Mormon Trek Boulevard
Lane Reconfiguration

Iowa City, Iowa

Prepared By:



SNYDER & ASSOCIATES
Engineers and Planners

Prepared For:

City of Iowa City

July 6, 2016

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Snyder & Associates, Inc.

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I hereby certify that this Engineering Document was prepared by me or under my direct personal supervision and that I am a duly Licensed Professional Engineer under the Laws of the State of Iowa.

Justin C. Jackson, P.E. — 7/06/16 Date

License Number 20538

My License Renewal Date is December 31, 2016

All

Background

Iowa City submitted and was successful in applying for the Iowa DOT Traffic Safety Improvement Program (TSIP) funding in 2014 for Mormon Trek Boulevard 3-lane conversion from Melrose Avenue to Iowa Highway 1. The following report summarizes the findings of a detailed analysis of converting Mormon Trek Boulevard from a 4-lane to a 3-lane roadway (with continuous center left turn lane) based on current and future forecasted traffic conditions. Iowa City's DOT Traffic Safety Funds application was used for existing conditions, historic traffic data, and project concept for the corridor.

Traffic History

The Iowa Department of Transportation (DOT) historic counts were compiled from similar locations within the corridors to estimate a traffic growth rate and identify traffic pattern trends. The annual average daily traffic (AADT) volumes from the DOT counts for years 2002, 2006, 2010, and 2014 are shown in Table 1 for locations within the corridor. As is illustrated in Table 1, most of the segments experienced steady traffic or traffic declines, with the exception of Iowa Hwy 1 increasing. The City collected peak hour counts at intersections in the corridor as part of the TSIP application. A peak hour traffic volume count was conducted in January 2016 at the intersection of Cameron Way to validate that the prior traffic counts conducted were still representative of the corridor peak hour traffic conditions. The total peak hour traffic volumes with directional split volumes on Mormon Trek Boulevard near intersections with highest traffic volume within the corridor are listed in Table 2. Since peak hour counts were not conducted on the same day and the corridor has very few additional access points other than the modeled intersections, the peak hour traffic volumes were adjusted to smooth the exiting volumes from one intersection with the entering volume at the next intersection. In most locations, the recorded peak hour traffic volumes balanced relatively well at consecutive intersections. Engineering judgment was used to proportionally adjust entering volumes for individual peak hour volumes at two intersections. The goal was to have less than 10 to 15 percent variation between the exiting and entering volumes at consecutive intersections with additional access points between the intersections.

One noticeable traffic pattern dependent on time of day is the Benton Street to Rohret Road connection. The peak hour traffic volume from Rohret Road to Benton Street is heavily directional during the AM peak hour demand flow of eastbound on Rohret Road turning left to northbound on Mormon Trek Boulevard and then turning right to eastbound Benton Street. The reverse traffic flow pattern was observed during the PM peak hour.

Travel Time Study

Travel time studies were conducted on January 21, 2016 during AM (7-9am), Noon (11-1pm), and PM (4-6pm) peak hours. A travel time study involves a test car driving each corridor from beginning to end noting the time at key intersections and continuously recording the speed. The studies start and end outside the corridor study limits in order to determine the travel speed and delays at the intersections on the corridor study limits. Ten passes in each direction along the corridor were made during each peak hour. The floating car technique was used to conduct the study. In this technique, the test car passes as many vehicles as pass the test car. In this way, the vehicle's relative position in the traffic stream remains unchanged, and the test approximates the behavior of an average vehicle in the traffic stream.

Table 3 lists the results of the travel time study. The average speeds and travel times of all three peak periods were within a narrow range despite the difference in traffic volume characteristics for each peak. This demonstrates that there is additional capacity of the roadway not being utilized. Further conclusions of this are shown in the following peak hour capacity analysis. During all three peaks, no areas caused excessive delay except for the randomness of being stopped at a traffic signal. Summaries of the travel time studies are included in the appendix.

Table 1: Historic Annual Average Daily Traffic

Roadway Segment (Mormon Trek Blvd)	Historic Daily Traffic			
	2002	2006	2010	2014
Melrose Ave, south of	16,900	-	14,100	-
Rohret Rd, north of	-	15,400	-	8,800
Rohret Rd, south of	10,900	-	10,300	
Plain View Dr, south of	-	11,100	-	9,200
Iowa Hwy 1, north of	12,200	9,800	12,100	13,300

- DOT did not count location during count year

Table 2: Existing Total Peak Hour Traffic Volumes

Roadway Segment (Mormon Trek Blvd)	AM			PM		
	Total	NB	SB	Total	NB	SB
Melrose Ave, south of	**1,100**	720	380	**1,400**	620	780
Cameron Way, south of	**1,030**	680	350	**1,250**	550	700
Benton St, north of	**1,150**	740	410	**1,620**	760	860
Benton St, south of	**1,130**	760	370	**1,410**	590	820
Rohret Rd, north of	**1,040**	670	370	**1,240**	520	720
Abbey Ln, south of	**810**	410	400	**960**	460	500
Westside Dr, north of	**810**	410	400	**960**	460	500
Iowa Hwy 1, north of	**1,040**	560	480	**1,160**	540	620

Table 3: Travel Time Study Results

Peak Period	Run	Start Time		Travel Time (sec)		Stops		Speed (mph)	
		NB	SB	NB	SB	NB	SB	NB	SB
AM Peak Hour	Run 1	7:00	7:06	275	369	2	4	23.4	17.7
	Run 2	7:15	7:20	240	323	1	2	26.8	20.3
	Run 3	7:26	7:32	258	307	2	3	24.9	21.3
	Run 4	7:38	7:46	389	293	3	2	16.5	22.4
	Run 5	7:51	7:58	291	248	2	2	22	26.4
	Run 6	8:03	8:09	291	267	3	2	21.9	24.5
	Run 7	8:15	8:21	274	272	2	3	22.8	24.2
	Run 8	8:26	8:32	268	297	2	3	23.6	22
	Run 9	8:38	8:44	261	289	2	2	24.7	22.7
	Run 10	8:50	8:56	275	260	3	2	23.3	25.2
	Average			**282**	**296**	**2**	**2**	**23**	**22**
Noon Peak Hour	Run 1	11:02	11:09	282	211	3	1	22.9	31.3
	Run 2	11:13	11:20	261	294	2	4	24.5	22.5
	Run 3	11:27	11:33	284	281	3	3	22.8	23.5
	Run 4	11:38	11:44	255	282	2	2	25.2	23.4
	Run 5	11:49	11:57	359	267	5	3	18.1	24.8
	Run 6	12:02	12:08	300	243	3	1	21.4	27.2
	Run 7	12:13	12:21	291	247	4	2	21.9	26.7
	Run 8	12:26	12:32	242	279	2	2	26.5	23.7
	Run 9	12:37	12:43	256	272	3	2	25.3	24.2
	Run 10	12:48	12:53	229	274	1	2	27.4	24.1
	Average			**276**	**265**	**3**	**2**	**23**	**25**
PM Peak Hour	Run 1	16:00	16:06	302	196	3	0	21.3	33.5
	Run 2	16:11	16:18	345	269	2	1	18.7	24.5
	Run 3	16:23	16:29	270	305	3	3	23.8	21.6
	Run 4	16:35	16:41	254	193	2	0	25.3	34
	Run 5	16:45	16:51	276	204	2	1	23.3	32.2
	Run 6	16:55	17:01	252	307	2	2	25.5	21.4
	Run 7	17:07	17:13	246	291	1	2	25.6	22.6
	Run 8	17:19	17:25	280	270	4	2	22.6	24.4
	Run 9	17:30	17:36	254	209	2	0	25.2	31.4
	Run 10	17:40	17:47	327	312	3	2	19.7	21
	Run 11	17:53	18:01	356	271	3	2	18.1	24.2
	Average			**288**	**257**	**3**	**1**	**22**	**26**

Traffic Volume Forecasts

Metropolitan Planning Organization of Johnson County (MPOJC) provided traffic volumes from their regional travel demand model for base year 2010 and the 2040 horizon year as the source of information for annual rates of traffic change for the corridor. The traffic demand model addresses future changes in the region and/or corridor development trends that are different from the historical trend. In addition, the model has the capability of taking into account street network changes that may result in Mormon Trek Boulevard becoming a more attractive or less attractive route relative to alternative corridors. Thus, there is the potential for observing substantial changes from historical traffic trends if there are forecasted employment, residential development, or roadway network changes from the current conditions or historical trends. MPOJC base year traffic volumes, future year traffic volumes, and annual change rate are listed in Table 4. Table 5 lists the 2040 future total peak hour traffic volumes. The annual rate of traffic volume change was applied to existing peak hour traffic volumes to calculate future 2040 peak hour traffic volumes. Given that the majority of the corridor intersecting roads are fully developed (no undeveloped land along the roadway), the growth factor was applied only to the through traffic on Mormon Trek Boulevard future projections while the turning traffic from Mormon Trek Boulevard and the intersecting roadway traffic remained constant with the exception of Iowa Highway 1, Rohret Road, Benton Street, and Melrose Avenue. Traffic volumes of these roadways and turning traffic volumes onto these roadways were grown at the same rate as the adjacent Mormon Trek Boulevard through traffic volumes.

Table 4: MPOJC Traffic Model Volumes

Roadway Segment (Mormon Trek Blvd)	Daily Traffic		
	2010	2040	Annual Rate
Melrose Ave to Benton St	14,100	14,300	0.05%
Benton St to Rohret Rd	15,400	19,980	0.87%
Rohret Rd to Westside Dr	10,300	13,800	0.98%
Westside Dr to Iowa Hwy 1	12,100	14,900	0.70%

Table 5: 2040 Total Peak Hour Traffic Volumes

Roadway Segment (Mormon Trek Blvd)	AM			PM		
	Total	NB	SB	Total	NB	SB
Melrose Ave, south of	**1,110**	730	380	**1,410**	630	780
Cameron Way, south of	**1,040**	680	360	**1,260**	560	700
Benton St, north of	**1,220**	810	410	**1,640**	770	870
Benton St, south of	**1,290**	820	470	**1,580**	700	880
Rohret Rd, north of	**1,320**	870	450	**1,520**	650	870
Abbey Ln, south of	**1,010**	510	500	**1,200**	570	630
Westside Dr, north of	**960**	470	490	**1,150**	550	600
Iowa Hwy 1, north of	**1,230**	650	580	**1,370**	640	730

Proposed Corridor Improvements

The current and forecasted traffic volumes for the corridor are within the limits of what a 3-lane roadway can typically accommodate with acceptable user delay. The one exception would be the peak hour traffic volume from Rohret Road to Benton Street. However, given the heavily directional AM peak hour demand flow of eastbound traffic on Rohret Road turning left to northbound Mormon Trek Boulevard and then turning right to eastbound Benton Street (and the reverse during the PM peak hour), as well as low side friction from additional accesses and intersecting roads, the vehicle delay is not excessive with the addition of dedicated left turn lanes for this portion of Mormon Trek Boulevard. The 3-lane corridor was evaluated with every signalized intersection providing protected/permissive left turn phasing on Mormon Trek Boulevard along with the traffic signals operating in coordination. Additional consideration was taken into account for transit stops on Mormon Trek Boulevard. As found in the funding application, the infrequency of buses stopping is to be insignificant in adding constant vehicle delay. The existing and future 3-lane traffic conditions were analyzed with the following improvements:

- 3-lane cross section from Petsel Place to 1,000' north of Westside Drive
- Protected/permissive left turn phasing at all signalized intersections
- Traffic signals operating in coordination
- Benton Street - dedicated northbound right turn lane
    - Existing traffic conditions, 150' storage lane length
    - Future traffic conditions, 300' storage lane length
- Rohret Road – dedicated southbound right turn lane
    - Future traffic conditions, 125' storage lane length

Capacity and Intersection Analysis

Traffic operations were evaluated at each key intersection using the existing conditions, existing traffic volumes with 3-lane configuration, and year 2040 forecasted traffic volumes with 4-lane and 3-lane configuration for AM and PM peak period traffic volumes. The "measure of effectiveness" (MOE's) for the corridor was characterized by quantifying the following:

- The level-of-service (LOS) at each intersection for either STOP controlled or traffic signalized intersection resulted from applying *Highway Capacity Manual, 2010* methodology incorporated into traffic analysis and modeling software, *Synchro 8*.
- Corridor travel time and delays of the corridor were modeled utilizing *SimTraffic 8* traffic signal coordination software.

At signalized intersections, the LOS is based on weighted average of all approach delays. For unsignalized intersections, the LOS is based on the minor street approach delay. LOS is expressed as a letter grade from A through F, with each grade representing a range of vehicle delay. The most acceptable delay per each movement corresponds to LOS D. The recommended improvements were based on all resulting movements having LOS D or better. Tables 6 and 7 list vehicle delay and LOS of each intersection by approach for existing conditions, existing traffic volume with 3-lane configuration, and forecasted traffic volumes with 3-lane configurations for AM and PM peak periods. Analysis of 3-lane configurations include the proposed improvements as previously discussed. The travel times of the corridor during the

Table 6: AM Peak Hour HCM 2010 Analysis Results

Intersection of Mormon Trek Blvd w/	App	2016 -Existing							2040 - Future						
			4-Lane			3-Lane				4-Lane			3-Lane		
		Peak Volume	Delay (secs/ veh)	LOS	Max Queue (ft/ lane)	Delay (secs/ veh)	LOS	Max Queue (ft/ lane)	Peak Volume	Delay (secs/ veh)	LOS	Max Queue (ft/ lane)	Delay (secs/ veh)	LOS	Max Queue (ft/ lane)
Melrose Ave	NB	724	29	C	344 / Th	25	C	346 / Th	731	24	C	299 / Th	22	C	334 / Th
	SB	524	19	B	171 / Lt	17	B	218 / Lt	529	16	B	156 / Lt	16	B	150 / Th
	EB	361	26	C	136 / Th	35	C	129 / Th	365	31	C	130 / Th	42	D	170 / Th
	WB	746	25	C	227 / Th	45	D	267 / Th	753	33	C	211 / th	42	D	365 / Th
	All	**2355**	**25**	**C**		**31**	**C**		**2378**	**26**	**C**		**30**	**C**	
Bartelt Rd North	NB	719	-	-	-	-	-	-	726	-	-	-	-	-	-
	SB	376	-	-	-	-	-	-	380	-	-	-	-	-	-
	EB	17	13	B	46	13	B	27	17	13	B	52	13	B	28
	All	**1112**							**1123**						
MacBride Dr	NB	716	-	-		-	-	-	723	-	-	-	-	-	-
	SB	379	-	-	29 / Lt	-	-	46 / Th	383	-	-	-	-	-	29 / Th
	WB	10	15	C	30	16	C	30	10	16	C	31	16	C	30
	All	**1105**							**1116**						
Bartelt Rd South	NB	715	-	-	-	-	-	31 / Lt	722	-	-	-	-	-	31 / Lt
	SB	382	-	-	-	-	-	-	386	-	-	-	-	-	-
	EB	20	15	C	71	15	C	61	20	15	C	46	15	C	48
	All	**1117**							1128						
Cameron Way / Walden Sq	NB	676	4	A	134	1	A	205 / Th	683	1	A	96 / Th	1	A	143 / Th
	SB	382	3	A	72	4	A	162 / Th	385	2	A	91 / Th	4	A	94 / Th
	EB	55	15	B	79	48	D	92	55	38	D	159	53	D	53
	WB	26	15	B	31	46	D	55	26	37	D	31	51	D	74
	All	**1139**	**4**	**A**		**6**	**A**		**1149**	**4**	**A**		6	A	
Westwinds Dr	NB	745	-	-	94 / Lt	-		50 / Lt	752	-	-	71 / Lt	-	-	74 / Lt
	SB	354	-	-	-	-	-	-	354	-	-	-	-	-	-
	EB	72	13	B	53	13	B	89	72	13	B	97	13	B	76
	All	**1171**							**1178**						
Benton St	NB	756	6	A	96	12	B	251 / Th	818	8	A	204 / Rt	6	A	234 / Th
	SB	407	6	A	115	2	A	75 / Lt	411	2	A	111 / Th	1	A	167 / Th
	WB	265	18	B	94 / Rt	16	B	128 / Rt	339	35	D	108 / Rt	17	B	130 / Lt
	All	**1428**	**8**	**A**		**10**	**B**		**1568**	**12**	**B**		**7**	**A**	
Walden Rd	NB	681	-	-	31 / Lt	-	-	92 / Th	870	-	-	53 / Lt	-	-	75 / Th
	SB	377	-	-	-	-	-	-	474	-	-	-	-	-	30 / Th
	EB	92	23	C	75 / Lt	21	C	118 / Lt	92	38	E	114 / Lt	30	D	92 / Lt
	All	**1150**							**1436**						
Cae Dr / Rohret Rd	NB	449	7	A	97	12	B	198 / Th	566	12	B	132 / Th	17	B	236 / Th
	SB	359	7	A	93	27	C	205 / Th	454	11	B	98 / Th	16	B	263 / Th
	EB	372	12	B	139 / Lt	34	C	243 / Lt	474	14	B	185 / Lt	38	D	366 / Th
	WB	39	10	B	54	48	D	30	39	21	C	74	53	D	30
	All	**1219**	**9**	**A**		**24**	**C**		**1533**	**13**	**B**		**24**	**C**	
Abbey Ln / Rushmore Dr	NB	410	-	-	-	-	-	28 / Lt	514	-	-	-	-	-	-
	SB	385	-	-	54 / Lt	-	-	30 / Lt	479	-	-	101 / Lt	-	-	68 / Lt
	EB	52	15	B	54	19	C	50	52	18	C	71	25	D	72
	WB	40	13	B	31	16	C	53	40	15	C	53	2	C	53
	All	**887**							**1085**						
Westside Dr East	NB	549	8	A	64 / Th	6	A	106 / Th	611	7	A	145 / Th	6	A	62 / Th
	SB	400	7	A	96 / Th	6	A	70 / Th	486	6	A	117 / Th	6	A	92 / Th
	EB	12	13	B	28 / Th	37	D	177 / Th	12	34	C	176 / Lt	47	D	27 / Th
	WB	210	15	B	118 / Lt	42	D	27 / Lt	210	30	C	28 / Th	41	D	159 / Lt
	All	**1171**	**9**	**A**		**13**	**B**		**1319**	**11**	**B**		**13**	**B**	
Iowa Hwy 1	NB	250	32	C	213 / Lt	39	D	181 / Lt	295	35	C	162 / Lt	43	D	179 / Lt
	SB	485	33	C	136 / Th	37	C	104 / Th	573	31	C	107 / Lt	42	D	280 / Th
	EB	1106	28	C	255 / Th	43	D	392 / Th	1305	35	D	326 / Th	42	D	514 / Th
	WB	678	26	C	223 / Th	40	D	284 / Th	801	24	C	334 / Th	32	C	237 / Th
	All	**2519**	**29**	**C**		**41**	**D**		**2974**	**31**	**C**		**40**	**D**	

Table 7: PM Peak Hour HCM 2010 Analysis Results

Intersection of Mormon Trek Blvd w/	App	2016 -Existing							2040 - Future						
			4-Lane			3-Lane				4-Lane			3-Lane		
		Peak Volume	Delay (secs/ veh)	LOS	Max Queue (ft/ lane)	Delay (secs/ veh)	LOS	Max Queue (ft/ lane)	Peak Volume	Delay (secs/ veh)	LOS	Max Queue (ft/ lane)	Delay (secs/ veh)	LOS	Max Queue (ft/ lane)
Melrose Ave	NB	630	27	C	241 / Th	28	C	203 / Lt	630	27	C	198 / Lt	27	C	212 / Th
	SB	640	26	C	170 / Th	27	C	333 / Th	650	26	C	195 / Th	25	C	282 / Th
	EB	920	31	C	340 / Th	43	D	368 / Th	930	41	D	476 / Th	40	D	318 / Th
	WB	570	23	C	182 / Th	32	C	217 / Th	580	27	C	137 / Th	25	C	156 / Th
	All	**2760**	**27**	**C**		**34**	**C**		**2790**	**31**	**C**		**31**	**C**	
Bartelt Rd North	NB	620	-	-	-	-	-	31 / Lt	630	-	-	32 / Lt	-	-	31 / Lt
	SB	780	-	-	-	-	-	-	780	-	-	-	-	-	-
	EB	30	16	C	49	17	C	28	30	17	C	71	17	C	29
	All	**1430**							**1440**						
MacBride Dr	NB	620	-	-	-	-	-	-	630	-	-	-	-	-	-
	SB	780	-	-	-	-	-	28 / Lt	780	-	-	31 / Lt	-	-	31 / Lt
	WB	20	16	C	30	16	C	31	20	16	C	30	16	C	30
	All	**1420**							**1430**						
Bartelt Rd South	NB	780	-	-	53	-	-	31 / Lt	630	-	-	74 / Lt	-	-	31 / Lt
	SB	630	-	-	-	-	-	-	790	-	-	-	-	-	-
	EB	40	17	C	45	17	C	66	40	17	C	64	17	C	46
	All	**1450**							1460						
Cameron Way / Walden Sq	NB	550	5	A	101	2	A	163 / Th	560	0	A	140 / Th	2	A	224 / Th
	SB	800	6	A	137	13	B	302 / Th	800	1	A	201 / Th	13	B	264 / Th
	EB	160	13	B	116	32	C	97	160	44	D	271	32	C	112
	WB	20	12	B	31	26	C	31	20	38	D	31	27	C	50
	All	**1530**	**7**	**A**		**11**	**B**		**1540**	**6**	**A**		11	B	
Westwinds Dr	NB	760	-	-	98	-	-	149 / Lt	760	-	-	239 / Lt	-	-	156 / Lt
	SB	700	-	-	50	-	-	-	700	-	-	-	-	-	-
	EB	190	21	C	94	26	D	199	190	21	C	94	26	D	222
	All	**1650**							**1650**						
Benton St	NB	590	7	A	96	1	A	225 / Th	700	1	A	136 / Th	15	A	264 / Th
	SB	860	10	B	230	2	A	252 / Th	870	2	A	246 / Lt	4	B	359 / Th
	WB	460	18	B	101 / Lt	16	B	179 / Lt	510	42	D	365 / Rt	35	C	158 / Rt
	All	**1910**	**11**	**B**		**5**	**A**		**2080**	**11**	**B**		**15**	**B**	
Walden Rd	NB	520	-	-	53	-	-	31 / Lt	640	-	-	53 / Lt	-	-	54 / Lt
	SB	820	-	-	-	-	-	-	870	-	-	-	-	-	-
	EB	90	39	E	118 / Lt	23	C	160 / Lt	90	54	F	140 / Lt	22	C	180 / Lt
	All	**1430**							**1600**						
Cae Dr / Rohret Rd	NB	470	5	A	90	5	A	89 / Th	590	5	A	132 / Lt	32	C	241 / Th
	SB	720	6	A	97	9	A	225 / Th	880	1	A	160 / Lt	11	B	181 / Th
	EB	200	12	B	74 / Lt	31	C	135 / Lt	250	43	D	247 / Lt	30	C	148 / Lt
	WB	20	11	B	30	28	C	31	20	38	D	31	26	C	30
	All	**1410**	**7**	**A**		**11**	**B**		**1740**	**9**	**A**		**21**	**C**	
Abbey Ln / Rushmore Dr	NB	460	-	-	52 / Lt	-	-	28 / Lt	570	-	-	87 / Lt	-	-	50 / Lt
	SB	540	-	-	54 / Lt	-	-	30 / Lt	680	-	-	95 / Lt	-	-	31 / Lt
	EB	40	20	C	31	25	D	54	40	28	D	31	41	E	56
	WB	40	13	B	31	16	C	31	40	16	C	54	22	C	52
	All	**1080**							**1330**						
Westside Dr East	NB	540	9	A	86 / Th	6	A	82 / Th	690	7	A	101 / Th	7	A	135 / Th
	SB	510	8	A	140 / Th	7	A	96 / Th	600	6	A	134 / Th	6	A	116 / Th
	EB	40	12	B	50 / Th	29	C	51 / Th	40	36	D	50 / Th	33	C	47 / Th
	WB	230	13	B	108 / Lt	33	C	163 / Lt	230	42	D	208 / Th	37	D	170 / Lt
	All	**1320**	**10**	**A**		**12**	**B**		**1560**	**13**	**B**		**12**	**B**	
Iowa Hwy 1	NB	300	35	D	200 / Lt	42	D	244 / Lt	350	45	D	245 / Lt	42	D	212 / Lt
	SB	620	39	D	126 / Th	33	C	173 / Lt	730	40	D	212 / Lt	44	D	154 / Lt
	EB	810	23	C	196 / Th	26	C	198 / Lt	950	29	C	242 / Th	27	C	217 / Th
	WB	1170	37	D	375 / Th	33	C	330 / Th	1380	32	C	416 / Th	33	C	455 / Th
	All	**2900**	**33**	**C**		**32**	**C**		**3410**	**34**	**C**		**34**	**C**	

peak analysis periods is listed in Table 8. The 2040 4-lane modeled travel time includes coordinating the traffic signals.

Table 8: Travel Time in Minutes

Peak Hour	Direction of Travel	2016 Field Measured	2016 Model 4-lane	2016 Model 3-Lane	2040 Model 4-Lane	2040 Model 3-Lane
AM Peak	Northbound	4.7	4.8	5.4	4.9	5.3
	Southbound	4.9	4.9	5.0	4.8	5.0
PM Peak	Northbound	4.8	4.6	4.8	4.5	5.0
	Southbound	4.3	4.7	5.1	4.6	5.3

Summary

Given the existing traffic volumes and the limited accesses along Mormon Trek Boulevard, converting the 4-lane roadway to a 3-lane roadway with a continuous center left turn from Petsel Place to north of Westside Drive does not result in a significant change in side street delay which will remain acceptable. In addition the travel time through the corridor will only increase slightly. Future forecasted traffic volumes along the corridor are projected to have a minimal increase since there are no undeveloped areas adjacent to the corridor, with the exception of undeveloped areas along Rohret Road west of the corridor which may generate new traffic with destinations east of the corridor. As such, future 3-lane traffic conditions should mimic existing 3-lane traffic conditions except between Rohret Road and Benton Street. Traffic conditions should be monitored between these intersections to determine if and when future recommendations are needed as vehicle delay would increase past the acceptable threshold. However, with the future recommended improvements, traffic conditions should still be acceptable between the two intersections. The future recommended improvements should be planned for but do not need to be implemented with the current traffic conditions. The following are recommended improvements to the corridor:

- 3-lane cross section from Petsel Place to 1,000’ north of Westside Drive
- Protected/permissive left turn phasing at all signalized intersections
- Traffic signals operating in coordination
- Benton Street - dedicated northbound right turn lane
    - Existing traffic conditions, 150’ storage lane length
    - Future traffic conditions, 300’ storage lane length
- Rohret Road – dedicated southbound right turn lane
    - Future traffic conditions, 125’ storage lane length

Mormon Trek Boulevard
Lane Reconfiguration

Appendix

A. Traffic Volume Counts
B. Travel Time Study
C. Projected Traffic Volumes
D. Capacity Analysis

Appendix

A.Traffic Counts

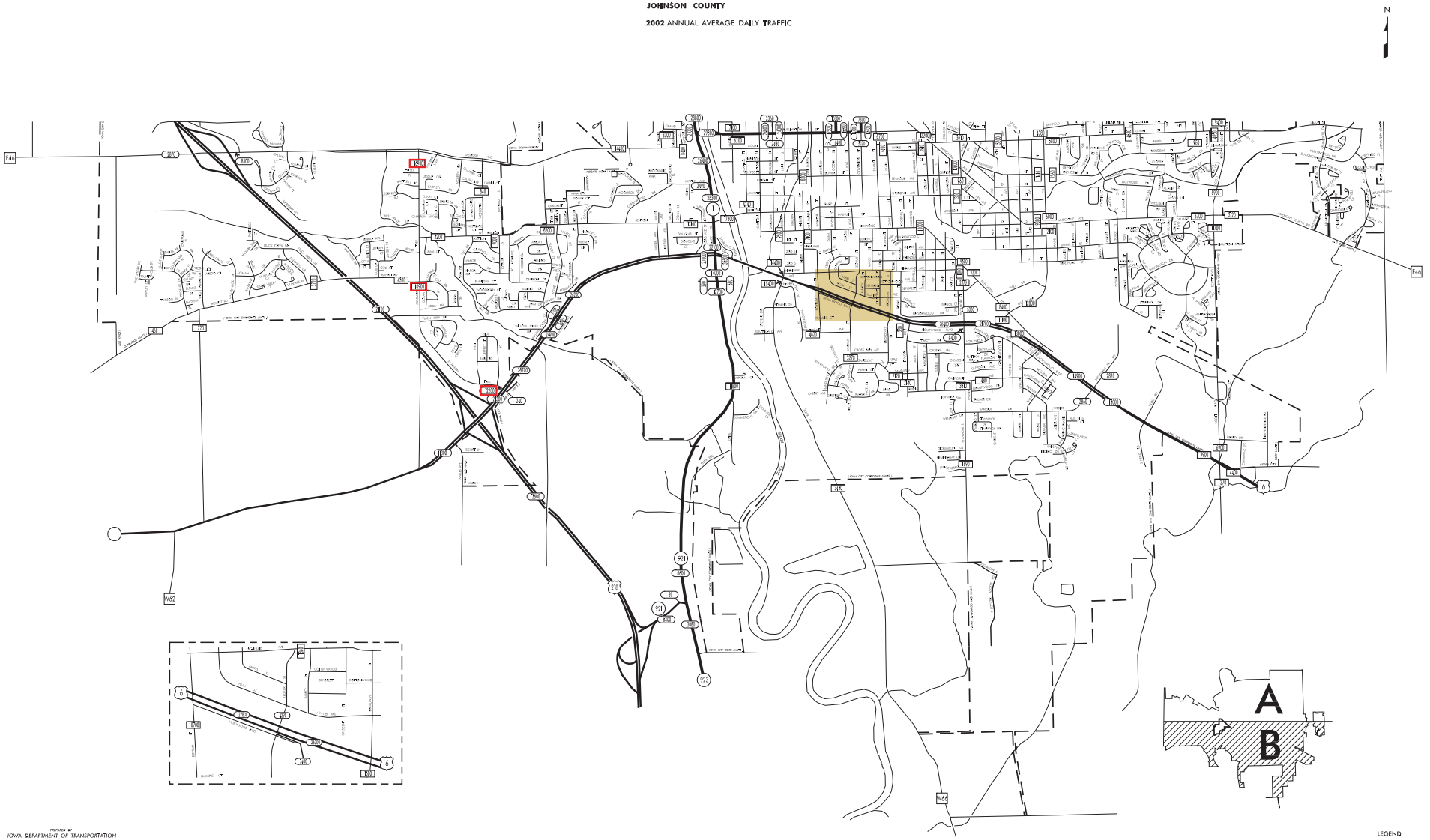
Iowa Department of Transportation

TRAFFIC FLOW MAP OF

IOWA CITY "B"

JOHNSON COUNTY

2002 ANNUAL AVERAGE DAILY **TRAFFIC**



PRINTED BY
IOWA DEPARTMENT OF TRANSPORTATION
DIVISION OF PLANNING AND PROGRAMMING
OFFICE OF TRANSPORTATION DATA
PHONE (515) 239-1332

LEGEND

RECORDER ONLY

MANUAL COUNT

Iowa Department of Transportation

TRAFFIC FLOW MAP OF

IOWA CITY A

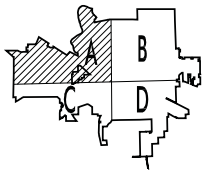
JOHNSON COUNTY

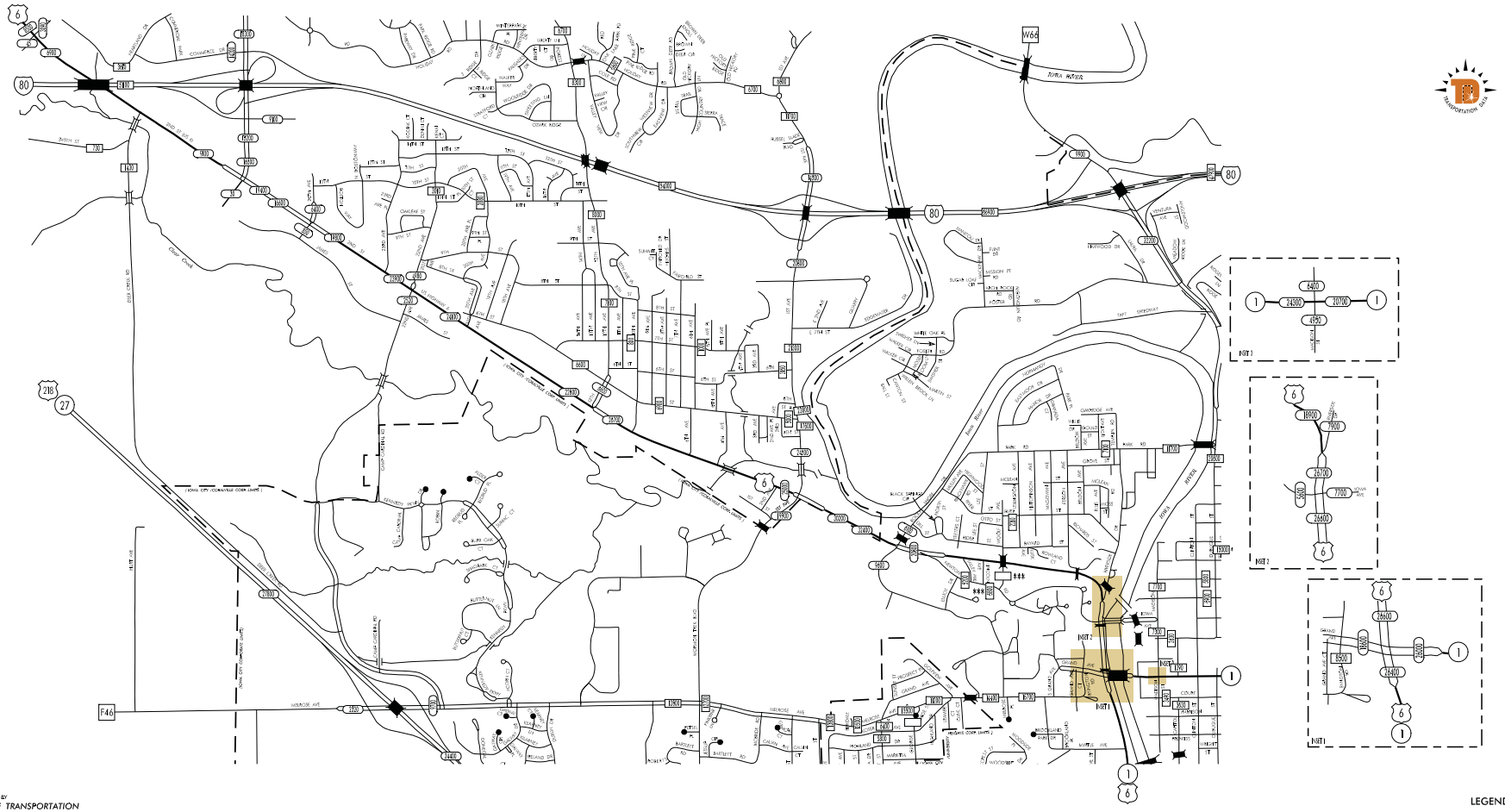
2006 ANNUAL AVERAGE DAILY TRAFFIC

* REVISED 07/2007

** REVISED 04/2008

*** REVISED 11/2009





PREPARED BY
IOWA DEPARTMENT OF TRANSPORTATION
DIVISION OF PLANNING AND PROGRAMMING
OFFICE OF TRANSPORTATION DATA
PHONE (515) 239-1289

LEGEND

RECORDER ONLY

MANUAL COUNT

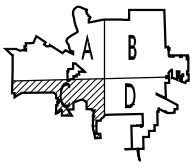
Iowa Department of Transportation

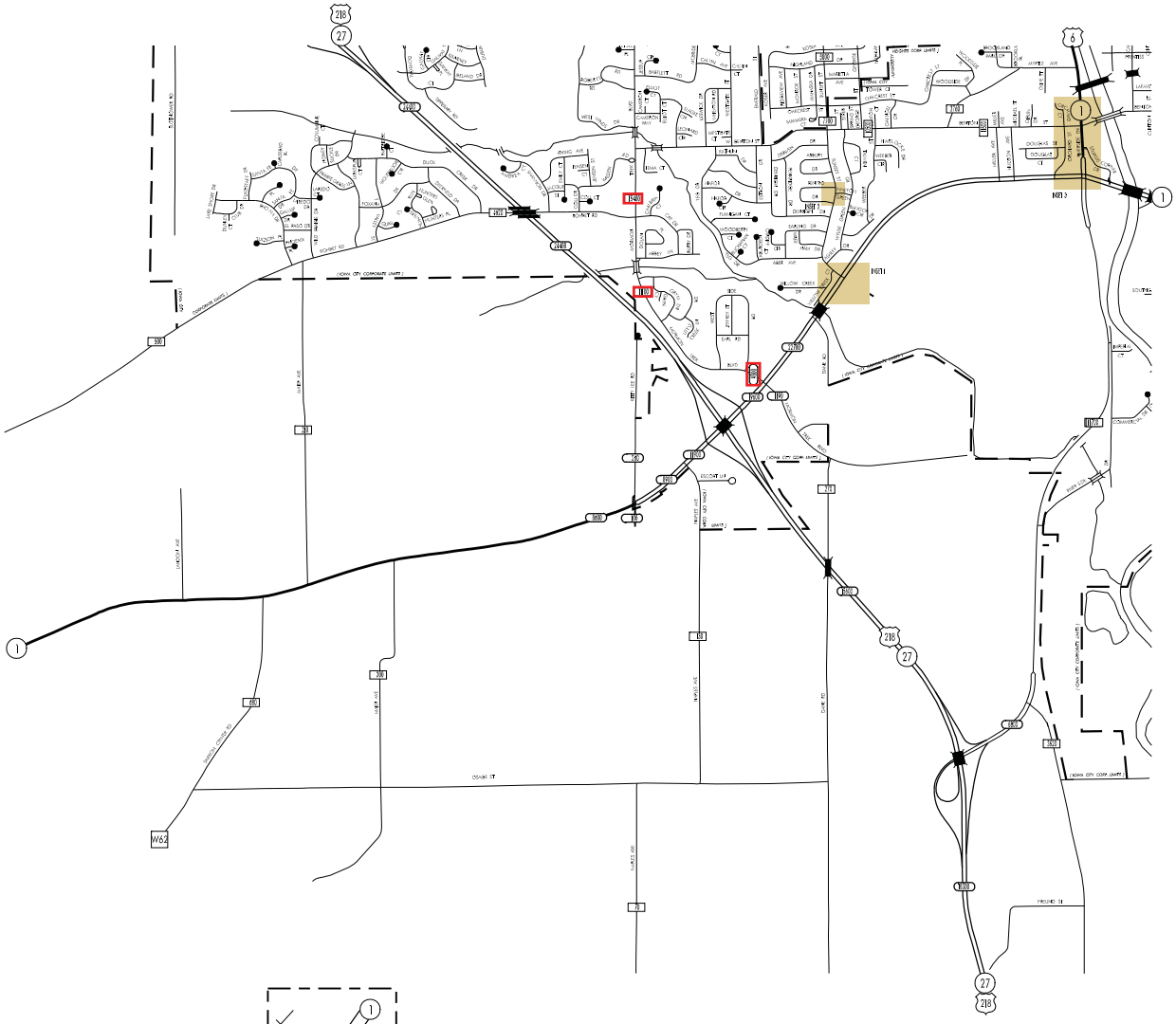
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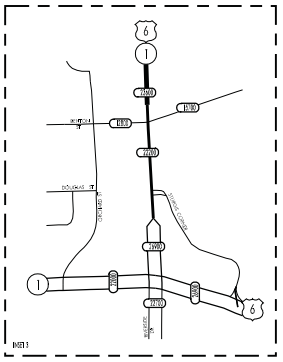
IOWA CITY C

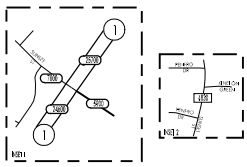
JOHNSON COUNTY

2006 ANNUAL AVERAGE DAILY TRAFFIC









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OFFICE OF TRANSPORTATION DATA
PHONE (515) 239-1289

LEGEND

RECORDER ONLY
MANUAL COUNT

Iowa Department of Transportation

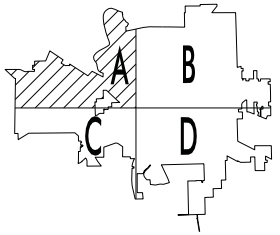
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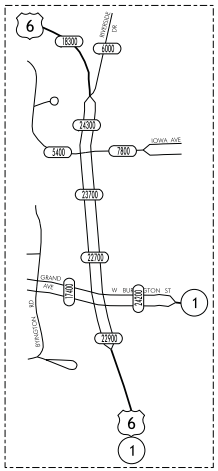
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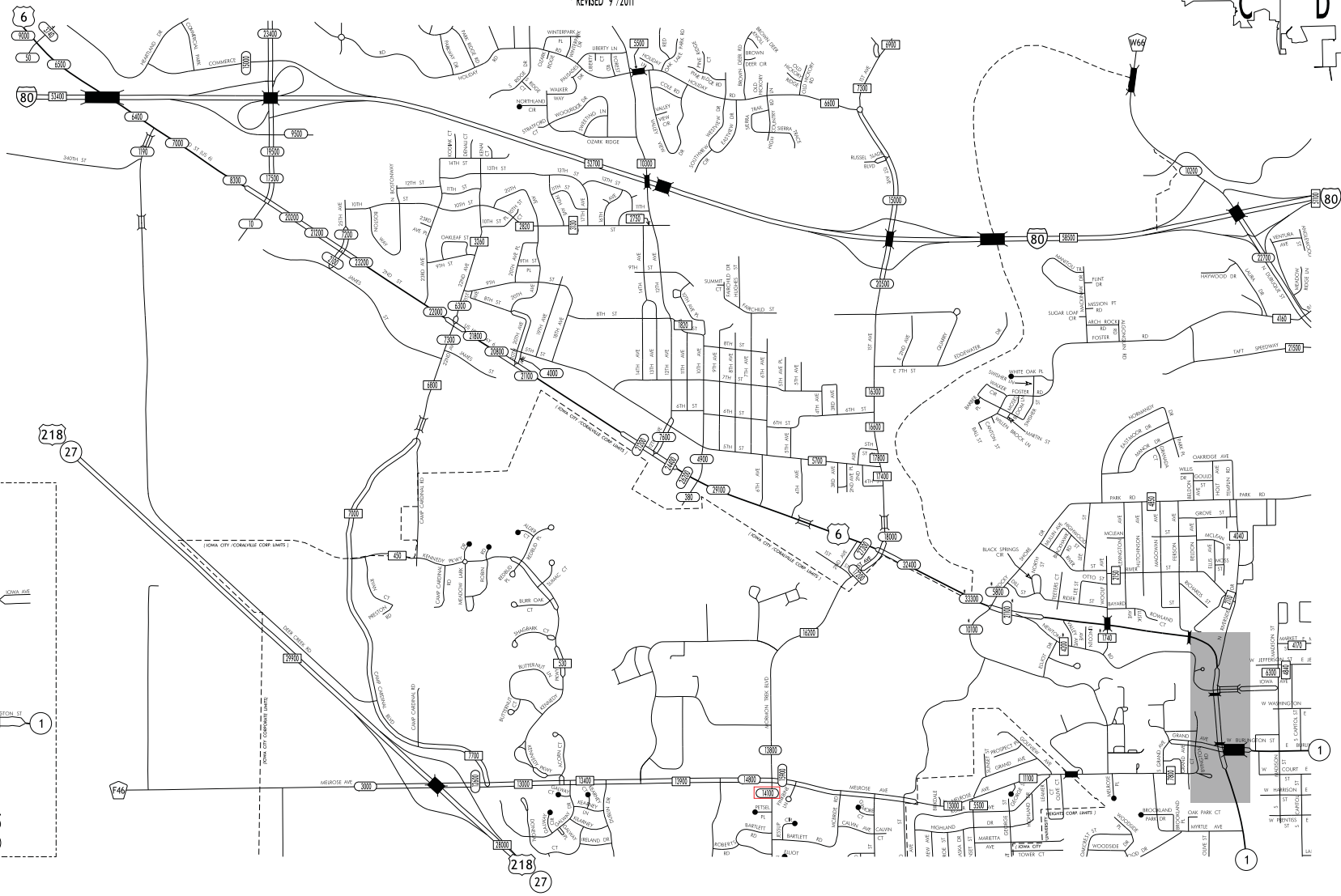
JOHNSON COUNTY

2010 ANNUAL AVERAGE DAILY TRAFFIC

* REVISED 9 /2011






IOWA CITY / CORALVILLE CORP. LIMITS
IOWA CITY / CORALVILLE CORP. LIMITS
IOWA CITY / CORALVILLE CORP. LIMITS
IOWA CITY / CORALVILLE CORP. LIMITS
IOWA CITY CORPORATE LIMITS
HEIGHTS CORP. LIMITS
IOWA CITY
CORALVILLE
CAMP CARDINAL RD
DEER CREEK RD
MELROSE AVE
KENNEDY PKWY
GILBERT ST
DUBUQUE ST
CLINTON ST
RIVERSIDE DR
MORMON TREK BLVD
SCOTTDALE DR
HIGHWAY 1 WEST
HIGHWAY 1 EAST
GRAND AVE
W BURLINGTON ST
E BURLINGTON ST
W WASHINGTON
E WASHINGTON
W COURT
E COURT
W HARRISON
E HARRISON
W JEFFERSON
E JEFFERSON
W MARKET
E MARKET
IOWA AVE
MADISON ST
CAPITOL ST
PARK RD
TAFT SPEEDWAY
MUSCATINE AVE
CLARK ST
RIVER ST
RIVERSIDE DR
DUBUQUE ST
GILBERT ST
CLINTON ST
MAPLE ST
MYRTLE AVE
OAK PARK CT
BROOKLAND PARK DR
WOODSIDE DR
OLIVE CT
HIGHLAND DR
MARIETTA AVE
BARTLETT RD
ROBERTS RD
CALVIN AVE
CALVIN CT
ELIOT
KETSEL PL
MCBRIDE RD
ANNA DR
WEST ST
IOWA CITY TOWER CT
OAKCREST ST
WOODSIDE DR
BRENDALE
LOWELL
COLLEGE
OLIVE CT
MAPLE ST
MYRTLE AVE
OAK PARK CT
BROOKLAND PARK DR
WOODSIDE DR

Iowa Department of Transportation

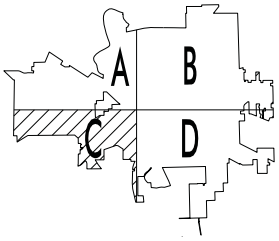
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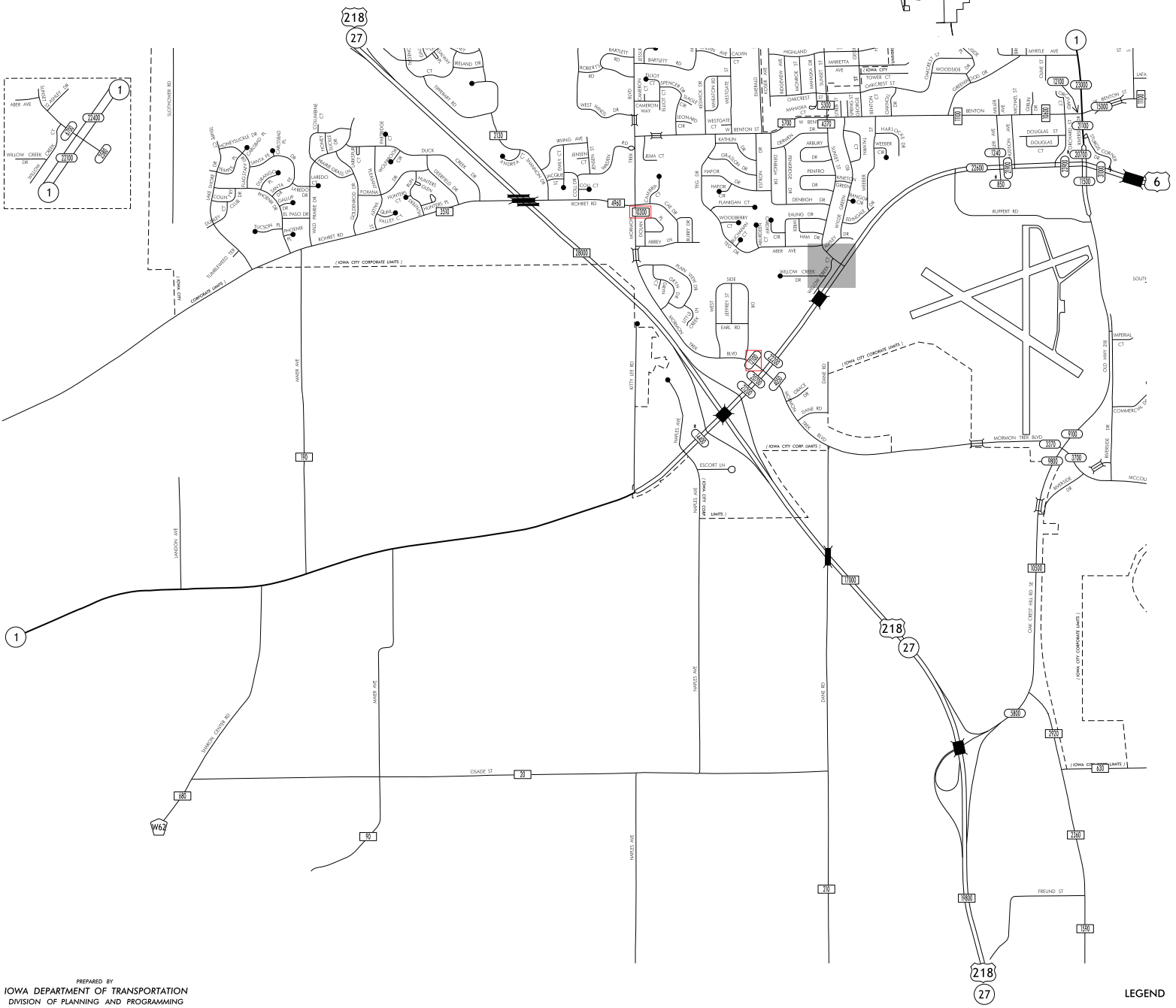
IOWA CITY C

JOHNSON COUNTY

2010 ANNUAL AVERAGE DAILY TRAFFIC

* REVISED 9 /2011




218
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IOWA CITY CORPORATE LIMITS
IOWA CITY CORP. LIMITS
IOWA CITY CORP LIMITS
IOWA CITY CORP LIMITS
IOWA CITY CORP

IOWADOT

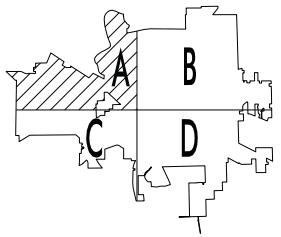
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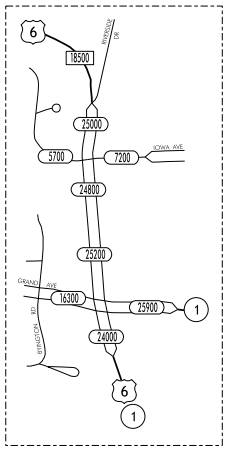
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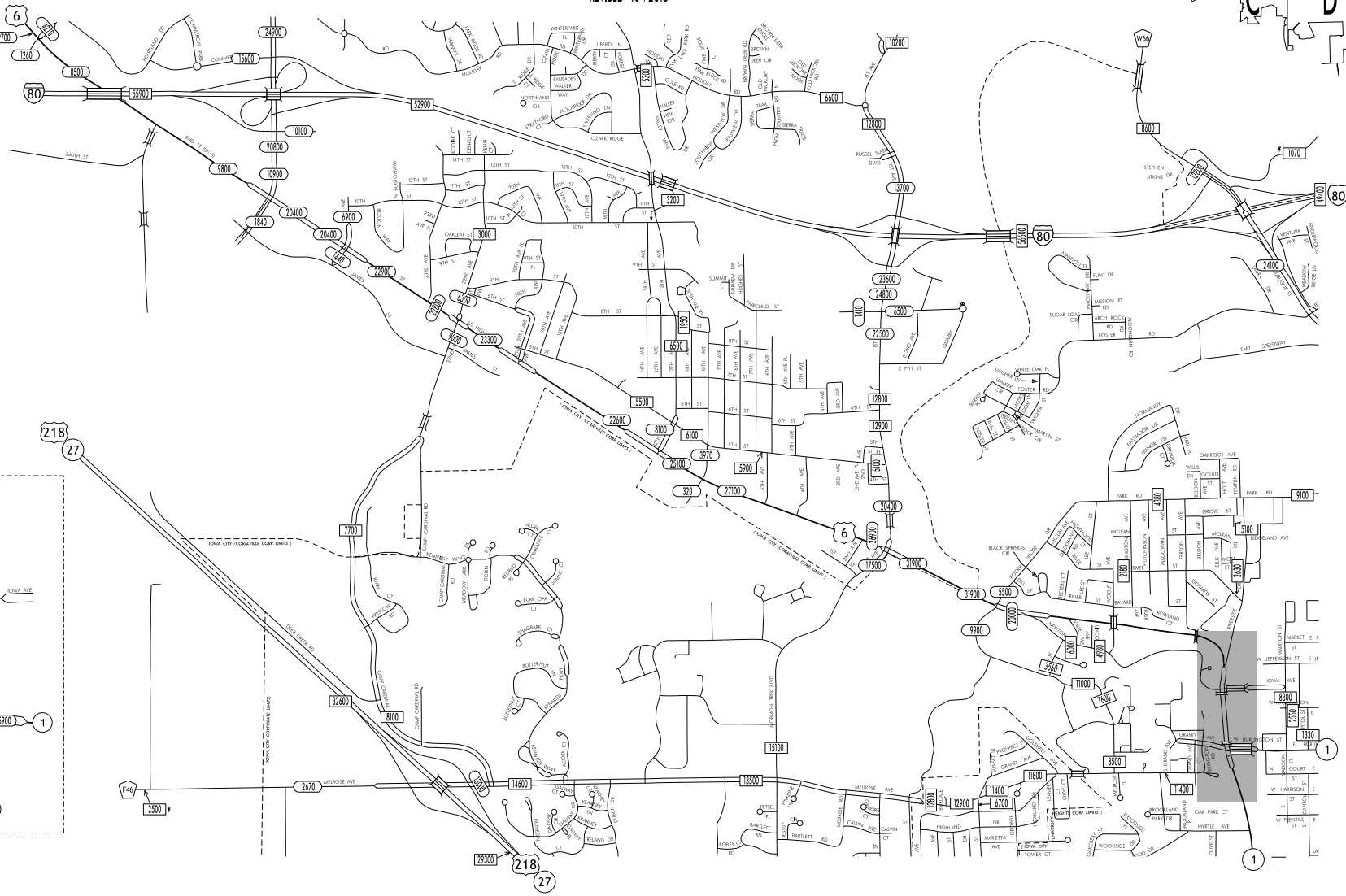
JOHNSON COUNTY

