



ALDRIDGE TRANSPORTATION CONSULTANTS, LLC
Advanced Transportation Planning and Traffic Engineering

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March 22, 2019

Mr. Bryan D. Kniep
Goodwin-Knight
8605 Explorer Dr. #250
Colorado Springs, CO 80920

Re: Traffic Impact Study - Revised
Home Place Ranch, Monument, Colorado

Dear Mr. Kniep:

Aldridge Transportation Consultants (ATC) is pleased to present this traffic impact study regarding the Home Place Ranch residential development in Monument.

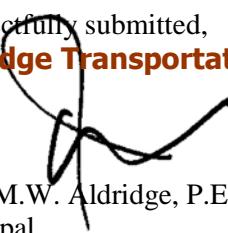
ATC is professional service firm specializing in traffic engineering and transportation planning. ATC's principal, John M.W. Aldridge, is a Colorado licensed professional engineer. In the past 20 years, ATC has prepared over 1,000 traffic impact studies, designed over 100 traffic signals, and has provided expert witness testimony on engineering design and access issues on multi-million-dollar interchange and highway projects in Kansas and Colorado.

This study is provided for general conformance with County standards and design criteria. We understand that the County is not responsible for the accuracy and adequacy of the data, analysis, and conclusions.

ATC appreciates the opportunity to be of service. Please call if you have any questions. We can be reached at 303-703-9112.



Respectfully submitted,
Aldridge Transportation Consultants, LLC


John M.W. Aldridge, P.E.
Principal



1. INTRODUCTION/PROJECT DESCRIPTION

Home Place Ranch is proposed residential development of 990 single-family homes on a 431-acre site in the Town of Monument. The site is located on the south side of Higby Road approximately 1.25 miles east of Jackson Creek Parkway in the southeast area of the town. The site will be developed in two filings. In the first filing 299 single-family homes will be constructed on the southern side of the property. In a future filing another 691 single-family homes will be constructed on the northern side of the property.

Figure 1 shows the site location, first filing with lots and roads in the shaded yellow area, and the future filing with proposed roadway alignments and accesses to Higby Road. Gleneagle and Promontory Pointe subdivisions are to the south. All traffic generated by the first filing will be routed on Gleneagle Dr. to Baptist Road. There will be no access to Higby Road in the first filing. However, a second access to Baptist Road through Sanctuary Pointe will be available.

In the future filing, most of the traffic will be directed to Higby Road. The exact internal roadway alignment(s) has not been determined. The Higby Road Access Control Plan¹ proposes four access locations to Higby Road. Two main entrances are probable. One in the approximate center of the property that will connect to a proposed extension of Furrow Road and another on the east end of the property at the existing gravel road intersection. The other two accesses will be secondary type and oriented to specific areas of the future filing. One will connect with the existing Fairplay Dr. intersection and the other approximately 1,200 feet west of Fairplay Dr. Both are likely serving a limited number of estate lots and possibly an elementary school.

A. Study Area

The study area is generally defined as Higby Road on the north, Baptist Road on the south and the property borders on the east and west sides.

B. Study Horizon Year

The study will examine the current year, and five-year expected build out of Filing 1 in the 2024 horizon and the 2040 long-term horizon that includes full-build out of the entire 431-acre development.

C. Analysis Time Periods

The study examines average daily traffic and the AM and PM peak hour conditions.

Although the site is in the Town of Monument, the two main access roads, Higby Road and Baptist Road are controlled and maintained by El Paso County. Gleneagle Dr. is also on the County system. The El Paso County 2016 Major Corridors Plan Update, the Town of Monument Comprehensive Plan, Town of Monument Roadway Design and Technical Criteria, and the Town's Traffic Impact Analysis Criteria were reviewed for guidance and compliance with multi-modal features and goals and objectives for transportation facilities within the area. In addition, two previous traffic impact studies prepared by LSC in June 2005, and by PBS&J in August 2006 were reviewed for consistency and gleaned for any pertinent information. However, as they over 10 years old, neither provided any useful data or information. The recent traffic study for Sanctuary Pointe Phase 2 prepared by LSC in

¹ The Higby Road Access Control Plan is a separate document attached in the appendix.



HOME PLACE RANCH
Master Transportation Impact Study



Figure 1 Site Location and Adjacent Streets and Intersections



May 2017 was useful however, particularly in terms of verifying our traffic counts taken in May 2018 and October 2018. The LSC study also indicated that there would be connecting road to Homeplace Ranch to Sanctuary Pointe. This connection has been platted and under construction.

2. EXISTING CONDITIONS

The following data was collected in accord with ITE, Town, and County standards.

a. Intersection Traffic Volumes

IDAX counted the existing AM and PM traffic at the intersection of Gleneagle Dr. and Baptist Road on Wednesday, May 30, 2018. AM and PM counts were also taken on Higby Road at Fairplay Dr. on May 16, 2018. In addition, 24 hour counts on Higby Road were taken that include speed and vehicle classification. The Higby Road traffic data were taken for the Access Control Plan. The 24-hour and the AM and PM counts are provided in the appendix. In addition, a 24-hour count was taken October 2, 2018 on the southern end of Gleneagle Dr. to resolve a count difference that the County had for that location. The counts confirmed our ADT traffic calculations from the May counts and those in the most recent traffic study for Sanctuary Pointe.

b. Roadway Functional Classification, Speed Limit, and Traffic Volumes

Baptist Road is a four-lane, median divided, Principal Arterial. It is posted at 45 mph. Gleneagle Dr. is a two-lane Collector with a painted center turn lane. It is posted at 30 mph. It currently carries approximately 1,950 ADT. Again, this number was confirmed by the October 24-hour counts. Current ADT is approximately 10,000 on Baptist Road west of Gleneagle Drive. East of Gleneagle Dr. the ADT drops to 7,000. The daily volume approximations are per the intersection counts assuming the PM peak hour is about 10 percent of the daily volume.

Higby Road is a two-lane undivided Collector up to approximately the future Furrow Rd intersection. From there to Roller Coaster Road it is classified as a Minor Arterial. It is posted at 35 mph. Per the 2060 Corridor Preservation Plan, Higby Road will be improved to a Minor Arterial in the 2040 to 2060 timeframe. Currently it carries approximately 2,223 average daily traffic (ADT). The recorded ADT in the 2005 traffic study for Home Place Ranch was 2,235 ADT indicating that there has been no growth in traffic on the road for the last 13 years. The heavy vehicle percent is low at less than one percent. The 85th percentile speed is higher than the posted limit at 52.6 mph eastbound and 55.5 mph westbound.

c. Roadway and Intersection Geometrics

Gleneagle Dr./Baptist Road is a signalized intersection of a 4-lane Principal Arterial and a 2-lane Collector. The intersection features left turn lanes on all approaches. On the eastbound and westbound approaches, the left turn lanes are long at around 600 feet. The right turn lanes on the eastbound and westbound approaches are about 300 feet in length. The southbound approach includes 75-foot right and left turn lanes and a single through



lane. The northbound approach features a left turn lane and a shared through and right turn lane.

Regarding bike lanes and sidewalks, Baptist Road features detached sidewalk on the south side and gravel trail on the north side. Gleneagle Dr. features attached sidewalks and bike lanes on both sides which become sharrows near the intersection at Baptist Road.

Presently there are only two access locations on Higby Road within the frontage. One at Fairplay Dr. near the western end and the other at a private road near the eastern end. There are no other intersecting driveways or farm access roads. The terrain is moderately hilly and there is only one area where the road is slightly horizontally curved around outcropping rock.

3. PROJECTED SITE GENERATED TRAFFIC

The trip generation rates and values presented in Table 1 are from the ITE Trip Generation Manual, 10th Edition. Shown are the Average Daily Trips and the AM and PM peak hours for each filing.

Table 1 Trip Generation

Trip Generation Table									
ITE Code	Land Use	Variable	Quantity	ADT	AM in	AM out	PM in	PM out	
220	Single Family Filing 1	DU	299	9.42	0.19	0.55	0.63	0.37	
				2817	57	164	188	111	
220	Single Family Future Filing	DU	691	9.42	0.19	0.55	0.63	0.37	
				6509	131	380	435	256	
522	Elementary School Future Filing	Students	1000	2.13	0.31	0.27	0.08	0.09	
				2130	313	267	83	87	
Total Trips				11456	501	811	707	453	

4. TRIP DISTRIBUTION AND ASSIGNMENT

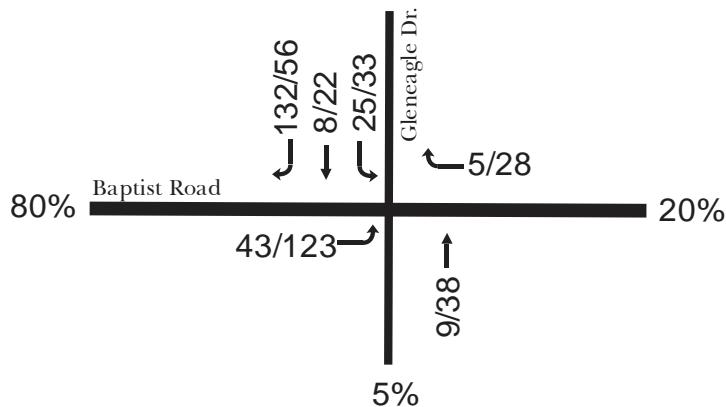
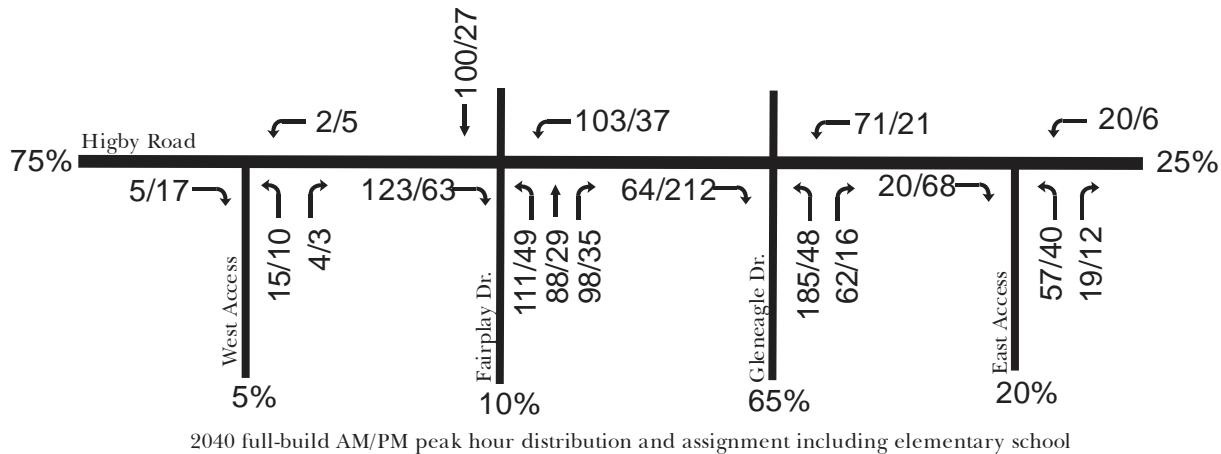
Two design horizons are considered, 2024 (five year) and 2040 (20-year). The anticipated completion of Filing 1 corresponds with the 2024 design horizon and no connections to Higby Rd. All traffic generated by Filing 1 will access Baptist Rd. via Gleneagle Dr. Traffic generated by Filing 1 is analyzed for its impact on the intersection of Gleneagle Dr. and Baptist Rd. Figure 2 shows the AM and PM peak hour trip assignment and the existing and 2024 link volumes.

Development dates of the future filing is not known but anticipated after or near completion of Filing 1. No development of the future filing will occur without access to Higby Rd. at any one of the four proposed access locations. The 2040 design horizon assumes completion of the future filing with 691 homes and an elementary school with 1,000 students. The school is anticipated to be in the northwest corner of the property and accessible primarily from Fairplay Dr.



With the extension of Gleneagle Dr. to Higby Rd. several trips from Filing 1 are expected to use the route in lieu of travelling south to Baptist Rd. Likewise, trips from the future filing will travel south on Gleneagle Dr. to Baptist Road. These will probably cancel each other. Filing 1 site generated trips were distributed 100 percent to the Gleneagle Dr./Baptist Road intersection. Although there will be a connection to the Sanctuary Pointe development to the east via a proposed roundabout, the connecting roads will basically just circle back to Baptist Road. Consequently, it is assumed that any traffic using this routing would be negligible and random. The assigned movements at the Gleneagle Dr./Baptist Road intersection were split according to the existing split percentages.

On Higby Road, 5 percent of the site generated traffic was allocated to the first, most western access, 10 percent to the Fairplay Dr. intersection, 65 percent to the main access of Gleneagle Dr. and Higby Road, and 20 percent the most eastern access (aka Ashley Road). An assignment to the connecting road to Sanctuary Pointe was not made as it likely a wash between the two developments and insignificant in operational terms. The following graphics show the AM and PM peak hour trip distribution and assignment.



2024 and 2040 full-build AM/PM peak hour distribution and assignment

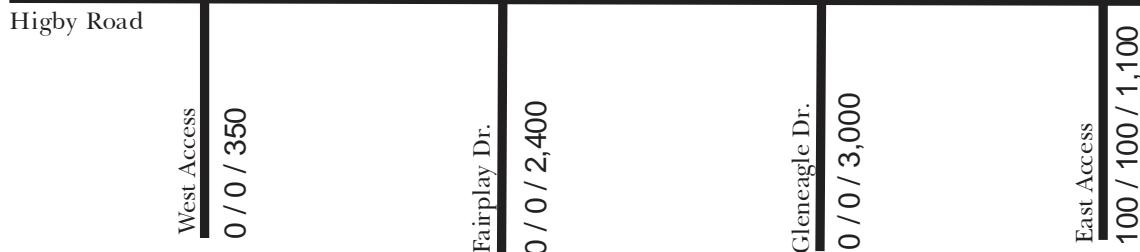


5. FUTURE CONDITIONS

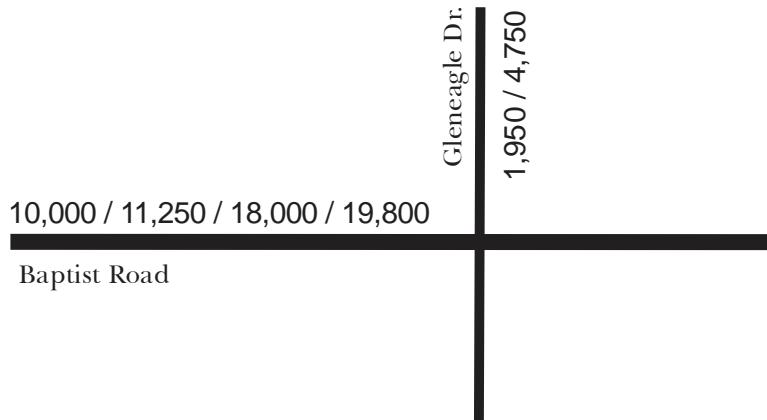
The El Paso County 2016 Major Transportation Corridors Plan Update forecasts a year 2040 volume of 27,000 ADT on Baptist Road just east of Jackson Creek Parkway. The year 2016 volume at this location is 15,000. The 25-year growth factor is 1.8. At Gleneagle Dr. this would equate to an increase from 10,000 to 18,000 ADT on Baptist Road. The five-year growth factor is 1.125 or an increase from 10,000 to 11,250 ADT.

On Higby Road the County staff directed us to use a growth rate of 2.57 percent per annum which equates to a 20-year growth factor of 1.66. The five-year growth will bring the ADT up from 2,223 to 2,525 and by 2040 the ADT is expected to be around 3,700. Synchro graphics and reports in the appendix show the existing, 2023, and 2040 AM and PM peak hours. The additional traffic from the Home Place Ranch development will increase the traffic on Higby Road to 8,600 ADT on the west side and 5,400 on the east side of the project. On Baptist Road the 2040 forecast traffic of 18,000 ADT will increase to 19,800 ADT with the site generated traffic from Home Place Ranch. The following graphics show the ADT for the existing, 2024, 2040, and 2040 with full development.

2,223 / 2,525 / 3,700 / 8,600 with HPR to the west, 5,400 to the east of HPR



Existing / 2024 Background / 2040 Background / 2040 Totals with HPR



Existing / 2024 Background / 2040 Background / 2040 Totals with HPR
On Gleneagle Dr. Existing / 2024 & 2040 Total with HPR



6. TRAFFIC OPERATIONS

ATC uses Synchro v.10 for operations analyses. The Synchro v.10 methodologies are based on the most recent Highway Capacity Manual, 6th Edition (HCM). The Synchro HCM reports in the appendix are for reference. LOS is letter rating from A to F. LOS A indicates free-flow traffic conditions and no delay at intersections. LOS F is heavy traffic congestion with significant delay. LOS is provided for the overall operations at signalized intersections. LOS D is generally the benchmark for acceptable signalized intersection operations during the weekday peak hours. The critical movement, not the overall, provides the LOS rating for unsignalized intersections. The critical movement is generally a left turn from the minor approach. Caution is advised when evaluating the LOS at unsignalized intersections particularly when LOS F shows. In cases of a LOS F, the HCM suggests that other evaluation measures should be considered such as the volume over capacity ratio and the 95th percentile queue length to make the most effective traffic control decision. LOS F at unsignalized intersections is considered normal for the weekday peak hour particularly when the v/c ratio and the 95th percentile queue length are acceptable.

The following Table 2 summarizes the LOS and delay in vehicle seconds of delay for the existing and 2023 and 2040 background and total conditions. Further LOS details are found in the attached Synchro graphics and reports.

Table 2 Peak Hour Intersection Level of Service

Unsignalized Intersection LOS Summary						
LOS/Control Delay (secs) A=0-10, B=>10-15, C=>15-25, D=>25-35, E=>35-50, F=>50						
	Existing		2023		2040	
Higby Intersection	AM	PM	AM	PM	AM	PM
Road A	n/a	n/a	C	B	C	C
Road B/Fairplay	A	A	F	C	F	D
Gleneagle/Furrow	n/a	n/a	E	B	E	C
Ashley	n/a	n/a	C	B	B	B

The proposed intersections on Higby Road will operate at an acceptable LOS in the 2023 and 2040 PM peak hour conditions. In the AM peak hour there are LOS F/E at the Fairplay Dr. and Furrow Road intersections. This is because of the heavy left turn out in the morning hours. At Fairplay Dr. the traffic leaving the elementary school is the cause. Even though, there is delay in excess of 50 seconds per vehicle, the 95% queue length and the v/c ratio are acceptable per the HCM. Traffic signal control is possible at both locations but should meet either Warrant #1 and/or #2 with actual volumes before installation.

The traffic signal at Gleneagle and Baptist Road currently operates at LOS C in the AM and PM peak hours and will continue to do so in the 2023 and 2040 background and total conditions.



Signalized Intersection LOS Summary										
LOS/Control Delay (secs) A=0-10, B=>10-20, C=>20-35, D=>35-55, E=>55-80, F=>80										
	Existing		2023 Background		2023 Total		2040 Background		2040 Total	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Baptist Intersection										
Gleneagle	C	C	C	C	C	C	C	C	C	C

7. NEIGHBORHOOD CONCERNS

The primary concern from the neighbors located on or near Gleneagle Dr. is construction traffic. Construction vehicles will have to use Gleneagle Dr. from Baptist Road to Filing 1 in Home Place Ranch as there are no other reasonable alternatives. Gleneagle Dr. is a well-constructed, per the El Paso Engineering Criteria Manual, three-lane (center left turn lane) facility with sufficient width and radii to handle truck traffic. The roadway was constructed with the intent of its eventual connection to Higby Road and Furrow Road in accord with the El Paso County 2016 Major Corridors Plan Update.

The additional traffic generated by Home Place Ranch was also a concern. Presently, Gleneagle Dr. carries 1,950 ADT. With the additional traffic it will carry upwards to 5,000 ADT. But this is approximately 50 percent of its capacity. The ADT threshold for a collector of this nature is 10,000 ADT. The roadway and intersection at Baptist Road will operate acceptably at LOS C in all conditions with the additional traffic.

8. SAFETY ANALYSIS

Crash data on Higby Road is not maintained by El Paso County. Instead it is held by CDOT. A CDOT provided a 4-year crash history on Higby Road from Jackson Creek Parkway to Roller Coaster Road, approximately 4 miles, from January 2014 to December 2017. CDOT provided a general summary and a listing of the crashes within the 4-mile section in the time specified. Both are attached for reference. During this time 32 crashes were reported. Of the 32, 24 occurred at either Jackson Creek Parkway or Roller Coaster Road. Eight of the 32 were in between, but of the eight only one (1) occurred within the Home Place Ranch frontage at Fairplay Dr. This crash in June 2014 involved a wild animal and an inexperienced driver.

According to the Highway Safety Manual, crashes are rare and random occurrences. And 99 percent of crashes are the result of human error. The MUTCD advises that five crashes per year of the same type and correctable by a movement restriction or change in traffic control, i.e. installation of a traffic signal would warrant a change in the roadway or intersection configuration or traffic control.

Based on this analysis there is no correctable pattern of crashes within the Home Place Ranch frontage and that this section of the roadway functions with a less than expected level number of crashes. In any event, this study and the ACP are strongly committed to the design standards promulgated by the ECM to ensure the safest possible implementation of the proposed improvements.



9. PROPOSED IMPROVEMENTS

The additional traffic generated by the first filing of Home Place Ranch will not necessitate any type of improvements to Gleneagle Dr., Baptist Road, or the intersection of the two roadways. On Higby Road four intersections are recommended when development in the northern section commences. Essentially, based on this study and analysis herein, there are no other options and that the analysis shows that the access points work well to serve the development at acceptable levels of service.

- On the west end a new full-movement T type approximately 1,200 feet west of Fairplay Dr.
- At Fairplay Dr. a fourth leg for the northbound approach.
- A new intersection at 1,250 feet east of Fairplay Dr. that will connect the extension of Gleneagle Dr. to an extension of Furrow Road.
- The eastern intersection is the existing gravel road (aka Ashely Rd.) approximately 2,050 feet east of the Furrow Rd./Gleneagle intersection.

The accompanying Access Control Plan for Higby Road provides additional information and graphic on the proposed locations. Note that presently the County cross-section for Higby Road does not include bike lanes however paved shoulders are planned.

Internally, the streets are mainly Local Type I and Minor Collector. While they should be constructed to the Town standards, some modifications to achieve the best engineering fit should be allowed. i.e., on Collector roads with direct access to residential properties, on-street parking should be permitted, and where there are adjacent or proximal ped/bike trails it may not be prudent to have on-street bike lanes.

10. RECOMMENDATIONS AND CONCLUSIONS

As this is a Master TIS, each development phase should be reviewed for conformance in terms of trip generation, distribution and assignment, required improvements, and level of service impact on the adjacent streets and intersections.

Periodic review of traffic signal warrants is recommended generally with occupation of 200-unit increments.

Monitoring of the vehicular construction traffic by the developer is recommended to ensure that the trucks operate safely and within reasonable day of time and day of the week timeframes. Equipment operators must also take responsibility to clean any mud-tracking or debris left on the street.

With the proposed improvements implementation of the Access Control Plan it is my professional opinion, the traffic generated by Home Place Ranch can be absorbed by the adjacent roadways and intersections and operate harmoniously with the existing and future 2023 and 2040 traffic flow.



HOME PLACE RANCH
Master Transportation Impact Study

APPENDIX



ALDRIDGE TRANSPORTATION CONSULTANTS, LLC

Advanced Transportation Planning and Traffic Engineering

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Colorado Registered Professional Engineer

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March 21, 2019
Technical Memorandum
Higby Road Access Control Plan

Introduction

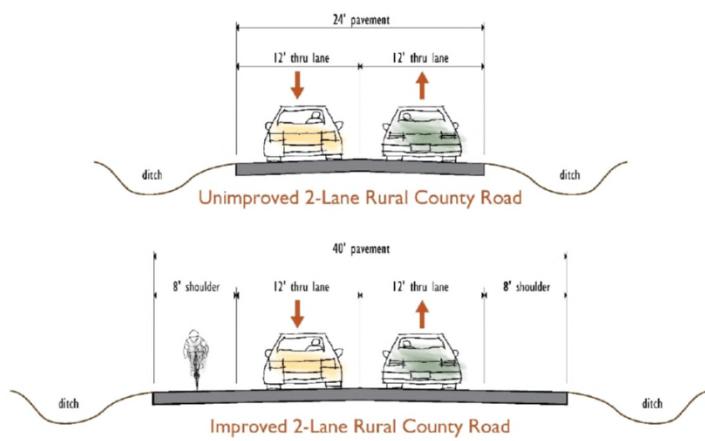
This technical memorandum presents an Access Control Plan (ACP) for the one-mile section of Higby Road that fronts the Home Place Ranch property. The purpose of the ACP is to determine locations for access to the Home Place Ranch development from Higby Road that can be jointly agreed upon by the Town of Monument and El Paso County. The agreement could informal or formalized through an Intergovernmental Agreement.

General Characteristics

Higby Road is a El Paso County controlled and maintained two-lane undivided Collector/Minor Arterial posted at 35 mph. The **El Paso 2016 Major Corridors Plan Update** classifies it as a Collector from Jackson Creek Parkway to the future intersection with Furrow Rd. and from there to Roller Coaster Rd. it is classified as a Minor Arterial. It currently carries approximately 2,223 average daily traffic (ADT). The recorded ADT in the 2005 traffic study for Home Place Ranch was 2,235 ADT indicating that there has been no growth in traffic on the road for the last 13 years. The heavy vehicle percent is low at less than one percent. The 85th percentile speed is higher than the posted limit (35 mph) at 52.6 mph eastbound and 55.5 mph westbound.

Presently there are only two access locations on Higby Road within the frontage of Home Place Ranch. One at Fairplay Dr. near the western end and the other at a private road near the eastern

end. There are no other intersecting driveways or farm access roads. The terrain is moderately hilly and there is only area where the road is slightly horizontally curved around outcropping rock.



The **MCPU** reports that by 2040 Higby Road from Cloverleaf Road to Roller Coaster Road will be improved with the addition of shoulders, turn lanes where needed, and realignment if



needed. The graphic shows the current unimproved condition and the proposed improved condition.

In addition, the MCPU reports that by 2040 a new 2 lane collector will be constructed to extend Furrow Road from Lamplighter Dr. to Higby Road and from there it will connect to an extension of Gleneagle Dr. This will provide a direct roadway connection from Lamplighter Dr. to Baptist Road.

Access Locations

The recommended access locations are consistent with the **El Paso County Engineering Criteria Manual** that provides standards on access spacing and entering sight distance. Per the manual in Section 2.4, for 2-lane roadways posted at 35 mph, the required access spacing is the same as the entering sight distance (Table 2-35) at 350 feet. However, for safety the spacing and entering sight distance should be based on the 85th percentile speed vs. the posted speed. Considering the 85th percentile speed of 55 mph, the access spacing should again be the same as the entering sight distance at 550 feet.

The attached graphic shows the recommended access locations.

- 1) **Fairplay Dr.** This is an existing access on Higby Road. Fairplay Dr. is a 2-lane divided Collector roadway that extends from SH-105 to Higby Road. The intersection on Higby Road is two-way stop sign controlled. The roadway into Home Place Ranch could be the primary entrance to a new elementary school.
- 2) **Furrow Road / Gleneagle Dr.** This would be new intersection located approximately 1,250 feet east of Fairplay Dr. Both Furrow Road and Gleneagle Dr. would be extended to intersect with Higby Road. Furrow Road is two-lane Collector that intersects with SH-105. Gleneagle Dr. intersects with Baptist Road. This intersection is an important improvement recommended by the MUPC.
- 3) **Private Drive (aka Ashley Road).** This is an existing access to a gravel road and a few private residences. It is approximately 2,050 feet east of the Furrow/Gleneagle intersection. The intersection is a T type with two-way stop sign control. The graphic shows that the south end of the improved (paved) roadway will connect to Gleneagle Dr. It could function as an emergency access. A primary concern for the private road access is the sight distance looking to the west. ATC measured the sight distance per the criteria in the manual and found that approximately 600 feet is available. ATC also had a roadway profile drawn that indicates that approximately 610 feet is available. This exceeds the requirement for 550 feet.
- 4) **West Access.** This would be a new intersection approximately 1,200 feet west of Fairplay Dr. It will primarily serve estate and large lot homes and possibly extend into the property on the west side. It may also provide a secondary access to the potential elementary school and function as an emergency access.

Traffic control (stop sign or traffic signal) at the access location depends upon how many homes will use the access and conformance to the signal warrants in the MUTCD. The ECM provides guidance on when turn lanes are required. Exclusive right turn lanes are required on Minor Arterials



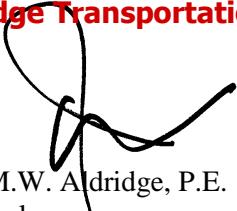
with a projected peak hour right turning volume of 50 vph or greater. A right turn acceleration lane is generally not required. A left turn lane is required for any access with a projected peak hour ingress turning volume of 25 vph or greater. Under the ECM regulations, right and left turn lanes will be required at all recommended access locations excepting the west access. The turn lane design for a 40-mph design speed is a lane length of 155 feet and a taper of 160 feet, a total of 315 feet.

Traffic signal control will likely be warranted at the Furrow Rd./Gleneagle Dr. intersection when about 200 homes are occupied that access Gleneagle Dr. At Fairplay Dr. a traffic signal may be necessary for the school traffic.

In Summary, the recommended access locations conform to the MCPU, ECM, and the traffic needs of Home Place Ranch for efficient site circulation and access to the adjacent roadways and intersections.



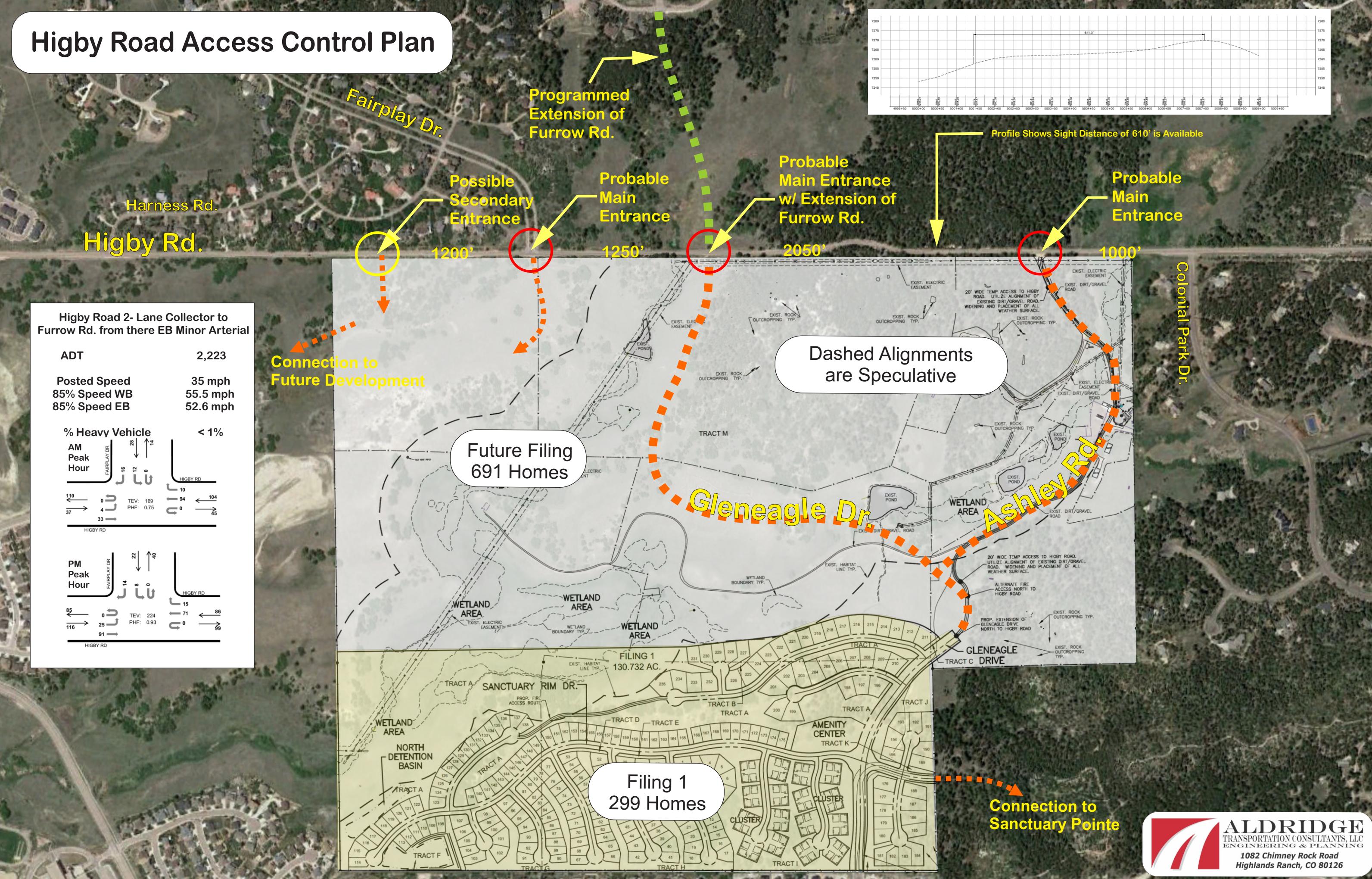
Respectfully submitted,
Aldridge Transportation Consultants, LLC



John M.W. Aldridge, P.E.
Principal

jmwa/me

Higby Road Access Control Plan





Colorado Department of Transportation
DiExSys™ Roadway Safety Systems
General Summary of Crashes Report

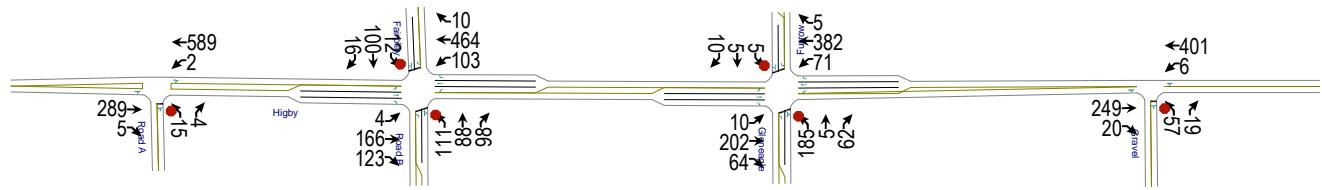
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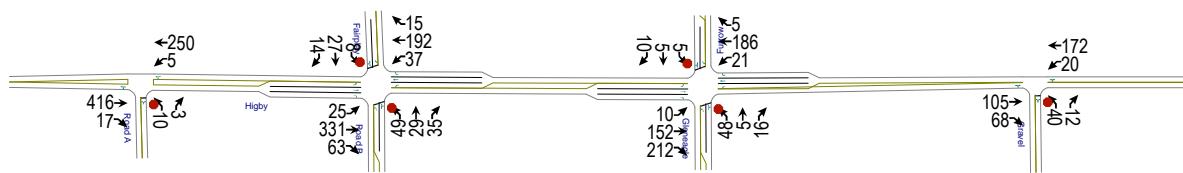
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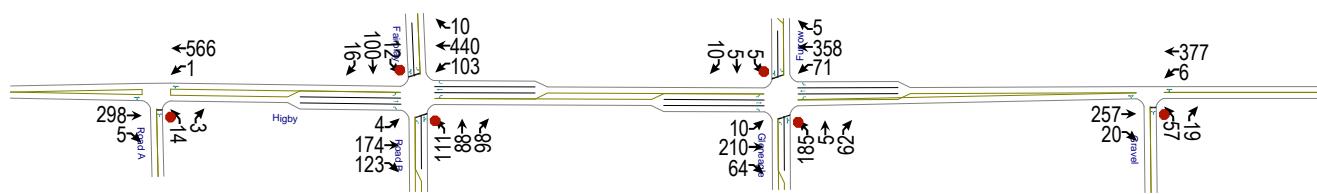
Location: Accident History for HIGBY

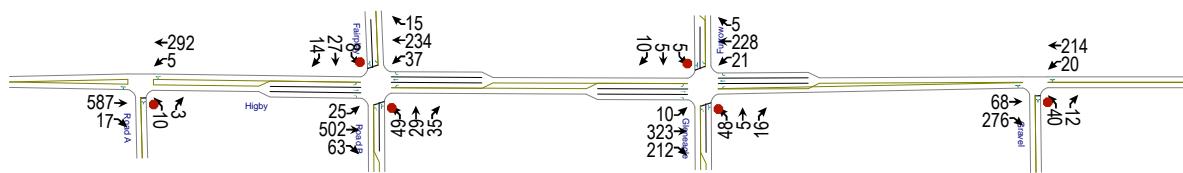
From:01/01/2014 To:12/31/2017

Severity	Crash Type	Weather Conditions
PDO: 19 INJ: 13 FAT: 0 Total: 32	Overturning: 1 Other Non Collision: 0 Pedestrians: 0 Broadside: 2 Head On: 3 Rear End: 10 Sideswipe Same: 3 Sideswipe Opposite: 2 Approach Turn: 1 Overtaking Turn: 1 Parked Motor Vehicle: 0 Railway Vehicle: 0 Bicycles: 1 Domestic Animal: 0 Wild Animal: 1 Fixed Objects: 7 Other Objects: 0 Unknown: 0 Total: 32	None: 17 Rain: 0 Snow/Sleet/Hail: 5 Fog: 2 Dust: 0 Wind: 0 Unknown: 8 Total: 32
Number of Vehicles		Road Conditions
One Vehicle: 9 Two Vehicles: 17 Three or More: 6 Unknown: 0 Total: 32		Dry: 24 Wet: 0 Muddy: 0 Snowy: 0 Icy: 7 Slushy: 0 Foreign Material: 0 With Road Treatment: 1 Unknown: 0 Total: 32
Location		
On Road: 23 Off Road: 9 Unknown: 0 Total: 32		
Mainline/Ramps/Frontage Rds	Vehicle Types	Vehicle 1
Mainline: 32 Ramps: 0 Frontage/Ramp Intsx: 0 Frontage Roads: 0 HOV Lanes: 0 Unknown: 0 Total: 32	Passenger Car/Van: 11 Passenger Car/Van w/Trailer: 0 Pickup Truck/Utility Van: 5 Pickup Truck/Utility Van w/Trailer: 0 SUV: 14 SUV w/Trailer: 0 Truck 10k lbs or Less: 0 Trucks > 10k lbs/Busses > 15 People: 0 School Bus < 15 People: 0 Non School Bus < 15 People: 0 Motorhome: 0 Motorcycle: 0 Bicycle: 1 Motorized Bicycle: 0 Farm Equipment: 0 Hit and Run - Unknown: 1 Other: 0 Unknown: 0 Total: 32	6 1 0 0 4 0 0 0 13 4 0 0 0 0 0 0 0 1 0 Total: 32
Lighting Conditions	Vehicle 2	Vehicle 3
Daylight: 26 Dawn or Dusk: 2 Dark - Lighted: 1 Dark - Unlighted: 3 Unknown: 0 Total: 32		
Crash Rates		
PDO: N/A * INJ: N/A * FAT: N/A ** Total: N/A *		









Intersection

Int Delay, s/veh 21.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	4	166	123	103	464	10	111	88	98	12	100	16
Future Vol, veh/h	4	166	123	103	464	10	111	88	98	12	100	16
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	200	-	200	200	-	200	100	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	180	134	112	504	11	121	96	107	13	109	17

Major/Minor	Major1	Major2		Minor1		Minor2						
Conflicting Flow All	515	0	0	314	0	0	985	927	180	1085	1050	504
Stage 1	-	-	-	-	-	-	188	188	-	728	728	-
Stage 2	-	-	-	-	-	-	797	739	-	357	322	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1051	-	-	1246	-	-	227	268	863	194	227	568
Stage 1	-	-	-	-	-	-	814	745	-	415	429	-
Stage 2	-	-	-	-	-	-	380	424	-	661	651	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1051	-	-	1246	-	-	~120	243	863	110	206	568
Mov Cap-2 Maneuver	-	-	-	-	-	-	~120	243	-	110	206	-
Stage 1	-	-	-	-	-	-	811	742	-	413	390	-
Stage 2	-	-	-	-	-	-	242	386	-	503	648	-

Approach	EB	WB		NB		SB					
HCM Control Delay, s	0.1	1.5		71.9		39.6					
HCM LOS				F		E					
Minor Lane/Major Mvmt		NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)		120	391	1051	-	-	1246	-	-	110	226
HCM Lane V/C Ratio		1.005	0.517	0.004	-	-	0.09	-	-	0.119	0.558
HCM Control Delay (s)		152.7	23.7	8.4	-	-	8.2	-	-	42.1	39.3
HCM Lane LOS		F	C	A	-	-	A	-	-	E	E
HCM 95th %tile Q(veh)		6.8	2.9	0	-	-	0.3	-	-	0.4	3

Notes

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

Intersection

Int Delay, s/veh 10.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↖	↖	↑	↖	↖	↖	↖	↖	↖	↖
Traffic Vol, veh/h	10	202	64	71	382	5	185	5	62	5	5	10
Future Vol, veh/h	10	202	64	71	382	5	185	5	62	5	5	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	200	-	200	200	-	200	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	220	70	77	415	5	201	5	67	5	5	11

Major/Minor	Major1	Major2		Minor1		Minor2						
Conflicting Flow All	420	0	0	290	0	0	822	816	220	882	881	415
Stage 1	-	-	-	-	-	-	242	242	-	569	569	-
Stage 2	-	-	-	-	-	-	580	574	-	313	312	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1139	-	-	1272	-	-	293	311	820	267	285	637
Stage 1	-	-	-	-	-	-	762	705	-	507	506	-
Stage 2	-	-	-	-	-	-	500	503	-	698	658	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1139	-	-	1272	-	-	268	289	820	229	265	637
Mov Cap-2 Maneuver	-	-	-	-	-	-	268	289	-	229	265	-
Stage 1	-	-	-	-	-	-	754	698	-	502	475	-
Stage 2	-	-	-	-	-	-	456	472	-	630	651	-

Approach	EB	WB		NB		SB					
HCM Control Delay, s	0.3	1.2		39.5		15.5					
HCM LOS				E		C					
Minor Lane/Major Mvmt		NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)		268	721	1139	-	-	1272	-	-	229	434
HCM Lane V/C Ratio		0.75	0.101	0.01	-	-	0.061	-	-	0.024	0.038
HCM Control Delay (s)		50	10.6	8.2	-	-	8	-	-	21.1	13.6
HCM Lane LOS		F	B	A	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)		5.5	0.3	0	-	-	0.2	-	-	0.1	0.1

Intersection

Int Delay, s/veh 1.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑		↔	↔		
Traffic Vol, veh/h	249	20	6	401	57	19
Future Vol, veh/h	249	20	6	401	57	19
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	271	22	7	436	62	21

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	293	0	732 282
Stage 1	-	-	-	-	282 -
Stage 2	-	-	-	-	450 -
Critical Hdwy	-	-	4.12	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	-	-	2.218	-	3.518 3.318
Pot Cap-1 Maneuver	-	-	1269	-	388 757
Stage 1	-	-	-	-	766 -
Stage 2	-	-	-	-	642 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1269	-	385 757
Mov Cap-2 Maneuver	-	-	-	-	385 -
Stage 1	-	-	-	-	766 -
Stage 2	-	-	-	-	638 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	15.1
HCM LOS		C	

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	439	-	-	1269	-
HCM Lane V/C Ratio	0.188	-	-	0.005	-
HCM Control Delay (s)	15.1	-	-	7.9	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.7	-	-	0	-

Intersection

Int Delay, s/veh 0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑		↔	↔		
Traffic Vol, veh/h	289	5	2	589	15	4
Future Vol, veh/h	289	5	2	589	15	4
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	314	5	2	640	16	4

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	319	0	961
Stage 1	-	-	-	-	317
Stage 2	-	-	-	-	644
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1241	-	724
Stage 1	-	-	-	-	738
Stage 2	-	-	-	-	523
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1241	-	724
Mov Cap-2 Maneuver	-	-	-	-	283
Stage 1	-	-	-	-	738
Stage 2	-	-	-	-	521

Approach	EB	WB	NB
HCM Control Delay, s	0	0	16.8
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	325	-	-	1241	-
HCM Lane V/C Ratio	0.064	-	-	0.002	-
HCM Control Delay (s)	16.8	-	-	7.9	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection

Int Delay, s/veh 3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑ ↗	↑ ↗	↑ ↗	↑ ↗	↑ ↗	↑ ↗	↑ ↗	↑ ↗	↑ ↗	↑ ↗	↑ ↗	↑ ↗
Traffic Vol, veh/h	25	331	63	37	192	15	49	29	35	8	27	14
Future Vol, veh/h	25	331	63	37	192	15	49	29	35	8	27	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	200	-	200	200	-	200	100	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	27	360	68	40	209	16	53	32	38	9	29	15

Major/Minor	Major1	Major2		Minor1		Minor2						
Conflicting Flow All	225	0	0	428	0	0	733	719	360	772	771	209
Stage 1	-	-	-	-	-	-	414	414	-	289	289	-
Stage 2	-	-	-	-	-	-	319	305	-	483	482	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1344	-	-	1131	-	-	336	354	684	317	331	831
Stage 1	-	-	-	-	-	-	616	593	-	719	673	-
Stage 2	-	-	-	-	-	-	693	662	-	565	553	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1344	-	-	1131	-	-	294	335	684	266	313	831
Mov Cap-2 Maneuver	-	-	-	-	-	-	294	335	-	266	313	-
Stage 1	-	-	-	-	-	-	604	581	-	705	649	-
Stage 2	-	-	-	-	-	-	627	639	-	494	542	-

