default Data

Vehical Detector

Diagnostic Value 0

MaxNoErratic

Detector PresenceActivityCount

Default Data - Diag 0 Values

Vehical Detector

Diagnostic Value 1

MaxNoErratic

Detector PresenceActivityCount

Default Data - No Diag 1 Values

Special Detector

Diagnostic Value 0

MaxNoErratic

Detector PresenceActivityCount

Default Data - No Diag 0 Valu

Pedestrian Detector

Diagnostic Value 0

MaxNoErratic

Detector PresenceActivityCount

Default Data - No Diag 0 Values

Pedestrian Detector

Diagnostic Value 1

MaxNoErratic

Detector PresenceActivityCount

Default Data - No Diag 1 Values

Special Detector

Diagnostic Value 1

MaxNoErratic

Detector PresenceActivityCount

Default Data - No Diag 1 Values

Speed Trap Data

Speed Trap:

Measurement:

Detector 1Detector_2Distance :

Dial/Split/Offset

//

Default Data

Speed Trap

Speed Trap

Low Treshold

High Treshold

Page 6 of 7

Volume Detector Data

Report Interval	
Volume	Controller
Detector	Detector
Number	Channel

Default Data

Programmed EPAC Data

9/11/2013

8:20:50AM

Intersection Name: SR 140 @ 13 - Eves Road

Intersection Alias: SR140@Eves

Access Code: 9999 Channel: Address: 1 Revision: 3.32g
IP: 143.100.216.156

Access Data

:1200 Baud
:19200 Baud

Phase Data

Vehical Basic Timings							Vehical Density Timings					
Phase	Min_Grn	Passage	Max1	Max2	Yellow	All Red	Added Initial	Max_Initial	Time B4 Reduction	Cars Before	Time To Reduce	Min_Gap
1	6	2.0	20	20	3.4	3.0	0.0	0	0	0	0	3.0
2	20	5.0	65	65	4.9	2.0	2.0	35	20	20	40	3.5
3	6	2.0	20	20	3.1	3.0	0.0	0	0	0	0	3.0
4	8	3.0	25	40	3.8	2.7	0.0	0	0	0	0	3.0
5	6	2.0	20	20	3.4	3.0	0.0	0	0	0	0	3.0
6	20	5.0	65	65	4.9	2.0	2.0	35	20	20	40	3.0
7	6	2.0	20	20	3.1	3.0	0.0	0	0	0	0	3.0
8	8	3.0	25	40	3.8	2.7	0.0	0	0	0	0	3.0

Pedestrian Timing						General Control					Miscellaneous				
Phase	Walk	Ped Clear	Flashing Walk	Ped Clear	Rest in Walk	Initialize	Non-Act Response	Veh Recall	Ped Recall	Recall Delay	Non Lock	Dual Entry	Last Car Passage	Conditional Service	No Simultaneous Gap Out
1	0	0	No	0	No	Inactive	None	None	None	0	Yes	No	No	No	No
2	7	18	No	0	No	Green	None	Min	None	0	No	Yes	No	No	No
3	0	0	No	0	No	Inactive	None	None	None	0	Yes	No	No	No	No
4	7	24	No	0	No	Inactive	None	None	None	0	Yes	Yes	No	No	No
5	0	0	No	0	No	Inactive	None	None	None	0	Yes	No	No	No	No
6	7	10	No	0	No	Green	None	Min	None	0	No	Yes	No	No	No
7	0	0	No	0	No	Inactive	None	None	None	0	Yes	No	No	No	No
8	7	24	No	0	No	Inactive	None	None	None	0	Yes	Yes	No	No	No

Special Sequence				Vehical Detector Phase Assignment					
Phase	Phase Omit	Minus Yellow Phase	Omit Call		Assigned Phase	Mode	Switched Phase	Extend	Delay
1	2	0	0	Vehical Detector Channel :1	5	Veh	6	0.0	5
2	0	0	0	Vehical Detector Channel :3	2	Veh	0	0.0	0
3	0	0	0	Vehical Detector Channel :4	2	Veh	0	0.0	5
4	0	0	0	Vehical Detector Channel :9	7	Veh	4	0.0	5
5	6	0	0	Vehical Detector Channel :11	4	Veh	0	0.0	5
6	0	0	0	Vehical Detector Channel :12	4	Veh	0	0.0	5
7	0	0	0	Vehical Detector Channel :19	1	Veh	2	0.0	0
8	0	0	0	Vehical Detector Channel :21	6	Veh	0	0.0	0
				Vehical Detector Channel :22	6	Veh	0	0.0	0
				Vehical Detector Channel :29	3	Veh	8	0.0	5
				Vehical Detector Channel :31	8	Veh	0	0.0	5
				Vehical Detector Channel :32	8	Veh	0	0.0	5

Pedestrian Detector

Default Data

Special Detector Phase Assignment

Assign Phase Mode Switched Phase Extend Delay

:
Default Data

Unit Data

General Control				Remote Flash			
Startup Time: 0sec	Startup State: Flash	Red Revert: 4.0sec		Test A = Flash	No	Flash Channel	Flash Alternat
Auto Ped Clear: No	Stop Time Reset: No	Alternate Sequence: 0		Flash Entry Phase	Flash Exit Phase	Default Data - No Flash	
ABC connector Input Modes: 0		Input Ring	Output Selection	1	Yes		
ABC connector Output Modes: 0		1	Ring 1	1	Yes		
D connector Input Modes: 0		2	Ring 2				
D connector Output Modes: 0		3	None				
		4	None				

Overlaps																
Overlaps																
Phase(s)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yellow	4.0	2.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stop Grn/Yel Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Strat Green Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring			Phase(s)																
Phase	Ring	Next Phase	Concurrent Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	1	2		1	2	3	4	1	1	3	3	9	10	11	12	13	14	15	16
2	1	3		5	5	7	7	2	2	4	4								
3	1	4		6	6	8	8	5	6	7	8								
4	1	1																	
5	2	6																	
6	2	7																	
7	2	8																	
8	2	5																	

Alternate Sequences				Port 1 Data			
No Alternate Sequences Programmed				BIU Addr	Port Status	Message	40
				Default Data			

Control	Channel	Hardware Pins	Control	Channel	Hardware Pins
1 - Veh Phase 1	1	1 - Phase 1 RYG	2 - Veh Phase 2	2	2 - Phase 2 RYG
3 - Veh Phase 3	3	3 - Phase 3 RYG	4 - Veh Phase 4	4	4 - Phase 4 RYG
5 - Veh Phase 5	5	5 - Phase 5 RYG	6 - Veh Phase 6	6	6 - Phase 6 RYG
7 - Veh Phase 7	7	7 - Phase 7 RYG	8 - Veh Phase 8	8	8 - Phase 8 RYG
18 - Ped Phase 2	9	10 - Phase 2 DPW	20 - Ped Phase 4	10	12 - Phase 4 DPW
22 - Ped Phase 6	11	14 - Phase 6 DPW	24 - Ped Phase 8	12	16 - Phase 8 DPW
33 - Overlap A	13	17 - Overlap A RYG	34 - Overlap B	14	18 - Overlap B RYG
35 - Overlap C	15	19 - Overlap C RYG	36 - Overlap D	16	20 - Overlap D RYG
17 - Ped Phase 1	17	9 - Phase 1 DPW	19 - Ped Phase 3	18	11 - Phase 3 DPW
21 - Ped Phase 5	19	13 - Phase 5 DPW	23 - Ped Phase 7	20	15 - Phase 7 DPW
37 - Overlap E	21	21 - Phase 1 ONC	38 - Overlap F	22	22 - Phase 2 ONC
39 - Overlap G	23	23 - Phase 3 ONC	40 - Overlap H	24	24 - Phase 4 ONC

Coordination Data

General Coordination Data

Operation Mode: 1=Auto

Coordination Mode: 1=Yield

Maximun Mode: 0=Inhibit

Correction Mode: 2=Short Way

Offset Mode: 0=Beg Grn

Force Mode: 0=Plan

Max Dwell Time: 20

Yield Period: 15

Manual Dial: 1

Manual Split: 1

Manual Offset: 1

Dial/Split Cycle

1/1	160
1/2	120
1/3	120
1/4	160
2/1	120
2/2	140
2/3	130
3/1	160
3/2	160
3/3	180
3/4	160
4/1	180
4/2	180
4/3	210
4/4	160

Dial 1 / Split 1

Dial 1 / Split 2Dial 1 / Split 3Dial 1 / Split 4Dial 2 / Split 1Dial 2 / Split 2Dial 2 / Split 3Dial 3 / Split 1Dial 3 / Split 2Dial 3 / Split 3Dial 3 / Split 4Dial 4 / Split 1Dial 4 / Split 2Dial 4 / Split 3

De... 4... 611

Dial 4 / Split 4

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
1	30	0=Actuated	2	70	1=Coordinate	3	30	0=Actuated	4	30	0=Actuated
5	40	0=Actuated	6	60	1=Coordinate	7	30	0=Actuated	8	30	0=Actuated

Traffic Plan Data

Plan: 1/1/1	Offset Time: 120	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: 1/2/2	Offset Time: 40	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: 1/3/3	Offset Time: 95	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: 1/4/1	Offset Time: 120	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: 2/1/1	Offset Time: 40	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: 2/2/2	Offset Time: 40	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: 2/3/1	Offset Time: 95	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: 3/1/1	Offset Time: 120	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: 3/2/2	Offset Time: 90	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: 3/3/3	Offset Time: 155	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: 3/4/1	Offset Time: 120	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: 4/1/1	Offset Time: 100	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: 4/2/2	Offset Time: 65	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: 4/3/3	Offset Time: 35	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: 4/4/1	Offset Time: 120	Alt. Sequence: 0	Mode: 0=Normal	Rg 2 Lag Time: 0	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0

Local TBC Data

Start of Daylight Saving Month: 3 Week: 2 Cycle Zero Reference Hours: 1 Min: 0
End of Daylight Saving Month: 11 Week: 1

Source	Equate Days						
Day	1	2	3	4	5	6	7
2	3	4	5	0	0	0	0

Traffic Data

Event	Day	Time	D/S/O	flash	PHASE FUNCTION															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	1	0:1	0/0/4																	
2	1	10:0	1/2/2																	
3	1	11:30	2/2/2																	
4	1	18:30	1/2/2																	
5	1	21:0	0/0/4																	
6	2	0:1	0/0/4																	
7	2	6:30	3/1/1																	
8	2	8:0	3/4/1																	
9	2	9:30	1/2/2																	
10	2	11:30	2/2/2																	
11	2	15:0	3/3/3																	
12	2	19:30	1/3/3																	
13	2	21:0	0/0/4																	
14	6	0:1	0/0/4																	
15	6	6:30	3/1/1																	
16	6	8:0	3/4/1																	
17	6	9:30	1/2/2																	
18	6	11:30	2/2/2																	
19	6	15:0	3/3/3																	
20	6	19:30	1/3/3																	
21	6	21:0	0/0/4																	
22	7	0:1	0/0/4																	
23	7	7:0	1/2/2																	
24	7	9:0	2/2/2																	
25	7	19:30	1/2/2																	
26	7	21:0	0/0/4																	
27	58	0:1	0/0/4																	
28	58	7:0	1/2/2																	
29	58	9:0	2/2/2																	
30	58	19:30	1/2/2																	
31	58	21:0	0/0/4																	

AUX. Events

[illegible]

Event	Month	Day	Year	Special Day	Special Week
1	1	2	12	0	0
2	5	28	12	58	0
3	7	4	12	58	0
4	9	3	12	58	0
5	11	22	12	58	0
6	12	25	12	58	0
7	1	1	13	58	0

Special Functions

Function	SF1	SF2	SF3	SF4	SF5	SF6	SF7	SF8
Special Function 1	☒	☐	☐	☐	☐	☐	☐	☐
Special Function 2	☐	☒	☐	☐	☐	☐	☐	☐
Special Function 3	☐	☐	☒	☐	☐	☐	☐	☐
Special Function 4	☐	☐	☐	☒	☐	☐	☐	☐
Special Function 5	☐	☐	☐	☐	☒	☐	☐	☐
Special Function 6	☐	☐	☐	☐	☐	☒	☐	☐
Special Function 7	☐	☐	☐	☐	☐	☐	☒	☐
Special Function 8	☐	☐	☐	☐	☐	☐	☐	☒

Phase Function

Phase Function Map	PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16
	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Dimming Data

Channel

Red

Yellow

Green

Alternate

☐
☐
☐
☐

Default Data - No Dimming Programmed

Preemption Data

General Preemption Data

Flash > Preepmt 1, Preepmt 1 > Preempt 2, Preepmt 2 > Preempt 3, Preepmt 3 > Preempt 4, Preepmt 4 = Preempt 5, Preepmt 5 = Preempt 6
 Ring 1 Min GRN/WLK = 10 Ring 2 Min GRN/WLK = 10 Ring 3 Min GRN/WLK = 10 Ring 4 Min GRN/WLK = 10

Preempt	Preempt Timers								Select			Track				Dwell	Return		
	Non-Locking	Link to Preempt	Delay	Extend	Duration	MaxCall	Lock-Out		Ped Clear	Yel	Red	Grn	Ped	Yel	Red	Green	Ped Clear	Yel	Red
1	No	0	0	0	0	0	0		8	40	20	10	8	40	20	10	8	40	20
2	No	0	0	0	0	0	0		8	40	20	10	8	40	20	10	8	40	20
3	No	0	0	0	0	0	0		8	40	20	10	8	40	20	10	8	40	20
4	No	0	0	0	0	0	0		8	40	20	10	8	40	20	10	8	40	20
5	No	0	0	0	0	0	0		0	40	0	0	0	40	0	0	0	40	0
6	No	0	0	0	0	0	0		0	40	0	0	0	40	0	0	0	40	0

Preempt 1			Preempt 2			Preempt 3			Preempt 4			Preempt 5			Preempt 6		
Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls

Priority	Non-Locking	Delay	Extend	Duration	Dwell	Max_Call	Lock-Out	Skip Phases
1	No	0	0	0	0	0	0	0=Do not Skip Phases
2	No	0	0	0	0	0	0	0=Do not Skip Phases
3	No	0	0	0	0	0	0	0=Do not Skip Phases
4	No	0	0	0	0	0	0	0=Do not Skip Phases
5	No	0	0	0	0	0	0	0=Do not Skip Phases
6	No	0	0	0	0	0	0	0=Do not Skip Phases

Priority 1			Priority 2			Priority 3			Priority 4			Priority 5			Priority 6		
Exit	Exit		Exit	Exit		Exit	Exit		Exit	Exit		Exit	Exit		Exit	Exit	
Phase	Phase	Calls	Phase	Phase	Calls	Phase	Phase	Calls	Phase	Phase	Calls	Phase	Phase	Calls	Phase	Phase	Calls
Preempt 1																	
Vehical Phases				Pedestrian Phases				Overlaps									
Ph.	Track	Dwell	Cycle	Ph	Track	Dwell	Cycle	Ovlp	Track	Dwell	Cycle						
1	Red	Red	No	1	Don't Walk	Don't Walk	No	A	Red	Red	No						
2	Red	Red	No	2	Don't Walk	Don't Walk	No	B	Red	Red	No						
3	Red	Red	No	3	Don't Walk	Don't Walk	No	C	Red	Red	No						
4	Red	Red	No	4	Don't Walk	Don't Walk	No	D	Red	Red	No						
5	Red	Red	No	5	Don't Walk	Don't Walk	No	E	Red	Red	No						
6	Red	Red	No	6	Don't Walk	Don't Walk	No	F	Red	Red	No						
7	Red	Red	No	7	Don't Walk	Don't Walk	No	G	Red	Red	No						
8	Red	Red	No	8	Don't Walk	Don't Walk	No	H	Red	Red	No						
9	Red	Red	No	9	Don't Walk	Don't Walk	No	I	Red	Red	No						
10	Red	Red	No	10	Don't Walk	Don't Walk	No	J	Red	Red	No						
11	Red	Red	No	11	Don't Walk	Don't Walk	No	K	Red	Red	No						
12	Red	Red	No	12	Don't Walk	Don't Walk	No	L	Red	Red	No						
13	Red	Red	No	13	Don't Walk	Don't Walk	No	M	Red	Red	No						
14	Red	Red	No	14	Don't Walk	Don't Walk	No	N	Red	Red	No						
15	Red	Red	No	15	Don't Walk	Don't Walk	No	O	Red	Red	No						
16	Red	Red	No	16	Don't Walk	Don't Walk	No	P	Red	Red	No						

Vehical Phases				Pedestrian Phases				Overlaps			
Ph.	Track	Dwell	Cycle	Ph.	Track	Dwell	Cycle	Ovlp.	Track	Dwell	Cycle
1	Red	Red	No	1	Don't Walk	Don't Walk	No	A	Red	Red	No
2	Red	Red	No	2	Don't Walk	Don't Walk	No	B	Red	Red	No
3	Red	Red	No	3	Don't Walk	Don't Walk	No	C	Red	Red	No
4	Red	Red	No	4	Don't Walk	Don't Walk	No	D	Red	Red	No
5	Red	Red	No	5	Don't Walk	Don't Walk	No	E	Red	Red	No
6	Red	Red	No	6	Don't Walk	Don't Walk	No	F	Red	Red	No
7	Red	Red	No	7	Don't Walk	Don't Walk	No	G	Red	Red	No
8	Red	Red	No	8	Don't Walk	Don't Walk	No	H	Red	Red	No
9	Red	Red	No	9	Don't Walk	Don't Walk	No	I	Red	Red	No
10	Red	Red	No	10	Don't Walk	Don't Walk	No	J	Red	Red	No
11	Red	Red	No	11	Don't Walk	Don't Walk	No	K	Red	Red	No
12	Red	Red	No	12	Don't Walk	Don't Walk	No	L	Red	Red	No
13	Red	Red	No	13	Don't Walk	Don't Walk	No	M	Red	Red	No
14	Red	Red	No	14	Don't Walk	Don't Walk	No	N	Red	Red	No
15	Red	Red	No	15	Don't Walk	Don't Walk	No	O	Red	Red	No
16	Red	Red	No	16	Don't Walk	Don't Walk	No	P	Red	Red	No

