Project No: 554-03

TRAFFIC STUDY

PROPOSED RETAIL DEVELOPMENT
SOUTH H STREET SOUTH OF HOSKING AVENUE

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TABLE OF CONTENTS

INTRODUCTION 1
FIGURE 1: VICINITY MAP 2
FIGURE 2: LOCATION MAP 3
FIGURE 3: SITE PLAN 4
PROJECT TRIP GENERATION AND DESIGN HOUR VOLUMES 7
TABLE 1: PROJECT TRIP GENERATION 7
TRIP DISTRIBUTION AND ASSIGNMENT 8
TABLE 2: PROJECT TRIP DISTRIBUTION 8
EXISTING AND FUTURE TRAFFIC 8
FIGURE 4: PROJECT PEAK HOUR TRAFFIC 9
FIGURE 5: 2022 PEAK HOUR TRAFFIC 10
FIGURE 6: 2022+PROJECT PEAK HOUR TRAFFIC 11
FIGURE 7: 2024 PEAK HOUR TRAFFIC 12
FIGURE 8: 2024+PROJECT PEAK HOUR TRAFFIC 13
FIGURE 9: 2042 PEAK HOUR TRAFFIC 14
FIGURE 10: 2042+PROJECT PEAK HOUR TRAFFIC 15
INTERSECTION ANALYSIS 16
TABLE 3a: AM INTERSECTION LOS 18
TABLE 3b: PM INTERSECTION LOS 18
TRAFFIC SIGNAL WARRANT ANALYSIS 19
TABLE 4a: PM PEAK HOUR TRAFFIC SIGNAL WARRANTS 19
TABLE 4b: PM PEAK HOUR WITH PROJECT TRAFFIC SIGNAL WARRANTS 19
ROADWAY CAPACITY ANALYSIS 20
TABLE 5a: ROADWAY ADT & CAPACITY 20
TABLE 5b: ROADWAY LEVEL OF SERVICE 21
QUEUE LENGTH ANALYSIS 22
TABLE 6a: AM QUEUE ANALYSIS 22
TABLE 6b: PM QUEUE ANALYSIS 22
MITIGATION 23
TABLE 7a: FUTURE INTERSECTION IMPROVEMENTS AND LOCAL MITIGATION 23
TABLE 7b: FUTURE ROADWAY IMPROVEMENTS AND LOCAL MITIGATION 24
VEHICLE MILES TRAVELED (VMT) 25
TABLE 6: 2021 BASELINE TOTAL REGIONAL VMT 25
SUMMARY AND CONCLUSIONS 26
REFERENCES 27
APPENDIX 28

INTRODUCTION

The purpose of this study is to evaluate the potential traffic impact for a proposed retail development located on South H Street south of Hosking Avenue in the City of Bakersfield, California. Traffic impacts were evaluated for vehicle miles travelled (VMT) in accordance with current CEQA requirements.

Additionally, this study provides an operational analysis of the existing and future street system with the addition of project traffic, for the purpose of evaluating consistency with the City's General Plan goals relating to intersection and roadway level of service

A. Land Use, Site and Study Area Boundaries

The proposed project consists of 241,375 square feet of retail building. (See Figure 3: Phase 2). The project site is currently vacant. The site is currently zoned R-1 (single family residential).

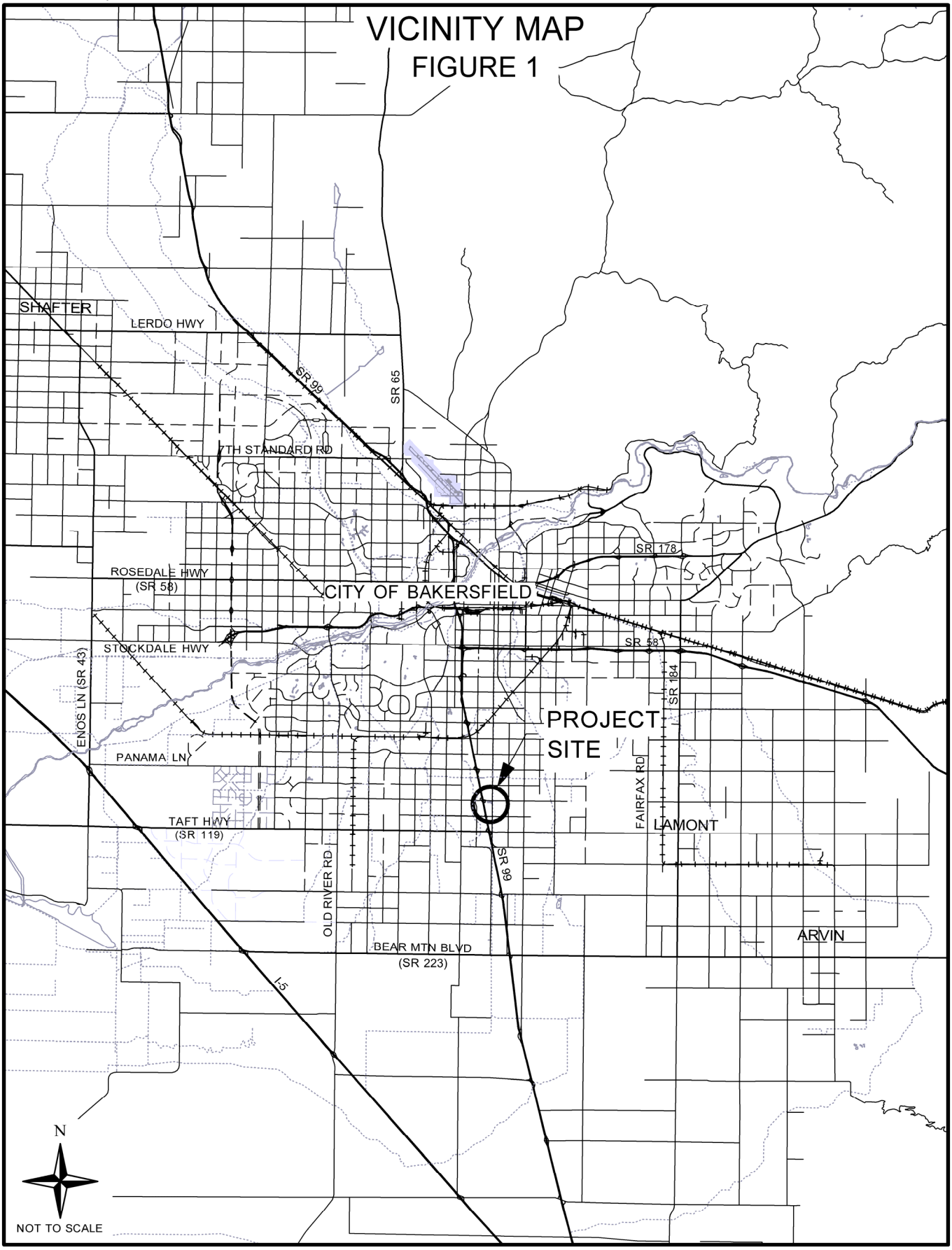
14 intersections are included in this study (13 signalized, one stop-controlled). The scope of the study was developed in association with the City of Bakersfield Traffic Department and Caltrans. A vicinity map is presented in Figure 1 and a location map is presented in Figure 2.

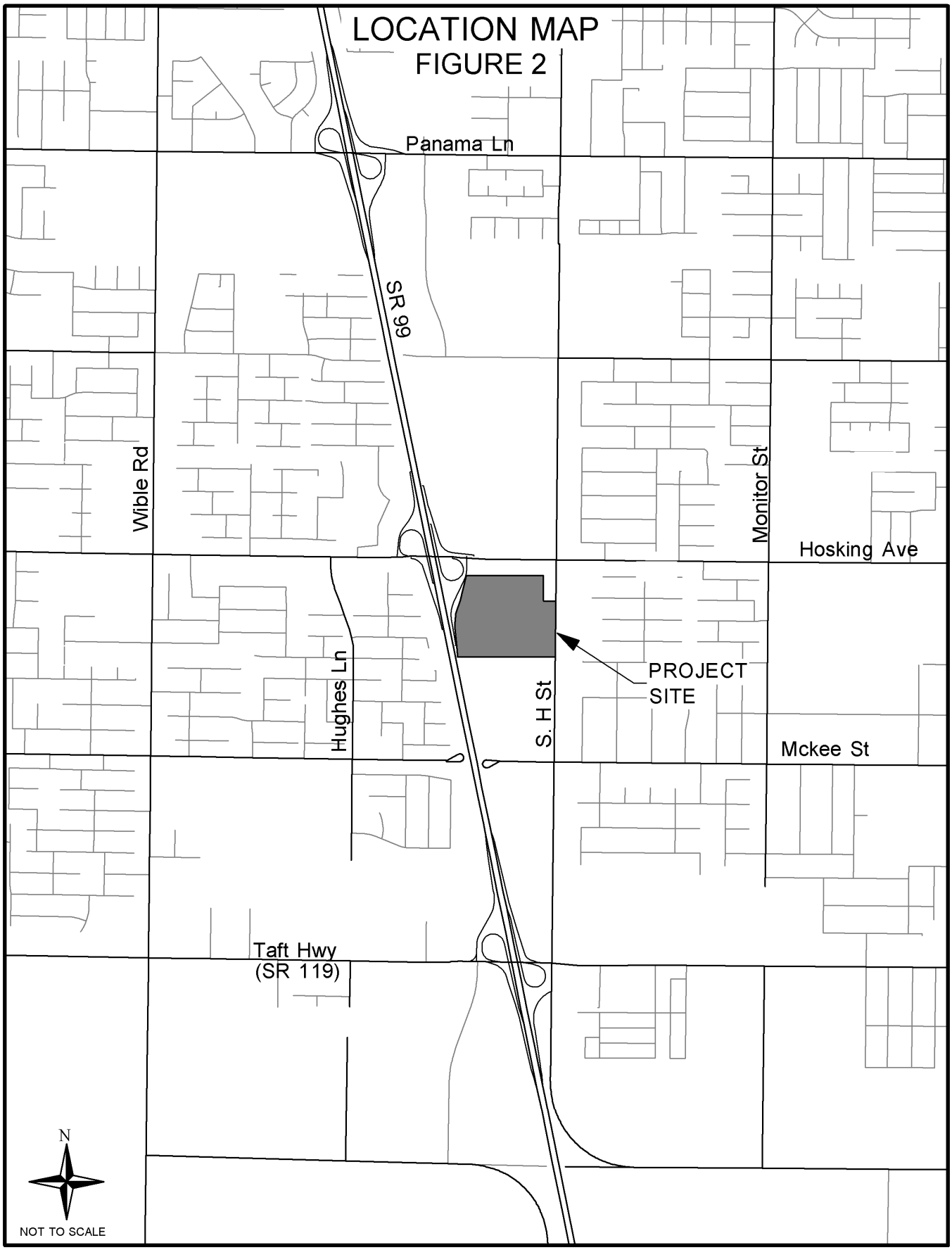
B. Existing Site Uses and Site Access

The project site currently consists of undeveloped land, with no building or other structures. Access to the site is proposed along both Hosking Avenue and South H Street. Phase 1 of the site was previously approved, and a tentative tract map is currently being processed on the property.

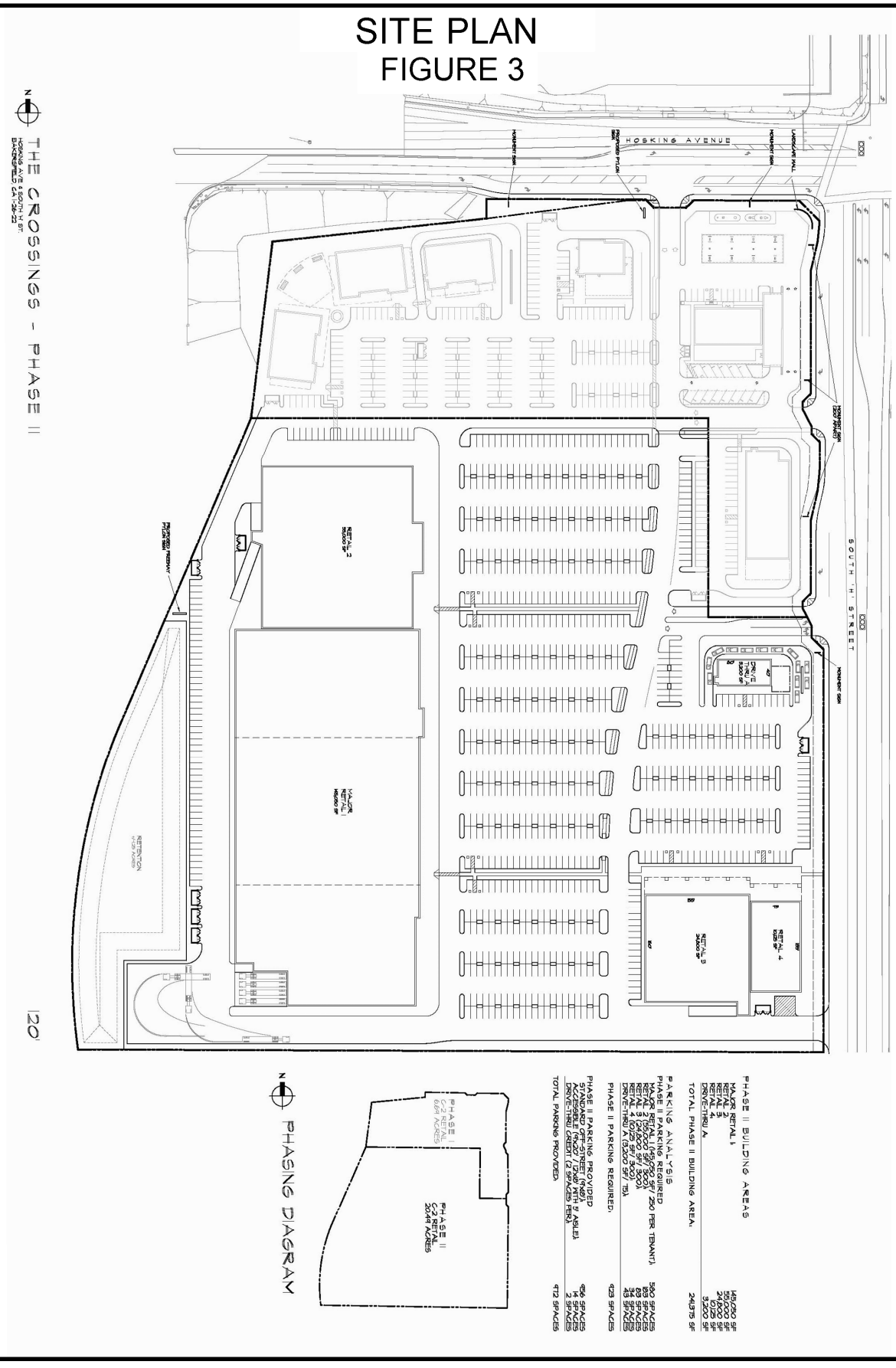
C. Existing Uses in Vicinity of the Site

The site is bounded to the west by State Route 99 and the Kern Island canal to the east. East of the canal there is retail and residential uses. South of the project is an existing temple, church, senior center and other retail uses. To the north is existing retail-zoned land, which has had various projects planned in the past. The site is currently planned for a mixed-use, warehouse/retail center.


VICINITY MAP
FIGURE 1
SHAFTER
LERDO HWY
SR 99
SR 65
7TH STANDARD RD
SR 178
ROSEDALE HWY
(SR 58)
CITY OF BAKERSFIELD
STOCKDALE HWY
SR 58
SR 184
ENOS LN (SR 43)
PROJECT
SITE
PANAMA LN
FAIRFAX RD
TAFT HWY
(SR 119)
LAMONT
OLD RIVER RD
SR 99
ARVIN
BEAR MTN BLVD
(SR 223)
I-5
N
NOT TO SCALE


LOCATION MAP
FIGURE 2
Panama Ln
SR 99
Wible Rd
Monitor St
Hosking Ave
Hughes Ln
S. H St
PROJECT SITE
Mckee St
Taft Hwy
(SR 119)
N
NOT TO SCALE

SITE PLAN
FIGURE 3



D. Roadway Descriptions

Akers Road is designated as a collector. Within the study area, it extends north from Taft Highway and operates as a two-lane facility widened to ultimate width. Akers Road currently provides access to residential land uses in the vicinity of the project.

Hosking Avenue is an east-west arterial that exists from Stine Road midway between McKee Road and Berkshire Road and has a recently constructed interchange with State Route 99 at the northwest boundary of the project site. Hosking Avenue exists as a four-lane facility where it is fully expanded adjacent to developed areas and exists with less than four lanes next to areas that are not yet fully developed. It provides access to residential and retail uses (existing and future).

Hughes Lane is a north-south roadway located midway between Wible Road and South H Street. It is designated as a collector and currently exists as an improved two-lane roadway adjacent to development. Hughes Lane provides access to residential land uses within the study area.

Monitor Street/Shannon Drive is a two-lane, north-south collector located midway between South H Street and South Union Avenue. It provides access to residential areas and exists at various stages of widening in the vicinity of the project.

Panama Lane is designated as an arterial. It extends east from State Route 43 near Interstate 5 through the southern metropolitan Bakersfield area and provides access from agricultural, residential, and commercial areas to north-south arterials and collectors and State Routes 43 and 99.

South H Street is a north-south arterial that extends from State Route 119 (Taft Highway) to Brundage Lane and continues northward through downtown Bakersfield as H Street. It exists as a four-lane roadway north of Berkshire Road and narrows to a two-lane roadway south of Berkshire Road. South H Street provides access to residential, commercial, and industrial land uses within the study area.

State Route 99 is a major north-south route through the central valley of California, extending from Interstate 5 south of Bakersfield to Sacramento. State Route 99 operates as an eight-lane freeway from Taft Highway to Airport Drive with six lanes elsewhere in Kern County.

Stine Road is a north-south arterial which currently exists at full improvement width north of Panama Lane and at various stages of widening adjacent to development south of Panama Lane. Stine Road

provides access from residential and commercial areas to east-west arterials and from southern metropolitan Bakersfield to central Bakersfield via New Stine Road and California Avenue.

Taft Highway (SR 119) is an east-west roadway and is designated as an expressway west of State Route 99 (State Route 119) and as an arterial east of State Route 99 (Panama Road). It currently exists as a two-lane roadway at various stages of widening adjacent to development between State Route 99 and South Union Avenue. Taft Highway continues as a two-lane roadway with graded shoulders east of South Union Avenue along the Panama Road alignment. Within the project vicinity, Taft Highway provides access from the communities of Greenfield, Weedpatch and Lamont to State Route 99.

Union Avenue is designated as an arterial. Within the project vicinity, South Union Avenue operates with four lanes and has a graded median and graded shoulders. It provides access to residential, commercial, and industrial areas.

Wible Road is a north-south arterial located adjacent to State Route 99. It currently operates as a four-lane roadway north of Berkshire Road and as a two-lane roadway at various widths and stages of improvement south of Berkshire Road. Wible Road continues as Oak Street north of Stockdale Highway/Brundage Lane. It provides access to residential, commercial and industrial land uses within the study area.

PROJECT TRIP GENERATION AND DESIGN HOUR VOLUMES

The trip generation and design hour volumes shown in Table 1 were calculated using the Institute of Transportation Engineers (ITE) Trip Generation, 11th Edition. The ADT, AM and PM peak hour rates, and peak hour directional splits for ITE Land Uses 820 (Shopping Center) were used to estimate the project traffic.

Table 1
Project Trip Generation

General Information			Daily Trips		AM Peak Hour Trips			PM Peak Hour Trips		
ITE Code	Development Type	Variable	ADT RATE	ADT	Rate	In % Split/ Trips	Out % Split/ Trips	Rate	In % Split/ Trips	Out % Split/ Trips
820	Shopping Center	241.375 1000 sq ft GLA	eq	12166	eq	62% 171	38% 105	eq	48% 511	52% 553
Adjustments Pass-by		15%		1,825		26	16		77	83
Total				10,341		145	89		434	470

Pass-by rates are applied to account for vehicle trips already using the roadway network and are merely diverted into and out of new business. The rates are based on the City of Bakersfield Subdivision and Engineering Design Manual.

TRIP DISTRIBUTION AND ASSIGNMENT

The project trip distribution in Table 2 represents the most logically traveled routes for traffic accessing the project. Project traffic distribution was estimated based on a review of the potential draw from population centers within the region and the type of land use involved, and in cooperation with the City of Bakersfield Public Works Department. These assumptions were used to distribute project traffic as shown in Figure 4.

Table 2
Project Trip Distribution

Direction	Percent
North	33%
East	17%
South	23%
West	27%

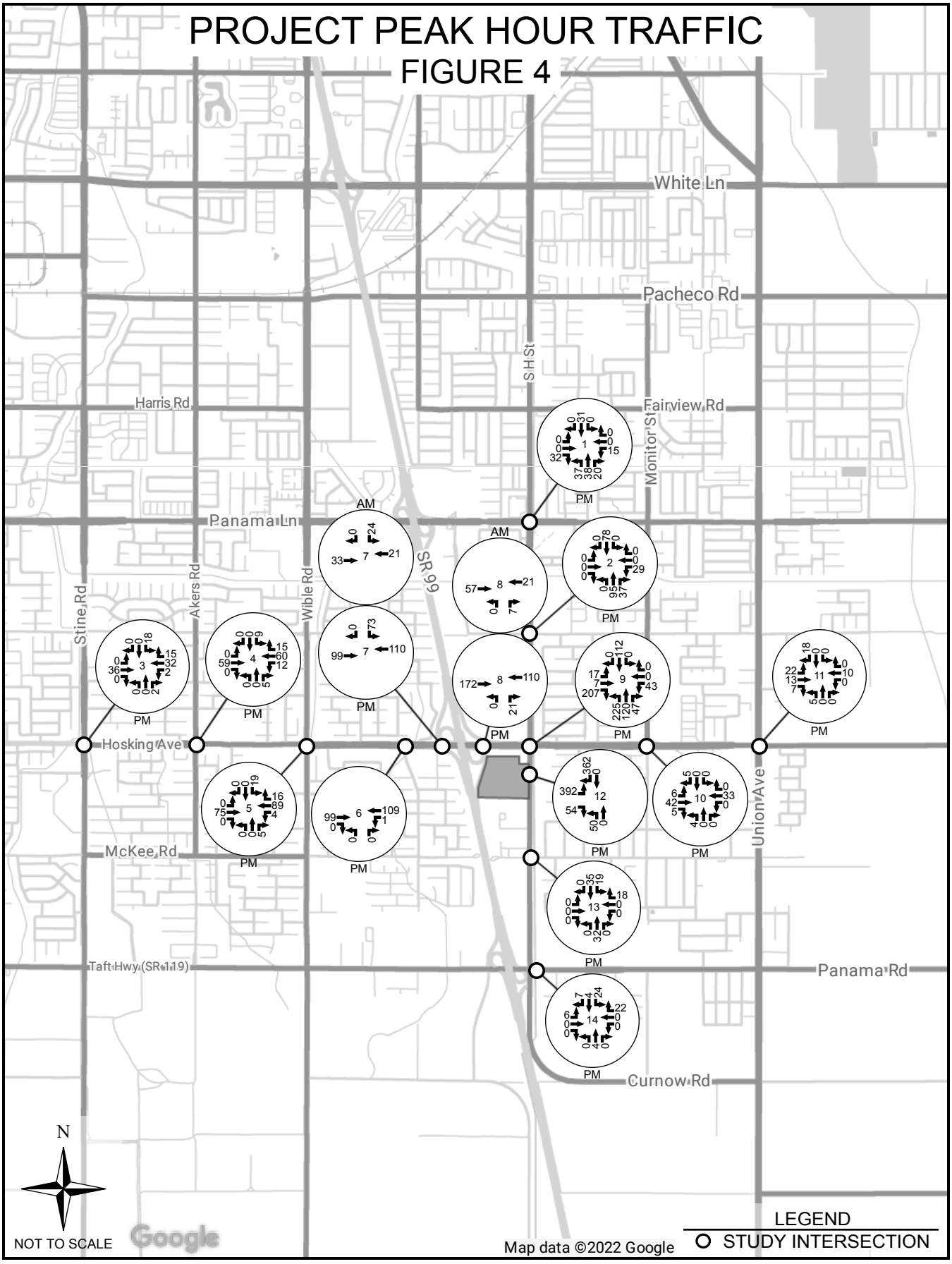
EXISTING AND FUTURE TRAFFIC

Existing peak hour turn movement volumes were field measured in July 2021 at the study intersections and are shown in Figure 5. Existing+Project peak hour volumes are shown in Figure 6.

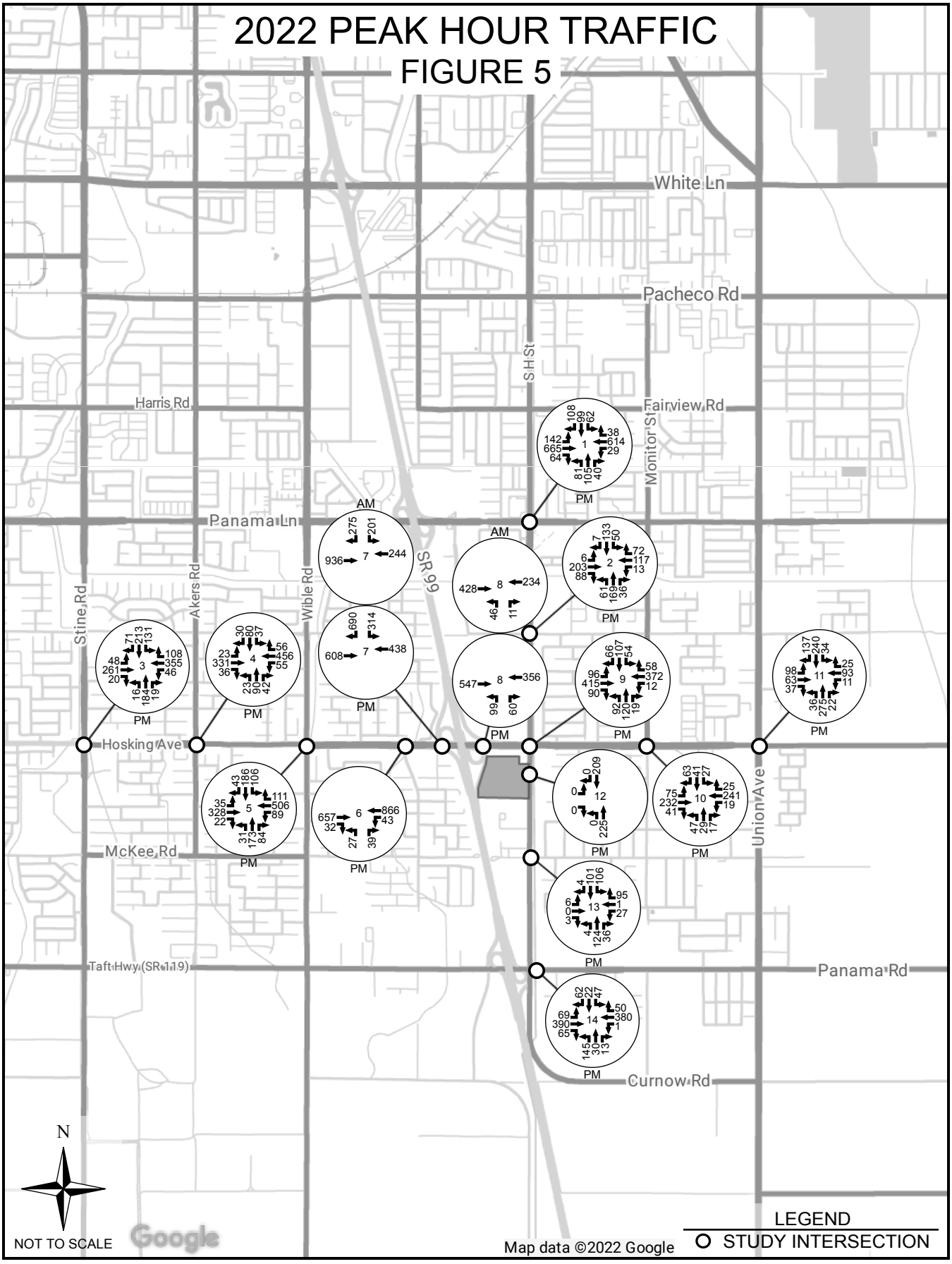
Annual growth rates from 0.19% to 3% were applied to existing traffic volumes to estimate future traffic volumes for the year 2042. These growth rates were estimated based on a review of existing and proposed developments and KernCOG traffic model data. Trip generation and distribution for pending or approved projects which were determined to have an influence on the study intersections was prepared and the volumes were added to the future scenarios. Build year (2024) is shown in Figure 7. Build year (2024) plus project peak hour volumes are shown in Figure 8. Future peak hour volumes and future plus project peak hour volumes are shown in Figures 9 and 10, respectively.

PROJECT PEAK HOUR TRAFFIC

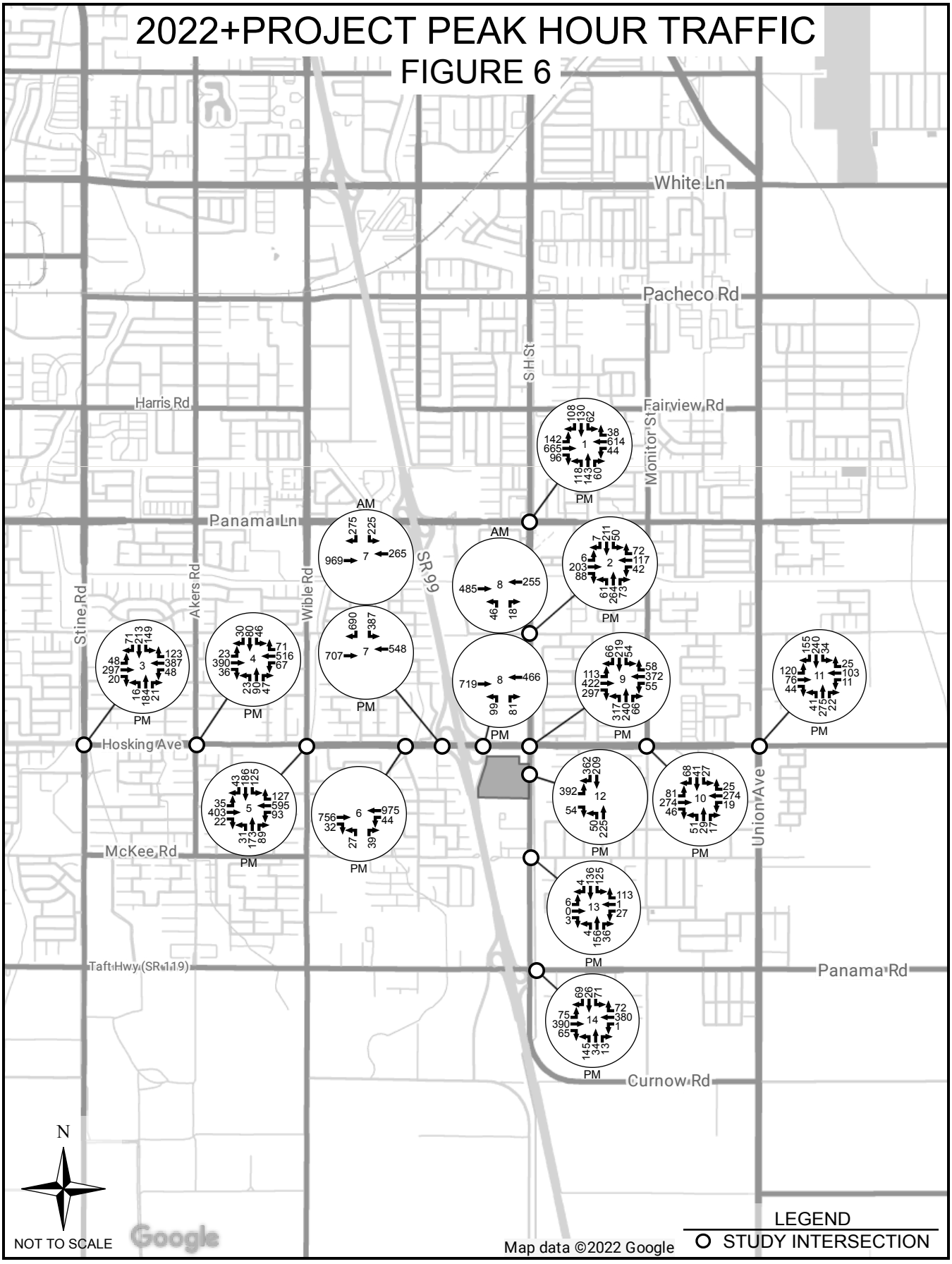
FIGURE 4



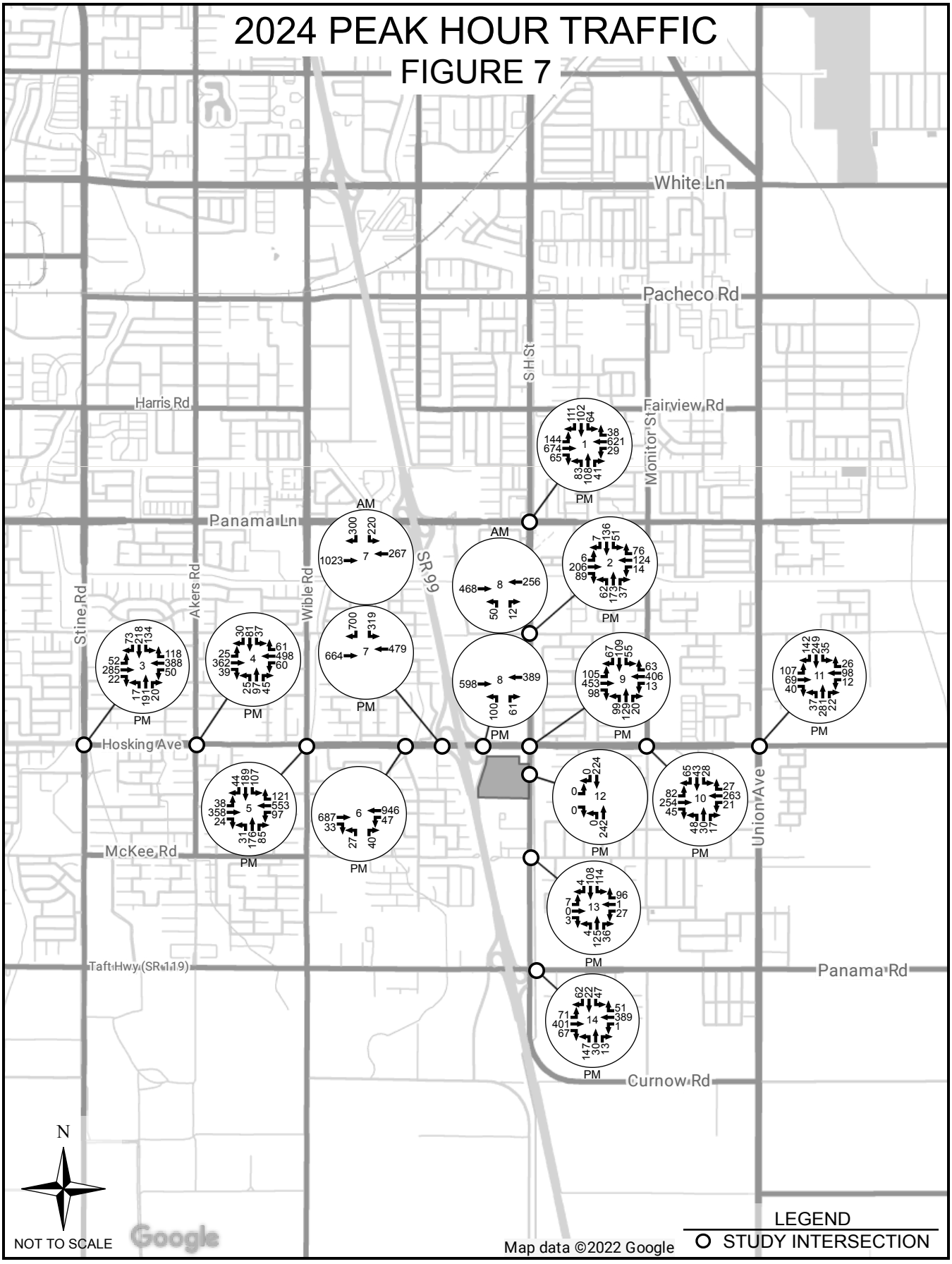
2022 PEAK HOUR TRAFFIC
FIGURE 5



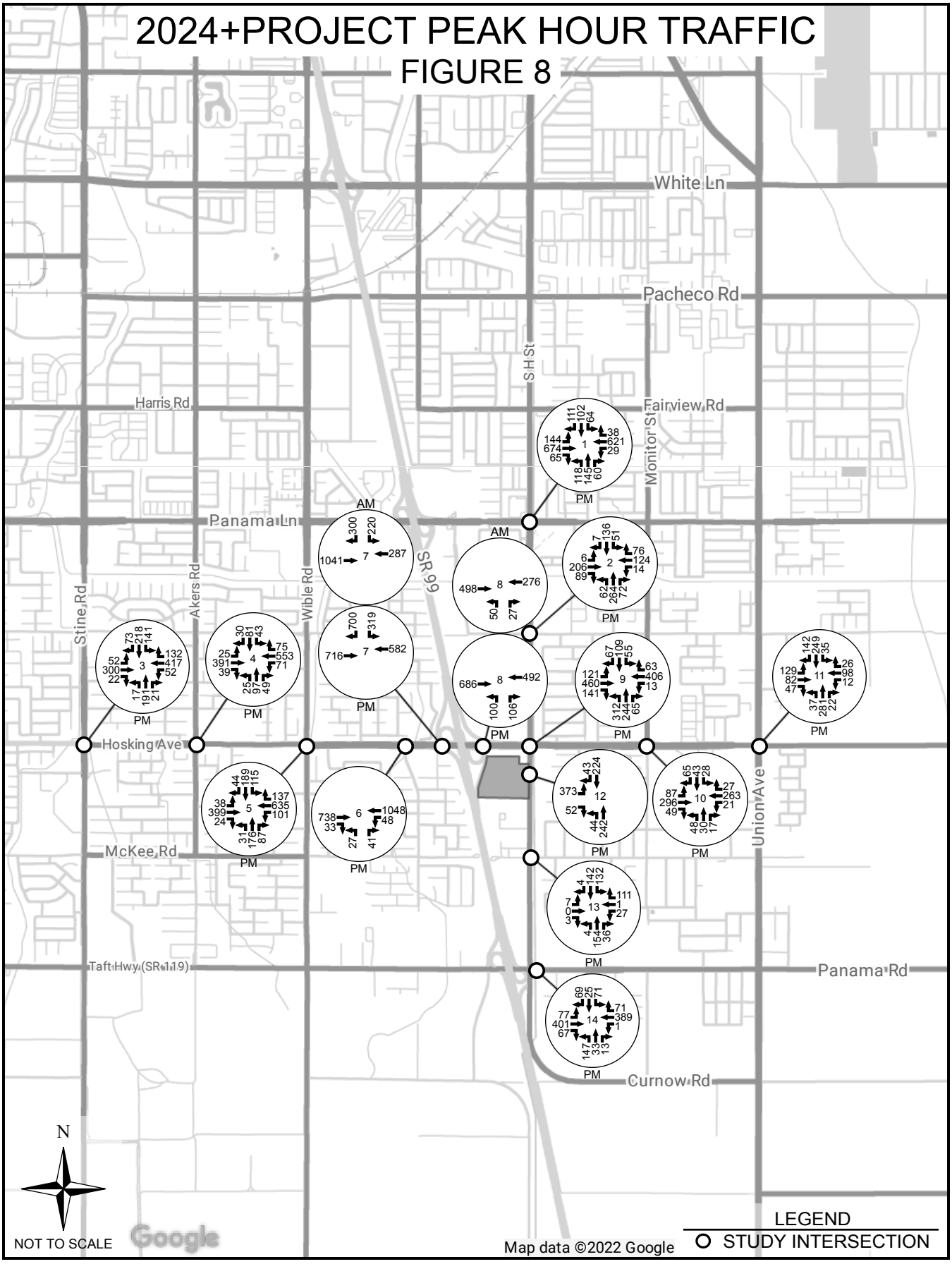
2022+PROJECT PEAK HOUR TRAFFIC
FIGURE 6



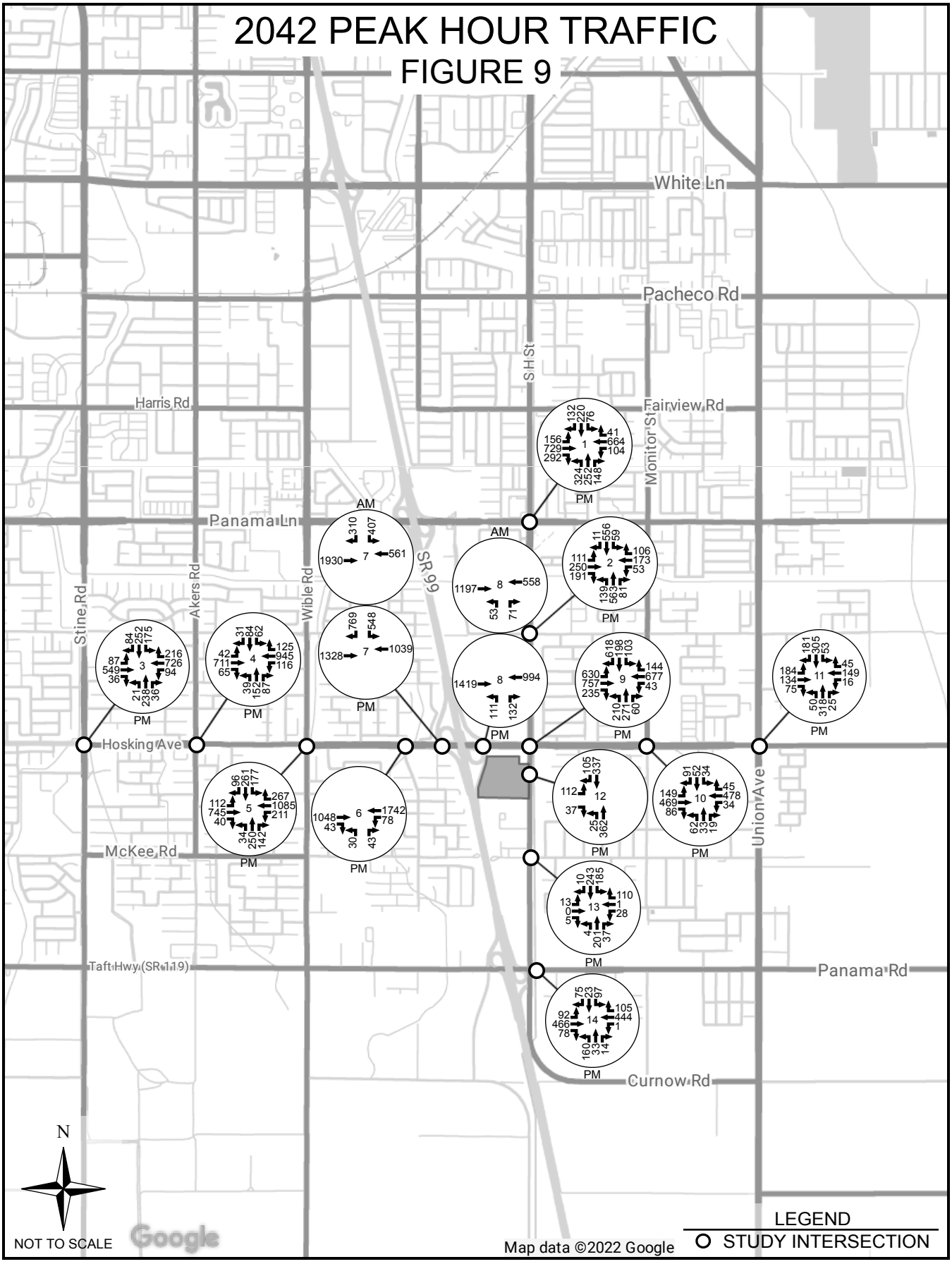
2024 PEAK HOUR TRAFFIC
FIGURE 7



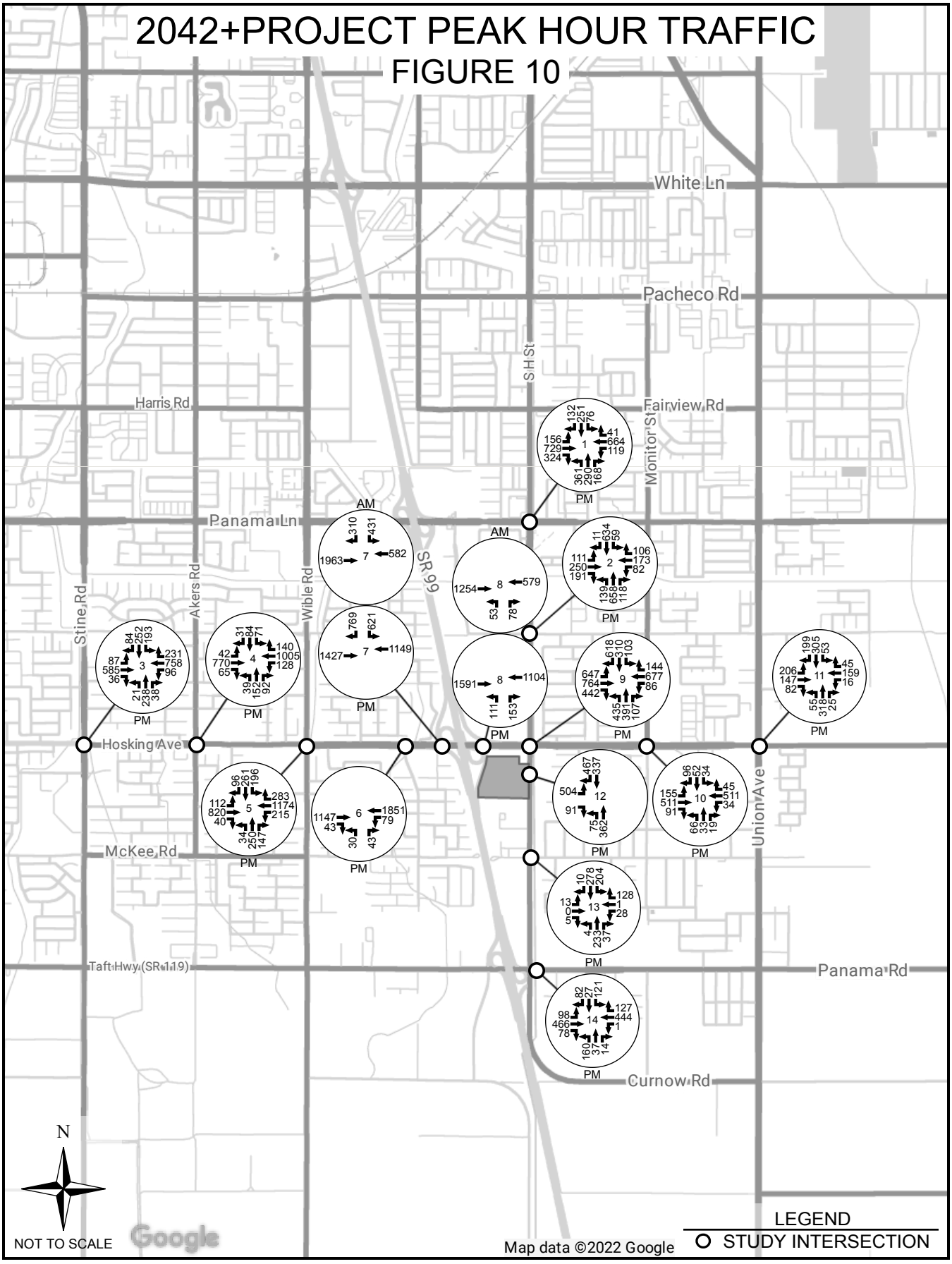
2024+PROJECT PEAK HOUR TRAFFIC
FIGURE 8



2042 PEAK HOUR TRAFFIC
FIGURE 9



2042+PROJECT PEAK HOUR TRAFFIC
FIGURE 10



INTERSECTION ANALYSIS

A capacity analysis of the study intersections was conducted using Synchro 9 software from Trafficware. This software utilizes the 2010 capacity analysis methodology in the Transportation Research Board's Highway Capacity Manual. The analysis was performed for the following traffic scenarios:

- Existing (2022)
- Existing (2022) + Project
- Build Year (2024)
- Build Year (2024) + Project
- Future (2042)
- Future (2042) + Project

Level of Service Criteria

The City of Bakersfield generally utilizes three performance criteria for determining whether a traffic forecast to be generated by a project would cause a significant impact and therefore require mitigation. First, a significant impact is found where the addition of project traffic causes the level of service of an intersection or roadway segment to drop below LOS C. Second, a significant impact is found if an intersection or roadway segment operates below LOS C in the base year prior to the addition of project traffic, and the added project traffic lowers the level of service below its pre-project status. Third, mitigation is required if the addition of the project traffic creates an additional control or average delay per vehicle of more than 5 seconds to the existing or projected congestion at an intersection already or projected to operate at LOS D, E, or F.