Approach	EB	WB		NB		SB					
HCM Control Delay, s	0.5	1.3		16.6		15.8					
HCM LOS				C		C					
<hr/>											
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	
Capacity (veh/h)	294	465	1344	-	-	1131	-	-	266	398	
HCM Lane V/C Ratio	0.181	0.15	0.02	-	-	0.036	-	-	0.033	0.112	
HCM Control Delay (s)	19.9	14.1	7.7	-	-	8.3	-	-	19	15.2	
HCM Lane LOS	C	B	A	-	-	A	-	-	C	C	
HCM 95th %tile Q(veh)	0.7	0.5	0.1	-	-	0.1	-	-	0.1	0.4	

Intersection

Int Delay, s/veh 2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	10	152	212	21	186	5	48	5	16	5	5	10
Future Vol, veh/h	10	152	212	21	186	5	48	5	16	5	5	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	200	-	200	200	-	200	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	165	230	23	202	5	52	5	17	5	5	11

Major/Minor	Major1	Major2		Minor1		Minor2						
Conflicting Flow All	207	0	0	395	0	0	446	440	165	561	665	202
Stage 1	-	-	-	-	-	-	187	187	-	248	248	-
Stage 2	-	-	-	-	-	-	259	253	-	313	417	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1364	-	-	1164	-	-	523	511	879	438	381	839
Stage 1	-	-	-	-	-	-	815	745	-	756	701	-
Stage 2	-	-	-	-	-	-	746	698	-	698	591	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1364	-	-	1164	-	-	499	497	879	417	370	839
Mov Cap-2 Maneuver	-	-	-	-	-	-	499	497	-	417	370	-
Stage 1	-	-	-	-	-	-	808	739	-	750	687	-
Stage 2	-	-	-	-	-	-	716	684	-	674	586	-

Approach	EB	WB		NB		SB					
HCM Control Delay, s	0.2	0.8		12.2		11.9					
HCM LOS				B		B					
Minor Lane/Major Mvmt		NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)		499	743	1364	-	-	1164	-	-	417	590
HCM Lane V/C Ratio	0.105	0.031	0.008	-	-	-	0.02	-	-	0.013	0.028
HCM Control Delay (s)	13.1	10	7.7	-	-	-	8.2	-	-	13.7	11.3
HCM Lane LOS	B	B	A	-	-	-	A	-	-	B	B
HCM 95th %tile Q(veh)	0.3	0.1	0	-	-	-	0.1	-	-	0	0.1

Intersection

Int Delay, s/veh 1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑		↔	↔		
Traffic Vol, veh/h	105	68	20	172	40	12
Future Vol, veh/h	105	68	20	172	40	12
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	114	74	22	187	43	13

Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	188	0	382	151
Stage 1	-	-	-	-	151	-
Stage 2	-	-	-	-	231	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1386	-	620	895
Stage 1	-	-	-	-	877	-
Stage 2	-	-	-	-	807	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1386	-	609	895
Mov Cap-2 Maneuver	-	-	-	-	609	-
Stage 1	-	-	-	-	877	-
Stage 2	-	-	-	-	792	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.8	11
HCM LOS		B	

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	657	-	-	1386	-
HCM Lane V/C Ratio	0.086	-	-	0.016	-
HCM Control Delay (s)	11	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0	-

Intersection

Int Delay, s/veh 0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑		↔	↔		
Traffic Vol, veh/h	416	17	5	250	10	3
Future Vol, veh/h	416	17	5	250	10	3
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	452	18	5	272	11	3

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	470	0	743 461
Stage 1	-	-	-	-	461 -
Stage 2	-	-	-	-	282 -
Critical Hdwy	-	-	4.12	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	-	-	2.218	-	3.518 3.318
Pot Cap-1 Maneuver	-	-	1092	-	383 600
Stage 1	-	-	-	-	635 -
Stage 2	-	-	-	-	766 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1092	-	381 600
Mov Cap-2 Maneuver	-	-	-	-	381 -
Stage 1	-	-	-	-	635 -
Stage 2	-	-	-	-	762 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	14
HCM LOS		B	

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	416	-	-	1092	-
HCM Lane V/C Ratio	0.034	-	-	0.005	-
HCM Control Delay (s)	14	-	-	8.3	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection

Int Delay, s/veh 19.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	4	174	123	103	440	10	111	88	98	12	100	16
Future Vol, veh/h	4	174	123	103	440	10	111	88	98	12	100	16
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	200	-	200	200	-	200	100	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	189	134	112	478	11	121	96	107	13	109	17

Major/Minor	Major1	Major2		Minor1		Minor2						
Conflicting Flow All	489	0	0	323	0	0	968	910	189	1068	1033	478
Stage 1	-	-	-	-	-	-	197	197	-	702	702	-
Stage 2	-	-	-	-	-	-	771	713	-	366	331	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1074	-	-	1237	-	-	233	275	853	199	232	587
Stage 1	-	-	-	-	-	-	805	738	-	429	440	-
Stage 2	-	-	-	-	-	-	393	435	-	653	645	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1074	-	-	1237	-	-	125	249	853	114	210	587
Mov Cap-2 Maneuver	-	-	-	-	-	-	125	249	-	114	210	-
Stage 1	-	-	-	-	-	-	802	735	-	427	400	-
Stage 2	-	-	-	-	-	-	253	395	-	495	642	-

Approach	EB	WB		NB		SB					
HCM Control Delay, s	0.1	1.5		66.1		38.3					
HCM LOS				F		E					
Minor Lane/Major Mvmt		NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)		125	397	1074	-	-	1237	-	-	114	230
HCM Lane V/C Ratio	0.965	0.509	0.004	-	-	-	0.091	-	-	0.114	0.548
HCM Control Delay (s)	138.1	23.1	8.4	-	-	-	8.2	-	-	40.6	38.1
HCM Lane LOS	F	C	A	-	-	-	A	-	-	E	E
HCM 95th %tile Q(veh)	6.5	2.8	0	-	-	-	0.3	-	-	0.4	3

Intersection

Int Delay, s/veh 10.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↖	↖	↑	↖	↖	↖	↖	↖	↖	↖
Traffic Vol, veh/h	10	210	64	71	358	5	185	5	62	5	5	10
Future Vol, veh/h	10	210	64	71	358	5	185	5	62	5	5	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	200	-	200	200	-	200	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	228	70	77	389	5	201	5	67	5	5	11

Major/Minor	Major1	Major2		Minor1		Minor2						
Conflicting Flow All	394	0	0	298	0	0	804	798	228	864	863	389
Stage 1	-	-	-	-	-	-	250	250	-	543	543	-
Stage 2	-	-	-	-	-	-	554	548	-	321	320	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1165	-	-	1263	-	-	301	319	811	274	292	659
Stage 1	-	-	-	-	-	-	754	700	-	524	520	-
Stage 2	-	-	-	-	-	-	517	517	-	691	652	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1165	-	-	1263	-	-	276	297	811	235	272	659
Mov Cap-2 Maneuver	-	-	-	-	-	-	276	297	-	235	272	-
Stage 1	-	-	-	-	-	-	747	694	-	519	488	-
Stage 2	-	-	-	-	-	-	472	485	-	623	646	-

Approach	EB	WB		NB		SB					
HCM Control Delay, s	0.3	1.3		36.9		15.2					
HCM LOS				E		C					
Minor Lane/Major Mvmt		NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)		276	718	1165	-	-	1263	-	-	235	447
HCM Lane V/C Ratio	0.729	0.101	0.009	-	-	0.061	-	-	0.023	0.036	
HCM Control Delay (s)	46.4	10.6	8.1	-	-	8	-	-	20.7	13.4	
HCM Lane LOS	E	B	A	-	-	A	-	-	C	B	
HCM 95th %tile Q(veh)	5.2	0.3	0	-	-	0.2	-	-	0.1	0.1	

Intersection

Int Delay, s/veh 1.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑		↔	↔		
Traffic Vol, veh/h	257	20	6	377	57	19
Future Vol, veh/h	257	20	6	377	57	19
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	279	22	7	410	62	21

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	301	0	714
Stage 1	-	-	-	-	290
Stage 2	-	-	-	-	424
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1260	-	398
Stage 1	-	-	-	-	759
Stage 2	-	-	-	-	660
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1260	-	395
Mov Cap-2 Maneuver	-	-	-	-	395
Stage 1	-	-	-	-	759
Stage 2	-	-	-	-	655

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	14.8
HCM LOS		B	

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	448	-	-	1260	-
HCM Lane V/C Ratio	0.184	-	-	0.005	-
HCM Control Delay (s)	14.8	-	-	7.9	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.7	-	-	0	-

Intersection

Int Delay, s/veh 0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑		↔	↔		
Traffic Vol, veh/h	298	5	1	566	14	3
Future Vol, veh/h	298	5	1	566	14	3
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	324	5	1	615	15	3

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	329	0	944
Stage 1	-	-	-	-	327
Stage 2	-	-	-	-	617
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1231	-	714
Stage 1	-	-	-	-	731
Stage 2	-	-	-	-	538
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1231	-	291
Mov Cap-2 Maneuver	-	-	-	-	291
Stage 1	-	-	-	-	731
Stage 2	-	-	-	-	537

Approach	EB	WB	NB
HCM Control Delay, s	0	0	16.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	325	-	-	1231	-
HCM Lane V/C Ratio	0.057	-	-	0.001	-
HCM Control Delay (s)	16.7	-	-	7.9	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection

Int Delay, s/veh 4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	25	502	63	37	234	15	49	29	35	8	27	14
Future Vol, veh/h	25	502	63	37	234	15	49	29	35	8	27	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	200	-	200	200	-	200	100	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	27	546	68	40	254	16	53	32	38	9	29	15

Major/Minor	Major1	Major2		Minor1		Minor2						
Conflicting Flow All	270	0	0	614	0	0	964	950	546	1003	1002	254
Stage 1	-	-	-	-	-	-	600	600	-	334	334	-
Stage 2	-	-	-	-	-	-	364	350	-	669	668	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1293	-	-	965	-	-	235	260	538	221	242	785
Stage 1	-	-	-	-	-	-	488	490	-	680	643	-
Stage 2	-	-	-	-	-	-	655	633	-	447	456	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1293	-	-	965	-	-	198	244	538	177	227	785
Mov Cap-2 Maneuver	-	-	-	-	-	-	198	244	-	177	227	-
Stage 1	-	-	-	-	-	-	478	480	-	666	617	-
Stage 2	-	-	-	-	-	-	586	607	-	380	446	-

Approach	EB	WB		NB		SB					
HCM Control Delay, s	0.3	1.2		23		20.3					
HCM LOS				C		C					
<hr/>											
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	
Capacity (veh/h)	198	348	1293	-	-	965	-	-	177	300	
HCM Lane V/C Ratio	0.269	0.2	0.021	-	-	0.042	-	-	0.049	0.149	
HCM Control Delay (s)	29.7	17.9	7.8	-	-	8.9	-	-	26.4	19.1	
HCM Lane LOS	D	C	A	-	-	A	-	-	D	C	
HCM 95th %tile Q(veh)	1	0.7	0.1	-	-	0.1	-	-	0.2	0.5	

Intersection

Int Delay, s/veh 1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	10	323	212	21	228	5	48	5	16	5	5	10
Future Vol, veh/h	10	323	212	21	228	5	48	5	16	5	5	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	200	-	200	200	-	200	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	351	230	23	248	5	52	5	17	5	5	11

Major/Minor	Major1	Major2		Minor1		Minor2						
Conflicting Flow All	253	0	0	581	0	0	678	672	351	793	897	248
Stage 1	-	-	-	-	-	-	373	373	-	294	294	-
Stage 2	-	-	-	-	-	-	305	299	-	499	603	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1312	-	-	993	-	-	366	377	692	306	279	791
Stage 1	-	-	-	-	-	-	648	618	-	714	670	-
Stage 2	-	-	-	-	-	-	705	666	-	554	488	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1312	-	-	993	-	-	347	365	692	288	270	791
Mov Cap-2 Maneuver	-	-	-	-	-	-	347	365	-	288	270	-
Stage 1	-	-	-	-	-	-	643	613	-	708	655	-
Stage 2	-	-	-	-	-	-	674	651	-	531	484	-

Approach	EB	WB		NB		SB						
HCM Control Delay, s	0.1	0.7		15.5		14						
HCM LOS				C		B						
<hr/>												
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	347	570	1312	-	-	993	-	-	288	481		
HCM Lane V/C Ratio	0.15	0.04	0.008	-	-	0.023	-	-	0.019	0.034		
HCM Control Delay (s)	17.2	11.6	7.8	-	-	8.7	-	-	17.7	12.7		
HCM Lane LOS	C	B	A	-	-	A	-	-	C	B		
HCM 95th %tile Q(veh)	0.5	0.1	0	-	-	0.1	-	-	0.1	0.1		

Intersection

Int Delay, s/veh 1.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑		↔	↔		
Traffic Vol, veh/h	68	276	20	214	40	12
Future Vol, veh/h	68	276	20	214	40	12
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	74	300	22	233	43	13

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	374	0	501 224
Stage 1	-	-	-	-	224 -
Stage 2	-	-	-	-	277 -
Critical Hdwy	-	-	4.12	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	-	-	2.218	-	3.518 3.318
Pot Cap-1 Maneuver	-	-	1184	-	530 815
Stage 1	-	-	-	-	813 -
Stage 2	-	-	-	-	770 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1184	-	519 815
Mov Cap-2 Maneuver	-	-	-	-	519 -
Stage 1	-	-	-	-	813 -
Stage 2	-	-	-	-	754 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	12.1
HCM LOS		B	

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	566	-	-	1184	-
HCM Lane V/C Ratio	0.1	-	-	0.018	-
HCM Control Delay (s)	12.1	-	-	8.1	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

Intersection

Int Delay, s/veh 0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
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Lane Configurations						
Traffic Vol, veh/h	587	17	5	292	10	3
Future Vol, veh/h	587	17	5	292	10	3
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	638	18	5	317	11	3

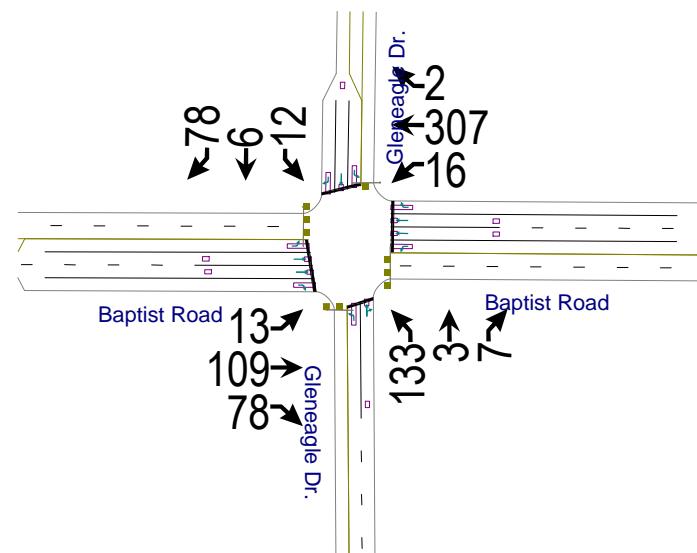
Major/Minor	Major1	Major2	Minor1
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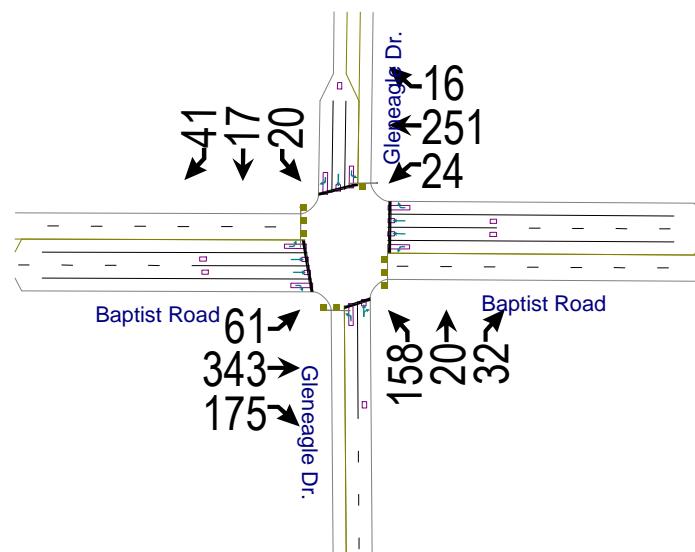
Conflicting Flow All	0	0	656	0	974	647
Stage 1	-	-	-	-	647	-
Stage 2	-	-	-	-	327	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	931	-	279	471
Stage 1	-	-	-	-	521	-
Stage 2	-	-	-	-	731	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	931	-	277	471
Mov Cap-2 Maneuver	-	-	-	-	277	-
Stage 1	-	-	-	-	521	-
Stage 2	-	-	-	-	726	-

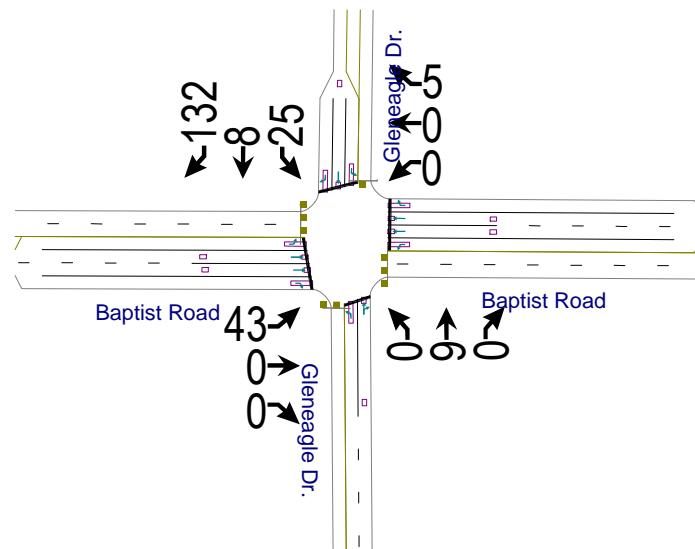
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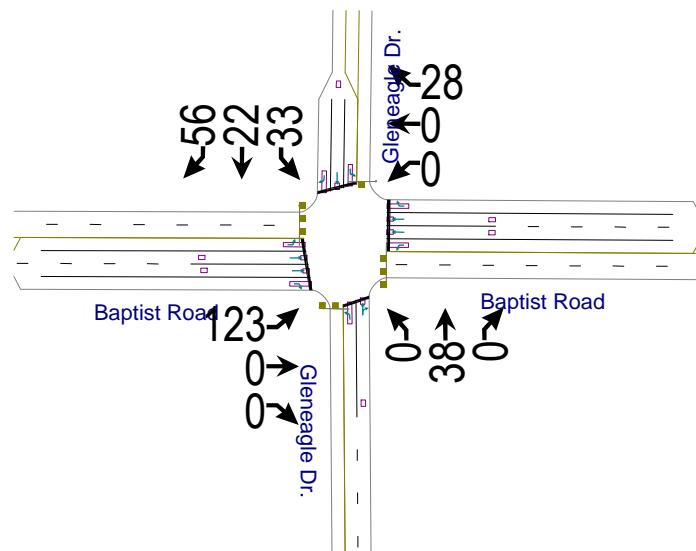
HCM Control Delay, s	0	0.1	17.3
HCM LOS		C	

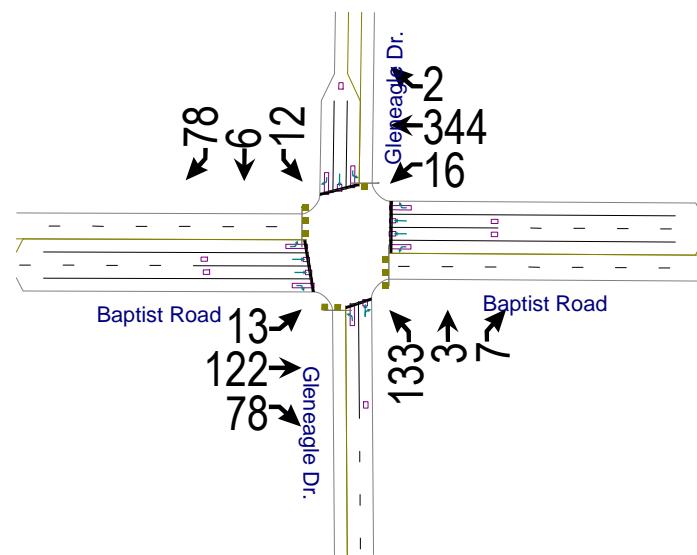
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	306	-	-	931	-
HCM Lane V/C Ratio	0.046	-	-	0.006	-
HCM Control Delay (s)	17.3	-	-	8.9	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

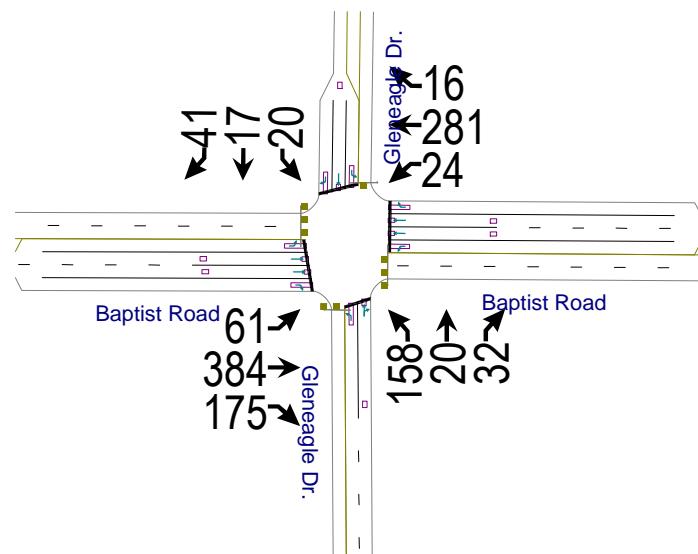


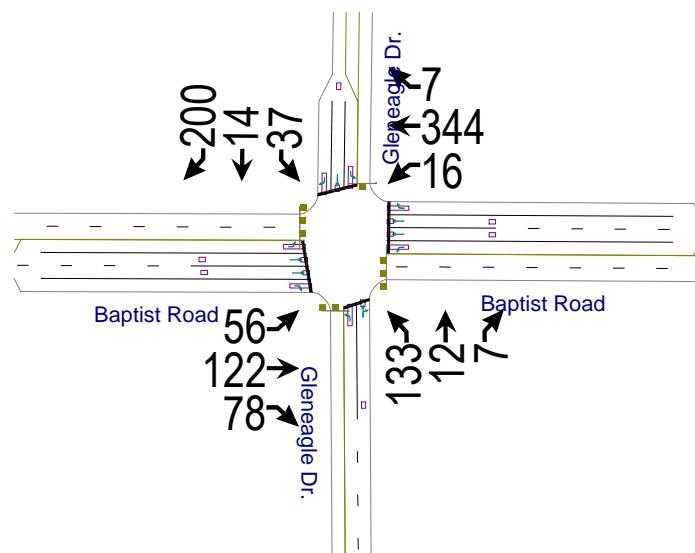


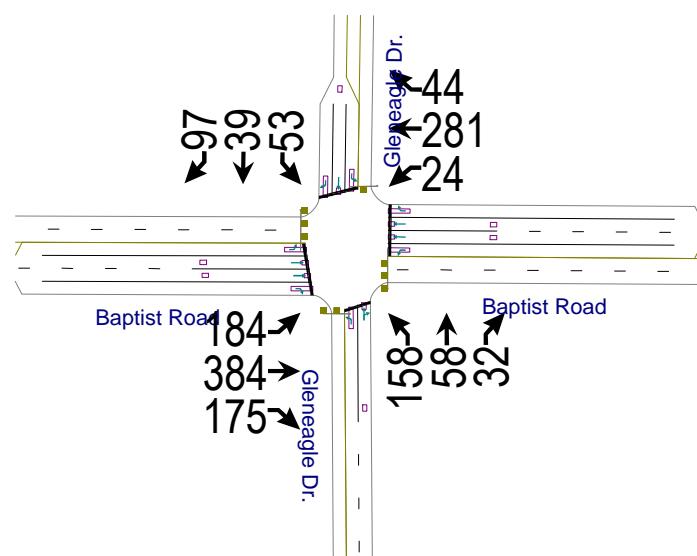


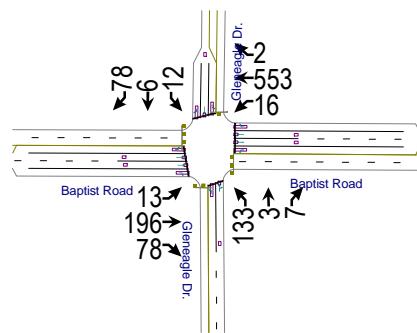


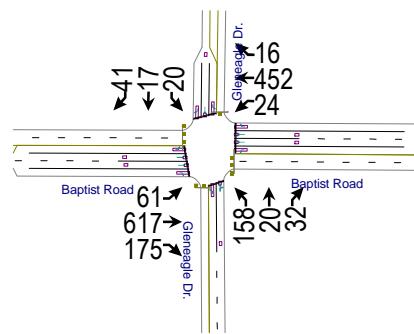


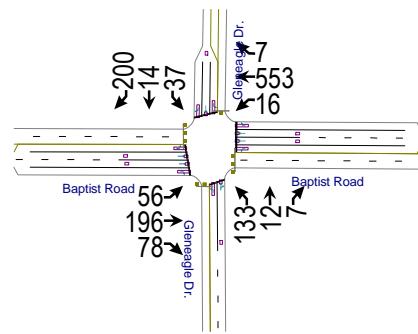


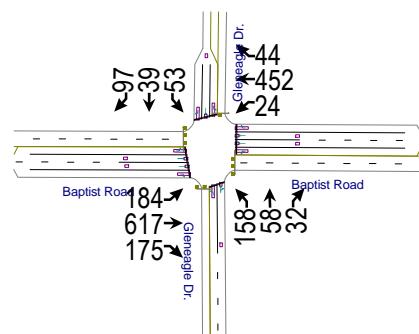












Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↑	↑		↑	↑	↑
Traffic Volume (veh/h)	13	109	78	16	307	2	133	3	7	12	6	78
Future Volume (veh/h)	13	109	78	16	307	2	133	3	7	12	6	78
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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
Work Zone On Approach	No											
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	14	118	85	17	334	2	145	3	8	13	7	85
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	141	497	222	218	497	222	1065	338	902	1139	1403	1189
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.75	0.75	0.75	0.75	0.75	0.75
Sat Flow, veh/h	1044	3554	1585	1179	3554	1585	1304	451	1203	1404	1870	1585
Grp Volume(v), veh/h	14	118	85	17	334	2	145	0	11	13	7	85
Grp Sat Flow(s), veh/h/ln	1044	1777	1585	1179	1777	1585	1304	0	1654	1404	1870	1585
Q Serve(g_s), s	1.1	2.4	4.0	1.1	7.3	0.1	2.6	0.0	0.1	0.2	0.1	1.2
Cycle Q Clear(g_c), s	8.4	2.4	4.0	3.5	7.3	0.1	2.6	0.0	0.1	0.3	0.1	1.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.73	1.00		1.00
Lane Grp Cap(c), veh/h	141	497	222	218	497	222	1065	0	1241	1139	1403	1189
V/C Ratio(X)	0.10	0.24	0.38	0.08	0.67	0.01	0.14	0.00	0.01	0.01	0.00	0.07
Avail Cap(c_a), veh/h	625	2146	957	765	2146	957	1065	0	1241	1139	1403	1189
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(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.4	31.4	32.0	32.9	33.5	30.4	2.9	0.0	2.6	2.6	2.6	2.7
Incr Delay (d2), s/veh	0.3	0.2	1.1	0.2	1.6	0.0	0.3	0.0	0.0	0.0	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.3	1.0	1.5	0.3	3.1	0.0	0.5	0.0	0.0	0.0	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	37.7	31.6	33.1	33.1	35.0	30.4	3.2	0.0	2.6	2.6	2.6	2.8
LnGrp LOS	D	C	C	C	D	C	A	A	A	A	A	A
Approach Vol, veh/h		217			353			156		105		
Approach Delay, s/veh		32.6			34.9			3.1		2.8		
Approach LOS		C			C			A		A		
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+R _c), s		66.0		16.0		66.0		16.0				
Change Period (Y+R _c), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		61.5		49.5		61.5		49.5				
Max Q Clear Time (g_c+l1), s		4.6		10.4		3.2		9.3				
Green Ext Time (p_c), s		0.5		1.0		0.4		2.2				
Intersection Summary												
HCM 6th Ctrl Delay			24.3									
HCM 6th LOS			C									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	61	343	175	24	251	16	158	20	32	20	17	41
Future Volume (veh/h)	61	343	175	24	251	16	158	20	32	20	17	41
Initial Q (Q _b), 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
Work Zone On Approach	No											
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	66	373	190	26	273	17	172	22	35	22	18	45
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	214	663	296	161	663	296	1029	460	732	1024	1325	1122
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.71	0.71	0.71	0.71	0.71	0.71
Sat Flow, veh/h	1089	3554	1585	847	3554	1585	1339	650	1034	1346	1870	1585
Grp Volume(v), veh/h	66	373	190	26	273	17	172	0	57	22	18	45
Grp Sat Flow(s), veh/h/ln	1089	1777	1585	847	1777	1585	1339	0	1684	1346	1870	1585
Q Serve(g_s), s	4.9	8.2	9.5	2.5	5.8	0.8	3.7	0.0	0.9	0.4	0.2	0.7
Cycle Q Clear(g_c), s	10.6	8.2	9.5	10.6	5.8	0.8	4.0	0.0	0.9	1.3	0.2	0.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.61	1.00		1.00
Lane Grp Cap(c), veh/h	214	663	296	161	663	296	1029	0	1193	1024	1325	1122
V/C Ratio(X)	0.31	0.56	0.64	0.16	0.41	0.06	0.17	0.00	0.05	0.02	0.01	0.04
Avail Cap(c_a), veh/h	654	2101	937	504	2101	937	1029	0	1193	1024	1325	1122
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(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.3	31.6	32.1	36.4	30.6	28.6	4.3	0.0	3.8	4.0	3.7	3.7
Incr Delay (d2), s/veh	0.8	0.8	2.3	0.5	0.4	0.1	0.4	0.0	0.1	0.0	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	1.3	3.3	3.6	0.5	2.4	0.3	0.9	0.0	0.3	0.1	0.1	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.1	32.3	34.5	36.9	31.0	28.7	4.6	0.0	3.8	4.0	3.7	3.8
LnGrp LOS	D	C	C	D	C	C	A	A	A	A	A	A
Approach Vol, veh/h					316			229			85	
Approach Delay, s/veh					31.4			4.4			3.8	
Approach LOS		C			C			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+R _c), s		65.0		20.4		65.0		20.4				
Change Period (Y+R _c), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		60.5		50.5		60.5		50.5				
Max Q Clear Time (g_c+l1), s		6.0		12.6		3.3		12.6				
Green Ext Time (p_c), s		0.9		3.3		0.3		1.9				
Intersection Summary												
HCM 6th Ctrl Delay				25.6								
HCM 6th LOS				C								

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↑	↑		↑	↑	↑
Traffic Volume (veh/h)	13	109	78	16	307	2	133	3	7	12	6	78
Future Volume (veh/h)	13	109	78	16	307	2	133	3	7	12	6	78
Initial Q (Q _b), 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
Work Zone On Approach	No		No			No			No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	14	133	85	17	374	2	145	3	8	13	7	85
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	144	548	245	230	548	245	1046	331	884	1117	1374	1164
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.73	0.73	0.73	0.73	0.73	0.73
Sat Flow, veh/h	1007	3554	1585	1163	3554	1585	1304	451	1203	1404	1870	1585
Grp Volume(v), veh/h	14	133	85	17	374	2	145	0	11	13	7	85
Grp Sat Flow(s), veh/h/ln	1007	1777	1585	1163	1777	1585	1304	0	1654	1404	1870	1585
Q Serve(g_s), s	1.1	2.7	3.9	1.1	8.1	0.1	2.7	0.0	0.1	0.2	0.1	1.2
Cycle Q Clear(g_c), s	9.1	2.7	3.9	3.7	8.1	0.1	2.8	0.0	0.1	0.3	0.1	1.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.73	1.00		1.00
Lane Grp Cap(c), veh/h	144	548	245	230	548	245	1046	0	1215	1117	1374	1164
V/C Ratio(X)	0.10	0.24	0.35	0.07	0.68	0.01	0.14	0.00	0.01	0.01	0.01	0.07
Avail Cap(c_a), veh/h	629	2259	1008	790	2259	1008	1046	0	1215	1117	1374	1164
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(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.7	30.1	30.6	31.7	32.4	29.0	3.2	0.0	2.9	2.9	2.9	3.0
Incr Delay (d2), s/veh	0.3	0.2	0.8	0.1	1.5	0.0	0.3	0.0	0.0	0.0	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.3	1.1	1.4	0.3	3.3	0.0	0.6	0.0	0.0	0.0	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	37.0	30.3	31.5	31.9	33.9	29.0	3.5	0.0	2.9	2.9	2.9	3.1
LnGrp LOS	D	C	C	C	C	C	A	A	A	A	A	A
Approach Vol, veh/h						393			156			105
Approach Delay, s/veh						33.8			3.5			3.1
Approach LOS						C			A			A
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+R _c), s		64.0		17.0		64.0		17.0				
Change Period (Y+R _c), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		59.5		51.5		59.5		51.5				
Max Q Clear Time (g_c+l1), s		4.8		11.1		3.2		10.1				
Green Ext Time (p_c), s		0.5		1.1		0.4		2.4				
Intersection Summary												
HCM 6th Ctrl Delay				24.1								
HCM 6th LOS				C								

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	61	343	175	24	251	16	158	20	32	20	17	41
Future Volume (veh/h)	61	343	175	24	251	16	158	20	32	20	17	41
Initial Q (Q _b), 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
Work Zone On Approach	No											
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	66	418	190	26	306	17	172	22	35	22	18	45
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	213	707	315	158	707	315	1013	453	721	1008	1304	1105
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.70	0.70	0.70	0.70	0.70	0.70
Sat Flow, veh/h	1057	3554	1585	813	3554	1585	1339	650	1034	1346	1870	1585
Grp Volume(v), veh/h	66	418	190	26	306	17	172	0	57	22	18	45
Grp Sat Flow(s), veh/h/ln	1057	1777	1585	813	1777	1585	1339	0	1684	1346	1870	1585
Q Serve(g_s), s	5.1	9.3	9.5	2.6	6.5	0.8	3.9	0.0	0.9	0.5	0.3	0.8
Cycle Q Clear(g_c), s	11.6	9.3	9.5	11.9	6.5	0.8	4.2	0.0	0.9	1.4	0.3	0.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.61	1.00		1.00
Lane Grp Cap(c), veh/h	213	707	315	158	707	315	1013	0	1175	1008	1304	1105
V/C Ratio(X)	0.31	0.59	0.60	0.16	0.43	0.05	0.17	0.00	0.05	0.02	0.01	0.04
Avail Cap(c_a), veh/h	618	2069	923	469	2069	923	1013	0	1175	1008	1304	1105
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(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.6	31.6	31.6	36.9	30.5	28.1	4.6	0.0	4.1	4.3	4.0	4.1
Incr Delay (d2), s/veh	0.8	0.8	1.9	0.5	0.4	0.1	0.4	0.0	0.1	0.0	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	1.3	3.8	3.6	0.5	2.7	0.3	1.0	0.0	0.3	0.1	0.1	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.4	32.3	33.5	37.4	30.9	28.2	5.0	0.0	4.2	4.4	4.0	4.2
LnGrp LOS	D	C	C	D	C	C	A	A	A	A	A	A
Approach Vol, veh/h		674			349			229			85	
Approach Delay, s/veh		33.1			31.2			4.8			4.2	
Approach LOS		C			C			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+R _c), s		65.0		21.7		65.0		21.7				
Change Period (Y+R _c), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		60.5		50.5		60.5		50.5				
Max Q Clear Time (g_c+l1), s		6.2		13.6		3.4		13.9				
Green Ext Time (p_c), s		0.9		3.6		0.3		2.1				
Intersection Summary												
HCM 6th Ctrl Delay			25.9									
HCM 6th LOS			C									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	56	109	78	16	307	7	133	12	7	37	14	200
Future Volume (veh/h)	56	109	78	16	307	7	133	12	7	37	14	200
Initial Q (Q _b), 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
Work Zone On Approach	No		No		No		No		No	No		No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	61	133	85	17	374	8	145	13	8	40	15	217
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	179	681	304	269	681	304	890	764	470	1058	1319	1118
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.71	0.71	0.71	0.71	0.71	0.71
Sat Flow, veh/h	1001	3554	1585	1163	3554	1585	1148	1084	667	1391	1870	1585
Grp Volume(v), veh/h	61	133	85	17	374	8	145	0	21	40	15	217
Grp Sat Flow(s), veh/h/ln	1001	1777	1585	1163	1777	1585	1148	0	1750	1391	1870	1585
Q Serve(g_s), s	5.1	2.7	4.0	1.1	8.3	0.4	3.7	0.0	0.3	0.8	0.2	4.1
Cycle Q Clear(g_c), s	13.4	2.7	4.0	3.8	8.3	0.4	4.0	0.0	0.3	1.1	0.2	4.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.38	1.00		1.00
Lane Grp Cap(c), veh/h	179	681	304	269	681	304	890	0	1234	1058	1319	1118
V/C Ratio(X)	0.34	0.20	0.28	0.06	0.55	0.03	0.16	0.00	0.02	0.04	0.01	0.19
Avail Cap(c_a), veh/h	556	2017	900	706	2017	900	890	0	1234	1058	1319	1118
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(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.9	29.6	30.1	31.2	31.8	28.6	4.4	0.0	3.8	4.0	3.8	4.4
Incr Delay (d2), s/veh	1.1	0.1	0.5	0.1	0.7	0.0	0.4	0.0	0.0	0.1	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 BackOfQ(50%), veh/ln	1.2	1.1	1.5	0.3	3.4	0.1	0.8	0.0	0.1	0.2	0.1	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.0	29.7	30.6	31.3	32.5	28.7	4.8	0.0	3.9	4.1	3.8	4.8
LnGrp LOS	D	C	C	C	C	C	A	A	A	A	A	A
Approach Vol, veh/h						399			166			272
Approach Delay, s/veh	32.0					32.4			4.7			4.6
Approach LOS		C				C		A		A		
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+R _c), s	66.0		21.2		66.0		21.2					
Change Period (Y+R _c), s	4.5		4.5		4.5		4.5					
Max Green Setting (Gmax), s	61.5		49.5		61.5		49.5					
Max Q Clear Time (g_c+l1), s	6.0		15.4		6.1		10.3					
Green Ext Time (p_c), s	0.7		1.3		1.0		2.5					
Intersection Summary												
HCM 6th Ctrl Delay			21.4									
HCM 6th LOS			C									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↑	↑		↑	↑	↑
Traffic Volume (veh/h)	13	109	78	16	307	2	133	3	7	12	6	78
Future Volume (veh/h)	13	109	78	16	307	2	133	3	7	12	6	78
Initial Q (Q _b), 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
Work Zone On Approach	No		No		No		No		No	No		No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	14	213	85	17	601	2	145	3	8	13	7	85
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	160	840	375	297	840	375	935	291	777	997	1208	1024
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.65	0.65	0.65	0.65	0.65	0.65
Sat Flow, veh/h	816	3554	1585	1081	3554	1585	1304	451	1203	1404	1870	1585
Grp Volume(v), veh/h	14	213	85	17	601	2	145	0	11	13	7	85
Grp Sat Flow(s), veh/h/ln	816	1777	1585	1081	1777	1585	1304	0	1654	1404	1870	1585
Q Serve(g_s), s	1.2	3.7	3.3	1.0	11.9	0.1	3.4	0.0	0.2	0.3	0.1	1.5
Cycle Q Clear(g_c), s	13.1	3.7	3.3	4.7	11.9	0.1	3.5	0.0	0.2	0.4	0.1	1.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.73	1.00		1.00
Lane Grp Cap(c), veh/h	160	840	375	297	840	375	935	0	1069	997	1208	1024
V/C Ratio(X)	0.09	0.25	0.23	0.06	0.72	0.01	0.16	0.00	0.01	0.01	0.01	0.08
Avail Cap(c_a), veh/h	623	2853	1272	909	2853	1272	935	0	1069	997	1208	1024
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(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.9	23.8	23.6	25.7	26.9	22.4	5.4	0.0	4.8	4.9	4.8	5.1
Incr Delay (d2), s/veh	0.2	0.2	0.3	0.1	1.2	0.0	0.4	0.0	0.0	0.0	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.2	1.5	1.2	0.2	4.7	0.0	0.9	0.0	0.1	0.1	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.1	23.9	23.9	25.8	28.0	22.4	5.8	0.0	4.8	4.9	4.8	5.2
LnGrp LOS	C	C	C	C	C	C	A	A	A	A	A	A
Approach Vol, veh/h		312			620			156			105	
Approach Delay, s/veh		24.3			28.0			5.7			5.2	
Approach LOS		C			C			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+R _c), s		54.0		22.6		54.0		22.6				
Change Period (Y+R _c), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		49.5		61.5		49.5		61.5				
Max Q Clear Time (g_c+l1), s		5.5		15.1		3.5		13.9				
Green Ext Time (p_c), s		0.5		1.7		0.3		4.2				
Intersection Summary												
HCM 6th Ctrl Delay			22.1									
HCM 6th LOS			C									

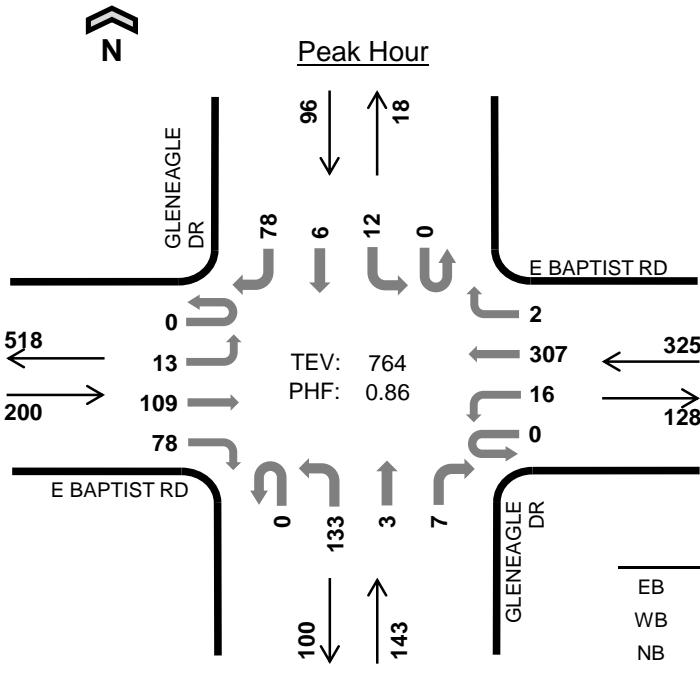
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	61	343	175	24	251	16	158	20	32	20	17	41
Future Volume (veh/h)	61	343	175	24	251	16	158	20	32	20	17	41
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	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
Work Zone On Approach	No											
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	66	671	190	26	491	17	172	22	35	22	18	45
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	233	990	442	158	990	442	902	398	633	893	1145	971
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.61	0.61	0.61	0.61	0.61	0.61
Sat Flow, veh/h	891	3554	1585	642	3554	1585	1339	650	1034	1346	1870	1585
Grp Volume(v), veh/h	66	671	190	26	491	17	172	0	57	22	18	45
Grp Sat Flow(s), veh/h/ln	891	1777	1585	642	1777	1585	1339	0	1684	1346	1870	1585
Q Serve(g_s), s	5.5	13.8	8.1	3.1	9.5	0.6	4.8	0.0	1.1	0.5	0.3	0.9
Cycle Q Clear(g_c), s	15.1	13.8	8.1	16.9	9.5	0.6	5.1	0.0	1.1	1.7	0.3	0.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.61	1.00		1.00
Lane Grp Cap(c), veh/h	233	990	442	158	990	442	902	0	1031	893	1145	971
V/C Ratio(X)	0.28	0.68	0.43	0.16	0.50	0.04	0.19	0.00	0.06	0.02	0.02	0.05
Avail Cap(c_a), veh/h	638	2607	1163	450	2607	1163	902	0	1031	893	1145	971
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(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.2	26.5	24.4	34.0	24.9	21.7	7.3	0.0	6.4	6.8	6.3	6.4
Incr Delay (d2), s/veh	0.7	0.8	0.7	0.5	0.4	0.0	0.5	0.0	0.1	0.1	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	1.2	5.5	2.9	0.5	3.7	0.2	1.3	0.0	0.4	0.2	0.1	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	31.9	27.3	25.0	34.5	25.3	21.7	7.7	0.0	6.5	6.8	6.3	6.5
LnGrp LOS	C	C	C	C	C	C	A	A	A	A	A	A
Approach Vol, veh/h	927				534			229			85	
Approach Delay, s/veh	27.1				25.6			7.4			6.5	
Approach LOS	C				C			A			A	
Timer - Assigned Phs	2		4		6		8					
Phs Duration (G+Y+R _c), s	55.0		27.5		55.0		27.5					
Change Period (Y+R _c), s	4.5		4.5		4.5		4.5					
Max Green Setting (Gmax), s	50.5		60.5		50.5		60.5					
Max Q Clear Time (g_c+l1), s	7.1		17.1		3.7		18.9					
Green Ext Time (p_c), s	0.9		5.9		0.3		3.6					
Intersection Summary												
HCM 6th Ctrl Delay			23.2									
HCM 6th LOS			C									