Preempt 6

Vehical Phases				Pedestrian Phases				Overlaps			
Ph.	Track	Dwell	Cycle	Ph.	Track	Dwell	Cycle	Ovlp.	Track	Dwell	Cycle
1	Red	Red	No	1	Don't Walk	Don't Walk	No	A	Red	Red	No
2	Red	Red	No	2	Don't Walk	Don't Walk	No	B	Red	Red	No
3	Red	Red	No	3	Don't Walk	Don't Walk	No	C	Red	Red	No
4	Red	Red	No	4	Don't Walk	Don't Walk	No	D	Red	Red	No
5	Red	Red	No	5	Don't Walk	Don't Walk	No	E	Red	Red	No
6	Red	Red	No	6	Don't Walk	Don't Walk	No	F	Red	Red	No
7	Red	Red	No	7	Don't Walk	Don't Walk	No	G	Red	Red	No
8	Red	Red	No	8	Don't Walk	Don't Walk	No	H	Red	Red	No
9	Red	Red	No	9	Don't Walk	Don't Walk	No	I	Red	Red	No
10	Red	Red	No	10	Don't Walk	Don't Walk	No	J	Red	Red	No
11	Red	Red	No	11	Don't Walk	Don't Walk	No	K	Red	Red	No
12	Red	Red	No	12	Don't Walk	Don't Walk	No	L	Red	Red	No
13	Red	Red	No	13	Don't Walk	Don't Walk	No	M	Red	Red	No
14	Red	Red	No	14	Don't Walk	Don't Walk	No	N	Red	Red	No
15	Red	Red	No	15	Don't Walk	Don't Walk	No	O	Red	Red	No
16	Red	Red	No	16	Don't Walk	Don't Walk	No	P	Red	Red	No

System/Detectors Data

Local Critical Alarms

Revert to Backup: 5	Cycle Failure: Yes	Local Flash: Yes	Special Status 1: No
1st Phone:	Local Free: No	Cycle Fault: Yes	Special Status 2: No
2nd Phone:	Coord Failure: No	Coord Fault: No	Special Status 3: No
	Conflict Flash: Yes	Preemption: Yes	Special Status 4: No
	Remote Flash: Yes	Voltage Monitor: Yes	Special Status 5: No
			Special Status 6: No

Traffic Responsive

System	Detector	Average	Occupancy	Min	Queue 1	System	Weight	Queue 2	System	Weight
Detector	Channel	Veh/Hr	Time(mins)	Correction/10	Volume %	Detectors	Factor	Detectors	Detectors	Factor

Default Data

Sample Interval: 15

Default Data

Queue:	Input Selection:	0=Average	Queue:	Level	Enter	Leave	Dial / Split / Offset
Queue: 1	Detector Failed Level :	0	Queue: 2	Input Selection:	0=Average		/ /
	Detector Failed Level :	0					

Default Data

Vehical Detector

Diagnostic Value 0

	Max	No	Erratic
Detector	Presence	Activity	Count

Vehical Detector

Diagnostic Value 1

	Max	No	Erratic
Detector	Presence	Activity	Count

Special Detector

Diagnostic Value 0

	Max	No	Erratic
Detector	Presence	Activity	Count

Default Data - Diag 0 Values

Default Data - No Diag 1 Values

Default Data - No Diag 0 Valu

Pedestrian Detector			
Diagnostic Value 0			
	Max	No	Erratic
Detector	Presence	Activity	Count

Default Data - No Diag 0 Values

Speed Trap Data

Speed Trap:		Dial/Split/Offset	
Measurement:		//	
Detector 1	Detector_2	Distance :	

Default Data

Volume Detector Data

		Report Interval	15
Volume	Controller	60	
Detector	Detector		
Number	Channel		
1	1		
3	3		
4	4		
6	9		
7	11		
8	12		
9	19		
11	21		
12	22		
14	29		
15	31		
16	32		
18	74		
20	76		
22	78		
24	80		

Pedestrian Detector			
Diagnostic Value 1			
	Max	No	Erratic
Detector	Presence	Activity	Count

Default Data - No Diag 1 Values

Special Detector			
Diagnostic Value 1			
	Max	No	Erratic
Detector	Presence	Activity	Count

Default Data - No Diag 1 Values

Speed Trap	Speed Trap
Low Treshold	High Treshold

Default Data



APPENDIX C

Synchro Output

Intersection						
Intersection Delay, s/veh	11.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	171	1182	1356	23	2	264
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Free	-	Yield
Storage Length	250	-	-	250	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	64	91	93	58	50	73
Heavy Vehicles, %	2	3	3	3	0	4
Mvmt Flow	267	1299	1458	40	4	362
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1458	0	-	0	2642	729
Stage 1	-	-	-	-	1458	-
Stage 2	-	-	-	-	1184	-
Follow-up Headway	2.22	-	-	-	3.5	3.34
Pot Capacity-1 Maneuver	460	-	-	-	19	# 361
Stage 1	-	-	-	-	184	-
Stage 2	-	-	-	-	257	-
Time blocked-Platoon, %	-	-	-	-	-	-
Mov Capacity-1 Maneuver	460	-	-	-	8	# 361
Mov Capacity-2 Maneuver	-	-	-	-	8	-
Stage 1	-	-	-	-	184	-
Stage 2	-	-	-	-	108	-
Approach	EB		WB		SB	
HCM Control Delay, s	3.9		0		88.9	
HCM LOS					F	
Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	460	-	-	-	8	361
HCM Lane V/C Ratio	0.581	-	-	-	0.5	1.002
HCM Control Delay (s)	23.11	-	-	-	\$ 680	82.4
HCM Lane LOS	C				F	F
HCM 95th %tile Q(veh)	3.615	-	-	-	1	11.686
Notes						
~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined						

HCM 2010 Signalized Intersection Summary

2: Eves Road & Holcomb Bridge Road

2013AM.syn
9/11/2013

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	69	1131	36	333	1290	14	80	118	354	64	134	39
Number	5	2	12	1	6	16	7	4	14	3	8	18
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	152.0	183.8	190.0	174.3	186.3	190.0	184.5	174.3	184.5	174.3	186.3	190.0
Lanes	1	2	0	1	2	1	1	1	1	1	1	1
Cap, veh/h	166	1592	56	391	2127	922	211	243	219	205	220	191
Arrive On Green	0.05	0.45	0.45	0.17	0.57	0.57	0.08	0.14	0.00	0.05	0.12	0.12
Sat Flow, veh/h	1448	3531	124	1660	3725	1615	1757	1743	1568	1660	1863	1615
Grp Volume(v), veh/h	96	654	647	416	1743	17	127	155	0	80	181	48
Grp Sat Flow(s),veh/h/ln	1448	1838	1816	1660	1863	1615	1757	1743	1568	1660	1863	1615
Q Serve(g_s), s	4.9	42.2	42.3	23.6	52.5	0.6	8.5	11.7	0.0	5.8	13.2	3.8
Cycle Q Clear(g_c), s	4.9	42.2	42.3	23.6	52.5	0.6	8.5	11.7	0.0	5.8	13.2	3.8
Prop In Lane	1.00		0.07	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	166	829	819	391	2127	922	211	243	219	205	220	191
V/C Ratio(X)	0.58	0.79	0.79	1.06	0.82	0.02	0.60	0.64	0.00	0.39	0.82	0.25
Avail Cap(c_a), veh/h	340	833	823	391	2127	922	379	294	265	400	314	272
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.8	32.6	32.6	43.4	24.1	13.0	47.3	56.6	0.0	50.4	60.0	55.8
Incr Delay (d2), s/veh	1.2	7.5	7.7	63.5	3.7	0.0	1.0	3.3	0.0	0.4	11.2	0.7
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 Back of Q (50%), veh/ln	1.8	20.8	20.6	20.9	24.1	0.2	3.8	5.4	0.0	2.5	7.0	1.6
Lane Grp Delay (d), s/veh	28.0	40.1	40.3	107.0	27.8	13.0	48.3	59.9	0.0	50.9	71.2	56.5
Lane Grp LOS	C	D	D	F	C	B	D	E		D	E	E
Approach Vol, veh/h		1397			2176			282			309	
Approach Delay, s/veh		39.4			42.8			54.7			63.7	
Approach LOS		D			D			D			E	
Timer												
Assigned Phs	5	2		1	6		7	4		3	8	
Phs Duration (G+Y+Rc), s	13.3	69.7		30.0	86.4		16.7	25.9		13.6	22.9	
Change Period (Y+Rc), s	6.4	6.9		6.4	6.9		6.1	6.5		6.1	6.5	
Max Green Setting (Gmax), s	23.6	63.1		23.6	63.1		23.9	23.5		23.9	23.5	
Max Q Clear Time (g_c+I1), s	6.9	44.3		25.6	54.5		10.5	13.7		7.8	15.2	
Green Ext Time (p_c), s	0.1	18.5		0.0	8.5		0.1	1.3		0.1	1.2	
Intersection Summary												
HCM 2010 Ctrl Delay				44.0								
HCM 2010 LOS				D								
Notes												

Intersection						
Intersection Delay, s/veh	5.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	160	53	210	176	5	184
Conflicting Peds, #/hr	0	36	0	0	36	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	250	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	76	95	73	87	31	98
Heavy Vehicles, %	5	4	3	6	20	11
Mvmt Flow	211	56	288	202	16	188
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	302	0	950	169
Stage 1	-	-	-	-	274	-
Stage 2	-	-	-	-	676	-
Follow-up Headway	-	-	2.23	-	3.7	3.41
Pot Capacity-1 Maneuver	-	-	1249	-	228	818
Stage 1	-	-	-	-	696	-
Stage 2	-	-	-	-	421	-
Time blocked-Platoon, %	-	-	-	-	-	-
Mov Capacity-1 Maneuver	-	-	1249	-	165	793
Mov Capacity-2 Maneuver	-	-	-	-	165	-
Stage 1	-	-	-	-	675	-
Stage 2	-	-	-	-	314	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		5.1		12.3	
HCM LOS	B					
Minor Lane / Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	165	793	-	-	1249	-
HCM Lane V/C Ratio	0.098	0.237	-	-	0.23	-
HCM Control Delay (s)	29.2	10.9	-	-	8.743	-
HCM Lane LOS	D	B	A			
HCM 95th %tile Q(veh)	0.32	0.919	-	-	0.891	-
Notes						
~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined						

HCM 2010 Signalized Intersection Summary

4: Old Scott Road & Scott Road

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	94	182	4	76	299	174	21	107	102	98	22	130
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		1.00	1.00		0.99	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	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0
Lanes	1	1	1	1	2	1	0	1	0	0	1	1
Cap, veh/h	592	756	637	682	1512	642	29	109	83	120	10	524
Arrive On Green	0.14	0.40	0.40	0.14	0.40	0.40	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	1810	1900	1601	1810	3800	1615	0	335	256	214	30	1608
Grp Volume(v), veh/h	104	217	8	84	352	232	305	0	0	196	0	232
Grp Sat Flow(s),veh/h/ln	1810	1900	1601	1810	1900	1615	591	0	0	244	0	1608
Q Serve(g_s), s	3.8	10.5	0.4	3.0	8.3	13.6	0.0	0.0	0.0	0.0	0.0	15.3
Cycle Q Clear(g_c), s	3.8	10.5	0.4	3.0	8.3	13.6	44.0	0.0	0.0	44.0	0.0	15.3
Prop In Lane	1.00		1.00	1.00		1.00	0.10		0.43	0.88		1.00
Lane Grp Cap(c), veh/h	592	756	637	682	1512	642	222	0	0	130	0	524
V/C Ratio(X)	0.18	0.29	0.01	0.12	0.23	0.36	1.37	0.00	0.00	1.51	0.00	0.44
Avail Cap(c_a), veh/h	592	756	637	682	1512	642	222	0	0	130	0	524
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	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.5	27.6	24.6	15.5	27.0	28.6	47.1	0.0	0.0	54.0	0.0	35.8
Incr Delay (d2), s/veh	0.6	1.0	0.0	0.4	0.4	1.6	194.0	0.0	0.0	265.4	0.0	2.7
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 Back of Q (50%), veh/ln	1.8	5.3	0.2	1.4	4.1	5.9	18.6	0.0	0.0	14.1	0.0	6.7
Lane Grp Delay (d), s/veh	16.2	28.6	24.6	15.9	27.3	30.2	241.1	0.0	0.0	319.4	0.0	38.5
Lane Grp LOS	B	C	C	B	C	C	F			F		D
Approach Vol, veh/h		329			668			305			428	
Approach Delay, s/veh		24.6			26.9			241.1			167.2	
Approach LOS		C			C			F			F	
Timer												
Assigned Phs	5	2		1	6			4			8	
Phs Duration (G+Y+Rc), s	25.0	60.0		25.0	60.0			50.0			50.0	
Change Period (Y+Rc), s	6.0	6.3		6.0	6.3			6.0			6.0	
Max Green Setting (Gmax), s	19.0	53.7		19.0	53.7			38.0			44.0	
Max Q Clear Time (g_c+I1), s	5.8	12.5		5.0	15.6			46.0			46.0	
Green Ext Time (p_c), s	0.2	10.7		0.1	10.5			0.0			0.0	
Intersection Summary												
HCM 2010 Ctrl Delay				98.9								
HCM 2010 LOS				F								
Notes												

Intersection						
Intersection Delay, s/veh	6.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	150	1647	1435	20	5	182
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Free	-	Yield
Storage Length	250	-	-	250	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	91	94	83	42	73
Heavy Vehicles, %	3	4	3	0	0	8
Mvmt Flow	176	1810	1527	24	12	249
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1527	0	-	0	2785	763
Stage 1	-	-	-	-	1527	-
Stage 2	-	-	-	-	1258	-
Follow-up Headway	2.23	-	-	-	3.5	3.38
Pot Capacity-1 Maneuver	428	-	-	-	15	334
Stage 1	-	-	-	-	169	-
Stage 2	-	-	-	-	235	-
Time blocked-Platoon, %	-	-	-	-	-	-
Mov Capacity-1 Maneuver	428	-	-	-	# 9	334
Mov Capacity-2 Maneuver	-	-	-	-	# 9	-
Stage 1	-	-	-	-	169	-
Stage 2	-	-	-	-	138	-
Approach	EB		WB		SB	
HCM Control Delay, s	1.7		0		84	
HCM LOS					F	
Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	428	-	-	-	9	334
HCM Lane V/C Ratio	0.412	-	-	-	1.323	0.746
HCM Control Delay (s)	19.186	-	-	-	\$ 970.9	41.6
HCM Lane LOS	C				F	E
HCM 95th %tile Q(veh)	1.98	-	-	-	2.302	5.73
Notes						
~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined						

HCM 2010 Signalized Intersection Summary

2: Eves Road & Holcomb Bridge Road

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	151	1564	193	260	1204	79	29	144	254	45	300	49
Number	5	2	12	1	6	16	7	4	14	3	8	18
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	190.0	184.7	190.0	190.0	186.3	186.3	190.0	188.1	188.1	190.0	190.0	186.3
Lanes	1	2	0	1	2	1	1	1	1	1	1	1
Cap, veh/h	310	2009	236	191	2363	1004	108	248	211	155	261	218
Arrive On Green	0.05	0.62	0.62	0.06	0.63	0.63	0.03	0.13	0.00	0.04	0.14	0.14
Sat Flow, veh/h	1810	3246	380	1810	3725	1583	1810	1881	1599	1810	1900	1583
Grp Volume(v), veh/h	168	973	973	302	1254	100	40	180	0	56	323	64
Grp Sat Flow(s),veh/h/ln	1810	1847	1779	1810	1863	1583	1810	1881	1599	1810	1900	1583
Q Serve(g_s), s	5.8	72.5	78.5	10.6	31.7	4.2	3.2	15.7	0.0	4.5	23.5	6.2
Cycle Q Clear(g_c), s	5.8	72.5	78.5	10.6	31.7	4.2	3.2	15.7	0.0	4.5	23.5	6.2
Prop In Lane	1.00		0.21	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	310	1143	1102	191	2363	1004	108	248	211	155	261	218
V/C Ratio(X)	0.54	0.85	0.88	1.58	0.53	0.10	0.37	0.73	0.00	0.36	1.24	0.29
Avail Cap(c_a), veh/h	444	1146	1105	191	2363	1004	201	259	220	238	261	218
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.7	26.2	27.4	53.9	17.2	12.2	62.7	71.2	0.0	61.2	73.7	66.3
Incr Delay (d2), s/veh	0.5	8.0	10.3	284.5	0.9	0.2	0.8	9.4	0.0	0.5	134.8	0.7
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 Back of Q (50%), veh/ln	2.5	35.0	36.9	23.7	14.4	0.1	1.5	8.3	0.0	2.1	21.5	2.6
Lane Grp Delay (d), s/veh	15.3	34.2	37.7	338.5	18.1	12.4	63.5	80.6	0.0	61.7	208.5	67.0
Lane Grp LOS	B	C	D	F	B	B	E	F		E	F	E
Approach Vol, veh/h		2114			1656			220			443	
Approach Delay, s/veh		34.3			76.2			77.5			169.5	
Approach LOS		C			E			E			F	
Timer												
Assigned Phs	5	2		1	6		7	4		3	8	
Phs Duration (G+Y+Rc), s	14.4	112.7		17.0	115.3		11.2	29.0		12.2	30.0	
Change Period (Y+Rc), s	6.4	6.9		6.4	6.9		6.1	6.5		6.1	6.5	
Max Green Setting (Gmax), s	20.6	106.1		10.6	96.1		13.9	23.5		13.9	23.5	
Max Q Clear Time (g_c+l1), s	7.8	80.5		12.6	33.7		5.2	17.7		6.5	25.5	
Green Ext Time (p_c), s	0.2	25.3		0.0	60.8		0.0	1.5		0.0	0.0	
Intersection Summary												
HCM 2010 Ctrl Delay				65.6								
HCM 2010 LOS				E								
Notes												

