 **Volume 2 – Appendix**

Texas Odyssey TIA
Dallas, Texas

May 23, 2018

Kimley-Horn and Associates, Inc.
Dallas, Texas

Project #064529800
Registered Firm F-928

Kimley»»Horn

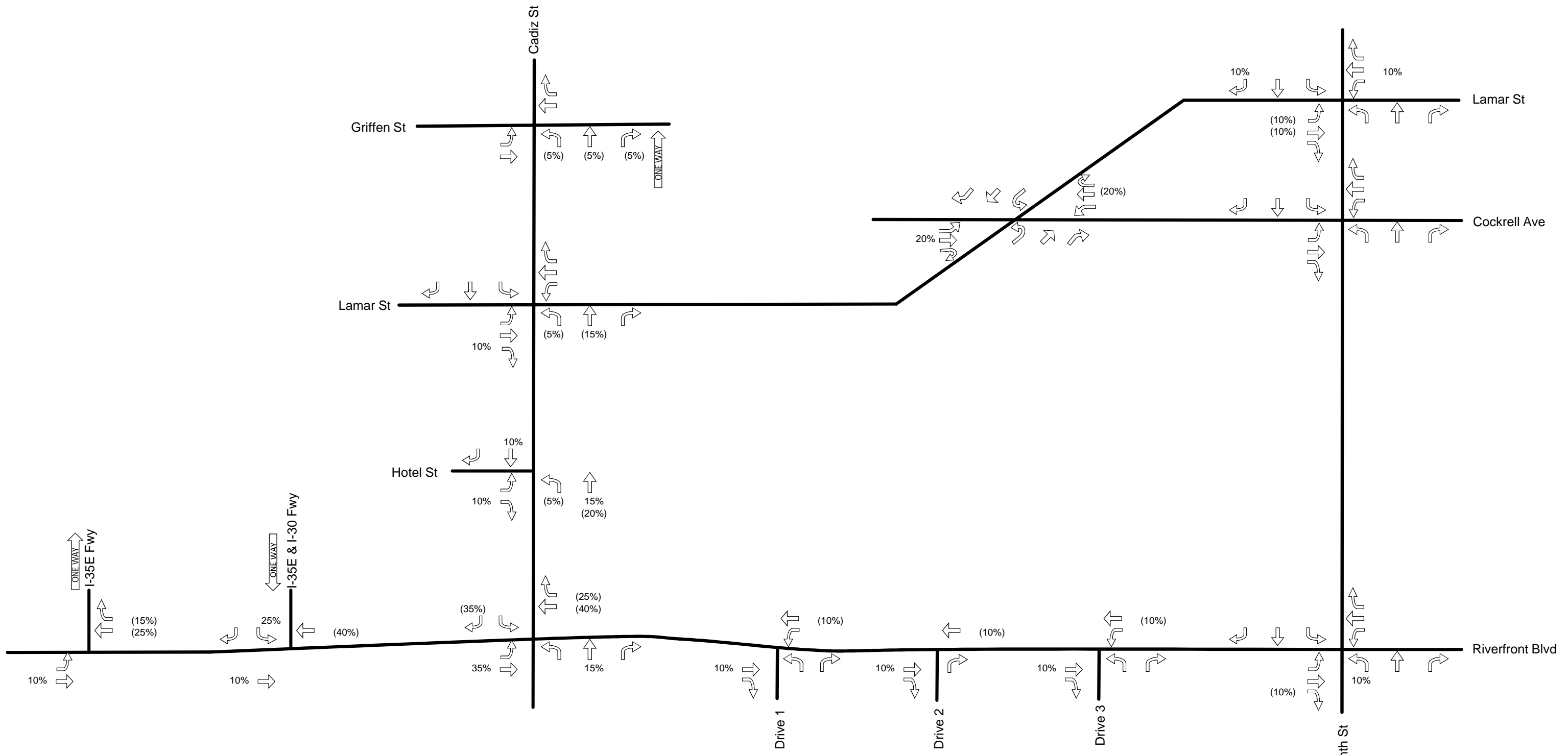


EXHIBIT A1

Trip Distribution and Traffic Assignment: Texas Central (Texas Bullet Train)
EOT - Dallas, Texas



LEGEND:
 X% (Y%)
 X% = Percentage of Inbound Site-Generated Traffic
 Y% = Percentage of Outbound Site-Generated Traffic

North
 Not To Scale

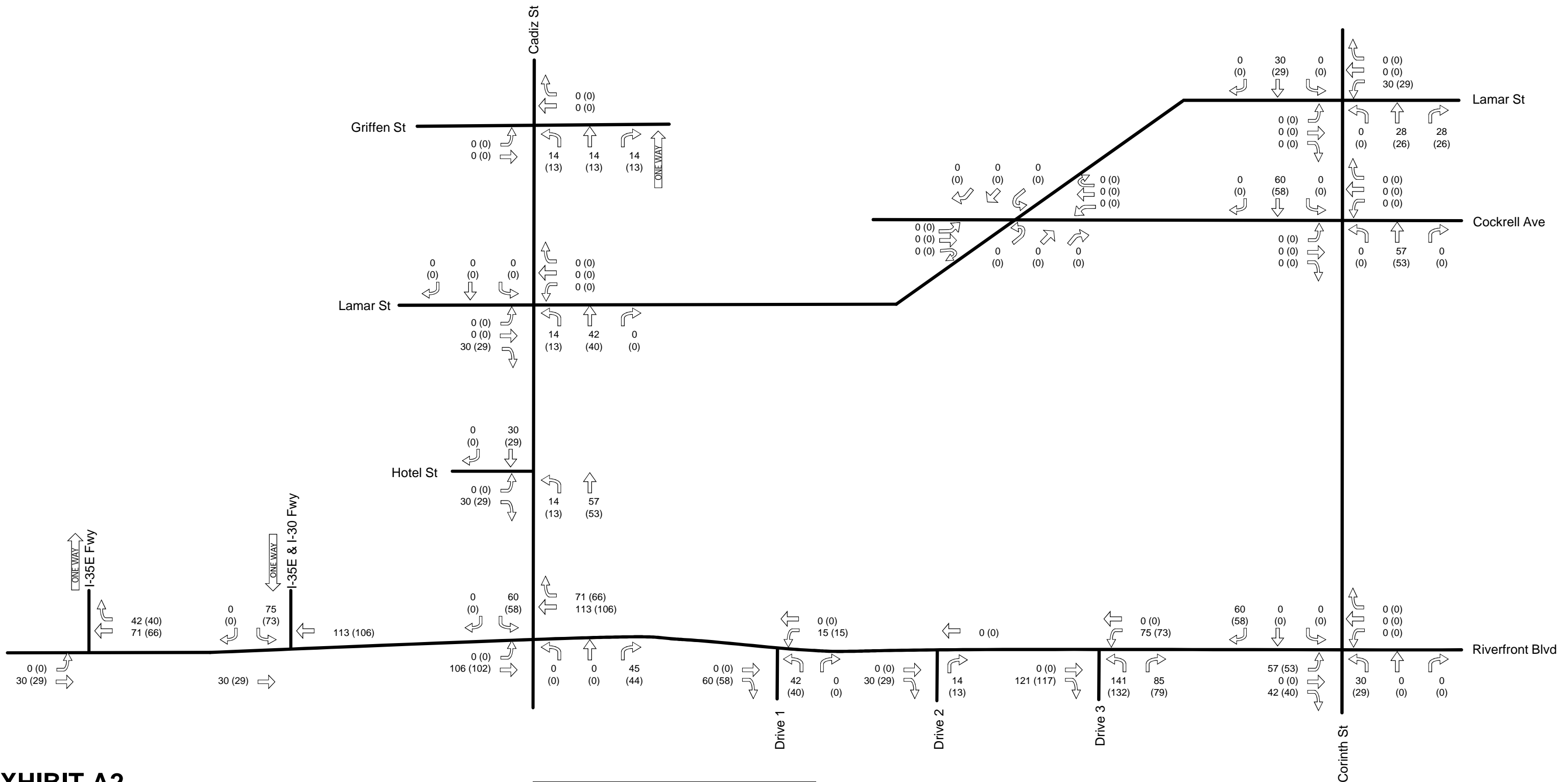


EXHIBIT A2

Site-Generated Traffic Volumes: Texas Central (Texas Bullet Train)
EOT - Dallas, Texas



LEGEND:
 X (Y)
 X = Weekend Peak Hour Turning Movements
 Y = Weekday PM Peak Hour Turning Movements
 Volumes may not sum from point to point due to rounding
 and presence of smaller driveways not included in analysis.

North
 ↑
 Not To Scale

Traffic Counts and Historical Data

Riverfront Boulevard						
Record	Year	Link Start	Link End	Source	24-Hour Volume	Annual Growth Rate
1	2018	Cadiz St	Corinth St	KHA	14814	-
	2014	Cadiz St	Corinth St	TXDOT	21898	-9.3%
	2014	Cadiz St	Corinth St	TXDOT	14303	-
	2009	Cadiz St	Corinth St	TXDOT	10670	6.0%
	2004	Cadiz St	Corinth St	TXDOT	19150	-11.0%
	2004	Cadiz St	Corinth St	NCTCOG	18806	-
	2004	Cadiz St	Corinth St	TXDOT	17060	-
	2004	Cadiz St	Corinth St	NCTCOG	16802	-
	2002	Cadiz St	Corinth St	NCTCOG	10952	23.9%
Annual Growth 2018 - 2002:						0.19%

Corinth Street, north of Riverfront						
Record	Year	Link Start	Link End	Source	24-Hour Volume	Annual Growth Rate
	2018	Lamar St	Riverfront Blvd	KHA	16419	-
	2017	Lamar St	Riverfront Blvd	NCTCOG	15549	5.6%
	2014	Lamar St	Riverfront Blvd	TXDOT	16115	-1.2%
	2009	Lamar St	Riverfront Blvd	TXDOT	11000	7.9%
	2004	Lamar St	Riverfront Blvd	TXDOT	15120	-6.2%
	2004	Lamar St	Riverfront Blvd	NCTCOG	14891	-
Annual Growth 2018 - 2004:						0.86%

Corinth Street, south of Riverfront						
Record	Year	Link Start	Link End	Source	24-Hour Volume	Annual Growth Rate
	2018	Riverfront Blvd	8th St	KHA	14751	-
	2016	Riverfront Blvd	8th St	NCTCOG	15686	-3.0%
	2015	Riverfront Blvd	8th St	TXDOT	14102	11.2%
	2014	Riverfront Blvd	8th St	TXDOT	14443	-2.4%
	2013	Riverfront Blvd	8th St	NCTCOG	14921	-3.2%
	2013	Riverfront Blvd	8th St	TXDOT	13396	-
	2012	Riverfront Blvd	8th St	NCTCOG	11938	12.2%
	2012	Riverfront Blvd	8th St	TXDOT	10800	-
	2001	Riverfront Blvd	8th St	NCTCOG	15061	-3.0%
	1999	Riverfront Blvd	8th St	TXDOT	12600	9.3%
Annual Growth 2018 - 1999:						0.36%

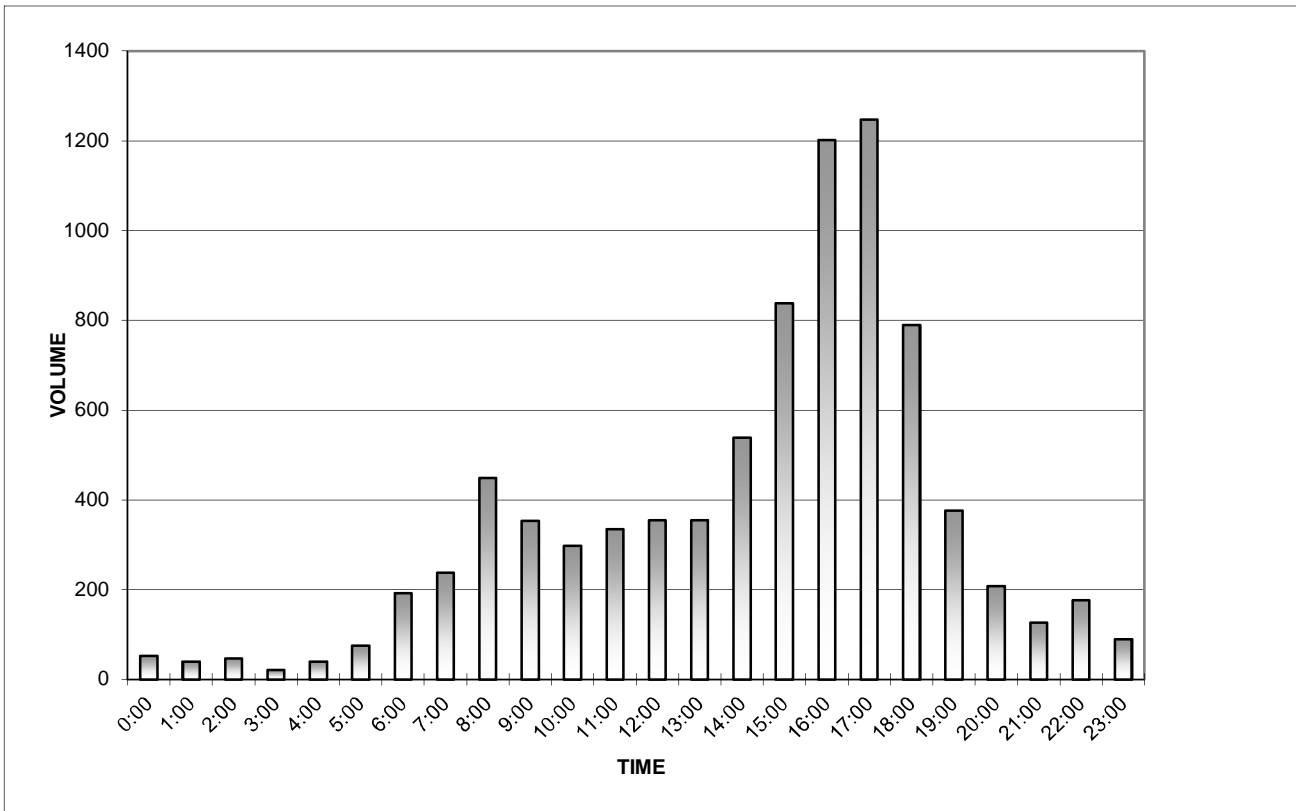
Cadiz Street, north of Riverfront						
Record	Year	Link Start	Link End	Source	24-Hour Volume	Annual Growth Rate
1	2018	Riverfront Blvd	Hotel St	KHA	10885	-
Average Annual Growth						0.47%

EB Riverfront Boulevard between Cadiz Street and Corinth Street

Date Began:
5/1/2018

TIME	0:00	0:15	0:30	0:45	TOTAL
0:00	18	14	11	9	52
1:00	14	6	10	10	40
2:00	12	14	14	7	47
3:00	5	5	5	6	21
4:00	5	3	16	16	40
5:00	20	14	18	23	75
6:00	39	36	64	53	192
7:00	56	50	66	66	238
8:00	90	158	130	70	448
9:00	104	92	84	73	353
10:00	76	76	66	80	298
11:00	106	68	92	69	335
12:00	90	82	94	88	354
13:00	83	91	86	94	354
14:00	102	122	140	174	538
15:00	143	192	230	273	838
16:00	266	279	341	316	1202
17:00	253	340	334	320	1247
18:00	248	222	168	152	790
19:00	110	118	80	68	376
20:00	58	56	50	44	208
21:00	32	28	35	31	126
22:00	39	54	46	37	176
23:00	29	24	18	18	89
TOTAL:					8437

The A.M. peak hour from 8:15 to 9:15 is 462
The P.M. peak hour from 16:30 to 17:30 is 1250

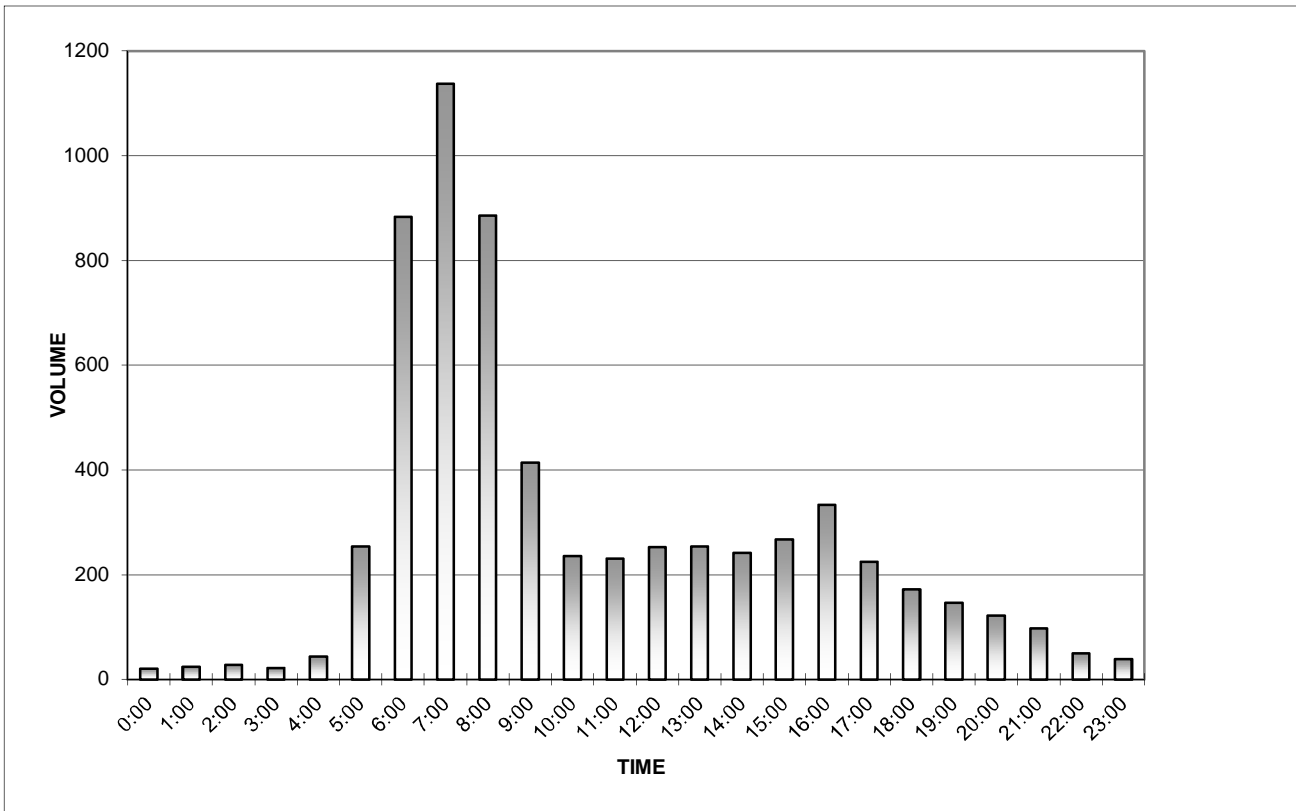


WB Riverfront Boulevard between Cadiz Street and Corinth Street

Date Began:
5/1/2018

TIME	0:00	0:15	0:30	0:45	TOTAL
0:00	7	6	2	5	20
1:00	6	4	8	6	24
2:00	5	6	7	10	28
3:00	8	4	6	4	22
4:00	7	8	10	18	43
5:00	44	42	78	90	254
6:00	150	200	257	276	883
7:00	296	286	306	250	1138
8:00	192	216	246	232	886
9:00	162	108	92	52	414
10:00	63	60	74	38	235
11:00	48	49	72	62	231
12:00	62	67	50	74	253
13:00	54	62	66	72	254
14:00	50	68	67	56	241
15:00	60	71	63	73	267
16:00	78	84	100	71	333
17:00	68	59	55	43	225
18:00	44	52	44	32	172
19:00	40	32	30	44	146
20:00	26	48	33	15	122
21:00	18	28	27	24	97
22:00	14	10	18	8	50
23:00	4	14	14	7	39
TOTAL:					6377