Movement	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	56	109	78	16	307	7	133	12	7	37	14	200
Future Volume (veh/h)	56	109	78	16	307	7	133	12	7	37	14	200
Initial Q (Q _b), 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
Work Zone On Approach	No		No		No		No		No	No		No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	61	213	85	17	601	8	145	13	8	40	15	217
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	186	956	426	329	956	426	797	672	414	945	1160	983
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.62	0.62	0.62	0.62	0.62	0.62
Sat Flow, veh/h	812	3554	1585	1081	3554	1585	1148	1084	667	1391	1870	1585
Grp Volume(v), veh/h	61	213	85	17	601	8	145	0	21	40	15	217
Grp Sat Flow(s), veh/h/ln	812	1777	1585	1081	1777	1585	1148	0	1750	1391	1870	1585
Q Serve(g_s), s	5.8	3.8	3.4	1.0	12.1	0.3	4.5	0.0	0.4	0.9	0.2	4.9
Cycle Q Clear(g_c), s	17.9	3.8	3.4	4.8	12.1	0.3	4.8	0.0	0.4	1.3	0.2	4.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.38	1.00		1.00
Lane Grp Cap(c), veh/h	186	956	426	329	956	426	797	0	1086	945	1160	983
V/C Ratio(X)	0.33	0.22	0.20	0.05	0.63	0.02	0.18	0.00	0.02	0.04	0.01	0.22
Avail Cap(c_a), veh/h	571	2641	1178	842	2641	1178	797	0	1086	945	1160	983
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(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.1	23.1	23.0	25.0	26.2	21.9	6.8	0.0	5.9	6.2	5.9	6.8
Incr Delay (d2), s/veh	1.0	0.1	0.2	0.1	0.7	0.0	0.5	0.0	0.0	0.1	0.0	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	1.1	1.5	1.2	0.2	4.8	0.1	1.1	0.0	0.1	0.3	0.1	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.1	23.2	23.2	25.1	26.9	21.9	7.3	0.0	6.0	6.3	5.9	7.3
LnGrp LOS	D	C	C	C	C	C	A	A	A	A	A	A
Approach Vol, veh/h		359			626			166		272		
Approach Delay, s/veh		25.2			26.7			7.2		7.1		
Approach LOS		C			C			A		A		
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+R _c), s		55.0		26.4		55.0		26.4				
Change Period (Y+R _c), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		50.5		60.5		50.5		60.5				
Max Q Clear Time (g_c+l1), s		6.8		19.9		6.9		14.1				
Green Ext Time (p_c), s		0.7		2.0		1.0		4.2				
Intersection Summary												
HCM 6th Ctrl Delay			20.3									
HCM 6th LOS			C									

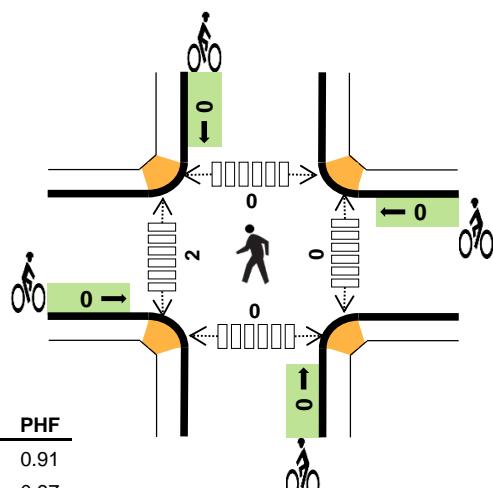
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	184	343	175	24	251	44	158	58	32	53	39	97
Future Volume (veh/h)	184	343	175	24	251	44	158	58	32	53	39	97
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		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
Work Zone On Approach	No											
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	200	671	190	26	491	48	172	63	35	58	42	105
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	358	1454	649	260	1454	649	671	546	303	673	904	766
Arrive On Green	0.41	0.41	0.41	0.41	0.41	0.41	0.48	0.48	0.48	0.48	0.48	0.48
Sat Flow, veh/h	866	3554	1585	642	3554	1585	1241	1130	628	1297	1870	1585
Grp Volume(v), veh/h	200	671	190	26	491	48	172	0	98	58	42	105
Grp Sat Flow(s), veh/h/ln	866	1777	1585	642	1777	1585	1241	0	1757	1297	1870	1585
Q Serve(g_s), s	17.2	11.5	6.7	2.6	7.9	1.5	7.1	0.0	2.6	2.1	1.0	3.1
Cycle Q Clear(g_c), s	25.2	11.5	6.7	14.1	7.9	1.5	8.1	0.0	2.6	4.7	1.0	3.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.36	1.00		1.00
Lane Grp Cap(c), veh/h	358	1454	649	260	1454	649	671	0	849	673	904	766
V/C Ratio(X)	0.56	0.46	0.29	0.10	0.34	0.07	0.26	0.00	0.12	0.09	0.05	0.14
Avail Cap(c_a), veh/h	733	2990	1334	538	2990	1334	671	0	849	673	904	766
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(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.6	18.0	16.6	23.2	17.0	15.1	13.6	0.0	11.8	13.1	11.4	12.0
Incr Delay (d2), s/veh	1.4	0.2	0.2	0.2	0.1	0.0	0.9	0.0	0.3	0.3	0.1	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 BackOfQ(50%), veh/ln	3.4	4.3	2.2	0.4	2.9	0.5	2.0	0.0	1.0	0.6	0.4	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.0	18.3	16.9	23.3	17.1	15.1	14.5	0.0	12.1	13.4	11.5	12.4
LnGrp LOS	C	B	B	C	B	B	B	A	B	B	B	B
Approach Vol, veh/h	1061				565			270			205	
Approach Delay, s/veh	19.6				17.2			13.6			12.5	
Approach LOS	B				B			B			B	
Timer - Assigned Phs	2		4		6		8					
Phs Duration (G+Y+R _c), s	45.0		38.8		45.0		38.8					
Change Period (Y+R _c), s	4.5		4.5		4.5		4.5					
Max Green Setting (Gmax), s	40.5		70.5		40.5		70.5					
Max Q Clear Time (g_c+l1), s	10.1		27.2		6.7		16.1					
Green Ext Time (p_c), s	1.2		7.1		0.8		3.7					
Intersection Summary												
HCM 6th Ctrl Delay			17.5									
HCM 6th LOS			B									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	184	343	175	24	251	44	158	58	32	53	39	97
Future Volume (veh/h)	184	343	175	24	251	44	158	58	32	53	39	97
Initial Q (Q _b), 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
Work Zone On Approach	No		No		No		No		No	No		No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	200	418	190	26	306	48	172	63	35	58	42	105
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	353	1144	510	276	1144	510	780	642	357	792	1062	900
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.57	0.57	0.57	0.57	0.57	0.57
Sat Flow, veh/h	1027	3554	1585	813	3554	1585	1241	1130	628	1297	1870	1585
Grp Volume(v), veh/h	200	418	190	26	306	48	172	0	98	58	42	105
Grp Sat Flow(s), veh/h/ln	1027	1777	1585	813	1777	1585	1241	0	1757	1297	1870	1585
Q Serve(g_s), s	14.7	7.4	7.6	2.1	5.2	1.7	5.8	0.0	2.1	1.8	0.8	2.5
Cycle Q Clear(g_c), s	19.9	7.4	7.6	9.5	5.2	1.7	6.6	0.0	2.1	3.8	0.8	2.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.36	1.00		1.00
Lane Grp Cap(c), veh/h	353	1144	510	276	1144	510	780	0	998	792	1062	900
V/C Ratio(X)	0.57	0.37	0.37	0.09	0.27	0.09	0.22	0.00	0.10	0.07	0.04	0.12
Avail Cap(c_a), veh/h	832	2800	1249	655	2800	1249	780	0	998	792	1062	900
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(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.0	21.3	21.4	25.0	20.6	19.4	9.3	0.0	8.1	9.0	7.8	8.2
Incr Delay (d2), s/veh	1.4	0.2	0.5	0.1	0.1	0.1	0.7	0.0	0.2	0.2	0.1	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	3.4	2.8	2.6	0.4	2.0	0.6	1.6	0.0	0.8	0.5	0.3	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.4	21.5	21.8	25.1	20.7	19.5	9.9	0.0	8.3	9.1	7.9	8.4
LnGrp LOS	C	C	C	C	C	B	A	A	A	A	A	A
Approach Vol, veh/h	808				380			270			205	
Approach Delay, s/veh	23.5				20.9			9.3			8.5	
Approach LOS	C				C			A			A	
Timer - Assigned Phs	2		4		6		8					
Phs Duration (G+Y+R _c), s	51.0		30.9		51.0		30.9					
Change Period (Y+R _c), s	4.5		4.5		4.5		4.5					
Max Green Setting (Gmax), s	46.5		64.5		46.5		64.5					
Max Q Clear Time (g_c+l1), s	8.6		21.9		5.8		11.5					
Green Ext Time (p_c), s	1.2		4.5		0.8		2.3					
Intersection Summary												
HCM 6th Ctrl Delay			18.8									
HCM 6th LOS			B									

GLENNEAGLE DR E BAPTIST RD



Date: Wed, May 30, 2018
 Count Period: 7:00 AM to 9:00 AM
 Peak Hour: 7:00 AM to 8:00 AM



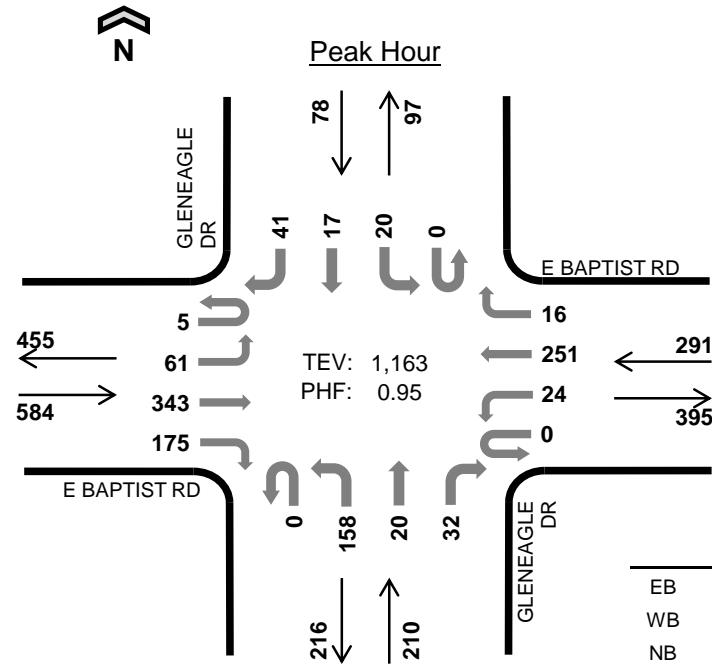
Two-Hour Count Summaries

Interval Start	E BAPTIST RD				E BAPTIST RD				GLENNEAGLE DR				GLENNEAGLE DR				15-min Total	Rolling One Hour
	Eastbound		Westbound		Northbound		Southbound		UT	LT	TH	RT	UT	LT	TH	RT		
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	1	28	18	0	6	74	0	0	23	0	3	0	2	1	20	176	0
7:15 AM	0	4	23	16	0	6	72	1	0	27	1	2	0	1	2	20	175	0
7:30 AM	0	7	30	18	0	3	78	1	0	53	1	2	0	5	1	22	221	0
7:45 AM	0	1	28	26	0	1	83	0	0	30	1	0	0	4	2	16	192	764
8:00 AM	1	8	29	20	0	6	60	1	0	25	0	5	0	2	1	14	172	760
8:15 AM	0	3	36	14	0	5	66	6	0	30	1	3	0	0	1	14	179	764
8:30 AM	0	8	30	14	0	4	57	2	0	21	0	4	0	2	0	9	151	694
8:45 AM	0	9	29	26	0	3	57	0	0	24	3	2	0	4	4	22	183	685
Count Total	1	41	233	152	0	34	547	11	0	233	7	21	0	20	12	137	1,449	0
Peak Hour	0	13	109	78	0	16	307	2	0	133	3	7	0	12	6	78	764	0

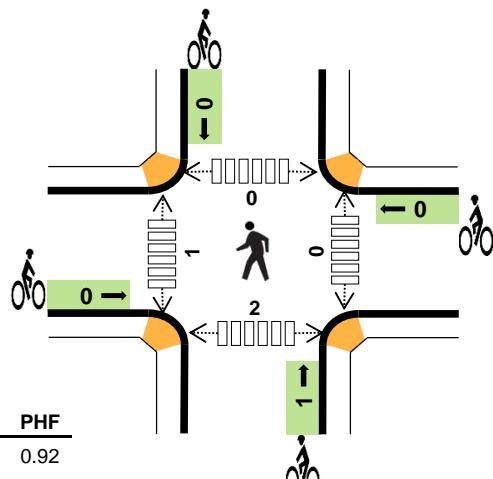
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	7	5	0	0	12	0	0	0	0	0	0	0	0	0	0
7:15 AM	3	2	0	0	5	0	0	0	0	0	0	1	0	0	1
7:30 AM	3	1	0	0	4	0	0	0	0	0	0	0	0	0	0
7:45 AM	3	2	1	0	6	0	0	0	0	0	0	1	0	0	1
8:00 AM	5	3	0	0	8	0	0	0	0	0	0	0	0	0	0
8:15 AM	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0
8:30 AM	3	1	1	0	5	0	0	0	0	0	0	0	1	0	1
8:45 AM	1	2	0	0	3	0	0	0	0	0	0	1	0	0	1
Count Total	26	17	2	0	45	0	0	0	0	0	0	3	1	0	4
Peak Hour	16	10	1	0	27	0	0	0	0	0	0	2	0	0	2

GLENEAGLE DR E BAPTIST RD



Date: Tue, May 29, 2018
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM



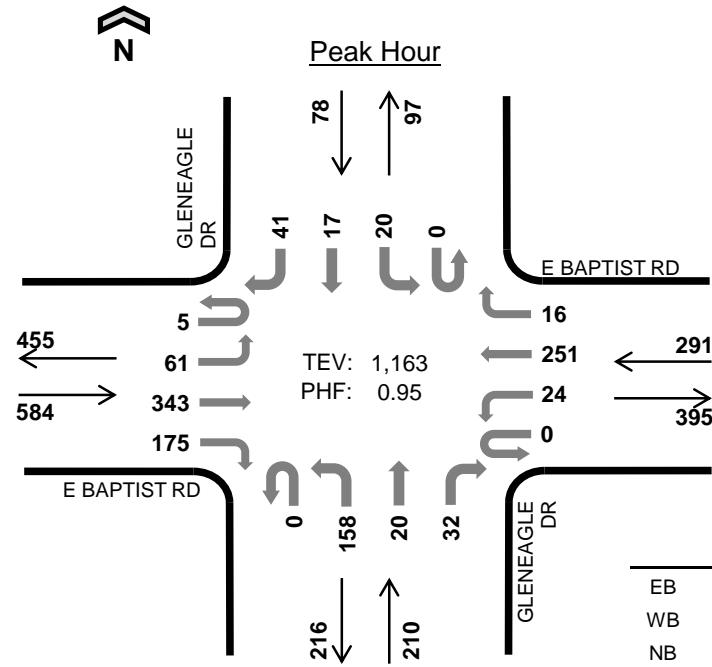
Two-Hour Count Summaries

Interval Start	E BAPTIST RD				E BAPTIST RD				GLENEAGLE DR				GLENEAGLE DR				15-min Total	Rolling One Hour							
	Eastbound		Westbound		Northbound		Southbound		UT		LT		TH		RT		UT		LT		TH		RT		
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	
4:00 PM	0	10	74	36	0	3	51	3	0	37	2	5	0	2	0	12	235	0							
4:15 PM	0	20	82	42	0	9	76	6	0	35	3	7	0	7	4	11	302	0							
4:30 PM	2	15	79	33	0	6	67	4	0	46	6	10	0	5	5	13	291	0							
4:45 PM	3	13	94	48	0	4	42	3	0	25	7	8	0	5	5	8	265	1,093							
5:00 PM	0	13	88	52	0	5	66	3	0	52	4	7	0	3	3	9	305	1,163							
5:15 PM	0	19	83	32	0	2	76	6	0	34	3	3	0	4	3	6	271	1,132							
5:30 PM	0	16	93	53	0	4	76	9	0	40	4	6	0	1	2	14	318	1,159							
5:45 PM	2	14	78	36	0	6	80	4	0	27	4	1	0	4	2	11	269	1,163							
Count Total	7	120	671	332	0	39	534	38	0	296	33	47	0	31	24	84	2,256	0							
Peak Hour	5	61	343	175	0	24	251	16	0	158	20	32	0	20	17	41	1,163	0							

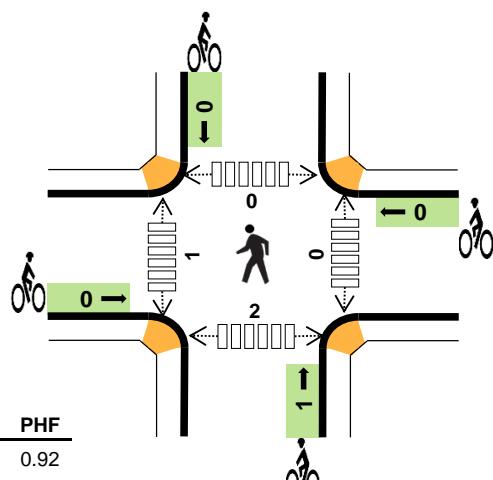
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0
4:15 PM	2	1	1	1	5	0	0	0	0	0	0	0	0	0	0
4:30 PM	1	1	1	0	3	0	0	0	0	0	0	0	0	0	0
4:45 PM	4	2	0	0	6	0	0	1	0	1	0	0	0	1	1
5:00 PM	2	1	1	0	4	0	0	0	0	0	0	1	0	1	2
5:15 PM	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0
5:30 PM	1	1	0	1	3	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	1	0	2	0	1	0	0	1	0	0	0	0	0
Count Total	12	8	5	2	27	0	1	1	0	2	0	1	0	2	3
Peak Hour	9	5	3	1	18	0	0	1	0	1	0	1	0	2	3

GLENEAGLE DR E BAPTIST RD



Date: Tue, May 29, 2018
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM



Two-Hour Count Summaries

Interval Start	E BAPTIST RD				E BAPTIST RD				GLENEAGLE DR				GLENEAGLE DR				15-min Total	Rolling One Hour
	Eastbound		Westbound		Northbound		Southbound		UT	LT	TH	RT	UT	LT	TH	RT		
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	10	74	36	0	3	51	3	0	37	2	5	0	2	0	12	235	0
4:15 PM	0	20	82	42	0	9	76	6	0	35	3	7	0	7	4	11	302	0
4:30 PM	2	15	79	33	0	6	67	4	0	46	6	10	0	5	5	13	291	0
4:45 PM	3	13	94	48	0	4	42	3	0	25	7	8	0	5	5	8	265	1,093
5:00 PM	0	13	88	52	0	5	66	3	0	52	4	7	0	3	3	9	305	1,163
5:15 PM	0	19	83	32	0	2	76	6	0	34	3	3	0	4	3	6	271	1,132
5:30 PM	0	16	93	53	0	4	76	9	0	40	4	6	0	1	2	14	318	1,159
5:45 PM	2	14	78	36	0	6	80	4	0	27	4	1	0	4	2	11	269	1,163
Count Total	7	120	671	332	0	39	534	38	0	296	33	47	0	31	24	84	2,256	0
Peak Hour	5	61	343	175	0	24	251	16	0	158	20	32	0	20	17	41	1,163	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0
4:15 PM	2	1	1	1	5	0	0	0	0	0	0	0	0	0	0
4:30 PM	1	1	1	0	3	0	0	0	0	0	0	0	0	0	0
4:45 PM	4	2	0	0	6	0	0	1	0	1	0	0	0	1	1
5:00 PM	2	1	1	0	4	0	0	0	0	0	0	1	0	1	2
5:15 PM	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0
5:30 PM	1	1	0	1	3	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	1	0	2	0	1	0	0	1	0	0	0	0	0
Count Total	12	8	5	2	27	0	1	1	0	2	0	1	0	2	3
Peak Hour	9	5	3	1	18	0	0	1	0	1	0	1	0	2	3

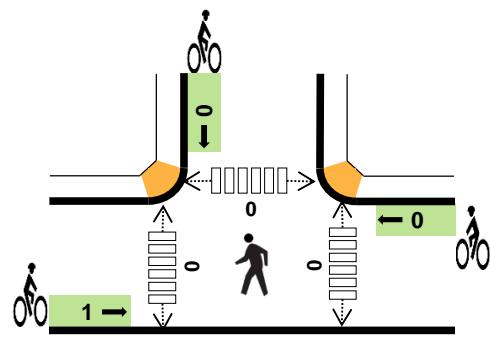
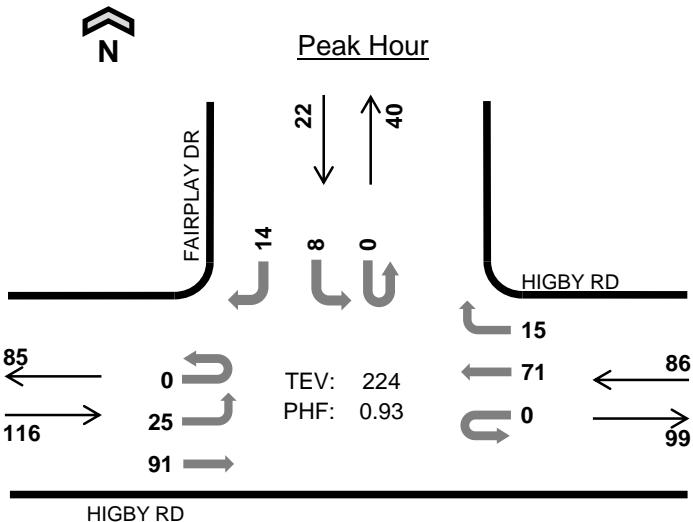
FAIRPLAY DR HIGBY RD



Date: Wed, May 16, 2018

Count Period: 4:00 PM to 6:00 PM

Peak Hour: 5:00 PM to 6:00 PM



	HV %:	PHF
EB	0.0%	0.88
WB	1.2%	0.93
NB	-	-
SB	0.0%	0.69
TOTAL	0.4%	0.93

Two-Hour Count Summaries

Interval Start	Higby Rd				Higby Rd				0				Fairplay Dr				15-min Total	Rolling One Hour
	Eastbound		Westbound		Northbound		Southbound		UT	LT	TH	RT	UT	LT	TH	RT		
UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
4:00 PM	0	4	18	0	0	0	17	2	0	0	0	0	0	2	0	3	46	0
4:15 PM	0	5	24	0	0	0	12	3	0	0	0	0	0	3	0	1	48	0
4:30 PM	0	6	20	0	0	0	13	2	0	0	0	0	0	1	0	2	44	0
4:45 PM	0	3	21	0	0	0	19	1	0	0	0	0	0	1	0	2	47	185
5:00 PM	0	7	21	0	0	0	14	7	0	0	0	0	0	2	0	6	57	196
5:15 PM	0	5	22	0	0	0	21	2	0	0	0	0	0	1	0	4	55	203
5:30 PM	0	9	24	0	0	0	19	3	0	0	0	0	0	3	0	2	60	219
5:45 PM	0	4	24	0	0	0	17	3	0	0	0	0	0	2	0	2	52	224
Count Total	0	43	174	0	0	0	132	23	0	0	0	0	0	15	0	22	409	0
Peak Hour	0	25	91	0	0	0	71	15	0	0	0	0	0	8	0	14	224	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals				Bicycles					Pedestrians (Crossing Leg)					
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	2	1	0	0	3	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0
5:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
Count Total	2	3	0	0	5	1	0	0	0	1	0	0	0	0	0
Peak Hr	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0

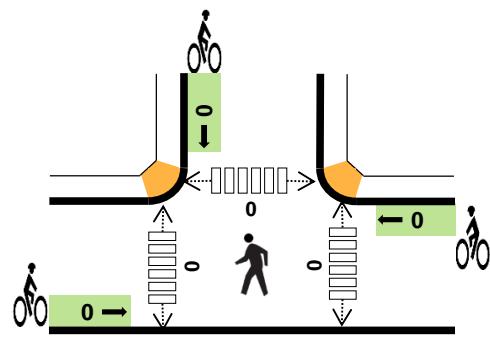
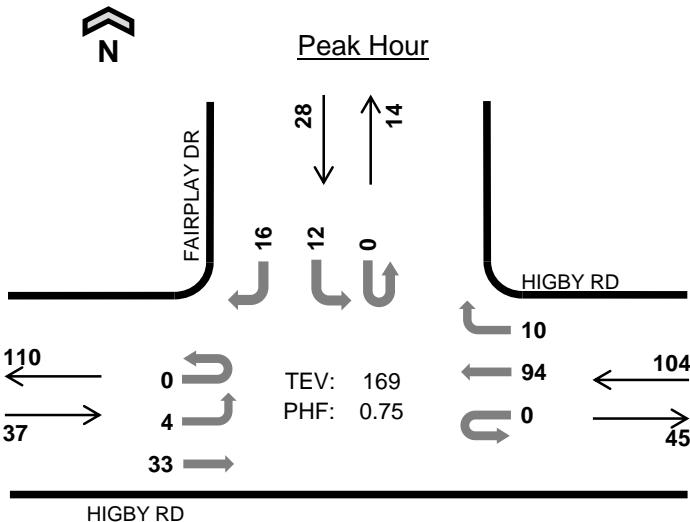
FAIRPLAY DR HIGBY RD



Date: Wed, May 16, 2018

Count Period: 7:00 AM to 9:00 AM

Peak Hour: 7:00 AM to 8:00 AM



	HV %:	PHF
EB	2.7%	0.66
WB	0.0%	0.60
NB	-	-
SB	0.0%	0.54
TOTAL	0.6%	0.75

Two-Hour Count Summaries

Interval Start	HIGBY RD				HIGBY RD				0				FAIRPLAY DR				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	1	9	0	0	0	42	1	0	0	0	0	0	0	0	3	56	0
7:15 AM	0	2	3	0	0	0	20	6	0	0	0	0	0	6	0	7	44	0
7:30 AM	0	1	7	0	0	0	15	1	0	0	0	0	0	6	0	3	33	0
7:45 AM	0	0	14	0	0	0	17	2	0	0	0	0	0	0	0	3	36	169
8:00 AM	0	1	7	0	0	0	10	0	0	0	0	0	0	0	0	3	21	134
8:15 AM	0	2	3	0	0	0	22	0	0	0	0	0	0	2	0	3	32	122
8:30 AM	0	2	13	0	0	0	12	2	0	0	0	0	0	2	0	4	35	124
8:45 AM	0	1	10	0	0	0	31	1	0	0	0	0	0	4	0	4	51	139
Count Total	0	10	66	0	0	0	169	13	0	0	0	0	0	20	0	30	308	0
Peak Hour	0	4	33	0	0	0	94	10	0	0	0	0	0	12	0	16	169	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
8:00 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	2	1	0	0	3	0	0	0	0	0	0	0	0	0	0
Peak Hr	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0

Location: HIGBY ROAD E/O FAIRPLAY DR
 Date Range: 5/16/2018 - 5/22/2018
 Site Code: 01

Time	Wednesday			Thursday			Friday			Saturday			Sunday			Monday			Tuesday					
	5/16/2018			5/17/2018			5/18/2018			5/19/2018			5/20/2018			5/21/2018			5/22/2018			Mid-Week Average		
	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total
12:00 AM	1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	2	
1:00 AM	2	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	3	
2:00 AM	0	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	1	1	
3:00 AM	0	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	1	1	
4:00 AM	2	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	6	8	
5:00 AM	3	9	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	9	12	
6:00 AM	12	41	53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	41	53	
7:00 AM	44	106	150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	106	150	
8:00 AM	40	73	113	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	40	73	113	
9:00 AM	59	111	170	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	59	111	170	
10:00 AM	44	56	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	56	100	
11:00 AM	67	76	143	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	67	76	143	
12:00 PM	103	77	180	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	103	77	180	
1:00 PM	105	80	185	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	105	80	185	
2:00 PM	87	78	165	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	87	78	165	
3:00 PM	96	68	164	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	96	68	164	
4:00 PM	92	67	159	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	92	67	159	
5:00 PM	97	81	178	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	97	81	178	
6:00 PM	85	70	155	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	85	70	155	
7:00 PM	69	37	106	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	69	37	106	
8:00 PM	58	30	88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	58	30	88	
9:00 PM	38	15	53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	15	53	
10:00 PM	10	9	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	9	19	
11:00 PM	11	4	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	4	15	
Total	1,125	1,098	2,223	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,125	1,098	2,223	
Percent	51%	49%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	51%	49%	-	

1. Mid-week average includes data between Tuesday and Thursday.

Vehicle Speed Report Summary

Location: HIGBY ROAD E/O FAIRPLAY DR

Count Direction: Eastbound / Westbound

Date Range: 5/16/2018 to 5/16/2018

Site Code: 01

	Speed Range (mph)																Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +
Study Total																	
Eastbound	0	0	0	0	4	19	92	312	383	213	62	26	10	2	2	0	0
Percent	0.0%	0.0%	0.0%	0.0%	0.4%	1.7%	8.2%	27.7%	34.0%	18.9%	5.5%	2.3%	0.9%	0.2%	0.2%	0.0%	0.0%
Westbound	0	0	0	0	0	4	40	146	347	366	141	39	8	6	1	0	0
Percent	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	3.6%	13.3%	31.6%	33.3%	12.8%	3.6%	0.7%	0.5%	0.1%	0.0%	0.0%
Total	0	0	0	0	4	23	132	458	730	579	203	65	18	8	3	0	0
Percent	0.0%	0.0%	0.0%	0.0%	0.2%	1.0%	5.9%	20.6%	32.8%	26.0%	9.1%	2.9%	0.8%	0.4%	0.1%	0.0%	0.0%

Total Study Percentile Speed Summary		Total Study Speed Statistics	
Eastbound		Eastbound	
50th Percentile (Median)	46.5 mph	Mean (Average) Speed	47.1 mph
85th Percentile	52.6 mph	10 mph Pace	42.1 - 52.1 mph
95th Percentile	57.8 mph	Percent in Pace	63.7 %
Westbound		Westbound	
50th Percentile (Median)	50.1 mph	Mean (Average) Speed	50.2 mph
85th Percentile	55.5 mph	10 mph Pace	44.6 - 54.6 mph
95th Percentile	59.8 mph	Percent in Pace	65.5 %

Location: HIGBY ROAD E/O FAIRPLAY DR
Date Range: 5/16/2018 to 5/16/2018
Site Code: 01



Wednesday, May 16, 2018

Eastbound

Time	Speed Range (mph)																Total Volume	
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
1:00 AM	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	2
5:00 AM	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	3
6:00 AM	0	0	0	0	0	0	0	0	4	4	3	1	0	0	0	0	0	12
7:00 AM	0	0	0	0	0	1	6	11	17	5	4	0	0	0	0	0	0	44
8:00 AM	0	0	0	0	1	1	5	10	15	4	3	0	0	0	1	0	0	40
9:00 AM	0	0	0	0	0	0	4	12	22	16	3	2	0	0	0	0	0	59
10:00 AM	0	0	0	0	0	1	6	9	14	10	2	2	0	0	0	0	0	44
11:00 AM	0	0	0	0	0	0	5	21	18	14	5	3	1	0	0	0	0	67
12:00 PM	0	0	0	0	1	1	7	26	36	19	9	4	0	0	0	0	0	103
1:00 PM	0	0	0	0	0	2	9	32	35	19	3	3	0	1	1	0	0	105
2:00 PM	0	0	0	0	1	1	2	25	32	17	8	1	0	0	0	0	0	87
3:00 PM	0	0	0	0	0	0	12	29	33	13	5	3	1	0	0	0	0	96
4:00 PM	0	0	0	0	0	4	6	19	32	21	7	2	1	0	0	0	0	92
5:00 PM	0	0	0	0	0	1	6	31	32	22	2	2	1	0	0	0	0	97
6:00 PM	0	0	0	0	0	2	7	16	29	19	5	4	2	1	0	0	0	85
7:00 PM	0	0	0	0	1	2	6	27	18	13	2	0	0	0	0	0	0	69
8:00 PM	0	0	0	0	0	2	5	19	20	9	2	0	1	0	0	0	0	58
9:00 PM	0	0	0	0	0	1	2	13	13	7	0	0	2	0	0	0	0	38
10:00 PM	0	0	0	0	0	0	1	3	6	0	0	0	0	0	0	0	0	10
11:00 PM	0	0	0	0	0	0	2	3	2	2	1	0	1	0	0	0	0	11
Total	0	0	0	0	4	19	92	312	383	213	62	26	10	2	2	0	0	1,125
Percent	0.0%	0.0%	0.0%	0.0%	0.4%	1.7%	8.2%	27.7%	34.0%	18.9%	5.5%	2.3%	0.9%	0.2%	0.2%	0.0%	0.0%	

Daily Percentile Speed Summary	Speed Statistics
50th Percentile (Median) 46.5 mph	Mean (Average) Speed 47.1 mph
85th Percentile 52.6 mph	10 mph Pace 42.1 - 52.1 mph
95th Percentile 57.8 mph	Percent in Pace 63.7 %

Location: HIGBY ROAD E/O FAIRPLAY DR
Date Range: 5/16/2018 to 5/16/2018
Site Code: 01



Wednesday, May 16, 2018

Westbound

Time	Speed Range (mph)																Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	2	1	2	1	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	1	2	4	2	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	2	2	10	14	9	4	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	3	14	37	43	8	1	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	1	8	28	22	9	4	1	0	0	0	0
9:00 AM	0	0	0	0	0	1	4	10	36	35	20	3	1	1	0	0	0
10:00 AM	0	0	0	0	0	0	1	7	22	15	8	3	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	1	13	21	23	12	6	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	1	7	28	32	8	1	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	1	7	18	41	9	3	0	1	0	0	0
2:00 PM	0	0	0	0	0	0	2	9	18	30	12	2	3	2	0	0	0
3:00 PM	0	0	0	0	0	0	4	11	18	21	11	2	1	0	0	0	0
4:00 PM	0	0	0	0	0	1	2	5	20	18	12	7	0	1	1	0	0
5:00 PM	0	0	0	0	0	0	3	9	26	31	9	2	0	1	0	0	0
6:00 PM	0	0	0	0	0	0	3	15	21	17	11	2	1	0	0	0	0
7:00 PM	0	0	0	0	0	0	2	3	18	10	2	2	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	3	9	11	5	2	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	3	2	2	7	1	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	2	2	2	0	2	1	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	1	0	1	2	0	0	0	0	0	0	0
Total	0	0	0	0	0	4	40	146	347	366	141	39	8	6	1	0	0
Percent	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	3.6%	13.3%	31.6%	33.3%	12.8%	3.6%	0.7%	0.5%	0.1%	0.0%	0.0%

Daily Percentile Speed Summary	Speed Statistics
50th Percentile (Median) 50.1 mph	Mean (Average) Speed 50.2 mph
85th Percentile 55.5 mph	10 mph Pace 44.6 - 54.6 mph
95th Percentile 59.8 mph	Percent in Pace 65.5 %

Location: HIGBY ROAD E/O FAIRPLAY DR
Date Range: 5/16/2018 to 5/16/2018
Site Code: 01



Total Study Average

Eastbound

Time	Speed Range (mph)																Total Volume	
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
1:00 AM	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	2
5:00 AM	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	3
6:00 AM	0	0	0	0	0	0	0	4	4	3	1	0	0	0	0	0	0	12
7:00 AM	0	0	0	0	0	1	6	11	17	5	4	0	0	0	0	0	0	44
8:00 AM	0	0	0	0	1	1	5	10	15	4	3	0	0	0	1	0	0	40
9:00 AM	0	0	0	0	0	0	4	12	22	16	3	2	0	0	0	0	0	59
10:00 AM	0	0	0	0	0	1	6	9	14	10	2	2	0	0	0	0	0	44
11:00 AM	0	0	0	0	0	0	5	21	18	14	5	3	1	0	0	0	0	67
12:00 PM	0	0	0	0	1	1	7	26	36	19	9	4	0	0	0	0	0	103
1:00 PM	0	0	0	0	0	2	9	32	35	19	3	3	0	1	1	0	0	105
2:00 PM	0	0	0	0	1	1	2	25	32	17	8	1	0	0	0	0	0	87
3:00 PM	0	0	0	0	0	0	12	29	33	13	5	3	1	0	0	0	0	96
4:00 PM	0	0	0	0	0	4	6	19	32	21	7	2	1	0	0	0	0	92
5:00 PM	0	0	0	0	0	1	6	31	32	22	2	2	1	0	0	0	0	97
6:00 PM	0	0	0	0	0	2	7	16	29	19	5	4	2	1	0	0	0	85
7:00 PM	0	0	0	0	1	2	6	27	18	13	2	0	0	0	0	0	0	69
8:00 PM	0	0	0	0	0	2	5	19	20	9	2	0	1	0	0	0	0	58
9:00 PM	0	0	0	0	0	1	2	13	13	7	0	0	2	0	0	0	0	38
10:00 PM	0	0	0	0	0	0	1	3	6	0	0	0	0	0	0	0	0	10
11:00 PM	0	0	0	0	0	0	2	3	2	2	1	0	1	0	0	0	0	11
Total	0	0	0	0	4	19	92	312	383	213	62	26	10	2	2	0	0	1,125
Percent	0.0%	0.0%	0.0%	0.0%	0.4%	1.7%	8.2%	27.7%	34.0%	18.9%	5.5%	2.3%	0.9%	0.2%	0.2%	0.0%	0.0%	

Note: Average only considered on days with 24-hours of data.

Total Study Percentile Speed Summary		Total Study Speed Statistics					
50th Percentile (Median)	46.5 mph	Mean (Average) Speed			47.1 mph		
85th Percentile	52.6 mph	10 mph Pace			42.1 - 52.1 mph		
95th Percentile	57.8 mph	Percent in Pace			63.7 %		

Location: HIGBY ROAD E/O FAIRPLAY DR
Date Range: 5/16/2018 to 5/16/2018
Site Code: 01

Total Study Average

Westbound

Time	Speed Range (mph)																Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
1:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	2	1	2	1	0	0	0	0	0	6
5:00 AM	0	0	0	0	0	0	1	2	4	2	0	0	0	0	0	0	9
6:00 AM	0	0	0	0	0	2	2	10	14	9	4	0	0	0	0	0	41
7:00 AM	0	0	0	0	0	0	3	14	37	43	8	1	0	0	0	0	106
8:00 AM	0	0	0	0	0	0	1	8	28	22	9	4	1	0	0	0	73
9:00 AM	0	0	0	0	0	1	4	10	36	35	20	3	1	1	0	0	111
10:00 AM	0	0	0	0	0	0	1	7	22	15	8	3	0	0	0	0	56
11:00 AM	0	0	0	0	0	0	1	13	21	23	12	6	0	0	0	0	76
12:00 PM	0	0	0	0	0	0	1	7	28	32	8	1	0	0	0	0	77
1:00 PM	0	0	0	0	0	0	1	7	18	41	9	3	0	1	0	0	80
2:00 PM	0	0	0	0	0	0	2	9	18	30	12	2	3	2	0	0	78
3:00 PM	0	0	0	0	0	0	4	11	18	21	11	2	1	0	0	0	68
4:00 PM	0	0	0	0	0	1	2	5	20	18	12	7	0	1	1	0	67
5:00 PM	0	0	0	0	0	0	3	9	26	31	9	2	0	1	0	0	81
6:00 PM	0	0	0	0	0	0	3	15	21	17	11	2	1	0	0	0	70
7:00 PM	0	0	0	0	0	0	2	3	18	10	2	2	0	0	0	0	37
8:00 PM	0	0	0	0	0	0	3	9	11	5	2	0	0	0	0	0	30
9:00 PM	0	0	0	0	0	0	3	2	2	7	1	0	0	0	0	0	15
10:00 PM	0	0	0	0	0	0	2	2	2	0	2	1	0	0	0	0	9
11:00 PM	0	0	0	0	0	0	1	0	1	2	0	0	0	0	0	0	4
Total	0	0	0	0	0	4	40	146	347	366	141	39	8	6	1	0	0
Percent	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	3.6%	13.3%	31.6%	33.3%	12.8%	3.6%	0.7%	0.5%	0.1%	0.0%	0.0%

Note: Average only considered on days with 24-hours of data.

Total Study Percentile Speed Summary		Total Study Speed Statistics					
50th Percentile (Median)	50.1 mph	Mean (Average) Speed			50.2 mph		
85th Percentile	55.5 mph	10 mph Pace			44.6 - 54.6 mph		
95th Percentile	59.8 mph	Percent in Pace			65.5 %		

Vehicle Classification Report Summary

Location: HIGBY ROAD E/O FAIRPLAY DR

Count Direction: Eastbound / Westbound

Date Range: 5/16/2018 to 5/16/2018

Site Code: 01

	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
Study Total														
Eastbound	7	901	150	0	55	11	0	0	0	0	0	0	1	1,125
Percent	0.6%	80.1%	13.3%	0.0%	4.9%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	100%
Westbound	3	861	175	0	55	3	0	1	0	0	0	0	0	1,098
Percent	0.3%	78.4%	15.9%	0.0%	5.0%	0.3%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Total	10	1,762	325	0	110	14	0	1	0	0	0	0	1	2,223
Percent	0.4%	79.3%	14.6%	0.0%	4.9%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%

FHWA Vehicle Classification

Class 1 - Motorcycles	Class 8 - Four or Fewer Axle Single-Trailer Trucks
Class 2 - Passenger Cars	Class 9 - Five-Axle Single-Trailer Trucks
Class 3 - Other Two-Axle, Four-Tire Single Unit Vehicles	Class 10 - Six or More Axle Single-Trailer Trucks
Class 4 - Buses	Class 11 - Five or fewer Axle Multi-Trailer Trucks
Class 5 - Two-Axle, Six-Tire, Single-Unit Trucks	Class 12 - Six-Axle Multi-Trailer Trucks
Class 6 - Three-Axle Single-Unit Trucks	Class 13 - Seven or More Axle Multi-Trailer Trucks
Class 7 - Four or More Axle Single-Unit Trucks	

Location: HIGBY ROAD E/O FAIRPLAY DR
 Date Range: 5/16/2018 to 5/16/2018
 Site Code: 01

Wednesday, May 16, 2018

Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
1:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	2
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	2
5:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	3
6:00 AM	0	8	1	0	3	0	0	0	0	0	0	0	0	12
7:00 AM	0	37	2	0	4	1	0	0	0	0	0	0	0	44
8:00 AM	0	32	5	0	3	0	0	0	0	0	0	0	0	40
9:00 AM	0	41	7	0	8	3	0	0	0	0	0	0	0	59
10:00 AM	0	32	10	0	2	0	0	0	0	0	0	0	0	44
11:00 AM	0	52	11	0	2	1	0	0	0	0	0	0	0	67
12:00 PM	0	90	8	0	3	2	0	0	0	0	0	0	0	103
1:00 PM	0	88	14	0	3	0	0	0	0	0	0	0	0	105
2:00 PM	0	67	13	0	5	2	0	0	0	0	0	0	0	87
3:00 PM	1	81	11	0	3	0	0	0	0	0	0	0	0	96
4:00 PM	3	69	15	0	4	1	0	0	0	0	0	0	0	92
5:00 PM	0	73	19	0	4	1	0	0	0	0	0	0	0	97
6:00 PM	2	71	7	0	5	0	0	0	0	0	0	0	0	85
7:00 PM	1	58	7	0	3	0	0	0	0	0	0	0	0	69
8:00 PM	0	46	10	0	2	0	0	0	0	0	0	0	0	58
9:00 PM	0	30	8	0	0	0	0	0	0	0	0	0	0	38
10:00 PM	0	10	0	0	0	0	0	0	0	0	0	0	0	10
11:00 PM	0	8	2	0	1	0	0	0	0	0	0	0	0	11
Total	7	901	150	0	55	11	0	0	0	0	0	0	1	1,125
Percent	0.6%	80.1%	13.3%	0.0%	4.9%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	

Location: HIGBY ROAD E/O FAIRPLAY DR
 Date Range: 5/16/2018 to 5/16/2018
 Site Code: 01

Wednesday, May 16, 2018

Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
1:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
4:00 AM	0	6	0	0	0	0	0	0	0	0	0	0	0	6
5:00 AM	0	5	3	0	1	0	0	0	0	0	0	0	0	9
6:00 AM	0	33	6	0	2	0	0	0	0	0	0	0	0	41
7:00 AM	0	94	10	0	2	0	0	0	0	0	0	0	0	106
8:00 AM	1	54	10	0	8	0	0	0	0	0	0	0	0	73
9:00 AM	0	84	24	0	2	1	0	0	0	0	0	0	0	111
10:00 AM	0	38	14	0	4	0	0	0	0	0	0	0	0	56
11:00 AM	0	55	15	0	6	0	0	0	0	0	0	0	0	76
12:00 PM	0	63	10	0	4	0	0	0	0	0	0	0	0	77
1:00 PM	0	63	16	0	1	0	0	0	0	0	0	0	0	80
2:00 PM	1	59	12	0	5	1	0	0	0	0	0	0	0	78
3:00 PM	0	53	10	0	5	0	0	0	0	0	0	0	0	68
4:00 PM	0	54	7	0	5	0	0	1	0	0	0	0	0	67
5:00 PM	0	64	13	0	3	1	0	0	0	0	0	0	0	81
6:00 PM	1	56	8	0	5	0	0	0	0	0	0	0	0	70
7:00 PM	0	31	5	0	1	0	0	0	0	0	0	0	0	37
8:00 PM	0	23	6	0	1	0	0	0	0	0	0	0	0	30
9:00 PM	0	13	2	0	0	0	0	0	0	0	0	0	0	15
10:00 PM	0	6	3	0	0	0	0	0	0	0	0	0	0	9
11:00 PM	0	3	1	0	0	0	0	0	0	0	0	0	0	4
Total	3	861	175	0	55	3	0	1	0	0	0	0	0	1,098
Percent	0.3%	78.4%	15.9%	0.0%	5.0%	0.3%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Location: HIGBY ROAD E/O FAIRPLAY DR
 Date Range: 5/16/2018 to 5/16/2018
 Site Code: 01

Total Study Average

Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
1:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	2
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	2
5:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	3
6:00 AM	0	8	1	0	3	0	0	0	0	0	0	0	0	12
7:00 AM	0	37	2	0	4	1	0	0	0	0	0	0	0	44
8:00 AM	0	32	5	0	3	0	0	0	0	0	0	0	0	40
9:00 AM	0	41	7	0	8	3	0	0	0	0	0	0	0	59
10:00 AM	0	32	10	0	2	0	0	0	0	0	0	0	0	44
11:00 AM	0	52	11	0	2	1	0	0	0	0	0	0	0	67
12:00 PM	0	90	8	0	3	2	0	0	0	0	0	0	0	103
1:00 PM	0	88	14	0	3	0	0	0	0	0	0	0	0	105
2:00 PM	0	67	13	0	5	2	0	0	0	0	0	0	0	87
3:00 PM	1	81	11	0	3	0	0	0	0	0	0	0	0	96
4:00 PM	3	69	15	0	4	1	0	0	0	0	0	0	0	92
5:00 PM	0	73	19	0	4	1	0	0	0	0	0	0	0	97
6:00 PM	2	71	7	0	5	0	0	0	0	0	0	0	0	85
7:00 PM	1	58	7	0	3	0	0	0	0	0	0	0	0	69
8:00 PM	0	46	10	0	2	0	0	0	0	0	0	0	0	58
9:00 PM	0	30	8	0	0	0	0	0	0	0	0	0	0	38
10:00 PM	0	10	0	0	0	0	0	0	0	0	0	0	0	10
11:00 PM	0	8	2	0	1	0	0	0	0	0	0	0	0	11
Total	7	901	150	0	55	11	0	0	0	0	0	0	1	1,125
Percent	0.6%	80.1%	13.3%	0.0%	4.9%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	

Note: Average only considered on days with 24-hours of data.

