Kimley»Horn

TECHNICAL MEMORANDUM

To:	Mr. Danny Cameron City of West University Place
From:	Vivek Deshpande, P.E. Kimley-Horn and Associates, Inc. Firm Number F-928
Date:	December 15, 2023
Subject:	Browning Street Access Evaluation Technical Memorandum

12/15/2023

SUMMARY

Kimley-Horn has prepared this memorandum for the City of West University Place to evaluate traffic operations at the intersection of Browning Street and Weslayan Street. This memorandum includes a description of existing conditions which includes field observations, review of turning movement counts, crash data, and evaluation of signal operations at the adjacent signal on Bissonnet Street.

Based on collected volume and crash data, observations, and capacity analysis results, no mitigation measures are recommended at this time.

EXISTING CONDITIONS

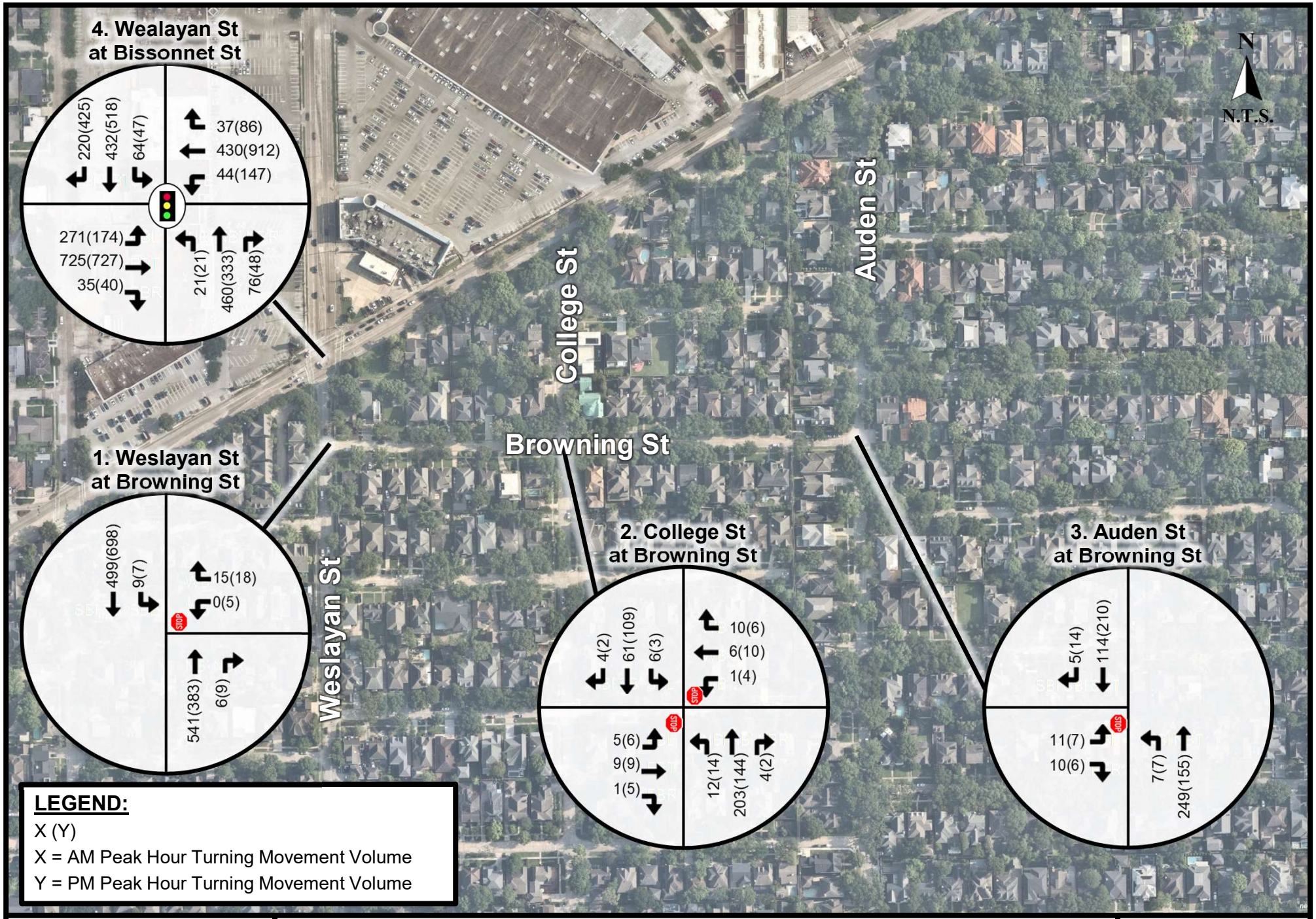
Browning Street is an east-west two-lane undivided roadway with a posted speed limit of 25 miles-per-hour (mph). The surrounding area is residential. Browning Street connects Weslayan Street to the west and Auden Street to the north, both of which have direct signalized access to Bissonnet Street. College Street, between Weslayan Street and Auden Street, provides access to Liberty Hill Park to the north and connects to Bissonnet Street via Northwestern Street.

Volume Data

Turning movement counts were collected on Tuesday May 16, 2023 from 6:30 AM to 9:30 AM and 3:00 PM to 7:00 PM in 15-minute intervals at the following locations:

- Weslayan Street at Bissonnet Street
- Weslayan Street at Browning Street
- College Street at Browning Street
- Auden Street at Browning Street

Peak hours of the network were determined to be 7:30-8:30 AM and 5:00-6:00 PM. AM and PM peak hour volumes are provided as **Exhibit 1**. Raw count data is provided as **Attachment A**.



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2023 EXISTING PEAK HOUR VOLUMES

EXHIBIT 1

Crash Data

Crash history was obtained from TxDOT's Crash Records Information System (C.R.I.S.) along Browning Street between Weslayan Street and Auden Street between January 1, 2020 and July 10, 2023. Raw crash data is provided as **Attachment B**.

Three (3) property damage only crashes were reported at the intersection of Browning Street and Weslayan Street during the study period. One head-on collision was reported in August 2021; reported contributing factors include "driver inattention" and "had been drinking". One fixed object collision was reported in October 2021; reported contributing factors include "under influence – alcohol". One sideswipe collision was reported in June 2023; contributing factors include "changed lane when unsafe", "driver inattention", and "followed too closely".

Observations

Video recordings of the AM and PM peak hours (7:30 AM and 5:00 PM respectively) were observed to better understand existing traffic operations as residents reported difficulty turning left from southbound Weslayan Street on to Browning Street.

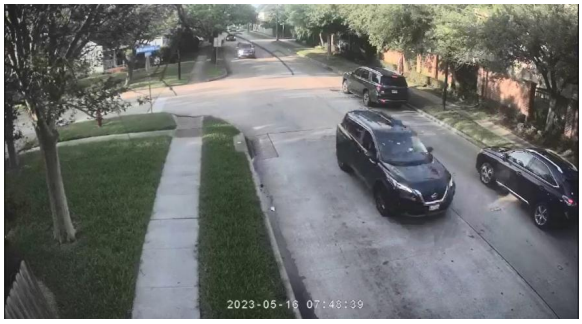
While the intersection of Browning Street was sometimes blocked by northbound vehicles queuing for the signal at Bissonnet Street, queuing vehicles generally left a gap for southbound vehicles to turn onto Browning Street or westbound vehicles to turn onto Weslayan Street (**Figure 1**).

When the signal at Bissonnet Street is green, vehicles must wait for gaps in the northbound traffic stream to make a southbound left movement onto Browning Street, or westbound egress from Browning Street onto Weslayan Street (**Figure 2**).

Field observations during peak hours confirmed video observations.

Figure 1 – Northbound Queuing Vehicles Leave Gap for Browning Street Access

Figure 2 – Southbound Vehicle Waiting for Gap



TRAFFIC ANALYSIS

Traffic analysis at study area intersections was performed to identify traffic congestion issues along Weslayan Street at Browning Street and Bissonnet Street. Analysis consists of AM and PM peak hour Level of Service (LOS) analyses. LOS, which is a measure of the degree of congestion, ranges from LOS A (free flowing) to LOS F (a congested, forced flow condition). LOS thresholds for both unsignalized and signalized intersections are presented in **Table 1**.