The A.M. peak hour from 6:45 to 7:45 is 1164
The P.M. peak hour from 15:45 to 16:45 is 335

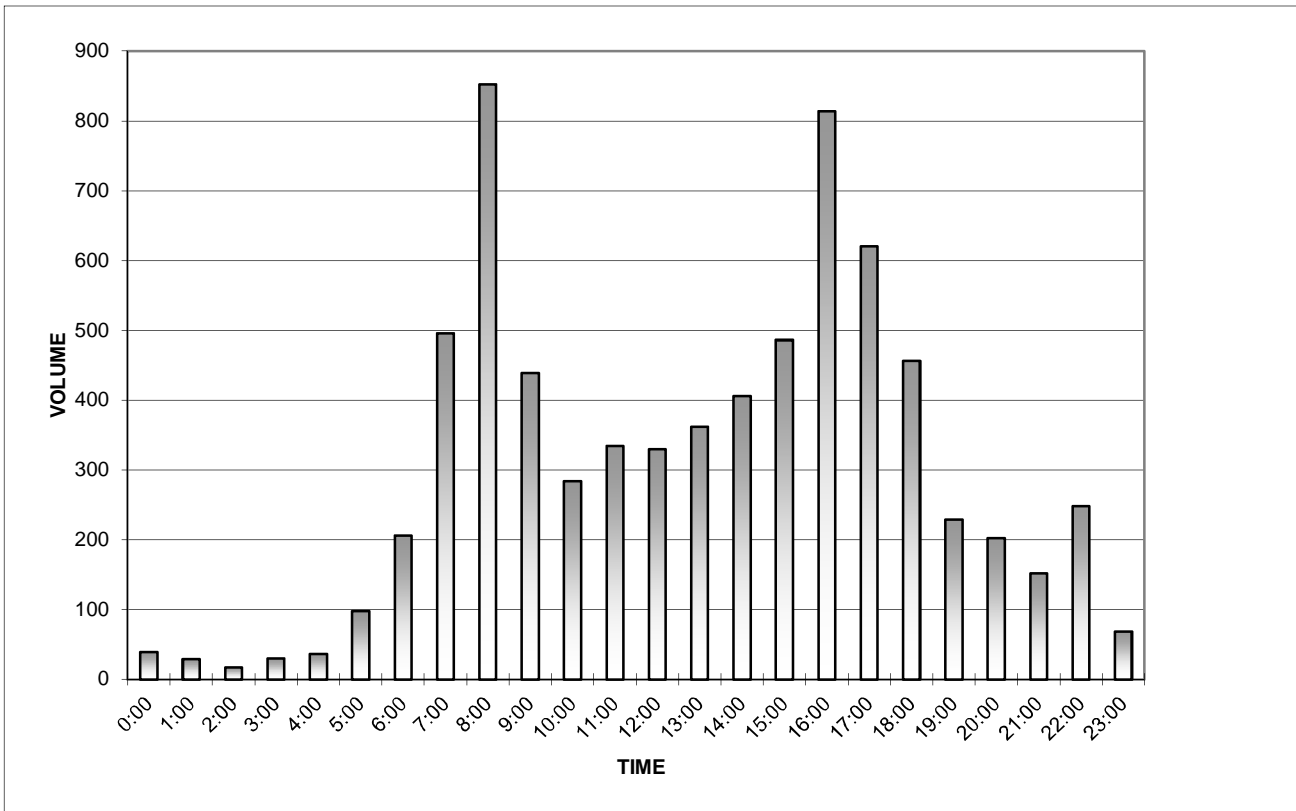


NB Cadiz Street between Riverfront Boulevard and Hotel Street

Date Began:
5/1/2018

TIME	0:00	0:15	0:30	0:45	TOTAL
0:00	14	6	10	9	39
1:00	10	10	4	5	29
2:00	5	4	5	3	17
3:00	10	6	7	7	30
4:00	8	12	8	8	36
5:00	16	24	26	32	98
6:00	26	37	64	79	206
7:00	80	103	126	187	496
8:00	240	302	160	150	852
9:00	138	114	89	98	439
10:00	82	56	66	80	284
11:00	82	66	86	100	334
12:00	77	72	81	100	330
13:00	87	88	86	101	362
14:00	82	112	120	92	406
15:00	96	114	128	148	486
16:00	180	228	216	190	814
17:00	162	130	160	168	620
18:00	148	134	88	86	456
19:00	76	59	44	50	229
20:00	44	48	58	52	202
21:00	30	37	29	56	152
22:00	62	80	53	53	248
23:00	25	12	15	16	68
TOTAL:					7233

The A.M. peak hour from 7:45 to 8:45 is 889
The P.M. peak hour from 16:00 to 17:00 is 814

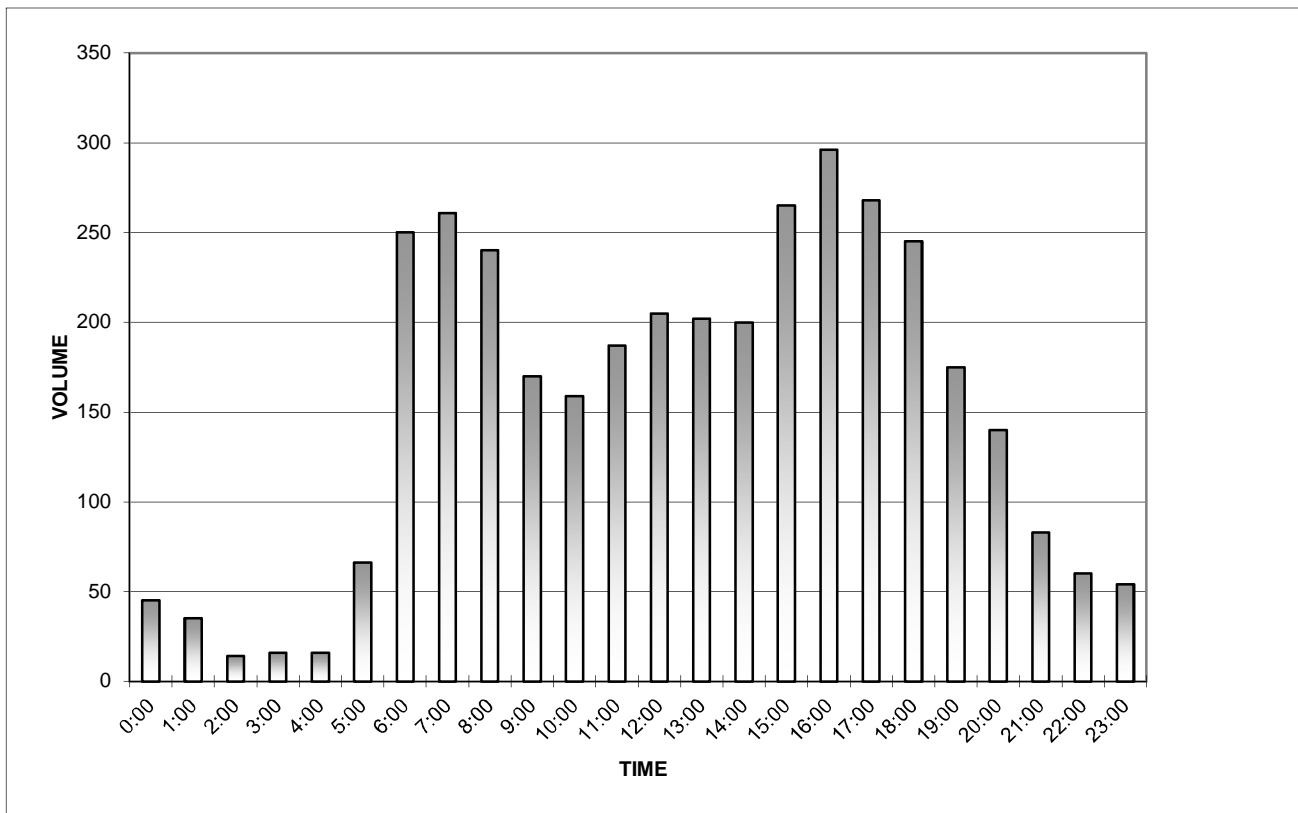


SB Cadiz Street between Riverfront Boulevard and Hotel Street

Date Began:
5/1/2018

TIME	0:00	0:15	0:30	0:45	TOTAL
0:00	12	14	6	13	45
1:00	10	12	5	8	35
2:00	4	4	2	4	14
3:00	2	1	4	9	16
4:00	3	2	2	9	16
5:00	9	13	25	19	66
6:00	40	62	78	70	250
7:00	71	48	82	60	261
8:00	45	65	66	64	240
9:00	52	48	37	33	170
10:00	39	36	48	36	159
11:00	49	46	54	38	187
12:00	51	52	56	46	205
13:00	52	48	62	40	202
14:00	52	46	52	50	200
15:00	67	56	72	70	265
16:00	68	70	87	71	296
17:00	86	74	52	56	268
18:00	68	56	68	53	245
19:00	52	41	42	40	175
20:00	20	30	50	40	140
21:00	20	15	29	19	83
22:00	22	12	17	9	60
23:00	12	18	16	8	54
TOTAL:					3652

The A.M. peak hour from 6:15 to 7:15 is 281
The P.M. peak hour from 16:30 to 17:30 is 318

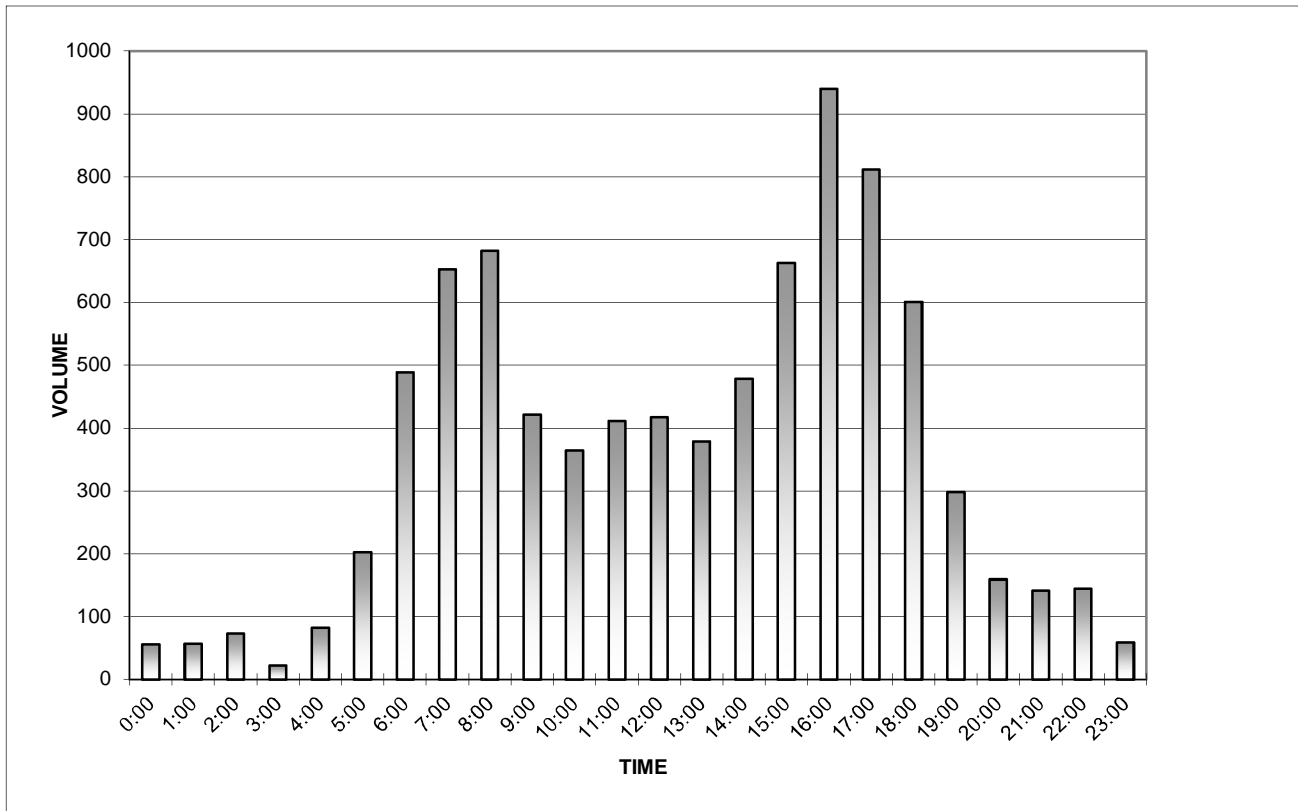


NB Corinth Street between Riverfront Boulevard and Austin Street

Date Began:
5/1/2018

TIME	0:00	0:15	0:30	0:45	TOTAL
0:00	15	16	13	12	56
1:00	17	13	8	19	57
2:00	12	31	21	9	73
3:00	5	5	4	8	22
4:00	8	15	24	35	82
5:00	27	39	78	58	202
6:00	83	103	140	163	489
7:00	154	158	157	184	653
8:00	146	224	195	117	682
9:00	136	102	104	79	421
10:00	89	95	91	89	364
11:00	112	88	91	120	411
12:00	103	111	101	102	417
13:00	86	96	90	107	379
14:00	98	120	120	140	478
15:00	132	158	166	207	663
16:00	194	221	275	250	940
17:00	194	206	201	210	811
18:00	188	169	113	131	601
19:00	85	80	68	65	298
20:00	43	50	29	37	159
21:00	34	41	33	33	141
22:00	37	34	33	40	144
23:00	16	20	15	8	59
TOTAL:					8602

The A.M. peak hour from 7:45 to 8:45 is 749
The P.M. peak hour from 16:15 to 17:15 is 940



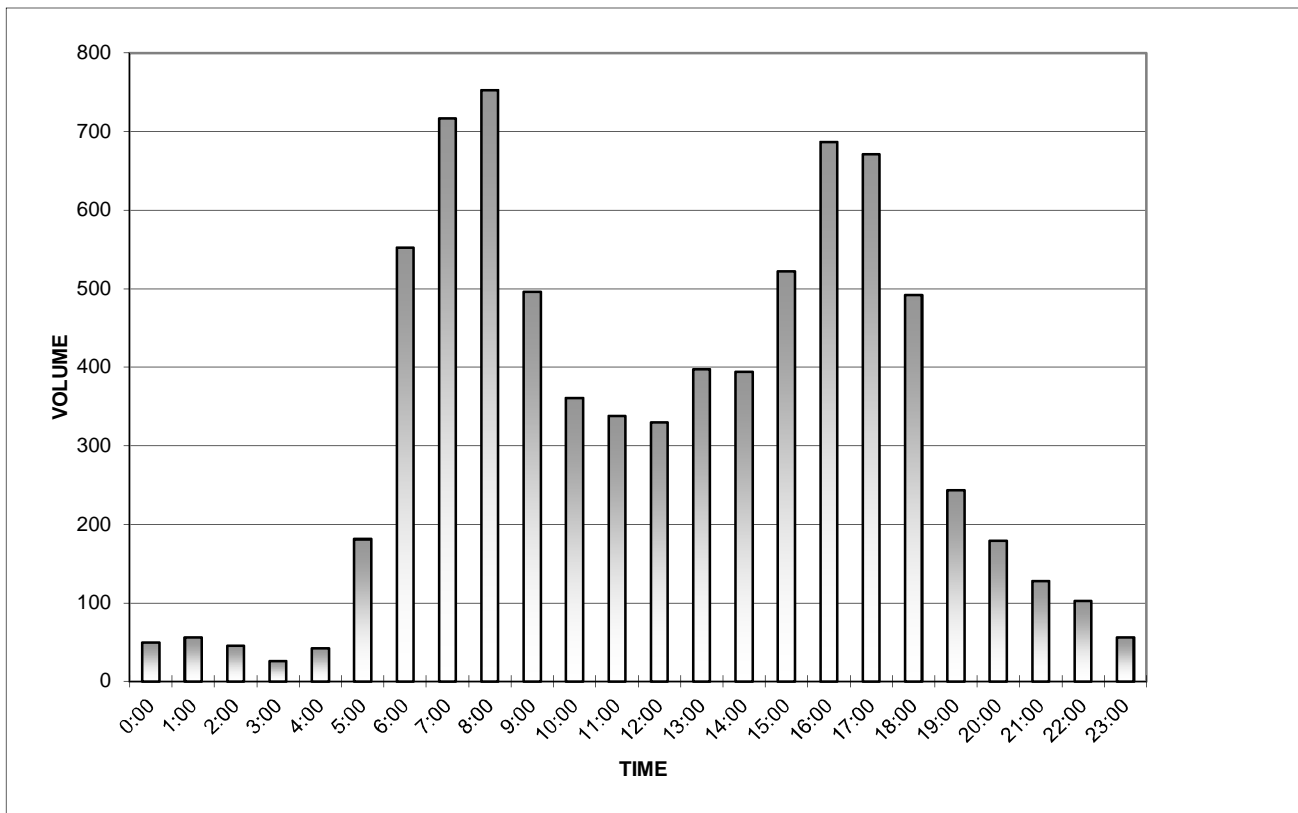
SB Corinth Street between Riverfront Boulevard and Austin Street