2014 ANNUAL AVERAGE DAILY TRAFFIC

* REVISED 10 /2015






IOWA CITY /CORALVILLE CORP. LIMITS
IOWA CITY /CORALVILLE CORP. LIMITS
IOWA CITY /CORALVILLE CORP. LIMITS
IOWA CITY CORPORATE LIMITS
IOWA CITY CORPORATE LIMITS
IOWA CITY CORPORATE

IOWADOT

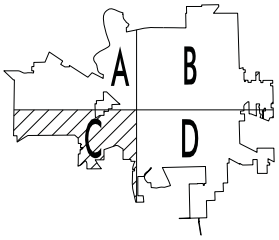
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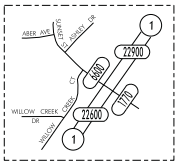
IOWA CITY C

JOHNSON COUNTY

2014 ANNUAL AVERAGE DAILY TRAFFIC

* REVISED 10 /2015





218
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200
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70
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W62
IOWA CITY CORPORATE LIMITS
IOWA CITY CORP. LIMITS
IOWA CITY CORP LIMITS
IOWA CITY CORP. LIMITS
IOWA CITY CORP. LIMITS
CORPORATE LIMITS
MAIER AVE
LANDON AVE
SUGNOWRI RD
TUMBLEWEED TRL
RICHRET RD
WILD PRAIRIE DR
OSAGE ST
SIMON CENTER RD
KITTY LEE RD
NAPLES AVE
DANE RD
MORMON TREK BLVD
MORMON TREK
ESCORT LN
WILLOW CREEK DR
ABER AVE
RUPPERT RD
OLD HWY 218
OAK CREST HILL RD SE
FREUND ST
IMPERIAL CT
COMMERCE DR
RIVERSIDE DR
HIGHLAND AVE
MYRTLE AVE
BENTON ST
IRVING AVE
BARTLETT RD
WESTGATE CT
KATHLIN DR
ARBURY DR
PENFRO DR
DENBIGH DR
EALING DR
WOODBERRY CT
FLANIGAN CT
HAFOR CIR
GRUSON DR
HARLOCK RD
WEBBER CIR
DOUGLAS ST
WALKER AVE
MICHAEL ST
GREEN ST
WOODSIDE DR
FOREST VIEW DR
OAKCREST ST
IOWA CITY TOWER CT
MARETTA AVE
MANASSA CT
MANASSA DR
MONROE ST
MESSERVY AVE
ROVER AVE
EMERALD AVE
CALVIN CT
WESTGATE ST
KENWICK DR
ELLIOT CT
CAMERON WAY
ROBERTS RD
WEST WOOD DR
IRELAND DR
PIPERARY RD
DUCK CREEK DR
DEERFIELD DR
WINTERGREEN DR
WINTERSET DR
SUMMERS PL
FAIRBROOK CT
FOXCROFT DR
KENSINGTON DR
CLARIDGE CT
COLUMBINE CT
MONETA DR
MONEYSUCKLE DR
CARDINAL CT
CARDINAL DR
CARDINAL PL
DAKOTA CT
DAKOTA DR
FLAMINGO DR
CLUB DR
CLUB CT
LAKE SHORE DR
LAREDO CT
LAREDO DR
DELTA CT
DELTA DR
ARIZONA DR
DAVIS DR
EL PASO DR
TUCSON PL
PHOENIX PL
QUAIL CT
VALLEY CT
MONTEREY CT
MONTEREY DR
PONTIAC CT
PONTIAC DR
ROANOKE CT
ROANOKE DR
IRVING CT
JENSEN CT
JENSEN ST
JACQUES ST
COLT CT
COLT DR
TREE
JEAN CT
CAMPUS LN
CAE DR
MORMON TREK
IOWA
ABBEY LN
ABBEY CT
RIVER VIEW DR
GAIL LN
GAIL CT
SIDE
WEST
JEFFREY ST
EARL RD
BLVD
WOODLAND AVE
WOODLAND CT
WOODLAND DR
WOODLAND CIR
MARTINGALE RD
MARTINGALE CT
MARTINGALE CIR
STEVEN CT
STEVEN DR
STEVEN CIR
MOHRFIELD RD
JOSHUA DR
JOSHUA CT
LEIGH CT
LEIGH DR
LEIGH CIR
WYATT CT
WYATT DR
WYATT CIR
EDINBURGH CT
EDINBURGH DR
EDINBURGH CIR
DENVER CT
DENVER DR
DENVER CIR
ABERDEEN CT
ABERDEEN DR
ABERDEEN CIR
ABERDEEN PL
ABERDEEN LN
ABERDEEN WAY

Iowa Department of Transportation

Turning Movement Traffic Count Summary

Annualized Daily Traffic For All Vehicles

Station Number:

52236521099

Count Date:

Monday, September 20, 2010

County:

Johnson

Location Description:

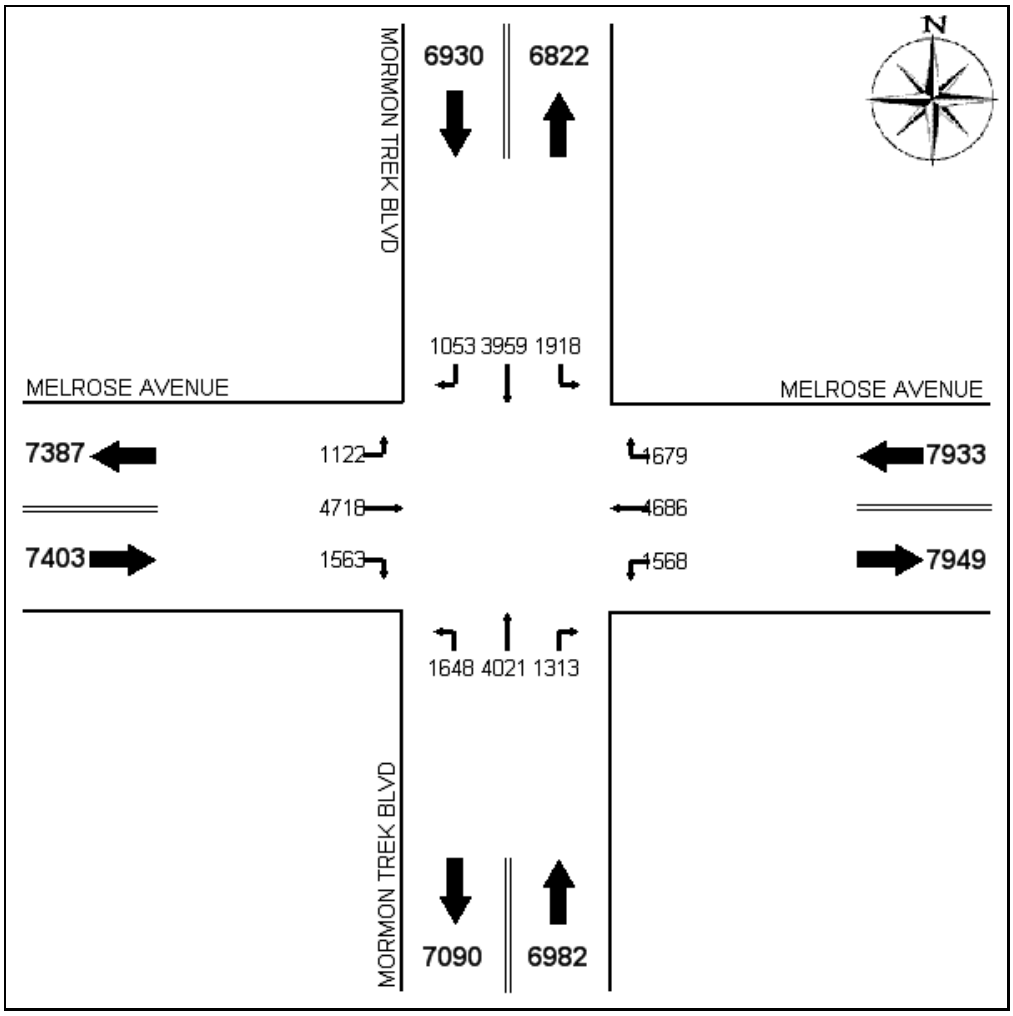
Melrose Ave & Mormon Trek Blvd

Volume Factor: 2.047

Pass Class Factor: 2.069

SU Class Factor: 1.823

Combo Class Factor: 1.951



Raw Data-All Vehicles:

	N Leg			E Leg			S Leg			W Leg		
	L	*T*	*R*	*L*	*T*	*R*	*L*	*T*	*R*	*L*	*T*	*R*
07:00	192	285	113	140	541	98	72	170	192	39	272	65
08:00	89	313	99	115	421	105	125	260	52	43	149	109
11:00	107	183	49	42	187	91	72	258	60	56	194	53
12:00	101	249	62	63	243	55	84	248	45	75	187	52
15:00	135	273	62	209	294	136	113	308	96	82	396	113
16:00	144	299	63	110	308	152	152	317	97	82	585	176
17:00	163	319	62	84	282	178	181	390	97	167	505	194

Iowa Department of Transportation

Turning Movement Traffic Count Summary

Vehicle Type: Passenger Vehicles

Station Number:

52236521099

Count Date:

Monday, September 20, 2010

County:

Johnson

Location Description:

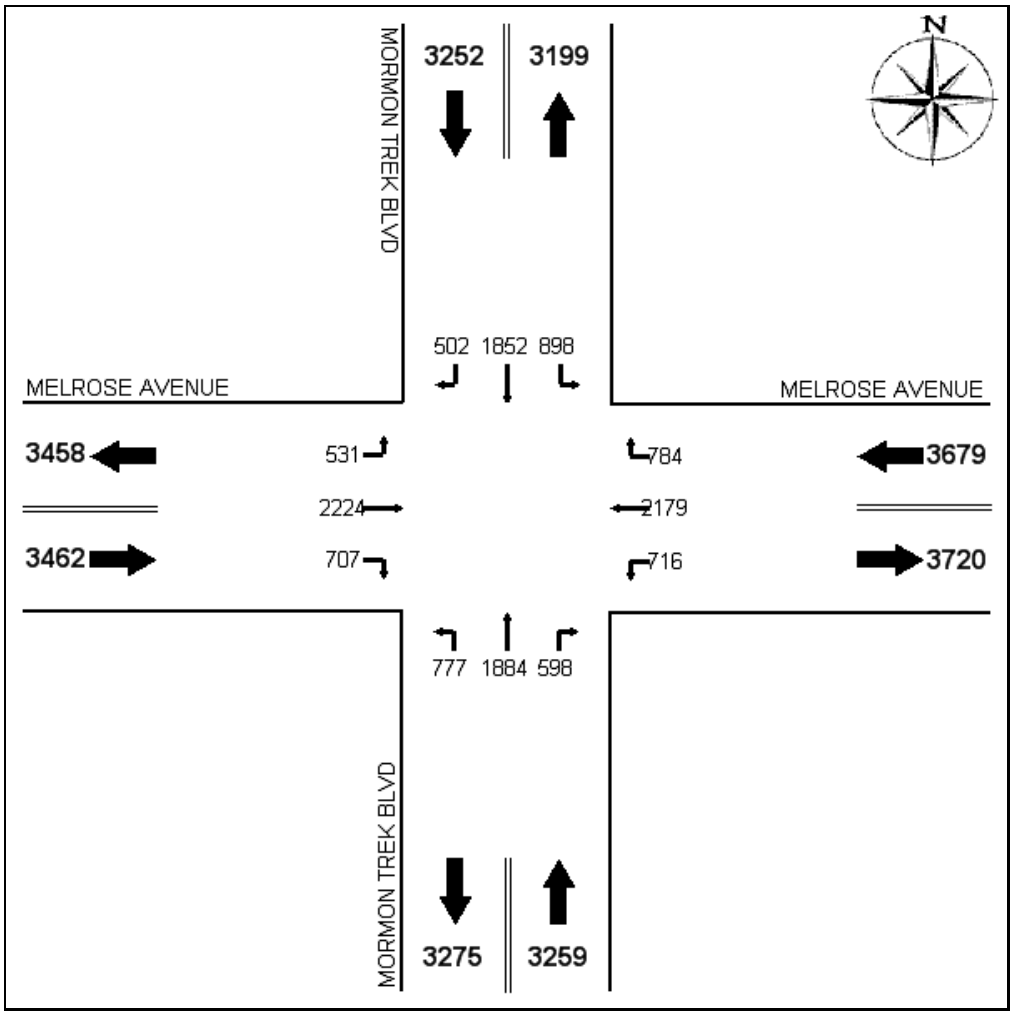
Melrose Ave & Mormon Trek Blvd

Volume Factor: N/A

Pass Class Factor: N/A

SU Class Factor: N/A

Combo Class Factor: N/A



Raw Data-Passenger Vehicles:

	N Leg			E Leg			S Leg			W Leg		
	L	*T*	*R*	*L*	*T*	*R*	*L*	*T*	*R*	*L*	*T*	*R*
07:00	184	269	112	132	525	85	70	158	176	38	264	55
08:00	86	296	98	106	396	95	119	239	46	39	141	97
11:00	98	176	47	39	177	88	71	253	53	54	188	49
12:00	97	240	61	55	229	55	82	238	42	73	176	48
15:00	132	265	60	197	280	132	111	293	89	81	385	106
16:00	140	292	63	103	300	151	146	317	95	80	571	167
17:00	161	314	61	84	272	178	178	386	97	166	499	185

Iowa Department of Transportation

Turning Movement Traffic Count Summary

Vehicle Type: Single-Unit Trucks

Station Number:

52236521099

Count Date:

Monday, September 20, 2010

County:

Johnson

Location Description:

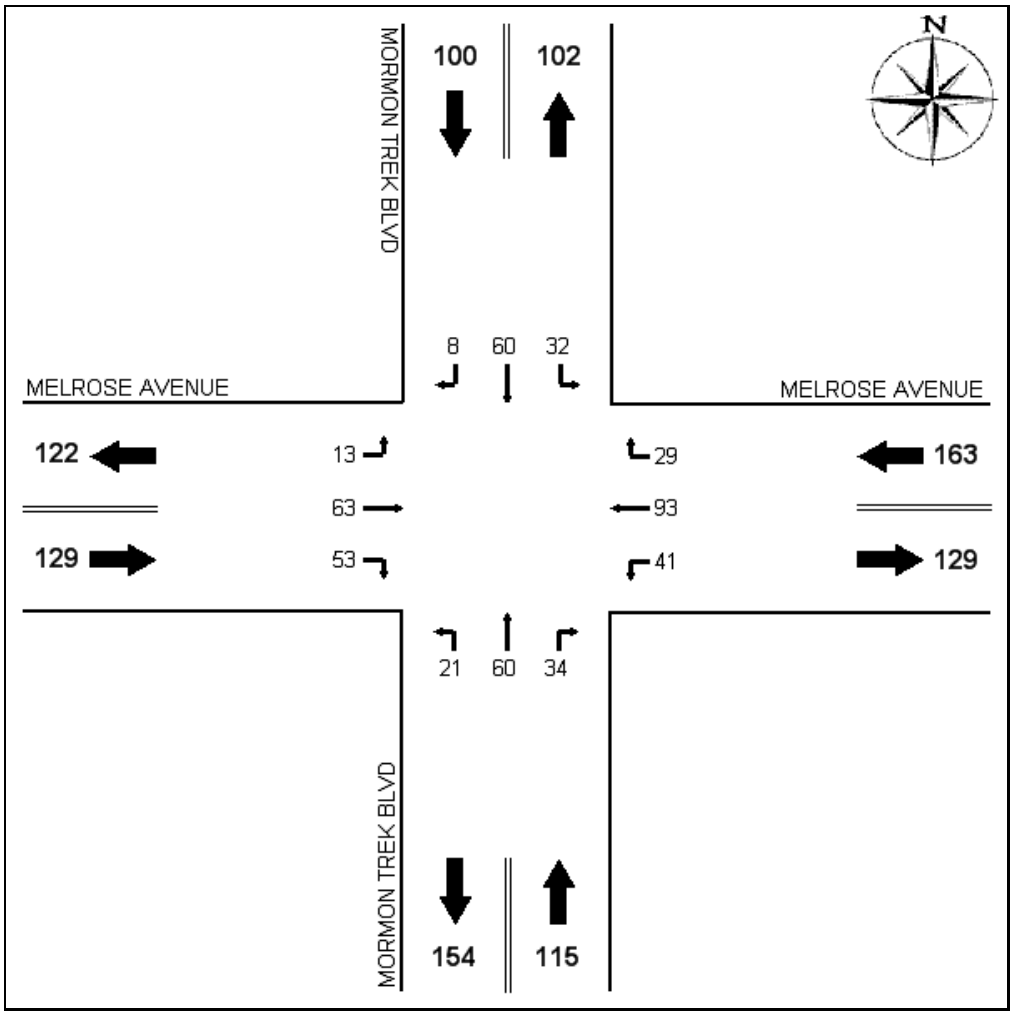
Melrose Ave & Mormon Trek Blvd

Volume Factor: N/A

Pass Class Factor: N/A

SU Class Factor: N/A

Combo Class Factor: N/A



Raw Data-Single-Unit Trucks:

	N Leg			E Leg			S Leg			W Leg		
	L	*T*	*R*	*L*	*T*	*R*	*L*	*T*	*R*	*L*	*T*	*R*
07:00	7	15	1	8	15	12	2	7	13	1	7	10
08:00	3	16	1	6	24	10	6	20	4	4	8	10
11:00	9	6	2	3	10	3	0	5	5	2	6	4
12:00	4	7	1	8	14	0	2	9	3	2	11	4
15:00	3	7	2	12	14	4	2	15	7	1	11	7
16:00	4	6	0	4	7	0	6	0	2	2	14	9
17:00	2	3	1	0	9	0	3	4	0	1	6	9

Iowa Department of Transportation

Turning Movement Traffic Count Summary

Vehicle Type: Combination Trucks

Station Number:

52236521099

Count Date:

Monday, September 20, 2010

County:

Johnson

Location Description:

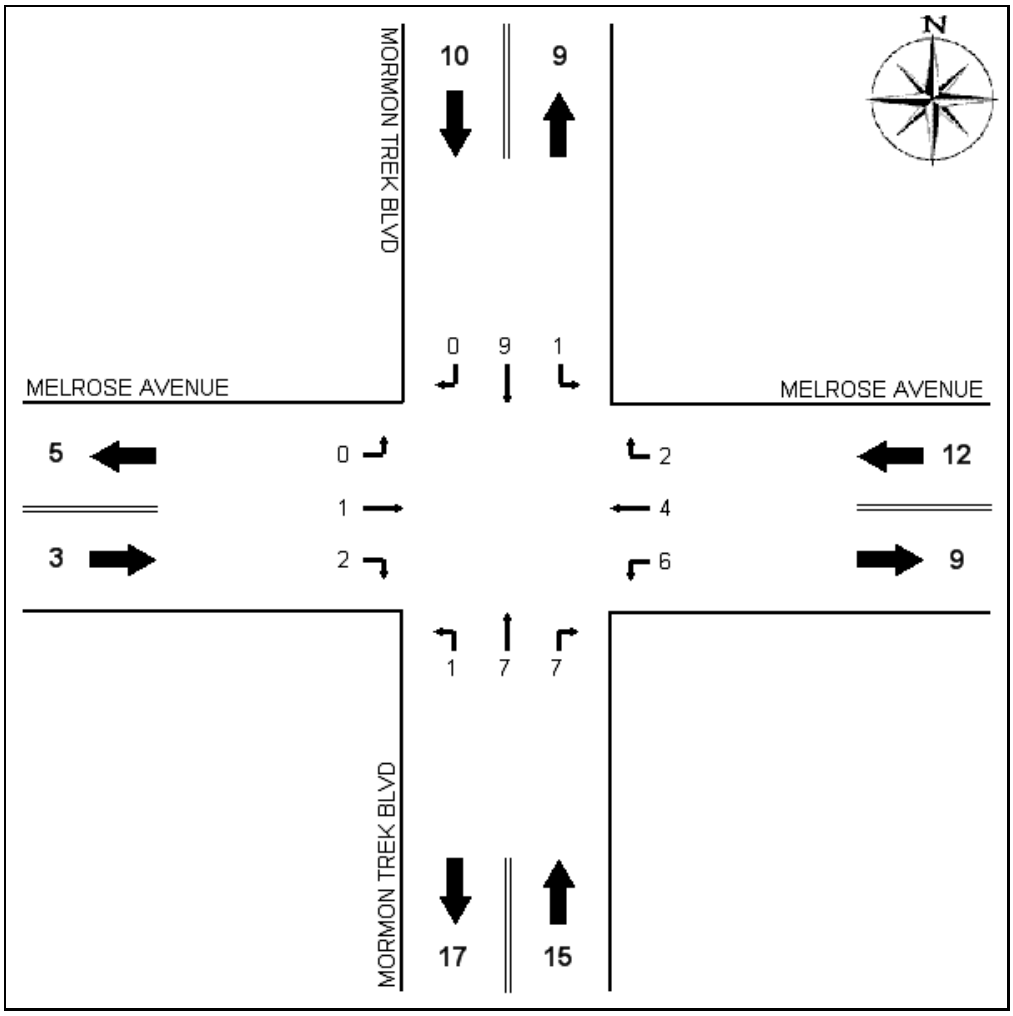
Melrose Ave & Mormon Trek Blvd

Volume Factor: N/A

Pass Class Factor: N/A

SU Class Factor: N/A

Combo Class Factor: N/A



Raw Data-Combination Trucks:

	N Leg			E Leg			S Leg			W Leg		
	L	*T*	*R*	*L*	*T*	*R*	*L*	*T*	*R*	*L*	*T*	*R*
07:00	1	1	0	0	1	1	0	5	3	0	1	0
08:00	0	1	0	3	1	0	0	1	2	0	0	2
11:00	0	1	0	0	0	0	1	0	2	0	0	0
12:00	0	2	0	0	0	0	0	1	0	0	0	0
15:00	0	1	0	0	0	0	0	0	0	0	0	0
16:00	0	1	0	3	1	1	0	0	0	0	0	0
17:00	0	2	0	0	1	0	0	0	0	0	0	0

File Name: S:\JCCOG\TRANS\Traffic Counts\Peak Hr\Iowa City\Mormon Trek & Bartelt & MacBride - AM - Mar12.ppd
Start Date: 3/22/2012
Start Time: 7:15:00 AM
Site Code: 00000000

Vehicles-Peds

	MORMONTREK Southbound				BARTLETCAMDEN Westbound				MORMONTREK Northbound				BARTLETCAMDEN Eastbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
07:15 AM	0	71	2	2	0	0	1	0	0	161	1	0	3	0	2	0
07:30 AM	0	91	2	1	3	0	2	0	0	230	0	0	0	0	2	0
07:45 AM	1	120	0	0	1	0	3	0	0	219	1	0	0	0	2	0
08:00 AM	0	119	1	0	0	0	0	0	0	147	1	0	3	0	3	0
08:15 AM	0	76	1	2	3	0	0	0	0	128	0	2	4	0	3	1
08:30 AM	1	71	0	1	1	0	1	0	0	149	1	2	5	0	4	0

Trucks_Buses

	MORMONTREK				BARTLETCAMDEN				MORMONTREK				BARTLETCAMDEN			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
07:15 AM	0	9	1	0	0	0	0	0	0	6	0	0	0	0	1	0
07:30 AM	0	8	1	0	0	0	0	0	1	10	0	0	0	0	0	0
07:45 AM	0	7	0	0	0	0	0	0	0	9	0	0	0	0	1	0
08:00 AM	0	11	1	0	0	0	0	0	0	5	0	0	0	0	0	0
08:15 AM	0	3	1	0	0	0	0	0	0	5	0	0	0	0	2	0
08:30 AM	0	4	1	0	0	0	0	0	0	2	0	0	0	0	0	0

Bicycles

	MORMONTREK				BARTLETCAMDEN				MORMONTREK				BARTLETCAMDEN			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
07:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0

File Name: S:\JCCOG\TRANS\Traffic Counts\Peak Hr\Iowa City\Mormon Trek & Bartelt & Macbride - PM - Apr12.ppd
Start Date: 4/11/2012
Start Time: 4:15:00 PM
Site Code: 00000000

Vehicles-Peds

	MORMON Southbound				BARTELTMACBRIDE Westbound				MORMON Northbound				BARTELTMACBRIDE Eastbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
04:15 PM	2	140	3	0	3	0	0	0	2	110	2	3	3	0	3	0
04:30 PM	3	173	4	5	3	0	4	1	1	149	0	0	1	0	3	1
04:45 PM	0	192	6	3	0	0	2	0	0	160	3	4	1	0	6	0
05:00 PM	1	186	1	0	1	0	0	0	2	179	1	4	2	0	5	0
05:15 PM	2	190	6	2	3	0	2	0	3	170	2	2	6	0	2	0
05:30 PM	1	174	3	4	3	0	0	0	1	153	2	0	2	0	2	0

Trucks-Buses

	MORMON				BARTELTMACBRIDE				MORMON				BARTELTMACBRIDE			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
04:15 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0
04:30 PM	0	2	0	0	0	0	0	0	0	4	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0
05:00 PM	0	4	0	0	0	0	0	0	0	1	0	0	0	0	0	0
05:15 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0
05:30 PM	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles

	MORMON				BARTELTMACBRIDE				MORMON				BARTELTMACBRIDE			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
04:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0
04:30 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0
04:45 PM	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0
05:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	1	0	0	0	0	1	0	1	1	0	0	0	0	0	0
05:30 PM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0

File Name: S:\JCCOG\TRANS\Traffic Counts\Peak Hr\Iowa City\Mormon Trek & Bartelt (South) - AM - Apr12.ppd
Start Date: 4/4/2012
Start Time: 7:15:00 AM
Site Code: 00000000

Vehicles-Peds

	Southbound				Westbound				Northbound				Eastbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
07:15 AM	0	77	3	0	0	0	0	0	7	136	0	1	2	0	2	0
07:30 AM	0	78	2	0	0	0	0	0	1	197	0	0	0	0	1	0
07:45 AM	0	87	0	0	0	0	0	0	4	207	0	0	2	0	2	0
08:00 AM	0	128	3	1	0	0	0	0	3	122	0	0	4	0	1	0
08:15 AM	0	88	2	0	0	0	0	0	2	110	0	0	4	0	1	0
08:30 AM	0	48	4	0	0	0	0	0	7	91	0	1	1	0	4	0

Trucks-Buses

	Southbound				Westbound				Northbound				Eastbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
07:15 AM	0	3	0	0	0	0	0	0	0	2	0	0	0	0	2	1
07:30 AM	0	4	0	0	0	0	0	0	0	7	0	0	1	0	2	0
07:45 AM	0	3	0	0	0	0	0	0	0	1	0	0	0	0	0	0
08:00 AM	0	8	2	0	0	0	0	0	0	5	0	0	0	0	1	0
08:15 AM	0	4	0	0	0	0	0	0	0	2	0	0	0	0	1	0
08:30 AM	0	1	0	0	0	0	0	0	0	4	0	0	1	0	0	0

Bicycles

	Southbound				Westbound				Northbound				Eastbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

File Name: S:\JCCOG\TRANS\Traffic Counts\Peak Hr\Iowa City\Mormon Trek & Bartelt (South) - PM - Apr12.ppd
Start Date: 4/18/2012
Start Time: 4:15:00 PM
Site Code: 00000000

Vehicles-Peds

	Southbound				Westbound				Northbound				Eastbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
04:15 PM	0	149	5	5	0	0	0	0	6	129	0	3	3	0	3	0
04:30 PM	0	163	3	2	0	0	0	0	3	156	0	0	3	0	1	0
04:45 PM	0	190	5	8	0	0	0	0	8	145	0	12	3	0	10	0
05:00 PM	0	207	6	1	0	0	0	0	4	180	0	6	5	0	5	0
05:15 PM	0	207	1	3	0	0	0	0	5	178	0	4	1	0	3	0
05:30 PM	0	211	4	2	0	0	0	0	1	161	0	1	4	0	8	0

Trucks-Buses

	Southbound				Westbound				Northbound				Eastbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
04:15 PM	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0
04:30 PM	0	3	0	0	0	0	0	0	0	2	0	0	0	0	0	0
04:45 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0
05:15 PM	0	1	0	0	0	0	0	0	1	2	0	0	0	0	1	0
05:30 PM	0	4	0	0	0	0	0	0	0	1	0	0	0	0	0	0

Bicycles

	Southbound				Westbound				Northbound				Eastbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
04:30 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	0	2	0
04:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0
05:15 PM	0	1	0	0	0	0	0	0	0	1	0	0	0	0	2	0
05:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0

Snyder & Associates

2727 Snyder Blvd.
Ankeny, Iowa, 50023

Mormon Trek Blvd and Cameron Way
Iowa City, IA
Iowa City 4 to 3 lane reconfiguration

File Name : Mormon Trek and Cameron Way 160121
Site Code :
Start Date : 1/21/2016
Page No : 1

Groups Printed- Cars+ - Heavy Vehicles

	Mormon Trek Blvd SB					Cameron Way WB					Mormon Trek Blvd NB					Walden Sq EB					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	1	48	8	0	57	0	0	1	0	1	4	104	0	0	108	9	0	3	0	12	178
07:15 AM	1	60	5	0	66	1	0	4	1	6	3	151	0	0	154	7	0	5	1	13	239
07:30 AM	1	80	12	0	93	1	0	8	0	9	5	230	0	0	235	10	0	3	0	13	350
07:45 AM	1	104	14	0	119	1	1	5	0	7	4	174	0	0	178	10	1	3	0	14	318
Total	4	292	39	0	335	3	1	18	1	23	16	659	0	0	675	36	1	14	1	52	1085
08:00 AM	0	91	13	0	104	0	2	3	0	5	5	103	1	1	110	10	0	6	0	16	235
08:15 AM	3	69	16	1	89	1	0	4	0	5	6	102	1	0	109	4	1	9	1	15	218
08:30 AM	1	86	12	0	99	0	0	1	0	1	6	129	0	0	135	10	1	4	0	15	250
08:45 AM	0	85	18	0	103	1	1	1	0	3	7	136	1	0	144	13	0	9	1	23	273
Total	4	331	59	1	395	2	3	9	0	14	24	470	3	1	498	37	2	28	2	69	976
09:00 AM	0	68	12	0	80	0	0	3	0	3	2	103	0	0	105	16	0	3	1	20	208
09:15 AM	0	59	11	0	70	0	1	2	0	3	8	88	0	0	96	12	3	4	0	19	188
09:30 AM	0	76	10	0	86	0	0	1	2	3	10	67	0	0	77	12	0	8	0	20	186
09:45 AM	0	72	13	0	85	0	1	1	0	2	4	82	0	0	86	12	0	7	0	19	192
Total	0	275	46	0	321	0	2	7	2	11	24	340	0	0	364	52	3	22	1	78	774
10:00 AM	0	74	22	0	96	0	0	1	2	3	4	82	1	1	88	13	0	7	0	20	207
10:15 AM	1	60	16	1	78	0	1	0	1	2	4	82	0	0	86	15	0	8	4	27	193
10:30 AM	1	76	18	0	95	1	0	1	0	2	7	89	0	0	96	9	2	8	1	20	213
10:45 AM	1	65	17	0	83	1	1	3	0	5	8	82	1	0	91	15	0	10	2	27	206
Total	3	275	73	1	352	2	2	5	3	12	23	335	2	1	361	52	2	33	7	94	819
11:00 AM	1	85	20	0	106	0	0	1	0	1	5	80	0	0	85	12	0	7	1	20	212
11:15 AM	2	76	21	0	99	0	0	0	1	1	3	110	0	0	113	17	0	7	2	26	239
11:30 AM	1	89	18	0	108	0	0	1	0	1	11	101	0	0	112	12	0	17	2	31	252
11:45 AM	2	113	20	0	135	0	0	2	0	2	9	105	0	0	114	15	0	6	0	21	272
Total	6	363	79	0	448	0	0	4	1	5	28	396	0	0	424	56	0	37	5	98	975
12:00 PM	2	115	21	0	138	0	0	0	1	1	7	86	0	0	93	17	2	17	0	36	268
12:15 PM	2	98	16	0	116	0	0	0	1	1	4	76	0	0	80	25	2	12	2	41	238
12:30 PM	3	83	16	3	105	0	0	2	2	4	6	103	0	0	109	21	0	10	1	32	250
12:45 PM	0	98	38	1	137	0	0	1	0	1	8	103	0	0	111	14	0	12	0	26	275
Total	7	394	91	4	496	0	0	3	4	7	25	368	0	0	393	77	4	51	3	135	1031
01:00 PM	0	99	27	1	127	0	0	3	0	3	7	84	0	1	92	20	0	16	0	36	258
01:15 PM	1	99	22	0	122	0	0	1	1	2	8	84	0	0	92	21	0	12	0	33	249
01:30 PM	1	94	22	0	117	0	0	1	1	2	9	81	0	0	90	10	0	18	0	28	237
01:45 PM	0	101	25	2	128	0	0	0	0	0	6	94	0	0	100	13	0	8	0	21	249
Total	2	393	96	3	494	0	0	5	2	7	30	343	0	1	374	64	0	54	0	118	993
02:00 PM	0	90	24	0	114	0	0	1	0	1	6	114	0	0	120	16	0	13	0	29	264
02:15 PM	5	128	26	0	159	1	2	3	0	6	3	81	0	0	84	20	0	13	0	33	282
02:30 PM	2	123	23	1	149	1	0	1	0	2	7	93	1	0	101	24	1	7	2	34	286
02:45 PM	3	129	13	0	145	0	0	2	0	2	6	108	0	0	114	17	2	13	0	32	293
Total	10	470	86	1	567	2	2	7	0	11	22	396	1	0	419	77	3	46	2	128	1125
03:00 PM	2	128	25	0	155	0	0	2	1	3	6	112	0	0	118	21	0	15	0	36	312
03:15 PM	1	119	18	0	138	0	0	5	0	5	10	113	0	0	123	16	1	11	0	28	294
03:30 PM	4	115	26	3	148	0	0	1	1	2	10	119	0	0	129	11	0	14	0	25	304
03:45 PM	3	139	34	1	177	0	1	2	0	3	6	107	1	0	114	32	0	11	1	44	338
Total	10	501	103	4	618	0	1	10	2	13	32	451	1	0	484	80	1	51	1	133	1248
04:00 PM	1	124	30	2	157	0	2	1	1	4	4	112	0	0	116	20	0	10	0	30	307
04:15 PM	3	142	21	0	166	0	1	3	0	4	12	96	0	0	108	20	1	10	0	31	309
04:30 PM	3	132	29	0	164	3	1	1	1	6	3	109	0	0	112	18	2	11	0	31	313
04:45 PM	4	149	42	1	196	0	2	0	0	2	9	145	0	0	154	20	1	17	3	41	393
Total	11	547	122	3	683	3	6	5	2	16	28	462	0	0	490	78	4	48	3	133	1322

Snyder & Associates

2727 Snyder Blvd.
Ankeny, Iowa, 50023

Mormon Trek Blvd and Cameron Way
Iowa City, IA
Iowa City 4 to 3 lane reconfiguration

File Name : Mormon Trek and Cameron Way 160121
Site Code :
Start Date : 1/21/2016
Page No : 2

Groups Printed- Cars+ - Heavy Vehicles

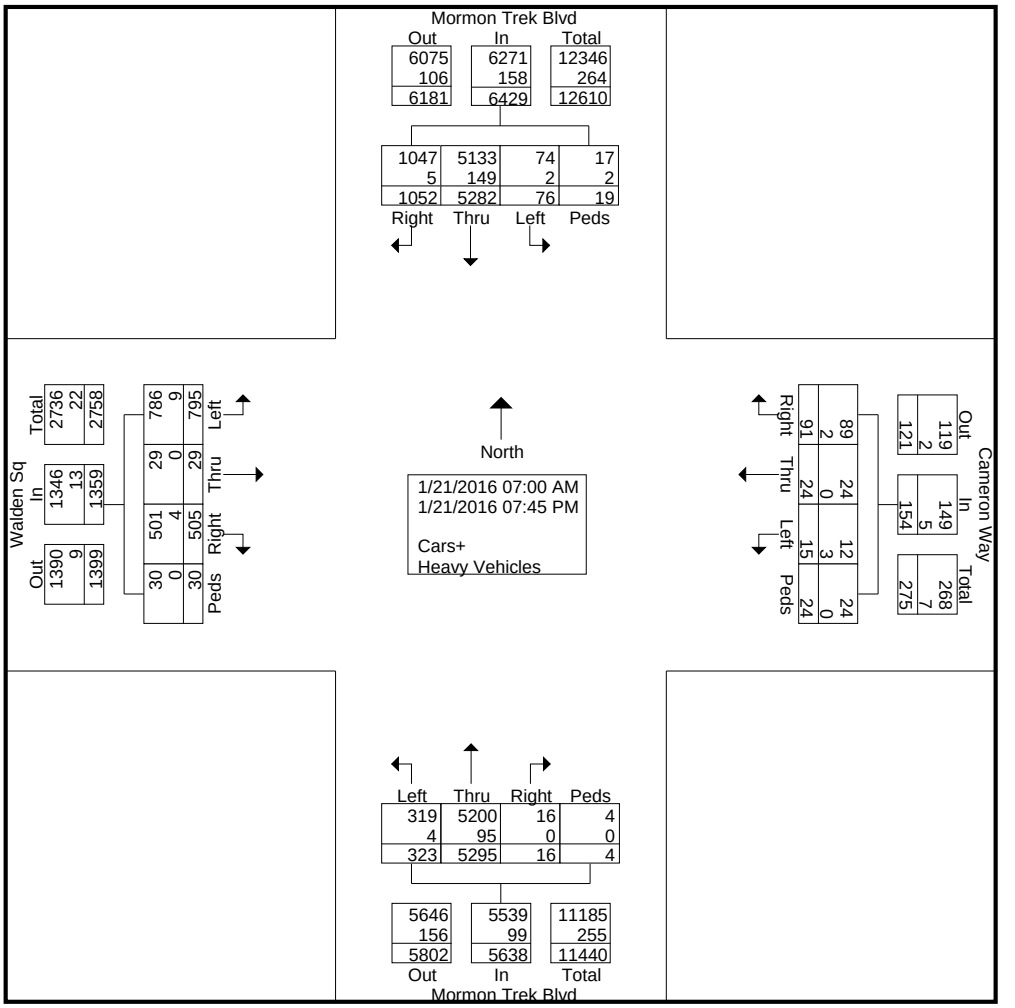
	Mormon Trek Blvd SB					Cameron Way WB					Mormon Trek Blvd NB					Walden Sq EB					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
05:00 PM	3	181	33	0	217	3	2	6	3	14	6	128	2	0	136	25	2	16	2	45	412
05:15 PM	3	172	40	0	215	0	0	1	1	2	4	127	2	0	133	30	1	26	1	58	408
05:30 PM	2	129	37	1	169	0	0	3	0	3	4	123	1	0	128	17	2	5	2	26	326
05:45 PM	0	177	24	0	201	0	1	2	1	4	9	111	0	0	120	21	0	8	0	29	354
Total	8	659	134	1	802	3	3	12	5	23	23	489	5	0	517	93	5	55	5	158	1500
06:00 PM	2	144	20	0	166	0	0	1	0	1	11	96	0	1	108	12	0	10	0	22	297
06:15 PM	3	104	25	0	132	0	3	2	1	6	12	89	0	0	101	14	1	11	0	26	265
06:30 PM	0	99	17	0	116	0	0	1	1	2	4	95	2	0	101	9	0	9	0	18	237
06:45 PM	1	106	11	0	118	0	1	0	0	1	1	89	0	0	90	17	0	5	0	22	231
Total	6	453	73	0	532	0	4	4	2	10	28	369	2	1	400	52	1	35	0	88	1030
07:00 PM	2	105	14	1	122	0	0	1	0	1	6	63	0	0	69	11	2	7	0	20	212
07:15 PM	0	80	10	0	90	0	0	0	0	0	8	59	1	0	68	14	0	6	0	20	178
07:30 PM	2	69	14	0	85	0	0	0	0	0	4	51	1	0	56	12	1	8	0	21	162
07:45 PM	1	75	13	0	89	0	0	1	0	1	2	44	0	0	46	4	0	10	0	14	150
Total	5	329	51	1	386	0	0	2	0	2	20	217	2	0	239	41	3	31	0	75	702
Grand Total	76	5282	1052	19	6429	15	24	91	24	154	323	5295	16	4	5638	795	29	505	30	1359	13580
Apprch %	1.2	82.2	16.4	0.3		9.7	15.6	59.1	15.6		5.7	93.9	0.3	0.1		58.5	2.1	37.2	2.2		
Total %	0.6	38.9	7.7	0.1	47.3	0.1	0.2	0.7	0.2	1.1	2.4	39	0.1	0	41.5	5.9	0.2	3.7	0.2	10	
Cars+	74	5133	1047	17	6271	12	24	89	24	149	319	5200	16	4	5539	786	29	501	30	1346	13305
% Cars+	97.4	97.2	99.5	89.5	97.5	80	100	97.8	100	96.8	98.8	98.2	100	100	98.2	98.9	100	99.2	100	99	98
Heavy Vehicles	2	149	5	2	158	3	0	2	0	5	4	95	0	0	99	9	0	4	0	13	275
% Heavy Vehicles	2.6	2.8	0.5	10.5	2.5	20	0	2.2	0	3.2	1.2	1.8	0	0	1.8	1.1	0	0.8	0	1	2

Snyder & Associates

2727 Snyder Blvd.
Ankeny, Iowa, 50023

Mormon Trek Blvd and Cameron Way
Iowa City, IA
Iowa City 4 to 3 lane reconfiguration

File Name : Mormon Trek and Cameron Way 160121
Site Code :
Start Date : 1/21/2016
Page No : 3



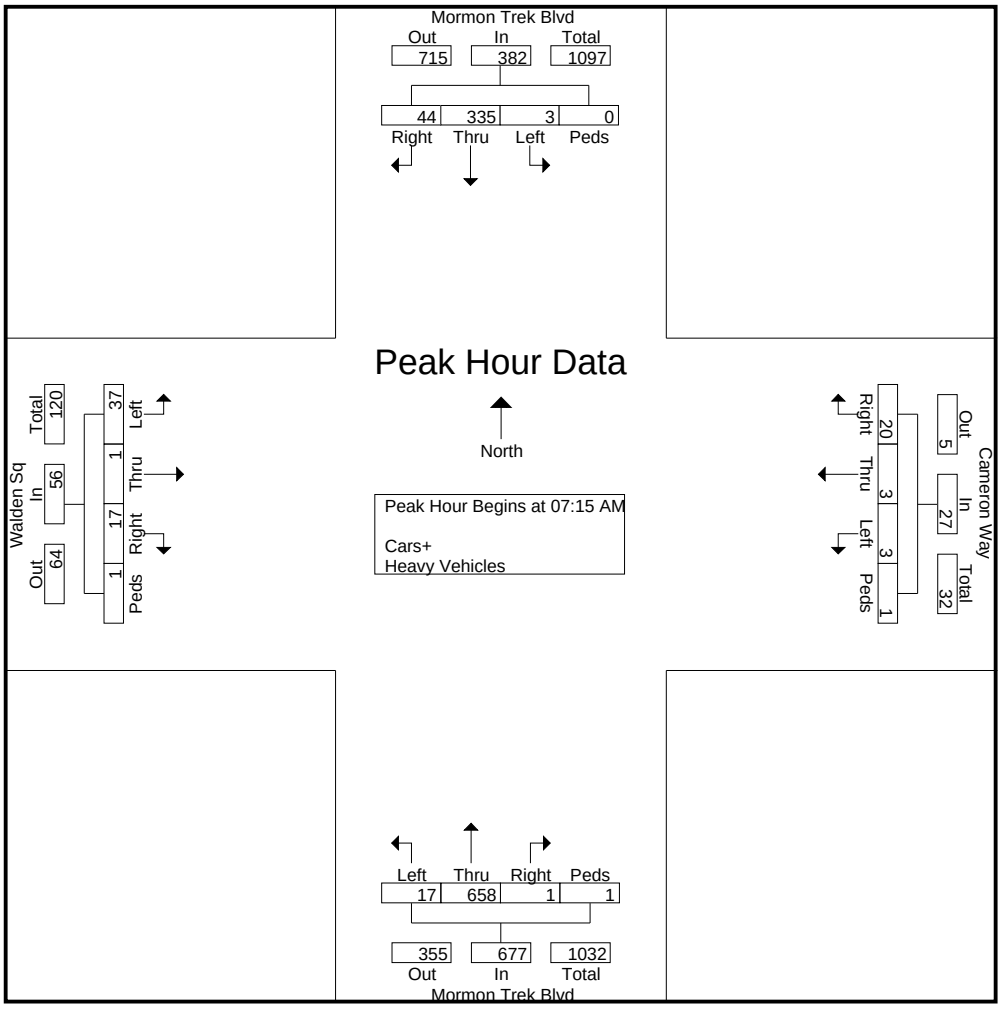
Snyder & Associates

2727 Snyder Blvd.
Ankeny, Iowa, 50023

Mormon Trek Blvd and Cameron Way
Iowa City, IA
Iowa City 4 to 3 lane reconfiguration

File Name : Mormon Trek and Cameron Way 160121
Site Code :
Start Date : 1/21/2016
Page No : 4

	Mormon Trek Blvd SB					Cameron Way WB					Mormon Trek Blvd NB					Walden Sq EB					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	**1**	60	5	0	66	**1**	0	4	**1**	6	3	151	0	0	154	7	0	5	**1**	13	239
07:30 AM	1	80	12	0	93	1	0	**8**	0	**9**	**5**	**230**	0	0	**235**	**10**	0	3	0	13	**350**
07:45 AM	1	**104**	**14**	0	**119**	1	1	5	0	7	4	174	0	0	178	10	**1**	3	0	14	318
08:00 AM	0	91	13	0	104	0	**2**	3	0	5	5	103	**1**	**1**	110	10	0	**6**	0	**16**	235
Total Volume	3	335	44	0	382	3	3	20	1	27	17	658	1	1	677	37	1	17	1	56	1142
% App. Total	0.8	87.7	11.5	0		11.1	11.1	74.1	3.7		2.5	97.2	0.1	0.1		66.1	1.8	30.4	1.8		
PHF	.750	.805	.786	.000	.803	.750	.375	.625	.250	.750	.850	.715	.250	.250	.720	.925	.250	.708	.250	.875	.816



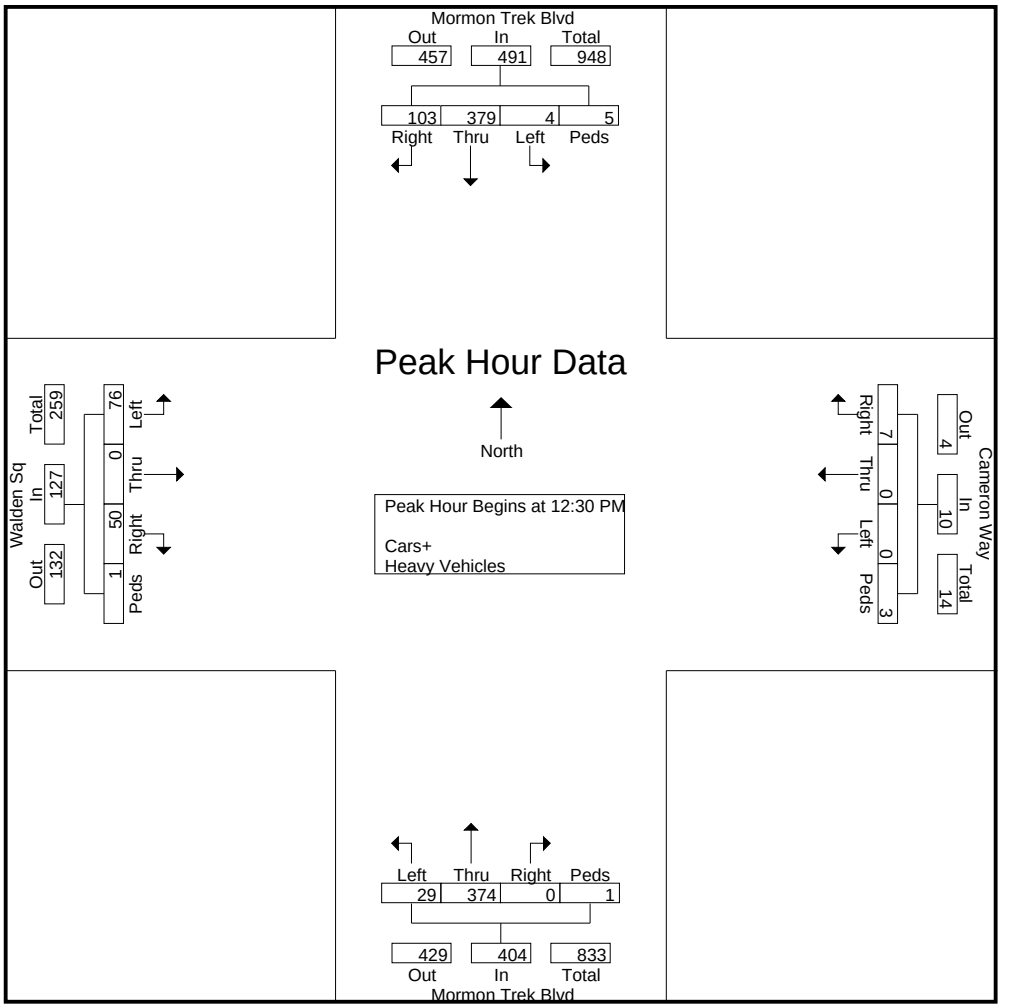
Snyder & Associates

2727 Snyder Blvd.
Ankeny, Iowa, 50023

Mormon Trek Blvd and Cameron Way
Iowa City, IA
Iowa City 4 to 3 lane reconfiguration

File Name : Mormon Trek and Cameron Way 160121
Site Code :
Start Date : 1/21/2016
Page No : 5

	Mormon Trek Blvd SB					Cameron Way WB					Mormon Trek Blvd NB					Walden Sq EB					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:30 PM																					
12:30 PM	**3**	83	16	**3**	105	0	0	2	**2**	**4**	6	**103**	0	0	109	**21**	0	10	**1**	32	250
12:45 PM	0	98	**38**	1	**137**	0	0	1	0	1	**8**	103	0	0	**111**	14	0	12	0	26	**275**
01:00 PM	0	**99**	27	1	127	0	0	**3**	0	3	7	84	0	**1**	92	20	0	**16**	0	**36**	258
01:15 PM	1	99	22	0	122	0	0	1	1	2	8	84	0	0	92	21	0	12	0	33	249
Total Volume	4	379	103	5	491	0	0	7	3	10	29	374	0	1	404	76	0	50	1	127	1032
% App. Total	0.8	77.2	21	1		0	0	70	30		7.2	92.6	0	0.2		59.8	0	39.4	0.8		
PHF	.333	.957	.678	.417	.896	.000	.000	.583	.375	.625	.906	.908	.000	.250	.910	.905	.000	.781	.250	.882	.938



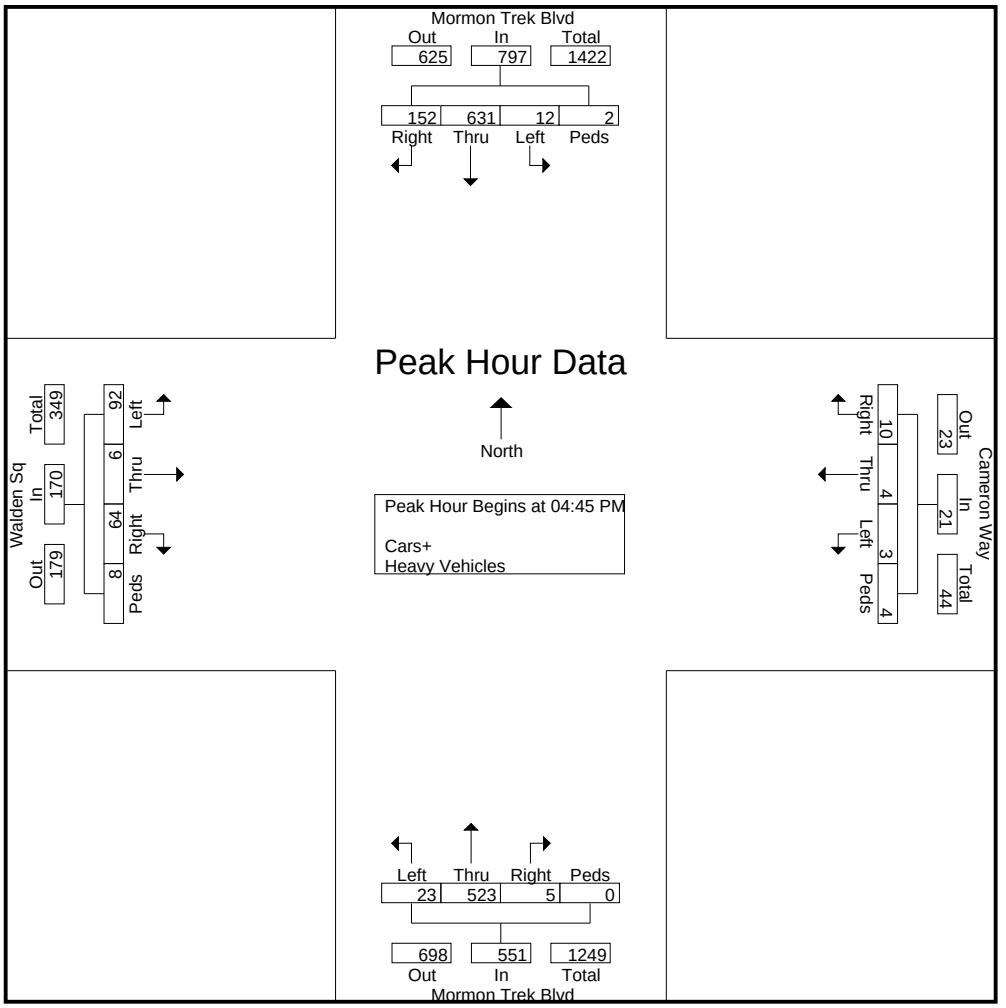
Snyder & Associates

2727 Snyder Blvd.
Ankeny, Iowa, 50023

Mormon Trek Blvd and Cameron Way
Iowa City, IA
Iowa City 4 to 3 lane reconfiguration