Table 1 – Level of Service Thresholds

Level of Service	Average Total Delay (Sec/Veh)		Description
	Signalized	Unsignalized	
A	≤ 10	≤ 10	No delays at intersections with continuous flow traffic. Uncongested operations; high frequency of long gaps available for all left and right-turning traffic; no observable queues.
B	> 10 and ≤ 20	> 10 and ≤ 15	
C	> 20 and ≤ 35	> 15 and ≤ 25	Moderate delays at intersections with satisfactory to good traffic flow. Light congestion; infrequent backups on critical approaches.
D	> 35 and ≤ 55	> 25 and ≤ 35	Increased probability of delays along every approach. Significant congestion on critical approaches, but intersection functional. No long-standing lines formed.
E	> 55 and ≤ 80	> 35 and ≤ 50	Heavy traffic flow condition. Heavy delays probable. No available gaps for cross-street traffic or main street turning traffic. Limit of stable flow.
F	> 80	> 50	Unstable traffic flow. Heavy congestion. Traffic moves in forced flow condition. Average delays greater than one minute highly probable. Total breakdown.

For both unsignalized and signalized intersections, if the volume-to-capacity ratio is greater than one, then the intersection/approach operates at LOS F. LOS D or better is generally deemed as acceptable operations for an urban/suburban area.

Traffic analysis of the study area was conducted using *Synchro 11*™ software. Analysis output is provided as **Attachment C**. A summary of reported delay and LOS is provided as **Table 2**. The signalized intersection of Weslayan Street at Bissonnet Street reports an acceptable intersection LOS of D during both the AM and PM peak hours. Stop-controlled approaches along Browning Street report LOS B during both the AM and PM peak hours.

Reported 95th percentile queue length for the northbound approach of Weslayan Street at Bissonnet Street is 282 feet during the AM peak hour and 241 feet during the PM peak hour. As the intersection of Browning Street is approximately 150 feet south of the intersection of Bissonnet Street at Weslayan Street, capacity analysis supports that northbound vehicle queues extend south of the intersection of Browning Street during AM and PM peak-periods. There is an existing ground mounted sign for 'DO NOT BLOCK INTERSECTION' on the southeast corner of Weslayan Street and Browning Street that alerts the drivers to keep an open space for vehicles turning to/from the Browning Street.

Table 2 – LOS Summary

Study Intersections		AM Peak Hour		PM Peak Hour	
		Delay (Sec/Veh)	LOS	Delay (Sec/Veh)	LOS
SIGNALIZED INTERSECTIONS					
Weslayan St at Bissonnet St	EB	24.9	C	44.6	D
	WB	55.8	E	35.1	D
	NB	46.3	D	50.6	D
	SB	37.8	D	62.3	E
	Int.	**38.0**	**D**	**47.2**	**D**
UNSIGNALIZED INTERSECTIONS					
Weslayan St at Browning St	WB	12.1	B	13.6	B
College St at Browning St	EB	11.9	B	10.9	B
	WB	10.8	B	10.9	B
Auden St at Browning St	EB	10.3	B	10.6	B

Per existing signal timing plans, the traffic signal at Bissonnet Street at Weslayan Street runs a 120-second cycle length during the AM peak (6:00 – 9:00 am) and PM peak (3:00 – 7:30 pm) periods. As stated in the previous section, when the signal for northbound Weslayan Street is green, traffic on Browning Street will likely need to wait to turn on to Weslayan Street. Based on the field observations and existing signal timing, traffic on Browning Street may have to wait for approximately one cycle length or up to 120 seconds before they find a gap to turn on to Weslayan Street. When the signal for northbound Weslayan Street is red, traffic on Weslayan Street will likely allow vehicles from Browning Street to turn on to Weslayan Street.

CONCLUSION

Existing traffic volumes, field observations, and capacity analysis results showed that traffic in the northbound direction may back-up on Weslayan Street extending from the traffic signal at Bissonnet Street. There is an existing sign on Weslayan Street that alerts drivers to not block the intersection. However, when the signal for Weslayan Street is green, northbound traffic is likely to maximize the available green time and not allow traffic from side street to turn on to Weslayan Street. In these situations, traffic may have to wait for the next signal cycle. When the signal for Weslayan Street turns red, northbound traffic is likely to keep the intersection open especially when a vehicle is waiting on the side street. No additional improvement is recommended at this time.

Attachments:

A. Volume Data
B. Crash Data
C. Synchro Output

A. VOLUME DATA

National Data & Surveying Services Intersection Turning Movement Count

Location: Weslayan St & Browning St
City: Houston
Control: 1-Way Stop(WB)

Project ID: 23-450085-005
Date: 5/16/2023

Data - Totals

NS/EW Streets:	Weslayan St				Weslayan St				Browning St				Browning St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
6:30 AM	0	41	1	0	1	52	0	0	0	0	0	0	0	0	0	0	95
6:45 AM	0	63	0	0	2	49	0	0	0	0	0	0	0	0	0	0	114
7:00 AM	0	99	1	0	0	87	0	0	0	0	0	0	0	0	0	0	187
7:15 AM	0	122	1	0	0	89	0	0	0	0	0	0	0	0	4	0	216
7:30 AM	0	151	2	0	1	120	0	0	0	0	0	0	0	0	6	0	280
7:45 AM	0	129	2	0	4	110	0	0	0	0	0	0	0	0	7	0	252
8:00 AM	0	137	1	0	2	134	0	0	0	0	0	0	0	0	2	0	276
8:15 AM	0	124	1	0	2	135	0	0	0	0	0	0	0	0	0	0	262
8:30 AM	0	138	1	0	1	133	0	0	0	0	0	0	1	0	1	0	275
8:45 AM	0	134	3	0	1	137	0	0	0	0	0	0	0	0	2	0	277
9:00 AM	0	121	2	0	1	125	0	0	0	0	0	0	0	0	0	0	249
9:15 AM	0	49	1	0	1	49	0	0	0	0	0	0	0	0	0	0	100
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1308	16	0	16	1220	0	0	0	0	0	0	1	0	22	0	2583
APPROACH %'s :	0.00%	98.79%	1.21%	0.00%	1.29%	98.71%	0.00%	0.00%					4.35%	0.00%	95.65%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	533	6	0	6	539	0	0	0	0	0	0	1	0	5	0	1090
PEAK HR FACTOR :	0.000	0.966	0.500	0.000	0.750	0.984	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.625	0.000	0.984
		0.969				0.987								0.750			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	91	0	0	2	143	0	0	0	0	0	0	2	0	2	0	240
3:15 PM	0	98	0	0	1	176	0	0	0	0	0	0	0	0	2	0	277
3:30 PM	0	95	0	0	0	149	0	0	0	0	0	0	0	0	4	0	248
3:45 PM	0	91	1	0	1	167	0	0	0	0	0	0	0	0	0	0	260
4:00 PM	0	97	1	0	4	173	0	0	0	0	0	0	0	0	9	0	284
4:15 PM	0	95	1	0	2	175	0	0	0	0	0	0	0	0	2	0	275
4:30 PM	0	88	2	0	1	188	0	0	0	0	0	0	0	0	2	0	281
4:45 PM	0	101	2	0	2	176	0	0	0	0	0	0	0	0	1	0	282
5:00 PM	0	105	2	0	3	186	0	0	0	0	0	0	0	0	2	0	298
5:15 PM	0	96	1	0	1	177	0	0	0	0	0	0	0	0	4	0	279
5:30 PM	0	96	2	0	2	152	0	0	0	0	0	0	3	0	10	0	265
5:45 PM	0	86	4	0	1	183	0	0	0	0	0	0	2	0	2	0	278
6:00 PM	0	104	1	0	0	167	0	0	0	0	0	0	0	0	2	0	274
6:15 PM	0	98	3	0	1	179	0	0	0	0	0	0	0	0	4	0	285
6:30 PM	0	72	2	0	1	136	0	0	0	0	0	0	0	0	0	0	211
6:45 PM	0	92	0	0	1	137	0	0	0	0	0	0	0	0	1	0	231
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1505	22	0	23	2664	0	0	0	0	0	0	7	0	47	0	4268
APPROACH %'s :	0.00%	98.56%	1.44%	0.00%	0.86%	99.14%	0.00%	0.00%					12.96%	0.00%	87.04%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	390	7	0	7	727	0	0	0	0	0	0	0	0	9	0	1140
PEAK HR FACTOR :	0.000	0.929	0.875	0.000	0.583	0.967	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.563	0.000	0.956
		0.928				0.971								0.563			

Prepared by National Data & Surveying Services

Weslayan St & Browning St

Peak Hour Turning Movement Count

ID: 23-450085-005
City: Houston

Day: Tuesday
Date: 5/16/2023

PEAK HOURS

AM	08:00 AM - 09:00 AM
NOON	NONE
PM	04:30 PM - 05:30 PM

COUNT PERIODS

AM	6:30 AM - 09:30 AM
NOON	NONE
PM	3:00 PM - 07:00 PM

SOUTHBOUND (Weslayan St)

AM	0	539	6	0	538	AM
NOON	0	0	0	0	0	NOON
PM	0	727	7	0	399	PM

EASTBOUND (Browning St)