These performance criteria have been adopted by the City of Bakersfield, and are also contained within various planning documents such as the Circulation Element of the Metropolitan Bakersfield General Plan and the County's congestion management plan. These performance criteria are the basis on which the City determines if a "substantial" or "significant" impact, or increase to the existing traffic load and the capacity of the street system, exists as a result of project traffic. Criteria for intersection level of service (LOS) are shown in the following tables.

LEVEL OF SERVICE CRITERIA
UNSIGNALIZED INTERSECTION

Average Control Delay (sec/veh)	Level of Service	Expected Delay to Minor Street Traffic
≤ 10	A	Little or no delay
> 10 and ≤ 15	B	Short traffic delays
> 15 and ≤ 25	C	Average traffic delays
> 25 and ≤ 35	D	Long traffic delays
> 35 and ≤ 50	E	Very long traffic delays
> 50	F	Extreme delays

LEVEL OF SERVICE CRITERIA
SIGNALIZED INTERSECTIONS

Volume/Capacity	Control Delay (sec/veh)	Level of Service
< 0.60	≤ 10	A
0.61 - 0.70	> 10 and ≤ 20	B
0.71 - 0.80	> 20 and ≤ 35	C
0.81 - 0.90	> 35 and ≤ 55	D
0.91 - 1.00	> 55 and ≤ 80	E
> 1.0	> 80	F

Level of service for the study intersections is presented in Tables 3a and 3b. It is noted that the planned commercial development immediately to the north is conditioned to require dual southbound right turn lanes on South H Street at Hosking Road. Therefore, for future scenarios, the intersection was analyzed with dual right turn lanes. Due to the lane configuration, the intersection was also analyzed with permitted overlap for the southbound dual right turns.

Table 3a
AM Intersection Level of Service

#	Intersection	Control Type	2022	2022+ Project	2024	2024+ Project	2042	2042+ Project
7	SR 99 & Hosking Ave	Signal	B	B	B	B	B	B
8	SR 99 & Hosking Ave	Signal	B	B	B	B	B	B

Table 3b
PM Intersection Level of Service

#	Intersection	Control Type	2022	2022+ Project	2024	2024+ Project	2042	2042+ Project	2042+ Project Mitigation
1	S H St & Panama Ln	Signal	D (36.8)	D (37.9)	D (35.6)	D (36.3)	D (50.5)	D (51.0)	-
2	S H St & Berkshire Rd	Signal	C	C	C	C	C	C	-
3	Stine Rd & Hosking Ave/McCutchen Rd	Signal	D (44.3)	D (45.8)	D (44.5)	D (44.3)	D (48.1)	D (50.7)	-
4	Akers Rd & Hosking Ave	Signal	C	C	C	C	C	C	-
5	Wible Rd & Hosking Ave	Signal	D (40.5)	D (41.1)	D (40.8)	D (40.4)	D (37.2)	D (49.8)	-
6	Hughes Ln & Hosking Ave	NB	C	C	C	C	F (65.4)	F `(95.6)	-
		Signal	-	-	-	-	-	-	B
7	SR 99 & Hosking Ave	Signal	C	C	C	C	C	C	-
8	SR 99 & Hosking Ave	Signal	A	A	A	A	A	A	-
9	S H St & Hosking Ave	Signal	C	F (96.0)	C	F (89.1)	F (253.2)	F (>300)	C
10	Monitor St/Shannon Dr & Hosking Ave	Signal	C	C	C	C	C	C	-
11	S Union Ave & Hosking Ave	Signal	C	C	C	C	C	C	-
12	S H St & Driveway	Signal	-	C	-	C	-	C	-
13	S H St & McKee Rd	Signal	C	C	C	C	C	C	-
14	S H St & Taft Hwy	Signal	C	C	C	C	C	C	-

[1]See Table 7 for mitigation details.

TRAFFIC SIGNAL WARRANT ANALYSIS

The peak hour signal warrant was evaluated for the unsignalized intersection within the study scope based on the California Manual on Uniform Traffic Control Devices (MUTCD). Peak hour signal warrants assess delay to traffic on the minor street approaches when entering or crossing a major street. Signal warrant analysis results for AM and PM peak hours are shown in Tables 5a through 5d.

It is important to note that a signal warrant defines the minimum condition under which signalization of an intersection might be warranted. Meeting this threshold does not suggest traffic signals are required, but rather, that other traffic factors and conditions be considered in order to determine whether signals are truly justified.

It is also noted that signal warrants do not necessarily correlate with level of service. An intersection may satisfy a signal warrant condition and operate at or above an acceptable level of service, or operate below an acceptable level of service and not meet signal warrant criteria.

Table 4a
PM Peak Hour Traffic Signal Warrants

	2022			2024			2042		
Intersection	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met
Hughes Ln at Hosking Ave	1598	66	NO	1713	67	NO	2911	73	NO

Table 4b
PM Peak Hour with Project Traffic Signal Warrants

	2022+Project			2024+Project			2042+Project		
Intersection	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met
Hughes Ln at Hosking Ave	1807	66	NO	1867	68	NO	3120	73	NO

ROADWAY ANALYSIS

Published ADT information and future projected traffic, as shown in Table 5a, were used to calculate the volume-to-capacity ratios shown in Table 5b.

A volume-to-capacity ratio (v/c) of greater than 0.80 corresponds to a LOS of less than "C", as defined in the Highway Capacity Manual. As mentioned previously, a level of service "C" is an accepted standard in the City of Bakersfield within the metropolitan Bakersfield areas. A significant impact is generally defined as a condition where the addition of project traffic reduces the LOS to below LOS C, or where the pre-existing condition of the roadway is below LOS C, and the LOS degrades below the pre-existing level of service with the addition of the project.

Table 5a
Roadway ADT & Capacity

Roadway Segment	2022	Project ADT	Cumulative ADT	2022+Proj ADT	2024 ADT	2024+Proj ADT	2042 Cum ADT	2042 Cum+Proj ADT
Hosking Ave: Stine Rd - Akers Rd	9,458	1,361	1,364	10,819	10,335	11,696	18,959	20,320
Hosking Ave: Akers Rd - Wible Rd	11,286	1,876	2,056	13,162	12,333	14,209	23,051	24,927
Hosking Ave: Wible Rd - Hughes Ln	15,627	2,379	2,170	18,006	17,076	19,455	31,241	33,620
Hosking Ave: Hughes Ln - Interstate 99 On Ramp	15,627	2,391	2,607	18,018	17,076	19,467	31,678	34,069
Hosking Ave: I-99 On Ramp - I-99 Off Ramp	16,096	3,226	4,458	19,322	17,589	20,815	34,401	37,627
Hosking Ave: Interstate 99 Off Ramp - S H St	16,096	5,056	7,255	21,152	17,589	22,645	37,198	42,254
Hosking Ave: S H St - Monitor St	14,857	5,216	859	20,073	16,235	21,451	28,497	33,713
Hosking Ave: Monitor St - Union Ave	7,713	858	647	8,571	8,843	9,701	20,737	21,595
S H St: Taft Hwy - McKee Rd	6,263	766	692	7,029	6,298	7,064	7,204	7,970
S H St: McKee Rd - Hosking Ave	6,251	1,190	857	7,441	6,711	7,901	11,129	12,319
S H St: Hosking Ave - Berkshire Rd	9,020	2,848	7,418	11,868	9,208	12,056	17,837	20,685
S H St: Berkshire Rd - Panama Ln	8,958	1,979	5,498	10,937	9,171	11,150	16,061	18,040

2022 Volumes Grown out from 2020 KernCOG Published ADT

Table 5b
Roadway Level of Service

Roadway Segment	Existing Capacity	Mitigated Capacity	v/c 2022	v/c 2022+Proj	v/c 2024	v/c 2024+Proj	v/c 2042 Cum	v/c 2042 Cum+Proj	v/c (Mit) 2042 Cum+Proj
Hosking Ave: Stine Rd - Akers Rd	20,000	40,000	0.47	0.54	0.52	0.58	**0.95**	**1.02**	0.51
Hosking Ave: Akers Rd - Wible Rd	40,000	-	0.28	0.33	0.31	0.36	0.58	0.62	-
Hosking Ave: Wible Rd - Hughes Ln	60,000[1]	-	0.26	0.30	0.28	0.32	0.52	0.56	-
Hosking Ave: Hughes Ln - Interstate 99 On Ramp	60,000[1]	-	0.26	0.30	0.28	0.32	0.53	0.57	-
Hosking Ave: I-99 On Ramp - I-99 Off Ramp	60,000[1]	-	0.27	0.32	0.29	0.35	0.57	0.63	-
Hosking Ave: Interstate 99 Off Ramp - S H St	60,000[1]	-	0.27	0.35	0.29	0.38	0.62	0.70	-
Hosking Ave: S H St - Monitor St	40,000	60,000	0.37	0.50	0.41	0.54	0.71	**0.84**	0.56
Hosking Ave: Monitor St - Union Ave	40,000	-	0.19	0.21	0.22	0.24	0.52	0.54	-
S H St: Taft Hwy - McKee Rd	15,000	-	0.42	0.47	0.42	0.47	0.48	0.53	-
S H St: McKee Rd - Hosking Ave	15,000	20,000	0.42	0.50	0.45	0.53	0.74	**0.82**	0.62
S H St: Hosking Ave - Berkshire Rd	15,000	40,000	0.60	0.79	0.61	0.80	**1.19**	**1.38**	0.52
S H St: Berkshire Rd - Panama Ln	40,000	-	0.22	0.27	0.23	0.28	0.40	0.45	-

[1]Current roadway is constructed to full width, which will allow for 6 lanes. The roadway is currently striped for 4 lanes. Analysis is based on constructed roadway capacity with ultimate striping configuration.

QUEUE LENGTH ANALYSIS

A queue length analysis was conducted at all stop-controlled freeway off ramps within the study area to evaluate the adequacy of the existing storage lengths. Tables 6a and 6b below, show the existing storage lengths, as well as the 95th percentile queue length determined for each traffic scenario analyzed.

Table 6a
AM Queue Analysis

Intersection	Hosking Ave & SR 99 SB Off Ramp		Hosking Ave & SR 99 NB Off Ramp	
Movement	SBLR	SBR	NBLR	NBR
Ramp Length	400		400	
2022	184	133	59	-
2022+Project	170	152	55	31
2024	174	123	74	-
2024+Project	165	111	62	8
2042 Cumulative	169	151	63	17
2042 Cumulative+ Project	218	185	58	122

SBL = Southbound Left
SBR = Southbound Right
SBLR = Southbound Left Right

NBL = Northbound Left
NBR = Northbound Right
NBLR = Northbound Left Right

Table 6a
PM Queue Analysis

Intersection	Hosking Ave & SR 99 SB Off Ramp		Hosking Ave & SR 99 NB Off Ramp	
Movement	SBLR	SBR	NBLR	NBR
Ramp Length	400		400	
2022	236	206	130	42
2022+Project	319	252	74	49
2024	274	228	98	36
2024+Project	365	340	169	29
2042 Cumulative	290	248	96	28
2042 Cumulative+ Project	373	228	128	40

SBL = Southbound Left
SBR = Southbound Right
SBLR = Southbound Left Right

NBL = Northbound Left
NBR = Northbound Right
NBLR = Northbound Left Right

MITIGATION

Intersection improvements needed by the year 2042 to maintain or improve the operational level of service of the street system in the vicinity of the project are shown in Table 7a. Roadway improvements needed by the year 2042 to maintain or improve the operational level of service in the vicinity of the project are shown in Table 7b. The Regional Transportation Impact Fee (RTIF) Program is a fee imposed on new development and contains a Regional Transportation Facilities List and a Transportation Impact Fee Schedule. The Facilities List includes many of the facilities needed to maintain a Level of Service (LOS) C or better for new growth or to prevent the degradation of facilities which are currently operating below LOS C. The Fee Schedule sets forth the fees to be collected from new development to mitigate the need for the facilities.

Table 7a
Future Intersection Improvements and Local Mitigation

#	Intersection	Total Improvements Required by 2042	Local Mitigation (Improvements not covered by RTIF or adjacent development)
6	Hughes Ln & Hosking Ave	Add Signal	-
9	S H St & Hosking Ave	Add EBL, EBT, WBT, NBL, NBT, NBR, SBL, SBT, SBR Make SBT Permitted Overlap	-

Notes: NB = Northbound, SB = Southbound, L = Left-Turn Lane, WB = Westbound, T = Through Lane, EB = Eastbound, R = Right-Turn Lane
[1]Striping only. Pavement is widened to accommodate the additional lanes.

Table 7b
Future Roadway Improvements and Local Mitigation

Roadway Segment	Total Improvements Required by 2042	Local Mitigation (Improvements not covered by RTIF or adjacent development)
Hosking Rd: Stine Rd – Akers Rd	Add Two Lanes	-
Hosking Ave: S H St - Monitor St	Add Two Lanes	-
S H St: McKee Rd – Hosking Rd	Add Two Lanes	-
S H St: Hosking Ave – Berkshire Rd	Add Two Lanes	-

As shown in Tables 7a and 7b, the RTIF program includes all needed mitigation measures.

VEHICLE MILES TRAVELED (VMT)

A. Background

In 2013, the State of California approved legislation (SB 743) to change the primary basis of evaluation of traffic impacts in CEQA from Level of Service (LOS) to Vehicle Miles Traveled (VMT). CEQA Guidelines section 15064.3 was approved in December 2018 and became effective in early 2019. Section 15064.3 required agencies to implement the new VMT requirement no later than July 1, 2020. The Governor's Office of Planning and Research (OPR) released a Technical Advisory On Evaluating Transportation Impacts In CEQA in December 2018, which provides guidelines and recommendations for VMT evaluation and thresholds. As of March 2022, the City of Bakersfield has not finalized or adopted any policies or methodologies for VMT analysis, therefore the OPR Technical Advisory was used as the basis for this evaluation.

Pursuant to OPR recommendations, "net change in regional VMT" has been used to evaluate the retail project.

B. Analysis

The Kern Council of Governments' (KernCOG) Travel Demand Model was used to estimate regional VMT with and without project conditions to determine if the project will have a significant VMT impact. Total regional VMT with and without project conditions was calculated using the model runs. Table 6 shows the 2021 baseline regional VMT both with and without project traffic.

Table 8
2021 Baseline Total Regional VMT

Regional VMT Without Project	Regional VMT With Project	Difference
46,341,915	46,245,634	(96,281)

The total regional VMT with project traffic is lower than the total regional VMT without project conditions. Therefore, the project's VMT impact will be considered less than significant.

SUMMARY AND CONCLUSIONS

This study evaluated the potential traffic impact of a proposed retail development located South H Street south of Hosking Avenue in Bakersfield, California.

Level of Service Analysis

The intersection at Hughes Lane & Hosking Road is expected to operate below an acceptable level of service with the addition of project traffic in 2022. All other intersections operate with an acceptable level of service during peak hours in the existing year, prior to the addition of project traffic, and are anticipated to continue to do so with the addition of project traffic.

By 2042, S H Street & Hosking Avenue falls below an acceptable level of service prior to the addition of project traffic. The remaining intersections are anticipated to operate at acceptable levels of service during the peak hours and are expected to continue to do so with the addition of project traffic in the future year. With the implementation of improvements shown in Table 7a, the intersections will operate at acceptable levels.

Roadway Capacity

All roadways within the project scope currently operate at acceptable levels of service and are expected to continue to do so with the addition of project traffic through 2024.

In 2042, Hosking Road from Stine Road to Akers Road and S H Street from Hosking Road to Berkshire Road are anticipated to fall below an acceptable level of service prior to the addition of project traffic. Hosking Avenue from S H Street to Monitor Street and S H Street from McKee Road to Hosking Avenue are anticipated to fall below an acceptable level of service with the addition of project traffic. With the implementation of improvements shown in Table 7b, the roadways will operate at acceptable levels.

VMT

The analysis indicates the project will have less than significant VMT impacts.

REFERENCES

1. Annual Traffic Census, Kern COG
2. City of Bakersfield General Plan, approved 2010
3. Highway Capacity Manual, Special Report 209, Transportation Research Board
4. California Manual on Uniform Traffic Control Devices for Streets and Highways, 2012 Edition, Federal Highway Administration (FHA)
5. Trip Generation, 11th Edition, Institute of Transportation Engineers (ITE)

APPENDIX

Cumulative Projects

TRIP GENERATION 636-02
1 Million Sq Ft Industrial + Shopping Center
6/17/2021

General Information			Daily Trips		AM Peak Hour Trips			PM Peak Hour Trips		
ITE Code	Development Type	Variable	ADT RATE	ADT	Rate	In % Split/ Trips	Out % Split/ Trips	Rate	In % Split/ Trips	Out % Split/ Trips
-	Warehouse and Cold Storage (Employees)	1013.04 1000 sq ft GFA	-	3213	-	95.8% 723	4.2% 32	-	49.6% 640	50.4% 651
-	Warehouse and Cold Storage (Trucks)		-	584	-	50% 10	50% 10	-	50% 8	50% 8
820	Shopping Center	184.5 1000 sq ft GLA	eq	9118	eq	62% 151	38% 93	eq	48% 410	52% 445
sub-total				12,915		884	135		1058	1104
Adjustments Pass-by[1]		15%		1,368		23	14		62	67
Total				11,547		861	121		996	1,037

[1]Shopping Center only

TRIP GENERATION 636-02

Del Papa

8/23/2021

General Information			Daily Trips		AM Peak Hour Trips			PM Peak Hour Trips		
ITE Code	Development Type	Variable	ADT RATE	ADT	Rate	In % Split/ Trips	Out % Split/ Trips	Rate	In % Split/ Trips	Out % Split/ Trips
820	Shopping Center	164 1000 sq ft GLA	eq	8416	eq	62% 145	38% 89	eq	48% 376	52% 407
Adjustments Pass-by[1]		15%		1,262		22	13		56	61
Total				10,951		123	108		320	346

[1]Shopping Center only

PM

Direction	%	In	Out
North	33%	106	114
East	17%	54	59
South	23%	74	80
West	27%	86	93
Total:	100%	320	346

AM

Direction	%	In	Out
North	33%	41	36
East	17%	21	18
South	23%	28	25
West	27%	33	29
Total:	100%	123	108

573-02 Trip Generation

8/23/2021

General Information			Daily Trips		AM Peak Hour Trips			PM Peak Hour Trips		
ITE Code	Development Type	Variable	ADT RATE	ADT	Rate	In % Split/ Trips	Out % Split/ Trips	Rate	In % Split/ Trips	Out % Split/ Trips
826	Specialty Retail Center	20.5 1000 sq ft GLA	eq	915	eq	48% 104	52% 112	eq	44% 31	56% 40
934	Fast-Food Restaurant w/Drive-Thru	13 1000 sq ft GFA	496.1	6450	45.42	51% 301	49% 289	32.7	52% 221	48% 204
945	Gasoline/Service Station with Convenience Market	12 Vehicle Fueling Postions	162.8	1953	10.16	50% 61	50% 61	13.5	50% 81	50% 81
sub-total				9,318		466	462		333	325
Adjustments										
Capture		5%		466		23	23		17	16
Pass-by[1]		30%		274		31	34		9	12
Pass-by[2]		40%		3,361		145	140		121	114
Total				5,217		267	265		186	183

[1]Specialty Retail Center only.

[2]Fast-Food Restaurant & Gasoline/Service Station with Convenience Market only.

PM

Direction	**%**	In	Out
North	20%	37	37
East	30%	56	54
South	20%	37	37
West	30%	56	55
Total:	100%	186	183

AM

Direction	**%**	In	Out
North	20%	53	53
East	30%	80	80
South	20%	53	53
West	30%	80	80
Total:	100%	267	265

TRIP GENERATION

Commercial Development

NE Corner of Wible & Hosking

8/23/2021

General Information			Daily Trips		AM Peak Hour Trips			PM Peak Hour Trips		
ITE Code	Development Type	Variable	ADT RATE	ADT	Rate	In % Split/ Trips	Out % Split/ Trips	Rate	In % Split/ Trips	Out % Split/ Trips
853	Convenience Market with Gasoline Pumps	5.5 1000 sq ft GFA	624.2	3433	40.59	50% 112	50% 112	49.29	50% 136	50% 136
820	Shopping Center	59.346 1000 sq ft GLA	eq	4216	eq	62% 113	38% 69	eq	48% 177	52% 192
932	High-Turnover (Sit-Down) Restaurant	5.85 1000 sq ft GFA	112.18	656	9.94	55% 32	45% 26	9.77	62% 35	38% 22
934	Fast-Food Restaurant w/Drive-Thru	5 1000 sq ft GFA	470.95	2355	40.19	51% 102	49% 98	32.67	52% 85	48% 78
sub-total				10,660		359	305		433	428
Capture[1]		5%		533		18	15		22	21
Pass-by[2]		15%		731		22	14		32	32
Pass-by[3]		40%		2,315		86	84		88	86
Total				7,081		233	192		291	289

[1]Capture rate of 5%, per COB Subdivision & Design Manual, applied to all land uses.

[2]Pass-by rate of 15% applied to High-Turnover Restaurant and Shopping Center land uses only.

[3]Pass-by rate of 40% applied to Fast Food & Service Station land uses per COB Subdivision & Design Manual.

PM	Direction	%	In	Out
	North	25%	73	72
	East	25%	73	72
	South	20%	58	58
	West	30%	87	87
	Total:	100%	291	289

AM	Direction	%	In	Out
	North	25%	58	48
	East	25%	58	48
	South	20%	47	38
	West	30%	70	58
	Total:	100%	233	192

Intersection Level of Service

Intersection 1
S H St & Panama Ln

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	142	665	64	29	614	38	81	105	40	62	99	108
Future Volume (veh/h)	142	665	64	29	614	38	81	105	40	62	99	108
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1716	1716	1863	1750
Adj Flow Rate, veh/h	154	723	70	32	667	41	88	114	43	67	108	117
Adj No. of Lanes	1	2	0	1	3	0	1	2	1	1	2	0
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	634	1386	134	402	1388	85	140	452	186	110	195	174
Arrive On Green	0.39	0.43	0.41	0.25	0.28	0.27	0.09	0.13	0.13	0.07	0.11	0.09
Sat Flow, veh/h	1634	3261	316	1634	4900	300	1634	3539	1458	1634	1770	1583
Grp Volume(v), veh/h	154	392	401	32	460	248	88	114	43	67	108	117
Grp Sat Flow(s),veh/h/ln	1634	1770	1807	1634	1695	1810	1634	1770	1458	1634	1770	1583
Q Serve(g_s), s	7.6	19.6	19.7	1.8	13.5	13.7	6.2	3.5	1.9	4.8	6.9	8.6
Cycle Q Clear(g_c), s	7.6	19.6	19.7	1.8	13.5	13.7	6.2	3.5	1.9	4.8	6.9	8.6
Prop In Lane	1.00		0.17	1.00		0.17	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	634	752	768	402	961	513	140	452	186	110	195	174
V/C Ratio(X)	0.24	0.52	0.52	0.08	0.48	0.48	0.63	0.25	0.23	0.61	0.55	0.67
Avail Cap(c_a), veh/h	634	752	768	402	961	513	231	855	352	204	398	356
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.8	25.5	25.6	34.8	35.7	35.9	53.0	47.2	17.1	54.4	50.6	52.3
Incr Delay (d2), s/veh	0.2	2.6	2.5	0.1	1.7	3.2	4.6	0.3	0.6	5.3	2.5	4.4
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	3.5	10.1	10.4	0.8	6.6	7.3	3.0	1.7	0.8	2.3	3.5	4.0
LnGrp Delay(d),s/veh	25.0	28.1	28.2	34.9	37.4	39.1	57.7	47.4	17.7	59.7	53.1	56.7
LnGrp LOS	C	C	C	C	D	D	E	D	B	E	D	E
Approach Vol, veh/h		947			740			245			292	
Approach Delay, s/veh		27.6			37.8			45.9			56.0	
Approach LOS		C			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.1	19.3	33.5	55.0	14.2	17.2	50.5	38.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	13.0	27.0	7.0	49.0	15.0	25.0	24.0	32.0
Max Q Clear Time (g_c+I1), s	6.8	5.5	3.8	21.7	8.2	10.6	9.6	15.7
Green Ext Time (p_c), s	0.1	0.8	0.2	3.0	0.5	0.6	0.5	2.5

Intersection Summary	
HCM 2010 Ctrl Delay	36.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	142	665	96	44	614	38	118	143	60	62	130	108
Future Volume (veh/h)	142	665	96	44	614	38	118	143	60	62	130	108
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1716	1716	1863	1750
Adj Flow Rate, veh/h	154	723	104	48	667	41	128	155	65	67	141	117
Adj No. of Lanes	1	2	0	1	3	0	1	2	1	1	2	0
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	553	1243	179	389	1470	90	183	569	235	110	221	171
Arrive On Green	0.34	0.40	0.38	0.24	0.30	0.28	0.11	0.16	0.16	0.07	0.12	0.10
Sat Flow, veh/h	1634	3107	447	1634	4900	300	1634	3539	1458	1634	1904	1469
Grp Volume(v), veh/h	154	412	415	48	460	248	128	155	65	67	130	128
Grp Sat Flow(s),veh/h/ln	1634	1770	1784	1634	1695	1810	1634	1770	1458	1634	1770	1603
Q Serve(g_s), s	8.3	21.8	21.9	2.8	13.2	13.3	9.1	4.6	2.8	4.8	8.4	9.2
Cycle Q Clear(g_c), s	8.3	21.8	21.9	2.8	13.2	13.3	9.1	4.6	2.8	4.8	8.4	9.2
Prop In Lane	1.00		0.25	1.00		0.17	1.00		1.00	1.00		0.92
Lane Grp Cap(c), veh/h	553	708	714	389	1017	543	183	569	235	110	205	186
V/C Ratio(X)	0.28	0.58	0.58	0.12	0.45	0.46	0.70	0.27	0.28	0.61	0.63	0.69
Avail Cap(c_a), veh/h	553	708	714	389	1017	543	245	914	377	177	383	347
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.0	28.1	28.4	35.9	34.0	34.2	51.3	44.2	15.8	54.4	50.6	51.8
Incr Delay (d2), s/veh	0.3	3.5	3.5	0.1	1.5	2.7	5.4	0.3	0.6	5.3	3.2	4.4
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	3.8	11.3	11.4	1.3	6.4	7.1	4.4	2.3	1.2	2.3	4.3	4.3
LnGrp Delay(d),s/veh	29.3	31.6	31.8	36.0	35.5	37.0	56.7	44.4	16.4	59.7	53.8	56.3
LnGrp LOS	C	C	C	D	D	D	E	D	B	E	D	E
Approach Vol, veh/h		981			756			348			325	
Approach Delay, s/veh		31.3			36.0			43.7			56.0	
Approach LOS		C			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.1	23.3	32.6	52.0	17.5	17.9	44.6	40.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	11.0	29.0	10.0	46.0	16.0	24.0	22.0	34.0
Max Q Clear Time (g_c+I1), s	6.8	6.6	4.8	23.9	11.1	11.2	10.3	15.3
Green Ext Time (p_c), s	0.0	1.2	0.3	3.1	0.6	0.7	0.5	2.6

Intersection Summary	
HCM 2010 Ctrl Delay	37.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	144	674	65	29	621	38	83	108	41	64	102	111
Future Volume (veh/h)	144	674	65	29	621	38	83	108	41	64	102	111
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1716	1716	1863	1750
Adj Flow Rate, veh/h	157	733	71	32	675	41	90	117	45	70	111	121
Adj No. of Lanes	1	2	0	1	3	0	1	2	1	1	2	0
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	208	1109	107	532	2637	159	146	466	192	114	198	177
Arrive On Green	0.13	0.34	0.32	0.33	0.54	0.52	0.09	0.13	0.13	0.07	0.11	0.10
Sat Flow, veh/h	1634	3261	316	1634	4904	296	1634	3539	1458	1634	1770	1583
Grp Volume(v), veh/h	157	398	406	32	466	250	90	117	45	70	111	121
Grp Sat Flow(s),veh/h/ln	1634	1770	1807	1634	1695	1810	1634	1770	1458	1634	1770	1583
Q Serve(g_s), s	11.1	23.0	23.0	1.6	8.8	9.0	6.4	3.6	1.7	5.0	7.1	8.9
Cycle Q Clear(g_c), s	11.1	23.0	23.0	1.6	8.8	9.0	6.4	3.6	1.7	5.0	7.1	8.9
Prop In Lane	1.00		0.17	1.00		0.16	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	208	602	614	532	1823	974	146	466	192	114	198	177
V/C Ratio(X)	0.75	0.66	0.66	0.06	0.26	0.26	0.62	0.25	0.23	0.61	0.56	0.68
Avail Cap(c_a), veh/h	300	602	614	532	1823	974	381	1156	476	177	357	319
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.5	33.7	33.9	27.9	14.9	15.0	52.7	46.8	12.1	54.3	50.5	52.2
Incr Delay (d2), s/veh	6.3	5.6	5.5	0.0	0.3	0.6	4.2	0.3	0.6	5.3	2.5	4.5
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	5.4	12.1	12.4	0.7	4.2	4.6	3.0	1.8	0.7	2.4	3.6	4.1
LnGrp Delay(d),s/veh	56.9	39.3	39.4	27.9	15.2	15.6	56.8	47.1	12.8	59.6	52.9	56.8
LnGrp LOS	E	D	D	C	B	B	E	D	B	E	D	E
Approach Vol, veh/h		961			748			252			302	
Approach Delay, s/veh		42.2			15.9			44.4			56.0	
Approach LOS		D			B			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.4	19.8	43.0	44.8	14.7	17.5	19.3	68.5
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	11.0	37.2	9.0	38.8	26.0	22.2	20.0	27.8
Max Q Clear Time (g_c+I1), s	7.0	5.6	3.6	25.0	8.4	10.9	13.1	11.0
Green Ext Time (p_c), s	0.0	0.9	0.5	2.6	0.8	0.6	0.2	2.7

Intersection Summary	
HCM 2010 Ctrl Delay	35.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	144	674	65	29	621	38	118	145	60	64	102	111
Future Volume (veh/h)	144	674	65	29	621	38	118	145	60	64	102	111
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1716	1716	1863	1750
Adj Flow Rate, veh/h	157	733	71	32	675	41	128	158	65	70	111	121
Adj No. of Lanes	1	2	0	1	3	0	1	2	1	1	2	0
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	208	1109	107	487	2505	151	190	562	231	114	198	177
Arrive On Green	0.13	0.34	0.32	0.30	0.51	0.49	0.12	0.16	0.16	0.07	0.11	0.10
Sat Flow, veh/h	1634	3261	316	1634	4904	296	1634	3539	1458	1634	1770	1583
Grp Volume(v), veh/h	157	398	406	32	466	250	128	158	65	70	111	121
Grp Sat Flow(s),veh/h/ln	1634	1770	1807	1634	1695	1810	1634	1770	1458	1634	1770	1583
Q Serve(g_s), s	11.1	23.0	23.0	1.7	9.3	9.5	9.0	4.7	2.5	5.0	7.1	8.9
Cycle Q Clear(g_c), s	11.1	23.0	23.0	1.7	9.3	9.5	9.0	4.7	2.5	5.0	7.1	8.9
Prop In Lane	1.00		0.17	1.00		0.16	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	208	602	614	487	1732	925	190	562	231	114	198	177
V/C Ratio(X)	0.75	0.66	0.66	0.07	0.27	0.27	0.67	0.28	0.28	0.61	0.56	0.68
Avail Cap(c_a), veh/h	300	602	614	487	1732	925	381	1156	476	177	357	319
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.5	33.7	33.9	30.1	16.6	16.8	50.8	44.5	12.3	54.3	50.5	52.2
Incr Delay (d2), s/veh	6.3	5.6	5.5	0.1	0.4	0.7	4.1	0.3	0.6	5.3	2.5	4.5
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	5.4	12.1	12.4	0.8	4.5	4.9	4.3	2.3	1.0	2.4	3.6	4.1
LnGrp Delay(d),s/veh	56.9	39.3	39.4	30.2	17.0	17.5	54.9	44.7	13.0	59.6	52.9	56.8
LnGrp LOS	E	D	D	C	B	B	D	D	B	E	D	E
Approach Vol, veh/h		961			748			351			302	
Approach Delay, s/veh		42.2			17.7			42.6			56.0	
Approach LOS		D			B			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.4	23.0	39.8	44.8	18.0	17.5	19.3	65.3
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	11.0	37.2	9.0	38.8	26.0	22.2	20.0	27.8
Max Q Clear Time (g_c+I1), s	7.0	6.7	3.7	25.0	11.0	10.9	13.1	11.5
Green Ext Time (p_c), s	0.0	1.3	0.5	2.6	1.1	0.6	0.2	2.7

Intersection Summary	
HCM 2010 Ctrl Delay	36.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	156	729	292	104	664	41	324	252	148	76	220	132
Future Volume (veh/h)	156	729	292	104	664	41	324	252	148	76	220	132
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1716	1716	1863	1750
Adj Flow Rate, veh/h	170	792	317	113	722	45	352	274	161	83	239	143
Adj No. of Lanes	1	2	0	1	3	0	1	2	1	1	2	0
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	221	840	336	234	1702	106	381	1079	445	129	325	188
Arrive On Green	0.14	0.34	0.32	0.14	0.35	0.33	0.23	0.30	0.30	0.08	0.15	0.13
Sat Flow, veh/h	1634	2471	988	1634	4896	304	1634	3539	1458	1634	2164	1248
Grp Volume(v), veh/h	170	567	542	113	499	268	352	274	161	83	194	188
Grp Sat Flow(s),veh/h/ln	1634	1770	1688	1634	1695	1809	1634	1770	1458	1634	1770	1642
Q Serve(g_s), s	12.0	37.3	37.5	7.6	13.5	13.7	25.3	7.0	6.7	5.9	12.5	13.2
Cycle Q Clear(g_c), s	12.0	37.3	37.5	7.6	13.5	13.7	25.3	7.0	6.7	5.9	12.5	13.2
Prop In Lane	1.00		0.58	1.00		0.17	1.00		1.00	1.00		0.76
Lane Grp Cap(c), veh/h	221	602	574	234	1178	629	381	1079	445	129	266	247
V/C Ratio(X)	0.77	0.94	0.94	0.48	0.42	0.43	0.92	0.25	0.36	0.64	0.73	0.76
Avail Cap(c_a), veh/h	300	602	574	234	1178	629	381	1156	476	177	357	331
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.88	0.88	0.88	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.1	38.5	39.1	47.3	29.9	30.1	44.9	31.4	13.8	53.6	48.6	49.7
Incr Delay (d2), s/veh	8.1	24.9	26.0	1.5	1.1	2.1	25.3	0.1	0.4	5.3	5.0	7.1
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	5.9	22.4	21.6	3.6	6.5	7.2	14.0	3.4	2.7	2.9	6.5	6.5
LnGrp Delay(d),s/veh	58.1	63.4	65.1	48.9	31.1	32.2	70.3	31.5	14.2	58.9	53.6	56.7
LnGrp LOS	E	E	E	D	C	C	E	C	B	E	D	E
Approach Vol, veh/h		1279			880			787			465	
Approach Delay, s/veh		63.4			33.7			45.3			55.8	
Approach LOS		E			C			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.5	40.6	21.2	44.8	32.0	22.0	20.2	45.7
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	11.0	37.2	9.0	38.8	26.0	22.2	20.0	27.8
Max Q Clear Time (g_c+I1), s	7.9	9.0	9.6	39.5	27.3	15.2	14.0	15.7
Green Ext Time (p_c), s	0.0	3.2	0.0	0.0	0.0	0.8	0.2	2.9

Intersection Summary	
HCM 2010 Ctrl Delay	50.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	156	729	324	119	664	41	361	290	168	76	251	132
Future Volume (veh/h)	156	729	324	119	664	41	361	290	168	76	251	132
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1716	1716	1863	1750
Adj Flow Rate, veh/h	170	792	352	129	722	45	392	315	183	83	273	143
Adj No. of Lanes	1	2	0	1	3	0	1	2	1	1	2	0
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	221	913	405	150	1659	103	381	1110	457	129	361	184
Arrive On Green	0.14	0.38	0.37	0.09	0.34	0.32	0.23	0.31	0.31	0.08	0.16	0.14
Sat Flow, veh/h	1634	2387	1058	1634	4896	304	1634	3539	1458	1634	2272	1157
Grp Volume(v), veh/h	170	587	557	129	499	268	392	315	183	83	211	205
Grp Sat Flow(s),veh/h/ln	1634	1770	1676	1634	1695	1809	1634	1770	1458	1634	1770	1659
Q Serve(g_s), s	12.0	36.7	37.0	9.3	13.7	13.8	28.0	8.0	11.8	5.9	13.7	14.3
Cycle Q Clear(g_c), s	12.0	36.7	37.0	9.3	13.7	13.8	28.0	8.0	11.8	5.9	13.7	14.3
Prop In Lane	1.00		0.63	1.00		0.17	1.00		1.00	1.00		0.70
Lane Grp Cap(c), veh/h	221	677	641	150	1149	613	381	1110	457	129	281	264
V/C Ratio(X)	0.77	0.87	0.87	0.86	0.43	0.44	1.03	0.28	0.40	0.64	0.75	0.78
Avail Cap(c_a), veh/h	300	677	641	150	1149	613	381	1156	476	177	357	334
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.82	0.82	0.82	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.1	34.2	34.9	53.7	30.7	30.9	46.0	31.0	32.3	53.6	48.2	49.1
Incr Delay (d2), s/veh	8.1	14.0	14.9	36.7	1.2	2.3	49.0	0.1	0.5	5.3	6.5	8.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	20.6	19.7	5.8	6.6	7.3	17.8	4.0	4.8	2.9	7.2	7.2
LnGrp Delay(d),s/veh	58.1	48.2	49.8	90.5	31.9	33.2	95.0	31.2	32.8	58.9	54.7	57.7
LnGrp LOS	E	D	D	F	C	C	F	C	C	E	D	E
Approach Vol, veh/h		1314			896			890			499	
Approach Delay, s/veh		50.1			40.7			59.6			56.6	
Approach LOS		D			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.5	41.6	15.0	49.9	32.0	23.1	20.2	44.7
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	11.0	37.2	9.0	38.8	26.0	22.2	20.0	27.8
Max Q Clear Time (g_c+I1), s	7.9	13.8	11.3	39.0	30.0	16.3	14.0	15.8
Green Ext Time (p_c), s	0.0	3.6	0.0	0.0	0.0	0.8	0.2	6.4

Intersection Summary	
HCM 2010 Ctrl Delay	51.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	156	729	324	119	664	41	361	290	168	76	251	132
Future Volume (veh/h)	156	729	324	119	664	41	361	290	168	76	251	132
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1750	1716	1863	1716	1716	1863	1750
Adj Flow Rate, veh/h	170	792	352	129	722	45	392	315	183	83	273	143
Adj No. of Lanes	1	2	0	1	3	0	1	2	1	1	2	0
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	221	812	360	219	1659	103	381	1110	457	129	361	184
Arrive On Green	0.14	0.34	0.32	0.13	0.34	0.32	0.23	0.31	0.31	0.08	0.16	0.14
Sat Flow, veh/h	1634	2387	1058	1634	4896	304	1634	3539	1458	1634	2272	1157
Grp Volume(v), veh/h	170	587	557	129	499	268	392	315	183	83	211	205
Grp Sat Flow(s),veh/h/ln	1634	1770	1676	1634	1695	1809	1634	1770	1458	1634	1770	1659
Q Serve(g_s), s	12.0	39.3	39.5	8.9	13.7	13.8	28.0	8.0	7.8	5.9	13.7	14.3
Cycle Q Clear(g_c), s	12.0	39.3	39.5	8.9	13.7	13.8	28.0	8.0	7.8	5.9	13.7	14.3
Prop In Lane	1.00		0.63	1.00		0.17	1.00		1.00	1.00		0.70
Lane Grp Cap(c), veh/h	221	602	570	219	1149	613	381	1110	457	129	281	264
V/C Ratio(X)	0.77	0.98	0.98	0.59	0.43	0.44	1.03	0.28	0.40	0.64	0.75	0.78
Avail Cap(c_a), veh/h	300	602	570	219	1149	613	381	1156	476	177	357	334
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.82	0.82	0.82	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.1	39.1	39.8	48.8	30.7	30.9	46.0	31.0	14.0	53.6	48.2	49.1
Incr Delay (d2), s/veh	8.1	31.1	32.7	4.0	1.2	2.3	49.0	0.1	0.5	5.3	6.5	8.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	24.3	23.5	4.3	6.6	7.3	17.8	4.0	3.2	2.9	7.2	7.2
LnGrp Delay(d),s/veh	58.1	70.1	72.5	52.9	31.9	33.2	95.0	31.2	14.5	58.9	54.7	57.7
LnGrp LOS	E	E	E	D	C	C	F	C	B	E	D	E
Approach Vol, veh/h		1314			896			890			499	
Approach Delay, s/veh		69.6			35.3			55.9			56.6	
Approach LOS		E			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.5	41.6	20.1	44.8	32.0	23.1	20.2	44.7
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	11.0	37.2	9.0	38.8	26.0	22.2	20.0	27.8
Max Q Clear Time (g_c+I1), s	7.9	10.0	10.9	41.5	30.0	16.3	14.0	15.8
Green Ext Time (p_c), s	0.0	3.6	0.0	0.0	0.0	0.8	0.2	2.9