Date Began:
5/1/2018

TIME	0:00	0:15	0:30	0:45	TOTAL
0:00	16	15	11	7	49
1:00	9	8	22	17	56
2:00	14	10	11	10	45
3:00	10	9	5	2	26
4:00	9	6	9	18	42
5:00	26	26	57	72	181
6:00	107	131	162	152	552
7:00	185	181	201	150	717
8:00	185	185	179	204	753
9:00	182	120	107	87	496
10:00	94	88	90	89	361
11:00	94	86	83	75	338
12:00	92	76	74	88	330
13:00	85	92	106	114	397
14:00	81	88	126	99	394
15:00	128	119	139	136	522
16:00	184	181	156	166	687
17:00	201	180	161	129	671
18:00	154	140	112	86	492
19:00	68	73	51	51	243
20:00	45	57	43	34	179
21:00	32	31	34	31	128
22:00	21	24	36	21	102
23:00	17	16	12	11	56

TOTAL: 7817

The A.M. peak hour from 8:00 to 9:00 is 753
The P.M. peak hour from 16:45 to 17:45 is 708

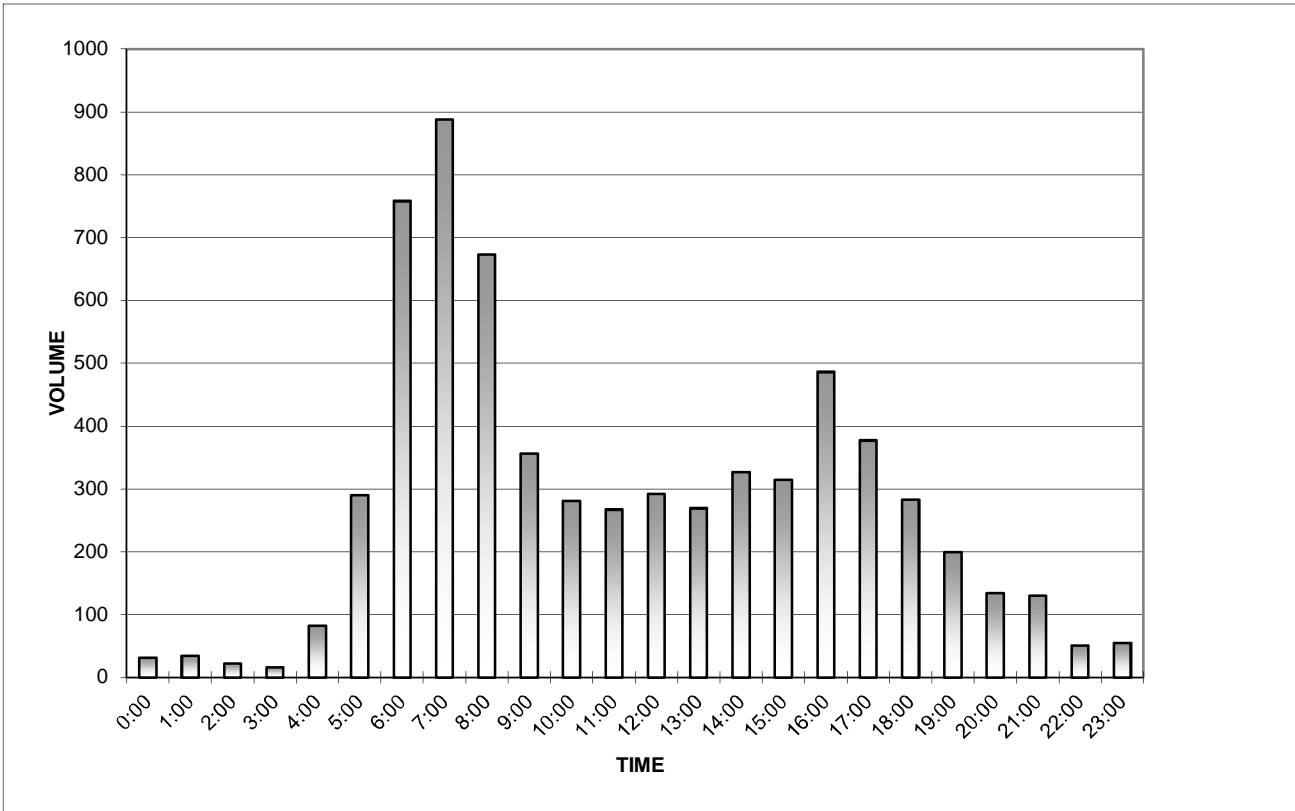


NB Corinth Street South of Riverfront Boulevard

Date Began:
5/3/2018

TIME	0:00	0:15	0:30	0:45	TOTAL
0:00	7	7	8	9	31
1:00	9	7	10	8	34
2:00	5	9	4	4	22
3:00	6	2	2	6	16
4:00	9	16	25	32	82
5:00	42	57	108	83	290
6:00	130	157	216	255	758
7:00	210	218	222	238	888
8:00	185	194	163	131	673
9:00	122	91	84	59	356
10:00	64	78	84	55	281
11:00	63	50	76	78	267
12:00	63	72	75	82	292
13:00	65	67	63	74	269
14:00	89	87	89	62	327
15:00	72	90	71	81	314
16:00	101	127	130	128	486
17:00	116	92	99	70	377
18:00	84	74	67	58	283
19:00	63	45	48	43	199
20:00	46	35	23	30	134
21:00	22	43	40	25	130
22:00	12	13	14	12	51
23:00	19	12	8	16	55
TOTAL:					6615

The A.M. peak hour from 6:45 to 7:45 is 905
The P.M. peak hour from 16:15 to 17:15 is 501

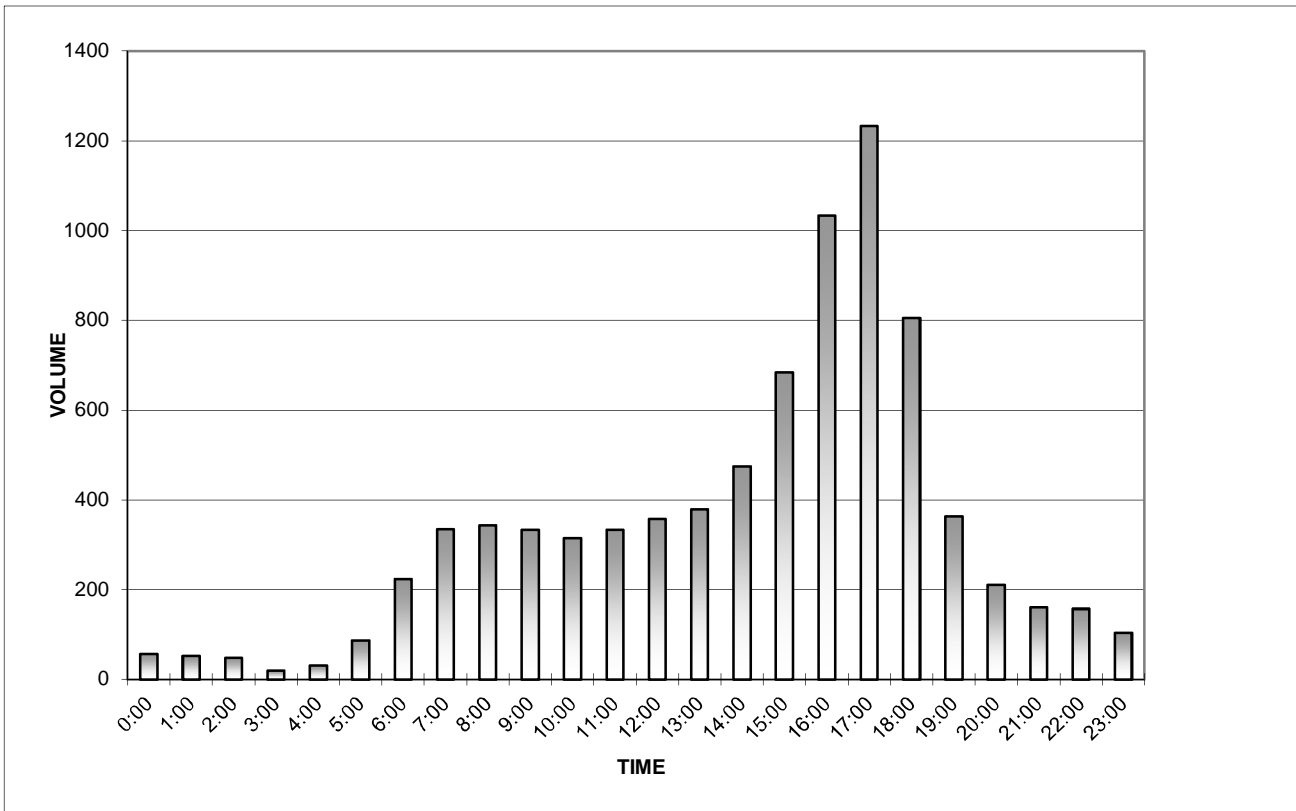


SB Corinth Street South of Riverfront Boulevard

Date Began:
5/3/2018

TIME	0:00	0:15	0:30	0:45	TOTAL
0:00	20	16	11	10	57
1:00	6	9	20	17	52
2:00	11	11	19	7	48
3:00	7	8	2	2	19
4:00	4	5	12	10	31
5:00	19	13	23	32	87
6:00	48	47	61	68	224
7:00	79	84	80	92	335
8:00	76	87	68	112	343
9:00	99	76	90	68	333
10:00	81	77	79	77	314
11:00	92	81	87	73	333
12:00	96	79	88	94	357
13:00	94	94	96	95	379
14:00	95	124	122	134	475
15:00	167	153	166	198	684
16:00	209	241	285	298	1033
17:00	313	323	317	280	1233
18:00	252	234	176	143	805
19:00	103	94	85	81	363
20:00	56	57	45	52	210
21:00	49	37	40	34	160
22:00	44	42	34	37	157
23:00	32	26	24	22	104
TOTAL:					8136

The A.M. peak hour from 8:45 to 9:45 is 377
The P.M. peak hour from 16:45 to 17:45 is 1251



1. Cadiz Street at Griffin Street - TMC

Tue May 1, 2018

Full Length (4:30PM-6:30PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 518139, Location: 32.772223, -96.798172, Site Code: 1



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg Direction	Griffin Street Eastbound						Griffin Street Westbound						Cadiz Street Northbound						Cadiz Street Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2018-05-01 4:30PM	36	174	0	0	210	0	0	24	1	0	25	1	6	56	74	0	136	3	0	0	0	0	0	0	371
4:45PM	32	191	0	0	223	0	0	34	1	0	35	4	9	52	82	0	143	1	0	0	0	0	0	0	401
Hourly Total	68	365	0	0	433	0	0	58	2	0	60	5	15	108	156	0	279	4	0	0	0	0	0	0	772
5:00PM	27	157	0	0	184	0	0	20	4	0	24	4	9	59	77	0	145	4	0	0	0	0	0	0	353
5:15PM	15	175	0	0	190	0	0	11	1	2	14	4	6	50	81	0	137	5	0	0	0	1	1	2	342
5:30PM	16	180	0	0	196	0	0	22	3	1	26	6	4	37	73	0	114	1	0	0	0	0	0	0	336
5:45PM	15	145	0	0	160	1	0	20	6	0	26	0	7	43	65	0	115	0	0	0	0	0	0	0	301
Hourly Total	73	657	0	0	730	1	0	73	14	3	90	14	26	189	296	0	511	10	0	0	0	1	1	4	1332
6:00PM	18	117	0	0	135	0	0	18	3	1	22	0	4	43	69	0	116	2	0	0	0	0	0	0	273
6:15PM	12	84	0	0	96	0	0	16	0	0	16	3	10	33	77	0	120	1	0	0	0	0	0	0	232
Hourly Total	30	201	0	0	231	0	0	34	3	1	38	3	14	76	146	0	236	3	0	0	0	0	0	0	505
Total	171	1223	0	0	1394	1	0	165	19	4	188	22	55	373	598	0	1026	17	0	0	0	1	1	5	2609
% Approach	12.3%	87.7%	0%	0%	-	-	0%	87.8%	10.1%	2.1%	-	-	5.4%	36.4%	58.3%	0%	-	-	0%	0%	0%	100%	-	-	-
% Total	6.6%	46.9%	0%	0%	53.4%	-	0%	6.3%	0.7%	0.2%	7.2%	-	2.1%	14.3%	22.9%	0%	39.3%	-	0%	0%	0%	0%	0%	0%	-
Lights	164	1203	0	0	1367	-	0	159	19	4	182	-	54	366	589	0	1009	-	0	0	0	1	1	-	2559
% Lights	95.9%	98.4%	0%	0%	98.1%	-	0%	96.4%	100%	100%	96.8%	-	98.2%	98.1%	98.5%	0%	98.3%	-	0%	0%	0%	100%	100%	-	98.1%
Articulated Trucks	1	2	0	0	3	-	0	1	0	0	1	-	0	1	3	0	4	-	0	0	0	0	0	-	8
% Articulated Trucks	0.6%	0.2%	0%	0%	0.2%	-	0%	0.6%	0%	0%	0.5%	-	0%	0.3%	0.5%	0%	0.4%	-	0%	0%	0%	0%	0%	-	0.3%
Buses and Single-Unit Trucks	6	18	0	0	24	-	0	5	0	0	5	-	1	6	6	0	13	-	0	0	0	0	0	-	42
% Buses and Single-Unit Trucks	3.5%	1.5%	0%	0%	1.7%	-	0%	3.0%	0%	0%	2.7%	-	1.8%	1.6%	1.0%	0%	1.3%	-	0%	0%	0%	0%	0%	-	1.6%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	20	-	-	-	-	-	17	-	-	-	-	-	4	-
% Pedestrians	-	-	-	-	-	0%	-	-	-	-	-	90.9%	-	-	-	-	-	100%	-	-	-	-	-	80.0%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	1	-
% Bicycles on Crosswalk	-	-	-	-	-	100%	-	-	-	-	-	9.1%	-	-	-	-	-	0%	-	-	-	-	-	20.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

1. Cadiz Street at Griffin Street - TMC

Tue May 1, 2018

PM Peak (4:30PM - 5:30PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 518139, Location: 32.772223, -96.798172, Site Code: 1



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg Direction	Griffin Street Eastbound					Griffin Street Westbound					Cadiz Street Northbound					Cadiz Street Southbound										
Time	L	T	R	U	App Ped*	L	T	R	U	App Ped*	L	T	R	U	App Ped*	L	T	R	U	App Ped*	Int					
2018-05-01 4:30PM	36	174	0	0	210	0	0	24	1	0	25	1	6	56	74	0	136	3	0	0	0	0	0	371		
4:45PM	32	191	0	0	223	0	0	34	1	0	35	4	9	52	82	0	143	1	0	0	0	0	0	401		
5:00PM	27	157	0	0	184	0	0	20	4	0	24	4	9	59	77	0	145	4	0	0	0	0	0	353		
5:15PM	15	175	0	0	190	0	0	11	1	2	14	4	6	50	81	0	137	5	0	0	0	1	1	342		
Total	110	697	0	0	807	0	0	89	7	2	98	13	30	217	314	0	561	13	0	0	0	1	1	3	1467	
% Approach	13.6%	86.4%	0%	0%	-	0%	90.8%	7.1%	2.0%	-	-	-	5.3%	38.7%	56.0%	0%	-	-	0%	0%	0%	100%	-	-	-	
% Total	7.5%	47.5%	0%	0%	55.0%	-	0%	6.1%	0.5%	0.1%	6.7%	-	2.0%	14.8%	21.4%	0%	38.2%	-	0%	0%	0%	0.1%	0.1%	-	-	
PHF	0.764	0.912	-	-	0.905	-	-	0.654	0.438	0.250	0.700	-	0.833	0.919	0.957	-	0.967	-	-	-	-0.250	0.250	-	0.915		
Lights	104	683	0	0	787	-	0	85	7	2	94	-	30	214	309	0	553	-	0	0	0	1	1	-	1435	
% Lights	94.5%	98.0%	0%	0%	97.5%	-	0%	95.5%	100%	100%	95.9%	-	100%	98.6%	98.4%	0%	98.6%	-	0%	0%	0%	100%	100%	-	97.8%	
Articulated Trucks	1	2	0	0	3	-	0	1	0	0	1	-	0	0	0	0	0	0	-	0	0	0	0	0	-	4
% Articulated Trucks	0.9%	0.3%	0%	0%	0.4%	-	0%	1.1%	0%	0%	1.0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0.3%	
Buses and Single-Unit Trucks	5	12	0	0	17	-	0	3	0	0	3	-	0	3	5	0	8	-	0	0	0	0	0	-	28	
% Buses and Single-Unit Trucks	4.5%	1.7%	0%	0%	2.1%	-	0%	3.4%	0%	0%	3.1%	-	0%	1.4%	1.6%	0%	1.4%	-	0%	0%	0%	0%	0%	-	1.9%	
Pedestrians	-	-	-	-	0	-	-	-	-	-	12	-	-	-	-	-	13	-	-	-	-	-	-	2	-	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-92.3%	-	-	-	-	-	-100%	-	-	-	-	-	-	-	-66.7%	
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	-	1	-	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-7.7%	-	-	-	-	-	0%	-	-	-	-	-	-	-	-33.3%	

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

1. Cadiz Street at Griffin Street - TMC

Sat Apr 28, 2018

Full Length (12PM-2PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 518120, Location: 32.772191, -96.798167