Intersection						
Intersection Delay, s/veh	5.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	218	61	152	128	43	180
Conflicting Peds, #/hr	0	7	0	0	7	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	250	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	69	79	87	54	88
Heavy Vehicles, %	1	2	1	1	2	1
Mvmt Flow	251	88	192	147	80	205
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	346	0	760	176
Stage 1	-	-	-	-	302	-
Stage 2	-	-	-	-	458	-
Follow-up Headway	-	-	2.21	-	3.52	3.31
Pot Capacity-1 Maneuver	-	-	1217	-	342	840
Stage 1	-	-	-	-	724	-
Stage 2	-	-	-	-	604	-
Time blocked-Platoon, %	-	-	-	-	-	-
Mov Capacity-1 Maneuver	-	-	1217	-	285	835
Mov Capacity-2 Maneuver	-	-	-	-	285	-
Stage 1	-	-	-	-	720	-
Stage 2	-	-	-	-	506	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		4.8		14	
HCM LOS	B					
Minor Lane / Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	285	835	-	-	1217	-
HCM Lane V/C Ratio	0.279	0.245	-	-	0.158	-
HCM Control Delay (s)	22.5	10.7	-	-	8.513	-
HCM Lane LOS	C	B	A			
HCM 95th %tile Q(veh)	1.115	0.962	-	-	0.561	-
Notes						
~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined						

HCM 2010 Signalized Intersection Summary
4: Old Scott Road & Scott Road

2013PM.syn
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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	18	379	9	98	280	10	35	6	113	21	3	41
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	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	190.0	188.1	190.0	190.0	188.1	172.7	190.0	190.0	190.0	190.0	181.6	186.3
Lanes	1	1	1	1	2	1	0	1	0	0	1	1
Cap, veh/h	664	748	638	536	1497	583	175	46	272	362	26	514
Arrive On Green	0.14	0.40	0.40	0.14	0.40	0.40	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	1810	1881	1605	1810	3762	1466	428	140	833	952	80	1576
Grp Volume(v), veh/h	28	403	20	120	329	20	190	0	0	56	0	52
Grp Sat Flow(s),veh/h/ln	1810	1881	1605	1810	1881	1466	1401	0	0	1031	0	1576
Q Serve(g_s), s	1.0	22.2	1.0	4.4	7.8	1.1	9.1	0.0	0.0	0.0	0.0	3.1
Cycle Q Clear(g_c), s	1.0	22.2	1.0	4.4	7.8	1.1	17.1	0.0	0.0	8.0	0.0	3.1
Prop In Lane	1.00		1.00	1.00		1.00	0.34		0.59	0.93		1.00
Lane Grp Cap(c), veh/h	664	748	638	536	1497	583	493	0	0	388	0	514
V/C Ratio(X)	0.04	0.54	0.03	0.22	0.22	0.03	0.39	0.00	0.00	0.14	0.00	0.10
Avail Cap(c_a), veh/h	664	748	638	536	1497	583	493	0	0	388	0	514
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	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.8	31.2	24.8	17.5	26.8	24.8	36.9	0.0	0.0	33.3	0.0	31.7
Incr Delay (d2), s/veh	0.1	2.8	0.1	1.0	0.3	0.1	2.3	0.0	0.0	0.8	0.0	0.4
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 Back of Q (50%), veh/ln	0.4	11.2	0.4	2.1	3.8	0.4	5.6	0.0	0.0	1.5	0.0	1.3
Lane Grp Delay (d), s/veh	15.0	33.9	24.9	18.4	27.2	24.9	39.2	0.0	0.0	34.1	0.0	32.1
Lane Grp LOS	B	C	C	B	C	C	D			C		C
Approach Vol, veh/h		451			469			190			108	
Approach Delay, s/veh		32.3			24.8			39.2			33.1	
Approach LOS		C			C			D			C	
Timer												
Assigned Phs	5	2		1	6			4			8	
Phs Duration (G+Y+Rc), s	25.0	60.0		25.0	60.0			50.0			50.0	
Change Period (Y+Rc), s	6.0	6.3		6.0	6.3			6.0			6.0	
Max Green Setting (Gmax), s	19.0	53.7		19.0	53.7			38.0			44.0	
Max Q Clear Time (g_c+I1), s	3.0	24.2		6.4	9.8			19.1			10.0	
Green Ext Time (p_c), s	0.0	10.2		0.2	11.6			2.2			2.6	
Intersection Summary												
HCM 2010 Ctrl Delay				30.6								
HCM 2010 LOS				C								
Notes												

Intersection						
Intersection Delay, s/veh	12.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	174	1206	1383	23	2	269
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Free	-	Yield
Storage Length	250	-	-	250	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	64	91	93	58	50	73
Heavy Vehicles, %	2	3	3	3	0	4
Mvmt Flow	272	1325	1487	40	4	368
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1487	0	-	0	2693	744
Stage 1	-	-	-	-	1487	-
Stage 2	-	-	-	-	1206	-
Follow-up Headway	2.22	-	-	-	3.5	3.34
Pot Capacity-1 Maneuver	448	-	-	-	18	# 353
Stage 1	-	-	-	-	177	-
Stage 2	-	-	-	-	250	-
Time blocked-Platoon, %	-	-	-	-	-	-
Mov Capacity-1 Maneuver	448	-	-	-	7	# 353
Mov Capacity-2 Maneuver	-	-	-	-	7	-
Stage 1	-	-	-	-	177	-
Stage 2	-	-	-	-	98	-
Approach	EB		WB		SB	
HCM Control Delay, s	4.2		0		102.6	
HCM LOS					F	
Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	448	-	-	-	7	353
HCM Lane V/C Ratio	0.607	-	-	-	0.571	1.044
HCM Control Delay (s)	24.674	-	-	-	\$ 799.1	95
HCM Lane LOS	C				F	F
HCM 95th %tile Q(veh)	3.93	-	-	-	1.052	12.763
Notes						
~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined						

HCM 2010 Signalized Intersection Summary

2: Eves Road & Holcomb Bridge Road

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	70	1154	37	340	1316	14	82	120	361	65	137	40
Number	5	2	12	1	6	16	7	4	14	3	8	18
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	152.0	183.8	190.0	174.3	186.3	190.0	184.5	174.3	184.5	174.3	186.3	190.0
Lanes	1	2	0	1	2	1	1	1	1	1	1	1
Cap, veh/h	161	1586	56	383	2117	918	213	248	223	207	223	194
Arrive On Green	0.05	0.45	0.45	0.17	0.57	0.57	0.08	0.14	0.00	0.05	0.12	0.12
Sat Flow, veh/h	1448	3530	124	1660	3725	1615	1757	1743	1568	1660	1863	1615
Grp Volume(v), veh/h	97	667	660	425	1778	17	130	158	0	81	185	49
Grp Sat Flow(s),veh/h/ln	1448	1838	1816	1660	1863	1615	1757	1743	1568	1660	1863	1615
Q Serve(g_s), s	5.0	43.9	44.0	23.6	55.2	0.6	8.7	12.0	0.0	5.9	13.6	3.9
Cycle Q Clear(g_c), s	5.0	43.9	44.0	23.6	55.2	0.6	8.7	12.0	0.0	5.9	13.6	3.9
Prop In Lane	1.00		0.07	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	161	826	816	383	2117	918	213	248	223	207	223	194
V/C Ratio(X)	0.60	0.81	0.81	1.11	0.84	0.02	0.61	0.64	0.00	0.39	0.83	0.25
Avail Cap(c_a), veh/h	333	829	819	383	2117	918	377	293	263	400	313	271
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.3	33.3	33.3	44.3	25.0	13.2	47.2	56.6	0.0	50.4	60.2	55.9
Incr Delay (d2), s/veh	1.4	8.3	8.5	78.7	4.2	0.0	1.1	3.5	0.0	0.4	12.1	0.7
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 Back of Q (50%), veh/ln	3.5	21.9	21.7	22.2	25.7	0.3	3.9	5.6	0.0	2.5	7.3	0.0
Lane Grp Delay (d), s/veh	29.6	41.7	41.8	123.0	29.2	13.2	48.2	60.1	0.0	50.9	72.2	56.6
Lane Grp LOS	C	D	D	F	C	B	D	E		D	E	E
Approach Vol, veh/h		1424			2220			288			315	
Approach Delay, s/veh		40.9			47.0			54.7			64.3	
Approach LOS		D			D			D			E	
Timer												
Assigned Phs	5	2		1	6		7	4		3	8	
Phs Duration (G+Y+Rc), s	13.4	69.8		30.0	86.4		16.9	26.4		13.8	23.3	
Change Period (Y+Rc), s	6.4	6.9		6.4	6.9		6.1	6.5		6.1	6.5	
Max Green Setting (Gmax), s	23.6	63.1		23.6	63.1		23.9	23.5		23.9	23.5	
Max Q Clear Time (g_c+I1), s	7.0	46.0		25.6	57.2		10.7	14.0		7.9	15.6	
Green Ext Time (p_c), s	0.1	16.9		0.0	5.9		0.1	1.4		0.1	1.2	
Intersection Summary												
HCM 2010 Ctrl Delay				46.8								
HCM 2010 LOS				D								
Notes												

Intersection						
Intersection Delay, s/veh	5.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	163	54	214	180	5	188
Conflicting Peds, #/hr	0	36	0	0	36	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	250	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	76	95	73	87	31	98
Heavy Vehicles, %	5	4	3	6	20	11
Mvmt Flow	214	57	293	207	16	192
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	307	0	969	172
Stage 1	-	-	-	-	279	-
Stage 2	-	-	-	-	690	-
Follow-up Headway	-	-	2.23	-	3.7	3.41
Pot Capacity-1 Maneuver	-	-	1243	-	221	814
Stage 1	-	-	-	-	692	-
Stage 2	-	-	-	-	414	-
Time blocked-Platoon, %	-	-	-	-	-	-
Mov Capacity-1 Maneuver	-	-	1243	-	159	790
Mov Capacity-2 Maneuver	-	-	-	-	159	-
Stage 1	-	-	-	-	671	-
Stage 2	-	-	-	-	307	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		5.2		12.5	
HCM LOS	B					
Minor Lane / Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	159	790	-	-	1243	-
HCM Lane V/C Ratio	0.101	0.243	-	-	0.236	-
HCM Control Delay (s)	30.2	11	-	-	8.788	-
HCM Lane LOS	D	B	A			
HCM 95th %tile Q(veh)	0.332	0.95	-	-	0.919	-
Notes						
~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined						

HCM 2010 Signalized Intersection Summary
4: Old Scott Road & Scott Road

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	96	186	4	78	305	177	21	109	104	100	22	133
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		1.00	1.00		0.99	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	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0
Lanes	1	1	1	1	2	1	0	1	0	0	1	1
Cap, veh/h	588	756	637	678	1512	642	29	109	84	119	9	524
Arrive On Green	0.14	0.40	0.40	0.14	0.40	0.40	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	1810	1900	1601	1810	3800	1615	0	333	257	212	29	1608
Grp Volume(v), veh/h	107	221	8	86	359	236	310	0	0	199	0	238
Grp Sat Flow(s),veh/h/ln	1810	1900	1601	1810	1900	1615	591	0	0	241	0	1608
Q Serve(g_s), s	3.9	10.7	0.4	3.1	8.5	13.9	0.0	0.0	0.0	0.0	0.0	15.8
Cycle Q Clear(g_c), s	3.9	10.7	0.4	3.1	8.5	13.9	44.0	0.0	0.0	44.0	0.0	15.8
Prop In Lane	1.00		1.00	1.00		1.00	0.10		0.44	0.88		1.00
Lane Grp Cap(c), veh/h	588	756	637	678	1512	642	222	0	0	129	0	524
V/C Ratio(X)	0.18	0.29	0.01	0.13	0.24	0.37	1.40	0.00	0.00	1.55	0.00	0.45
Avail Cap(c_a), veh/h	588	756	637	678	1512	642	222	0	0	129	0	524
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	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.6	27.7	24.6	15.6	27.0	28.7	47.1	0.0	0.0	54.1	0.0	36.0
Incr Delay (d2), s/veh	0.7	1.0	0.0	0.4	0.4	1.6	203.7	0.0	0.0	280.6	0.0	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	1.8	5.4	0.2	1.4	4.2	6.0	19.2	0.0	0.0	14.6	0.0	6.9
Lane Grp Delay (d), s/veh	16.3	28.7	24.6	15.9	27.4	30.3	250.8	0.0	0.0	334.6	0.0	38.8
Lane Grp LOS	B	C	C	B	C	C	F			F		D
Approach Vol, veh/h		336			681			310			437	
Approach Delay, s/veh		24.6			27.0			250.8			173.5	
Approach LOS		C			C			F			F	
Timer												
Assigned Phs	5	2		1	6			4			8	
Phs Duration (G+Y+Rc), s	25.0	60.0		25.0	60.0			50.0			50.0	
Change Period (Y+Rc), s	6.0	6.3		6.0	6.3			6.0			6.0	
Max Green Setting (Gmax), s	19.0	53.7		19.0	53.7			38.0			44.0	
Max Q Clear Time (g_c+I1), s	5.9	12.7		5.1	15.9			46.0			46.0	
Green Ext Time (p_c), s	0.2	11.0		0.1	10.7			0.0			0.0	
Intersection Summary												
HCM 2010 Ctrl Delay				102.2								
HCM 2010 LOS				F								
Notes												

Intersection						
Intersection Delay, s/veh	7.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	153	1680	1464	20	5	186
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Free	-	Yield
Storage Length	250	-	-	250	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	91	94	83	42	73
Heavy Vehicles, %	3	4	3	0	0	8
Mvmt Flow	180	1846	1557	24	12	255
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1557	0	-	0	2840	779
Stage 1	-	-	-	-	1557	-
Stage 2	-	-	-	-	1283	-
Follow-up Headway	2.23	-	-	-	3.5	3.38
Pot Capacity-1 Maneuver	416	-	-	-	14	326
Stage 1	-	-	-	-	162	-
Stage 2	-	-	-	-	228	-
Time blocked-Platoon, %	-	-	-	-	-	-
Mov Capacity-1 Maneuver	416	-	-	-	# 8	326
Mov Capacity-2 Maneuver	-	-	-	-	# 8	-
Stage 1	-	-	-	-	162	-
Stage 2	-	-	-	-	129	-
Approach	EB		WB		SB	
HCM Control Delay, s	1.8		0		94.4	
HCM LOS					F	
Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	416	-	-	-	8	326
HCM Lane V/C Ratio	0.433	-	-	-	1.488	0.782
HCM Control Delay (s)	20.092	-	-	-	\$ 1124.6	46.3
HCM Lane LOS	C				F	E
HCM 95th %tile Q(veh)	2.134	-	-	-	2.371	6.29
Notes						
~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined						

HCM 2010 Signalized Intersection Summary

2: Eves Road & Holcomb Bridge Road

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	154	1595	197	265	1228	81	30	147	259	46	306	50
Number	5	2	12	1	6	16	7	4	14	3	8	18
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	190.0	184.7	190.0	190.0	186.3	186.3	190.0	188.1	188.1	190.0	190.0	186.3
Lanes	1	2	0	1	2	1	1	1	1	1	1	1
Cap, veh/h	304	2010	235	185	2361	1003	108	246	209	153	261	218
Arrive On Green	0.05	0.62	0.62	0.06	0.63	0.63	0.03	0.13	0.00	0.04	0.14	0.14
Sat Flow, veh/h	1810	3246	380	1810	3725	1583	1810	1881	1599	1810	1900	1583
Grp Volume(v), veh/h	171	992	992	308	1279	103	41	184	0	58	329	66
Grp Sat Flow(s),veh/h/ln	1810	1847	1779	1810	1863	1583	1810	1881	1599	1810	1900	1583
Q Serve(g_s), s	6.0	75.6	82.1	10.6	32.8	4.4	3.3	16.1	0.0	4.7	23.5	6.4
Cycle Q Clear(g_c), s	6.0	75.6	82.1	10.6	32.8	4.4	3.3	16.1	0.0	4.7	23.5	6.4
Prop In Lane	1.00		0.21	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	304	1143	1102	185	2361	1003	108	246	209	153	261	218
V/C Ratio(X)	0.56	0.87	0.90	1.66	0.54	0.10	0.38	0.75	0.00	0.38	1.26	0.30
Avail Cap(c_a), veh/h	436	1145	1104	185	2361	1003	201	258	220	234	261	218
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.2	26.8	28.0	55.6	17.5	12.3	62.9	71.6	0.0	61.2	73.8	66.4
Incr Delay (d2), s/veh	0.6	9.0	11.7	321.1	0.9	0.2	0.8	10.9	0.0	0.6	144.3	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	2.5	36.7	38.9	24.8	14.9	1.7	1.6	8.7	0.0	2.2	22.1	2.7
Lane Grp Delay (d), s/veh	15.8	35.8	39.7	376.7	18.4	12.5	63.7	82.5	0.0	61.8	218.1	67.2
Lane Grp LOS	B	D	D	F	B	B	E	F		E	F	E
Approach Vol, veh/h		2155			1690			225			453	
Approach Delay, s/veh		36.0			83.3			79.1			176.1	
Approach LOS		D			F			E			F	
Timer												
Assigned Phs	5	2		1	6		7	4		3	8	
Phs Duration (G+Y+Rc), s	14.5	112.8		17.0	115.3		11.2	28.9		12.4	30.0	
Change Period (Y+Rc), s	6.4	6.9		6.4	6.9		6.1	6.5		6.1	6.5	
Max Green Setting (Gmax), s	20.6	106.1		10.6	96.1		13.9	23.5		13.9	23.5	
Max Q Clear Time (g_c+I1), s	8.0	84.1		12.6	34.8		5.3	18.1		6.7	25.5	
Green Ext Time (p_c), s	0.2	21.9		0.0	60.1		0.0	1.5		0.0	0.0	
Intersection Summary												
HCM 2010 Ctrl Delay				69.9								
HCM 2010 LOS				E								
Notes												