AM	NOON	PM		
0	0	0	⇦	
0	0	0	↶	0
0	0	0	↱	0
0	0	0	→	0
0	0	0	↴	0
AM	NOON	PM		

WESTBOUND (Browning St)

PM	NOON	AM		
9	0	5	↰	0
0	0	0	←	1
0	0	1	↩	0
0	0	0	↩	0
14	0	12	⇨	
PM	NOON	AM		

NORTHBOUND (Weslayan St)

PM	727	0	0	390	7	PM
NOON	0	0	0	0	0	NOON
AM	540	0	0	533	6	AM

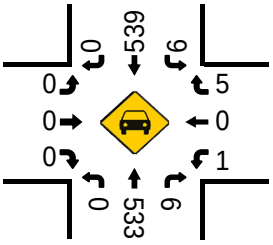
↶	↰	↑	↱	
0	0	1	0	

CONTROL

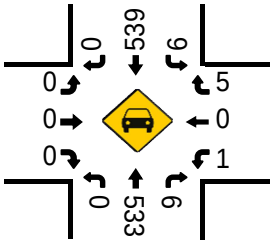
1-Way Stop(WB)

TEV	1090	0	1140
	AM	NOON	PM
PHF	0.98		0.96

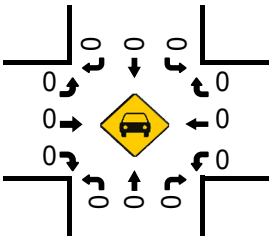
Totals (AM)



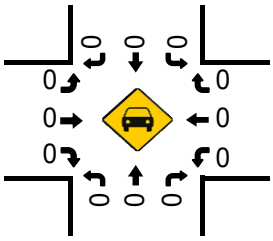
Totals (AM)



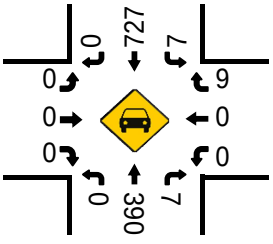
Totals (NOON)



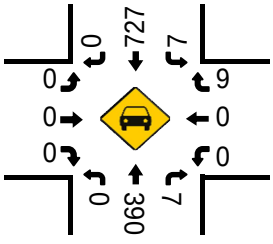
Totals (NOON)



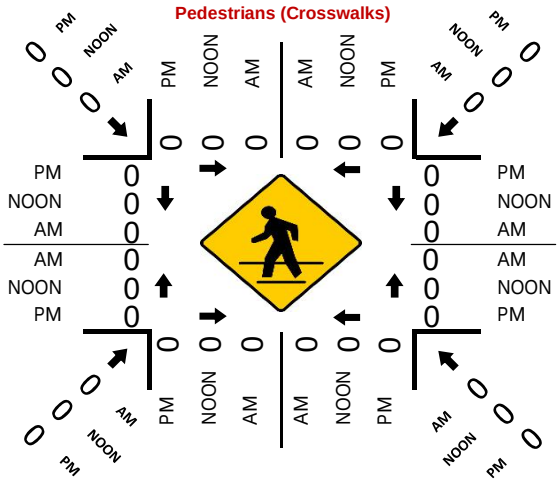
Totals (PM)



Totals (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services Intersection Turning Movement Count

Location: College St & Browning St
City: Houston
Control: 2-Way Stop(EB/WB)

Project ID: 23-450085-006
Date: 5/16/2023

Data - Totals

NS/EW Streets:	College St				College St				Browning St				Browning St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
6:30 AM	0	6	1	0	0	2	1	0	0	1	1	0	0	0	0	0	12
6:45 AM	0	13	0	0	1	3	1	0	0	1	1	0	0	0	0	0	20
7:00 AM	0	12	0	0	1	6	1	0	3	1	1	0	0	0	2	0	27
7:15 AM	0	29	2	0	0	19	0	0	1	1	2	0	0	3	2	0	59
7:30 AM	4	69	2	0	2	20	0	0	1	1	1	0	0	5	2	0	107
7:45 AM	5	61	0	0	0	15	0	0	4	3	0	0	0	1	4	0	93
8:00 AM	2	46	2	0	2	15	2	0	0	2	0	0	1	0	1	0	73
8:15 AM	1	27	0	0	2	11	2	0	0	3	0	0	0	0	3	0	49
8:30 AM	0	19	1	0	0	15	0	0	1	1	1	0	0	2	0	0	40
8:45 AM	1	23	1	0	1	12	0	0	3	2	1	0	0	1	0	0	45
9:00 AM	0	25	0	0	2	12	0	0	1	0	1	0	0	0	0	0	41
9:15 AM	0	29	0	0	2	9	0	0	3	2	1	0	1	1	0	0	48
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	13	359	9	0	13	139	7	0	17	18	10	0	2	13	14	0	614
APPROACH %'s :	3.41%	94.23%	2.36%	0.00%	8.18%	87.42%	4.40%	0.00%	37.78%	40.00%	22.22%	0.00%	6.90%	44.83%	48.28%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	11	205	6	0	4	69	2	0	6	7	3	0	1	9	9	0	332
PEAK HR FACTOR :	0.550	0.743	0.750	0.000	0.500	0.863	0.250	0.000	0.375	0.583	0.375	0.000	0.250	0.450	0.563	0.000	0.776
	0.740				0.852				0.571				0.679				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	1	51	4	0	1	17	1	0	2	2	0	0	0	5	1	0	85
3:15 PM	2	53	1	0	1	17	1	0	1	1	0	0	2	1	0	0	80
3:30 PM	1	23	1	0	2	17	0	0	0	0	0	0	0	3	1	0	48
3:45 PM	0	25	0	0	0	28	0	0	2	2	1	0	3	0	1	0	62
4:00 PM	4	29	0	0	0	33	0	0	1	2	2	0	2	4	1	0	78
4:15 PM	1	35	1	0	1	13	0	0	1	2	0	0	0	1	0	0	55
4:30 PM	2	29	1	0	4	31	1	0	1	1	1	0	0	0	0	0	71
4:45 PM	2	29	0	0	1	28	0	0	2	1	1	0	1	1	0	0	66
5:00 PM	2	31	1	0	0	29	1	0	0	3	3	0	1	0	5	0	76
5:15 PM	5	51	0	0	0	32	0	0	0	0	2	0	1	3	1	0	95
5:30 PM	5	43	0	0	1	28	1	0	3	3	0	0	1	5	0	0	90
5:45 PM	2	19	1	0	2	20	0	0	3	3	0	0	1	2	0	0	53
6:00 PM	5	20	0	0	0	25	1	0	4	0	0	0	1	0	0	0	56
6:15 PM	0	21	0	0	0	20	0	0	1	0	1	0	1	0	2	0	46
6:30 PM	0	13	0	0	1	11	3	0	1	1	0	0	0	0	0	0	30
6:45 PM	0	5	0	0	1	16	0	0	1	1	0	0	0	3	0	0	27
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	32	477	10	0	15	365	9	0	23	22	11	0	14	28	12	0	1018
APPROACH %'s :	6.17%	91.91%	1.93%	0.00%	3.86%	93.83%	2.31%	0.00%	41.07%	39.29%	19.64%	0.00%	25.93%	51.85%	22.22%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	14	154	1	0	2	117	2	0	5	7	6	0	4	9	6	0	327
PEAK HR FACTOR :	0.700	0.755	0.250	0.000	0.500	0.914	0.500	0.000	0.417	0.583	0.500	0.000	1.000	0.450	0.300	0.000	0.861
	0.754				0.945				0.750				0.792				

Prepared by National Data & Surveying Services

College St & Browning St

Peak Hour Turning Movement Count

ID: 23-450085-006
City: Houston

Day: Tuesday
Date: 5/16/2023

PEAK HOURS

AM: 07:15 AM - 08:15 AM
NOON: NONE
PM: 04:45 PM - 05:45 PM

COUNT PERIODS

AM: 6:30 AM - 09:30 AM
NOON: NONE
PM: 3:00 PM - 07:00 PM

SOUTHBOUND (College St)

AM	2	69	4	0	220	AM
NOON	0	0	0	0	0	NOON
PM	2	117	2	0	165	PM

EASTBOUND (Browning St)

AM	NOON	PM	
22	0	25	
0	0	0	0
6	0	5	0
7	0	7	1
3	0	6	0

WESTBOUND (Browning St)

PM	NOON	AM	
6	0	9	0
9	0	9	1
4	0	1	0
0	0	0	0
10	0	17	

NORTHBOUND (College St)

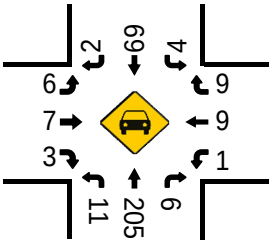
PM	127	0	14	154	1	PM
NOON	0	0	0	0	0	NOON
AM	73	0	11	205	6	AM