File Name : Mormon Trek and Cameron Way 160121
Site Code :
Start Date : 1/21/2016

	Mormon Trek Blvd SB					Cameron Way WB					Mormon Trek Blvd NB					Walden Sq EB					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 07:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	**4**	149	**42**	**1**	196	0	**2**	0	0	2	**9**	**145**	0	0	**154**	20	1	17	**3**	41	393
05:00 PM	3	**181**	33	0	**217**	**3**	2	**6**	**3**	**14**	6	128	**2**	0	136	25	**2**	16	2	45	**412**
05:15 PM	3	172	40	0	215	0	0	1	1	2	4	127	2	0	133	**30**	1	**26**	1	**58**	408
05:30 PM	2	129	37	1	169	0	0	3	0	3	4	123	1	0	128	17	2	5	2	26	326
Total Volume	12	631	152	2	797	3	4	10	4	21	23	523	5	0	551	92	6	64	8	170	1539
% App. Total	1.5	79.2	19.1	0.3		14.3	19	47.6	19		4.2	94.9	0.9	0		54.1	3.5	37.6	4.7		
PHF	.750	.872	.905	.500	.918	.250	.500	.417	.333	.375	.639	.902	.625	.000	.894	.767	.750	.615	.667	.733	.934



File Name: S:\JCCOG\TRANS\Traffic Counts\Peak Hr\Iowa City\Mormon Trek & Westwind
Start Date: 6/19/2012
Start Time: 7:15:00 AM
Site Code: 00000000

Vehicles-Peds

	MORMONTREK Southbound				WESTWINDS Westbound				MORMONTREK Northbound				WESTWINDS Eastbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
07:15 AM	0	59	0	0	0	0	0	0	10	108	0	0	3	0	6	0
07:30 AM	0	63	1	0	0	0	0	0	18	157	0	3	3	0	10	0
07:45 AM	0	96	0	2	0	0	0	0	14	184	0	2	1	0	17	0
08:00 AM	0	85	2	2	0	0	0	0	23	119	0	3	2	0	17	0
08:15 AM	0	120	2	2	0	0	0	0	11	104	0	0	4	0	7	0
08:30 AM	0	91	3	10	0	0	0	0	26	131	0	0	4	0	20	0

Trucks-Buses

	MORMONTREK				WESTWINDS				MORMONTREK				WESTWINDS			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
07:15 AM	0	7	0	0	0	0	0	0	0	1	0	0	0	0	0	0
07:30 AM	0	2	0	0	0	0	0	0	0	5	0	0	0	0	0	0
07:45 AM	0	2	0	0	0	0	0	0	3	4	0	0	0	0	0	0
08:00 AM	0	6	0	0	0	0	0	0	0	3	0	0	0	0	0	0
08:15 AM	0	5	2	0	0	0	0	0	1	2	0	0	0	0	0	0
08:30 AM	0	4	0	0	0	0	0	0	2	1	0	0	0	0	0	0

Bicycles

	MORMONTREK				WESTWINDS				MORMONTREK				WESTWINDS			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0

File Name: S:\JCCOG\TRANS\Traffic Counts\Peak Hr\Iowa City\Mormon Trek & Westwinds - PM - JUL12.ppd
Start Date: 7/18/2012
Start Time: 4:15:00 PM
Site Code: 00000000

Vehicles-Peds

	MORMON TK Southbound				WESTWINDS Westbound				MORMON TK Northbound				WESTWINDS Eastbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
04:15 PM	0	148	0	1	0	0	0	0	32	120	0	0	2	0	43	0
04:30 PM	0	151	6	1	0	0	0	0	62	117	0	0	4	0	45	0
04:45 PM	0	143	6	3	0	0	0	0	52	125	0	2	2	0	41	0
05:00 PM	0	160	6	3	0	0	0	0	51	165	0	4	1	0	57	0
05:15 PM	0	208	3	4	0	0	0	0	46	144	0	3	1	0	41	0
05:30 PM	0	163	1	2	0	0	0	0	27	125	0	4	3	0	50	0

Trucks-Buses

	MORMON TK				WESTWINDS				MORMON TK				WESTWINDS			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
04:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	6	0	0	0	0	0	0	1	0	0	0	0	0	0	0
04:45 PM	0	3	0	0	0	0	0	0	1	1	0	0	0	0	1	0
05:00 PM	0	3	0	0	0	0	0	0	1	0	0	0	1	0	0	0
05:15 PM	0	2	0	0	0	0	0	0	0	3	0	0	0	0	0	0
05:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles

	MORMON TK				WESTWINDS				MORMON TK				WESTWINDS			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
04:15 PM	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
05:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

File Name: S:\JCCOG\TRANS\Traffic Counts\Peak Hr\Iowa City\Mormon Trek & Benton - AM - Apr13.ppd
Start Date: 3/28/2013
Start Time: 7:15:00 AM
Site Code: 00000000

Vehicles-Peds

	Southbound				Westbound				Northbound				Eastbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
07:15 AM	20	48	0	0	15	0	39	6	0	118	39	0	0	0	0	3
07:30 AM	17	73	0	1	9	0	61	1	0	147	53	0	0	0	0	5
07:45 AM	30	66	0	0	17	0	56	4	0	150	58	0	0	0	1	1
08:00 AM	34	71	0	0	14	0	32	0	0	113	41	0	0	0	0	2
08:15 AM	25	69	0	0	36	0	40	1	0	104	48	0	0	0	0	1
08:30 AM	25	49	0	1	17	0	23	1	0	109	40	0	0	0	0	0

Truck-Buses

	Southbound				Westbound				Northbound				Eastbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
07:15 AM	1	3	0	0	0	0	0	0	0	9	1	0	0	0	0	0
07:30 AM	0	2	0	0	1	0	1	0	0	9	0	0	0	0	0	0
07:45 AM	1	11	0	0	1	0	1	0	0	3	2	0	0	0	0	0
08:00 AM	4	7	0	0	0	0	1	0	0	4	1	0	0	0	0	0
08:15 AM	1	4	0	0	3	0	0	0	0	3	1	0	0	0	0	0
08:30 AM	1	3	0	0	1	0	1	0	0	4	1	0	0	0	0	0

Bicycles

	Southbound				Westbound				Northbound				Eastbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
07:15 AM	0	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

File Name: S:\JCCOG\TRANS\Traffic Counts\Peak Hr\Iowa City\Mormon Trek & Benton - PM - Apr13.ppd
Start Date: 3/27/2013
Start Time: 4:15:00 PM
Site Code: 00000000

Vehicles-Peds

	MORMON TREK Southbound				BENTON Westbound				MORMON TREK Northbound				BENTON Eastbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
04:15 PM	43	99	0	1	31	0	49	5	0	109	19	2	0	0	0	9
04:30 PM	42	99	0	1	24	0	55	5	0	101	23	0	0	0	0	5
04:45 PM	62	165	0	1	35	0	60	4	0	107	19	0	0	0	0	6
05:00 PM	55	171	0	0	52	0	68	5	0	119	30	1	0	0	0	3
05:15 PM	63	168	0	1	49	0	77	3	0	118	29	0	0	0	0	2
05:30 PM	57	173	0	3	50	0	70	2	0	128	25	3	0	0	0	6

Trucks-Buses

	MORMON TREK				BENTON				MORMON TREK				BENTON			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
04:15 PM	2	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	2	1	0	0	0	0	0	0	0	3	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	1	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0
05:30 PM	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0

Bicycles

	MORMON TREK				BENTON				MORMON TREK				BENTON			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
04:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0
05:30 PM	1	0	0	0	2	0	0	0	0	0	1	0	0	0	0	1

File Name: S:\JCCOG\TRANS\Traffic Counts\Peak Hr\Iowa City\Mormon Trek & Walden -
Start Date: 3/27/2012
Start Time: 7:15:00 AM
Site Code: 00000000

Vehicle-Peds

	MORMONTREK Southbound				WALDEN Westbound				MORMONTREK Northbound				WALDEN Eastbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
07:15 AM	3	52	9	0	0	0	0	0	2	123	0	0	14	0	3	0
07:30 AM	0	65	6	1	0	0	0	0	2	183	0	0	11	0	2	0
07:45 AM	0	87	11	0	0	0	0	0	1	240	0	0	28	0	2	0
08:00 AM	0	95	9	0	0	0	0	0	1	143	0	0	19	0	3	1
08:15 AM	0	86	6	0	0	0	0	0	1	136	0	0	15	0	5	0
08:30 AM	0	84	3	0	0	0	0	0	1	168	0	0	18	0	2	0

Trucks-Buses

	MORMONTREK				WALDEN				MORMONTREK				WALDEN			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
07:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
07:30 AM	0	7	1	0	0	0	0	0	0	10	0	0	1	0	0	0
07:45 AM	0	1	0	0	0	0	0	0	1	6	0	0	0	0	0	0
08:00 AM	0	6	1	0	0	0	0	0	0	2	0	0	0	0	0	0
08:15 AM	0	3	0	0	0	0	0	0	0	9	0	0	0	0	0	0
08:30 AM	0	3	0	0	0	0	0	0	0	1	0	0	0	0	0	0

Bicycles

	MORMONTREK				WALDEN				MORMONTREK				WALDEN			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

File Name: S:\JCCOG\TRANS\Traffic Counts\Peak Hr\Iowa City\Mormon Trek & Walden -
Start Date: 4/4/2012
Start Time: 4:15:00 PM
Site Code: 00000000

Vehicles-Peds

	MORMON TREK Southbound				WALDEN ROAD Westbound				MORMON TREK Northbound				WALDEN ROAD Eastbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
04:15 PM	0	178	17	3	0	0	0	0	0	115	0	2	12	0	1	0
04:30 PM	0	134	19	1	0	0	0	0	3	105	0	1	17	0	0	0
04:45 PM	0	162	24	14	0	0	0	0	3	135	0	4	16	0	6	0
05:00 PM	0	239	43	7	0	0	0	1	3	165	0	6	23	0	2	0
05:15 PM	0	225	24	2	0	0	0	0	2	155	0	11	17	0	6	0
05:30 PM	0	220	28	2	0	0	0	0	3	134	0	4	21	0	1	0

Trucks-Buses

	MORMON TREK				WALDEN ROAD				MORMON TREK				WALDEN ROAD			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
04:15 PM	0	4	0	0	0	0	0	0	0	1	0	0	0	0	0	0
04:30 PM	0	3	0	0	0	0	0	0	0	3	0	0	0	0	0	0
04:45 PM	0	3	1	0	0	0	0	0	0	3	0	0	0	0	0	0
05:00 PM	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0
05:15 PM	0	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0
05:30 PM	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0

Bicycles

	MORMON TREK				WALDEN ROAD				MORMON TREK				WALDEN ROAD			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
04:15 PM	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0
04:30 PM	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0
04:45 PM	0	0	1	0	0	0	0	0	0	2	0	0	0	0	0	0
05:00 PM	0	3	1	0	0	0	0	0	0	3	0	0	0	0	0	0
05:15 PM	0	2	1	0	0	0	0	0	0	4	0	0	0	0	0	0
05:30 PM	0	5	1	0	0	0	0	0	0	2	0	0	0	0	0	0

File Name: S:\JCCOG\TRANS\Traffic Counts\Peak Hr\Iowa City\Mormon Trek & Rohret & Cae - AM - Feb13.ppd
Start Date: 2/12/2013
Start Time: 7:15:00 AM
Site Code: 00000000

Vehicles-Peds

	MORMONTREK Southbound				CAE Westbound				MORMONTREK Northbound				CAE Eastbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
07:15 AM	0	35	10	0	1	0	4	1	4	81	1	0	44	0	15	0
07:30 AM	0	43	7	0	1	0	4	0	5	85	0	1	73	1	18	1
07:45 AM	2	62	15	3	2	0	14	0	10	104	2	0	69	0	29	0
08:00 AM	1	76	28	0	1	0	3	0	8	79	0	0	71	0	21	0
08:15 AM	2	68	18	0	1	0	11	0	19	97	0	0	45	0	24	0
08:30 AM	2	67	18	0	1	0	4	1	14	63	1	0	63	1	30	0

Trucks-Buses

	MORMONTREK				CAE				MORMONTREK				CAE			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
07:15 AM	0	3	0	0	0	1	1	0	0	3	1	0	2	0	0	0
07:30 AM	0	0	1	0	0	0	0	0	0	1	0	0	2	0	0	0
07:45 AM	0	4	0	0	0	0	1	0	1	4	0	0	4	0	1	0
08:00 AM	0	4	1	0	0	0	0	0	2	1	0	0	2	0	0	0
08:15 AM	0	2	5	0	0	0	1	0	0	3	0	0	1	0	2	0
08:30 AM	0	0	2	0	0	0	0	0	1	1	0	0	1	0	8	0

Bicycles

	MORMONTREK				CAE				MORMONTREK				CAE			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

File Name: S:\JCCOG\TRANS\Traffic Counts\Peak Hr\Iowa City\Mormon Trek & Rohret &
Start Date: 3/4/2014
Start Time: 4:00:00 PM
Site Code: 00000000
Comment 1: .
Comment 2: .
Comment 3: .
Comment 4: .

	MORMONTREK Southbound				ROHRET Westbound				MORMONTREK Northbound				ROHRET Eastbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
04:00 PM	3	104	44	0	1	0	1	0	18	84	0	0	29	0	10	0
04:15 PM	3	108	44	0	1	0	3	0	15	92	0	0	32	1	10	1
04:30 PM	5	103	50	1	1	1	6	0	15	103	3	0	28	0	13	1
04:45 PM	5	129	64	0	1	1	5	0	18	87	1	0	34	1	23	0
05:00 PM	7	121	50	0	1	0	1	0	22	100	1	2	35	0	20	0
05:15 PM	4	126	69	0	0	0	5	0	27	95	0	0	24	0	20	0
Pk hr totals	21	479	233	1	3	2	17	0	82	385	5	2	121	1	76	1

PHF

By Movement	0.75	0.93	0.84		0.75	0.50	0.71		0.76	0.93	0.42		0.86	0.25	0.83	
Approach	0.92				0.69				0.96				0.85			
Intersection	0.96															

Trucks	MORMONTREK Southbound			ROHRET Westbound			MORMONTREK Northbound			ROHRET Eastbound		
# Trucks	0	6	2	0	0	0	1	6	0	3	0	1
# All vehicles	21	479	233	3	2	17	82	385	5	121	1	76
% Trucks	0%	1%	1%	0%	0%	0%	1%	2%	0%	2%	0%	1%

Bikes	MORMONTREK Southbound			ROHRET Westbound			MORMONTREK Northbound			ROHRET Eastbound		
# Bikes	0	0	0	0	0	0	0	0	0	0	0	0
# All vehicles	21	479	233	3	2	17	82	385	5	121	1	76
% Trucks	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

File Name: S:\JCCOG\TRANS\Traffic Counts\Peak Hr\Iowa City\Mormon Trek & Abbey - AM - Mar12.ppd
Start Date: 3/27/2012
Start Time: 7:15:00 AM
Site Code: 00000000

Vehicles - Peds

	MORMON TREK Southbound				ABBEY Westbound				MORMON TREK Northbound				ABBEY Eastbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
07:15 AM	2	60	1	0	4	0	5	0	1	67	2	0	5	0	5	0
07:30 AM	3	82	2	1	5	0	13	0	2	107	2	0	9	0	7	1
07:45 AM	4	89	5	0	6	0	2	0	0	106	1	2	10	0	4	0
08:00 AM	1	85	4	0	3	0	6	0	0	77	1	2	5	0	7	0
08:15 AM	3	72	1	2	1	0	3	0	2	67	2	1	3	1	5	0
08:30 AM	2	78	0	0	0	0	1	0	1	63	1	0	4	0	6	1

Trucks-Buses

	MORMON TREK				ABBEY				MORMON TREK				ABBEY			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
07:15 AM	0	0	1	0	0	0	0	0	0	4	1	0	0	1	0	0
07:30 AM	0	7	0	0	0	0	0	0	0	7	1	0	0	0	0	0
07:45 AM	0	3	0	0	0	0	0	0	0	5	0	0	0	0	0	0
08:00 AM	1	4	0	0	0	0	1	0	0	2	1	0	0	0	1	0
08:15 AM	0	8	0	0	0	0	0	0	0	3	1	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0

Bicycles

	MORMON TREK				ABBEY				MORMON TREK				ABBEY			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

File Name: S:\JCCOG\TRANS\Traffic Counts\Peak Hr\Iowa City\Mormon Trek & Abbey - PM - Apr12.ppd
Start Date: 4/18/2012
Start Time: 4:15:00 PM
Site Code: 00000000

Vehicles-Peds

	MORMON TREK BLVD Southbound				ABBEY LN Westbound				MORMON TREK BLVD Northbound				ABBEY LN Eastbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
04:15 PM	4	109	5	0	0	0	8	4	1	100	6	2	5	0	2	1
04:30 PM	7	91	8	0	2	0	4	0	6	95	1	6	2	0	2	1
04:45 PM	6	115	7	0	5	0	4	2	5	89	3	2	9	0	1	2
05:00 PM	10	114	7	1	2	0	9	0	7	116	1	1	3	0	6	0
05:15 PM	5	119	10	1	1	1	10	3	4	106	6	4	8	0	2	0
05:30 PM	6	125	8	0	2	0	2	1	9	90	5	0	10	0	4	1

Trucks-Buses

	MORMON TREK BLVD				ABBEY LN				MORMON TREK BLVD				ABBEY LN			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
04:15 PM	0	3	0	0	0	0	0	0	0	0	1	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0
04:45 PM	0	3	0	0	0	0	0	0	0	0	1	0	0	0	0	0
05:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	2	0	0	0	0	0	0	0	2	1	0	0	0	0	0
05:30 PM	0	2	0	0	0	0	0	0	0	1	1	0	0	0	0	0

Bicycles

	MORMON TREK BLVD				ABBEY LN				MORMON TREK BLVD				ABBEY LN			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

File Name: S:\JCCOG\TRANS\Traffic Counts\Peak Hr\Iowa City\Mormon Trek & Westside
Start Date: 11/18/2014
Start Time: 8:15:00 AM
Site Code: 00000000
Comment 1: .
Comment 2: .
Comment 3: .
Comment 4: .

	WESTSIDEDR Southbound				MORMOMTREK Westbound				WESTSIDEDR Northbound				MORMOMTREK Eastbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
08:15 AM	37	2	15	0	5	60	40	0	1	0	3	0	9	62	1	0
08:30 AM	39	1	14	1	6	65	40	0	0	1	0	0	17	85	2	0
08:45 AM	56	1	13	0	11	85	59	0	1	0	3	0	14	95	5	0
09:00 AM	39	0	13	0	6	67	28	0	1	0	1	0	11	58	1	0
09:15 AM	37	0	12	0	6	66	23	1	4	0	1	0	9	82	5	0
09:30 AM	24	0	14	0	11	43	36	0	0	0	2	0	25	71	1	0
Pk hr totals	171	2	52	1	29	283	150	1	6	1	5	0	51	320	13	0

PHF

By Movement	0.76	0.50	0.93		0.66	0.83	0.64		0.38	0.25	0.42		0.75	0.84	0.65	
Approach	0.80				0.75				0.60				0.84			
Intersection	0.79															

Trucks	WESTSIDEDR Southbound			MORMOMTREK Westbound			WESTSIDEDR Northbound			MORMOMTREK Eastbound		
# Trucks	2	0	1	1	21	6	0	0	0	0	22	0
# All vehicles	171	2	52	29	283	150	6	1	5	51	320	13
% Trucks	1%	0%	2%	3%	7%	4%	0%	0%	0%	0%	7%	0%

Bikes	WESTSIDEDR Southbound			MORMOMTREK Westbound			WESTSIDEDR Northbound			MORMOMTREK Eastbound		
# Bikes	0	0	0	0	0	0	0	0	0	0	0	0
# All vehicles	171	2	52	29	283	150	6	1	5	51	320	13
% Trucks	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

File Name: S:\JCCOG\TRANS\Traffic Counts\Peak Hour Counts\Iowa City\Mormon Trek & Westside Dr at signal - PM - Oct 08.ppd
Start Date: 10/15/2008
Start Time: 4:15:00 PM
Site Code: 00000000

Vehicles-Peds

	MORMON TREK Southbound				WESTSIDE Westbound				MORMON TREK Northbound				WESTSIDE Eastbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
04:15 PM	11	90	3	0	27	2	14	0	6	81	26	0	1	2	6	0
04:30 PM	10	96	0	0	38	0	7	0	5	81	29	0	0	1	2	0
04:45 PM	20	109	0	0	42	2	13	0	1	109	36	0	2	1	12	0
05:00 PM	7	95	2	4	53	0	19	0	4	108	29	0	1	0	8	0
05:15 PM	16	111	0	0	30	0	14	0	4	102	44	2	0	0	3	0
05:30 PM	29	109	1	0	32	4	17	0	2	82	37	0	1	0	8	0

Trucks-Buses

	MORMON TREK				WESTSIDE				MORMON TREK				WESTSIDE			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
04:15 PM	0	1	0	0	0	0	0	0	0	2	1	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
05:00 PM	0	3	0	0	0	0	2	0	0	2	1	0	0	0	0	0
05:15 PM	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycles

	MORMON TREK				WESTSIDE				MORMON TREK				WESTSIDE			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Iowa Department of Transportation

Turning Movement Traffic Count Summary

Annualized Daily Traffic For All Vehicles

Station Number:

52234129099

Count Date:

Thursday, July 31, 2014

County:

Johnson

Location Description:

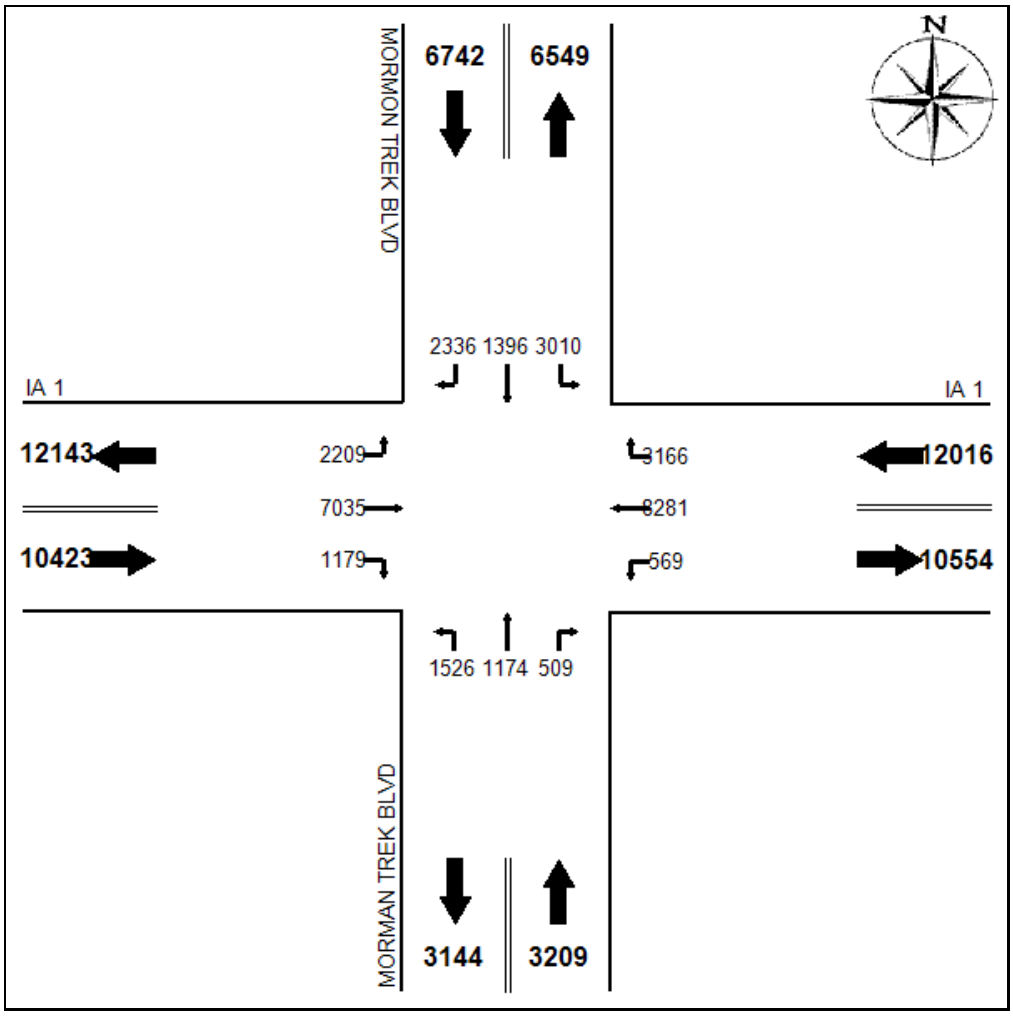
IA 1 & MORMON TREK BLVD

Volume Factor: 1.910

Pass Class Factor: 1.930

SU Class Factor: 1.623

Combo Class Factor: 1.654



Raw Data-All Vehicles:

	N Leg			E Leg			S Leg			W Leg		
	L	*T*	*R*	*L*	*T*	*R*	*L*	*T*	*R*	*L*	*T*	*R*
07:00	135	94	144	55	420	136	111	74	29	158	748	122
08:00	210	62	159	33	396	142	84	74	41	167	513	99
11:00	252	85	131	33	452	238	108	72	36	161	475	80
12:00	241	124	202	56	594	276	88	109	55	189	488	80
15:00	225	110	199	47	782	277	131	79	31	134	477	66
16:00	261	134	195	34	863	280	154	104	41	174	534	104
17:00	241	119	186	38	813	300	125	103	32	166	439	66

Iowa Department of Transportation

Turning Movement Traffic Count Summary

Vehicle Type: Passenger Vehicles

Station Number:

52234129099

Count Date:

Thursday, July 31, 2014

County:

Johnson

Location Description:

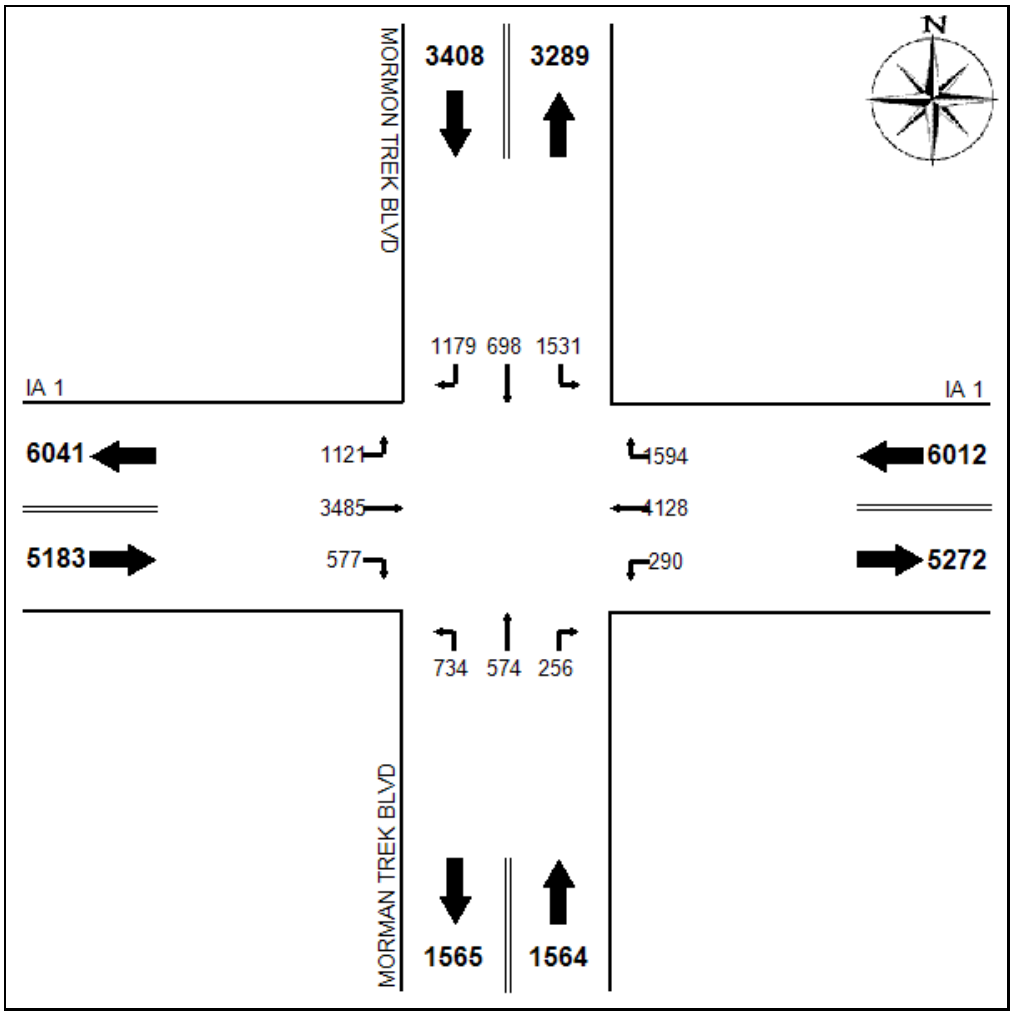
IA 1 & MORMON TREK BLVD

Volume Factor: N/A

Pass Class Factor: N/A

SU Class Factor: N/A

Combo Class Factor: N/A



Raw Data-Passenger Vehicles:

	N Leg			E Leg			S Leg			W Leg		
	L	*T*	*R*	*L*	*T*	*R*	*L*	*T*	*R*	*L*	*T*	*R*
07:00	132	92	137	54	406	131	95	63	28	157	709	116
08:00	202	59	151	32	362	133	74	69	36	164	487	87
11:00	247	79	128	32	430	222	95	67	35	155	446	74
12:00	236	120	194	56	551	271	80	104	55	179	457	76
15:00	217	105	196	45	752	270	120	77	31	129	447	59
16:00	257	131	190	33	836	273	147	98	39	171	514	99
17:00	240	112	183	38	791	294	123	96	32	166	425	66

Iowa Department of Transportation

Turning Movement Traffic Count Summary

Vehicle Type: Single-Unit Trucks

Station Number:

52234129099

Count Date:

Thursday, July 31, 2014

County:

Johnson

Location Description:

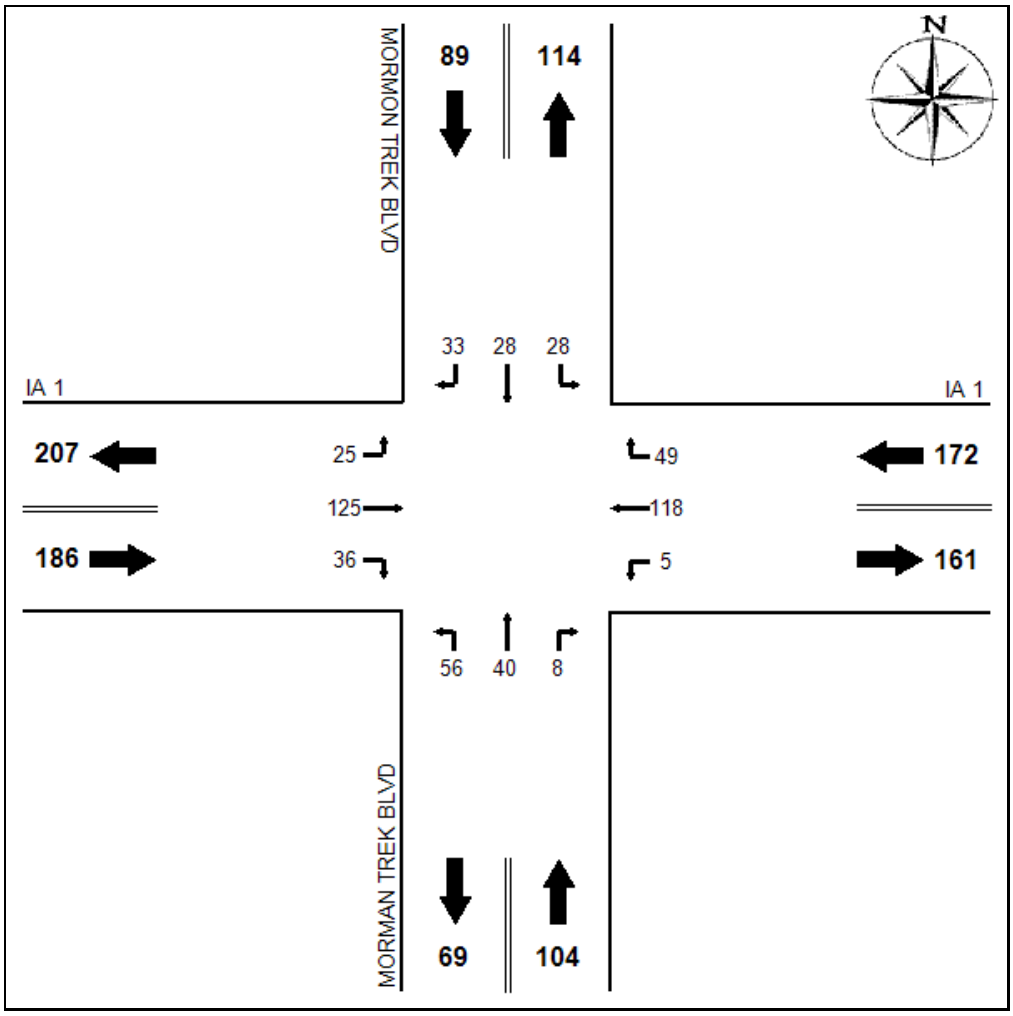
IA 1 & MORMON TREK BLVD

Volume Factor: N/A

Pass Class Factor: N/A

SU Class Factor: N/A

Combo Class Factor: N/A



Raw Data-Single-Unit Trucks:

	N Leg			E Leg			S Leg			W Leg		
	L	*T*	*R*	*L*	*T*	*R*	*L*	*T*	*R*	*L*	*T*	*R*
07:00	2	1	4	1	6	4	14	11	1	0	24	6
08:00	7	3	8	1	20	7	10	5	4	3	20	11
11:00	5	6	3	1	12	14	12	5	1	6	18	5
12:00	2	3	8	0	30	4	6	4	0	9	20	3
15:00	7	5	3	2	17	7	8	2	0	4	19	6
16:00	4	3	4	0	18	7	4	6	2	3	14	5
17:00	1	7	3	0	15	6	2	7	0	0	10	0

Iowa Department of Transportation

Turning Movement Traffic Count Summary

Vehicle Type: Combination Trucks

Station Number:

52234129099

Count Date:

Thursday, July 31, 2014

County:

Johnson

Location Description:

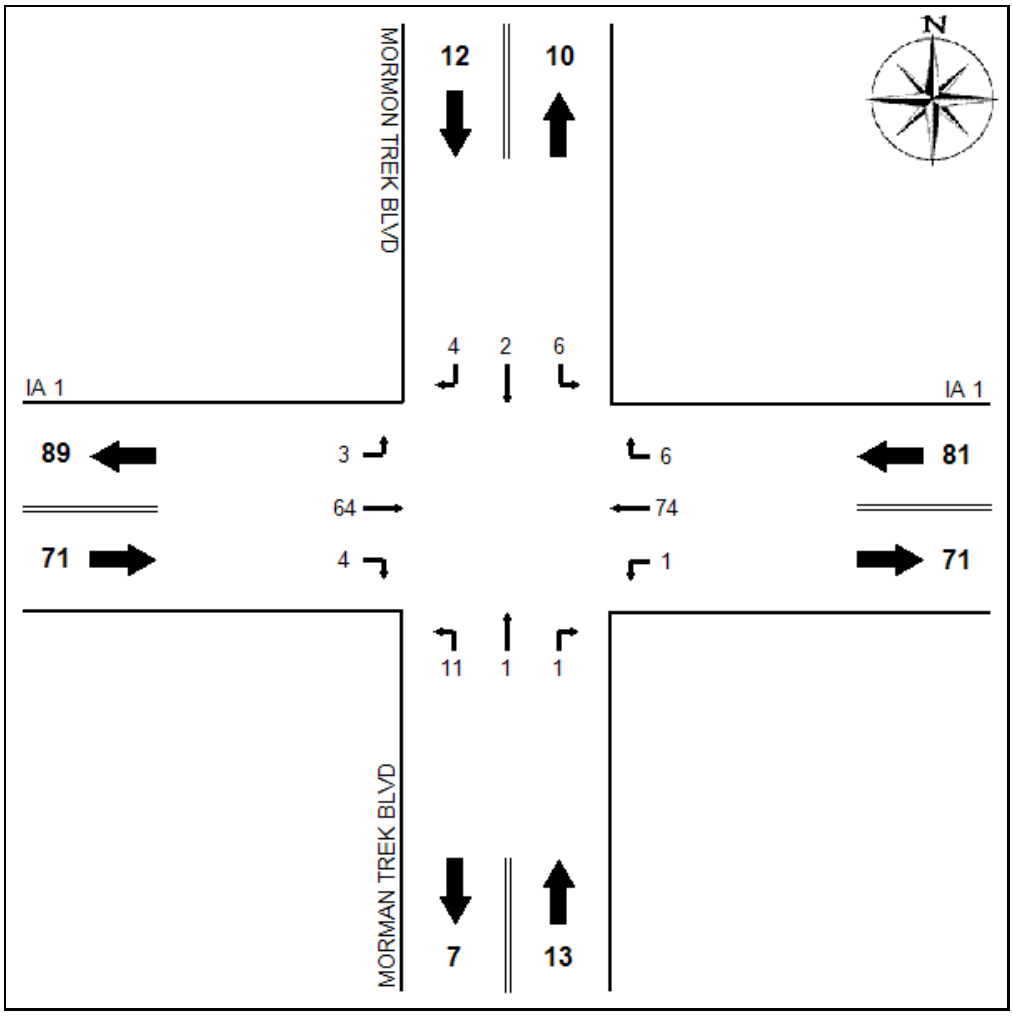
IA 1 & MORMON TREK BLVD

Volume Factor: N/A

Pass Class Factor: N/A

SU Class Factor: N/A

Combo Class Factor: N/A



Raw Data-Combination Trucks:

	N Leg			E Leg			S Leg			W Leg		
	L	*T*	*R*	*L*	*T*	*R*	*L*	*T*	*R*	*L*	*T*	*R*
07:00	1	1	3	0	8	1	2	0	0	1	15	0
08:00	1	0	0	0	14	2	0	0	1	0	6	1
11:00	0	0	0	0	10	2	1	0	0	0	11	1
12:00	3	1	0	0	13	1	2	1	0	1	11	1
15:00	1	0	0	0	13	0	3	0	0	1	11	1
16:00	0	0	1	1	9	0	3	0	0	0	6	0
17:00	0	0	0	0	7	0	0	0	0	0	4	0

Appendix

B. Travel Time Study

Snyder & Associates, Inc.
Ankeny, Iowa

PC-Travel Reports for study: Mormon_Trek_AM_NB

Report Name	***Page***
Study Summary	2
Overall Output Statistics	3
Detailed Statistics By Run - Travel Times	4
Detailed Statistics By Run - Stops	6
Detailed Statistics By Run - Average Speed	8
Speed/Distance Profiles of All Runs	10
Time/Space Trajectories of All Runs	11

Snyder & Associates, Inc.

Ankeny, Iowa

Study Name : **Mormon_Trek_AM_NB**
Study Date : **1/21/2016**

Study Summary

Runs Used in This Study

Run Title	Start Date	Start Time	Length	Before/ After	Run Type
Mormon Trek AM-NB-001tn	01/21/16	07:00	9400	Before	Primary
Mormon Trek AM-NB-002t	01/21/16	07:15	9401	Before	Secondary
Mormon Trek AM-NB-003t	01/21/16	07:26	9397	Before	Secondary
Mormon Trek AM-NB-004t	01/21/16	07:38	9417	Before	Secondary
Mormon Trek AM-NB-005t	01/21/16	07:51	9340	Before	Secondary
Mormon Trek AM-NB-006t	01/21/16	08:03	9317	Before	Secondary
Mormon Trek AM-NB-007t	01/21/16	08:15	9150	Before	Secondary
Mormon Trek AM-NB-008t	01/21/16	08:26	9238	Before	Secondary
Mormon Trek AM-NB-009t	01/21/16	08:38	9724	Before	Secondary
Mormon Trek AM-NB-010t	01/21/16	08:50	9338	Before	Secondary

Node Info

#	Len	Name
1	0	
2	415	Hwy 1
3	421	Westside Dr
4	4464	Rohret Rd
5	1421	W Benton St
6	713	Cameron Way
7	1966	Melrose Ave
8	0	

Length of Study Route = 9,400 feet

Notes:

Snyder & Associates, Inc.

Ankeny, Iowa

Study Name : **Mormon_Trek_AM_NB**
Study Date : **1/21/2016**

Overall Output Statistics

Node #	Length	Node	Travel Time	# of Stops	Avg Speed	Total Delay	Time <= 0 MPH	Time <= 15 MPH	Time <= 30 MPH
1	0								
2	415	Hwy 1	48.4	1.0	5.8	40.2	25.1	39.1	48.3
3	421	Westside Dr	10.2	0.0	28.1	1.6	0.0	0.0	6.4
4	4464	Rohret Rd	96.2	0.3	31.6	9.4	4.7	8.7	15.3
5	1421	W Benton St	33.1	0.1	29.3	5.3	1.4	3.4	10.3
6	713	Cameron Way	15.0	0.0	32.4	0.9	0.0	0.0	2.3
7	1966	Melrose Ave	78.9	0.8	17.0	41.4	28.2	38.6	52.1
8	0								
Total	**9,400**		**282.2**	**2.2**	**22.7**	**98.8**	**59.4**	**89.8**	**134.7**

Stats based on 10 BEFORE runs.
Stops based on a Stop Speed of 5 MPH.
Total Delay based on a Normal Speed of 35 MPH.

Snyder & Associates, Inc.

Ankeny, Iowa

Study Name : **Mormon_Trek_AM_NB**
Study Date : **1/21/2016**

Detailed Statistics By Run

Travel Time (sec) by Section

Mormon Trek AM-NB-001tn
Mormon Trek AM-NB-002t
Mormon Trek AM-NB-003t
Mormon Trek AM-NB-004t
Mormon Trek AM-NB-005t
Mormon Trek AM-NB-006t
Mormon Trek AM-NB-007t
Mormon Trek AM-NB-

Node #	Length	Node Name	Run #1	Run #2	Run #3	Run #4	Run #5	Run #6	Run #7	Run #8
1	0									
2	415	Hwy 1	27	51	58	57	54	60	51	50
3	421	Westside Dr	11	10	11	10	11	10	9	9
4	4464	Rohret Rd	93	89	86	115	86	109	93	86
5	1421	W Benton St	33	27	27	43	28	31	28	28
6	713	Cameron Way	14	15	14	16	14	14	15	14
7	1966	Melrose Ave	96	47	62	147	98	67	78	81
8	0		1	1	0	1	0	0	0	0
Totals	**9400**		**275**	**240**	**258**	**389**	**291**	**291**	**274**	**268**

Snyder & Associates, Inc.

Ankeny, Iowa

Study Name : **Mormon_Trek_AM_NB**
Study Date : **1/21/2016**

Detailed Statistics By Run

Travel Time (sec) by Section

Node #	Length	Node Name	Run #9 Mormon Trek AM-NB-009t	Run #10 Mormon Trek AM-NB-010t
1	0			
2	415	Hwy 1	47	29
3	421	Westside Dr	11	10
4	4464	Rohret Rd	114	91
5	1421	W Benton St	32	54
6	713	Cameron Way	14	20
7	1966	Melrose Ave	42	71
8	0		1	0
Totals	**9400**		**261**	**275**

Snyder & Associates, Inc.

Ankeny, Iowa

Study Name : **Mormon_Trek_AM_NB**
Study Date : **1/21/2016**

Detailed Statistics By Run

Number of Stops by Section

Mormon Trek AM-NB-001tn
Mormon Trek AM-NB-002t
Mormon Trek AM-NB-003t
Mormon Trek AM-NB-004t
Mormon Trek AM-NB-005t
Mormon Trek AM-NB-006t
Mormon Trek AM-NB-007t
Mormon Trek AM-NB-

Node #	Length	Node Name	Run #1	Run #2	Run #3	Run #4	Run #5	Run #6	Run #7	Run #8
1	0									
2	415	Hwy 1	1	1	1	1	1	1	1	1
3	421	Westside Dr	0	0	0	0	0	0	0	0
4	4464	Rohret Rd	0	0	0	1	0	1	0	0
5	1421	W Benton St	0	0	0	0	0	0	0	0
6	713	Cameron Way	0	0	0	0	0	0	0	0
7	1966	Melrose Ave	1	0	1	1	1	1	1	1
8	0		0	0	0	0	0	0	0	0
Totals	**9400**		**2**	**1**	**2**	**3**	**2**	**3**	**2**	**2**

Stops based on a Stop Speed of 5 MPH.

Detailed Statistics By Run

Number of Stops by Section

Mormon Trek AM-NB-009t
Mormon Trek AM-NB-010t

Node #	Length	Node Name	Run #9	Run #10
1	0			
2	415	Hwy 1	1	1
3	421	Westside Dr	0	0
4	4464	Rohret Rd	1	0
5	1421	W Benton St	0	1
6	713	Cameron Way	0	0
7	1966	Melrose Ave	0	1
8	0		0	0
Totals	**9400**		**2**	**3**

Stops based on a Stop Speed of 5 MPH.

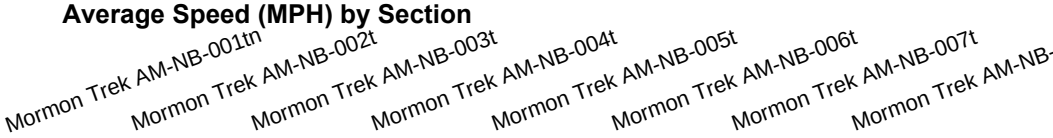
Snyder & Associates, Inc.

Ankeny, Iowa

Study Name : **Mormon_Trek_AM_NB**
Study Date : **1/21/2016**

Detailed Statistics By Run

Average Speed (MPH) by Section



Node #	Length	Node Name	Run #1	Run #2	Run #3	Run #4	Run #5	Run #6	Run #7	Run #8
1	0									
2	415	Hwy 1	10.4	5.9	5.1	5.2	5.4	4.9	5.5	6.1
3	421	Westside Dr	26.2	28.6	27.2	28.3	27.8	30.2	33.0	31.4
4	4464	Rohret Rd	32.7	34.3	35.3	26.4	35.2	27.7	32.7	35.1
5	1421	W Benton St	29.3	34.7	35.4	22.5	35.1	31.5	34.3	34.9
6	713	Cameron Way	34.6	33.3	34.9	30.2	34.5	35.8	32.3	35.1
7	1966	Melrose Ave	14.0	28.1	21.8	9.1	13.2	19.0	15.1	15.1
8	0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Totals	**9400**		**23.4**	**26.8**	**24.9**	**16.5**	**22.0**	**21.9**	**22.8**	**23.6**

Snyder & Associates, Inc.

Ankeny, Iowa

Study Name : **Mormon_Trek_AM_NB**
Study Date : **1/21/2016**
Page No. : **9**

Detailed Statistics By Run

Average Speed (MPH) by Section

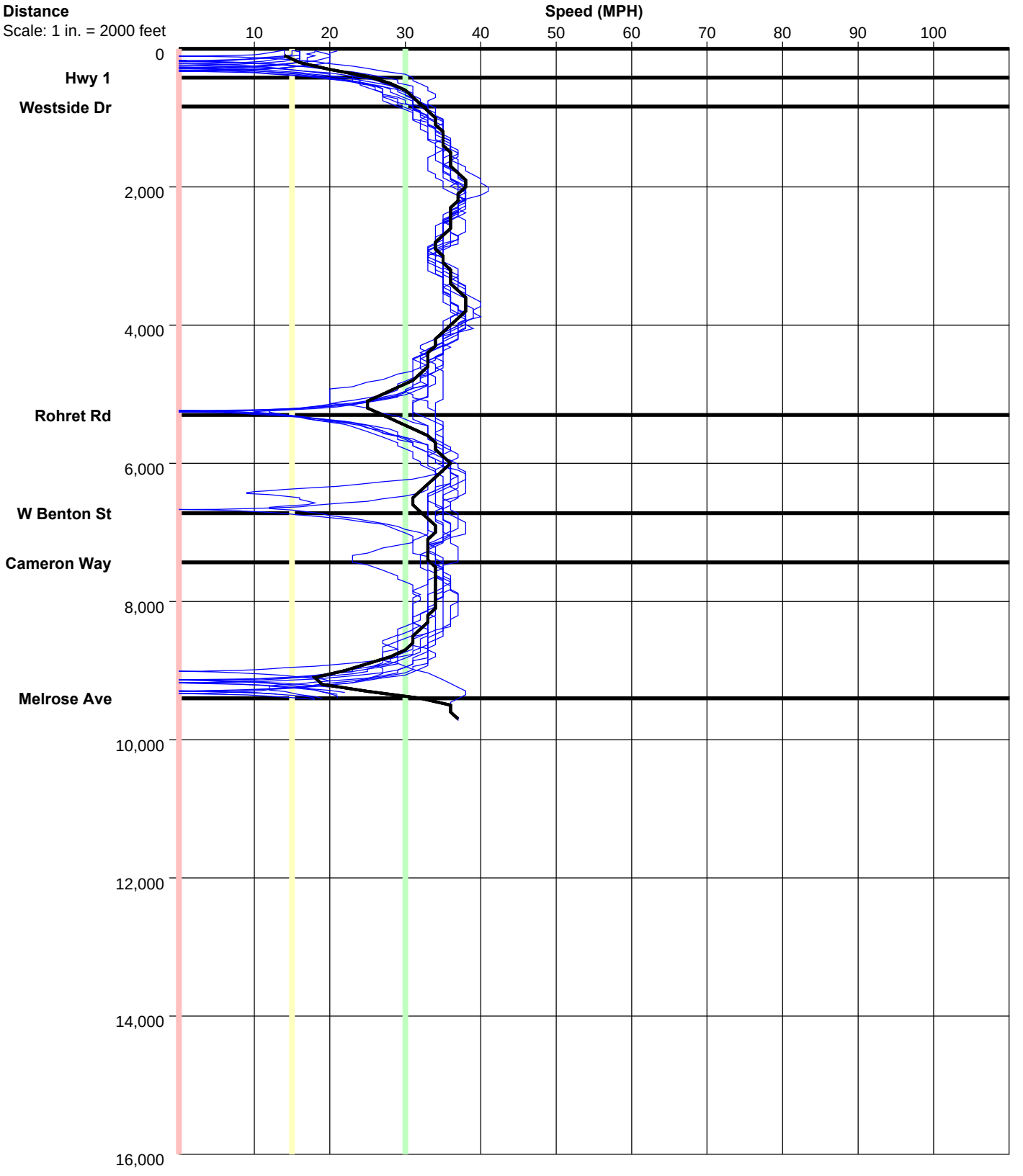
Node #	Length	Node Name	Run #9 Mormon Trek AM-NB-009t	Run #10 Mormon Trek AM-NB-010t
1	0			
2	415	Hwy 1	6.1	9.8
3	421	Westside Dr	26.7	29.4
4	4464	Rohret Rd	26.7	33.6
5	1421	W Benton St	30.8	17.7
6	713	Cameron Way	34.1	25.5
7	1966	Melrose Ave	31.5	18.2
8	0		36.0	0.0
Totals	**9400**		**24.7**	**23.3**

Snyder & Associates, Inc.