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg Direction	Griffin Street Eastbound						Griffin Street Westbound						Cadiz Street Northbound						Cadiz Street Southbound						Int
	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	
2018-04-28 12:00PM	16	17	0	0	33	0	0	25	2	1	28	1	4	35	32	0	71	1	0	0	0	0	0	0	132
12:15PM	8	26	0	0	34	0	0	18	5	1	24	4	6	24	30	0	60	1	0	0	0	0	0	0	118
12:30PM	9	31	0	0	40	1	0	17	0	1	18	1	5	39	31	0	75	6	0	0	0	0	0	0	133
12:45PM	16	42	0	0	58	0	0	17	7	1	25	0	9	43	51	0	103	2	0	0	0	0	0	0	186
Hourly Total	49	116	0	0	165	1	0	77	14	4	95	6	24	141	144	0	309	10	0	0	0	0	0	0	569
1:00PM	10	24	0	0	34	0	0	22	1	0	23	2	5	51	43	0	99	1	0	0	0	0	0	0	156
1:15PM	8	25	0	0	33	0	0	22	3	2	27	4	6	35	39	0	80	0	0	0	0	0	0	1	140
1:30PM	8	20	0	0	28	0	0	24	2	1	27	1	1	27	39	0	67	0	0	0	0	0	0	0	122
1:45PM	13	17	0	0	30	0	0	21	1	0	22	3	2	49	43	0	94	0	0	0	0	0	0	4	146
Hourly Total	39	86	0	0	125	0	0	89	7	3	99	10	14	162	164	0	340	1	0	0	0	0	0	5	564
Total	88	202	0	0	290	1	0	166	21	7	194	16	38	303	308	0	649	11	0	0	0	0	0	5	1133
% Approach	30.3%	69.7%	0%	0%	-	-	0%	85.6%	10.8%	3.6%	-	-	5.9%	46.7%	47.5%	0%	-	-	0%	0%	0%	0%	-	-	-
% Total	7.8%	17.8%	0%	0%	25.6%	-	0%	14.7%	1.9%	0.6%	17.1%	-	3.4%	26.7%	27.2%	0%	57.3%	-	0%	0%	0%	0%	0%	-	-
Lights	86	199	0	0	285	-	0	161	21	7	189	-	37	298	300	0	635	-	0	0	0	0	0	-	1109
% Lights	97.7%	98.5%	0%	0%	98.3%	-	0%	97.0%	100%	100%	97.4%	-	97.4%	98.3%	97.4%	0%	97.8%	-	0%	0%	0%	0%	-	-	97.9%
Articulated Trucks	0	1	0	0	1	-	0	1	0	0	1	-	0	1	3	0	4	-	0	0	0	0	0	-	6
% Articulated Trucks	0%	0.5%	0%	0%	0.3%	-	0%	0.6%	0%	0%	0.5%	-	0%	0.3%	1.0%	0%	0.6%	-	0%	0%	0%	0%	-	-	0.5%
Buses and Single-Unit Trucks	2	2	0	0	4	-	0	4	0	0	4	-	1	4	5	0	10	-	0	0	0	0	0	-	18
% Buses and Single-Unit Trucks	2.3%	1.0%	0%	0%	1.4%	-	0%	2.4%	0%	0%	2.1%	-	2.6%	1.3%	1.6%	0%	1.5%	-	0%	0%	0%	0%	-	-	1.6%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	15	-	-	-	-	-	11	-	-	-	-	-	3	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	93.8%	-	-	-	-	-	100%	-	-	-	-	-	60.0%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	2	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	6.3%	-	-	-	-	-	0%	-	-	-	-	-	40.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

1. Cadiz Street at Griffin Street - TMC

Sat Apr 28, 2018

Midday Peak (WKND) (12:30PM - 1:30PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 518120, Location: 32.772191, -96.798167



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg Direction	Griffin Street Eastbound						Griffin Street Westbound						Cadiz Street Northbound						Cadiz Street Southbound						Int
	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	
2018-04-28 12:30PM	9	31	0	0	40	1	0	17	0	1	18	1	5	39	31	0	75	6	0	0	0	0	0	0	133
12:45PM	16	42	0	0	58	0	0	17	7	1	25	0	9	43	51	0	103	2	0	0	0	0	0	0	186
1:00PM	10	24	0	0	34	0	0	22	1	0	23	2	5	51	43	0	99	1	0	0	0	0	0	0	156
1:15PM	8	25	0	0	33	0	0	22	3	2	27	4	6	35	39	0	80	0	0	0	0	0	0	1	140
Total	43	122	0	0	165	1	0	78	11	4	93	7	25	168	164	0	357	9	0	0	0	0	0	1	615
% Approach	26.1%	73.9%	0%	0%	-	-	0%	83.9%	11.8%	4.3%	-	-	7.0%	47.1%	45.9%	0%	-	-	0%	0%	0%	0%	-	-	-
% Total	7.0%	19.8%	0%	0%	26.8%	-	0%	12.7%	1.8%	0.7%	15.1%	-	4.1%	27.3%	26.7%	0%	58.0%	-	0%	0%	0%	0%	0%	-	-
PHF	0.672	0.726	-	-	0.711	-	-	0.886	0.393	0.500	0.861	-	0.694	0.824	0.804	-	0.867	-	-	-	-	-	-	-	0.827
Lights	43	121	0	0	164	-	0	75	11	4	90	-	24	164	158	0	346	-	0	0	0	0	0	-	600
% Lights	100%	99.2%	0%	0%	99.4%	-	0%	96.2%	100%	100%	96.8%	-	96.0%	97.6%	96.3%	0%	96.9%	-	0%	0%	0%	0%	-	-	97.6%
Articulated Trucks	0	0	0	0	0	-	0	1	0	0	1	-	0	1	2	0	3	-	0	0	0	0	0	-	4
% Articulated Trucks	0%	0%	0%	0%	0%	-	0%	1.3%	0%	0%	1.1%	-	0%	0.6%	1.2%	0%	0.8%	-	0%	0%	0%	0%	-	-	0.7%
Buses and Single-Unit Trucks	0	1	0	0	1	-	0	2	0	0	2	-	1	3	4	0	8	-	0	0	0	0	0	-	11
% Buses and Single-Unit Trucks	0%	0.8%	0%	0%	0.6%	-	0%	2.6%	0%	0%	2.2%	-	4.0%	1.8%	2.4%	0%	2.2%	-	0%	0%	0%	0%	-	-	1.8%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	7	-	-	-	-	-	9	-	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	0%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	100%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

2. Cadiz Street at Lamar Street - TMC

Tue May 1, 2018

Full Length (4:30PM-6:30PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 518140, Location: 32.770497, -96.799627, Site Code: 2



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	Lamar Street Eastbound						Lamar Street Westbound						Cadiz Street Northbound						Cadiz Street Southbound						Int
	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	
2018-05-01 4:30PM	15	137	48	0	200	0	31	39	20	0	90	3	13	93	64	0	170	0	33	6	19	2	60	2	520
4:45PM	12	115	32	0	159	0	32	36	16	1	85	1	7	104	82	0	193	0	23	4	15	0	42	5	479
Hourly Total	27	252	80	0	359	0	63	75	36	1	175	4	20	197	146	0	363	0	56	10	34	2	102	7	999
5:00PM	9	74	38	0	121	1	39	39	28	0	106	3	13	86	55	1	155	0	20	3	3	0	26	2	408
5:15PM	13	122	31	0	166	0	38	33	26	0	97	5	6	74	56	0	136	1	36	1	6	0	43	1	442
5:30PM	17	115	30	0	162	0	30	21	26	0	77	7	4	78	64	4	150	9	30	1	7	1	39	1	428
5:45PM	18	91	23	0	132	0	29	25	23	0	77	2	8	89	80	2	179	2	47	6	11	0	64	1	452
Hourly Total	57	402	122	0	581	1	136	118	103	0	357	17	31	327	255	7	620	12	133	11	27	1	172	5	1730
6:00PM	17	88	24	0	129	0	34	25	19	0	78	2	15	67	62	8	152	1	37	2	7	1	47	2	406
6:15PM	16	50	20	0	86	0	34	35	20	0	89	2	6	68	68	6	148	2	23	2	5	0	30	3	353
Hourly Total	33	138	44	0	215	0	68	60	39	0	167	4	21	135	130	14	300	3	60	4	12	1	77	5	759
Total	117	792	246	0	1155	1	267	253	178	1	699	25	72	659	531	21	1283	15	249	25	73	4	351	17	3488
% Approach	10.1%	68.6%	21.3%	0%	-	-	38.2%	36.2%	25.5%	0.1%	-	-	5.6%	51.4%	41.4%	1.6%	-	-	70.9%	7.1%	20.8%	1.1%	-	-	-
% Total	3.4%	22.7%	7.1%	0%	33.1%	-	7.7%	7.3%	5.1%	0%	20.0%	-	2.1%	18.9%	15.2%	0.6%	36.8%	-	7.1%	0.7%	2.1%	0.1%	10.1%	-	-
Lights	115	774	238	0	1127	-	264	241	172	1	678	-	68	650	520	21	1259	-	233	25	72	4	334	-	3398
% Lights	98.3%	97.7%	96.7%	0%	97.6%	-	98.9%	95.3%	96.6%	100%	97.0%	-	94.4%	98.6%	97.9%	100%	98.1%	-	93.6%	100%	98.6%	100%	95.2%	-	97.4%
Articulated Trucks	0	1	1	0	2	-	1	2	3	0	6	-	0	1	5	0	6	-	9	0	0	0	9	-	23
% Articulated Trucks	0%	0.1%	0.4%	0%	0.2%	-	0.4%	0.8%	1.7%	0%	0.9%	-	0%	0.2%	0.9%	0%	0.5%	-	3.6%	0%	0%	0%	2.6%	-	0.7%
Buses and Single-Unit Trucks	2	17	7	0	26	-	2	10	3	0	15	-	4	8	6	0	18	-	7	0	1	0	8	-	67
% Buses and Single-Unit Trucks	1.7%	2.1%	2.8%	0%	2.3%	-	0.7%	4.0%	1.7%	0%	2.1%	-	5.6%	1.2%	1.1%	0%	1.4%	-	2.8%	0%	1.4%	0%	2.3%	-	1.9%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	24	-	-	-	-	-	15	-	-	-	-	-	16	-
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	96.0%	-	-	-	-	-	100%	-	-	-	-	-	94.1%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	-
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	4.0%	-	-	-	-	-	0%	-	-	-	-	-	5.9%	-

* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

2. Cadiz Street at Lamar Street - TMC

Tue May 1, 2018

PM Peak (4:30PM - 5:30PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 518140, Location: 32.770497, -96.799627, Site Code: 2



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	Lamar Street Eastbound						Lamar Street Westbound						Cadiz Street Northbound						Cadiz Street Southbound						Int
	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	
2018-05-01 4:30PM	15	137	48	0	200	0	31	39	20	0	90	3	13	93	64	0	170	0	33	6	19	2	60	2	520
4:45PM	12	115	32	0	159	0	32	36	16	1	85	1	7	104	82	0	193	0	23	4	15	0	42	5	479
5:00PM	9	74	38	0	121	1	39	39	28	0	106	3	13	86	55	1	155	0	20	3	3	0	26	2	408
5:15PM	13	122	31	0	166	0	38	33	26	0	97	5	6	74	56	0	136	1	36	1	6	0	43	1	442
Total	49	448	149	0	646	1	140	147	90	1	378	12	39	357	257	1	654	1	112	14	43	2	171	10	1849
% Approach	7.6%	69.3%	23.1%	0%	-	-	37.0%	38.9%	23.8%	0.3%	-	-	6.0%	54.6%	39.3%	0.2%	-	-	65.5%	8.2%	25.1%	1.2%	-	-	-
% Total	2.7%	24.2%	8.1%	0%	34.9%	-	7.6%	8.0%	4.9%	0.1%	20.4%	-	2.1%	19.3%	13.9%	0.1%	35.4%	-	6.1%	0.8%	2.3%	0.1%	9.2%	-	-
PHF	0.817	0.818	0.776	-	0.808	-	0.897	0.942	0.804	0.250	0.892	-	0.750	0.858	0.784	0.250	0.847	-	0.778	0.583	0.566	0.250	0.713	-	0.889
Lights	47	437	141	0	625	-	137	138	89	1	365	-	37	352	250	1	640	-	103	14	43	2	162	-	1792
% Lights	95.9%	97.5%	94.6%	0%	96.7%	-	97.9%	93.9%	98.9%	100%	96.6%	-	94.9%	98.6%	97.3%	100%	97.9%	-	92.0%	100%	100%	100%	94.7%	-	96.9%
Articulated Trucks	0	0	1	0	1	-	1	0	0	0	1	-	0	0	1	0	1	-	6	0	0	0	6	-	9
% Articulated Trucks	0%	0%	0.7%	0%	0.2%	-	0.7%	0%	0%	0%	0.3%	-	0%	0%	0.4%	0%	0.2%	-	5.4%	0%	0%	0%	3.5%	-	0.5%
Buses and Single-Unit Trucks	2	11	7	0	20	-	2	9	1	0	12	-	2	5	6	0	13	-	3	0	0	0	3	-	48
% Buses and Single-Unit Trucks	4.1%	2.5%	4.7%	0%	3.1%	-	1.4%	6.1%	1.1%	0%	3.2%	-	5.1%	1.4%	2.3%	0%	2.0%	-	2.7%	0%	0%	0%	1.8%	-	2.6%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	12	-	-	-	-	-	1	-	-	-	-	-	9	-
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	90.0%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	10.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

2. Cadiz Street at Lamar Street - TMC

Sat Apr 28, 2018

Full Length (12PM-2PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 518122, Location: 32.77047, -96.799595



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	Lamar Street Eastbound						Lamar Street Westbound						Cadiz Street Northbound						Cadiz Street Southbound						Int
	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	
2018-04-28 12:00PM	7	22	22	0	51	0	30	30	26	0	86	3	4	35	24	0	63	3	29	6	10	0	45	1	245
12:15PM	5	28	14	0	47	0	35	35	15	0	85	1	9	37	21	2	69	0	41	1	13	1	56	5	257
12:30PM	12	34	12	0	58	0	40	38	23	0	101	3	8	34	43	3	88	0	46	8	8	1	63	2	310
12:45PM	12	39	17	0	68	0	21	24	30	0	75	5	11	48	32	3	94	1	28	2	13	2	45	6	282
Hourly Total	36	123	65	0	224	0	126	127	94	0	347	12	32	154	120	8	314	4	144	17	44	4	209	14	1094
1:00PM	15	41	16	0	72	0	21	34	29	0	84	1	6	51	37	6	100	0	35	2	7	2	46	2	302
1:15PM	11	26	13	0	50	0	24	21	14	0	59	1	5	46	28	2	81	2	43	2	14	1	60	2	250
1:30PM	4	36	15	0	55	0	27	27	13	0	67	1	8	49	34	2	93	0	16	5	16	0	37	3	252
1:45PM	4	28	14	0	46	0	34	17	36	0	87	0	18	54	24	8	104	1	28	1	15	0	44	1	281
Hourly Total	34	131	58	0	223	0	106	99	92	0	297	3	37	200	123	18	378	3	122	10	52	3	187	8	1085
Total	70	254	123	0	447	0	232	226	186	0	644	15	69	354	243	26	692	7	266	27	96	7	396	22	2179
% Approach	15.7%	56.8%	27.5%	0%	-	-	36.0%	35.1%	28.9%	0%	-	-	10.0%	51.2%	35.1%	3.8%	-	-	67.2%	6.8%	24.2%	1.8%	-	-	-
% Total	3.2%	11.7%	5.6%	0%	20.5%	-	10.6%	10.4%	8.5%	0%	29.6%	-	3.2%	16.2%	11.2%	1.2%	31.8%	-	12.2%	1.2%	4.4%	0.3%	18.2%	-	-
Lights	67	249	122	0	438	-	228	222	180	0	630	-	64	347	243	26	680	-	250	25	92	7	374	-	2122
% Lights	95.7%	98.0%	99.2%	0%	98.0%	-	98.3%	98.2%	96.8%	0%	97.8%	-	92.8%	98.0%	100%	100%	98.3%	-	94.0%	92.6%	95.8%	100%	94.4%	-	97.4%
Articulated Trucks	0	1	0	0	1	-	0	0	0	0	0	-	0	3	0	0	3	-	8	0	3	0	11	-	15
% Articulated Trucks	0%	0.4%	0%	0%	0.2%	-	0%	0%	0%	0%	0%	-	0%	0.8%	0%	0%	0.4%	-	3.0%	0%	3.1%	0%	2.8%	-	0.7%
Buses and Single-Unit Trucks	3	4	1	0	8	-	4	4	6	0	14	-	5	4	0	0	9	-	8	2	1	0	11	-	42
% Buses and Single-Unit Trucks	4.3%	1.6%	0.8%	0%	1.8%	-	1.7%	1.8%	3.2%	0%	2.2%	-	7.2%	1.1%	0%	0%	1.3%	-	3.0%	7.4%	1.0%	0%	2.8%	-	1.9%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	11	-	-	-	-	-	6	-	-	-	-	-	14	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-73.3%	-	-	-	-	-	-85.7%	-	-	-	-	-	-63.6%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	4	-	-	-	-	-	1	-	-	-	-	-	8	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-26.7%	-	-	-	-	-	-14.3%	-	-	-	-	-	-36.4%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

2. Cadiz Street at Lamar Street - TMC

Sat Apr 28, 2018

Midday Peak (WKND) (12:15PM - 1:15PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 518122, Location: 32.77047, -96.799595



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	Lamar Street Eastbound						Lamar Street Westbound						Cadiz Street Northbound						Cadiz Street Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2018-04-28 12:15PM	5	28	14	0	47	0	35	35	15	0	85	1	9	37	21	2	69	0	41	1	13	1	56	5	257
12:30PM	12	34	12	0	58	0	40	38	23	0	101	3	8	34	43	3	88	0	46	8	8	1	63	2	310
12:45PM	12	39	17	0	68	0	21	24	30	0	75	5	11	48	32	3	94	1	28	2	13	2	45	6	282
1:00PM	15	41	16	0	72	0	21	34	29	0	84	1	6	51	37	6	100	0	35	2	7	2	46	2	302
Total	44	142	59	0	245	0	117	131	97	0	345	10	34	170	133	14	351	1	150	13	41	6	210	15	1151
% Approach	18.0%	58.0%	24.1%	0%	-	-	33.9%	38.0%	28.1%	0%	-	-	9.7%	48.4%	37.9%	4.0%	-	-	71.4%	6.2%	19.5%	2.9%	-	-	-
% Total	3.8%	12.3%	5.1%	0%	21.3%	-	10.2%	11.4%	8.4%	0%	30.0%	-	3.0%	14.8%	11.6%	1.2%	30.5%	-	13.0%	1.1%	3.6%	0.5%	18.2%	-	-
PHF	0.733	0.866	0.868	-	0.851	-	0.731	0.862	0.808	-	0.854	-	0.773	0.833	0.773	0.583	0.878	-	0.815	0.406	0.788	0.750	0.833	-	0.928
Lights	41	140	58	0	239	-	113	129	95	0	337	-	32	165	133	14	344	-	145	12	39	6	202	-	1122
% Lights	93.2%	98.6%	98.3%	0%	97.6%	-	96.6%	98.5%	97.9%	0%	97.7%	-	94.1%	97.1%	100%	100%	98.0%	-	96.7%	92.3%	95.1%	100%	96.2%	-	97.5%
Articulated Trucks	0	0	0	0	0	-	0	0	0	0	0	-	0	2	0	0	2	-	4	0	1	0	5	-	7
% Articulated Trucks	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	1.2%	0%	0%	0.6%	-	2.7%	0%	2.4%	0%	2.4%	-	0.6%
Buses and Single-Unit Trucks	3	2	1	0	6	-	4	2	2	0	8	-	2	3	0	0	5	-	1	1	1	0	3	-	22
% Buses and Single-Unit Trucks	6.8%	1.4%	1.7%	0%	2.4%	-	3.4%	1.5%	2.1%	0%	2.3%	-	5.9%	1.8%	0%	0%	1.4%	-	0.7%	7.7%	2.4%	0%	1.4%	-	1.9%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	6	-	-	-	-	-	1	-	-	-	-	-	11	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-60.0%	-	-	-	-	-	-100%	-	-	-	-	-	-	-73.3%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	4	-	-	-	-	-	0	-	-	-	-	-	4	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-40.0%	-	-	-	-	-	-	0%	-	-	-	-	-	-26.7%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