Location: HIGBY ROAD E/O FAIRPLAY DR
 Date Range: 5/16/2018 to 5/16/2018
 Site Code: 01

Total Study Average

Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
1:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
4:00 AM	0	6	0	0	0	0	0	0	0	0	0	0	0	6
5:00 AM	0	5	3	0	1	0	0	0	0	0	0	0	0	9
6:00 AM	0	33	6	0	2	0	0	0	0	0	0	0	0	41
7:00 AM	0	94	10	0	2	0	0	0	0	0	0	0	0	106
8:00 AM	1	54	10	0	8	0	0	0	0	0	0	0	0	73
9:00 AM	0	84	24	0	2	1	0	0	0	0	0	0	0	111
10:00 AM	0	38	14	0	4	0	0	0	0	0	0	0	0	56
11:00 AM	0	55	15	0	6	0	0	0	0	0	0	0	0	76
12:00 PM	0	63	10	0	4	0	0	0	0	0	0	0	0	77
1:00 PM	0	63	16	0	1	0	0	0	0	0	0	0	0	80
2:00 PM	1	59	12	0	5	1	0	0	0	0	0	0	0	78
3:00 PM	0	53	10	0	5	0	0	0	0	0	0	0	0	68
4:00 PM	0	54	7	0	5	0	0	1	0	0	0	0	0	67
5:00 PM	0	64	13	0	3	1	0	0	0	0	0	0	0	81
6:00 PM	1	56	8	0	5	0	0	0	0	0	0	0	0	70
7:00 PM	0	31	5	0	1	0	0	0	0	0	0	0	0	37
8:00 PM	0	23	6	0	1	0	0	0	0	0	0	0	0	30
9:00 PM	0	13	2	0	0	0	0	0	0	0	0	0	0	15
10:00 PM	0	6	3	0	0	0	0	0	0	0	0	0	0	9
11:00 PM	0	3	1	0	0	0	0	0	0	0	0	0	0	4
Total	3	861	175	0	55	3	0	1	0	0	0	0	0	1,098
Percent	0.3%	78.4%	15.9%	0.0%	5.0%	0.3%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Note: Average only considered on days with 24-hours of data.

Location: HIGBY ROAD E/O FAIRPLAY DR
 Date Range: 5/16/2018 to 5/16/2018
 Site Code: 01

3-Day (Tuesday - Thursday) Average

Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
1:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	2
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	2
5:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	3
6:00 AM	0	8	1	0	3	0	0	0	0	0	0	0	0	12
7:00 AM	0	37	2	0	4	1	0	0	0	0	0	0	0	44
8:00 AM	0	32	5	0	3	0	0	0	0	0	0	0	0	40
9:00 AM	0	41	7	0	8	3	0	0	0	0	0	0	0	59
10:00 AM	0	32	10	0	2	0	0	0	0	0	0	0	0	44
11:00 AM	0	52	11	0	2	1	0	0	0	0	0	0	0	67
12:00 PM	0	90	8	0	3	2	0	0	0	0	0	0	0	103
1:00 PM	0	88	14	0	3	0	0	0	0	0	0	0	0	105
2:00 PM	0	67	13	0	5	2	0	0	0	0	0	0	0	87
3:00 PM	1	81	11	0	3	0	0	0	0	0	0	0	0	96
4:00 PM	3	69	15	0	4	1	0	0	0	0	0	0	0	92
5:00 PM	0	73	19	0	4	1	0	0	0	0	0	0	0	97
6:00 PM	2	71	7	0	5	0	0	0	0	0	0	0	0	85
7:00 PM	1	58	7	0	3	0	0	0	0	0	0	0	0	69
8:00 PM	0	46	10	0	2	0	0	0	0	0	0	0	0	58
9:00 PM	0	30	8	0	0	0	0	0	0	0	0	0	0	38
10:00 PM	0	10	0	0	0	0	0	0	0	0	0	0	0	10
11:00 PM	0	8	2	0	1	0	0	0	0	0	0	0	0	11
Total	7	901	150	0	55	11	0	0	0	0	0	0	1	1,125
Percent	0.6%	80.1%	13.3%	0.0%	4.9%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	

Location: HIGBY ROAD E/O FAIRPLAY DR
 Date Range: 5/16/2018 to 5/16/2018
 Site Code: 01

3-Day (Tuesday - Thursday) Average

Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
1:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
4:00 AM	0	6	0	0	0	0	0	0	0	0	0	0	0	6
5:00 AM	0	5	3	0	1	0	0	0	0	0	0	0	0	9
6:00 AM	0	33	6	0	2	0	0	0	0	0	0	0	0	41
7:00 AM	0	94	10	0	2	0	0	0	0	0	0	0	0	106
8:00 AM	1	54	10	0	8	0	0	0	0	0	0	0	0	73
9:00 AM	0	84	24	0	2	1	0	0	0	0	0	0	0	111
10:00 AM	0	38	14	0	4	0	0	0	0	0	0	0	0	56
11:00 AM	0	55	15	0	6	0	0	0	0	0	0	0	0	76
12:00 PM	0	63	10	0	4	0	0	0	0	0	0	0	0	77
1:00 PM	0	63	16	0	1	0	0	0	0	0	0	0	0	80
2:00 PM	1	59	12	0	5	1	0	0	0	0	0	0	0	78
3:00 PM	0	53	10	0	5	0	0	0	0	0	0	0	0	68
4:00 PM	0	54	7	0	5	0	0	1	0	0	0	0	0	67
5:00 PM	0	64	13	0	3	1	0	0	0	0	0	0	0	81
6:00 PM	1	56	8	0	5	0	0	0	0	0	0	0	0	70
7:00 PM	0	31	5	0	1	0	0	0	0	0	0	0	0	37
8:00 PM	0	23	6	0	1	0	0	0	0	0	0	0	0	30
9:00 PM	0	13	2	0	0	0	0	0	0	0	0	0	0	15
10:00 PM	0	6	3	0	0	0	0	0	0	0	0	0	0	9
11:00 PM	0	3	1	0	0	0	0	0	0	0	0	0	0	4
Total	3	861	175	0	55	3	0	1	0	0	0	0	0	1,098
Percent	0.3%	78.4%	15.9%	0.0%	5.0%	0.3%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%



LSC TRANSPORTATION CONSULTANTS, INC.
545 East Pikes Peak Avenue, Suite 210
Colorado Springs, CO 80903
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Website: <http://www.lsctrans.com>

May 1, 2017

Mr. Joe Loidolt
Classic Homes
6385 Corporate Drive
Colorado Springs, CO 80919

RE: Sanctuary Pointe Phase 2
Updated Traffic Impact and Access Analysis
Monument, Colorado
LSC #164550

Dear Mr. Loidolt:

In response to your request LSC Transportation Consultants, Inc. has prepared this updated traffic impact and access analysis for Sanctuary Pointe Phase 2. As shown in Figure 1, the site is located generally north of Baptist Road and west of Roller Coaster Road. The Master-Plan-level traffic impact analysis for the entire Sanctuary Pointe development was dated December 12, 2005. The traffic impact analysis for the first phase of Sanctuary Pointe was dated August 14, 2014. This report addresses the second phase.

This report identifies:

- The proposed land use
- The planned short-term access points
- The projected vehicle-trip generation
- The estimated directional distribution of trips
- An assignment of the site-generated traffic volumes to the area transportation network
- An assessment of the site's traffic impacts
- Findings and recommendations

SITE DEVELOPMENT AND LAND USE

Land Use

Sanctuary Pointe Phase 2 is located generally north of Baptist Road and northeast of the current end of Kingswood Drive. Sanctuary Pointe Phase 1 is located just to the east. Phase 1 is planned to contain 171 lots for single-family homes and 80 attached multi-family "carriage units." As of early August 2016, none of the homes in Phase 1 had been constructed. Phase 2 is planned to

contain 267 lots for single-family homes (233 detached single-family homes and 34 attached single-family homes). The site plan is shown in Figure 2.

The December 12, 2005 *Sanctuary Pointe Master Plan-Level Traffic Impact and Access Analysis Report* by LSC assumed a maximum of 650 single-family homes within all of Sanctuary Pointe. About 132 additional homes (plus any additional accounting for the single-family equivalent number of carriage units) could be constructed in future phases located west of Phase 2 before this maximum is reached.

Access and Street Connections

Initially, access to Phases 1 and 2 would be from Baptist Road only via Sanctuary Rim Drive (primary) and Kingswood Drive (secondary). As part of the Phase 1 development a full-movement access to Baptist Road (Sanctuary Rim Drive) is currently under construction about 2,350 feet northeast of Red Fox Lane and about 3,350 feet west of Roller Coaster Road. A secondary access to Baptist Road via Kingswood Drive is planned to be added with Phase 2.

No changes to the long-term access and street network as shown in the 2005 Master-Plan level traffic impact study are proposed at this time. The extension of Sanctuary Rim east of Phase 2 would be added with a future phase.

ROADWAY AND TRAFFIC CONDITIONS

Area Roadways

Figure 1 shows the roadways in the vicinity of the site. The major roadways are identified below, followed by a brief description.

- **Baptist Road** is a Principal Arterial that extends east of Hay Creek Road to the intersection of Roller Coaster Road and Hogden Road. Baptist Road has a median-divided four-lane cross section from Interstate 25 to just east of Kingswood Drive. The posted speed limit on Kingswood is 45 miles per hour (mph). In the vicinity of the Phase 1 site Baptist Road is currently built with a Minor Arterial cross section with one through lane in each direction and a posted speed limit of 40 miles per hour. Left- and right-turn lanes exist at the Kingswood intersection.
- **Leather Chaps Drive** is a three-lane Major Collector (residential) with one through lane in each direction plus a center, two-way, left-turn lane.
- **Gleneagle Drive** is a two-lane Collector that serves the Gleneagle neighborhood (in unincorporated El Paso County). Gleneagle Drive is a rural two-lane cross section with a multi-use outside lane for bicycles and pedestrians. Gleneagle Drive extends north from the Struthers Road/Northgate Road intersection into the Promontory Pointe subdivision just north of Baptist Road.

- **Jackson Creek Parkway** extends south from Highway 105 to Baptist Road, where it continues south to North Gate Boulevard as Struthers Road. Jackson Creek Parkway is classified as a Major Collector (commercial) by the Town of Monument.
- **Roller Coaster Road** is classified as a two-lane Collector and extends north from North Gate Boulevard to Higby Road. Roller Coaster then continues north from Higby Road about one-half mile to the west and extends to County Line Road. The posted speed limit on Roller Coaster Road is 35 miles per hour. The roadway is currently a two-lane rural roadway.
- **Kingswood Drive** is a rural two-lane roadway that extends north from Baptist Road. The posted speed limit is 30 mph.

Figure 3 shows the existing traffic controls and lane geometry for the Roller Coaster/Baptist, Gleneagle/Baptist, Leather Chaps/Baptist Road, Kingswood/Baptist Road, and Jackson Creek/Baptist intersections.

Existing Traffic Conditions

Figure 3 also shows the existing morning and afternoon peak-hour traffic volumes on Baptist Road adjacent to the site and offsite at the Roller Coaster/Baptist, Gleneagle/Baptist, Leather Chaps/Baptist, and Jackson Creek/Baptist intersections. The traffic volumes are based on the traffic counts conducted by LSC in May 2014 and July 2016 (at Baptist Road/Kingswood Drive intersection). The traffic count reports are attached.

Existing Levels of Service

Level of service (LOS) is a quantitative measure of the level of delay at an intersection. Level of service is indicated on a scale from “A” to “F.” LOS A represents control delay of less than 10 seconds for unsignalized and signalized intersections. LOS F represents an average control delay of more than 50 seconds per vehicle for unsignalized intersections and more than 80 seconds per vehicle for signalized intersections. Table 1 shows the level of service delay ranges.

Table 1
Intersection Levels of Service Delay Ranges

Level of Service	Signalized Intersections		Unsignalized Intersections
	Average Control Delay (seconds per vehicle)	V/C ⁽¹⁾	Average Control Delay (seconds per vehicle) ⁽²⁾
A	10.0 sec or less	Less than 0.60	10.0 sec or less
B	10.1-20.0 sec	0.60-0.69	10.1-15.0 sec
C	20.1-35.0 sec	0.70-0.79	15.1-25.0 sec
D	35.1-55.0 sec	0.80-0.89	25.1-35.0 sec
E	55.1-80.0 sec	0.90-0.99	35.1-50.0 sec
F	80.1 sec or more	1.00 and greater	50.1 sec or more

(1) Source: *Transportation Research Circular 212*

(2) For unsignalized intersections if V/C ratio is greater than 1.0 the level of service is LOS F regardless of the projected average control delay per vehicle.

The intersections of Gleneagle/Baptist, Leather Chaps/Baptist, and Jackson Creek/Baptist have been analyzed using Synchro. The intersections of Roller Coaster/Baptist and Kingswood/Baptist were analyzed based on the unsignalized method of analysis procedures found in the *Highway Capacity Manual, 2010 Edition* by the Transportation Research Board. Figure 3 shows the level of service analysis results. As shown on the figure, all of the movements at the intersection of Jackson Creek/Baptist are currently operating at level of service D or better during the peak hours. All movements at the intersection of Gleneagle/Baptist, Leather Chaps/Baptist, and Kingwood/Baptist are currently operating at LOS B or better during the peak hours. The level of service reports are attached.

SHORT-TERM BACKGROUND TRAFFIC

Figure 4 shows the short-term background traffic volumes at the study area intersections. These volumes are based on the existing traffic volumes shown in Figure 3 plus estimates of traffic from currently planned developments in the vicinity of the site including buildout of Sanctuary Pointe Phase 1, the Promontory Pointe residential development located north of the intersection of Baptist/Gleneagle, the Creekside commercial development located southeast of the intersection of Jackson Creek/Leather Chaps, and buildout of planned County residential developments east of Roller Coaster Road including Walden Preserve, Majestic Pines, Settlers Ranch, and Jackson Ranch. Background traffic is exclusive of any traffic to be added by the proposed homes in Sanctuary Pointe Phase 2.

TRIP GENERATION

The estimates of vehicle-trips expected to be generated by Sanctuary Pointe Phase 2 have been made using the nationally published trip generation rates found in *Trip Generation, 9th Edition, 2012* by the Institute of Transportation Engineers (ITE). Table 2 shows the results of the trip generation estimates.

As shown in Table 2, Sanctuary Pointe Phase 2 could be expected to generate about 2,542 new vehicle-trips on the average weekday, with about one-half entering and one-half exiting the site in a 24-hour period. During the morning peak hour, which generally occurs for one hour between 6:30 and 8:30 a.m., about 50 vehicles would enter and 150 vehicles would exit the site. During the afternoon peak hour, which generally occurs for one hour between 4:15 and 6:15 p.m., about 168 vehicles would enter and 99 vehicles would exit the site.

TRIP DISTRIBUTION AND ASSIGNMENT

The short-term directional distribution of the site-generated traffic volumes on the area street and roadway system is one of the most important factors in determining the site's traffic impacts. The specific distribution estimates are shown in Figure 5. The directional distribution estimates were based on the following factors: the location of the site with respect to the nearby employment, commercial, schools, and activity centers; the land use proposed for the site; the proposed access system for the site; the roadway system serving the site and the traffic counts.

When the distribution percentages (from Figure 5) are applied to the trip generation estimates (from Table 2), the resulting short-term site-generated traffic volumes can be determined. Figure 6 shows the short-term site-generated traffic volume estimates.

SHORT-TERM TOTAL TRAFFIC

Figure 7 shows the short-term total traffic volumes at the site access points and off-site intersections. The short-term total traffic volumes are the sum of the short-term background traffic volumes (from Figure 4) plus the site-generated traffic volumes (from Figure 6).

LONG-TERM BUILDOUT TOTAL TRAFFIC

A master-level traffic report was prepared for Sanctuary Pointe in 2005. The *Sanctuary Pointe Master-Plan Level Traffic Impact Analysis* by LSC dated December 12, 2005 included long-term traffic volume projections, level of service analysis, and recommended roadway functional classifications.

PROJECTED LEVELS OF SERVICE

The intersections of Gleneagle/Baptist, Leather Chaps/Baptist, and Jackson Creek/Baptist have been analyzed to determine the projected levels of service for the short-term background and total traffic volumes using Synchro. The intersections of Roller Coaster/Baptist, Sanctuary Rim/Baptist, and Kingswood/Baptist were analyzed based on the unsignalized method of analysis procedures found in the *Highway Capacity Manual, 2010 Edition* by the Transportation Research Board. Figures 4 and 7 show the level of service analysis results based on the short-term background and total traffic volumes, respectively. Table 3 shows a summary of the level of service analysis. Table 3 also shows the projected volume to capacity and 95th percentile queue length for all movements at the analyzed intersections. The level of service reports are attached.

All movements at the intersection of Sanctuary Rim/Baptist Road are projected to operate at level of service C or better during the peak hours as a two-way stop-sign-controlled intersection based on the projected short-term total traffic volumes including Phases 1 and 2. The southbound left-turn movement is projected to operate at LOS C during the afternoon peak hour based on the short-term total traffic volumes shown in Figure 7.

All movements at the intersection of Kingwood/Baptist Road are projected to operate at level of service B or better during the peak hours as a two-way stop-sign-controlled intersection based on the projected short-term total traffic volumes. The southbound left-turn movement is projected to operate at LOS B during the morning and afternoon peak hours based on the short-term total traffic volumes shown in Figure 7.

The off-site intersections of Gleneagle/Baptist, Leather Chaps/Baptist, and Jackson Creek/Baptist are projected to operate at an overall level of service C or better during the peak hour as signalized intersections based on the projected short-term total traffic volumes. All movements at the intersection of Jackson Creek/Baptist are projected to operate at LOS D or better during peak hours. All movements at the intersections of Gleneagle/Baptist and Leather Chaps/Baptist are projected to operate at LOS B or better during the peak hours.

All movements at the intersection of Roller Coaster/Baptist are projected to operate at level of service C or better during the peak hours as a two-way stop-sign-controlled intersection based on the projected short-term total traffic volumes.

CONCLUSIONS AND RECOMMENDATIONS

Trip Generation

1. LSC projects Sanctuary Pointe Phase 2 to generate about 2,542 new vehicle-trips on the average weekday, with about one-half entering and one-half exiting the site in a 24-hour period. During the morning peak hour about 50 vehicles would enter and 150 vehicles would exit the site. During the afternoon peak hour about 168 vehicles would enter and 99 vehicles would exit the site.

Site Access

2. Interim Phase 2 primary access would be via Sanctuary Rim Drive east to Baptist Road. The applicant will extend Sanctuary Rim Drive west to the west property line and once the future extension of Gleneagle Drive occurs and a connection is made to Sanctuary Rim Drive (the land through which this future connection would be built is private property not owned by this applicant), additional Collector road access will be available. A secondary access is provided with the proposed street connection to the current north terminus of Kingswood Drive. This also provides a secondary access for the residents along Kingswood Drive. Additionally, the applicant has also added a direct emergency-only connection to the terminus of Kingswood Drive.

Kingswood Drive Cut-Through Traffic Analysis

3. In response to a comment from the El Paso County Planning and Community Development (PCD), LSC has prepared a supplemental analysis of the potential for cut-through traffic on Kingswood Drive. Appendix A contains this analysis.
4. The applicant is agreeable to a chip-seal application to existing Kingswood Drive.
5. County Planning and Community Development (PCD) Engineering staff, pursuant to a recent meeting to review the LSC analysis contained in Appendix A, is requesting future monitoring of the actual Kingswood cut-through traffic in the field as development within Sanctuary Pointe progresses. Using data from monitoring, the traffic impacts on Kingswood could be reassessed based on actual traffic data collected. Provided the Town continues to refer Sanctuary Pointe applications to the County PCD Department, County PCD Staff will be able to request monitoring with future Sanctuary Pointe applications.

Projected Levels of Service

6. All movements at the intersection of Sanctuary Rim/Baptist Road (Phase 1 access) are projected to operate at level of service C or better during the peak hours as a two-way stop-sign-controlled intersection based on the projected short-term total traffic volumes.
7. All movements at the intersection of Kingwood Drive/Baptist Road are projected to operate at level of service B or better during the peak hours as a two-way stop-sign-controlled intersection based on the projected short-term total traffic volumes.
8. All movements at the intersection of Jackson Creek/Baptist are projected to operate at level of service D or better during the peak hours based on the projected short-term total traffic volumes.
9. All movements at the intersections of Gleneagle/Baptist and Leather Chaps/Baptist are projected to operate at LOS B or better during the peak hours based on the projected short-term total traffic volumes.
10. All movements at the intersection of Baptist/Roller Coaster are projected to operate at level of service C or better during peak hours as a two-way stop-sign-controlled intersection based on the short-term total traffic volumes.

Auxiliary Turn Lane Recommendations

Sanctuary Rim Drive/Baptist Road

11. The eastbound left-turn lane and westbound right-turn deceleration lane recently constructed on Baptist Road approaching Sanctuary Rim Drive meet the criteria contained in the *ECM*. No other auxiliary turn lanes would be required at this intersection.

Kingswood Drive/Baptist Road

12. The existing eastbound left-turn lane is about 250 feet plus a 170-foot transition taper. The ECM-prescribed deceleration lane length is 235 feet plus a 200-foot taper (plus vehicle stacking/queuing length needed). The estimated queue length is projected to be minimal based on short-term total traffic projections.
13. The existing westbound right-turn lane is about 500 feet plus a 180-foot taper.

Baptist/Roller Coaster Intersection

14. This report shows the anticipated Phase 2 site-generated traffic at this intersection and estimated short-term total traffic volumes following the buildup of Phases 1 and 2. Please refer to the Phase 1 report for additional detail.

* * * * *

Please contact me if you have any questions or need further assistance.

Sincerely,

LSC TRANSPORTATION CONSULTANTS, INC.

By _____
Jeffrey C. Hodsdon, P.E., PTOE
Principal

JCH:KDF:bjw

Enclosures: Tables 2-3
Figures 1-7
Traffic Count Reports
Level of Service Reports
Appendix A: Memorandum - Kingswood Drive Cut-Through Traffic Analysis



Table 2
Trip Generation Estimate
Sanctuary Pointe Phase Two

Land Use Code	Land Use Description	Trip Generation Units	Trip Generation Rates ⁽¹⁾						Total Trips Generated					
			Average Weekday Traffic	Morning Peak Hour		Afternoon Peak Hour		Average Weekday Traffic	Morning Peak Hour		Afternoon Peak Hour			
				In	Out	In	Out		In	Out	In	Out		
210	Single-Family Detached Housing	267 DU ⁽²⁾	9.52	0.19	0.56	0.63	0.37	2,542	50	150	168	99		

Notes:

(1) Source: "Trip Generation, 9th Edition, 2012" by the Institute of Transportation Engineers (ITE)

(2) DU = dwelling unit

Source: LSC Transportation Consultants, Inc.

Table 3
Intersection Level of Service Summary
Sanctuary Pointe Phase Two

Intersection	Traffic Control	Existing								Short-Term Background								Short-Term Total								
		AM				PM				AM				PM				AM				PM				
		Level of Service	Control Delay (sec)	V/C	95th Percentile Queue Length (ft) (veh)	Level of Service	Control Delay (sec)	V/C	95th Percentile Queue Length (ft) (veh)	Level of Service	Control Delay (sec)	V/C	95th Percentile Queue Length (ft) (veh)	Level of Service	Control Delay (sec)	V/C	95th Percentile Queue Length (ft) (veh)	Level of Service	Control Delay (sec)	V/C	95th Percentile Queue Length (ft) (veh)	Level of Service	Control Delay (sec)	V/C	95th Percentile Queue Length (ft) (veh)	
Jackson Creek Parkway/Baptist Road	Signalized																									
EB Left		D	51.9	0.52	137	---	D	51.6	0.78	292	---	D	53.4	0.58	152	---	D	55.0	0.83	322 ⁽¹⁾	---	D	53.4	0.58	152	---
EB Through		B	18.0	0.14	76	---	C	20.0	0.31	166	---	B	18.3	0.17	91	---	C	21.4	0.41	224	---	B	18.5	0.19	100	---
EB Right		A	0.1	0.04	0	---	A	0.5	0.08	4	---	A	0.1	0.06	0	---	A	0.3	0.11	0	---	A	0.1	0.06	0	---
WB Left		D	50.3	0.13	16	---	D	52.5	0.29	65	---	D	50.8	0.17	42	---	D	53.0	0.32	70	---	D	51.1	0.19	46	---
WB Through		C	22.6	0.28	112	---	C	28.9	0.28	140	---	C	23.9	0.37	200	---	C	29.9	0.35	175	---	C	24.8	0.43	236	---
WB Right		A	3.7	0.15	0	---	A	5.1	0.28	50	---	A	4.0	0.20	39	---	A	4.9	0.33	54	---	A	3.8	0.23	42	---
NB Left		D	52.5	0.29	37	---	D	51.7	0.24	55	---	D	52.6	0.30	61	---	D	52.7	0.30	67	---	D	52.6	0.30	61	---
NB Through		D	39.1	0.24	64	---	D	47.6	0.52	175	---	D	39.2	0.25	94	---	D	49.3	0.56	181	---	D	39.2	0.25	94	---
NB Right		A	1.6	0.16	0	---	A	0.8	0.16	0	---	A	2.5	0.17	6	---	A	0.9	0.18	0	---	A	2.7	0.17	7	---
SB Left		D	52.2	0.27	34	---	D	52.8	0.55	146	---	D	53.1	0.33	71	---	D	54.5	0.64	176	---	D	53.7	0.36	77	---
SB Through		D	38.0	0.16	41	---	D	37.9	0.28	113	---	D	38.1	0.16	71	---	D	39.8	0.30	118	---	D	39.8	0.30	80	---
SB Right		A	8.7	0.60	0	---	A	8.5	0.53	75	---	B	13.3	0.66	135	---	A	8.6	0.58	82	---	B	17.6	0.69	169	---
Entire Intersection LOS		C	26.9	0.60		C	33.5			C	27.9			C	33.9	0.83		C	28.4	0.69		C	34.0	0.83		
Leather Chaps Drive/Baptist Road	Signalized																									
EB Left		A	8.4	0.17	17	---	B	13.1	0.50	51	---	A	8.8	0.23	20	---	B	13.2	0.53	61	---	A	9.5	0.26	21	---
EB Through		A	7.0	0.15	20	---	A	7.9	0.37	48	---	A	6.4	0.17	25	---	A	8.0	0.48	74	---	A	5.9	0.18	28	---
EB Right		A	2.9	0.03	5	---	A	2.9	0.03	6	---	A	2.5	0.02	5	---	A	2.4	0.03	5	---	A	2.2	0.02	4	---
WB Left		A	6.4	0.02	5	---	A	5.9	0.02	5	---	A	5.9	0.02	5	---	A	5.3	0.03	5	---	A	5.1	0.02	5	---
WB Through		A	9.2	0.48	56	---	A	7.8	0.35	44	---	A	9.1	0.55	79	---	A	7.2	0.37	54	---	A	9.1	0.60	96	---
WB Right		A	3.3	0.05	7	---	A	2.8	0.07	9	---	A	2.6	0.06	8	---	A	2.2	0.07	9	---	A	2.3	0.06	8	---
NB Left		A	8.6	0.06	12	---	B	10.5	0.12	14	---	B	10.5	0.07	16	---	B	13.4	0.14	18	---	A	12.7	0.07	18	---
NB Through/Right		A	6.5	0.01	4	---	A	7.0	0.04	6	---	A	8.0	0.01	5	---	A	8.9	0.05	7	---	A	9.5	0.01	6	---
SB Left/Through		A	8.6	0.07	15	---	B	11.5	0.25	37	---	B	10.9	0.10	22	---	B	15.3	0.32	52	---	A	12.8	0.11	26	---
SB Right		A	3.5	0.38	29	---	A	4.0	0.29	20	---	A	5.0	0.45	43	---	A	4.9	0.35	25	---	A	8.2	0.51	66	---
Entire Intersection LOS		A	7.3	0.48		A	8.1	0.50		A	7.7	0.55		A	8.3	0.53		A	8.3	0.60		A	8.5	0.55		
Glenagle Drive/Baptist Road	Signalized																									
EB Left		A	7.9	0.10	11.0	---	A	7.3	0.12	14.0	---	A	8.1	0.17	16.0	---	A	8.3	0.28	30	---	A	8.0	0.18	17	---
EB Through		A	7.1	0.08	11.0	---	A	8.5	0.39	43.0	---	A	6.7	0.11	16.0	---	A	8.3	0.47	62	---	A	6.3	0.13	20	---
EB Right		A	3.0	0.16	13.0	---	A	2.8	0.31	17.0	---	A	2.6	0.14	13.0	---	A	2.2	0.25	17	---	A	2.4	0.13	13	---
WB Left		A	7.3	0.07	10.0	---	A	6.7	0.05	7.0	---	A	7.0	0.11	14.0	---	A	6.9	0.13	14	---	A	6.5	0.11	15	---
WB Through		A	8.9	0.38	37.0	---	A	7.3	0.19	24.0	---	A	8.9	0.46	53.0	---	A	6.7	0.23	34	---	A	9.0	0.52	68	---
WB Right		A	3.3	0.04	5.0	---	A	3.2	0.04	6.0	---	A	3.4	0.04	6.0	---	A	2.6	0.06	9	---	A	3.1	0.04	6	---
NB Left		B	10.2	0.37	49.0	---	B	11.4	0.36	55.0	---	B	12.4	0.41	62.0	---	B	14.7	0.41	73	---	B	14.5	0.44	73	---
NB Through/Right		A	4.6	0.04	7.0	---	A	5.4	0.07	14.0	---	A	5.3	0.05	11.0	---	A	6.0								

Vicinity Map

Figure 1

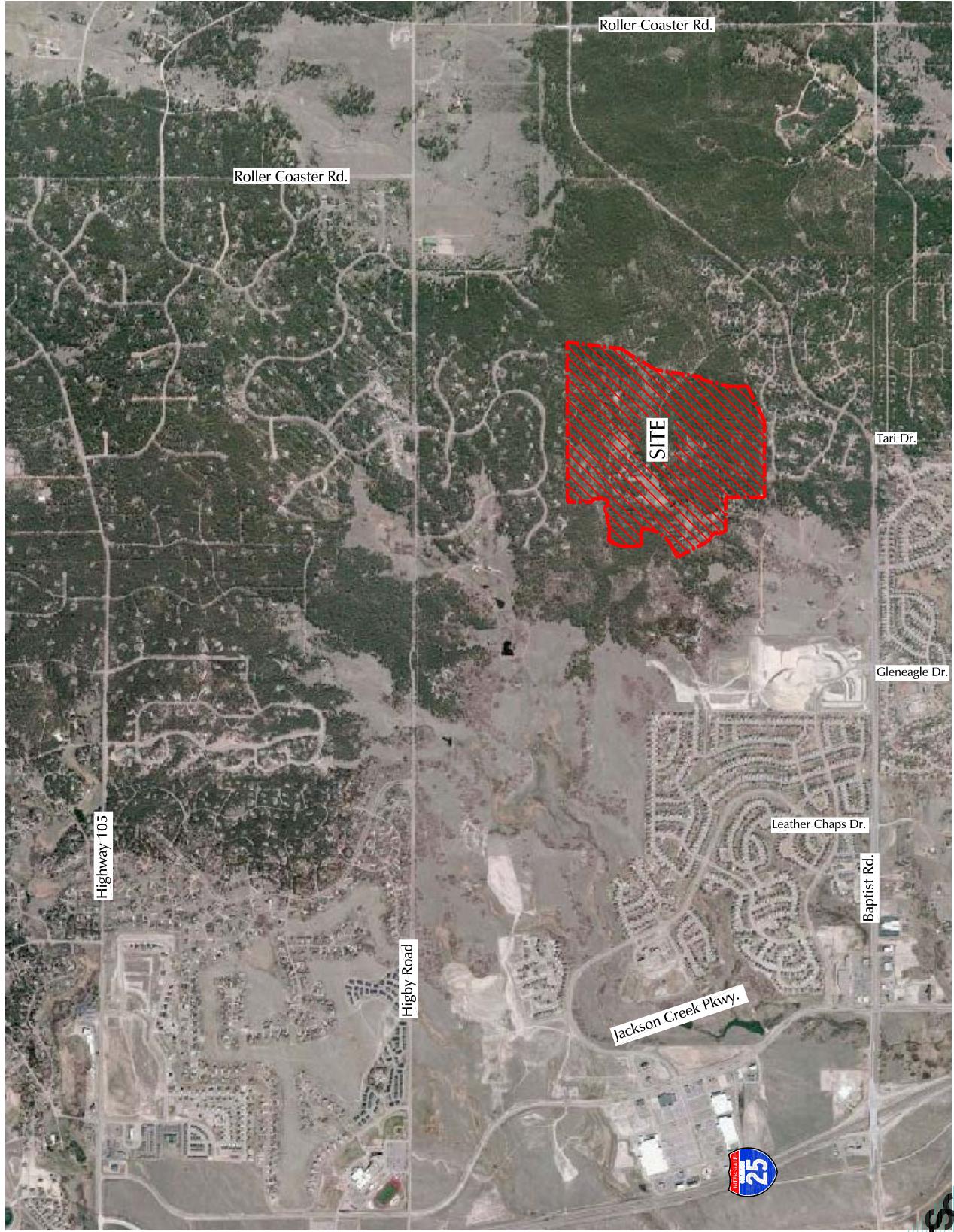
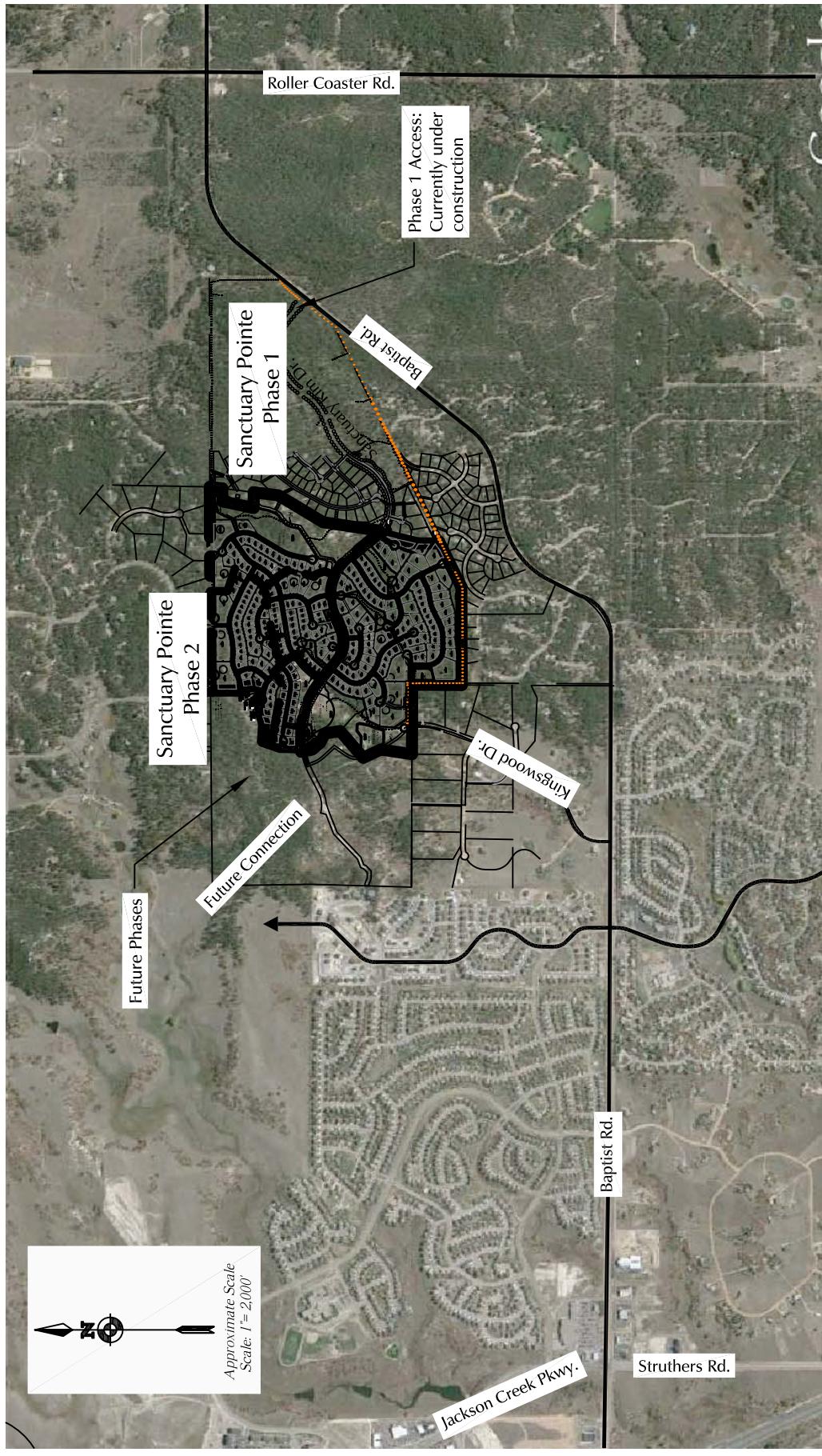
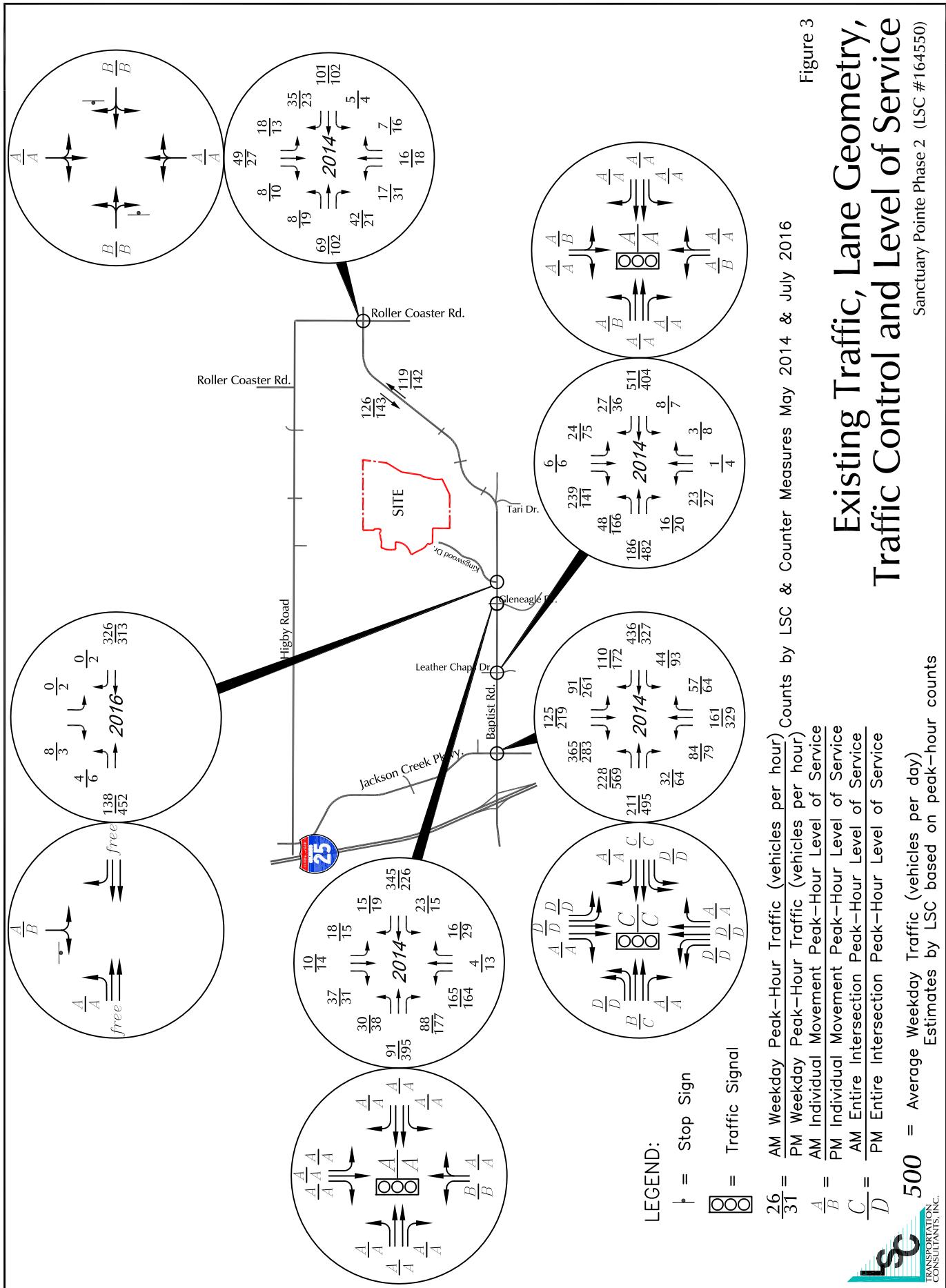


Figure 2 Site Plan

Sanctuary Pointe Phase 2 (LSC #164550)