Intersection						
Intersection Delay, s/veh	5.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	222	62	155	131	44	184
Conflicting Peds, #/hr	0	7	0	0	7	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	250	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	69	79	87	54	88
Heavy Vehicles, %	1	2	1	1	2	1
Mvmt Flow	255	90	196	151	81	209
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	352	0	775	180
Stage 1	-	-	-	-	307	-
Stage 2	-	-	-	-	468	-
Follow-up Headway	-	-	2.21	-	3.52	3.31
Pot Capacity-1 Maneuver	-	-	1211	-	335	835
Stage 1	-	-	-	-	719	-
Stage 2	-	-	-	-	597	-
Time blocked-Platoon, %	-	-	-	-	-	-
Mov Capacity-1 Maneuver	-	-	1211	-	278	830
Mov Capacity-2 Maneuver	-	-	-	-	278	-
Stage 1	-	-	-	-	715	-
Stage 2	-	-	-	-	497	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		4.8		14.3	
HCM LOS	B					
Minor Lane / Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	278	830	-	-	1211	-
HCM Lane V/C Ratio	0.293	0.252	-	-	0.162	-
HCM Control Delay (s)	23.2	10.8	-	-	8.547	-
HCM Lane LOS	C	B	A			
HCM 95th %tile Q(veh)	1.187	0.997	-	-	0.577	-
Notes						
~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined						

HCM 2010 Signalized Intersection Summary
4: Old Scott Road & Scott Road

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9/11/2013

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	18	387	9	100	286	10	36	6	115	21	3	42
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	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	190.0	188.1	190.0	190.0	188.1	172.7	190.0	190.0	190.0	190.0	181.6	186.3
Lanes	1	1	1	1	2	1	0	1	0	0	1	1
Cap, veh/h	661	748	638	530	1497	583	177	45	270	360	26	514
Arrive On Green	0.14	0.40	0.40	0.14	0.40	0.40	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	1810	1881	1605	1810	3762	1466	432	138	830	948	79	1576
Grp Volume(v), veh/h	28	412	20	122	336	20	194	0	0	56	0	53
Grp Sat Flow(s),veh/h/ln	1810	1881	1605	1810	1881	1466	1400	0	0	1027	0	1576
Q Serve(g_s), s	1.0	22.8	1.0	4.5	8.0	1.1	9.5	0.0	0.0	0.0	0.0	3.2
Cycle Q Clear(g_c), s	1.0	22.8	1.0	4.5	8.0	1.1	17.5	0.0	0.0	8.0	0.0	3.2
Prop In Lane	1.00		1.00	1.00		1.00	0.35		0.59	0.93		1.00
Lane Grp Cap(c), veh/h	661	748	638	530	1497	583	492	0	0	386	0	514
V/C Ratio(X)	0.04	0.55	0.03	0.23	0.22	0.03	0.39	0.00	0.00	0.15	0.00	0.10
Avail Cap(c_a), veh/h	661	748	638	530	1497	583	492	0	0	386	0	514
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	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.8	31.3	24.8	17.6	26.9	24.8	37.1	0.0	0.0	33.3	0.0	31.7
Incr Delay (d2), s/veh	0.1	2.9	0.1	1.0	0.3	0.1	2.4	0.0	0.0	0.8	0.0	0.4
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 Back of Q (50%), veh/ln	0.4	11.6	0.4	2.1	3.9	0.4	5.7	0.0	0.0	1.5	0.0	1.3
Lane Grp Delay (d), s/veh	15.0	34.3	24.9	18.6	27.2	24.9	39.4	0.0	0.0	34.1	0.0	32.1
Lane Grp LOS	B	C	C	B	C	C	D			C		C
Approach Vol, veh/h		460			478			194			109	
Approach Delay, s/veh		32.7			24.9			39.4			33.1	
Approach LOS		C			C			D			C	
Timer												
Assigned Phs	5	2		1	6			4			8	
Phs Duration (G+Y+Rc), s	25.0	60.0		25.0	60.0			50.0			50.0	
Change Period (Y+Rc), s	6.0	6.3		6.0	6.3			6.0			6.0	
Max Green Setting (Gmax), s	19.0	53.7		19.0	53.7			38.0			44.0	
Max Q Clear Time (g_c+I1), s	3.0	24.8		6.5	10.0			19.5			10.0	
Green Ext Time (p_c), s	0.0	10.4		0.2	11.9			2.2			2.6	
Intersection Summary												
HCM 2010 Ctrl Delay				30.8								
HCM 2010 LOS				C								
Notes												

Intersection						
Intersection Delay, s/veh	88.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	243	1678	1926	33	3	375
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Free	-	Yield
Storage Length	250	-	-	250	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	64	91	93	58	50	73
Heavy Vehicles, %	2	3	3	3	0	4
Mvmt Flow	380	1844	2071	57	6	514
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	2071	0	-	0	3752	1035
Stage 1	-	-	-	-	2071	-
Stage 2	-	-	-	-	1681	-
Follow-up Headway	2.22	-	-	-	3.5	3.34
Pot Capacity-1 Maneuver	# 265	-	-	-	# 3	# 225
Stage 1	-	-	-	-	85	-
Stage 2	-	-	-	-	139	-
Time blocked-Platoon, %	-	-	-	-	-	-
Mov Capacity-1 Maneuver	# 265	-	-	-	# 3	# 225
Mov Capacity-2 Maneuver	-	-	-	-	# 3	-
Stage 1	-	-	-	-	85	-
Stage 2	-	-	-	-	139	-
Approach	EB		WB		SB	
HCM Control Delay, s	42.9		0		\$ 647.2	
HCM LOS					F	
Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	# 265	-	-	-	3	225
HCM Lane V/C Ratio	1.433	-	-	-	2	2.283
HCM Control Delay (s)	251.02	-	-	-	\$ 2493.3	\$ 625.6
HCM Lane LOS	F				F	F
HCM 95th %tile Q(veh)	21.088	-	-	-	1.699	40.808
Notes						
~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined						

HCM 2010 Signalized Intersection Summary
2: Eves Road & Holcomb Bridge Road

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	98	1606	51	473	1832	20	114	168	503	91	190	55
Number	5	2	12	1	6	16	7	4	14	3	8	18
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	152.0	183.8	190.0	174.3	186.3	190.0	184.5	174.3	184.5	174.3	186.3	190.0
Lanes	1	2	0	1	2	1	1	1	1	1	1	1
Cap, veh/h	154	1488	51	310	1886	818	235	309	278	228	281	243
Arrive On Green	0.07	0.42	0.42	0.16	0.51	0.51	0.10	0.18	0.00	0.07	0.15	0.15
Sat Flow, veh/h	1448	3532	122	1660	3725	1615	1757	1743	1568	1660	1863	1615
Grp Volume(v), veh/h	136	924	922	591	2476	25	181	221	0	114	257	68
Grp Sat Flow(s),veh/h/ln	1448	1838	1817	1660	1863	1615	1757	1743	1568	1660	1863	1615
Q Serve(g_s), s	8.8	63.1	63.1	23.6	75.9	1.2	12.5	17.9	0.0	8.6	20.4	5.6
Cycle Q Clear(g_c), s	8.8	63.1	63.1	23.6	75.9	1.2	12.5	17.9	0.0	8.6	20.4	5.6
Prop In Lane	1.00		0.07	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	154	774	765	310	1886	818	235	309	278	228	281	243
V/C Ratio(X)	0.88	1.19	1.20	1.91	1.31	0.03	0.77	0.71	0.00	0.50	0.92	0.28
Avail Cap(c_a), veh/h	278	774	765	310	1886	818	344	309	278	376	292	253
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.3	43.3	43.3	53.8	37.0	18.5	46.1	58.0	0.0	49.5	62.7	56.4
Incr Delay (d2), s/veh	6.2	99.6	104.4	420.8	144.5	0.1	3.2	7.6	0.0	0.6	31.0	0.6
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 Back of Q (50%), veh/ln	5.6	50.2	50.7	48.2	72.2	0.5	7.2	8.7	0.0	3.7	12.3	2.4
Lane Grp Delay (d), s/veh	45.5	143.0	147.8	474.6	181.5	18.6	49.4	65.6	0.0	50.1	93.7	57.0
Lane Grp LOS	D	F	F	F	F	B	D	E		D	F	E
Approach Vol, veh/h		1982			3092			402			439	
Approach Delay, s/veh		138.5			236.2			58.3			76.7	
Approach LOS		F			F			E			E	
Timer												
Assigned Phs	5	2		1	6		7	4		3	8	
Phs Duration (G+Y+Rc), s	17.2	70.0		30.0	82.8		20.7	33.1		16.7	29.1	
Change Period (Y+Rc), s	6.4	6.9		6.4	6.9		6.1	6.5		6.1	6.5	
Max Green Setting (Gmax), s	23.6	63.1		23.6	63.1		23.9	23.5		23.9	23.5	
Max Q Clear Time (g_c+I1), s	10.8	65.1		25.6	77.9		14.5	19.9		10.6	22.4	
Green Ext Time (p_c), s	0.1	0.0		0.0	0.0		0.2	1.0		0.1	0.2	
Intersection Summary												
HCM 2010 Ctrl Delay			179.5									
HCM 2010 LOS			F									
Notes												

Intersection						
Intersection Delay, s/veh	6.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	227	75	298	250	7	261
Conflicting Peds, #/hr	0	36	0	0	36	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	250	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	76	95	73	87	31	98
Heavy Vehicles, %	5	4	3	6	20	11
Mvmt Flow	299	79	408	287	23	266
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	414	0	1334	225
Stage 1	-	-	-	-	374	-
Stage 2	-	-	-	-	960	-
Follow-up Headway	-	-	2.23	-	3.7	3.41
Pot Capacity-1 Maneuver	-	-	1134	-	124	751
Stage 1	-	-	-	-	615	-
Stage 2	-	-	-	-	293	-
Time blocked-Platoon, %	-	-	-	-	-	-
Mov Capacity-1 Maneuver	-	-	1134	-	75	728
Mov Capacity-2 Maneuver	-	-	-	-	75	-
Stage 1	-	-	-	-	597	-
Stage 2	-	-	-	-	182	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		5.8		17.5	
HCM LOS	C					
Minor Lane / Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	75	728	-	-	1134	-
HCM Lane V/C Ratio	0.301	0.366	-	-	0.36	-
HCM Control Delay (s)	72.5	12.8	-	-	9.949	-
HCM Lane LOS	F	B	A			
HCM 95th %tile Q(veh)	1.106	1.682	-	-	1.657	-
Notes						
~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined						

HCM 2010 Signalized Intersection Summary
4: Old Scott Road & Scott Road

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	133	258	6	108	425	247	30	152	145	139	31	185
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	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	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0
Lanes	1	1	1	1	2	1	0	1	0	0	1	1
Cap, veh/h	514	756	637	610	1512	642	29	83	64	120	10	524
Arrive On Green	0.14	0.40	0.40	0.14	0.40	0.40	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	1810	1900	1601	1810	3800	1615	0	256	196	213	30	1608
Grp Volume(v), veh/h	148	307	12	119	500	329	433	0	0	278	0	330
Grp Sat Flow(s),veh/h/ln	1810	1900	1601	1810	1900	1615	452	0	0	243	0	1608
Q Serve(g_s), s	5.5	15.7	0.6	4.4	12.3	20.8	0.0	0.0	0.0	0.0	0.0	23.5
Cycle Q Clear(g_c), s	5.5	15.7	0.6	4.4	12.3	20.8	44.0	0.0	0.0	44.0	0.0	23.5
Prop In Lane	1.00		1.00	1.00		1.00	0.10		0.43	0.88		1.00
Lane Grp Cap(c), veh/h	514	756	637	610	1512	642	177	0	0	129	0	524
V/C Ratio(X)	0.29	0.41	0.02	0.20	0.33	0.51	2.45	0.00	0.00	2.15	0.00	0.63
Avail Cap(c_a), veh/h	514	756	637	610	1512	642	177	0	0	129	0	524
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	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.4	29.2	24.7	16.4	28.2	30.7	45.8	0.0	0.0	54.0	0.0	38.6
Incr Delay (d2), s/veh	1.4	1.6	0.1	0.7	0.6	2.9	668.1	0.0	0.0	543.2	0.0	5.7
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 Back of Q (50%), veh/ln	2.6	7.9	0.3	2.0	6.1	9.1	38.0	0.0	0.0	24.0	0.0	10.4
Lane Grp Delay (d), s/veh	17.8	30.8	24.7	17.1	28.8	33.6	713.9	0.0	0.0	597.2	0.0	44.2
Lane Grp LOS	B	C	C	B	C	C	F			F		D
Approach Vol, veh/h		467			948			433			608	
Approach Delay, s/veh		26.5			29.0			713.9			297.1	
Approach LOS		C			C			F			F	
Timer												
Assigned Phs	5	2		1	6			4			8	
Phs Duration (G+Y+Rc), s	25.0	60.0		25.0	60.0			50.0			50.0	
Change Period (Y+Rc), s	6.0	6.3		6.0	6.3			6.0			6.0	
Max Green Setting (Gmax), s	19.0	53.7		19.0	53.7			38.0			44.0	
Max Q Clear Time (g_c+I1), s	7.5	17.7		6.4	22.8			46.0			46.0	
Green Ext Time (p_c), s	0.3	15.9		0.2	14.8			0.0			0.0	
Intersection Summary												
HCM 2010 Ctrl Delay			215.6									
HCM 2010 LOS			F									
Notes												

Intersection						
Intersection Delay, s/veh	51.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	213	2339	2038	28	7	258
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Free	-	Yield
Storage Length	250	-	-	250	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	91	94	83	42	73
Heavy Vehicles, %	3	4	3	0	0	8
Mvmt Flow	251	2570	2168	34	17	353
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	2168	0	-	0	3954	1084
Stage 1	-	-	-	-	2168	-
Stage 2	-	-	-	-	1786	-
Follow-up Headway	2.23	-	-	-	3.5	3.38
Pot Capacity-1 Maneuver	# 240	-	-	-	# 2	# 203
Stage 1	-	-	-	-	75	-
Stage 2	-	-	-	-	122	-
Time blocked-Platoon, %	-	-	-	-	-	-
Mov Capacity-1 Maneuver	# 240	-	-	-	# 2	# 203
Mov Capacity-2 Maneuver	-	-	-	-	# 2	-
Stage 1	-	-	-	-	75	-
Stage 2	-	-	-	-	122	-
Approach	EB		WB		SB	
HCM Control Delay, s	10.2		0		\$ 670.1	
HCM LOS					F	
Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	# 240	-	-	-	2	203
HCM Lane V/C Ratio	1.044	-	-	-	8.333	1.741
HCM Control Delay (s)	114.462	-	-	-	\$ 6532.7	\$ 393.6
HCM Lane LOS	F				F	F
HCM 95th %tile Q(veh)	10.378	-	-	-	3.579	24.265
Notes						
~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined						

HCM 2010 Signalized Intersection Summary
2: Eves Road & Holcomb Bridge Road

2034PMBBackground.syn

9/11/2013

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	214	2221	274	369	1710	112	41	204	361	64	426	70
Number	5	2	12	1	6	16	7	4	14	3	8	18
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	190.0	184.7	190.0	190.0	186.3	186.3	190.0	188.1	188.1	190.0	190.0	186.3
Lanes	1	2	0	1	2	1	1	1	1	1	1	1
Cap, veh/h	257	1974	231	152	2136	908	116	253	215	128	279	233
Arrive On Green	0.10	0.61	0.61	0.06	0.57	0.57	0.04	0.13	0.00	0.05	0.15	0.15
Sat Flow, veh/h	1810	3246	380	1810	3725	1583	1810	1881	1599	1810	1900	1583
Grp Volume(v), veh/h	238	1382	1382	429	1781	142	56	255	0	80	458	92
Grp Sat Flow(s),veh/h/ln	1810	1847	1780	1810	1863	1583	1810	1881	1599	1810	1900	1583
Q Serve(g_s), s	14.5	106.1	106.1	10.6	68.2	7.3	4.6	23.5	0.0	6.5	25.6	9.2
Cycle Q Clear(g_c), s	14.5	106.1	106.1	10.6	68.2	7.3	4.6	23.5	0.0	6.5	25.6	9.2
Prop In Lane	1.00		0.21	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	257	1123	1082	152	2136	908	116	253	215	128	279	233
V/C Ratio(X)	0.93	1.23	1.28	2.82	0.83	0.16	0.48	1.01	0.00	0.63	1.64	0.40
Avail Cap(c_a), veh/h	298	1123	1082	152	2136	908	195	253	215	185	279	233
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.7	34.2	34.2	62.7	30.4	17.4	63.4	75.5	0.0	61.0	74.4	67.4
Incr Delay (d2), s/veh	29.2	111.5	131.7	834.7	4.0	0.4	1.2	58.1	0.0	1.9	303.5	1.1
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 Back of Q (50%), veh/ln	12.9	82.5	85.6	42.3	32.4	2.9	2.2	15.6	0.0	3.7	36.3	3.9
Lane Grp Delay (d), s/veh	84.0	145.7	165.8	897.4	34.4	17.8	64.6	133.6	0.0	62.9	377.9	68.5
Lane Grp LOS	F	F	F	F	C	B	E	F		E	F	E
Approach Vol, veh/h		3001			2352			311			630	
Approach Delay, s/veh		150.1			190.8			121.2			292.7	
Approach LOS		F			F			F			F	
Timer												
Assigned Phs	5	2		1	6		7	4		3	8	
Phs Duration (G+Y+Rc), s	23.1	113.0		17.0	106.9		12.3	30.0		14.5	32.1	
Change Period (Y+Rc), s	6.4	6.9		6.4	6.9		6.1	6.5		6.1	6.5	
Max Green Setting (Gmax), s	20.6	106.1		10.6	96.1		13.9	23.5		13.9	23.5	
Max Q Clear Time (g_c+I1), s	16.5	108.1		12.6	70.2		6.6	25.5		8.5	27.6	
Green Ext Time (p_c), s	0.1	0.0		0.0	25.9		0.0	0.0		0.0	0.0	
Intersection Summary												
HCM 2010 Ctrl Delay				178.1								
HCM 2010 LOS				F								
Notes												