3. Cadiz Street at Hotel Street - TMC

Tue May 1, 2018

Full Length (4:30PM-6:30PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 518141, Location: 32.76837, -96.801777, Site Code: 3



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg Direction	Hotel Street Eastbound					Cadiz Street Northbound					Cadiz Street Southbound					Int
	L	R	U	App	Ped*	L	T	U	App	Ped*	T	R	U	App	Ped*	
2018-05-01 4:30PM	2	7	0	9	0	34	170	2	206	0	77	7	0	84	0	299
4:45PM	2	6	1	9	0	24	158	0	182	0	55	5	0	60	0	251
Hourly Total	4	13	1	18	0	58	328	2	388	0	132	12	0	144	0	550
5:00PM	1	7	0	8	0	13	140	2	155	0	73	10	0	83	0	246
5:15PM	3	3	0	6	0	10	111	1	122	0	65	9	0	74	0	202
5:30PM	1	4	0	5	0	4	158	0	162	0	49	6	0	55	0	222
5:45PM	1	6	0	7	1	9	152	0	161	0	45	3	0	48	0	216
Hourly Total	6	20	0	26	1	36	561	3	600	0	232	28	0	260	0	886
6:00PM	1	7	0	8	1	8	138	0	146	0	51	6	0	57	0	211
6:15PM	2	3	0	5	0	7	119	0	126	0	45	7	0	52	1	183
Hourly Total	3	10	0	13	1	15	257	0	272	0	96	13	0	109	1	394
Total	13	43	1	57	2	109	1146	5	1260	0	460	53	0	513	1	1830
% Approach	22.8%	75.4%	1.8%	-	-	8.7%	91.0%	0.4%	-	-	89.7%	10.3%	0%	-	-	-
% Total	0.7%	2.3%	0.1%	3.1%	-	6.0%	62.6%	0.3%	68.9%	-	25.1%	2.9%	0%	28.0%	-	-
Lights	11	40	0	51	-	106	1127	5	1238	-	452	52	0	504	-	1793
% Lights	84.6%	93.0%	0%	89.5%	-	97.2%	98.3%	100%	98.3%	-	98.3%	98.1%	0%	98.2%	-	98.0%
Articulated Trucks	2	3	1	6	-	1	3	0	4	-	1	0	0	1	-	11
% Articulated Trucks	15.4%	7.0%	100%	10.5%	-	0.9%	0.3%	0%	0.3%	-	0.2%	0%	0%	0.2%	-	0.6%
Buses and Single-Unit Trucks	0	0	0	0	-	2	16	0	18	-	7	1	0	8	-	26
% Buses and Single-Unit Trucks	0%	0%	0%	0%	-	1.8%	1.4%	0%	1.4%	-	1.5%	1.9%	0%	1.6%	-	1.4%
Pedestrians	-	-	-	-	2	-	-	-	-	0	-	-	-	-	-	1
% Pedestrians	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	100%
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0
% Bicycles on Crosswalk	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	0%

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

3. Cadiz Street at Hotel Street - TMC

Tue May 1, 2018

PM Peak (4:30PM - 5:30PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 518141, Location: 32.76837, -96.801777, Site Code: 3



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg Direction	Hotel Street Eastbound					Cadiz Street Northbound					Cadiz Street Southbound					Int
	L	R	U	App	Ped*	L	T	U	App	Ped*	T	R	U	App	Ped*	
2018-05-01 4:30PM	2	7	0	9	0	34	170	2	206	0	77	7	0	84	0	299
4:45PM	2	6	1	9	0	24	158	0	182	0	55	5	0	60	0	251
5:00PM	1	7	0	8	0	13	140	2	155	0	73	10	0	83	0	246
5:15PM	3	3	0	6	0	10	111	1	122	0	65	9	0	74	0	202
Total	8	23	1	32	0	81	579	5	665	0	270	31	0	301	0	998
% Approach	25.0%	71.9%	3.1%	-	-	12.2%	87.1%	0.8%	-	-	89.7%	10.3%	0%	-	-	-
% Total	0.8%	2.3%	0.1%	3.2%	-	8.1%	58.0%	0.5%	66.6%	-	27.1%	3.1%	0%	30.2%	-	-
PHF	0.667	0.821	0.250	0.889	-	0.596	0.851	0.625	0.807	-	0.877	0.775	-	0.896	-	0.834
Lights	8	21	0	29	-	78	567	5	650	-	262	30	0	292	-	971
% Lights	100%	91.3%	0%	90.6%	-	96.3%	97.9%	100%	97.7%	-	97.0%	96.8%	0%	97.0%	-	97.3%
Articulated Trucks	0	2	1	3	-	1	1	0	2	-	1	0	0	1	-	6
% Articulated Trucks	0%	8.7%	100%	9.4%	-	1.2%	0.2%	0%	0.3%	-	0.4%	0%	0%	0.3%	-	0.6%
Buses and Single-Unit Trucks	0	0	0	0	-	2	11	0	13	-	7	1	0	8	-	21
% Buses and Single-Unit Trucks	0%	0%	0%	0%	-	2.5%	1.9%	0%	2.0%	-	2.6%	3.2%	0%	2.7%	-	2.1%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

3. Cadiz Street at Hotel Street - TMC

Sat Apr 28, 2018

Full Length (12PM-2PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 518123, Location: 32.768343, -96.80171



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg Direction	Hotel Street Eastbound					Cadiz Street Northbound					Cadiz Street Southbound					Int
	L	R	U	App	Ped*	L	T	U	App	Ped*	T	R	U	App	Ped*	
2018-04-28 12:00PM	1	3	0	4	0	5	69	0	74	0	47	1	0	48	1	126
12:15PM	2	3	0	5	0	3	78	0	81	0	51	2	0	53	1	139
12:30PM	2	4	0	6	0	3	70	0	73	0	46	7	0	53	0	132
12:45PM	1	2	0	3	0	4	77	0	81	0	37	5	0	42	0	126
Hourly Total	6	12	0	18	0	15	294	0	309	0	181	15	0	196	2	523
1:00PM	1	1	0	2	3	3	84	0	87	1	37	2	0	39	2	128
1:15PM	1	1	0	2	0	4	82	0	86	0	36	2	0	38	0	126
1:30PM	1	0	0	1	0	4	83	0	87	0	42	3	0	45	0	133
1:45PM	1	4	0	5	0	9	73	0	82	0	46	4	0	50	0	137
Hourly Total	4	6	0	10	3	20	322	0	342	1	161	11	0	172	2	524
Total	10	18	0	28	3	35	616	0	651	1	342	26	0	368	4	1047
% Approach	35.7%	64.3%	0%	-	-	5.4%	94.6%	0%	-	-	92.9%	7.1%	0%	-	-	-
% Total	1.0%	1.7%	0%	2.7%	-	3.3%	58.8%	0%	62.2%	-	32.7%	2.5%	0%	35.1%	-	-
Lights	10	14	0	24	-	28	604	0	632	-	336	26	0	362	-	1018
% Lights	100%	77.8%	0%	85.7%	-	80.0%	98.1%	0%	97.1%	-	98.2%	100%	0%	98.4%	-	97.2%
Articulated Trucks	0	0	0	0	-	7	3	0	10	-	0	0	0	0	-	10
% Articulated Trucks	0%	0%	0%	0%	-	20.0%	0.5%	0%	1.5%	-	0%	0%	0%	0%	-	1.0%
Buses and Single-Unit Trucks	0	4	0	4	-	0	9	0	9	-	6	0	0	6	-	19
% Buses and Single-Unit Trucks	0%	22.2%	0%	14.3%	-	0%	1.5%	0%	1.4%	-	1.8%	0%	0%	1.6%	-	1.8%
Pedestrians	-	-	-	-	3	-	-	-	-	1	-	-	-	-	3	-
% Pedestrians	-	-	-	-	100%	-	-	-	-	100%	-	-	-	-	75.0%	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	1	-
% Bicycles on Crosswalk	-	-	-	-	0%	-	-	-	-	0%	-	-	-	-	25.0%	-

* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

3. Cadiz Street at Hotel Street - TMC

Sat Apr 28, 2018

Midday Peak (WKND) (12:15PM - 1:15PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 518123, Location: 32.768343, -96.80171



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg Direction	Hotel Street Eastbound					Cadiz Street Northbound					Cadiz Street Southbound					Int
	L	R	U	App	Ped*	L	T	U	App	Ped*	T	R	U	App	Ped*	
2018-04-28 12:15PM	2	3	0	5	0	3	78	0	81	0	51	2	0	53	1	139
12:30PM	2	4	0	6	0	3	70	0	73	0	46	7	0	53	0	132
12:45PM	1	2	0	3	0	4	77	0	81	0	37	5	0	42	0	126
1:00PM	1	1	0	2	3	3	84	0	87	1	37	2	0	39	2	128
Total	6	10	0	16	3	13	309	0	322	1	171	16	0	187	3	525
% Approach	37.5%	62.5%	0%	-	-	4.0%	96.0%	0%	-	-	91.4%	8.6%	0%	-	-	-
% Total	1.1%	1.9%	0%	3.0%	-	2.5%	58.9%	0%	61.3%	-	32.6%	3.0%	0%	35.6%	-	-
PHF	0.750	0.625	-	0.667	-	0.813	0.920	-	0.925	-	0.838	0.571	-	0.882	-	0.944
Lights	6	8	0	14	-	11	302	0	313	-	166	16	0	182	-	509
% Lights	100%	80.0%	0%	87.5%	-	84.6%	97.7%	0%	97.2%	-	97.1%	100%	0%	97.3%	-	97.0%
Articulated Trucks	0	0	0	0	-	2	2	0	4	-	0	0	0	0	-	4
% Articulated Trucks	0%	0%	0%	0%	-	15.4%	0.6%	0%	1.2%	-	0%	0%	0%	0%	-	0.8%
Buses and Single-Unit Trucks	0	2	0	2	-	0	5	0	5	-	5	0	0	5	-	12
% Buses and Single-Unit Trucks	0%	20.0%	0%	12.5%	-	0%	1.6%	0%	1.6%	-	2.9%	0%	0%	2.7%	-	2.3%
Pedestrians	-	-	-	-	3	-	-	-	-	1	-	-	-	-	3	-
% Pedestrians	-	-	-	-	100%	-	-	-	-	100%	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-
% Bicycles on Crosswalk	-	-	-	-	0%	-	-	-	-	0%	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

4. Cadiz Street at Riverfront Boulevard - TMC

Tue May 1, 2018

Full Length (4:30PM-6:30PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 518142, Location: 32.766309, -96.803664, Site Code: 4



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	Riverfront Boulevard Eastbound						Riverfront Boulevard Westbound						Cadiz Street Northbound						Cadiz Street Southbound						Int
	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	
2018-05-01 4:30PM	117	328	0	0	445	0	0	82	17	0	99	1	109	86	26	0	221	1	16	0	68	0	84	0	849
4:45PM	132	278	0	0	410	0	0	75	8	0	83	3	68	52	15	0	135	3	12	0	58	1	71	0	699
Hourly Total	249	606	0	0	855	0	0	157	25	0	182	4	177	138	41	0	356	4	28	0	126	1	155	0	1548
5:00PM	98	231	0	0	329	0	0	66	6	0	72	2	25	57	18	0	100	0	16	0	75	0	91	0	592
5:15PM	91	329	0	0	420	0	0	58	8	0	66	3	20	38	13	0	71	0	10	0	54	0	64	0	621
5:30PM	108	327	0	0	435	0	0	60	8	0	68	0	25	41	22	0	88	6	11	0	43	1	55	0	646
5:45PM	112	304	0	0	416	0	0	42	9	0	51	2	18	50	14	0	82	3	6	0	54	0	60	0	609
Hourly Total	409	1191	0	0	1600	0	0	226	31	0	257	7	88	186	67	0	341	9	43	0	226	1	270	0	2468
6:00PM	93	237	0	0	330	0	0	35	6	0	41	0	11	45	9	0	65	0	15	0	51	0	66	0	502
6:15PM	84	211	0	1	296	0	0	52	16	0	68	0	10	33	12	0	55	0	7	0	45	0	52	0	471
Hourly Total	177	448	0	1	626	0	0	87	22	0	109	0	21	78	21	0	120	0	22	0	96	0	118	0	973
Total	835	2245	0	1	3081	0	0	470	78	0	548	11	286	402	129	0	817	13	93	0	448	2	543	0	4989
% Approach	27.1%	72.9%	0%	0%	-	-	0% 85.8%	14.2%	0%	-	-	35.0%	49.2%	15.8%	0%	-	-	17.1%	0%	82.5%	0.4%	-	-	-	
% Total	16.7%	45.0%	0%	0%	61.8%	-	0% 9.4%	1.6%	0%	11.0%	-	5.7%	8.1%	2.6%	0%	16.4%	-	1.9%	0%	9.0%	0%	10.9%	-	-	
Lights	818	2198	0	1	3017	-	0	440	78	0	518	-	272	396	125	0	793	-	92	0	437	2	531	-	4859
% Lights	98.0%	97.9%	0%	100%	97.9%	-	0% 93.6%	100%	0%	94.5%	-	95.1%	98.5%	96.9%	0%	97.1%	-	98.9%	0%	97.5%	100%	97.8%	-	97.4%	
Articulated Trucks	4	11	0	0	15	-	0	10	0	0	10	-	4	0	0	0	4	-	0	0	4	0	4	-	33
% Articulated Trucks	0.5%	0.5%	0%	0%	0.5%	-	0% 2.1%	0%	0%	1.8%	-	1.4%	0%	0%	0%	0.5%	-	0%	0%	0.9%	0%	0.7%	-	0.7%	
Buses and Single-Unit Trucks	13	36	0	0	49	-	0	20	0	0	20	-	10	6	4	0	20	-	1	0	7	0	8	-	97
% Buses and Single-Unit Trucks	1.6%	1.6%	0%	0%	1.6%	-	0% 4.3%	0%	0%	3.6%	-	3.5%	1.5%	3.1%	0%	2.4%	-	1.1%	0%	1.6%	0%	1.5%	-	1.9%	
Pedestrians	-	-	-	-	0	-	-	-	-	-	8	-	-	-	-	-	9	-	-	-	-	-	0	-	0
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-72.7%	-	-	-	-	-	-69.2%	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	4	-	-	-	-	-	0	-	0
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-27.3%	-	-	-	-	-	-30.8%	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

4. Cadiz Street at Riverfront Boulevard - TMC

Tue May 1, 2018

PM Peak (4:30PM - 5:30PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 518142, Location: 32.766309, -96.803664, Site Code: 4



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg Direction	Riverfront Boulevard Eastbound						Riverfront Boulevard Westbound						Cadiz Street Northbound						Cadiz Street Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2018-05-01 4:30PM	117	328	0	0	445	0	0	82	17	0	99	1	109	86	26	0	221	1	16	0	68	0	84	0	849
4:45PM	132	278	0	0	410	0	0	75	8	0	83	3	68	52	15	0	135	3	12	0	58	1	71	0	699
5:00PM	98	231	0	0	329	0	0	66	6	0	72	2	25	57	18	0	100	0	16	0	75	0	91	0	592
5:15PM	91	329	0	0	420	0	0	58	8	0	66	3	20	38	13	0	71	0	10	0	54	0	64	0	621
Total	438	1166	0	0	1604	0	0	281	39	0	320	9	222	233	72	0	527	4	54	0	255	1	310	0	2761
% Approach	27.3%	72.7%	0%	0%	-	-	0%	87.8%	12.2%	0%	-	-	42.1%	44.2%	13.7%	0%	-	-	17.4%	0%	82.3%	0.3%	-	-	-
% Total	15.9%	42.2%	0%	0%	58.1%	-	0%	10.2%	1.4%	0%	11.6%	-	8.0%	8.4%	2.6%	0%	19.1%	-	2.0%	0%	9.2%	0%	11.2%	-	-
PHF	0.830	0.886	-	-	0.901	-	-	0.857	0.574	-	0.808	-	0.509	0.677	0.692	-	0.596	-	0.844	-	0.850	0.250	0.852	-	0.813
Lights	426	1138	0	0	1564	-	0	259	39	0	298	-	211	229	68	0	508	-	53	0	245	1	299	-	2669
% Lights	97.3%	97.6%	0%	0%	97.5%	-	0%	92.2%	100%	0%	93.1%	-	95.0%	98.3%	94.4%	0%	96.4%	-	98.1%	0%	96.1%	100%	96.5%	-	96.7%
Articulated Trucks	2	6	0	0	8	-	0	7	0	0	7	-	3	0	0	0	3	-	0	0	3	0	3	-	21
% Articulated Trucks	0.5%	0.5%	0%	0%	0.5%	-	0%	2.5%	0%	0%	2.2%	-	1.4%	0%	0%	0%	0.6%	-	0%	0%	1.2%	0%	1.0%	-	0.8%
Buses and Single-Unit Trucks	10	22	0	0	32	-	0	15	0	0	15	-	8	4	4	0	16	-	1	0	7	0	8	-	71
% Buses and Single-Unit Trucks	2.3%	1.9%	0%	0%	2.0%	-	0%	5.3%	0%	0%	4.7%	-	3.6%	1.7%	5.6%	0%	3.0%	-	1.9%	0%	2.7%	0%	2.6%	-	2.6%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	7	-	-	-	-	-	3	-	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-77.8%	-	-	-	-	-	-75.0%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	0	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-22.2%	-	-	-	-	-	-25.0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