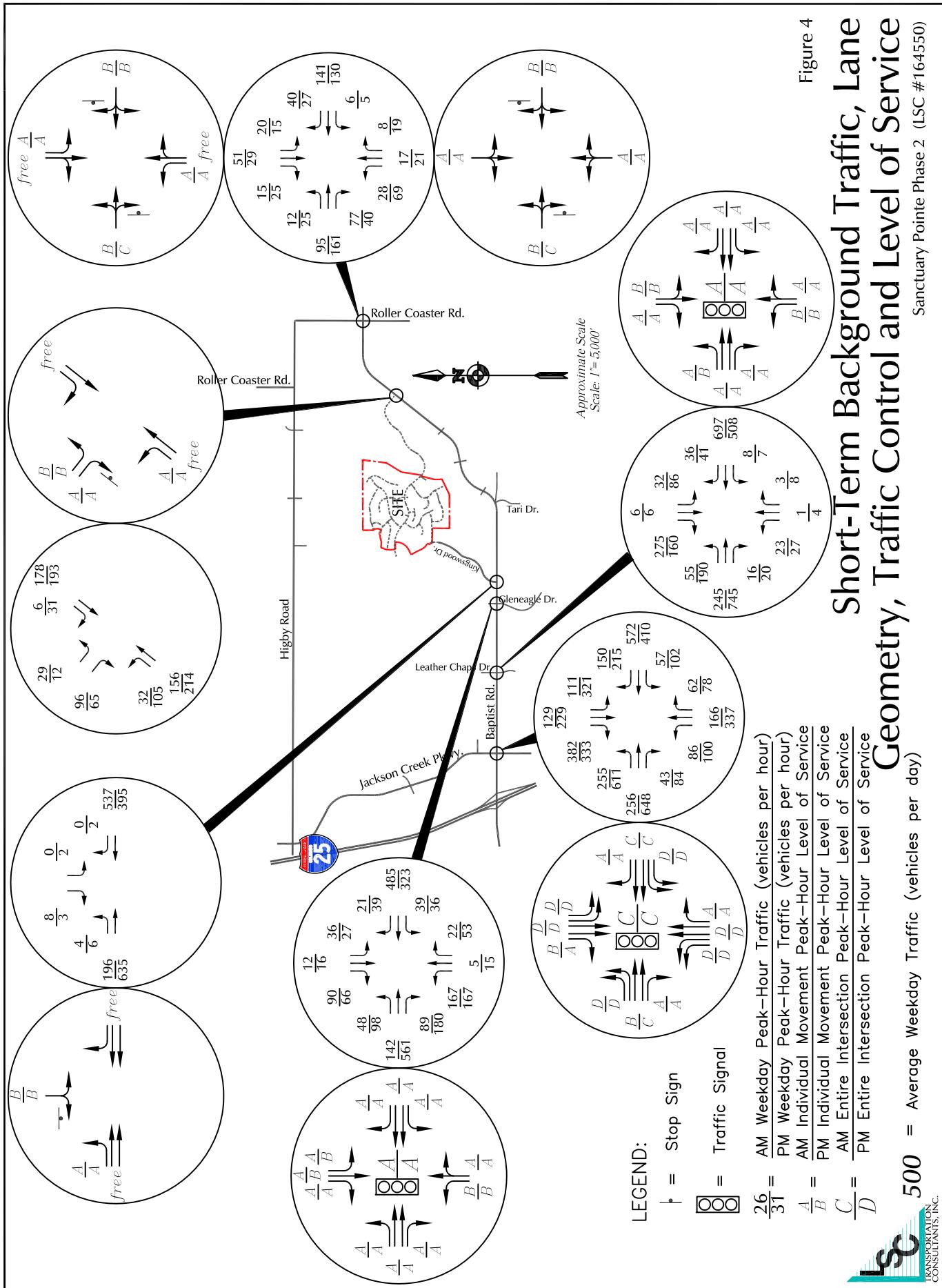
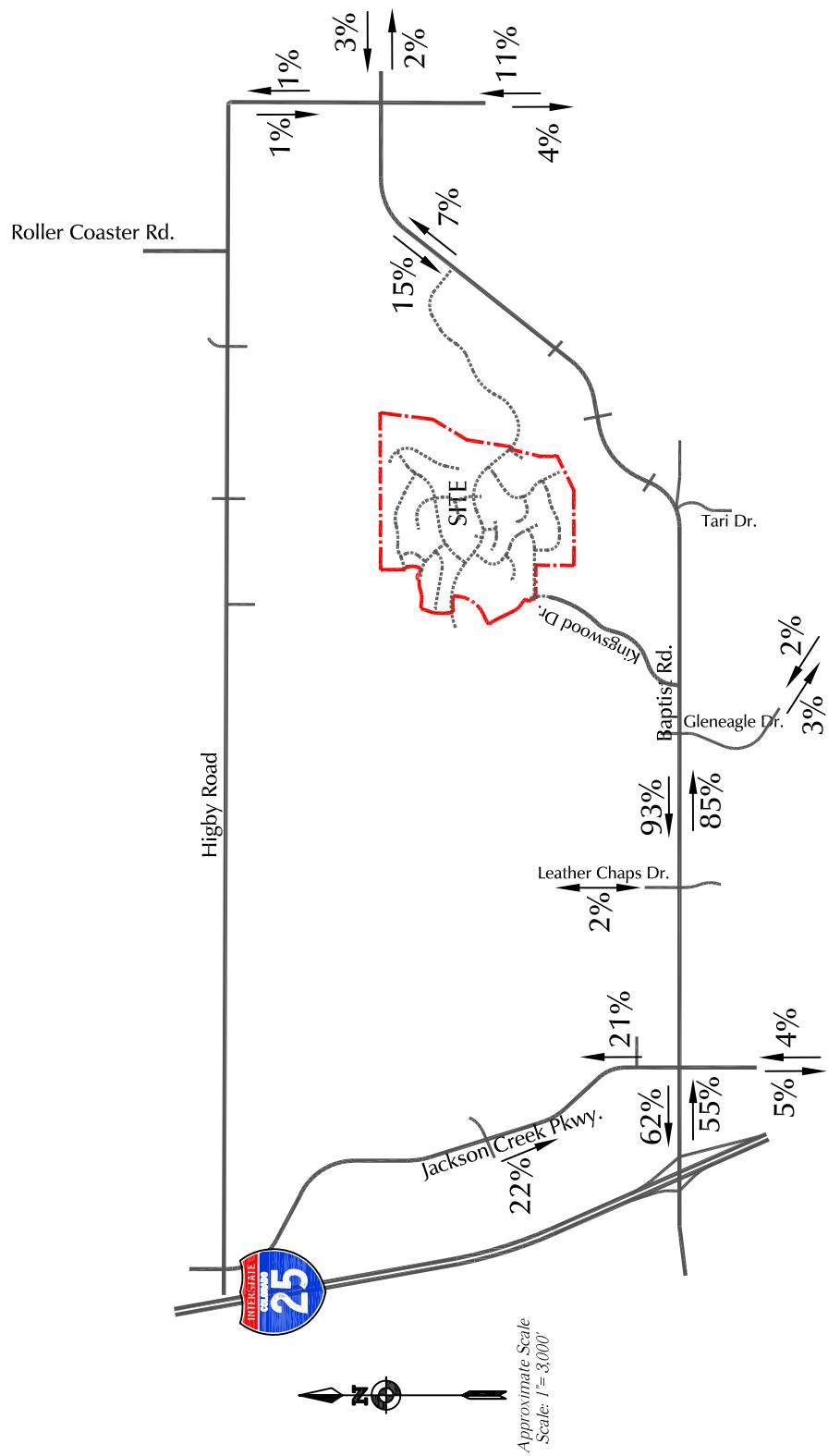


Figure 5
Directional Distribution
of Site-Generated Traffic

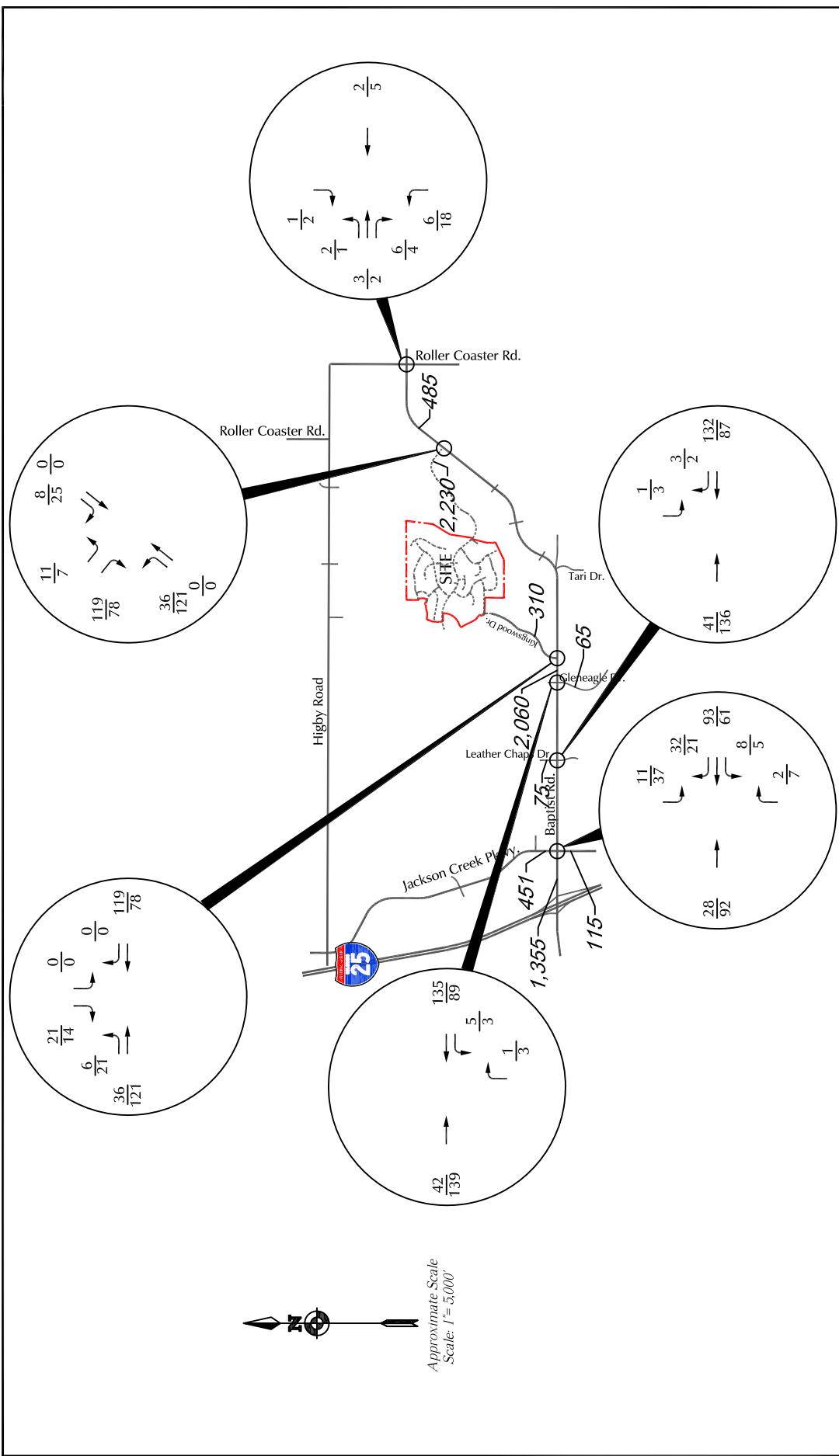
Sanctuary Pointe Phase 2 (LSC #164550)



Assignment of Site-Generated Traffic

Sanctuary Pointe Phase 2 (LSC #164550)

Figure 6



LEGEND:

$$\frac{26}{31} = \frac{\text{AM Weekday Peak-Hour Traffic (vehicles per hour)}}{\text{PM Weekday Peak-Hour Traffic (vehicles per hour)}}$$

500 = Average Weekday Traffic (vehicles per day)



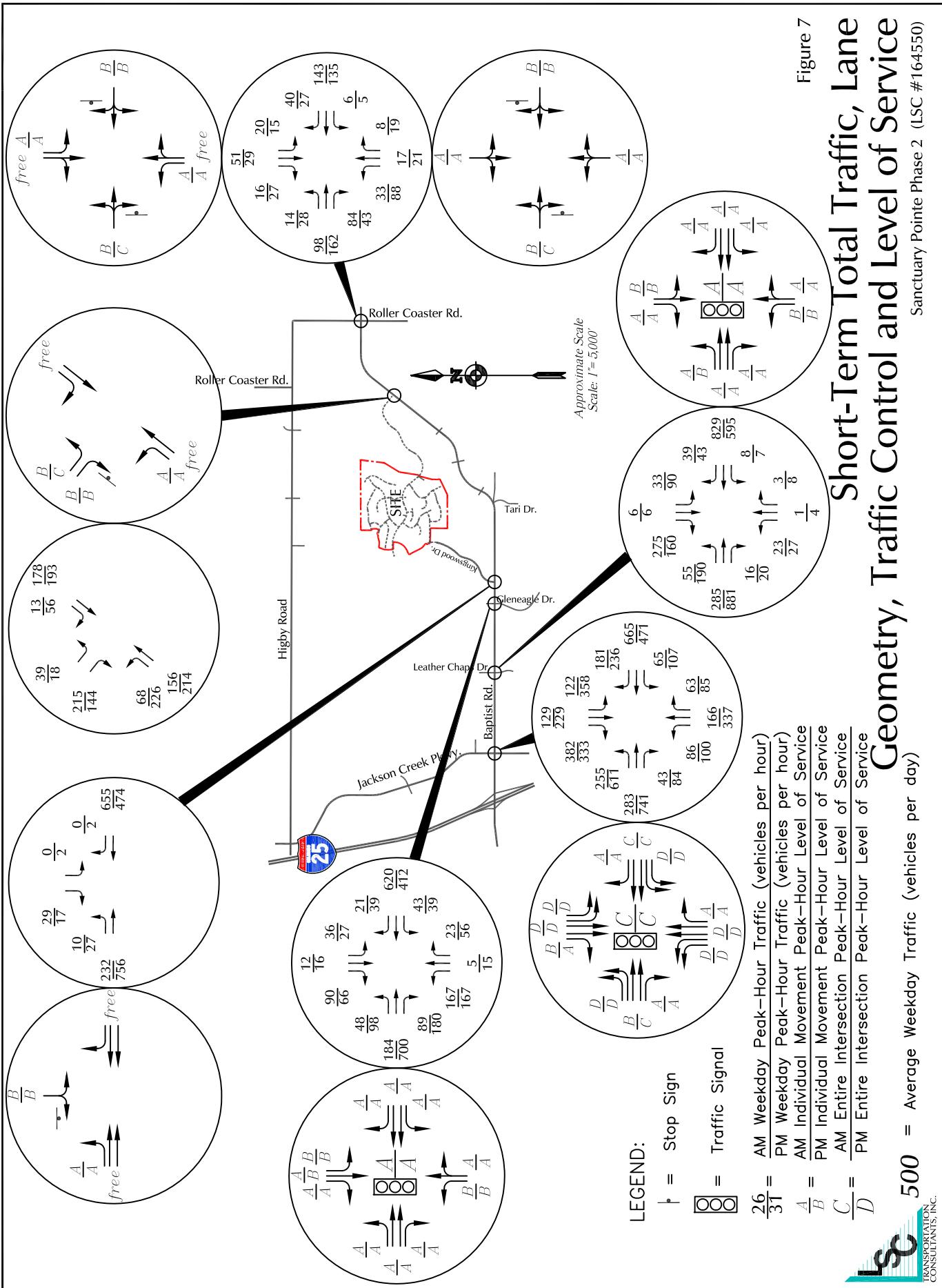


Figure 7

Sanctuary Pointe Phase 2 (LSC #164550)

LSC Transportation Consultants, Inc.
516 N. Tejon St.

Counter: Colorado Springs, CO **File Name :** baptist-wildhaven pm
Counted By: (719) 633-2868 **Site Code :** 00000000
Weather: **Start Date :** 12/11/2008
Other: **Page No :** 1

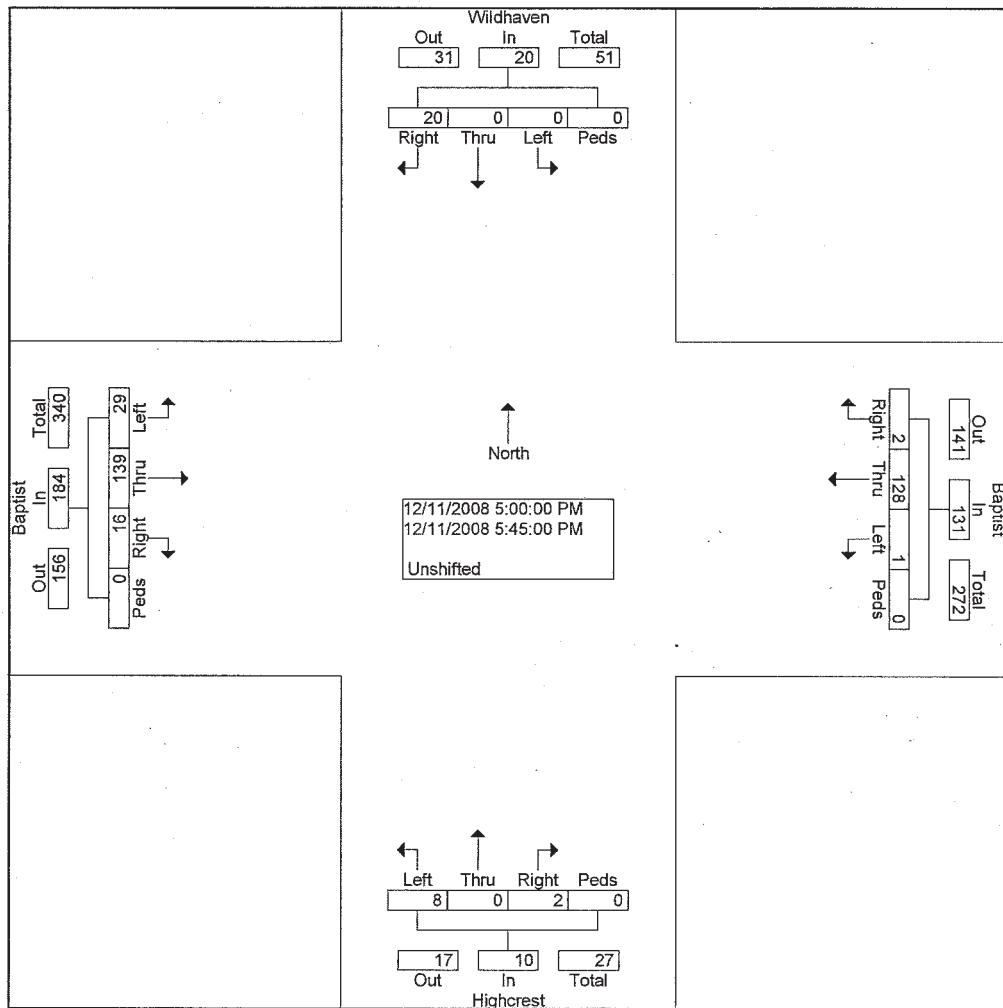
Groups Printed- Unshifted

Start Time	Wildhaven From North				Baptist From East				Highcrest From South				Baptist From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	80
04:15 PM	1	0	1	0	0	23	0	0	0	1	2	0	5	42	5	0	80
04:30 PM	5	0	1	0	0	20	0	0	0	0	2	0	3	36	5	0	72
04:45 PM	2	0	0	0	2	27	0	0	0	0	1	0	3	38	4	0	77
Total	8	0	2	0	2	70	0	0	0	1	5	0	11	116	14	0	229
05:00 PM	3	0	0	0	1	36	0	0	1	0	0	0	6	40	7	0	94
05:15 PM	4	0	0	0	0	30	1	0	0	0	4	0	3	33	11	0	86
05:30 PM	9	0	0	0	0	34	0	0	0	0	1	0	6	29	6	0	85
05:45 PM	4	0	0	0	1	28	0	0	1	0	3	0	1	37	5	0	80
Total	20	0	0	0	2	128	1	0	2	0	8	0	16	139	29	0	345
06:00 PM	3	0	0	0	3	25	1	0	0	0	1	0	4	34	3	0	74
06:15 PM	2	0	0	0	0	42	0	0	1	0	3	0	4	37	8	0	97
Grand Total	33	0	2	0	7	265	2	0	3	1	17	0	35	326	54	0	745
Apprch %	94.3	0.0	5.7	0.0	2.6	96.7	0.7	0.0	14.3	4.8	81.0	0.0	8.4	78.6	13.0	0.0	
Total %	4.4	0.0	0.3	0.0	0.9	35.6	0.3	0.0	0.4	0.1	2.3	0.0	4.7	43.8	7.2	0.0	

LSC Transportation Consultants, Inc.
 516 N. Tejon St.
 Colorado Springs, CO
 (719) 633-2868

File Name : baptist-wildhaven pm
Site Code : 00000000
Start Date : 12/11/2008
Page No : 2

Start Time	Wildhaven From North					Baptist From East					Highcrest From South					Baptist From West						
	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Int. Total	
Peak Hour From 04:15 PM to 06:15 PM - Peak 1 of 1																						
Intersection 05:00 PM																						
Volume	20	0	0	0	20	2	12	8	1	0	131	2	0	8	0	10	16	13	9	29	0	184
Percent	10.0	0.0	0.0	0.0	10.0	1.5	97.7	0.8	0.0	0.0	20.0	0.0	80.0	0.0	0.0	8.7	75.5	15.8	0.0	0.0	345	
05:00 Volume Peak Factor	3	0	0	0	3	1	36	0	0	0	37	1	0	0	0	1	6	40	7	0	53	
High Int. 05:30 PM						05:00 PM					05:15 PM					05:00 PM					0.918	
Volume	9	0	0	0	9	1	36	0	0	0	37	0	0	4	0	0	6	40	7	0	53	
Peak Factor					0.55						0.88					0.62					0.86	
	6					5										5					8	



LSC Transportation Consultants, Inc.

516 N. Tejon St.

Colorado Springs, File Name : Baptist-Red Fox (east) pm

(719) 633-2868 Site Code : 00000000

Start Date : 12/11/2008

Page No : 1

Groups Printed- Unshifted

Start Time	Red Fox Ln (east) From North				Baptist Rd From East				Longmeadow (east) From South				Baptist Rd From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
04:30 PM	1	0	0	0	0	23	2	0	1	0	0	0	4	27	1	0	59
04:45 PM	1	0	0	0	0	26	3	0	0	0	1	0	1	25	0	0	57
Total	2	0	0	0	0	49	5	0	1	0	1	0	5	52	1	0	116
05:00 PM	3	0	1	0	2	28	3	0	0	0	0	0	0	35	2	0	74
05:15 PM	1	0	0	0	1	23	3	0	1	0	3	0	5	21	4	0	62
05:30 PM	1	0	0	0	2	30	0	0	0	0	4	0	7	19	2	0	65
05:45 PM	1	0	0	0	3	23	1	0	0	0	3	0	4	30	0	0	65
Total	6	0	1	0	8	104	7	0	1	0	10	0	16	105	8	0	266
06:00 PM	3	0	0	0	1	28	1	0	1	0	1	0	0	23	2	0	60
Grand Total	11	0	1	0	9	181	13	0	3	0	12	0	21	180	11	0	442
Apprch %	91.7	0.0	8.3	0.0	4.4	89.2	6.4	0.0	20.0	0.0	80.0	0.0	9.9	84.9	5.2	0.0	
Total %	2.5	0.0	0.2	0.0	2.0	41.0	2.9	0.0	0.7	0.0	2.7	0.0	4.8	40.7	2.5	0.0	

LSC Transportation Consultants, Inc.

516 N. Tejon St.

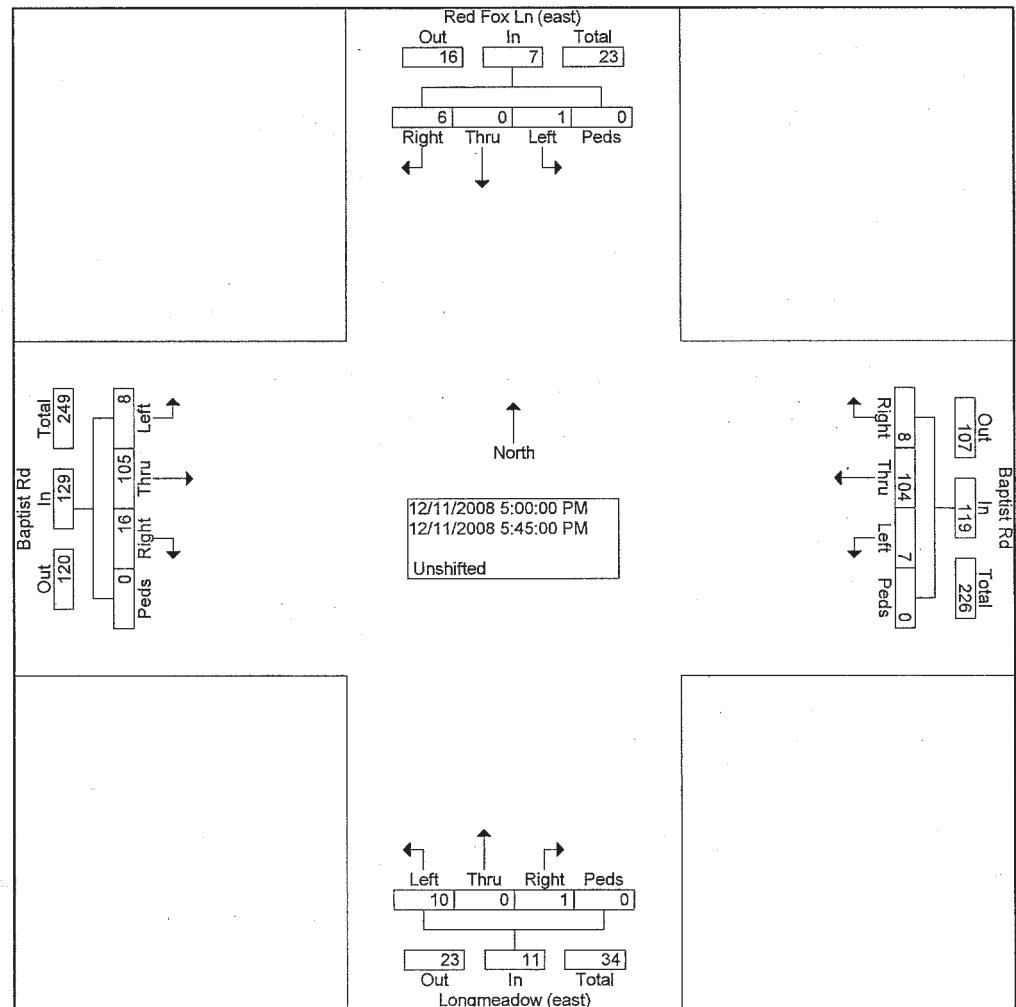
Colorado Springs, CO File Name : Baptist-Red Fox (east) pm

(719) 633-2868 Site Code : 00000000

Start Date : 12/11/2008

Page No : 2

Start Time	Red Fox Ln (east) From North					Baptist Rd From East					Longmeadow (east) From South					Baptist Rd From West								
	Rig ht	Thru	Left	Peds	App. Total	Rig ht	Thru	Left	Peds	App. Total	Rig ht	Thru	Left	Peds	App. Total	Rig ht	Thru	Left	Peds	App. Total	Int. Total			
Peak Hour From 04:30 PM to 06:00 PM - Peak 1 of 1																								
Intersection 05:00 PM	Volume	6	0	1	0	7	8	10	4	7	0	119	1	0	10	0	11	16	10	5	8	0	129	266
Percent	85.	7	0.0	14.	3	0.0	6.7	87.	4	5.9	0.0		9.1	0.0	90.	9	0.0	12.	81.	4	6.2	0.0		
05:00 Volume Peak Factor	3	0	1	0	4		2	28	3	0	33		0	0	0	0	0	0	35	2	0	37	74	
High Int. 05:00 PM	Volume	3	0	1	0	4	2	28	3	0	33		1	0	3	0	4	0	35	2	0	37	0.899	
Peak Factor	0.43						0.90						0.68					0.68					0.87	
		8						2															2	



LSC Transportation Consultants, Inc.

516 N. Tejon St.

Colorado Springs, File Name : Baptist-Red Fox (west) pm

(719) 633-2868 Site Code : 00121108

Start Date : 12/11/2008

Page No : 1

Groups Printed- Unshifted

Start Time	Red Fox Ln (west) From North				Baptist Rd. From East				Longmeadow (west) From South				Baptist Rd. From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
04:15 PM	3	0	2	0	1	22	1	0	0	0	1	0	4	41	1	0	76
04:30 PM	0	0	1	0	0	24	3	0	1	0	2	0	7	25	8	0	71
04:45 PM	4	0	0	0	3	26	2	0	0	0	3	0	2	31	2	0	73
Total	7	0	3	0	4	72	6	0	1	0	6	0	13	97	11	0	220
05:00 PM	2	0	0	0	0	24	0	0	1	1	2	0	5	31	6	0	72
05:15 PM	3	0	0	0	1	31	1	0	0	0	4	0	5	27	3	0	75
05:30 PM	3	1	0	0	3	24	3	0	0	0	2	0	3	32	4	0	75
05:45 PM	1	0	0	0	2	28	3	0	0	0	1	0	5	30	6	0	76
Total	9	1	0	0	6	107	7	0	1	1	9	0	18	120	19	0	298
06:00 PM	2	0	1	0	3	27	0	0	2	1	4	0	5	35	6	0	86
Grand Total	18	1	4	0	13	206	13	0	4	2	19	0	36	252	36	0	604
Apprch %	78.3	4.3	17.4	0.0	5.6	88.8	5.6	0.0	16.0	8.0	76.0	0.0	11.1	77.8	11.1	0.0	
Total %	3.0	0.2	0.7	0.0	2.2	34.1	2.2	0.0	0.7	0.3	3.1	0.0	6.0	41.7	6.0	0.0	

LSC Transportation Consultants, Inc.

516 N. Tejon St.

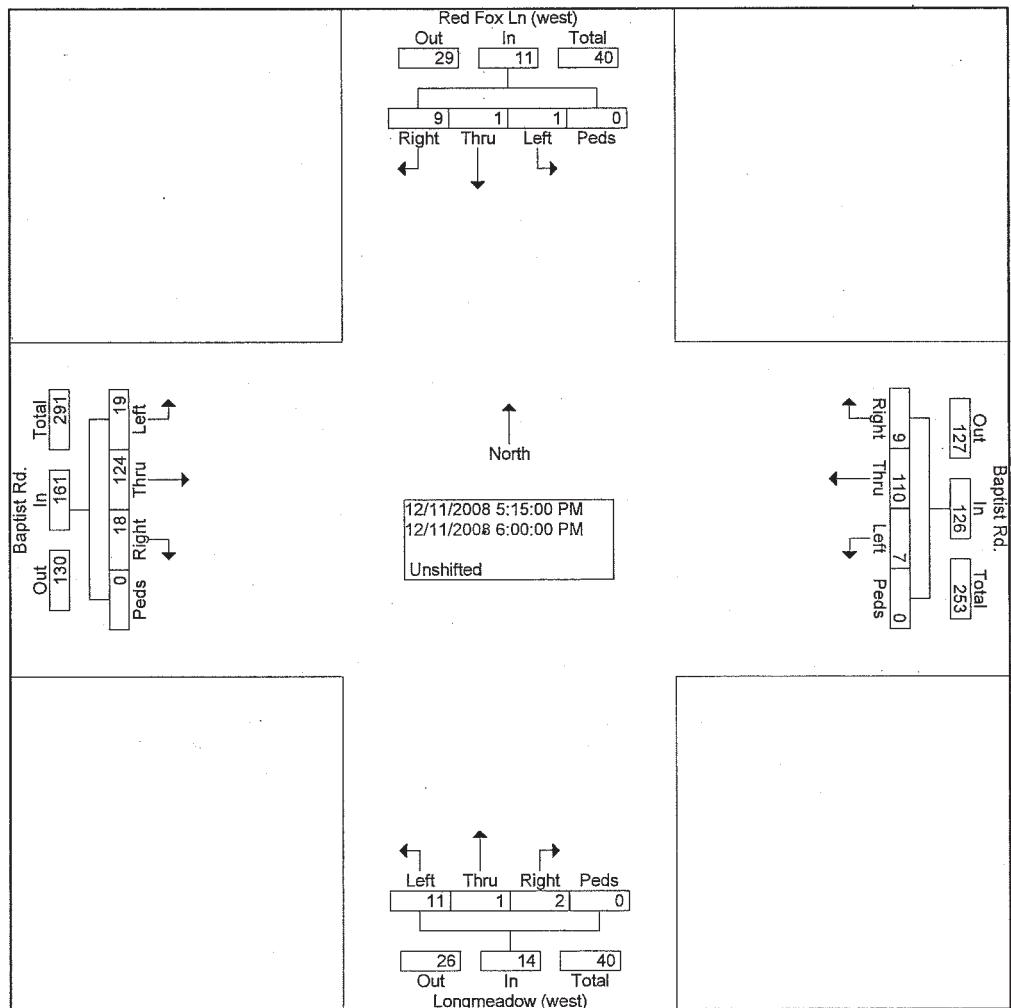
Colorado Springs, File Name : Baptist-Red Fox (west) pm

(719) 633-2868 Site Code : 00121108

Start Date : 12/11/2008

Page No : 2

	Red Fox Ln (west) From North					Baptist Rd. From East					Longmeadow (west) From South					Baptist Rd. From West							
Start Time	Rig ht	Thru	Left	Peds	App. Total	Rig ht	Thru	Left	Peds	App. Total	Rig ht	Thru	Left	Peds	App. Total	Rig ht	Thru	Left	Peds	App. Total	Int. Total		
Peak Hour From 04:15 PM to 06:00 PM - Peak 1 of 1																							
Intersection	05:15 PM																						
Volume	9	1	1	0	11	9	11	0	7	0	126	2	1	11	0	14	18	12	4	19	0	161	312
Percent	81.8	9.1	9.1	0.0		7.1	87.3	5.6	0.0			14.3	7.1	78.6	0.0		11.2	77.0	11.8	0.0			
06:00 Volume Peak Factor	2	0	1	0	3	3	27	0	0	30		2	1	4	0	7	5	35	6	0	46	86	0.907
High Int. 05:30 PM	05:15 PM					06:00 PM					06:00 PM												
Volume Peak Factor	3	1	0	0	4	1	31	1	0	33	0.95	2	1	4	0	7	5	35	6	0	46	0.87	5
	0.68					0.95					0.50												
	8					5																	



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516 N. Tejon St.

Colorado Springs, **Job Name : Roller Coaster Rd - Baptist Rd AM**
(719) 633-2868 Site Code : 00144390

Start Date : 05/14/2014

Page No : 1

Groups Printed- Unshifted

Start Time	Roller Coaster Rd From North				Hodgen Rd From East				Roller Coaster Rd From South				Baptist Rd From West				Int. Total
	Righ t	Thru	Left	Ped s	Righ t	Thru	Left	Ped s	Righ t	Thru	Left	Ped s	Righ t	Thru	Left	Ped s	
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
06:30 AM	0	2	2	0	6	21	0	0	2	1	1	0	5	14	0	0	54
06:45 AM	2	6	2	0	7	13	1	0	0	5	6	0	6	19	0	0	67
Total	2	8	4	0	13	34	1	0	2	6	7	0	11	33	0	0	121
07:00 AM	2	7	3	0	14	21	1	0	2	1	4	0	7	21	2	0	85
07:15 AM	1	15	5	0	23	30	2	0	0	4	2	0	14	20	2	0	118
07:30 AM	4	10	5	0	7	24	2	0	1	5	6	0	10	14	3	0	91
07:45 AM	1	16	3	0	3	23	1	0	1	2	3	0	7	15	1	0	76
Total	8	48	16	0	47	98	6	0	4	12	15	0	38	70	8	0	370
08:00 AM	2	8	5	0	2	24	0	0	5	5	6	0	11	20	2	0	90
08:15 AM	3	4	1	0	3	25	1	0	1	5	3	0	6	22	1	0	75
Grand Total	15	68	26	0	65	181	8	0	12	28	31	0	66	145	11	0	656
Apprch %	13.8	62.4	23.9	0.0	25.6	71.3	3.1	0.0	16.9	39.4	43.7	0.0	29.7	65.3	5.0	0.0	
Total %	2.3	10.4	4.0	0.0	9.9	27.6	1.2	0.0	1.8	4.3	4.7	0.0	10.1	22.1	1.7	0.0	

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516 N. Tejon St.

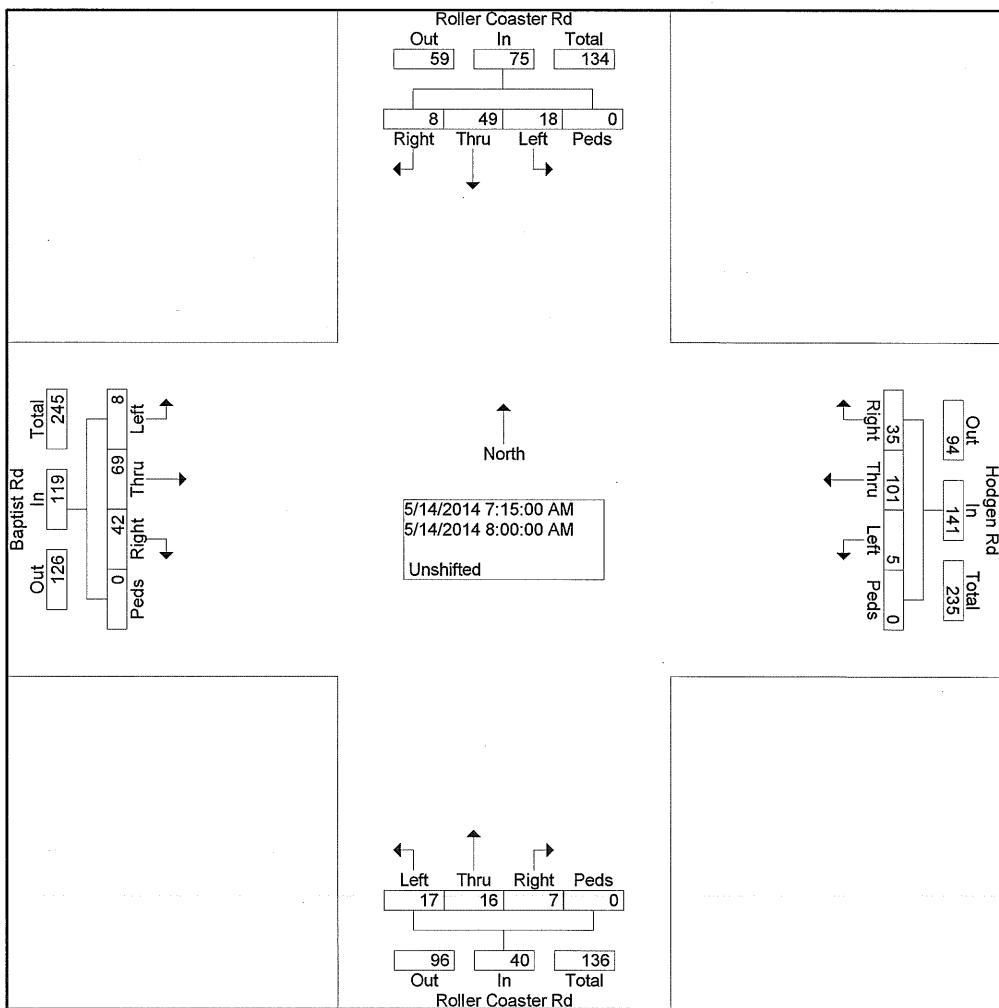
Colorado Springs, **Site Name : Roller Coaster Rd - Baptist Rd AM**

Site Code : 00144390

Start Date : 05/14/2014

Page No : 2

Start Time	Roller Coaster Rd From North					Hodgen Rd From East					Roller Coaster Rd From South					Baptist Rd From West						
	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Int. Total	
Peak Hour From 06:30 AM to 08:15 AM - Peak 1 of 1																						
Intersection 07:15 AM																						
Volume	8	49	18	0	75	35	10	1	5	0	141	7	16	17	0	40	42	69	8	0	119	375
Percent	10.7	65.3	24.0	0.0		24.8	71.6	3.5	0.0			17.5	40.0	42.5	0.0		35.3	58.0	6.7	0.0		
07:15 Volume Peak Factor	1	15	5	0	21	23	30	2	0	55	0	4	2	0	6	14	20	2	0	36	118	
High Int. 07:15 AM						07:15 AM					08:00 AM					07:15 AM					0.794	
Volume Peak Factor	1	15	5	0	21	23	30	2	0	55	5	5	6	0	16	14	20	2	0	36		
					0.89					0.64					0.62					0.82		
					3					1					5					6		



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516 N. Tejon St.

Colorado Springs, **Proj Name : Roller Coaster Rd - Baptist Rd PM**
Site Code : 00144390
Start Date : 05/12/2014

Page No : 1

Groups Printed- Unshifted

Start Time	Roller Coaster Rd From North				Hodgen Rd From East				Roller Coaster Rd From South				Baptist Rd From West				Int. Total
	Righ t	Thru	Left	Ped s	Righ t	Thru	Left	Ped s	Righ t	Thru	Left	Ped s	Righ t	Thru	Left	Ped s	
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
04:15 PM	1	7	1	0	6	23	1	0	3	6	10	0	5	16	6	0	85
04:30 PM	3	9	6	0	8	31	2	0	3	3	8	0	3	18	7	0	101
04:45 PM	3	5	3	0	6	22	0	0	3	3	5	0	5	37	3	0	95
Total	7	21	10	0	20	76	3	0	9	12	23	0	13	71	16	0	281
05:00 PM	3	6	3	0	3	26	1	0	7	6	8	0	8	31	3	0	105
05:15 PM	5	1	3	0	7	14	1	0	2	10	10	0	6	21	3	0	83
05:30 PM	0	6	2	0	4	17	0	0	0	8	9	0	8	30	5	0	89
05:45 PM	0	4	1	0	6	19	1	0	3	4	5	0	5	26	4	0	78
Total	8	17	9	0	20	76	3	0	12	28	32	0	27	108	15	0	355
06:00 PM	5	1	3	0	6	22	1	0	0	4	9	0	1	22	4	0	78
Grand Total	20	39	22	0	46	174	7	0	21	44	64	0	41	201	35	0	714
Apprch %	24.7	48.1	27.2	0.0	20.3	76.7	3.1	0.0	16.3	34.1	49.6	0.0	14.8	72.6	12.6	0.0	
Total %	2.8	5.5	3.1	0.0	6.4	24.4	1.0	0.0	2.9	6.2	9.0	0.0	5.7	28.2	4.9	0.0	

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516 N. Tejon St.

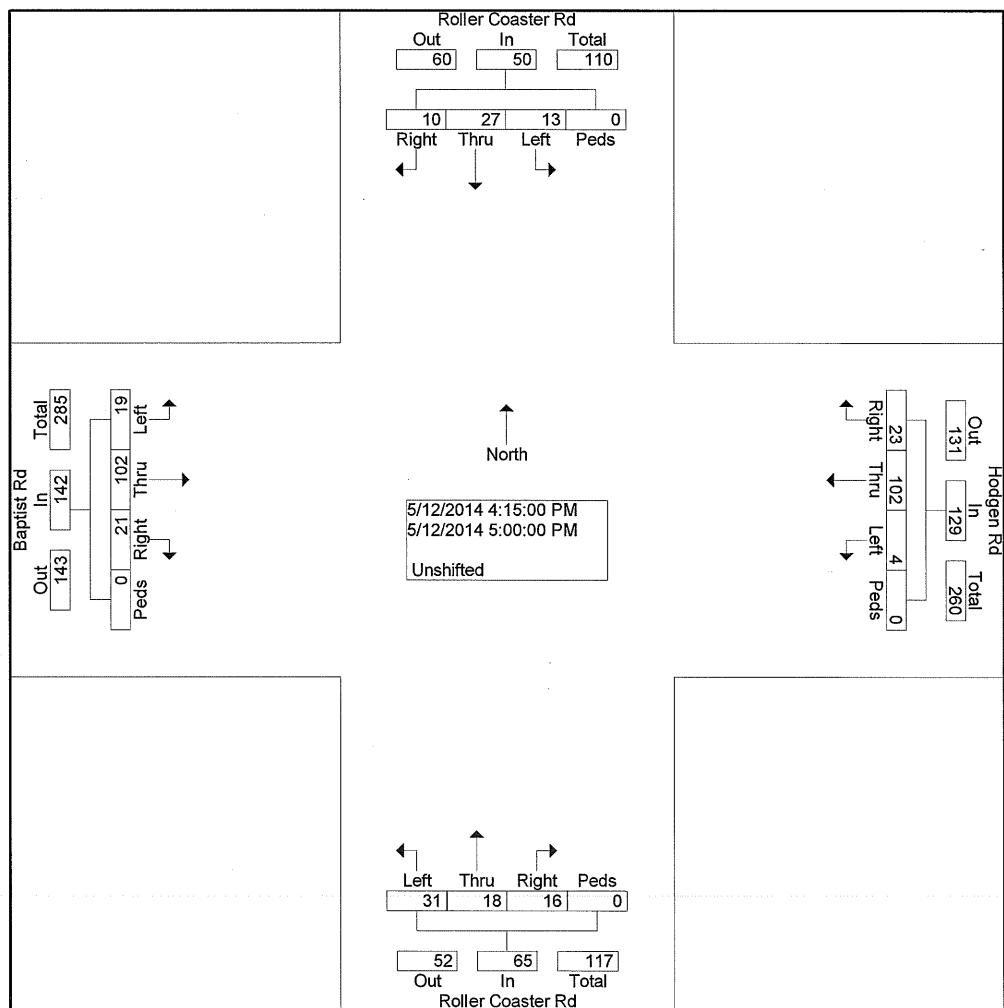
Colorado Springs, File Name : Roller Coaster Rd - Baptist Rd PM

(719) 633-2868 Site Code : 00144390

Start Date : 05/12/2014

Page No : 2

Start Time	Roller Coaster Rd From North						Hodgen Rd From East						Roller Coaster Rd From South						Baptist Rd From West					
	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Int. Total			
Peak Hour From 04:15 PM to 06:00 PM - Peak 1 of 1																								
Intersection 04:15 PM																								
Volume	10	27	13	0	50	23	10 2	4	0	129	16	18	31	0	65	21	10 2	19	0	142	386			
Percent	20. 0	54. 0	26. 0	0.0		17. 8	79. 1	3.1	0.0		24. 6	27. 7	47. 7	0.0		14. 8	71. 8	13. 4	0.0					
05:00 Volume Peak Factor	3	6	3	0	12	3	26	1	0	30	7	6	8	0	21	8	31	3	0	42	105	0.919		
High Int. 04:30 PM						04:30 PM					05:00 PM					04:45 PM								
Volume Peak Factor	3	9	6	0	18	8	31	2	0	41	7	6	8	0	21	5	37	3	0	45	0.78	0.78	9	



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516 N. Tejon St.

Colorado Springs, CO File Name : Leather Chaps - Baptist Rd AM
(719) 633-2868 Site Code : 00144390

Start Date : 05/15/2014

Page No : 1

Groups Printed- Unshifted

Start Time	Leather Chaps From North				Baptist Rd From East				Leather Chaps From South				Baptist Rd From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
06:30 AM	38	1	5	0	2	85	1	0	0	0	0	0	1	21	3	0	157
06:45 AM	43	0	5	0	3	90	0	0	0	1	6	0	4	27	8	0	187
Total	81	1	10	0	5	175	1	0	0	1	6	0	5	48	11	0	344
07:00 AM	66	1	2	0	5	118	2	0	1	0	5	0	1	36	5	0	242
07:15 AM	68	0	5	0	5	152	1	0	1	1	6	0	1	39	10	0	289
07:30 AM	46	4	6	0	8	129	1	0	0	0	3	0	5	56	17	0	275
07:45 AM	59	1	11	0	9	112	4	0	1	0	9	0	9	55	16	0	286
Total	239	6	24	0	27	511	8	0	3	1	23	0	16	186	48	0	1092
08:00 AM	36	1	4	0	4	80	0	0	1	2	2	0	4	65	13	1	213
08:15 AM	38	2	5	0	8	85	4	0	2	0	6	0	3	81	18	1	253
Grand Total	394	10	43	0	44	851	13	0	6	4	37	0	28	380	90	2	1902
Apprch %	88.1	2.2	9.6	0.0	4.8	93.7	1.4	0.0	12.8	8.5	78.7	0.0	5.6	76.0	18.0	0.4	
Total %	20.7	0.5	2.3	0.0	2.3	44.7	0.7	0.0	0.3	0.2	1.9	0.0	1.5	20.0	4.7	0.1	

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516 N. Tejon St.