Intersection						
Intersection Delay, s/veh	10.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	310	87	216	182	61	256
Conflicting Peds, #/hr	0	7	0	0	7	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	250	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	69	79	87	54	88
Heavy Vehicles, %	1	2	1	1	2	1
Mvmt Flow	356	126	273	209	113	291
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	489	0	1077	248
Stage 1	-	-	-	-	426	-
Stage 2	-	-	-	-	651	-
Follow-up Headway	-	-	2.21	-	3.52	3.31
Pot Capacity-1 Maneuver	-	-	1078	-	214	755
Stage 1	-	-	-	-	627	-
Stage 2	-	-	-	-	481	-
Time blocked-Platoon, %	-	-	-	-	-	-
Mov Capacity-1 Maneuver	-	-	1078	-	158	751
Mov Capacity-2 Maneuver	-	-	-	-	158	-
Stage 1	-	-	-	-	623	-
Stage 2	-	-	-	-	357	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		5.4		29	
HCM LOS	D					
Minor Lane / Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	158	751	-	-	1078	-
HCM Lane V/C Ratio	0.715	0.387	-	-	0.254	-
HCM Control Delay (s)	70.6	12.8	-	-	9.471	-
HCM Lane LOS	F	B	A			
HCM 95th %tile Q(veh)	4.276	1.838	-	-	1.009	-
Notes						
~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined						

HCM 2010 Signalized Intersection Summary
4: Old Scott Road & Scott Road

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9/11/2013

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	26	538	13	139	398	14	50	9	160	30	4	58
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	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	190.0	188.1	190.0	190.0	188.1	172.7	190.0	190.0	190.0	190.0	181.5	186.3
Lanes	1	1	1	1	2	1	0	1	0	0	1	1
Cap, veh/h	594	748	638	420	1497	583	157	43	238	304	19	514
Arrive On Green	0.14	0.40	0.40	0.14	0.40	0.40	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	1810	1881	1605	1810	3762	1466	373	133	730	774	57	1576
Grp Volume(v), veh/h	41	572	29	170	468	28	271	0	0	80	0	73
Grp Sat Flow(s),veh/h/ln	1810	1881	1605	1810	1881	1466	1237	0	0	831	0	1576
Q Serve(g_s), s	1.4	35.5	1.5	6.5	11.5	1.6	17.2	0.0	0.0	0.0	0.0	4.4
Cycle Q Clear(g_c), s	1.4	35.5	1.5	6.5	11.5	1.6	29.7	0.0	0.0	12.5	0.0	4.4
Prop In Lane	1.00		1.00	1.00		1.00	0.34		0.59	0.94		1.00
Lane Grp Cap(c), veh/h	594	748	638	420	1497	583	439	0	0	322	0	514
V/C Ratio(X)	0.07	0.76	0.05	0.41	0.31	0.05	0.62	0.00	0.00	0.25	0.00	0.14
Avail Cap(c_a), veh/h	594	748	638	420	1497	583	439	0	0	322	0	514
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	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.2	35.2	24.9	21.7	28.0	25.0	42.8	0.0	0.0	34.8	0.0	32.2
Incr Delay (d2), s/veh	0.2	7.3	0.1	2.9	0.5	0.2	6.4	0.0	0.0	1.8	0.0	0.6
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 Back of Q (50%), veh/ln	0.7	18.5	0.6	3.2	5.6	0.6	9.2	0.0	0.0	2.2	0.0	1.9
Lane Grp Delay (d), s/veh	15.5	42.5	25.1	24.6	28.5	25.1	49.2	0.0	0.0	36.6	0.0	32.7
Lane Grp LOS	B	D	C	C	C	C	D			D		C
Approach Vol, veh/h		642			666			271			153	
Approach Delay, s/veh		40.0			27.4			49.2			34.8	
Approach LOS		D			C			D			C	
Timer												
Assigned Phs	5	2		1	6			4			8	
Phs Duration (G+Y+Rc), s	25.0	60.0		25.0	60.0			50.0			50.0	
Change Period (Y+Rc), s	6.0	6.3		6.0	6.3			6.0			6.0	
Max Green Setting (Gmax), s	19.0	53.7		19.0	53.7			38.0			44.0	
Max Q Clear Time (g_c+I1), s	3.4	37.5		8.5	13.5			31.7			14.5	
Green Ext Time (p_c), s	0.1	10.3		0.3	17.9			1.7			3.7	
Intersection Summary												
HCM 2010 Ctrl Delay				36.1								
HCM 2010 LOS				D								
Notes												

Intersection						
Intersection Delay, s/veh	16.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	180	1214	1388	23	2	289
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Free	-	Yield
Storage Length	250	-	-	250	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	64	91	93	58	50	73
Heavy Vehicles, %	2	3	3	3	0	4
Mvmt Flow	281	1334	1492	40	4	396
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1492	0	-	0	2722	746
Stage 1	-	-	-	-	1492	-
Stage 2	-	-	-	-	1230	-
Follow-up Headway	2.22	-	-	-	3.5	3.34
Pot Capacity-1 Maneuver	446	-	-	-	17	# 352
Stage 1	-	-	-	-	176	-
Stage 2	-	-	-	-	243	-
Time blocked-Platoon, %	-	-	-	-	-	-
Mov Capacity-1 Maneuver	446	-	-	-	6	# 352
Mov Capacity-2 Maneuver	-	-	-	-	6	-
Stage 1	-	-	-	-	176	-
Stage 2	-	-	-	-	90	-
Approach	EB		WB		SB	
HCM Control Delay, s	4.5		0		128.9	
HCM LOS					F	
Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	446	-	-	-	6	352
HCM Lane V/C Ratio	0.631	-	-	-	0.667	1.125
HCM Control Delay (s)	25.866	-	-	-	\$ 960.8	120.5
HCM Lane LOS	D	-	-	-	F	F
HCM 95th %tile Q(veh)	4.246	-	-	-	1.106	15.232
Notes						
~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined						

HCM 2010 Signalized Intersection Summary

2: Eves Road & Holcomb Bridge Road

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9/17/2013

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	78	1154	37	340	1316	29	82	125	361	91	146	45
Number	5	2	12	1	6	16	7	4	14	3	8	18
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	152.0	183.8	190.0	174.3	186.3	190.0	184.5	174.3	184.5	174.3	186.3	190.0
Lanes	1	2	0	1	2	1	1	1	1	1	1	1
Cap, veh/h	162	1573	55	378	2080	902	213	228	205	218	235	203
Arrive On Green	0.05	0.45	0.45	0.17	0.56	0.56	0.08	0.13	0.00	0.07	0.13	0.13
Sat Flow, veh/h	1448	3530	124	1660	3725	1615	1757	1743	1568	1660	1863	1615
Grp Volume(v), veh/h	108	667	660	425	1778	36	130	164	0	114	197	56
Grp Sat Flow(s),veh/h/ln	1448	1838	1816	1660	1863	1615	1757	1743	1568	1660	1863	1615
Q Serve(g_s), s	5.7	44.6	44.7	23.6	56.9	1.4	8.9	12.7	0.0	8.3	14.6	4.4
Cycle Q Clear(g_c), s	5.7	44.6	44.7	23.6	56.9	1.4	8.9	12.7	0.0	8.3	14.6	4.4
Prop In Lane	1.00		0.07	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	162	819	809	378	2080	902	213	228	205	218	235	203
V/C Ratio(X)	0.67	0.81	0.82	1.12	0.85	0.04	0.61	0.72	0.00	0.52	0.84	0.28
Avail Cap(c_a), veh/h	326	822	812	378	2080	902	374	290	261	378	310	269
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.8	34.0	34.1	44.7	26.3	14.1	48.7	58.9	0.0	49.2	60.3	55.9
Incr Delay (d2), s/veh	1.7	8.7	8.9	84.2	4.7	0.1	1.1	6.2	0.0	0.7	14.4	0.7
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 Back of Q (50%), veh/ln	4.0	22.2	22.0	22.6	26.8	0.6	4.1	6.1	0.0	3.6	7.9	1.9
Lane Grp Delay (d), s/veh	31.5	42.8	43.0	128.9	31.1	14.2	49.8	65.1	0.0	49.9	74.7	56.6
Lane Grp LOS	C	D	D	F	C	B	D	E		D	E	E
Approach Vol, veh/h		1435			2239			294			367	
Approach Delay, s/veh		42.0			49.4			58.3			64.2	
Approach LOS		D			D			E			E	
Timer												
Assigned Phs	5	2		1	6		7	4		3	8	
Phs Duration (G+Y+Rc), s	14.1	69.8		30.0	85.7		17.1	24.9		16.4	24.3	
Change Period (Y+Rc), s	6.4	6.9		6.4	6.9		6.1	6.5		6.1	6.5	
Max Green Setting (Gmax), s	23.6	63.1		23.6	63.1		23.9	23.5		23.9	23.5	
Max Q Clear Time (g_c+l1), s	7.7	46.7		25.6	58.9		10.9	14.7		10.3	16.6	
Green Ext Time (p_c), s	0.1	16.2		0.0	4.2		0.1	1.4		0.1	1.2	
Intersection Summary												
HCM 2010 Ctrl Delay				48.8								
HCM 2010 LOS				D								
Notes												

Intersection						
Intersection Delay, s/veh	5.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	171	54	216	183	5	189
Conflicting Peds, #/hr	0	36	0	0	36	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	250	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	76	95	73	87	31	98
Heavy Vehicles, %	5	4	3	6	20	11
Mvmt Flow	225	57	296	210	16	193
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	318	0	986	177
Stage 1	-	-	-	-	289	-
Stage 2	-	-	-	-	697	-
Follow-up Headway	-	-	2.23	-	3.7	3.41
Pot Capacity-1 Maneuver	-	-	1232	-	215	808
Stage 1	-	-	-	-	684	-
Stage 2	-	-	-	-	410	-
Time blocked-Platoon, %	-	-	-	-	-	-
Mov Capacity-1 Maneuver	-	-	1232	-	154	784
Mov Capacity-2 Maneuver	-	-	-	-	154	-
Stage 1	-	-	-	-	663	-
Stage 2	-	-	-	-	302	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		5.2		12.6	
HCM LOS	B					
Minor Lane / Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	154	784	-	-	1232	-
HCM Lane V/C Ratio	0.105	0.246	-	-	0.24	-
HCM Control Delay (s)	31.1	11.1	-	-	8.843	-
HCM Lane LOS	D	B	A			
HCM 95th %tile Q(veh)	0.344	0.966	-	-	0.941	-
Notes						
~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined						

HCM 2010 Signalized Intersection Summary
4: Old Scott Road & Scott Road

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9/17/2013

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	98	193	4	78	309	177	21	109	104	100	22	134
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		1.00	1.00		0.99	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	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0
Lanes	1	1	1	1	2	1	0	1	0	0	1	1
Cap, veh/h	586	756	637	671	1512	642	29	109	84	119	9	524
Arrive On Green	0.14	0.40	0.40	0.14	0.40	0.40	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	1810	1900	1601	1810	3800	1615	0	333	257	212	29	1608
Grp Volume(v), veh/h	109	230	8	86	364	236	310	0	0	199	0	239
Grp Sat Flow(s),veh/h/ln	1810	1900	1601	1810	1900	1615	591	0	0	241	0	1608
Q Serve(g_s), s	4.0	11.2	0.4	3.1	8.6	13.9	0.0	0.0	0.0	0.0	0.0	15.9
Cycle Q Clear(g_c), s	4.0	11.2	0.4	3.1	8.6	13.9	44.0	0.0	0.0	44.0	0.0	15.9
Prop In Lane	1.00		1.00	1.00		1.00	0.10		0.44	0.88		1.00
Lane Grp Cap(c), veh/h	586	756	637	671	1512	642	222	0	0	129	0	524
V/C Ratio(X)	0.19	0.30	0.01	0.13	0.24	0.37	1.40	0.00	0.00	1.55	0.00	0.46
Avail Cap(c_a), veh/h	586	756	637	671	1512	642	222	0	0	129	0	524
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	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.6	27.9	24.6	15.6	27.1	28.7	47.1	0.0	0.0	54.1	0.0	36.0
Incr Delay (d2), s/veh	0.7	1.0	0.0	0.4	0.4	1.6	203.7	0.0	0.0	280.6	0.0	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q (50%), veh/ln	1.9	5.6	0.2	1.4	4.2	6.0	19.2	0.0	0.0	14.6	0.0	6.9
Lane Grp Delay (d), s/veh	16.3	28.9	24.6	16.0	27.5	30.3	250.8	0.0	0.0	334.6	0.0	38.9
Lane Grp LOS	B	C	C	B	C	C	F			F		D
Approach Vol, veh/h		347			686			310			438	
Approach Delay, s/veh		24.8			27.0			250.8			173.2	
Approach LOS		C			C			F			F	
Timer												
Assigned Phs	5	2		1	6			4			8	
Phs Duration (G+Y+Rc), s	25.0	60.0		25.0	60.0			50.0			50.0	
Change Period (Y+Rc), s	6.0	6.3		6.0	6.3			6.0			6.0	
Max Green Setting (Gmax), s	19.0	53.7		19.0	53.7			38.0			44.0	
Max Q Clear Time (g_c+I1), s	6.0	13.2		5.1	15.9			46.0			46.0	
Green Ext Time (p_c), s	0.2	11.2		0.1	11.0			0.0			0.0	
Intersection Summary												
HCM 2010 Ctrl Delay				101.5								
HCM 2010 LOS				F								
Notes												

Intersection						
Intersection Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	20	0	197	6	0	271
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	0	214	7	0	295
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	364	110	0	0	221	0
Stage 1	217	-	-	-	-	-
Stage 2	147	-	-	-	-	-
Follow-up Headway	3.52	3.32	-	-	2.22	-
Pot Capacity-1 Maneuver	609	922	-	-	1345	-
Stage 1	798	-	-	-	-	-
Stage 2	865	-	-	-	-	-
Time blocked-Platoon, %			-	-		-
Mov Capacity-1 Maneuver	609	922	-	-	1345	-
Mov Capacity-2 Maneuver	609	-	-	-	-	-
Stage 1	798	-	-	-	-	-
Stage 2	865	-	-	-	-	-
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)	-	-	609	1345	-	
HCM Lane V/C Ratio	-	-	0.036	-	-	
HCM Control Delay (s)	-	-	11.1	0	-	
HCM Lane LOS			B	A		
HCM 95th %tile Q(veh)	-	-	0.111	0	-	
Notes						
~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined						

Intersection						
Intersection Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	217	0	3	185	0	8
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, %	2	2	2	2	2	2
Mvmt Flow	236	0	3	201	0	9
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	236	0	343	118
Stage 1	-	-	-	-	236	-
Stage 2	-	-	-	-	107	-
Follow-up Headway	-	-	2.22	-	3.52	3.32
Pot Capacity-1 Maneuver	-	-	1328	-	627	912
Stage 1	-	-	-	-	781	-
Stage 2	-	-	-	-	906	-
Time blocked-Platoon, %	-	-	-	-	-	-
Mov Capacity-1 Maneuver	-	-	1328	-	625	912
Mov Capacity-2 Maneuver	-	-	-	-	625	-
Stage 1	-	-	-	-	781	-
Stage 2	-	-	-	-	903	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.1		9	
HCM LOS					A	
Minor Lane / Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	912	-	-	1328	-	
HCM Lane V/C Ratio	0.01	-	-	0.002	-	
HCM Control Delay (s)	9	-	-	7.718	0	
HCM Lane LOS	A			A	A	
HCM 95th %tile Q(veh)	0.029	-	-	0.007	-	
Notes						
~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined						

Intersection						
Intersection Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	0	0	8	194	270	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	9	211	293	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	416	147	293	0	-	0
Stage 1	293	-	-	-	-	-
Stage 2	123	-	-	-	-	-
Follow-up Headway	3.52	3.32	2.22	-	-	-
Pot Capacity-1 Maneuver	565	873	1265	-	-	-
Stage 1	731	-	-	-	-	-
Stage 2	889	-	-	-	-	-
Time blocked-Platoon, %				-	-	-
Mov Capacity-1 Maneuver	560	873	1265	-	-	-
Mov Capacity-2 Maneuver	560	-	-	-	-	-
Stage 1	731	-	-	-	-	-
Stage 2	882	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0.3		0		
HCM LOS	A					
Minor Lane / Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1265	-	0	-	-	
HCM Lane V/C Ratio	0.007	-	+	-	-	
HCM Control Delay (s)	7.866	0	0	-	-	
HCM Lane LOS	A	A	A			
HCM 95th %tile Q(veh)	0.021	-	+	-	-	
Notes						
~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined						