CONTROL

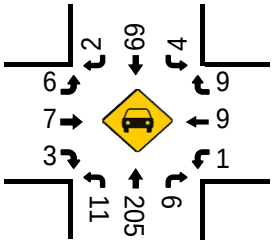
2-Way Stop(EB/WB)

TEV	332 AM	0 NOON	327 PM
PHF	0.78		0.86

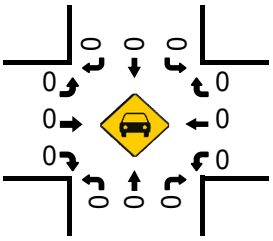
Totals (AM)



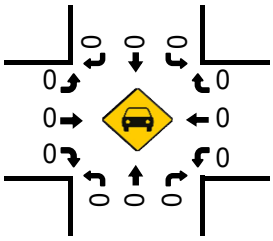
Totals (AM)



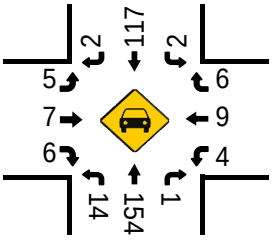
Totals (NOON)



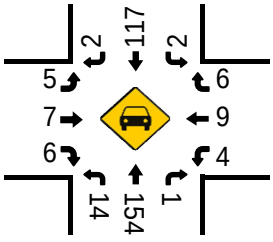
Totals (NOON)



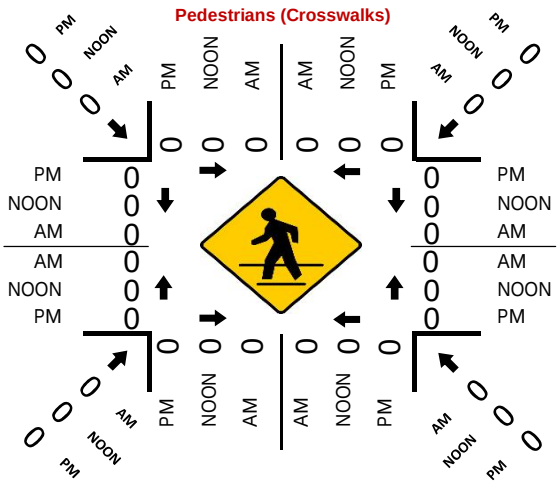
Totals (PM)



Totals (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services Intersection Turning Movement Count

Location: Auden St & Browning St
City: Houston
Control: 1-Way Stop(EB)

Project ID: 23-450085-007
Date: 5/16/2023

Data - Totals

NS/EW Streets:	Auden St				Auden St				Browning St				Browning St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
6:30 AM	0	7	0	0	0	6	0	0	1	0	2	0	0	0	0	0	16
6:45 AM	0	7	0	0	0	9	0	0	1	0	0	0	0	0	0	0	17
7:00 AM	0	22	0	0	0	27	1	0	0	0	0	0	0	0	0	0	50
7:15 AM	1	41	0	0	0	37	1	0	1	0	4	0	0	0	0	0	85
7:30 AM	5	73	0	0	0	29	2	0	2	0	3	0	0	0	0	0	114
7:45 AM	2	67	0	0	0	29	1	0	0	0	3	0	0	0	0	0	102
8:00 AM	0	67	0	0	0	33	2	0	6	0	1	0	0	0	0	0	109
8:15 AM	0	42	0	0	0	23	0	0	3	0	3	0	0	0	0	0	71
8:30 AM	2	43	0	0	0	33	1	0	1	0	0	0	0	0	0	0	80
8:45 AM	0	33	0	0	0	27	0	0	2	0	1	0	0	0	0	0	63
9:00 AM	0	19	0	0	0	15	1	0	0	0	1	0	0	0	0	0	36
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	10	421	0	0	0	268	9	0	17	0	18	0	0	0	0	0	743
APPROACH %'s :	2.32%	97.68%	0.00%	0.00%	0.00%	96.75%	3.25%	0.00%	48.57%	0.00%	51.43%	0.00%					
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	8	248	0	0	0	128	6	0	9	0	11	0	0	0	0	0	410
PEAK HR FACTOR :	0.400	0.849	0.000	0.000	0.000	0.865	0.750	0.000	0.375	0.000	0.688	0.000	0.000	0.000	0.000	0.000	0.899
		0.821				0.882				0.714							

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	3	44	0	0	0	35	2	0	6	0	2	0	0	0	0	0	92
3:15 PM	2	41	0	0	0	24	2	0	2	0	1	0	0	0	0	0	72
3:30 PM	2	41	0	0	0	41	4	0	1	0	0	0	0	0	0	0	89
3:45 PM	2	34	0	0	0	40	2	0	1	0	2	0	0	0	0	0	81
4:00 PM	6	39	0	0	0	69	2	0	1	0	1	0	0	0	0	0	118
4:15 PM	1	37	0	0	0	44	1	0	3	0	1	0	0	0	0	0	87
4:30 PM	0	37	0	0	0	43	0	0	5	0	1	0	0	0	0	0	86
4:45 PM	1	35	0	0	0	52	2	0	1	0	2	0	0	0	0	0	93
5:00 PM	2	35	0	0	0	55	4	0	2	0	1	0	0	0	0	0	99
5:15 PM	1	45	0	0	0	59	6	0	0	0	2	0	0	0	0	0	113
5:30 PM	3	38	0	0	0	42	3	0	3	0	0	0	0	0	0	0	89
5:45 PM	1	37	0	0	0	54	1	0	2	0	3	0	0	0	0	0	98
6:00 PM	1	29	0	0	0	40	0	0	0	0	0	0	0	0	0	0	70
6:15 PM	0	27	0	0	0	26	2	0	0	0	1	0	0	0	0	0	56
6:30 PM	0	30	0	0	0	30	1	0	1	0	1	0	0	0	0	0	63
6:45 PM	0	21	0	0	0	29	2	0	0	0	1	0	0	0	0	0	53
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	25	570	0	0	0	683	34	0	28	0	19	0	0	0	0	0	1359
APPROACH %'s :	4.20%	95.80%	0.00%	0.00%	0.00%	95.26%	4.74%	0.00%	59.57%	0.00%	40.43%	0.00%					
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	7	155	0	0	0	210	14	0	7	0	6	0	0	0	0	0	399
PEAK HR FACTOR :	0.583	0.861	0.000	0.000	0.000	0.890	0.583	0.000	0.583	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.883
		0.880				0.862				0.650							

Prepared by National Data & Surveying Services

Auden St & Browning St

Peak Hour Turning Movement Count

ID: 23-450085-007
City: Houston

Day: Tuesday
Date: 5/16/2023

PEAK HOURS

AM: 07:15 AM - 08:15 AM
NOON: NONE
PM: 05:00 PM - 06:00 PM

COUNT PERIODS

AM: 6:30 AM - 09:30 AM
NOON: NONE
PM: 3:00 PM - 07:00 PM

Auden St

SOUTHBOUND

AM	6	128	0	0	257	AM
NOON	0	0	0	0	0	NOON
PM	14	210	0	0	162	PM

0 1 0 0

EASTBOUND

Browning St

AM	NOON	PM	
14	0	21	
0	0	0	0
9	0	7	0
0	0	0	1
11	0	6	0
AM	NOON	PM	

WESTBOUND

Browning St

PM	NOON	AM	
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	
PM	NOON	AM	

CONTROL

1-Way Stop(EB)

TEV	410 AM	0 NOON	399 PM
PHF	0.90		0.88

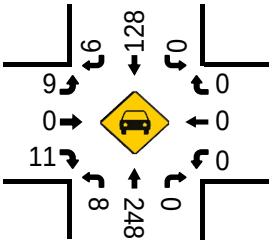
0 0 1 0

PM	216	0	7	155	0	PM
NOON	0	0	0	0	0	NOON
AM	139	0	8	248	0	AM

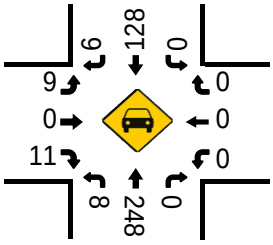
NORTHBOUND

Auden St

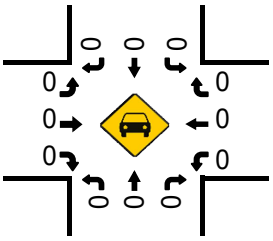
Totals (AM)



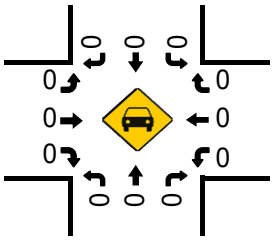
Totals (AM)