Ankeny, Iowa

Study Name : **Mormon_Trek_AM_NB**
Study Date : **1/21/2016**
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Speed/Distance Profiles of All Runs

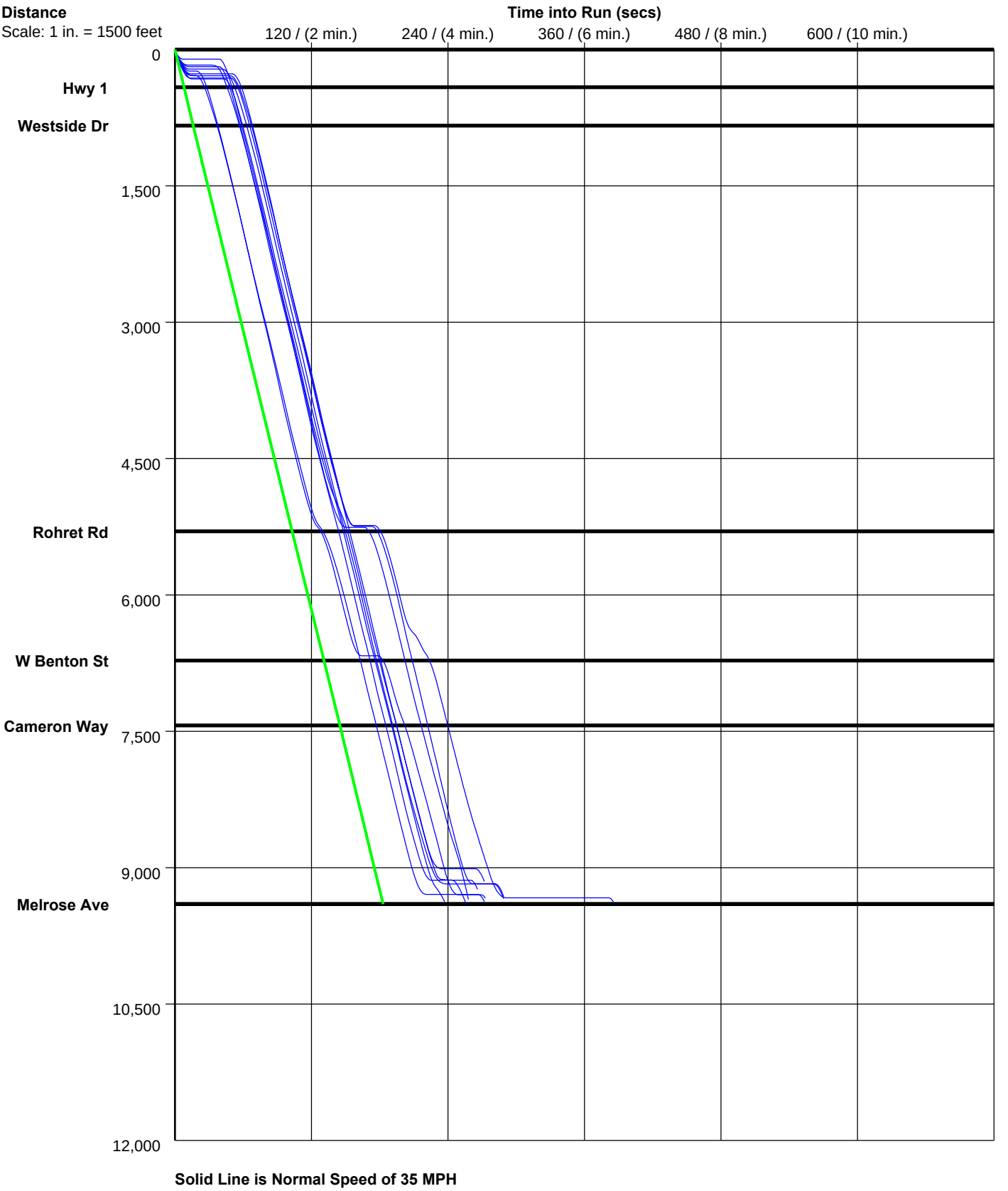


Snyder & Associates, Inc.

Ankeny, Iowa

Study Name : **Mormon_Trek_AM_NB**
Study Date : **1/21/2016**
Page No. : **11**

Time/Space Trajectories of All Runs



Solid Line is Normal Speed of 35 MPH

Snyder & Associates, Inc.
Ankeny, Iowa

PC-Travel Reports for study: Mormon_Trek_AM_SB

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Detailed Statistics By Run - Average Speed	8
Speed/Distance Profiles of All Runs	10
Time/Space Trajectories of All Runs	11

Snyder & Associates, Inc.

Ankeny, Iowa

Study Name : **Mormon_Trek_AM_SB**
Study Date : **1/21/2016**

Study Summary

Runs Used in This Study

Run Title	Start Date	Start Time	Length	Before/ After	Run Type
Mormon Trek AM-SB-001tn	01/21/16	07:06	9603	Before	Primary
Mormon Trek AM-SB-002t	01/21/16	07:20	9656	Before	Secondary
Mormon Trek AM-SB-003t	01/21/16	07:32	9607	Before	Secondary
Mormon Trek AM-SB-004t	01/21/16	07:46	9669	Before	Secondary
Mormon Trek AM-SB-005t	01/21/16	07:58	9650	Before	Secondary
Mormon Trek AM-SB-006t	01/21/16	08:09	9685	Before	Secondary
Mormon Trek AM-SB-007t	01/21/16	08:21	9646	Before	Secondary
Mormon Trek AM-SB-008t	01/21/16	08:32	9669	Before	Secondary
Mormon Trek AM-SB-009t	01/21/16	08:44	9692	Before	Secondary
Mormon Trek AM-SB-010t	01/21/16	08:56	9716	Before	Secondary

Node Info

#	Len	Name
1	0	
2	522	Melrose Ave
3	1932	Cameron Way
4	702	W Benton St
5	1401	Rohret Rd
6	4539	Westside Dr
7	477	Hwy 1
8	30	

Length of Study Route = 9,603 feet

Notes:

Snyder & Associates, Inc.

Ankeny, Iowa

Study Name : **Mormon_Trek_AM_SB**
Study Date : **1/21/2016**

Overall Output Statistics

Node #	Length	Node	Travel Time	# of Stops	Avg Speed	Total Delay	Time <= 0 MPH	Time <= 15 MPH	Time <= 30 MPH
1	0								
2	522	Melrose Ave	47.6	0.9	7.5	37.2	21.0	36.3	46.5
3	1932	Cameron Way	44.0	0.2	29.9	5.8	0.0	2.2	17.0
4	702	W Benton St	15.7	0.0	30.5	1.9	0.0	0.5	6.4
5	1401	Rohret Rd	32.4	0.2	29.5	5.0	0.5	3.3	9.0
6	4539	Westside Dr	95.6	0.4	32.4	7.5	3.6	7.0	11.0
7	477	Hwy 1	51.0	0.8	6.4	41.6	32.7	40.6	48.5
8	30		6.2	0.0	3.3	5.2	4.6	5.4	6.1
Total	**9,603**		**292.5**	**2.5**	**22.4**	**104.2**	**62.4**	**95.3**	**144.5**

Stats based on 10 BEFORE runs.
Stops based on a Stop Speed of 5 MPH.
Total Delay based on a Normal Speed of 35 MPH.

Snyder & Associates, Inc.

Ankeny, Iowa

Study Name : **Mormon_Trek_AM_SB**
Study Date : **1/21/2016**

Detailed Statistics By Run

Travel Time (sec) by Section

Mormon Trek AM-SB-001tn
Mormon Trek AM-SB-002t
Mormon Trek AM-SB-003t
Mormon Trek AM-SB-004t
Mormon Trek AM-SB-005t
Mormon Trek AM-SB-006t
Mormon Trek AM-SB-007t
Mormon Trek AM-SB-

Node #	Length	Node Name	Run #1	Run #2	Run #3	Run #4	Run #5	Run #6	Run #7	Run #8
1	0									
2	522	Melrose Ave	56	53	49	67	29	45	47	54
3	1932	Cameron Way	49	41	46	46	47	39	49	42
4	702	W Benton St	17	14	16	21	15	13	18	13
5	1401	Rohret Rd	28	28	53	30	27	28	30	31
6	4539	Westside Dr	116	87	89	116	93	87	91	101
7	477	Hwy 1	102	99	53	12	36	54	36	54
8	30		1	1	1	1	1	1	1	2
Totals	**9603**		**369**	**323**	**307**	**293**	**248**	**267**	**272**	**297**

Detailed Statistics By Run

Travel Time (sec) by Section

Node #	Length	Node Name	Run #9 (Mormon Trek AM-SB-009t)	Run #10 (Mormon Trek AM-SB-010t)
1	0			
2	522	Melrose Ave	65	11
3	1932	Cameron Way	41	40
4	702	W Benton St	14	16
5	1401	Rohret Rd	28	41
6	4539	Westside Dr	89	87
7	477	Hwy 1	51	13
8	30		1	52
Totals	**9603**		**289**	**260**

Snyder & Associates, Inc.

Ankeny, Iowa

Study Name : **Mormon_Trek_AM_SB**
Study Date : **1/21/2016**

Detailed Statistics By Run

Number of Stops by Section

Mormon Trek AM-SB-001tn
Mormon Trek AM-SB-002t
Mormon Trek AM-SB-003t
Mormon Trek AM-SB-004t
Mormon Trek AM-SB-005t
Mormon Trek AM-SB-006t
Mormon Trek AM-SB-007t
Mormon Trek AM-SB-

Node #	Length	Node Name	Run #1	Run #2	Run #3	Run #4	Run #5	Run #6	Run #7	Run #8
1	0									
2	522	Melrose Ave	1	1	1	1	1	1	1	1
3	1932	Cameron Way	1	0	0	0	0	0	1	0
4	702	W Benton St	0	0	0	0	0	0	0	0
5	1401	Rohret Rd	0	0	1	0	0	0	0	0
6	4539	Westside Dr	1	0	0	1	1	0	0	1
7	477	Hwy 1	1	1	1	0	0	1	1	1
8	30		0	0	0	0	0	0	0	0
Totals	**9603**		**4**	**2**	**3**	**2**	**2**	**2**	**3**	**3**

Stops based on a Stop Speed of 5 MPH.

Detailed Statistics By Run

Number of Stops by Section

Mormon Trek AM-SB-009t
Mormon Trek AM-SB-010t

Node #	Length	Node Name	Run #9	Run #10
1	0			
2	522	Melrose Ave	1	0
3	1932	Cameron Way	0	0
4	702	W Benton St	0	0
5	1401	Rohret Rd	0	1
6	4539	Westside Dr	0	0
7	477	Hwy 1	1	1
8	30		0	0
Totals	**9603**		**2**	**2**

Stops based on a Stop Speed of 5 MPH.

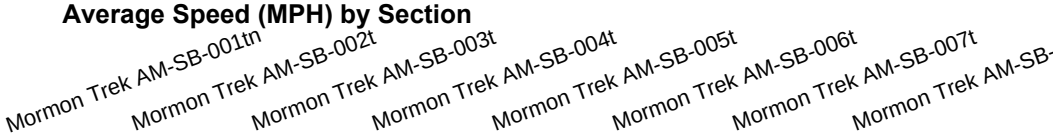
Snyder & Associates, Inc.

Ankeny, Iowa

Study Name : **Mormon_Trek_AM_SB**
Study Date : **1/21/2016**

Detailed Statistics By Run

Average Speed (MPH) by Section



Node #	Length	Node Name	Run #1	Run #2	Run #3	Run #4	Run #5	Run #6	Run #7	Run #8
1	0									
2	522	Melrose Ave	6.4	6.8	7.3	5.6	12.4	8.3	8.0	6.7
3	1932	Cameron Way	26.8	32.0	28.8	28.2	28.1	33.9	26.6	31.9
4	702	W Benton St	28.2	34.6	29.5	23.2	32.9	35.2	27.7	34.6
5	1401	Rohret Rd	34.0	33.8	18.2	31.5	35.0	34.3	31.1	30.8
6	4539	Westside Dr	26.7	35.7	34.8	26.7	33.1	35.5	34.0	30.8
7	477	Hwy 1	3.2	3.3	5.7	26.9	9.2	6.1	9.6	5.6
8	30		20.0	21.0	22.0	31.0	22.0	18.0	29.0	13.0
Totals	**9603**		**17.7**	**20.3**	**21.3**	**22.4**	**26.4**	**24.5**	**24.2**	**22.0**

Snyder & Associates, Inc.

Ankeny, Iowa

Study Name : **Mormon_Trek_AM_SB**
Study Date : **1/21/2016**

Detailed Statistics By Run

Average Speed (MPH) by Section

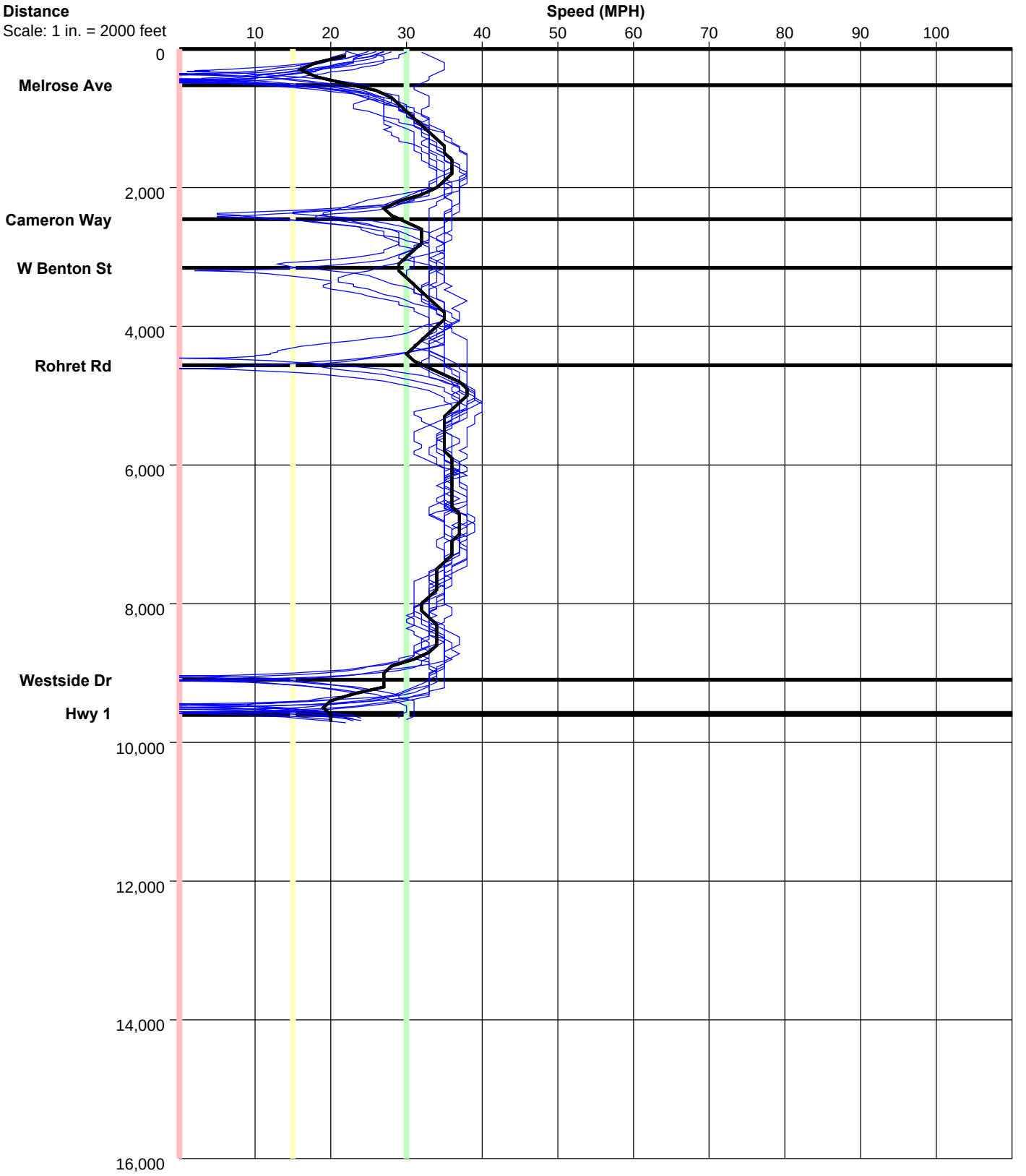
Node #	Length	Node Name	Run #9 Mormon Trek AM-SB-009t	Run #10 Mormon Trek AM-SB-010t
1	0			
2	522	Melrose Ave	5.7	33.4
3	1932	Cameron Way	32.8	33.4
4	702	W Benton St	32.1	28.3
5	1401	Rohret Rd	34.7	23.9
6	4539	Westside Dr	34.8	35.5
7	477	Hwy 1	6.1	23.0
8	30		20.0	0.5
Totals	**9603**		**22.7**	**25.2**

Snyder & Associates, Inc.

Ankeny, Iowa

Study Name : **Mormon_Trek_AM_SB**
Study Date : **1/21/2016**
Page No. : **10**

Speed/Distance Profiles of All Runs

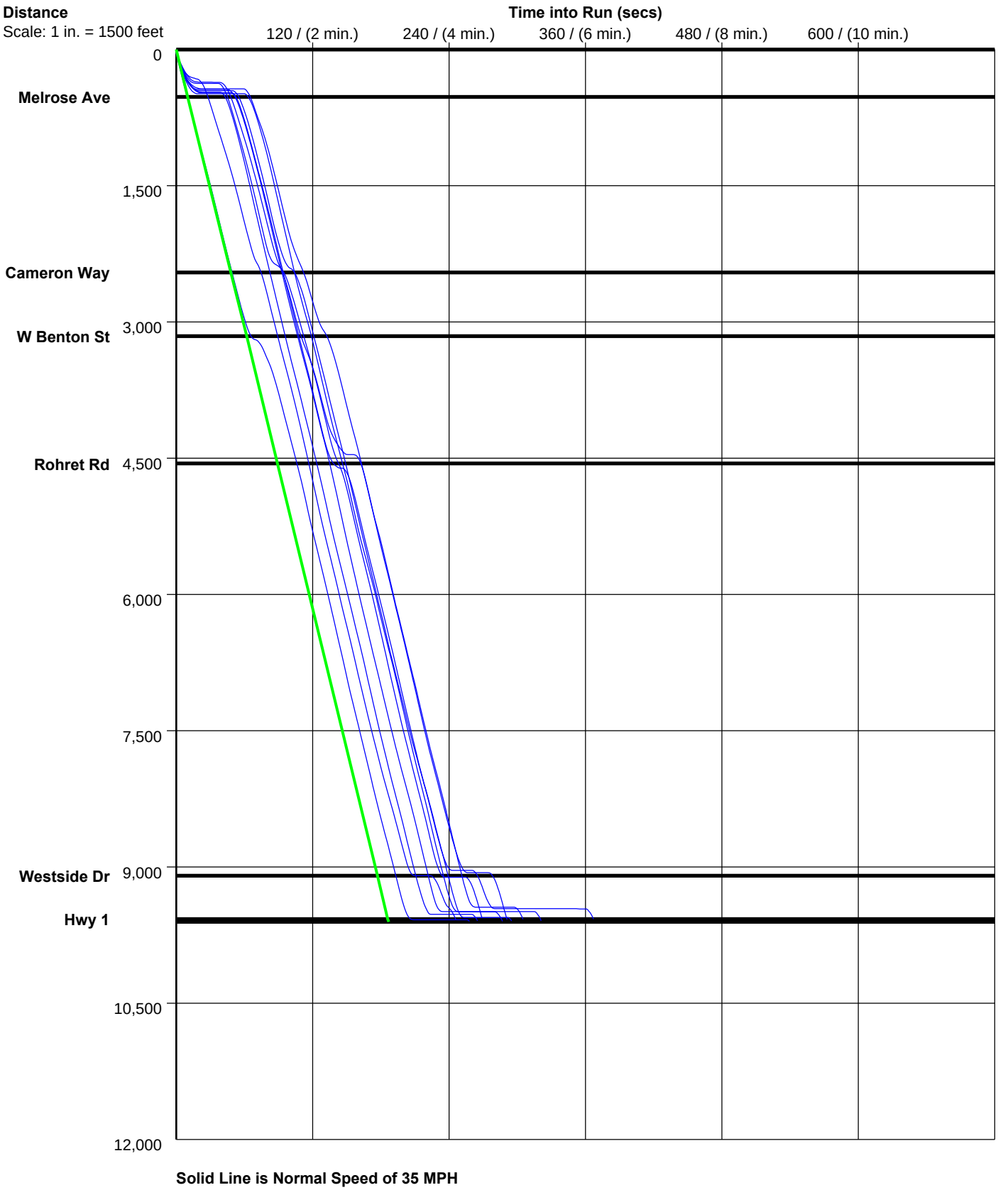


Snyder & Associates, Inc.

Ankeny, Iowa

Study Name : **Mormon_Trek_AM_SB**
Study Date : **1/21/2016**
Page No. : **11**

Time/Space Trajectories of All Runs



Solid Line is Normal Speed of 35 MPH

Snyder & Associates, Inc.
Ankeny, Iowa

PC-Travel Reports for study: Mormon_Trek_Noon_NB

Report Name	***Page***
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Detailed Statistics By Run - Stops	6
Detailed Statistics By Run - Average Speed	8
Speed/Distance Profiles of All Runs	10
Time/Space Trajectories of All Runs	11

Snyder & Associates, Inc.

Ankeny, Iowa

Study Name **: Mormon_Trek_Noon_NB**
Study Date **: 1/21/2016**
Page No. **: 2**

Study Summary

Runs Used in This Study

Run Title	Start Date	Start Time	Length	Before/ After	Run Type
Mormon Trek Noon-NB-001tn	01/21/16	11:02	9448	Before	Primary
Mormon Trek Noon-NB-002	01/21/16	11:13	9343	Before	Secondary
Mormon Trek Noon-NB-003	01/21/16	11:27	9478	Before	Secondary
Mormon Trek Noon-NB-004	01/21/16	11:38	9385	Before	Secondary
Mormon Trek Noon-NB-005	01/21/16	11:49	9481	Before	Secondary
Mormon Trek Noon-NB-006	01/21/16	12:02	9406	Before	Secondary
Mormon Trek Noon-NB-007	01/21/16	12:13	9318	Before	Secondary
Mormon Trek Noon-NB-008	01/21/16	12:26	9356	Before	Secondary
Mormon Trek Noon-NB-009	01/21/16	12:37	9459	Before	Secondary
Mormon Trek Noon-NB-010	01/21/16	12:48	9177	Before	Secondary

Node Info

#	Len	Name
1	0	
2	473	Hwy 1
3	454	Westside Dr
4	4462	Rohret Rd
5	1399	W Benton St
6	707	Cameron Way
7	1953	Melrose Ave
8	0	

Length of Study Route = 9,448 feet

Notes:

Snyder & Associates, Inc.

Ankeny, Iowa

Study Name : **Mormon_Trek_Noon_NB**
Study Date : **1/21/2016**

Overall Output Statistics

Node #	Length	Node	Travel Time	# of Stops	Avg Speed	Total Delay	Time <= 0 MPH	Time <= 35 MPH	Time <= 55 MPH
1	0								
2	473	Hwy 1	52.9	0.9	6.1	44.7	30.1	52.9	52.9
3	454	Westside Dr	24.2	0.6	12.8	16.2	8.1	24.2	24.2
4	4462	Rohret Rd	89.7	0.1	33.9	13.1	0.0	39.0	89.7
5	1399	W Benton St	38.1	0.4	25.0	13.9	4.4	33.9	38.1
6	707	Cameron Way	20.7	0.3	23.3	8.4	3.0	17.2	20.7
7	1953	Melrose Ave	49.9	0.5	26.7	17.4	4.5	43.3	49.3
8	0								
Total	**9,448**		**275.9**	**2.8**	**23.3**	**113.7**	**50.1**	**210.6**	**275.0**

Stats based on 10 BEFORE runs.
Stops based on a Stop Speed of 5 MPH.
Total Delay based on a Normal Speed of 40 MPH.

Snyder & Associates, Inc.

Ankeny, Iowa

Study Name : **Mormon_Trek_Noon_NB**
Study Date : **1/21/2016**
Page No. : **4**

Detailed Statistics By Run

Travel Time (sec) by Section

Mormon Trek Noon-NB-001tn
Mormon Trek Noon-NB-002
Mormon Trek Noon-NB-003
Mormon Trek Noon-NB-004
Mormon Trek Noon-NB-005
Mormon Trek Noon-NB-006
Mormon Trek Noon-NB-007
Mormon Trek Noon-NB

Node #	Length	Node Name	Run #1	Run #2	Run #3	Run #4	Run #5	Run #6	Run #7	Run #8
1	0									
2	473	Hwy 1	64	54	60	51	59	60	61	42
3	454	Westside Dr	31	9	23	11	58	35	32	10
4	4462	Rohret Rd	99	91	89	86	90	92	88	85
5	1399	W Benton St	34	28	30	52	51	56	45	29
6	707	Cameron Way	15	14	20	15	30	16	14	36
7	1953	Melrose Ave	38	65	61	40	70	41	51	40
8	0		1	0	1	0	1	0	0	0
Totals	**9448**		**282**	**261**	**284**	**255**	**359**	**300**	**291**	**242**

Detailed Statistics By Run

Travel Time (sec) by Section

Node #	Length	Node Name	Mormon Trek Noon-NB-009 Run #9	Mormon Trek Noon-NB-010 Run #10
1	0			
2	473	Hwy 1	44	34
3	454	Westside Dr	23	10
4	4462	Rohret Rd	86	91
5	1399	W Benton St	27	29
6	707	Cameron Way	32	15
7	1953	Melrose Ave	43	50
8	0		1	0
Totals	**9448**		**256**	**229**

Snyder & Associates, Inc.

Ankeny, Iowa

Study Name : **Mormon_Trek_Noon_NB**
Study Date : **1/21/2016**
Page No. : **6**

Detailed Statistics By Run

Number of Stops by Section

Mormon Trek Noon-NB-001tn
Mormon Trek Noon-NB-002
Mormon Trek Noon-NB-003
Mormon Trek Noon-NB-004
Mormon Trek Noon-NB-005
Mormon Trek Noon-NB-006
Mormon Trek Noon-NB-007
Mormon Trek Noon-NB

Node #	Length	Node Name	Run #1	Run #2	Run #3	Run #4	Run #5	Run #6	Run #7	Run #8
1	0									
2	473	Hwy 1	1	1	1	1	1	1	1	1
3	454	Westside Dr	1	0	1	0	1	1	1	0
4	4462	Rohret Rd	1	0	0	0	0	0	0	0
5	1399	W Benton St	0	0	0	1	1	1	1	0
6	707	Cameron Way	0	0	0	0	1	0	0	1
7	1953	Melrose Ave	0	1	1	0	1	0	1	0
8	0		0	0	0	0	0	0	0	0
Totals	**9448**		**3**	**2**	**3**	**2**	**5**	**3**	**4**	**2**

Stops based on a Stop Speed of 5 MPH.

Detailed Statistics By Run

Number of Stops by Section

Mormon Trek Noon-NB-009
Mormon Trek Noon-NB-010

Node #	Length	Node Name	Run #9	Run #10
1	0			
2	473	Hwy 1	1	0
3	454	Westside Dr	1	0
4	4462	Rohret Rd	0	0
5	1399	W Benton St	0	0
6	707	Cameron Way	1	0
7	1953	Melrose Ave	0	1
8	0		0	0
Totals	**9448**		**3**	**1**

Stops based on a Stop Speed of 5 MPH.

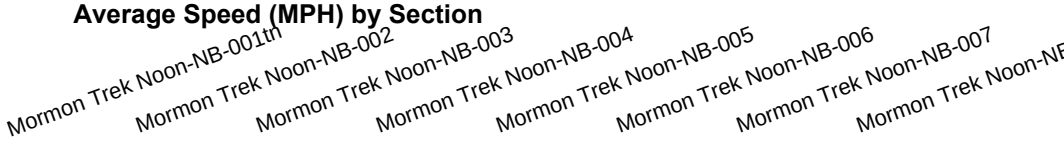
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Ankeny, Iowa

Study Name : **Mormon_Trek_Noon_NB**
Study Date : **1/21/2016**

Detailed Statistics By Run

Average Speed (MPH) by Section



Node #	Length	Node Name	Run #1	Run #2	Run #3	Run #4	Run #5	Run #6	Run #7	Run #8
1	0									
2	473	Hwy 1	5.0	6.5	5.7	6.5	5.6	5.7	5.5	7.8
3	454	Westside Dr	10.0	31.7	13.1	28.6	5.4	8.8	9.7	32.1
4	4462	Rohret Rd	30.7	33.6	34.4	35.6	33.8	32.9	34.7	35.9
5	1399	W Benton St	28.0	33.3	31.4	18.0	18.5	17.0	21.1	33.1
6	707	Cameron Way	32.1	35.9	24.4	32.4	16.2	30.1	35.2	12.6
7	1953	Melrose Ave	35.1	19.3	21.6	32.6	19.3	32.4	24.1	32.3
8	0		0.0	0.0	20.0	0.0	0.0	0.0	0.0	0.0
Totals	**9448**		**22.9**	**24.5**	**22.8**	**25.2**	**18.1**	**21.4**	**21.9**	**26.5**

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Study Name : **Mormon_Trek_Noon_NB**
Study Date : **1/21/2016**
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Detailed Statistics By Run

Average Speed (MPH) by Section

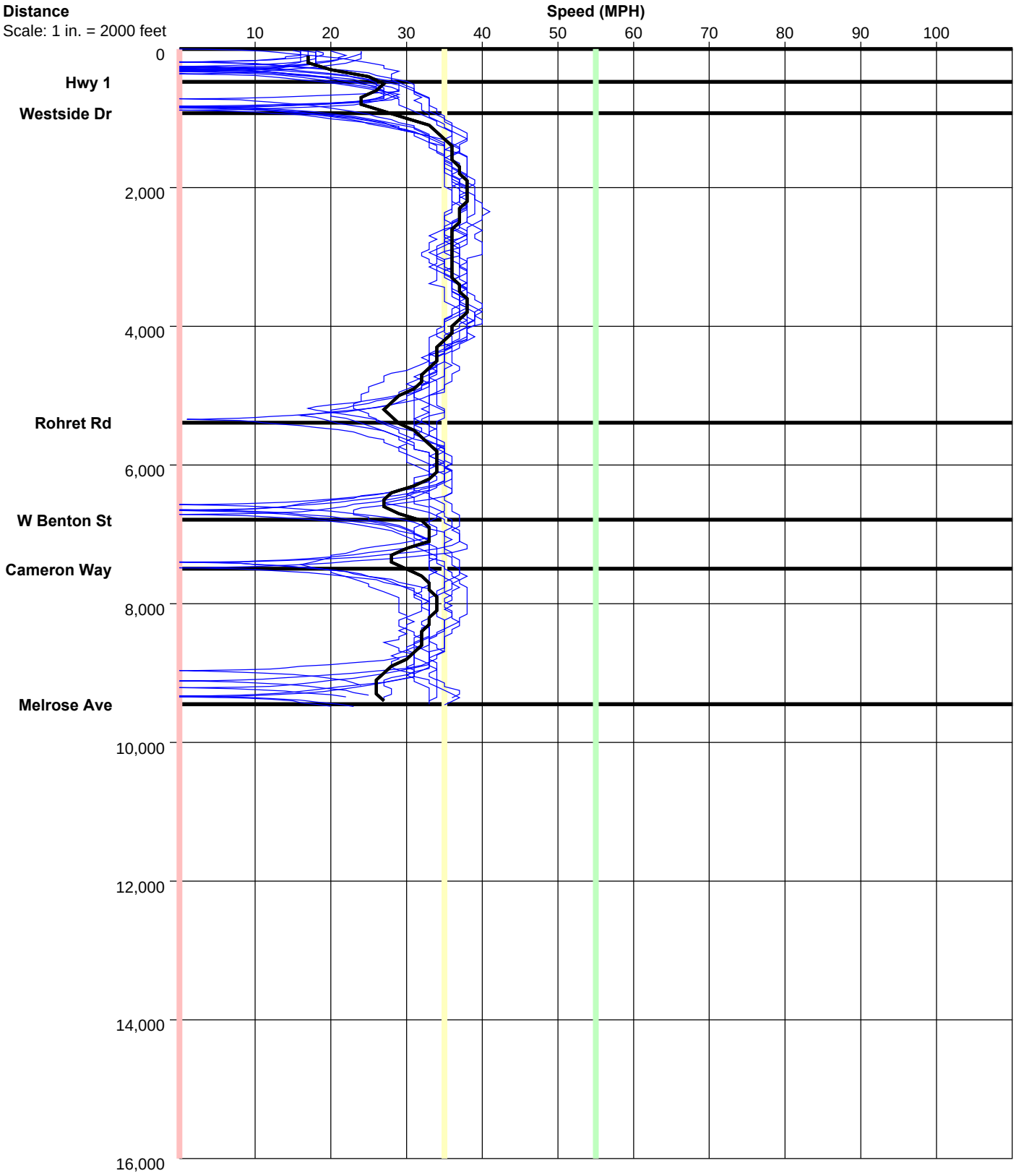
Node #	Length	Node Name	Run #9	Run #10
			Mormon Trek Noon-NB-009	Mormon Trek Noon-NB-010
1	0			
2	473	Hwy 1	7.3	9.8
3	454	Westside Dr	13.9	32.6
4	4462	Rohret Rd	35.6	33.3
5	1399	W Benton St	35.4	32.9
6	707	Cameron Way	14.5	32.8
7	1953	Melrose Ave	30.9	22.9
8	0		0.0	0.0
Totals	**9448**		**25.3**	**27.4**

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Ankeny, Iowa

Study Name : **Mormon_Trek_Noon_NB**
Study Date : **1/21/2016**
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Speed/Distance Profiles of All Runs

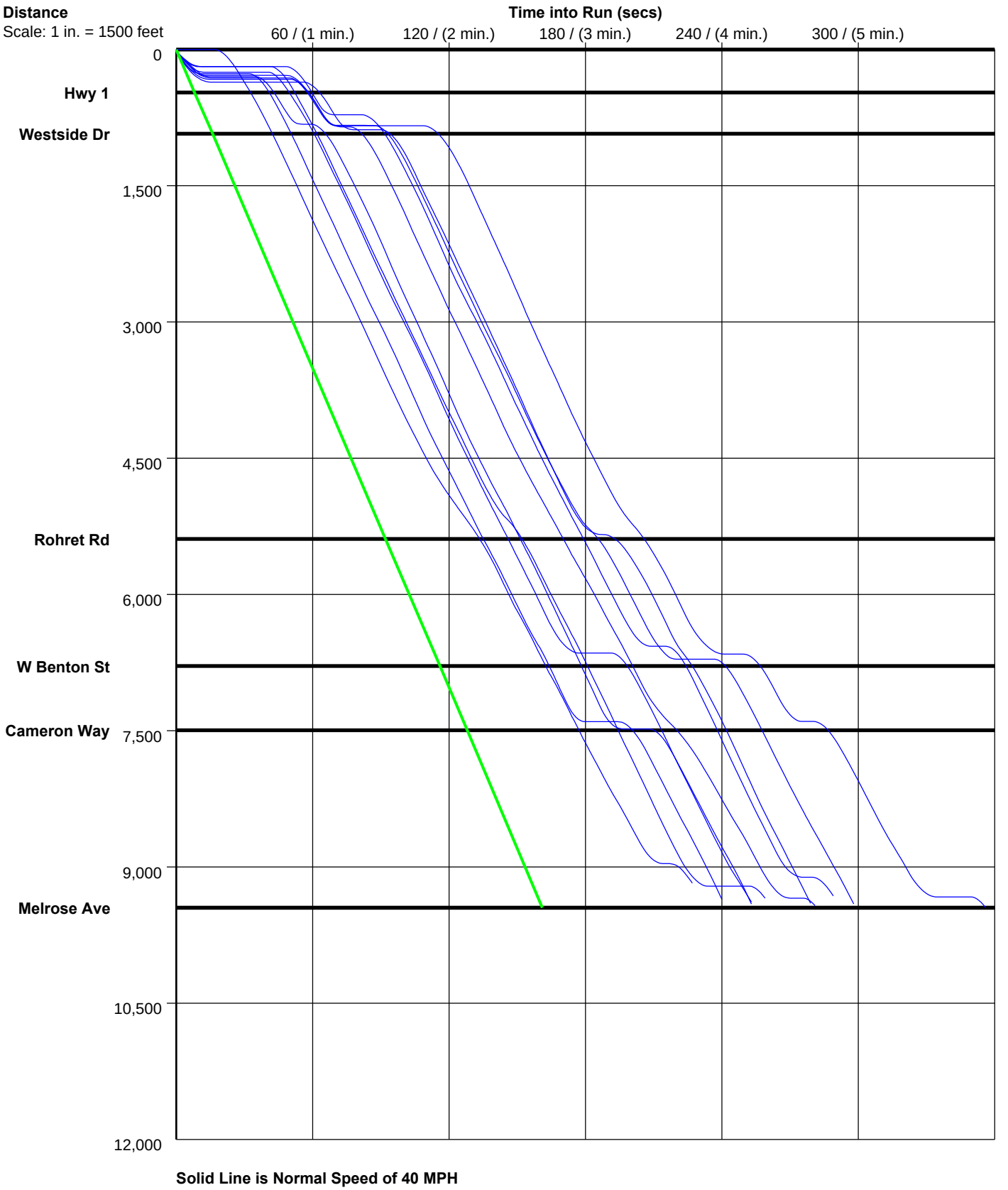


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Study Name : **Mormon_Trek_Noon_NB**
Study Date : **1/21/2016**
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Time/Space Trajectories of All Runs



Solid Line is Normal Speed of 40 MPH

Snyder & Associates, Inc.
Ankeny, Iowa

PC-Travel Reports for study: Mormon_Trek_Noon_SB

Report Name	***Page***
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Snyder & Associates, Inc.

Ankeny, Iowa

Study Name : **Mormon_Trek_Noon_SB**
Study Date : **1/21/2016**

Study Summary

Runs Used in This Study

Run Title	Start Date	Start Time	Length	Before/ After	Run Type
Mormon Trek Noon-SB-001tn	01/21/16	11:09	9696	Before	Primary
Mormon Trek Noon-SB-002t	01/21/16	11:20	9705	Before	Secondary
Mormon Trek Noon-SB-003t	01/21/16	11:33	9742	Before	Secondary
Mormon Trek Noon-SB-004t	01/21/16	11:44	9644	Before	Secondary
Mormon Trek Noon-SB-005t	01/21/16	11:57	9708	Before	Secondary
Mormon Trek Noon-SB-006t	01/21/16	12:08	9640	Before	Secondary
Mormon Trek Noon-SB-007t	01/21/16	12:21	9630	Before	Secondary
Mormon Trek Noon-SB-008t	01/21/16	12:32	9640	Before	Secondary
Mormon Trek Noon-SB-009t	01/21/16	12:43	9655	Before	Secondary
Mormon Trek Noon-SB-010t	01/21/16	12:53	9671	Before	Secondary

Node Info

#	Len	Name
1	0	
2	531	Melrose Ave
3	1889	Cameron Way
4	718	W Benton St
5	1422	Rohret Rd
6	4563	Westside Dr
7	502	Hwy 1
8	71	

Length of Study Route = 9,696 feet

Notes:

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Ankeny, Iowa

Study Name : **Mormon_Trek_Noon_SB**
Study Date : **1/21/2016**
Page No. : **3**

Overall Output Statistics

Node #	Length	Node	Travel Time	# of Stops	Avg Speed	Total Delay	Time <= 0 MPH	Time <= 35 MPH	Time <= 55 MPH
1	0								
2	531	Melrose Ave	28.4	0.5	12.7	19.2	9.5	27.7	28.4
3	1889	Cameron Way	40.9	0.1	31.5	8.5	0.6	28.5	40.9
4	718	W Benton St	18.3	0.1	26.8	5.8	0.2	17.6	18.3
5	1422	Rohret Rd	37.5	0.3	25.9	12.9	4.1	34.2	37.5
6	4563	Westside Dr	96.1	0.4	32.4	18.1	4.5	46.7	96.1
7	502	Hwy 1	42.3	0.8	8.1	33.3	22.8	42.3	42.3
8	71		1.5	0.0	32.3	0.5	0.0	0.9	0.9
Total	**9,696**		**265.0**	**2.2**	**24.9**	**98.3**	**41.7**	**197.9**	**264.4**

Stats based on 10 BEFORE runs.
Stops based on a Stop Speed of 5 MPH.
Total Delay based on a Normal Speed of 40 MPH.

Snyder & Associates, Inc.

Ankeny, Iowa

Study Name : **Mormon_Trek_Noon_SB**
Study Date : **1/21/2016**
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Detailed Statistics By Run

Travel Time (sec) by Section

Node #	Length	Node Name	Run #1	Run #2	Run #3	Run #4	Run #5	Run #6	Run #7	Run #8
1	0									
2	531	Melrose Ave	11	32	34	17	11	12	29	60
3	1889	Cameron Way	35	42	41	39	39	38	38	47
4	718	W Benton St	14	18	17	15	31	17	18	19
5	1422	Rohret Rd	30	62	40	28	34	32	30	29
6	4563	Westside Dr	90	104	91	107	107	89	87	109
7	502	Hwy 1	29	34	56	75	43	54	44	14
8	71		2	2	2	1	2	1	1	1
Totals	**9696**		**211**	**294**	**281**	**282**	**267**	**243**	**247**	**279**

Mormon Trek Noon-SB-001tn
Mormon Trek Noon-SB-002t
Mormon Trek Noon-SB-003t
Mormon Trek Noon-SB-004t
Mormon Trek Noon-SB-005t
Mormon Trek Noon-SB-006t
Mormon Trek Noon-SB-007t
Mormon Trek Noon-SB

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Study Name : **Mormon_Trek_Noon_SB**
Study Date : **1/21/2016**
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Detailed Statistics By Run

Travel Time (sec) by Section

Node #	Length	Node Name	Run #9 (Mormon Trek Noon-SB-009t)	Run #10 (Mormon Trek Noon-SB-010t)
1	0			
2	531	Melrose Ave	67	11
3	1889	Cameron Way	53	37
4	718	W Benton St	18	16
5	1422	Rohret Rd	31	59
6	4563	Westside Dr	91	86
7	502	Hwy 1	11	63
8	71		1	2
Totals	**9696**		**272**	**274**

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Ankeny, Iowa

Study Name : **Mormon_Trek_Noon_SB**
Study Date : **1/21/2016**
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Detailed Statistics By Run

Number of Stops by Section

Mormon Trek Noon-SB-001tn
Mormon Trek Noon-SB-002t
Mormon Trek Noon-SB-003t
Mormon Trek Noon-SB-004t
Mormon Trek Noon-SB-005t
Mormon Trek Noon-SB-006t
Mormon Trek Noon-SB-007t
Mormon Trek Noon-SB

Node #	Length	Node Name	Run #1	Run #2	Run #3	Run #4	Run #5	Run #6	Run #7	Run #8
1	0									
2	531	Melrose Ave	0	1	1	0	0	0	1	1
3	1889	Cameron Way	0	0	0	0	0	0	0	0
4	718	W Benton St	0	0	0	0	1	0	0	0
5	1422	Rohret Rd	0	1	1	0	0	0	0	0
6	4563	Westside Dr	0	1	0	1	1	0	0	1
7	502	Hwy 1	1	1	1	1	1	1	1	0
8	71		0	0	0	0	0	0	0	0
Totals	**9696**		**1**	**4**	**3**	**2**	**3**	**1**	**2**	**2**

Stops based on a Stop Speed of 5 MPH.

Detailed Statistics By Run

Number of Stops by Section

Mormon Trek Noon-SB-009t
Mormon Trek Noon-SB-010t

Node #	Length	Node Name	Run #9	Run #10
1	0			
2	531	Melrose Ave	1	0
3	1889	Cameron Way	1	0
4	718	W Benton St	0	0
5	1422	Rohret Rd	0	1
6	4563	Westside Dr	0	0
7	502	Hwy 1	0	1
8	71		0	0
Totals	**9696**		**2**	**2**

Stops based on a Stop Speed of 5 MPH.

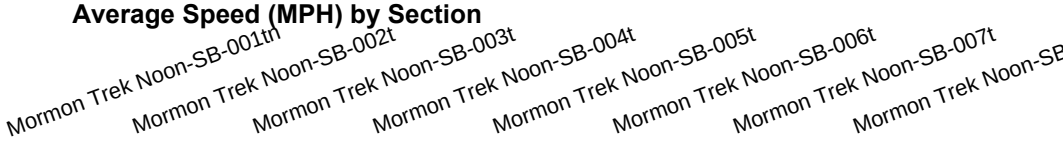
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Ankeny, Iowa

Study Name : **Mormon_Trek_Noon_SB**
Study Date : **1/21/2016**

Detailed Statistics By Run

Average Speed (MPH) by Section



Node #	Length	Node Name	Run #1	Run #2	Run #3	Run #4	Run #5	Run #6	Run #7	Run #8
1	0									
2	531	Melrose Ave	32.8	11.9	10.8	21.6	33.1	32.3	13.1	6.1
3	1889	Cameron Way	36.8	30.5	31.5	33.8	33.0	33.5	33.7	27.6
4	718	W Benton St	35.0	27.0	28.6	31.8	16.2	28.5	28.1	25.4
5	1422	Rohret Rd	32.2	15.8	24.0	34.5	29.0	30.6	32.4	33.4
6	4563	Westside Dr	34.6	29.9	34.1	28.9	28.9	35.0	35.5	28.6
7	502	Hwy 1	11.8	10.1	6.4	4.7	7.7	6.2	7.7	24.9
8	71		24.0	21.5	21.0	0.0	26.0	0.0	0.0	0.0
Totals	**9696**		**31.3**	**22.5**	**23.5**	**23.4**	**24.8**	**27.2**	**26.7**	**23.7**

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Study Name : **Mormon_Trek_Noon_SB**
Study Date : **1/21/2016**
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Detailed Statistics By Run

Average Speed (MPH) by Section

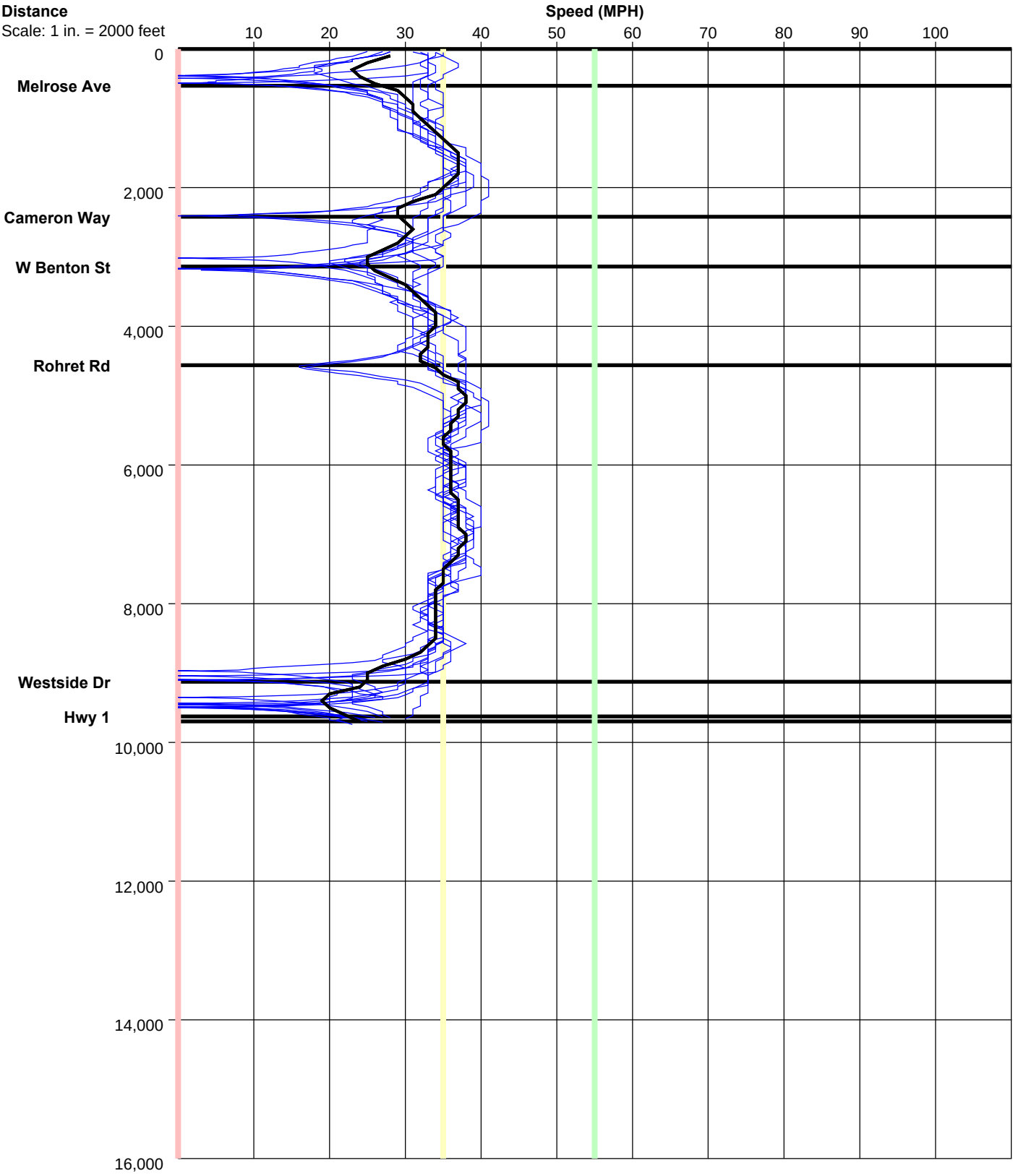
Node #	Length	Node Name	Run #9 Mormon Trek Noon-SB-009t	Run #10 Mormon Trek Noon-SB-010t
1	0			
2	531	Melrose Ave	5.5	35.1
3	1889	Cameron Way	24.3	34.7
4	718	W Benton St	28.1	29.2
5	1422	Rohret Rd	30.4	16.7
6	4563	Westside Dr	34.2	35.9
7	502	Hwy 1	31.8	5.5
8	71		0.0	25.0
Totals	**9696**		**24.2**	**24.1**

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Study Name : **Mormon_Trek_Noon_SB**
Study Date : **1/21/2016**
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Speed/Distance Profiles of All Runs

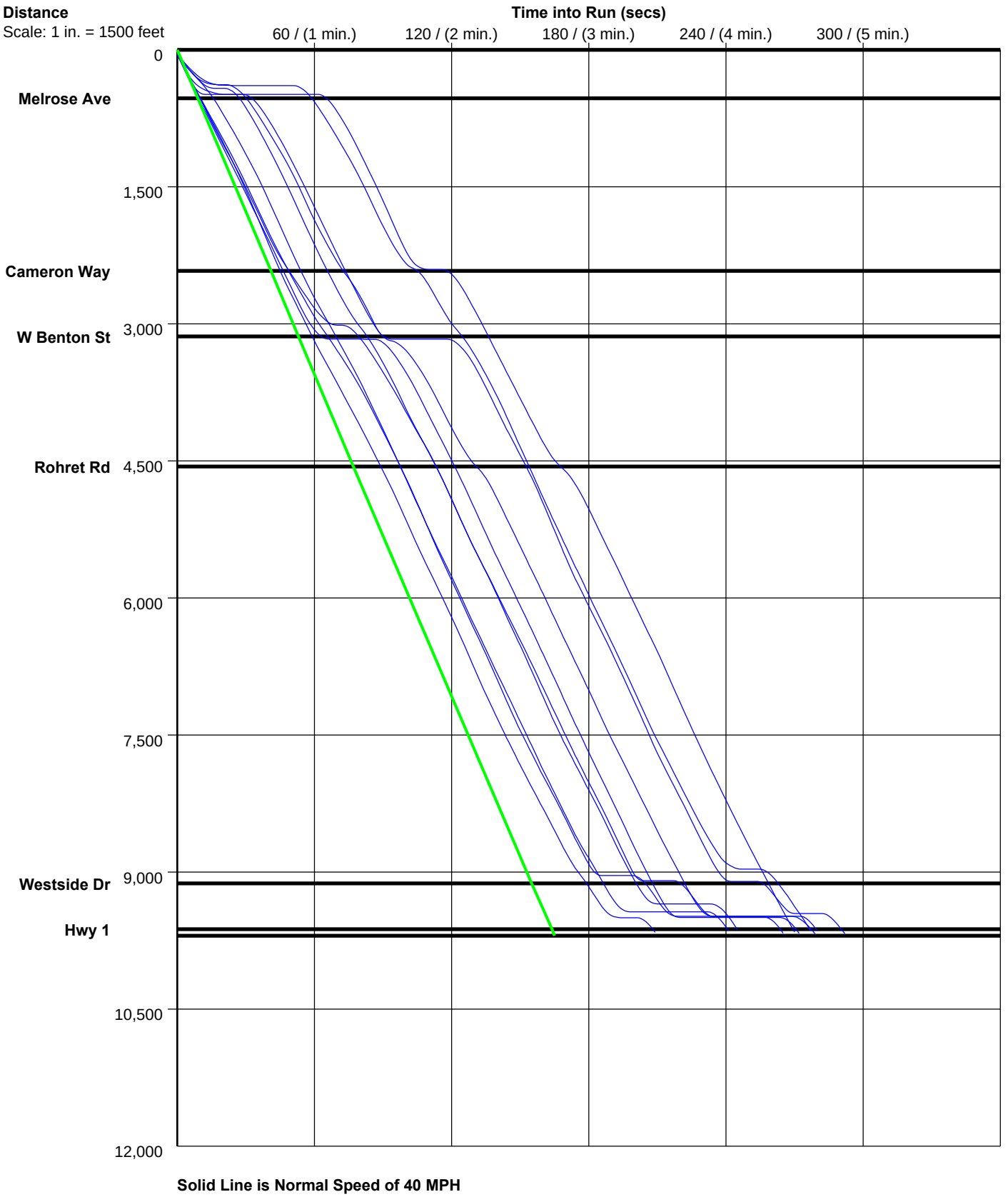


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Study Name : **Mormon_Trek_Noon_SB**
Study Date : **1/21/2016**
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Time/Space Trajectories of All Runs



Solid Line is Normal Speed of 40 MPH

Snyder & Associates, Inc.
Ankeny, Iowa

PC-Travel Reports for study: Mormon_Trek_PM_NB

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Snyder & Associates, Inc.