4. Cadiz Street at Riverfront Boulevard - TMC

Sat Apr 28, 2018

Full Length (12PM-2PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 518125, Location: 32.766277, -96.803603



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg Direction Time	Riverfront Boulevard Eastbound					Riverfront Boulevard Westbound					Hwy 77 Off Ramp Northbound					Cadiz Street Southbound					Int					
	L	T	R	U	App Ped*	L	T	R	U	App Ped*	L	T	R	U	App Ped*	L	T	R	U	App Ped*						
2018-04-28 12:00PM	36	75	0	0	111	0	0	57	9	0	66	0	42	35	8	0	85	0	9	0	47	0	56	0	318	
12:15PM	40	78	0	1	119	0	0	54	5	0	59	0	45	40	13	0	98	0	5	0	46	0	51	0	327	
12:30PM	34	100	0	2	136	0	0	55	6	0	61	0	35	38	13	0	86	0	11	0	48	0	59	0	342	
12:45PM	31	85	0	1	117	0	0	56	12	0	68	0	31	54	15	0	100	1	5	0	43	0	48	0	333	
Hourly Total	141	338	0	4	483	0	0	222	32	0	254	0	153	167	49	0	369	1	30	0	184	0	214	0	1320	
1:00PM	34	75	0	1	110	0	0	66	9	0	75	4	48	50	21	0	119	0	13	0	34	0	47	1	351	
1:15PM	37	93	0	1	131	0	0	80	7	0	87	1	53	53	25	0	131	0	14	0	41	0	55	1	404	
1:30PM	36	96	0	1	133	0	0	77	15	1	93	0	46	38	14	0	98	0	10	0	35	0	45	0	369	
1:45PM	25	85	0	0	110	0	0	71	11	0	82	1	48	54	12	0	114	0	9	0	47	0	56	0	362	
Hourly Total	132	349	0	3	484	0	0	294	42	1	337	6	195	195	72	0	462	0	46	0	157	0	203	2	1486	
Total	273	687	0	7	967	0	0	516	74	1	591	6	348	362	121	0	831	1	76	0	341	0	417	2	2806	
% Approach	28.2%	71.0%	0%	0.7%	-	-0%	87.3%	12.5%	0.2%	-	-	-	41.9%	43.6%	14.6%	0%	-	-	18.2%	0%	81.8%	0%	-	-	-	
% Total	9.7%	24.5%	0%	0.2%	34.5%	-0%	18.4%	2.6%	0%	21.1%	-	-	12.4%	12.9%	4.3%	0%	29.6%	-	2.7%	0%	12.2%	0%	14.9%	-	-	
Lights	260	666	0	7	933	-	0	498	74	1	573	-	345	358	117	0	820	-	75	0	332	0	407	-	2733	
% Lights	95.2%	96.9%	0%	100%	96.5%	-0%	96.5%	100%	100%	97.0%	-	-	99.1%	98.9%	96.7%	0%	98.7%	-	98.7%	0%	97.4%	0%	97.6%	-	97.4%	
Articulated Trucks	10	4	0	0	14	-	0	6	0	0	6	-	2	0	3	0	5	-	0	0	0	0	0	0	-	25
% Articulated Trucks	3.7%	0.6%	0%	0%	1.4%	-0%	1.2%	0%	0%	1.0%	-	-	0.6%	0%	2.5%	0%	0.6%	-	0%	0%	0%	0%	0%	0%	-	0.9%
Buses and Single-Unit Trucks	3	17	0	0	20	-	0	12	0	0	12	-	1	4	1	0	6	-	1	0	9	0	10	-	48	
% Buses and Single-Unit Trucks	1.1%	2.5%	0%	0%	2.1%	-0%	2.3%	0%	0%	2.0%	-	-	0.3%	1.1%	0.8%	0%	0.7%	-	1.3%	0%	2.6%	0%	2.4%	-	1.7%	
Pedestrians	-	-	-	-	0	-	-	-	-	-	6	-	-	-	-	-	1	-	-	-	-	-	-	2	-	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-100%	-	-	-	-	-	-100%	-	-	-	-	-	-	-100%	-	
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	-	0	-	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	-	0%	-	

* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

4. Cadiz Street at Riverfront Boulevard - TMC

Sat Apr 28, 2018

Midday Peak (WKND) (1PM - 2PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 518125, Location: 32.766277, -96.803603



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg Direction	Riverfront Boulevard Eastbound						Riverfront Boulevard Westbound						Hwy 77 Off Ramp Northbound						Cadiz Street Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2018-04-28 1:00PM	34	75	0	1	110	0	0	66	9	0	75	4	48	50	21	0	119	0	13	0	34	0	47	1	351
1:15PM	37	93	0	1	131	0	0	80	7	0	87	1	53	53	25	0	131	0	14	0	41	0	55	1	404
1:30PM	36	96	0	1	133	0	0	77	15	1	93	0	46	38	14	0	98	0	10	0	35	0	45	0	369
1:45PM	25	85	0	0	110	0	0	71	11	0	82	1	48	54	12	0	114	0	9	0	47	0	56	0	362
Total	132	349	0	3	484	0	0	294	42	1	337	6	195	195	72	0	462	0	46	0	157	0	203	2	1486
% Approach	27.3%	72.1%	0%	0.6%	-	-	0%	87.2%	12.5%	0.3%	-	-	42.2%	42.2%	15.6%	0%	-	-	22.7%	0%	77.3%	0%	-	-	-
% Total	8.9%	23.5%	0%	0.2%	32.6%	-	0%	19.8%	2.8%	0.1%	22.7%	-	13.1%	13.1%	4.8%	0%	31.1%	-	3.1%	0%	10.6%	0%	13.7%	-	-
PHF	0.892	0.909	-	0.750	0.910	-	-	0.919	0.700	0.250	0.906	-	0.920	0.903	0.720	-	0.882	-	0.821	-	0.835	-	0.906	-	0.920
Lights	125	337	0	3	465	-	0	285	42	1	328	-	195	193	70	0	458	-	46	0	154	0	200	-	1451
% Lights	94.7%	96.6%	0%	100%	96.1%	-	0%	96.9%	100%	100%	97.3%	-	100%	99.0%	97.2%	0%	99.1%	-	100%	0%	98.1%	0%	98.5%	-	97.6%
Articulated Trucks	5	2	0	0	7	-	0	4	0	0	4	-	0	0	1	0	1	-	0	0	0	0	0	-	12
% Articulated Trucks	3.8%	0.6%	0%	0%	1.4%	-	0%	1.4%	0%	0%	1.2%	-	0%	0%	1.4%	0%	0.2%	-	0%	0%	0%	0%	0%	-	0.8%
Buses and Single-Unit Trucks	2	10	0	0	12	-	0	5	0	0	5	-	0	2	1	0	3	-	0	0	3	0	3	-	23
% Buses and Single-Unit Trucks	1.5%	2.9%	0%	0%	2.5%	-	0%	1.7%	0%	0%	1.5%	-	0%	1.0%	1.4%	0%	0.6%	-	0%	0%	1.9%	0%	1.5%	-	1.5%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	6	-	-	-	-	-	0	-	-	-	-	-	2	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

5. Riverfront Boulevard at 35E South On Ramp - TMC

Tue May 1, 2018

Full Length (4:30PM-6:30PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 518144, Location: 32.768039, -96.808567, Site Code: 5



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg Direction	Riverfront Boulevard Eastbound					Riverfront Boulevard Westbound					35E South On-Ramp Southbound					Int
	L	T	U	App	Ped*	T	R	U	App	Ped*	L	R	U	App	Ped*	
2018-05-01 4:30PM	89	385	0	474	0	219	45	0	264	0	0	0	0	0	0	738
4:45PM	84	401	1	486	0	178	46	1	225	0	0	0	0	0	0	711
Hourly Total	173	786	1	960	0	397	91	1	489	0	0	0	0	0	0	1449
5:00PM	93	327	1	421	0	141	54	0	195	0	0	0	0	0	0	616
5:15PM	88	380	1	469	0	115	37	0	152	0	0	0	0	0	0	621
5:30PM	89	362	1	452	0	109	28	0	137	0	0	0	0	0	0	589
5:45PM	75	364	1	440	0	91	33	0	124	0	0	0	0	0	0	564
Hourly Total	345	1433	4	1782	0	456	152	0	608	0	0	0	0	0	0	2390
6:00PM	70	298	0	368	0	77	37	0	114	0	0	0	0	0	0	482
6:15PM	70	283	0	353	0	81	37	0	118	0	0	0	0	0	0	471
Hourly Total	140	581	0	721	0	158	74	0	232	0	0	0	0	0	0	953
Total	658	2800	5	3463	0	1011	317	1	1329	0	0	0	0	0	0	4792
% Approach	19.0%	80.9%	0.1%	-	-	76.1%	23.9%	0.1%	-	-	0%	0%	0%	-	-	-
% Total	13.7%	58.4%	0.1%	72.3%	-	21.1%	6.6%	0%	27.7%	-	0%	0%	0%	0%	-	-
Lights	651	2748	5	3404	-	960	310	1	1271	-	0	0	0	0	-	4675
% Lights	98.9%	98.1%	100%	98.3%	-	95.0%	97.8%	100%	95.6%	-	0%	0%	0%	-	-	97.6%
Articulated Trucks	3	14	0	17	-	16	4	0	20	-	0	0	0	0	-	37
% Articulated Trucks	0.5%	0.5%	0%	0.5%	-	1.6%	1.3%	0%	1.5%	-	0%	0%	0%	-	-	0.8%
Buses and Single-Unit Trucks	4	38	0	42	-	35	3	0	38	-	0	0	0	0	-	80
% Buses and Single-Unit Trucks	0.6%	1.4%	0%	1.2%	-	3.5%	0.9%	0%	2.9%	-	0%	0%	0%	-	-	1.7%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

5. Riverfront Boulevard at 35E South On Ramp - TMC

Tue May 1, 2018

PM Peak (4:30PM - 5:30PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 518144, Location: 32.768039, -96.808567, Site Code: 5



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg Direction	Riverfront Boulevard Eastbound					Riverfront Boulevard Westbound					35E South On-Ramp Southbound					Int
	L	T	U	App	Ped*	T	R	U	App	Ped*	L	R	U	App	Ped*	
2018-05-01 4:30PM	89	385	0	474	0	219	45	0	264	0	0	0	0	0	0	738
4:45PM	84	401	1	486	0	178	46	1	225	0	0	0	0	0	0	711
5:00PM	93	327	1	421	0	141	54	0	195	0	0	0	0	0	0	616
5:15PM	88	380	1	469	0	115	37	0	152	0	0	0	0	0	0	621
Total	354	1493	3	1850	0	653	182	1	836	0	0	0	0	0	0	2686
% Approach	19.1%	80.7%	0.2%	-	-	78.1%	21.8%	0.1%	-	-	0%	0%	0%	-	-	-
% Total	13.2%	55.6%	0.1%	68.9%	-	24.3%	6.8%	0%	31.1%	-	0%	0%	0%	0%	-	-
PHF	0.952	0.931	0.750	0.952	-	0.745	0.843	0.250	0.792	-	-	-	-	-	-	0.910
Lights	349	1461	3	1813	-	619	176	1	796	-	0	0	0	0	-	2609
% Lights	98.6%	97.9%	100%	98.0%	-	94.8%	96.7%	100%	95.2%	-	0%	0%	0%	-	-	97.1%
Articulated Trucks	1	9	0	10	-	10	4	0	14	-	0	0	0	0	-	24
% Articulated Trucks	0.3%	0.6%	0%	0.5%	-	1.5%	2.2%	0%	1.7%	-	0%	0%	0%	-	-	0.9%
Buses and Single-Unit Trucks	4	23	0	27	-	24	2	0	26	-	0	0	0	0	-	53
% Buses and Single-Unit Trucks	1.1%	1.5%	0%	1.5%	-	3.7%	1.1%	0%	3.1%	-	0%	0%	0%	-	-	2.0%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

5. Riverfront Boulevard at 35E South On Ramp - TMC

Sat Apr 28, 2018

Full Length (12PM-2PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 518127, Location: 32.76803, -96.808511



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg Direction	Riverfront Boulevard Eastbound					Riverfront Boulevard Westbound					I 35E South On Ramp Southbound					Int
	L	T	U	App	Ped*	T	R	U	App	Ped*	L	R	U	App	Ped*	
2018-04-28 12:00PM	31	120	1	152	0	122	42	1	165	0	0	0	0	0	0	317
12:15PM	49	113	0	162	0	136	57	0	193	0	0	0	0	0	0	355
12:30PM	34	129	1	164	0	117	54	1	172	0	0	0	0	0	0	336
12:45PM	41	111	2	154	0	122	47	0	169	0	0	0	0	0	0	323
Hourly Total	155	473	4	632	0	497	200	2	699	0	0	0	0	0	0	1331
1:00PM	42	115	1	158	0	140	47	0	187	0	0	0	0	0	0	345
1:15PM	28	123	0	151	0	158	47	0	205	0	0	0	0	0	0	356
1:30PM	31	103	1	135	0	131	44	0	175	0	0	0	0	0	1	310
1:45PM	40	99	0	139	0	151	63	0	214	0	0	0	0	0	0	353
Hourly Total	141	440	2	583	0	580	201	0	781	0	0	0	0	0	1	1364
2:00PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	296	913	6	1215	0	1077	401	2	1480	0	0	0	0	0	1	2695
% Approach	24.4%	75.1%	0.5%	-	-	72.8%	27.1%	0.1%	-	-	0%	0%	0%	-	-	-
% Total	11.0%	33.9%	0.2%	45.1%	-	40.0%	14.9%	0.1%	54.9%	-	0%	0%	0%	0%	-	-
Lights	291	881	6	1178	-	1029	396	2	1427	-	0	0	0	0	-	2605
% Lights	98.3%	96.5%	100%	97.0%	-	95.5%	98.8%	100%	96.4%	-	0%	0%	0%	-	-	96.7%
Articulated Trucks	1	11	0	12	-	9	1	0	10	-	0	0	0	0	-	22
% Articulated Trucks	0.3%	1.2%	0%	1.0%	-	0.8%	0.2%	0%	0.7%	-	0%	0%	0%	-	-	0.8%
Buses and Single-Unit Trucks	4	21	0	25	-	39	4	0	43	-	0	0	0	0	-	68
% Buses and Single-Unit Trucks	1.4%	2.3%	0%	2.1%	-	3.6%	1.0%	0%	2.9%	-	0%	0%	0%	-	-	2.5%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	1
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

5. Riverfront Boulevard at 35E South On Ramp - TMC

Sat Apr 28, 2018

Midday Peak (WKND) (1PM - 2PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 518127, Location: 32.76803, -96.808511



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg Direction	Riverfront Boulevard Eastbound					Riverfront Boulevard Westbound					I 35E South On Ramp Southbound					Int
	L	T	U	App	Ped*	T	R	U	App	Ped*	L	R	U	App	Ped*	
2018-04-28 1:00PM	42	115	1	158	0	140	47	0	187	0	0	0	0	0	0	345
1:15PM	28	123	0	151	0	158	47	0	205	0	0	0	0	0	0	356
1:30PM	31	103	1	135	0	131	44	0	175	0	0	0	0	0	1	310
1:45PM	40	99	0	139	0	151	63	0	214	0	0	0	0	0	0	353
Total	141	440	2	583	0	580	201	0	781	0	0	0	0	0	1	1364
% Approach	24.2%	75.5%	0.3%	-	-	74.3%	25.7%	0%	-	-	0%	0%	0%	-	-	-
% Total	10.3%	32.3%	0.1%	42.7%	-	42.5%	14.7%	0%	57.3%	-	0%	0%	0%	0%	-	-
PHF	0.839	0.894	0.500	0.922	-	0.918	0.798	-	0.912	-	-	-	-	-	-	0.958
Lights	140	425	2	567	-	556	199	0	755	-	0	0	0	0	-	1322
% Lights	99.3%	96.6%	100%	97.3%	-	95.9%	99.0%	0%	96.7%	-	0%	0%	0%	-	-	96.9%
Articulated Trucks	0	4	0	4	-	4	1	0	5	-	0	0	0	0	-	9
% Articulated Trucks	0%	0.9%	0%	0.7%	-	0.7%	0.5%	0%	0.6%	-	0%	0%	0%	-	-	0.7%
Buses and Single-Unit Trucks	1	11	0	12	-	20	1	0	21	-	0	0	0	0	-	33
% Buses and Single-Unit Trucks	0.7%	2.5%	0%	2.1%	-	3.4%	0.5%	0%	2.7%	-	0%	0%	0%	-	-	2.4%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	1
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

6. Riverfront Boulevard at 35E South and 30 E Off Ramp - TMC

Tue May 1, 2018

Full Length (4:30PM-6:30PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 518143, Location: 32.76694, -96.804535, Site Code: 6



Provided by: C. J. Hensch & Associates

Inc.