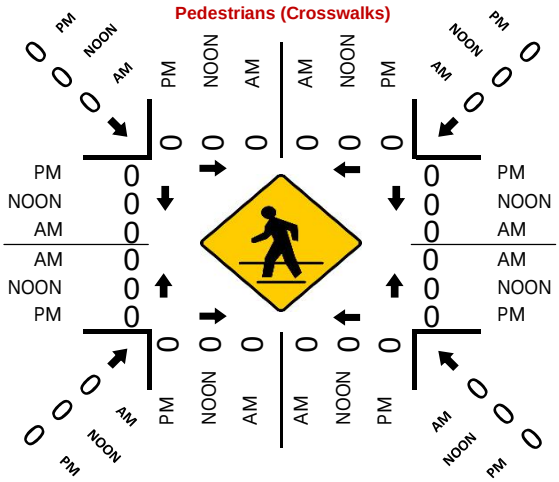
Totals (NOON)



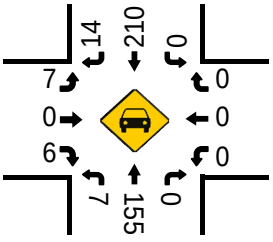
Totals (NOON)



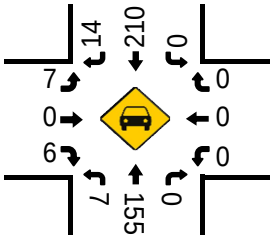
Pedestrians (Crosswalks)



Totals (PM)



Totals (PM)