Ankeny, Iowa

Study Name : **Mormon_Trek_PM_NB**
Study Date : **1/21/2016**

Study Summary

Runs Used in This Study

Run Title	Start Date	Start Time	Length	Before/ After	Run Type
Mormon Trek PM-NB-001tn	01/21/16	16:00	9437	Before	Primary
Mormon Trek PM-NB-002t	01/21/16	16:11	9427	Before	Secondary
Mormon Trek PM-NB-003t	01/21/16	16:23	9386	Before	Secondary
Mormon Trek PM-NB-004t	01/21/16	16:35	9398	Before	Secondary
Mormon Trek PM-NB-005t	01/21/16	16:45	9409	Before	Secondary
Mormon Trek PM-NB-006t	01/21/16	16:55	9394	Before	Secondary
Mormon Trek PM-NB-007t	01/21/16	17:07	9200	Before	Secondary
Mormon Trek PM-NB-008t	01/21/16	17:19	9269	Before	Secondary
Mormon Trek PM-NB-009t	01/21/16	17:30	9363	Before	Secondary
Mormon Trek PM-NB-010t	01/21/16	17:40	9424	Before	Secondary
Mormon Trek PM-NB-011t	01/21/16	17:53	9420	Before	Secondary

Node Info

#	Len	Name
1	0	
2	382	Hwy 1
3	431	Westside Dr
4	4458	Rohret Rd
5	1381	W Benton St
6	732	Cameron Way
7	1990	Melrose Ave
8	63	

Length of Study Route = 9,437 feet

Notes:

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Ankeny, Iowa

Study Name : **Mormon_Trek_PM_NB**
Study Date : **1/21/2016**

Overall Output Statistics

Node #	Length	Node	Travel Time	# of Stops	Avg Speed	Total Delay	Time <= 0 MPH	Time <= 15 MPH	Time <= 30 MPH
1	0								
2	382	Hwy 1	55.2	0.9	4.7	47.4	34.8	45.8	55.2
3	431	Westside Dr	12.2	0.1	24.1	3.4	0.8	1.7	8.5
4	4458	Rohret Rd	91.9	0.3	33.1	5.8	2.8	5.9	12.5
5	1381	W Benton St	33.5	0.2	28.1	6.4	0.5	3.2	13.2
6	732	Cameron Way	24.2	0.4	20.6	9.8	2.8	9.0	15.4
7	1990	Melrose Ave	69.5	0.6	19.5	30.9	19.1	27.0	41.7
8	63		1.1	0.0	39.4	0.1	0.0	0.0	0.5
Total	**9,437**		**287.5**	**2.5**	**22.4**	**103.7**	**60.9**	**92.6**	**146.8**

Stats based on 11 BEFORE runs.
Stops based on a Stop Speed of 5 MPH.
Total Delay based on a Normal Speed of 35 MPH.

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Ankeny, Iowa

Study Name : **Mormon_Trek_PM_NB**
Study Date : **1/21/2016**
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Detailed Statistics By Run

Travel Time (sec) by Section

Node #	Length	Node Name	Run #1	Run #2	Run #3	Run #4	Run #5	Run #6	Run #7	Run #8
			Mormon Trek PM-NB-001tn	Mormon Trek PM-NB-002t	Mormon Trek PM-NB-003t	Mormon Trek PM-NB-004t	Mormon Trek PM-NB-005t	Mormon Trek PM-NB-006t	Mormon Trek PM-NB-007t	Mormon Trek PM-NB-
1	0									
2	382	Hwy 1	37	110	59	33	45	37	50	37
3	431	Westside Dr	14	10	10	10	14	28	9	9
4	4458	Rohret Rd	106	83	98	85	88	90	86	112
5	1381	W Benton St	32	26	45	33	32	30	28	43
6	732	Cameron Way	15	14	18	17	18	14	33	15
7	1990	Melrose Ave	96	100	39	75	78	52	40	64
8	63		2	2	1	1	1	1	0	0
Totals	**9437**		**302**	**345**	**270**	**254**	**276**	**252**	**246**	**280**

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Ankeny, Iowa

Study Name : **Mormon_Trek_PM_NB**
Study Date : **1/21/2016**

Detailed Statistics By Run

Travel Time (sec) by Section

Node #	Length	Node Name	Run #9	Run #10	Run #11
			Mormon Trek PM-NB-009t	Mormon Trek PM-NB-010t	Mormon Trek PM-NB-011t
1	0				
2	382	Hwy 1	63	34	102
3	431	Westside Dr	10	10	10
4	4458	Rohret Rd	84	92	87
5	1381	W Benton St	27	36	36
6	732	Cameron Way	26	60	36
7	1990	Melrose Ave	44	93	83
8	63		0	2	2
Totals	**9437**		**254**	**327**	**356**

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Ankeny, Iowa

Study Name : **Mormon_Trek_PM_NB**
Study Date : **1/21/2016**
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Detailed Statistics By Run

Number of Stops by Section

Mormon Trek PM-NB-001tn
Mormon Trek PM-NB-002t
Mormon Trek PM-NB-003t
Mormon Trek PM-NB-004t
Mormon Trek PM-NB-005t
Mormon Trek PM-NB-006t
Mormon Trek PM-NB-007t
Mormon Trek PM-NB-

Node #	Length	Node Name	Run #1	Run #2	Run #3	Run #4	Run #5	Run #6	Run #7	Run #8
1	0									
2	382	Hwy 1	1	1	1	1	1	1	0	1
3	431	Westside Dr	0	0	0	0	0	1	0	0
4	4458	Rohret Rd	1	0	1	0	0	0	0	1
5	1381	W Benton St	0	0	1	0	0	0	0	1
6	732	Cameron Way	0	0	0	0	0	0	1	0
7	1990	Melrose Ave	1	1	0	1	1	0	0	1
8	63		0	0	0	0	0	0	0	0
Totals	**9437**		**3**	**2**	**3**	**2**	**2**	**2**	**1**	**4**

Stops based on a Stop Speed of 5 MPH.

Detailed Statistics By Run

Number of Stops by Section

Node #	Length	Node Name	Run #9 Mormon Trek PM-NB-009t	Run #10 Mormon Trek PM-NB-010t	Run #11 Mormon Trek PM-NB-011t
1	0				
2	382	Hwy 1	1	1	1
3	431	Westside Dr	0	0	0
4	4458	Rohret Rd	0	0	0
5	1381	W Benton St	0	0	0
6	732	Cameron Way	1	1	1
7	1990	Melrose Ave	0	1	1
8	63		0	0	0
Totals	**9437**		**2**	**3**	**3**

Stops based on a Stop Speed of 5 MPH.

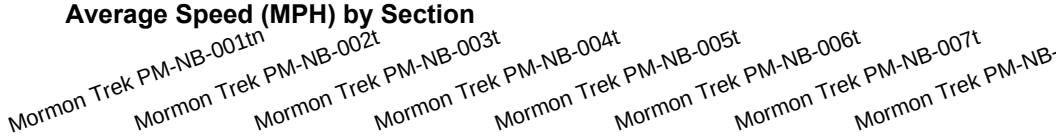
Snyder & Associates, Inc.

Ankeny, Iowa

Study Name : **Mormon_Trek_PM_NB**
Study Date : **1/21/2016**

Detailed Statistics By Run

Average Speed (MPH) by Section



Node #	Length	Node Name	Run #1	Run #2	Run #3	Run #4	Run #5	Run #6	Run #7	Run #8
1	0									
2	382	Hwy 1	7.1	2.4	4.6	7.9	6.1	7.3	5.7	7.6
3	431	Westside Dr	21.0	29.7	30.2	30.5	20.2	10.8	31.0	31.1
4	4458	Rohret Rd	28.7	36.7	30.8	35.7	34.6	33.7	35.5	27.1
5	1381	W Benton St	29.3	36.0	21.0	28.8	29.6	32.3	33.6	22.4
6	732	Cameron Way	33.3	35.9	28.0	30.3	28.8	34.9	14.7	32.1
7	1990	Melrose Ave	14.1	13.4	34.6	17.8	17.3	25.9	31.6	20.2
8	63		21.0	24.0	0.0	0.0	0.0	0.0	0.0	0.0
Totals	**9437**		**21.3**	**18.7**	**23.8**	**25.3**	**23.3**	**25.5**	**25.6**	**22.6**

Detailed Statistics By Run

Average Speed (MPH) by Section

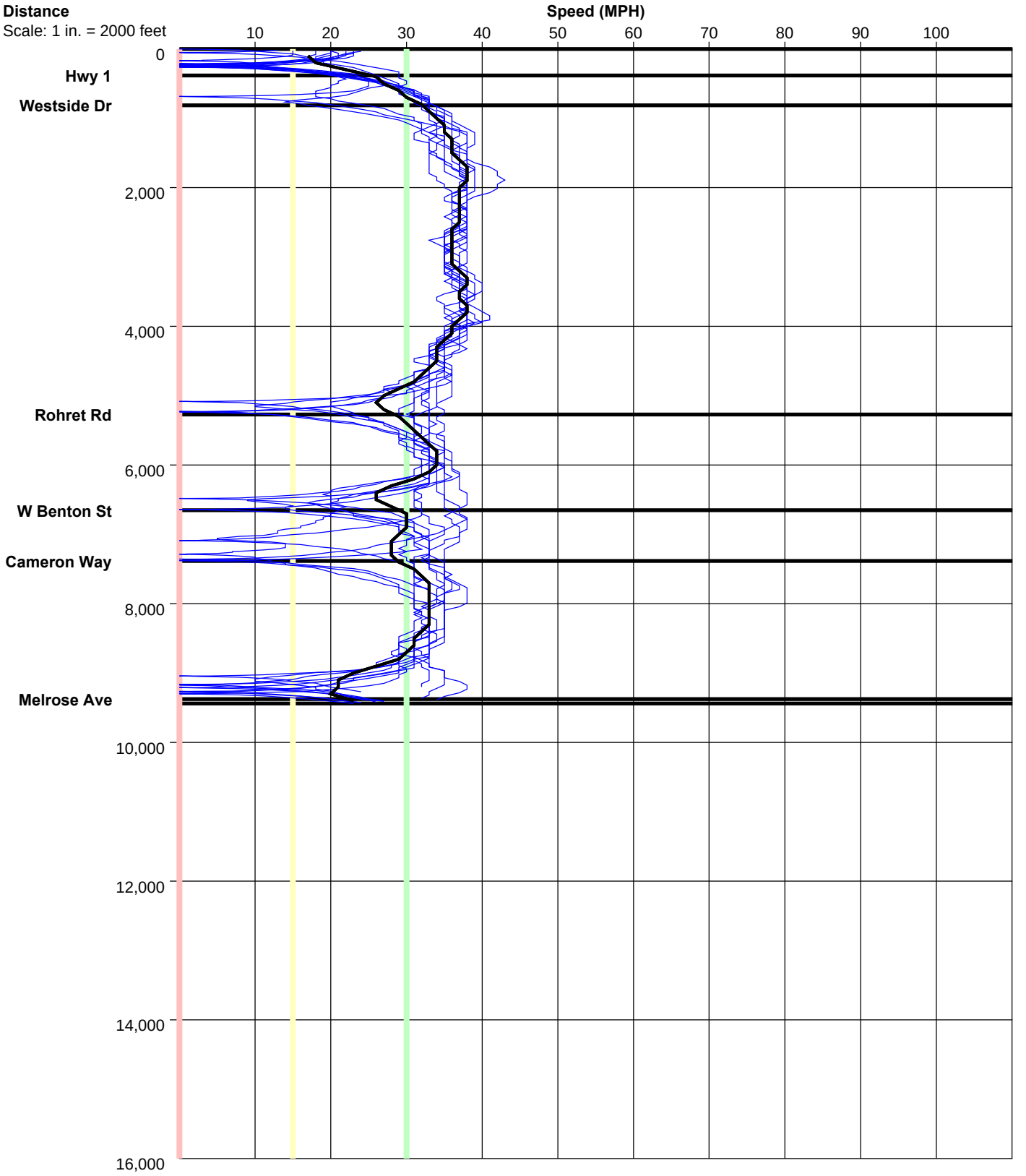
Node #	Length	Node Name	Run #9 Mormon Trek PM-NB-009t	Run #10 Mormon Trek PM-NB-010t	Run #11 Mormon Trek PM-NB-011t
1	0				
2	382	Hwy 1	4.4	8.2	2.7
3	431	Westside Dr	30.5	29.9	28.8
4	4458	Rohret Rd	36.2	32.9	35.1
5	1381	W Benton St	34.3	26.1	25.4
6	732	Cameron Way	18.8	8.3	13.9
7	1990	Melrose Ave	31.3	14.6	16.4
8	63		0.0	24.0	26.0
Totals	**9437**		**25.2**	**19.7**	**18.1**

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Ankeny, Iowa

Study Name : **Mormon_Trek_PM_NB**
Study Date : **1/21/2016**
Page No. : **10**

Speed/Distance Profiles of All Runs

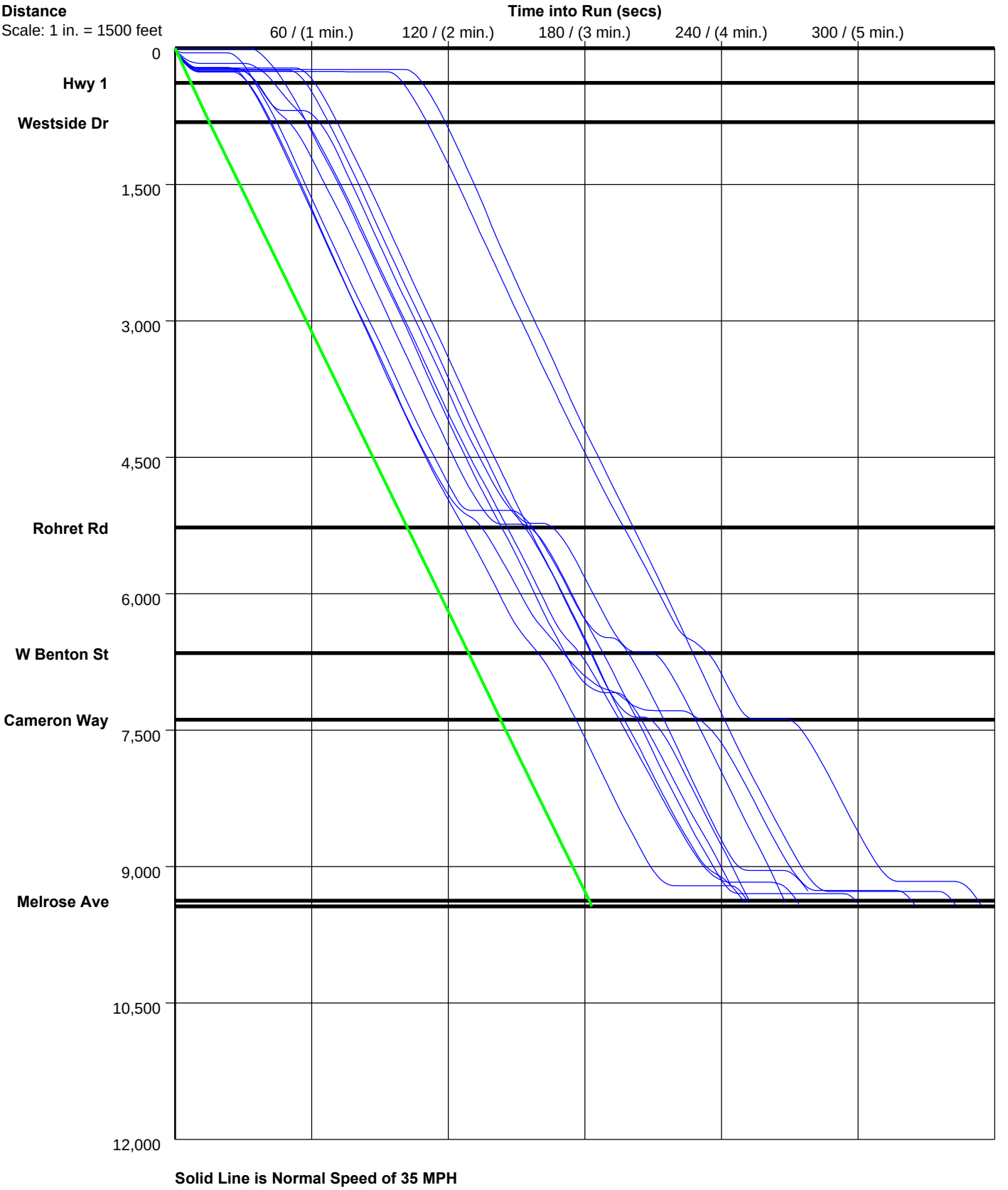


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Study Name : **Mormon_Trek_PM_NB**
Study Date : **1/21/2016**
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Time/Space Trajectories of All Runs



Solid Line is Normal Speed of 35 MPH

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PC-Travel Reports for study: Mormon_Trek_PM_SB

Report Name	***Page***
Study Summary	2
Overall Output Statistics	3
Detailed Statistics By Run - Travel Times	4
Detailed Statistics By Run - Stops	6
Detailed Statistics By Run - Average Speed	8
Speed/Distance Profiles of All Runs	10
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Snyder & Associates, Inc.

Ankeny, Iowa

Study Name : **Mormon_Trek_PM_SB**
Study Date : **1/21/2016**

Study Summary

Runs Used in This Study

Run Title	Start Date	Start Time	Length	Before/ After	Run Type
Mormon Trek PM-SB-001tn	01/21/16	16:06	9625	Before	Primary
Mormon Trek PM-SB-002t	01/21/16	16:18	9622	Before	Secondary
Mormon Trek PM-SB-003t	01/21/16	16:29	9681	Before	Secondary
Mormon Trek PM-SB-004t	01/21/16	16:41	9634	Before	Secondary
Mormon Trek PM-SB-005t	01/21/16	16:51	9593	Before	Secondary
Mormon Trek PM-SB-006t	01/21/16	17:01	9660	Before	Secondary
Mormon Trek PM-SB-007t	01/21/16	17:13	9653	Before	Secondary
Mormon Trek PM-SB-008t	01/21/16	17:25	9637	Before	Secondary
Mormon Trek PM-SB-009t	01/21/16	17:36	9605	Before	Secondary
Mormon Trek PM-SB-010t	01/21/16	17:47	9657	Before	Secondary
Mormon Trek PM-SB-011t	01/21/16	18:01	9610	Before	Secondary

Node Info

#	Len	Name
1	0	
2	559	Melrose Ave
3	1908	Cameron Way
4	728	W Benton St
5	1368	Rohret Rd
6	4548	Westside Dr
7	475	Hwy 1
8	39	

Length of Study Route = 9,625 feet

Notes:

Snyder & Associates, Inc.

Ankeny, Iowa

Study Name : **Mormon_Trek_PM_SB**
Study Date : **1/21/2016**
Page No. : **3**

Overall Output Statistics

Node #	Length	Node	Travel Time	# of Stops	Avg Speed	Total Delay	Time <= 0 MPH	Time <= 15 MPH	Time <= 30 MPH
1	0								
2	559	Melrose Ave	21.8	0.2	17.5	10.8	5.2	8.6	16.7
3	1908	Cameron Way	42.4	0.1	30.7	5.0	0.5	1.7	14.2
4	728	W Benton St	19.4	0.1	25.6	5.0	0.0	2.2	12.5
5	1368	Rohret Rd	31.2	0.2	29.9	4.1	0.2	2.1	10.0
6	4548	Westside Dr	94.8	0.3	32.7	6.8	4.7	7.5	11.5
7	475	Hwy 1	46.3	0.5	7.0	36.9	29.9	35.6	43.2
8	39		1.2	0.0	22.5	0.2	0.0	0.0	0.8
Total	**9,625**		**257.0**	**1.4**	**25.5**	**68.8**	**40.5**	**57.7**	**108.8**

Stats based on 11 BEFORE runs.
Stops based on a Stop Speed of 5 MPH.
Total Delay based on a Normal Speed of 35 MPH.

Snyder & Associates, Inc.

Ankeny, Iowa

Study Name : **Mormon_Trek_PM_SB**
Study Date : **1/21/2016**

Detailed Statistics By Run

Travel Time (sec) by Section

Node #	Length	Node Name	Run #1	Run #2	Run #3	Run #4	Run #5	Run #6	Run #7	Run #8
			Mormon Trek PM-SB-001tn	Mormon Trek PM-SB-002t	Mormon Trek PM-SB-003t	Mormon Trek PM-SB-004t	Mormon Trek PM-SB-005t	Mormon Trek PM-SB-006t	Mormon Trek PM-SB-007t	Mormon Trek PM-SB-
1	0									
2	559	Melrose Ave	15	14	12	12	17	14	45	64
3	1908	Cameron Way	38	47	50	38	39	42	46	42
4	728	W Benton St	14	23	23	15	14	15	22	19
5	1368	Rohret Rd	27	30	34	27	36	27	30	45
6	4548	Westside Dr	88	88	100	88	88	122	85	89
7	475	Hwy 1	13	65	85	12	9	86	61	10
8	39		1	2	1	1	1	1	2	1
Totals	**9625**		**196**	**269**	**305**	**193**	**204**	**307**	**291**	**270**

Snyder & Associates, Inc.

Ankeny, Iowa

Study Name : **Mormon_Trek_PM_SB**
Study Date : **1/21/2016**

Detailed Statistics By Run

Travel Time (sec) by Section

Node #	Length	Node Name	Run #9	Run #10	Run #11
1	0				
2	559	Melrose Ave	23	12	12
3	1908	Cameron Way	44	41	39
4	728	W Benton St	15	21	32
5	1368	Rohret Rd	28	27	32
6	4548	Westside Dr	87	120	88
7	475	Hwy 1	11	90	67
8	39		1	1	1
Totals	**9625**		**209**	**312**	**271**

Mormon Trek PM-SB-009t
Mormon Trek PM-SB-010t
Mormon Trek PM-SB-011t

Snyder & Associates, Inc.

Ankeny, Iowa

Study Name : **Mormon_Trek_PM_SB**
Study Date : **1/21/2016**

Detailed Statistics By Run

Number of Stops by Section

Mormon Trek PM-SB-001tn
Mormon Trek PM-SB-002t
Mormon Trek PM-SB-003t
Mormon Trek PM-SB-004t
Mormon Trek PM-SB-005t
Mormon Trek PM-SB-006t
Mormon Trek PM-SB-007t
Mormon Trek PM-SB-

Node #	Length	Node Name	Run #1	Run #2	Run #3	Run #4	Run #5	Run #6	Run #7	Run #8
1	0									
2	559	Melrose Ave	0	0	0	0	0	0	1	1
3	1908	Cameron Way	0	0	1	0	0	0	0	0
4	728	W Benton St	0	0	0	0	0	0	0	0
5	1368	Rohret Rd	0	0	0	0	1	0	0	1
6	4548	Westside Dr	0	0	1	0	0	1	0	0
7	475	Hwy 1	0	1	1	0	0	1	1	0
8	39		0	0	0	0	0	0	0	0
Totals	**9625**		**0**	**1**	**3**	**0**	**1**	**2**	**2**	**2**

Stops based on a Stop Speed of 5 MPH.

Detailed Statistics By Run

Number of Stops by Section

Node #	Length	Node Name	Run #9 Mormon Trek PM-SB-009t	Run #10 Mormon Trek PM-SB-010t	Run #11 Mormon Trek PM-SB-011t
1	0				
2	559	Melrose Ave	0	0	0
3	1908	Cameron Way	0	0	0
4	728	W Benton St	0	0	1
5	1368	Rohret Rd	0	0	0
6	4548	Westside Dr	0	1	0
7	475	Hwy 1	0	1	1
8	39		0	0	0
Totals	**9625**		**0**	**2**	**2**

Stops based on a Stop Speed of 5 MPH.

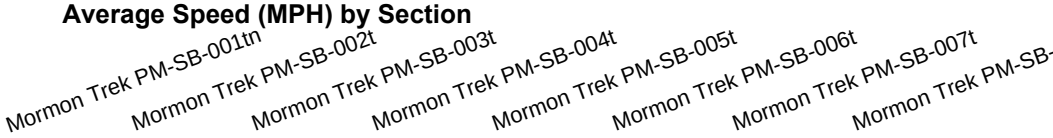
Snyder & Associates, Inc.

Ankeny, Iowa

Study Name : **Mormon_Trek_PM_SB**
Study Date : **1/21/2016**

Detailed Statistics By Run

Average Speed (MPH) by Section



Node #	Length	Node Name	Run #1	Run #2	Run #3	Run #4	Run #5	Run #6	Run #7	Run #8
1	0									
2	559	Melrose Ave	25.3	27.5	33.0	33.4	22.9	28.5	8.9	6.1
3	1908	Cameron Way	34.3	27.9	25.9	33.9	33.4	30.8	28.0	31.0
4	728	W Benton St	35.4	21.6	21.3	34.5	34.9	32.7	23.0	26.5
5	1368	Rohret Rd	34.4	31.3	27.7	34.4	25.7	34.5	31.7	20.6
6	4548	Westside Dr	35.3	35.3	31.2	35.0	35.3	25.5	36.5	34.9
7	475	Hwy 1	25.0	4.7	3.8	26.8	35.1	3.7	5.1	31.7
8	39		27.0	23.0	22.0	29.0	0.0	20.0	18.5	30.0
Totals	**9625**		**33.5**	**24.5**	**21.6**	**34.0**	**32.2**	**21.4**	**22.6**	**24.4**

Snyder & Associates, Inc.

Ankeny, Iowa

Study Name : **Mormon_Trek_PM_SB**
Study Date : **1/21/2016**

Detailed Statistics By Run

Average Speed (MPH) by Section

Mormon Trek PM-SB-009t
Mormon Trek PM-SB-010t
Mormon Trek PM-SB-011t

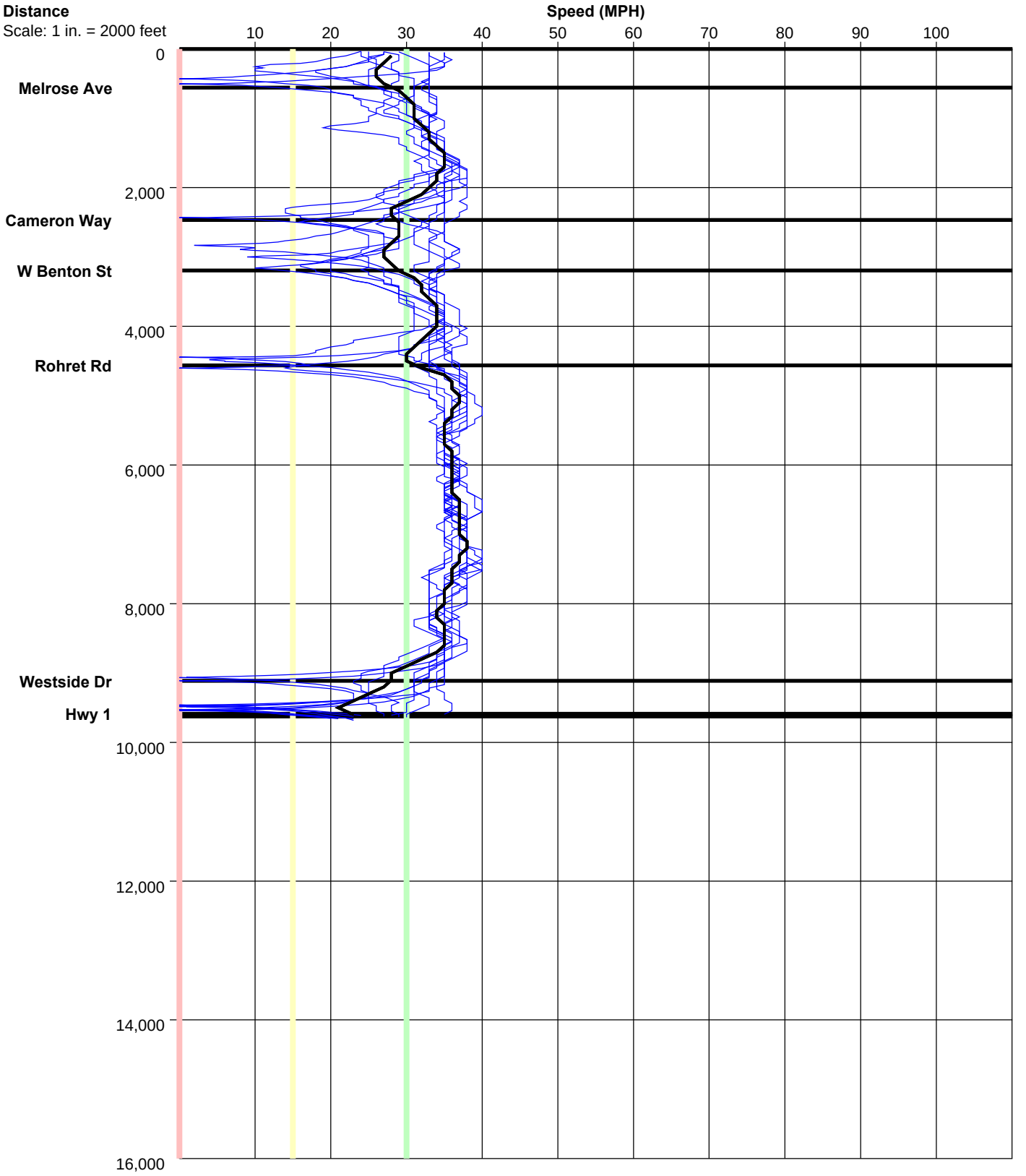
Node #	Length	Node Name	Run #9	Run #10	Run #11
1	0				
2	559	Melrose Ave	17.2	33.0	32.1
3	1908	Cameron Way	29.7	32.0	33.2
4	728	W Benton St	32.6	22.9	15.5
5	1368	Rohret Rd	33.8	34.5	29.8
6	4548	Westside Dr	35.3	25.8	34.9
7	475	Hwy 1	30.4	3.7	5.0
8	39		0.0	18.0	0.0
Totals	**9625**		**31.4**	**21.0**	**24.2**

Snyder & Associates, Inc.

Ankeny, Iowa

Study Name : **Mormon_Trek_PM_SB**
Study Date : **1/21/2016**
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Speed/Distance Profiles of All Runs

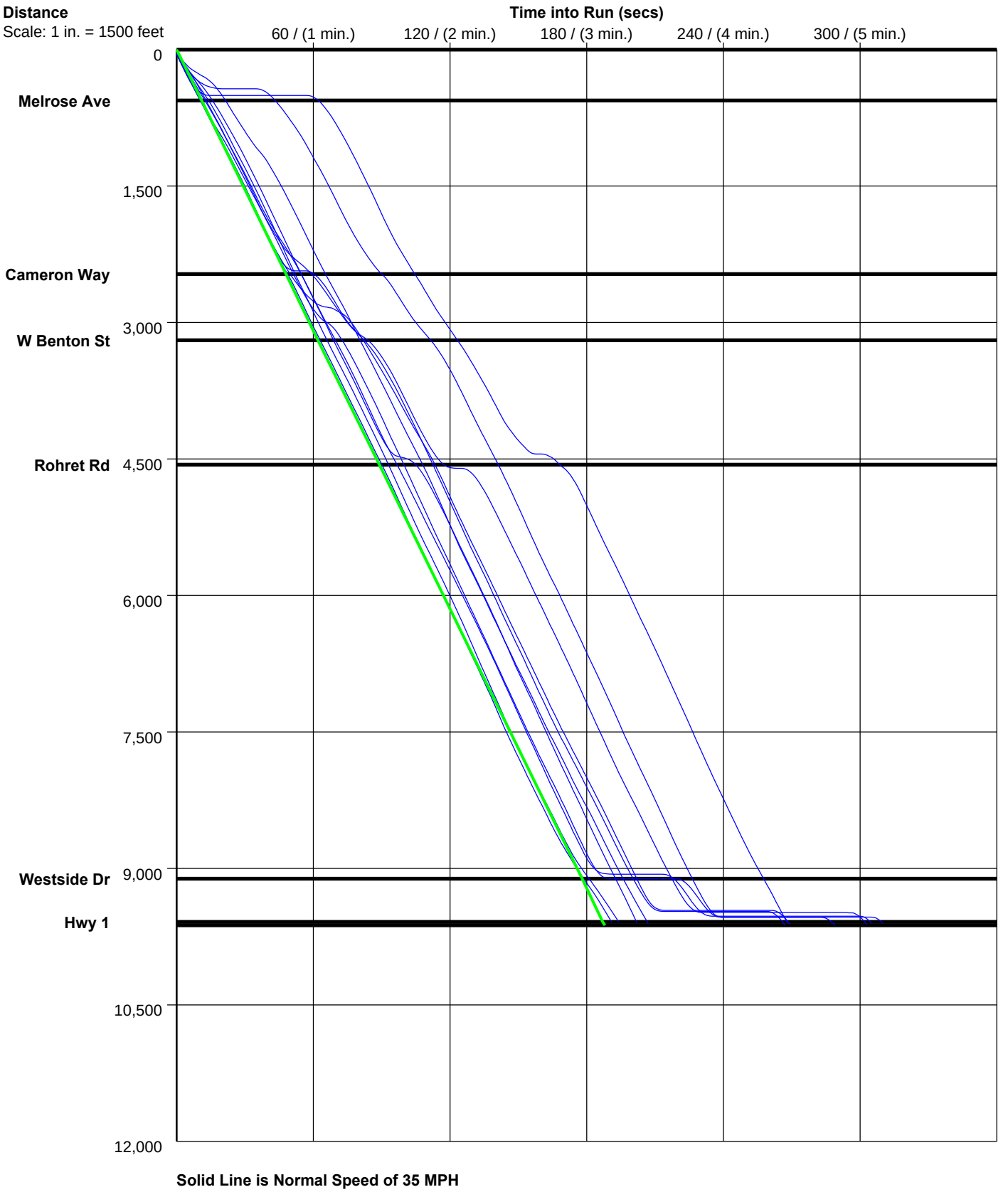


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Ankeny, Iowa

Study Name : **Mormon_Trek_PM_SB**
Study Date : **1/21/2016**
Page No. : **11**

Time/Space Trajectories of All Runs



Solid Line is Normal Speed of 35 MPH

Appendix

C.Projected Traffic Volumes

Metropolitan Planning Organization of Johnson County

Date: March 9th, 2016

To: Scott Sovers; Senior Engineer; City of Iowa City
Brenna Fall; Civil Engineer; Snyder Associates

From: Darian Nagle-Gamm; Sr. Transportation Engineering Planner

Re: First Avenue and Mormon Trek Boulevard Year 2040 Traffic Forecast

This memo documents the year 2040 daily traffic forecast for First Avenue (Mall Drive to Highway 6), and Mormon Trek Boulevard (Melrose Avenue to Highway 1) in Iowa City. Traffic was forecasted using the MPOJC Travel Demand Model which generates estimates of vehicular traffic volumes using current and forecasted socio-economic data.

Year 2040 Traffic Forecast

The MPOJC Travel Demand Model traffic estimates for First Avenue and Mormon Trek Boulevard are reflected below. The 2010 DOT AADT counts were included for comparison. It is important to note that the MPOJC Travel Demand Model was built using the 2010 DOT AADT counts. Based on a general overview of the 2014 DOT AADT counts, traffic on many arterial streets in Iowa City is trending downward. This is a pattern we are observing at many locations throughout the metro area. As such, it is my opinion that the forecasted traffic volumes are probably on the high end.

As an FYI - We are in the process of updating the model (which will be built using the 2014 DOT AADT counts) with expected completion in early 2017. I would not be surprised if we see a decrease in the forecasted traffic volumes on these roads at that time.

First Avenue	**2010 DOT AADT**	**2040 Adj'd Daily Traffic Forecast***
Mall Drive to Lower Muscatine Road	13,000	14,300
Lower Muscatine Road to Highway 6	11,000	12,800

Mormon Trek Boulevard	**2010 DOT AADT**	**2040 Adj'd Daily Traffic Forecast***
Melrose Avenue to Benton Street	14,100	14,300
Benton Street to Rohret Road	15,400	19,980
South of Rohret	10,300	13,800
Highway 1 to Westside Drive	12,100	14,900

**The model was developed jointly with the Iowa DOT Systems Planning staff. Future growth assumptions are based on growth trends, zoning and land use plans, availability of open space, and an evaluation of current land uses and densities. Traffic analysis models are best used for general indications of traffic patterns in the area, but not for prediction of exact volumes. Future traffic volume data is generated with the best knowledge we have, but there is no model software that can predict specific land use decisions as well as the political, cultural, and economic decisions that influence future traffic.*

Appendix

D.Capacity Analysis Worksheets

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	272	50	107	541	98	120	284	320	192	219	113
Future Volume (veh/h)	39	272	50	107	541	98	120	284	320	192	219	113
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1812	1900	1792	1845	1681	1845	1767	1900	1827	1792	1881
Adj Flow Rate, veh/h	42	296	54	116	588	107	130	309	348	209	238	123
Adj No. of Lanes	1	2	0	1	2	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, %	3	3	3	6	3	13	3	7	7	4	6	1
Cap, veh/h	246	633	114	348	857	511	506	486	434	349	1112	597
Arrive On Green	0.05	0.22	0.22	0.07	0.24	0.24	0.08	0.29	0.29	0.11	0.33	0.33
Sat Flow, veh/h	1757	2916	525	1707	3505	1429	1757	1679	1502	1740	3406	1599
Grp Volume(v), veh/h	42	173	177	116	588	107	130	309	348	209	238	123
Grp Sat Flow(s),veh/h/ln	1757	1721	1719	1707	1752	1429	1757	1679	1502	1740	1703	1599
Q Serve(g_s), s	1.4	6.6	6.7	3.9	11.4	3.9	3.8	12.0	16.1	6.1	3.8	3.9
Cycle Q Clear(g_c), s	1.4	6.6	6.7	3.9	11.4	3.9	3.8	12.0	16.1	6.1	3.8	3.9
Prop In Lane	1.00		0.31	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	246	374	373	348	857	511	506	486	434	349	1112	597
V/C Ratio(X)	0.17	0.46	0.47	0.33	0.69	0.21	0.26	0.64	0.80	0.60	0.21	0.21
Avail Cap(c_a), veh/h	633	574	573	677	1168	638	842	560	501	617	1135	608
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	21.4	25.5	25.6	20.6	25.7	16.7	16.3	23.2	24.7	17.6	18.3	16.0
Incr Delay (d2), s/veh	0.3	0.9	0.9	0.6	1.0	0.2	0.3	1.9	8.0	1.6	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	0.7	3.2	3.3	1.9	5.6	1.6	1.9	5.8	7.6	3.1	1.8	1.7
LnGrp Delay(d),s/veh	21.8	26.4	26.5	21.1	26.7	16.9	16.6	25.1	32.6	19.3	18.4	16.1
LnGrp LOS	C	C	C	C	C	B	B	C	C	B	B	B
Approach Vol, veh/h		392			811			787			570	
Approach Delay, s/veh		26.0			24.6			27.0			18.2	
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	11.2	30.5	11.1	22.3	14.0	27.7	9.0	24.3
Change Period (Y+Rc), s	5.5	6.0	5.5	6.0	5.5	6.0	5.5	6.0
Max Green Setting (Gmax), s	20.0	25.0	20.0	25.0	20.0	25.0	20.0	25.0
Max Q Clear Time (g_c+I1), s	5.8	5.9	5.9	8.7	8.1	18.1	3.4	13.4
Green Ext Time (p_c), s	0.3	2.9	0.2	3.1	0.4	3.6	0.1	4.9

Intersection Summary	
HCM 2010 Ctrl Delay	24.1
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	11	1	718	368	8
Future Vol, veh/h	6	11	1	718	368	8
Conflicting Peds, #/hr	0	0	3	0	0	3
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	86	86	86	86	86	86
Heavy Vehicles, %	0	18	4	4	0	8
Mvmt Flow	7	13	1	835	428	9

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	856	222	440	0	-	0
Stage 1	436	-	-	-	-	-
Stage 2	420	-	-	-	-	-
Critical Hdwy	6.8	7.26	4.18	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.48	2.24	-	-	-
Pot Cap-1 Maneuver	301	735	1102	-	-	-
Stage 1	625	-	-	-	-	-
Stage 2	637	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	299	733	1099	-	-	-
Mov Cap-2 Maneuver	299	-	-	-	-	-
Stage 1	623	-	-	-	-	-
Stage 2	636	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1099	-	485	-	-
HCM Lane V/C Ratio	0.001	-	0.041	-	-
HCM Control Delay (s)	8.3	0	12.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	6	713	3	1	378
Future Vol, veh/h	4	6	713	3	1	378
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	0	4	0	0	8
Mvmt Flow	5	7	829	3	1	440

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1053	416	0	0	832	0
Stage 1	831	-	-	-	-	-
Stage 2	222	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	225	591	-	-	809	-
Stage 1	393	-	-	-	-	-
Stage 2	800	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	225	591	-	-	809	-
Mov Cap-2 Maneuver	225	-	-	-	-	-
Stage 1	392	-	-	-	-	-
Stage 2	800	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.4	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	358	809	-
HCM Lane V/C Ratio	-	-	0.032	0.001	-
HCM Control Delay (s)	-	-	15.4	9.5	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

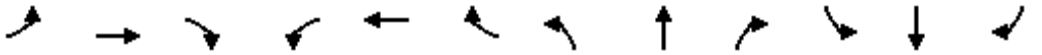
Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	11	9	10	705	373	9
Future Vol, veh/h	11	9	10	705	373	9
Conflicting Peds, #/hr	0	0	1	0	0	1
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	89	89	89	89	89	89
Heavy Vehicles, %	11	45	0	2	5	20
Mvmt Flow	12	10	11	792	419	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	843	216	430	0	-	0
Stage 1	425	-	-	-	-	-
Stage 2	418	-	-	-	-	-
Critical Hdwy	7.02	7.8	4.1	-	-	-
Critical Hdwy Stg 1	6.02	-	-	-	-	-
Critical Hdwy Stg 2	6.02	-	-	-	-	-
Follow-up Hdwy	3.61	3.75	2.2	-	-	-
Pot Cap-1 Maneuver	285	671	1140	-	-	-
Stage 1	602	-	-	-	-	-
Stage 2	607	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	280	670	1139	-	-	-
Mov Cap-2 Maneuver	280	-	-	-	-	-
Stage 1	591	-	-	-	-	-
Stage 2	606	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.1	0.2	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1139	-	379	-	-
HCM Lane V/C Ratio	0.01	-	0.059	-	-
HCM Control Delay (s)	8.2	0.1	15.1	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	1	17	3	3	20	17	658	1	3	335	44
Future Volume (veh/h)	37	1	17	3	3	20	17	658	1	3	335	44
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		1.00	0.99		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	1900	1824	1900	1900	1825	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	45	1	20	4	4	24	20	793	1	4	404	53
Adj No. of Lanes	0	1	0	0	1	0	0	2	0	0	2	0
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	6	6	6	33	33	33	0	0	0	0	0	0
Cap, veh/h	293	2	34	161	16	97	150	1890	2	134	1661	215
Arrive On Green	0.08	0.08	0.08	0.08	0.08	0.08	0.53	0.53	0.53	0.53	0.53	0.53
Sat Flow, veh/h	1008	22	448	211	211	1268	29	3565	4	6	3133	406
Grp Volume(v), veh/h	66	0	0	32	0	0	424	0	390	245	0	216
Grp Sat Flow(s),veh/h/ln	1478	0	0	1690	0	0	1871	0	1728	1889	0	1656
Q Serve(g_s), s	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	0.0	0.0	2.0
Cycle Q Clear(g_c), s	1.2	0.0	0.0	0.5	0.0	0.0	3.8	0.0	3.8	1.9	0.0	2.0
Prop In Lane	0.68		0.30	0.12		0.75	0.05		0.00	0.02		0.25
Lane Grp Cap(c), veh/h	329	0	0	274	0	0	1127	0	916	1133	0	878
V/C Ratio(X)	0.20	0.00	0.00	0.12	0.00	0.00	0.38	0.00	0.43	0.22	0.00	0.25
Avail Cap(c_a), veh/h	1375	0	0	1428	0	0	1788	0	1546	1806	0	1481
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	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.4	0.0	0.0	12.1	0.0	0.0	4.0	0.0	4.0	3.5	0.0	3.5
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.2	0.0	0.0	0.2	0.0	0.3	0.1	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.0	0.2	0.0	0.0	2.0	0.0	1.8	1.0	0.0	0.9
LnGrp Delay(d),s/veh	12.7	0.0	0.0	12.3	0.0	0.0	4.2	0.0	4.3	3.6	0.0	3.7
LnGrp LOS	B			B			A		A	A		A
Approach Vol, veh/h		66			32			814			461	
Approach Delay, s/veh		12.7			12.3			4.2			3.7	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		20.3		7.6		20.3		7.6
Change Period (Y+Rc), s		5.5		5.5		5.5		5.5
Max Green Setting (Gmax), s		25.0		23.0		25.0		23.0
Max Q Clear Time (g_c+I1), s		4.0		3.2		5.8		2.5
Green Ext Time (p_c), s		5.1		0.1		9.0		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	4.6
HCM 2010 LOS	A

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	11	61	80	665	346	9
Future Vol, veh/h	11	61	80	665	346	9
Conflicting Peds, #/hr	0	0	16	0	0	16
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, %	0	0	8	2	4	22
Mvmt Flow	13	70	92	764	398	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	985	220	424	0	-	0
Stage 1	419	-	-	-	-	-
Stage 2	566	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.26	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.28	-	-	-
Pot Cap-1 Maneuver	249	790	1090	-	-	-
Stage 1	638	-	-	-	-	-
Stage 2	537	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	206	779	1075	-	-	-
Mov Cap-2 Maneuver	206	-	-	-	-	-
Stage 1	536	-	-	-	-	-
Stage 2	530	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.8	1.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1075	-	547	-	-
HCM Lane V/C Ratio	0.086	-	0.151	-	-
HCM Control Delay (s)	8.7	0.5	12.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.3	-	0.5	-	-

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	76	189	556	200	106	301
Future Volume (veh/h)	76	189	556	200	106	301
Number	3	18	6	16	5	2
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	1792	1863	1836	1900	1900	1772
Adj Flow Rate, veh/h	84	210	618	222	118	334
Adj No. of Lanes	1	1	2	0	0	2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	6	2	4	4	8	8
Cap, veh/h	328	304	1187	426	320	894
Arrive On Green	0.19	0.19	0.47	0.47	0.47	0.47
Sat Flow, veh/h	1707	1583	2610	903	318	1977
Grp Volume(v), veh/h	84	210	428	412	198	254
Grp Sat Flow(s),veh/h/ln	1707	1583	1744	1677	683	1532
Q Serve(g_s), s	1.4	4.2	5.8	5.8	3.6	3.6
Cycle Q Clear(g_c), s	1.4	4.2	5.8	5.8	9.4	3.6
Prop In Lane	1.00	1.00		0.54	0.60	
Lane Grp Cap(c), veh/h	328	304	822	790	492	722
V/C Ratio(X)	0.26	0.69	0.52	0.52	0.40	0.35
Avail Cap(c_a), veh/h	1007	934	1287	1237	716	1130
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	11.6	12.7	6.3	6.3	7.1	5.7
Incr Delay (d2), s/veh	0.4	2.8	0.5	0.5	0.5	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	2.0	2.9	2.7	1.6	1.5
LnGrp Delay(d),s/veh	12.0	15.5	6.8	6.8	7.6	6.0
LnGrp LOS	B	B	A	A	A	A
Approach Vol, veh/h	294		840			452
Approach Delay, s/veh	14.5		6.8			6.7
Approach LOS	B		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		22.0				22.0		11.9
Change Period (Y+Rc), s		6.0				6.0		5.4
Max Green Setting (Gmax), s		25.0				25.0		20.0
Max Q Clear Time (g_c+I1), s		11.4				7.8		6.2
Green Ext Time (p_c), s		4.6				7.2		0.8

Intersection Summary	
HCM 2010 Ctrl Delay	8.2
HCM 2010 LOS	A

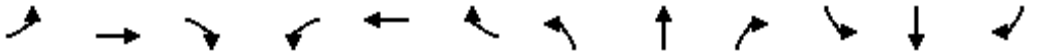
Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	80	12	5	676	347	30
Future Vol, veh/h	80	12	5	676	347	30
Conflicting Peds, #/hr	0	1	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	0	0	3	3	4	3
Mvmt Flow	101	15	6	856	439	38

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	898	240	477	0	-	0
Stage 1	458	-	-	-	-	-
Stage 2	440	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.16	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.23	-	-	-
Pot Cap-1 Maneuver	283	767	1074	-	-	-
Stage 1	609	-	-	-	-	-
Stage 2	622	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	280	766	1074	-	-	-
Mov Cap-2 Maneuver	280	-	-	-	-	-
Stage 1	602	-	-	-	-	-
Stage 2	622	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	23	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1074	-	280	766	-	-
HCM Lane V/C Ratio	0.006	-	0.362	0.02	-	-
HCM Control Delay (s)	8.4	0	25	9.8	-	-
HCM Lane LOS	A	A	D	A	-	-
HCM 95th %tile Q(veh)	0	-	1.6	0.1	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	256	1	115	5	0	34	55	391	3	7	265	87
Future Volume (veh/h)	256	1	115	5	0	34	55	391	3	7	265	87
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1729	1900	1900	1805	1900	1900	1836	1900	1900	1807	1900
Adj Flow Rate, veh/h	278	1	125	5	0	37	60	425	3	8	288	95
Adj No. of Lanes	1	1	0	0	1	0	0	2	0	0	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, %	3	0	0	0	0	0	3	3	3	4	4	4
Cap, veh/h	619	3	401	151	33	372	225	1083	7	132	873	278
Arrive On Green	0.28	0.28	0.28	0.28	0.00	0.28	0.35	0.35	0.35	0.35	0.35	0.35
Sat Flow, veh/h	1351	12	1458	62	120	1352	219	3073	21	20	2478	790
Grp Volume(v), veh/h	278	0	126	42	0	0	252	0	236	211	0	180
Grp Sat Flow(s),veh/h/ln	1351	0	1469	1534	0	0	1645	0	1667	1788	0	1501
Q Serve(g_s), s	4.8	0.0	2.0	0.0	0.0	0.0	0.0	0.0	3.2	0.0	0.0	2.7
Cycle Q Clear(g_c), s	5.4	0.0	2.0	0.6	0.0	0.0	3.1	0.0	3.2	2.6	0.0	2.7
Prop In Lane	1.00		0.99	0.12		0.88	0.24		0.01	0.04		0.53
Lane Grp Cap(c), veh/h	619	0	404	556	0	0	728	0	587	754	0	529
V/C Ratio(X)	0.45	0.00	0.31	0.08	0.00	0.00	0.35	0.00	0.40	0.28	0.00	0.34
Avail Cap(c_a), veh/h	1146	0	978	1136	0	0	1457	0	1387	1590	0	1249
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	9.8	0.0	8.6	8.1	0.0	0.0	7.3	0.0	7.3	7.1	0.0	7.2
Incr Delay (d2), s/veh	0.5	0.0	0.4	0.1	0.0	0.0	0.3	0.0	0.4	0.2	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	0.9	0.3	0.0	0.0	1.6	0.0	1.5	1.3	0.0	1.2
LnGrp Delay(d),s/veh	10.3	0.0	9.1	8.2	0.0	0.0	7.6	0.0	7.8	7.3	0.0	7.5
LnGrp LOS	B		A	A			A		A	A		A
Approach Vol, veh/h		404			42			488			391	
Approach Delay, s/veh		9.9			8.2			7.7			7.4	
Approach LOS		A			A			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		16.2		13.9		16.2		13.9
Change Period (Y+Rc), s		5.6		5.6		5.6		5.6
Max Green Setting (Gmax), s		25.0		20.0		25.0		20.0
Max Q Clear Time (g_c+I1), s		4.7		7.4		5.2		2.6
Green Ext Time (p_c), s		4.2		1.1		5.4		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	8.3
HCM 2010 LOS	A

Notes

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↕			↕	
Traffic Vol, veh/h	27	1	24	15	0	25	4	397	9	12	361	12
Future Vol, veh/h	27	1	24	15	0	25	4	397	9	12	361	12
Conflicting Peds, #/hr	0	0	1	1	0	0	3	0	5	5	0	3
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	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	0	0	4	0	0	4	0	5	5	8	6	0
Mvmt Flow	31	1	28	17	0	29	5	456	10	14	415	14

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	691	934	219	713	936	238	432	0	0	471	0	0
Stage 1	453	453	-	476	476	-	-	-	-	-	-	-
Stage 2	238	481	-	237	460	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.98	7.5	6.5	6.98	4.1	-	-	4.26	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.34	3.5	4	3.34	2.2	-	-	2.28	-	-
Pot Cap-1 Maneuver	335	268	779	323	267	757	1138	-	-	1046	-	-
Stage 1	561	573	-	544	560	-	-	-	-	-	-	-
Stage 2	750	557	-	751	569	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	316	260	776	303	259	754	1135	-	-	1042	-	-
Mov Cap-2 Maneuver	316	260	-	303	259	-	-	-	-	-	-	-
Stage 1	557	562	-	539	554	-	-	-	-	-	-	-
Stage 2	717	551	-	709	558	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.6	13.2	0.1	0.4
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1135	-	-	433	484	1042	-	-
HCM Lane V/C Ratio	0.004	-	-	0.138	0.095	0.013	-	-
HCM Control Delay (s)	8.2	0	-	14.6	13.2	8.5	0.1	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.5	0.3	0	-	-