Intersection Summary	
HCM 2010 Ctrl Delay	55.9
HCM 2010 LOS	E

Intersection 2
S H St & Berkshire Rd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	203	88	13	117	72	61	169	36	50	133	7
Future Volume (veh/h)	6	203	88	13	117	72	61	169	36	50	133	7
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	7	221	96	14	127	78	66	184	39	54	145	8
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	1
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	48	311	243	58	322	252	116	321	67	833	1944	801
Arrive On Green	0.03	0.17	0.17	0.04	0.17	0.17	0.14	0.22	0.18	0.51	0.55	0.55
Sat Flow, veh/h	1634	1863	1458	1634	1863	1458	1634	2919	606	1634	3539	1458
Grp Volume(v), veh/h	7	221	96	14	127	78	66	110	113	54	145	8
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	1863	1458	1634	1770	1756	1634	1770	1458
Q Serve(g_s), s	0.4	10.1	4.0	0.8	5.4	0.9	3.4	5.0	5.2	1.5	1.7	0.2
Cycle Q Clear(g_c), s	0.4	10.1	4.0	0.8	5.4	0.9	3.4	5.0	5.2	1.5	1.7	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.35	1.00		1.00
Lane Grp Cap(c), veh/h	48	311	243	58	322	252	116	195	193	833	1944	801
V/C Ratio(X)	0.15	0.71	0.39	0.24	0.39	0.31	0.57	0.56	0.58	0.06	0.07	0.01
Avail Cap(c_a), veh/h	109	580	454	109	580	454	200	610	605	833	1944	801
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.94	0.94	0.94	0.89	0.89	0.89
Uniform Delay (d), s/veh	42.6	35.5	19.1	42.2	33.1	1.6	37.3	33.2	33.9	11.2	9.5	9.2
Incr Delay (d2), s/veh	1.4	3.0	1.0	2.1	0.8	0.7	4.1	10.6	11.5	0.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	5.4	1.7	0.4	2.9	0.4	1.7	3.0	3.2	0.7	0.9	0.1
LnGrp Delay(d),s/veh	44.0	38.5	20.1	44.4	33.8	2.3	41.4	43.8	45.5	11.2	9.6	9.2
LnGrp LOS	D	D	C	D	C	A	D	D	D	B	A	A
Approach Vol, veh/h		324			219			289			207	
Approach Delay, s/veh		33.1			23.3			43.9			10.0	
Approach LOS		C			C			D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	49.9	13.9	7.2	19.0	10.4	53.4	6.6	19.5
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	7.0	29.0	4.0	26.0	9.0	27.0	4.0	26.0
Max Q Clear Time (g_c+I1), s	3.5	7.2	2.8	12.1	5.4	3.7	2.4	7.4
Green Ext Time (p_c), s	0.2	0.7	0.1	0.9	0.0	0.7	0.0	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	29.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	203	88	42	117	72	61	264	73	50	211	7
Future Volume (veh/h)	6	203	88	42	117	72	61	264	73	50	211	7
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	7	221	96	46	127	78	66	287	79	54	229	8
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	1
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	48	311	243	92	360	282	119	1480	400	102	1864	768
Arrive On Green	0.03	0.17	0.17	0.06	0.19	0.19	0.02	0.18	0.17	0.06	0.53	0.53
Sat Flow, veh/h	1634	1863	1458	1634	1863	1458	1634	2756	745	1634	3539	1458
Grp Volume(v), veh/h	7	221	96	46	127	78	66	182	184	54	229	8
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	1863	1458	1634	1770	1731	1634	1770	1458
Q Serve(g_s), s	0.4	10.1	4.0	2.5	5.3	4.1	3.6	7.9	8.2	2.9	2.9	0.2
Cycle Q Clear(g_c), s	0.4	10.1	4.0	2.5	5.3	4.1	3.6	7.9	8.2	2.9	2.9	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.43	1.00		1.00
Lane Grp Cap(c), veh/h	48	311	243	92	360	282	119	950	930	102	1864	768
V/C Ratio(X)	0.15	0.71	0.39	0.50	0.35	0.28	0.55	0.19	0.20	0.53	0.12	0.01
Avail Cap(c_a), veh/h	109	580	454	109	580	454	200	950	930	145	1864	768
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.83	0.83	0.83	0.86	0.86	0.86
Uniform Delay (d), s/veh	42.6	35.5	18.9	41.3	31.4	30.9	42.5	20.4	20.6	40.9	10.8	10.1
Incr Delay (d2), s/veh	1.4	3.0	1.0	4.2	0.6	0.5	3.3	0.4	0.4	3.6	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	5.4	1.7	1.2	2.8	1.7	1.7	4.0	4.0	1.4	1.5	0.1
LnGrp Delay(d),s/veh	44.0	38.5	20.0	45.5	32.0	31.5	45.8	20.8	21.0	44.5	10.9	10.2
LnGrp LOS	D	D	B	D	C	C	D	C	C	D	B	B
Approach Vol, veh/h		324			251			432			291	
Approach Delay, s/veh		33.1			34.3			24.7			17.1	
Approach LOS		C			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	52.3	9.0	19.0	10.6	51.4	6.6	21.4
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	6.0	30.0	4.0	26.0	9.0	27.0	4.0	26.0
Max Q Clear Time (g_c+I1), s	4.9	10.2	4.5	12.1	5.6	4.9	2.4	7.3
Green Ext Time (p_c), s	0.0	2.1	0.0	0.9	0.0	2.2	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	27.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	206	89	14	124	76	62	173	37	51	136	7
Future Volume (veh/h)	6	206	89	14	124	76	62	173	37	51	136	7
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	7	224	97	15	135	83	67	188	40	55	148	8
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	1
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	48	314	245	59	326	255	117	325	68	827	1933	796
Arrive On Green	0.03	0.17	0.17	0.04	0.18	0.18	0.14	0.22	0.18	0.51	0.55	0.55
Sat Flow, veh/h	1634	1863	1458	1634	1863	1458	1634	2917	608	1634	3539	1458
Grp Volume(v), veh/h	7	224	97	15	135	83	67	112	116	55	148	8
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	1863	1458	1634	1770	1755	1634	1770	1458
Q Serve(g_s), s	0.4	10.2	4.0	0.8	5.8	1.0	3.4	5.1	5.3	1.5	1.8	0.2
Cycle Q Clear(g_c), s	0.4	10.2	4.0	0.8	5.8	1.0	3.4	5.1	5.3	1.5	1.8	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.35	1.00		1.00
Lane Grp Cap(c), veh/h	48	314	245	59	326	255	117	197	196	827	1933	796
V/C Ratio(X)	0.15	0.71	0.40	0.25	0.41	0.33	0.57	0.57	0.59	0.07	0.08	0.01
Avail Cap(c_a), veh/h	109	580	454	109	580	454	200	610	605	827	1933	796
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.93	0.93	0.88	0.88	0.88
Uniform Delay (d), s/veh	42.6	35.4	18.9	42.2	33.0	1.6	37.3	33.0	33.8	11.4	9.7	9.3
Incr Delay (d2), s/veh	1.4	3.0	1.0	2.2	0.8	0.7	4.0	10.6	11.5	0.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	5.6	1.7	0.4	3.1	0.4	1.7	3.0	3.2	0.7	0.9	0.1
LnGrp Delay(d),s/veh	44.0	38.4	20.0	44.4	33.9	2.4	41.3	43.6	45.3	11.4	9.7	9.3
LnGrp LOS	D	D	B	D	C	A	D	D	D	B	A	A
Approach Vol, veh/h		328			233			295			211	
Approach Delay, s/veh		33.1			23.3			43.7			10.2	
Approach LOS		C			C			D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	49.6	14.0	7.3	19.2	10.5	53.1	6.6	19.8
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	7.0	29.0	4.0	26.0	9.0	27.0	4.0	26.0
Max Q Clear Time (g_c+I1), s	3.5	7.3	2.8	12.2	5.4	3.8	2.4	7.8
Green Ext Time (p_c), s	0.2	0.7	0.1	0.9	0.0	0.7	0.0	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	29.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	206	89	14	124	76	62	264	72	51	136	7
Future Volume (veh/h)	6	206	89	14	124	76	62	264	72	51	136	7
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	7	224	97	15	135	83	67	287	78	55	148	8
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	1
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	48	327	256	59	339	266	120	1513	404	103	1901	783
Arrive On Green	0.03	0.18	0.18	0.04	0.18	0.18	0.02	0.18	0.17	0.06	0.54	0.54
Sat Flow, veh/h	1634	1863	1458	1634	1863	1458	1634	2764	738	1634	3539	1458
Grp Volume(v), veh/h	7	224	97	15	135	83	67	182	183	55	148	8
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	1863	1458	1634	1770	1732	1634	1770	1458
Q Serve(g_s), s	0.4	10.1	5.3	0.8	5.8	4.4	3.7	7.8	8.1	2.9	1.8	0.2
Cycle Q Clear(g_c), s	0.4	10.1	5.3	0.8	5.8	4.4	3.7	7.8	8.1	2.9	1.8	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.43	1.00		1.00
Lane Grp Cap(c), veh/h	48	327	256	59	339	266	120	969	948	103	1901	783
V/C Ratio(X)	0.15	0.69	0.38	0.25	0.40	0.31	0.56	0.19	0.19	0.53	0.08	0.01
Avail Cap(c_a), veh/h	109	580	454	109	580	454	200	969	948	145	1901	783
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.78	0.78	0.78	0.88	0.88	0.88
Uniform Delay (d), s/veh	42.6	34.8	32.8	42.2	32.4	31.9	42.5	19.9	20.1	40.9	10.1	9.7
Incr Delay (d2), s/veh	1.4	2.5	0.9	2.2	0.8	0.7	3.1	0.3	0.4	3.7	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	5.5	2.2	0.4	3.0	1.8	1.8	3.9	4.0	1.4	0.9	0.1
LnGrp Delay(d),s/veh	44.0	37.3	33.7	44.4	33.2	32.6	45.6	20.2	20.4	44.6	10.1	9.7
LnGrp LOS	D	D	C	D	C	C	D	C	C	D	B	A
Approach Vol, veh/h		328			233			432			211	
Approach Delay, s/veh		36.4			33.7			24.3			19.1	
Approach LOS		D			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.7	53.3	7.3	19.8	10.6	52.3	6.6	20.4
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	6.0	30.0	4.0	26.0	9.0	27.0	4.0	26.0
Max Q Clear Time (g_c+I1), s	4.9	10.1	2.8	12.1	5.7	3.8	2.4	7.8
Green Ext Time (p_c), s	0.0	1.8	0.0	1.6	0.0	1.8	0.0	1.8

Intersection Summary	
HCM 2010 Ctrl Delay	28.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	111	250	191	53	173	106	139	563	81	59	556	11
Future Volume (veh/h)	111	250	191	53	173	106	139	563	81	59	556	11
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	121	272	208	58	188	115	151	612	88	64	604	12
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	1
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	181	367	288	107	283	221	208	741	106	525	1530	630
Arrive On Green	0.11	0.20	0.20	0.07	0.15	0.15	0.25	0.48	0.43	0.32	0.43	0.43
Sat Flow, veh/h	1634	1863	1458	1634	1863	1458	1634	3108	446	1634	3539	1458
Grp Volume(v), veh/h	121	272	208	58	188	115	151	348	352	64	604	12
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	1863	1458	1634	1770	1784	1634	1770	1458
Q Serve(g_s), s	6.4	12.4	8.1	3.1	8.6	3.0	7.6	15.3	15.4	2.5	10.5	0.4
Cycle Q Clear(g_c), s	6.4	12.4	8.1	3.1	8.6	3.0	7.6	15.3	15.4	2.5	10.5	0.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.25	1.00		1.00
Lane Grp Cap(c), veh/h	181	367	288	107	283	221	208	422	425	525	1530	630
V/C Ratio(X)	0.67	0.74	0.72	0.54	0.67	0.52	0.73	0.82	0.83	0.12	0.39	0.02
Avail Cap(c_a), veh/h	182	573	449	127	511	400	236	596	601	525	1530	630
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09	0.68	0.68	0.68
Uniform Delay (d), s/veh	38.4	34.0	15.4	40.7	36.0	7.6	32.1	21.9	22.4	21.6	17.5	14.6
Incr Delay (d2), s/veh	9.0	2.9	3.4	4.2	2.7	1.9	0.9	1.8	1.8	0.1	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	6.6	3.5	1.5	4.6	1.3	3.4	7.5	7.7	1.1	5.2	0.2
LnGrp Delay(d),s/veh	47.4	36.9	18.9	44.9	38.7	9.5	33.0	23.7	24.2	21.7	18.0	14.7
LnGrp LOS	D	D	B	D	D	A	C	C	C	C	B	B
Approach Vol, veh/h		601			361			851			680	
Approach Delay, s/veh		32.8			30.4			25.6			18.3	
Approach LOS		C			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	32.9	25.5	9.9	21.7	15.4	42.9	14.0	17.7
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	7.0	28.3	5.0	25.7	11.0	24.3	8.0	22.7
Max Q Clear Time (g_c+I1), s	4.5	17.4	5.1	14.4	9.6	12.5	8.4	10.6
Green Ext Time (p_c), s	0.8	2.0	0.0	1.4	0.1	2.3	0.0	1.0

Intersection Summary	
HCM 2010 Ctrl Delay	26.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	111	250	191	82	173	106	139	658	118	59	634	11
Future Volume (veh/h)	111	250	191	82	173	106	139	658	118	59	634	11
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	121	272	208	89	188	115	151	715	128	64	689	12
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	1
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	181	365	286	146	325	254	216	1400	251	115	1433	590
Arrive On Green	0.11	0.20	0.20	0.09	0.17	0.17	0.09	0.31	0.30	0.07	0.40	0.40
Sat Flow, veh/h	1634	1863	1458	1634	1863	1458	1634	3001	537	1634	3539	1458
Grp Volume(v), veh/h	121	272	208	89	188	115	151	422	421	64	689	12
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	1863	1458	1634	1770	1768	1634	1770	1458
Q Serve(g_s), s	6.4	12.4	8.1	4.7	8.3	6.4	8.1	17.5	17.6	3.4	12.9	0.4
Cycle Q Clear(g_c), s	6.4	12.4	8.1	4.7	8.3	6.4	8.1	17.5	17.6	3.4	12.9	0.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.30	1.00		1.00
Lane Grp Cap(c), veh/h	181	365	286	146	325	254	216	826	825	115	1433	590
V/C Ratio(X)	0.67	0.75	0.73	0.61	0.58	0.45	0.70	0.51	0.51	0.56	0.48	0.02
Avail Cap(c_a), veh/h	182	532	416	163	511	400	236	826	825	145	1433	590
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09	0.61	0.61	0.61
Uniform Delay (d), s/veh	38.4	34.1	15.2	39.5	34.1	33.3	39.3	22.5	22.7	40.5	19.8	16.1
Incr Delay (d2), s/veh	9.0	3.3	3.5	5.4	1.6	1.3	0.8	0.2	0.2	2.6	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	6.7	3.5	2.3	4.4	2.7	3.7	8.6	8.7	1.6	6.5	0.2
LnGrp Delay(d),s/veh	47.4	37.3	18.8	44.8	35.8	34.6	40.0	22.7	22.9	43.1	20.5	16.1
LnGrp LOS	D	D	B	D	D	C	D	C	C	D	C	B
Approach Vol, veh/h		601			392			994			765	
Approach Delay, s/veh		32.9			37.5			25.4			22.3	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.3	46.0	12.0	21.6	15.9	40.4	14.0	19.7
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	6.0	29.3	7.0	23.7	11.0	24.3	8.0	22.7
Max Q Clear Time (g_c+I1), s	5.4	19.6	6.7	14.4	10.1	14.9	8.4	10.3
Green Ext Time (p_c), s	0.0	4.6	0.0	1.3	0.0	4.5	0.0	1.1

Intersection Summary	
HCM 2010 Ctrl Delay	27.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	111	250	191	82	173	106	139	658	118	59	634	11
Future Volume (veh/h)	111	250	191	82	173	106	139	658	118	59	634	11
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	121	272	208	89	188	115	151	715	128	64	689	12
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	1
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	181	365	286	146	325	254	214	1400	251	115	1437	592
Arrive On Green	0.11	0.20	0.20	0.09	0.17	0.17	0.13	0.47	0.44	0.07	0.41	0.41
Sat Flow, veh/h	1634	1863	1458	1634	1863	1458	1634	3001	537	1634	3539	1458
Grp Volume(v), veh/h	121	272	208	89	188	115	151	422	421	64	689	12
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	1863	1458	1634	1770	1768	1634	1770	1458
Q Serve(g_s), s	6.4	12.4	8.1	4.7	8.3	6.4	8.0	15.0	15.1	3.4	12.9	0.4
Cycle Q Clear(g_c), s	6.4	12.4	8.1	4.7	8.3	6.4	8.0	15.0	15.1	3.4	12.9	0.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.30	1.00		1.00
Lane Grp Cap(c), veh/h	181	365	286	146	325	254	214	826	825	115	1437	592
V/C Ratio(X)	0.67	0.75	0.73	0.61	0.58	0.45	0.71	0.51	0.51	0.56	0.48	0.02
Avail Cap(c_a), veh/h	182	532	416	163	511	400	236	826	825	145	1437	592
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.75	0.75	0.75	0.61	0.61	0.61
Uniform Delay (d), s/veh	38.4	34.1	15.3	39.5	34.1	33.3	37.5	16.8	17.1	40.5	19.7	16.0
Incr Delay (d2), s/veh	9.0	3.3	3.5	5.4	1.6	1.3	6.3	1.7	1.7	2.6	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	6.7	3.5	2.3	4.4	2.7	4.0	7.6	7.7	1.6	6.5	0.2
LnGrp Delay(d),s/veh	47.4	37.3	18.8	44.8	35.8	34.6	43.7	18.5	18.7	43.1	20.4	16.0
LnGrp LOS	D	D	B	D	D	C	D	B	B	D	C	B
Approach Vol, veh/h		601			392			994			765	
Approach Delay, s/veh		33.0			37.5			22.4			22.2	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.3	46.0	12.0	21.6	15.8	40.5	14.0	19.7
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	6.0	29.3	7.0	23.7	11.0	24.3	8.0	22.7
Max Q Clear Time (g_c+I1), s	5.4	17.1	6.7	14.4	10.0	14.9	8.4	10.3
Green Ext Time (p_c), s	0.0	5.2	0.0	1.3	0.0	4.5	0.0	1.1

Intersection Summary	
HCM 2010 Ctrl Delay	26.8
HCM 2010 LOS	C

Intersection 3
Stine Rd & Hosking Ave/McCutchen Rd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	261	20	46	355	108	16	184	19	131	213	71
Future Volume (veh/h)	48	261	20	46	355	108	16	184	19	131	213	71
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	52	284	22	50	386	117	17	200	21	142	232	77
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
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	93	462	341	85	452	334	757	1594	657	190	367	151
Arrive On Green	0.06	0.25	0.23	0.05	0.24	0.23	0.46	0.45	0.45	0.12	0.10	0.10
Sat Flow, veh/h	1634	1863	1458	1634	1863	1458	1634	3539	1458	1634	3539	1458
Grp Volume(v), veh/h	52	284	22	50	386	117	17	200	21	142	232	77
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	1863	1458	1634	1770	1458	1634	1770	1458
Q Serve(g_s), s	3.7	16.2	0.4	3.6	23.7	6.0	0.7	3.9	1.0	10.1	7.5	6.0
Cycle Q Clear(g_c), s	3.7	16.2	0.4	3.6	23.7	6.0	0.7	3.9	1.0	10.1	7.5	6.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	93	462	341	85	452	334	757	1594	657	190	367	151
V/C Ratio(X)	0.56	0.62	0.06	0.59	0.85	0.35	0.02	0.13	0.03	0.75	0.63	0.51
Avail Cap(c_a), veh/h	163	699	526	163	699	526	757	1594	657	313	1180	486
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.88	0.88	0.88	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.1	40.1	3.0	55.6	43.4	21.5	17.5	19.2	18.4	51.3	51.6	50.9
Incr Delay (d2), s/veh	5.1	1.3	0.1	5.5	5.6	0.6	0.0	0.2	0.1	5.8	8.1	11.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	8.5	0.2	1.8	12.9	2.5	0.3	2.0	0.4	4.9	4.1	2.9
LnGrp Delay(d),s/veh	60.2	41.4	3.1	61.1	49.0	22.1	17.5	19.4	18.5	57.1	59.6	62.6
LnGrp LOS	E	D	A	E	D	C	B	B	B	E	E	E
Approach Vol, veh/h		358			553			238			451	
Approach Delay, s/veh		41.8			44.4			19.2			59.4	
Approach LOS		D			D			B			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.9	58.1	10.3	33.7	59.6	16.4	10.8	33.1
Change Period (Y+Rc), s	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
Max Green Setting (Gmax), s	21.3	22.3	10.3	43.3	5.3	38.3	10.3	43.3
Max Q Clear Time (g_c+I1), s	12.1	5.9	5.6	18.2	2.7	9.5	5.7	25.7
Green Ext Time (p_c), s	0.3	0.8	0.0	1.2	0.2	1.2	0.5	1.7

Intersection Summary	
HCM 2010 Ctrl Delay	44.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	297	20	48	387	123	16	184	21	149	213	71
Future Volume (veh/h)	48	297	20	48	387	123	16	184	21	149	213	71
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	52	323	22	52	421	134	17	200	23	162	232	77
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
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	87	490	363	88	490	363	730	1533	632	191	365	150
Arrive On Green	0.05	0.26	0.25	0.05	0.26	0.25	0.45	0.43	0.43	0.12	0.10	0.10
Sat Flow, veh/h	1634	1863	1458	1634	1863	1458	1634	3539	1458	1634	3539	1458
Grp Volume(v), veh/h	52	323	22	52	421	134	17	200	23	162	232	77
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	1863	1458	1634	1770	1458	1634	1770	1458
Q Serve(g_s), s	3.7	18.5	0.4	3.7	25.8	6.7	0.7	4.1	1.1	11.7	7.6	6.0
Cycle Q Clear(g_c), s	3.7	18.5	0.4	3.7	25.8	6.7	0.7	4.1	1.1	11.7	7.6	6.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	87	490	363	88	490	363	730	1533	632	191	365	150
V/C Ratio(X)	0.59	0.66	0.06	0.59	0.86	0.37	0.02	0.13	0.04	0.85	0.64	0.51
Avail Cap(c_a), veh/h	95	866	657	153	931	709	730	1533	632	191	923	380
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.86	0.86	0.86	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.5	39.4	3.0	55.5	42.1	20.2	18.6	20.4	19.6	52.0	51.7	51.0
Incr Delay (d2), s/veh	8.3	1.5	0.1	5.4	3.9	0.5	0.0	0.2	0.1	28.7	8.2	12.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	9.7	0.2	1.8	13.9	2.7	0.3	2.0	0.5	6.8	4.1	2.9
LnGrp Delay(d),s/veh	63.8	40.9	3.1	60.9	46.0	20.8	18.6	20.6	19.7	80.6	59.9	62.9
LnGrp LOS	E	D	A	E	D	C	B	C	B	F	E	E
Approach Vol, veh/h		397			607			240			471	
Approach Delay, s/veh		41.8			41.7			20.4			67.5	
Approach LOS		D			D			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	56.0	10.4	35.6	57.6	16.4	10.4	35.6
Change Period (Y+Rc), s	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
Max Green Setting (Gmax), s	12.3	21.3	9.5	54.1	4.0	29.6	5.3	58.3
Max Q Clear Time (g_c+I1), s	13.7	6.1	5.7	20.5	2.7	9.6	5.7	27.8
Green Ext Time (p_c), s	0.0	0.7	0.0	1.4	0.1	1.1	0.0	2.1

Intersection Summary	
HCM 2010 Ctrl Delay	45.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	285	22	50	388	118	17	191	20	134	218	73
Future Volume (veh/h)	52	285	22	50	388	118	17	191	20	134	218	73
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	57	310	24	54	422	128	18	208	22	146	237	79
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
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	94	495	367	90	491	364	721	1518	626	191	370	152
Arrive On Green	0.06	0.27	0.25	0.06	0.26	0.25	0.44	0.43	0.43	0.12	0.10	0.10
Sat Flow, veh/h	1634	1863	1458	1634	1863	1458	1634	3539	1458	1634	3539	1458
Grp Volume(v), veh/h	57	310	24	54	422	128	18	208	22	146	237	79
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	1863	1458	1634	1770	1458	1634	1770	1458
Q Serve(g_s), s	4.1	17.6	0.5	3.9	25.9	6.4	0.7	4.3	1.0	10.4	7.7	6.2
Cycle Q Clear(g_c), s	4.1	17.6	0.5	3.9	25.9	6.4	0.7	4.3	1.0	10.4	7.7	6.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	94	495	367	90	491	364	721	1518	626	191	370	152
V/C Ratio(X)	0.61	0.63	0.07	0.60	0.86	0.35	0.02	0.14	0.04	0.77	0.64	0.52
Avail Cap(c_a), veh/h	95	866	657	153	931	709	721	1518	626	191	923	380
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.86	0.86	0.86	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.2	38.8	3.1	55.4	42.1	20.1	18.9	20.8	19.9	51.4	51.6	50.9
Incr Delay (d2), s/veh	10.4	1.3	0.1	5.4	3.9	0.5	0.0	0.2	0.1	16.9	8.2	12.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	9.2	0.2	1.9	13.9	2.6	0.3	2.1	0.4	5.6	4.2	3.0
LnGrp Delay(d),s/veh	65.7	40.1	3.2	60.8	46.0	20.6	19.0	21.0	20.0	68.3	59.8	62.9
LnGrp LOS	E	D	A	E	D	C	B	C	B	E	E	E
Approach Vol, veh/h		391			604			248			462	
Approach Delay, s/veh		41.6			41.9			20.7			63.0	
Approach LOS		D			D			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	55.5	10.6	35.9	56.9	16.5	10.9	35.6
Change Period (Y+Rc), s	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
Max Green Setting (Gmax), s	12.3	21.3	9.5	54.1	4.0	29.6	5.3	58.3
Max Q Clear Time (g_c+I1), s	12.4	6.3	5.9	19.6	2.7	9.7	6.1	27.9
Green Ext Time (p_c), s	0.0	0.8	0.0	1.4	0.1	1.1	0.0	2.1

Intersection Summary	
HCM 2010 Ctrl Delay	44.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	300	22	52	417	132	17	191	21	141	218	73
Future Volume (veh/h)	52	300	22	52	417	132	17	191	21	141	218	73
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	57	326	24	57	453	143	18	208	23	153	237	79
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
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	94	523	388	94	523	389	693	1458	601	191	370	152
Arrive On Green	0.06	0.28	0.27	0.06	0.28	0.27	0.42	0.41	0.41	0.12	0.10	0.10
Sat Flow, veh/h	1634	1863	1458	1634	1863	1458	1634	3539	1458	1634	3539	1458
Grp Volume(v), veh/h	57	326	24	57	453	143	18	208	23	153	237	79
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	1863	1458	1634	1770	1458	1634	1770	1458
Q Serve(g_s), s	4.1	18.3	0.5	4.1	27.7	7.0	0.8	4.4	1.1	11.0	7.7	6.2
Cycle Q Clear(g_c), s	4.1	18.3	0.5	4.1	27.7	7.0	0.8	4.4	1.1	11.0	7.7	6.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	94	523	388	94	523	389	693	1458	601	191	370	152
V/C Ratio(X)	0.61	0.62	0.06	0.61	0.87	0.37	0.03	0.14	0.04	0.80	0.64	0.52
Avail Cap(c_a), veh/h	95	866	657	153	931	709	693	1458	601	191	923	380
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.84	0.84	0.84	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.2	37.6	3.2	55.2	41.0	19.1	20.1	22.0	21.1	51.7	51.6	50.9
Incr Delay (d2), s/veh	10.4	1.2	0.1	5.2	3.8	0.5	0.0	0.2	0.1	21.4	8.2	12.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	9.6	0.2	2.0	14.8	2.8	0.3	2.2	0.5	6.1	4.2	3.0
LnGrp Delay(d),s/veh	65.7	38.9	3.3	60.4	44.8	19.6	20.1	22.3	21.2	73.0	59.8	62.9
LnGrp LOS	E	D	A	E	D	B	C	C	C	E	E	E
Approach Vol, veh/h		407			653			249			469	
Approach Delay, s/veh		40.5			40.7			22.0			64.6	
Approach LOS		D			D			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	53.4	10.9	37.7	54.9	16.5	10.9	37.7
Change Period (Y+Rc), s	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
Max Green Setting (Gmax), s	12.3	21.3	9.5	54.1	4.0	29.6	5.3	58.3
Max Q Clear Time (g_c+I1), s	13.0	6.4	6.1	20.3	2.8	9.7	6.1	29.7
Green Ext Time (p_c), s	0.0	0.8	0.0	1.4	0.1	1.1	0.0	2.3

Intersection Summary	
HCM 2010 Ctrl Delay	44.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	549	36	94	726	216	21	238	36	175	252	84
Future Volume (veh/h)	87	549	36	94	726	216	21	238	36	175	252	84
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	95	597	39	102	789	235	23	259	39	190	274	91
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
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	95	791	599	145	849	644	387	836	344	191	410	169
Arrive On Green	0.06	0.42	0.41	0.09	0.46	0.44	0.24	0.24	0.24	0.12	0.12	0.12
Sat Flow, veh/h	1634	1863	1458	1634	1863	1458	1634	3539	1458	1634	3539	1458
Grp Volume(v), veh/h	95	597	39	102	789	235	23	259	39	190	274	91
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	1863	1458	1634	1770	1458	1634	1770	1458
Q Serve(g_s), s	7.0	32.5	0.9	7.3	48.0	8.3	1.3	7.2	2.5	13.9	8.9	7.1
Cycle Q Clear(g_c), s	7.0	32.5	0.9	7.3	48.0	8.3	1.3	7.2	2.5	13.9	8.9	7.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	95	791	599	145	849	644	387	836	344	191	410	169
V/C Ratio(X)	1.00	0.75	0.07	0.70	0.93	0.37	0.06	0.31	0.11	1.00	0.67	0.54
Avail Cap(c_a), veh/h	95	866	657	153	931	709	387	836	344	191	923	380
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.5	29.2	4.5	53.1	30.9	9.3	35.4	37.8	36.0	53.0	50.8	50.0
Incr Delay (d2), s/veh	91.0	3.5	0.0	8.8	10.7	0.2	0.1	1.0	0.7	64.2	8.3	11.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	17.5	0.4	3.6	27.1	3.4	0.6	3.6	1.1	9.7	4.8	3.4
LnGrp Delay(d),s/veh	147.5	32.7	4.6	61.9	41.5	9.6	35.5	38.7	36.6	117.1	59.2	61.8
LnGrp LOS	F	C	A	E	D	A	D	D	D	F	E	E
Approach Vol, veh/h		731			1126			321			555	
Approach Delay, s/veh		46.1			36.7			38.3			79.4	
Approach LOS		D			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	32.3	14.7	55.0	32.4	17.9	11.0	58.7
Change Period (Y+Rc), s	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
Max Green Setting (Gmax), s	12.3	21.3	9.5	54.1	4.0	29.6	5.3	58.3
Max Q Clear Time (g_c+I1), s	15.9	9.2	9.3	34.5	3.3	10.9	9.0	50.0
Green Ext Time (p_c), s	0.0	1.0	0.0	2.7	0.1	1.3	0.0	3.0

Intersection Summary	
HCM 2010 Ctrl Delay	48.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	585	36	96	758	231	21	238	38	193	252	84
Future Volume (veh/h)	87	585	36	96	758	231	21	238	38	193	252	84
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	95	636	39	104	824	251	23	259	41	210	274	91
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
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	95	818	620	147	878	667	361	780	321	191	410	169
Arrive On Green	0.06	0.44	0.43	0.09	0.47	0.46	0.22	0.22	0.22	0.12	0.12	0.12
Sat Flow, veh/h	1634	1863	1458	1634	1863	1458	1634	3539	1458	1634	3539	1458
Grp Volume(v), veh/h	95	636	39	104	824	251	23	259	41	210	274	91
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	1863	1458	1634	1770	1458	1634	1770	1458
Q Serve(g_s), s	7.0	34.9	0.9	7.4	50.3	8.6	1.3	7.4	2.7	14.0	8.9	7.1
Cycle Q Clear(g_c), s	7.0	34.9	0.9	7.4	50.3	8.6	1.3	7.4	2.7	14.0	8.9	7.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	95	818	620	147	878	667	361	780	321	191	410	169
V/C Ratio(X)	1.00	0.78	0.06	0.71	0.94	0.38	0.06	0.33	0.13	1.10	0.67	0.54
Avail Cap(c_a), veh/h	95	866	657	153	931	709	361	780	321	191	923	380
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.66	0.66	0.66	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.5	28.6	4.6	53.0	30.1	8.6	36.9	39.3	37.5	53.0	50.8	50.0
Incr Delay (d2), s/veh	91.0	4.3	0.0	9.1	11.9	0.2	0.1	1.1	0.8	95.0	8.3	11.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	18.8	0.4	3.7	28.8	3.5	0.6	3.7	1.2	11.3	4.8	3.4
LnGrp Delay(d),s/veh	147.5	32.9	4.6	62.1	42.0	8.9	37.0	40.5	38.3	148.0	59.2	61.8
LnGrp LOS	F	C	A	E	D	A	D	D	D	F	E	E
Approach Vol, veh/h		770			1179			323			575	
Approach Delay, s/veh		45.6			36.7			40.0			92.0	
Approach LOS		D			D			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	30.4	14.8	56.7	30.5	17.9	11.0	60.6
Change Period (Y+Rc), s	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
Max Green Setting (Gmax), s	12.3	21.3	9.5	54.1	4.0	29.6	5.3	58.3
Max Q Clear Time (g_c+I1), s	16.0	9.4	9.4	36.9	3.3	10.9	9.0	52.3
Green Ext Time (p_c), s	0.0	1.0	0.0	2.8	0.1	1.3	0.0	2.5

Intersection Summary	
HCM 2010 Ctrl Delay	50.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	585	36	96	758	231	21	238	38	193	252	84
Future Volume (veh/h)	87	585	36	96	758	231	21	238	38	193	252	84
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	95	636	39	104	824	251	23	259	41	210	274	91
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
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	110	830	629	148	872	662	52	669	276	231	1057	436
Arrive On Green	0.07	0.45	0.43	0.09	0.47	0.45	0.03	0.19	0.19	0.14	0.30	0.30
Sat Flow, veh/h	1634	1863	1458	1634	1863	1458	1634	3539	1458	1634	3539	1458
Grp Volume(v), veh/h	95	636	39	104	824	251	23	259	41	210	274	91
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	1863	1458	1634	1770	1458	1634	1770	1458
Q Serve(g_s), s	6.9	34.5	1.9	7.4	50.6	13.6	1.7	7.7	2.8	15.2	7.1	5.6
Cycle Q Clear(g_c), s	6.9	34.5	1.9	7.4	50.6	13.6	1.7	7.7	2.8	15.2	7.1	5.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	110	830	629	148	872	662	52	669	276	231	1057	436
V/C Ratio(X)	0.86	0.77	0.06	0.70	0.94	0.38	0.44	0.39	0.15	0.91	0.26	0.21
Avail Cap(c_a), veh/h	110	830	630	158	885	672	84	669	276	231	1057	436
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.66	0.66	0.66	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.4	28.0	19.9	53.0	30.4	21.6	57.0	42.6	40.6	50.7	32.0	31.5
Incr Delay (d2), s/veh	45.8	4.3	0.0	8.4	13.5	0.2	5.7	1.7	1.1	35.2	0.6	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	18.7	0.8	3.7	29.1	5.5	0.8	3.9	1.2	9.1	3.6	2.4
LnGrp Delay(d),s/veh	101.2	32.3	20.0	61.5	43.9	21.8	62.7	44.3	41.7	86.0	32.6	32.6
LnGrp LOS	F	C	B	E	D	C	E	D	D	F	C	C
Approach Vol, veh/h		770			1179			323			575	
Approach Delay, s/veh		40.2			40.8			45.2			52.1	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.0	26.7	14.8	57.5	7.8	39.9	12.1	60.2
Change Period (Y+Rc), s	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
Max Green Setting (Gmax), s	15.3	20.2	9.9	51.8	4.5	31.0	6.4	55.3
Max Q Clear Time (g_c+I1), s	17.2	9.7	9.4	36.5	3.7	9.1	8.9	52.6
Green Ext Time (p_c), s	0.0	2.0	0.0	6.9	0.0	2.6	0.0	1.9

Intersection Summary	
HCM 2010 Ctrl Delay	43.4
HCM 2010 LOS	D

Intersection 4
Akers Rd & Hosking Ave

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	331	36	55	456	56	23	90	42	37	80	30
Future Volume (veh/h)	23	331	36	55	456	56	23	90	42	37	80	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	25	360	39	60	496	61	25	98	46	40	87	33
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	1	1	1
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	70	610	251	110	696	287	70	990	775	84	1005	787
Arrive On Green	0.04	0.17	0.17	0.07	0.20	0.20	0.04	0.53	0.53	0.05	0.54	0.54
Sat Flow, veh/h	1634	3539	1458	1634	3539	1458	1634	1863	1458	1634	1863	1458
Grp Volume(v), veh/h	25	360	39	60	496	61	25	98	46	40	87	33
Grp Sat Flow(s),veh/h/ln	1634	1770	1458	1634	1770	1458	1634	1863	1458	1634	1863	1458
Q Serve(g_s), s	1.3	8.4	2.0	3.2	11.8	2.4	1.3	2.3	1.4	2.1	2.0	0.6
Cycle Q Clear(g_c), s	1.3	8.4	2.0	3.2	11.8	2.4	1.3	2.3	1.4	2.1	2.0	0.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	70	610	251	110	696	287	70	990	775	84	1005	787
V/C Ratio(X)	0.36	0.59	0.16	0.55	0.71	0.21	0.36	0.10	0.06	0.48	0.09	0.04
Avail Cap(c_a), veh/h	109	1034	426	163	1152	475	109	990	775	109	1005	787
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.82	0.82	0.82	0.73	0.73	0.73	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.9	34.3	31.7	40.6	33.8	18.0	41.9	10.4	10.2	41.5	10.0	3.7
Incr Delay (d2), s/veh	2.5	0.7	0.2	3.1	1.0	0.3	3.0	0.2	0.1	4.2	0.2	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	0.7	4.2	0.8	1.5	5.8	1.0	0.7	1.3	0.6	1.1	1.1	0.3
LnGrp Delay(d),s/veh	44.4	35.1	31.9	43.7	34.8	18.2	44.9	10.6	10.4	45.7	10.2	3.8
LnGrp LOS	D	D	C	D	C	B	D	B	B	D	B	A
Approach Vol, veh/h		424			617			169			160	
Approach Delay, s/veh		35.3			34.0			15.6			17.7	
Approach LOS		D			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	51.8	10.1	19.5	7.9	52.6	7.9	21.7
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	4.0	30.7	7.0	24.3	4.0	30.7	4.0	27.3
Max Q Clear Time (g_c+I1), s	4.1	4.3	5.2	10.4	3.3	4.0	3.3	13.8
Green Ext Time (p_c), s	0.0	0.9	0.0	1.4	0.0	0.9	0.1	1.9

Intersection Summary	
HCM 2010 Ctrl Delay	30.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	390	36	67	516	71	23	90	47	46	80	30
Future Volume (veh/h)	23	390	36	67	516	71	23	90	47	46	80	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	25	424	39	73	561	77	25	98	51	50	87	33
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	1	1	1
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	70	641	264	126	762	314	70	940	736	97	971	760
Arrive On Green	0.04	0.18	0.18	0.08	0.22	0.22	0.04	0.50	0.50	0.06	0.52	0.52
Sat Flow, veh/h	1634	3539	1458	1634	3539	1458	1634	1863	1458	1634	1863	1458
Grp Volume(v), veh/h	25	424	39	73	561	77	25	98	51	50	87	33
Grp Sat Flow(s),veh/h/ln	1634	1770	1458	1634	1770	1458	1634	1863	1458	1634	1863	1458
Q Serve(g_s), s	1.3	10.0	2.0	3.9	13.3	3.0	1.3	2.5	1.6	2.7	2.1	0.6
Cycle Q Clear(g_c), s	1.3	10.0	2.0	3.9	13.3	3.0	1.3	2.5	1.6	2.7	2.1	0.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	70	641	264	126	762	314	70	940	736	97	971	760
V/C Ratio(X)	0.36	0.66	0.15	0.58	0.74	0.25	0.36	0.10	0.07	0.52	0.09	0.04
Avail Cap(c_a), veh/h	109	1034	426	145	1113	459	109	940	736	109	971	760
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.80	0.80	0.80	0.74	0.74	0.74	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.9	34.3	31.0	40.1	32.9	16.7	41.9	11.6	11.4	41.1	10.8	4.2
Incr Delay (d2), s/veh	2.5	1.0	0.2	3.2	1.1	0.3	3.0	0.2	0.2	4.2	0.2	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	0.7	5.0	0.8	1.9	6.6	1.2	0.7	1.3	0.7	1.3	1.1	0.3
LnGrp Delay(d),s/veh	44.3	35.2	31.2	43.3	34.0	17.0	44.9	11.9	11.6	45.3	11.0	4.3
LnGrp LOS	D	D	C	D	C	B	D	B	B	D	B	A
Approach Vol, veh/h		488			711			174			170	
Approach Delay, s/veh		35.4			33.1			16.5			19.8	
Approach LOS		D			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	49.4	10.9	20.3	7.9	50.9	7.9	23.4
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	4.0	31.7	6.0	24.3	4.0	31.7	4.0	26.3
Max Q Clear Time (g_c+I1), s	4.7	4.5	5.9	12.0	3.3	4.1	3.3	15.3
Green Ext Time (p_c), s	0.0	0.9	0.0	1.6	0.0	0.9	0.2	2.1

Intersection Summary	
HCM 2010 Ctrl Delay	30.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	362	39	60	498	61	25	97	45	37	81	30
Future Volume (veh/h)	25	362	39	60	498	61	25	97	45	37	81	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	27	393	42	65	541	66	27	105	49	40	88	33
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	1	1	1
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	72	647	267	116	743	306	72	963	754	84	977	765
Arrive On Green	0.04	0.18	0.18	0.07	0.21	0.21	0.04	0.52	0.52	0.05	0.52	0.52
Sat Flow, veh/h	1634	3539	1458	1634	3539	1458	1634	1863	1458	1634	1863	1458
Grp Volume(v), veh/h	27	393	42	65	541	66	27	105	49	40	88	33
Grp Sat Flow(s),veh/h/ln	1634	1770	1458	1634	1770	1458	1634	1863	1458	1634	1863	1458
Q Serve(g_s), s	1.4	9.2	2.2	3.5	12.8	2.6	1.4	2.6	1.5	2.1	2.1	0.6
Cycle Q Clear(g_c), s	1.4	9.2	2.2	3.5	12.8	2.6	1.4	2.6	1.5	2.1	2.1	0.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	72	647	267	116	743	306	72	963	754	84	977	765
V/C Ratio(X)	0.38	0.61	0.16	0.56	0.73	0.22	0.38	0.11	0.06	0.48	0.09	0.04
Avail Cap(c_a), veh/h	109	1034	426	163	1152	475	109	963	754	109	977	765
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.82	0.82	0.82	0.65	0.65	0.65	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.8	33.8	30.9	40.4	33.2	17.3	41.8	11.1	10.9	41.5	10.7	4.1
Incr Delay (d2), s/veh	2.7	0.8	0.2	2.7	0.9	0.2	3.2	0.2	0.2	4.2	0.2	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	0.7	4.5	0.9	1.7	6.3	1.1	0.7	1.4	0.6	1.1	1.1	0.3
LnGrp Delay(d),s/veh	44.5	34.6	31.2	43.2	34.1	17.5	45.0	11.4	11.0	45.7	10.9	4.2
LnGrp LOS	D	C	C	D	C	B	D	B	B	D	B	A
Approach Vol, veh/h		462			672			181			161	
Approach Delay, s/veh		34.8			33.3			16.3			18.2	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	50.5	10.4	20.5	8.0	51.2	8.0	22.9
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	4.0	30.7	7.0	24.3	4.0	30.7	4.0	27.3
Max Q Clear Time (g_c+I1), s	4.1	4.6	5.5	11.2	3.4	4.1	3.4	14.8
Green Ext Time (p_c), s	0.0	0.9	0.0	1.5	0.0	0.9	0.1	2.1

Intersection Summary	
HCM 2010 Ctrl Delay	30.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	391	39	71	553	75	25	97	49	43	81	30
Future Volume (veh/h)	25	391	39	71	553	75	25	97	49	43	81	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	27	425	42	77	601	82	27	105	53	47	88	33
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	1	1	1
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	72	674	278	131	801	330	72	922	722	93	946	740
Arrive On Green	0.04	0.19	0.19	0.08	0.23	0.23	0.04	0.49	0.49	0.06	0.51	0.51
Sat Flow, veh/h	1634	3539	1458	1634	3539	1458	1634	1863	1458	1634	1863	1458
Grp Volume(v), veh/h	27	425	42	77	601	82	27	105	53	47	88	33
Grp Sat Flow(s),veh/h/ln	1634	1770	1458	1634	1770	1458	1634	1863	1458	1634	1863	1458
Q Serve(g_s), s	1.4	9.9	2.2	4.1	14.2	3.1	1.4	2.7	1.7	2.5	2.2	0.7
Cycle Q Clear(g_c), s	1.4	9.9	2.2	4.1	14.2	3.1	1.4	2.7	1.7	2.5	2.2	0.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	72	674	278	131	801	330	72	922	722	93	946	740
V/C Ratio(X)	0.38	0.63	0.15	0.59	0.75	0.25	0.38	0.11	0.07	0.51	0.09	0.04
Avail Cap(c_a), veh/h	109	1034	426	145	1113	459	109	922	722	109	946	740
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.82	0.82	0.82	0.62	0.62	0.62	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.8	33.5	30.4	40.0	32.4	16.2	41.8	12.2	11.9	41.2	11.4	4.6
Incr Delay (d2), s/veh	2.6	0.8	0.2	3.2	1.2	0.2	3.2	0.3	0.2	4.2	0.2	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	0.7	4.9	0.9	2.0	7.1	1.3	0.7	1.5	0.7	1.2	1.2	0.3
LnGrp Delay(d),s/veh	44.5	34.3	30.6	43.1	33.6	16.5	45.0	12.4	12.1	45.4	11.6	4.7
LnGrp LOS	D	C	C	D	C	B	D	B	B	D	B	A
Approach Vol, veh/h		494			760			185			168	
Approach Delay, s/veh		34.6			32.7			17.1			19.7	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.1	48.5	11.2	21.1	8.0	49.7	8.0	24.4
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	4.0	31.7	6.0	24.3	4.0	31.7	4.0	26.3
Max Q Clear Time (g_c+I1), s	4.5	4.7	6.1	11.9	3.4	4.2	3.4	16.2
Green Ext Time (p_c), s	0.0	0.9	0.0	1.6	0.0	0.9	0.1	2.1