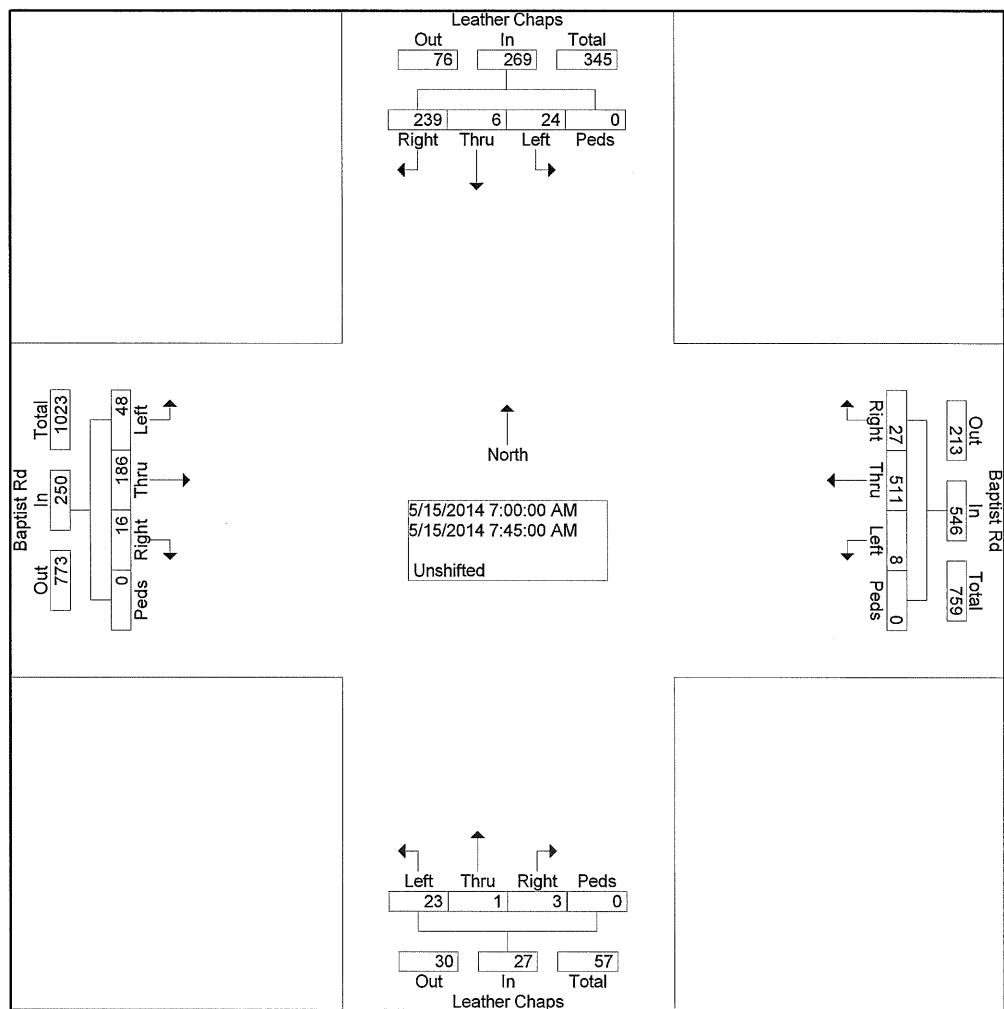
Colorado Springs, CO File Name : Leather Chaps - Baptist Rd AM

(719) 633-2868 Site Code : 00144390

Start Date : 05/15/2014

Page No : 2

Start Time	Leather Chaps From North					Baptist Rd From East					Leather Chaps From South					Baptist Rd From West				
	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total
Peak Hour From 06:30 AM to 08:15 AM - Peak 1 of 1																				
Intersection 07:00 AM	23 9	6	24	0	269	27 1	51 8	0	546	3 1	23 0	0	27	16 6	18 48	0	250	1092		
Volume	88. 8	2.2	8.9	0.0		4.9	93. 6	1.5	0.0	11. 1	3.7	85. 2	0.0	6.4 4	74. 2	19. 0.0				
Percent																				
07:15	68	0	5	0	73	5 2	15 1	0	158	1 1	6 0	0	8	1 1	39 10	10 0	50	289	0.945	
Volume																				
Peak Factor																				
High Int.	07:15 AM					07:15 AM					07:45 AM					07:45 AM				
Volume	68	0	5	0	73	5 2	15 1	0	158	1 0	9 0	0	10	9 1	55 4	16 0	0	80	0.78	
Peak Factor																				
	0.92 1								0.86 4					0.67 5						0.78 1



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516 N. Tejon St.

Colorado Springs, CO

File Name : Leather Chaps - Baptist Rd PM

Site Code : 00144390

(719) 633-2868 Start Date : 05/14/2014

Page No : 1

Groups Printed- Unshifted

Start Time	Leather Chaps From North				Baptist Rd From East				Leather Chaps From South				Baptist Rd From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
04:00 PM	44	1	27	0	10	114	3	0	3	3	12	0	5	104	33	1	360
04:15 PM	33	4	16	0	11	104	1	0	2	0	9	0	5	127	47	3	362
04:30 PM	39	0	19	0	9	93	2	0	1	1	3	0	1	112	42	1	323
04:45 PM	25	1	13	1	6	93	1	0	2	0	3	0	9	139	44	2	339
Total	141	6	75	1	36	404	7	0	8	4	27	0	20	482	166	7	1384
05:00 PM	34	0	13	0	14	90	2	0	5	1	6	0	3	104	54	2	328
05:15 PM	36	1	15	0	9	117	1	0	2	0	6	0	6	123	41	1	358
05:30 PM	27	4	17	0	6	100	0	0	1	2	7	0	5	134	45	2	350
05:45 PM	33	2	18	0	13	100	1	0	3	2	3	0	9	119	35	3	341
Total	130	7	63	0	42	407	4	0	11	5	22	0	23	480	175	8	1377
Grand Total	271	13	138	1	78	811	11	0	19	9	49	0	43	962	341	15	2761
Apprch %	64.1	3.1	32.6	0.2	8.7	90.1	1.2	0.0	24.7	11.7	63.6	0.0	3.2	70.7	25.1	1.1	
Total %	9.8	0.5	5.0	0.0	2.8	29.4	0.4	0.0	0.7	0.3	1.8	0.0	1.6	34.8	12.4	0.5	

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516 N. Tejon St.

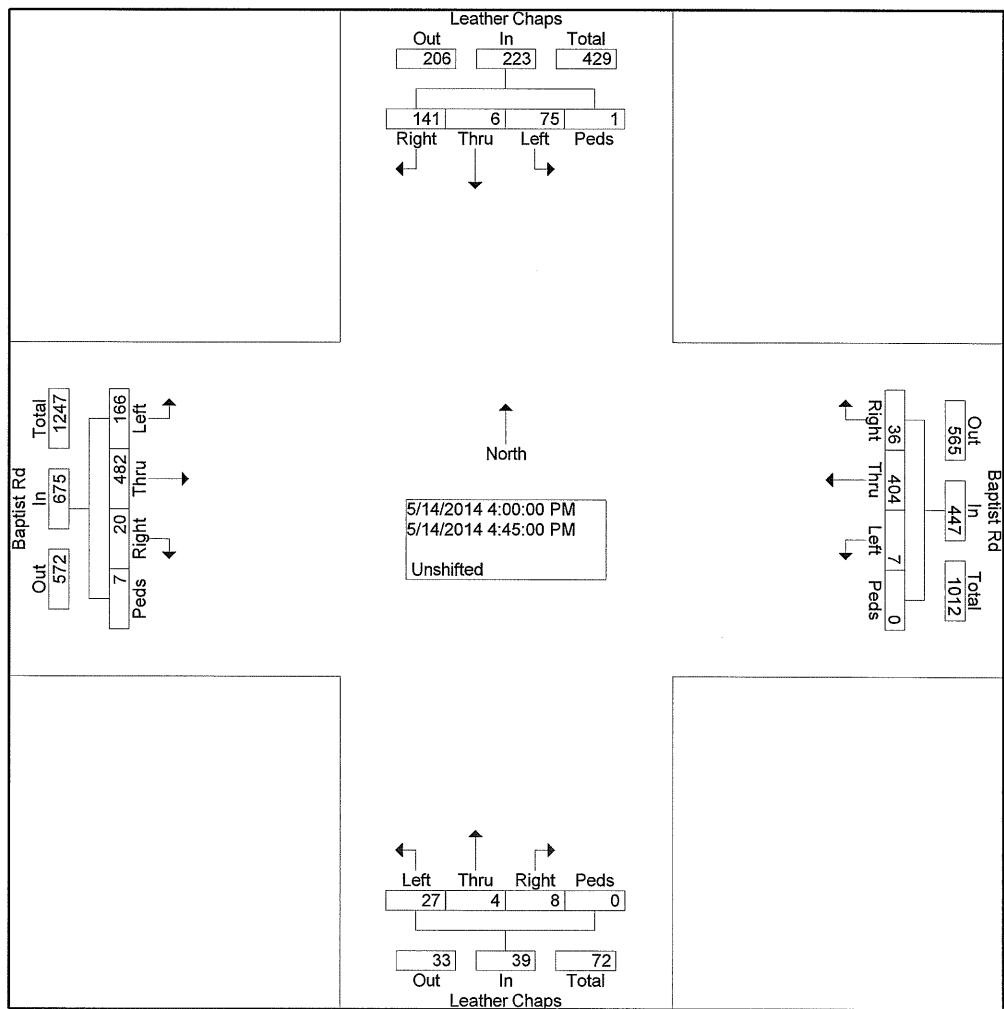
Colorado Springs, CO File Name : Leather Chaps - Baptist Rd PM

(719) 633-2868 Site Code : 00144390

Start Date : 05/14/2014

Page No : 2

Start Time	Leather Chaps From North					Baptist Rd From East					Leather Chaps From South					Baptist Rd From West					
	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Int. Total
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Intersection	04:00 PM																				
Volume	14 1	6	75	1	223	36 4	40 4	7	0	447	8 5	4 3	27 2	0	39	20 4	48 4	16 6	7	675	1384
Percent	63. 2	2.7	33. 6	0.4		8.1 4	90. 4	1.6	0.0		20. 5	10. 3	69. 2	0.0		3.0 4	71. 4	24. 6	1.0		
04:15 Volume	33	4	16	0	53	11 4	10 4	1	0	116	2 0	0	9	0	11	5 7	12 47	3	182	362	
Peak Factor																				0.956	
High Int.	04:00 PM					04:00 PM					04:00 PM					04:45 PM					
Volume	44	1	27	0	72	10 4	11 4	3	0	127	3 0	3	12	0	18	9 2	13 9	44	2	194	
Peak Factor						0.77 4				0.88 0					0.54 2					0.87 0	



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516 N. Tejon St.

Colorado Springs, CO File Name : Jackson Creek - Baptist Rd AM
(719) 633-2868 Site Code : 00144390

Start Date : 05/20/2014

Page No : 1

Groups Printed- Unshifted

Start Time	Jackson Creek Pkwy From North				Baptist Rd From East				Struthers Rd From South				Baptist Rd From West				Int. Total
	Righ t	Thru	Left	Ped s	Righ t	Thru	Left	Ped s	Righ t	Thru	Left	Ped s	Righ t	Thru	Left	Ped s	
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
06:30 AM	66	11	1	0	10	87	7	1	3	14	20	0	2	29	33	0	284
06:45 AM	80	23	15	0	11	95	8	0	7	20	22	1	6	34	41	0	363
Total	146	34	16	0	21	182	15	1	10	34	42	1	8	63	74	0	647
07:00 AM	105	27	15	0	15	136	8	1	5	18	25	0	5	34	47	0	441
07:15 AM	110	31	20	0	17	153	14	0	10	30	18	0	4	46	40	0	493
07:30 AM	119	34	14	0	21	122	14	1	5	39	24	0	7	44	48	0	492
07:45 AM	82	38	17	0	23	121	16	0	15	29	21	0	8	64	57	0	491
Total	416	130	66	0	76	532	52	2	35	116	88	0	24	188	192	0	1917
08:00 AM	76	33	22	0	30	103	9	0	16	48	15	0	7	48	58	0	465
08:15 AM	88	20	38	0	36	90	5	2	21	45	24	0	10	55	65	1	500
Grand Total	726	217	142	0	163	907	81	5	82	243	169	1	49	354	389	1	3529
Apprch %	66.9	20.0	13.1	0.0	14.1	78.5	7.0	0.4	16.6	49.1	34.1	0.2	6.2	44.6	49.1	0.1	
Total %	20.6	6.1	4.0	0.0	4.6	25.7	2.3	0.1	2.3	6.9	4.8	0.0	1.4	10.0	11.0	0.0	

LSC Transportation Consultants, Inc.

516 N. Tejon St.

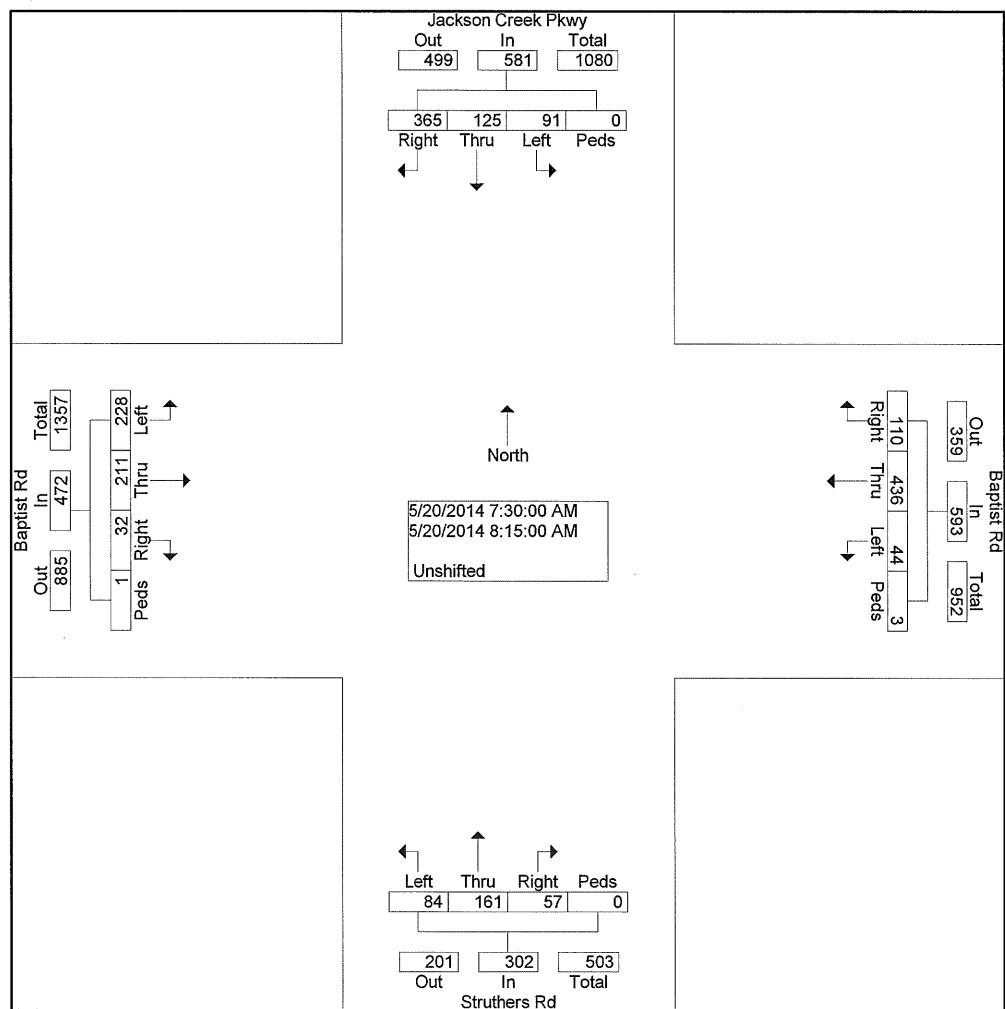
Colorado Springs, CO File Name : Jackson Creek - Baptist Rd AM

(719) 633-2868 Site Code : 00144390

Start Date : 05/20/2014

Page No : 2

Start Time	Jackson Creek Pkwy From North					Baptist Rd From East					Struthers Rd From South					Baptist Rd From West					
	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Int. Total
Peak Hour From 06:30 AM to 08:15 AM - Peak 1 of 1																					
Intersection 07:30 AM																					
Volume	365	125	91	0	581	110	436	44	3	593	571	161	84	0	302	321	218	22	1	472	1948
Percent	62.8	21.5	15.7	0.0		18.5	73.5	7.4	0.5		18.9	53.3	27.8	0.0		6.8	44.7	48.3	0.2		
08:15 Volume Peak Factor	88	20	38	0	146	36	90	5	2	133	21	45	24	0	90	10	55	65	1	131	500
High Int. Peak Factor	119	34	14	0	167	231	121	16	0	160	21	45	24	0	90	10	55	65	1	131	0.974
Volume																					
Peak Factor						0.87										0.92					



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516 N. Tejon St.

LSC Transportation Consultants, Inc.

Colorado Springs, CO File Name : Jackson Creek - Baptist Rd PM
Site Code : 00144390
Start Date : 05/20/2014

Page No : 1

Groups Printed- Unshifted

Start Time	Jackson Creek Pkwy From North				Baptist Rd From East				Struthers Rd From South				Baptist Rd From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
04:00 PM	81	62	57	0	42	104	31	1	13	69	27	0	19	101	113	0	720
04:15 PM	75	45	50	0	33	89	24	1	21	83	20	0	15	115	128	0	699
04:30 PM	71	55	52	0	55	90	28	1	19	66	19	0	13	112	141	0	722
04:45 PM	70	52	55	0	45	81	15	8	11	54	20	0	10	112	134	0	667
Total	297	214	214	0	175	364	98	11	64	272	86	0	57	440	516	0	2808
05:00 PM	72	57	69	0	56	58	21	7	14	85	21	0	20	134	141	0	755
05:15 PM	80	57	74	0	38	78	27	1	15	96	21	0	19	98	151	0	755
05:30 PM	71	58	67	0	38	97	22	1	17	81	24	0	13	143	142	0	774
05:45 PM	60	47	51	0	40	94	23	6	18	67	13	0	12	120	135	0	686
Total	283	219	261	0	172	327	93	15	64	329	79	0	64	495	569	0	2970
Grand Total	580	433	475	0	347	691	191	26	128	601	165	0	121	935	1085	0	5778
Apprch %	39.0	29.1	31.9	0.0	27.6	55.1	15.2	2.1	14.3	67.2	18.5	0.0	5.7	43.7	50.7	0.0	
Total %	10.0	7.5	8.2	0.0	6.0	12.0	3.3	0.4	2.2	10.4	2.9	0.0	2.1	16.2	18.8	0.0	

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516 N. Tejon St.

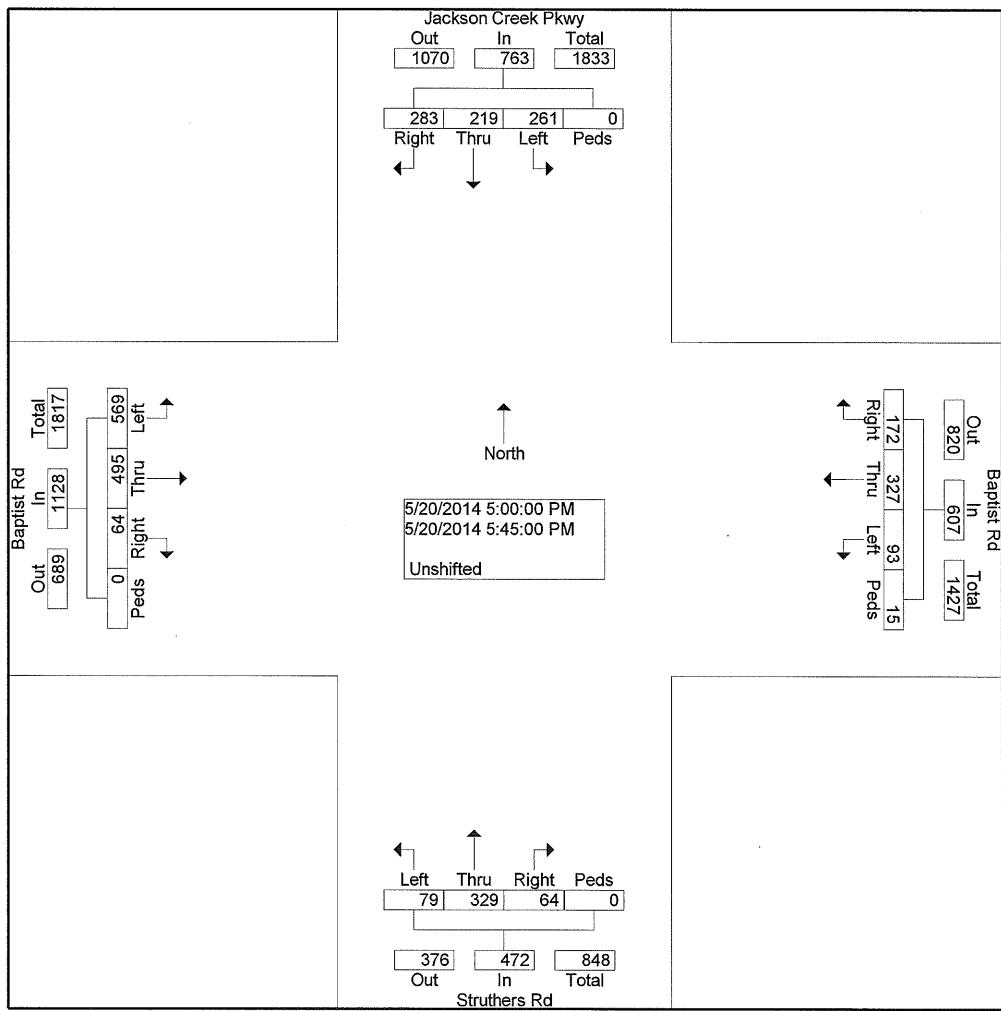
Colorado Springs, CO File Name : Jackson Creek - Baptist Rd PM

(719) 633-2868 Site Code : 00144390

Start Date : 05/20/2014

Page No : 2

	Jackson Creek Pkwy From North						Baptist Rd From East						Struthers Rd From South						Baptist Rd From West					
	Start Time	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Int. Total		
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																								
Intersection	05:00 PM																							
Volume	28 3	21 9	26 1	0	763	17 2	32 7	93 15	15 607	64 9	32 79	0	472	64 5	49 56	0	1128	2970						
Percent	37.1	28.7	34.2	0.0		28.3	53.9	15.3	2.5	13.6	69.7	16.7	0.0	5.7	43.9	50.4	0.0							
05:30 Volume	71	58	67	0	196	38	97	22	1	158	17	81	24	0	122	13	14	14	2	0	298	774	0.959	
Peak Factor																								
High Int.	05:15 PM					05:45 PM					05:15 PM				05:30 PM									
Volume	80	57	74	0	211	40	94	23	6	163	15	96	21	0	132	13	14	14	2	0	298			
Peak Factor					0.90					0.93					0.89									
					4					1														



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516 N. Tejon St.

Colorado Springs, CO

(719) 633-2868

File Name : Gleneagle Dr - Baptist Rd AM

Site Code : 00144390

Start Date : 05/08/2014

Page No : 1

Groups Printed- Unshifted

Start Time	Gleneagle Dr From North				Baptist Rd From East				Gleneagle Dr From South				Baptist Rd From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
06:30 AM	8	0	3	0	4	61	7	0	1	0	20	0	11	15	5	0	135
06:45 AM	8	2	9	0	2	54	5	0	3	2	24	0	14	17	5	0	145
Total	16	2	12	0	6	115	12	0	4	2	44	0	25	32	10	0	280
07:00 AM	7	3	6	0	5	95	2	0	5	1	54	0	17	23	4	0	222
07:15 AM	10	4	5	0	4	103	7	0	5	0	46	0	22	18	6	0	230
07:30 AM	11	2	3	0	4	83	7	0	5	1	39	0	19	29	9	0	212
07:45 AM	9	1	4	0	2	64	7	0	1	2	26	0	30	21	11	0	178
Total	37	10	18	0	15	345	23	0	16	4	165	0	88	91	30	0	842
08:00 AM	7	2	3	0	4	63	5	0	4	1	14	0	31	31	8	0	173
08:15 AM	14	5	2	0	4	64	18	0	3	1	23	0	48	32	7	0	221
Grand Total	74	19	35	0	29	587	58	0	27	8	246	0	192	186	55	0	1516
Apprch %	57.8	14.8	27.3	0.0	4.3	87.1	8.6	0.0	9.6	2.8	87.5	0.0	44.3	43.0	12.7	0.0	
Total %	4.9	1.3	2.3	0.0	1.9	38.7	3.8	0.0	1.8	0.5	16.2	0.0	12.7	12.3	3.6	0.0	

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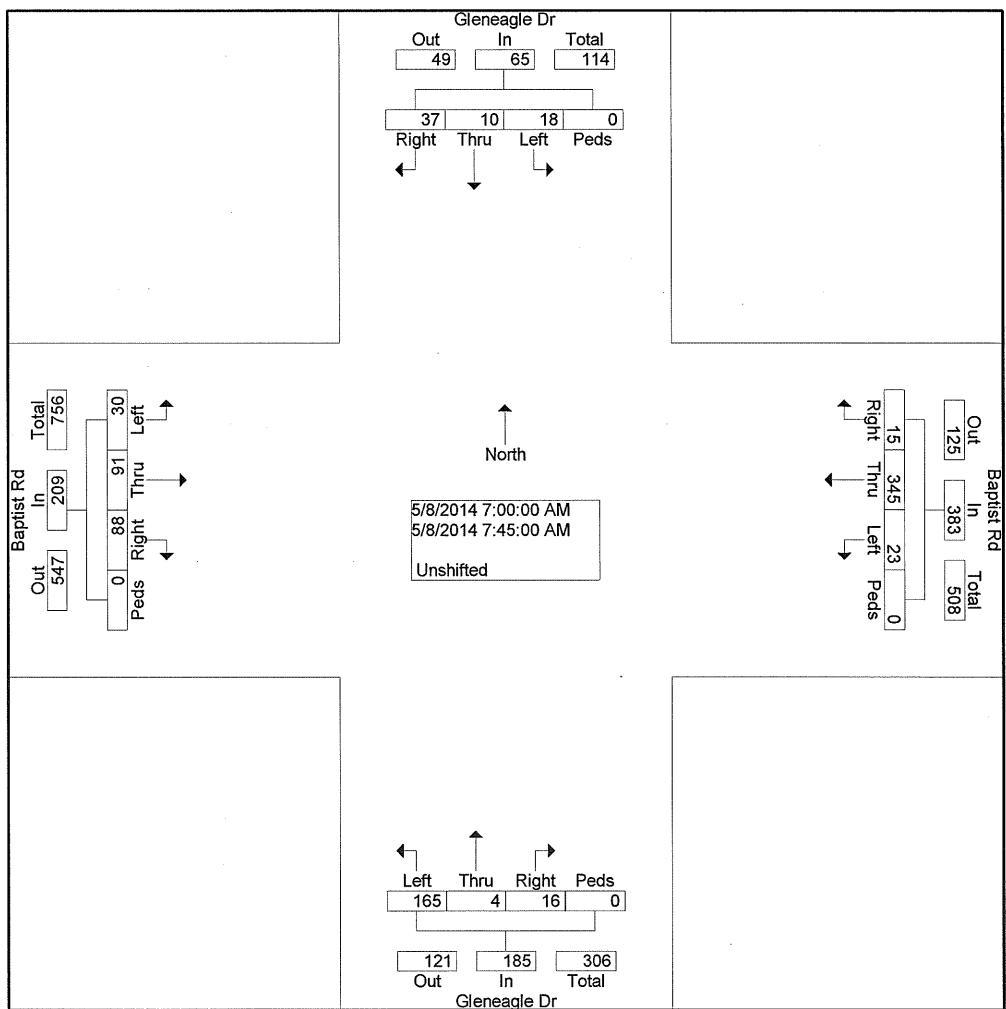
516 N. Tejon St.

Colorado Springs, CO File Name : Gleneagle Dr - Baptist Rd AM
 (719) 633-2868 Site Code : 00144390

Start Date : 05/08/2014

Page No : 2

	Gleneagle Dr From North					Baptist Rd From East					Gleneagle Dr From South					Baptist Rd From West						
Start Time	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Int. Total	
Peak Hour From 06:30 AM to 08:15 AM - Peak 1 of 1																						
Intersection 07:00 AM																						
Volume	37	10	18	0	65	15	34	5	23	0	383	16	4	16	5	0	185	88	91	30	0	209
Percent	56.9	15.4	27.7	0.0		3.9	90.1	6.0	0.0			8.6	2.2	89.2	0.0		42.1	43.5	14.4	0.0		842
07:15 Volume Peak Factor	10	4	5	0	19	4	10	3	7	0	114	5	0	46	0	51	22	18	6	0	46	230
High Int. Peak Factor	07:15 AM					07:15 AM					07:00 AM					07:45 AM					0.915	
Volume	10	4	5	0	19	4	10	3	7	0	114	5	1	54	0	60	30	21	11	0	62	
Peak Factor	0.85					0.84					0.77					0.84					3	



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516 N. Tejon St.

Colorado Springs, CO

(719) 633-2868

File Name : Gleneagle Dr - Baptist Rd PM

Site Code : 00144390

Start Date : 05/08/2014

Page No : 1

Groups Printed- Unshifted

Start Time	Gleneagle Dr From North				Baptist Rd From East				Gleneagle Dr From South				Baptist Rd From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
04:15 PM	5	4	3	0	7	63	3	0	6	2	29	0	49	76	8	1	256
04:30 PM	8	2	6	0	2	72	6	0	6	3	35	0	44	83	5	0	272
04:45 PM	5	0	7	0	8	65	2	0	9	2	36	0	35	69	8	1	247
Total	18	6	16	0	17	200	11	0	21	7	100	0	128	228	21	2	775
05:00 PM	10	2	4	0	2	56	1	0	6	1	35	0	42	97	2	2	260
05:15 PM	7	4	7	0	4	59	5	0	5	4	42	0	53	117	13	0	320
05:30 PM	7	6	3	0	9	57	6	0	14	4	45	0	53	91	13	0	308
05:45 PM	7	2	1	0	4	54	3	0	4	4	42	0	29	90	10	0	250
Total	31	14	15	0	19	226	15	0	29	13	164	0	177	395	38	2	1138
06:00 PM	3	2	7	0	4	42	2	0	4	2	37	0	38	85	3	2	231
Grand Total	52	22	38	0	40	468	28	0	54	22	301	0	343	708	62	6	2144
Apprch %	46.4	19.6	33.9	0.0	7.5	87.3	5.2	0.0	14.3	5.8	79.8	0.0	30.7	63.3	5.5	0.5	
Total %	2.4	1.0	1.8	0.0	1.9	21.8	1.3	0.0	2.5	1.0	14.0	0.0	16.0	33.0	2.9	0.3	

LSC Transportation Consultants, Inc.

516 N. Tejon St.

Colorado Springs, CO File Name : Gleneagle Dr - Baptist Rd PM

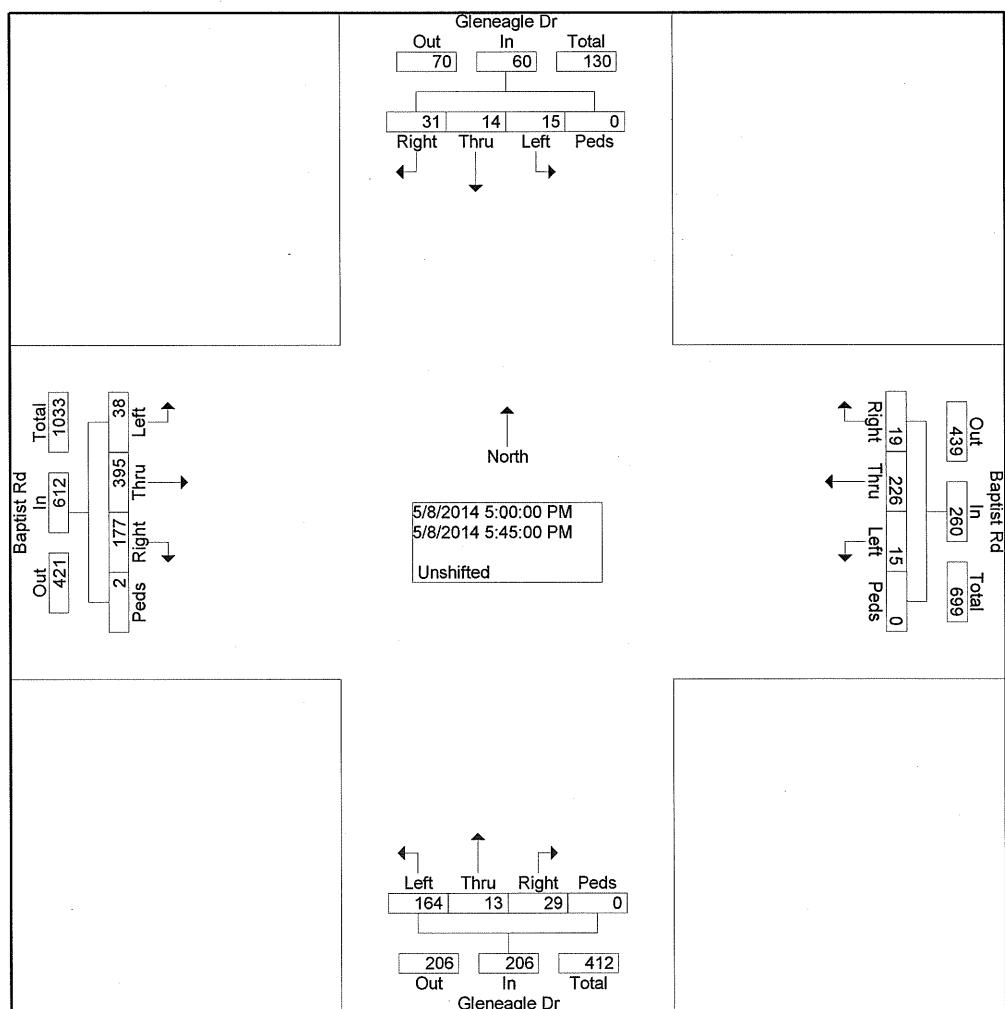
(719) 633-2868

Site Code : 00144390

Start Date : 05/08/2014

Page No : 2

Start Time	Gleneagle Dr From North					Baptist Rd From East					Gleneagle Dr From South					Baptist Rd From West							
	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Int. Total		
Peak Hour From 04:15 PM to 06:00 PM - Peak 1 of 1																							
Intersection 05:00 PM	Volume	31	14	15	0	60	19	22	6	15	0	260	29	13	16	4	0	206	17	39	5	612	1138
Percent	51.7	23.3	25.0	0.0			7.3	86.9	5.8	0.0			14.1	6.3	79.6	0.0		28.9	64.5	6.2	0.3		
05:15 Volume Peak Factor	7	4	7	0	18	4	59	5	0	68	5	4	42	0	51	53	11	7	13	0	183	320	
High Int. 05:15 PM	0.889																						
Volume	7	4	7	0	18	9	57	6	0	72	14	4	45	0	63	53	11	7	13	0	183		
Peak Factor	0.83					0.83					0.90					0.81					0.83		
						3					3					7					6		



LSC Transportation Consultants, Inc.
545 E. Pikes Peak Ave., #210
 LSC Transportation Consultants, Inc. Colorado Springs, CO 80903
 (719) 633-2868

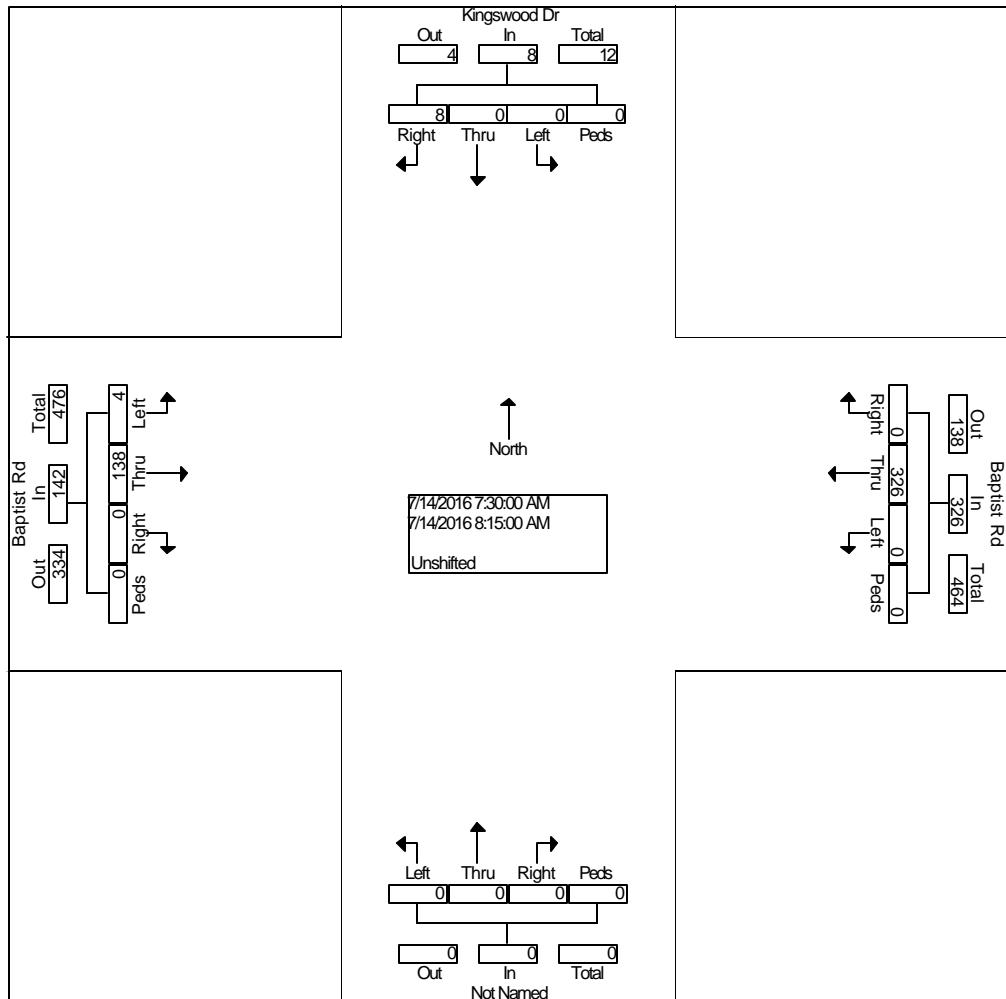
Name : Baptist Rd - Kingswood Dr AM
 Site Code : 00164550
 Start Date : 07/14/2016
 Page No : 1

Groups Printed- Unshifted

Start Time	Kingswood Dr From North				Baptist Rd From East				From South				Baptist Rd From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
06:30 AM	1	0	0	0	0	49	0	0	0	0	0	0	0	19	0	0	69
06:45 AM	0	0	0	0	0	58	0	0	0	0	0	0	0	21	0	0	79
Total	1	0	0	0	0	107	0	0	0	0	0	0	0	40	0	0	148
07:00 AM	2	0	0	0	0	68	0	0	0	0	0	0	0	23	0	0	93
07:15 AM	1	0	0	0	0	62	0	0	0	0	0	0	0	24	1	0	88
07:30 AM	3	0	0	0	0	87	0	0	0	0	0	0	0	20	0	0	110
07:45 AM	2	0	0	0	0	85	0	0	0	0	0	0	0	37	1	0	125
Total	8	0	0	0	0	302	0	0	0	0	0	0	0	104	2	0	416
08:00 AM	0	0	0	0	0	76	0	0	0	0	0	0	0	38	1	0	115
08:15 AM	3	0	0	0	0	78	0	0	0	0	0	0	0	43	2	0	126
Grand Total	12	0	0	0	0	563	0	0	0	0	0	0	0	225	5	0	805
Apprch %	100.	0.0	0.0	0.0	0.0	100.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	97.8	2.2	0.0	
Total %	1.5	0.0	0.0	0.0	0.0	69.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.0	0.6	0.0	

LSC Transportation Consultants, Inc.
545 E. Pikes Peak Ave., #210
Colorado Springs, CO 80903
 Name : Baptist Rd - Kingswood Dr AM
 Site Code : 00164550
 Start Date : 07/14/2016
 Page No : 2

Start Time	Kingswood Dr From North					Baptist Rd From East					From South					Baptist Rd From West						
	Rig ht	Thru	Left	Peds	App. Total	Rig ht	Thru	Left	Peds	App. Total	Rig ht	Thru	Left	Peds	App. Total	Rig ht	Thru	Left	Peds	App. Total	Int. Total	
Peak Hour From 06:30 AM to 08:15 AM - Peak 1 of 1																						
Intersection 07:30 AM																						
Volume	8	0	0	0	8	0	32	0	0	326	0	0	0	0	0	0	13	4	0	142	476	
Percent	10.0	0.0	0.0	0.0		0.0	10.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	97.2	2.8	0.0			
08:15 Volume Peak Factor	3	0	0	0	3	0	78	0	0	78	0	0	0	0	0	0	0	43	2	0	45	126
High Int. 07:30 AM						07:30 AM					6:15:00 AM					08:15 AM						0.944
Volume Peak Factor	3	0	0	0	3	0	87	0	0	87	0	0	0	0	0	0	0	43	2	0	45	0.78
					0.66					0.93											0.78	
					7					7												9



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545 E. Pikes Peak Ave., #210
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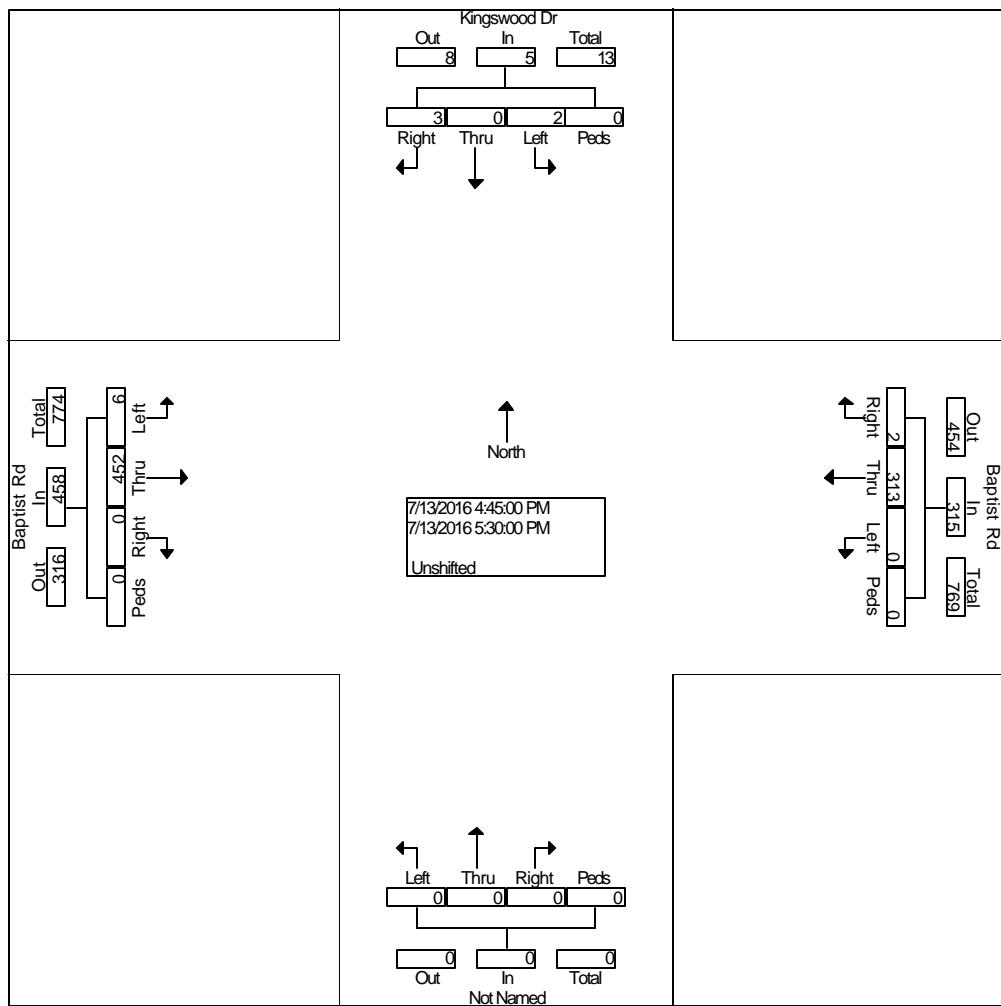
Name : Baptist Rd - Kingswood Dr PM
 Site Code : 00164550
 Start Date : 07/13/2016
 Page No : 1

Groups Printed- Unshifted

Start Time	Kingswood Dr From North				Baptist Rd From East				From South				Baptist Rd From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
04:00 PM	3	0	0	0	0	76	0	0	0	0	0	0	0	93	2	0	174
04:15 PM	1	0	0	0	2	80	0	0	0	0	0	0	0	92	1	0	176
04:30 PM	2	0	1	0	1	82	0	0	0	0	0	0	0	98	1	0	185
04:45 PM	0	0	0	0	0	86	0	0	0	0	0	0	0	117	2	0	205
Total	6	0	1	0	3	324	0	0	0	0	0	0	0	400	6	0	740
05:00 PM	2	0	1	0	0	77	0	0	0	0	0	0	0	107	3	0	190
05:15 PM	0	0	0	0	1	65	0	0	0	0	0	0	0	120	0	0	186
05:30 PM	1	0	1	0	1	85	0	0	0	0	0	0	0	108	1	0	197
05:45 PM	1	0	0	0	1	79	0	0	0	0	0	0	0	101	1	0	183
Total	4	0	2	0	3	306	0	0	0	0	0	0	0	436	5	0	756
Grand Total	10	0	3	0	6	630	0	0	0	0	0	0	0	836	11	0	1496
Apprch %	76.9	0.0	23.1	0.0	0.9	99.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	98.7	1.3	0.0	
Total %	0.7	0.0	0.2	0.0	0.4	42.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.9	0.7	0.0	

LSC Transportation Consultants, Inc.
 545 E. Pikes Peak Ave., #210
 Colorado Springs, CO 80903
 Name : Baptist Rd - Kingswood Dr PM
 Site Code : 00164550
 Start Date : 07/13/2016
 Page No : 2
 (719) 633-2868