Intersection						
Intersection Delay, s/veh	0.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	1	13	20	212	269	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	14	22	230	292	2
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	452	147	295	0	-	0
Stage 1	293	-	-	-	-	-
Stage 2	159	-	-	-	-	-
Follow-up Headway	3.52	3.32	2.22	-	-	-
Pot Capacity-1 Maneuver	536	873	1263	-	-	-
Stage 1	731	-	-	-	-	-
Stage 2	853	-	-	-	-	-
Time blocked-Platoon, %				-	-	-
Mov Capacity-1 Maneuver	525	873	1263	-	-	-
Mov Capacity-2 Maneuver	525	-	-	-	-	-
Stage 1	731	-	-	-	-	-
Stage 2	836	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	9.4	0.8		0		
HCM LOS	A					
Minor Lane / Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1263	-	834	-	-	
HCM Lane V/C Ratio	0.017	-	0.018	-	-	
HCM Control Delay (s)	7.9	0.1	9.4	-	-	
HCM Lane LOS	A	A	A			
HCM 95th %tile Q(veh)	0.053	-	0.056	-	-	
Notes						
~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined						

Intersection						
Intersection Delay, s/veh	8.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	175	1688	1472	20	5	198
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Free	-	Yield
Storage Length	250	-	-	250	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	91	94	83	42	73
Heavy Vehicles, %	3	4	3	0	0	8
Mvmt Flow	206	1855	1566	24	12	271
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1566	0	-	0	2905	783
Stage 1	-	-	-	-	1566	-
Stage 2	-	-	-	-	1339	-
Follow-up Headway	2.23	-	-	-	3.5	3.38
Pot Capacity-1 Maneuver	413	-	-	-	13	324
Stage 1	-	-	-	-	161	-
Stage 2	-	-	-	-	213	-
Time blocked-Platoon, %	-	-	-	-	-	-
Mov Capacity-1 Maneuver	413	-	-	-	# 7	324
Mov Capacity-2 Maneuver	-	-	-	-	# 7	-
Stage 1	-	-	-	-	161	-
Stage 2	-	-	-	-	107	-
Approach	EB		WB		SB	
HCM Control Delay, s	2.2		0		107.2	
HCM LOS					F	
Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	413	-	-	-	7	324
HCM Lane V/C Ratio	0.499	-	-	-	1.701	0.837
HCM Control Delay (s)	22.072	-	-	-	\$ 1323.8	53.8
HCM Lane LOS	C				F	F
HCM 95th %tile Q(veh)	2.7	-	-	-	2.442	7.313
Notes						
~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined						

HCM 2010 Signalized Intersection Summary

2: Eves Road & Holcomb Bridge Road

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	162	1595	197	265	1228	112	30	158	259	67	313	58
Number	5	2	12	1	6	16	7	4	14	3	8	18
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	190.0	184.7	190.0	190.0	186.3	186.3	190.0	188.1	188.1	190.0	190.0	186.3
Lanes	1	2	0	1	2	1	1	1	1	1	1	1
Cap, veh/h	299	2006	235	184	2349	998	108	223	189	151	264	220
Arrive On Green	0.05	0.62	0.62	0.06	0.63	0.63	0.03	0.12	0.00	0.05	0.14	0.14
Sat Flow, veh/h	1810	3246	380	1810	3725	1583	1810	1881	1599	1810	1900	1583
Grp Volume(v), veh/h	180	992	992	308	1279	142	41	198	0	84	337	76
Grp Sat Flow(s),veh/h/ln	1810	1847	1779	1810	1863	1583	1810	1881	1599	1810	1900	1583
Q Serve(g_s), s	6.3	76.0	82.4	10.6	33.1	6.2	3.4	17.8	0.0	6.8	23.8	7.4
Cycle Q Clear(g_c), s	6.3	76.0	82.4	10.6	33.1	6.2	3.4	17.8	0.0	6.8	23.8	7.4
Prop In Lane	1.00		0.21	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	299	1141	1100	184	2349	998	108	223	189	151	264	220
V/C Ratio(X)	0.60	0.87	0.90	1.67	0.54	0.14	0.38	0.89	0.00	0.56	1.28	0.35
Avail Cap(c_a), veh/h	427	1143	1102	184	2349	998	200	258	219	207	264	220
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.8	27.0	28.2	55.7	17.8	12.8	64.6	74.4	0.0	60.5	73.8	66.7
Incr Delay (d2), s/veh	0.7	9.1	11.9	324.3	0.9	0.3	0.8	26.7	0.0	1.2	150.8	0.9
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 Back of Q (50%), veh/ln	2.7	36.8	38.9	24.9	15.0	2.4	1.6	10.4	0.0	3.2	22.9	3.1
Lane Grp Delay (d), s/veh	16.5	36.1	40.1	379.9	18.7	13.1	65.4	101.1	0.0	61.7	224.6	67.7
Lane Grp LOS	B	D	D	F	B	B	E	F		E	F	E
Approach Vol, veh/h		2164			1729			239			497	
Approach Delay, s/veh		36.3			82.6			95.0			173.1	
Approach LOS		D			F			F			F	
Timer												
Assigned Phs	5	2		1	6		7	4		3	8	
Phs Duration (G+Y+Rc), s	14.9	112.8		17.0	115.0		11.2	26.8		14.7	30.3	
Change Period (Y+Rc), s	6.4	6.9		6.4	6.9		6.1	6.5		6.1	6.5	
Max Green Setting (Gmax), s	20.6	106.1		10.6	96.1		13.9	23.5		13.9	23.5	
Max Q Clear Time (g_c+I1), s	8.3	84.4		12.6	35.1		5.4	19.8		8.8	25.8	
Green Ext Time (p_c), s	0.2	21.5		0.0	59.8		0.0	0.5		0.0	0.0	
Intersection Summary												
HCM 2010 Ctrl Delay				71.3								
HCM 2010 LOS				E								
Notes												

Intersection						
Intersection Delay, s/veh	6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	227	62	157	139	44	186
Conflicting Peds, #/hr	0	7	0	0	7	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	250	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	69	79	87	54	88
Heavy Vehicles, %	1	2	1	1	2	1
Mvmt Flow	261	90	199	160	81	211
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	358	0	790	182
Stage 1	-	-	-	-	313	-
Stage 2	-	-	-	-	477	-
Follow-up Headway	-	-	2.21	-	3.52	3.31
Pot Capacity-1 Maneuver	-	-	1205	-	327	832
Stage 1	-	-	-	-	715	-
Stage 2	-	-	-	-	590	-
Time blocked-Platoon, %	-	-	-	-	-	-
Mov Capacity-1 Maneuver	-	-	1205	-	270	827
Mov Capacity-2 Maneuver	-	-	-	-	270	-
Stage 1	-	-	-	-	711	-
Stage 2	-	-	-	-	490	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		4.8		14.5	
HCM LOS	B					
Minor Lane / Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	270	827	-	-	1205	-
HCM Lane V/C Ratio	0.302	0.256	-	-	0.165	-
HCM Control Delay (s)	24	10.8	-	-	8.577	-
HCM Lane LOS	C	B	A			
HCM 95th %tile Q(veh)	1.232	1.017	-	-	0.59	-
Notes						
~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined						

HCM 2010 Signalized Intersection Summary
4: Old Scott Road & Scott Road

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9/17/2013

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	19	393	9	100	294	10	36	6	115	21	3	44
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	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	190.0	188.1	190.0	190.0	188.1	172.7	190.0	190.0	190.0	190.0	181.6	186.3
Lanes	1	1	1	1	2	1	0	1	0	0	1	1
Cap, veh/h	655	748	638	525	1497	583	177	45	270	360	26	514
Arrive On Green	0.14	0.40	0.40	0.14	0.40	0.40	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	1810	1881	1605	1810	3762	1466	432	138	829	948	79	1576
Grp Volume(v), veh/h	30	418	20	122	346	20	194	0	0	56	0	56
Grp Sat Flow(s),veh/h/ln	1810	1881	1605	1810	1881	1466	1398	0	0	1027	0	1576
Q Serve(g_s), s	1.1	23.2	1.0	4.5	8.2	1.1	9.5	0.0	0.0	0.0	0.0	3.4
Cycle Q Clear(g_c), s	1.1	23.2	1.0	4.5	8.2	1.1	17.5	0.0	0.0	8.0	0.0	3.4
Prop In Lane	1.00		1.00	1.00		1.00	0.35		0.59	0.93		1.00
Lane Grp Cap(c), veh/h	655	748	638	525	1497	583	492	0	0	386	0	514
V/C Ratio(X)	0.05	0.56	0.03	0.23	0.23	0.03	0.39	0.00	0.00	0.15	0.00	0.11
Avail Cap(c_a), veh/h	655	748	638	525	1497	583	492	0	0	386	0	514
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	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.9	31.5	24.8	17.7	27.0	24.8	37.1	0.0	0.0	33.3	0.0	31.8
Incr Delay (d2), s/veh	0.1	3.0	0.1	1.0	0.4	0.1	2.4	0.0	0.0	0.8	0.0	0.4
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 Back of Q (50%), veh/ln	0.5	11.8	0.4	2.1	4.0	0.4	5.7	0.0	0.0	1.5	0.0	1.4
Lane Grp Delay (d), s/veh	15.0	34.5	24.9	18.7	27.3	24.9	39.4	0.0	0.0	34.1	0.0	32.2
Lane Grp LOS	B	C	C	B	C	C	D			C		C
Approach Vol, veh/h		468			488			194			112	
Approach Delay, s/veh		32.8			25.1			39.4			33.1	
Approach LOS		C			C			D			C	
Timer												
Assigned Phs	5	2		1	6			4			8	
Phs Duration (G+Y+Rc), s	25.0	60.0		25.0	60.0			50.0			50.0	
Change Period (Y+Rc), s	6.0	6.3		6.0	6.3			6.0			6.0	
Max Green Setting (Gmax), s	19.0	53.7		19.0	53.7			38.0			44.0	
Max Q Clear Time (g_c+I1), s	3.1	25.2		6.5	10.2			19.5			10.0	
Green Ext Time (p_c), s	0.0	10.5		0.2	12.2			2.2			2.6	
Intersection Summary												
HCM 2010 Ctrl Delay			30.9									
HCM 2010 LOS			C									
Notes												

Intersection						
Intersection Delay, s/veh	0.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	12	0	173	22	0	191
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	0	188	24	0	208
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	304	106	0	0	212	0
Stage 1	200	-	-	-	-	-
Stage 2	104	-	-	-	-	-
Follow-up Headway	3.52	3.32	-	-	2.22	-
Pot Capacity-1 Maneuver	664	928	-	-	1356	-
Stage 1	814	-	-	-	-	-
Stage 2	909	-	-	-	-	-
Time blocked-Platoon, %			-	-		-
Mov Capacity-1 Maneuver	664	928	-	-	1356	-
Mov Capacity-2 Maneuver	664	-	-	-	-	-
Stage 1	814	-	-	-	-	-
Stage 2	909	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	10.5	0		0		
HCM LOS	B					
Minor Lane / Major Mvmt	NBT	NBR	WBLn1	SBL	SBT	
Capacity (veh/h)	-	-	664	1356	-	
HCM Lane V/C Ratio	-	-	0.02	-	-	
HCM Control Delay (s)	-	-	10.5	0	-	
HCM Lane LOS			B	A		
HCM 95th %tile Q(veh)	-	-	0.06	0	-	
Notes						
~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined						

Intersection						
Intersection Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	284	0	8	175	0	5
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, %	2	2	2	2	2	2
Mvmt Flow	309	0	9	190	0	5
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	309	0	422	154
Stage 1	-	-	-	-	309	-
Stage 2	-	-	-	-	113	-
Follow-up Headway	-	-	2.22	-	3.52	3.32
Pot Capacity-1 Maneuver	-	-	1248	-	560	864
Stage 1	-	-	-	-	718	-
Stage 2	-	-	-	-	899	-
Time blocked-Platoon, %	-	-	-	-	-	-
Mov Capacity-1 Maneuver	-	-	1248	-	556	864
Mov Capacity-2 Maneuver	-	-	-	-	556	-
Stage 1	-	-	-	-	718	-
Stage 2	-	-	-	-	892	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.3		9.2	
HCM LOS	A					
Minor Lane / Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	864	-	-	1248	-	
HCM Lane V/C Ratio	0.006	-	-	0.007	-	
HCM Control Delay (s)	9.2	-	-	7.905	0	
HCM Lane LOS	A			A	A	
HCM 95th %tile Q(veh)	0.019	-	-	0.021	-	
Notes						
~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined						

Intersection						
Intersection Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	0	0	31	230	219	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	34	250	238	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	430	119	238	0	-	0
Stage 1	238	-	-	-	-	-
Stage 2	192	-	-	-	-	-
Follow-up Headway	3.52	3.32	2.22	-	-	-
Pot Capacity-1 Maneuver	553	910	1326	-	-	-
Stage 1	779	-	-	-	-	-
Stage 2	822	-	-	-	-	-
Time blocked-Platoon, %				-	-	-
Mov Capacity-1 Maneuver	536	910	1326	-	-	-
Mov Capacity-2 Maneuver	536	-	-	-	-	-
Stage 1	779	-	-	-	-	-
Stage 2	797	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	1		0		
HCM LOS	A					
Minor Lane / Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1326	-	0	-	-	
HCM Lane V/C Ratio	0.025	-	+	-	-	
HCM Control Delay (s)	7.786	0.1	0	-	-	
HCM Lane LOS	A	A	A			
HCM 95th %tile Q(veh)	0.078	-	+	-	-	
Notes						
~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined						

Intersection						
Intersection Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	2	19	19	413	419	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	21	21	449	455	2
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	723	229	458	0	-	0
Stage 1	457	-	-	-	-	-
Stage 2	266	-	-	-	-	-
Follow-up Headway	3.52	3.32	2.22	-	-	-
Pot Capacity-1 Maneuver	361	774	1099	-	-	-
Stage 1	604	-	-	-	-	-
Stage 2	754	-	-	-	-	-
Time blocked-Platoon, %				-	-	-
Mov Capacity-1 Maneuver	352	774	1099	-	-	-
Mov Capacity-2 Maneuver	352	-	-	-	-	-
Stage 1	604	-	-	-	-	-
Stage 2	735	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	10.4	0.5		0		
HCM LOS	B					
Minor Lane / Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1099	-	695	-	-	
HCM Lane V/C Ratio	0.019	-	0.033	-	-	
HCM Control Delay (s)	8.338	0.1	10.4	-	-	
HCM Lane LOS	A	A	B			
HCM 95th %tile Q(veh)	0.057	-	0.102	-	-	
Notes						
~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined						

Intersection						
Intersection Delay, s/veh	99.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	249	1686	1931	33	3	395
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Free	-	Yield
Storage Length	250	-	-	250	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	64	91	93	58	50	73
Heavy Vehicles, %	2	3	3	3	0	4
Mvmt Flow	389	1853	2076	57	6	541
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	2076	0	-	0	3780	1038
Stage 1	-	-	-	-	2076	-
Stage 2	-	-	-	-	1704	-
Follow-up Headway	2.22	-	-	-	3.5	3.34
Pot Capacity-1 Maneuver	# 264	-	-	-	# 3	# 224
Stage 1	-	-	-	-	84	-
Stage 2	-	-	-	-	135	-
Time blocked-Platoon, %	-	-	-	-	-	-
Mov Capacity-1 Maneuver	# 264	-	-	-	# 3	# 224
Mov Capacity-2 Maneuver	-	-	-	-	# 3	-
Stage 1	-	-	-	-	84	-
Stage 2	-	-	-	-	135	-
Approach	EB		WB		SB	
HCM Control Delay, s	46.5		0		\$ 704.2	
HCM LOS					F	
Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	# 264	-	-	-	3	224
HCM Lane V/C Ratio	1.474	-	-	-	2	2.416
HCM Control Delay (s)	268.067	-	-	-	\$ 2493.3	\$ 684.4
HCM Lane LOS	F				F	F
HCM 95th %tile Q(veh)	22.204	-	-	-	1.699	44.225
Notes						
~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined						

HCM 2010 Signalized Intersection Summary

2: Eves Road & Holcomb Bridge Road

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9/17/2013

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	106	1606	51	473	1832	35	114	173	503	117	199	60
Number	5	2	12	1	6	16	7	4	14	3	8	18
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	152.0	183.8	190.0	174.3	186.3	190.0	184.5	174.3	184.5	174.3	186.3	190.0
Lanes	1	2	0	1	2	1	1	1	1	1	1	1
Cap, veh/h	165	1476	51	307	1841	798	234	292	262	237	290	251
Arrive On Green	0.08	0.42	0.42	0.16	0.49	0.49	0.10	0.17	0.00	0.09	0.16	0.16
Sat Flow, veh/h	1448	3532	122	1660	3725	1615	1757	1743	1568	1660	1863	1615
Grp Volume(v), veh/h	147	924	922	591	2476	43	181	228	0	146	269	74
Grp Sat Flow(s),veh/h/ln	1448	1838	1817	1660	1863	1615	1757	1743	1568	1660	1863	1615
Q Serve(g_s), s	10.0	63.1	63.1	23.6	74.6	2.1	12.7	18.9	0.0	11.0	21.5	6.1
Cycle Q Clear(g_c), s	10.0	63.1	63.1	23.6	74.6	2.1	12.7	18.9	0.0	11.0	21.5	6.1
Prop In Lane	1.00		0.07	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	165	768	759	307	1841	798	234	292	262	237	290	251
V/C Ratio(X)	0.89	1.20	1.21	1.92	1.35	0.05	0.77	0.78	0.00	0.62	0.93	0.29
Avail Cap(c_a), veh/h	275	768	759	307	1841	798	339	292	262	356	290	251
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.5	43.9	43.9	54.0	38.2	19.9	47.4	60.2	0.0	48.6	62.9	56.4
Incr Delay (d2), s/veh	10.4	103.6	108.4	427.6	159.1	0.1	3.6	12.9	0.0	1.0	34.4	0.6
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 Back of Q (50%), veh/ln	6.2	50.9	51.3	48.5	74.9	0.8	7.3	9.5	0.0	4.7	13.2	2.6
Lane Grp Delay (d), s/veh	51.9	147.5	152.4	481.6	197.3	20.0	51.0	73.1	0.0	49.6	97.3	57.0
Lane Grp LOS	D	F	F	F	F	B	D	E		D	F	E
Approach Vol, veh/h		1993			3110			409			489	
Approach Delay, s/veh		142.7			248.9			63.3			76.9	
Approach LOS		F			F			E			E	
Timer												
Assigned Phs	5	2		1	6		7	4		3	8	
Phs Duration (G+Y+Rc), s	18.5	70.0		30.0	81.5		21.0	31.8		19.2	30.0	
Change Period (Y+Rc), s	6.4	6.9		6.4	6.9		6.1	6.5		6.1	6.5	
Max Green Setting (Gmax), s	23.6	63.1		23.6	63.1		23.9	23.5		23.9	23.5	
Max Q Clear Time (g_c+I1), s	12.0	65.1		25.6	76.6		14.7	20.9		13.0	23.5	
Green Ext Time (p_c), s	0.1	0.0		0.0	0.0		0.2	0.8		0.1	0.0	
Intersection Summary												
HCM 2010 Ctrl Delay			186.9									
HCM 2010 LOS			F									
Notes												