Intersection Summary	
HCM 2010 Ctrl Delay	30.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	711	65	116	945	125	39	152	87	62	84	31
Future Volume (veh/h)	42	711	65	116	945	125	39	152	87	62	84	31
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	46	773	71	126	1027	136	42	165	95	67	91	34
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	1	1	1
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	92	1024	422	145	1140	470	86	703	550	109	729	571
Arrive On Green	0.06	0.29	0.29	0.09	0.32	0.32	0.05	0.38	0.38	0.07	0.39	0.39
Sat Flow, veh/h	1634	3539	1458	1634	3539	1458	1634	1863	1458	1634	1863	1458
Grp Volume(v), veh/h	46	773	71	126	1027	136	42	165	95	67	91	34
Grp Sat Flow(s),veh/h/ln	1634	1770	1458	1634	1770	1458	1634	1863	1458	1634	1863	1458
Q Serve(g_s), s	2.5	17.9	3.3	6.9	24.9	4.4	2.2	5.4	3.9	3.6	2.8	0.9
Cycle Q Clear(g_c), s	2.5	17.9	3.3	6.9	24.9	4.4	2.2	5.4	3.9	3.6	2.8	0.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	92	1024	422	145	1140	470	86	703	550	109	729	571
V/C Ratio(X)	0.50	0.76	0.17	0.87	0.90	0.29	0.49	0.23	0.17	0.62	0.12	0.06
Avail Cap(c_a), veh/h	109	1062	437	145	1140	470	109	703	550	109	729	571
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.66	0.66	0.66	0.25	0.25	0.25	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.3	29.1	23.9	40.5	29.1	11.3	41.4	19.1	18.7	40.9	17.5	8.1
Incr Delay (d2), s/veh	2.8	2.0	0.1	13.0	2.8	0.1	4.2	0.8	0.7	9.9	0.4	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	1.2	9.0	1.3	3.6	12.6	1.8	1.1	2.9	1.7	1.9	1.5	0.4
LnGrp Delay(d),s/veh	44.0	31.1	24.0	53.5	32.0	11.4	45.6	19.9	19.3	50.8	17.9	8.3
LnGrp LOS	D	C	C	D	C	B	D	B	B	D	B	A
Approach Vol, veh/h		890			1289			302			192	
Approach Delay, s/veh		31.2			31.9			23.3			27.7	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	38.0	12.0	30.0	8.8	39.2	9.0	33.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	4.0	31.0	6.0	25.0	4.0	31.0	4.0	27.0
Max Q Clear Time (g_c+I1), s	5.6	7.4	8.9	19.9	4.2	4.8	4.5	26.9
Green Ext Time (p_c), s	0.0	1.3	0.0	1.9	0.0	1.3	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	30.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	770	65	128	1005	140	39	152	92	71	84	31
Future Volume (veh/h)	42	770	65	128	1005	140	39	152	92	71	84	31
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	46	837	71	139	1092	152	42	165	100	77	91	34
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	1	1	1
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	92	1024	422	145	1140	470	86	703	550	109	728	570
Arrive On Green	0.06	0.29	0.29	0.09	0.32	0.32	0.05	0.38	0.38	0.07	0.39	0.39
Sat Flow, veh/h	1634	3539	1458	1634	3539	1458	1634	1863	1458	1634	1863	1458
Grp Volume(v), veh/h	46	837	71	139	1092	152	42	165	100	77	91	34
Grp Sat Flow(s),veh/h/ln	1634	1770	1458	1634	1770	1458	1634	1863	1458	1634	1863	1458
Q Serve(g_s), s	2.5	19.8	3.3	7.6	27.2	5.0	2.2	5.4	4.1	4.2	2.8	0.9
Cycle Q Clear(g_c), s	2.5	19.8	3.3	7.6	27.2	5.0	2.2	5.4	4.1	4.2	2.8	0.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	92	1024	422	145	1140	470	86	703	550	109	728	570
V/C Ratio(X)	0.50	0.82	0.17	0.96	0.96	0.32	0.49	0.23	0.18	0.71	0.12	0.06
Avail Cap(c_a), veh/h	109	1062	437	145	1140	470	109	703	550	109	728	570
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.60	0.60	0.60	0.24	0.24	0.24	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.3	29.8	23.9	40.8	29.9	11.5	41.4	19.1	18.7	41.1	17.5	8.1
Incr Delay (d2), s/veh	2.6	3.1	0.1	26.1	6.0	0.1	4.2	0.8	0.7	18.8	0.4	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	1.2	10.1	1.3	4.5	14.1	2.0	1.1	2.9	1.8	2.5	1.5	0.4
LnGrp Delay(d),s/veh	43.8	32.8	24.0	66.9	35.9	11.6	45.6	19.9	19.5	60.0	17.9	8.3
LnGrp LOS	D	C	C	E	D	B	D	B	B	E	B	A
Approach Vol, veh/h		954			1383			307			202	
Approach Delay, s/veh		32.7			36.4			23.3			32.3	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	38.0	12.0	30.0	8.8	39.2	9.0	33.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	4.0	31.0	6.0	25.0	4.0	31.0	4.0	27.0
Max Q Clear Time (g_c+I1), s	6.2	7.4	9.6	21.8	4.2	4.8	4.5	29.2
Green Ext Time (p_c), s	0.0	1.3	0.0	1.4	0.0	1.3	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	33.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	770	65	128	1005	140	39	152	92	71	84	31
Future Volume (veh/h)	42	770	65	128	1005	140	39	152	92	71	84	31
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	46	837	71	139	1092	152	42	165	100	77	91	34
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	1	1	1
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	92	1024	422	145	1140	470	86	703	550	109	728	570
Arrive On Green	0.06	0.29	0.29	0.09	0.32	0.32	0.05	0.38	0.38	0.07	0.39	0.39
Sat Flow, veh/h	1634	3539	1458	1634	3539	1458	1634	1863	1458	1634	1863	1458
Grp Volume(v), veh/h	46	837	71	139	1092	152	42	165	100	77	91	34
Grp Sat Flow(s),veh/h/ln	1634	1770	1458	1634	1770	1458	1634	1863	1458	1634	1863	1458
Q Serve(g_s), s	2.5	19.8	3.3	7.6	27.2	5.0	2.2	5.4	4.1	4.2	2.8	0.9
Cycle Q Clear(g_c), s	2.5	19.8	3.3	7.6	27.2	5.0	2.2	5.4	4.1	4.2	2.8	0.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	92	1024	422	145	1140	470	86	703	550	109	728	570
V/C Ratio(X)	0.50	0.82	0.17	0.96	0.96	0.32	0.49	0.23	0.18	0.71	0.12	0.06
Avail Cap(c_a), veh/h	109	1062	437	145	1140	470	109	703	550	109	728	570
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.58	0.58	0.58	0.48	0.48	0.48	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.3	29.8	23.9	40.8	29.9	11.5	41.4	19.1	18.7	41.1	17.5	8.1
Incr Delay (d2), s/veh	2.5	2.9	0.1	40.3	10.4	0.2	4.2	0.8	0.7	18.8	0.4	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	1.2	10.1	1.3	5.1	14.8	2.0	1.1	2.9	1.8	2.5	1.5	0.4
LnGrp Delay(d),s/veh	43.7	32.7	24.0	81.1	40.3	11.7	45.6	19.9	19.5	60.0	17.9	8.3
LnGrp LOS	D	C	C	F	D	B	D	B	B	E	B	A
Approach Vol, veh/h		954			1383			307			202	
Approach Delay, s/veh		32.6			41.2			23.3			32.3	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	38.0	12.0	30.0	8.8	39.2	9.0	33.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	4.0	31.0	6.0	25.0	4.0	31.0	4.0	27.0
Max Q Clear Time (g_c+I1), s	6.2	7.4	9.6	21.8	4.2	4.8	4.5	29.2
Green Ext Time (p_c), s	0.0	1.3	0.0	1.4	0.0	1.3	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	35.8
HCM 2010 LOS	D

Intersection 5
Wible Rd & Hosking Ave

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	328	22	89	506	111	31	173	84	106	186	43
Future Volume (veh/h)	35	328	22	89	506	111	31	173	84	106	186	43
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1716	1716	1863	1716	1716	1863	1750
Adj Flow Rate, veh/h	38	357	24	97	550	121	34	188	91	115	202	47
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	1	1	0
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	54	533	36	126	718	296	48	1009	790	146	880	205
Arrive On Green	0.03	0.16	0.15	0.08	0.20	0.20	0.03	0.54	0.54	0.09	0.60	0.60
Sat Flow, veh/h	1634	3367	225	1634	3539	1458	1634	1863	1458	1634	1462	340
Grp Volume(v), veh/h	38	187	194	97	550	121	34	188	91	115	0	249
Grp Sat Flow(s),veh/h/ln	1634	1770	1823	1634	1770	1458	1634	1863	1458	1634	0	1803
Q Serve(g_s), s	2.8	11.9	12.0	7.0	17.6	8.7	2.5	6.2	3.7	8.3	0.0	7.7
Cycle Q Clear(g_c), s	2.8	11.9	12.0	7.0	17.6	8.7	2.5	6.2	3.7	8.3	0.0	7.7
Prop In Lane	1.00		0.12	1.00		1.00	1.00		1.00	1.00		0.19
Lane Grp Cap(c), veh/h	54	280	289	126	718	296	48	1009	790	146	0	1084
V/C Ratio(X)	0.71	0.67	0.67	0.77	0.77	0.41	0.71	0.19	0.12	0.79	0.00	0.23
Avail Cap(c_a), veh/h	150	529	545	260	1298	535	99	1009	790	231	0	1084
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	57.5	47.5	47.6	54.3	45.1	41.6	57.7	14.0	13.4	53.6	0.0	11.1
Incr Delay (d2), s/veh	14.4	2.5	2.5	9.3	1.7	0.9	17.1	0.4	0.3	9.1	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	1.5	6.0	6.2	3.5	8.8	3.6	1.3	3.3	1.5	4.1	0.0	4.0
LnGrp Delay(d),s/veh	71.9	50.0	50.1	63.6	46.9	42.5	74.8	14.4	13.7	62.7	0.0	11.6
LnGrp LOS	E	D	D	E	D	D	E	B	B	E		B
Approach Vol, veh/h		419			768			313			364	
Approach Delay, s/veh		52.0			48.3			20.8			27.7	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.7	69.0	13.3	23.0	7.5	76.2	7.9	28.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	16.5	31.5	18.6	35.4	6.8	41.2	10.5	43.5
Max Q Clear Time (g_c+I1), s	10.3	8.2	9.0	14.0	4.5	9.7	4.8	19.6
Green Ext Time (p_c), s	0.1	1.8	0.2	4.2	0.0	1.9	0.0	4.2

Intersection Summary	
HCM 2010 Ctrl Delay	40.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	403	22	93	595	127	31	173	89	125	186	43
Future Volume (veh/h)	35	403	22	93	595	127	31	173	89	125	186	43
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1716	1716	1863	1716	1716	1863	1750
Adj Flow Rate, veh/h	38	438	24	101	647	138	34	188	97	136	202	47
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	1	1	0
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	54	674	37	135	873	360	51	886	693	109	747	174
Arrive On Green	0.03	0.20	0.19	0.08	0.25	0.25	0.03	0.48	0.48	0.07	0.51	0.51
Sat Flow, veh/h	1634	3413	187	1634	3539	1458	1634	1863	1458	1634	1462	340
Grp Volume(v), veh/h	38	227	235	101	647	138	34	188	97	136	0	249
Grp Sat Flow(s),veh/h/ln	1634	1770	1830	1634	1770	1458	1634	1863	1458	1634	0	1803
Q Serve(g_s), s	2.1	10.6	10.7	5.4	15.2	7.1	1.9	5.3	3.4	6.0	0.0	7.1
Cycle Q Clear(g_c), s	2.1	10.6	10.7	5.4	15.2	7.1	1.9	5.3	3.4	6.0	0.0	7.1
Prop In Lane	1.00		0.10	1.00		1.00	1.00		1.00	1.00		0.19
Lane Grp Cap(c), veh/h	54	350	361	135	873	360	51	886	693	109	0	921
V/C Ratio(X)	0.70	0.65	0.65	0.75	0.74	0.38	0.67	0.21	0.14	1.25	0.00	0.27
Avail Cap(c_a), veh/h	82	486	502	227	1286	530	116	886	693	109	0	921
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.87	0.87	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	43.1	33.2	33.3	40.4	31.2	28.2	43.2	13.8	13.3	42.0	0.0	12.5
Incr Delay (d2), s/veh	13.2	1.8	1.7	8.0	1.3	0.7	14.3	0.5	0.4	167.3	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	5.3	5.5	2.7	7.5	2.9	1.0	2.9	1.4	7.8	0.0	3.6
LnGrp Delay(d),s/veh	56.2	35.0	35.0	48.4	32.5	28.9	57.4	14.3	13.7	209.3	0.0	13.2
LnGrp LOS	E	D	D	D	C	C	E	B	B	F		B
Approach Vol, veh/h		500			886			319			385	
Approach Delay, s/veh		36.6			33.8			18.7			82.5	
Approach LOS		D			C			B			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	46.8	11.4	21.8	6.8	50.0	7.0	26.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	30.3	12.0	24.2	5.9	29.9	4.0	32.2
Max Q Clear Time (g_c+I1), s	8.0	7.3	7.4	12.7	3.9	9.1	4.1	17.2
Green Ext Time (p_c), s	0.0	1.9	0.1	4.0	0.0	1.8	0.0	4.5

Intersection Summary	
HCM 2010 Ctrl Delay	41.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	358	24	97	553	121	31	176	85	107	189	44
Future Volume (veh/h)	38	358	24	97	553	121	31	176	85	107	189	44
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1716	1716	1863	1716	1716	1863	1750
Adj Flow Rate, veh/h	41	389	26	105	601	132	34	191	92	116	205	48
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	1	1	0
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	58	570	38	135	767	316	48	977	765	147	855	200
Arrive On Green	0.04	0.17	0.16	0.08	0.22	0.22	0.03	0.52	0.52	0.09	0.59	0.58
Sat Flow, veh/h	1634	3368	224	1634	3539	1458	1634	1863	1458	1634	1460	342
Grp Volume(v), veh/h	41	204	211	105	601	132	34	191	92	116	0	253
Grp Sat Flow(s),veh/h/ln	1634	1770	1823	1634	1770	1458	1634	1863	1458	1634	0	1802
Q Serve(g_s), s	3.0	13.0	13.1	7.6	19.2	9.4	2.5	6.5	3.8	8.3	0.0	8.1
Cycle Q Clear(g_c), s	3.0	13.0	13.1	7.6	19.2	9.4	2.5	6.5	3.8	8.3	0.0	8.1
Prop In Lane	1.00		0.12	1.00		1.00	1.00		1.00	1.00		0.19
Lane Grp Cap(c), veh/h	58	299	308	135	767	316	48	977	765	147	0	1055
V/C Ratio(X)	0.71	0.68	0.69	0.78	0.78	0.42	0.70	0.20	0.12	0.79	0.00	0.24
Avail Cap(c_a), veh/h	123	428	441	245	1121	462	123	977	765	272	0	1055
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.89	0.89	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	57.3	46.8	46.9	54.0	44.4	40.5	57.7	15.1	14.5	53.5	0.0	12.0
Incr Delay (d2), s/veh	13.6	2.4	2.4	9.2	2.3	0.9	17.0	0.4	0.3	8.9	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	1.6	6.5	6.8	3.8	9.7	3.9	1.3	3.5	1.6	4.1	0.0	4.2
LnGrp Delay(d),s/veh	70.9	49.2	49.3	63.2	46.6	41.4	74.8	15.5	14.8	62.4	0.0	12.6
LnGrp LOS	E	D	D	E	D	D	E	B	B	E		B
Approach Vol, veh/h		456			838			317			369	
Approach Delay, s/veh		51.2			47.9			21.7			28.2	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.8	67.0	13.9	24.3	7.5	74.2	8.2	30.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	19.5	36.5	17.5	28.5	8.5	47.5	8.5	37.5
Max Q Clear Time (g_c+I1), s	10.3	8.5	9.6	15.1	4.5	10.1	5.0	21.2
Green Ext Time (p_c), s	0.2	1.9	0.2	4.0	0.0	1.9	0.0	4.3

Intersection Summary	
HCM 2010 Ctrl Delay	40.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	399	24	101	635	137	31	176	87	115	189	44
Future Volume (veh/h)	38	399	24	101	635	137	31	176	87	115	189	44
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1716	1716	1863	1716	1716	1863	1750
Adj Flow Rate, veh/h	41	434	26	110	690	149	34	191	95	125	205	48
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	1	1	0
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	58	665	40	141	874	360	48	911	713	156	811	190
Arrive On Green	0.04	0.20	0.19	0.09	0.25	0.25	0.03	0.49	0.49	0.10	0.56	0.55
Sat Flow, veh/h	1634	3394	203	1634	3539	1458	1634	1863	1458	1634	1460	342
Grp Volume(v), veh/h	41	226	234	110	690	149	34	191	95	125	0	253
Grp Sat Flow(s),veh/h/ln	1634	1770	1827	1634	1770	1458	1634	1863	1458	1634	0	1802
Q Serve(g_s), s	3.0	14.1	14.2	7.9	21.9	10.3	2.5	7.0	4.3	9.0	0.0	8.7
Cycle Q Clear(g_c), s	3.0	14.1	14.2	7.9	21.9	10.3	2.5	7.0	4.3	9.0	0.0	8.7
Prop In Lane	1.00		0.11	1.00		1.00	1.00		1.00	1.00		0.19
Lane Grp Cap(c), veh/h	58	347	358	141	874	360	48	911	713	156	0	1000
V/C Ratio(X)	0.71	0.65	0.65	0.78	0.79	0.41	0.71	0.21	0.13	0.80	0.00	0.25
Avail Cap(c_a), veh/h	150	529	547	260	1298	535	99	911	713	231	0	1000
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.88	0.88	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	57.3	44.4	44.5	53.7	42.3	37.9	57.7	17.5	16.8	53.1	0.0	13.8
Incr Delay (d2), s/veh	13.3	1.8	1.8	9.1	2.0	0.8	17.1	0.5	0.4	11.4	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	7.1	7.3	3.9	11.0	4.2	1.3	3.7	1.8	4.6	0.0	4.5
LnGrp Delay(d),s/veh	70.6	46.3	46.3	62.8	44.3	38.7	74.8	18.0	17.1	64.6	0.0	14.5
LnGrp LOS	E	D	D	E	D	D	E	B	B	E		B
Approach Vol, veh/h		501			949			320			378	
Approach Delay, s/veh		48.3			45.5			23.8			31.0	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.5	62.7	14.3	27.5	7.5	70.6	8.2	33.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	16.5	31.5	18.6	35.4	6.8	41.2	10.5	43.5
Max Q Clear Time (g_c+I1), s	11.0	9.0	9.9	16.2	4.5	10.7	5.0	23.9
Green Ext Time (p_c), s	0.1	1.9	0.2	5.2	0.0	1.9	0.0	5.2

Intersection Summary	
HCM 2010 Ctrl Delay	40.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	112	745	40	211	1085	267	34	250	142	177	261	96
Future Volume (veh/h)	112	745	40	211	1085	267	34	250	142	177	261	96
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1716	1716	1863	1716	1716	1863	1750
Adj Flow Rate, veh/h	122	810	43	229	1179	290	37	272	154	192	284	104
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	1	1	0
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	131	1345	71	242	1633	673	53	333	260	196	347	127
Arrive On Green	0.08	0.39	0.39	0.15	0.46	0.46	0.03	0.18	0.18	0.12	0.27	0.26
Sat Flow, veh/h	1634	3419	181	1634	3539	1458	1634	1863	1458	1634	1302	477
Grp Volume(v), veh/h	122	419	434	229	1179	290	37	272	154	192	0	388
Grp Sat Flow(s),veh/h/ln	1634	1770	1831	1634	1770	1458	1634	1863	1458	1634	0	1779
Q Serve(g_s), s	7.4	18.8	18.8	13.9	26.9	8.2	2.2	14.0	6.9	11.7	0.0	20.5
Cycle Q Clear(g_c), s	7.4	18.8	18.8	13.9	26.9	8.2	2.2	14.0	6.9	11.7	0.0	20.5
Prop In Lane	1.00		0.10	1.00		1.00	1.00		1.00	1.00		0.27
Lane Grp Cap(c), veh/h	131	696	720	242	1633	673	53	333	260	196	0	474
V/C Ratio(X)	0.93	0.60	0.60	0.95	0.72	0.43	0.70	0.82	0.59	0.98	0.00	0.82
Avail Cap(c_a), veh/h	131	696	720	242	1633	673	111	572	448	196	0	639
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.70	0.70	0.70	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	45.7	24.1	24.1	42.2	21.7	6.7	47.9	39.5	19.0	43.9	0.0	34.5
Incr Delay (d2), s/veh	47.0	2.7	2.6	43.3	2.8	2.0	15.5	4.9	2.1	58.0	0.0	6.2
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	5.1	9.7	10.0	9.1	13.7	3.6	1.2	7.7	2.9	8.4	0.0	10.8
LnGrp Delay(d),s/veh	92.7	26.8	26.7	85.5	24.5	8.7	63.4	44.5	21.2	101.9	0.0	40.7
LnGrp LOS	F	C	C	F	C	A	E	D	C	F		D
Approach Vol, veh/h		975			1698			463			580	
Approach Delay, s/veh		35.0			30.1			38.2			60.9	
Approach LOS		D			C			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	21.9	18.8	43.3	7.2	30.6	12.0	50.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	11.5	30.2	14.3	26.0	6.3	35.4	7.5	32.8
Max Q Clear Time (g_c+I1), s	13.7	16.0	15.9	20.8	4.2	22.5	9.4	28.9
Green Ext Time (p_c), s	0.0	1.3	0.0	4.0	0.0	1.8	0.0	3.1

Intersection Summary	
HCM 2010 Ctrl Delay	37.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	112	820	40	215	1174	283	34	250	147	196	261	96
Future Volume (veh/h)	112	820	40	215	1174	283	34	250	147	196	261	96
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1716	1716	1863	1716	1716	1863	1750
Adj Flow Rate, veh/h	122	891	43	234	1276	308	37	272	160	213	284	104
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	1	1	0
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	136	1028	50	260	1327	547	52	322	252	385	490	180
Arrive On Green	0.08	0.30	0.29	0.16	0.37	0.37	0.03	0.17	0.17	0.24	0.38	0.37
Sat Flow, veh/h	1634	3437	166	1634	3539	1458	1634	1863	1458	1634	1302	477
Grp Volume(v), veh/h	122	459	475	234	1276	308	37	272	160	213	0	388
Grp Sat Flow(s),veh/h/ln	1634	1770	1833	1634	1770	1458	1634	1863	1458	1634	0	1779
Q Serve(g_s), s	8.9	29.4	29.4	16.9	42.3	10.1	2.7	17.0	8.8	13.7	0.0	20.9
Cycle Q Clear(g_c), s	8.9	29.4	29.4	16.9	42.3	10.1	2.7	17.0	8.8	13.7	0.0	20.9
Prop In Lane	1.00		0.09	1.00		1.00	1.00		1.00	1.00		0.27
Lane Grp Cap(c), veh/h	136	529	548	260	1327	547	52	322	252	385	0	670
V/C Ratio(X)	0.90	0.87	0.87	0.90	0.96	0.56	0.71	0.84	0.63	0.55	0.00	0.58
Avail Cap(c_a), veh/h	136	529	549	260	1327	547	99	497	389	385	0	670
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.66	0.66	0.66	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	54.5	39.8	39.8	49.5	36.7	7.5	57.5	48.1	23.7	40.3	0.0	29.9
Incr Delay (d2), s/veh	35.6	9.9	9.6	31.0	16.4	1.3	16.2	22.9	11.6	1.7	0.0	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	15.9	16.4	9.8	23.6	4.2	1.4	10.8	4.3	6.4	0.0	10.9
LnGrp Delay(d),s/veh	90.1	49.7	49.4	80.5	53.1	8.9	73.7	71.0	35.3	42.0	0.0	33.5
LnGrp LOS	F	D	D	F	D	A	E	E	D	D		C
Approach Vol, veh/h		1056			1818			469			601	
Approach Delay, s/veh		54.2			49.1			59.0			36.5	
Approach LOS		D			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	32.3	24.7	23.1	39.9	7.8	49.2	14.0	49.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	16.5	31.5	18.6	35.4	6.8	41.2	9.5	44.5
Max Q Clear Time (g_c+I1), s	15.7	19.0	18.9	31.4	4.7	22.9	10.9	44.3
Green Ext Time (p_c), s	0.2	1.3	0.0	3.3	0.0	2.1	0.0	0.2

Intersection Summary	
HCM 2010 Ctrl Delay	49.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	112	820	40	215	1174	283	34	250	147	196	261	96
Future Volume (veh/h)	112	820	40	215	1174	283	34	250	147	196	261	96
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	122	891	43	234	1276	308	37	272	160	213	284	104
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
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	152	1349	550	336	1748	720	52	498	205	217	856	346
Arrive On Green	0.09	0.38	0.38	0.21	0.49	0.49	0.03	0.14	0.14	0.13	0.24	0.24
Sat Flow, veh/h	1634	3539	1458	1634	3539	1458	1634	3539	1458	1634	3539	1458
Grp Volume(v), veh/h	122	891	43	234	1276	308	37	272	160	213	284	104
Grp Sat Flow(s),veh/h/ln	1634	1770	1458	1634	1770	1458	1634	1770	1458	1634	1770	1458
Q Serve(g_s), s	8.4	23.9	1.8	15.3	32.8	9.1	2.6	8.2	12.2	14.9	7.6	6.7
Cycle Q Clear(g_c), s	8.4	23.9	1.8	15.3	32.8	9.1	2.6	8.2	12.2	14.9	7.6	6.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	152	1349	550	336	1748	720	52	498	205	217	856	346
V/C Ratio(X)	0.80	0.66	0.08	0.70	0.73	0.43	0.71	0.55	0.78	0.98	0.33	0.30
Avail Cap(c_a), veh/h	156	1349	550	336	1748	720	101	945	389	217	1197	487
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.66	0.66	0.66	0.70	0.70	0.70	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.1	29.4	15.8	42.3	23.0	6.3	55.1	46.0	47.7	49.7	35.9	36.0
Incr Delay (d2), s/veh	17.3	0.8	0.0	4.4	1.9	1.3	16.0	0.9	6.3	55.1	0.2	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	4.5	11.8	0.7	7.3	16.4	3.8	1.4	4.1	5.3	10.1	3.7	2.8
LnGrp Delay(d),s/veh	68.4	30.2	15.9	46.7	24.9	7.6	71.2	46.9	54.0	104.8	36.2	36.5
LnGrp LOS	E	C	B	D	C	A	E	D	D	F	D	D
Approach Vol, veh/h		1056			1818			469			601	
Approach Delay, s/veh		34.0			24.8			51.2			60.5	
Approach LOS		C			C			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.3	20.2	27.7	47.8	7.7	31.8	14.7	60.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	14.8	30.2	18.5	33.5	6.6	38.4	10.5	41.5
Max Q Clear Time (g_c+I1), s	16.9	14.2	17.3	25.9	4.6	9.6	10.4	34.8
Green Ext Time (p_c), s	0.0	1.5	1.0	2.6	0.0	2.3	0.0	4.3

Intersection Summary	
HCM 2010 Ctrl Delay	35.9
HCM 2010 LOS	D

Intersection 6
Hughes Ln & Hosking Ave

Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Traffic Vol, veh/h	657	32	43	866	27	39
Future Vol, veh/h	657	32	43	866	27	39
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	200	-	-	200	-
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	714	35	47	941	29	42

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	714	0	1184	357
Stage 1	-	-	-	-	714	-
Stage 2	-	-	-	-	470	-
Critical Hdwy	-	-	4.14	-	6.29	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	-	-	2.22	-	3.67	3.32
Pot Cap-1 Maneuver	-	-	882	-	213	639
Stage 1	-	-	-	-	434	-
Stage 2	-	-	-	-	561	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	882	-	202	639
Mov Cap-2 Maneuver	-	-	-	-	202	-
Stage 1	-	-	-	-	434	-
Stage 2	-	-	-	-	531	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	17.1
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	202	639	-	-	882	-
HCM Lane V/C Ratio	0.145	0.066	-	-	0.053	-
HCM Control Delay (s)	25.8	11	-	-	9.3	-
HCM Lane LOS	D	B	-	-	A	-
HCM 95th %tile Q(veh)	0.5	0.2	-	-	0.2	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Traffic Vol, veh/h	756	32	44	975	27	39
Future Vol, veh/h	756	32	44	975	27	39
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	200	-	-	200	-
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	822	35	48	1060	29	42

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	822	0	1342	411
Stage 1	-	-	-	-	822	-
Stage 2	-	-	-	-	520	-
Critical Hdwy	-	-	4.14	-	6.29	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	-	-	2.22	-	3.67	3.32
Pot Cap-1 Maneuver	-	-	803	-	173	590
Stage 1	-	-	-	-	382	-
Stage 2	-	-	-	-	528	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	803	-	163	590
Mov Cap-2 Maneuver	-	-	-	-	163	-
Stage 1	-	-	-	-	382	-
Stage 2	-	-	-	-	496	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	19.9
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	163	590	-	-	803	-
HCM Lane V/C Ratio	0.18	0.072	-	-	0.06	-
HCM Control Delay (s)	31.9	11.6	-	-	9.8	-
HCM Lane LOS	D	B	-	-	A	-
HCM 95th %tile Q(veh)	0.6	0.2	-	-	0.2	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Traffic Vol, veh/h	687	33	47	946	27	40
Future Vol, veh/h	687	33	47	946	27	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	200	-	-	200	-
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	747	36	51	1028	29	43

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	747	0	1260	373
Stage 1	-	-	-	-	747	-
Stage 2	-	-	-	-	513	-
Critical Hdwy	-	-	4.14	-	6.29	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	-	-	2.22	-	3.67	3.32
Pot Cap-1 Maneuver	-	-	857	-	193	624
Stage 1	-	-	-	-	417	-
Stage 2	-	-	-	-	533	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	857	-	182	624
Mov Cap-2 Maneuver	-	-	-	-	182	-
Stage 1	-	-	-	-	417	-
Stage 2	-	-	-	-	501	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	18.2
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	182	624	-	-	857	-
HCM Lane V/C Ratio	0.161	0.07	-	-	0.06	-
HCM Control Delay (s)	28.5	11.2	-	-	9.5	-
HCM Lane LOS	D	B	-	-	A	-
HCM 95th %tile Q(veh)	0.6	0.2	-	-	0.2	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Traffic Vol, veh/h	738	33	48	1048	27	41
Future Vol, veh/h	738	33	48	1048	27	41
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	200	-	-	200	-
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	802	36	52	1139	29	45

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	802	0	1362	401
Stage 1	-	-	-	-	802	-
Stage 2	-	-	-	-	560	-
Critical Hdwy	-	-	4.14	-	6.29	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	-	-	2.22	-	3.67	3.32
Pot Cap-1 Maneuver	-	-	817	-	168	599
Stage 1	-	-	-	-	391	-
Stage 2	-	-	-	-	503	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	817	-	157	599
Mov Cap-2 Maneuver	-	-	-	-	157	-
Stage 1	-	-	-	-	391	-
Stage 2	-	-	-	-	471	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	20.1
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	157	599	-	-	817	-
HCM Lane V/C Ratio	0.187	0.074	-	-	0.064	-
HCM Control Delay (s)	33.1	11.5	-	-	9.7	-
HCM Lane LOS	D	B	-	-	A	-
HCM 95th %tile Q(veh)	0.7	0.2	-	-	0.2	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Traffic Vol, veh/h	1048	43	78	1742	30	43
Future Vol, veh/h	1048	43	78	1742	30	43
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	200	-	-	200	-
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	1139	47	85	1893	33	47

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1139	0	2066	570
Stage 1	-	-	-	-	1139	-
Stage 2	-	-	-	-	927	-
Critical Hdwy	-	-	4.14	-	6.29	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	-	-	2.22	-	3.67	3.32
Pot Cap-1 Maneuver	-	-	609	-	64	465
Stage 1	-	-	-	-	261	-
Stage 2	-	-	-	-	320	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	609	-	55	465
Mov Cap-2 Maneuver	-	-	-	-	55	-
Stage 1	-	-	-	-	261	-
Stage 2	-	-	-	-	275	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	65.4
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	55	465	-	-	609	-
HCM Lane V/C Ratio	0.593	0.101	-	-	0.139	-
HCM Control Delay (s)	139.6	13.6	-	-	11.9	-
HCM Lane LOS	F	B	-	-	B	-
HCM 95th %tile Q(veh)	2.4	0.3	-	-	0.5	-

Intersection	
Int Delay, s/veh	2.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Traffic Vol, veh/h	1147	43	79	1851	30	43
Future Vol, veh/h	1147	43	79	1851	30	43
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	200	-	-	200	-
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	1247	47	86	2012	33	47

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1247	0	2224	623
Stage 1	-	-	-	-	1247	-
Stage 2	-	-	-	-	977	-
Critical Hdwy	-	-	4.14	-	6.29	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	-	-	2.22	-	3.67	3.32
Pot Cap-1 Maneuver	-	-	554	-	51	429
Stage 1	-	-	-	-	229	-
Stage 2	-	-	-	-	301	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	554	-	43	429
Mov Cap-2 Maneuver	-	-	-	-	43	-
Stage 1	-	-	-	-	229	-
Stage 2	-	-	-	-	254	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	95.6
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	43	429	-	-	554	-
HCM Lane V/C Ratio	0.758	0.109	-	-	0.155	-
HCM Control Delay (s)	211.9	14.4	-	-	12.7	-
HCM Lane LOS	F	B	-	-	B	-
HCM 95th %tile Q(veh)	2.9	0.4	-	-	0.5	-

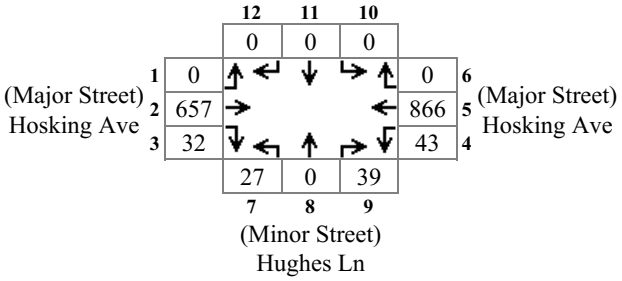
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1147	43	79	1851	30	43
Future Volume (veh/h)	1147	43	79	1851	30	43
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1716	1716	1863	1716	1716
Adj Flow Rate, veh/h	1247	47	86	2012	33	47
Adj No. of Lanes	2	1	1	3	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1642	677	108	2950	523	467
Arrive On Green	0.46	0.46	0.07	0.58	0.32	0.32
Sat Flow, veh/h	3632	1458	1634	5253	1634	1458
Grp Volume(v), veh/h	1247	47	86	2012	33	47
Grp Sat Flow(s),veh/h/ln	1770	1458	1634	1695	1634	1458
Q Serve(g_s), s	26.2	1.6	4.7	24.7	1.3	2.0
Cycle Q Clear(g_c), s	26.2	1.6	4.7	24.7	1.3	2.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1642	677	108	2950	523	467
V/C Ratio(X)	0.76	0.07	0.79	0.68	0.06	0.10
Avail Cap(c_a), veh/h	1750	721	209	3418	523	467
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.53	0.53	0.80	0.80	1.00	1.00
Uniform Delay (d), s/veh	20.0	13.4	41.4	13.1	21.2	21.5
Incr Delay (d2), s/veh	1.0	0.0	10.0	0.4	0.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.0	0.6	2.4	11.5	0.6	0.9
LnGrp Delay(d),s/veh	21.0	13.4	51.5	13.5	21.5	21.9
LnGrp LOS	C	B	D	B	C	C
Approach Vol, veh/h	1294			2098	80	
Approach Delay, s/veh	20.7			15.1	21.7	
Approach LOS	C			B	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		33.3	10.5	46.3				56.7
Change Period (Y+Rc), s		4.5	4.5	4.5				4.5
Max Green Setting (Gmax), s		20.5	11.5	44.5				60.5
Max Q Clear Time (g_c+I1), s		4.0	6.7	28.2				26.7
Green Ext Time (p_c), s		0.2	0.1	13.5				24.0

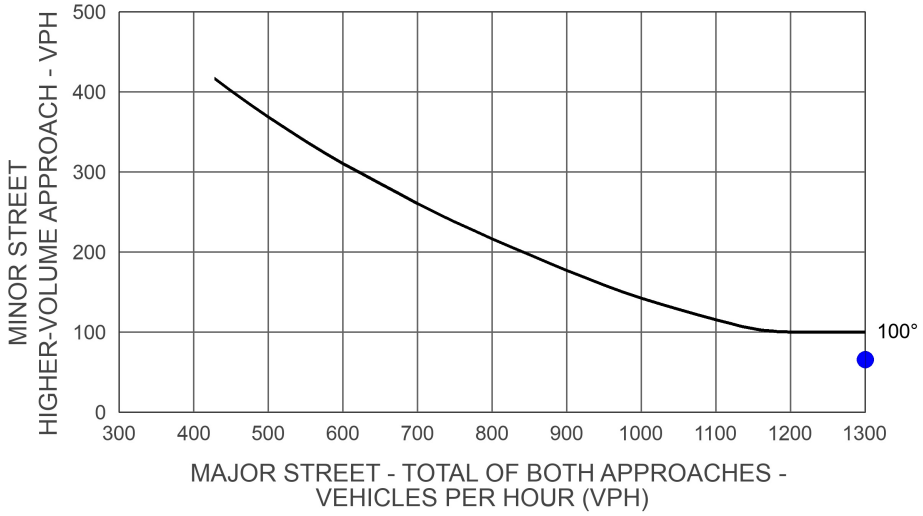
Intersection Summary	
HCM 2010 Ctrl Delay	17.3
HCM 2010 LOS	B

Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Existing
Intersection #: 6

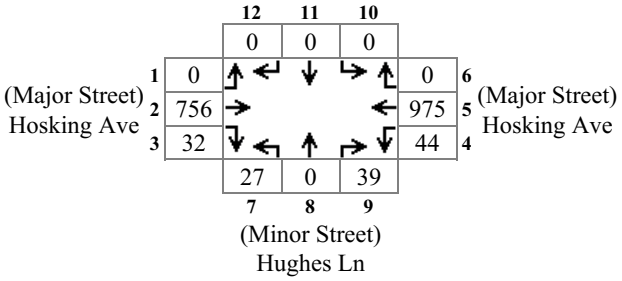


Major Total: 1598
Minor High Volume: 66



Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Existing+Project
Intersection #: 6



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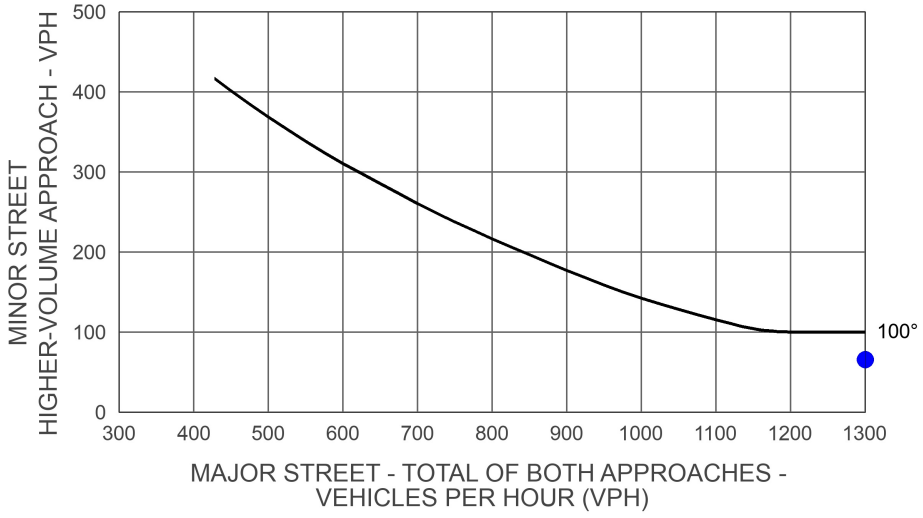
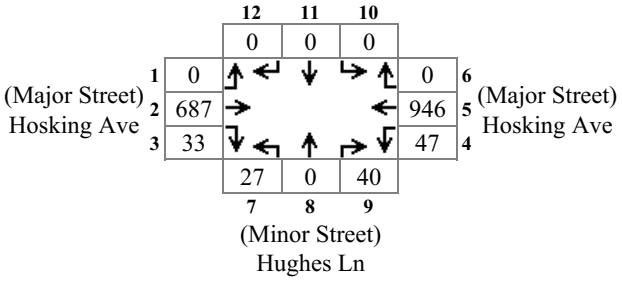
Minor High Volume: 66

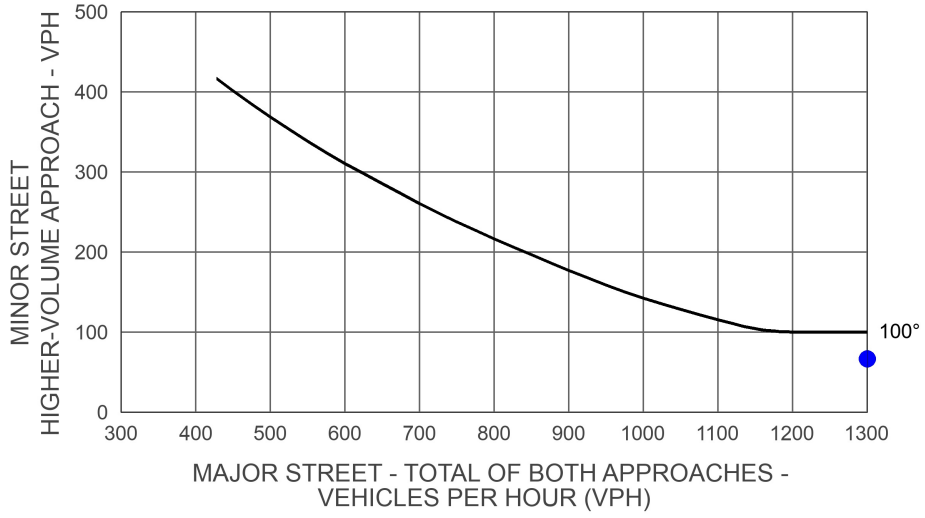


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Future
Intersection #: 6

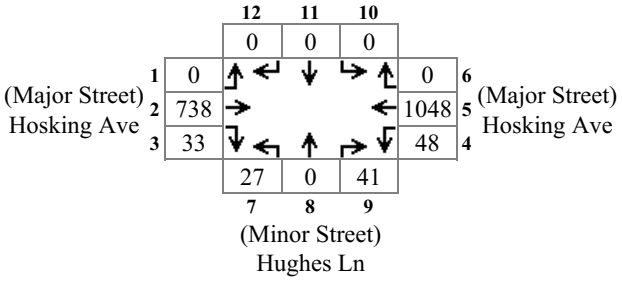


Major Total: 1713
Minor High Volume: 67

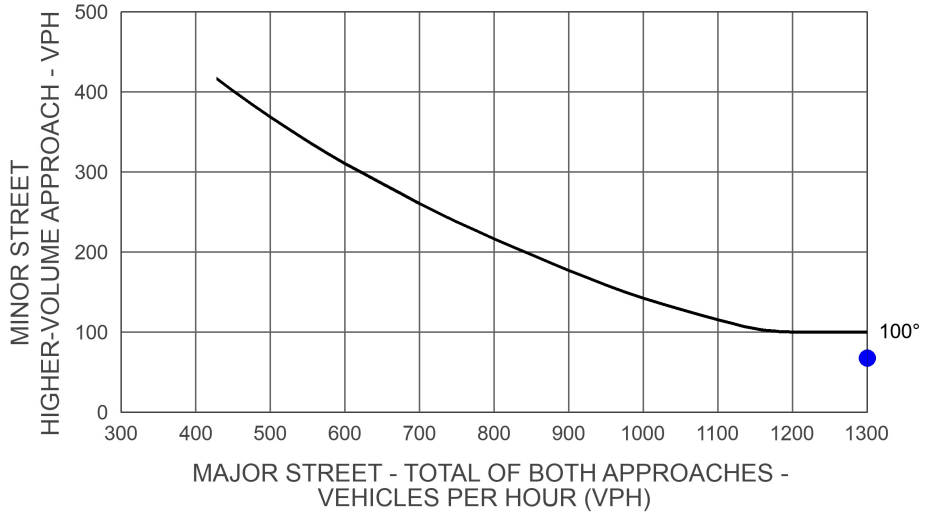


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Future+Project
Intersection #: 6