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	176	122	187	111	110	29	236	748	122	55	420	203
Future Volume (veh/h)	176	122	187	111	110	29	236	748	122	55	420	203
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1810	1667	1689	1900	1881	1810	1900	1863	1845	1827
Adj Flow Rate, veh/h	191	133	203	121	120	32	257	813	133	60	457	221
Adj No. of Lanes	2	1	1	1	2	0	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	5	14	15	15	1	5	5	2	3	4
Cap, veh/h	306	311	257	152	439	113	309	1033	169	77	771	342
Arrive On Green	0.09	0.17	0.17	0.10	0.17	0.17	0.17	0.35	0.35	0.04	0.22	0.22
Sat Flow, veh/h	3442	1863	1538	1587	2526	653	1792	2959	484	1774	3505	1553
Grp Volume(v), veh/h	191	133	203	121	75	77	257	472	474	60	457	221
Grp Sat Flow(s),veh/h/ln	1721	1863	1538	1587	1605	1574	1792	1719	1724	1774	1752	1553
Q Serve(g_s), s	3.5	4.2	8.3	4.9	2.6	2.8	9.1	16.2	16.2	2.2	7.7	8.5
Cycle Q Clear(g_c), s	3.5	4.2	8.3	4.9	2.6	2.8	9.1	16.2	16.2	2.2	7.7	8.5
Prop In Lane	1.00		1.00	1.00		0.41	1.00		0.28	1.00		1.00
Lane Grp Cap(c), veh/h	306	311	257	152	279	274	309	600	602	77	771	342
V/C Ratio(X)	0.62	0.43	0.79	0.80	0.27	0.28	0.83	0.79	0.79	0.78	0.59	0.65
Avail Cap(c_a), veh/h	1024	395	326	351	340	334	437	603	605	433	1230	545
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	28.8	24.5	26.2	29.0	23.5	23.5	26.2	19.1	19.1	31.0	22.9	23.2
Incr Delay (d2), s/veh	2.1	0.9	9.7	9.1	0.5	0.6	9.1	6.8	6.8	15.7	0.7	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	2.2	4.2	2.5	1.2	1.2	5.3	8.7	8.8	1.4	3.8	3.8
LnGrp Delay(d),s/veh	30.9	25.4	35.9	38.1	24.0	24.1	35.3	26.0	25.9	46.7	23.6	25.3
LnGrp LOS	C	C	D	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		527			273			1203			738	
Approach Delay, s/veh		31.4			30.3			28.0			26.0	
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	11.3	17.5	6.8	29.9	11.8	17.0	15.3	21.4
Change Period (Y+Rc), s	5.5	6.1	4.0	7.0	5.5	6.1	4.0	7.0
Max Green Setting (Gmax), s	19.5	13.9	16.0	23.0	14.5	13.9	16.0	23.0
Max Q Clear Time (g_c+I1), s	5.5	4.8	4.2	18.2	6.9	10.3	11.1	10.5
Green Ext Time (p_c), s	0.5	0.8	0.1	3.1	0.2	0.6	0.3	3.9

Intersection Summary	
HCM 2010 Ctrl Delay	28.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	329	10	27	347	175	3	0	9	147	3	60
Future Volume (veh/h)	61	329	10	27	347	175	3	0	9	147	3	60
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1846	1900	1900	1845	1845	1900	1900	1900	1881	1900	1900
Adj Flow Rate, veh/h	69	370	11	30	390	197	3	0	10	165	3	67
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	1	1	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	3	3	0	3	3	0	0	0	1	0	0
Cap, veh/h	521	1196	35	546	1107	494	408	0	280	462	12	270
Arrive On Green	0.06	0.34	0.34	0.03	0.32	0.32	0.17	0.00	0.17	0.17	0.17	0.17
Sat Flow, veh/h	1810	3478	103	1810	3505	1565	1350	0	1612	1411	70	1553
Grp Volume(v), veh/h	69	186	195	30	390	197	3	0	10	165	0	70
Grp Sat Flow(s),veh/h/ln	1810	1754	1828	1810	1752	1565	1350	0	1612	1411	0	1623
Q Serve(g_s), s	0.8	2.5	2.5	0.4	2.8	3.2	0.1	0.0	0.2	3.5	0.0	1.2
Cycle Q Clear(g_c), s	0.8	2.5	2.5	0.4	2.8	3.2	1.3	0.0	0.2	3.7	0.0	1.2
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		0.96
Lane Grp Cap(c), veh/h	521	603	628	546	1107	494	408	0	280	462	0	282
V/C Ratio(X)	0.13	0.31	0.31	0.05	0.35	0.40	0.01	0.00	0.04	0.36	0.00	0.25
Avail Cap(c_a), veh/h	979	1361	1418	1055	2720	1215	1011	0	1001	1092	0	1007
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	0.00	1.00
Uniform Delay (d), s/veh	6.7	7.8	7.8	7.1	8.5	8.6	12.0	0.0	11.1	12.6	0.0	11.5
Incr Delay (d2), s/veh	0.1	0.3	0.3	0.0	0.2	0.5	0.0	0.0	0.1	0.5	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	0.4	1.2	1.3	0.2	1.3	1.4	0.0	0.0	0.1	1.4	0.0	0.6
LnGrp Delay(d),s/veh	6.8	8.1	8.0	7.1	8.7	9.1	12.0	0.0	11.1	13.1	0.0	11.9
LnGrp LOS	A	A	A	A	A	A	B		B	B		B
Approach Vol, veh/h		450			617			13			235	
Approach Delay, s/veh		7.9			8.8			11.3			12.7	
Approach LOS		A			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.3	15.8		11.1	4.4	16.7		11.1
Change Period (Y+Rc), s	3.5	5.6		5.5	3.5	5.6		5.5
Max Green Setting (Gmax), s	10.0	25.0		20.0	10.0	25.0		20.0
Max Q Clear Time (g_c+I1), s	2.8	5.2		3.3	2.4	4.5		5.7
Green Ext Time (p_c), s	0.1	5.0		0.0	0.0	4.0		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	9.2
HCM 2010 LOS	A

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	167	505	252	109	282	178	181	347	97	163	414	62
Future Volume (veh/h)	167	505	252	109	282	178	181	347	97	163	414	62
Number	7	4	14	3	8	18	1	6	16	5	2	12
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	1863	1821	1900	1792	1827	1827	1845	1833	1900	1827	1827	1863
Adj Flow Rate, veh/h	182	549	274	118	307	193	197	377	105	177	450	67
Adj No. of Lanes	1	2	0	1	2	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	3	3	6	4	4	3	3	3	4	4	2
Cap, veh/h	461	663	330	273	938	419	367	529	146	348	647	295
Arrive On Green	0.10	0.30	0.30	0.08	0.27	0.27	0.12	0.20	0.20	0.11	0.19	0.19
Sat Flow, veh/h	1774	2239	1115	1707	3471	1553	1757	2700	743	1740	3471	1583
Grp Volume(v), veh/h	182	424	399	118	307	193	197	242	240	177	450	67
Grp Sat Flow(s),veh/h/ln	1774	1730	1624	1707	1736	1553	1757	1741	1702	1740	1736	1583
Q Serve(g_s), s	5.1	16.3	16.3	3.5	5.1	7.4	6.3	9.2	9.4	5.7	8.6	2.6
Cycle Q Clear(g_c), s	5.1	16.3	16.3	3.5	5.1	7.4	6.3	9.2	9.4	5.7	8.6	2.6
Prop In Lane	1.00		0.69	1.00		1.00	1.00		0.44	1.00		1.00
Lane Grp Cap(c), veh/h	461	513	481	273	938	419	367	341	333	348	647	295
V/C Ratio(X)	0.40	0.83	0.83	0.43	0.33	0.46	0.54	0.71	0.72	0.51	0.70	0.23
Avail Cap(c_a), veh/h	777	606	569	622	1217	544	650	610	596	645	1217	555
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	15.9	23.4	23.4	18.2	20.8	21.7	20.1	26.8	26.9	20.4	27.1	24.7
Incr Delay (d2), s/veh	0.6	8.0	8.7	1.1	0.2	0.8	1.2	2.7	3.0	1.2	1.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	8.9	8.5	1.7	2.5	3.3	3.1	4.7	4.7	2.8	4.2	1.1
LnGrp Delay(d),s/veh	16.4	31.4	32.1	19.3	21.0	22.5	21.3	29.5	29.8	21.5	28.5	25.0
LnGrp LOS	B	C	C	B	C	C	C	C	C	C	C	C
Approach Vol, veh/h		1005			618			679			694	
Approach Delay, s/veh		29.0			21.2			27.2			26.4	
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	14.0	19.3	10.9	27.1	13.3	20.0	12.8	25.3
Change Period (Y+Rc), s	5.5	6.0	5.5	6.0	5.5	6.0	5.5	6.0
Max Green Setting (Gmax), s	20.0	25.0	20.0	25.0	20.0	25.0	20.0	25.0
Max Q Clear Time (g_c+I1), s	8.3	10.6	5.5	18.3	7.7	11.4	7.1	9.4
Green Ext Time (p_c), s	0.4	2.6	0.2	2.8	0.4	2.3	0.4	2.3

Intersection Summary	
HCM 2010 Ctrl Delay	26.4
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	18	6	615	758	17
Future Vol, veh/h	10	18	6	615	758	17
Conflicting Peds, #/hr	1	1	10	0	0	10
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, %	0	0	0	1	0	1
Mvmt Flow	10	19	6	641	790	18

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1143	415	818	0	-	0
Stage 1	809	-	-	-	-	-
Stage 2	334	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	197	592	819	-	-	-
Stage 1	403	-	-	-	-	-
Stage 2	703	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	192	587	812	-	-	-
Mov Cap-2 Maneuver	192	-	-	-	-	-
Stage 1	395	-	-	-	-	-
Stage 2	697	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.7	0.2	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	812	-	338	-	-
HCM Lane V/C Ratio	0.008	-	0.086	-	-
HCM Control Delay (s)	9.5	0.1	16.7	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	7	8	613	6	6	770
Future Vol, veh/h	7	8	613	6	6	770
Conflicting Peds, #/hr	1	1	0	10	10	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, %	0	0	1	0	0	1
Mvmt Flow	7	8	639	6	6	802

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1066	334	0	0	655	0
Stage 1	652	-	-	-	-	-
Stage 2	414	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	221	668	-	-	942	-
Stage 1	486	-	-	-	-	-
Stage 2	641	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	216	662	-	-	934	-
Mov Cap-2 Maneuver	216	-	-	-	-	-
Stage 1	476	-	-	-	-	-
Stage 2	640	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.2	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	337	934	-
HCM Lane V/C Ratio	-	-	0.046	0.007	-
HCM Control Delay (s)	-	-	16.2	8.9	0.1
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	13	27	19	606	768	16
Future Vol, veh/h	13	27	19	606	768	16
Conflicting Peds, #/hr	0	0	14	0	0	14
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, %	0	0	0	1	1	0
Mvmt Flow	14	28	20	631	800	17

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1179	423	831	0	-	0
Stage 1	823	-	-	-	-	-
Stage 2	356	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	186	585	810	-	-	-
Stage 1	397	-	-	-	-	-
Stage 2	686	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	175	578	801	-	-	-
Mov Cap-2 Maneuver	175	-	-	-	-	-
Stage 1	377	-	-	-	-	-
Stage 2	678	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.4	0.5	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	801	-	331	-	-
HCM Lane V/C Ratio	0.025	-	0.126	-	-
HCM Control Delay (s)	9.6	0.2	17.4	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-

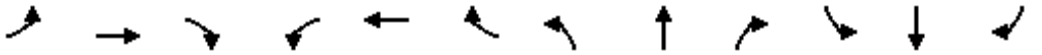
Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	9	185	215	542	677	21
Future Vol, veh/h	9	185	215	542	677	21
Conflicting Peds, #/hr	0	0	11	0	0	11
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	1	1	1	2	0
Mvmt Flow	10	201	234	589	736	23

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1522	391	770	0	-	0
Stage 1	759	-	-	-	-	-
Stage 2	763	-	-	-	-	-
Critical Hdwy	6.82	6.92	4.12	-	-	-
Critical Hdwy Stg 1	5.82	-	-	-	-	-
Critical Hdwy Stg 2	5.82	-	-	-	-	-
Follow-up Hdwy	3.51	3.31	2.21	-	-	-
Pot Cap-1 Maneuver	110	611	847	-	-	-
Stage 1	426	-	-	-	-	-
Stage 2	424	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	63	605	839	-	-	-
Mov Cap-2 Maneuver	63	-	-	-	-	-
Stage 1	247	-	-	-	-	-
Stage 2	420	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	21	4	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	839	-	432	-	-
HCM Lane V/C Ratio	0.279	-	0.488	-	-
HCM Control Delay (s)	10.9	1.3	21	-	-
HCM Lane LOS	B	A	C	-	-
HCM 95th %tile Q(veh)	1.1	-	2.6	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	92	6	64	3	4	10	23	523	5	12	631	152
Future Volume (veh/h)	92	6	64	3	4	10	23	523	5	12	631	152
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	1.00		0.99	1.00		0.98	0.99		0.98
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	1900	1899	1900	1900	1900	1900	1900	1882	1900	1900	1885	1900
Adj Flow Rate, veh/h	99	6	69	3	4	11	25	562	5	13	678	163
Adj No. of Lanes	0	1	0	0	1	0	0	2	0	0	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	0	0	0	1	1	1	1	1	1
Cap, veh/h	336	16	99	175	85	171	163	1501	13	140	1222	291
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	811	100	599	145	517	1040	54	3406	30	16	2774	660
Grp Volume(v), veh/h	174	0	0	18	0	0	306	0	286	462	0	392
Grp Sat Flow(s),veh/h/ln	1510	0	0	1702	0	0	1782	0	1707	1865	0	1585
Q Serve(g_s), s	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1	0.0	0.0	5.1
Cycle Q Clear(g_c), s	3.0	0.0	0.0	0.2	0.0	0.0	3.0	0.0	3.1	5.1	0.0	5.1
Prop In Lane	0.57		0.40	0.17		0.61	0.08		0.02	0.03		0.42
Lane Grp Cap(c), veh/h	451	0	0	431	0	0	925	0	752	954	0	699
V/C Ratio(X)	0.39	0.00	0.00	0.04	0.00	0.00	0.33	0.00	0.38	0.48	0.00	0.56
Avail Cap(c_a), veh/h	1438	0	0	1492	0	0	1669	0	1531	1785	0	1422
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	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.0	0.0	0.0	9.8	0.0	0.0	5.2	0.0	5.2	5.8	0.0	5.8
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.3	0.4	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	1.3	0.0	0.0	0.1	0.0	0.0	1.6	0.0	1.5	2.7	0.0	2.3
LnGrp Delay(d),s/veh	11.5	0.0	0.0	9.9	0.0	0.0	5.4	0.0	5.6	6.2	0.0	6.5
LnGrp LOS	B			A			A		A	A		A
Approach Vol, veh/h		174			18			592			854	
Approach Delay, s/veh		11.5			9.9			5.5			6.3	
Approach LOS		B			A			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		17.8		10.1		17.8		10.1
Change Period (Y+Rc), s		5.5		5.5		5.5		5.5
Max Green Setting (Gmax), s		25.0		23.0		25.0		23.0
Max Q Clear Time (g_c+I1), s		7.1		5.0		5.1		2.2
Green Ext Time (p_c), s		5.2		0.9		3.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	6.6
HCM 2010 LOS	A



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	186	275	482	104	225	637
Future Volume (veh/h)	186	275	482	104	225	637
Number	3	18	6	16	5	2
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	1900	1900	1881	1900	1900	1881
Adj Flow Rate, veh/h	194	286	502	108	234	664
Adj No. of Lanes	1	1	2	0	0	2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	1	1	1	1
Cap, veh/h	430	384	1460	313	381	1040
Arrive On Green	0.24	0.24	0.50	0.50	0.50	0.50
Sat Flow, veh/h	1810	1615	3022	627	497	2170
Grp Volume(v), veh/h	194	286	305	305	394	504
Grp Sat Flow(s),veh/h/ln	1810	1615	1787	1768	956	1626
Q Serve(g_s), s	4.0	7.1	4.5	4.5	11.7	9.7
Cycle Q Clear(g_c), s	4.0	7.1	4.5	4.5	16.2	9.7
Prop In Lane	1.00	1.00		0.35	0.59	
Lane Grp Cap(c), veh/h	430	384	891	881	609	811
V/C Ratio(X)	0.45	0.74	0.34	0.35	0.65	0.62
Avail Cap(c_a), veh/h	837	747	1033	1022	693	940
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	14.1	15.3	6.6	6.6	10.0	7.9
Incr Delay (d2), s/veh	0.7	2.9	0.2	0.2	1.7	1.0
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	3.4	2.2	2.3	4.3	4.6
LnGrp Delay(d),s/veh	14.8	18.2	6.8	6.8	11.7	8.9
LnGrp LOS	B	B	A	A	B	A
Approach Vol, veh/h	480		610			898
Approach Delay, s/veh	16.8		6.8			10.1
Approach LOS	B		A			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		27.6				27.6		15.7
Change Period (Y+Rc), s		6.0				6.0		5.4
Max Green Setting (Gmax), s		25.0				25.0		20.0
Max Q Clear Time (g_c+I1), s		18.2				6.5		9.1
Green Ext Time (p_c), s		3.4				3.5		1.2

Intersection Summary	
HCM 2010 Ctrl Delay	10.7
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	77	15	11	509	703	120
Future Vol, veh/h	77	15	11	509	703	120
Conflicting Peds, #/hr	1	0	25	0	0	25
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	1	1	1
Mvmt Flow	89	17	13	585	808	138

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1222	498	971	0	-	0
Stage 1	902	-	-	-	-	-
Stage 2	320	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	175	523	718	-	-	-
Stage 1	361	-	-	-	-	-
Stage 2	715	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	163	512	703	-	-	-
Mov Cap-2 Maneuver	163	-	-	-	-	-
Stage 1	344	-	-	-	-	-
Stage 2	700	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	44.4	0.3	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	703	-	163	512	-	-
HCM Lane V/C Ratio	0.018	-	0.543	0.034	-	-
HCM Control Delay (s)	10.2	0.1	50.6	12.3	-	-
HCM Lane LOS	B	A	F	B	-	-
HCM 95th %tile Q(veh)	0.1	-	2.8	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	124	1	77	3	2	17	83	379	5	21	462	235
Future Volume (veh/h)	124	1	77	3	2	17	83	379	5	21	462	235
Number	7	4	14	3	8	18	1	6	16	5	2	12
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	1863	1881	1900	1900	1900	1900	1900	1866	1900	1900	1882	1900
Adj Flow Rate, veh/h	129	1	80	3	2	18	86	395	5	22	481	245
Adj No. of Lanes	1	1	0	0	1	0	0	2	0	0	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	0	0	0	0	0	2	2	2	1	1	1
Cap, veh/h	495	3	247	174	37	198	296	1108	14	160	925	460
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	1386	20	1582	117	236	1273	260	2658	34	38	2220	1104
Grp Volume(v), veh/h	129	0	81	23	0	0	236	0	250	412	0	336
Grp Sat Flow(s),veh/h/ln	1386	0	1602	1626	0	0	1259	0	1692	1848	0	1514
Q Serve(g_s), s	1.9	0.0	1.2	0.0	0.0	0.0	0.3	0.0	2.6	0.0	0.0	4.4
Cycle Q Clear(g_c), s	2.2	0.0	1.2	0.3	0.0	0.0	4.6	0.0	2.6	4.3	0.0	4.4
Prop In Lane	1.00		0.99	0.13		0.78	0.36		0.02	0.05		0.73
Lane Grp Cap(c), veh/h	495	0	250	409	0	0	712	0	705	915	0	631
V/C Ratio(X)	0.26	0.00	0.32	0.06	0.00	0.00	0.33	0.00	0.35	0.45	0.00	0.53
Avail Cap(c_a), veh/h	1338	0	1223	1376	0	0	1350	0	1615	1879	0	1445
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.2	0.0	9.8	9.5	0.0	0.0	5.1	0.0	5.2	5.7	0.0	5.7
Incr Delay (d2), s/veh	0.3	0.0	0.7	0.1	0.0	0.0	0.3	0.0	0.3	0.3	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	0.9	0.0	0.6	0.1	0.0	0.0	1.2	0.0	1.2	2.3	0.0	1.9
LnGrp Delay(d),s/veh	10.5	0.0	10.6	9.5	0.0	0.0	5.4	0.0	5.5	6.1	0.0	6.4
LnGrp LOS	B		B	A			A		A	A		A
Approach Vol, veh/h		210			23			486			748	
Approach Delay, s/veh		10.5			9.5			5.5			6.2	
Approach LOS		B			A			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		16.5		9.7		16.5		9.7
Change Period (Y+Rc), s		5.6		5.6		5.6		5.6
Max Green Setting (Gmax), s		25.0		20.0		25.0		20.0
Max Q Clear Time (g_c+I1), s		6.4		4.2		6.6		2.3
Green Ext Time (p_c), s		4.6		0.7		3.0		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	6.6
HCM 2010 LOS	A

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	0	13	10	1	25	25	412	18	27	483	32
Future Vol, veh/h	30	0	13	10	1	25	25	412	18	27	483	32
Conflicting Peds, #/hr	6	0	3	3	0	6	2	0	7	7	0	2
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	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	1	1	0	2	0
Mvmt Flow	31	0	14	10	1	26	26	429	19	28	503	33

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	851	1085	273	809	1092	237	538	0	0	455	0	0
Stage 1	578	578	-	498	498	-	-	-	-	-	-	-
Stage 2	273	507	-	311	594	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	257	218	731	275	216	771	1040	-	-	1116	-	-
Stage 1	474	504	-	528	548	-	-	-	-	-	-	-
Stage 2	715	543	-	680	496	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	233	202	728	254	200	763	1038	-	-	1109	-	-
Mov Cap-2 Maneuver	233	202	-	254	200	-	-	-	-	-	-	-
Stage 1	457	485	-	507	527	-	-	-	-	-	-	-
Stage 2	663	522	-	642	477	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	19.5	13.4	0.6	0.5
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1038	-	-	293	467	1109	-	-
HCM Lane V/C Ratio	0.025	-	-	0.153	0.08	0.025	-	-
HCM Control Delay (s)	8.6	0.1	-	19.5	13.4	8.3	0.1	-
HCM Lane LOS	A	A	-	C	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0.3	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	432	3	11	386	147	4	1	31	157	6	65
Future Volume (veh/h)	71	432	3	11	386	147	4	1	31	157	6	65
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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	1900	1881	1900	1900	1881	1900	1900	1900	1900	1900	1849	1900
Adj Flow Rate, veh/h	75	455	3	12	406	155	4	1	33	165	6	68
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	1	1	0
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, %	0	1	1	0	1	0	0	0	0	0	0	0
Cap, veh/h	511	1276	8	485	1083	486	426	9	305	465	25	284
Arrive On Green	0.06	0.35	0.35	0.01	0.30	0.30	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	1810	3640	24	1810	3574	1604	1345	48	1572	1394	129	1460
Grp Volume(v), veh/h	75	223	235	12	406	155	4	0	34	165	0	74
Grp Sat Flow(s),veh/h/ln	1810	1787	1877	1810	1787	1604	1345	0	1620	1394	0	1589
Q Serve(g_s), s	0.9	3.1	3.1	0.2	2.9	2.5	0.1	0.0	0.6	3.6	0.0	1.3
Cycle Q Clear(g_c), s	0.9	3.1	3.1	0.2	2.9	2.5	1.4	0.0	0.6	4.2	0.0	1.3
Prop In Lane	1.00		0.01	1.00		1.00	1.00		0.97	1.00		0.92
Lane Grp Cap(c), veh/h	511	627	658	485	1083	486	426	0	315	465	0	309
V/C Ratio(X)	0.15	0.36	0.36	0.02	0.37	0.32	0.01	0.00	0.11	0.35	0.00	0.24
Avail Cap(c_a), veh/h	950	1354	1422	1010	2708	1216	981	0	982	1039	0	963
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	0.00	1.00
Uniform Delay (d), s/veh	7.1	7.9	7.9	7.8	9.0	8.9	11.8	0.0	10.9	12.7	0.0	11.2
Incr Delay (d2), s/veh	0.1	0.3	0.3	0.0	0.2	0.4	0.0	0.0	0.1	0.5	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	1.5	1.6	0.1	1.4	1.1	0.0	0.0	0.3	1.4	0.0	0.6
LnGrp Delay(d),s/veh	7.2	8.3	8.3	7.8	9.3	9.2	11.8	0.0	11.1	13.1	0.0	11.6
LnGrp LOS	A	A	A	A	A	A	B		B	B		B
Approach Vol, veh/h		533			573			38			239	
Approach Delay, s/veh		8.1			9.2			11.2			12.7	
Approach LOS		A			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.5	15.6		11.9	3.9	17.2		11.9
Change Period (Y+Rc), s	3.5	5.6		5.5	3.5	5.6		5.5
Max Green Setting (Gmax), s	10.0	25.0		20.0	10.0	25.0		20.0
Max Q Clear Time (g_c+I1), s	2.9	4.9		3.4	2.2	5.1		6.2
Green Ext Time (p_c), s	0.1	3.0		0.1	0.0	2.5		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	9.5
HCM 2010 LOS	A

Notes

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	274	141	205	154	101	41	170	534	104	34	865	273
Future Volume (veh/h)	274	141	205	154	101	41	170	534	104	34	865	273
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1810	1810	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	298	153	223	167	110	45	185	580	113	37	940	297
Adj No. of Lanes	2	1	1	1	2	0	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	5	5	5	3	3	3	3	3	3
Cap, veh/h	410	309	262	206	401	157	226	1154	224	50	1029	460
Arrive On Green	0.12	0.17	0.17	0.12	0.17	0.17	0.13	0.39	0.39	0.03	0.29	0.29
Sat Flow, veh/h	3442	1863	1583	1723	2418	944	1757	2928	569	1757	3505	1568
Grp Volume(v), veh/h	298	153	223	167	77	78	185	347	346	37	940	297
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1723	1719	1643	1757	1752	1744	1757	1752	1568
Q Serve(g_s), s	6.5	5.8	10.6	7.3	3.0	3.2	7.9	11.5	11.6	1.6	20.0	12.8
Cycle Q Clear(g_c), s	6.5	5.8	10.6	7.3	3.0	3.2	7.9	11.5	11.6	1.6	20.0	12.8
Prop In Lane	1.00		1.00	1.00		0.57	1.00		0.33	1.00		1.00
Lane Grp Cap(c), veh/h	410	309	262	206	285	273	226	691	687	50	1029	460
V/C Ratio(X)	0.73	0.50	0.85	0.81	0.27	0.29	0.82	0.50	0.50	0.74	0.91	0.65
Avail Cap(c_a), veh/h	869	335	285	323	309	296	364	691	687	364	1043	467
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	32.8	29.3	31.3	33.2	28.1	28.2	32.8	17.7	17.7	37.3	26.3	23.8
Incr Delay (d2), s/veh	2.5	1.2	19.8	8.3	0.5	0.6	7.5	0.6	0.6	19.3	12.0	3.0
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	3.2	3.1	6.1	4.0	1.5	1.5	4.3	5.7	5.7	1.0	11.4	5.9
LnGrp Delay(d),s/veh	35.3	30.5	51.1	41.5	28.6	28.8	40.2	18.3	18.3	56.5	38.3	26.8
LnGrp LOS	D	C	D	D	C	C	D	B	B	E	D	C
Approach Vol, veh/h		674			322			878			1274	
Approach Delay, s/veh		39.5			35.3			22.9			36.2	
Approach LOS		D			D			C			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	14.7	18.9	6.2	37.4	14.7	18.9	14.0	29.7
Change Period (Y+Rc), s	5.5	6.1	4.0	7.0	5.5	6.1	4.0	7.0
Max Green Setting (Gmax), s	19.5	13.9	16.0	23.0	14.5	13.9	16.0	23.0
Max Q Clear Time (g_c+I1), s	8.5	5.2	3.6	13.6	9.3	12.6	9.9	22.0
Green Ext Time (p_c), s	0.8	0.4	0.0	2.6	0.2	0.2	0.2	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	33.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	272	50	107	541	98	120	284	320	192	219	113
Future Volume (veh/h)	39	272	50	107	541	98	120	284	320	192	219	113
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1812	1900	1792	1817	1900	1845	1767	1900	1827	1792	1881
Adj Flow Rate, veh/h	42	296	54	116	588	107	130	309	348	209	238	123
Adj No. of Lanes	1	2	0	1	2	0	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, %	3	3	3	6	3	3	3	7	7	4	6	1
Cap, veh/h	174	599	108	304	683	124	573	676	605	401	1475	759
Arrive On Green	0.04	0.21	0.21	0.07	0.23	0.23	0.06	0.40	0.40	0.09	0.43	0.43
Sat Flow, veh/h	1757	2916	525	1707	2920	530	1757	1679	1502	1740	3406	1599
Grp Volume(v), veh/h	42	173	177	116	347	348	130	309	348	209	238	123
Grp Sat Flow(s),veh/h/ln	1757	1721	1719	1707	1727	1724	1757	1679	1502	1740	1703	1599
Q Serve(g_s), s	1.8	8.9	9.1	5.3	19.3	19.4	4.3	13.5	18.0	6.9	4.3	4.4
Cycle Q Clear(g_c), s	1.8	8.9	9.1	5.3	19.3	19.4	4.3	13.5	18.0	6.9	4.3	4.4
Prop In Lane	1.00		0.31	1.00		0.31	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	174	354	353	304	404	403	573	676	605	401	1475	759
V/C Ratio(X)	0.24	0.49	0.50	0.38	0.86	0.86	0.23	0.46	0.58	0.52	0.16	0.16
Avail Cap(c_a), veh/h	216	448	447	313	466	465	597	676	605	528	1475	759
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	30.5	35.1	35.2	28.6	36.7	36.8	15.5	21.9	23.2	16.8	17.3	15.0
Incr Delay (d2), s/veh	0.7	1.1	1.1	0.8	13.4	13.8	0.2	2.2	4.0	1.1	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	0.9	4.3	4.4	2.5	10.7	10.7	2.1	6.7	8.1	3.4	2.0	2.0
LnGrp Delay(d),s/veh	31.2	36.2	36.3	29.4	50.1	50.6	15.7	24.1	27.2	17.8	17.5	15.4
LnGrp LOS	C	D	D	C	D	D	B	C	C	B	B	B
Approach Vol, veh/h		392			811			787			570	
Approach Delay, s/veh		35.7			47.4			24.1			17.2	
Approach LOS		D			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	11.6	49.3	12.5	26.5	14.7	46.3	9.6	29.4
Change Period (Y+Rc), s	5.5	6.0	5.5	6.0	5.5	6.0	5.5	6.0
Max Green Setting (Gmax), s	7.5	36.0	7.5	26.0	16.5	27.0	6.5	27.0
Max Q Clear Time (g_c+I1), s	6.3	6.4	7.3	11.1	8.9	20.0	3.8	21.4
Green Ext Time (p_c), s	0.0	2.0	0.0	1.7	0.3	2.4	0.0	2.0

Intersection Summary	
HCM 2010 Ctrl Delay	31.7
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	11	1	718	368	8
Future Vol, veh/h	6	11	1	718	368	8
Conflicting Peds, #/hr	0	0	3	0	0	3
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	69	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	18	4	4	0	8
Mvmt Flow	7	13	1	835	428	9

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1273	436	440	0	-	0
Stage 1	436	-	-	-	-	-
Stage 2	837	-	-	-	-	-
Critical Hdwy	6.4	6.38	4.14	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.462	2.236	-	-	-
Pot Cap-1 Maneuver	187	588	1109	-	-	-
Stage 1	656	-	-	-	-	-
Stage 2	428	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	186	587	1106	-	-	-
Mov Cap-2 Maneuver	315	-	-	-	-	-
Stage 1	654	-	-	-	-	-
Stage 2	427	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1106	-	450	-	-
HCM Lane V/C Ratio	0.001	-	0.044	-	-
HCM Control Delay (s)	8.3	-	13.4	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	6	713	3	1	378
Future Vol, veh/h	4	6	713	3	1	378
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	69	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	0	4	0	0	8
Mvmt Flow	5	7	829	3	1	440

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1273	831	0	0	832	0
Stage 1	831	-	-	-	-	-
Stage 2	442	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	187	373	-	-	809	-
Stage 1	431	-	-	-	-	-
Stage 2	652	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	187	373	-	-	809	-
Mov Cap-2 Maneuver	317	-	-	-	-	-
Stage 1	431	-	-	-	-	-
Stage 2	652	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.7	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	348	809	-
HCM Lane V/C Ratio	-	-	0.033	0.001	-
HCM Control Delay (s)	-	-	15.7	9.5	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	11	9	10	705	373	9
Future Vol, veh/h	11	9	10	705	373	9
Conflicting Peds, #/hr	0	0	1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	150	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	11	45	0	2	5	20
Mvmt Flow	12	10	11	792	419	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1239	425	430	0	-	0
Stage 1	425	-	-	-	-	-
Stage 2	814	-	-	-	-	-
Critical Hdwy	6.51	6.65	4.1	-	-	-
Critical Hdwy Stg 1	5.51	-	-	-	-	-
Critical Hdwy Stg 2	5.51	-	-	-	-	-
Follow-up Hdwy	3.599	3.705	2.2	-	-	-
Pot Cap-1 Maneuver	186	547	1140	-	-	-
Stage 1	641	-	-	-	-	-
Stage 2	421	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	184	547	1139	-	-	-
Mov Cap-2 Maneuver	305	-	-	-	-	-
Stage 1	634	-	-	-	-	-
Stage 2	421	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1139	-	381	-	-
HCM Lane V/C Ratio	0.01	-	0.059	-	-
HCM Control Delay (s)	8.2	-	15	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	1	17	3	3	20	17	658	1	3	335	44
Future Volume (veh/h)	37	1	17	3	3	20	17	658	1	3	335	44
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	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	1900	1824	1900	1900	1825	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	45	1	20	4	4	24	20	793	1	4	404	53
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	6	6	6	33	33	33	0	0	0	0	0	0
Cap, veh/h	119	4	27	47	17	72	767	1493	2	617	1274	167
Arrive On Green	0.06	0.06	0.06	0.06	0.06	0.06	0.03	1.00	1.00	0.00	0.77	0.77
Sat Flow, veh/h	990	60	456	111	296	1220	1810	1897	2	1810	1646	216
Grp Volume(v), veh/h	66	0	0	32	0	0	20	0	794	4	0	457
Grp Sat Flow(s),veh/h/ln	1506	0	0	1627	0	0	1810	0	1900	1810	0	1861
Q Serve(g_s), s	2.2	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	7.3
Cycle Q Clear(g_c), s	4.2	0.0	0.0	1.9	0.0	0.0	0.2	0.0	0.0	0.0	0.0	7.3
Prop In Lane	0.68		0.30	0.12		0.75	1.00		0.00	1.00		0.12
Lane Grp Cap(c), veh/h	149	0	0	136	0	0	767	0	1495	617	0	1441
V/C Ratio(X)	0.44	0.00	0.00	0.24	0.00	0.00	0.03	0.00	0.53	0.01	0.00	0.32
Avail Cap(c_a), veh/h	241	0	0	237	0	0	809	0	1495	682	0	1441
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	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	46.1	0.0	0.0	45.2	0.0	0.0	2.4	0.0	0.0	2.5	0.0	3.4
Incr Delay (d2), s/veh	2.1	0.0	0.0	0.9	0.0	0.0	0.0	0.0	1.4	0.0	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	1.9	0.0	0.0	0.9	0.0	0.0	0.1	0.0	0.6	0.0	0.0	3.9
LnGrp Delay(d),s/veh	48.2	0.0	0.0	46.1	0.0	0.0	2.4	0.0	1.4	2.5	0.0	4.0
LnGrp LOS	D			D			A		A	A		A
Approach Vol, veh/h		66			32			814			461	
Approach Delay, s/veh		48.2			46.1			1.4			3.9	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.7	82.9		11.4	4.4	84.2		11.4
Change Period (Y+Rc), s	4.0	5.5		5.5	4.0	5.5		5.5
Max Green Setting (Gmax), s	4.0	68.5		12.5	4.0	68.5		12.5
Max Q Clear Time (g_c+I1), s	2.2	9.3		6.2	2.0	2.0		3.9
Green Ext Time (p_c), s	0.0	3.4		0.1	0.0	7.5		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	5.5
HCM 2010 LOS	A

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	11	61	80	665	346	9
Future Vol, veh/h	11	61	80	665	346	9
Conflicting Peds, #/hr	0	0	16	0	0	16
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	150	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	8	2	4	22
Mvmt Flow	13	70	92	764	398	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1367	419	424	0	-	0
Stage 1	419	-	-	-	-	-
Stage 2	948	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.18	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.272	-	-	-
Pot Cap-1 Maneuver	164	638	1104	-	-	-
Stage 1	668	-	-	-	-	-
Stage 2	380	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	146	629	1089	-	-	-
Mov Cap-2 Maneuver	230	-	-	-	-	-
Stage 1	604	-	-	-	-	-
Stage 2	375	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.7	0.9	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1089	-	497	-	-
HCM Lane V/C Ratio	0.084	-	0.167	-	-
HCM Control Delay (s)	8.6	-	13.7	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.3	-	0.6	-	-



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	76	189	556	200	106	301
Future Volume (veh/h)	76	189	556	200	106	301
Number	3	18	6	16	5	2
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	1792	1863	1827	1863	1810	1759
Adj Flow Rate, veh/h	84	210	618	222	118	334
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	6	2	4	2	5	8
Cap, veh/h	215	263	1243	1077	421	1337
Arrive On Green	0.13	0.13	0.46	0.46	0.08	1.00
Sat Flow, veh/h	1707	1583	1827	1583	1723	1759
Grp Volume(v), veh/h	84	210	618	222	118	334
Grp Sat Flow(s),veh/h/ln	1707	1583	1827	1583	1723	1759
Q Serve(g_s), s	4.5	12.6	23.8	8.4	2.0	0.0
Cycle Q Clear(g_c), s	4.5	12.6	23.8	8.4	2.0	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	215	263	1243	1077	421	1337
V/C Ratio(X)	0.39	0.80	0.50	0.21	0.28	0.25
Avail Cap(c_a), veh/h	215	263	1243	1077	559	1337
HCM Platoon Ratio	1.00	1.00	0.67	0.67	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.2	40.1	15.2	11.0	7.4	0.0
Incr Delay (d2), s/veh	1.2	16.0	1.4	0.4	0.4	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	2.2	6.7	12.5	3.8	1.0	0.2
LnGrp Delay(d),s/veh	41.3	56.1	16.6	11.4	7.7	0.4
LnGrp LOS	D	E	B	B	A	A
Approach Vol, veh/h	294		840			452
Approach Delay, s/veh	51.9		15.2			2.3
Approach LOS	D		B			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		82.0			8.0	74.0		18.0
Change Period (Y+Rc), s		6.0			4.0	6.0		5.4
Max Green Setting (Gmax), s		76.0			12.0	60.0		12.6
Max Q Clear Time (g_c+I1), s		2.0			4.0	25.8		14.6
Green Ext Time (p_c), s		2.3			0.2	5.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	18.4
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	80	12	5	676	347	30
Future Vol, veh/h	80	12	5	676	347	30
Conflicting Peds, #/hr	0	1	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	150	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	0	0	3	3	4	3
Mvmt Flow	101	15	6	856	439	38

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1326	459	477	0	-	0
Stage 1	458	-	-	-	-	-
Stage 2	868	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.13	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.227	-	-	-
Pot Cap-1 Maneuver	173	606	1080	-	-	-
Stage 1	641	-	-	-	-	-
Stage 2	414	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	172	605	1080	-	-	-
Mov Cap-2 Maneuver	300	-	-	-	-	-
Stage 1	637	-	-	-	-	-
Stage 2	414	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	21.4	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1080	-	300	605	-	-
HCM Lane V/C Ratio	0.006	-	0.338	0.025	-	-
HCM Control Delay (s)	8.4	-	23	11.1	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0	-	1.4	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	256	1	115	5	0	34	55	391	3	7	265	87
Future Volume (veh/h)	256	1	115	5	0	34	55	391	3	7	265	87
Number	7	4	14	3	8	18	1	6	16	5	2	12
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	0.99		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1729	1900	1900	1805	1900	1776	1845	1900	1900	1805	1900
Adj Flow Rate, veh/h	278	1	125	5	0	37	60	425	3	8	288	95
Adj No. of Lanes	1	1	0	0	1	0	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, %	3	0	0	0	0	0	7	3	3	0	4	4
Cap, veh/h	464	3	374	46	3	66	472	1067	8	531	726	239
Arrive On Green	0.17	0.26	0.26	0.05	0.00	0.05	0.03	0.58	0.58	0.00	0.18	0.18
Sat Flow, veh/h	1757	12	1456	109	69	1323	1691	1830	13	1810	1300	429
Grp Volume(v), veh/h	278	0	126	42	0	0	60	0	428	8	0	383
Grp Sat Flow(s),veh/h/ln	1757	0	1468	1502	0	0	1691	0	1843	1810	0	1728
Q Serve(g_s), s	14.3	0.0	7.0	0.8	0.0	0.0	1.5	0.0	12.6	0.2	0.0	19.5
Cycle Q Clear(g_c), s	14.3	0.0	7.0	2.7	0.0	0.0	1.5	0.0	12.6	0.2	0.0	19.5
Prop In Lane	1.00		0.99	0.12		0.88	1.00		0.01	1.00		0.25
Lane Grp Cap(c), veh/h	464	0	377	115	0	0	472	0	1074	531	0	965
V/C Ratio(X)	0.60	0.00	0.33	0.37	0.00	0.00	0.13	0.00	0.40	0.02	0.00	0.40
Avail Cap(c_a), veh/h	556	0	505	165	0	0	484	0	1074	589	0	965
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.6	0.0	30.2	46.4	0.0	0.0	10.6	0.0	11.3	10.0	0.0	26.0
Incr Delay (d2), s/veh	1.2	0.0	0.5	1.9	0.0	0.0	0.1	0.0	1.1	0.0	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	0.0	2.9	1.2	0.0	0.0	0.7	0.0	6.7	0.1	0.0	9.7
LnGrp Delay(d),s/veh	35.8	0.0	30.7	48.4	0.0	0.0	10.7	0.0	12.4	10.0	0.0	27.2
LnGrp LOS	D		C	D			B		B	B		C
Approach Vol, veh/h		404			42			488			391	
Approach Delay, s/veh		34.2			48.4			12.2			26.8	
Approach LOS		C			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.2	61.5		31.3	4.8	63.9	20.7	10.6
Change Period (Y+Rc), s	4.0	5.6		5.6	4.0	5.6	4.0	5.6
Max Green Setting (Gmax), s	4.0	46.4		34.4	4.0	46.4	22.0	8.4
Max Q Clear Time (g_c+I1), s	3.5	21.5		9.0	2.2	14.6	16.3	4.7
Green Ext Time (p_c), s	0.0	3.0		0.5	0.0	3.6	0.4	0.0

Intersection Summary		
HCM 2010 Ctrl Delay		24.4
HCM 2010 LOS		C

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	27	1	24	15	0	25	4	397	9	12	361	12
Future Vol, veh/h	27	1	24	15	0	25	4	397	9	12	361	12
Conflicting Peds, #/hr	0	0	1	1	0	0	3	0	5	5	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	125	-	-	125	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	0	0	4	0	0	4	0	5	5	8	6	0
Mvmt Flow	31	1	28	17	0	29	5	456	10	14	415	14

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	939	934	426	942	936	466	432	0	0	471	0	0
Stage 1	453	453	-	476	476	-	-	-	-	-	-	-
Stage 2	486	481	-	466	460	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.24	7.1	6.5	6.24	4.1	-	-	4.18	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.336	3.5	4	3.336	2.2	-	-	2.272	-	-
Pot Cap-1 Maneuver	246	268	624	245	267	592	1138	-	-	1060	-	-
Stage 1	590	573	-	574	560	-	-	-	-	-	-	-
Stage 2	566	557	-	581	569	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	230	262	622	229	261	590	1135	-	-	1056	-	-
Mov Cap-2 Maneuver	230	262	-	229	261	-	-	-	-	-	-	-
Stage 1	586	564	-	569	556	-	-	-	-	-	-	-
Stage 2	536	553	-	546	560	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	18.6	16.1	0.1	0.3
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1135	-	-	325	371	1056	-	-
HCM Lane V/C Ratio	0.004	-	-	0.184	0.124	0.013	-	-
HCM Control Delay (s)	8.2	-	-	18.6	16.1	8.5	-	-
HCM Lane LOS	A	-	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.7	0.4	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	329	10	27	347	175	3	0	9	147	3	60
Future Volume (veh/h)	61	329	10	27	347	175	3	0	9	147	3	60
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1846	1900	1900	1845	1845	1900	1900	1900	1881	1900	1900
Adj Flow Rate, veh/h	69	370	11	30	390	197	3	0	10	165	3	67
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	1	1	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	3	3	0	3	3	0	0	0	1	0	0
Cap, veh/h	666	2382	71	771	2360	1055	218	0	236	271	10	228
Arrive On Green	0.03	0.68	0.68	0.02	0.67	0.67	0.15	0.00	0.15	0.15	0.15	0.15
Sat Flow, veh/h	1810	3479	103	1810	3505	1567	1350	0	1612	1410	70	1553
Grp Volume(v), veh/h	69	186	195	30	390	197	3	0	10	165	0	70
Grp Sat Flow(s),veh/h/ln	1810	1754	1828	1810	1752	1567	1350	0	1612	1410	0	1622
Q Serve(g_s), s	1.2	3.7	3.8	0.5	4.1	4.7	0.2	0.0	0.5	11.4	0.0	3.8
Cycle Q Clear(g_c), s	1.2	3.7	3.8	0.5	4.1	4.7	4.0	0.0	0.5	11.9	0.0	3.8
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		0.96
Lane Grp Cap(c), veh/h	666	1201	1252	771	2360	1055	218	0	236	271	0	238
V/C Ratio(X)	0.10	0.16	0.16	0.04	0.17	0.19	0.01	0.00	0.04	0.61	0.00	0.29
Avail Cap(c_a), veh/h	812	1201	1252	866	2360	1055	526	0	604	593	0	608
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	0.85	0.85	0.85	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.5	5.6	5.6	4.7	6.0	6.1	39.9	0.0	36.6	41.8	0.0	38.1
Incr Delay (d2), s/veh	0.1	0.3	0.3	0.0	0.1	0.3	0.0	0.0	0.1	2.2	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	0.6	1.9	2.0	0.3	2.0	2.1	0.1	0.0	0.2	4.6	0.0	1.8
LnGrp Delay(d),s/veh	4.6	5.8	5.8	4.8	6.1	6.4	39.9	0.0	36.7	44.0	0.0	38.7
LnGrp LOS	A	A	A	A	A	A	D		D	D		D
Approach Vol, veh/h		450			617			13			235	
Approach Delay, s/veh		5.6			6.2			37.4			42.4	
Approach LOS		A			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.9	72.9		20.2	5.8	74.1		20.2
Change Period (Y+Rc), s	3.5	5.6		5.5	3.5	5.6		5.5
Max Green Setting (Gmax), s	11.5	36.4		37.5	7.5	40.4		37.5
Max Q Clear Time (g_c+I1), s	3.2	6.7		6.0	2.5	5.8		13.9
Green Ext Time (p_c), s	0.1	4.0		0.0	0.0	3.0		0.8

Intersection Summary	
HCM 2010 Ctrl Delay	12.8
HCM 2010 LOS	B

Notes

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	176	122	187	111	110	29	236	748	122	55	420	203
Future Volume (veh/h)	176	122	187	111	110	29	236	748	122	55	420	203
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1810	1667	1689	1900	1881	1810	1900	1863	1845	1827
Adj Flow Rate, veh/h	191	133	203	121	120	32	257	813	133	60	457	221
Adj No. of Lanes	2	1	1	1	2	0	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	5	14	15	15	1	5	5	2	3	4
Cap, veh/h	260	598	494	147	855	221	294	936	153	77	687	305
Arrive On Green	0.08	0.32	0.32	0.09	0.34	0.34	0.16	0.32	0.32	0.04	0.20	0.20
Sat Flow, veh/h	3442	1863	1538	1587	2526	653	1792	2959	484	1774	3505	1553
Grp Volume(v), veh/h	191	133	203	121	75	77	257	472	474	60	457	221
Grp Sat Flow(s),veh/h/ln	1721	1863	1538	1587	1605	1574	1792	1719	1724	1774	1752	1553
Q Serve(g_s), s	5.4	5.2	10.3	7.5	3.2	3.4	14.0	25.9	25.9	3.3	12.1	13.3
Cycle Q Clear(g_c), s	5.4	5.2	10.3	7.5	3.2	3.4	14.0	25.9	25.9	3.3	12.1	13.3
Prop In Lane	1.00		1.00	1.00		0.41	1.00		0.28	1.00		1.00
Lane Grp Cap(c), veh/h	260	598	494	147	543	533	294	544	546	77	687	305
V/C Ratio(X)	0.73	0.22	0.41	0.82	0.14	0.14	0.88	0.87	0.87	0.78	0.66	0.73
Avail Cap(c_a), veh/h	354	598	494	237	543	533	412	619	621	160	771	342
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)	0.96	0.96	0.96	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.2	24.8	26.5	44.5	23.0	23.0	40.8	32.2	32.2	47.3	37.2	37.7
Incr Delay (d2), s/veh	4.9	0.8	2.4	11.5	0.5	0.6	14.1	11.5	11.5	15.1	1.9	6.6
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	2.7	2.8	4.7	3.8	1.5	1.6	8.1	13.9	14.0	2.0	6.0	6.3
LnGrp Delay(d),s/veh	50.1	25.6	28.9	56.1	23.5	23.6	54.9	43.7	43.7	62.5	39.0	44.3
LnGrp LOS	D	C	C	E	C	C	D	D	D	E	D	D
Approach Vol, veh/h		527			273			1203			738	
Approach Delay, s/veh		35.8			38.0			46.1			42.5	
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	13.1	39.9	8.4	38.6	14.8	38.2	20.4	26.6
Change Period (Y+Rc), s	5.5	6.1	4.0	7.0	5.5	6.1	4.0	7.0
Max Green Setting (Gmax), s	10.3	22.1	9.0	36.0	14.9	17.5	23.0	22.0
Max Q Clear Time (g_c+I1), s	7.4	5.4	5.3	27.9	9.5	12.3	16.0	15.3
Green Ext Time (p_c), s	0.2	0.8	0.0	3.7	0.1	0.7	0.4	2.1

Intersection Summary	
HCM 2010 Ctrl Delay	42.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	167	505	252	109	282	178	181	347	97	163	414	62
Future Volume (veh/h)	167	505	252	109	282	178	181	347	97	163	414	62
Number	7	4	14	3	8	18	1	6	16	5	2	12
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	1863	1821	1900	1792	1827	1827	1845	1833	1900	1827	1827	1863
Adj Flow Rate, veh/h	182	549	274	118	307	193	197	377	105	177	450	67
Adj No. of Lanes	1	2	0	1	2	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	3	3	6	4	4	3	3	3	4	4	2
Cap, veh/h	393	645	321	209	914	535	451	1008	277	442	1272	724
Arrive On Green	0.09	0.29	0.29	0.07	0.26	0.26	0.09	0.37	0.37	0.08	0.37	0.37
Sat Flow, veh/h	1774	2239	1115	1707	3471	1553	1757	2700	743	1740	3471	1583
Grp Volume(v), veh/h	182	424	399	118	307	193	197	242	240	177	450	67
Grp Sat Flow(s),veh/h/ln	1774	1730	1624	1707	1736	1553	1757	1741	1702	1740	1736	1583
Q Serve(g_s), s	8.9	27.7	27.8	6.0	8.6	11.2	8.3	12.1	12.4	7.5	11.3	2.9
Cycle Q Clear(g_c), s	8.9	27.7	27.8	6.0	8.6	11.2	8.3	12.1	12.4	7.5	11.3	2.9
Prop In Lane	1.00		0.69	1.00		1.00	1.00		0.44	1.00		1.00
Lane Grp Cap(c), veh/h	393	498	468	209	914	535	451	650	635	442	1272	724
V/C Ratio(X)	0.46	0.85	0.85	0.56	0.34	0.36	0.44	0.37	0.38	0.40	0.35	0.09
Avail Cap(c_a), veh/h	416	606	569	302	1273	695	539	650	635	526	1272	724
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	28.3	40.3	40.3	32.1	35.7	29.5	20.8	27.4	27.5	21.1	27.7	18.5
Incr Delay (d2), s/veh	0.9	9.5	10.3	2.4	0.2	0.4	0.7	1.6	1.7	0.6	0.8	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	14.5	13.9	2.9	4.1	4.9	4.0	6.1	6.1	3.6	5.6	1.3
LnGrp Delay(d),s/veh	29.1	49.8	50.6	34.5	35.9	29.9	21.5	29.0	29.2	21.7	28.5	18.7
LnGrp LOS	C	D	D	C	D	C	C	C	C	C	C	B
Approach Vol, veh/h		1005			618			679			694	
Approach Delay, s/veh		46.4			33.8			26.9			25.8	
Approach LOS		D			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	16.0	50.0	13.4	40.6	15.2	50.8	16.4	37.6
Change Period (Y+Rc), s	5.5	6.0	5.5	6.0	5.5	6.0	5.5	6.0
Max Green Setting (Gmax), s	16.5	24.0	14.5	42.0	15.5	25.0	12.5	44.0
Max Q Clear Time (g_c+I1), s	10.3	13.3	8.0	29.8	9.5	14.4	10.9	13.2
Green Ext Time (p_c), s	0.3	2.6	0.1	4.7	0.2	2.4	0.1	3.0

Intersection Summary	
HCM 2010 Ctrl Delay	34.6
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	18	6	615	758	17
Future Vol, veh/h	10	18	6	615	758	17
Conflicting Peds, #/hr	1	1	10	0	0	10
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	69	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	1	0	1
Mvmt Flow	10	19	6	641	790	18

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1463	810	818	0	-	0
Stage 1	809	-	-	-	-	-
Stage 2	654	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	143	383	819	-	-	-
Stage 1	441	-	-	-	-	-
Stage 2	521	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	140	379	812	-	-	-
Mov Cap-2 Maneuver	278	-	-	-	-	-
Stage 1	434	-	-	-	-	-
Stage 2	517	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.8	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	812	-	335	-	-
HCM Lane V/C Ratio	0.008	-	0.087	-	-
HCM Control Delay (s)	9.5	-	16.8	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	7	8	613	6	6	770
Future Vol, veh/h	7	8	613	6	6	770
Conflicting Peds, #/hr	1	1	0	10	10	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	69	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	1	0	0	1
Mvmt Flow	7	8	639	6	6	802