Kimley»Horn

B. CRASH DATA

Crash ID	Intersection	Crash Date	Crash Severity	First Harmful Event	Manner of Collision	Contributing Factors.1	Contributing Factors.2	Contributing Factors.3	Contributing Factors.4	Contributing Factors.5	Intersection Related	Object Struck	Other Factor	Surface Condition	Weather Condition	Light Condition
17593742	Weslayan at Riley	2/28/2020	B - SUSPECTED MINOR INJURY	MOTOR VEHICLE IN TRANSPORT	ANGLE - BOTH GOING STRAIGHT	DISREGARD STOP SIGN OR LIGHT	DRIVER INATTENTION				INTERSECTION	NOT APPLICABLE	ATTENTION DIVERTED FROM DRIVING	1 - DRY	1 - CLEAR	1 - DAYLIGHT
17820844	Weslayan at Tennyson	8/13/2020	N - NOT INJURED	MOTOR VEHICLE IN TRANSPORT	OPPOSITE DIRECTION - ONE STRAIGHT-ONE LEFT TURN	DRIVER INATTENTION	FAILED TO YIELD RIGHT OF WAY - TURNING LEFT				INTERSECTION	NOT APPLICABLE	ATTENTION DIVERTED FROM DRIVING	1 - DRY	1 - CLEAR	1 - DAYLIGHT
17830209	Weslayan at Tennyson	8/19/2020	N - NOT INJURED	MOTOR VEHICLE IN TRANSPORT	SAME DIRECTION - BOTH GOING STRAIGHT-REAR END	DRIVER INATTENTION					INTERSECTION	NOT APPLICABLE	ATTENTION DIVERTED FROM DRIVING	1 - DRY	1 - CLEAR	1 - DAYLIGHT
17839260	Weslayan at Riley	8/21/2020	N - NOT INJURED	MOTOR VEHICLE IN TRANSPORT	SAME DIRECTION - ONE STRAIGHT-ONE STOPPED	CHANGED LANE WHEN UNSAFE	DRIVER INATTENTION	OTHER (EXPLAIN IN NARRATIVE)			INTERSECTION RELATED	NOT APPLICABLE	ATTENTION DIVERTED FROM DRIVING	1 - DRY	1 - CLEAR	1 - DAYLIGHT
17919142	Weslayan at Riley	10/11/2020	N - NOT INJURED	FIXED OBJECT	ONE MOTOR VEHICLE - GOING STRAIGHT	UNDER INFLUENCE - ALCOHOL					NON INTERSECTION	HIT HIGHWAY SIGN	NOT APPLICABLE	1 - DRY	1 - CLEAR	3 - DARK, LIGHTED
17954469	Weslayan at Browning	11/1/2020	K - FATAL INJURY	MOTOR VEHICLE IN TRANSPORT	OPPOSITE DIRECTION - BOTH GOING STRAIGHT	DRIVER INATTENTION	FAILED TO CONTROL SPEED	FAILED TO PASS TO RIGHT SAFELY			NON INTERSECTION	NOT APPLICABLE	VEHICLE PASSING OR ATTEMPTING TO PASS ON LEFT	1 - DRY	1 - CLEAR	1 - DAYLIGHT
17943894	Weslayan at Riley	11/3/2020	N - NOT INJURED	MOTOR VEHICLE IN TRANSPORT	ANGLE - BOTH GOING STRAIGHT	DRIVER INATTENTION	FAILED TO YIELD RIGHT OF WAY - STOP SIGN				INTERSECTION	NOT APPLICABLE	ATTENTION DIVERTED FROM DRIVING	1 - DRY	1 - CLEAR	1 - DAYLIGHT
18020864	Weslayan at Browning	12/8/2020	99 - UNKNOWN	PARKED CAR	ONE MOTOR VEHICLE - GOING STRAIGHT	DRIVER INATTENTION					NON INTERSECTION	NOT APPLICABLE	ATTENTION DIVERTED FROM DRIVING	2 - WET	3 - RAIN	1 - DAYLIGHT
18790348	Weslayan at Amherst	3/10/2022	C - POSSIBLE INJURY	MOTOR VEHICLE IN TRANSPORT	SAME DIRECTION - ONE STRAIGHT-ONE STOPPED	DRIVER INATTENTION	FAILED TO CONTROL SPEED	FOLLOWED TOO CLOSELY	CELL/MOBILE DEVICE USE - TALKING		NON INTERSECTION	NOT APPLICABLE	SLOWING/STOPPING-FOR TRAFFIC	1 - DRY	1 - CLEAR	2 - DARK, NOT LIGHTED
19567792	Weslayan at Amherst	5/26/2023	N - NOT INJURED	MOTOR VEHICLE IN TRANSPORT	SAME DIRECTION - ONE STRAIGHT-ONE STOPPED	FAILED TO CONTROL SPEED	FOLLOWED TOO CLOSELY				INTERSECTION	NOT APPLICABLE	SLOWING/STOPPING-FOR TRAFFIC	1 - DRY	1 - CLEAR	1 - DAYLIGHT
18142919	Weslayan at Tennyson	3/2/2021	N - NOT INJURED	MOTOR VEHICLE IN TRANSPORT	SAME DIRECTION - ONE STRAIGHT-ONE STOPPED	FAILED TO CONTROL SPEED					INTERSECTION RELATED	NOT APPLICABLE	SLOWING/STOPPING - FOR OFFICER, FLAGMAN, OR TRAFFIC CONTROL	1 - DRY	1 - CLEAR	1 - DAYLIGHT
18143705	Weslayan at Tennyson	3/2/2021	N - NOT INJURED	MOTOR VEHICLE IN TRANSPORT	OPPOSITE DIRECTION - ONE STRAIGHT-ONE LEFT TURN	DRIVER INATTENTION					INTERSECTION	NOT APPLICABLE	NOT APPLICABLE	1 - DRY	1 - CLEAR	3 - DARK, LIGHTED
18162913	Weslayan at Riley	3/22/2021	N - NOT INJURED	MOTOR VEHICLE IN TRANSPORT	ANGLE - ONE STRAIGHT-ONE LEFT TURN	DRIVER INATTENTION	FAILED TO YIELD RIGHT OF WAY - TURNING LEFT				INTERSECTION	NOT APPLICABLE	ATTENTION DIVERTED FROM DRIVING	1 - DRY	2 - CLOUDY	1 - DAYLIGHT
18200198	Weslayan at Riley	4/8/2021	N - NOT INJURED	FIXED OBJECT	ONE MOTOR VEHICLE - GOING STRAIGHT	UNDER INFLUENCE - ALCOHOL					NON INTERSECTION	HIT TREE, SHRUB, LANDSCAPING	SWERVED OR VEERED-REASON NOT SPECIFIED	1 - DRY	1 - CLEAR	4 - DARK, UNKNOWN LIGHTING
18204090	Weslayan at Tennyson	4/14/2021	N - NOT INJURED	FIXED OBJECT	ONE MOTOR VEHICLE - GOING STRAIGHT	FAILED TO CONTROL SPEED	IMPAIRED VISIBILITY (EXPLAIN IN NARRATIVE)				INTERSECTION RELATED	HIT CURB	VISION OBSTRUCTED BY OTHER VISUAL OBSTRUCTIONS	2 - WET	2 - CLOUDY	3 - DARK, LIGHTED
18220365	Weslayan at Riley	4/23/2021	N - NOT INJURED	MOTOR VEHICLE IN TRANSPORT	OPPOSITE DIRECTION - ONE RIGHT TURN-ONE LEFT TURN	FAILED TO YIELD RIGHT OF WAY - TURN ON RED					INTERSECTION RELATED	NOT APPLICABLE	NOT APPLICABLE	2 - WET	3 - RAIN	3 - DARK, LIGHTED
18281899	Weslayan at Case	5/28/2021	N - NOT INJURED	MOTOR VEHICLE IN TRANSPORT	ANGLE - BOTH GOING STRAIGHT	DRIVER INATTENTION	FAILED TO YIELD RIGHT OF WAY - STOP SIGN				INTERSECTION	NOT APPLICABLE	ATTENTION DIVERTED FROM DRIVING	1 - DRY	1 - CLEAR	1 - DAYLIGHT
18444450	Weslayan at Browning	8/28/2021	N - NOT INJURED	MOTOR VEHICLE IN TRANSPORT	OPPOSITE DIRECTION - BOTH GOING STRAIGHT	DRIVER INATTENTION	HAD BEEN DRINKING				INTERSECTION	NOT APPLICABLE	ATTENTION DIVERTED FROM DRIVING	1 - DRY	2 - CLOUDY	1 - DAYLIGHT
18449454	Weslayan at Byron	8/31/2021	N - NOT INJURED	MOTOR VEHICLE IN TRANSPORT	SAME DIRECTION - ONE STRAIGHT-ONE STOPPED	DRIVER INATTENTION					NON INTERSECTION	NOT APPLICABLE	SLOWING/STOPPING-FOR TRAFFIC	1 - DRY	1 - CLEAR	1 - DAYLIGHT
18519067	Weslayan at Browning	10/6/2021	N - NOT INJURED	FIXED OBJECT	ONE MOTOR VEHICLE - GOING STRAIGHT	UNDER INFLUENCE - ALCOHOL					INTERSECTION RELATED	HIT LUMINAIRE POLE	NOT APPLICABLE	1 - DRY	1 - CLEAR	3 - DARK, LIGHTED
18488400	Weslayan at Marlowe	9/22/2021	N - NOT INJURED	MOTOR VEHICLE IN TRANSPORT	OPPOSITE DIRECTION - ONE STRAIGHT-ONE LEFT TURN	DRIVER INATTENTION	FAILED TO CONTROL SPEED	FAILED TO YIELD RIGHT OF WAY - TURNING LEFT			INTERSECTION	NOT APPLICABLE	ATTENTION DIVERTED FROM DRIVING	1 - DRY	1 - CLEAR	1 - DAYLIGHT
18532260	Weslayan at Riley	10/12/2021	99 - UNKNOWN	FIXED OBJECT	ONE MOTOR VEHICLE - TURNING RIGHT	HAD BEEN DRINKING	UNSAFE SPEED				INTERSECTION RELATED	HIT LUMINAIRE POLE	NOT APPLICABLE	1 - DRY	1 - CLEAR	3 - DARK, LIGHTED
18550441	Weslayan at Marlowe	10/25/2021	N - NOT INJURED	MOTOR VEHICLE IN TRANSPORT	SAME DIRECTION - BOTH GOING STRAIGHT-REAR END	FAILED TO CONTROL SPEED					NON INTERSECTION	NOT APPLICABLE	SLOWING/STOPPING-REASON NOT SPECIFIED	1 - DRY	1 - CLEAR	3 - DARK, LIGHTED
18571250	Weslayan at Marlowe	10/29/2021	99 - UNKNOWN	PARKED CAR	ONE MOTOR VEHICLE - OTHER	DRIVER INATTENTION					NON INTERSECTION	NOT APPLICABLE	ATTENTION DIVERTED FROM DRIVING	99 - UNKNOWN	1 - CLEAR	99 - UNKNOWN
18569412	Weslayan at Browning	11/3/2021	N - NOT INJURED	MOTOR VEHICLE IN TRANSPORT	ANGLE - ONE STRAIGHT-ONE LEFT TURN	NONE					INTERSECTION	NOT APPLICABLE	NOT APPLICABLE	2 - WET	3 - RAIN	5 - DAWN
18604039	Weslayan at Tennyson	11/22/2021	N - NOT INJURED	MOTOR VEHICLE IN TRANSPORT	SAME DIRECTION - ONE STRAIGHT-ONE STOPPED	DRIVER INATTENTION	FAILED TO CONTROL SPEED	CELL/MOBILE DEVICE USE - OTHER			INTERSECTION RELATED	NOT APPLICABLE	SLOWING/STOPPING - FOR OFFICER, FLAGMAN, OR TRAFFIC CONTROL	1 - DRY	1 - CLEAR	1 - DAYLIGHT
18626167	Weslayan at Tennyson	12/4/2021	N - NOT INJURED	MOTOR VEHICLE IN TRANSPORT	OPPOSITE DIRECTION - ONE STRAIGHT-ONE LEFT TURN	FAILED TO YIELD RIGHT OF WAY - TURNING LEFT	UNSAFE SPEED				INTERSECTION	NOT APPLICABLE	NOT APPLICABLE	1 - DRY	2 - CLOUDY	1 - DAYLIGHT
19169228	Weslayan at Browning	10/10/2022	N - NOT INJURED	MOTOR VEHICLE IN TRANSPORT	SAME DIRECTION - ONE STRAIGHT-ONE STOPPED	FAILED TO CONTROL SPEED					NON INTERSECTION	NOT APPLICABLE	SLOWING/STOPPING - FOR OFFICER, FLAGMAN, OR TRAFFIC CONTROL	1 - DRY	1 - CLEAR	1 - DAYLIGHT
19593747	Weslayan at Browning	6/10/2023	N - NOT INJURED	MOTOR VEHICLE IN TRANSPORT	SAME DIRECTION - ONE STRAIGHT-ONE STOPPED	DISTRACTION IN VEHICLE	DRIVER INATTENTION				NON INTERSECTION	NOT APPLICABLE	SLOWING/STOPPING-FOR TRAFFIC	1 - DRY	1 - CLEAR	1 - DAYLIGHT
18647299	Weslayan at Stella Link	12/15/2021	N - NOT INJURED	FIXED OBJECT	ONE MOTOR VEHICLE - GOING STRAIGHT	NONE					NON INTERSECTION	HIT HIGHWAY SIGN	NOT APPLICABLE	1 - DRY	1 - CLEAR	1 - DAYLIGHT
18653507	Weslayan at Riley	12/19/2021	N - NOT INJURED	MOTOR VEHICLE IN TRANSPORT	ANGLE - ONE STRAIGHT-ONE LEFT TURN	DRIVER INATTENTION	FAILED TO YIELD RIGHT OF WAY - STOP SIGN				INTERSECTION	NOT APPLICABLE	ATTENTION DIVERTED FROM DRIVING	1 - DRY	1 - CLEAR	1 - DAYLIGHT
18769644	Weslayan at Case	2/25/2022	N - NOT INJURED	MOTOR VEHICLE IN TRANSPORT	ANGLE - BOTH GOING STRAIGHT	FAILED TO YIELD RIGHT OF WAY - STOP SIGN					INTERSECTION	NOT APPLICABLE	NOT APPLICABLE	2 - WET	3 - RAIN	3 - DARK, LIGHTED
19125599	Weslayan at Marquette	9/21/2022	N - NOT INJURED	MOTOR VEHICLE IN TRANSPORT	SAME DIRECTION - BOTH GOING STRAIGHT-REAR END	DRIVER INATTENTION	FAILED TO CONTROL SPEED				INTERSECTION RELATED	NOT APPLICABLE	SLOWING/STOPPING-REASON NOT SPECIFIED	1 - DRY	1 - CLEAR	1 - DAYLIGHT
19529542	Weslayan at Marquette	5/7/2023	N - NOT INJURED	MOTOR VEHICLE IN TRANSPORT	ANGLE - BOTH GOING STRAIGHT	DRIVER INATTENTION	FAILED TO YIELD RIGHT OF WAY - STOP SIGN				INTERSECTION	NOT APPLICABLE	NOT APPLICABLE	2 - WET	3 - RAIN	1 - DAYLIGHT
19078546	Weslayan at Milton	8/24/2022	N - NOT INJURED	MOTOR VEHICLE IN TRANSPORT	ANGLE - BOTH GOING STRAIGHT	FAILED TO YIELD RIGHT OF WAY - STOP SIGN	OTHER (EXPLAIN IN NARRATIVE)				INTERSECTION	NOT APPLICABLE	NOT APPLICABLE	1 - DRY	1 - CLEAR	1 - DAYLIGHT
18907378	Weslayan at Riley	5/11/2022	N - NOT INJURED	MOTOR VEHICLE IN TRANSPORT	OPPOSITE DIRECTION - ONE RIGHT TURN-ONE LEFT TURN	DRIVER INATTENTION	TURNED WHEN UNSAFE	OTHER (EXPLAIN IN NARRATIVE)			INTERSECTION RELATED	NOT APPLICABLE	ATTENTION DIVERTED FROM DRIVING	1 - DRY	1 - CLEAR	1 - DAYLIGHT
18951547	Weslayan at University	5/31/2022	N - NOT INJURED	MOTOR VEHICLE IN TRANSPORT	ANGLE - BOTH GOING STRAIGHT	DISTRACTION IN VEHICLE	DRIVER INATTENTION				INTERSECTION	NOT APPLICABLE	ATTENTION DIVERTED FROM DRIVING	1 - DRY	1 - CLEAR	1 - DAYLIGHT
19051885	Weslayan at Stella Link	8/4/2022	N - NOT INJURED	MOTOR VEHICLE IN TRANSPORT	ANGLE - BOTH GOING STRAIGHT	CHANGED LANE WHEN UNSAFE	FAILED TO YIELD RIGHT OF WAY - STOP SIGN				INTERSECTION	NOT APPLICABLE	NOT APPLICABLE	2 - WET	2 - CLOUDY	1 - DAYLIGHT
19074936	Weslayan at Riley	8/19/2022	N - NOT INJURED	MOTOR VEHICLE IN TRANSPORT	SAME DIRECTION - ONE STRAIGHT-ONE STOPPED	DRIVER INATTENTION	FAILED TO CONTROL SPEED				DRIVEWAY ACCESS	NOT APPLICABLE	SLOWING/STOPPING-TO MAKE LEFT TURN	2 - WET	3 - RAIN	1 - DAYLIGHT
19385962	Weslayan at Riley	2/9/2023	N - NOT INJURED	MOTOR VEHICLE IN TRANSPORT	ANGLE - BOTH GOING STRAIGHT	DRIVER INATTENTION	FAILED TO YIELD RIGHT OF WAY - STOP SIGN				NON INTERSECTION	NOT APPLICABLE	NOT APPLICABLE	1 - DRY	1 - CLEAR	1 - DAYLIGHT
19538870	Weslayan at Southwestern	10/13/2022	N - NOT INJURED	MOTOR VEHICLE IN TRANSPORT	SAME DIRECTION - BOTH LEFT TURN	FAILED TO DRIVE IN SINGLE LANE					INTERSECTION RELATED	NOT APPLICABLE	NOT APPLICABLE	1 - DRY	1 - CLEAR	3 - DARK, LIGHTED
19191613	Weslayan at Southwestern	10/26/2022	N - NOT INJURED	MOTOR VEHICLE IN TRANSPORT	ANGLE - BOTH GOING STRAIGHT	FAILED TO YIELD RIGHT OF WAY - STOP SIGN					INTERSECTION	NOT APPLICABLE	NOT APPLICABLE	1 - DRY	1 - CLEAR	1 - DAYLIGHT
19407170	Weslayan at Swarthmore	2/25/2023	N - NOT INJURED	MOTOR VEHICLE IN TRANSPORT	SAME DIRECTION - BOTH GOING STRAIGHT-REAR END	DISTRACTION IN VEHICLE	DRIVER INATTENTION	FOLLOWED TOO CLOSELY			INTERSECTION RELATED	NOT APPLICABLE	SLOWING/STOPPING-TO MAKE LEFT TURN	1 - DRY	1 - CLEAR	1 - DAYLIGHT
19335889	Weslayan at University	1/15/2023	N - NOT INJURED	MOTOR VEHICLE IN TRANSPORT	OPPOSITE DIRECTION - ONE STRAIGHT-ONE LEFT TURN	FAILED TO YIELD RIGHT OF WAY - TURNING LEFT					INTERSECTION	NOT APPLICABLE	NOT APPLICABLE	1 - DRY	1 - CLEAR	3 - DARK, LIGHTED
19567793	Weslayan at Tennyson	5/26/2023	N - NOT INJURED	MOTOR VEHICLE IN TRANSPORT	SAME DIRECTION - ONE STRAIGHT-ONE STOPPED	FAILED TO CONTROL SPEED					INTERSECTION RELATED	NOT APPLICABLE	SLOWING/STOPPING - FOR OFFICER, FLAGMAN, OR TRAFFIC CONTROL	1 - DRY	1 - CLEAR	1 - DAYLIGHT