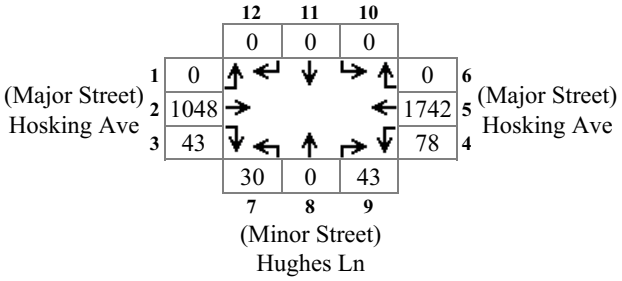


Major Total: 1867
Minor High Volume: 68

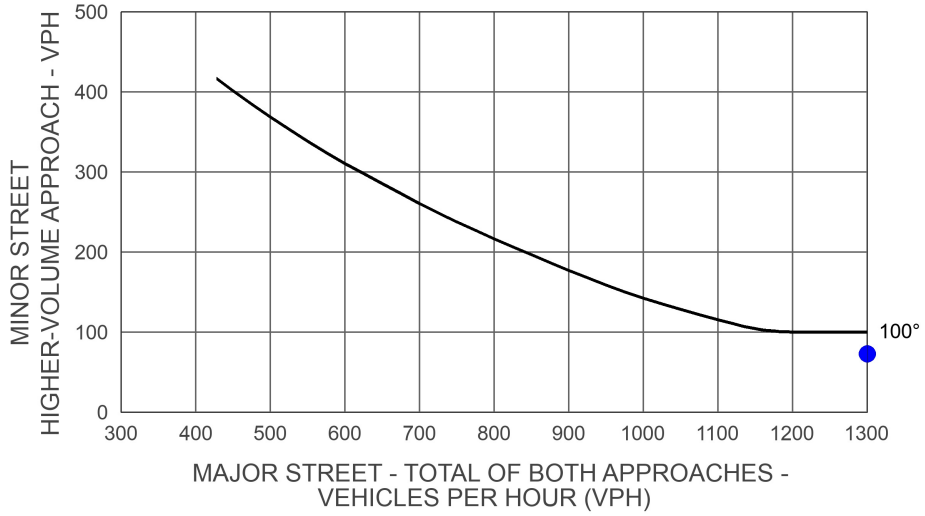


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Future
Intersection #: 6

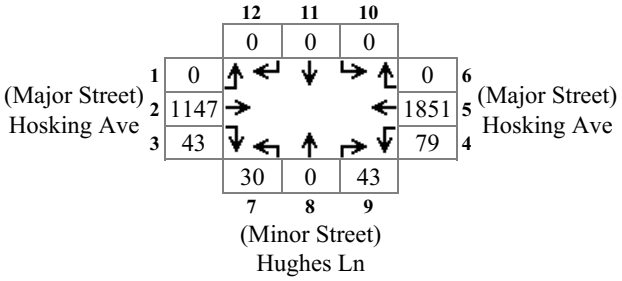


Major Total: 2911
Minor High Volume: 73

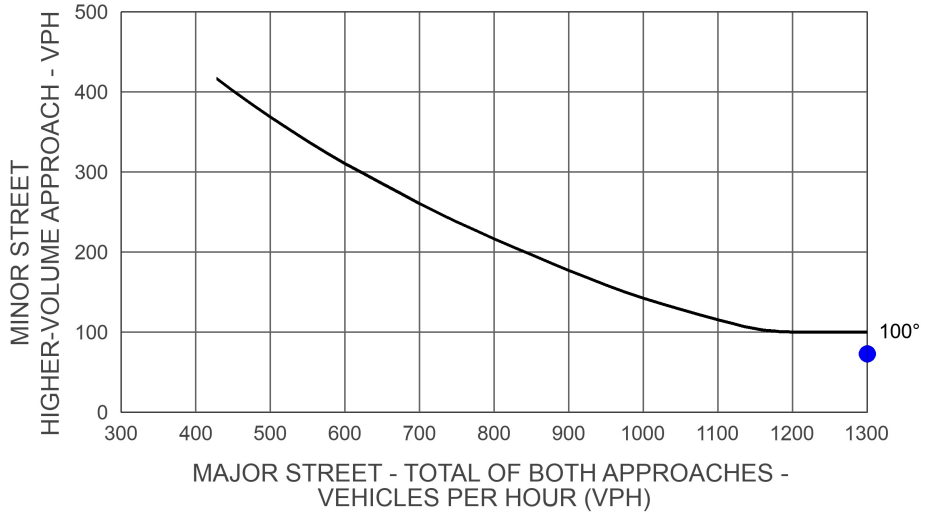


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

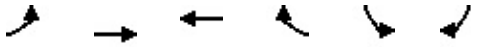
Scenario: PM Future+Project
Intersection #: 6



Major Total: 3120
Minor High Volume: 73



Intersection 7
& Hosking Ave



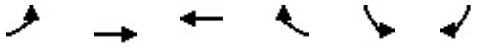
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑↑		↰↰	↱
Traffic Volume (veh/h)	0	608	438	0	314	690
Future Volume (veh/h)	0	608	438	0	314	690
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1716
Adj Flow Rate, veh/h	0	661	476	0	341	750
Adj No. of Lanes	0	2	3	0	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	2230	3204	0	534	877
Arrive On Green	0.00	0.63	0.63	0.00	0.30	0.30
Sat Flow, veh/h	0	3725	5421	0	1774	2917
Grp Volume(v), veh/h	0	661	476	0	341	750
Grp Sat Flow(s),veh/h/ln	0	1770	1695	0	1774	1458
Q Serve(g_s), s	0.0	10.2	4.6	0.0	20.0	29.0
Cycle Q Clear(g_c), s	0.0	10.2	4.6	0.0	20.0	29.0
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2230	3204	0	534	877
V/C Ratio(X)	0.00	0.30	0.15	0.00	0.64	0.86
Avail Cap(c_a), veh/h	0	2230	3204	0	720	1184
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.99	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	10.1	9.1	0.0	36.3	39.5
Incr Delay (d2), s/veh	0.0	0.3	0.1	0.0	1.3	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.1	2.1	0.0	9.9	12.3
LnGrp Delay(d),s/veh	0.0	10.4	9.2	0.0	37.6	44.3
LnGrp LOS		B	A		D	D
Approach Vol, veh/h		661	476		1091	
Approach Delay, s/veh		10.4	9.2		42.2	
Approach LOS		B	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				79.6		40.4		79.6
Change Period (Y+Rc), s				6.0		4.5		6.0
Max Green Setting (Gmax), s				61.0		48.5		61.0
Max Q Clear Time (g_c+I1), s				12.2		31.0		6.6
Green Ext Time (p_c), s				5.5		4.8		5.5

Intersection Summary	
HCM 2010 Ctrl Delay	25.7
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



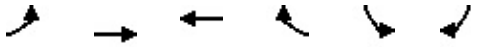
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑↑		↑↑	↑
Traffic Volume (veh/h)	0	707	548	0	387	690
Future Volume (veh/h)	0	707	548	0	387	690
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1716
Adj Flow Rate, veh/h	0	768	596	0	390	783
Adj No. of Lanes	0	2	3	0	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	2187	3142	0	555	913
Arrive On Green	0.00	0.62	0.62	0.00	0.31	0.31
Sat Flow, veh/h	0	3725	5421	0	1774	2917
Grp Volume(v), veh/h	0	768	596	0	390	783
Grp Sat Flow(s),veh/h/ln	0	1770	1695	0	1774	1458
Q Serve(g_s), s	0.0	12.7	6.1	0.0	23.2	30.3
Cycle Q Clear(g_c), s	0.0	12.7	6.1	0.0	23.2	30.3
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2187	3142	0	555	913
V/C Ratio(X)	0.00	0.35	0.19	0.00	0.70	0.86
Avail Cap(c_a), veh/h	0	2187	3142	0	720	1184
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.99	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	11.2	9.9	0.0	36.3	38.7
Incr Delay (d2), s/veh	0.0	0.4	0.1	0.0	2.1	5.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.3	2.9	0.0	11.7	12.8
LnGrp Delay(d),s/veh	0.0	11.6	10.1	0.0	38.4	43.9
LnGrp LOS		B	B		D	D
Approach Vol, veh/h		768	596		1173	
Approach Delay, s/veh		11.6	10.1		42.1	
Approach LOS		B	B		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				78.1		41.9		78.1
Change Period (Y+Rc), s				6.0		4.5		6.0
Max Green Setting (Gmax), s				61.0		48.5		61.0
Max Q Clear Time (g_c+I1), s				14.7		32.3		8.1
Green Ext Time (p_c), s				7.1		5.1		7.1

Intersection Summary	
HCM 2010 Ctrl Delay	25.3
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



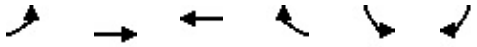
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑↑		↰↰	↱
Traffic Volume (veh/h)	0	664	479	0	319	700
Future Volume (veh/h)	0	664	479	0	319	700
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1716
Adj Flow Rate, veh/h	0	722	521	0	347	761
Adj No. of Lanes	0	2	3	0	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	2216	3185	0	540	888
Arrive On Green	0.00	0.63	0.63	0.00	0.30	0.30
Sat Flow, veh/h	0	3725	5421	0	1774	2917
Grp Volume(v), veh/h	0	722	521	0	347	761
Grp Sat Flow(s),veh/h/ln	0	1770	1695	0	1774	1458
Q Serve(g_s), s	0.0	11.5	5.1	0.0	20.3	29.5
Cycle Q Clear(g_c), s	0.0	11.5	5.1	0.0	20.3	29.5
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2216	3185	0	540	888
V/C Ratio(X)	0.00	0.33	0.16	0.00	0.64	0.86
Avail Cap(c_a), veh/h	0	2216	3185	0	720	1184
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.99	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	10.5	9.3	0.0	36.1	39.3
Incr Delay (d2), s/veh	0.0	0.4	0.1	0.0	1.3	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.7	2.4	0.0	10.1	12.4
LnGrp Delay(d),s/veh	0.0	10.9	9.4	0.0	37.4	44.2
LnGrp LOS		B	A		D	D
Approach Vol, veh/h		722	521		1108	
Approach Delay, s/veh		10.9	9.4		42.1	
Approach LOS		B	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				79.2		40.8		79.2
Change Period (Y+Rc), s				6.0		4.5		6.0
Max Green Setting (Gmax), s				61.0		48.5		61.0
Max Q Clear Time (g_c+I1), s				13.5		31.5		7.1
Green Ext Time (p_c), s				6.2		4.9		6.2

Intersection Summary	
HCM 2010 Ctrl Delay	25.3
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



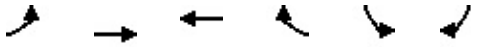
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑↑		↰↰	↱
Traffic Volume (veh/h)	0	716	582	0	319	700
Future Volume (veh/h)	0	716	582	0	319	700
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1716
Adj Flow Rate, veh/h	0	778	633	0	347	761
Adj No. of Lanes	0	2	3	0	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	2216	3185	0	540	888
Arrive On Green	0.00	0.63	0.63	0.00	0.30	0.30
Sat Flow, veh/h	0	3725	5421	0	1774	2917
Grp Volume(v), veh/h	0	778	633	0	347	761
Grp Sat Flow(s),veh/h/ln	0	1770	1695	0	1774	1458
Q Serve(g_s), s	0.0	12.6	6.4	0.0	20.3	29.5
Cycle Q Clear(g_c), s	0.0	12.6	6.4	0.0	20.3	29.5
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2216	3185	0	540	888
V/C Ratio(X)	0.00	0.35	0.20	0.00	0.64	0.86
Avail Cap(c_a), veh/h	0	2216	3185	0	720	1184
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.99	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	10.7	9.6	0.0	36.1	39.3
Incr Delay (d2), s/veh	0.0	0.4	0.1	0.0	1.3	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.3	3.0	0.0	10.1	12.4
LnGrp Delay(d),s/veh	0.0	11.2	9.7	0.0	37.4	44.2
LnGrp LOS		B	A		D	D
Approach Vol, veh/h		778	633		1108	
Approach Delay, s/veh		11.2	9.7		42.1	
Approach LOS		B	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				79.2		40.8		79.2
Change Period (Y+Rc), s				6.0		4.5		6.0
Max Green Setting (Gmax), s				61.0		48.5		61.0
Max Q Clear Time (g_c+I1), s				14.6		31.5		8.4
Green Ext Time (p_c), s				7.4		4.9		7.4

Intersection Summary	
HCM 2010 Ctrl Delay	24.4
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



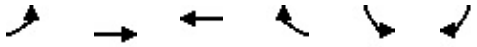
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑↑		↰↰	↱
Traffic Volume (veh/h)	0	1328	1039	0	548	769
Future Volume (veh/h)	0	1328	1039	0	548	769
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1716
Adj Flow Rate, veh/h	0	1443	1129	0	477	963
Adj No. of Lanes	0	2	3	0	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	1990	2859	0	654	1075
Arrive On Green	0.00	0.56	0.56	0.00	0.37	0.37
Sat Flow, veh/h	0	3725	5421	0	1774	2917
Grp Volume(v), veh/h	0	1443	1129	0	477	963
Grp Sat Flow(s),veh/h/ln	0	1770	1695	0	1774	1458
Q Serve(g_s), s	0.0	36.2	15.0	0.0	27.9	37.4
Cycle Q Clear(g_c), s	0.0	36.2	15.0	0.0	27.9	37.4
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1990	2859	0	654	1075
V/C Ratio(X)	0.00	0.73	0.39	0.00	0.73	0.90
Avail Cap(c_a), veh/h	0	1990	2859	0	720	1184
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.97	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	19.4	14.8	0.0	32.7	35.7
Incr Delay (d2), s/veh	0.0	2.3	0.4	0.0	3.4	8.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	18.3	7.1	0.0	14.3	16.3
LnGrp Delay(d),s/veh	0.0	21.8	15.2	0.0	36.1	44.3
LnGrp LOS		C	B		D	D
Approach Vol, veh/h		1443	1129		1440	
Approach Delay, s/veh		21.8	15.2		41.6	
Approach LOS		C	B		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				71.5		48.5		71.5
Change Period (Y+Rc), s				6.0		4.5		6.0
Max Green Setting (Gmax), s				61.0		48.5		61.0
Max Q Clear Time (g_c+I1), s				38.2		39.4		17.0
Green Ext Time (p_c), s				14.1		4.7		19.7

Intersection Summary	
HCM 2010 Ctrl Delay	27.0
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



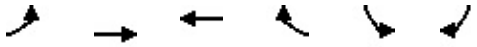
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑↑		↰↰	↱
Traffic Volume (veh/h)	0	1427	1149	0	621	769
Future Volume (veh/h)	0	1427	1149	0	621	769
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1716
Adj Flow Rate, veh/h	0	1551	1249	0	504	1020
Adj No. of Lanes	0	2	3	0	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	1939	2786	0	679	1117
Arrive On Green	0.00	0.55	1.00	0.00	0.38	0.38
Sat Flow, veh/h	0	3725	5421	0	1774	2917
Grp Volume(v), veh/h	0	1551	1249	0	504	1020
Grp Sat Flow(s),veh/h/ln	0	1770	1695	0	1774	1458
Q Serve(g_s), s	0.0	42.3	0.0	0.0	29.4	39.8
Cycle Q Clear(g_c), s	0.0	42.3	0.0	0.0	29.4	39.8
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1939	2786	0	679	1117
V/C Ratio(X)	0.00	0.80	0.45	0.00	0.74	0.91
Avail Cap(c_a), veh/h	0	1939	2786	0	720	1184
HCM Platoon Ratio	1.00	1.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.96	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	21.8	0.0	0.0	31.9	35.1
Incr Delay (d2), s/veh	0.0	3.6	0.5	0.0	3.9	10.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	21.4	0.1	0.0	15.2	17.6
LnGrp Delay(d),s/veh	0.0	25.4	0.5	0.0	35.8	45.6
LnGrp LOS		C	A		D	D
Approach Vol, veh/h		1551	1249		1524	
Approach Delay, s/veh		25.4	0.5		42.4	
Approach LOS		C	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				69.7		50.3		69.7
Change Period (Y+Rc), s				6.0		4.5		6.0
Max Green Setting (Gmax), s				61.0		48.5		61.0
Max Q Clear Time (g_c+I1), s				44.3		41.8		2.0
Green Ext Time (p_c), s				12.3		3.9		25.5

Intersection Summary	
HCM 2010 Ctrl Delay	24.2
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



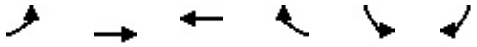
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑↑		↰↰	↱
Traffic Volume (veh/h)	0	1427	1149	0	621	769
Future Volume (veh/h)	0	1427	1149	0	621	769
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1716
Adj Flow Rate, veh/h	0	1551	1249	0	504	1020
Adj No. of Lanes	0	2	3	0	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	1939	2786	0	679	1117
Arrive On Green	0.00	0.55	1.00	0.00	0.38	0.38
Sat Flow, veh/h	0	3725	5421	0	1774	2917
Grp Volume(v), veh/h	0	1551	1249	0	504	1020
Grp Sat Flow(s),veh/h/ln	0	1770	1695	0	1774	1458
Q Serve(g_s), s	0.0	42.3	0.0	0.0	29.4	39.8
Cycle Q Clear(g_c), s	0.0	42.3	0.0	0.0	29.4	39.8
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1939	2786	0	679	1117
V/C Ratio(X)	0.00	0.80	0.45	0.00	0.74	0.91
Avail Cap(c_a), veh/h	0	1939	2786	0	720	1184
HCM Platoon Ratio	1.00	1.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.59	0.96	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	21.8	0.0	0.0	31.9	35.1
Incr Delay (d2), s/veh	0.0	2.1	0.5	0.0	3.9	10.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	21.0	0.1	0.0	15.2	17.6
LnGrp Delay(d),s/veh	0.0	24.0	0.5	0.0	35.8	45.6
LnGrp LOS		C	A		D	D
Approach Vol, veh/h		1551	1249		1524	
Approach Delay, s/veh		24.0	0.5		42.4	
Approach LOS		C	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				69.7		50.3		69.7
Change Period (Y+Rc), s				6.0		4.5		6.0
Max Green Setting (Gmax), s				61.0		48.5		61.0
Max Q Clear Time (g_c+I1), s				44.3		41.8		2.0
Green Ext Time (p_c), s				12.3		3.9		25.5

Intersection Summary	
HCM 2010 Ctrl Delay	23.7
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



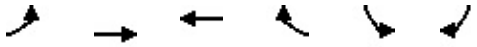
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑↑		↰↰	↱
Traffic Volume (veh/h)	0	936	244	0	201	275
Future Volume (veh/h)	0	936	244	0	201	275
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1716
Adj Flow Rate, veh/h	0	1017	265	0	172	348
Adj No. of Lanes	0	2	3	0	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	2672	3839	0	271	446
Arrive On Green	0.00	0.75	0.75	0.00	0.15	0.15
Sat Flow, veh/h	0	3725	5421	0	1774	2917
Grp Volume(v), veh/h	0	1017	265	0	172	348
Grp Sat Flow(s),veh/h/ln	0	1770	1695	0	1774	1458
Q Serve(g_s), s	0.0	8.9	1.2	0.0	8.2	10.3
Cycle Q Clear(g_c), s	0.0	8.9	1.2	0.0	8.2	10.3
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2672	3839	0	271	446
V/C Ratio(X)	0.00	0.38	0.07	0.00	0.63	0.78
Avail Cap(c_a), veh/h	0	2672	3839	0	369	606
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.99	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	3.8	2.9	0.0	35.8	36.7
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.0	2.5	4.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.4	0.6	0.0	4.2	4.4
LnGrp Delay(d),s/veh	0.0	4.2	2.9	0.0	38.2	41.2
LnGrp LOS		A	A		D	D
Approach Vol, veh/h		1017	265		520	
Approach Delay, s/veh		4.2	2.9		40.2	
Approach LOS		A	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				71.9		18.1		71.9
Change Period (Y+Rc), s				6.0		4.5		6.0
Max Green Setting (Gmax), s				61.0		18.5		61.0
Max Q Clear Time (g_c+I1), s				10.9		12.3		3.2
Green Ext Time (p_c), s				6.7		1.2		6.8

Intersection Summary	
HCM 2010 Ctrl Delay	14.4
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.



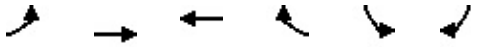
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑↑		↰↑	↱
Traffic Volume (veh/h)	0	969	265	0	225	275
Future Volume (veh/h)	0	969	265	0	225	275
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1716
Adj Flow Rate, veh/h	0	1053	288	0	181	367
Adj No. of Lanes	0	2	3	0	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	2650	3808	0	282	464
Arrive On Green	0.00	0.75	0.75	0.00	0.16	0.16
Sat Flow, veh/h	0	3725	5421	0	1774	2917
Grp Volume(v), veh/h	0	1053	288	0	181	367
Grp Sat Flow(s),veh/h/ln	0	1770	1695	0	1774	1458
Q Serve(g_s), s	0.0	9.6	1.4	0.0	8.6	10.9
Cycle Q Clear(g_c), s	0.0	9.6	1.4	0.0	8.6	10.9
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2650	3808	0	282	464
V/C Ratio(X)	0.00	0.40	0.08	0.00	0.64	0.79
Avail Cap(c_a), veh/h	0	2650	3808	0	369	606
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.99	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	4.0	3.0	0.0	35.4	36.4
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.0	2.4	5.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.7	0.7	0.0	4.4	4.7
LnGrp Delay(d),s/veh	0.0	4.5	3.0	0.0	37.9	41.7
LnGrp LOS		A	A		D	D
Approach Vol, veh/h		1053	288		548	
Approach Delay, s/veh		4.5	3.0		40.4	
Approach LOS		A	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				71.4		18.6		71.4
Change Period (Y+Rc), s				6.0		4.5		6.0
Max Green Setting (Gmax), s				61.0		18.5		61.0
Max Q Clear Time (g_c+I1), s				11.6		12.9		3.4
Green Ext Time (p_c), s				7.2		1.2		7.2

Intersection Summary	
HCM 2010 Ctrl Delay	14.7
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.



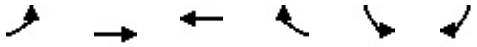
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑↑		↰↰	↱
Traffic Volume (veh/h)	0	1023	267	0	220	300
Future Volume (veh/h)	0	1023	267	0	220	300
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1716
Adj Flow Rate, veh/h	0	1112	290	0	188	380
Adj No. of Lanes	0	2	3	0	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	2635	3786	0	290	476
Arrive On Green	0.00	0.74	0.74	0.00	0.16	0.16
Sat Flow, veh/h	0	3725	5421	0	1774	2917
Grp Volume(v), veh/h	0	1112	290	0	188	380
Grp Sat Flow(s),veh/h/ln	0	1770	1695	0	1774	1458
Q Serve(g_s), s	0.0	10.5	1.4	0.0	8.9	11.3
Cycle Q Clear(g_c), s	0.0	10.5	1.4	0.0	8.9	11.3
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2635	3786	0	290	476
V/C Ratio(X)	0.00	0.42	0.08	0.00	0.65	0.80
Avail Cap(c_a), veh/h	0	2635	3786	0	369	606
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.99	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	4.3	3.1	0.0	35.2	36.2
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.0	2.6	5.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.3	0.7	0.0	4.6	4.9
LnGrp Delay(d),s/veh	0.0	4.8	3.2	0.0	37.9	42.1
LnGrp LOS		A	A		D	D
Approach Vol, veh/h		1112	290		568	
Approach Delay, s/veh		4.8	3.2		40.7	
Approach LOS		A	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				71.0		19.0		71.0
Change Period (Y+Rc), s				6.0		4.5		6.0
Max Green Setting (Gmax), s				61.0		18.5		61.0
Max Q Clear Time (g_c+I1), s				12.5		13.3		3.4
Green Ext Time (p_c), s				7.7		1.2		7.7

Intersection Summary	
HCM 2010 Ctrl Delay	14.9
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.



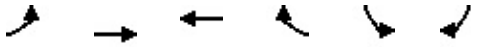
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑↑		↰↰	↱
Traffic Volume (veh/h)	0	1041	287	0	220	300
Future Volume (veh/h)	0	1041	287	0	220	300
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1716
Adj Flow Rate, veh/h	0	1132	312	0	188	380
Adj No. of Lanes	0	2	3	0	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	2635	3786	0	290	476
Arrive On Green	0.00	0.74	0.74	0.00	0.16	0.16
Sat Flow, veh/h	0	3725	5421	0	1774	2917
Grp Volume(v), veh/h	0	1132	312	0	188	380
Grp Sat Flow(s),veh/h/ln	0	1770	1695	0	1774	1458
Q Serve(g_s), s	0.0	10.8	1.5	0.0	8.9	11.3
Cycle Q Clear(g_c), s	0.0	10.8	1.5	0.0	8.9	11.3
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2635	3786	0	290	476
V/C Ratio(X)	0.00	0.43	0.08	0.00	0.65	0.80
Avail Cap(c_a), veh/h	0	2635	3786	0	369	606
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.98	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	4.3	3.1	0.0	35.2	36.2
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.0	2.6	5.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.4	0.7	0.0	4.6	4.9
LnGrp Delay(d),s/veh	0.0	4.8	3.2	0.0	37.9	42.1
LnGrp LOS		A	A		D	D
Approach Vol, veh/h		1132	312		568	
Approach Delay, s/veh		4.8	3.2		40.7	
Approach LOS		A	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				71.0		19.0		71.0
Change Period (Y+Rc), s				6.0		4.5		6.0
Max Green Setting (Gmax), s				61.0		18.5		61.0
Max Q Clear Time (g_c+I1), s				12.8		13.3		3.5
Green Ext Time (p_c), s				8.0		1.2		8.1

Intersection Summary	
HCM 2010 Ctrl Delay	14.7
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.



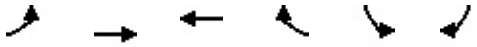
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑↑		↰↰	↱
Traffic Volume (veh/h)	0	1930	561	0	407	310
Future Volume (veh/h)	0	1930	561	0	407	310
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1716
Adj Flow Rate, veh/h	0	2098	610	0	514	260
Adj No. of Lanes	0	2	3	0	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	2499	3590	0	716	294
Arrive On Green	0.00	0.71	0.71	0.00	0.20	0.20
Sat Flow, veh/h	0	3725	5421	0	3548	1458
Grp Volume(v), veh/h	0	2098	610	0	514	260
Grp Sat Flow(s),veh/h/ln	0	1770	1695	0	1774	1458
Q Serve(g_s), s	0.0	38.5	3.6	0.0	12.2	15.6
Cycle Q Clear(g_c), s	0.0	38.5	3.6	0.0	12.2	15.6
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2499	3590	0	716	294
V/C Ratio(X)	0.00	0.84	0.17	0.00	0.72	0.88
Avail Cap(c_a), veh/h	0	2499	3590	0	737	303
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.99	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	9.5	4.4	0.0	33.5	34.9
Incr Delay (d2), s/veh	0.0	3.6	0.1	0.0	3.3	24.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	19.6	1.7	0.0	6.3	8.3
LnGrp Delay(d),s/veh	0.0	13.1	4.5	0.0	36.8	59.5
LnGrp LOS		B	A		D	E
Approach Vol, veh/h		2098	610		774	
Approach Delay, s/veh		13.1	4.5		44.4	
Approach LOS		B	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				67.5		22.5		67.5
Change Period (Y+Rc), s				6.0		4.5		6.0
Max Green Setting (Gmax), s				61.0		18.5		61.0
Max Q Clear Time (g_c+I1), s				40.5		17.6		5.6
Green Ext Time (p_c), s				14.7		0.4		26.5

Intersection Summary	
HCM 2010 Ctrl Delay	18.6
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑↑		↰↰	↱
Traffic Volume (veh/h)	0	1963	582	0	431	310
Future Volume (veh/h)	0	1963	582	0	431	310
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1716
Adj Flow Rate, veh/h	0	2134	633	0	532	268
Adj No. of Lanes	0	2	3	0	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	2486	3572	0	728	299
Arrive On Green	0.00	0.70	0.70	0.00	0.21	0.21
Sat Flow, veh/h	0	3725	5421	0	3548	1458
Grp Volume(v), veh/h	0	2134	633	0	532	268
Grp Sat Flow(s),veh/h/ln	0	1770	1695	0	1774	1458
Q Serve(g_s), s	0.0	40.7	3.8	0.0	12.6	16.1
Cycle Q Clear(g_c), s	0.0	40.7	3.8	0.0	12.6	16.1
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2486	3572	0	728	299
V/C Ratio(X)	0.00	0.86	0.18	0.00	0.73	0.90
Avail Cap(c_a), veh/h	0	2486	3572	0	737	303
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.99	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	10.0	4.5	0.0	33.4	34.8
Incr Delay (d2), s/veh	0.0	4.1	0.1	0.0	3.7	26.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	20.7	1.8	0.0	6.6	8.7
LnGrp Delay(d),s/veh	0.0	14.1	4.7	0.0	37.1	61.6
LnGrp LOS		B	A		D	E
Approach Vol, veh/h		2134	633		800	
Approach Delay, s/veh		14.1	4.7		45.3	
Approach LOS		B	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				67.2		22.8		67.2
Change Period (Y+Rc), s				6.0		4.5		6.0
Max Green Setting (Gmax), s				61.0		18.5		61.0
Max Q Clear Time (g_c+I1), s				42.7		18.1		5.8
Green Ext Time (p_c), s				13.8		0.2		27.5

Intersection Summary	
HCM 2010 Ctrl Delay	19.5
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Intersection 8
& Hosking Ave

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	547	0	0	356	99	60
Future Volume (veh/h)	547	0	0	356	99	60
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	0	1863	1716	1716
Adj Flow Rate, veh/h	595	0	0	387	115	58
Adj No. of Lanes	2	0	0	3	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	2969	0	0	4266	236	105
Arrive On Green	0.84	0.00	0.00	1.00	0.07	0.07
Sat Flow, veh/h	3725	0	0	5421	3268	1458
Grp Volume(v), veh/h	595	0	0	387	115	58
Grp Sat Flow(s),veh/h/ln	1770	0	0	1695	1634	1458
Q Serve(g_s), s	2.9	0.0	0.0	0.0	3.0	3.5
Cycle Q Clear(g_c), s	2.9	0.0	0.0	0.0	3.0	3.5
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2969	0	0	4266	236	105
V/C Ratio(X)	0.20	0.00	0.00	0.09	0.49	0.55
Avail Cap(c_a), veh/h	2969	0	0	4266	1089	486
HCM Platoon Ratio	1.00	1.00	1.00	2.00	1.00	1.00
Upstream Filter(I)	0.82	0.00	0.00	0.96	1.00	1.00
Uniform Delay (d), s/veh	1.4	0.0	0.0	0.0	40.2	40.3
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.0	1.6	4.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	0.0	0.0	1.4	1.5
LnGrp Delay(d),s/veh	1.5	0.0	0.0	0.0	41.7	44.8
LnGrp LOS	A			A	D	D
Approach Vol, veh/h	595			387	173	
Approach Delay, s/veh	1.5			0.0	42.7	
Approach LOS	A			A	D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		10.5		79.5				79.5
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		29.5		51.5				51.5
Max Q Clear Time (g_c+I1), s		5.5		4.9				2.0
Green Ext Time (p_c), s		0.6		4.6				4.6

Intersection Summary	
HCM 2010 Ctrl Delay	7.2
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	719	0	0	466	99	81
Future Volume (veh/h)	719	0	0	466	99	81
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	0	1863	1716	1716
Adj Flow Rate, veh/h	782	0	0	507	129	65
Adj No. of Lanes	2	0	0	3	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	2949	0	0	4238	254	113
Arrive On Green	0.83	0.00	0.00	1.00	0.08	0.08
Sat Flow, veh/h	3725	0	0	5421	3268	1458
Grp Volume(v), veh/h	782	0	0	507	129	65
Grp Sat Flow(s),veh/h/ln	1770	0	0	1695	1634	1458
Q Serve(g_s), s	4.3	0.0	0.0	0.0	3.4	3.9
Cycle Q Clear(g_c), s	4.3	0.0	0.0	0.0	3.4	3.9
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2949	0	0	4238	254	113
V/C Ratio(X)	0.27	0.00	0.00	0.12	0.51	0.57
Avail Cap(c_a), veh/h	2949	0	0	4238	1017	454
HCM Platoon Ratio	1.00	1.00	1.00	2.00	1.00	1.00
Upstream Filter(I)	0.80	0.00	0.00	0.09	1.00	1.00
Uniform Delay (d), s/veh	1.6	0.0	0.0	0.0	39.8	40.1
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.0	1.6	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	0.0	0.0	1.6	1.7
LnGrp Delay(d),s/veh	1.8	0.0	0.0	0.0	41.4	44.5
LnGrp LOS	A			A	D	D
Approach Vol, veh/h	782			507	194	
Approach Delay, s/veh	1.8			0.0	42.5	
Approach LOS	A			A	D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		11.0		79.0				79.0
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		27.5		53.5				53.5
Max Q Clear Time (g_c+I1), s		5.9		6.3				2.0
Green Ext Time (p_c), s		0.7		6.5				6.6

Intersection Summary	
HCM 2010 Ctrl Delay	6.5
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	598	0	0	389	100	61
Future Volume (veh/h)	598	0	0	389	100	61
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	0	1863	1716	1716
Adj Flow Rate, veh/h	650	0	0	423	116	58
Adj No. of Lanes	2	0	0	3	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	2970	0	0	4267	235	105
Arrive On Green	0.84	0.00	0.00	0.56	0.07	0.07
Sat Flow, veh/h	3725	0	0	5421	3268	1458
Grp Volume(v), veh/h	650	0	0	423	116	58
Grp Sat Flow(s),veh/h/ln	1770	0	0	1695	1634	1458
Q Serve(g_s), s	3.3	0.0	0.0	3.5	3.1	3.5
Cycle Q Clear(g_c), s	3.3	0.0	0.0	3.5	3.1	3.5
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2970	0	0	4267	235	105
V/C Ratio(X)	0.22	0.00	0.00	0.10	0.49	0.55
Avail Cap(c_a), veh/h	2970	0	0	4267	980	437
HCM Platoon Ratio	1.00	1.00	1.00	0.67	1.00	1.00
Upstream Filter(I)	0.82	0.00	0.00	0.95	1.00	1.00
Uniform Delay (d), s/veh	1.4	0.0	0.0	3.9	40.2	40.4
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.0	1.6	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	0.0	1.6	1.4	1.5
LnGrp Delay(d),s/veh	1.6	0.0	0.0	4.0	41.8	44.8
LnGrp LOS	A			A	D	D
Approach Vol, veh/h	650			423	174	
Approach Delay, s/veh	1.6			4.0	42.8	
Approach LOS	A			A	D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		10.5		79.5				79.5
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		26.5		54.5				54.5
Max Q Clear Time (g_c+I1), s		5.5		5.3				5.5
Green Ext Time (p_c), s		0.6		5.1				5.1

Intersection Summary	
HCM 2010 Ctrl Delay	8.1
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	686	0	0	492	100	106
Future Volume (veh/h)	686	0	0	492	100	106
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	0	1863	1716	1716
Adj Flow Rate, veh/h	746	0	0	535	147	75
Adj No. of Lanes	2	0	0	3	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	2922	0	0	4198	280	125
Arrive On Green	0.83	0.00	0.00	0.55	0.09	0.09
Sat Flow, veh/h	3725	0	0	5421	3268	1458
Grp Volume(v), veh/h	746	0	0	535	147	75
Grp Sat Flow(s),veh/h/ln	1770	0	0	1695	1634	1458
Q Serve(g_s), s	4.2	0.0	0.0	4.6	3.9	4.5
Cycle Q Clear(g_c), s	4.2	0.0	0.0	4.6	3.9	4.5
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2922	0	0	4198	280	125
V/C Ratio(X)	0.26	0.00	0.00	0.13	0.53	0.60
Avail Cap(c_a), veh/h	2922	0	0	4198	944	421
HCM Platoon Ratio	1.00	1.00	1.00	0.67	1.00	1.00
Upstream Filter(I)	0.82	0.00	0.00	0.09	1.00	1.00
Uniform Delay (d), s/veh	1.7	0.0	0.0	4.5	39.4	39.7
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.0	1.5	4.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	0.0	2.1	1.8	2.0
LnGrp Delay(d),s/veh	1.9	0.0	0.0	4.5	40.9	44.3
LnGrp LOS	A			A	D	D
Approach Vol, veh/h	746			535	222	
Approach Delay, s/veh	1.9			4.5	42.1	
Approach LOS	A			A	D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		11.7		78.3				78.3
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		25.5		55.5				55.5
Max Q Clear Time (g_c+I1), s		6.5		6.2				6.6
Green Ext Time (p_c), s		0.8		6.5				6.5

Intersection Summary	
HCM 2010 Ctrl Delay	8.8
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1419	0	0	994	111	132
Future Volume (veh/h)	1419	0	0	994	111	132
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	0	1863	1716	1716
Adj Flow Rate, veh/h	1542	0	0	1080	88	178
Adj No. of Lanes	2	0	0	3	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	2887	0	0	4147	156	279
Arrive On Green	0.82	0.00	0.00	1.00	0.10	0.10
Sat Flow, veh/h	3725	0	0	5421	1634	2917
Grp Volume(v), veh/h	1542	0	0	1080	88	178
Grp Sat Flow(s),veh/h/ln	1770	0	0	1695	1634	1458
Q Serve(g_s), s	12.8	0.0	0.0	0.0	4.6	5.3
Cycle Q Clear(g_c), s	12.8	0.0	0.0	0.0	4.6	5.3
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2887	0	0	4147	156	279
V/C Ratio(X)	0.53	0.00	0.00	0.26	0.56	0.64
Avail Cap(c_a), veh/h	2887	0	0	4147	363	648
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.00	1.00
Upstream Filter(I)	0.58	0.00	0.00	0.09	1.00	1.00
Uniform Delay (d), s/veh	2.7	0.0	0.0	0.0	38.9	39.2
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.0	3.2	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	0.0	0.0	0.0	2.2	2.2
LnGrp Delay(d),s/veh	3.1	0.0	0.0	0.0	42.1	41.6
LnGrp LOS	A			A	D	D
Approach Vol, veh/h	1542			1080	266	
Approach Delay, s/veh	3.1			0.0	41.8	
Approach LOS	A			A	D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		12.6		77.4				77.4
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		19.5		61.5				61.5
Max Q Clear Time (g_c+I1), s		7.3		14.8				2.0
Green Ext Time (p_c), s		0.8		21.0				22.7

Intersection Summary	
HCM 2010 Ctrl Delay	5.5
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1591	0	0	1104	111	153
Future Volume (veh/h)	1591	0	0	1104	111	153
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	0	1863	1716	1716
Adj Flow Rate, veh/h	1729	0	0	1200	96	193
Adj No. of Lanes	2	0	0	3	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	2974	0	0	4273	152	271
Arrive On Green	1.00	0.00	0.00	0.84	0.09	0.09
Sat Flow, veh/h	3725	0	0	5421	1634	2917
Grp Volume(v), veh/h	1729	0	0	1200	96	193
Grp Sat Flow(s),veh/h/ln	1770	0	0	1695	1634	1458
Q Serve(g_s), s	0.0	0.0	0.0	5.9	6.8	7.7
Cycle Q Clear(g_c), s	0.0	0.0	0.0	5.9	6.8	7.7
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2974	0	0	4273	152	271
V/C Ratio(X)	0.58	0.00	0.00	0.28	0.63	0.71
Avail Cap(c_a), veh/h	2974	0	0	4273	327	583
HCM Platoon Ratio	2.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.50	0.00	0.00	0.09	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	2.0	52.4	52.8
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.0	4.3	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	2.7	3.2	3.2
LnGrp Delay(d),s/veh	0.4	0.0	0.0	2.0	56.7	56.3
LnGrp LOS	A			A	E	E
Approach Vol, veh/h	1729			1200	289	
Approach Delay, s/veh	0.4			2.0	56.4	
Approach LOS	A			A	E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		15.2		104.8				104.8
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		23.5		87.5				87.5
Max Q Clear Time (g_c+I1), s		9.7		2.0				7.9
Green Ext Time (p_c), s		1.0		32.0				31.4

Intersection Summary	
HCM 2010 Ctrl Delay	6.0
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1591	0	0	1104	111	153
Future Volume (veh/h)	1591	0	0	1104	111	153
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	0	1863	1716	1716
Adj Flow Rate, veh/h	1729	0	0	1200	96	193
Adj No. of Lanes	2	0	0	3	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	2974	0	0	4273	152	271
Arrive On Green	1.00	0.00	0.00	0.84	0.09	0.09
Sat Flow, veh/h	3725	0	0	5421	1634	2917
Grp Volume(v), veh/h	1729	0	0	1200	96	193
Grp Sat Flow(s),veh/h/ln	1770	0	0	1695	1634	1458
Q Serve(g_s), s	0.0	0.0	0.0	5.9	6.8	7.7
Cycle Q Clear(g_c), s	0.0	0.0	0.0	5.9	6.8	7.7
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2974	0	0	4273	152	271
V/C Ratio(X)	0.58	0.00	0.00	0.28	0.63	0.71
Avail Cap(c_a), veh/h	2974	0	0	4273	327	583
HCM Platoon Ratio	2.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.50	0.00	0.00	0.47	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	2.0	52.4	52.8
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.1	4.3	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	2.7	3.2	3.2
LnGrp Delay(d),s/veh	0.4	0.0	0.0	2.1	56.7	56.3
LnGrp LOS	A			A	E	E
Approach Vol, veh/h	1729			1200	289	
Approach Delay, s/veh	0.4			2.1	56.4	
Approach LOS	A			A	E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		15.2		104.8				104.8
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		23.5		87.5				87.5
Max Q Clear Time (g_c+I1), s		9.7		2.0				7.9
Green Ext Time (p_c), s		1.0		32.0				31.4

Intersection Summary	
HCM 2010 Ctrl Delay	6.1
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	428	0	0	234	46	11
Future Volume (veh/h)	428	0	0	234	46	11
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	0	1863	1716	1716
Adj Flow Rate, veh/h	465	0	0	254	50	12
Adj No. of Lanes	2	0	0	3	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	678	0	0	974	2352	1049
Arrive On Green	0.06	0.00	0.00	0.19	0.72	0.72
Sat Flow, veh/h	3725	0	0	5421	3268	1458
Grp Volume(v), veh/h	465	0	0	254	50	12
Grp Sat Flow(s),veh/h/ln	1770	0	0	1695	1634	1458
Q Serve(g_s), s	11.6	0.0	0.0	3.8	0.4	0.2
Cycle Q Clear(g_c), s	11.6	0.0	0.0	3.8	0.4	0.2
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	678	0	0	974	2352	1049
V/C Ratio(X)	0.69	0.00	0.00	0.26	0.02	0.01
Avail Cap(c_a), veh/h	2359	0	0	3390	2352	1049
HCM Platoon Ratio	0.33	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.5	0.0	0.0	31.0	3.6	3.6
Incr Delay (d2), s/veh	1.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	0.0	0.0	1.8	0.2	0.1
LnGrp Delay(d),s/veh	40.6	0.0	0.0	31.1	3.6	3.6
LnGrp LOS	D			C	A	A
Approach Vol, veh/h	465			254	62	
Approach Delay, s/veh	40.6			31.1	3.6	
Approach LOS	D			C	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		68.8		21.2				21.2
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		21.5		59.5				59.5
Max Q Clear Time (g_c+I1), s		2.4		13.6				5.8
Green Ext Time (p_c), s		0.2		3.2				3.2

Intersection Summary	
HCM 2010 Ctrl Delay	34.6
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	485	0	0	255	46	18
Future Volume (veh/h)	485	0	0	255	46	18
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	0	1863	1716	1716
Adj Flow Rate, veh/h	527	0	0	277	50	20
Adj No. of Lanes	2	0	0	3	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	755	0	0	1085	2280	1018
Arrive On Green	0.07	0.00	0.00	0.21	0.70	0.70
Sat Flow, veh/h	3725	0	0	5421	3268	1458
Grp Volume(v), veh/h	527	0	0	277	50	20
Grp Sat Flow(s),veh/h/ln	1770	0	0	1695	1634	1458
Q Serve(g_s), s	13.1	0.0	0.0	4.1	0.4	0.4
Cycle Q Clear(g_c), s	13.1	0.0	0.0	4.1	0.4	0.4
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	755	0	0	1085	2280	1018
V/C Ratio(X)	0.70	0.00	0.00	0.26	0.02	0.02
Avail Cap(c_a), veh/h	2359	0	0	3390	2280	1018
HCM Platoon Ratio	0.33	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.0	0.0	0.0	29.5	4.2	4.2
Incr Delay (d2), s/veh	1.0	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	0.0	0.0	1.9	0.2	0.2
LnGrp Delay(d),s/veh	40.0	0.0	0.0	29.6	4.2	4.2
LnGrp LOS	D			C	A	A
Approach Vol, veh/h	527			277	70	
Approach Delay, s/veh	40.0			29.6	4.2	
Approach LOS	D			C	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		66.8		23.2				23.2
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		21.5		59.5				59.5
Max Q Clear Time (g_c+I1), s		2.4		15.1				6.1
Green Ext Time (p_c), s		0.2		3.6				3.6

Intersection Summary	
HCM 2010 Ctrl Delay	33.9
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	468	0	0	256	50	12
Future Volume (veh/h)	468	0	0	256	50	12
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	0	1863	1716	1716
Adj Flow Rate, veh/h	509	0	0	278	54	13
Adj No. of Lanes	2	0	0	3	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	734	0	0	1054	2300	1026
Arrive On Green	0.07	0.00	0.00	0.21	0.70	0.70
Sat Flow, veh/h	3725	0	0	5421	3268	1458
Grp Volume(v), veh/h	509	0	0	278	54	13
Grp Sat Flow(s),veh/h/ln	1770	0	0	1695	1634	1458
Q Serve(g_s), s	12.7	0.0	0.0	4.1	0.4	0.2
Cycle Q Clear(g_c), s	12.7	0.0	0.0	4.1	0.4	0.2
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	734	0	0	1054	2300	1026
V/C Ratio(X)	0.69	0.00	0.00	0.26	0.02	0.01
Avail Cap(c_a), veh/h	2359	0	0	3390	2300	1026
HCM Platoon Ratio	0.33	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.1	0.0	0.0	29.9	4.0	4.0
Incr Delay (d2), s/veh	1.0	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	0.0	0.0	1.9	0.2	0.1
LnGrp Delay(d),s/veh	40.2	0.0	0.0	30.0	4.0	4.0
LnGrp LOS	D			C	A	A
Approach Vol, veh/h	509			278	67	
Approach Delay, s/veh	40.2			30.0	4.0	
Approach LOS	D			C	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		67.3		22.7				22.7
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		21.5		59.5				59.5
Max Q Clear Time (g_c+I1), s		2.4		14.7				6.1
Green Ext Time (p_c), s		0.2		3.5				3.5

Intersection Summary	
HCM 2010 Ctrl Delay	34.0
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	498	0	0	276	50	27
Future Volume (veh/h)	498	0	0	276	50	27
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	0	1863	1716	1716
Adj Flow Rate, veh/h	541	0	0	300	55	28
Adj No. of Lanes	2	0	0	3	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	776	0	0	1115	2261	1009
Arrive On Green	0.07	0.00	0.00	0.22	0.69	0.69
Sat Flow, veh/h	3725	0	0	5421	3268	1458
Grp Volume(v), veh/h	541	0	0	300	55	28
Grp Sat Flow(s),veh/h/ln	1770	0	0	1695	1634	1458
Q Serve(g_s), s	13.4	0.0	0.0	4.4	0.5	0.5
Cycle Q Clear(g_c), s	13.4	0.0	0.0	4.4	0.5	0.5
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	776	0	0	1115	2261	1009
V/C Ratio(X)	0.70	0.00	0.00	0.27	0.02	0.03
Avail Cap(c_a), veh/h	2359	0	0	3390	2261	1009
HCM Platoon Ratio	0.33	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.8	0.0	0.0	29.2	4.3	4.4
Incr Delay (d2), s/veh	1.0	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	0.0	0.0	2.1	0.2	0.2
LnGrp Delay(d),s/veh	39.8	0.0	0.0	29.3	4.3	4.4
LnGrp LOS	D			C	A	A
Approach Vol, veh/h	541			300	83	
Approach Delay, s/veh	39.8			29.3	4.4	
Approach LOS	D			C	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		66.3		23.7				23.7
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		21.5		59.5				59.5
Max Q Clear Time (g_c+I1), s		2.5		15.4				6.4
Green Ext Time (p_c), s		0.2		3.8				3.8