5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg Direction	Riverfront Boulevard Eastbound						Riverfront Boulevard Westbound						Drive way Northbound						35 E South and 30 East Off-Ramp Southbound						Int
	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	
2018-05-01 4:30PM	0	401	0	0	401	0	0	257	0	0	257	0	0	0	0	0	0	0	48	0	30	0	78	0	736
4:45PM	0	399	0	0	399	0	0	193	0	0	193	0	0	0	0	0	0	0	15	0	21	0	36	0	628
Hourly Total	0	800	0	0	800	0	0	450	0	0	450	0	0	0	0	0	0	0	63	0	51	0	114	0	1364
5:00PM	0	303	0	0	303	0	0	178	0	1	179	0	0	0	0	0	0	0	21	0	11	0	32	0	514
5:15PM	0	392	0	1	393	0	0	138	0	0	138	0	0	0	0	0	0	0	35	0	11	0	46	0	577
5:30PM	0	368	0	0	368	0	0	126	0	1	127	0	0	0	0	0	0	0	61	0	8	0	69	0	564
5:45PM	0	357	0	1	358	0	0	113	0	0	113	0	0	0	0	0	0	0	61	0	13	0	74	0	545
Hourly Total	0	1420	0	2	1422	0	0	555	0	2	557	0	0	0	0	0	0	0	178	0	43	0	221	0	2200
6:00PM	0	304	0	0	304	0	0	96	0	0	96	0	0	0	0	0	0	0	28	0	14	0	42	0	442
6:15PM	0	283	0	0	283	0	0	115	0	0	115	0	0	0	0	0	0	0	25	0	14	0	39	0	437
Hourly Total	0	587	0	0	587	0	0	211	0	0	211	0	0	0	0	0	0	0	53	0	28	0	81	0	879
Total	0	2807	0	2	2809	0	0	1216	0	2	1218	0	0	0	0	0	0	0	294	0	122	0	416	0	4443
% Approach	0%	99.9%	0%	0.1%	-	-	0%	99.8%	0%	0.2%	-	-	0%	0%	0%	0%	-	-	70.7%	0%	29.3%	0%	-	-	-
% Total	0%	63.2%	0%	0%	63.2%	-	0%	27.4%	0%	0%	27.4%	-	0%	0%	0%	0%	0%	0%	6.6%	0%	2.7%	0%	9.4%	-	-
Lights	0	2750	0	1	2751	-	0	1159	0	2	1161	-	0	0	0	0	0	0	288	0	119	0	407	-	4319
% Lights	0%	98.0%	0%	50.0%	97.9%	-	0%	95.3%	0%	100%	95.3%	-	0%	0%	0%	0%	-	-	98.0%	0%	97.5%	0%	97.8%	-	97.2%
Articulated Trucks	0	11	0	0	11	-	0	19	0	0	19	-	0	0	0	0	0	0	3	0	0	0	3	-	33
% Articulated Trucks	0%	0.4%	0%	0%	0.4%	-	0%	1.6%	0%	0%	1.6%	-	0%	0%	0%	0%	-	-	1.0%	0%	0%	0%	0.7%	-	0.7%
Buses and Single-Unit Trucks	0	46	0	1	47	-	0	38	0	0	38	-	0	0	0	0	0	0	3	0	3	0	6	-	91
% Buses and Single-Unit Trucks	0%	1.6%	0%	50.0%	1.7%	-	0%	3.1%	0%	0%	3.1%	-	0%	0%	0%	0%	-	-	1.0%	0%	2.5%	0%	1.4%	-	2.0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	6	-	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	75.0%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25.0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

6. Riverfront Boulevard at 35E South and 30 E Off Ramp - TMC

Tue May 1, 2018

PM Peak (4:30PM - 5:30PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 518143, Location: 32.76694, -96.804535, Site Code: 6



Provided by: C. J. Hensch & Associates

Inc.

5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg Direction	Riverfront Boulevard Eastbound						Riverfront Boulevard Westbound						Driveway Northbound						35 E South and 30 East Off-Ramp Southbound						Int
	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	
2018-05-01 4:30PM	0	401	0	0	401	0	0	257	0	0	257	0	0	0	0	0	0	4	48	0	30	0	78	0	736
4:45PM	0	399	0	0	399	0	0	193	0	0	193	0	0	0	0	0	0	1	15	0	21	0	36	0	628
5:00PM	0	303	0	0	303	0	0	178	0	1	179	0	0	0	0	0	0	0	21	0	11	0	32	0	514
5:15PM	0	392	0	1	393	0	0	138	0	0	138	0	0	0	0	0	0	0	35	0	11	0	46	0	577
Total	0	1495	0	1	1496	0	0	766	0	1	767	0	0	0	0	0	0	5	119	0	73	0	192	0	2455
% Approach	0%	99.9%	0%	0.1%	-	-	0%	99.9%	0%	0.1%	-	-	0%	0%	0%	0%	-	-	62.0%	0%	38.0%	0%	-	-	-
% Total	0%	60.9%	0%	0%	60.9%	-	0%	31.2%	0%	0%	31.2%	-	0%	0%	0%	0%	0%	-	4.8%	0%	3.0%	0%	7.8%	-	-
PHF	-	0.932	-	0.250	0.933	-	-	0.745	-	0.250	0.746	-	-	-	-	-	-	-	0.620	-	0.608	-	0.615	-	0.834
Lights	0	1457	0	0	1457	-	0	721	0	1	722	-	0	0	0	0	0	-	117	0	72	0	189	-	2368
% Lights	0%	97.5%	0%	0%	97.4%	-	0%	94.1%	0%	100%	94.1%	-	0%	0%	0%	0%	-	-	98.3%	0%	98.6%	0%	98.4%	-	96.5%
Articulated Trucks	0	7	0	0	7	-	0	15	0	0	15	-	0	0	0	0	0	-	2	0	0	0	2	-	24
% Articulated Trucks	0%	0.5%	0%	0%	0.5%	-	0%	2.0%	0%	0%	2.0%	-	0%	0%	0%	0%	-	-	1.7%	0%	0%	0%	1.0%	-	1.0%
Buses and Single-Unit Trucks	0	31	0	1	32	-	0	30	0	0	30	-	0	0	0	0	0	-	0	0	1	0	1	-	63
% Buses and Single-Unit Trucks	0%	2.1%	0%	100%	2.1%	-	0%	3.9%	0%	0%	3.9%	-	0%	0%	0%	0%	-	-	0%	0%	1.4%	0%	0.5%	-	2.6%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	4	-	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	80.0%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20.0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

6. Riverfront Boulevard at 35E South and 30 E Off Ramp - TMC

Sat Apr 28, 2018

Full Length (12PM-2PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 518130, Location: 32.766918, -96.80449



Provided by: C. J. Hensch & Associates

Inc.

5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg Direction	Riverfront Boulevard Eastbound						Riverfront Boulevard Westbound						Driveaway Northbound						I 35E South Off Ramp Southbound						Int
	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	
2018-04-28 12:00PM	0	96	0	0	96	0	0	149	0	0	149	0	0	0	0	0	0	0	16	0	29	0	45	0	290
12:15PM	0	101	0	0	101	0	0	145	0	0	145	0	0	0	0	0	0	0	17	0	31	0	48	0	294
12:30PM	0	118	0	0	118	0	0	141	0	1	142	0	0	0	0	0	0	0	21	0	30	0	51	0	311
12:45PM	0	98	0	0	98	0	0	131	0	0	131	0	0	0	0	0	0	0	17	0	23	0	40	0	269
Hourly Total	0	413	0	0	413	0	0	566	0	1	567	0	0	0	0	0	0	0	71	0	113	0	184	0	1164
1:00PM	0	98	0	1	99	0	0	148	0	0	148	0	0	0	0	0	0	0	15	0	28	0	43	0	290
1:15PM	0	116	0	0	116	0	0	170	0	2	172	0	0	0	0	0	0	0	13	0	29	0	42	1	330
1:30PM	0	112	0	0	112	0	0	153	0	0	153	0	0	0	0	0	0	0	19	0	23	0	42	0	307
1:45PM	0	98	0	0	98	0	0	167	0	0	167	0	0	0	0	0	0	0	13	0	24	0	37	0	302
Hourly Total	0	424	0	1	425	0	0	638	0	2	640	0	0	0	0	0	0	0	60	0	104	0	164	1	1229
Total	0	837	0	1	838	0	0	1204	0	3	1207	0	0	0	0	0	0	0	131	0	217	0	348	1	2393
% Approach	0%	99.9%	0%	0.1%	-	-	0%	99.8%	0%	0.2%	-	-	0%	0%	0%	0%	-	-	37.6%	0%	62.4%	0%	-	-	-
% Total	0%	35.0%	0%	0%	35.0%	-	0%	50.3%	0%	0.1%	50.4%	-	0%	0%	0%	0%	0%	-	5.5%	0%	9.1%	0%	14.5%	-	-
Lights	0	815	0	1	816	-	0	1172	0	3	1175	-	0	0	0	0	0	-	123	0	207	0	330	-	2321
% Lights	0%	97.4%	0%	100%	97.4%	-	0%	97.3%	0%	100%	97.3%	-	0%	0%	0%	0%	-	-	93.9%	0%	95.4%	0%	94.8%	-	97.0%
Articulated Trucks	0	10	0	0	10	-	0	8	0	0	8	-	0	0	0	0	0	-	4	0	3	0	7	-	25
% Articulated Trucks	0%	1.2%	0%	0%	1.2%	-	0%	0.7%	0%	0%	0.7%	-	0%	0%	0%	0%	-	-	3.1%	0%	1.4%	0%	2.0%	-	1.0%
Buses and Single-Unit Trucks	0	12	0	0	12	-	0	24	0	0	24	-	0	0	0	0	0	-	4	0	7	0	11	-	47
% Buses and Single-Unit Trucks	0%	1.4%	0%	0%	1.4%	-	0%	2.0%	0%	0%	2.0%	-	0%	0%	0%	0%	-	-	3.1%	0%	3.2%	0%	3.2%	-	2.0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

6. Riverfront Boulevard at 35E South and 30 E Off Ramp - TMC

Sat Apr 28, 2018

Midday Peak (WKND) (1PM - 2PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 518130, Location: 32.766918, -96.80449



Provided by: C. J. Hensch & Associates Inc.

5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg Direction	Riverfront Boulevard Eastbound						Riverfront Boulevard Westbound						Drive way Northbound						I 35E South Off Ramp Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2018-04-28 1:00PM	0	98	0	1	99	0	0	148	0	0	148	0	0	0	0	0	0	0	15	0	28	0	43	0	290
1:15PM	0	116	0	0	116	0	0	170	0	2	172	0	0	0	0	0	0	0	13	0	29	0	42	1	330
1:30PM	0	112	0	0	112	0	0	153	0	0	153	0	0	0	0	0	0	0	19	0	23	0	42	0	307
1:45PM	0	98	0	0	98	0	0	167	0	0	167	0	0	0	0	0	0	0	13	0	24	0	37	0	302
Total	0	424	0	1	425	0	0	638	0	2	640	0	0	0	0	0	0	0	60	0	104	0	164	1	1229
% Approach	0%	99.8%	0%	0.2%	-	-	0%	99.7%	0%	0.3%	-	-	0%	0%	0%	0%	-	-	36.6%	0%	63.4%	0%	-	-	-
% Total	0%	34.5%	0%	0.1%	34.6%	-	0%	51.9%	0%	0.2%	52.1%	-	0%	0%	0%	0%	0%	-	4.9%	0%	8.5%	0%	13.3%	-	-
PHF	-	0.914	-	0.250	0.916	-	-	0.938	-	0.250	0.930	-	-	-	-	-	-	-	0.789	-	0.897	-	0.953	-	0.931
Lights	0	414	0	1	415	-	0	624	0	2	626	-	0	0	0	0	0	-	55	0	99	0	154	-	1195
% Lights	0%	97.6%	0%	100%	97.6%	-	0%	97.8%	0%	100%	97.8%	-	0%	0%	0%	0%	-	-	91.7%	0%	95.2%	0%	93.9%	-	97.2%
Articulated Trucks	0	4	0	0	4	-	0	4	0	0	4	-	0	0	0	0	0	-	3	0	3	0	6	-	14
% Articulated Trucks	0%	0.9%	0%	0%	0.9%	-	0%	0.6%	0%	0%	0.6%	-	0%	0%	0%	0%	-	-	5.0%	0%	2.9%	0%	3.7%	-	1.1%
Buses and Single-Unit Trucks	0	6	0	0	6	-	0	10	0	0	10	-	0	0	0	0	0	-	2	0	2	0	4	-	20
% Buses and Single-Unit Trucks	0%	1.4%	0%	0%	1.4%	-	0%	1.6%	0%	0%	1.6%	-	0%	0%	0%	0%	-	-	3.3%	0%	1.9%	0%	2.4%	-	1.6%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

7. Riverfront Boulevard at Corinth Street - TMC

Tue May 1, 2018

Full Length (4:30PM-6:30PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 518145, Location: 32.759785, -96.794029, Site Code: 7



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	Riverfront Boulevard Eastbound						Riverfront Boulevard Westbound						Corinth Street Northbound						Corinth Street Southbound						Int
	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	
2018-05-01 4:30PM	141	23	178	0	342	0	2	12	37	0	51	0	41	117	4	0	162	0	1	134	31	0	166	0	721
4:45PM	143	7	166	0	316	0	0	3	15	0	18	0	35	114	3	0	152	0	1	152	37	0	190	0	676
Hourly Total	284	30	344	0	658	0	2	15	52	0	69	0	76	231	7	0	314	0	2	286	68	0	356	0	1397
5:00PM	125	3	137	0	265	0	0	2	6	0	8	0	27	85	1	0	113	0	1	195	35	0	231	0	617
5:15PM	128	7	182	0	317	0	1	4	12	0	17	0	21	81	0	0	102	0	2	166	28	0	196	0	632
5:30PM	134	7	196	1	338	1	0	1	6	0	7	0	17	66	0	0	83	0	2	128	32	0	162	0	590
5:45PM	151	3	163	1	318	0	3	3	10	0	16	0	20	55	1	0	76	0	0	119	16	0	135	0	545
Hourly Total	538	20	678	2	1238	1	4	10	34	0	48	0	85	287	2	0	374	0	5	608	111	0	724	0	2384
6:00PM	123	2	139	0	264	1	2	0	4	0	6	0	21	60	1	0	82	2	3	128	23	0	154	0	506
6:15PM	110	0	125	0	235	0	3	1	4	0	8	0	25	57	1	0	83	1	2	116	24	0	142	0	468
Hourly Total	233	2	264	0	499	1	5	1	8	0	14	0	46	117	2	0	165	3	5	244	47	0	296	0	974
Total	1055	52	1286	2	2395	2	11	26	94	0	131	0	207	635	11	0	853	3	12	1138	226	0	1376	0	4755
% Approach	44.1%	2.2%	53.7%	0.1%	-	-	8.4%	19.8%	71.8%	0%	-	-	24.3%	74.4%	1.3%	0%	-	-	0.9%	82.7%	16.4%	0%	-	-	-
% Total	22.2%	1.1%	27.0%	0%	50.4%	-	0.2%	0.5%	2.0%	0%	2.8%	-	4.4%	13.4%	0.2%	0%	17.9%	-	0.3%	23.9%	4.8%	0%	28.9%	-	-
Lights	1023	51	1272	2	2348	-	11	24	91	0	126	-	204	629	11	0	844	-	12	1131	205	0	1348	-	4666
% Lights	97.0%	98.1%	98.9%	100%	98.0%	-	100%	92.3%	96.8%	0%	96.2%	-	98.6%	99.1%	100%	0%	98.9%	-	100%	99.4%	90.7%	0%	98.0%	-	98.1%
Articulated Trucks	7	1	3	0	11	-	0	2	0	0	2	-	0	0	0	0	0	-	0	0	8	0	8	-	21
% Articulated Trucks	0.7%	1.9%	0.2%	0%	0.5%	-	0%	7.7%	0%	0%	1.5%	-	0%	0%	0%	0%	0%	-	0%	0%	3.5%	0%	0.6%	-	0.4%
Buses and Single-Unit Trucks	25	0	11	0	36	-	0	0	3	0	3	-	3	6	0	0	9	-	0	7	13	0	20	-	68
% Buses and Single-Unit Trucks	2.4%	0%	0.9%	0%	1.5%	-	0%	0%	3.2%	0%	2.3%	-	1.4%	0.9%	0%	0%	1.1%	-	0%	0.6%	5.8%	0%	1.5%	-	1.4%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	50.0%	-	-	-	-	-	-	-	-	-	-	-	66.7%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-
% Bicycles on Crosswalk	-	-	-	-	-	50.0%	-	-	-	-	-	-	-	-	-	-	-	33.3%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

7. Riverfront Boulevard at Corinth Street - TMC

Tue May 1, 2018

PM Peak (4:30PM - 5:30PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 518145, Location: 32.759785, -96.794029, Site Code: 7



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg Direction	Riverfront Boulevard Eastbound						Riverfront Boulevard Westbound						Corinth Street Northbound						Corinth Street Southbound						Int
	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	
2018-05-01 4:30PM	141	23	178	0	342	0	2	12	37	0	51	0	41	117	4	0	162	0	1	134	31	0	166	0	721
4:45PM	143	7	166	0	316	0	0	3	15	0	18	0	35	114	3	0	152	0	1	152	37	0	190	0	676
5:00PM	125	3	137	0	265	0	0	2	6	0	8	0	27	85	1	0	113	0	1	195	35	0	231	0	617
5:15PM	128	7	182	0	317	0	1	4	12	0	17	0	21	81	0	0	102	0	2	166	28	0	196	0	632
Total	537	40	663	0	1240	0	3	21	70	0	94	0	124	397	8	0	529	0	5	647	131	0	783	0	2646
% Approach	43.3%	3.2%	53.5%	0%	-	-	3.2%	22.3%	74.5%	0%	-	-	23.4%	75.0%	1.5%	0%	-	-	0.6%	82.6%	16.7%	0%	-	-	-
% Total	20.3%	1.5%	25.1%	0%	46.9%	-	0.1%	0.8%	2.6%	0%	3.6%	-	4.7%	15.0%	0.3%	0%	20.0%	-	0.2%	24.5%	5.0%	0%	29.6%	-	-
PHF	0.939	0.435	0.911	-	0.906	-	0.375	0.438	0.473	-	0.461	-	0.756	0.848	0.500	-	0.816	-	0.625	0.829	0.885	-	0.847	-	0.917
Lights	517	39	654	0	1210	-	3	19	68	0	90	-	123	392	8	0	523	-	5	641	114	0	760	-	2583
% Lights	96.3%	97.5%	98.6%	0%	97.6%	-	100%	90.5%	97.1%	0%	95.7%	-	99.2%	98.7%	100%	0%	98.9%	-	100%	99.1%	87.0%	0%	97.1%	-	97.6%
Articulated Trucks	4	1	2	0	7	-	0	2	0	0	2	-	0	0	0	0	0	-	0	0	7	0	7	-	16
% Articulated Trucks	0.7%	2.5%	0.3%	0%	0.6%	-	0%	9.5%	0%	0%	2.1%	-	0%	0%	0%	0%	0%	-	0%	0%	5.3%	0%	0.9%	-	0.6%
Buses and Single-Unit Trucks	16	0	7	0	23	-	0	0	2	0	2	-	1	5	0	0	6	-	0	6	10	0	16	-	47
% Buses and Single-Unit Trucks	3.0%	0%	1.1%	0%	1.9%	-	0%	0%	2.9%	0%	2.1%	-	0.8%	1.3%	0%	0%	1.1%	-	0%	0.9%	7.6%	0%	2.0%	-	1.8%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

7. Riverfront Boulevard at Corinth Street - TMC

Sat Apr 28, 2018

Full Length (12PM-2PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 518131, Location: 32.759758, -96.794