	Kingswood Dr From North					Baptist Rd From East					From South					Baptist Rd From West						
Start Time	Rig ht	Thru u	Lef t	Pe ds	App. Total	Rig ht	Thru u	Lef t	Pe ds	App. Total	Rig ht	Thru u	Lef t	Pe ds	App. Total	Rig ht	Thru u	Lef t	Pe ds	App. Total	Int. Total	
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																						
Intersection	04:45 PM																					
Volume	3	0	2	0	5	2	31	0	0	315	0	0	0	0	0	0	45	6	0	458	778	
Percent	60.	0.0	40.	0	0.0	0.6	99.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	98.	1.3	0.0	0.0		
04:45	0	0	0	0	0	0	86	0	0	86	0	0	0	0	0	0	11	2	0	119	205	
Volume	Peak Factor																				0.949	
High Int.	05:00 PM					04:45 PM					3:45:00 PM					05:15 PM						
Volume	2	0	1	0	3	0	86	0	0	86	0	0	0	0	0	0	12	0	0	0	120	
Peak Factor	0.41					0.91					0.95					0.95					4	



Timings
1: Jackson Creek Pkwy & Baptist Rd

Existing Traffic

AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑	↑	↑↑	↑↑	↑	↑↑	↑↑	↑	↑↑	↑↑	↑
Traffic Volume (vph)	228	211	32	44	436	110	84	161	57	91	125	365
Future Volume (vph)	228	211	32	44	436	110	84	161	57	91	125	365
Turn Type	Prot	NA	Perm									
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases				4		8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	22.0	22.0	13.0	22.0	22.0	9.0	22.0	22.0	9.0	22.0	22.0
Total Split (s)	20.0	60.0	60.0	15.0	55.0	55.0	15.0	30.0	30.0	15.0	30.0	30.0
Total Split (%)	16.7%	50.0%	50.0%	12.5%	45.8%	45.8%	12.5%	25.0%	25.0%	12.5%	25.0%	25.0%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-3.0	-2.0	-2.0	-3.0	-2.0	-2.0	-3.0	-2.0	-2.0	-3.0	0.0
Total Lost Time (s)	3.0	3.0	4.0	3.0	3.0	4.0	3.0	3.0	4.0	3.0	3.0	6.0
Lead/Lag	Lead	Lag	Lag									
Lead-Lag Optimize?	Yes											
Recall Mode	Max											
Act Effect Green (s)	17.0	57.0	56.0	12.0	52.0	51.0	12.0	27.0	26.0	12.0	27.0	24.0
Actuated g/C Ratio	0.14	0.48	0.47	0.10	0.43	0.42	0.10	0.22	0.22	0.10	0.22	0.20
v/c Ratio	0.52	0.14	0.04	0.13	0.28	0.15	0.29	0.24	0.16	0.27	0.16	0.60
Control Delay	51.9	18.0	0.1	50.3	22.6	3.7	52.5	39.1	1.6	52.2	38.0	8.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.9	18.0	0.1	50.3	22.6	3.7	52.5	39.1	1.6	52.2	38.0	8.7
LOS	D	B	A	D	C	A	D	D	A	D	D	A
Approach Delay		33.2			21.2			35.7			21.8	
Approach LOS		C			C			D			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Natural Cycle: 70

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.60

Intersection Signal Delay: 26.9

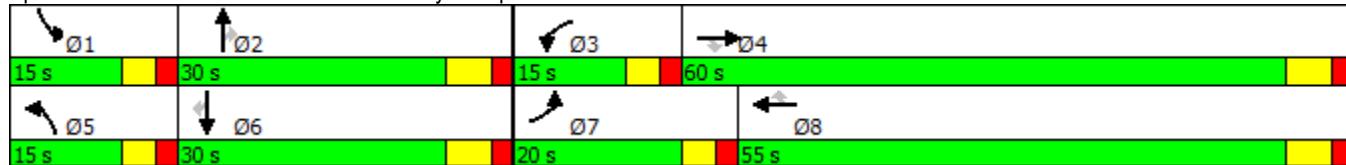
Intersection LOS: C

Intersection Capacity Utilization 49.7%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: Jackson Creek Pkwy & Baptist Rd

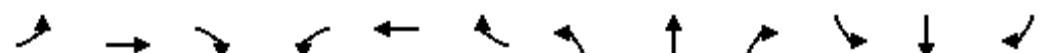


Queues

Existing Traffic

1: Jackson Creek Pkwy & Baptist Rd

AM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	251	232	35	44	436	110	100	192	68	92	126	369
v/c Ratio	0.52	0.14	0.04	0.13	0.28	0.15	0.29	0.24	0.16	0.27	0.16	0.60
Control Delay	51.9	18.0	0.1	50.3	22.6	3.7	52.5	39.1	1.6	52.2	38.0	8.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.9	18.0	0.1	50.3	22.6	3.7	52.5	39.1	1.6	52.2	38.0	8.7
Queue Length 50th (ft)	93	51	0	16	112	0	37	64	0	34	41	0
Queue Length 95th (ft)	137	76	0	35	151	30	61	91	1	61	68	86
Internal Link Dist (ft)		775			3072			531			413	
Turn Bay Length (ft)	435			265			435			280	175	175
Base Capacity (vph)	486	1681	801	343	1533	740	343	796	435	343	796	611
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.52	0.14	0.04	0.13	0.28	0.15	0.29	0.24	0.16	0.27	0.16	0.60

Intersection Summary

Timings
2: Leather Chaps Dr & Baptist Rd

Existing Traffic

AM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations	↑ ↗	↑↑ ↗	↗ ↗	↗	↑↑ ↗	↗ ↗	↗ ↗	↗ ↗	↑	↗ ↗	↗ ↗
Traffic Volume (vph)	48	186	16	8	511	27	23	1	24	6	239
Future Volume (vph)	48	186	16	8	511	27	23	1	24	6	239
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA	Perm
Protected Phases					4		8		2		6
Permitted Phases	4			4	8		8	2		6	6
Detector Phase	4	4	4	8	8	8	2	2	6	6	6
Switch Phase											
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Total Split (s)	75.0	75.0	75.0	75.0	75.0	75.0	75.0	15.0	15.0	15.0	15.0
Total Split (%)	83.3%	83.3%	83.3%	83.3%	83.3%	83.3%	16.7%	16.7%	16.7%	16.7%	16.7%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag											
Lead-Lag Optimize?											
Recall Mode	None	None	None	None	None	None	Max	Max	Max	Max	Max
Act Effect Green (s)	10.8	10.8	10.8	10.8	10.8	10.8	10.1	10.1	10.1	10.1	10.1
Actuated g/C Ratio	0.35	0.35	0.35	0.35	0.35	0.35	0.33	0.33	0.33	0.33	0.33
v/c Ratio	0.17	0.15	0.03	0.02	0.48	0.05	0.06	0.01	0.07	0.38	
Control Delay	8.4	7.0	2.9	6.4	9.2	3.3	8.6	6.5	8.6	3.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	8.4	7.0	2.9	6.4	9.2	3.3	8.6	6.5	8.6	3.5	
LOS	A	A	A	A	A	A	A	A	A	A	A
Approach Delay		7.0			8.8			8.2		4.1	
Approach LOS		A			A			A		A	

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 30.9

Natural Cycle: 40

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.48

Intersection Signal Delay: 7.3

Intersection LOS: A

Intersection Capacity Utilization 44.8%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: Leather Chaps Dr & Baptist Rd



Queues
2: Leather Chaps Dr & Baptist Rd

Existing Traffic
AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	48	186	16	9	594	31	27	5	33	260
v/c Ratio	0.17	0.15	0.03	0.02	0.48	0.05	0.06	0.01	0.07	0.38
Control Delay	8.4	7.0	2.9	6.4	9.2	3.3	8.6	6.5	8.6	3.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	8.4	7.0	2.9	6.4	9.2	3.3	8.6	6.5	8.6	3.5
Queue Length 50th (ft)	5	10	0	1	36	0	3	0	4	0
Queue Length 95th (ft)	17	20	5	5	56	7	12	4	15	29
Internal Link Dist (ft)	3072			2632			332		326	
Turn Bay Length (ft)	575	200		335	335					
Base Capacity (vph)	797	3539	1583	1183	3539	1583	446	536	495	690
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.05	0.01	0.01	0.17	0.02	0.06	0.01	0.07	0.38

Intersection Summary

Timings
3: Gleneagle Dr & Baptist Rd

Existing Traffic
AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations	↑ ↗	↑↑ ↗	↗ ↗	↗	↑↑ ↗	↗ ↗	↗ ↗	↗ ↗	↗ ↗	↑ ↗	↗ ↗
Traffic Volume (vph)	30	91	88	23	345	15	165	4	18	10	37
Future Volume (vph)	30	91	88	23	345	15	165	4	18	10	37
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA	Perm
Protected Phases					4		8		2		6
Permitted Phases	4			4	8		8	2		6	6
Detector Phase	4	4	4	8	8	8	2	2	6	6	6
Switch Phase											
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Total Split (s)	75.0	75.0	75.0	75.0	75.0	75.0	75.0	15.0	15.0	15.0	15.0
Total Split (%)	83.3%	83.3%	83.3%	83.3%	83.3%	83.3%	16.7%	16.7%	16.7%	16.7%	16.7%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag											
Lead-Lag Optimize?											
Recall Mode	None	None	None	None	None	None	Max	Max	Max	Max	Max
Act Effect Green (s)	8.8	8.8	8.8	8.8	8.8	8.8	10.0	10.0	10.0	10.0	10.0
Actuated g/C Ratio	0.31	0.31	0.31	0.31	0.31	0.31	0.35	0.35	0.35	0.35	0.35
v/c Ratio	0.10	0.08	0.16	0.07	0.38	0.04	0.37	0.04	0.04	0.02	0.07
Control Delay	7.9	7.1	3.0	7.3	8.9	3.3	10.2	4.6	7.2	7.0	3.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	7.9	7.1	3.0	7.3	8.9	3.3	10.2	4.6	7.2	7.0	3.5
LOS	A	A	A	A	A	A	B	A	A	A	A
Approach Delay		5.5			8.6			9.6		5.1	
Approach LOS		A			A			A		A	

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 28.8

Natural Cycle: 40

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.38

Intersection Signal Delay: 7.8

Intersection LOS: A

Intersection Capacity Utilization 41.2%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: Gleneagle Dr & Baptist Rd



Queues
3: Gleneagle Dr & Baptist Rd

Existing Traffic
AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	30	91	88	27	411	18	181	22	21	12	43
v/c Ratio	0.10	0.08	0.16	0.07	0.38	0.04	0.37	0.04	0.04	0.02	0.07
Control Delay	7.9	7.1	3.0	7.3	8.9	3.3	10.2	4.6	7.2	7.0	3.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	7.9	7.1	3.0	7.3	8.9	3.3	10.2	4.6	7.2	7.0	3.5
Queue Length 50th (ft)	3	4	0	3	23	0	18	1	2	1	0
Queue Length 95th (ft)	11	11	13	10	37	5	49	7	9	6	9
Internal Link Dist (ft)	2632			948			513			372	
Turn Bay Length (ft)	640	315		500	500		75	50			
Base Capacity (vph)	952	3539	1583	1295	3539	1583	485	579	481	647	578
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.03	0.06	0.02	0.12	0.01	0.37	0.04	0.04	0.02	0.07

Intersection Summary

Intersection

Int Delay, s/veh 8.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	69	42	5	101	35	17	16	7	18	49	8
Future Vol, veh/h	8	69	42	5	101	35	17	16	7	18	49	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	64	64	64	100	100	100	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	10	83	51	8	158	55	17	16	7	20	55	9

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	260	157	60	221	158	20	64	0	0	23	0	0
Stage 1	100	100	-	54	54	-	-	-	-	-	-	-
Stage 2	160	57	-	167	104	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	693	735	1005	735	734	1058	1538	-	-	1592	-	-
Stage 1	906	812	-	958	850	-	-	-	-	-	-	-
Stage 2	842	847	-	835	809	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	536	717	1005	625	716	1058	1538	-	-	1592	-	-
Mov Cap-2 Maneuver	536	717	-	625	716	-	-	-	-	-	-	-
Stage 1	896	801	-	947	841	-	-	-	-	-	-	-
Stage 2	642	838	-	701	798	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.7	11.5	3.1	1.7
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1538	-	-	778	774	1592	-	-
HCM Lane V/C Ratio	0.011	-	-	0.184	0.285	0.013	-	-
HCM Control Delay (s)	7.4	0	-	10.7	11.5	7.3	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.7	1.2	0	-	-

HCM 2010 TWSC
33: Baptist Rd & Kingswood Dr

Existing Traffic
AM Peak Hour

Intersection

Int Delay, s/veh 0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑↑	↑↑	↑	↑	
Traffic Vol, veh/h	4	138	326	0	0	8
Future Vol, veh/h	4	138	326	0	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	265	-	-	500	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	79	79	100	100	67	67
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	175	326	0	0	12

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	326	0	- 423 163
Stage 1	-	-	- 326 -
Stage 2	-	-	- 97 -
Critical Hdwy	4.14	-	- 6.84 6.94
Critical Hdwy Stg 1	-	-	- 5.84 -
Critical Hdwy Stg 2	-	-	- 5.84 -
Follow-up Hdwy	2.22	-	- 3.52 3.32
Pot Cap-1 Maneuver	1230	-	- 559 853
Stage 1	-	-	- 704 -
Stage 2	-	-	- 916 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1230	-	- 557 853
Mov Cap-2 Maneuver	-	-	- 603 -
Stage 1	-	-	- 704 -
Stage 2	-	-	- 912 -

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1230	-	-	-	853
HCM Lane V/C Ratio	0.004	-	-	-	0.014
HCM Control Delay (s)	7.9	-	-	-	9.3
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Timings
1: Jackson Creek Pkwy & Baptist Rd

Existing Traffic
PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑	↑	↑↑	↑↑	↑	↑↑	↑↑	↑	↑↑	↑↑	↑
Traffic Volume (vph)	569	495	64	93	327	172	79	329	64	261	219	283
Future Volume (vph)	569	495	64	93	327	172	79	329	64	261	219	283
Turn Type	Prot	NA	Perm									
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases				4		8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	22.0	22.0	13.0	22.0	22.0	9.0	22.0	22.0	9.0	22.0	22.0
Total Split (s)	30.0	60.0	60.0	15.0	45.0	45.0	15.0	25.0	25.0	20.0	30.0	30.0
Total Split (%)	25.0%	50.0%	50.0%	12.5%	37.5%	37.5%	12.5%	20.8%	20.8%	16.7%	25.0%	25.0%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-3.0	-2.0	-2.0	-3.0	-2.0	-2.0	-3.0	-2.0	-2.0	-3.0	0.0
Total Lost Time (s)	3.0	3.0	4.0	3.0	3.0	4.0	3.0	3.0	4.0	3.0	3.0	6.0
Lead/Lag	Lead	Lag	Lag									
Lead-Lag Optimize?	Yes											
Recall Mode	Max											
Act Effect Green (s)	27.0	57.0	56.0	12.0	42.0	41.0	12.0	22.0	21.0	17.0	27.0	24.0
Actuated g/C Ratio	0.22	0.48	0.47	0.10	0.35	0.34	0.10	0.18	0.18	0.14	0.22	0.20
v/c Ratio	0.78	0.31	0.08	0.29	0.28	0.28	0.24	0.52	0.16	0.55	0.28	0.53
Control Delay	51.6	20.0	0.5	52.5	28.9	5.1	51.7	47.6	0.8	52.8	39.7	8.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.6	20.0	0.5	52.5	28.9	5.1	51.7	47.6	0.8	52.8	39.7	8.5
LOS	D	C	A	D	C	A	D	D	A	D	D	A
Approach Delay		34.9			25.7			41.9			32.6	
Approach LOS		C			C			D			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Natural Cycle: 70

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 33.5

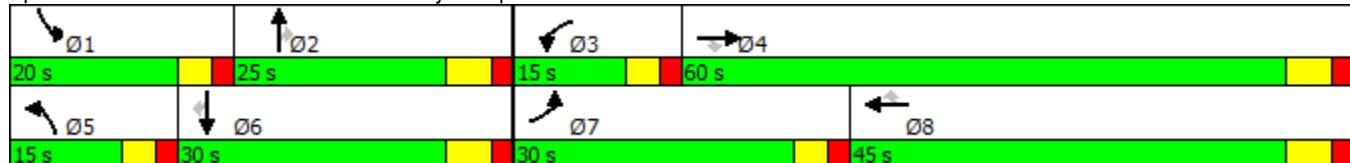
Intersection LOS: C

Intersection Capacity Utilization 55.1%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 1: Jackson Creek Pkwy & Baptist Rd



Queues

Existing Traffic

1: Jackson Creek Pkwy & Baptist Rd

PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	599	521	67	99	348	183	81	339	66	269	226	292
v/c Ratio	0.78	0.31	0.08	0.29	0.28	0.28	0.24	0.52	0.16	0.55	0.28	0.53
Control Delay	51.6	20.0	0.5	52.5	28.9	5.1	51.7	47.6	0.8	52.8	39.7	8.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.6	20.0	0.5	52.5	28.9	5.1	51.7	47.6	0.8	52.8	39.7	8.5
Queue Length 50th (ft)	226	127	0	37	101	0	30	126	0	101	76	0
Queue Length 95th (ft)	292	166	4	65	140	50	55	175	0	146	113	75
Internal Link Dist (ft)		775			3072			531			413	
Turn Bay Length (ft)	435			265			435		280	175		175
Base Capacity (vph)	772	1681	801	343	1238	661	343	648	412	486	796	550
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.78	0.31	0.08	0.29	0.28	0.28	0.24	0.52	0.16	0.55	0.28	0.53

Intersection Summary

Timings
2: Leather Chaps Dr & Baptist Rd

Existing Traffic
PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↑	↑	↑	↑	↑
Traffic Volume (vph)	166	482	20	7	404	36	27	4	75	6	141
Future Volume (vph)	166	482	20	7	404	36	27	4	75	6	141
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA	Perm
Protected Phases					4		8		2		6
Permitted Phases	4			4	8		8	2		6	6
Detector Phase	4	4	4	8	8	8	2	2	6	6	6
Switch Phase											
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Total Split (s)	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
Total Split (%)	83.3%	83.3%	83.3%	83.3%	83.3%	83.3%	83.3%	16.7%	16.7%	16.7%	16.7%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag											
Lead-Lag Optimize?											
Recall Mode	None	None	None	None	None	None	Max	Max	Max	Max	Max
Act Effect Green (s)	11.8	11.8	11.8	11.8	11.8	11.8	10.1	10.1	10.1	10.1	10.1
Actuated g/C Ratio	0.37	0.37	0.37	0.37	0.37	0.37	0.31	0.31	0.31	0.31	0.31
v/c Ratio	0.50	0.37	0.03	0.02	0.35	0.07	0.12	0.04	0.25	0.25	0.29
Control Delay	13.1	7.9	2.9	5.9	7.8	2.8	10.5	7.0	11.5	4.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.1	7.9	2.9	5.9	7.8	2.8	10.5	7.0	11.5	4.0	
LOS	B	A	A	A	A	A	B	A	B	A	
Approach Delay		9.1			7.4			9.4		6.7	
Approach LOS		A			A			A		A	

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 32.1

Natural Cycle: 40

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.50

Intersection Signal Delay: 8.1

Intersection LOS: A

Intersection Capacity Utilization 44.0%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: Leather Chaps Dr & Baptist Rd



Queues
2: Leather Chaps Dr & Baptist Rd

Existing Traffic
PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	166	482	20	8	459	41	50	22	105	183
v/c Ratio	0.50	0.37	0.03	0.02	0.35	0.07	0.12	0.04	0.25	0.29
Control Delay	13.1	7.9	2.9	5.9	7.8	2.8	10.5	7.0	11.5	4.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.1	7.9	2.9	5.9	7.8	2.8	10.5	7.0	11.5	4.0
Queue Length 50th (ft)	20	28	0	1	26	0	6	1	12	0
Queue Length 95th (ft)	51	48	6	5	44	9	14	6	37	20
Internal Link Dist (ft)	3072			2638				332	326	
Turn Bay Length (ft)	575	200		335	335					
Base Capacity (vph)	909	3539	1583	889	3539	1583	405	538	427	625
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.14	0.01	0.01	0.13	0.03	0.12	0.04	0.25	0.29

Intersection Summary

Timings
3: Gleneagle Dr & Baptist Rd

Existing Traffic
PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations	↑ ↗	↑↑ ↗	↗ ↗	↗	↑↑ ↗	↗ ↗	↗ ↗	↗ ↗	↗ ↗	↑ ↗	↗ ↗
Traffic Volume (vph)	38	395	177	15	226	19	164	13	15	14	31
Future Volume (vph)	38	395	177	15	226	19	164	13	15	14	31
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA	Perm
Protected Phases		4				8			2		6
Permitted Phases	4		4	8		8	2		6		6
Detector Phase	4	4	4	8	8	8	2	2	6	6	6
Switch Phase											
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Total Split (s)	75.0	75.0	75.0	75.0	75.0	75.0	15.0	15.0	15.0	15.0	15.0
Total Split (%)	83.3%	83.3%	83.3%	83.3%	83.3%	83.3%	16.7%	16.7%	16.7%	16.7%	16.7%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag											
Lead-Lag Optimize?											
Recall Mode	None	None	None	None	None	None	Max	Max	Max	Max	Max
Act Effect Green (s)	10.5	10.5	10.5	10.5	10.5	10.5	10.1	10.1	10.1	10.1	10.1
Actuated g/C Ratio	0.34	0.34	0.34	0.34	0.34	0.34	0.33	0.33	0.33	0.33	0.33
v/c Ratio	0.12	0.39	0.31	0.05	0.19	0.04	0.36	0.07	0.04	0.03	0.07
Control Delay	7.3	8.5	2.8	6.7	7.3	3.2	11.4	5.4	8.5	8.3	4.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	7.3	8.5	2.8	6.7	7.3	3.2	11.4	5.4	8.5	8.3	4.3
LOS	A	A	A	A	A	A	B	A	A	A	A
Approach Delay		6.8			6.9			10.2		6.3	
Approach LOS		A			A			B		A	

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 30.6

Natural Cycle: 40

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.39

Intersection Signal Delay: 7.3

Intersection LOS: A

Intersection Capacity Utilization 42.5%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: Gleneagle Dr & Baptist Rd



Queues
3: Gleneagle Dr & Baptist Rd

Existing Traffic
PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR	
Lane Group Flow (vph)	46	476	213	16	235	20	164	42	18	17	37	
v/c Ratio	0.12	0.39	0.31	0.05	0.19	0.04	0.36	0.07	0.04	0.03	0.07	
Control Delay	7.3	8.5	2.8	6.7	7.3	3.2	11.4	5.4	8.5	8.3	4.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	7.3	8.5	2.8	6.7	7.3	3.2	11.4	5.4	8.5	8.3	4.3	
Queue Length 50th (ft)	5	28	0	2	13	0	18	1	2	2	0	
Queue Length 95th (ft)	14	43	17	7	24	6	55	14	10	9	10	
Internal Link Dist (ft)	2638			942			522			369		
Turn Bay Length (ft)	640		315		500		500		75		50	
Base Capacity (vph)	1127	3539	1583	894	3539	1583	457	568	447	613	546	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.04	0.13	0.13	0.02	0.07	0.01	0.36	0.07	0.04	0.03	0.07	

Intersection Summary

Intersection

Int Delay, s/veh 8.7

Movement	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	19	102	21	4	102	23	31	18	16	13	27	10
Future Vol, veh/h	19	102	21	4	102	23	31	18	16	13	27	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	100	100	100	77	77	77	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	120	25	4	102	23	40	23	21	13	27	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	235	183	32	244	177	34	37	0	0	44	0	0
Stage 1	58	58	-	114	114	-	-	-	-	-	-	-
Stage 2	177	125	-	130	63	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	720	711	1042	710	717	1039	1574	-	-	1564	-	-
Stage 1	954	847	-	891	801	-	-	-	-	-	-	-
Stage 2	825	792	-	874	842	-	-	-	-	-	-	-
Platoon blocked, %							-	-	-	-	-	-
Mov Cap-1 Maneuver	609	687	1042	585	693	1039	1574	-	-	1564	-	-
Mov Cap-2 Maneuver	609	687	-	585	693	-	-	-	-	-	-	-
Stage 1	929	840	-	868	780	-	-	-	-	-	-	-
Stage 2	683	771	-	726	835	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.6	11	3.5	1.9
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1574	-	-	711	732	1564	-	-
HCM Lane V/C Ratio	0.026	-	-	0.235	0.176	0.008	-	-
HCM Control Delay (s)	7.3	0	-	11.6	11	7.3	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.9	0.6	0	-	-

HCM 2010 TWSC
33: Baptist Rd & Kingswood Dr

Existing Traffic
PM Peak Hour

Intersection

Int Delay, s/veh 0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑↑	↑↑	↑	↑↑	
Traffic Vol, veh/h	6	452	313	2	2	3
Future Vol, veh/h	6	452	313	2	2	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	265	-	-	500	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	6	471	340	2	2	3

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	340	0	-
Stage 1	-	-	340
Stage 2	-	-	248
Critical Hdwy	4.14	-	-
Critical Hdwy Stg 1	-	-	5.84
Critical Hdwy Stg 2	-	-	5.84
Follow-up Hdwy	2.22	-	-
Pot Cap-1 Maneuver	1216	-	-
Stage 1	-	-	692
Stage 2	-	-	770
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1216	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	692
Stage 2	-	-	766

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	10.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1216	-	-	-	682
HCM Lane V/C Ratio	0.005	-	-	-	0.008
HCM Control Delay (s)	8	-	-	-	10.3
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Timings

1: Jackson Creek Pkwy & Baptist Rd

Short-Term Background Traffic

AM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑	↑	↑↑	↑↑	↑	↑↑	↑↑	↑	↑↑	↑↑	↑
Traffic Volume (vph)	255	256	43	57	572	150	86	166	62	111	129	382
Future Volume (vph)	255	256	43	57	572	150	86	166	62	111	129	382
Turn Type	Prot	NA	Perm									
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases				4		8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	22.0	22.0	13.0	22.0	22.0	9.0	22.0	22.0	9.0	22.0	22.0
Total Split (s)	20.0	60.0	60.0	15.0	55.0	55.0	15.0	30.0	30.0	15.0	30.0	30.0
Total Split (%)	16.7%	50.0%	50.0%	12.5%	45.8%	45.8%	12.5%	25.0%	25.0%	12.5%	25.0%	25.0%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-3.0	-2.0	-2.0	-3.0	-2.0	-2.0	-3.0	-2.0	-2.0	-3.0	0.0
Total Lost Time (s)	3.0	3.0	4.0	3.0	3.0	4.0	3.0	3.0	4.0	3.0	3.0	6.0
Lead/Lag	Lead	Lag	Lag									
Lead-Lag Optimize?	Yes											
Recall Mode	Max											
Act Effect Green (s)	17.0	57.0	56.0	12.0	52.0	51.0	12.0	27.0	26.0	12.0	27.0	24.0
Actuated g/C Ratio	0.14	0.48	0.47	0.10	0.43	0.42	0.10	0.22	0.22	0.10	0.22	0.20
v/c Ratio	0.58	0.17	0.06	0.17	0.37	0.20	0.30	0.25	0.17	0.33	0.16	0.66
Control Delay	53.4	18.3	0.1	50.8	23.9	4.0	52.6	39.2	2.5	53.1	38.1	13.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.4	18.3	0.1	50.8	23.9	4.0	52.6	39.2	2.5	53.1	38.1	13.3
LOS	D	B	A	D	C	A	D	D	A	D	D	B
Approach Delay		33.1			22.0			35.6			25.5	
Approach LOS		C			C			D			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Natural Cycle: 70

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.66

Intersection Signal Delay: 27.9

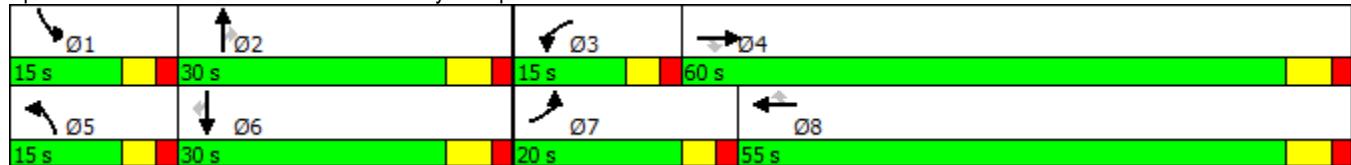
Intersection LOS: C

Intersection Capacity Utilization 54.5%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: Jackson Creek Pkwy & Baptist Rd



Queues

1: Jackson Creek Pkwy & Baptist Rd

Short-Term Background Traffic

AM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	280	281	47	57	572	150	102	198	74	112	130	386
v/c Ratio	0.58	0.17	0.06	0.17	0.37	0.20	0.30	0.25	0.17	0.33	0.16	0.66
Control Delay	53.4	18.3	0.1	50.8	23.9	4.0	52.6	39.2	2.5	53.1	38.1	13.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.4	18.3	0.1	50.8	23.9	4.0	52.6	39.2	2.5	53.1	38.1	13.3
Queue Length 50th (ft)	105	63	0	21	154	0	38	66	0	42	43	31
Queue Length 95th (ft)	152	91	0	42	200	39	61	94	6	71	71	135
Internal Link Dist (ft)	775			3072			531			413		
Turn Bay Length (ft)	435			265			435			280		
Base Capacity (vph)	486	1681	801	343	1533	759	343	796	435	343	796	587
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.17	0.06	0.17	0.37	0.20	0.30	0.25	0.17	0.33	0.16	0.66

Intersection Summary

Timings
2: Leather Chaps Dr & Baptist Rd

Short-Term Background Traffic
AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations	↑ ↗	↑↑ ↗	↗ ↗	↗	↑↑ ↗	↗ ↗	↗ ↗	↗ ↗	↑	↗ ↗	↗ ↗
Traffic Volume (vph)	55	245	16	8	697	36	23	1	32	6	275
Future Volume (vph)	55	245	16	8	697	36	23	1	32	6	275
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA	Perm
Protected Phases					4		8		2		6
Permitted Phases	4			4	8		8	2		6	6
Detector Phase	4	4	4	8	8	8	2	2	6	6	6
Switch Phase											
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Total Split (s)	75.0	75.0	75.0	75.0	75.0	75.0	75.0	15.0	15.0	15.0	15.0
Total Split (%)	83.3%	83.3%	83.3%	83.3%	83.3%	83.3%	16.7%	16.7%	16.7%	16.7%	16.7%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag											
Lead-Lag Optimize?											
Recall Mode	None	None	None	None	None	None	Max	Max	Max	Max	Max
Act Effect Green (s)	14.3	14.3	14.3	14.3	14.3	14.3	10.1	10.1	10.1	10.1	10.1
Actuated g/C Ratio	0.42	0.42	0.42	0.42	0.42	0.42	0.29	0.29	0.29	0.29	0.29
v/c Ratio	0.23	0.17	0.02	0.02	0.55	0.06	0.07	0.01	0.10	0.45	
Control Delay	8.8	6.4	2.5	5.6	9.1	2.6	10.8	8.0	10.9	5.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	8.8	6.4	2.5	5.6	9.1	2.6	10.8	8.0	10.9	5.0	
LOS	A	A	A	A	A	A	B	A	B	A	
Approach Delay		6.6			8.7			10.4		5.7	
Approach LOS		A			A			B		A	

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 34.4

Natural Cycle: 40

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.55

Intersection Signal Delay: 7.7

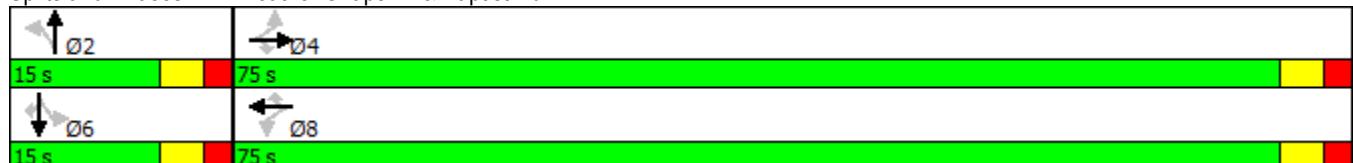
Intersection LOS: A

Intersection Capacity Utilization 52.1%

ICU Level of Service A

Analysis Period (min) 15

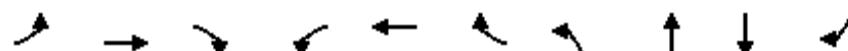
Splits and Phases: 2: Leather Chaps Dr & Baptist Rd



Queues
2: Leather Chaps Dr & Baptist Rd

Short-Term Background Traffic

AM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	55	245	16	9	810	42	27	5	42	299
v/c Ratio	0.23	0.17	0.02	0.02	0.55	0.06	0.07	0.01	0.10	0.45
Control Delay	8.8	6.4	2.5	5.6	9.1	2.6	10.8	8.0	10.9	5.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	8.8	6.4	2.5	5.6	9.1	2.6	10.8	8.0	10.9	5.0
Queue Length 50th (ft)	6	13	0	1	54	0	3	0	5	2
Queue Length 95th (ft)	20	25	5	5	79	8	16	5	22	43
Internal Link Dist (ft)	3072			2632			332		326	
Turn Bay Length (ft)	575	200		335	335					
Base Capacity (vph)	589	3539	1583	1118	3539	1583	397	481	433	661
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.07	0.01	0.01	0.23	0.03	0.07	0.01	0.10	0.45

Intersection Summary

Timings
3: Gleneagle Dr & Baptist Rd

Short-Term Background Traffic
AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations	↑ ↗	↑↑ ↗	↗ ↗	↗	↑↑ ↗	↗	↗ ↗	↗	↗	↑ ↗	↗
Traffic Volume (vph)	48	143	89	39	485	21	167	5	36	12	90
Future Volume (vph)	48	143	89	39	485	21	167	5	36	12	90
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA	Perm
Protected Phases		4				8			2		6
Permitted Phases	4		4	8		8	2		6		6
Detector Phase	4	4	4	8	8	8	2	2	6	6	6
Switch Phase											
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Total Split (s)	75.0	75.0	75.0	75.0	75.0	75.0	15.0	15.0	15.0	15.0	15.0
Total Split (%)	83.3%	83.3%	83.3%	83.3%	83.3%	83.3%	16.7%	16.7%	16.7%	16.7%	16.7%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag											
Lead-Lag Optimize?											
Recall Mode	None	None	None	None	None	None	Max	Max	Max	Max	Max
Act Effect Green (s)	11.0	11.0	11.0	11.0	11.0	11.0	10.1	10.1	10.1	10.1	10.1
Actuated g/C Ratio	0.35	0.35	0.35	0.35	0.35	0.35	0.32	0.32	0.32	0.32	0.32
v/c Ratio	0.17	0.11	0.14	0.11	0.46	0.04	0.41	0.05	0.09	0.02	0.18
Control Delay	8.1	6.7	2.6	7.0	8.9	3.4	12.4	5.3	9.1	8.6	3.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	8.1	6.7	2.6	7.0	8.9	3.4	12.4	5.3	9.1	8.6	3.6
LOS	A	A	A	A	A	A	B	A	A	A	A
Approach Delay		5.7			8.6			11.4		5.5	
Approach LOS		A			A			B		A	

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 31.1

Natural Cycle: 40

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.46

Intersection Signal Delay: 8.0

Intersection LOS: A

Intersection Capacity Utilization 45.2%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: Gleneagle Dr & Baptist Rd



Queues
3: Gleneagle Dr & Baptist Rd

Short-Term Background Traffic
AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	48	143	89	46	577	25	184	29	42	14	105
v/c Ratio	0.17	0.11	0.14	0.11	0.46	0.04	0.41	0.05	0.09	0.02	0.18
Control Delay	8.1	6.7	2.6	7.0	8.9	3.4	12.4	5.3	9.1	8.6	3.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	8.1	6.7	2.6	7.0	8.9	3.4	12.4	5.3	9.1	8.6	3.6
Queue Length 50th (ft)	5	7	0	5	35	0	22	1	4	1	0
Queue Length 95th (ft)	16	16	13	14	53	6	62	11	18	8	17
Internal Link Dist (ft)	2632			948			513			372	
Turn Bay Length (ft)	640	315		500	500		75	50			
Base Capacity (vph)	810	3539	1583	1231	3539	1583	450	544	444	602	583
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.04	0.06	0.04	0.16	0.02	0.41	0.05	0.09	0.02	0.18

Intersection Summary

HCM 2010 TWSC
4: Baptist Rd & Sanctuary Rim

Short-Term Background Traffic
AM Peak Hour

Intersection

Int Delay, s/veh 3.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations	↑	↑	↑	↑	↑	↑	
Traffic Vol, veh/h	32	156		178	6	29	96
Future Vol, veh/h	32	156		178	6	29	96
Conflicting Peds, #/hr	0	0		0	0	0	0
Sign Control	Free	Free		Free	Free	Stop	Stop
RT Channelized	-	None		-	None	-	None
Storage Length	300	-		-	225	0	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	35	170		193	7	32	104

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	193	0	-	0	432	193
Stage 1	-	-	-	-	193	-
Stage 2	-	-	-	-	239	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1380	-	-	-	581	849
Stage 1	-	-	-	-	840	-
Stage 2	-	-	-	-	801	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1380	-	-	-	566	849
Mov Cap-2 Maneuver	-	-	-	-	566	-
Stage 1	-	-	-	-	840	-
Stage 2	-	-	-	-	781	-

Approach	EB		WB		SB	
HCM Control Delay, s	1.3		0		10.2	
HCM LOS					B	

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1380	-	-	-	566	849
HCM Lane V/C Ratio	0.025	-	-	-	0.056	0.123
HCM Control Delay (s)	7.7	-	-	-	11.7	9.8
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2	0.4

Intersection

Int Delay, s/veh 10.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	95	77	6	141	40	28	17	8	20	51	15
Future Vol, veh/h	12	95	77	6	141	40	28	17	8	20	51	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	64	64	64	100	100	100	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	114	93	9	220	63	28	17	8	22	57	17

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	329	192	66	291	196	21	74	0	0	25	0	0
Stage 1	111	111	-	77	77	-	-	-	-	-	-	-
Stage 2	218	81	-	214	119	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	624	703	998	661	699	1056	1526	-	-	1589	-	-
Stage 1	894	804	-	932	831	-	-	-	-	-	-	-
Stage 2	784	828	-	788	797	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	428	680	998	509	676	1056	1526	-	-	1589	-	-
Mov Cap-2 Maneuver	428	680	-	509	676	-	-	-	-	-	-	-
Stage 1	877	793	-	914	815	-	-	-	-	-	-	-
Stage 2	528	812	-	603	786	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.8	13.3	3.9	1.7
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1526	-	-	751	724	1589	-	-
HCM Lane V/C Ratio	0.018	-	-	0.295	0.404	0.014	-	-
HCM Control Delay (s)	7.4	0	-	11.8	13.3	7.3	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	1.2	2	0	-	-

Intersection

Int Delay, s/veh 0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑↑	↑↑	↑	↑	
Traffic Vol, veh/h	4	196		537	0	0
Future Vol, veh/h	4	196		537	0	0
Conflicting Peds, #/hr	0	0		0	0	0
Sign Control	Free	Free		Free	Free	Stop
RT Channelized	-	None		-	None	-
Storage Length	265	-		-	500	0
Veh in Median Storage, #	-	0		0	-	1
Grade, %	-	0		0	-	0
Peak Hour Factor	79	79		100	100	67
Heavy Vehicles, %	2	2		2	2	2
Mvmt Flow	5	248		537	0	12

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	537	0	-	0	671	269
Stage 1	-	-	-	-	537	-
Stage 2	-	-	-	-	134	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1027	-	-	-	390	729
Stage 1	-	-	-	-	550	-
Stage 2	-	-	-	-	878	-
Platoon blocked, %	-	-	-	-		
Mov Cap-1 Maneuver	1027	-	-	-	388	729
Mov Cap-2 Maneuver	-	-	-	-	465	-
Stage 1	-	-	-	-	550	-
Stage 2	-	-	-	-	874	-

Approach	EB		WB		SB	
HCM Control Delay, s	0.2		0		10	
HCM LOS					B	

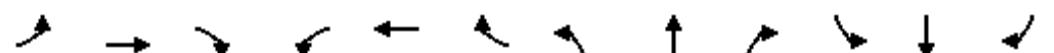
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1027	-	-	-	729	
HCM Lane V/C Ratio	0.005	-	-	-	0.016	
HCM Control Delay (s)	8.5	-	-	-	10	
HCM Lane LOS	A	-	-	-	B	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

Timings

1: Jackson Creek Pkwy & Baptist Rd

Short-Term Background Traffic

PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑	↑	↑↑	↑↑	↑	↑↑	↑↑	↑	↑↑	↑↑	↑
Traffic Volume (vph)	611	648	84	102	410	215	100	337	78	321	229	333
Future Volume (vph)	611	648	84	102	410	215	100	337	78	321	229	333
Turn Type	Prot	NA	Perm									
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases				4		8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	22.0	22.0	13.0	22.0	22.0	9.0	22.0	22.0	9.0	22.0	22.0
Total Split (s)	30.0	60.0	60.0	15.0	45.0	45.0	15.0	24.0	24.0	21.0	30.0	30.0
Total Split (%)	25.0%	50.0%	50.0%	12.5%	37.5%	37.5%	12.5%	20.0%	20.0%	17.5%	25.0%	25.0%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-3.0	-2.0	-2.0	-3.0	-2.0	-2.0	-3.0	-2.0	-2.0	-3.0	0.0
Total Lost Time (s)	3.0	3.0	4.0	3.0	3.0	4.0	3.0	3.0	4.0	3.0	3.0	6.0
Lead/Lag	Lead	Lag	Lag									
Lead-Lag Optimize?	Yes											
Recall Mode	Max											
Act Effect Green (s)	27.0	57.0	56.0	12.0	42.0	41.0	12.0	21.0	20.0	18.0	27.0	24.0
Actuated g/C Ratio	0.22	0.48	0.47	0.10	0.35	0.34	0.10	0.18	0.17	0.15	0.22	0.20
v/c Ratio	0.83	0.41	0.11	0.32	0.35	0.33	0.30	0.56	0.18	0.64	0.30	0.58
Control Delay	55.0	21.4	0.3	53.0	29.9	4.9	52.7	49.3	0.9	54.5	39.8	8.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.0	21.4	0.3	53.0	29.9	4.9	52.7	49.3	0.9	54.5	39.8	8.6
LOS	D	C	A	D	C	A	D	D	A	D	D	A
Approach Delay		35.4			25.8			42.6			33.4	
Approach LOS		D			C			D			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Natural Cycle: 70

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 33.9

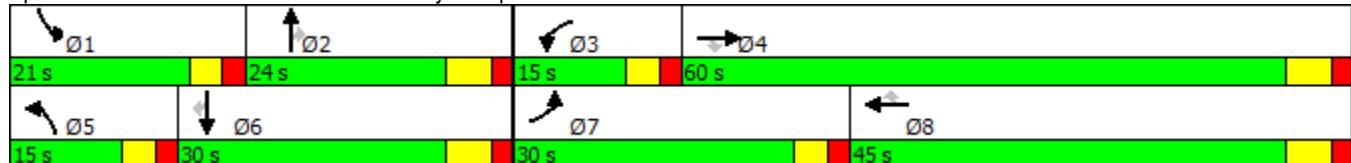
Intersection LOS: C

Intersection Capacity Utilization 60.6%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 1: Jackson Creek Pkwy & Baptist Rd



Queues

1: Jackson Creek Pkwy & Baptist Rd

Short-Term Background Traffic

PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	643	682	88	109	436	229	103	347	80	331	236	343
v/c Ratio	0.83	0.41	0.11	0.32	0.35	0.33	0.30	0.56	0.18	0.64	0.30	0.58
Control Delay	55.0	21.4	0.3	53.0	29.9	4.9	52.7	49.3	0.9	54.5	39.8	8.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.0	21.4	0.3	53.0	29.9	4.9	52.7	49.3	0.9	54.5	39.8	8.6
Queue Length 50th (ft)	246	176	0	41	131	0	38	131	0	125	80	0
Queue Length 95th (ft)	#322	224	0	70	175	54	67	181	0	176	118	82
Internal Link Dist (ft)		775			3072			531			413	
Turn Bay Length (ft)	435			265			435			280	175	175
Base Capacity (vph)	772	1681	826	343	1238	691	343	619	438	514	796	591
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.83	0.41	0.11	0.32	0.35	0.33	0.30	0.56	0.18	0.64	0.30	0.58

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Timings
2: Leather Chaps Dr & Baptist Rd

Short-Term Background Traffic
PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↑	↑	↑	↑	↑
Traffic Volume (vph)	190	745	20	7	508	41	27	4	86	6	160
Future Volume (vph)	190	745	20	7	508	41	27	4	86	6	160
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA	Perm
Protected Phases					4		8		2		6
Permitted Phases	4			4	8		8	2		6	6
Detector Phase	4	4	4	8	8	8	2	2	6	6	6
Switch Phase											
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Total Split (s)	75.0	75.0	75.0	75.0	75.0	75.0	75.0	15.0	15.0	15.0	15.0
Total Split (%)	83.3%	83.3%	83.3%	83.3%	83.3%	83.3%	16.7%	16.7%	16.7%	16.7%	16.7%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag											
Lead-Lag Optimize?											
Recall Mode	None	None	None	None	None	None	Max	Max	Max	Max	Max
Act Effect Green (s)	16.0	16.0	16.0	16.0	16.0	16.0	10.2	10.2	10.2	10.2	10.2
Actuated g/C Ratio	0.44	0.44	0.44	0.44	0.44	0.44	0.28	0.28	0.28	0.28	0.28
v/c Ratio	0.53	0.48	0.03	0.03	0.37	0.07	0.14	0.05	0.32	0.35	
Control Delay	13.2	8.0	2.4	5.3	7.2	2.2	13.4	8.9	15.3	4.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	13.2	8.0	2.4	5.3	7.2	2.2	13.4	8.9	15.3	4.9	
LOS	B	A	A	A	A	A	B	A	B	A	
Approach Delay		8.9			6.8			12.0		8.7	
Approach LOS		A			A			B		A	