Intersection Summary	
HCM 2010 Ctrl Delay	33.2
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1197	0	0	558	53	71
Future Volume (veh/h)	1197	0	0	558	53	71
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	0	1863	1716	1716
Adj Flow Rate, veh/h	1301	0	0	607	45	91
Adj No. of Lanes	2	0	0	3	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	1576	0	0	2264	761	1359
Arrive On Green	0.59	0.00	0.00	0.45	0.47	0.47
Sat Flow, veh/h	3725	0	0	5421	1634	2917
Grp Volume(v), veh/h	1301	0	0	607	45	91
Grp Sat Flow(s),veh/h/ln	1770	0	0	1695	1634	1458
Q Serve(g_s), s	26.4	0.0	0.0	6.8	1.4	1.5
Cycle Q Clear(g_c), s	26.4	0.0	0.0	6.8	1.4	1.5
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	1576	0	0	2264	761	1359
V/C Ratio(X)	0.83	0.00	0.00	0.27	0.06	0.07
Avail Cap(c_a), veh/h	2359	0	0	3390	761	1359
HCM Platoon Ratio	1.33	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.46	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.6	0.0	0.0	15.7	13.2	13.3
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.8	0.0	0.0	3.2	0.6	0.6
LnGrp Delay(d),s/veh	16.3	0.0	0.0	15.8	13.2	13.3
LnGrp LOS	B			B	B	B
Approach Vol, veh/h	1301			607	136	
Approach Delay, s/veh	16.3			15.8	13.3	
Approach LOS	B			B	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		45.9		44.1				44.1
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		21.5		59.5				59.5
Max Q Clear Time (g_c+I1), s		3.5		28.4				8.8
Green Ext Time (p_c), s		0.4		11.2				12.4

Intersection Summary	
HCM 2010 Ctrl Delay	15.9
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1254	0	0	579	53	78
Future Volume (veh/h)	1254	0	0	579	53	78
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	0	1863	1716	1716
Adj Flow Rate, veh/h	1363	0	0	629	48	96
Adj No. of Lanes	2	0	0	3	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	1637	0	0	2353	733	1308
Arrive On Green	0.62	0.00	0.00	0.46	0.45	0.45
Sat Flow, veh/h	3725	0	0	5421	1634	2917
Grp Volume(v), veh/h	1363	0	0	629	48	96
Grp Sat Flow(s),veh/h/ln	1770	0	0	1695	1634	1458
Q Serve(g_s), s	27.3	0.0	0.0	6.8	1.5	1.7
Cycle Q Clear(g_c), s	27.3	0.0	0.0	6.8	1.5	1.7
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	1637	0	0	2353	733	1308
V/C Ratio(X)	0.83	0.00	0.00	0.27	0.07	0.07
Avail Cap(c_a), veh/h	2359	0	0	3390	733	1308
HCM Platoon Ratio	1.33	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.43	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.6	0.0	0.0	14.8	14.1	14.2
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.2	0.0	0.0	3.2	0.7	0.7
LnGrp Delay(d),s/veh	15.3	0.0	0.0	14.9	14.1	14.2
LnGrp LOS	B			B	B	B
Approach Vol, veh/h	1363			629	144	
Approach Delay, s/veh	15.3			14.9	14.2	
Approach LOS	B			B	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		44.4		45.6				45.6
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		21.5		59.5				59.5
Max Q Clear Time (g_c+I1), s		3.7		29.3				8.8
Green Ext Time (p_c), s		0.5		11.8				13.4

Intersection Summary	
HCM 2010 Ctrl Delay	15.1
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Intersection 9
S H St & Hosking Ave

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	96	415	90	12	372	58	92	120	19	54	107	66
Future Volume (veh/h)	96	415	90	12	372	58	92	120	19	54	107	66
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	104	451	98	13	404	63	100	130	21	59	116	72
Adj No. of Lanes	1	1	1	1	2	1	1	1	0	1	1	0
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	140	1074	841	29	1799	741	134	278	45	82	157	97
Arrive On Green	0.03	0.19	0.19	0.01	0.17	0.17	0.03	0.06	0.06	0.02	0.05	0.05
Sat Flow, veh/h	1634	1863	1458	1634	3539	1458	1634	1565	253	1634	1077	668
Grp Volume(v), veh/h	104	451	98	13	404	63	100	0	151	59	0	188
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	1770	1458	1634	0	1818	1634	0	1745
Q Serve(g_s), s	5.7	19.2	5.0	0.7	8.9	3.3	5.5	0.0	7.2	3.2	0.0	9.6
Cycle Q Clear(g_c), s	5.7	19.2	5.0	0.7	8.9	3.3	5.5	0.0	7.2	3.2	0.0	9.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		0.38
Lane Grp Cap(c), veh/h	140	1074	841	29	1799	741	134	0	323	82	0	254
V/C Ratio(X)	0.74	0.42	0.12	0.44	0.22	0.08	0.74	0.00	0.47	0.72	0.00	0.74
Avail Cap(c_a), veh/h	272	1074	841	100	1799	741	182	0	667	109	0	562
HCM Platoon Ratio	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33
Upstream Filter(I)	0.99	0.99	0.99	0.93	0.93	0.93	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	42.7	23.2	17.5	44.3	22.1	19.8	42.8	0.0	38.3	43.6	0.0	41.2
Incr Delay (d2), s/veh	7.3	1.2	0.3	9.5	0.3	0.2	10.5	0.0	1.1	13.9	0.0	4.2
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	2.9	10.3	2.1	0.4	4.4	1.4	2.9	0.0	3.7	1.8	0.0	4.9
LnGrp Delay(d),s/veh	50.0	24.4	17.7	53.8	22.4	20.0	53.4	0.0	39.3	57.5	0.0	45.4
LnGrp LOS	D	C	B	D	C	B	D		D	E		D
Approach Vol, veh/h		653			480			251			247	
Approach Delay, s/veh		27.5			22.9			44.9			48.3	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.5	20.0	5.6	55.9	11.4	17.1	11.7	49.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	32.5	5.0	29.0	9.5	28.5	14.5	19.5
Max Q Clear Time (g_c+I1), s	5.2	9.2	2.7	21.2	7.5	11.6	7.7	10.9
Green Ext Time (p_c), s	0.0	1.1	0.0	2.6	0.0	1.0	0.1	2.8

Intersection Summary	
HCM 2010 Ctrl Delay	32.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	113	422	297	55	372	58	317	240	66	54	219	66
Future Volume (veh/h)	113	422	297	55	372	58	317	240	66	54	219	66
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	123	459	323	60	404	63	345	261	72	59	238	72
Adj No. of Lanes	1	1	1	1	2	1	1	1	0	1	1	0
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	163	821	643	84	1389	572	182	394	109	82	301	91
Arrive On Green	0.03	0.15	0.15	0.02	0.13	0.13	0.04	0.09	0.09	0.02	0.07	0.07
Sat Flow, veh/h	1634	1863	1458	1634	3539	1458	1634	1406	388	1634	1374	416
Grp Volume(v), veh/h	123	459	323	60	404	63	345	0	333	59	0	310
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	1770	1458	1634	0	1794	1634	0	1789
Q Serve(g_s), s	6.7	20.6	18.4	3.3	9.3	3.4	10.0	0.0	16.2	3.2	0.0	15.3
Cycle Q Clear(g_c), s	6.7	20.6	18.4	3.3	9.3	3.4	10.0	0.0	16.2	3.2	0.0	15.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.22	1.00		0.23
Lane Grp Cap(c), veh/h	163	821	643	84	1389	572	182	0	502	82	0	392
V/C Ratio(X)	0.76	0.56	0.50	0.72	0.29	0.11	1.90	0.00	0.66	0.72	0.00	0.79
Avail Cap(c_a), veh/h	272	821	643	100	1389	572	182	0	658	109	0	577
HCM Platoon Ratio	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33
Upstream Filter(I)	0.97	0.97	0.97	0.91	0.91	0.91	0.78	0.00	0.78	0.99	0.00	0.99
Uniform Delay (d), s/veh	42.4	30.3	29.4	43.6	27.8	25.3	43.4	0.0	36.8	43.6	0.0	39.7
Incr Delay (d2), s/veh	6.8	2.7	2.7	16.5	0.5	0.4	420.8	0.0	1.2	13.9	0.0	4.5
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	3.3	11.3	7.9	1.9	4.6	1.4	25.7	0.0	8.2	1.8	0.0	8.1
LnGrp Delay(d),s/veh	49.2	33.0	32.1	60.0	28.3	25.7	464.1	0.0	38.0	57.5	0.0	44.2
LnGrp LOS	D	C	C	E	C	C	F		D	E		D
Approach Vol, veh/h		905			527			678			369	
Approach Delay, s/veh		34.9			31.6			254.8			46.4	
Approach LOS		C			C			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.5	29.2	8.6	43.7	14.0	23.7	13.0	39.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	32.5	5.0	29.0	9.5	28.5	14.5	19.5
Max Q Clear Time (g_c+I1), s	5.2	18.2	5.3	22.6	12.0	17.3	8.7	11.3
Green Ext Time (p_c), s	0.0	2.1	0.0	2.9	0.0	1.9	0.1	3.4

Intersection Summary	
HCM 2010 Ctrl Delay	96.0
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	453	98	13	406	63	99	129	20	55	109	67
Future Volume (veh/h)	105	453	98	13	406	63	99	129	20	55	109	67
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	114	492	107	14	441	68	108	140	22	60	118	73
Adj No. of Lanes	1	1	1	1	2	1	1	1	0	1	1	0
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	148	1058	828	31	1755	723	144	290	46	84	159	99
Arrive On Green	0.18	1.00	1.00	0.01	0.16	0.16	0.03	0.06	0.06	0.02	0.05	0.05
Sat Flow, veh/h	1634	1863	1458	1634	3539	1458	1634	1572	247	1634	1078	667
Grp Volume(v), veh/h	114	492	107	14	441	68	108	0	162	60	0	191
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	1770	1458	1634	0	1819	1634	0	1745
Q Serve(g_s), s	6.0	0.0	0.0	0.8	9.8	3.6	5.9	0.0	7.8	3.3	0.0	9.7
Cycle Q Clear(g_c), s	6.0	0.0	0.0	0.8	9.8	3.6	5.9	0.0	7.8	3.3	0.0	9.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		0.38
Lane Grp Cap(c), veh/h	148	1058	828	31	1755	723	144	0	336	84	0	258
V/C Ratio(X)	0.77	0.47	0.13	0.46	0.25	0.09	0.75	0.00	0.48	0.72	0.00	0.74
Avail Cap(c_a), veh/h	272	1058	828	100	1755	723	182	0	667	109	0	562
HCM Platoon Ratio	2.00	2.00	2.00	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33
Upstream Filter(I)	0.98	0.98	0.98	0.91	0.91	0.91	0.99	0.00	0.99	1.00	0.00	1.00
Uniform Delay (d), s/veh	36.0	0.0	0.0	44.3	23.1	20.5	42.7	0.0	38.1	43.6	0.0	41.1
Incr Delay (d2), s/veh	8.0	1.4	0.3	9.5	0.3	0.2	12.4	0.0	1.1	14.4	0.0	4.1
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	3.0	0.4	0.1	0.4	4.9	1.5	3.2	0.0	4.0	1.8	0.0	5.0
LnGrp Delay(d),s/veh	44.0	1.4	0.3	53.8	23.4	20.7	55.1	0.0	39.2	58.0	0.0	45.3
LnGrp LOS	D	A	A	D	C	C	E		D	E		D
Approach Vol, veh/h		713			523			270			251	
Approach Delay, s/veh		8.1			23.8			45.6			48.3	
Approach LOS		A			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	20.6	5.7	55.1	11.9	17.3	12.2	48.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	32.5	5.0	29.0	9.5	28.5	14.5	19.5
Max Q Clear Time (g_c+I1), s	5.3	9.8	2.8	2.0	7.9	11.7	8.0	11.8
Green Ext Time (p_c), s	0.0	1.2	0.0	4.7	0.0	1.1	0.1	2.9

Intersection Summary	
HCM 2010 Ctrl Delay	24.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	460	141	13	406	63	312	244	65	55	109	67
Future Volume (veh/h)	121	460	141	13	406	63	312	244	65	55	109	67
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	132	500	153	14	441	68	339	265	71	60	118	73
Adj No. of Lanes	1	1	1	1	2	1	1	1	0	1	1	0
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	167	972	761	31	1551	639	182	326	87	84	184	114
Arrive On Green	0.20	1.00	1.00	0.01	0.14	0.14	0.04	0.08	0.07	0.02	0.06	0.05
Sat Flow, veh/h	1634	1863	1458	1634	3539	1458	1634	1416	379	1634	1078	667
Grp Volume(v), veh/h	132	500	153	14	441	68	339	0	336	60	0	191
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	1770	1458	1634	0	1796	1634	0	1745
Q Serve(g_s), s	6.9	0.0	0.0	0.8	10.0	3.6	10.0	0.0	16.6	3.3	0.0	9.6
Cycle Q Clear(g_c), s	6.9	0.0	0.0	0.8	10.0	3.6	10.0	0.0	16.6	3.3	0.0	9.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.21	1.00		0.38
Lane Grp Cap(c), veh/h	167	972	761	31	1551	639	182	0	414	84	0	298
V/C Ratio(X)	0.79	0.51	0.20	0.46	0.28	0.11	1.87	0.00	0.81	0.72	0.00	0.64
Avail Cap(c_a), veh/h	272	972	761	100	1551	639	182	0	658	109	0	562
HCM Platoon Ratio	2.00	2.00	2.00	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33
Upstream Filter(I)	0.97	0.97	0.97	0.92	0.92	0.92	0.80	0.00	0.80	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.9	0.0	0.0	44.3	25.9	23.2	43.4	0.0	39.7	43.6	0.0	39.8
Incr Delay (d2), s/veh	7.8	1.9	0.6	9.5	0.4	0.3	406.5	0.0	3.3	14.4	0.0	2.3
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	0.5	0.1	0.4	5.0	1.5	25.0	0.0	8.6	1.8	0.0	4.9
LnGrp Delay(d),s/veh	42.6	1.9	0.6	53.8	26.3	23.5	449.9	0.0	43.0	58.0	0.0	42.1
LnGrp LOS	D	A	A	D	C	C	F		D	E		D
Approach Vol, veh/h		785			523			675			251	
Approach Delay, s/veh		8.5			26.7			247.4			45.9	
Approach LOS		A			C			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	24.7	5.7	51.0	14.0	19.3	13.2	43.4
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	32.5	5.0	29.0	9.5	28.5	14.5	19.5
Max Q Clear Time (g_c+I1), s	5.3	18.6	2.8	2.0	12.0	11.6	8.9	12.0
Green Ext Time (p_c), s	0.0	1.7	0.0	4.9	0.0	1.8	0.2	3.0

Intersection Summary	
HCM 2010 Ctrl Delay	89.1
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	630	757	235	43	677	144	210	271	60	103	198	618
Future Volume (veh/h)	630	757	235	43	677	144	210	271	60	103	198	618
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	685	823	255	47	736	157	228	295	65	112	215	672
Adj No. of Lanes	1	1	1	1	2	1	1	1	0	1	1	0
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	272	649	508	67	786	324	182	542	120	109	128	401
Arrive On Green	0.06	0.11	0.11	0.01	0.07	0.07	0.04	0.12	0.12	0.02	0.11	0.10
Sat Flow, veh/h	1634	1863	1458	1634	3539	1458	1634	1479	326	1634	398	1245
Grp Volume(v), veh/h	685	823	255	47	736	157	228	0	360	112	0	887
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	1770	1458	1634	0	1805	1634	0	1643
Q Serve(g_s), s	15.0	31.3	14.8	2.6	18.6	9.3	10.0	0.0	16.9	6.0	0.0	29.0
Cycle Q Clear(g_c), s	15.0	31.3	14.8	2.6	18.6	9.3	10.0	0.0	16.9	6.0	0.0	29.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.18	1.00		0.76
Lane Grp Cap(c), veh/h	272	649	508	67	786	324	182	0	662	109	0	529
V/C Ratio(X)	2.52	1.27	0.50	0.71	0.94	0.48	1.26	0.00	0.54	1.03	0.00	1.68
Avail Cap(c_a), veh/h	272	649	508	100	786	324	182	0	662	109	0	529
HCM Platoon Ratio	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33
Upstream Filter(I)	0.83	0.83	0.83	0.77	0.77	0.77	0.95	0.00	0.95	0.89	0.00	0.89
Uniform Delay (d), s/veh	42.5	39.8	32.5	43.9	41.1	36.7	43.4	0.0	32.5	44.0	0.0	40.3
Incr Delay (d2), s/veh	690.9	131.1	2.9	10.1	16.4	4.0	150.5	0.0	0.9	89.1	0.0	311.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
%ile BackOfQ(50%),veh/ln	59.0	39.8	6.4	1.4	10.9	4.1	12.1	0.0	8.6	5.4	0.0	59.0
LnGrp Delay(d),s/veh	733.4	170.9	35.4	53.9	57.5	40.7	193.9	0.0	33.4	133.5	0.0	351.5
LnGrp LOS	F	F	D	D	E	D	F		C	F		F
Approach Vol, veh/h		1763			940			588			999	
Approach Delay, s/veh		369.9			54.5			95.6			327.1	
Approach LOS		F			D			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	37.0	7.7	35.3	14.0	33.0	19.0	24.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	32.5	5.0	29.0	9.5	28.5	14.5	19.5
Max Q Clear Time (g_c+I1), s	8.0	18.9	4.6	33.3	12.0	31.0	17.0	20.6
Green Ext Time (p_c), s	0.0	5.1	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	253.2
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	647	764	442	86	677	144	435	391	107	103	310	618
Future Volume (veh/h)	647	764	442	86	677	144	435	391	107	103	310	618
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	703	830	480	93	736	157	473	425	116	112	337	672
Adj No. of Lanes	1	1	1	1	2	1	1	1	0	1	1	0
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	272	611	478	100	786	324	182	517	141	109	179	358
Arrive On Green	0.17	0.33	0.33	0.02	0.07	0.07	0.04	0.12	0.12	0.02	0.11	0.10
Sat Flow, veh/h	1634	1863	1458	1634	3539	1458	1634	1410	385	1634	557	1110
Grp Volume(v), veh/h	703	830	480	93	736	157	473	0	541	112	0	1009
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	1770	1458	1634	0	1795	1634	0	1667
Q Serve(g_s), s	15.0	29.5	29.5	5.1	18.6	9.3	10.0	0.0	26.5	6.0	0.0	29.0
Cycle Q Clear(g_c), s	15.0	29.5	29.5	5.1	18.6	9.3	10.0	0.0	26.5	6.0	0.0	29.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.21	1.00		0.67
Lane Grp Cap(c), veh/h	272	611	478	100	786	324	182	0	658	109	0	537
V/C Ratio(X)	2.58	1.36	1.00	0.93	0.94	0.48	2.61	0.00	0.82	1.03	0.00	1.88
Avail Cap(c_a), veh/h	272	611	478	100	786	324	182	0	658	109	0	537
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33
Upstream Filter(I)	0.79	0.79	0.79	0.75	0.75	0.75	0.67	0.00	0.67	0.84	0.00	0.84
Uniform Delay (d), s/veh	37.5	30.3	30.2	43.9	41.1	36.7	43.4	0.0	36.7	44.0	0.0	40.3
Incr Delay (d2), s/veh	720.0	170.1	37.5	57.4	16.1	3.9	733.0	0.0	5.7	86.6	0.0	401.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
%ile BackOfQ(50%),veh/ln	61.2	43.9	16.9	3.9	10.9	4.1	41.5	0.0	14.2	5.3	0.0	73.2
LnGrp Delay(d),s/veh	757.5	200.3	67.8	101.3	57.2	40.6	776.4	0.0	42.4	131.0	0.0	441.6
LnGrp LOS	F	F	F	F	E	D	F		D	F		F
Approach Vol, veh/h		2013			986			1014			1121	
Approach Delay, s/veh		363.3			58.7			384.8			410.5	
Approach LOS		F			E			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	37.0	9.5	33.5	14.0	33.0	19.0	24.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	32.5	5.0	29.0	9.5	28.5	14.5	19.5
Max Q Clear Time (g_c+I1), s	8.0	28.5	7.1	31.5	12.0	31.0	17.0	20.6
Green Ext Time (p_c), s	0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	319.4
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	647	764	442	86	677	144	435	391	107	103	310	618
Future Volume (veh/h)	647	764	442	86	677	144	435	391	107	103	310	618
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1716	1716	1863	1863
Adj Flow Rate, veh/h	703	830	480	93	736	157	473	425	116	112	337	672
Adj No. of Lanes	2	2	1	1	3	1	2	2	1	2	2	1
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	875	1398	576	123	989	284	471	1085	440	184	765	763
Arrive On Green	0.28	0.39	0.39	0.08	0.19	0.19	0.15	0.31	0.30	0.06	0.22	0.21
Sat Flow, veh/h	3170	3539	1458	1634	5085	1458	3170	3539	1458	3170	3539	1583
Grp Volume(v), veh/h	703	830	480	93	736	157	473	425	116	112	337	672
Grp Sat Flow(s),veh/h/ln	1585	1770	1458	1634	1695	1458	1585	1770	1458	1585	1770	1583
Q Serve(g_s), s	20.0	18.0	17.3	5.4	13.2	9.4	14.4	9.2	5.9	3.3	8.0	16.9
Cycle Q Clear(g_c), s	20.0	18.0	17.3	5.4	13.2	9.4	14.4	9.2	5.9	3.3	8.0	16.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	875	1398	576	123	989	284	471	1085	440	184	765	763
V/C Ratio(X)	0.80	0.59	0.83	0.75	0.74	0.55	1.01	0.39	0.26	0.61	0.44	0.88
Avail Cap(c_a), veh/h	875	1398	576	148	989	284	471	1085	440	245	832	793
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.79	0.79	0.79	0.75	0.75	0.75	0.67	0.67	0.67	0.84	0.84	0.84
Uniform Delay (d), s/veh	32.7	23.2	9.6	44.0	36.8	35.3	41.3	26.5	25.7	44.6	32.9	7.7
Incr Delay (d2), s/veh	4.4	1.5	10.7	12.5	2.3	1.8	35.3	0.2	0.2	2.7	0.3	9.5
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	9.3	9.0	8.6	2.9	6.4	3.9	8.6	4.5	2.4	1.5	4.0	9.3
LnGrp Delay(d),s/veh	37.0	24.7	20.3	56.5	39.1	37.0	76.6	26.7	25.9	47.3	33.3	17.2
LnGrp LOS	D	C	C	E	D	D	F	C	C	D	C	B
Approach Vol, veh/h		2013			986			1014			1121	
Approach Delay, s/veh		28.0			40.4			49.9			25.0	
Approach LOS		C			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	33.7	11.3	42.3	18.4	25.0	30.8	22.9
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	7.0	29.2	8.3	34.5	13.9	22.3	24.8	18.0
Max Q Clear Time (g_c+I1), s	5.3	11.2	7.4	20.0	16.4	18.9	22.0	15.2
Green Ext Time (p_c), s	0.0	4.1	0.0	8.7	0.0	1.6	0.9	2.2

Intersection Summary	
HCM 2010 Ctrl Delay	34.0
HCM 2010 LOS	C

Intersection 10
Monitor St/Shannon Dr & Hosking Ave

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	232	41	19	241	25	47	29	17	27	41	63
Future Volume (veh/h)	75	232	41	19	241	25	47	29	17	27	41	63
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1750	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	82	252	45	21	262	27	51	32	18	29	45	68
Adj No. of Lanes	1	2	1	1	2	0	1	1	1	1	1	1
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	136	424	175	152	421	43	98	1051	823	74	1023	801
Arrive On Green	0.17	0.24	0.24	0.09	0.13	0.11	0.06	0.56	0.56	0.05	0.55	0.55
Sat Flow, veh/h	1634	3539	1458	1634	3243	331	1634	1863	1458	1634	1863	1458
Grp Volume(v), veh/h	82	252	45	21	142	147	51	32	18	29	45	68
Grp Sat Flow(s),veh/h/ln	1634	1770	1458	1634	1770	1804	1634	1863	1458	1634	1863	1458
Q Serve(g_s), s	4.2	5.7	1.8	1.1	6.8	7.0	2.7	0.7	0.2	1.6	1.0	2.0
Cycle Q Clear(g_c), s	4.2	5.7	1.8	1.1	6.8	7.0	2.7	0.7	0.2	1.6	1.0	2.0
Prop In Lane	1.00		1.00	1.00		0.18	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	136	424	175	152	230	234	98	1051	823	74	1023	801
V/C Ratio(X)	0.60	0.59	0.26	0.14	0.62	0.63	0.52	0.03	0.02	0.39	0.04	0.08
Avail Cap(c_a), veh/h	290	1286	530	152	446	455	145	1051	823	109	1023	801
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.91	0.93	0.93	0.93	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.1	32.3	18.9	37.5	37.0	37.3	41.0	8.7	2.0	41.8	9.4	9.6
Incr Delay (d2), s/veh	3.9	1.2	0.7	0.4	2.5	2.5	4.2	0.1	0.0	3.4	0.1	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	2.0	2.8	0.7	0.5	3.5	3.6	1.3	0.4	0.1	0.8	0.5	0.8
LnGrp Delay(d),s/veh	40.0	33.5	19.6	37.9	39.5	39.8	45.2	8.8	2.0	45.1	9.5	9.8
LnGrp LOS	D	C	B	D	D	D	D	A	A	D	A	A
Approach Vol, veh/h		379			310			101			142	
Approach Delay, s/veh		33.3			39.5			26.0			16.9	
Approach LOS		C			D			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.1	54.8	12.4	14.8	9.4	53.4	11.5	15.7
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	4.0	27.3	4.0	30.7	6.0	25.3	14.0	20.7
Max Q Clear Time (g_c+I1), s	3.6	2.7	3.1	7.7	4.7	4.0	6.2	9.0
Green Ext Time (p_c), s	0.0	0.5	0.1	1.1	0.0	0.5	0.1	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	32.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	274	46	19	274	25	51	29	17	27	41	68
Future Volume (veh/h)	81	274	46	19	274	25	51	29	17	27	41	68
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1750	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	88	298	50	21	298	27	55	32	18	29	45	74
Adj No. of Lanes	1	2	1	1	2	0	1	1	1	1	1	1
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	143	471	194	154	460	41	103	1024	802	74	990	775
Arrive On Green	0.17	0.27	0.27	0.09	0.14	0.12	0.06	0.55	0.55	0.05	0.53	0.53
Sat Flow, veh/h	1634	3539	1458	1634	3285	296	1634	1863	1458	1634	1863	1458
Grp Volume(v), veh/h	88	298	50	21	160	165	55	32	18	29	45	74
Grp Sat Flow(s),veh/h/ln	1634	1770	1458	1634	1770	1811	1634	1863	1458	1634	1863	1458
Q Serve(g_s), s	4.5	6.7	1.9	1.1	7.7	7.8	2.9	0.7	0.3	1.6	1.0	2.3
Cycle Q Clear(g_c), s	4.5	6.7	1.9	1.1	7.7	7.8	2.9	0.7	0.3	1.6	1.0	2.3
Prop In Lane	1.00		1.00	1.00		0.16	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	143	471	194	154	248	254	103	1024	802	74	990	775
V/C Ratio(X)	0.62	0.63	0.26	0.14	0.64	0.65	0.53	0.03	0.02	0.39	0.05	0.10
Avail Cap(c_a), veh/h	290	1286	530	154	446	457	145	1024	802	109	990	775
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.78	0.78	0.78	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.7	31.1	17.6	37.4	36.6	36.8	40.9	9.3	2.3	41.8	10.1	10.4
Incr Delay (d2), s/veh	3.3	1.1	0.5	0.4	2.5	2.6	4.2	0.1	0.1	3.4	0.1	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	2.1	3.3	0.8	0.5	3.9	4.1	1.4	0.4	0.1	0.8	0.6	1.0
LnGrp Delay(d),s/veh	39.1	32.2	18.2	37.8	39.1	39.4	45.1	9.3	2.3	45.1	10.2	10.7
LnGrp LOS	D	C	B	D	D	D	D	A	A	D	B	B
Approach Vol, veh/h		436			346			105			148	
Approach Delay, s/veh		32.0			39.2			26.8			17.3	
Approach LOS		C			D			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.1	53.5	12.5	16.0	9.7	51.8	11.9	16.6
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	4.0	27.3	4.0	30.7	6.0	25.3	14.0	20.7
Max Q Clear Time (g_c+I1), s	3.6	2.7	3.1	8.7	4.9	4.3	6.5	9.8
Green Ext Time (p_c), s	0.0	0.5	0.1	1.3	0.0	0.5	0.1	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	31.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	82	254	45	21	263	27	48	30	17	28	43	65
Future Volume (veh/h)	82	254	45	21	263	27	48	30	17	28	43	65
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1750	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	89	276	49	23	286	29	52	33	18	30	47	71
Adj No. of Lanes	1	2	1	1	2	0	1	1	1	1	1	1
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	449	185	161	446	45	100	1026	804	75	998	781
Arrive On Green	0.18	0.25	0.25	0.10	0.14	0.12	0.06	0.55	0.55	0.05	0.54	0.54
Sat Flow, veh/h	1634	3539	1458	1634	3248	327	1634	1863	1458	1634	1863	1458
Grp Volume(v), veh/h	89	276	49	23	155	160	52	33	18	30	47	71
Grp Sat Flow(s),veh/h/ln	1634	1770	1458	1634	1770	1805	1634	1863	1458	1634	1863	1458
Q Serve(g_s), s	4.5	6.2	1.9	1.2	7.4	7.6	2.8	0.7	0.2	1.6	1.1	2.1
Cycle Q Clear(g_c), s	4.5	6.2	1.9	1.2	7.4	7.6	2.8	0.7	0.2	1.6	1.1	2.1
Prop In Lane	1.00		1.00	1.00		0.18	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	144	449	185	161	243	248	100	1026	804	75	998	781
V/C Ratio(X)	0.62	0.61	0.26	0.14	0.64	0.65	0.52	0.03	0.02	0.40	0.05	0.09
Avail Cap(c_a), veh/h	290	1286	530	161	446	455	145	1026	804	109	998	781
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.89	0.89	0.92	0.92	0.92	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.7	31.6	18.3	37.1	36.7	36.9	41.0	9.2	2.1	41.7	9.9	10.2
Incr Delay (d2), s/veh	3.8	1.2	0.7	0.4	2.5	2.6	4.2	0.1	0.1	3.5	0.1	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	2.2	3.1	0.8	0.5	3.8	4.0	1.4	0.4	0.1	0.8	0.6	0.9
LnGrp Delay(d),s/veh	39.5	32.9	18.9	37.4	39.2	39.5	45.2	9.3	2.2	45.2	10.0	10.4
LnGrp LOS	D	C	B	D	D	D	D	A	A	D	B	B
Approach Vol, veh/h		414			338			103			148	
Approach Delay, s/veh		32.6			39.2			26.2			17.4	
Approach LOS		C			D			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.1	53.6	12.9	15.4	9.5	52.2	11.9	16.4
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	4.0	27.3	4.0	30.7	6.0	25.3	14.0	20.7
Max Q Clear Time (g_c+I1), s	3.6	2.7	3.2	8.2	4.8	4.1	6.5	9.6
Green Ext Time (p_c), s	0.0	0.5	0.1	1.2	0.0	0.5	0.1	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	31.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	296	49	21	263	27	48	30	17	28	43	65
Future Volume (veh/h)	87	296	49	21	263	27	48	30	17	28	43	65
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1750	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	95	322	53	23	286	29	52	33	18	30	47	71
Adj No. of Lanes	1	2	1	1	2	0	1	1	1	1	1	1
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	151	496	204	146	446	45	100	1019	798	75	990	775
Arrive On Green	0.18	0.28	0.28	0.09	0.14	0.12	0.06	0.55	0.55	0.05	0.53	0.53
Sat Flow, veh/h	1634	3539	1458	1634	3248	327	1634	1863	1458	1634	1863	1458
Grp Volume(v), veh/h	95	322	53	23	155	160	52	33	18	30	47	71
Grp Sat Flow(s),veh/h/ln	1634	1770	1458	1634	1770	1805	1634	1863	1458	1634	1863	1458
Q Serve(g_s), s	4.8	7.2	2.0	1.2	7.4	7.6	2.8	0.7	0.3	1.6	1.1	2.2
Cycle Q Clear(g_c), s	4.8	7.2	2.0	1.2	7.4	7.6	2.8	0.7	0.3	1.6	1.1	2.2
Prop In Lane	1.00		1.00	1.00		0.18	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	151	496	204	146	243	248	100	1019	798	75	990	775
V/C Ratio(X)	0.63	0.65	0.26	0.16	0.64	0.65	0.52	0.03	0.02	0.40	0.05	0.09
Avail Cap(c_a), veh/h	290	1286	530	146	446	455	145	1019	798	109	990	775
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.85	0.85	0.85	0.92	0.92	0.92	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.3	30.4	17.2	37.8	36.7	36.9	41.0	9.4	2.4	41.7	10.1	10.4
Incr Delay (d2), s/veh	3.7	1.2	0.6	0.5	2.5	2.6	4.2	0.1	0.1	3.5	0.1	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	2.3	3.6	0.8	0.5	3.8	4.0	1.4	0.4	0.1	0.8	0.6	0.9
LnGrp Delay(d),s/veh	38.9	31.7	17.8	38.3	39.2	39.5	45.2	9.5	2.5	45.2	10.2	10.6
LnGrp LOS	D	C	B	D	D	D	D	A	A	D	B	B
Approach Vol, veh/h		470			338			103			148	
Approach Delay, s/veh		31.6			39.3			26.3			17.5	
Approach LOS		C			D			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.1	53.2	12.1	16.6	9.5	51.8	12.3	16.4
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	4.0	27.3	4.0	30.7	6.0	25.3	14.0	20.7
Max Q Clear Time (g_c+I1), s	3.6	2.7	3.2	9.2	4.8	4.2	6.8	9.6
Green Ext Time (p_c), s	0.0	0.5	0.1	1.4	0.0	0.5	0.1	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	31.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	149	469	86	34	478	45	62	33	19	34	52	91
Future Volume (veh/h)	149	469	86	34	478	45	62	33	19	34	52	91
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1750	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	162	510	93	37	520	49	67	36	21	37	57	99
Adj No. of Lanes	1	2	1	1	2	0	1	1	1	1	1	1
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	220	686	283	241	676	63	119	805	630	80	761	596
Arrive On Green	0.27	0.39	0.39	0.15	0.21	0.18	0.07	0.43	0.43	0.05	0.41	0.41
Sat Flow, veh/h	1634	3539	1458	1634	3271	307	1634	1863	1458	1634	1863	1458
Grp Volume(v), veh/h	162	510	93	37	281	288	67	36	21	37	57	99
Grp Sat Flow(s),veh/h/ln	1634	1770	1458	1634	1770	1809	1634	1863	1458	1634	1863	1458
Q Serve(g_s), s	8.1	11.2	3.0	1.8	13.5	13.6	3.6	1.0	0.4	2.0	1.7	3.9
Cycle Q Clear(g_c), s	8.1	11.2	3.0	1.8	13.5	13.6	3.6	1.0	0.4	2.0	1.7	3.9
Prop In Lane	1.00		1.00	1.00		0.17	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	220	686	283	241	366	374	119	805	630	80	761	596
V/C Ratio(X)	0.74	0.74	0.33	0.15	0.77	0.77	0.57	0.04	0.03	0.46	0.07	0.17
Avail Cap(c_a), veh/h	290	1286	530	241	446	456	145	805	630	109	761	596
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	0.82	0.82	0.82	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.4	25.6	13.0	33.5	33.7	33.9	40.4	14.8	3.8	41.6	16.2	16.9
Incr Delay (d2), s/veh	0.6	0.1	0.1	0.2	5.3	5.4	4.2	0.1	0.1	4.1	0.2	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	5.4	1.2	0.8	7.1	7.3	1.8	0.5	0.2	1.0	0.9	1.6
LnGrp Delay(d),s/veh	32.1	25.8	13.1	33.7	39.0	39.3	44.5	14.9	3.9	45.7	16.4	17.5
LnGrp LOS	C	C	B	C	D	D	D	B	A	D	B	B
Approach Vol, veh/h		765			606			124			193	
Approach Delay, s/veh		25.6			38.8			29.0			22.6	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	42.9	17.3	21.4	10.5	40.8	16.1	22.6
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	4.0	27.3	4.0	30.7	6.0	25.3	14.0	20.7
Max Q Clear Time (g_c+I1), s	4.0	3.0	3.8	13.2	5.6	5.9	10.1	15.6
Green Ext Time (p_c), s	0.0	0.7	0.1	2.3	0.0	0.7	0.2	1.0

Intersection Summary	
HCM 2010 Ctrl Delay	30.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	511	91	34	511	45	66	33	19	34	52	96
Future Volume (veh/h)	155	511	91	34	511	45	66	33	19	34	52	96
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1750	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	168	555	99	37	555	49	72	36	21	37	57	104
Adj No. of Lanes	1	2	1	1	2	0	1	1	1	1	1	1
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	226	730	301	240	708	62	125	782	612	80	731	573
Arrive On Green	0.28	0.41	0.41	0.15	0.22	0.19	0.08	0.42	0.42	0.05	0.39	0.39
Sat Flow, veh/h	1634	3539	1458	1634	3291	290	1634	1863	1458	1634	1863	1458
Grp Volume(v), veh/h	168	555	99	37	298	306	72	36	21	37	57	104
Grp Sat Flow(s),veh/h/ln	1634	1770	1458	1634	1770	1812	1634	1863	1458	1634	1863	1458
Q Serve(g_s), s	8.4	12.1	3.1	1.8	14.3	14.4	3.8	1.0	0.4	2.0	1.7	4.2
Cycle Q Clear(g_c), s	8.4	12.1	3.1	1.8	14.3	14.4	3.8	1.0	0.4	2.0	1.7	4.2
Prop In Lane	1.00		1.00	1.00		0.16	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	226	730	301	240	381	390	125	782	612	80	731	573
V/C Ratio(X)	0.74	0.76	0.33	0.15	0.78	0.79	0.58	0.05	0.03	0.46	0.08	0.18
Avail Cap(c_a), veh/h	290	1286	530	240	446	457	145	782	612	109	731	573
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	0.81	0.81	0.81	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.1	24.5	12.0	33.5	33.3	33.5	40.2	15.4	4.1	41.6	17.1	17.9
Incr Delay (d2), s/veh	0.7	0.2	0.1	0.2	6.2	6.2	4.2	0.1	0.1	4.1	0.2	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	5.9	1.2	0.8	7.6	7.8	1.9	0.6	0.2	1.0	0.9	1.8
LnGrp Delay(d),s/veh	31.8	24.7	12.1	33.7	39.5	39.7	44.3	15.5	4.2	45.7	17.3	18.6
LnGrp LOS	C	C	B	C	D	D	D	B	A	D	B	B
Approach Vol, veh/h		822			641			129			198	
Approach Delay, s/veh		24.6			39.3			29.8			23.3	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	41.8	17.2	22.6	10.9	39.3	16.4	23.4
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	4.0	27.3	4.0	30.7	6.0	25.3	14.0	20.7
Max Q Clear Time (g_c+I1), s	4.0	3.0	3.8	14.1	5.8	6.2	10.4	16.4
Green Ext Time (p_c), s	0.0	0.7	0.1	2.5	0.0	0.7	0.2	1.0

Intersection Summary	
HCM 2010 Ctrl Delay	30.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	511	91	34	511	45	66	33	19	34	52	96
Future Volume (veh/h)	155	511	91	34	511	45	66	33	19	34	52	96
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1750	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	168	555	99	37	555	49	72	36	21	37	57	104
Adj No. of Lanes	1	2	1	1	2	0	1	1	1	1	1	1
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	768	317	230	708	62	125	774	606	80	723	566
Arrive On Green	0.14	0.22	0.22	0.14	0.22	0.19	0.08	0.42	0.42	0.05	0.39	0.39
Sat Flow, veh/h	1634	3539	1458	1634	3291	290	1634	1863	1458	1634	1863	1458
Grp Volume(v), veh/h	168	555	99	37	298	306	72	36	21	37	57	104
Grp Sat Flow(s),veh/h/ln	1634	1770	1458	1634	1770	1812	1634	1863	1458	1634	1863	1458
Q Serve(g_s), s	8.8	13.1	3.8	1.8	14.3	14.4	3.8	1.0	0.4	2.0	1.7	4.2
Cycle Q Clear(g_c), s	8.8	13.1	3.8	1.8	14.3	14.4	3.8	1.0	0.4	2.0	1.7	4.2
Prop In Lane	1.00		1.00	1.00		0.16	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	233	768	317	230	381	390	125	774	606	80	723	566
V/C Ratio(X)	0.72	0.72	0.31	0.16	0.78	0.79	0.58	0.05	0.03	0.46	0.08	0.18
Avail Cap(c_a), veh/h	290	1286	530	230	446	457	145	774	606	109	723	566
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.83	0.83	0.83	0.81	0.81	0.81	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.9	32.7	15.9	34.0	33.3	33.5	40.2	15.7	4.4	41.6	17.4	18.1
Incr Delay (d2), s/veh	5.4	1.1	0.5	0.3	6.2	6.2	4.2	0.1	0.1	4.1	0.2	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	6.5	1.5	0.8	7.6	7.8	1.9	0.6	0.2	1.0	0.9	1.8
LnGrp Delay(d),s/veh	42.3	33.8	16.3	34.3	39.5	39.7	44.3	15.8	4.5	45.7	17.6	18.8
LnGrp LOS	D	C	B	C	D	D	D	B	A	D	B	B
Approach Vol, veh/h		822			641			129			198	
Approach Delay, s/veh		33.4			39.3			29.9			23.5	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	41.4	16.6	23.5	10.9	38.9	16.8	23.4
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	4.0	27.3	4.0	30.7	6.0	25.3	14.0	20.7
Max Q Clear Time (g_c+I1), s	4.0	3.0	3.8	15.1	5.8	6.2	10.8	16.4
Green Ext Time (p_c), s	0.0	0.7	0.1	2.4	0.0	0.7	0.1	1.0