Intersection						
Intersection Delay, s/veh	6.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	235	75	300	253	7	262
Conflicting Peds, #/hr	0	36	0	0	36	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	250	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	76	95	73	87	31	98
Heavy Vehicles, %	5	4	3	6	20	11
Mvmt Flow	309	79	411	291	23	267
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	424	0	1352	230
Stage 1	-	-	-	-	385	-
Stage 2	-	-	-	-	967	-
Follow-up Headway	-	-	2.23	-	3.7	3.41
Pot Capacity-1 Maneuver	-	-	1125	-	121	745
Stage 1	-	-	-	-	607	-
Stage 2	-	-	-	-	290	-
Time blocked-Platoon, %	-	-	-	-	-	-
Mov Capacity-1 Maneuver	-	-	1125	-	72	723
Mov Capacity-2 Maneuver	-	-	-	-	72	-
Stage 1	-	-	-	-	589	-
Stage 2	-	-	-	-	179	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		5.9		17.8	
HCM LOS	C					
Minor Lane / Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	72	723	-	-	1125	-
HCM Lane V/C Ratio	0.314	0.37	-	-	0.365	-
HCM Control Delay (s)	76.4	12.9	-	-	10.03	-
HCM Lane LOS	F	B	B			
HCM 95th %tile Q(veh)	1.155	1.709	-	-	1.694	-
Notes						
~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined						

HCM 2010 Signalized Intersection Summary
4: Old Scott Road & Scott Road

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9/17/2013

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	135	265	6	108	429	247	30	152	145	139	31	186
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	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	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0
Lanes	1	1	1	1	2	1	0	1	0	0	1	1
Cap, veh/h	512	756	637	604	1512	642	29	83	64	120	10	524
Arrive On Green	0.14	0.40	0.40	0.14	0.40	0.40	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	1810	1900	1601	1810	3800	1615	0	256	196	213	30	1608
Grp Volume(v), veh/h	150	315	12	119	505	329	433	0	0	278	0	332
Grp Sat Flow(s),veh/h/ln	1810	1900	1601	1810	1900	1615	452	0	0	243	0	1608
Q Serve(g_s), s	5.6	16.2	0.6	4.4	12.5	20.8	0.0	0.0	0.0	0.0	0.0	23.7
Cycle Q Clear(g_c), s	5.6	16.2	0.6	4.4	12.5	20.8	44.0	0.0	0.0	44.0	0.0	23.7
Prop In Lane	1.00		1.00	1.00		1.00	0.10		0.43	0.88		1.00
Lane Grp Cap(c), veh/h	512	756	637	604	1512	642	177	0	0	129	0	524
V/C Ratio(X)	0.29	0.42	0.02	0.20	0.33	0.51	2.45	0.00	0.00	2.15	0.00	0.63
Avail Cap(c_a), veh/h	512	756	637	604	1512	642	177	0	0	129	0	524
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	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.4	29.3	24.7	16.5	28.2	30.7	45.8	0.0	0.0	54.0	0.0	38.7
Incr Delay (d2), s/veh	1.4	1.7	0.1	0.7	0.6	2.9	668.1	0.0	0.0	543.2	0.0	5.7
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 Back of Q (50%), veh/ln	2.7	8.1	0.3	2.0	6.2	9.1	38.0	0.0	0.0	24.0	0.0	10.5
Lane Grp Delay (d), s/veh	17.9	31.0	24.7	17.2	28.8	33.6	713.9	0.0	0.0	597.2	0.0	44.4
Lane Grp LOS	B	C	C	B	C	C	F			F		D
Approach Vol, veh/h		477			953			433			610	
Approach Delay, s/veh		26.7			29.0			713.9			296.3	
Approach LOS		C			C			F			F	
Timer												
Assigned Phs	5	2		1	6			4			8	
Phs Duration (G+Y+Rc), s	25.0	60.0		25.0	60.0			50.0			50.0	
Change Period (Y+Rc), s	6.0	6.3		6.0	6.3			6.0			6.0	
Max Green Setting (Gmax), s	19.0	53.7		19.0	53.7			38.0			44.0	
Max Q Clear Time (g_c+I1), s	7.6	18.2		6.4	22.8			46.0			46.0	
Green Ext Time (p_c), s	0.3	16.0		0.2	15.0			0.0			0.0	
Intersection Summary												
HCM 2010 Ctrl Delay			214.4									
HCM 2010 LOS			F									
Notes												

Intersection						
Intersection Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	20	0	276	6	0	378
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	0	300	7	0	411
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	508	153	0	0	307	0
Stage 1	303	-	-	-	-	-
Stage 2	205	-	-	-	-	-
Follow-up Headway	3.52	3.32	-	-	2.22	-
Pot Capacity-1 Maneuver	494	866	-	-	1250	-
Stage 1	723	-	-	-	-	-
Stage 2	809	-	-	-	-	-
Time blocked-Platoon, %			-	-		-
Mov Capacity-1 Maneuver	494	866	-	-	1250	-
Mov Capacity-2 Maneuver	494	-	-	-	-	-
Stage 1	723	-	-	-	-	-
Stage 2	809	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	12.6	0		0		
HCM LOS	B					
Minor Lane / Major Mvmt	NBT	NBR	WBLn1	SBL	SBT	
Capacity (veh/h)	-	-	494	1250	-	
HCM Lane V/C Ratio	-	-	0.044	-	-	
HCM Control Delay (s)	-	-	12.6	0	-	
HCM Lane LOS			B	A		
HCM 95th %tile Q(veh)	-	-	0.138	0	-	
Notes						
~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined						

Intersection						
Intersection Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	302	0	3	257	0	8
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, %	2	2	2	2	2	2
Mvmt Flow	328	0	3	279	0	9
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	328	0	474	164
Stage 1	-	-	-	-	328	-
Stage 2	-	-	-	-	146	-
Follow-up Headway	-	-	2.22	-	3.52	3.32
Pot Capacity-1 Maneuver	-	-	1228	-	519	852
Stage 1	-	-	-	-	702	-
Stage 2	-	-	-	-	866	-
Time blocked-Platoon, %	-	-	-	-	-	-
Mov Capacity-1 Maneuver	-	-	1228	-	517	852
Mov Capacity-2 Maneuver	-	-	-	-	517	-
Stage 1	-	-	-	-	702	-
Stage 2	-	-	-	-	863	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.1		9.3	
HCM LOS	A					
Minor Lane / Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	852	-	-	1228	-	
HCM Lane V/C Ratio	0.01	-	-	0.003	-	
HCM Control Delay (s)	9.3	-	-	7.939	0	
HCM Lane LOS	A			A	A	
HCM 95th %tile Q(veh)	0.031	-	-	0.008	-	
Notes						
~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined						

Intersection						
Intersection Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	0	0	8	269	375	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	9	292	408	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	572	204	408	0	-	0
Stage 1	408	-	-	-	-	-
Stage 2	164	-	-	-	-	-
Follow-up Headway	3.52	3.32	2.22	-	-	-
Pot Capacity-1 Maneuver	450	803	1147	-	-	-
Stage 1	640	-	-	-	-	-
Stage 2	848	-	-	-	-	-
Time blocked-Platoon, %				-	-	-
Mov Capacity-1 Maneuver	446	803	1147	-	-	-
Mov Capacity-2 Maneuver	446	-	-	-	-	-
Stage 1	640	-	-	-	-	-
Stage 2	840	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0.2		0		
HCM LOS	A					
Minor Lane / Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1147	-	0	-	-	
HCM Lane V/C Ratio	0.008	-	+	-	-	
HCM Control Delay (s)	8.163	0	0	-	-	
HCM Lane LOS	A	A	A			
HCM 95th %tile Q(veh)	0.023	-	+	-	-	
Notes						
~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined						

Intersection						
Intersection Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	1	13	20	294	363	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	14	22	320	395	2
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	599	198	397	0	-	0
Stage 1	396	-	-	-	-	-
Stage 2	203	-	-	-	-	-
Follow-up Headway	3.52	3.32	2.22	-	-	-
Pot Capacity-1 Maneuver	433	810	1158	-	-	-
Stage 1	649	-	-	-	-	-
Stage 2	811	-	-	-	-	-
Time blocked-Platoon, %				-	-	-
Mov Capacity-1 Maneuver	423	810	1158	-	-	-
Mov Capacity-2 Maneuver	423	-	-	-	-	-
Stage 1	649	-	-	-	-	-
Stage 2	792	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	9.8	0.6		0		
HCM LOS	A					
Minor Lane / Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1158	-	760	-	-	
HCM Lane V/C Ratio	0.019	-	0.02	-	-	
HCM Control Delay (s)	8.168	0.1	9.8	-	-	
HCM Lane LOS	A	A	A			
HCM 95th %tile Q(veh)	0.057	-	0.061	-	-	
Notes						
~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined						

Intersection						
Intersection Delay, s/veh	57.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	235	2347	2046	28	7	270
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Free	-	Yield
Storage Length	250	-	-	250	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	91	94	83	42	73
Heavy Vehicles, %	3	4	3	0	0	8
Mvmt Flow	276	2579	2177	34	17	370
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	2177	0	-	0	4020	1088
Stage 1	-	-	-	-	2177	-
Stage 2	-	-	-	-	1843	-
Follow-up Headway	2.23	-	-	-	3.5	3.38
Pot Capacity-1 Maneuver	# 238	-	-	-	# 2	# 201
Stage 1	-	-	-	-	74	-
Stage 2	-	-	-	-	114	-
Time blocked-Platoon, %	-	-	-	-	-	-
Mov Capacity-1 Maneuver	# 238	-	-	-	# 2	# 201
Mov Capacity-2 Maneuver	-	-	-	-	# 2	-
Stage 1	-	-	-	-	74	-
Stage 2	-	-	-	-	114	-
Approach	EB		WB		SB	
HCM Control Delay, s	14.8		0		\$ 699.6	
HCM LOS					F	
Minor Lane / Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	# 238	-	-	-	2	201
HCM Lane V/C Ratio	1.162	-	-	-	8.333	1.84
HCM Control Delay (s)	152.567	-	-	-	\$ 6532.7	\$ 436.8
HCM Lane LOS	F				F	F
HCM 95th %tile Q(veh)	12.867	-	-	-	3.579	26.368
Notes						
~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined						

HCM 2010 Signalized Intersection Summary

2: Eves Road & Holcomb Bridge Road

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9/17/2013

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	222	2221	274	369	1710	143	41	215	361	85	433	78
Number	5	2	12	1	6	16	7	4	14	3	8	18
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	190.0	184.7	190.0	190.0	186.3	186.3	190.0	188.1	188.1	190.0	190.0	186.3
Lanes	1	2	0	1	2	1	1	1	1	1	1	1
Cap, veh/h	265	1949	228	150	2067	879	115	250	213	149	299	249
Arrive On Green	0.11	0.60	0.60	0.06	0.55	0.55	0.04	0.13	0.00	0.06	0.16	0.16
Sat Flow, veh/h	1810	3246	380	1810	3725	1583	1810	1881	1599	1810	1900	1583
Grp Volume(v), veh/h	247	1382	1382	429	1781	181	56	269	0	106	466	103
Grp Sat Flow(s),veh/h/ln	1810	1847	1780	1810	1863	1583	1810	1881	1599	1810	1900	1583
Q Serve(g_s), s	16.6	106.1	106.1	10.6	72.0	10.1	4.7	23.5	0.0	8.6	27.8	10.4
Cycle Q Clear(g_c), s	16.6	106.1	106.1	10.6	72.0	10.1	4.7	23.5	0.0	8.6	27.8	10.4
Prop In Lane	1.00		0.21	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	265	1109	1069	150	2067	879	115	250	213	149	299	249
V/C Ratio(X)	0.93	1.25	1.29	2.85	0.86	0.21	0.49	1.08	0.00	0.71	1.56	0.41
Avail Cap(c_a), veh/h	285	1109	1069	150	2067	879	193	250	213	183	299	249
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.8	35.3	35.3	62.6	33.5	19.8	64.4	76.6	0.0	59.6	74.4	67.1
Incr Delay (d2), s/veh	33.3	118.3	138.8	850.9	5.0	0.5	1.2	78.2	0.0	6.4	267.6	1.1
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 Back of Q (50%), veh/ln	13.8	84.2	87.2	42.5	34.6	4.0	2.2	17.0	0.0	4.3	36.0	4.3
Lane Grp Delay (d), s/veh	92.1	153.6	174.1	913.5	38.5	20.3	65.6	154.8	0.0	66.0	342.0	68.2
Lane Grp LOS	F	F	F	F	D	C	E	F		E	F	E
Approach Vol, veh/h		3010			2391			325			675	
Approach Delay, s/veh		157.9			194.1			139.4			256.9	
Approach LOS		F			F			F			F	
Timer												
Assigned Phs	5	2		1	6		7	4		3	8	
Phs Duration (G+Y+Rc), s	25.1	113.0		17.0	104.9		12.4	30.0		16.7	34.3	
Change Period (Y+Rc), s	6.4	6.9		6.4	6.9		6.1	6.5		6.1	6.5	
Max Green Setting (Gmax), s	20.6	106.1		10.6	96.1		13.9	23.5		13.9	23.5	
Max Q Clear Time (g_c+I1), s	18.6	108.1		12.6	74.0		6.7	25.5		10.6	29.8	
Green Ext Time (p_c), s	0.1	0.0		0.0	22.0		0.0	0.0		0.0	0.0	
Intersection Summary												
HCM 2010 Ctrl Delay			181.0									
HCM 2010 LOS			F									
Notes												

Intersection						
Intersection Delay, s/veh	10.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	315	87	218	190	61	258
Conflicting Peds, #/hr	0	7	0	0	7	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	250	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	69	79	87	54	88
Heavy Vehicles, %	1	2	1	1	2	1
Mvmt Flow	362	126	276	218	113	293
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	495	0	1093	251
Stage 1	-	-	-	-	432	-
Stage 2	-	-	-	-	661	-
Follow-up Headway	-	-	2.21	-	3.52	3.31
Pot Capacity-1 Maneuver	-	-	1072	-	209	752
Stage 1	-	-	-	-	622	-
Stage 2	-	-	-	-	475	-
Time blocked-Platoon, %	-	-	-	-	-	-
Mov Capacity-1 Maneuver	-	-	1072	-	153	748
Mov Capacity-2 Maneuver	-	-	-	-	153	-
Stage 1	-	-	-	-	618	-
Stage 2	-	-	-	-	351	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		5.3		30.4	
HCM LOS	D					
Minor Lane / Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	153	748	-	-	1072	-
HCM Lane V/C Ratio	0.738	0.392	-	-	0.257	-
HCM Control Delay (s)	75.9	12.9	-	-	9.518	-
HCM Lane LOS	F	B	A			
HCM 95th %tile Q(veh)	4.471	1.872	-	-	1.029	-
Notes						
~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined						

HCM 2010 Signalized Intersection Summary

4: Old Scott Road & Scott Road

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9/17/2013

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	27	544	13	139	406	14	50	9	160	30	4	60
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	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	190.0	188.1	190.0	190.0	188.1	172.7	190.0	190.0	190.0	190.0	181.5	186.3
Lanes	1	1	1	1	2	1	0	1	0	0	1	1
Cap, veh/h	589	748	638	415	1497	583	157	43	238	304	19	514
Arrive On Green	0.14	0.40	0.40	0.14	0.40	0.40	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	1810	1881	1605	1810	3762	1466	373	133	730	773	57	1576
Grp Volume(v), veh/h	42	579	29	170	478	28	271	0	0	80	0	76
Grp Sat Flow(s),veh/h/ln	1810	1881	1605	1810	1881	1466	1236	0	0	830	0	1576
Q Serve(g_s), s	1.5	36.1	1.5	6.5	11.8	1.6	17.2	0.0	0.0	0.0	0.0	4.6
Cycle Q Clear(g_c), s	1.5	36.1	1.5	6.5	11.8	1.6	29.7	0.0	0.0	12.5	0.0	4.6
Prop In Lane	1.00		1.00	1.00		1.00	0.34		0.59	0.94		1.00
Lane Grp Cap(c), veh/h	589	748	638	415	1497	583	439	0	0	322	0	514
V/C Ratio(X)	0.07	0.77	0.05	0.41	0.32	0.05	0.62	0.00	0.00	0.25	0.00	0.15
Avail Cap(c_a), veh/h	589	748	638	415	1497	583	439	0	0	322	0	514
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	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.3	35.4	24.9	22.0	28.0	25.0	42.8	0.0	0.0	34.8	0.0	32.2
Incr Delay (d2), s/veh	0.2	7.7	0.1	3.0	0.6	0.2	6.4	0.0	0.0	1.8	0.0	0.6
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 Back of Q (50%), veh/ln	0.7	19.0	0.6	3.2	5.8	0.6	9.2	0.0	0.0	2.2	0.0	1.9
Lane Grp Delay (d), s/veh	15.5	43.0	25.1	24.9	28.6	25.1	49.2	0.0	0.0	36.6	0.0	32.8
Lane Grp LOS	B	D	C	C	C	C	D			D		C
Approach Vol, veh/h		650			676			271			156	
Approach Delay, s/veh		40.4			27.5			49.2			34.8	
Approach LOS		D			C			D			C	
Timer												
Assigned Phs	5	2		1	6			4			8	
Phs Duration (G+Y+Rc), s	25.0	60.0		25.0	60.0			50.0			50.0	
Change Period (Y+Rc), s	6.0	6.3		6.0	6.3			6.0			6.0	
Max Green Setting (Gmax), s	19.0	53.7		19.0	53.7			38.0			44.0	
Max Q Clear Time (g_c+I1), s	3.5	38.1		8.5	13.8			31.7			14.5	
Green Ext Time (p_c), s	0.1	10.2		0.3	18.2			1.7			3.8	
Intersection Summary												
HCM 2010 Ctrl Delay				36.3								
HCM 2010 LOS				D								
Notes												