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 36.4

Natural Cycle: 40

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.53

Intersection Signal Delay: 8.3

Intersection LOS: A

Intersection Capacity Utilization 48.8%

ICU Level of Service A

Analysis Period (min) 15

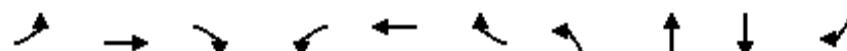
Splits and Phases: 2: Leather Chaps Dr & Baptist Rd



Queues
2: Leather Chaps Dr & Baptist Rd

Short-Term Background Traffic

PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	190	745	20	8	577	47	50	22	120	208
v/c Ratio	0.53	0.48	0.03	0.03	0.37	0.07	0.14	0.05	0.32	0.35
Control Delay	13.2	8.0	2.4	5.3	7.2	2.2	13.4	8.9	15.3	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.2	8.0	2.4	5.3	7.2	2.2	13.4	8.9	15.3	4.9
Queue Length 50th (ft)	24	48	0	1	35	0	7	1	18	0
Queue Length 95th (ft)	61	74	5	5	54	9	18	7	52	25
Internal Link Dist (ft)	3072			2638				332	326	
Turn Bay Length (ft)	575	200		335	335					
Base Capacity (vph)	810	3539	1583	659	3539	1583	354	479	377	593
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.21	0.01	0.01	0.16	0.03	0.14	0.05	0.32	0.35

Intersection Summary

Timings
3: Gleneagle Dr & Baptist Rd

Short-Term Background Traffic
PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations	↑ ↗	↑↑ ↗	↗ ↗	↗	↑↑ ↗	↗ ↗	↗ ↗	↗ ↗	↗ ↗	↑ ↗	↗ ↗
Traffic Volume (vph)	98	561	180	36	323	39	167	15	27	16	66
Future Volume (vph)	98	561	180	36	323	39	167	15	27	16	66
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA	Perm
Protected Phases					4		8		2		6
Permitted Phases	4			4	8		8	2		6	6
Detector Phase	4	4	4	8	8	8	2	2	6	6	6
Switch Phase											
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Total Split (s)	75.0	75.0	75.0	75.0	75.0	75.0	75.0	15.0	15.0	15.0	15.0
Total Split (%)	83.3%	83.3%	83.3%	83.3%	83.3%	83.3%	16.7%	16.7%	16.7%	16.7%	16.7%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag											
Lead-Lag Optimize?											
Recall Mode	None	None	None	None	None	None	Max	Max	Max	Max	Max
Act Effect Green (s)	14.1	14.1	14.1	14.1	14.1	14.1	10.1	10.1	10.1	10.1	10.1
Actuated g/C Ratio	0.41	0.41	0.41	0.41	0.41	0.41	0.29	0.29	0.29	0.29	0.29
v/c Ratio	0.28	0.47	0.28	0.13	0.23	0.06	0.41	0.13	0.08	0.03	0.15
Control Delay	8.3	8.3	2.2	6.9	6.7	2.6	14.7	6.0	11.1	10.6	4.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	8.3	8.3	2.2	6.9	6.7	2.6	14.7	6.0	11.1	10.6	4.7
LOS	A	A	A	A	A	A	B	A	B	B	A
Approach Delay		7.0			6.3			12.2		7.2	
Approach LOS		A			A			B		A	

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 34.3

Natural Cycle: 40

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.47

Intersection Signal Delay: 7.5

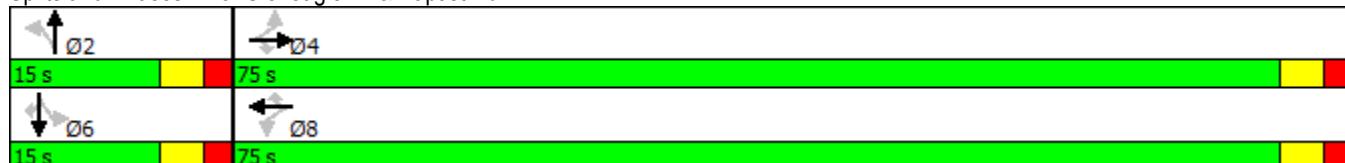
Intersection LOS: A

Intersection Capacity Utilization 47.3%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: Gleneagle Dr & Baptist Rd



Queues
3: Gleneagle Dr & Baptist Rd

Short-Term Background Traffic
PM Peak Hour



Lane Group	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR	
Lane Group Flow (vph)	118	676	217	38	336	41	167	68	33	19	80	
v/c Ratio	0.28	0.47	0.28	0.13	0.23	0.06	0.41	0.13	0.08	0.03	0.15	
Control Delay	8.3	8.3	2.2	6.9	6.7	2.6	14.7	6.0	11.1	10.6	4.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	8.3	8.3	2.2	6.9	6.7	2.6	14.7	6.0	11.1	10.6	4.7	
Queue Length 50th (ft)	13	43	0	4	18	0	24	2	4	2	0	
Queue Length 95th (ft)	30	62	17	14	34	9	73	22	18	13	18	
Internal Link Dist (ft)	2638			942			522			369		
Turn Bay Length (ft)	640		315		500		500		75		50	
Base Capacity (vph)	1023	3539	1583	736	3539	1583	409	522	391	549	522	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.12	0.19	0.14	0.05	0.09	0.03	0.41	0.13	0.08	0.03	0.15	

Intersection Summary

HCM 2010 TWSC
4: Baptist Rd & Sanctuary Rim

Short-Term Background Traffic
PM Peak Hour

Intersection

Int Delay, s/veh 2.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	105	214	193	31	12	65
Future Vol, veh/h	105	214	193	31	12	65
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	300	-	-	225	0	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	114	233	210	34	13	71

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	210	0	-
Stage 1	-	-	210
Stage 2	-	-	461
Critical Hdwy	4.12	-	-
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	2.218	-	-
Pot Cap-1 Maneuver	1361	-	-
Stage 1	-	-	825
Stage 2	-	-	635
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1361	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	825
Stage 2	-	-	582

Approach	EB	WB	SB
HCM Control Delay, s	2.6	0	10.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1361	-	-	-	387	830
HCM Lane V/C Ratio	0.084	-	-	-	0.034	0.085
HCM Control Delay (s)	7.9	-	-	-	14.6	9.7
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.3	-	-	-	0.1	0.3

Intersection

Int Delay, s/veh 11.1

Movement	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	161	40	5	130	27	69	21	19	15	29	25
Future Vol, veh/h	25	161	40	5	130	27	69	21	19	15	29	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	100	100	100	77	77	77	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	29	189	47	5	130	27	90	27	25	15	29	25

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	369	303	42	409	303	40	54	0	0	52	0	0
Stage 1	72	72	-	219	219	-	-	-	-	-	-	-
Stage 2	297	231	-	190	84	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	588	610	1029	553	610	1031	1551	-	-	1554	-	-
Stage 1	938	835	-	783	722	-	-	-	-	-	-	-
Stage 2	712	713	-	812	825	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	448	568	1029	372	568	1031	1551	-	-	1554	-	-
Mov Cap-2 Maneuver	448	568	-	372	568	-	-	-	-	-	-	-
Stage 1	882	827	-	736	679	-	-	-	-	-	-	-
Stage 2	527	670	-	591	817	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.8	13.1	4.7	1.6
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1551	-	-	598	603	1554	-	-
HCM Lane V/C Ratio	0.058	-	-	0.445	0.269	0.01	-	-
HCM Control Delay (s)	7.5	0	-	15.8	13.1	7.3	0	-
HCM Lane LOS	A	A	-	C	B	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	2.3	1.1	0	-	-

Intersection

Int Delay, s/veh 0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑↑	↑↑	↑	↑↑	
Traffic Vol, veh/h	6	635	395	2	2	3
Future Vol, veh/h	6	635	395	2	2	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	265	-	-	500	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	6	661	429	2	2	3

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	429	0	- 0 772 215
Stage 1	-	-	- 429 -
Stage 2	-	-	- 343 -
Critical Hdwy	4.14	-	- - 6.84 6.94
Critical Hdwy Stg 1	-	-	- - 5.84 -
Critical Hdwy Stg 2	-	-	- - 5.84 -
Follow-up Hdwy	2.22	-	- - 3.52 3.32
Pot Cap-1 Maneuver	1127	-	- - 336 790
Stage 1	-	-	- - 624 -
Stage 2	-	-	- - 690 -
Platoon blocked, %	-	-	- -
Mov Cap-1 Maneuver	1127	-	- - 334 790
Mov Cap-2 Maneuver	-	-	- - 450 -
Stage 1	-	-	- - 624 -
Stage 2	-	-	- - 686 -

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	11
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1127	-	-	-	607
HCM Lane V/C Ratio	0.006	-	-	-	0.009
HCM Control Delay (s)	8.2	-	-	-	11
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Timings

1: Jackson Creek Pkwy & Baptist Rd

Short-Term Total Traffic

AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑	↑	↑↑	↑↑	↑	↑↑	↑↑	↑	↑↑	↑↑	↑
Traffic Volume (vph)	255	283	43	65	665	181	86	166	64	122	129	382
Future Volume (vph)	255	283	43	65	665	181	86	166	64	122	129	382
Turn Type	Prot	NA	Perm									
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases				4		8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	22.0	22.0	13.0	22.0	22.0	9.0	22.0	22.0	9.0	22.0	22.0
Total Split (s)	20.0	60.0	60.0	15.0	55.0	55.0	15.0	30.0	30.0	15.0	30.0	30.0
Total Split (%)	16.7%	50.0%	50.0%	12.5%	45.8%	45.8%	12.5%	25.0%	25.0%	12.5%	25.0%	25.0%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-3.0	-2.0	-2.0	-3.0	-2.0	-2.0	-3.0	-2.0	-2.0	-3.0	0.0
Total Lost Time (s)	3.0	3.0	4.0	3.0	3.0	4.0	3.0	3.0	4.0	3.0	3.0	6.0
Lead/Lag	Lead	Lag	Lag									
Lead-Lag Optimize?	Yes											
Recall Mode	Max											
Act Effect Green (s)	17.0	57.0	56.0	12.0	52.0	51.0	12.0	27.0	26.0	12.0	27.0	24.0
Actuated g/C Ratio	0.14	0.48	0.47	0.10	0.43	0.42	0.10	0.22	0.22	0.10	0.22	0.20
v/c Ratio	0.58	0.19	0.06	0.19	0.43	0.23	0.30	0.25	0.17	0.36	0.16	0.69
Control Delay	53.4	18.5	0.1	51.1	24.8	3.8	52.6	39.2	2.7	53.7	38.1	17.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.4	18.5	0.1	51.1	24.8	3.8	52.6	39.2	2.7	53.7	38.1	17.6
LOS	D	B	A	D	C	A	D	D	A	D	D	B
Approach Delay		32.5			22.5			35.5			28.7	
Approach LOS		C			C			D			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Natural Cycle: 70

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.69

Intersection Signal Delay: 28.4

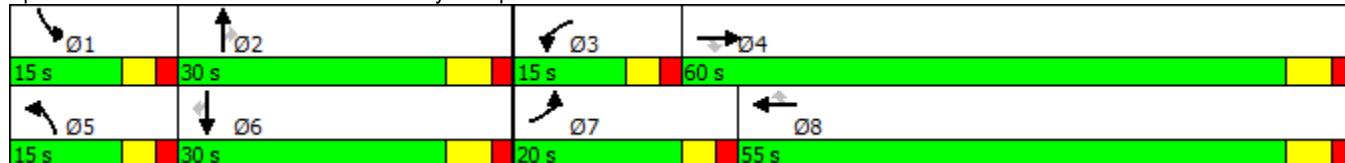
Intersection LOS: C

Intersection Capacity Utilization 57.0%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 1: Jackson Creek Pkwy & Baptist Rd



Queues

1: Jackson Creek Pkwy & Baptist Rd

Short-Term Total Traffic

AM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	280	311	47	65	665	181	102	198	76	123	130	386
v/c Ratio	0.58	0.19	0.06	0.19	0.43	0.23	0.30	0.25	0.17	0.36	0.16	0.69
Control Delay	53.4	18.5	0.1	51.1	24.8	3.8	52.6	39.2	2.7	53.7	38.1	17.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.4	18.5	0.1	51.1	24.8	3.8	52.6	39.2	2.7	53.7	38.1	17.6
Queue Length 50th (ft)	105	71	0	24	185	0	38	66	0	46	43	55
Queue Length 95th (ft)	152	100	0	46	236	42	61	94	7	77	71	169
Internal Link Dist (ft)	775			3072			531			413		
Turn Bay Length (ft)	435			265			435			280		
Base Capacity (vph)	486	1681	801	343	1533	776	343	796	435	343	796	559
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.19	0.06	0.19	0.43	0.23	0.30	0.25	0.17	0.36	0.16	0.69

Intersection Summary

Timings
2: Leather Chaps Dr & Baptist Rd

Short-Term Total Traffic
AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↑	↑	↑	↑↑	↑
Traffic Volume (vph)	55	285	16	8	829	39	23	1	33	6	275
Future Volume (vph)	55	285	16	8	829	39	23	1	33	6	275
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA	Perm
Protected Phases					4		8		2		6
Permitted Phases	4			4	8		8	2		6	6
Detector Phase	4	4	4	8	8	8	2	2	6	6	6
Switch Phase											
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Total Split (s)	75.0	75.0	75.0	75.0	75.0	75.0	75.0	15.0	15.0	15.0	15.0
Total Split (%)	83.3%	83.3%	83.3%	83.3%	83.3%	83.3%	16.7%	16.7%	16.7%	16.7%	16.7%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag											
Lead-Lag Optimize?											
Recall Mode	None	None	None	None	None	None	Max	Max	Max	Max	Max
Act Effect Green (s)	17.0	17.0	17.0	17.0	17.0	17.0	10.1	10.1	10.1	10.1	10.1
Actuated g/C Ratio	0.46	0.46	0.46	0.46	0.46	0.46	0.27	0.27	0.27	0.27	0.27
v/c Ratio	0.26	0.18	0.02	0.02	0.60	0.06	0.07	0.01	0.11	0.51	
Control Delay	9.5	5.9	2.2	5.1	9.1	2.3	12.7	9.5	12.8	8.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	9.5	5.9	2.2	5.1	9.1	2.3	12.7	9.5	12.8	8.2	
LOS	A	A	A	A	A	A	B	A	B	A	
Approach Delay		6.3			8.7			12.2		8.8	
Approach LOS		A			A			B		A	

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 37.2

Natural Cycle: 40

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.60

Intersection Signal Delay: 8.3

Intersection LOS: A

Intersection Capacity Utilization 55.8%

ICU Level of Service B

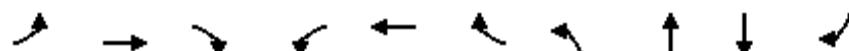
Analysis Period (min) 15

Splits and Phases: 2: Leather Chaps Dr & Baptist Rd



Queues
2: Leather Chaps Dr & Baptist Rd

Short-Term Total Traffic
AM Peak Hour



Lane Group	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	55	285	16	9	964	45	27	5	43	299
v/c Ratio	0.26	0.18	0.02	0.02	0.60	0.06	0.07	0.01	0.11	0.51
Control Delay	9.5	5.9	2.2	5.1	9.1	2.3	12.7	9.5	12.8	8.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.5	5.9	2.2	5.1	9.1	2.3	12.7	9.5	12.8	8.2
Queue Length 50th (ft)	6	15	0	1	67	0	4	0	6	13
Queue Length 95th (ft)	21	28	4	5	96	8	18	6	26	66
Internal Link Dist (ft)	3072			2632			332		326	
Turn Bay Length (ft)	575	200		335	335					
Base Capacity (vph)	460	3539	1583	1075	3539	1583	368	448	399	586
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.08	0.01	0.01	0.27	0.03	0.07	0.01	0.11	0.51

Intersection Summary

Timings
3: Gleneagle Dr & Baptist Rd

Short-Term Total Traffic
AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations	↑ ↗	↑↑ ↗	↗ ↗	↗	↑↑ ↗	↗ ↗	↗ ↗	↗ ↗	↗ ↗	↑ ↗	↗ ↗
Traffic Volume (vph)	48	184	89	43	620	21	167	5	36	12	90
Future Volume (vph)	48	184	89	43	620	21	167	5	36	12	90
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA	Perm
Protected Phases		4				8			2		6
Permitted Phases	4		4	8		8	2		6		6
Detector Phase	4	4	4	8	8	8	2	2	6	6	6
Switch Phase											
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Total Split (s)	75.0	75.0	75.0	75.0	75.0	75.0	15.0	15.0	15.0	15.0	15.0
Total Split (%)	83.3%	83.3%	83.3%	83.3%	83.3%	83.3%	16.7%	16.7%	16.7%	16.7%	16.7%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag											
Lead-Lag Optimize?											
Recall Mode	None	None	None	None	None	None	Max	Max	Max	Max	Max
Act Effect Green (s)	13.3	13.3	13.3	13.3	13.3	13.3	10.1	10.1	10.1	10.1	10.1
Actuated g/C Ratio	0.40	0.40	0.40	0.40	0.40	0.40	0.30	0.30	0.30	0.30	0.30
v/c Ratio	0.18	0.13	0.13	0.11	0.52	0.04	0.44	0.06	0.10	0.03	0.19
Control Delay	8.0	6.3	2.4	6.5	9.0	3.1	14.5	6.1	10.6	9.9	4.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	8.0	6.3	2.4	6.5	9.0	3.1	14.5	6.1	10.6	9.9	4.2
LOS	A	A	A	A	A	A	B	A	B	A	A
Approach Delay		5.5			8.6			13.3		6.4	
Approach LOS		A			A			B		A	

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 33.5

Natural Cycle: 40

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.52

Intersection Signal Delay: 8.4

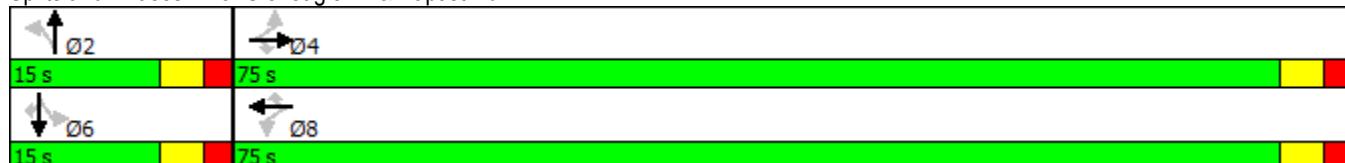
Intersection LOS: A

Intersection Capacity Utilization 48.9%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: Gleneagle Dr & Baptist Rd



Queues
3: Gleneagle Dr & Baptist Rd

Short-Term Total Traffic
AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	48	184	89	51	738	25	184	30	42	14	105
v/c Ratio	0.18	0.13	0.13	0.11	0.52	0.04	0.44	0.06	0.10	0.03	0.19
Control Delay	8.0	6.3	2.4	6.5	9.0	3.1	14.5	6.1	10.6	9.9	4.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	8.0	6.3	2.4	6.5	9.0	3.1	14.5	6.1	10.6	9.9	4.2
Queue Length 50th (ft)	5	10	0	5	47	0	26	1	5	2	0
Queue Length 95th (ft)	17	20	13	15	68	6	73	13	20	10	20
Internal Link Dist (ft)	2632			948			513			372	
Turn Bay Length (ft)	640	315		500	500		75	50			
Base Capacity (vph)	665	3539	1583	1185	3539	1583	419	508	414	560	550
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.05	0.06	0.04	0.21	0.02	0.44	0.06	0.10	0.03	0.19

Intersection Summary

HCM 2010 TWSC
4: Baptist Rd & Sanctuary Rim

Short-Term Total Traffic
AM Peak Hour

Intersection

Int Delay, s/veh 5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	68	156	178	13	39	215
Future Vol, veh/h	68	156	178	13	39	215
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	300	-	-	225	0	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	74	170	193	14	42	234

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	193	0	-
Stage 1	-	-	193
Stage 2	-	-	317
Critical Hdwy	4.12	-	-
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	2.218	-	-
Pot Cap-1 Maneuver	1380	-	-
Stage 1	-	-	840
Stage 2	-	-	738
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1380	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	840
Stage 2	-	-	698

Approach	EB	WB	SB
HCM Control Delay, s	2.4	0	11.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1380	-	-	-	495	849
HCM Lane V/C Ratio	0.054	-	-	-	0.086	0.275
HCM Control Delay (s)	7.8	-	-	-	13	10.8
HCM Lane LOS	A	-	-	-	B	B
HCM 95th %tile Q(veh)	0.2	-	-	-	0.3	1.1

Intersection

Int Delay, s/veh 10.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	98	84	6	143	40	33	17	8	20	51	16
Future Vol, veh/h	14	98	84	6	143	40	33	17	8	20	51	16
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	64	64	64	100	100	100	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	118	101	9	223	63	33	17	8	22	57	18

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	341	202	66	308	207	21	75	0	0	25	0	0
Stage 1	111	111	-	87	87	-	-	-	-	-	-	-
Stage 2	230	91	-	221	120	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	613	694	998	644	690	1056	1524	-	-	1589	-	-
Stage 1	894	804	-	921	823	-	-	-	-	-	-	-
Stage 2	773	820	-	781	796	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	415	669	998	487	665	1056	1524	-	-	1589	-	-
Mov Cap-2 Maneuver	415	669	-	487	665	-	-	-	-	-	-	-
Stage 1	874	793	-	901	805	-	-	-	-	-	-	-
Stage 2	514	802	-	589	785	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.1	13.6	4.2	1.7
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1524	-	-	741	713	1589	-	-
HCM Lane V/C Ratio	0.022	-	-	0.319	0.414	0.014	-	-
HCM Control Delay (s)	7.4	0	-	12.1	13.6	7.3	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	1.4	2	0	-	-

Intersection

Int Delay, s/veh 0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑ ↗	↑ ↘	↑ ↗	↗	↘	↙
Traffic Vol, veh/h	10	232	655	0	0	29
Future Vol, veh/h	10	232	655	0	0	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	265	-	-	500	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	79	79	100	100	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	294	655	0	0	32

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	655	0	-
Stage 1	-	-	655
Stage 2	-	-	172
Critical Hdwy	4.14	-	-
Critical Hdwy Stg 1	-	-	5.84
Critical Hdwy Stg 2	-	-	5.84
Follow-up Hdwy	2.22	-	-
Pot Cap-1 Maneuver	928	-	-
Stage 1	-	-	479
Stage 2	-	-	841
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	928	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	479
Stage 2	-	-	829

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	10.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	928	-	-	-	668
HCM Lane V/C Ratio	0.014	-	-	-	0.047
HCM Control Delay (s)	8.9	-	-	-	10.7
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Timings

1: Jackson Creek Pkwy & Baptist Rd

Short-Term Total Traffic

PM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑	↑	↑↑	↑↑	↑	↑↑	↑↑	↑	↑↑	↑↑	↑
Traffic Volume (vph)	611	741	84	107	471	236	100	337	85	358	229	333
Future Volume (vph)	611	741	84	107	471	236	100	337	85	358	229	333
Turn Type	Prot	NA	Perm									
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases				4		8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	22.0	22.0	13.0	22.0	22.0	9.0	22.0	22.0	9.0	22.0	22.0
Total Split (s)	30.0	60.0	60.0	15.0	45.0	45.0	15.0	23.0	23.0	22.0	30.0	30.0
Total Split (%)	25.0%	50.0%	50.0%	12.5%	37.5%	37.5%	12.5%	19.2%	19.2%	18.3%	25.0%	25.0%
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-3.0	-2.0	-2.0	-3.0	-2.0	-2.0	-3.0	-2.0	-2.0	-3.0	0.0
Total Lost Time (s)	3.0	3.0	4.0	3.0	3.0	4.0	3.0	3.0	4.0	3.0	3.0	6.0
Lead/Lag	Lead	Lag	Lag									
Lead-Lag Optimize?	Yes											
Recall Mode	Max											
Act Effect Green (s)	27.0	57.0	56.0	12.0	42.0	41.0	12.0	20.0	19.0	19.0	27.0	24.0
Actuated g/C Ratio	0.22	0.48	0.47	0.10	0.35	0.34	0.10	0.17	0.16	0.16	0.22	0.20
v/c Ratio	0.83	0.46	0.11	0.33	0.40	0.36	0.30	0.59	0.21	0.68	0.30	0.58
Control Delay	55.0	22.4	0.3	53.2	30.8	4.9	52.7	50.8	1.1	54.7	39.8	8.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.0	22.4	0.3	53.2	30.8	4.9	52.7	50.8	1.1	54.7	39.8	8.6
LOS	D	C	A	D	C	A	D	D	A	D	D	A
Approach Delay		35.0			26.2			43.1			34.3	
Approach LOS		C			C			D			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Natural Cycle: 70

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 34.0

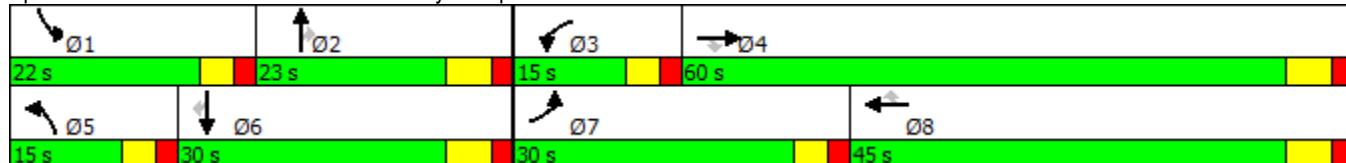
Intersection LOS: C

Intersection Capacity Utilization 63.3%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 1: Jackson Creek Pkwy & Baptist Rd

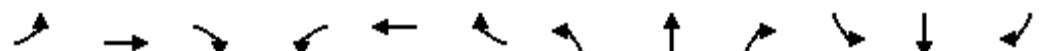


Queues

1: Jackson Creek Pkwy & Baptist Rd

Short-Term Total Traffic

PM Peak Hour



Lane Group	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	643	780	88	114	501	251	103	347	88	369	236	343
v/c Ratio	0.83	0.46	0.11	0.33	0.40	0.36	0.30	0.59	0.21	0.68	0.30	0.58
Control Delay	55.0	22.4	0.3	53.2	30.8	4.9	52.7	50.8	1.1	54.7	39.8	8.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.0	22.4	0.3	53.2	30.8	4.9	52.7	50.8	1.1	54.7	39.8	8.6
Queue Length 50th (ft)	246	208	0	43	153	0	38	132	0	140	80	0
Queue Length 95th (ft)	#322	262	0	73	202	56	67	183	0	193	118	82
Internal Link Dist (ft)		775			3072			531			413	
Turn Bay Length (ft)	435			265			435			280	175	175
Base Capacity (vph)	772	1681	826	343	1238	706	343	589	426	543	796	591
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.83	0.46	0.11	0.33	0.40	0.36	0.30	0.59	0.21	0.68	0.30	0.58

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Timings
2: Leather Chaps Dr & Baptist Rd

Short-Term Total Traffic
PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations	↑ ↗	↑↑ ↗	↗ ↗	↗	↑↑ ↗	↗ ↗	↗ ↗	↗ ↗	↑	↗ ↗	↗ ↗
Traffic Volume (vph)	190	881	20	7	595	43	27	4	90	6	160
Future Volume (vph)	190	881	20	7	595	43	27	4	90	6	160
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA	Perm
Protected Phases					4		8		2		6
Permitted Phases	4			4	8		8	2		6	6
Detector Phase	4	4	4	8	8	8	2	2	6	6	6
Switch Phase											
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Total Split (s)	75.0	75.0	75.0	75.0	75.0	75.0	75.0	15.0	15.0	15.0	15.0
Total Split (%)	83.3%	83.3%	83.3%	83.3%	83.3%	83.3%	16.7%	16.7%	16.7%	16.7%	16.7%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag											
Lead-Lag Optimize?											
Recall Mode	None	None	None	None	None	None	Max	Max	Max	Max	Max
Act Effect Green (s)	18.1	18.1	18.1	18.1	18.1	18.1	10.2	10.2	10.2	10.2	10.2
Actuated g/C Ratio	0.47	0.47	0.47	0.47	0.47	0.47	0.26	0.26	0.26	0.26	0.26
v/c Ratio	0.55	0.53	0.03	0.03	0.41	0.06	0.15	0.05	0.35	0.35	0.36
Control Delay	13.6	8.1	2.2	5.0	7.1	2.0	14.9	9.8	17.2	5.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.6	8.1	2.2	5.0	7.1	2.0	14.9	9.8	17.2	5.3	
LOS	B	A	A	A	A	A	B	A	B	A	
Approach Delay		9.0			6.7			13.3		9.8	
Approach LOS		A			A			B		A	

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 38.5

Natural Cycle: 40

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.55

Intersection Signal Delay: 8.5

Intersection LOS: A

Intersection Capacity Utilization 52.2%

ICU Level of Service A

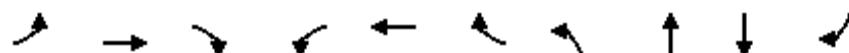
Analysis Period (min) 15

Splits and Phases: 2: Leather Chaps Dr & Baptist Rd



Queues
2: Leather Chaps Dr & Baptist Rd

Short-Term Total Traffic
PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	190	881	20	8	676	49	50	22	125	208
v/c Ratio	0.55	0.53	0.03	0.03	0.41	0.06	0.15	0.05	0.35	0.36
Control Delay	13.6	8.1	2.2	5.0	7.1	2.0	14.9	9.8	17.2	5.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.6	8.1	2.2	5.0	7.1	2.0	14.9	9.8	17.2	5.3
Queue Length 50th (ft)	25	60	0	1	43	0	8	1	20	0
Queue Length 95th (ft)	64	90	5	4	63	8	20	8	58	26
Internal Link Dist (ft)	3072			2638			332		326	
Turn Bay Length (ft)	575	200		335	335					
Base Capacity (vph)	736	3539	1583	535	3539	1583	334	454	357	572
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.25	0.01	0.01	0.19	0.03	0.15	0.05	0.35	0.36

Intersection Summary

Timings
3: Gleneagle Dr & Baptist Rd

Short-Term Total Traffic
PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↑	↑	↑	↑	↑
Traffic Volume (vph)	98	700	180	39	412	39	167	15	27	16	66
Future Volume (vph)	98	700	180	39	412	39	167	15	27	16	66
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA	Perm
Protected Phases					4		8		2		6
Permitted Phases	4			4	8		8	2		6	6
Detector Phase	4	4	4	8	8	8	2	2	6	6	6
Switch Phase											
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Total Split (s)	75.0	75.0	75.0	75.0	75.0	75.0	75.0	15.0	15.0	15.0	15.0
Total Split (%)	83.3%	83.3%	83.3%	83.3%	83.3%	83.3%	16.7%	16.7%	16.7%	16.7%	16.7%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag											
Lead-Lag Optimize?											
Recall Mode	None	None	None	None	None	None	Max	Max	Max	Max	Max
Act Effect Green (s)	16.9	16.9	16.9	16.9	16.9	16.9	10.1	10.1	10.1	10.1	10.1
Actuated g/C Ratio	0.45	0.45	0.45	0.45	0.45	0.45	0.27	0.27	0.27	0.27	0.27
v/c Ratio	0.28	0.52	0.26	0.16	0.27	0.06	0.44	0.15	0.09	0.04	0.16
Control Delay	7.8	8.3	1.9	7.1	6.4	2.3	17.6	6.9	13.1	12.5	5.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	7.8	8.3	1.9	7.1	6.4	2.3	17.6	6.9	13.1	12.5	5.4
LOS	A	A	A	A	A	A	B	A	B	B	A
Approach Delay				7.1			6.1		14.4		8.3
Approach LOS				A			A		B		A

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 37.2

Natural Cycle: 40

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.52

Intersection Signal Delay: 7.8

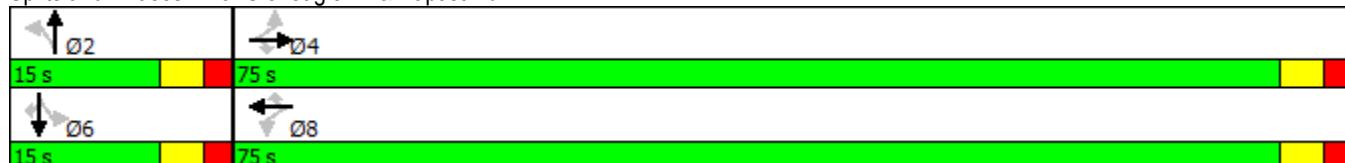
Intersection LOS: A

Intersection Capacity Utilization 51.1%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: Gleneagle Dr & Baptist Rd



Queues
3: Gleneagle Dr & Baptist Rd

Short-Term Total Traffic
PM Peak Hour

Lane Group	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	118	843	217	41	429	41	167	71	33	19	80
v/c Ratio	0.28	0.52	0.26	0.16	0.27	0.06	0.44	0.15	0.09	0.04	0.16
Control Delay	7.8	8.3	1.9	7.1	6.4	2.3	17.6	6.9	13.1	12.5	5.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	7.8	8.3	1.9	7.1	6.4	2.3	17.6	6.9	13.1	12.5	5.4
Queue Length 50th (ft)	13	56	0	4	25	0	27	2	5	3	0
Queue Length 95th (ft)	30	77	15	15	41	8	#86	25	21	14	20
Internal Link Dist (ft)	2638			942			522			369	
Turn Bay Length (ft)	640	315		500	500						
Base Capacity (vph)	935	3539	1583	566	3539	1583	378	488	360	508	489
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.24	0.14	0.07	0.12	0.03	0.44	0.15	0.09	0.04	0.16

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM 2010 TWSC
4: Baptist Rd & Sanctuary Rim

Short-Term Total Traffic
PM Peak Hour

Intersection

Int Delay, s/veh 4.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	226	214	193	56	18	144
Future Vol, veh/h	226	214	193	56	18	144
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	300	-	-	225	0	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	246	233	210	61	20	157

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	210	0	-
Stage 1	-	-	210
Stage 2	-	-	724
Critical Hdwy	4.12	-	-
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	2.218	-	-
Pot Cap-1 Maneuver	1361	-	-
Stage 1	-	-	825
Stage 2	-	-	480
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1361	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	825
Stage 2	-	-	393

Approach	EB	WB	SB
HCM Control Delay, s	4.2	0	11.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1361	-	-	-	242	830
HCM Lane V/C Ratio	0.18	-	-	-	0.081	0.189
HCM Control Delay (s)	8.2	-	-	-	21.2	10.3
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0.7	-	-	-	0.3	0.7

Intersection

Int Delay, s/veh 12.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	28	162	43	5	135	27	88	21	19	15	29	27
Future Vol, veh/h	28	162	43	5	135	27	88	21	19	15	29	27
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	100	100	100	77	77	77	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	33	191	51	5	135	27	114	27	25	15	29	27

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	422	354	43	461	354	40	56	0	0	52	0	0
Stage 1	73	73	-	268	268	-	-	-	-	-	-	-
Stage 2	349	281	-	193	86	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	542	571	1027	511	571	1031	1549	-	-	1554	-	-
Stage 1	937	834	-	738	687	-	-	-	-	-	-	-
Stage 2	667	678	-	809	824	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	396	522	1027	327	522	1031	1549	-	-	1554	-	-
Mov Cap-2 Maneuver	396	522	-	327	522	-	-	-	-	-	-	-
Stage 1	866	826	-	682	635	-	-	-	-	-	-	-
Stage 2	473	626	-	586	816	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17.8	14.2	5.2	1.6
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1549	-	-	551	556	1554	-	-
HCM Lane V/C Ratio	0.074	-	-	0.497	0.3	0.01	-	-
HCM Control Delay (s)	7.5	0	-	17.8	14.2	7.3	0	-
HCM Lane LOS	A	A	-	C	B	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	2.8	1.3	0	-	-

Intersection

Int Delay, s/veh 0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑↑	↑↑	↑	↑	
Traffic Vol, veh/h	27	756	474	2	2	17
Future Vol, veh/h	27	756	474	2	2	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	265	-	-	500	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	28	788	515	2	2	18

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	515	0	- 965 258
Stage 1	-	-	- 515 -
Stage 2	-	-	- 450 -
Critical Hdwy	4.14	-	- 6.84 6.94
Critical Hdwy Stg 1	-	-	- 5.84 -
Critical Hdwy Stg 2	-	-	- 5.84 -
Follow-up Hdwy	2.22	-	- 3.52 3.32
Pot Cap-1 Maneuver	1047	-	- 253 741
Stage 1	-	-	- 565 -
Stage 2	-	-	- 609 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1047	-	- 246 741
Mov Cap-2 Maneuver	-	-	- 376 -
Stage 1	-	-	- 565 -
Stage 2	-	-	- 593 -

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	10.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1047	-	-	-	672
HCM Lane V/C Ratio	0.027	-	-	-	0.031
HCM Control Delay (s)	8.5	-	-	-	10.5
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1



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Appendix A MEMORANDUM

DATE: May 1, 2017

TO: Joe Loidolt – Classic Homes

FROM: Jeffrey C. Hodsdon

SUBJECT: Sanctuary Pointe Phase 2
Kingswood Drive Cut-Through Traffic Analysis
(LSC #164550)

Appendix Figure 1 shows the primary access route for Sanctuary Pointe via Sanctuary Rim Drive and the main access to Baptist Road. The figure also shows the proposed secondary access route via a series of Sanctuary Pointe Phase 2 local streets and Kingswood Drive. Trips generated by homes in the “yellow area” oriented to/from Baptist Road west have been assigned to this secondary route. Regarding the remaining lots in Sanctuary Pointe Phase 2 (lots in the green and orange areas), although the travel distance along the primary route is longer than along the secondary route, there would be no travel time savings associated with the use of the secondary route. The use of the secondary route instead of the primary route by future residents living within the orange and green areas would involve turning off Sanctuary Rim Drive onto the secondary route and cutting through a residential area. This diversion from Sanctuary Rim Drive (Collector street) would require numerous additional turns at local street intersections, stops at additional Stop-signs, narrower streets with steeper grades and tight centerline radii, vehicles parked along the street, individual lot driveways with vehicles turning into and backing out of driveways, etc. These elements will make for a more complex driving situation, which will help to offset perceived attractiveness of this secondary route.

The attached Appendix Table 1 shows the travel time calculation for the primary and secondary routes. Travel times have been estimated based on the route distances divided by the anticipated travel speeds along the streets and roads along each route. The estimated average travel speed through the residential streets within Sanctuary Pointe Phase 2 from Sanctuary Rim and Kingswood Drive includes intersection delays and has been estimated based on actual travel time through a comparable series of curves and intersections in a hillside area of southwest Colorado Springs using GPS data. Intersection delays at the intersections of Baptist Road/Sanctuary Rim

(primary route) and Baptist Road/Kingswood Drive (secondary route) have been taken from the level of service analysis.

The trip distribution of Sanctuary Pointe Phase 2 trips shown in Figure 5 was carried over from a “sensitivity analysis” distribution included with the Phase 1 report. This alternate distribution was required as part of the Phase 1 report to show a traffic distribution more skewed toward the west and returning from the west as well. The original non-skewed distribution based on actual data collected (included in the Sanctuary Pointe Phase 1 report) is about 80 percent to/from the west and 20 percent to/from the east on Baptist Road. Appendix Table 2 shows the calculated daily trips on Kingswood Drive just north of Baptist generated by the Kingswood Drive area and the area of Sanctuary Pointe Phase 2 shaded in yellow on Appendix Figure 1. The 685 vehicles per day on Kingswood Drive shown in Appendix Table 2 and on Appendix Figure 1 has been based on this non-skewed distribution. This 685 vehicle-per-day volume at the south end of Kingswood Drive represents trips from both the yellow area within Sanctuary Pointe Phase 2 (419 vehicles per day) **and** the lots along Kingswood Drive (265 vehicles per day). It is not anticipated that a significant number of additional trips from the orange or green areas of Phase 2 would use the secondary route.

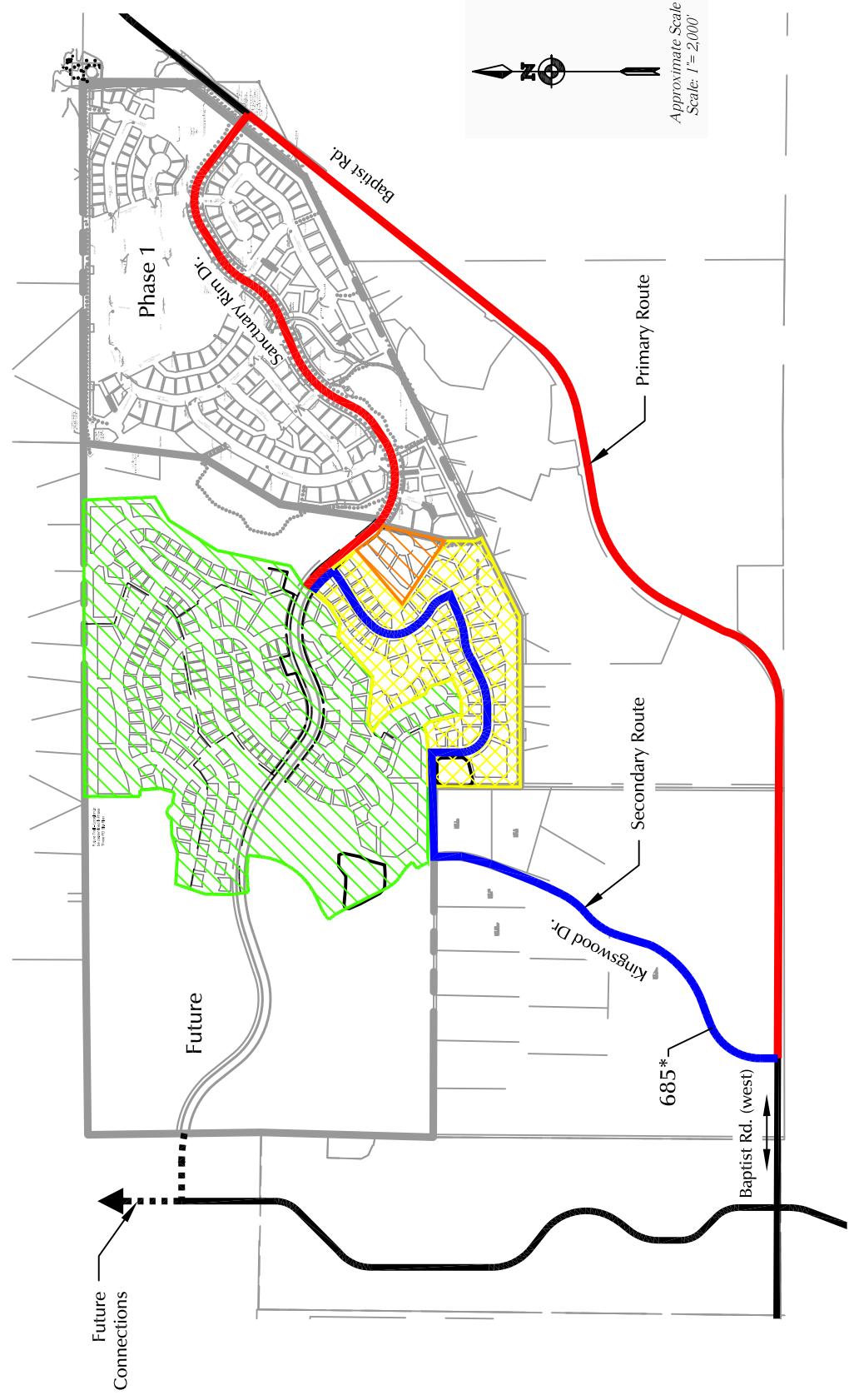
The applicant is agreeable to a chip-seal application to existing Kingswood Drive. County Planning and Community Development (PCD) Engineering staff (per a recent meeting) is requesting future monitoring of the actual Kingswood cut-through traffic in the field as development within Sanctuary Pointe progresses. Using data from monitoring, the traffic impacts on Kingswood could be reassessed based on actual traffic data collected. Provided the Town continues to refer Sanctuary Pointe applications to the County PCD Department, County PCD staff will be able to request monitoring with future Sanctuary Pointe applications.

Enclosures: Appendix Figure 1
Appendix Tables 1-2

Appendix Figure 1
**Route Travel Time Analysis
 Baptist Road (West)**
 Sanctuary Pointe Phase 2 (LSC #164550)

* The 685 vehicles per day ADT includes traffic generated by residents along Kingswood Drive and in the yellow area (projected) of Sanctuary Pointe. Please refer to the report narrative for details.

Phase II Areas
 = Green Area
 = Yellow Area
 = Orange Area



Appendix Table 1
Route Travel Time Analysis - Baptist Road (West)
Sanctuary Pointe Phase 2

Route Name	Route Components	LINK DISTANCE (ft)	SPEED (mph)	TIME (minutes)
Secondary Route	Sanctuary Pointe Local Streets	4,050	18	2.6
	Kingswood Drive	3,027	30	1.1
	Baptist Intersection Delays			0.2
	Route Totals	7,077		3.9
Primary Route	Sanctuary Rim Drive	4,467	37	1.4
	Baptist Road	8,860	43	2.3
	Baptist Intersection Delays			0.2
	Route Totals	13,327		3.9

Source: LSC Transportation Consultants, Inc.

Appendix Table 2
Secondary Route Traffic Volume Calculation
Sanctuary Pointe Phase Two

		Trip Generation Units	Average Weekday Traffic	Average Weekday Trips Generated
<u>Trips To/From Homes in the Yellow-Shaded Area Assumed to Use the Secondary Route</u>				
210	Single-Family Detached Housing	55 DU ⁽¹⁾	9.52	524
		Directional distribution to/from Baptist Road (west) applied		80%
		Secondary route trips from Sanctuary Pointe yellow area		419
<u>Trips To/From Existing Homes on Kingswood</u>				
210	Single-Family Detached Housing	28 DU	9.52	<u>267</u>
		Sum of the above		686
Notes:				
(1) DU = dwelling unit				
Source: LSC Transportation Consultants, Inc.				