Intersection Summary	
HCM 2010 Ctrl Delay	34.2
HCM 2010 LOS	C

Intersection 11
S Union Ave & Hosking Ave

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	98	63	37	11	93	25	36	275	22	34	240	137
Future Volume (veh/h)	98	63	37	11	93	25	36	275	22	34	240	137
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1750	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	107	68	40	12	101	27	39	299	24	37	261	149
Adj No. of Lanes	1	1	1	1	1	0	1	2	0	1	2	0
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	172	156	122	223	163	44	83	1836	146	80	1213	671
Arrive On Green	0.03	0.03	0.03	0.14	0.12	0.09	0.05	0.55	0.53	0.05	0.55	0.53
Sat Flow, veh/h	1634	1863	1458	1634	1417	379	1634	3321	265	1634	2200	1217
Grp Volume(v), veh/h	107	68	40	12	0	128	39	159	164	37	208	202
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	0	1796	1634	1770	1816	1634	1770	1648
Q Serve(g_s), s	5.8	3.2	1.9	0.6	0.0	6.1	2.1	4.0	4.0	2.0	5.4	5.8
Cycle Q Clear(g_c), s	5.8	3.2	1.9	0.6	0.0	6.1	2.1	4.0	4.0	2.0	5.4	5.8
Prop In Lane	1.00		1.00	1.00		0.21	1.00		0.15	1.00		0.74
Lane Grp Cap(c), veh/h	172	156	122	223	0	207	83	978	1004	80	976	908
V/C Ratio(X)	0.62	0.43	0.33	0.05	0.00	0.62	0.47	0.16	0.16	0.46	0.21	0.22
Avail Cap(c_a), veh/h	363	755	591	223	0	449	127	978	1004	163	976	908
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.7	41.7	26.4	33.8	0.0	38.1	41.6	9.9	10.0	41.6	10.3	10.7
Incr Delay (d2), s/veh	3.6	1.8	1.5	0.1	0.0	3.0	4.1	0.4	0.4	4.1	0.5	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	1.7	0.8	0.3	0.0	3.2	1.0	2.0	2.1	1.0	2.7	2.8
LnGrp Delay(d),s/veh	45.3	43.5	27.8	33.9	0.0	41.1	45.7	10.2	10.3	45.7	10.8	11.3
LnGrp LOS	D	D	C	C		D	D	B	B	D	B	B
Approach Vol, veh/h		215			140			362			447	
Approach Delay, s/veh		41.5			40.5			14.1			13.9	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	53.8	16.3	11.6	8.5	53.6	13.5	14.4
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	7.0	20.5	4.0	34.5	5.0	22.5	18.0	20.5
Max Q Clear Time (g_c+I1), s	4.0	6.0	2.6	5.2	4.1	7.8	7.8	8.1
Green Ext Time (p_c), s	0.0	2.3	0.1	0.3	0.0	2.3	0.2	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	22.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	76	44	11	103	25	41	275	22	34	240	155
Future Volume (veh/h)	120	76	44	11	103	25	41	275	22	34	240	155
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1750	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	130	83	48	12	112	27	45	299	24	37	261	168
Adj No. of Lanes	1	1	1	1	1	0	1	2	0	1	2	0
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	198	173	135	245	176	42	90	1761	141	80	1099	684
Arrive On Green	0.04	0.03	0.03	0.15	0.12	0.10	0.06	0.53	0.51	0.05	0.52	0.50
Sat Flow, veh/h	1634	1863	1458	1634	1451	350	1634	3321	265	1634	2097	1305
Grp Volume(v), veh/h	130	83	48	12	0	139	45	159	164	37	219	210
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	0	1801	1634	1770	1816	1634	1770	1632
Q Serve(g_s), s	7.1	3.9	2.3	0.6	0.0	6.6	2.4	4.2	4.2	2.0	6.0	6.5
Cycle Q Clear(g_c), s	7.1	3.9	2.3	0.6	0.0	6.6	2.4	4.2	4.2	2.0	6.0	6.5
Prop In Lane	1.00		1.00	1.00		0.19	1.00		0.15	1.00		0.80
Lane Grp Cap(c), veh/h	198	173	135	245	0	219	90	939	963	80	928	856
V/C Ratio(X)	0.66	0.48	0.35	0.05	0.00	0.64	0.50	0.17	0.17	0.46	0.24	0.25
Avail Cap(c_a), veh/h	363	755	591	245	0	450	127	939	963	163	928	856
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.96	0.96	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.3	41.5	25.7	32.8	0.0	37.8	41.3	10.9	11.0	41.6	11.6	12.2
Incr Delay (d2), s/veh	3.5	2.0	1.5	0.1	0.0	3.1	4.2	0.4	0.4	4.1	0.6	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	2.1	1.0	0.3	0.0	3.5	1.2	2.1	2.2	1.0	3.1	3.1
LnGrp Delay(d),s/veh	44.8	43.5	27.2	32.8	0.0	40.9	45.5	11.3	11.4	45.7	12.2	12.9
LnGrp LOS	D	D	C	C		D	D	B	B	D	B	B
Approach Vol, veh/h		261			151			368			466	
Approach Delay, s/veh		41.2			40.3			15.5			15.2	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	51.7	17.5	12.4	9.0	51.2	14.9	14.9
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	7.0	20.5	4.0	34.5	5.0	22.5	18.0	20.5
Max Q Clear Time (g_c+I1), s	4.0	6.2	2.6	5.9	4.4	8.5	9.1	8.6
Green Ext Time (p_c), s	0.0	2.4	0.1	0.4	0.0	2.4	0.2	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	23.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	107	69	40	12	98	26	37	281	22	35	249	142
Future Volume (veh/h)	107	69	40	12	98	26	37	281	22	35	249	142
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1750	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	116	75	43	13	107	28	40	305	24	38	271	154
Adj No. of Lanes	1	1	1	1	1	0	1	2	0	1	2	0
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	182	164	128	233	170	44	84	1802	141	81	1190	656
Arrive On Green	0.04	0.03	0.03	0.14	0.12	0.10	0.05	0.54	0.52	0.05	0.54	0.52
Sat Flow, veh/h	1634	1863	1458	1634	1424	373	1634	3326	260	1634	2203	1215
Grp Volume(v), veh/h	116	75	43	13	0	135	40	161	168	38	216	209
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	0	1797	1634	1770	1817	1634	1770	1648
Q Serve(g_s), s	6.3	3.6	2.1	0.6	0.0	6.5	2.1	4.1	4.2	2.0	5.8	6.2
Cycle Q Clear(g_c), s	6.3	3.6	2.1	0.6	0.0	6.5	2.1	4.1	4.2	2.0	5.8	6.2
Prop In Lane	1.00		1.00	1.00		0.21	1.00		0.14	1.00		0.74
Lane Grp Cap(c), veh/h	182	164	128	233	0	214	84	958	984	81	956	890
V/C Ratio(X)	0.64	0.46	0.33	0.06	0.00	0.63	0.48	0.17	0.17	0.47	0.23	0.23
Avail Cap(c_a), veh/h	363	755	591	233	0	449	127	958	984	163	956	890
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.5	41.6	26.1	33.3	0.0	37.9	41.5	10.4	10.5	41.6	10.8	11.3
Incr Delay (d2), s/veh	3.5	1.9	1.5	0.1	0.0	3.0	4.2	0.4	0.4	4.1	0.5	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	1.9	0.9	0.3	0.0	3.4	1.1	2.1	2.2	1.0	3.0	3.0
LnGrp Delay(d),s/veh	45.1	43.5	27.6	33.4	0.0	41.0	45.7	10.8	10.9	45.7	11.4	12.0
LnGrp LOS	D	D	C	C		D	D	B	B	D	B	B
Approach Vol, veh/h		234			148			369			463	
Approach Delay, s/veh		41.4			40.3			14.6			14.5	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.5	52.7	16.8	11.9	8.6	52.6	14.0	14.7
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	7.0	20.5	4.0	34.5	5.0	22.5	18.0	20.5
Max Q Clear Time (g_c+I1), s	4.0	6.2	2.6	5.6	4.1	8.2	8.3	8.5
Green Ext Time (p_c), s	0.0	2.4	0.1	0.4	0.0	2.4	0.2	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	22.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	82	47	12	98	26	37	281	22	35	249	142
Future Volume (veh/h)	129	82	47	12	98	26	37	281	22	35	249	142
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1750	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	140	89	51	13	107	28	40	305	24	38	271	154
Adj No. of Lanes	1	1	1	1	1	0	1	2	0	1	2	0
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	210	179	140	247	170	44	84	1746	137	81	1153	636
Arrive On Green	0.04	0.03	0.03	0.15	0.12	0.10	0.05	0.52	0.50	0.05	0.52	0.50
Sat Flow, veh/h	1634	1863	1458	1634	1424	373	1634	3326	260	1634	2203	1215
Grp Volume(v), veh/h	140	89	51	13	0	135	40	161	168	38	216	209
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	0	1797	1634	1770	1817	1634	1770	1648
Q Serve(g_s), s	7.6	4.2	2.5	0.6	0.0	6.5	2.1	4.3	4.4	2.0	6.0	6.4
Cycle Q Clear(g_c), s	7.6	4.2	2.5	0.6	0.0	6.5	2.1	4.3	4.4	2.0	6.0	6.4
Prop In Lane	1.00		1.00	1.00		0.21	1.00		0.14	1.00		0.74
Lane Grp Cap(c), veh/h	210	179	140	247	0	214	84	929	954	81	926	863
V/C Ratio(X)	0.67	0.50	0.36	0.05	0.00	0.63	0.48	0.17	0.18	0.47	0.23	0.24
Avail Cap(c_a), veh/h	363	755	591	247	0	449	127	929	954	163	926	863
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.95	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.2	41.4	25.9	32.7	0.0	37.9	41.5	11.2	11.3	41.6	11.6	12.2
Incr Delay (d2), s/veh	3.5	2.0	1.5	0.1	0.0	3.0	4.2	0.4	0.4	4.1	0.6	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	2.3	1.0	0.3	0.0	3.4	1.1	2.2	2.3	1.0	3.0	3.1
LnGrp Delay(d),s/veh	44.7	43.4	27.4	32.8	0.0	41.0	45.7	11.6	11.7	45.7	12.2	12.8
LnGrp LOS	D	D	C	C		D	D	B	B	D	B	B
Approach Vol, veh/h		280			148			369			463	
Approach Delay, s/veh		41.1			40.2			15.3			15.2	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.5	51.2	17.6	12.7	8.6	51.1	15.5	14.7
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	7.0	20.5	4.0	34.5	5.0	22.5	18.0	20.5
Max Q Clear Time (g_c+I1), s	4.0	6.4	2.6	6.2	4.1	8.4	9.6	8.5
Green Ext Time (p_c), s	0.0	2.4	0.1	0.4	0.0	2.4	0.2	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	24.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	184	134	75	16	149	45	50	318	25	53	305	181
Future Volume (veh/h)	184	134	75	16	149	45	50	318	25	53	305	181
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1750	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	200	146	82	17	162	49	54	346	27	58	332	197
Adj No. of Lanes	1	1	1	1	1	0	1	2	0	1	2	0
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	273	242	189	325	222	67	102	1424	111	107	930	541
Arrive On Green	0.06	0.04	0.04	0.20	0.16	0.14	0.06	0.43	0.41	0.07	0.43	0.41
Sat Flow, veh/h	1634	1863	1458	1634	1374	416	1634	3328	258	1634	2157	1254
Grp Volume(v), veh/h	200	146	82	17	0	211	54	183	190	58	271	258
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	0	1789	1634	1770	1817	1634	1770	1641
Q Serve(g_s), s	10.8	6.9	3.8	0.8	0.0	10.1	2.9	5.9	6.0	3.1	9.3	9.8
Cycle Q Clear(g_c), s	10.8	6.9	3.8	0.8	0.0	10.1	2.9	5.9	6.0	3.1	9.3	9.8
Prop In Lane	1.00		1.00	1.00		0.23	1.00		0.14	1.00		0.76
Lane Grp Cap(c), veh/h	273	242	189	325	0	289	102	757	778	107	763	708
V/C Ratio(X)	0.73	0.60	0.43	0.05	0.00	0.73	0.53	0.24	0.24	0.54	0.36	0.36
Avail Cap(c_a), veh/h	363	755	591	325	0	447	127	757	778	163	763	708
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.90	0.90	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.5	40.8	23.9	29.2	0.0	36.1	40.9	16.4	16.5	40.7	17.2	17.8
Incr Delay (d2), s/veh	4.6	2.2	1.4	0.1	0.0	3.5	4.2	0.8	0.7	4.2	1.3	1.5
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	5.3	3.7	1.6	0.3	0.0	5.3	1.4	3.1	3.2	1.5	4.8	4.7
LnGrp Delay(d),s/veh	45.2	43.0	25.3	29.3	0.0	39.6	45.1	17.2	17.3	44.9	18.5	19.3
LnGrp LOS	D	D	C	C		D	D	B	B	D	B	B
Approach Vol, veh/h		428			228			427			587	
Approach Delay, s/veh		40.6			38.9			20.8			21.5	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	42.5	21.9	15.7	9.6	42.8	19.0	18.5
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	7.0	20.5	4.0	34.5	5.0	22.5	18.0	20.5
Max Q Clear Time (g_c+I1), s	5.1	8.0	2.8	8.9	4.9	11.8	12.8	12.1
Green Ext Time (p_c), s	0.0	2.8	0.1	0.7	0.0	2.6	0.3	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	28.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	206	147	82	16	159	45	55	318	25	53	305	199
Future Volume (veh/h)	206	147	82	16	159	45	55	318	25	53	305	199
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1750	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	224	160	89	17	173	49	60	346	27	58	332	216
Adj No. of Lanes	1	1	1	1	1	0	1	2	0	1	2	0
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	297	257	201	345	234	66	110	1357	105	107	843	537
Arrive On Green	0.06	0.05	0.05	0.21	0.17	0.15	0.07	0.41	0.39	0.07	0.41	0.38
Sat Flow, veh/h	1634	1863	1458	1634	1397	396	1634	3328	258	1634	2076	1323
Grp Volume(v), veh/h	224	160	89	17	0	222	60	183	190	58	282	266
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	0	1793	1634	1770	1817	1634	1770	1629
Q Serve(g_s), s	12.1	7.6	4.1	0.7	0.0	10.6	3.2	6.2	6.2	3.1	10.1	10.7
Cycle Q Clear(g_c), s	12.1	7.6	4.1	0.7	0.0	10.6	3.2	6.2	6.2	3.1	10.1	10.7
Prop In Lane	1.00		1.00	1.00		0.22	1.00		0.14	1.00		0.81
Lane Grp Cap(c), veh/h	297	257	201	345	0	300	110	721	741	107	719	662
V/C Ratio(X)	0.75	0.62	0.44	0.05	0.00	0.74	0.55	0.25	0.26	0.54	0.39	0.40
Avail Cap(c_a), veh/h	363	755	591	345	0	448	127	721	741	163	719	662
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.89	0.89	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.3	40.6	23.3	28.3	0.0	35.8	40.7	17.6	17.7	40.7	18.9	19.6
Incr Delay (d2), s/veh	6.2	2.2	1.4	0.1	0.0	3.6	4.2	0.8	0.8	4.2	1.6	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	4.1	1.7	0.3	0.0	5.5	1.6	3.2	3.3	1.5	5.3	5.1
LnGrp Delay(d),s/veh	46.6	42.8	24.7	28.4	0.0	39.4	44.9	18.5	18.6	44.9	20.5	21.4
LnGrp LOS	D	D	C	C		D	D	B	B	D	C	C
Approach Vol, veh/h		473			239			433			606	
Approach Delay, s/veh		41.2			38.6			22.2			23.2	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	40.7	23.0	16.4	10.0	40.6	20.4	19.1
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	7.0	20.5	4.0	34.5	5.0	22.5	18.0	20.5
Max Q Clear Time (g_c+I1), s	5.1	8.2	2.7	9.6	5.2	12.7	14.1	12.6
Green Ext Time (p_c), s	0.0	2.8	0.1	0.8	0.0	2.6	0.3	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	29.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	206	147	82	16	159	45	55	318	25	53	305	199
Future Volume (veh/h)	206	147	82	16	159	45	55	318	25	53	305	199
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1750	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	224	160	89	17	173	49	60	346	27	58	332	216
Adj No. of Lanes	1	1	1	1	1	0	1	2	0	1	2	0
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	297	257	201	345	234	66	110	1357	105	107	843	537
Arrive On Green	0.06	0.05	0.05	0.21	0.17	0.15	0.07	0.41	0.39	0.07	0.41	0.38
Sat Flow, veh/h	1634	1863	1458	1634	1397	396	1634	3328	258	1634	2076	1323
Grp Volume(v), veh/h	224	160	89	17	0	222	60	183	190	58	282	266
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	0	1793	1634	1770	1817	1634	1770	1629
Q Serve(g_s), s	12.1	7.6	4.1	0.7	0.0	10.6	3.2	6.2	6.2	3.1	10.1	10.7
Cycle Q Clear(g_c), s	12.1	7.6	4.1	0.7	0.0	10.6	3.2	6.2	6.2	3.1	10.1	10.7
Prop In Lane	1.00		1.00	1.00		0.22	1.00		0.14	1.00		0.81
Lane Grp Cap(c), veh/h	297	257	201	345	0	300	110	721	741	107	719	662
V/C Ratio(X)	0.75	0.62	0.44	0.05	0.00	0.74	0.55	0.25	0.26	0.54	0.39	0.40
Avail Cap(c_a), veh/h	363	755	591	345	0	448	127	721	741	163	719	662
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.89	0.89	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.3	40.6	23.3	28.3	0.0	35.8	40.7	17.6	17.7	40.7	18.9	19.6
Incr Delay (d2), s/veh	6.2	2.2	1.4	0.1	0.0	3.6	4.2	0.8	0.8	4.2	1.6	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	4.1	1.7	0.3	0.0	5.5	1.6	3.2	3.3	1.5	5.3	5.1
LnGrp Delay(d),s/veh	46.6	42.8	24.7	28.4	0.0	39.4	44.9	18.5	18.6	44.9	20.5	21.4
LnGrp LOS	D	D	C	C		D	D	B	B	D	C	C
Approach Vol, veh/h		473			239			433			606	
Approach Delay, s/veh		41.2			38.6			22.2			23.2	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	40.7	23.0	16.4	10.0	40.6	20.4	19.1
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	7.0	20.5	4.0	34.5	5.0	22.5	18.0	20.5
Max Q Clear Time (g_c+I1), s	5.1	8.2	2.7	9.6	5.2	12.7	14.1	12.6
Green Ext Time (p_c), s	0.0	2.8	0.1	0.8	0.0	2.6	0.3	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	29.9
HCM 2010 LOS	C

Intersection 12
S H St &

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	225	209	0
Future Volume (veh/h)	0	0	0	225	209	0
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1716	1716	1863	1863	1716
Adj Flow Rate, veh/h	0	0	0	245	227	0
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	2	2	1225	1780	300	235
Arrive On Green	0.00	0.00	0.00	1.00	0.32	0.00
Sat Flow, veh/h	1634	1458	1634	1863	1863	1458
Grp Volume(v), veh/h	0	0	0	245	227	0
Grp Sat Flow(s),veh/h/ln	1634	1458	1634	1863	1863	1458
Q Serve(g_s), s	0.0	0.0	0.0	0.0	9.8	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	9.8	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	2	2	1225	1780	300	235
V/C Ratio(X)	0.00	0.00	0.00	0.14	0.76	0.00
Avail Cap(c_a), veh/h	672	600	1225	1780	704	551
HCM Platoon Ratio	1.00	1.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	0.00	0.00	0.00	0.99	0.92	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	28.9	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	15.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.1	6.3	0.0
LnGrp Delay(d),s/veh	0.0	0.0	0.0	0.2	43.9	0.0
LnGrp LOS				A	D	
Approach Vol, veh/h	0			245	227	
Approach Delay, s/veh	0.0			0.2	43.9	
Approach LOS				A	D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		90.0		0.0	71.5	18.5		
Change Period (Y+Rc), s		6.0		4.5	6.0	6.0		
Max Green Setting (Gmax), s		43.0		36.5	5.0	32.0		
Max Q Clear Time (g_c+I1), s		2.0		0.0	0.0	11.8		
Green Ext Time (p_c), s		0.8		0.0	0.0	0.7		

Intersection Summary	
HCM 2010 Ctrl Delay	21.2
HCM 2010 LOS	C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	392	54	50	225	209	362
Future Volume (veh/h)	392	54	50	225	209	362
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1716	1716	1863	1863	1716
Adj Flow Rate, veh/h	426	59	54	245	227	393
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	480	428	431	1150	576	451
Arrive On Green	0.29	0.29	0.53	1.00	0.41	0.41
Sat Flow, veh/h	1634	1458	1634	1863	1863	1458
Grp Volume(v), veh/h	426	59	54	245	227	393
Grp Sat Flow(s),veh/h/ln	1634	1458	1634	1863	1863	1458
Q Serve(g_s), s	22.4	2.7	1.5	0.0	7.7	22.2
Cycle Q Clear(g_c), s	22.4	2.7	1.5	0.0	7.7	22.2
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	480	428	431	1150	576	451
V/C Ratio(X)	0.89	0.14	0.13	0.21	0.39	0.87
Avail Cap(c_a), veh/h	672	600	431	1150	704	551
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.33	1.33
Upstream Filter(I)	1.00	1.00	0.98	0.98	0.81	0.81
Uniform Delay (d), s/veh	30.4	23.4	16.0	0.0	20.6	24.8
Incr Delay (d2), s/veh	10.5	0.1	0.1	0.4	1.6	17.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.5	2.5	0.7	0.1	4.2	10.9
LnGrp Delay(d),s/veh	40.9	23.6	16.1	0.4	22.2	41.8
LnGrp LOS	D	C	B	A	C	D
Approach Vol, veh/h	485			299	620	
Approach Delay, s/veh	38.8			3.3	34.6	
Approach LOS	D			A	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		59.6		30.4	27.7	31.9		
Change Period (Y+Rc), s		6.0		4.5	6.0	6.0		
Max Green Setting (Gmax), s		43.0		36.5	5.0	32.0		
Max Q Clear Time (g_c+I1), s		2.0		24.4	3.5	24.2		
Green Ext Time (p_c), s		1.0		1.5	0.2	1.6		

Intersection Summary	
HCM 2010 Ctrl Delay	29.4
HCM 2010 LOS	C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	242	224	0
Future Volume (veh/h)	0	0	0	242	224	0
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1716	1716	1863	1863	1716
Adj Flow Rate, veh/h	0	0	0	263	243	0
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	2	2	1212	1780	315	247
Arrive On Green	0.00	0.00	0.00	1.00	0.34	0.00
Sat Flow, veh/h	1634	1458	1634	1863	1863	1458
Grp Volume(v), veh/h	0	0	0	263	243	0
Grp Sat Flow(s),veh/h/ln	1634	1458	1634	1863	1863	1458
Q Serve(g_s), s	0.0	0.0	0.0	0.0	10.5	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	10.5	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	2	2	1212	1780	315	247
V/C Ratio(X)	0.00	0.00	0.00	0.15	0.77	0.00
Avail Cap(c_a), veh/h	672	600	1212	1780	704	551
HCM Platoon Ratio	1.00	1.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	0.00	0.00	0.00	0.99	0.92	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	28.2	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	15.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.1	6.6	0.0
LnGrp Delay(d),s/veh	0.0	0.0	0.0	0.2	43.5	0.0
LnGrp LOS				A	D	
Approach Vol, veh/h	0			263	243	
Approach Delay, s/veh	0.0			0.2	43.5	
Approach LOS				A	D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		90.0		0.0	70.8	19.2		
Change Period (Y+Rc), s		6.0		4.5	6.0	6.0		
Max Green Setting (Gmax), s		43.0		36.5	5.0	32.0		
Max Q Clear Time (g_c+I1), s		2.0		0.0	0.0	12.5		
Green Ext Time (p_c), s		0.9		0.0	0.0	0.7		

Intersection Summary	
HCM 2010 Ctrl Delay	21.0
HCM 2010 LOS	C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	373	52	44	242	224	43
Future Volume (veh/h)	373	52	44	242	224	43
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1716	1716	1863	1863	1716
Adj Flow Rate, veh/h	405	57	48	263	243	47
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	459	410	678	1174	318	249
Arrive On Green	0.28	0.28	0.83	1.00	0.34	0.34
Sat Flow, veh/h	1634	1458	1634	1863	1863	1458
Grp Volume(v), veh/h	405	57	48	263	243	47
Grp Sat Flow(s),veh/h/ln	1634	1458	1634	1863	1863	1458
Q Serve(g_s), s	21.3	2.6	0.5	0.0	10.5	2.0
Cycle Q Clear(g_c), s	21.3	2.6	0.5	0.0	10.5	2.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	459	410	678	1174	318	249
V/C Ratio(X)	0.88	0.14	0.07	0.22	0.76	0.19
Avail Cap(c_a), veh/h	672	600	678	1174	704	551
HCM Platoon Ratio	1.00	1.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.98	0.98	0.94	0.94
Uniform Delay (d), s/veh	30.9	24.2	4.5	0.0	28.0	25.2
Incr Delay (d2), s/veh	9.4	0.2	0.0	0.4	15.1	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.8	2.5	0.2	0.1	6.6	0.9
LnGrp Delay(d),s/veh	40.4	24.4	4.6	0.4	43.1	26.8
LnGrp LOS	D	C	A	A	D	C
Approach Vol, veh/h	462			311	290	
Approach Delay, s/veh	38.4			1.1	40.5	
Approach LOS	D			A	D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		60.7		29.3	41.3	19.4		
Change Period (Y+Rc), s		6.0		4.5	6.0	6.0		
Max Green Setting (Gmax), s		43.0		36.5	5.0	32.0		
Max Q Clear Time (g_c+I1), s		2.0		23.3	2.5	12.5		
Green Ext Time (p_c), s		1.1		1.5	0.3	0.9		

Intersection Summary	
HCM 2010 Ctrl Delay	28.0
HCM 2010 LOS	C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	112	37	25	362	337	105
Future Volume (veh/h)	112	37	25	362	337	105
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1716	1716	1863	1863	1716
Adj Flow Rate, veh/h	122	40	27	393	366	114
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	170	152	864	1503	435	341
Arrive On Green	0.10	0.10	1.00	1.00	0.47	0.47
Sat Flow, veh/h	1634	1458	1634	1863	1863	1458
Grp Volume(v), veh/h	122	40	27	393	366	114
Grp Sat Flow(s),veh/h/ln	1634	1458	1634	1863	1863	1458
Q Serve(g_s), s	6.5	2.3	0.0	0.0	15.5	4.4
Cycle Q Clear(g_c), s	6.5	2.3	0.0	0.0	15.5	4.4
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	170	152	864	1503	435	341
V/C Ratio(X)	0.72	0.26	0.03	0.26	0.84	0.33
Avail Cap(c_a), veh/h	672	600	864	1503	704	551
HCM Platoon Ratio	1.00	1.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.97	0.97	0.09	0.09
Uniform Delay (d), s/veh	39.0	37.1	0.0	0.0	22.5	19.6
Incr Delay (d2), s/veh	5.5	0.9	0.0	0.4	1.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	1.9	0.0	0.2	8.0	1.8
LnGrp Delay(d),s/veh	44.6	38.0	0.0	0.4	24.4	19.8
LnGrp LOS	D	D	A	A	C	B
Approach Vol, veh/h	162			420	480	
Approach Delay, s/veh	43.0			0.4	23.3	
Approach LOS	D			A	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		76.6		13.4	51.6	25.0		
Change Period (Y+Rc), s		6.0		4.5	6.0	6.0		
Max Green Setting (Gmax), s		43.0		36.5	5.0	32.0		
Max Q Clear Time (g_c+I1), s		2.0		8.5	2.0	17.5		
Green Ext Time (p_c), s		1.5		0.5	0.5	1.5		

Intersection Summary	
HCM 2010 Ctrl Delay	17.2
HCM 2010 LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	504	91	75	362	337	467
Future Volume (veh/h)	504	91	75	362	337	467
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1716	1716	1863	1863	1716
Adj Flow Rate, veh/h	548	99	82	393	366	508
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	595	531	204	1019	704	551
Arrive On Green	0.36	0.36	0.25	1.00	0.12	0.12
Sat Flow, veh/h	1634	1458	1634	1863	1863	1458
Grp Volume(v), veh/h	548	99	82	393	366	508
Grp Sat Flow(s),veh/h/ln	1634	1458	1634	1863	1863	1458
Q Serve(g_s), s	28.9	4.2	3.8	0.0	16.6	31.0
Cycle Q Clear(g_c), s	28.9	4.2	3.8	0.0	16.6	31.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	595	531	204	1019	704	551
V/C Ratio(X)	0.92	0.19	0.40	0.39	0.52	0.92
Avail Cap(c_a), veh/h	672	600	204	1019	704	551
HCM Platoon Ratio	1.00	1.00	2.00	2.00	0.33	0.33
Upstream Filter(I)	1.00	1.00	0.96	0.96	0.09	0.09
Uniform Delay (d), s/veh	27.4	19.5	31.0	0.0	31.8	38.1
Incr Delay (d2), s/veh	17.0	0.2	1.2	1.1	0.2	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.8	4.0	1.8	0.3	8.6	13.0
LnGrp Delay(d),s/veh	44.4	19.7	32.2	1.1	32.0	41.3
LnGrp LOS	D	B	C	A	C	D
Approach Vol, veh/h	647			475	874	
Approach Delay, s/veh	40.6			6.4	37.4	
Approach LOS	D			A	D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		53.2		36.8	15.2	38.0		
Change Period (Y+Rc), s		6.0		4.5	6.0	6.0		
Max Green Setting (Gmax), s		43.0		36.5	5.0	32.0		
Max Q Clear Time (g_c+I1), s		2.0		30.9	5.8	33.0		
Green Ext Time (p_c), s		1.7		1.4	0.0	0.0		

Intersection Summary	
HCM 2010 Ctrl Delay	31.1
HCM 2010 LOS	C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	504	91	75	362	337	467
Future Volume (veh/h)	504	91	75	362	337	467
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1716	1716	1863	1863	1716
Adj Flow Rate, veh/h	548	99	82	393	366	508
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	595	531	205	1019	703	550
Arrive On Green	0.36	0.36	0.25	1.00	0.38	0.38
Sat Flow, veh/h	1634	1458	1634	1863	1863	1458
Grp Volume(v), veh/h	548	99	82	393	366	508
Grp Sat Flow(s),veh/h/ln	1634	1458	1634	1863	1863	1458
Q Serve(g_s), s	28.9	4.2	3.8	0.0	13.7	29.9
Cycle Q Clear(g_c), s	28.9	4.2	3.8	0.0	13.7	29.9
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	595	531	205	1019	703	550
V/C Ratio(X)	0.92	0.19	0.40	0.39	0.52	0.92
Avail Cap(c_a), veh/h	672	600	205	1019	704	551
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.96	0.96	0.80	0.80
Uniform Delay (d), s/veh	27.4	19.5	30.9	0.0	21.7	26.8
Incr Delay (d2), s/veh	17.0	0.2	1.2	1.1	2.2	19.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.8	4.0	1.8	0.3	7.4	15.0
LnGrp Delay(d),s/veh	44.4	19.7	32.1	1.1	23.9	46.6
LnGrp LOS	D	B	C	A	C	D
Approach Vol, veh/h	647			475	874	
Approach Delay, s/veh	40.6			6.4	37.1	
Approach LOS	D			A	D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		53.2		36.8	15.3	38.0		
Change Period (Y+Rc), s		6.0		4.5	6.0	6.0		
Max Green Setting (Gmax), s		43.0		36.5	5.0	32.0		
Max Q Clear Time (g_c+I1), s		2.0		30.9	5.8	31.9		
Green Ext Time (p_c), s		1.7		1.4	0.0	0.0		

Intersection Summary	
HCM 2010 Ctrl Delay	30.9
HCM 2010 LOS	C

Intersection 13
S H St & McKee Rd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	0	3	27	1	95	4	124	36	106	101	4
Future Volume (veh/h)	6	0	3	27	1	95	4	124	36	106	101	4
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	7	0	3	29	1	103	4	135	39	115	110	4
Adj No. of Lanes	1	1	1	1	1	1	1	1	0	1	1	1
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	42	113	89	120	202	158	38	187	54	905	1238	969
Arrive On Green	0.03	0.00	0.06	0.07	0.11	0.11	0.05	0.27	0.23	0.92	1.00	1.00
Sat Flow, veh/h	1634	1863	1458	1634	1863	1458	1634	1390	402	1634	1863	1458
Grp Volume(v), veh/h	7	0	3	29	1	103	4	0	174	115	110	4
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	1863	1458	1634	0	1792	1634	1863	1458
Q Serve(g_s), s	0.4	0.0	0.1	1.5	0.0	6.1	0.2	0.0	8.0	0.5	0.0	0.0
Cycle Q Clear(g_c), s	0.4	0.0	0.1	1.5	0.0	6.1	0.2	0.0	8.0	0.5	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.22	1.00		1.00
Lane Grp Cap(c), veh/h	42	113	89	120	202	158	38	0	241	905	1238	969
V/C Ratio(X)	0.17	0.00	0.03	0.24	0.00	0.65	0.11	0.00	0.72	0.13	0.09	0.00
Avail Cap(c_a), veh/h	105	453	355	120	462	361	105	0	496	905	1238	969
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.67	1.67	1.67
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.98	0.00	0.98	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.9	0.0	28.1	39.3	35.8	38.5	42.0	0.0	31.8	1.5	0.0	0.0
Incr Delay (d2), s/veh	1.8	0.0	0.2	1.0	0.0	4.5	1.2	0.0	16.9	0.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.1	0.7	0.0	2.7	0.1	0.0	5.0	0.2	0.0	0.0
LnGrp Delay(d),s/veh	44.7	0.0	28.3	40.3	35.8	43.0	43.2	0.0	48.7	1.6	0.1	0.0
LnGrp LOS	D		C	D	D	D	D		D	A	A	A
Approach Vol, veh/h		10			133			178			229	
Approach Delay, s/veh		39.8			42.3			48.5			0.9	
Approach LOS		D			D			D			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	53.8	16.1	10.6	9.5	6.1	63.8	6.3	13.8
Change Period (Y+Rc), s	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
Max Green Setting (Gmax), s	19.3	23.2	4.5	20.2	4.1	38.4	4.1	20.6
Max Q Clear Time (g_c+I1), s	2.5	10.0	3.5	2.1	2.2	2.0	2.4	8.1
Green Ext Time (p_c), s	0.6	0.4	0.0	0.0	0.0	0.8	0.0	0.2

Intersection Summary	
HCM 2010 Ctrl Delay	27.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	0	3	27	1	113	4	156	36	125	136	4
Future Volume (veh/h)	6	0	3	27	1	113	4	156	36	125	136	4
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	7	0	3	29	1	123	4	170	39	136	148	4
Adj No. of Lanes	1	1	1	1	1	1	1	1	0	1	1	1
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	42	115	90	142	229	179	38	223	51	852	1211	948
Arrive On Green	0.03	0.00	0.06	0.09	0.12	0.12	0.05	0.30	0.27	1.00	1.00	1.00
Sat Flow, veh/h	1634	1863	1458	1634	1863	1458	1634	1467	337	1634	1863	1458
Grp Volume(v), veh/h	7	0	3	29	1	123	4	0	209	136	148	4
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	1863	1458	1634	0	1803	1634	1863	1458
Q Serve(g_s), s	0.4	0.0	0.1	1.5	0.0	7.3	0.2	0.0	9.5	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.4	0.0	0.1	1.5	0.0	7.3	0.2	0.0	9.5	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.19	1.00		1.00
Lane Grp Cap(c), veh/h	42	115	90	142	229	179	38	0	274	852	1211	948
V/C Ratio(X)	0.17	0.00	0.03	0.20	0.00	0.69	0.11	0.00	0.76	0.16	0.12	0.00
Avail Cap(c_a), veh/h	105	453	355	142	462	361	105	0	499	852	1211	948
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.98	0.00	0.98	0.98	0.98	0.98
Uniform Delay (d), s/veh	42.9	0.0	28.0	38.2	34.6	37.8	42.0	0.0	30.2	0.0	0.0	0.0
Incr Delay (d2), s/veh	1.8	0.0	0.1	0.7	0.0	4.6	1.2	0.0	17.7	0.1	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.1	0.7	0.0	3.2	0.1	0.0	6.0	0.0	0.1	0.0
LnGrp Delay(d),s/veh	44.7	0.0	28.2	38.9	34.6	42.4	43.2	0.0	47.9	0.1	0.2	0.0
LnGrp LOS	D		C	D	C	D	D		D	A	A	A
Approach Vol, veh/h		10			153			213			288	
Approach Delay, s/veh		39.7			41.7			47.8			0.1	
Approach LOS		D			D			D			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	50.9	17.7	11.8	9.6	6.1	62.5	6.3	15.1
Change Period (Y+Rc), s	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
Max Green Setting (Gmax), s	19.3	23.2	4.5	20.2	4.1	38.4	4.1	20.6
Max Q Clear Time (g_c+I1), s	2.0	11.5	3.5	2.1	2.2	2.0	2.4	9.3
Green Ext Time (p_c), s	0.8	0.5	0.0	0.0	0.0	1.0	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	25.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	0	3	27	1	96	4	125	36	114	108	4
Future Volume (veh/h)	7	0	3	27	1	96	4	125	36	114	108	4
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	8	0	3	29	1	104	4	136	39	124	117	4
Adj No. of Lanes	1	1	1	1	1	1	1	1	0	1	1	1
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	44	113	89	123	203	159	38	188	54	901	1235	967
Arrive On Green	0.03	0.00	0.06	0.08	0.11	0.11	0.05	0.27	0.23	0.92	1.00	1.00
Sat Flow, veh/h	1634	1863	1458	1634	1863	1458	1634	1393	399	1634	1863	1458
Grp Volume(v), veh/h	8	0	3	29	1	104	4	0	175	124	117	4
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	1863	1458	1634	0	1792	1634	1863	1458
Q Serve(g_s), s	0.4	0.0	0.1	1.5	0.0	6.2	0.2	0.0	8.0	0.6	0.0	0.0
Cycle Q Clear(g_c), s	0.4	0.0	0.1	1.5	0.0	6.2	0.2	0.0	8.0	0.6	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.22	1.00		1.00
Lane Grp Cap(c), veh/h	44	113	89	123	203	159	38	0	242	901	1235	967
V/C Ratio(X)	0.18	0.00	0.03	0.24	0.00	0.65	0.11	0.00	0.72	0.14	0.09	0.00
Avail Cap(c_a), veh/h	105	453	355	123	462	361	105	0	496	901	1235	967
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.67	1.67	1.67
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.98	0.00	0.98	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.8	0.0	28.1	39.2	35.7	38.5	42.0	0.0	31.7	1.6	0.0	0.0
Incr Delay (d2), s/veh	2.0	0.0	0.2	1.0	0.0	4.5	1.2	0.0	16.9	0.1	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.1	0.7	0.0	2.7	0.1	0.0	5.0	0.3	0.1	0.0
LnGrp Delay(d),s/veh	44.8	0.0	28.2	40.2	35.7	42.9	43.2	0.0	48.6	1.7	0.2	0.0
LnGrp LOS	D		C	D	D	D	D		D	A	A	A
Approach Vol, veh/h		11			134			179			245	
Approach Delay, s/veh		40.3			42.3			48.5			0.9	
Approach LOS		D			D			D			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	53.6	16.1	10.8	9.5	6.1	63.7	6.4	13.8
Change Period (Y+Rc), s	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
Max Green Setting (Gmax), s	19.3	23.2	4.5	20.2	4.1	38.4	4.1	20.6
Max Q Clear Time (g_c+I1), s	2.6	10.0	3.5	2.1	2.2	2.0	2.4	8.2
Green Ext Time (p_c), s	0.7	0.4	0.0	0.0	0.0	0.8	0.0	0.2

Intersection Summary	
HCM 2010 Ctrl Delay	26.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	0	3	27	1	111	4	154	36	132	142	4
Future Volume (veh/h)	7	0	3	27	1	111	4	154	36	132	142	4
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	8	0	3	29	1	121	4	167	39	143	154	4
Adj No. of Lanes	1	1	1	1	1	1	1	1	0	1	1	1
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	44	115	90	141	226	177	38	220	51	855	1212	949
Arrive On Green	0.03	0.00	0.06	0.09	0.12	0.12	0.05	0.30	0.26	1.00	1.00	1.00
Sat Flow, veh/h	1634	1863	1458	1634	1863	1458	1634	1461	341	1634	1863	1458
Grp Volume(v), veh/h	8	0	3	29	1	121	4	0	206	143	154	4
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	1863	1458	1634	0	1803	1634	1863	1458
Q Serve(g_s), s	0.4	0.0	0.1	1.5	0.0	7.2	0.2	0.0	9.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.4	0.0	0.1	1.5	0.0	7.2	0.2	0.0	9.3	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.19	1.00		1.00
Lane Grp Cap(c), veh/h	44	115	90	141	226	177	38	0	271	855	1212	949
V/C Ratio(X)	0.18	0.00	0.03	0.21	0.00	0.68	0.11	0.00	0.76	0.17	0.13	0.00
Avail Cap(c_a), veh/h	105	453	355	141	462	361	105	0	499	855	1212	949
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.98	0.00	0.98	0.98	0.98	0.98
Uniform Delay (d), s/veh	42.8	0.0	28.0	38.2	34.8	37.9	42.0	0.0	30.3	0.0	0.0	0.0
Incr Delay (d2), s/veh	2.0	0.0	0.1	0.7	0.0	4.6	1.2	0.0	17.6	0.1	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.1	0.7	0.0	3.1	0.1	0.0	5.9	0.0	0.1	0.0
LnGrp Delay(d),s/veh	44.8	0.0	28.2	38.9	34.8	42.5	43.2	0.0	47.9	0.1	0.2	0.0
LnGrp LOS	D		C	D	C	D	D		D	A	A	A
Approach Vol, veh/h		11			151			210			301	
Approach Delay, s/veh		40.3			41.7			47.8			0.2	
Approach LOS		D			D			D			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	51.1	17.5	11.8	9.6	6.1	62.6	6.4	14.9
Change Period (Y+Rc), s	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
Max Green Setting (Gmax), s	19.3	23.2	4.5	20.2	4.1	38.4	4.1	20.6
Max Q Clear Time (g_c+I1), s	2.0	11.3	3.5	2.1	2.2	2.0	2.4	9.2
Green Ext Time (p_c), s	0.9	0.5	0.0	0.0	0.0	1.0	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	25.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	0	5	28	1	110	4	201	37	185	243	10
Future Volume (veh/h)	13	0	5	28	1	110	4	201	37	185	243	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	14	0	5	30	1	120	4	218	40	201	264	11
Adj No. of Lanes	1	1	1	1	1	1	1	1	0	1	1	1
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	52	115	90	148	225	176	38	271	50	805	1204	943
Arrive On Green	0.03	0.00	0.06	0.09	0.12	0.12	0.05	0.35	0.32	0.99	1.00	1.00
Sat Flow, veh/h	1634	1863	1458	1634	1863	1458	1634	1532	281	1634	1863	1458
Grp Volume(v), veh/h	14	0	5	30	1	120	4	0	258	201	264	11
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	1863	1458	1634	0	1813	1634	1863	1458
Q Serve(g_s), s	0.8	0.0	0.2	1.5	0.0	7.1	0.2	0.0	11.6	0.2	0.0	0.0
Cycle Q Clear(g_c), s	0.8	0.0	0.2	1.5	0.0	7.1	0.2	0.0	11.6	0.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.16	1.00		1.00
Lane Grp Cap(c), veh/h	52	115	90	148	225	176	38	0	320	805	1204	943
V/C Ratio(X)	0.27	0.00	0.06	0.20	0.00	0.68	0.11	0.00	0.81	0.25	0.22	0.01
Avail Cap(c_a), veh/h	105	453	355	148	462	361	105	0	502	805	1204	943
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.97	0.00	0.97	0.97	0.97	0.97
Uniform Delay (d), s/veh	42.5	0.0	28.1	37.9	34.8	37.9	42.0	0.0	28.0	0.3	0.0	0.0
Incr Delay (d2), s/veh	2.7	0.0	0.3	0.7	0.0	4.6	1.2	0.0	18.6	0.2	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.1	0.7	0.0	3.1	0.1	0.0	7.4	0.1	0.1	0.0
LnGrp Delay(d),s/veh	45.2	0.0	28.3	38.6	34.8	42.5	43.2	0.0	46.6	0.5	0.4	0.0
LnGrp LOS	D		C	D	C	D	D		D	A	A	A
Approach Vol, veh/h		19			151			262			476	
Approach Delay, s/veh		40.8			41.6			46.6			0.4	
Approach LOS		D			D			D			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	48.4	19.9	12.2	9.6	6.1	62.2	6.9	14.9
Change Period (Y+Rc), s	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
Max Green Setting (Gmax), s	19.3	23.2	4.5	20.2	4.1	38.4	4.1	20.6
Max Q Clear Time (g_c+I1), s	2.2	13.6	3.5	2.2	2.2	2.0	2.8	9.1
Green Ext Time (p_c), s	1.5	0.6	0.0	0.0	0.0	1.7	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	21.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	0	5	28	1	128	4	233	37	204	278	10
Future Volume (veh/h)	13	0	5	28	1	128	4	233	37	204	278	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	14	0	5	30	1	139	4	253	40	222	302	11
Adj No. of Lanes	1	1	1	1	1	1	1	1	0	1	1	1
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	52	116	91	170	250	196	38	305	48	755	1179	923
Arrive On Green	0.03	0.00	0.06	0.10	0.13	0.13	0.05	0.39	0.35	0.92	1.00	1.00
Sat Flow, veh/h	1634	1863	1458	1634	1863	1458	1634	1571	248	1634	1863	1458
Grp Volume(v), veh/h	14	0	5	30	1	139	4	0	293	222	302	11
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	1863	1458	1634	0	1819	1634	1863	1458
Q Serve(g_s), s	0.8	0.0	0.2	1.5	0.0	8.2	0.2	0.0	13.1	1.3	0.0	0.0
Cycle Q Clear(g_c), s	0.8	0.0	0.2	1.5	0.0	8.2	0.2	0.0	13.1	1.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	52	116	91	170	250	196	38	0	353	755	1179	923
V/C Ratio(X)	0.27	0.00	0.05	0.18	0.00	0.71	0.11	0.00	0.83	0.29	0.26	0.01
Avail Cap(c_a), veh/h	105	453	355	170	462	361	105	0	503	755	1179	923
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.96	0.00	0.96	0.91	0.91	0.91
Uniform Delay (d), s/veh	42.5	0.0	28.0	36.8	33.7	37.3	42.0	0.0	26.4	1.9	0.0	0.0
Incr Delay (d2), s/veh	2.7	0.0	0.2	0.5	0.0	4.7	1.2	0.0	19.3	0.2	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.1	0.7	0.0	3.6	0.1	0.0	8.4	0.5	0.2	0.0
LnGrp Delay(d),s/veh	45.2	0.0	28.3	37.3	33.7	42.0	43.2	0.0	45.7	2.1	0.5	0.0
LnGrp LOS	D		C	D	C	D	D		D	A	A	A
Approach Vol, veh/h		19			170			297			535	
Approach Delay, s/veh		40.8			41.1			45.7			1.1	
Approach LOS		D			D			D			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	45.6	21.4	13.3	9.6	6.1	61.0	6.9	16.1
Change Period (Y+Rc), s	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
Max Green Setting (Gmax), s	19.3	23.2	4.5	20.2	4.1	38.4	4.1	20.6
Max Q Clear Time (g_c+I1), s	3.3	15.1	3.5	2.2	2.2	2.0	2.8	10.2
Green Ext Time (p_c), s	1.7	0.6	0.0	0.0	0.0	1.9	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	21.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	0	5	28	1	128	4	233	37	204	278	10
Future Volume (veh/h)	13	0	5	28	1	128	4	233	37	204	278	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1716	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	14	0	5	30	1	139	4	253	40	222	302	11
Adj No. of Lanes	1	1	1	1	1	1	1	1	0	1	1	1
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	52	116	91	170	250	196	38	305	48	755	1179	923
Arrive On Green	0.03	0.00	0.06	0.10	0.13	0.13	0.05	0.39	0.35	0.92	1.00	1.00
Sat Flow, veh/h	1634	1863	1458	1634	1863	1458	1634	1571	248	1634	1863	1458
Grp Volume(v), veh/h	14	0	5	30	1	139	4	0	293	222	302	11
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	1863	1458	1634	0	1819	1634	1863	1458
Q Serve(g_s), s	0.8	0.0	0.2	1.5	0.0	8.2	0.2	0.0	13.1	1.3	0.0	0.0
Cycle Q Clear(g_c), s	0.8	0.0	0.2	1.5	0.0	8.2	0.2	0.0	13.1	1.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	52	116	91	170	250	196	38	0	353	755	1179	923
V/C Ratio(X)	0.27	0.00	0.05	0.18	0.00	0.71	0.11	0.00	0.83	0.29	0.26	0.01
Avail Cap(c_a), veh/h	105	453	355	170	462	361	105	0	503	755	1179	923
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.96	0.00	0.96	0.91	0.91	0.91
Uniform Delay (d), s/veh	42.5	0.0	28.0	36.8	33.7	37.3	42.0	0.0	26.4	1.9	0.0	0.0
Incr Delay (d2), s/veh	2.7	0.0	0.2	0.5	0.0	4.7	1.2	0.0	19.3	0.2	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.1	0.7	0.0	3.6	0.1	0.0	8.4	0.5	0.2	0.0
LnGrp Delay(d),s/veh	45.2	0.0	28.3	37.3	33.7	42.0	43.2	0.0	45.7	2.1	0.5	0.0
LnGrp LOS	D		C	D	C	D	D		D	A	A	A
Approach Vol, veh/h		19			170			297			535	
Approach Delay, s/veh		40.8			41.1			45.7			1.1	
Approach LOS		D			D			D			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	45.6	21.4	13.3	9.6	6.1	61.0	6.9	16.1
Change Period (Y+Rc), s	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
Max Green Setting (Gmax), s	19.3	23.2	4.5	20.2	4.1	38.4	4.1	20.6
Max Q Clear Time (g_c+I1), s	3.3	15.1	3.5	2.2	2.2	2.0	2.8	10.2
Green Ext Time (p_c), s	1.7	0.6	0.0	0.0	0.0	1.9	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	21.5
HCM 2010 LOS	C