Kimley»Horn

C. SYNCHRO OUTPUT

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	15	541	6	9	499
Future Vol, veh/h	0	15	541	6	9	499
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	16	564	6	9	520

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1105	567	0	0	570	0
Stage 1	567	-	-	-	-	-
Stage 2	538	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	233	523	-	-	1002	-
Stage 1	568	-	-	-	-	-
Stage 2	585	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	230	523	-	-	1002	-
Mov Cap-2 Maneuver	230	-	-	-	-	-
Stage 1	568	-	-	-	-	-
Stage 2	577	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.1	0	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	523	1002	-
HCM Lane V/C Ratio	-	-	0.03	0.009	-
HCM Control Delay (s)	-	-	12.1	8.6	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	5	9	1	1	6	10	12	203	4	6	61	4
Future Vol, veh/h	5	9	1	1	6	10	12	203	4	6	61	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	12	1	1	8	13	16	271	5	8	81	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	416	408	84	412	408	274	86	0	0	276	0	0
Stage 1	100	100	-	306	306	-	-	-	-	-	-	-
Stage 2	316	308	-	106	102	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	547	533	975	550	533	765	1510	-	-	1287	-	-
Stage 1	906	812	-	704	662	-	-	-	-	-	-	-
Stage 2	695	660	-	900	811	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	523	522	975	531	522	765	1510	-	-	1287	-	-
Mov Cap-2 Maneuver	523	522	-	531	522	-	-	-	-	-	-	-
Stage 1	894	806	-	695	653	-	-	-	-	-	-	-
Stage 2	666	651	-	879	805	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.9	10.8	0.4	0.7
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1510	-	-	539	643	1287	-	-
HCM Lane V/C Ratio	0.011	-	-	0.037	0.035	0.006	-	-
HCM Control Delay (s)	7.4	0	-	11.9	10.8	7.8	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

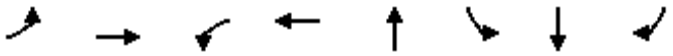
Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	11	10	7	249	114	5
Future Vol, veh/h	11	10	7	249	114	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	11	8	286	131	6

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	436	134	137	0	-	0
Stage 1	134	-	-	-	-	-
Stage 2	302	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	578	915	1447	-	-	-
Stage 1	892	-	-	-	-	-
Stage 2	750	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	574	915	1447	-	-	-
Mov Cap-2 Maneuver	574	-	-	-	-	-
Stage 1	886	-	-	-	-	-
Stage 2	750	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.3	0.2	0
HCM LOS	B		

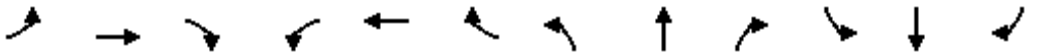
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1447	-	698	-	-
HCM Lane V/C Ratio	0.006	-	0.035	-	-
HCM Control Delay (s)	7.5	0	10.3	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-



Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	298	835	48	514	612	70	475	242
v/c Ratio	0.83	0.50	0.42	0.46	0.81	0.59	0.76	0.35
Control Delay	65.4	25.4	64.3	35.4	51.0	73.7	43.1	4.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.4	25.4	64.3	35.4	51.0	73.7	43.1	4.3
Queue Length 50th (ft)	223	243	36	168	233	53	316	0
Queue Length 95th (ft)	#368	354	75	242	282	103	401	49
Internal Link Dist (ft)		272		258	114		126	
Turn Bay Length (ft)	110		120			85		
Base Capacity (vph)	361	1680	184	1126	1025	138	843	848
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.83	0.50	0.26	0.46	0.60	0.51	0.56	0.29