Intersection						
Intersection Delay, s/veh	0.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	12	0	241	22	0	265
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	0	262	24	0	288
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	418	143	0	0	286	0
Stage 1	274	-	-	-	-	-
Stage 2	144	-	-	-	-	-
Follow-up Headway	3.52	3.32	-	-	2.22	-
Pot Capacity-1 Maneuver	563	879	-	-	1273	-
Stage 1	747	-	-	-	-	-
Stage 2	868	-	-	-	-	-
Time blocked-Platoon, %			-	-		-
Mov Capacity-1 Maneuver	563	879	-	-	1273	-
Mov Capacity-2 Maneuver	563	-	-	-	-	-
Stage 1	747	-	-	-	-	-
Stage 2	868	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	11.5	0		0		
HCM LOS	B					
Minor Lane / Major Mvmt	NBT	NBR	WBLn1	SBL	SBT	
Capacity (veh/h)	-	-	563	1273	-	
HCM Lane V/C Ratio	-	-	0.023	-	-	
HCM Control Delay (s)	-	-	11.5	0	-	
HCM Lane LOS			B	A		
HCM 95th %tile Q(veh)	-	-	0.071	0	-	
Notes						
~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined						

Intersection						
Intersection Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	397	0	8	243	0	5
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, %	2	2	2	2	2	2
Mvmt Flow	432	0	9	264	0	5
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	432	0	581	216
Stage 1	-	-	-	-	432	-
Stage 2	-	-	-	-	149	-
Follow-up Headway	-	-	2.22	-	3.52	3.32
Pot Capacity-1 Maneuver	-	-	1124	-	445	789
Stage 1	-	-	-	-	622	-
Stage 2	-	-	-	-	863	-
Time blocked-Platoon, %	-	-	-	-	-	-
Mov Capacity-1 Maneuver	-	-	1124	-	441	789
Mov Capacity-2 Maneuver	-	-	-	-	441	-
Stage 1	-	-	-	-	622	-
Stage 2	-	-	-	-	855	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.3		9.6	
HCM LOS	A					
Minor Lane / Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	789	-	-	1124	-	
HCM Lane V/C Ratio	0.007	-	-	0.008	-	
HCM Control Delay (s)	9.6	-	-	8.228	0	
HCM Lane LOS	A			A	A	
HCM 95th %tile Q(veh)	0.021	-	-	0.023	-	
Notes						
~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined						

Intersection						
Intersection Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	0	0	31	319	305	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	34	347	332	0
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	573	166	332	0	-	0
Stage 1	332	-	-	-	-	-
Stage 2	241	-	-	-	-	-
Follow-up Headway	3.52	3.32	2.22	-	-	-
Pot Capacity-1 Maneuver	450	849	1224	-	-	-
Stage 1	699	-	-	-	-	-
Stage 2	776	-	-	-	-	-
Time blocked-Platoon, %				-	-	-
Mov Capacity-1 Maneuver	435	849	1224	-	-	-
Mov Capacity-2 Maneuver	435	-	-	-	-	-
Stage 1	699	-	-	-	-	-
Stage 2	750	-	-	-	-	-
Approach	EB		NB		SB	
HCM Control Delay, s	0		0.8		0	
HCM LOS	A					
Minor Lane / Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1224	-	0	-	-	
HCM Lane V/C Ratio	0.028	-	+	-	-	
HCM Control Delay (s)	8.024	0.1	0	-	-	
HCM Lane LOS	A	A	A			
HCM 95th %tile Q(veh)	0.085	-	+	-	-	
Notes						
~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined						

Intersection						
Intersection Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	2	19	19	561	577	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	21	21	610	627	2
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	974	315	629	0	-	0
Stage 1	628	-	-	-	-	-
Stage 2	346	-	-	-	-	-
Follow-up Headway	3.52	3.32	2.22	-	-	-
Pot Capacity-1 Maneuver	249	681	949	-	-	-
Stage 1	494	-	-	-	-	-
Stage 2	688	-	-	-	-	-
Time blocked-Platoon, %				-	-	-
Mov Capacity-1 Maneuver	241	681	949	-	-	-
Mov Capacity-2 Maneuver	241	-	-	-	-	-
Stage 1	494	-	-	-	-	-
Stage 2	665	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	11.5	0.4		0		
HCM LOS	B					
Minor Lane / Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	949	-	580	-	-	
HCM Lane V/C Ratio	0.022	-	0.039	-	-	
HCM Control Delay (s)	8.878	0.1	11.5	-	-	
HCM Lane LOS	A	A	B			
HCM 95th %tile Q(veh)	0.067	-	0.123	-	-	
Notes						
~ : Volume Exceeds Capacity; \$: Delay Exceeds 300 Seconds; Error : Computation Not Defined						



APPENDIX D

Signal Warrant Analysis

From Raw Count

Time	East			West			North			South		
	L	T	R	L	T	R	L	T	R	L	T	R
7AM				2	0	264	0	1356	23	171	1182	
8AM				7	0	174	0	1141	29	80	1202	
9AM				4	0	122	0	1127	8	58	1022	
10AM				8	0	91	0	1041	11	51	895	
11AM				7	0	99	0	1022	17	64	1003	
12PM				11	0	96	0	1053	23	77	1056	
1PM				3	0	92	0	1127	11	81	1148	
2PM				5	0	103	0	1190	11	104	1263	
3PM				8	0	134	0	1359	22	140	1472	
4PM				3	0	149	0	1365	42	155	1713	
5PM				4	0	106	0	1188	74	175	1778	
6PM				4	0	137	0	1249	36	214	1650	

2013 Background (Directions modified so Holcomb Bridge is E-W)

Time	East			West			North			South		
	L	T	R	L	T	R	L	T	R	L	T	R
7AM	171	1182			1356	23				2		264
8AM	80	1202			1141	29				7		174
9AM	58	1022			1127	8				4		122
10AM	51	895			1041	11				8		91
11AM	64	1003			1022	17				7		99
12PM	77	1056			1053	23				11		96
1PM	81	1148			1127	11				3		92
2PM	104	1263			1190	11				5		103
3PM	140	1472			1359	22				8		134
4PM	155	1713			1365	42				3		149
5PM	175	1778			1188	74				4		106
6PM	214	1650			1249	36				4		137

GROWTH RATE 2%

2014 Background

Time	East			West			North			South		
	L	T	R	L	T	R	L	T	R	L	T	R
7AM	174	1206			1383	23				2		269
8AM	82	1226			1164	30				7		177
9AM	59	1042			1150	8				4		124
10AM	52	913			1062	11				8		93
11AM	65	1023			1042	17				7		101
12PM	79	1077			1074	23				11		98
1PM	83	1171			1150	11				3		94
2PM	106	1288			1214	11				5		105
3PM	143	1501			1386	22				8		137
4PM	158	1747			1392	43				3		152
5PM	179	1814			1212	75				4		108
6PM	218	1683			1274	37				4		140

Temporal Distribution (exlcuding peak hour traffic)

	INBOUND DISTRIB		OUTBOUND DISTRIB	
	(Turns Into Scott Road)		(Turns Out from Scott Road)	
7AM	REMOVED DUE TO PEAK HOUR CALCULATION			
8AM	109	9%	181	14%
9AM	66	5%	126	10%
10AM	62	5%	99	8%
11AM	81	7%	106	8%
12PM	100	8%	107	9%
1PM	92	7%	95	8%
2PM	115	9%	108	9%
3PM	162	13%	142	11%
4PM	197	16%	152	12%
5PM	REMOVED DUE TO PEAK HOUR CALCULATION			
6PM	250	20%	141	11%
	1234		1257	

	DAILY	AM	PM
Retail In	376	22	21
Retail Out	376	14	22
Residential In	464	17	61
Residentail Out	464	55	34

Project Traffic

Time	East			West			North			South		
	L	T	R	L	T	R	L	T	R	L	T	R
	RES IN	RET IN			RET OUT							RES OUT
% Residential	36%											36%
% Retail		36%			36%							
DAILY VOL	167	135			135							167
DAILY VOL (minus Peak Hour)												
	139	122			122							150
7AM	6	6			5							5
8AM	12	11			18							22
9AM	7	7			12							15
10AM	7	6			10							12
11AM	9	8			10							13
12PM	11	10			10							13
1PM	10	9			9							11
2PM	13	11			11							13
3PM	18	16			14							17
4PM	22	19			15							18
5PM	22	8			8							12
6PM	28	25			14							17

PER PEAK HOUR TRIP (

PER PEAK HOUR TRIP (

2014 Background + Project

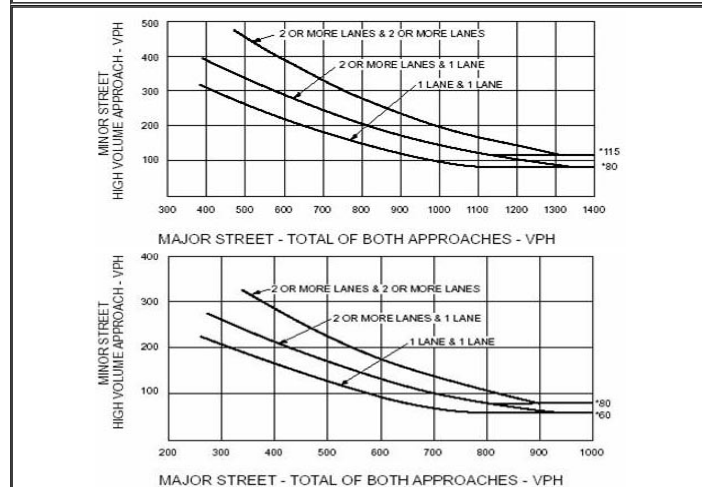
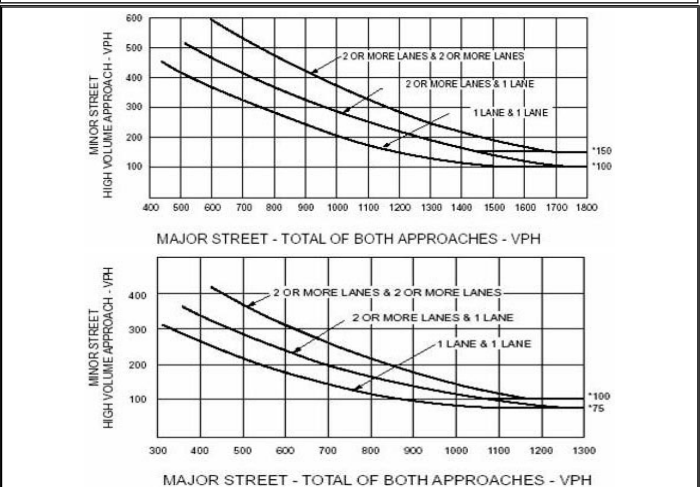
Time	East			West			North			South		
	L	T	R	L	T	R	L	T	R	L	T	R
7AM	180	1212			1388	23				2		274
8AM	94	1237			1182	30				7		199
9AM	66	1049			1162	8				4		139
10AM	59	919			1072	11				8		105
11AM	74	1031			1052	17				7		114
12PM	90	1087			1084	23				11		111
1PM	93	1180			1159	11				3		105
2PM	119	1299			1225	11				5		118
3PM	161	1517			1400	22				8		154
4PM	180	1766			1407	43				3		170
5PM	201	1822			1220	75				4		120
6PM	246	1708			1288	37				4		157

Warrants Volume			
Information			
Analyst Agency/Co Date Performed Project ID East/West Street File Name	ECL 9/17/2013 Centennial Walk Impact Holcomb Bridge Road 2014Background+Project.xhy	Intersection Jurisdiction Units Time Period Analyzed North/South Street Major Street	U.S. Customary 2014 Background + Project Scott Road East-West
Project Description <i>Centennial Walk Impact</i>			

Warrant 1

Condition A - Minimum Vehicular Volume									
Number of lanes for moving traffic on each approach		Vehicles per hour on major street (total of both approaches)			Vehicles per hour on higher-volume minor-street approach (one direction only)				
Major Street	Minor Street	100%*	80%*	70%*	100%*	80%*	70%*		
1.....	1.....	500	400	350	150	120	105		
2 or more...	1.....	600	480	420	150	120	105		
2 or more...	2 or more...	600	480	420	200	160	140		
1.....	2 or more...	500	400	350	200	160	140		

Condition B - Interruption of Continuous Traffic									
Number of lanes for moving traffic on each approach		Vehicles per hour on major street (total of both approaches)			Vehicles per hour on higher-volume minor-street approach (one direction only)				
Major Street	Minor Street	100%*	80%*	70%*	100%*	80%*	70%*		
1.....	1.....	750	600	525	75	60	53		
2 or more...	1.....	900	720	630	75	60	53		
2 or more...	2 or more...	900	720	630	100	80	70		
1.....	2 or more...	750	600	525	100	80	70		

Warrant 2**Warrant 3****Volume Summary**

Major Street Lanes 2+			Minor Street Lanes 1		Speed		35	Population		10000+
Hours	Major Volume	Minor Volume	Total Volume	1A (100%)	1A (80%)	1B (100%)	1B (80%)	2 (100%)	3A (100%)	3B (100%)
07-08	2803	2	2805	No	No	No	No	No	No	No
08-09	2543	7	2550	No	No	No	No	No	No	No
09-10	2285	4	2289	No	No	No	No	No	No	No
10-11	2061	8	2069	No	No	No	No	No	No	No
11-12	2174	7	2181	No	No	No	No	No	No	No
12-13	2284	11	2295	No	No	No	No	No	No	No
13-14	2443	3	2446	No	No	No	No	No	No	No
14-15	2654	5	2659	No	No	No	No	No	No	No
15-16	3100	8	3108	No	No	No	No	No	No	No
16-17	3396	3	3399	No	No	No	No	No	No	No
17-18	3318	4	3322	No	No	No	No	No	No	No
18-19	3279	4	3283	No	No	No	No	No	No	No
Totals	32340	66	32406	0	0	0	0	0	0	0

Warrants Summary													
Information													
Analyst ECL						Intersection							
Agency/Co						Jurisdiction							
Date Performed 9/17/2013						Units U.S. Customary							
Project ID Centennial Walk Impact						Time Period Analyzed 2014 Background + Project							
East/West Street Holcomb Bridge Road						North/South Street Scott Road							
File Name 2014Background+Project.xhy						Major Street East-West							
Project Description <i>Centennial Walk Impact</i>													
General						Roadway Network							
Major Street Speed (mph)		35		☐		Population < 10,000					☐		
Nearest Signal (ft)		0		☐		Coordinated Signal System					☐		
Crashes (per year)		0		☐		Adequate Trials of Alternatives					5-yr Growth Factor 0		
Geometry and Traffic		EB			WB			NB			SB		
		LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of lanes, N		1	2	0	0	2	1	0	0	0	1	0	0
Lane usage		L	T			T	R				L		
Vehicle Volume Averages (vph)		130	1318	0	0	1219	25	0	0	0	5	0	147
Peds (ped/h) / Gaps (gaps/h)		--	0 / 0	--	--	0 / 0	--	--	0 / 0	--	--	0 / 0	--
Delay (s/veh) / (veh-hr)		--	0 / 0	--	--	0 / 0	--	--	0 / 0	--	--	0 / 0	--
Warrant 1: Eight-Hour Vehicular Volume													
1 A. Minimum Vehicular Volumes (Both major approaches --and-- higher minor approach) --or--													
1 B. Interruption of Continuous Traffic (Both major approaches --and-- higher minor approach) --or--													
1 80% Vehicular --and-- Interruption Volumes (Both major approaches --and-- higher minor approach)													
Warrant 2: Four-Hour Vehicular Volume													
2 A. Four-Hour Vehicular Volumes (Both major approaches --and-- higher minor approach)													
Warrant 3: Peak Hour													
3 A. Peak-Hour Conditions (Minor delay --and-- minor volume --and-- total volume) --or--													
3 B. Peak- Hour Vehicular Volumes (Both major approaches --and-- higher minor approach)													
Warrant 4: Pedestrian Volume													
4 A. Four Hour Volumes --or--													
4 B. One-Hour Volumes													
Warrant 5: School Crossing													
5. Student Volumes --and--													
5. Gaps Same Period													
Warrant 6: Coordinated Signal System													
6. Degree of Platooning (Predominant direction or both directions)													
Warrant 7: Crash Experience													
7 A. Adequate trials of alternatives, observance and enforcement failed --and--													
7 B. Reported crashes susceptible to correction by signal (12-month period) --and--													
7 C. 80% Volumes for Warrants 1A, 1B --or-- 4 are satisfied													
Warrant 8: Roadway Network													
8 A. Weekday Volume (Peak hour total --and-- projected warrants 1, 2 or 3) --or--													
8 B. Weekend Volume (Five hours total)													
Warrant 9: Grade Crossing													
9 A. Grade Crossing within 140 ft --and--													
9 B. Peak-Hour Vehicular Volumes													