Intersection 14
S H St & Taft Hwy (SR 119)

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	390	65	1	380	50	145	30	13	47	22	62
Future Volume (veh/h)	69	390	65	1	380	50	145	30	13	47	22	62
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1716	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	75	424	71	1	413	54	158	33	14	51	24	67
Adj No. of Lanes	1	1	0	1	1	1	1	1	1	1	1	1
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	128	602	101	353	976	764	216	118	92	256	163	127
Arrive On Green	0.08	0.39	0.36	0.22	0.52	0.52	0.13	0.06	0.06	0.16	0.09	0.09
Sat Flow, veh/h	1634	1556	261	1634	1863	1458	1634	1863	1458	1634	1863	1458
Grp Volume(v), veh/h	75	0	495	1	413	54	158	33	14	51	24	67
Grp Sat Flow(s),veh/h/ln	1634	0	1817	1634	1863	1458	1634	1863	1458	1634	1863	1458
Q Serve(g_s), s	4.0	0.0	20.7	0.0	12.2	0.6	8.4	1.5	0.8	2.4	1.1	4.0
Cycle Q Clear(g_c), s	4.0	0.0	20.7	0.0	12.2	0.6	8.4	1.5	0.8	2.4	1.1	4.0
Prop In Lane	1.00		0.14	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	128	0	702	353	976	764	216	118	92	256	163	127
V/C Ratio(X)	0.58	0.00	0.70	0.00	0.42	0.07	0.73	0.28	0.15	0.20	0.15	0.53
Avail Cap(c_a), veh/h	145	0	702	353	976	764	243	497	389	256	410	321
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.0	0.0	23.4	27.7	13.1	1.6	37.5	40.2	39.9	33.1	38.0	39.3
Incr Delay (d2), s/veh	4.6	0.0	5.9	0.0	1.3	0.2	9.4	1.3	0.8	0.4	0.4	3.3
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	2.0	0.0	11.5	0.0	6.6	0.3	4.3	0.8	0.3	1.1	0.6	1.7
LnGrp Delay(d),s/veh	44.7	0.0	29.3	27.7	14.5	1.8	46.9	41.5	40.6	33.4	38.4	42.6
LnGrp LOS	D		C	C	B	A	D	D	D	C	D	D
Approach Vol, veh/h		570			468			205			142	
Approach Delay, s/veh		31.3			13.0			45.6			38.6	
Approach LOS		C			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.1	9.7	23.4	38.8	15.9	11.9	11.1	51.2
Change Period (Y+Rc), s	5.7	5.7	6.0	6.0	5.7	5.7	6.0	6.0
Max Green Setting (Gmax), s	7.5	22.3	4.0	32.8	11.7	18.1	6.0	30.8
Max Q Clear Time (g_c+I1), s	4.4	3.5	2.0	22.7	10.4	6.0	6.0	14.2
Green Ext Time (p_c), s	0.1	0.1	0.4	1.4	0.1	0.2	0.0	1.5

Intersection Summary	
HCM 2010 Ctrl Delay	28.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	390	65	1	380	72	145	34	13	71	26	69
Future Volume (veh/h)	75	390	65	1	380	72	145	34	13	71	26	69
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1716	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	82	424	71	1	413	78	158	37	14	77	28	75
Adj No. of Lanes	1	1	0	1	1	1	1	1	1	1	1	1
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	137	602	101	343	956	748	216	118	92	265	173	136
Arrive On Green	0.08	0.39	0.36	0.21	0.51	0.51	0.13	0.06	0.06	0.16	0.09	0.09
Sat Flow, veh/h	1634	1556	261	1634	1863	1458	1634	1863	1458	1634	1863	1458
Grp Volume(v), veh/h	82	0	495	1	413	78	158	37	14	77	28	75
Grp Sat Flow(s),veh/h/ln	1634	0	1817	1634	1863	1458	1634	1863	1458	1634	1863	1458
Q Serve(g_s), s	4.4	0.0	20.7	0.0	12.5	1.0	8.4	1.7	0.8	3.7	1.2	4.4
Cycle Q Clear(g_c), s	4.4	0.0	20.7	0.0	12.5	1.0	8.4	1.7	0.8	3.7	1.2	4.4
Prop In Lane	1.00		0.14	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	137	0	702	343	956	748	216	118	92	265	173	136
V/C Ratio(X)	0.60	0.00	0.70	0.00	0.43	0.10	0.73	0.31	0.15	0.29	0.16	0.55
Avail Cap(c_a), veh/h	145	0	702	343	956	748	243	497	389	265	410	321
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.8	0.0	23.4	28.1	13.7	1.7	37.5	40.3	39.9	33.2	37.6	39.0
Incr Delay (d2), s/veh	6.0	0.0	5.9	0.0	1.4	0.3	9.4	1.5	0.8	0.6	0.4	3.5
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	2.2	0.0	11.5	0.0	6.8	0.4	4.3	0.9	0.3	1.7	0.7	1.9
LnGrp Delay(d),s/veh	45.8	0.0	29.3	28.1	15.1	2.0	46.9	41.8	40.6	33.8	38.0	42.5
LnGrp LOS	D		C	C	B	A	D	D	D	C	D	D
Approach Vol, veh/h		577			492			209			180	
Approach Delay, s/veh		31.6			13.1			45.6			38.1	
Approach LOS		C			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.6	9.7	22.9	38.8	15.9	12.4	11.5	50.2
Change Period (Y+Rc), s	5.7	5.7	6.0	6.0	5.7	5.7	6.0	6.0
Max Green Setting (Gmax), s	7.5	22.3	4.0	32.8	11.7	18.1	6.0	30.8
Max Q Clear Time (g_c+I1), s	5.7	3.7	2.0	22.7	10.4	6.4	6.4	14.5
Green Ext Time (p_c), s	0.1	0.1	0.4	1.4	0.1	0.2	0.0	1.6

Intersection Summary	
HCM 2010 Ctrl Delay	28.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	401	67	1	389	51	147	30	13	47	22	62
Future Volume (veh/h)	71	401	67	1	389	51	147	30	13	47	22	62
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1716	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	77	436	73	1	423	55	160	33	14	51	24	67
Adj No. of Lanes	1	1	0	1	1	1	1	1	1	1	1	1
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	131	602	101	351	971	760	218	118	92	258	163	127
Arrive On Green	0.08	0.39	0.36	0.21	0.52	0.52	0.13	0.06	0.06	0.16	0.09	0.09
Sat Flow, veh/h	1634	1556	261	1634	1863	1458	1634	1863	1458	1634	1863	1458
Grp Volume(v), veh/h	77	0	509	1	423	55	160	33	14	51	24	67
Grp Sat Flow(s),veh/h/ln	1634	0	1817	1634	1863	1458	1634	1863	1458	1634	1863	1458
Q Serve(g_s), s	4.1	0.0	21.5	0.0	12.7	0.7	8.5	1.5	0.8	2.4	1.1	4.0
Cycle Q Clear(g_c), s	4.1	0.0	21.5	0.0	12.7	0.7	8.5	1.5	0.8	2.4	1.1	4.0
Prop In Lane	1.00		0.14	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	131	0	702	351	971	760	218	118	92	258	163	127
V/C Ratio(X)	0.59	0.00	0.72	0.00	0.44	0.07	0.73	0.28	0.15	0.20	0.15	0.53
Avail Cap(c_a), veh/h	145	0	702	351	971	760	243	497	389	258	410	321
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.0	0.0	23.7	27.8	13.3	1.6	37.4	40.2	39.9	33.0	38.0	39.3
Incr Delay (d2), s/veh	5.0	0.0	6.4	0.0	1.4	0.2	9.7	1.3	0.8	0.4	0.4	3.3
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	2.0	0.0	12.0	0.0	6.8	0.3	4.4	0.8	0.3	1.1	0.6	1.7
LnGrp Delay(d),s/veh	45.0	0.0	30.1	27.8	14.8	1.8	47.1	41.5	40.6	33.3	38.4	42.6
LnGrp LOS	D		C	C	B	A	D	D	D	C	D	D
Approach Vol, veh/h		586			479			207			142	
Approach Delay, s/veh		32.0			13.3			45.8			38.6	
Approach LOS		C			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.2	9.7	23.3	38.8	16.0	11.9	11.2	50.9
Change Period (Y+Rc), s	5.7	5.7	6.0	6.0	5.7	5.7	6.0	6.0
Max Green Setting (Gmax), s	7.5	22.3	4.0	32.8	11.7	18.1	6.0	30.8
Max Q Clear Time (g_c+I1), s	4.4	3.5	2.0	23.5	10.5	6.0	6.1	14.7
Green Ext Time (p_c), s	0.1	0.1	0.4	1.4	0.1	0.2	0.0	1.6

Intersection Summary	
HCM 2010 Ctrl Delay	28.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	401	67	1	389	71	147	33	13	71	25	69
Future Volume (veh/h)	77	401	67	1	389	71	147	33	13	71	25	69
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1716	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	84	436	73	1	423	77	160	36	14	77	27	75
Adj No. of Lanes	1	1	0	1	1	1	1	1	1	1	1	1
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	139	602	101	341	951	744	218	118	92	267	173	136
Arrive On Green	0.09	0.39	0.36	0.21	0.51	0.51	0.13	0.06	0.06	0.16	0.09	0.09
Sat Flow, veh/h	1634	1556	261	1634	1863	1458	1634	1863	1458	1634	1863	1458
Grp Volume(v), veh/h	84	0	509	1	423	77	160	36	14	77	27	75
Grp Sat Flow(s),veh/h/ln	1634	0	1817	1634	1863	1458	1634	1863	1458	1634	1863	1458
Q Serve(g_s), s	4.5	0.0	21.5	0.0	12.9	1.0	8.5	1.7	0.8	3.7	1.2	4.4
Cycle Q Clear(g_c), s	4.5	0.0	21.5	0.0	12.9	1.0	8.5	1.7	0.8	3.7	1.2	4.4
Prop In Lane	1.00		0.14	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	139	0	702	341	951	744	218	118	92	267	173	136
V/C Ratio(X)	0.60	0.00	0.72	0.00	0.44	0.10	0.73	0.31	0.15	0.29	0.16	0.55
Avail Cap(c_a), veh/h	145	0	702	341	951	744	243	497	389	267	410	321
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.7	0.0	23.7	28.2	14.0	1.8	37.4	40.3	39.9	33.1	37.6	39.0
Incr Delay (d2), s/veh	6.4	0.0	6.4	0.0	1.5	0.3	9.7	1.4	0.8	0.6	0.4	3.5
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	2.3	0.0	12.0	0.0	7.0	0.4	4.4	0.9	0.3	1.7	0.6	1.9
LnGrp Delay(d),s/veh	46.1	0.0	30.1	28.2	15.5	2.0	47.1	41.7	40.6	33.7	38.0	42.5
LnGrp LOS	D		C	C	B	A	D	D	D	C	D	D
Approach Vol, veh/h		593			501			210			179	
Approach Delay, s/veh		32.3			13.4			45.8			38.0	
Approach LOS		C			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.7	9.7	22.8	38.8	16.0	12.4	11.7	49.9
Change Period (Y+Rc), s	5.7	5.7	6.0	6.0	5.7	5.7	6.0	6.0
Max Green Setting (Gmax), s	7.5	22.3	4.0	32.8	11.7	18.1	6.0	30.8
Max Q Clear Time (g_c+I1), s	5.7	3.7	2.0	23.5	10.5	6.4	6.5	14.9
Green Ext Time (p_c), s	0.1	0.1	0.4	1.4	0.1	0.2	0.0	1.6

Intersection Summary	
HCM 2010 Ctrl Delay	28.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	92	466	78	1	444	105	160	33	14	97	23	75
Future Volume (veh/h)	92	466	78	1	444	105	160	33	14	97	23	75
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1716	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	100	507	85	1	483	114	174	36	15	105	25	82
Adj No. of Lanes	1	1	0	1	1	1	1	1	1	1	1	1
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	145	602	101	320	919	720	232	118	92	288	182	143
Arrive On Green	0.09	0.39	0.36	0.20	0.49	0.49	0.14	0.06	0.06	0.18	0.10	0.10
Sat Flow, veh/h	1634	1556	261	1634	1863	1458	1634	1863	1458	1634	1863	1458
Grp Volume(v), veh/h	100	0	592	1	483	114	174	36	15	105	25	82
Grp Sat Flow(s),veh/h/ln	1634	0	1817	1634	1863	1458	1634	1863	1458	1634	1863	1458
Q Serve(g_s), s	5.3	0.0	26.7	0.0	16.0	1.5	9.2	1.7	0.9	5.1	1.1	4.8
Cycle Q Clear(g_c), s	5.3	0.0	26.7	0.0	16.0	1.5	9.2	1.7	0.9	5.1	1.1	4.8
Prop In Lane	1.00		0.14	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	145	0	702	320	919	720	232	118	92	288	182	143
V/C Ratio(X)	0.69	0.00	0.84	0.00	0.53	0.16	0.75	0.31	0.16	0.36	0.14	0.58
Avail Cap(c_a), veh/h	145	0	702	320	919	720	243	497	389	288	410	321
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99
Uniform Delay (d), s/veh	39.8	0.0	25.3	29.1	15.6	1.9	37.1	40.3	39.9	32.6	37.1	38.8
Incr Delay (d2), s/veh	12.8	0.0	11.8	0.0	2.1	0.5	11.6	1.4	0.8	0.8	0.3	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	15.6	0.0	8.7	0.7	4.9	0.9	0.4	2.4	0.6	2.1
LnGrp Delay(d),s/veh	52.6	0.0	37.0	29.1	17.7	2.4	48.7	41.7	40.7	33.4	37.5	42.4
LnGrp LOS	D		D	C	B	A	D	D	D	C	D	D
Approach Vol, veh/h		692			598			225			212	
Approach Delay, s/veh		39.3			14.8			47.1			37.4	
Approach LOS		D			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.9	9.7	21.6	38.8	16.8	12.8	12.0	48.4
Change Period (Y+Rc), s	5.7	5.7	6.0	6.0	5.7	5.7	6.0	6.0
Max Green Setting (Gmax), s	7.5	22.3	4.0	32.8	11.7	18.1	6.0	30.8
Max Q Clear Time (g_c+I1), s	7.1	3.7	2.0	28.7	11.2	6.8	7.3	18.0
Green Ext Time (p_c), s	0.0	0.1	0.5	1.0	0.0	0.3	0.0	1.9

Intersection Summary	
HCM 2010 Ctrl Delay	31.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	98	466	78	1	444	127	160	37	14	121	27	82
Future Volume (veh/h)	98	466	78	1	444	127	160	37	14	121	27	82
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1716	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	107	507	85	1	483	138	174	40	15	132	29	89
Adj No. of Lanes	1	1	0	1	1	1	1	1	1	1	1	1
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	145	602	101	312	910	713	232	118	92	296	191	150
Arrive On Green	0.09	0.39	0.36	0.19	0.49	0.49	0.14	0.06	0.06	0.18	0.10	0.10
Sat Flow, veh/h	1634	1556	261	1634	1863	1458	1634	1863	1458	1634	1863	1458
Grp Volume(v), veh/h	107	0	592	1	483	138	174	40	15	132	29	89
Grp Sat Flow(s),veh/h/ln	1634	0	1817	1634	1863	1458	1634	1863	1458	1634	1863	1458
Q Serve(g_s), s	5.7	0.0	26.7	0.0	16.1	1.8	9.2	1.8	0.9	6.5	1.3	5.2
Cycle Q Clear(g_c), s	5.7	0.0	26.7	0.0	16.1	1.8	9.2	1.8	0.9	6.5	1.3	5.2
Prop In Lane	1.00		0.14	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	145	0	702	312	910	713	232	118	92	296	191	150
V/C Ratio(X)	0.74	0.00	0.84	0.00	0.53	0.19	0.75	0.34	0.16	0.45	0.15	0.59
Avail Cap(c_a), veh/h	145	0	702	312	910	713	243	497	389	296	410	321
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99
Uniform Delay (d), s/veh	40.0	0.0	25.3	29.5	15.9	1.9	37.1	40.3	39.9	32.8	36.8	38.6
Incr Delay (d2), s/veh	17.7	0.0	11.8	0.0	2.2	0.6	11.6	1.7	0.8	1.0	0.4	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	0.0	15.6	0.0	8.7	0.8	4.9	1.0	0.4	3.0	0.7	2.3
LnGrp Delay(d),s/veh	57.7	0.0	37.0	29.5	18.1	2.5	48.7	42.0	40.7	33.8	37.2	42.3
LnGrp LOS	E		D	C	B	A	D	D	D	C	D	D
Approach Vol, veh/h		699			622			229			250	
Approach Delay, s/veh		40.2			14.7			47.0			37.2	
Approach LOS		D			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.3	9.7	21.2	38.8	16.8	13.2	12.0	48.0
Change Period (Y+Rc), s	5.7	5.7	6.0	6.0	5.7	5.7	6.0	6.0
Max Green Setting (Gmax), s	7.5	22.3	4.0	32.8	11.7	18.1	6.0	30.8
Max Q Clear Time (g_c+I1), s	8.5	3.8	2.0	28.7	11.2	7.2	7.7	18.1
Green Ext Time (p_c), s	0.0	0.1	0.5	1.0	0.0	0.3	0.0	2.0

Intersection Summary	
HCM 2010 Ctrl Delay	31.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	98	466	78	1	444	127	160	37	14	121	27	82
Future Volume (veh/h)	98	466	78	1	444	127	160	37	14	121	27	82
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1716	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	107	507	85	1	483	138	174	40	15	132	29	89
Adj No. of Lanes	1	1	0	1	1	1	1	1	1	1	1	1
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	145	602	101	312	910	713	232	118	92	296	191	150
Arrive On Green	0.09	0.39	0.36	0.19	0.49	0.49	0.14	0.06	0.06	0.18	0.10	0.10
Sat Flow, veh/h	1634	1556	261	1634	1863	1458	1634	1863	1458	1634	1863	1458
Grp Volume(v), veh/h	107	0	592	1	483	138	174	40	15	132	29	89
Grp Sat Flow(s),veh/h/ln	1634	0	1817	1634	1863	1458	1634	1863	1458	1634	1863	1458
Q Serve(g_s), s	5.7	0.0	26.7	0.0	16.1	1.8	9.2	1.8	0.9	6.5	1.3	5.2
Cycle Q Clear(g_c), s	5.7	0.0	26.7	0.0	16.1	1.8	9.2	1.8	0.9	6.5	1.3	5.2
Prop In Lane	1.00		0.14	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	145	0	702	312	910	713	232	118	92	296	191	150
V/C Ratio(X)	0.74	0.00	0.84	0.00	0.53	0.19	0.75	0.34	0.16	0.45	0.15	0.59
Avail Cap(c_a), veh/h	145	0	702	312	910	713	243	497	389	296	410	321
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99
Uniform Delay (d), s/veh	40.0	0.0	25.3	29.5	15.9	1.9	37.1	40.3	39.9	32.8	36.8	38.6
Incr Delay (d2), s/veh	17.7	0.0	11.8	0.0	2.2	0.6	11.6	1.7	0.8	1.0	0.4	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	0.0	15.6	0.0	8.7	0.8	4.9	1.0	0.4	3.0	0.7	2.3
LnGrp Delay(d),s/veh	57.7	0.0	37.0	29.5	18.1	2.5	48.7	42.0	40.7	33.8	37.2	42.3
LnGrp LOS	E		D	C	B	A	D	D	D	C	D	D
Approach Vol, veh/h		699			622			229			250	
Approach Delay, s/veh		40.2			14.7			47.0			37.2	
Approach LOS		D			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.3	9.7	21.2	38.8	16.8	13.2	12.0	48.0
Change Period (Y+Rc), s	5.7	5.7	6.0	6.0	5.7	5.7	6.0	6.0
Max Green Setting (Gmax), s	7.5	22.3	4.0	32.8	11.7	18.1	6.0	30.8
Max Q Clear Time (g_c+I1), s	8.5	3.8	2.0	28.7	11.2	7.2	7.7	18.1
Green Ext Time (p_c), s	0.0	0.1	0.5	1.0	0.0	0.3	0.0	2.0

Intersection Summary	
HCM 2010 Ctrl Delay	31.8
HCM 2010 LOS	C

Vehicle Turn Movements

Turning Movement Count Report PM

Location ID: 5
North/South: S H St
East/West: Fairview Rd

Date: 07/13/21
City: Bakersfield, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	3	81	2	19	18	5	18	53	2	11	24	2	238
16:15	9	69	16	24	18	2	17	69	8	16	10	2	260
16:30	9	76	10	21	15	3	8	54	11	13	27	4	251
16:45	5	91	8	29	20	8	20	63	1	19	26	3	293
17:00	4	64	10	23	30	10	12	52	9	13	25	4	256
17:15	11	70	14	4	25	9	18	48	4	13	31	7	254
17:30	5	70	18	15	18	7	16	61	6	18	29	7	270
17:45	9	67	14	18	20	5	15	58	3	17	29	8	263
Total Volume:	55	588	92	153	164	49	124	458	44	120	201	37	2085
Approach %	7%	80%	13%	42%	45%	13%	20%	73%	7%	34%	56%	10%	
Peak Hr Begin:	16:45												
PHV	25	295	50	71	93	34	66	224	20	63	111	21	1073
PHF	0.889			0.786			0.923			0.903			0.916

Turning Movement Count Report PM

Location ID: 22
North/South: S H St
East/West: Berkshire Rd

Date: 07/13/21
City: Bakersfield, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	1	36	14	22	29	5	10	39	9	19	49	1	234
16:15	1	30	14	12	29	3	11	43	16	19	54	0	232
16:30	2	31	11	21	33	5	6	34	20	19	53	1	236
16:45	3	36	11	17	26	0	9	53	16	31	47	4	253
17:00	2	39	11	21	41	2	5	41	23	29	66	0	280
17:15	5	37	18	15	26	3	5	28	11	27	81	3	259
17:30	1	34	20	15	37	3	10	36	19	37	65	2	279
17:45	1	36	15	13	38	11	7	29	14	17	46	2	229

Total Volume:	16	279	114	136	259	32	63	303	128	198	461	13	2002
Approach %	4%	68%	28%	32%	61%	7%	13%	61%	26%	29%	69%	2%	

Peak Hr Begin:	16:45												
PHV	11	146	60	68	130	8	29	158	69	124	259	9	1071
PHF	0.904			0.805			0.821			0.883			0.956

Turning Movement Count Report PM

Location ID: 28
North/South: Stine Rd
East/West: Hosking Ave

Date: 07/14/21
City: Bakersfield, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	12	46	36	30	52	7	8	40	5	2	60	11	309
16:15	17	49	29	25	59	5	5	50	3	4	57	13	316
16:30	17	56	35	26	37	4	3	43	2	3	69	11	306
16:45	25	62	31	27	59	30	3	51	6	11	75	13	393
17:00	20	76	32	43	48	26	41	88	6	8	67	19	474
17:15	22	67	34	30	67	20	9	62	4	6	77	14	412
17:30	26	66	37	30	91	7	8	63	2	9	65	10	414
17:45	25	48	36	33	73	6	2	48	6	4	55	15	351
Total Volume:	164	470	270	244	486	105	79	445	34	47	525	106	2975
Approach %	18%	52%	30%	29%	58%	13%	14%	80%	6%	7%	77%	16%	
Peak Hr Begin:	16:45												
PHV	93	271	134	130	265	83	61	264	18	34	284	56	1693
PHF	0.965			0.934			0.635			0.944			0.893

Turning Movement Count Report PM

Location ID: 29
North/South: Akers Rd
East/West: Hosking Ave

Date: 07/14/21
City: Bakersfield, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	1	20	12	8	79	12	13	19	3	6	83	9	265
16:15	7	14	10	22	82	21	9	29	7	10	73	6	290
16:30	7	24	9	8	56	9	9	18	7	10	85	5	247
16:45	15	22	6	18	98	13	11	24	6	10	90	3	316
17:00	11	24	12	17	97	19	11	25	7	9	112	26	370
17:15	11	22	14	23	107	30	12	16	4	10	90	21	360
17:30	9	26	11	18	105	27	13	25	8	18	81	12	353
17:45	11	25	15	16	108	22	18	22	4	17	79	6	343
Total Volume:	72	177	89	130	732	153	96	178	46	90	693	88	2544
Approach %	21%	52%	26%	13%	72%	15%	30%	56%	14%	10%	80%	10%	
Peak Hr Begin:	17:00												
PHV	42	97	52	74	417	98	54	88	23	54	362	65	1426
PHF	0.936			0.920			0.897			0.818			0.964

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report PM

Location ID: 30
North/South: Wible Rd
East/West: Hosking Ave

Date: 07/14/21
City: Bakersfield, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	15	58	23	34	88	18	17	44	8	4	91	11	411
16:15	10	33	24	28	115	24	23	46	7	3	74	6	393
16:30	6	36	37	22	72	23	20	40	4	8	83	11	362
16:45	12	59	22	27	119	24	24	43	12	7	80	7	436
17:00	7	66	42	24	122	39	39	58	10	11	105	7	530
17:15	16	47	35	22	141	40	30	42	12	10	102	8	505
17:30	26	47	40	22	124	38	31	51	7	7	97	3	493
17:45	10	60	31	21	125	23	32	37	10	6	93	3	451
Total Volume:	102	406	254	200	906	229	216	361	70	56	725	56	3581
Approach %	13%	53%	33%	15%	68%	17%	33%	56%	11%	7%	87%	7%	
Peak Hr Begin:	17:00												
PHV	59	220	148	89	512	140	132	188	39	34	397	21	1979
PHF	0.928			0.913			0.839			0.919			0.933

Turning Movement Count Report PM

Location ID: 31
North/South: Silver Dollar Way
East/West: Hosking Ave

Date: 07/13/21
City: Bakersfield, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	0	0	0	9	196	0	8	0	9	0	174	12	382
16:15	0	0	0	11	217	0	13	0	15	0	169	8	411
16:30	0	0	0	9	212	0	8	0	13	0	172	12	400
16:45	0	0	0	9	241	0	8	0	18	0	142	7	398
17:00	0	0	0	9	239	0	7	0	15	0	173	12	430
17:15	0	0	0	9	293	0	5	0	9	0	192	5	503
17:30	0	0	0	6	250	0	6	0	10	0	185	8	453
17:45	0	0	0	5	228	0	7	0	8	0	183	6	426
Total Volume:	48	0	0	67	1876	0	0	0	0	0	1390	22	3403
Approach %	100%	0%	0%	3%	97%	0%	0%	0%	0%	0%	98%	2%	
Peak Hr Begin:	17:00												
PHV	30	0	0	29	1010	0	0	0	0	0	733	10	1812
PHF	0.833			0.860			0.000			0.953			0.901

Turning Movement Count Report AM

Location ID: 32
North/South: SR 99 SB offramp
East/West: Hosking Ave

Date: 07/13/21
City: Bakersfield, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	36	0	33	0	52	0	0	0	0	0	173	0	294
7:15	61	0	49	0	72	0	0	0	0	0	216	0	398
7:30	42	0	31	0	57	0	0	0	0	0	308	0	438
7:45	47	0	32	0	63	0	0	0	0	0	239	0	381
8:00	41	0	24	0	48	0	0	0	0	0	144	0	257
8:15	39	0	15	0	60	0	0	0	0	0	186	0	300
8:30	28	0	14	0	57	0	0	0	0	0	134	0	233
8:45	39	0	23	0	58	0	0	0	0	0	140	0	260
Total Volume:	333	0	221	0	467	0	0	0	0	0	1540	0	2561
Approach %	60%	0%	40%	0%	100%	0%	0%	0%	0%	0%	100%	0%	
Peak Hr Begin:	7:00												
PHV	186	0	145	0	244	0	0	0	0	0	936	0	1511
PHF	0.752			0.847			0.000			0.760			0.862

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report PM

Location ID: 32
North/South: SR 99 SB offramp
East/West: Hosking Ave

Date: 07/13/21
City: Bakersfield, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	104	0	41	0	102	0	0	0	0	0	164	0	411
16:15	108	0	61	0	120	0	0	0	0	0	153	0	442
16:30	110	0	56	0	112	0	0	0	0	0	154	0	432
16:45	146	0	50	0	104	0	0	0	0	0	137	0	437
17:00	138	0	67	0	115	0	0	0	0	0	162	0	482
17:15	160	0	75	0	130	0	0	0	0	0	183	0	548
17:30	124	0	62	0	126	0	0	0	0	0	169	0	481
17:45	113	0	55	0	126	0	0	0	0	0	167	0	461
Total Volume:	1003	0	467	0	935	0	0	0	0	0	1289	0	3694
Approach %	68%	0%	32%	0%	100%	0%	0%	0%	0%	0%	100%	0%	
Peak Hr Begin:	17:00												
PHV	535	0	259	0	497	0	0	0	0	0	681	0	1972
PHF	0.845			0.956			0.000			0.930			0.900

Turning Movement Count Report AM

Location ID: 33
North/South: SR 99 NB offramp
East/West: Hosking Ave

Date: 07/13/21
City: Bakersfield, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	0	0	0	47	52	0	1	0	1	0	85	0	186
7:15	0	0	0	81	70	0	2	0	4	0	130	0	287
7:30	0	0	0	118	52	0	4	0	4	0	104	0	282
7:45	0	0	0	88	60	0	4	0	11	0	109	0	272
8:00	0	0	0	51	48	0	2	0	5	0	71	0	177
8:15	0	0	0	56	53	0	1	0	7	0	64	0	181
8:30	0	0	0	65	53	0	1	0	5	0	65	0	189
8:45	0	0	0	42	58	0	4	0	7	0	71	0	182
Total Volume:	0	0	0	548	446	0	19	0	44	0	699	0	1756
Approach %	0%	0%	0%	55%	45%	0%	30%	0%	70%	0%	100%	0%	
Peak Hr Begin:	7:00												
PHV	0	0	0	334	234	0	11	0	20	0	428	0	1027
PHF	0.000			0.835			0.517			0.823			0.895

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report PM

Location ID: 33
North/South: SR 99 NB offramp
East/West: Hosking Ave

Date: 07/13/21
City: Bakersfield, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	0	0	0	41	93	0	12	0	17	0	129	0	292
16:15	0	0	0	38	95	0	16	0	25	0	146	0	320
16:30	0	0	0	51	91	0	6	0	25	0	144	1	318
16:45	0	0	0	49	77	0	18	0	22	0	128	0	294
17:00	0	0	0	57	107	0	8	0	17	0	154	0	343
17:15	0	0	0	48	112	0	14	0	28	0	170	0	372
17:30	0	0	0	46	98	0	16	0	26	0	145	0	331
17:45	0	0	0	44	105	0	11	0	23	0	152	0	335
Total Volume:	0	0	0	374	778	0	101	0	183	0	1168	1	2605
Approach %	0%	0%	0%	32%	68%	0%	36%	0%	64%	0%	100%	0%	
Peak Hr Begin:	17:00												
PHV	0	0	0	195	422	0	49	0	94	0	621	0	1381
PHF	0.000			0.941			0.851			0.913			0.928

Turning Movement Count Report PM

Location ID: 34
North/South: S H St
East/West: Hosking Ave

Date: 07/13/21
City: Bakersfield, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	15	32	18	8	89	5	6	28	20	22	97	24	364
16:15	16	21	11	15	99	5	6	32	23	25	113	26	392
16:30	18	26	14	15	95	2	4	31	27	23	109	16	380
16:45	17	28	11	20	89	0	3	29	22	20	96	30	365
17:00	31	22	24	27	91	1	4	35	29	32	107	21	424
17:15	30	17	21	7	104	4	7	21	25	28	124	18	406
17:30	21	31	18	13	103	2	9	32	21	27	123	21	421
17:45	25	26	18	14	102	4	0	15	23	26	108	22	383
Total Volume:	173	203	135	119	772	23	39	223	190	203	877	178	3135
Approach %	34%	40%	26%	13%	84%	3%	9%	49%	42%	16%	70%	14%	
Peak Hr Begin:	17:00												
PHV	107	96	81	61	400	11	20	103	98	113	462	82	1634
PHF	0.922			0.983			0.813			0.961			0.963

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Turning Movement Count Report PM

Location ID: 35
North/South: Monitor St
East/West: Hosking Ave

Date: 07/13/21
City: Bakersfield, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	11	11	8	9	50	7	2	11	12	12	62	26	221
16:15	20	7	3	5	69	3	5	6	10	9	57	16	210
16:30	15	16	4	6	55	5	6	3	12	12	57	18	209
16:45	17	7	12	5	67	4	4	9	13	8	56	15	217
17:00	14	9	20	26	87	8	5	6	14	9	62	19	279
17:15	16	12	7	5	81	6	2	4	12	8	82	31	266
17:30	21	9	6	7	66	3	4	5	13	13	73	22	242
17:45	14	14	4	6	71	3	1	2	7	9	53	24	208
Total Volume:	128	85	64	69	546	39	29	46	93	80	502	171	1852
Approach %	46%	31%	23%	11%	83%	6%	17%	27%	55%	11%	67%	23%	
Peak Hr Begin:	16:45												
PHV	68	37	45	43	301	21	15	24	52	38	273	87	1004
PHF	0.872			0.754			0.875			0.822			0.900

Turning Movement Count Report PM

Location ID: 36
North/South: Union Ave
East/West: Hosking Ave

Date: 07/13/21
City: Bakersfield, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	31	56	8	8	16	5	7	68	7	17	19	25	267
16:15	29	43	5	4	26	4	5	72	10	10	14	27	249
16:30	27	65	11	7	28	2	6	68	11	5	16	25	271
16:45	50	76	10	6	23	0	4	67	8	5	14	21	284
17:00	38	59	8	8	18	3	6	55	11	6	20	48	280
17:15	41	54	11	4	37	7	11	61	7	8	28	31	300
17:30	34	72	13	9	16	4	5	63	8	7	16	25	272
17:45	38	56	5	0	9	4	4	49	4	5	16	23	213

Total Volume:	288	481	71	46	173	29	48	503	66	63	143	225	2136
Approach %	34%	57%	8%	19%	70%	12%	8%	82%	11%	15%	33%	52%	

Peak Hr Begin:	16:45												
PHV	163	261	42	27	94	14	26	246	34	26	78	125	1136
PHF	0.857			0.703			0.968			0.774			0.947

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Turning Movement Count Report PM

Location ID: 38
North/South: S H St
East/West: McKee Rd

Date: 07/13/21
City: Bakersfield, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	1	30	30	19	0	9	9	27	0	1	0	0	126
16:15	1	22	27	31	1	6	10	29	0	0	0	0	127
16:30	0	30	25	28	0	8	9	37	3	1	0	3	144
16:45	2	19	24	17	0	4	8	31	1	1	0	3	110
17:00	1	20	26	29	0	3	12	39	1	1	1	4	137
17:15	0	18	36	23	1	8	6	19	1	0	0	4	116
17:30	2	28	30	26	0	3	8	38	1	2	0	1	139
17:45	1	29	26	25	0	10	7	12	1	0	1	1	113
Total Volume:	8	196	224	198	2	51	69	232	8	6	2	16	1012
Approach %	2%	46%	52%	79%	1%	20%	22%	75%	3%	25%	8%	67%	
Peak Hr Begin:	16:15												
PHV	4	91	102	105	1	21	39	136	5	3	1	10	518
PHF	0.895			0.836			0.865			0.583			0.899

Turning Movement Count Report PM

Location ID: 40
North/South: S H St
East/West: Taft Hwy

Date: 07/13/21
City: Bakersfield, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	17	9	13	10	95	1	0	9	38	24	108	16	340
16:15	16	4	8	9	96	0	4	6	22	19	88	22	294
16:30	16	5	18	19	104	0	6	5	32	10	94	17	326
16:45	13	4	8	12	85	0	3	10	53	12	100	14	314
17:00	10	7	13	10	88	0	8	7	45	11	78	18	295
17:15	11	3	11	12	97	0	6	4	46	23	111	12	336
17:30	14	4	12	15	100	0	3	7	40	21	103	16	335
17:45	22	6	11	3	89	1	3	10	22	12	95	7	281
Total Volume:	119	42	94	90	754	2	33	58	298	132	777	122	2521
Approach %	47%	16%	37%	11%	89%	0%	8%	15%	77%	13%	75%	12%	
Peak Hr Begin:	16:45												
PHV	48	18	44	49	370	0	20	28	184	67	392	60	1280
PHF	0.917			0.911			0.879			0.889			0.952

CARLSBAD
CLOVIS
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

MEMORANDUM

DATE: April 07, 2022

TO: Linda J Hakimi, PE

FROM: Ambarish Mukherjee, P.E., AICP

SUBJECT: H Street/Hosking Avenue (554-03) Shopping Center Project Vehicle Miles Traveled Analysis Memorandum

LSA is under contract to prepare a Vehicle Miles Traveled (VMT) Analysis Memorandum (Memo) for the proposed H Street/Hosking Avenue (554-03) Shopping Center Project (project) to be located on S H Street, south of Hosking Avenue in the City of Bakersfield (City). Figure 1 (all figures attached) illustrates the regional and project location.

The project will consist of two phases of retail development. The first phase of the project (Phase I) will include 23,775 square feet (sf) of commercial retail, 7,750 sf of sit-down restaurant, 6,360 sf of drive-through restaurant, and a gas station with 16 fueling positions, a 5,500 sf convenience market, and a car wash. The second phase of the project (Phase II) will include total of 241,375 sf of commercial uses. Phase I of the project has already been approved. Therefore, the VMT analysis has been conducted for Phase II of the project only. However, Phase I of the project has been included as part of the model runs to account for the internal capture between Phases I and II of the project.

BACKGROUND

On December 28, 2018, the California Office of Administrative Law cleared the revised California Environmental Quality Act (CEQA) guidelines for use. Among the changes to the guidelines was removal of vehicle delay and level of service from consideration under CEQA. With the adopted guidelines, transportation impacts are to be evaluated based on a project's effect on VMT.

The City of Bakersfield has not yet adopted Senate Bill 743 (SB 743) guidelines and so, the VMT analysis has been based upon the methodology and significant threshold criteria identified in the California Governor's Office of Research and Planning (OPR) Technical Advisory (TA), dated December 2018.

The project includes only retail land uses. As per OPR TA recommendations, "net change in VMT" has been used as the evaluation metric for this analysis. Net increase in total roadway VMT for the identified geographic area - "region" between without and with project conditions constitutes a significant impact. Following is a detailed description of the analysis:

METHODOLOGY

As per the OPR TA, a region should be defined based on where majority of the trips start or end their trips within that region. Typically, it is the County boundary within which majority of those trips are contained. Therefore, for purposes of this analysis, Kern County (County) has been considered as the region. As per the OPR TA, net increase in total roadway VMT for the region between without and with project conditions has been considered to create a significant impact. Since Phase I of the project is yet to be constructed, the total regional VMT under without project conditions do not include VMT from Phase I. The total regional VMT under with project conditions includes full build-out (Phases I and II) of the project. Further, the total regional VMT without and with the project under baseline (2021) conditions were compared to determine if the project will create a significant VMT impact.

The Kern Council of Governments' (Kern COG's) San Joaquin Valley Model Improvement Program Phase 2 (VMIP II) Travel Demand Model (Kern COG TDM) was used to estimate both regional VMT under without and with project conditions. The model's socioeconomic database under baseline (2021) conditions was updated with the project land use under both phases. As such, total regional VMT under without and with project conditions were calculated from the model runs as described below:

Project Traffic Analysis Zone Update

The first step in the preparation of this analysis was to update the traffic analysis zones (TAZs) in the model that includes the project area. LSA converted the project land uses for both Phases I and II into model socioeconomic categories and the Kern COG TDM socioeconomic database for the baseline (2021) scenario was updated with the project socioeconomic data. The socioeconomic data for the project was included in two separate TAZs for Phases I and II. Since the project includes two separate phases, two new TAZs were created to incorporate the different phases of the project into the model. The new TAZs were utilized to calculate project specific VMT metrics.

VMT ANALYSIS

Total regional VMT without and with the project were obtained from the Kern COG TDM model runs. Table A shows the VMT analysis results. As shown in Table A, the total regional VMT under with project conditions is lower than the total regional VMT under without project conditions. Therefore, based on the OPR TA, the project will not have a significant VMT impact.

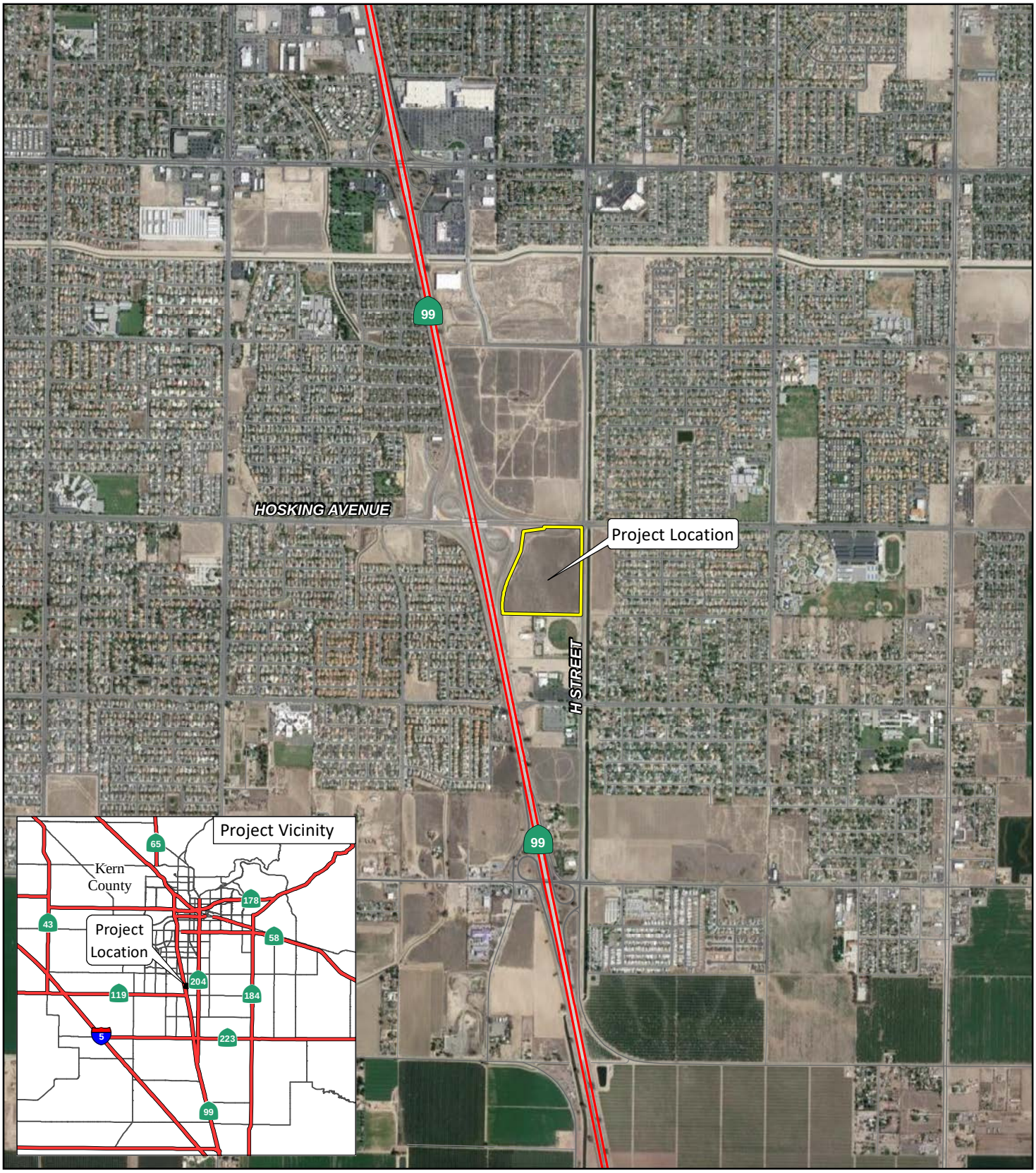
Table A: Baseline (2021) Total Regional VMT Comparison

Regional VMT without Project	Regional VMT with Project	Difference
46,341,915	46,245,634	(96,281)

Source: Kern COG VMIP II Travel Demand Model
VMT = Vehicle Miles Traveled

ATTACHMENTS

Figure 1: Regional and Project Location



LSA

FIGURE 1

N

0 1000 2000
FEET

H Street/Hosking Avenue (554-03) Shopping Center Project
Vehicle Miles Traveled Analysis Memorandum

Regional and Project Location

SOURCE: ESRI Streetmap, 2013; Google Earth, 2018.

R:\RUE2101\Traffic\GIS\Reports\Traffic\fig1_RegLoc_09-27-2021.mxd (9/27/2021)