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1467	653	0	0	655	0
Stage 1	652	-	-	-	-	-
Stage 2	815	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	142	471	-	-	942	-
Stage 1	522	-	-	-	-	-
Stage 2	439	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	140	467	-	-	934	-
Mov Cap-2 Maneuver	278	-	-	-	-	-
Stage 1	515	-	-	-	-	-
Stage 2	439	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.6	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	355	934	-
HCM Lane V/C Ratio	-	-	0.044	0.007	-
HCM Control Delay (s)	-	-	15.6	8.9	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	13	27	19	606	768	16
Future Vol, veh/h	13	27	19	606	768	16
Conflicting Peds, #/hr	0	0	14	0	0	14
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	150	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	1	1	0
Mvmt Flow	14	28	20	631	800	17

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1494	823	831	0	-	0
Stage 1	823	-	-	-	-	-
Stage 2	671	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	137	377	810	-	-	-
Stage 1	435	-	-	-	-	-
Stage 2	512	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	130	373	801	-	-	-
Mov Cap-2 Maneuver	264	-	-	-	-	-
Stage 1	419	-	-	-	-	-
Stage 2	506	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.5	0.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	801	-	329	-	-
HCM Lane V/C Ratio	0.025	-	0.127	-	-
HCM Control Delay (s)	9.6	-	17.5	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	92	6	64	3	4	10	23	523	5	12	631	152
Future Volume (veh/h)	92	6	64	3	4	10	23	523	5	12	631	152
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		0.99	0.99		0.99
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	1900	1899	1900	1900	1900	1900	1900	1881	1900	1881	1885	1900
Adj Flow Rate, veh/h	99	6	69	3	4	11	25	562	5	13	678	163
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	0	0	0	0	1	1	1	1	1
Cap, veh/h	190	17	83	76	77	146	342	1180	10	653	915	220
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.04	1.00	1.00	0.01	0.62	0.62
Sat Flow, veh/h	788	119	596	115	553	1049	1810	1862	17	1792	1465	352
Grp Volume(v), veh/h	174	0	0	18	0	0	25	0	567	13	0	841
Grp Sat Flow(s),veh/h/ln	1504	0	0	1717	0	0	1810	0	1878	1792	0	1818
Q Serve(g_s), s	7.2	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.2	0.0	22.6
Cycle Q Clear(g_c), s	7.9	0.0	0.0	0.6	0.0	0.0	0.3	0.0	0.0	0.2	0.0	22.6
Prop In Lane	0.57		0.40	0.17		0.61	1.00		0.01	1.00		0.19
Lane Grp Cap(c), veh/h	290	0	0	299	0	0	342	0	1191	653	0	1135
V/C Ratio(X)	0.60	0.00	0.00	0.06	0.00	0.00	0.07	0.00	0.48	0.02	0.00	0.74
Avail Cap(c_a), veh/h	327	0	0	339	0	0	406	0	1191	733	0	1135
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	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.3	0.0	0.0	26.2	0.0	0.0	8.0	0.0	0.0	4.6	0.0	9.2
Incr Delay (d2), s/veh	2.5	0.0	0.0	0.1	0.0	0.0	0.1	0.0	1.4	0.0	0.0	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	0.0	0.0	0.3	0.0	0.0	0.2	0.0	0.5	0.1	0.0	12.6
LnGrp Delay(d),s/veh	31.7	0.0	0.0	26.3	0.0	0.0	8.1	0.0	1.4	4.6	0.0	13.5
LnGrp LOS	C			C			A		A	A		B
Approach Vol, veh/h		174			18			592			854	
Approach Delay, s/veh		31.7			26.3			1.7			13.4	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.5	49.2		15.2	4.9	49.9		15.2
Change Period (Y+Rc), s	4.0	5.5		5.5	4.0	5.5		5.5
Max Green Setting (Gmax), s	4.0	39.5		11.5	4.0	39.5		11.5
Max Q Clear Time (g_c+I1), s	2.3	24.6		9.9	2.2	2.0		2.6
Green Ext Time (p_c), s	0.0	6.3		0.1	0.0	4.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	11.2
HCM 2010 LOS	B

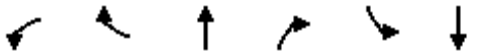
Intersection	
Int Delay, s/veh	5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	9	185	215	542	677	21
Future Vol, veh/h	9	185	215	542	677	21
Conflicting Peds, #/hr	0	0	11	0	0	11
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	150	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	1	1	1	2	0
Mvmt Flow	10	201	234	589	736	23

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1816	759	770	0	-	0
Stage 1	759	-	-	-	-	-
Stage 2	1057	-	-	-	-	-
Critical Hdwy	6.41	6.21	4.11	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	2.209	-	-	-
Pot Cap-1 Maneuver	86	408	849	-	-	-
Stage 1	464	-	-	-	-	-
Stage 2	336	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	61	404	841	-	-	-
Mov Cap-2 Maneuver	86	-	-	-	-	-
Stage 1	332	-	-	-	-	-
Stage 2	333	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	30.5	3.1	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	841	-	345	-	-
HCM Lane V/C Ratio	0.278	-	0.611	-	-
HCM Control Delay (s)	10.9	-	30.5	-	-
HCM Lane LOS	B	-	D	-	-
HCM 95th %tile Q(veh)	1.1	-	3.8	-	-



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	186	275	482	104	225	637
Future Volume (veh/h)	186	275	482	104	225	637
Number	3	18	6	16	5	2
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	1900	1900	1881	1881	1881	1881
Adj Flow Rate, veh/h	194	286	502	108	234	664
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	1	1	1	1
Cap, veh/h	343	454	939	795	672	1219
Arrive On Green	0.19	0.19	1.00	1.00	0.18	1.00
Sat Flow, veh/h	1810	1615	1881	1593	1792	1881
Grp Volume(v), veh/h	194	286	502	108	234	664
Grp Sat Flow(s),veh/h/ln	1810	1615	1881	1593	1792	1881
Q Serve(g_s), s	6.8	10.8	0.1	0.0	4.2	0.0
Cycle Q Clear(g_c), s	6.8	10.8	0.1	0.0	4.2	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	343	454	939	795	672	1219
V/C Ratio(X)	0.57	0.63	0.53	0.14	0.35	0.54
Avail Cap(c_a), veh/h	383	489	939	795	765	1219
HCM Platoon Ratio	1.00	1.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.8	22.0	0.0	0.0	5.3	0.0
Incr Delay (d2), s/veh	1.5	2.3	2.2	0.4	0.3	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	5.1	0.6	0.1	2.0	0.6
LnGrp Delay(d),s/veh	27.3	24.3	2.2	0.4	5.6	1.8
LnGrp LOS	C	C	A	A	A	A
Approach Vol, veh/h	480		610			898
Approach Delay, s/veh	25.5		1.9			2.8
Approach LOS	C		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		51.3			10.4	40.9		18.7
Change Period (Y+Rc), s		6.0			4.0	6.0		5.4
Max Green Setting (Gmax), s		43.8			10.0	29.8		14.8
Max Q Clear Time (g_c+I1), s		2.0			6.2	2.1		12.8
Green Ext Time (p_c), s		6.3			0.2	4.3		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	8.0
HCM 2010 LOS	A

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	77	15	11	509	703	120
Future Vol, veh/h	77	15	11	509	703	120
Conflicting Peds, #/hr	1	0	25	0	0	25
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	80	150	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	1	1	1
Mvmt Flow	89	17	13	585	808	138

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1514	902	971	0	-	0
Stage 1	902	-	-	-	-	-
Stage 2	612	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	133	339	718	-	-	-
Stage 1	399	-	-	-	-	-
Stage 2	545	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	125	332	703	-	-	-
Mov Cap-2 Maneuver	257	-	-	-	-	-
Stage 1	383	-	-	-	-	-
Stage 2	534	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	24.6	0.2	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	703	-	257	332	-	-
HCM Lane V/C Ratio	0.018	-	0.344	0.052	-	-
HCM Control Delay (s)	10.2	-	26.2	16.4	-	-
HCM Lane LOS	B	-	D	C	-	-
HCM 95th %tile Q(veh)	0.1	-	1.5	0.2	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	124	1	77	3	2	17	83	379	5	21	462	235
Future Volume (veh/h)	124	1	77	3	2	17	83	379	5	21	462	235
Number	7	4	14	3	8	18	1	6	16	5	2	12
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	1863	1881	1900	1900	1900	1900	1881	1863	1900	1900	1881	1900
Adj Flow Rate, veh/h	129	1	80	3	2	18	86	395	5	22	481	245
Adj No. of Lanes	1	1	0	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	0	0	0	0	0	1	2	2	0	1	1
Cap, veh/h	273	2	189	67	33	153	500	1265	16	743	779	397
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.05	0.69	0.69	0.02	0.66	0.66
Sat Flow, veh/h	1386	20	1582	78	279	1284	1792	1836	23	1810	1176	599
Grp Volume(v), veh/h	129	0	81	23	0	0	86	0	400	22	0	726
Grp Sat Flow(s),veh/h/ln	1386	0	1602	1641	0	0	1792	0	1859	1810	0	1774
Q Serve(g_s), s	5.2	0.0	3.3	0.0	0.0	0.0	1.0	0.0	6.0	0.3	0.0	16.4
Cycle Q Clear(g_c), s	6.1	0.0	3.3	0.9	0.0	0.0	1.0	0.0	6.0	0.3	0.0	16.4
Prop In Lane	1.00		0.99	0.13		0.78	1.00		0.01	1.00		0.34
Lane Grp Cap(c), veh/h	273	0	191	254	0	0	500	0	1281	743	0	1176
V/C Ratio(X)	0.47	0.00	0.42	0.09	0.00	0.00	0.17	0.00	0.31	0.03	0.00	0.62
Avail Cap(c_a), veh/h	425	0	366	428	0	0	520	0	1281	810	0	1176
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.7	0.0	28.6	27.5	0.0	0.0	5.3	0.0	4.3	3.7	0.0	6.7
Incr Delay (d2), s/veh	1.3	0.0	1.5	0.2	0.0	0.0	0.2	0.0	0.6	0.0	0.0	2.4
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	2.5	0.0	1.5	0.4	0.0	0.0	0.5	0.0	3.2	0.1	0.0	8.7
LnGrp Delay(d),s/veh	31.0	0.0	30.1	27.7	0.0	0.0	5.4	0.0	4.9	3.7	0.0	9.2
LnGrp LOS	C		C	C			A		A	A		A
Approach Vol, veh/h		210			23			486			748	
Approach Delay, s/veh		30.6			27.7			5.0			9.0	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.2	50.4		12.4	5.4	52.2		12.4
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	38.0		16.0	4.0	38.0		16.0
Max Q Clear Time (g_c+I1), s	3.0	18.4		8.1	2.3	8.0		2.9
Green Ext Time (p_c), s	0.0	6.0		0.4	0.0	3.0		0.0

Intersection Summary		
HCM 2010 Ctrl Delay		11.1
HCM 2010 LOS		B

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	0	13	10	1	25	25	412	18	27	483	32
Future Vol, veh/h	30	0	13	10	1	25	25	412	18	27	483	32
Conflicting Peds, #/hr	6	0	3	3	0	6	2	0	7	7	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	125	-	-	125	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	1	1	0	2	0
Mvmt Flow	31	0	14	10	1	26	26	429	19	28	503	33

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1088	1085	525	1084	1092	452	538	0	0	455	0	0
Stage 1	578	578	-	498	498	-	-	-	-	-	-	-
Stage 2	510	507	-	586	594	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	195	218	556	196	216	612	1040	-	-	1116	-	-
Stage 1	505	504	-	558	548	-	-	-	-	-	-	-
Stage 2	550	543	-	500	496	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	178	206	554	182	204	605	1038	-	-	1109	-	-
Mov Cap-2 Maneuver	178	206	-	182	204	-	-	-	-	-	-	-
Stage 1	491	490	-	541	531	-	-	-	-	-	-	-
Stage 2	510	526	-	474	483	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	25	16.3	0.5	0.4
HCM LOS	D	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1038	-	-	224	356	1109	-	-
HCM Lane V/C Ratio	0.025	-	-	0.2	0.105	0.025	-	-
HCM Control Delay (s)	8.6	-	-	25	16.3	8.3	-	-
HCM Lane LOS	A	-	-	D	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.7	0.4	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	432	3	11	386	147	4	1	31	157	6	65
Future Volume (veh/h)	71	432	3	11	386	147	4	1	31	157	6	65
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1900	1900	1900	1900	1900	1849	1900
Adj Flow Rate, veh/h	75	455	3	12	406	155	4	1	33	165	6	68
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	1	1	0
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, %	0	1	1	0	1	0	0	0	0	0	0	0
Cap, veh/h	647	2330	15	668	2184	984	258	8	261	296	21	242
Arrive On Green	0.04	0.64	0.64	0.01	0.61	0.61	0.17	0.17	0.17	0.17	0.17	0.17
Sat Flow, veh/h	1810	3640	24	1810	3574	1610	1345	48	1572	1394	129	1460
Grp Volume(v), veh/h	75	223	235	12	406	155	4	0	34	165	0	74
Grp Sat Flow(s),veh/h/ln	1810	1787	1877	1810	1787	1610	1345	0	1619	1394	0	1588
Q Serve(g_s), s	1.2	4.1	4.1	0.2	4.0	3.3	0.2	0.0	1.4	9.2	0.0	3.3
Cycle Q Clear(g_c), s	1.2	4.1	4.1	0.2	4.0	3.3	3.5	0.0	1.4	10.6	0.0	3.3
Prop In Lane	1.00		0.01	1.00		1.00	1.00		0.97	1.00		0.92
Lane Grp Cap(c), veh/h	647	1144	1201	668	2184	984	258	0	268	296	0	263
V/C Ratio(X)	0.12	0.20	0.20	0.02	0.19	0.16	0.02	0.00	0.13	0.56	0.00	0.28
Avail Cap(c_a), veh/h	788	1144	1201	794	2184	984	531	0	597	579	0	586
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	0.89	0.89	0.89	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.9	5.9	5.9	5.7	6.8	6.7	30.7	0.0	28.4	32.9	0.0	29.2
Incr Delay (d2), s/veh	0.1	0.4	0.4	0.0	0.2	0.3	0.0	0.0	0.2	1.6	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	0.6	2.1	2.2	0.1	2.0	1.5	0.1	0.0	0.7	3.7	0.0	1.5
LnGrp Delay(d),s/veh	5.0	6.3	6.3	5.8	7.0	7.0	30.7	0.0	28.6	34.6	0.0	29.8
LnGrp LOS	A	A	A	A	A	A	C		C	C		C
Approach Vol, veh/h		533			573			38			239	
Approach Delay, s/veh		6.1			7.0			28.9			33.1	
Approach LOS		A			A			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.7	54.5		18.8	4.4	56.8		18.8
Change Period (Y+Rc), s	3.5	5.6		5.5	3.5	5.6		5.5
Max Green Setting (Gmax), s	9.5	26.4		29.5	6.5	29.4		29.5
Max Q Clear Time (g_c+I1), s	3.2	6.0		5.5	2.2	6.1		12.6
Green Ext Time (p_c), s	0.1	3.4		0.1	0.0	3.1		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	11.8
HCM 2010 LOS	B

Notes

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	274	141	205	154	101	41	170	534	104	34	865	273
Future Volume (veh/h)	274	141	205	154	101	41	170	534	104	34	865	273
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1810	1810	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	298	153	223	167	110	45	185	580	113	37	940	297
Adj No. of Lanes	2	1	1	1	2	0	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	5	5	5	3	3	3	3	3	3
Cap, veh/h	391	320	472	203	425	166	222	1172	228	49	1059	652
Arrive On Green	0.11	0.17	0.17	0.12	0.18	0.18	0.13	0.40	0.40	0.03	0.30	0.30
Sat Flow, veh/h	3442	1863	1583	1723	2418	944	1757	2928	569	1757	3505	1568
Grp Volume(v), veh/h	298	153	223	167	77	78	185	347	346	37	940	297
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1723	1719	1643	1757	1752	1744	1757	1752	1568
Q Serve(g_s), s	6.7	5.9	9.2	7.6	3.1	3.3	8.2	11.8	11.9	1.7	20.5	10.9
Cycle Q Clear(g_c), s	6.7	5.9	9.2	7.6	3.1	3.3	8.2	11.8	11.9	1.7	20.5	10.9
Prop In Lane	1.00		1.00	1.00		0.57	1.00		0.33	1.00		1.00
Lane Grp Cap(c), veh/h	391	320	472	203	302	289	222	701	698	49	1059	652
V/C Ratio(X)	0.76	0.48	0.47	0.82	0.25	0.27	0.83	0.49	0.50	0.75	0.89	0.46
Avail Cap(c_a), veh/h	538	320	472	243	302	289	242	701	698	132	1095	668
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)	0.96	0.96	0.96	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.4	29.9	23.0	34.5	28.4	28.5	34.1	17.9	18.0	38.6	26.6	16.9
Incr Delay (d2), s/veh	4.1	4.9	3.2	17.3	2.0	2.3	20.3	0.5	0.5	20.2	8.9	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	3.4	3.5	4.5	4.6	1.6	1.7	5.3	5.8	5.8	1.1	11.2	4.8
LnGrp Delay(d),s/veh	38.5	34.8	26.2	51.8	30.5	30.8	54.5	18.5	18.5	58.8	35.5	17.4
LnGrp LOS	D	C	C	D	C	C	D	B	B	E	D	B
Approach Vol, veh/h		674			322			878			1274	
Approach Delay, s/veh		33.6			41.6			26.1			32.0	
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	14.6	20.2	6.2	39.0	14.9	19.8	14.1	31.2
Change Period (Y+Rc), s	5.5	6.1	4.0	7.0	5.5	6.1	4.0	7.0
Max Green Setting (Gmax), s	12.5	8.9	6.0	30.0	11.3	10.1	11.0	25.0
Max Q Clear Time (g_c+I1), s	8.7	5.3	3.7	13.9	9.6	11.2	10.2	22.5
Green Ext Time (p_c), s	0.4	0.3	0.0	3.9	0.1	0.0	0.0	1.7

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)	39	272	50	107	541	98	120	284	320	192	219	113
Future Volume (veh/h)	39	272	50	107	541	98	120	284	320	192	219	113
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1812	1900	1792	1845	1681	1845	1767	1900	1827	1792	1881
Adj Flow Rate, veh/h	43	299	55	117	594	108	132	312	351	211	240	124
Adj No. of Lanes	1	2	0	1	2	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, %	3	3	3	6	3	13	3	7	7	4	6	1
Cap, veh/h	249	501	91	348	729	457	481	390	349	319	863	488
Arrive On Green	0.05	0.17	0.17	0.09	0.21	0.21	0.09	0.23	0.23	0.11	0.25	0.25
Sat Flow, veh/h	1757	2911	529	1707	3505	1429	1757	1679	1502	1740	3406	1599
Grp Volume(v), veh/h	43	175	179	117	594	108	132	312	351	211	240	124
Grp Sat Flow(s),veh/h/ln	1757	1721	1719	1707	1752	1429	1757	1679	1502	1740	1703	1599
Q Serve(g_s), s	1.1	5.5	5.6	3.2	9.4	3.2	3.2	10.2	13.5	5.3	3.3	3.4
Cycle Q Clear(g_c), s	1.1	5.5	5.6	3.2	9.4	3.2	3.2	10.2	13.5	5.3	3.3	3.4
Prop In Lane	1.00		0.31	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	249	296	296	348	729	457	481	390	349	319	863	488
V/C Ratio(X)	0.17	0.59	0.60	0.34	0.81	0.24	0.27	0.80	1.01	0.66	0.28	0.25
Avail Cap(c_a), veh/h	340	320	319	381	729	457	506	390	349	319	863	488
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	18.4	22.2	22.2	17.4	21.9	14.5	14.4	21.0	22.3	15.8	17.4	15.2
Incr Delay (d2), s/veh	0.3	2.5	2.8	0.6	7.1	0.3	0.3	11.2	49.6	5.0	0.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	2.8	2.9	1.5	5.3	1.3	1.6	5.9	10.3	2.9	1.6	1.5
LnGrp Delay(d),s/veh	18.8	24.7	25.0	18.0	29.0	14.8	14.7	32.3	71.9	20.8	17.6	15.5
LnGrp LOS	B	C	C	B	C	B	B	C	F	C	B	B
Approach Vol, veh/h		397			819			795			575	
Approach Delay, s/veh		24.2			25.6			46.9			18.3	
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	10.8	20.7	10.6	16.0	12.0	19.5	8.5	18.1
Change Period (Y+Rc), s	5.5	6.0	5.5	6.0	5.5	6.0	5.5	6.0
Max Green Setting (Gmax), s	6.1	13.9	6.2	10.8	6.5	13.5	6.0	11.0
Max Q Clear Time (g_c+I1), s	5.2	5.4	5.2	7.6	7.3	15.5	3.1	11.4
Green Ext Time (p_c), s	0.0	1.2	0.0	0.6	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	30.3
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	11	1	718	368	8
Future Vol, veh/h	6	11	1	718	368	8
Conflicting Peds, #/hr	0	0	3	0	0	3
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	86	86	86	86	86	86
Heavy Vehicles, %	0	18	4	4	0	8
Mvmt Flow	7	13	1	843	432	9

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	864	224	444	0	-	0
Stage 1	440	-	-	-	-	-
Stage 2	424	-	-	-	-	-
Critical Hdwy	6.8	7.26	4.18	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.48	2.24	-	-	-
Pot Cap-1 Maneuver	297	732	1098	-	-	-
Stage 1	622	-	-	-	-	-
Stage 2	634	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	295	730	1095	-	-	-
Mov Cap-2 Maneuver	295	-	-	-	-	-
Stage 1	620	-	-	-	-	-
Stage 2	633	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.8	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1095	-	480	-	-
HCM Lane V/C Ratio	0.001	-	0.041	-	-
HCM Control Delay (s)	8.3	0	12.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	6	713	3	1	378
Future Vol, veh/h	4	6	713	3	1	378
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	0	4	0	0	8
Mvmt Flow	5	7	837	3	1	444

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1063	420	0	0	840	0
Stage 1	839	-	-	-	-	-
Stage 2	224	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	222	588	-	-	804	-
Stage 1	389	-	-	-	-	-
Stage 2	798	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	222	588	-	-	804	-
Mov Cap-2 Maneuver	222	-	-	-	-	-
Stage 1	388	-	-	-	-	-
Stage 2	798	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.5	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	354	804	-
HCM Lane V/C Ratio	-	-	0.033	0.001	-
HCM Control Delay (s)	-	-	15.5	9.5	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	11	9	10	705	373	9
Future Vol, veh/h	11	9	10	705	373	9
Conflicting Peds, #/hr	0	0	1	0	0	1
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	89	89	89	89	89	89
Heavy Vehicles, %	11	45	0	2	5	20
Mvmt Flow	12	10	11	800	423	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	851	218	434	0	-	0
Stage 1	429	-	-	-	-	-
Stage 2	422	-	-	-	-	-
Critical Hdwy	7.02	7.8	4.1	-	-	-
Critical Hdwy Stg 1	6.02	-	-	-	-	-
Critical Hdwy Stg 2	6.02	-	-	-	-	-
Follow-up Hdwy	3.61	3.75	2.2	-	-	-
Pot Cap-1 Maneuver	282	669	1136	-	-	-
Stage 1	599	-	-	-	-	-
Stage 2	604	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	277	668	1135	-	-	-
Mov Cap-2 Maneuver	277	-	-	-	-	-
Stage 1	588	-	-	-	-	-
Stage 2	603	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.2	0.2	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1135	-	376	-	-
HCM Lane V/C Ratio	0.01	-	0.06	-	-
HCM Control Delay (s)	8.2	0.1	15.2	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	1	17	3	3	20	17	658	1	3	335	44
Future Volume (veh/h)	37	1	17	3	3	20	17	658	1	3	335	44
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	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	1900	1824	1900	1900	1825	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	45	1	20	4	4	24	20	801	1	4	408	53
Adj No. of Lanes	0	1	0	0	1	0	0	2	0	0	2	0
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	6	6	6	33	33	33	0	0	0	0	0	0
Cap, veh/h	138	2	28	58	18	75	81	2835	3	51	2514	322
Arrive On Green	0.06	0.06	0.06	0.06	0.06	0.06	1.00	1.00	1.00	0.80	0.80	0.80
Sat Flow, veh/h	1013	39	457	121	288	1226	43	3538	4	7	3136	402
Grp Volume(v), veh/h	66	0	0	32	0	0	426	0	396	247	0	218
Grp Sat Flow(s),veh/h/ln	1509	0	0	1635	0	0	1857	0	1728	1888	0	1657
Q Serve(g_s), s	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4
Cycle Q Clear(g_c), s	3.3	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	2.4	0.0	2.4
Prop In Lane	0.68		0.30	0.12		0.75	0.05		0.00	0.02		0.24
Lane Grp Cap(c), veh/h	168	0	0	150	0	0	1535	0	1385	1559	0	1328
V/C Ratio(X)	0.39	0.00	0.00	0.21	0.00	0.00	0.28	0.00	0.29	0.16	0.00	0.16
Avail Cap(c_a), veh/h	388	0	0	393	0	0	1535	0	1385	1559	0	1328
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	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	36.7	0.0	0.0	36.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	1.8
Incr Delay (d2), s/veh	1.5	0.0	0.0	0.7	0.0	0.0	0.4	0.0	0.5	0.2	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	0.0	0.7	0.0	0.0	0.2	0.0	0.2	1.3	0.0	1.2
LnGrp Delay(d),s/veh	38.2	0.0	0.0	36.7	0.0	0.0	0.4	0.0	0.5	2.0	0.0	2.1
LnGrp LOS	D			D			A		A	A		A
Approach Vol, veh/h		66			32			822			465	
Approach Delay, s/veh		38.2			36.7			0.5			2.1	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		69.6		10.4		69.6		10.4
Change Period (Y+Rc), s		5.5		5.5		5.5		5.5
Max Green Setting (Gmax), s		51.5		17.5		51.5		17.5
Max Q Clear Time (g_c+I1), s		4.4		5.3		2.0		3.5
Green Ext Time (p_c), s		3.2		0.2		6.4		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	3.6
HCM 2010 LOS	A

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	11	61	80	665	346	9
Future Vol, veh/h	11	61	80	665	346	9
Conflicting Peds, #/hr	0	0	16	0	0	16
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, %	0	0	8	2	4	22
Mvmt Flow	13	70	92	772	402	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	993	222	428	0	-	0
Stage 1	423	-	-	-	-	-
Stage 2	570	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.26	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.28	-	-	-
Pot Cap-1 Maneuver	246	788	1086	-	-	-
Stage 1	635	-	-	-	-	-
Stage 2	535	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	204	777	1072	-	-	-
Mov Cap-2 Maneuver	204	-	-	-	-	-
Stage 1	533	-	-	-	-	-
Stage 2	528	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.8	1.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1072	-	544	-	-
HCM Lane V/C Ratio	0.086	-	0.152	-	-
HCM Control Delay (s)	8.7	0.5	12.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.3	-	0.5	-	-



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	76	189	556	200	106	301
Future Volume (veh/h)	76	189	556	200	106	301
Number	3	18	6	16	5	2
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	1792	1863	1838	1900	1900	1772
Adj Flow Rate, veh/h	108	269	624	284	119	338
Adj No. of Lanes	1	1	2	0	0	2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	6	2	4	4	8	8
Cap, veh/h	346	321	1528	695	344	1145
Arrive On Green	0.20	0.20	0.65	0.65	1.00	1.00
Sat Flow, veh/h	1707	1583	2426	1062	409	1829
Grp Volume(v), veh/h	108	269	467	441	173	284
Grp Sat Flow(s),veh/h/ln	1707	1583	1746	1651	625	1532
Q Serve(g_s), s	4.3	13.1	10.1	10.1	5.1	0.0
Cycle Q Clear(g_c), s	4.3	13.1	10.1	10.1	15.2	0.0
Prop In Lane	1.00	1.00		0.64	0.69	
Lane Grp Cap(c), veh/h	346	321	1143	1081	485	1003
V/C Ratio(X)	0.31	0.84	0.41	0.41	0.36	0.28
Avail Cap(c_a), veh/h	525	487	1143	1081	485	1003
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.1	30.6	6.5	6.5	1.3	0.0
Incr Delay (d2), s/veh	0.5	7.8	1.1	1.1	2.0	0.7
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	6.4	5.1	4.9	1.2	0.2
LnGrp Delay(d),s/veh	27.6	38.4	7.6	7.7	3.3	0.7
LnGrp LOS	C	D	A	A	A	A
Approach Vol, veh/h	377		908			457
Approach Delay, s/veh	35.3		7.6			1.7
Approach LOS	D		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		58.4				58.4		21.6
Change Period (Y+Rc), s		6.0				6.0		5.4
Max Green Setting (Gmax), s		44.0				44.0		24.6
Max Q Clear Time (g_c+I1), s		17.2				12.1		15.1
Green Ext Time (p_c), s		3.9				7.2		1.2

Intersection Summary	
HCM 2010 Ctrl Delay	12.1
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	80	12	5	676	347	30
Future Vol, veh/h	80	12	5	676	347	30
Conflicting Peds, #/hr	0	1	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	0	0	3	3	4	3
Mvmt Flow	101	15	6	1095	562	38

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1141	301	600	0	-	0
Stage 1	581	-	-	-	-	-
Stage 2	560	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.16	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.23	-	-	-
Pot Cap-1 Maneuver	197	701	966	-	-	-
Stage 1	528	-	-	-	-	-
Stage 2	541	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	194	700	966	-	-	-
Mov Cap-2 Maneuver	194	-	-	-	-	-
Stage 1	520	-	-	-	-	-
Stage 2	541	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	38	0.1	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	966	-	194	700	-	-
HCM Lane V/C Ratio	0.007	-	0.522	0.022	-	-
HCM Control Delay (s)	8.8	0.1	42.2	10.3	-	-
HCM Lane LOS	A	A	E	B	-	-
HCM 95th %tile Q(veh)	0	-	2.7	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	256	1	115	5	0	34	55	391	3	7	265	87
Future Volume (veh/h)	256	1	115	5	0	34	55	391	3	7	265	87
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1728	1900	1900	1805	1900	1900	1836	1900	1900	1807	1900
Adj Flow Rate, veh/h	356	1	158	5	0	37	75	536	4	10	363	121
Adj No. of Lanes	1	1	0	0	1	0	0	2	0	0	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, %	3	0	0	0	0	0	3	3	3	4	4	4
Cap, veh/h	655	3	515	94	5	108	200	1236	9	86	1031	333
Arrive On Green	0.18	0.35	0.35	0.08	0.00	0.08	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	1757	9	1460	116	63	1325	254	2960	22	19	2468	798
Grp Volume(v), veh/h	356	0	159	42	0	0	306	0	309	267	0	227
Grp Sat Flow(s),veh/h/ln	1757	0	1469	1504	0	0	1568	0	1667	1785	0	1500
Q Serve(g_s), s	8.5	0.0	3.8	0.0	0.0	0.0	0.0	0.0	6.3	0.0	0.0	5.0
Cycle Q Clear(g_c), s	8.5	0.0	3.8	1.2	0.0	0.0	5.6	0.0	6.3	4.8	0.0	5.0
Prop In Lane	1.00		0.99	0.12		0.88	0.24		0.01	0.04		0.53
Lane Grp Cap(c), veh/h	655	0	518	206	0	0	749	0	696	824	0	627
V/C Ratio(X)	0.54	0.00	0.31	0.20	0.00	0.00	0.41	0.00	0.44	0.32	0.00	0.36
Avail Cap(c_a), veh/h	655	0	890	580	0	0	749	0	696	824	0	627
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.7	0.0	11.3	20.8	0.0	0.0	9.7	0.0	10.0	9.5	0.0	9.6
Incr Delay (d2), s/veh	0.9	0.0	0.3	0.5	0.0	0.0	1.7	0.0	2.0	1.0	0.0	1.6
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	4.1	0.0	1.5	0.6	0.0	0.0	3.2	0.0	3.3	2.6	0.0	2.3
LnGrp Delay(d),s/veh	15.6	0.0	11.6	21.3	0.0	0.0	11.4	0.0	12.0	10.6	0.0	11.2
LnGrp LOS	B		B	C			B		B	B		B
Approach Vol, veh/h		515			42			615			494	
Approach Delay, s/veh		14.4			21.3			11.7			10.9	
Approach LOS		B			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6	7	8
Phs Duration (G+Y+Rc), s		25.5		22.4		25.5	13.0	9.4
Change Period (Y+Rc), s		5.5		5.5		5.5	4.5	5.5
Max Green Setting (Gmax), s		20.0		29.0		20.0	8.5	16.0
Max Q Clear Time (g_c+I1), s		7.0		5.8		8.3	10.5	3.2
Green Ext Time (p_c), s		3.0		0.6		3.6	0.0	0.1

Intersection Summary		
HCM 2010 Ctrl Delay		12.5
HCM 2010 LOS		B

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	27	1	24	15	0	25	4	397	9	12	361	12
Future Vol, veh/h	27	1	24	15	0	25	4	397	9	12	361	12
Conflicting Peds, #/hr	0	0	1	1	0	0	3	0	5	5	0	3
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	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	0	0	4	0	0	4	0	5	5	8	6	0
Mvmt Flow	31	1	28	17	0	29	5	575	10	14	523	14

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	859	1161	273	886	1163	298	540	0	0	590	0	0
Stage 1	561	561	-	595	595	-	-	-	-	-	-	-
Stage 2	298	600	-	291	568	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.98	7.5	6.5	6.98	4.1	-	-	4.26	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.34	3.5	4	3.34	2.2	-	-	2.28	-	-
Pot Cap-1 Maneuver	253	197	719	242	196	692	1039	-	-	941	-	-
Stage 1	485	513	-	463	496	-	-	-	-	-	-	-
Stage 2	692	493	-	698	510	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	237	190	717	226	189	689	1036	-	-	937	-	-
Mov Cap-2 Maneuver	237	190	-	226	189	-	-	-	-	-	-	-
Stage 1	481	501	-	458	491	-	-	-	-	-	-	-
Stage 2	658	488	-	655	498	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17.8	15.5	0.1	0.3
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1036	-	-	341	390	937	-	-
HCM Lane V/C Ratio	0.004	-	-	0.175	0.118	0.015	-	-
HCM Control Delay (s)	8.5	0	-	17.8	15.5	8.9	0.1	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.6	0.4	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	329	10	27	347	175	3	0	9	147	3	60
Future Volume (veh/h)	61	329	10	27	347	175	3	0	9	147	3	60
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1846	1900	1900	1845	1845	1900	1900	1900	1881	1900	1900
Adj Flow Rate, veh/h	69	466	11	30	460	197	3	0	10	165	3	67
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	1	1	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	3	3	0	3	3	0	0	0	1	0	0
Cap, veh/h	611	2248	53	681	2198	982	242	0	244	296	11	235
Arrive On Green	0.04	0.64	0.64	0.02	0.63	0.63	0.15	0.00	0.15	0.15	0.15	0.15
Sat Flow, veh/h	1810	3502	83	1810	3505	1567	1350	0	1612	1410	70	1553
Grp Volume(v), veh/h	69	233	244	30	460	197	3	0	10	165	0	70
Grp Sat Flow(s),veh/h/ln	1810	1754	1831	1810	1752	1567	1350	0	1612	1410	0	1622
Q Serve(g_s), s	1.1	4.4	4.4	0.5	4.5	4.3	0.2	0.0	0.4	9.1	0.0	3.1
Cycle Q Clear(g_c), s	1.1	4.4	4.4	0.5	4.5	4.3	3.2	0.0	0.4	9.5	0.0	3.1
Prop In Lane	1.00		0.05	1.00		1.00	1.00		1.00	1.00		0.96
Lane Grp Cap(c), veh/h	611	1126	1175	681	2198	982	242	0	244	296	0	245
V/C Ratio(X)	0.11	0.21	0.21	0.04	0.21	0.20	0.01	0.00	0.04	0.56	0.00	0.29
Avail Cap(c_a), veh/h	755	1126	1175	784	2198	982	502	0	554	567	0	558
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	0.91	0.91	0.91	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.8	5.9	5.9	5.0	6.4	6.4	31.5	0.0	29.0	33.0	0.0	30.1
Incr Delay (d2), s/veh	0.1	0.4	0.4	0.0	0.2	0.4	0.0	0.0	0.1	1.6	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	0.5	2.2	2.3	0.2	2.2	2.0	0.1	0.0	0.2	3.7	0.0	1.4
LnGrp Delay(d),s/veh	4.9	6.3	6.3	5.0	6.6	6.8	31.6	0.0	29.1	34.7	0.0	30.7
LnGrp LOS	A	A	A	A	A	A	C		C	C		C
Approach Vol, veh/h		546			687			13			235	
Approach Delay, s/veh		6.1			6.6			29.6			33.5	
Approach LOS		A			A			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.6	55.8		17.6	5.4	57.0		17.6
Change Period (Y+Rc), s	3.5	5.6		5.5	3.5	5.6		5.5
Max Green Setting (Gmax), s	9.5	28.4		27.5	6.5	31.4		27.5
Max Q Clear Time (g_c+I1), s	3.1	6.5		5.2	2.5	6.4		11.5
Green Ext Time (p_c), s	0.1	4.4		0.0	0.0	3.6		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	10.9
HCM 2010 LOS	B

Notes

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	176	122	187	111	110	29	236	748	122	55	420	203
Future Volume (veh/h)	176	122	187	111	110	29	236	748	122	55	420	203
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1810	1667	1689	1900	1881	1810	1900	1863	1845	1827
Adj Flow Rate, veh/h	226	156	240	142	141	37	303	959	156	71	539	260
Adj No. of Lanes	2	1	1	2	2	0	2	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	5	14	15	15	1	5	5	2	3	4
Cap, veh/h	309	436	534	208	536	137	395	1080	176	91	1060	609
Arrive On Green	0.09	0.23	0.23	0.07	0.21	0.21	0.11	0.36	0.36	0.05	0.30	0.30
Sat Flow, veh/h	3442	1863	1538	3079	2533	646	3476	2962	482	1774	3505	1553
Grp Volume(v), veh/h	226	156	240	142	88	90	303	556	559	71	539	260
Grp Sat Flow(s),veh/h/ln	1721	1863	1538	1540	1604	1575	1738	1719	1725	1774	1752	1553
Q Serve(g_s), s	5.1	5.6	9.7	3.6	3.6	3.8	6.8	24.3	24.4	3.2	10.1	9.8
Cycle Q Clear(g_c), s	5.1	5.6	9.7	3.6	3.6	3.8	6.8	24.3	24.4	3.2	10.1	9.8
Prop In Lane	1.00		1.00	1.00		0.41	1.00		0.28	1.00		1.00
Lane Grp Cap(c), veh/h	309	436	534	208	340	333	395	627	629	91	1060	609
V/C Ratio(X)	0.73	0.36	0.45	0.68	0.26	0.27	0.77	0.89	0.89	0.78	0.51	0.43
Avail Cap(c_a), veh/h	366	436	534	250	340	333	521	666	668	133	1095	625
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)	0.96	0.96	0.96	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.5	25.6	20.2	36.5	26.3	26.4	34.4	23.9	23.9	37.5	23.0	17.7
Incr Delay (d2), s/veh	5.8	2.2	2.6	5.8	1.8	2.0	4.9	13.3	13.3	16.2	0.4	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	2.7	3.1	4.5	1.7	1.8	1.8	3.5	13.7	13.8	2.0	4.9	4.2
LnGrp Delay(d),s/veh	41.3	27.8	22.8	42.2	28.1	28.4	39.4	37.1	37.2	53.7	23.4	18.2
LnGrp LOS	D	C	C	D	C	C	D	D	D	D	C	B
Approach Vol, veh/h		622			320			1418			870	
Approach Delay, s/veh		30.8			34.5			37.7			24.3	
Approach LOS		C			C			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	12.7	23.0	8.1	36.2	10.9	24.8	13.1	31.2
Change Period (Y+Rc), s	5.5	6.1	4.0	7.0	5.5	6.1	4.0	7.0
Max Green Setting (Gmax), s	8.5	11.9	6.0	31.0	6.5	13.9	12.0	25.0
Max Q Clear Time (g_c+I1), s	7.1	5.8	5.2	26.4	5.6	11.7	8.8	12.1
Green Ext Time (p_c), s	0.1	0.5	0.0	2.8	0.0	0.4	0.3	3.7

Intersection Summary	
HCM 2010 Ctrl Delay	32.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	167	505	252	109	282	178	181	347	97	163	414	62
Future Volume (veh/h)	167	505	252	109	282	178	181	347	97	163	414	62
Number	7	4	14	3	8	18	1	6	16	5	2	12
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	1863	1821	1900	1792	1827	1827	1845	1833	1900	1827	1827	1863
Adj Flow Rate, veh/h	183	554	277	120	310	195	199	381	106	179	454	68
Adj No. of Lanes	1	2	0	1	2	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	3	3	6	4	4	3	3	3	4	4	2
Cap, veh/h	411	625	312	226	878	536	419	817	225	390	1026	621
Arrive On Green	0.10	0.28	0.28	0.07	0.25	0.25	0.03	0.10	0.10	0.09	0.30	0.30
Sat Flow, veh/h	1774	2237	1117	1707	3471	1553	1757	2701	743	1740	3471	1583
Grp Volume(v), veh/h	183	428	403	120	310	195	199	244	243	179	454	68
Grp Sat Flow(s),veh/h/ln	1774	1730	1624	1707	1736	1553	1757	1741	1702	1740	1736	1583
Q Serve(g_s), s	6.7	21.3	21.4	4.6	6.6	8.5	6.9	11.9	12.1	6.3	9.5	2.5
Cycle Q Clear(g_c), s	6.7	21.3	21.4	4.6	6.6	8.5	6.9	11.9	12.1	6.3	9.5	2.5
Prop In Lane	1.00		0.69	1.00		1.00	1.00		0.44	1.00		1.00
Lane Grp Cap(c), veh/h	411	483	453	226	878	536	419	527	515	390	1026	621
V/C Ratio(X)	0.45	0.89	0.89	0.53	0.35	0.36	0.47	0.46	0.47	0.46	0.44	0.11
Avail Cap(c_a), veh/h	429	519	487	267	999	590	469	527	515	432	1026	621
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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.5	31.1	31.1	24.6	27.6	22.1	20.6	33.6	33.7	19.7	25.7	17.4
Incr Delay (d2), s/veh	0.8	16.1	17.2	1.9	0.2	0.4	0.8	2.9	3.1	0.8	1.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	12.3	11.7	2.3	3.2	3.7	3.4	6.2	6.2	3.1	4.7	1.1
LnGrp Delay(d),s/veh	22.3	47.1	48.3	26.6	27.8	22.5	21.5	36.5	36.8	20.6	27.1	17.7
LnGrp LOS	C	D	D	C	C	C	C	D	D	C	C	B
Approach Vol, veh/h		1014			625			686			701	
Approach Delay, s/veh		43.1			25.9			32.3			24.5	
Approach LOS		D			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	14.5	32.6	11.8	31.1	13.8	33.2	14.2	28.8
Change Period (Y+Rc), s	5.5	6.0	5.5	6.0	5.5	6.0	5.5	6.0
Max Green Setting (Gmax), s	11.5	20.0	8.5	27.0	10.5	21.0	9.6	25.9
Max Q Clear Time (g_c+I1), s	8.9	11.5	6.6	23.4	8.3	14.1	8.7	10.5
Green Ext Time (p_c), s	0.1	2.0	0.0	1.7	0.1	1.6	0.0	2.3

Intersection Summary	
HCM 2010 Ctrl Delay	32.8
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	18	6	615	758	17
Future Vol, veh/h	10	18	6	615	758	17
Conflicting Peds, #/hr	1	1	10	0	0	10
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, %	0	0	0	1	0	1
Mvmt Flow	10	19	6	647	797	18

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1153	419	825	0	-	0
Stage 1	816	-	-	-	-	-
Stage 2	337	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	194	589	814	-	-	-
Stage 1	400	-	-	-	-	-
Stage 2	701	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	189	584	807	-	-	-
Mov Cap-2 Maneuver	189	-	-	-	-	-
Stage 1	392	-	-	-	-	-
Stage 2	695	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.8	0.2	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	807	-	334	-	-
HCM Lane V/C Ratio	0.008	-	0.087	-	-
HCM Control Delay (s)	9.5	0.1	16.8	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	7	8	613	6	6	770
Future Vol, veh/h	7	8	613	6	6	770
Conflicting Peds, #/hr	1	1	0	10	10	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, %	0	0	1	0	0	1
Mvmt Flow	7	8	645	6	6	810

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1076	337	0	0	661	0
Stage 1	658	-	-	-	-	-
Stage 2	418	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	217	665	-	-	937	-
Stage 1	482	-	-	-	-	-
Stage 2	638	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	212	659	-	-	929	-
Mov Cap-2 Maneuver	212	-	-	-	-	-
Stage 1	472	-	-	-	-	-
Stage 2	637	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.4	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	332	929	-
HCM Lane V/C Ratio	-	-	0.047	0.007	-
HCM Control Delay (s)	-	-	16.4	8.9	0.1
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

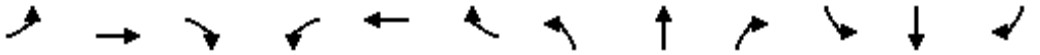
Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	13	27	19	606	768	16
Future Vol, veh/h	13	27	19	606	768	16
Conflicting Peds, #/hr	0	0	14	0	0	14
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, %	0	0	0	1	1	0
Mvmt Flow	14	28	20	638	808	17

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1190	427	839	0	-	0
Stage 1	831	-	-	-	-	-
Stage 2	359	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	183	582	804	-	-	-
Stage 1	393	-	-	-	-	-
Stage 2	683	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	172	575	795	-	-	-
Mov Cap-2 Maneuver	172	-	-	-	-	-
Stage 1	373	-	-	-	-	-
Stage 2	675	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.7	0.5	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	795	-	326	-	-
HCM Lane V/C Ratio	0.025	-	0.128	-	-
HCM Control Delay (s)	9.6	0.2	17.7	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	92	6	64	3	4	10	23	523	5	12	631	152
Future Volume (veh/h)	92	6	64	3	4	10	23	523	5	12	631	152
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	1.00		0.99	1.00		0.99	1.00		0.99
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	1900	1899	1900	1900	1900	1900	1900	1882	1900	1900	1885	1900
Adj Flow Rate, veh/h	97	6	67	3	4	11	24	556	5	13	671	160
Adj No. of Lanes	0	1	0	0	1	0	0	2	0	0	2	0
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, %	1	1	1	0	0	0	1	1	1	1	1	1
Cap, veh/h	174	16	83	65	75	147	110	2439	22	55	2053	483
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.74	0.74	0.74	0.49	0.49	0.49
Sat Flow, veh/h	798	117	596	133	538	1055	90	3303	29	19	2780	655
Grp Volume(v), veh/h	170	0	0	18	0	0	296	0	289	455	0	389
Grp Sat Flow(s),veh/h/ln	1511	0	0	1726	0	0	1716	0	1707	1862	0	1592
Q Serve(g_s), s	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0	13.3
Cycle Q Clear(g_c), s	9.8	0.0	0.0	0.8	0.0	0.0	4.4	0.0	4.8	13.1	0.0	13.3
Prop In Lane	0.57		0.39	0.17		0.61	0.08		0.02	0.03		0.41
Lane Grp Cap(c), veh/h	273	0	0	287	0	0	1310	0	1261	1416	0	1176
V/C Ratio(X)	0.62	0.00	0.00	0.06	0.00	0.00	0.23	0.00	0.23	0.32	0.00	0.33
Avail Cap(c_a), veh/h	538	0	0	572	0	0	1310	0	1261	1416	0	1176
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	37.5	0.0	0.0	33.7	0.0	0.0	3.6	0.0	3.7	9.2	0.0	9.3
Incr Delay (d2), s/veh	2.3	0.0	0.0	0.1	0.0	0.0	0.4	0.0	0.4	0.6	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	0.0	0.0	0.4	0.0	0.0	2.4	0.0	2.4	7.0	0.0	6.1
LnGrp Delay(d),s/veh	39.8	0.0	0.0	33.8	0.0	0.0	4.0	0.0	4.1	9.9	0.0	10.1
LnGrp LOS	D			C			A		A	A		B
Approach Vol, veh/h		170			18			585			844	
Approach Delay, s/veh		39.8			33.8			4.1			9.9	
Approach LOS		D			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		72.0		18.0		72.0		18.0
Change Period (Y+Rc), s		5.5		5.5		5.5		5.5
Max Green Setting (Gmax), s		50.5		28.5		50.5		28.5
Max Q Clear Time (g_c+I1), s		15.3		11.8		6.8		2.8
Green Ext Time (p_c), s		6.1		0.9		4.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	11.2
HCM 2010 LOS	B

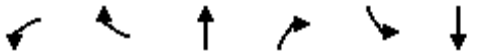
Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	9	185	215	542	677	21
Future Vol, veh/h	9	185	215	542	677	21
Conflicting Peds, #/hr	0	0	11	0	0	11
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	1	1	1	2	0
Mvmt Flow	10	201	234	595	743	23

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1532	394	777	0	-	0
Stage 1	766	-	-	-	-	-
Stage 2	766	-	-	-	-	-
Critical Hdwy	6.82	6.92	4.12	-	-	-
Critical Hdwy Stg 1	5.82	-	-	-	-	-
Critical Hdwy Stg 2	5.82	-	-	-	-	-
Follow-up Hdwy	3.51	3.31	2.21	-	-	-
Pot Cap-1 Maneuver	108	608	842	-	-	-
Stage 1	422	-	-	-	-	-
Stage 2	422	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	62	602	834	-	-	-
Mov Cap-2 Maneuver	62	-	-	-	-	-
Stage 1	243	-	-	-	-	-
Stage 2	418	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	21.2	4	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	834	-	429	-	-
HCM Lane V/C Ratio	0.28	-	0.492	-	-
HCM Control Delay (s)	11	1.3	21.2	-	-
HCM Lane LOS	B	A	C	-	-
HCM 95th %tile Q(veh)	1.2	-	2.6	-	-



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	186	275	482	176	225	637
Future Volume (veh/h)	186	275	482	176	225	637
Number	3	18	6	16	5	2
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	1900	1900	1881	1900	1900	1881
Adj Flow Rate, veh/h	238	289	507	226	237	670
Adj No. of Lanes	1	1	2	0	0	2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	1	1	1	1
Cap, veh/h	379	338	1405	623	394	1134
Arrive On Green	0.21	0.21	0.58	0.58	0.58	0.58
Sat Flow, veh/h	1810	1615	2501	1068	489	2029
Grp Volume(v), veh/h	238	289	376	357	361	546
Grp Sat Flow(s),veh/h/ln	1810	1615	1787	1688	806	1626
Q Serve(g_s), s	6.6	9.5	6.1	6.1	15.2	11.6
Cycle Q Clear(g_c), s	6.6	9.5	6.1	6.1	21.4	11.6
Prop In Lane	1.00	1.00		0.63	0.66	
Lane Grp Cap(c), veh/h	379	338	1043	985	579	949
V/C Ratio(X)	0.63	0.86	0.36	0.36	0.62	0.58
Avail Cap(c_a), veh/h	382	341	1043	985	579	949
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	19.8	20.9	6.0	6.0	10.4	7.2
Incr Delay (d2), s/veh	3.2	18.7	1.0	1.0	5.0	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	5.9	3.2	3.1	5.1	5.8
LnGrp Delay(d),s/veh	23.0	39.6	7.0	7.1	15.4	9.7
LnGrp LOS	C	D	A	A	B	A
Approach Vol, veh/h	527		733			907
Approach Delay, s/veh	32.1		7.0			12.0
Approach LOS	C		A			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		38.1				38.1		16.9
Change Period (Y+Rc), s		6.0				6.0		5.4
Max Green Setting (Gmax), s		32.0				32.0		11.6
Max Q Clear Time (g_c+I1), s		23.4				8.1		11.5
Green Ext Time (p_c), s		4.2				4.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	15.2
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	77	15	11	509	612	120
Future Vol, veh/h	77	15	11	509	612	120
Conflicting Peds, #/hr	1	0	25	0	0	25
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	1	1	1
Mvmt Flow	89	17	13	720	865	138