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	271	725	35	44	430	37	21	460	76	64	432	220
Future Volume (veh/h)	271	725	35	44	430	37	21	460	76	64	432	220
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	298	797	38	48	473	41	23	505	84	70	475	242
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	575	1700	81	62	676	58	46	629	110	90	624	529
Arrive On Green	0.32	0.49	0.49	0.03	0.20	0.20	0.24	0.24	0.24	0.05	0.33	0.33
Sat Flow, veh/h	1781	3453	165	1781	3310	286	57	2654	465	1781	1870	1585
Grp Volume(v), veh/h	298	410	425	48	253	261	320	0	292	70	475	242
Grp Sat Flow(s),veh/h/ln	1781	1777	1841	1781	1777	1819	1557	0	1618	1781	1870	1585
Q Serve(g_s), s	16.3	18.3	18.3	3.2	15.9	16.0	8.7	0.0	20.2	4.7	27.2	14.4
Cycle Q Clear(g_c), s	16.3	18.3	18.3	3.2	15.9	16.0	24.3	0.0	20.2	4.7	27.2	14.4
Prop In Lane	1.00		0.09	1.00		0.16	0.07		0.29	1.00		1.00
Lane Grp Cap(c), veh/h	575	875	906	62	363	371	401	0	383	90	624	529
V/C Ratio(X)	0.52	0.47	0.47	0.78	0.70	0.70	0.80	0.00	0.76	0.78	0.76	0.46
Avail Cap(c_a), veh/h	575	875	906	186	363	371	559	0	530	140	846	717
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.0	20.1	20.1	57.4	44.3	44.4	43.7	0.0	42.6	56.3	35.7	31.4
Incr Delay (d2), s/veh	0.4	1.8	1.7	7.5	10.6	10.6	3.6	0.0	2.6	5.7	1.7	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	7.1	7.9	8.2	1.6	8.0	8.3	9.6	0.0	8.3	2.2	12.6	5.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.4	21.9	21.9	64.9	55.0	55.0	47.3	0.0	45.2	62.0	37.4	31.7
LnGrp LOS	C	C	C	E	D	D	D	A	D	E	D	C
Approach Vol, veh/h		1133			562			612			787	
Approach Delay, s/veh		24.9			55.8			46.3			37.8	
Approach LOS		C			E			D			D	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.7	64.6		45.8	44.2	30.0	11.6	34.1				
Change Period (Y+Rc), s	* 5.5	* 5.5		5.7	* 5.5	* 5.5	5.6	5.7				
Max Green Setting (Gmax), s	* 13	* 37		54.3	* 25	* 25	9.4	39.3				
Max Q Clear Time (g_c+I1), s	5.2	20.3		29.2	18.3	18.0	6.7	26.3				
Green Ext Time (p_c), s	0.0	3.2		2.4	0.3	1.2	0.0	2.2				

Intersection Summary			
HCM 6th Ctrl Delay		38.0	
HCM 6th LOS		D	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	18	383	9	7	698
Future Vol, veh/h	5	18	383	9	7	698
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	19	407	10	7	743

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1169	412	0	0	417	0
Stage 1	412	-	-	-	-	-
Stage 2	757	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	213	640	-	-	1142	-
Stage 1	669	-	-	-	-	-
Stage 2	463	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	211	640	-	-	1142	-
Mov Cap-2 Maneuver	211	-	-	-	-	-
Stage 1	669	-	-	-	-	-
Stage 2	458	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.6	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	444	1142	-
HCM Lane V/C Ratio	-	-	0.055	0.007	-
HCM Control Delay (s)	-	-	13.6	8.2	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	6	9	5	4	10	6	14	144	2	3	109	2
Future Vol, veh/h	6	9	5	4	10	6	14	144	2	3	109	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	11	6	5	12	7	17	173	2	4	131	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	358	349	132	357	349	174	133	0	0	175	0	0
Stage 1	140	140	-	208	208	-	-	-	-	-	-	-
Stage 2	218	209	-	149	141	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	597	575	917	598	575	869	1452	-	-	1401	-	-
Stage 1	863	781	-	794	730	-	-	-	-	-	-	-
Stage 2	784	729	-	854	780	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	576	566	917	578	566	869	1452	-	-	1401	-	-
Mov Cap-2 Maneuver	576	566	-	578	566	-	-	-	-	-	-	-
Stage 1	852	779	-	784	721	-	-	-	-	-	-	-
Stage 2	755	720	-	834	778	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.9	10.9	0.7	0.2
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1452	-	-	630	635	1401	-	-
HCM Lane V/C Ratio	0.012	-	-	0.038	0.038	0.003	-	-
HCM Control Delay (s)	7.5	0	-	10.9	10.9	7.6	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

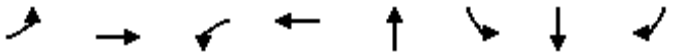
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	6	7	155	210	14
Future Vol, veh/h	7	6	7	155	210	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	7	8	176	239	16

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	439	247	255	0	-	0
Stage 1	247	-	-	-	-	-
Stage 2	192	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	575	792	1310	-	-	-
Stage 1	794	-	-	-	-	-
Stage 2	841	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	571	792	1310	-	-	-
Mov Cap-2 Maneuver	571	-	-	-	-	-
Stage 1	788	-	-	-	-	-
Stage 2	841	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.6	0.3	0
HCM LOS	B		

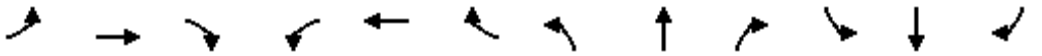
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1310	-	655	-	-
HCM Lane V/C Ratio	0.006	-	0.023	-	-
HCM Control Delay (s)	7.8	0	10.6	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-



Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	183	807	155	1051	424	49	545	447
v/c Ratio	0.93	0.53	0.73	0.68	0.75	0.47	0.95	0.66
Control Delay	102.9	26.9	71.0	29.4	52.4	68.5	66.9	18.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	102.9	26.9	71.0	29.4	52.4	68.5	66.9	18.0
Queue Length 50th (ft)	144	241	117	334	161	37	405	110
Queue Length 95th (ft)	#295	303	#214	412	#241	79	#617	228
Internal Link Dist (ft)		272		258	114		126	
Turn Bay Length (ft)	110		120			85		
Base Capacity (vph)	196	1514	213	1544	567	123	594	692
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.93	0.53	0.73	0.68	0.75	0.40	0.92	0.65

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	174	727	40	147	912	86	21	333	48	47	518	425
Future Volume (veh/h)	174	727	40	147	912	86	21	333	48	47	518	425
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	183	765	42	155	960	91	22	351	51	49	545	447
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	186	1442	79	215	1435	136	38	497	86	63	577	489
Arrive On Green	0.10	0.42	0.42	0.12	0.44	0.44	0.23	0.23	0.23	0.04	0.31	0.31
Sat Flow, veh/h	1781	3425	188	1781	3280	311	19	2196	379	1781	1870	1585
Grp Volume(v), veh/h	183	397	410	155	520	531	204	0	220	49	545	447
Grp Sat Flow(s),veh/h/ln	1781	1777	1837	1781	1777	1814	961	0	1634	1781	1870	1585
Q Serve(g_s), s	12.3	20.0	20.0	10.1	27.9	27.9	1.8	0.0	14.4	3.3	34.1	32.6
Cycle Q Clear(g_c), s	12.3	20.0	20.0	10.1	27.9	27.9	26.1	0.0	14.4	3.3	34.1	32.6
Prop In Lane	1.00		0.10	1.00		0.17	0.11		0.23	1.00		1.00
Lane Grp Cap(c), veh/h	186	748	773	215	777	794	251	0	370	63	577	489
V/C Ratio(X)	0.99	0.53	0.53	0.72	0.67	0.67	0.82	0.00	0.59	0.78	0.94	0.91
Avail Cap(c_a), veh/h	186	748	773	215	777	794	251	0	370	125	597	506
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.7	25.9	25.9	50.8	26.8	26.8	41.1	0.0	41.5	57.4	40.5	40.0
Incr Delay (d2), s/veh	61.8	2.7	2.6	9.7	4.5	4.5	17.3	0.0	1.8	7.4	23.2	20.3
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	8.7	8.9	9.2	5.1	12.6	12.9	6.5	0.0	6.0	1.6	19.2	15.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	115.4	28.6	28.5	60.5	31.4	31.3	58.4	0.0	43.3	64.8	63.7	60.3
LnGrp LOS	F	C	C	E	C	C	E	A	D	E	E	E
Approach Vol, veh/h		990			1206			424			1041	
Approach Delay, s/veh		44.6			35.1			50.6			62.3	
Approach LOS		D			D			D			E	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	20.0	56.0		42.7	18.0	58.0	9.9	32.9				
Change Period (Y+Rc), s	* 5.5	* 5.5		5.7	* 5.5	* 5.5	5.6	5.7				
Max Green Setting (Gmax), s	* 15	* 51		38.3	* 13	* 53	8.4	24.3				
Max Q Clear Time (g_c+I1), s	12.1	22.0		36.1	14.3	29.9	5.3	28.1				
Green Ext Time (p_c), s	0.0	3.5		0.9	0.0	4.8	0.0	0.0				

Intersection Summary		
HCM 6th Ctrl Delay		47.2
HCM 6th LOS		D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.