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1346	527	1028	0	-	0
Stage 1	959	-	-	-	-	-
Stage 2	387	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	145	501	683	-	-	-
Stage 1	337	-	-	-	-	-
Stage 2	662	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	135	491	669	-	-	-
Mov Cap-2 Maneuver	135	-	-	-	-	-
Stage 1	319	-	-	-	-	-
Stage 2	648	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	62.3	0.4	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	669	-	135	491	-	-
HCM Lane V/C Ratio	0.019	-	0.656	0.035	-	-
HCM Control Delay (s)	10.5	0.2	72	12.6	-	-
HCM Lane LOS	B	A	F	B	-	-
HCM 95th %tile Q(veh)	0.1	-	3.5	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	124	1	77	3	2	17	83	379	5	21	462	235
Future Volume (veh/h)	124	1	77	3	2	17	83	379	5	21	462	235
Number	7	4	14	3	8	18	1	6	16	5	2	12
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	1863	1881	1900	1900	1900	1900	1900	1866	1900	1900	1882	1900
Adj Flow Rate, veh/h	159	1	99	3	2	18	109	497	7	27	592	301
Adj No. of Lanes	1	1	0	0	1	0	0	2	0	0	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	0	0	0	0	0	2	2	2	1	1	1
Cap, veh/h	278	2	221	56	39	179	340	1615	23	81	1615	805
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.74	0.74	0.74	0.74	0.74	0.74
Sat Flow, veh/h	1386	16	1586	79	278	1282	382	2193	32	53	2195	1094
Grp Volume(v), veh/h	159	0	100	23	0	0	241	0	372	503	0	417
Grp Sat Flow(s),veh/h/ln	1386	0	1602	1639	0	0	915	0	1693	1824	0	1518
Q Serve(g_s), s	8.6	0.0	5.2	0.0	0.0	0.0	4.6	0.0	6.7	0.0	0.0	9.0
Cycle Q Clear(g_c), s	9.7	0.0	5.2	1.1	0.0	0.0	13.6	0.0	6.7	8.7	0.0	9.0
Prop In Lane	1.00		0.99	0.13		0.78	0.45		0.02	0.05		0.72
Lane Grp Cap(c), veh/h	278	0	223	274	0	0	731	0	1246	1385	0	1117
V/C Ratio(X)	0.57	0.00	0.45	0.08	0.00	0.00	0.33	0.00	0.30	0.36	0.00	0.37
Avail Cap(c_a), veh/h	507	0	488	536	0	0	731	0	1246	1385	0	1117
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	37.4	0.0	35.5	33.8	0.0	0.0	4.7	0.0	4.0	4.3	0.0	4.3
Incr Delay (d2), s/veh	1.9	0.0	1.4	0.1	0.0	0.0	1.2	0.0	0.6	0.7	0.0	1.0
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	4.0	0.0	2.4	0.5	0.0	0.0	2.7	0.0	3.3	4.8	0.0	4.0
LnGrp Delay(d),s/veh	39.2	0.0	36.9	33.9	0.0	0.0	5.9	0.0	4.6	5.0	0.0	5.3
LnGrp LOS	D		D	C			A		A	A		A
Approach Vol, veh/h		259			23			613			920	
Approach Delay, s/veh		38.3			33.9			5.1			5.1	
Approach LOS		D			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		71.9		18.1		71.9		18.1
Change Period (Y+Rc), s		5.6		5.6		5.6		5.6
Max Green Setting (Gmax), s		51.4		27.4		51.4		27.4
Max Q Clear Time (g_c+I1), s		11.0		11.7		15.6		3.1
Green Ext Time (p_c), s		7.2		0.9		5.0		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	10.2
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	0	13	10	1	25	25	412	18	27	483	32
Future Vol, veh/h	30	0	13	10	1	25	25	412	18	27	483	32
Conflicting Peds, #/hr	6	0	3	3	0	6	2	0	7	7	0	2
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	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	1	1	0	2	0
Mvmt Flow	31	0	14	10	1	26	33	541	24	35	634	42

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1070	1365	343	1016	1374	296	678	0	0	572	0	0
Stage 1	727	727	-	626	626	-	-	-	-	-	-	-
Stage 2	343	638	-	390	748	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	178	149	659	195	147	706	923	-	-	1011	-	-
Stage 1	386	432	-	443	480	-	-	-	-	-	-	-
Stage 2	651	474	-	611	423	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	156	132	656	174	131	698	921	-	-	1005	-	-
Mov Cap-2 Maneuver	156	132	-	174	131	-	-	-	-	-	-	-
Stage 1	365	407	-	417	452	-	-	-	-	-	-	-
Stage 2	590	447	-	563	398	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	27.7	16.3	0.7	0.6
HCM LOS	D	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	921	-	-	203	357	1005	-	-
HCM Lane V/C Ratio	0.036	-	-	0.221	0.105	0.035	-	-
HCM Control Delay (s)	9.1	0.2	-	27.7	16.3	8.7	0.2	-
HCM Lane LOS	A	A	-	D	C	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.8	0.3	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	432	3	11	386	147	4	1	31	157	6	65
Future Volume (veh/h)	71	432	3	11	386	147	4	1	31	157	6	65
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1900	1900	1900	1900	1900	1849	1900
Adj Flow Rate, veh/h	88	537	4	15	512	195	4	1	33	165	6	68
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	1	1	0
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, %	0	1	1	0	1	0	0	0	0	0	0	0
Cap, veh/h	583	2400	18	632	2268	1021	245	8	257	283	21	239
Arrive On Green	0.04	0.66	0.66	0.01	0.63	0.63	0.16	0.16	0.16	0.16	0.16	0.16
Sat Flow, veh/h	1810	3636	27	1810	3574	1610	1345	48	1572	1394	129	1460
Grp Volume(v), veh/h	88	264	277	15	512	195	4	0	34	165	0	74
Grp Sat Flow(s),veh/h/ln	1810	1787	1876	1810	1787	1610	1345	0	1619	1394	0	1588
Q Serve(g_s), s	1.5	5.3	5.3	0.3	5.5	4.5	0.2	0.0	1.6	10.3	0.0	3.7
Cycle Q Clear(g_c), s	1.5	5.3	5.3	0.3	5.5	4.5	3.9	0.0	1.6	11.9	0.0	3.7
Prop In Lane	1.00		0.01	1.00		1.00	1.00		0.97	1.00		0.92
Lane Grp Cap(c), veh/h	583	1180	1239	632	2268	1021	245	0	265	283	0	260
V/C Ratio(X)	0.15	0.22	0.22	0.02	0.23	0.19	0.02	0.00	0.13	0.58	0.00	0.28
Avail Cap(c_a), veh/h	722	1180	1239	738	2268	1021	496	0	567	543	0	556
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	0.91	0.91	0.91	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.0	6.1	6.1	5.7	7.0	6.8	34.7	0.0	32.1	37.2	0.0	33.0
Incr Delay (d2), s/veh	0.1	0.4	0.4	0.0	0.2	0.4	0.0	0.0	0.2	1.9	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	0.7	2.7	2.8	0.1	2.8	2.1	0.1	0.0	0.7	4.1	0.0	1.6
LnGrp Delay(d),s/veh	5.1	6.5	6.5	5.7	7.2	7.2	34.7	0.0	32.4	39.1	0.0	33.6
LnGrp LOS	A	A	A	A	A	A	C		C	D		C
Approach Vol, veh/h		629			722			38			239	
Approach Delay, s/veh		6.3			7.2			32.6			37.4	
Approach LOS		A			A			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.1	62.7		20.2	4.8	65.0		20.2
Change Period (Y+Rc), s	3.5	5.6		5.5	3.5	5.6		5.5
Max Green Setting (Gmax), s	10.5	33.4		31.5	6.5	37.4		31.5
Max Q Clear Time (g_c+I1), s	3.5	7.5		5.9	2.3	7.3		13.9
Green Ext Time (p_c), s	0.1	4.2		0.1	0.0	3.3		0.8

Intersection Summary	
HCM 2010 Ctrl Delay	11.9
HCM 2010 LOS	B

Notes

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	274	141	205	154	101	41	170	534	104	34	865	273
Future Volume (veh/h)	274	141	205	154	101	41	170	534	104	34	865	273
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1810	1810	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	351	181	263	198	130	53	218	685	133	44	1109	350
Adj No. of Lanes	2	1	1	2	2	0	2	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	5	5	5	3	3	3	3	3	3
Cap, veh/h	431	431	500	269	451	176	289	1188	230	55	1235	749
Arrive On Green	0.13	0.23	0.23	0.08	0.19	0.19	0.08	0.41	0.41	0.03	0.35	0.35
Sat Flow, veh/h	3442	1863	1583	3343	2419	944	3408	2929	568	1757	3505	1568
Grp Volume(v), veh/h	351	181	263	198	91	92	218	410	408	44	1109	350
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1672	1719	1643	1704	1752	1744	1757	1752	1568
Q Serve(g_s), s	8.9	7.4	12.3	5.2	4.1	4.4	5.6	16.3	16.4	2.2	27.0	13.5
Cycle Q Clear(g_c), s	8.9	7.4	12.3	5.2	4.1	4.4	5.6	16.3	16.4	2.2	27.0	13.5
Prop In Lane	1.00		1.00	1.00		0.57	1.00		0.33	1.00		1.00
Lane Grp Cap(c), veh/h	431	431	500	269	321	306	289	711	708	55	1235	749
V/C Ratio(X)	0.81	0.42	0.53	0.74	0.28	0.30	0.76	0.58	0.58	0.80	0.90	0.47
Avail Cap(c_a), veh/h	516	431	500	316	321	306	303	711	708	117	1285	771
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)	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.3	29.4	25.2	40.4	31.4	31.5	40.3	20.7	20.8	43.3	27.6	15.8
Incr Delay (d2), s/veh	7.9	2.9	3.7	7.3	2.2	2.5	9.9	1.1	1.2	22.1	8.5	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	4.7	4.2	5.9	2.7	2.1	2.2	3.0	8.1	8.1	1.4	14.4	5.9
LnGrp Delay(d),s/veh	46.3	32.3	29.0	47.8	33.6	34.1	50.2	21.9	21.9	65.4	36.1	16.3
LnGrp LOS	D	C	C	D	C	C	D	C	C	E	D	B
Approach Vol, veh/h		795			381			1036			1503	
Approach Delay, s/veh		37.4			41.1			27.9			32.3	
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	16.8	22.9	6.8	43.5	12.7	26.9	11.6	38.7
Change Period (Y+Rc), s	5.5	6.1	4.0	7.0	5.5	6.1	4.0	7.0
Max Green Setting (Gmax), s	13.5	12.9	6.0	35.0	8.5	17.9	8.0	33.0
Max Q Clear Time (g_c+I1), s	10.9	6.4	4.2	18.4	7.2	14.3	7.6	29.0
Green Ext Time (p_c), s	0.3	0.5	0.0	4.2	0.1	0.7	0.0	2.7

Intersection Summary	
HCM 2010 Ctrl Delay	33.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	272	50	107	541	98	120	284	320	192	219	113
Future Volume (veh/h)	39	272	50	107	541	98	120	284	320	192	219	113
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1812	1900	1792	1845	1681	1845	1767	1900	1827	1792	1881
Adj Flow Rate, veh/h	43	299	55	117	594	108	132	312	351	211	240	124
Adj No. of Lanes	1	2	0	1	2	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, %	3	3	3	6	3	13	3	7	7	4	6	1
Cap, veh/h	190	515	94	285	723	431	581	669	599	408	1464	758
Arrive On Green	0.04	0.18	0.18	0.07	0.21	0.21	0.06	0.40	0.40	0.10	0.43	0.43
Sat Flow, veh/h	1757	2911	529	1707	3505	1429	1757	1679	1502	1740	3406	1599
Grp Volume(v), veh/h	43	175	179	117	594	108	132	312	351	211	240	124
Grp Sat Flow(s),veh/h/ln	1757	1721	1719	1707	1752	1429	1757	1679	1502	1740	1703	1599
Q Serve(g_s), s	1.8	8.4	8.6	5.0	14.6	5.1	3.9	12.4	16.5	6.3	3.9	4.0
Cycle Q Clear(g_c), s	1.8	8.4	8.6	5.0	14.6	5.1	3.9	12.4	16.5	6.3	3.9	4.0
Prop In Lane	1.00		0.31	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	190	305	304	285	723	431	581	669	599	408	1464	758
V/C Ratio(X)	0.23	0.58	0.59	0.41	0.82	0.25	0.23	0.47	0.59	0.52	0.16	0.16
Avail Cap(c_a), veh/h	236	411	411	289	857	486	599	669	599	546	1464	758
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	28.8	33.9	34.0	27.6	34.1	23.7	14.0	20.0	21.2	15.2	15.7	13.5
Incr Delay (d2), s/veh	0.6	1.7	1.8	0.9	5.6	0.3	0.2	2.3	4.2	1.0	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	0.9	4.1	4.2	2.4	7.6	2.1	1.9	6.2	7.5	3.1	1.9	1.8
LnGrp Delay(d),s/veh	29.4	35.6	35.8	28.6	39.7	24.0	14.2	22.3	25.4	16.2	16.0	14.0
LnGrp LOS	C	D	D	C	D	C	B	C	C	B	B	B
Approach Vol, veh/h		397			819			795			575	
Approach Delay, s/veh		35.1			36.0			22.3			15.6	
Approach LOS		D			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	11.3	44.7	12.1	21.9	14.1	41.9	9.5	24.6
Change Period (Y+Rc), s	5.5	6.0	5.5	6.0	5.5	6.0	5.5	6.0
Max Green Setting (Gmax), s	6.7	32.0	6.8	21.5	15.7	23.0	6.3	22.0
Max Q Clear Time (g_c+I1), s	5.9	6.0	7.0	10.6	8.3	18.5	3.8	16.6
Green Ext Time (p_c), s	0.0	2.0	0.0	1.4	0.3	1.7	0.0	2.0

Intersection Summary	
HCM 2010 Ctrl Delay	27.1
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	11	1	718	368	8
Future Vol, veh/h	6	11	1	718	368	8
Conflicting Peds, #/hr	0	0	3	0	0	3
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	69	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	18	4	4	0	8
Mvmt Flow	7	13	1	843	432	9

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1285	440	444	0	-	0
Stage 1	440	-	-	-	-	-
Stage 2	845	-	-	-	-	-
Critical Hdwy	6.4	6.38	4.14	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.462	2.236	-	-	-
Pot Cap-1 Maneuver	183	585	1106	-	-	-
Stage 1	653	-	-	-	-	-
Stage 2	425	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	182	584	1103	-	-	-
Mov Cap-2 Maneuver	312	-	-	-	-	-
Stage 1	651	-	-	-	-	-
Stage 2	424	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1103	-	447	-	-
HCM Lane V/C Ratio	0.001	-	0.044	-	-
HCM Control Delay (s)	8.3	-	13.4	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	6	713	3	1	378
Future Vol, veh/h	4	6	713	3	1	378
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	69	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	0	4	0	0	8
Mvmt Flow	5	7	837	3	1	444

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1285	839	0	0	840	0
Stage 1	839	-	-	-	-	-
Stage 2	446	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	183	369	-	-	804	-
Stage 1	427	-	-	-	-	-
Stage 2	649	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	183	369	-	-	804	-
Mov Cap-2 Maneuver	313	-	-	-	-	-
Stage 1	427	-	-	-	-	-
Stage 2	649	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.8	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	344	804	-
HCM Lane V/C Ratio	-	-	0.034	0.001	-
HCM Control Delay (s)	-	-	15.8	9.5	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	11	9	10	705	373	9
Future Vol, veh/h	11	9	10	705	373	9
Conflicting Peds, #/hr	0	0	1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	150	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	11	45	0	2	5	20
Mvmt Flow	12	10	11	800	423	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1251	429	434	0	-	0
Stage 1	429	-	-	-	-	-
Stage 2	822	-	-	-	-	-
Critical Hdwy	6.51	6.65	4.1	-	-	-
Critical Hdwy Stg 1	5.51	-	-	-	-	-
Critical Hdwy Stg 2	5.51	-	-	-	-	-
Follow-up Hdwy	3.599	3.705	2.2	-	-	-
Pot Cap-1 Maneuver	183	544	1136	-	-	-
Stage 1	638	-	-	-	-	-
Stage 2	417	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	181	544	1135	-	-	-
Mov Cap-2 Maneuver	302	-	-	-	-	-
Stage 1	631	-	-	-	-	-
Stage 2	417	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1135	-	378	-	-
HCM Lane V/C Ratio	0.01	-	0.059	-	-
HCM Control Delay (s)	8.2	-	15.1	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	1	17	3	3	20	17	658	1	3	335	44
Future Volume (veh/h)	37	1	17	3	3	20	17	658	1	3	335	44
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	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	1900	1824	1900	1900	1825	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	45	1	20	4	4	24	20	801	1	4	408	53
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	6	6	6	33	33	33	0	0	0	0	0	0
Cap, veh/h	127	3	27	52	17	72	751	1461	2	609	1247	162
Arrive On Green	0.06	0.06	0.06	0.06	0.06	0.06	0.03	1.00	1.00	0.00	0.76	0.76
Sat Flow, veh/h	1002	47	456	116	292	1223	1810	1897	2	1810	1648	214
Grp Volume(v), veh/h	66	0	0	32	0	0	20	0	802	4	0	461
Grp Sat Flow(s),veh/h/ln	1505	0	0	1631	0	0	1810	0	1900	1810	0	1862
Q Serve(g_s), s	2.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	7.2
Cycle Q Clear(g_c), s	3.8	0.0	0.0	1.7	0.0	0.0	0.2	0.0	0.0	0.0	0.0	7.2
Prop In Lane	0.68		0.30	0.12		0.75	1.00		0.00	1.00		0.11
Lane Grp Cap(c), veh/h	156	0	0	141	0	0	751	0	1463	609	0	1409
V/C Ratio(X)	0.42	0.00	0.00	0.23	0.00	0.00	0.03	0.00	0.55	0.01	0.00	0.33
Avail Cap(c_a), veh/h	221	0	0	212	0	0	800	0	1463	682	0	1409
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	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	41.5	0.0	0.0	40.7	0.0	0.0	2.6	0.0	0.0	2.6	0.0	3.5
Incr Delay (d2), s/veh	1.8	0.0	0.0	0.8	0.0	0.0	0.0	0.0	1.5	0.0	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	1.7	0.0	0.0	0.8	0.0	0.0	0.1	0.0	0.6	0.0	0.0	3.8
LnGrp Delay(d),s/veh	43.3	0.0	0.0	41.5	0.0	0.0	2.6	0.0	1.5	2.6	0.0	4.2
LnGrp LOS	D			D			A		A	A		A
Approach Vol, veh/h		66			32			822			465	
Approach Delay, s/veh		43.3			41.5			1.5			4.1	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.6	73.6		10.8	4.4	74.8		10.8
Change Period (Y+Rc), s	4.0	5.5		5.5	4.0	5.5		5.5
Max Green Setting (Gmax), s	4.0	61.5		9.5	4.0	61.5		9.5
Max Q Clear Time (g_c+I1), s	2.2	9.2		5.8	2.0	2.0		3.7
Green Ext Time (p_c), s	0.0	3.4		0.1	0.0	7.6		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	5.3
HCM 2010 LOS	A

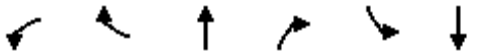
Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	11	61	80	665	346	9
Future Vol, veh/h	11	61	80	665	346	9
Conflicting Peds, #/hr	0	0	16	0	0	16
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	150	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	8	2	4	22
Mvmt Flow	13	70	92	772	402	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1379	423	428	0	-	0
Stage 1	423	-	-	-	-	-
Stage 2	956	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.18	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.272	-	-	-
Pot Cap-1 Maneuver	161	635	1100	-	-	-
Stage 1	665	-	-	-	-	-
Stage 2	376	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	143	627	1085	-	-	-
Mov Cap-2 Maneuver	226	-	-	-	-	-
Stage 1	600	-	-	-	-	-
Stage 2	371	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.8	0.9	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1085	-	493	-	-
HCM Lane V/C Ratio	0.085	-	0.168	-	-
HCM Control Delay (s)	8.6	-	13.8	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.3	-	0.6	-	-



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	76	189	556	200	106	301
Future Volume (veh/h)	76	189	556	200	106	301
Number	3	18	6	16	5	2
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	1792	1863	1827	1863	1810	1759
Adj Flow Rate, veh/h	108	269	624	284	119	338
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	6	2	4	2	5	8
Cap, veh/h	334	384	1071	1238	382	1193
Arrive On Green	0.20	0.20	0.59	0.59	0.09	1.00
Sat Flow, veh/h	1707	1583	1827	1583	1723	1759
Grp Volume(v), veh/h	108	269	624	284	119	338
Grp Sat Flow(s),veh/h/ln	1707	1583	1827	1583	1723	1759
Q Serve(g_s), s	4.9	13.9	19.3	4.3	2.4	0.0
Cycle Q Clear(g_c), s	4.9	13.9	19.3	4.3	2.4	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	334	384	1071	1238	382	1193
V/C Ratio(X)	0.32	0.70	0.58	0.23	0.31	0.28
Avail Cap(c_a), veh/h	713	736	1071	1238	492	1193
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.1	31.1	11.7	2.6	8.4	0.0
Incr Delay (d2), s/veh	0.6	2.3	2.3	0.4	0.5	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	6.3	10.4	3.7	1.1	0.2
LnGrp Delay(d),s/veh	31.7	33.4	14.0	3.0	8.9	0.6
LnGrp LOS	C	C	B	A	A	A
Approach Vol, veh/h	377		908			457
Approach Delay, s/veh	32.9		10.6			2.8
Approach LOS	C		B			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		67.0			8.3	58.8		23.0
Change Period (Y+Rc), s		6.0			4.0	6.0		5.4
Max Green Setting (Gmax), s		41.0			10.0	27.0		37.6
Max Q Clear Time (g_c+I1), s		2.0			4.4	21.3		15.9
Green Ext Time (p_c), s		2.3			0.1	2.6		1.6

Intersection Summary	
HCM 2010 Ctrl Delay	13.4
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	80	12	5	676	347	30
Future Vol, veh/h	80	12	5	676	347	30
Conflicting Peds, #/hr	0	1	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	70	150	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	0	0	3	3	4	3
Mvmt Flow	101	15	6	1095	562	38

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1141	582	600	0	-	0
Stage 1	581	-	-	-	-	-
Stage 2	560	-	-	-	-	-
Critical Hdwy	6.6	6.2	4.145	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2285	-	-	-
Pot Cap-1 Maneuver	210	517	969	-	-	-
Stage 1	563	-	-	-	-	-
Stage 2	541	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	209	517	969	-	-	-
Mov Cap-2 Maneuver	345	-	-	-	-	-
Stage 1	560	-	-	-	-	-
Stage 2	541	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.7	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	969	-	345	517	-	-
HCM Lane V/C Ratio	0.007	-	0.294	0.029	-	-
HCM Control Delay (s)	8.7	-	19.7	12.2	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0	-	1.2	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	256	1	115	5	0	34	55	391	3	7	265	87
Future Volume (veh/h)	256	1	115	5	0	34	55	391	3	7	265	87
Number	7	4	14	3	8	18	1	6	16	5	2	12
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	0.99		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1728	1900	1900	1805	1900	1776	1845	1900	1900	1827	1743
Adj Flow Rate, veh/h	356	1	158	5	0	37	75	536	4	10	363	121
Adj No. of Lanes	1	1	0	0	1	0	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, %	3	0	0	0	0	0	7	3	3	0	4	9
Cap, veh/h	472	2	385	51	4	70	497	1013	8	422	962	778
Arrive On Green	0.16	0.26	0.26	0.05	0.00	0.05	0.04	0.55	0.55	0.01	0.53	0.53
Sat Flow, veh/h	1757	9	1458	110	68	1320	1691	1829	14	1810	1827	1477
Grp Volume(v), veh/h	356	0	159	42	0	0	75	0	540	10	363	121
Grp Sat Flow(s),veh/h/ln	1757	0	1468	1498	0	0	1691	0	1843	1810	1827	1477
Q Serve(g_s), s	14.5	0.0	8.1	0.7	0.0	0.0	1.8	0.0	16.6	0.2	10.6	3.8
Cycle Q Clear(g_c), s	14.5	0.0	8.1	2.4	0.0	0.0	1.8	0.0	16.6	0.2	10.6	3.8
Prop In Lane	1.00		0.99	0.12		0.88	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	472	0	387	124	0	0	497	0	1021	422	962	778
V/C Ratio(X)	0.75	0.00	0.41	0.34	0.00	0.00	0.15	0.00	0.53	0.02	0.38	0.16
Avail Cap(c_a), veh/h	472	0	571	307	0	0	537	0	1021	485	962	778
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.0	0.0	27.4	41.5	0.0	0.0	9.6	0.0	12.7	10.9	12.6	11.0
Incr Delay (d2), s/veh	6.7	0.0	0.7	1.6	0.0	0.0	0.1	0.0	2.0	0.0	1.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.0	0.0	3.3	1.1	0.0	0.0	0.9	0.0	9.0	0.1	5.6	1.6
LnGrp Delay(d),s/veh	39.7	0.0	28.0	43.1	0.0	0.0	9.8	0.0	14.6	10.9	13.7	11.4
LnGrp LOS	D		C	D			A		B	B	B	B
Approach Vol, veh/h		515			42			615			494	
Approach Delay, s/veh		36.1			43.1			14.0			13.1	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	52.9		29.2	5.4	55.4	19.0	10.2
Change Period (Y+Rc), s	4.5	5.5		5.5	4.5	5.5	4.5	5.5
Max Green Setting (Gmax), s	5.5	34.0		35.0	4.0	35.5	14.5	16.0
Max Q Clear Time (g_c+I1), s	3.8	12.6		10.1	2.2	18.6	16.5	4.4
Green Ext Time (p_c), s	0.0	3.1		0.7	0.0	3.9	0.0	0.1

Intersection Summary		
HCM 2010 Ctrl Delay		21.3
HCM 2010 LOS		C

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	27	1	24	15	0	25	4	397	9	12	361	12
Future Vol, veh/h	27	1	24	15	0	25	4	397	9	12	361	12
Conflicting Peds, #/hr	0	0	1	1	0	0	3	0	5	5	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	125	-	-	125	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	0	0	4	0	0	4	0	5	5	8	6	0
Mvmt Flow	31	1	28	17	0	29	5	575	10	14	523	14

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1166	1161	534	1169	1163	585	540	0	0	590	0	0
Stage 1	561	561	-	595	595	-	-	-	-	-	-	-
Stage 2	605	600	-	574	568	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.24	7.1	6.5	6.24	4.1	-	-	4.18	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.336	3.5	4	3.336	2.2	-	-	2.272	-	-
Pot Cap-1 Maneuver	172	197	542	172	196	507	1039	-	-	957	-	-
Stage 1	516	513	-	494	496	-	-	-	-	-	-	-
Stage 2	488	493	-	507	510	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	159	192	540	159	191	505	1036	-	-	953	-	-
Mov Cap-2 Maneuver	159	192	-	159	191	-	-	-	-	-	-	-
Stage 1	512	504	-	490	492	-	-	-	-	-	-	-
Stage 2	458	489	-	473	501	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	25.2	20.5	0.1	0.2
HCM LOS	D	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1036	-	-	237	278	953	-	-
HCM Lane V/C Ratio	0.004	-	-	0.252	0.165	0.014	-	-
HCM Control Delay (s)	8.5	-	-	25.2	20.5	8.8	-	-
HCM Lane LOS	A	-	-	D	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	1	0.6	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	329	10	27	347	175	3	0	9	147	3	60
Future Volume (veh/h)	61	329	10	27	347	175	3	0	9	147	3	60
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1846	1900	1900	1845	1845	1900	1900	1900	1881	1900	1900
Adj Flow Rate, veh/h	69	466	11	30	460	197	3	0	10	165	3	67
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	1	1	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	3	3	0	3	3	0	0	0	1	0	0
Cap, veh/h	619	2331	55	695	2287	1022	229	0	240	282	10	231
Arrive On Green	0.04	0.67	0.67	0.02	0.65	0.65	0.15	0.00	0.15	0.15	0.15	0.15
Sat Flow, veh/h	1810	3502	83	1810	3505	1567	1350	0	1612	1410	70	1553
Grp Volume(v), veh/h	69	233	244	30	460	197	3	0	10	165	0	70
Grp Sat Flow(s),veh/h/ln	1810	1754	1831	1810	1752	1567	1350	0	1612	1410	0	1622
Q Serve(g_s), s	1.1	4.6	4.6	0.5	4.7	4.5	0.2	0.0	0.5	10.2	0.0	3.5
Cycle Q Clear(g_c), s	1.1	4.6	4.6	0.5	4.7	4.5	3.6	0.0	0.5	10.7	0.0	3.5
Prop In Lane	1.00		0.05	1.00		1.00	1.00		1.00	1.00		0.96
Lane Grp Cap(c), veh/h	619	1167	1219	695	2287	1022	229	0	240	282	0	241
V/C Ratio(X)	0.11	0.20	0.20	0.04	0.20	0.19	0.01	0.00	0.04	0.58	0.00	0.29
Avail Cap(c_a), veh/h	764	1167	1219	783	2287	1022	501	0	564	566	0	568
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	0.89	0.89	0.89	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.7	5.8	5.8	4.9	6.3	6.2	35.7	0.0	32.8	37.4	0.0	34.1
Incr Delay (d2), s/veh	0.1	0.4	0.4	0.0	0.2	0.4	0.0	0.0	0.1	1.9	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	0.6	2.3	2.4	0.2	2.3	2.0	0.1	0.0	0.2	4.1	0.0	1.6
LnGrp Delay(d),s/veh	4.7	6.2	6.2	4.9	6.4	6.6	35.7	0.0	32.9	39.3	0.0	34.7
LnGrp LOS	A	A	A	A	A	A	D		C	D		C
Approach Vol, veh/h		546			687			13			235	
Approach Delay, s/veh		6.0			6.4			33.5			38.0	
Approach LOS		A			A			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.8	64.3		18.9	5.6	65.5		18.9
Change Period (Y+Rc), s	3.5	5.6		5.5	3.5	5.6		5.5
Max Green Setting (Gmax), s	10.5	33.4		31.5	6.5	37.4		31.5
Max Q Clear Time (g_c+I1), s	3.1	6.7		5.6	2.5	6.6		12.7
Green Ext Time (p_c), s	0.1	4.6		0.0	0.0	3.7		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	11.5
HCM 2010 LOS	B

Notes

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	176	122	187	111	110	29	236	748	122	55	420	203
Future Volume (veh/h)	176	122	187	111	110	29	236	748	122	55	420	203
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1810	1667	1689	1900	1881	1810	1900	1863	1845	1827
Adj Flow Rate, veh/h	226	156	240	142	141	37	303	959	156	71	539	260
Adj No. of Lanes	2	1	1	2	2	0	2	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	5	14	15	15	1	5	5	2	3	4
Cap, veh/h	305	499	412	203	621	158	385	1077	175	91	1066	472
Arrive On Green	0.09	0.27	0.27	0.07	0.25	0.25	0.11	0.36	0.36	0.05	0.30	0.30
Sat Flow, veh/h	3442	1863	1538	3079	2533	646	3476	2962	482	1774	3505	1553
Grp Volume(v), veh/h	226	156	240	142	88	90	303	556	559	71	539	260
Grp Sat Flow(s),veh/h/ln	1721	1863	1538	1540	1604	1575	1738	1719	1725	1774	1752	1553
Q Serve(g_s), s	5.8	6.0	12.2	4.1	3.9	4.1	7.6	27.4	27.4	3.6	11.4	12.6
Cycle Q Clear(g_c), s	5.8	6.0	12.2	4.1	3.9	4.1	7.6	27.4	27.4	3.6	11.4	12.6
Prop In Lane	1.00		1.00	1.00		0.41	1.00		0.28	1.00		1.00
Lane Grp Cap(c), veh/h	305	499	412	203	394	386	385	625	627	91	1066	472
V/C Ratio(X)	0.74	0.31	0.58	0.70	0.22	0.23	0.79	0.89	0.89	0.78	0.51	0.55
Avail Cap(c_a), veh/h	424	499	412	257	394	386	502	669	671	138	1129	500
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)	0.95	0.95	0.95	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	26.3	28.6	41.1	27.1	27.2	39.0	26.9	27.0	42.2	25.7	26.2
Incr Delay (d2), s/veh	4.2	1.6	5.6	5.9	1.3	1.4	6.1	13.5	13.6	14.4	0.4	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	2.9	3.3	5.8	1.9	1.9	2.0	4.0	15.3	15.4	2.1	5.5	5.5
LnGrp Delay(d),s/veh	44.2	27.9	34.2	47.0	28.4	28.6	45.1	40.4	40.5	56.6	26.1	27.3
LnGrp LOS	D	C	C	D	C	C	D	D	D	E	C	C
Approach Vol, veh/h		622			320			1418			870	
Approach Delay, s/veh		36.3			36.7			41.5			29.0	
Approach LOS		D			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	13.5	28.2	8.6	39.7	11.4	30.2	14.0	34.4
Change Period (Y+Rc), s	5.5	6.1	4.0	7.0	5.5	6.1	4.0	7.0
Max Green Setting (Gmax), s	11.1	14.3	7.0	35.0	7.5	17.9	13.0	29.0
Max Q Clear Time (g_c+I1), s	7.8	6.1	5.6	29.4	6.1	14.2	9.6	14.6
Green Ext Time (p_c), s	0.2	0.6	0.0	3.3	0.1	0.7	0.3	3.9

Intersection Summary	
HCM 2010 Ctrl Delay	36.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	167	505	252	109	282	178	181	347	97	163	414	62
Future Volume (veh/h)	167	505	252	109	282	178	181	347	97	163	414	62
Number	7	4	14	3	8	18	1	6	16	5	2	12
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	1863	1821	1900	1792	1827	1827	1845	1833	1900	1827	1827	1863
Adj Flow Rate, veh/h	183	554	277	120	310	195	199	381	106	179	454	68
Adj No. of Lanes	1	2	0	1	2	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	3	3	6	4	4	3	3	3	4	4	2
Cap, veh/h	413	628	314	227	884	539	418	813	224	405	1017	616
Arrive On Green	0.10	0.28	0.28	0.07	0.25	0.25	0.10	0.30	0.30	0.09	0.29	0.29
Sat Flow, veh/h	1774	2237	1117	1707	3471	1553	1757	2701	743	1740	3471	1583
Grp Volume(v), veh/h	183	428	403	120	310	195	199	244	243	179	454	68
Grp Sat Flow(s),veh/h/ln	1774	1730	1624	1707	1736	1553	1757	1741	1702	1740	1736	1583
Q Serve(g_s), s	6.7	21.3	21.4	4.6	6.6	8.4	7.0	10.3	10.5	6.3	9.6	2.5
Cycle Q Clear(g_c), s	6.7	21.3	21.4	4.6	6.6	8.4	7.0	10.3	10.5	6.3	9.6	2.5
Prop In Lane	1.00		0.69	1.00		1.00	1.00		0.44	1.00		1.00
Lane Grp Cap(c), veh/h	413	486	456	227	884	539	418	525	513	405	1017	616
V/C Ratio(X)	0.44	0.88	0.88	0.53	0.35	0.36	0.48	0.47	0.47	0.44	0.45	0.11
Avail Cap(c_a), veh/h	431	519	487	269	999	590	466	525	513	428	1017	616
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	21.4	30.9	30.9	24.5	27.5	22.0	19.3	25.6	25.6	19.6	25.9	17.5
Incr Delay (d2), s/veh	0.7	15.5	16.5	1.9	0.2	0.4	0.8	3.0	3.1	0.8	1.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	12.2	11.6	2.3	3.2	3.7	3.4	5.3	5.4	3.1	4.8	1.1
LnGrp Delay(d),s/veh	22.2	46.4	47.5	26.4	27.7	22.4	20.2	28.5	28.8	20.4	27.3	17.9
LnGrp LOS	C	D	D	C	C	C	C	C	C	C	C	B
Approach Vol, veh/h		1014			625			686			701	
Approach Delay, s/veh		42.5			25.8			26.2			24.6	
Approach LOS		D			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	14.5	32.4	11.8	31.3	13.8	33.1	14.2	28.9
Change Period (Y+Rc), s	5.5	6.0	5.5	6.0	5.5	6.0	5.5	6.0
Max Green Setting (Gmax), s	11.5	20.0	8.5	27.0	9.5	22.0	9.6	25.9
Max Q Clear Time (g_c+I1), s	9.0	11.6	6.6	23.4	8.3	12.5	8.7	10.4
Green Ext Time (p_c), s	0.1	2.2	0.0	1.9	0.1	2.3	0.0	2.6

Intersection Summary	
HCM 2010 Ctrl Delay	31.2
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	18	6	615	758	17
Future Vol, veh/h	10	18	6	615	758	17
Conflicting Peds, #/hr	1	1	10	0	0	10
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	69	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	1	0	1
Mvmt Flow	10	19	6	647	797	18

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1476	817	825	0	-	0
Stage 1	816	-	-	-	-	-
Stage 2	660	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	140	380	814	-	-	-
Stage 1	438	-	-	-	-	-
Stage 2	518	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	137	377	807	-	-	-
Mov Cap-2 Maneuver	275	-	-	-	-	-
Stage 1	431	-	-	-	-	-
Stage 2	514	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.8	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	807	-	333	-	-
HCM Lane V/C Ratio	0.008	-	0.088	-	-
HCM Control Delay (s)	9.5	-	16.8	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	7	8	613	6	6	770
Future Vol, veh/h	7	8	613	6	6	770
Conflicting Peds, #/hr	1	1	0	10	10	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	69	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	1	0	0	1
Mvmt Flow	7	8	645	6	6	810

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1481	659	0	0	661	0
Stage 1	658	-	-	-	-	-
Stage 2	823	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	139	467	-	-	937	-
Stage 1	519	-	-	-	-	-
Stage 2	435	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	137	463	-	-	929	-
Mov Cap-2 Maneuver	275	-	-	-	-	-
Stage 1	512	-	-	-	-	-
Stage 2	435	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.7	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	351	929	-
HCM Lane V/C Ratio	-	-	0.045	0.007	-
HCM Control Delay (s)	-	-	15.7	8.9	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	13	27	19	606	768	16
Future Vol, veh/h	13	27	19	606	768	16
Conflicting Peds, #/hr	0	0	14	0	0	14
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	150	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	1	1	0
Mvmt Flow	14	28	20	638	808	17

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1509	831	839	0	-	0
Stage 1	831	-	-	-	-	-
Stage 2	678	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	134	373	804	-	-	-
Stage 1	431	-	-	-	-	-
Stage 2	508	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	128	369	795	-	-	-
Mov Cap-2 Maneuver	262	-	-	-	-	-
Stage 1	415	-	-	-	-	-
Stage 2	502	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.7	0.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	795	-	326	-	-
HCM Lane V/C Ratio	0.025	-	0.128	-	-
HCM Control Delay (s)	9.6	-	17.7	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	92	6	64	3	4	10	23	523	5	12	631	152
Future Volume (veh/h)	92	6	64	3	4	10	23	523	5	12	631	152
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		0.99	0.99		0.99
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	1900	1899	1900	1900	1900	1900	1900	1881	1900	1881	1885	1900
Adj Flow Rate, veh/h	97	6	67	3	4	11	24	556	5	13	671	160
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	1	0
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, %	1	1	1	0	0	0	0	1	1	1	1	1
Cap, veh/h	188	17	81	75	75	143	352	1185	11	659	922	220
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.04	1.00	1.00	0.01	0.63	0.63
Sat Flow, veh/h	789	121	592	113	553	1048	1810	1861	17	1792	1468	350
Grp Volume(v), veh/h	170	0	0	18	0	0	24	0	561	13	0	831
Grp Sat Flow(s),veh/h/ln	1503	0	0	1715	0	0	1810	0	1878	1792	0	1818
Q Serve(g_s), s	7.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.2	0.0	21.9
Cycle Q Clear(g_c), s	7.7	0.0	0.0	0.6	0.0	0.0	0.3	0.0	0.0	0.2	0.0	21.9
Prop In Lane	0.57		0.39	0.17		0.61	1.00		0.01	1.00		0.19
Lane Grp Cap(c), veh/h	286	0	0	294	0	0	352	0	1196	659	0	1142
V/C Ratio(X)	0.60	0.00	0.00	0.06	0.00	0.00	0.07	0.00	0.47	0.02	0.00	0.73
Avail Cap(c_a), veh/h	327	0	0	338	0	0	417	0	1196	739	0	1142
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	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.4	0.0	0.0	26.4	0.0	0.0	7.7	0.0	0.0	4.5	0.0	8.9
Incr Delay (d2), s/veh	2.3	0.0	0.0	0.1	0.0	0.0	0.1	0.0	1.3	0.0	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	3.4	0.0	0.0	0.3	0.0	0.0	0.2	0.0	0.4	0.1	0.0	12.1
LnGrp Delay(d),s/veh	31.6	0.0	0.0	26.5	0.0	0.0	7.8	0.0	1.3	4.6	0.0	13.0
LnGrp LOS	C			C			A		A	A		B
Approach Vol, veh/h		170			18			585			844	
Approach Delay, s/veh		31.6			26.5			1.6			12.9	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.5	49.5		15.0	4.9	50.1		15.0
Change Period (Y+Rc), s	4.0	5.5		5.5	4.0	5.5		5.5
Max Green Setting (Gmax), s	4.0	39.5		11.5	4.0	39.5		11.5
Max Q Clear Time (g_c+I1), s	2.3	23.9		9.7	2.2	2.0		2.6
Green Ext Time (p_c), s	0.0	6.4		0.1	0.0	4.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	10.9
HCM 2010 LOS	B

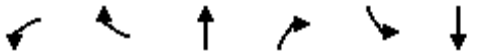
Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	9	185	215	542	677	21
Future Vol, veh/h	9	185	215	542	677	21
Conflicting Peds, #/hr	0	0	11	0	0	11
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	150	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	1	1	1	2	0
Mvmt Flow	10	201	234	595	743	23

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1829	766	777	0	-	0
Stage 1	766	-	-	-	-	-
Stage 2	1063	-	-	-	-	-
Critical Hdwy	6.41	6.21	4.11	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	2.209	-	-	-
Pot Cap-1 Maneuver	85	404	844	-	-	-
Stage 1	461	-	-	-	-	-
Stage 2	333	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	60	400	836	-	-	-
Mov Cap-2 Maneuver	84	-	-	-	-	-
Stage 1	329	-	-	-	-	-
Stage 2	330	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	31.2	3.1	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	836	-	341	-	-
HCM Lane V/C Ratio	0.28	-	0.618	-	-
HCM Control Delay (s)	11	-	31.2	-	-
HCM Lane LOS	B	-	D	-	-
HCM 95th %tile Q(veh)	1.1	-	3.9	-	-



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	186	275	482	176	225	637
Future Volume (veh/h)	186	275	482	176	225	637
Number	3	18	6	16	5	2
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	1900	1900	1881	1881	1881	1881
Adj Flow Rate, veh/h	238	289	507	226	237	670
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	1	1	1	1
Cap, veh/h	381	340	895	1094	476	1179
Arrive On Green	0.21	0.21	0.48	0.48	0.19	1.00
Sat Flow, veh/h	1810	1615	1881	1592	1792	1881
Grp Volume(v), veh/h	238	289	507	226	237	670
Grp Sat Flow(s),veh/h/ln	1810	1615	1881	1592	1792	1881
Q Serve(g_s), s	8.4	12.0	13.5	3.6	4.5	0.0
Cycle Q Clear(g_c), s	8.4	12.0	13.5	3.6	4.5	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	381	340	895	1094	476	1179
V/C Ratio(X)	0.62	0.85	0.57	0.21	0.50	0.57
Avail Cap(c_a), veh/h	442	395	895	1094	513	1179
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.1	26.6	13.2	4.0	8.1	0.0
Incr Delay (d2), s/veh	2.1	14.4	2.6	0.4	0.8	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	6.7	7.7	2.8	2.2	0.7
LnGrp Delay(d),s/veh	27.3	41.0	15.8	4.4	8.9	2.0
LnGrp LOS	C	D	B	A	A	A
Approach Vol, veh/h	527		733			907
Approach Delay, s/veh	34.8		12.3			3.8
Approach LOS	C		B			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		49.9			10.6	39.3		20.1
Change Period (Y+Rc), s		6.0			4.0	6.0		5.4
Max Green Setting (Gmax), s		41.5			8.0	29.5		17.1
Max Q Clear Time (g_c+I1), s		2.0			6.5	15.5		14.0
Green Ext Time (p_c), s		6.3			0.1	3.8		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	14.2
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	77	15	11	509	612	120
Future Vol, veh/h	77	15	11	509	612	120
Conflicting Peds, #/hr	1	0	25	0	0	25
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	70	150	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	1	1	1
Mvmt Flow	89	17	13	720	865	138

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1346	959	1028	0	-	0
Stage 1	959	-	-	-	-	-
Stage 2	387	-	-	-	-	-
Critical Hdwy	6.6	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	156	314	683	-	-	-
Stage 1	375	-	-	-	-	-
Stage 2	662	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	147	307	669	-	-	-
Mov Cap-2 Maneuver	269	-	-	-	-	-
Stage 1	360	-	-	-	-	-
Stage 2	648	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	23.6	0.2	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	669	-	269	307	-	-
HCM Lane V/C Ratio	0.019	-	0.329	0.056	-	-
HCM Control Delay (s)	10.5	-	24.8	17.4	-	-
HCM Lane LOS	B	-	C	C	-	-
HCM 95th %tile Q(veh)	0.1	-	1.4	0.2	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	124	1	77	3	2	17	83	379	5	21	462	235
Future Volume (veh/h)	124	1	77	3	2	17	83	379	5	21	462	235
Number	7	4	14	3	8	18	1	6	16	5	2	12
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	1863	1881	1900	1900	1900	1900	1881	1863	1900	1900	1881	1881
Adj Flow Rate, veh/h	159	1	99	3	2	18	109	497	7	27	592	301
Adj No. of Lanes	1	1	0	0	1	0	1	1	0	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	0	0	0	0	0	1	2	2	0	1	1
Cap, veh/h	304	2	225	68	41	182	225	597	8	674	1083	919
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.07	0.33	0.33	0.29	0.58	0.58
Sat Flow, veh/h	1386	16	1586	70	287	1285	1792	1833	26	1810	1881	1596
Grp Volume(v), veh/h	159	0	100	23	0	0	109	0	504	27	592	301
Grp Sat Flow(s),veh/h/ln	1386	0	1602	1642	0	0	1792	0	1859	1810	1881	1596
Q Serve(g_s), s	6.7	0.0	4.0	0.0	0.0	0.0	3.2	0.0	17.6	0.0	13.6	6.9
Cycle Q Clear(g_c), s	7.5	0.0	4.0	0.8	0.0	0.0	3.2	0.0	17.6	0.0	13.6	6.9
Prop In Lane	1.00		0.99	0.13		0.78	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	304	0	227	291	0	0	225	0	606	674	1083	919
V/C Ratio(X)	0.52	0.00	0.44	0.08	0.00	0.00	0.48	0.00	0.83	0.04	0.55	0.33
Avail Cap(c_a), veh/h	420	0	361	424	0	0	236	0	929	674	1083	919
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.9	0.0	27.5	26.1	0.0	0.0	20.3	0.0	21.8	15.8	9.2	7.8
Incr Delay (d2), s/veh	1.4	0.0	1.3	0.1	0.0	0.0	1.6	0.0	12.6	0.0	2.0	1.0
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	3.1	0.0	1.9	0.4	0.0	0.0	1.6	0.0	11.1	0.4	7.5	3.3
LnGrp Delay(d),s/veh	30.3	0.0	28.8	26.3	0.0	0.0	21.9	0.0	34.4	15.8	11.2	8.7
LnGrp LOS	C		C	C			C		C	B	B	A
Approach Vol, veh/h		259			23			613			920	
Approach Delay, s/veh		29.7			26.3			32.2			10.5	
Approach LOS		C			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.6	45.9		15.5	26.1	28.4		15.5
Change Period (Y+Rc), s	4.0	5.6		5.6	5.6	* 5.6		5.6
Max Green Setting (Gmax), s	5.0	34.0		15.8	4.0	* 35		15.8
Max Q Clear Time (g_c+I1), s	5.2	15.6		9.5	2.0	19.6		2.8
Green Ext Time (p_c), s	0.0	5.4		0.5	0.0	3.3		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	20.8
HCM 2010 LOS	C

Notes

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	0	13	10	1	25	25	412	18	27	483	32
Future Vol, veh/h	30	0	13	10	1	25	25	412	18	27	483	32
Conflicting Peds, #/hr	6	0	3	3	0	6	2	0	7	7	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	125	-	-	125	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	1	1	0	2	0
Mvmt Flow	31	0	14	10	1	26	33	541	24	35	634	42

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1366	1365	660	1361	1374	566	678	0	0	572	0	0
Stage 1	727	727	-	626	626	-	-	-	-	-	-	-
Stage 2	639	638	-	735	748	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	126	149	467	127	147	528	923	-	-	1011	-	-
Stage 1	419	432	-	475	480	-	-	-	-	-	-	-
Stage 2	468	474	-	414	423	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	112	138	465	116	136	522	921	-	-	1005	-	-
Mov Cap-2 Maneuver	112	138	-	116	136	-	-	-	-	-	-	-
Stage 1	403	416	-	456	460	-	-	-	-	-	-	-
Stage 2	426	454	-	387	407	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	40.6	21.5	0.5	0.4
HCM LOS	E	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	921	-	-	145	255	1005	-	-
HCM Lane V/C Ratio	0.036	-	-	0.309	0.147	0.035	-	-
HCM Control Delay (s)	9.1	-	-	40.6	21.5	8.7	-	-
HCM Lane LOS	A	-	-	E	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.2	0.5	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	432	3	11	386	147	4	1	31	157	6	65
Future Volume (veh/h)	71	432	3	11	386	147	4	1	31	157	6	65
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1900	1900	1900	1900	1900	1849	1900
Adj Flow Rate, veh/h	88	537	4	15	512	195	4	1	33	165	6	68
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	1	1	0
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, %	0	1	1	0	1	0	0	0	0	0	0	0
Cap, veh/h	584	2404	18	633	2271	1023	244	8	256	282	21	238
Arrive On Green	0.04	0.66	0.66	0.01	0.64	0.64	0.16	0.16	0.16	0.16	0.16	0.16
Sat Flow, veh/h	1810	3636	27	1810	3574	1610	1345	48	1572	1394	129	1460
Grp Volume(v), veh/h	88	264	277	15	512	195	4	0	34	165	0	74
Grp Sat Flow(s),veh/h/ln	1810	1787	1876	1810	1787	1610	1345	0	1619	1394	0	1588
Q Serve(g_s), s	1.5	5.3	5.3	0.3	5.5	4.5	0.2	0.0	1.6	10.3	0.0	3.7
Cycle Q Clear(g_c), s	1.5	5.3	5.3	0.3	5.5	4.5	3.9	0.0	1.6	11.9	0.0	3.7
Prop In Lane	1.00		0.01	1.00		1.00	1.00		0.97	1.00		0.92
Lane Grp Cap(c), veh/h	584	1181	1240	633	2271	1023	244	0	264	282	0	259
V/C Ratio(X)	0.15	0.22	0.22	0.02	0.23	0.19	0.02	0.00	0.13	0.59	0.00	0.29
Avail Cap(c_a), veh/h	723	1181	1240	739	2271	1023	496	0	567	543	0	556
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	0.85	0.85	0.85	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.0	6.1	6.1	5.6	7.0	6.8	34.8	0.0	32.2	37.3	0.0	33.1
Incr Delay (d2), s/veh	0.1	0.4	0.4	0.0	0.2	0.4	0.0	0.0	0.2	1.9	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	0.7	2.7	2.8	0.1	2.8	2.1	0.1	0.0	0.7	4.1	0.0	1.7
LnGrp Delay(d),s/veh	5.1	6.5	6.5	5.6	7.2	7.2	34.8	0.0	32.4	39.3	0.0	33.7
LnGrp LOS	A	A	A	A	A	A	C		C	D		C
Approach Vol, veh/h		629			722			38			239	
Approach Delay, s/veh		6.3			7.1			32.7			37.5	
Approach LOS		A			A			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.1	62.8		20.2	4.8	65.1		20.2
Change Period (Y+Rc), s	3.5	5.6		5.5	3.5	5.6		5.5
Max Green Setting (Gmax), s	10.5	33.4		31.5	6.5	37.4		31.5
Max Q Clear Time (g_c+I1), s	3.5	7.5		5.9	2.3	7.3		13.9
Green Ext Time (p_c), s	0.1	4.8		0.1	0.0	4.0		0.7

Intersection Summary		
HCM 2010 Ctrl Delay		11.9
HCM 2010 LOS		B

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	274	141	205	154	101	41	170	534	104	34	865	273
Future Volume (veh/h)	274	141	205	154	101	41	170	534	104	34	865	273
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1810	1810	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	351	181	263	198	130	53	218	685	133	44	1109	350
Adj No. of Lanes	2	1	1	2	2	0	2	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	5	5	5	3	3	3	3	3	3
Cap, veh/h	427	418	355	269	437	170	289	1209	235	55	1260	564
Arrive On Green	0.12	0.22	0.22	0.08	0.18	0.18	0.08	0.41	0.41	0.03	0.36	0.36
Sat Flow, veh/h	3442	1863	1583	3343	2419	944	3408	2929	568	1757	3505	1568
Grp Volume(v), veh/h	351	181	263	198	91	92	218	410	408	44	1109	350
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1672	1719	1643	1704	1752	1744	1757	1752	1568
Q Serve(g_s), s	9.0	7.5	13.9	5.2	4.1	4.4	5.6	16.1	16.2	2.2	26.7	16.6
Cycle Q Clear(g_c), s	9.0	7.5	13.9	5.2	4.1	4.4	5.6	16.1	16.2	2.2	26.7	16.6
Prop In Lane	1.00		1.00	1.00		0.57	1.00		0.33	1.00		1.00
Lane Grp Cap(c), veh/h	427	418	355	269	310	297	289	723	720	55	1260	564
V/C Ratio(X)	0.82	0.43	0.74	0.74	0.29	0.31	0.76	0.57	0.57	0.80	0.88	0.62
Avail Cap(c_a), veh/h	478	418	355	316	310	297	303	723	720	117	1324	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)	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.4	30.0	32.5	40.4	31.9	32.0	40.3	20.3	20.3	43.3	27.0	23.8
Incr Delay (d2), s/veh	9.7	3.1	12.5	7.3	2.4	2.7	9.9	1.0	1.0	22.1	6.9	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	4.2	7.3	2.7	2.1	2.2	3.0	7.9	7.9	1.4	14.0	7.5
LnGrp Delay(d),s/veh	48.1	33.1	45.0	47.8	34.3	34.7	50.2	21.3	21.3	65.4	33.9	25.6
LnGrp LOS	D	C	D	D	C	C	D	C	C	E	C	C
Approach Vol, veh/h		795			381			1036			1503	
Approach Delay, s/veh		43.7			41.4			27.4			32.9	
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	16.7	22.4	6.8	44.1	12.7	26.3	11.6	39.4
Change Period (Y+Rc), s	5.5	6.1	4.0	7.0	5.5	6.1	4.0	7.0
Max Green Setting (Gmax), s	12.5	12.9	6.0	36.0	8.5	16.9	8.0	34.0
Max Q Clear Time (g_c+I1), s	11.0	6.4	4.2	18.2	7.2	15.9	7.6	28.7
Green Ext Time (p_c), s	0.2	0.5	0.0	5.0	0.1	0.2	0.0	3.7

Intersection Summary	
HCM 2010 Ctrl Delay	34.5
HCM 2010 LOS	C