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	Riverfront Boulevard Eastbound						Riverfront Boulevard Westbound						Corinth Street Northbound						Corinth Street Southbound						Int
	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	
2018-04-28 12:00PM	42	0	34	1	77	0	2	2	3	0	7	0	20	47	1	0	68	1	1	71	32	0	104	3	256
12:15PM	44	3	36	0	83	0	2	1	4	0	7	1	17	50	2	0	69	0	0	78	39	0	117	0	276
12:30PM	48	2	63	0	113	0	0	0	3	0	3	0	22	54	0	0	76	0	3	78	32	0	113	0	305
12:45PM	49	1	49	1	100	0	0	2	5	0	7	1	35	52	5	0	92	0	3	75	25	0	103	0	302
Hourly Total	183	6	182	2	373	0	4	5	15	0	24	2	94	203	8	0	305	1	7	302	128	0	437	3	1139
1:00PM	48	0	40	0	88	0	1	0	1	0	2	0	33	53	0	0	86	1	2	68	39	0	109	0	285
1:15PM	51	1	53	0	105	1	3	2	2	0	7	1	29	63	4	0	96	0	0	66	25	0	91	3	299
1:30PM	47	2	51	1	101	0	1	1	4	0	6	0	24	61	0	0	85	0	3	60	38	0	101	0	293
1:45PM	44	1	42	0	87	0	1	0	1	1	3	0	40	53	0	0	93	1	4	85	33	0	122	0	305
Hourly Total	190	4	186	1	381	1	6	3	8	1	18	1	126	230	4	0	360	2	9	279	135	0	423	3	1182
Total	373	10	368	3	754	1	10	8	23	1	42	3	220	433	12	0	665	3	16	581	263	0	860	6	2321
% Approach	49.5%	1.3%	48.8%	0.4%	-	-	23.8%	19.0%	54.8%	2.4%	-	-	33.1%	65.1%	1.8%	0%	-	-	1.9%	67.6%	30.6%	0%	-	-	-
% Total	16.1%	0.4%	15.9%	0.1%	32.5%	-	0.4%	0.3%	1.0%	0%	1.8%	-	9.5%	18.7%	0.5%	0%	28.7%	-	0.7%	25.0%	11.3%	0%	37.1%	-	-
Lights	356	10	364	3	733	-	10	8	23	1	42	-	213	426	12	0	651	-	16	568	249	0	833	-	2259
% Lights	95.4%	100%	98.9%	100%	97.2%	-	100%	100%	100%	100%	100%	-	96.8%	98.4%	100%	0%	97.9%	-	100%	97.8%	94.7%	0%	96.9%	-	97.3%
Articulated Trucks	5	0	1	0	6	-	0	0	0	0	0	-	1	2	0	0	3	-	0	2	5	0	7	-	16
% Articulated Trucks	1.3%	0%	0.3%	0%	0.8%	-	0%	0%	0%	0%	0%	-	0.5%	0.5%	0%	0%	0.5%	-	0%	0.3%	1.9%	0%	0.8%	-	0.7%
Buses and Single-Unit Trucks	12	0	3	0	15	-	0	0	0	0	0	-	6	5	0	0	11	-	0	11	9	0	20	-	46
% Buses and Single-Unit Trucks	3.2%	0%	0.8%	0%	2.0%	-	0%	0%	0%	0%	0%	-	2.7%	1.2%	0%	0%	1.7%	-	0%	1.9%	3.4%	0%	2.3%	-	2.0%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	3	-	-	-	-	-	2	-	-	-	-	-	6	-
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	66.7%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	33.3%	-	-	-	-	-	0%	-

* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

7. Riverfront Boulevard at Corinth Street - TMC

Sat Apr 28, 2018

Midday Peak (WKND) (12:30PM - 1:30PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 518131, Location: 32.759758, -96.794



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	Riverfront Boulevard Eastbound						Riverfront Boulevard Westbound						Corinth Street Northbound						Corinth Street Southbound						Int
	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	
2018-04-28 12:30PM	48	2	63	0	113	0	0	0	3	0	3	0	22	54	0	0	76	0	3	78	32	0	113	0	305
12:45PM	49	1	49	1	100	0	0	2	5	0	7	1	35	52	5	0	92	0	3	75	25	0	103	0	302
1:00PM	48	0	40	0	88	0	1	0	1	0	2	0	33	53	0	0	86	1	2	68	39	0	109	0	285
1:15PM	51	1	53	0	105	1	3	2	2	0	7	1	29	63	4	0	96	0	0	66	25	0	91	3	299
Total	196	4	205	1	406	1	4	4	11	0	19	2	119	222	9	0	350	1	8	287	121	0	416	3	1191
% Approach	48.3%	1.0%	50.5%	0.2%	-	-	21.1%	21.1%	57.9%	0%	-	-	34.0%	63.4%	2.6%	0%	-	-	1.9%	69.0%	29.1%	0%	-	-	-
% Total	16.5%	0.3%	17.2%	0.1%	34.1%	-	0.3%	0.3%	0.9%	0%	1.6%	-	10.0%	18.6%	0.8%	0%	29.4%	-	0.7%	24.1%	10.2%	0%	34.9%	-	-
PHF	0.961	0.500	0.813	0.250	0.898	-	0.333	0.500	0.550	-	0.679	-	0.850	0.881	0.450	-	0.911	-	0.667	0.920	0.776	-	0.920	-	0.976
Lights	192	4	203	1	400	-	4	4	11	0	19	-	115	218	9	0	342	-	8	280	116	0	404	-	1165
% Lights	98.0%	100%	99.0%	100%	98.5%	-	100%	100%	100%	0%	100%	-	96.6%	98.2%	100%	0%	97.7%	-	100%	97.6%	95.9%	0%	97.1%	-	97.8%
Articulated Trucks	2	0	1	0	3	-	0	0	0	0	0	-	0	2	0	0	2	-	0	1	3	0	4	-	9
% Articulated Trucks	1.0%	0%	0.5%	0%	0.7%	-	0%	0%	0%	0%	0%	-	0%	0.9%	0%	0%	0.6%	-	0%	0.3%	2.5%	0%	1.0%	-	0.8%
Buses and Single-Unit Trucks	2	0	1	0	3	-	0	0	0	0	0	-	4	2	0	0	6	-	0	6	2	0	8	-	17
% Buses and Single-Unit Trucks	1.0%	0%	0.5%	0%	0.7%	-	0%	0%	0%	0%	0%	-	3.4%	0.9%	0%	0%	1.7%	-	0%	2.1%	1.7%	0%	1.9%	-	1.4%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	3	-
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

8. Corinth Street at Cockrell Avenue - TMC

Tue May 1, 2018

Full Length (4:30PM-6:30PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 518147, Location: 32.764521, -96.789899, Site Code: 8



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	Cockrell Avenue Eastbound						Cockrell Avenue Westbound						Corinth Street Northbound						Corinth Street Southbound						Int
	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	
2018-05-01 4:30PM	0	0	30	0	30	0	4	0	0	0	4	0	8	268	20	0	296	0	0	126	0	0	126	0	456
4:45PM	2	0	28	0	30	0	4	0	0	0	4	0	6	265	12	1	284	0	0	156	1	0	157	0	475
Hourly Total	2	0	58	0	60	0	8	0	0	0	8	0	14	533	32	1	580	0	0	282	1	0	283	0	931
5:00PM	0	0	50	0	50	1	5	0	0	0	5	0	4	205	5	0	214	0	0	173	0	0	173	0	442
5:15PM	0	0	33	0	33	0	3	0	0	2	5	0	5	202	10	0	217	0	1	149	0	0	150	1	405
5:30PM	0	0	25	0	25	0	4	0	1	0	5	0	5	212	9	0	226	0	0	142	4	0	146	0	402
5:45PM	0	0	34	0	34	0	0	0	1	0	1	0	2	211	9	0	222	1	0	109	2	0	111	0	368
Hourly Total	0	0	142	0	142	1	12	0	2	2	16	0	16	830	33	0	879	1	1	573	6	0	580	1	1617
6:00PM	0	0	22	0	22	0	6	0	1	0	7	0	2	186	2	0	190	0	0	132	2	0	134	0	353
6:15PM	0	1	28	0	29	0	2	0	1	0	3	0	3	167	6	0	176	0	1	120	0	1	122	0	330
Hourly Total	0	1	50	0	51	0	8	0	2	0	10	0	5	353	8	0	366	0	1	252	2	1	256	0	683
Total	2	1	250	0	253	1	28	0	4	2	34	0	35	1716	73	1	1825	1	2	1107	9	1	1119	1	3231
% Approach	0.8%	0.4%	98.8%	0%	-	-	82.4%	0%	11.8%	5.9%	-	-	1.9%	94.0%	4.0%	0.1%	-	-	0.2%	98.9%	0.8%	0.1%	-	-	-
% Total	0.1%	0%	7.7%	0%	7.8%	-	0.9%	0%	0.1%	0.1%	1.1%	-	1.1%	53.1%	2.3%	0%	56.5%	-	0.1%	34.3%	0.3%	0%	34.6%	-	-
Lights	2	1	249	0	252	-	28	0	4	2	34	-	34	1672	72	1	1779	-	1	1082	8	1	1092	-	3157
% Lights	100%	100%	99.6%	0%	99.6%	-	100%	0%	100%	100%	100%	-	97.1%	97.4%	98.6%	100%	97.5%	-	50.0%	97.7%	88.9%	100%	97.6%	-	97.7%
Articulated Trucks	0	0	0	0	0	-	0	0	0	0	0	-	0	9	0	0	9	-	1	8	0	0	9	-	18
% Articulated Trucks	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0.5%	0%	0%	0.5%	-	50.0%	0.7%	0%	0%	0.8%	-	0.6%
Buses and Single-Unit Trucks	0	0	1	0	1	-	0	0	0	0	0	-	1	35	1	0	37	-	0	17	1	0	18	-	56
% Buses and Single-Unit Trucks	0%	0%	0.4%	0%	0.4%	-	0%	0%	0%	0%	0%	-	2.9%	2.0%	1.4%	0%	2.0%	-	0%	1.5%	11.1%	0%	1.6%	-	1.7%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	0%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	100%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

8. Corinth Street at Cockrell Avenue - TMC

Tue May 1, 2018

PM Peak (4:30PM - 5:30PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 518147, Location: 32.764521, -96.789899, Site Code: 8



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg Direction	Cockrell Avenue Eastbound						Cockrell Avenue Westbound						Corinth Street Northbound						Corinth Street Southbound						Int
	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	
2018-05-01 4:30PM	0	0	30	0	30	0	4	0	0	0	4	0	8	268	20	0	296	0	0	126	0	0	126	0	456
4:45PM	2	0	28	0	30	0	4	0	0	0	4	0	6	265	12	1	284	0	0	156	1	0	157	0	475
5:00PM	0	0	50	0	50	1	5	0	0	0	5	0	4	205	5	0	214	0	0	173	0	0	173	0	442
5:15PM	0	0	33	0	33	0	3	0	0	2	5	0	5	202	10	0	217	0	1	149	0	0	150	1	405
Total	2	0	141	0	143	1	16	0	0	2	18	0	23	940	47	1	1011	0	1	604	1	0	606	1	1778
% Approach	1.4%	0%	98.6%	0%	-	-	88.9%	0%	0%	11.1%	-	-	2.3%	93.0%	4.6%	0.1%	-	-	0.2%	99.7%	0.2%	0%	-	-	-
% Total	0.1%	0%	7.9%	0%	8.0%	-	0.9%	0%	0%	0.1%	1.0%	-	1.3%	52.9%	2.6%	0.1%	56.9%	-	0.1%	34.0%	0.1%	0%	34.1%	-	-
PHF	0.250	-	0.705	-	0.715	-	0.800	-	-	0.250	0.900	-	0.719	0.877	0.588	0.250	0.854	-	0.250	0.873	0.250	-	0.876	-	0.936
Lights	2	0	140	0	142	-	16	0	0	2	18	-	22	913	46	1	982	-	0	583	1	0	584	-	1726
% Lights	100%	0%	99.3%	0%	99.3%	-	100%	0%	0%	100%	100%	-	95.7%	97.1%	97.9%	100%	97.1%	-	0%	96.5%	100%	0%	96.4%	-	97.1%
Articulated Trucks	0	0	0	0	0	-	0	0	0	0	0	-	0	6	0	0	6	-	1	7	0	0	8	-	14
% Articulated Trucks	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0.6%	0%	0%	0.6%	-	100%	1.2%	0%	0%	1.3%	-	0.8%
Buses and Single-Unit Trucks	0	0	1	0	1	-	0	0	0	0	0	-	1	21	1	0	23	-	0	14	0	0	14	-	38
% Buses and Single-Unit Trucks	0%	0%	0.7%	0%	0.7%	-	0%	0%	0%	0%	0%	-	4.3%	2.2%	2.1%	0%	2.3%	-	0%	2.3%	0%	0%	2.3%	-	2.1%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	-	0
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	-	1
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

8. Corinth Street at Cockrell Avenue - TMC

Sat Apr 28, 2018

Full Length (12PM-2PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 518133, Location: 32.764489, -96.789859



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	Cockrell Avenue Eastbound						Cockrell Avenue Westbound						Corinth Street Northbound						Corinth Street Southbound						Int
	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	
2018-04-28 12:00PM	1	0	7	0	8	3	2	1	0	0	3	0	3	89	2	0	94	0	0	100	6	0	106	0	211
12:15PM	1	0	13	1	15	0	2	0	1	0	3	0	3	88	3	0	94	0	2	96	2	0	100	0	212
12:30PM	0	0	11	0	11	0	2	0	1	0	3	0	3	97	8	0	108	0	4	95	2	0	101	0	223
12:45PM	0	1	11	0	12	0	2	0	2	0	4	0	5	95	3	0	103	2	0	93	3	0	96	0	215
Hourly Total	2	1	42	1	46	3	8	1	4	0	13	0	14	369	16	0	399	2	6	384	13	0	403	0	861
1:00PM	1	0	16	0	17	3	4	0	2	0	6	0	3	89	3	0	95	0	1	89	3	0	93	0	211
1:15PM	0	1	7	0	8	0	4	0	0	0	4	0	3	113	8	0	124	0	2	81	5	0	88	0	224
1:30PM	0	1	16	0	17	1	1	0	0	0	1	0	3	107	1	0	111	0	0	78	2	1	81	0	210
1:45PM	3	0	20	0	23	2	0	0	2	0	2	0	0	95	3	0	98	0	2	111	4	0	117	0	240
Hourly Total	4	2	59	0	65	6	9	0	4	0	13	0	9	404	15	0	428	0	5	359	14	1	379	0	885
2:00PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	6	3	101	1	111	10	17	1	8	0	26	0	23	773	31	0	827	2	11	743	27	1	782	0	1746
% Approach	5.4%	2.7%	91.0%	0.9%	-	-	65.4%	3.8%	30.8%	0%	-	-	2.8%	93.5%	3.7%	0%	-	-	1.4%	95.0%	3.5%	0.1%	-	-	-
% Total	0.3%	0.2%	5.8%	0.1%	6.4%	-	1.0%	0.1%	0.5%	0%	1.5%	-	1.3%	44.3%	1.8%	0%	47.4%	-	0.6%	42.6%	1.5%	0.1%	44.8%	-	-
Lights	5	3	100	1	109	-	16	1	6	0	23	-	22	751	30	0	803	-	10	718	26	1	755	-	1690
% Lights	83.3%	100%	99.0%	100%	98.2%	-	94.1%	100%	75.0%	0%	88.5%	-	95.7%	97.2%	96.8%	0%	97.1%	-	90.9%	96.6%	96.3%	100%	96.5%	-	96.8%
Articulated Trucks	0	0	0	0	0	-	1	0	2	0	3	-	0	6	1	0	7	-	1	4	0	0	5	-	15
% Articulated Trucks	0%	0%	0%	0%	0%	-	5.9%	0%	25.0%	0%	11.5%	-	0%	0.8%	3.2%	0%	0.8%	-	9.1%	0.5%	0%	0%	0.6%	-	0.9%
Buses and Single-Unit Trucks	1	0	1	0	2	-	0	0	0	0	0	-	1	16	0	0	17	-	0	21	1	0	22	-	41
% Buses and Single-Unit Trucks	16.7%	0%	1.0%	0%	1.8%	-	0%	0%	0%	0%	0%	-	4.3%	2.1%	0%	0%	2.1%	-	0%	2.8%	3.7%	0%	2.8%	-	2.3%
Pedestrians	-	-	-	-	-	10	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	-
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	100%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

8. Corinth Street at Cockrell Avenue - TMC

Sat Apr 28, 2018

Midday Peak (WKND) (1PM - 2PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 518133, Location: 32.764489, -96.789859



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg Direction	Cockrell Avenue Eastbound						Cockrell Avenue Westbound						Corinth Street Northbound						Corinth Street Southbound						Int
	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	
2018-04-28 1:00PM	1	0	16	0	17	3	4	0	2	0	6	0	3	89	3	0	95	0	1	89	3	0	93	0	211
1:15PM	0	1	7	0	8	0	4	0	0	0	4	0	3	113	8	0	124	0	2	81	5	0	88	0	224
1:30PM	0	1	16	0	17	1	1	0	0	0	1	0	3	107	1	0	111	0	0	78	2	1	81	0	210
1:45PM	3	0	20	0	23	2	0	0	2	0	2	0	0	95	3	0	98	0	2	111	4	0	117	0	240
Total	4	2	59	0	65	6	9	0	4	0	13	0	9	404	15	0	428	0	5	359	14	1	379	0	885
% Approach	6.2%	3.1%	90.8%	0%	-	-	69.2%	0%	30.8%	0%	-	-	2.1%	94.4%	3.5%	0%	-	-	1.3%	94.7%	3.7%	0.3%	-	-	-
% Total	0.5%	0.2%	6.7%	0%	7.3%	-	1.0%	0%	0.5%	0%	1.5%	-	1.0%	45.6%	1.7%	0%	48.4%	-	0.6%	40.6%	1.6%	0.1%	42.8%	-	-
PHF	0.333	0.500	0.738	-	0.707	-	0.563	-	0.500	-	0.542	-	0.750	0.894	0.469	-	0.863	-	0.625	0.809	0.700	0.250	0.810	-	0.922
Lights	4	2	58	0	64	-	9	0	3	0	12	-	9	395	14	0	418	-	4	349	14	1	368	-	862
% Lights	100%	100%	98.3%	0%	98.5%	-	100%	0%	75.0%	0%	92.3%	-	100%	97.8%	93.3%	0%	97.7%	-	80.0%	97.2%	100%	100%	97.1%	-	97.4%
Articulated Trucks	0	0	0	0	0	-	0	0	1	0	1	-	0	2	1	0	3	-	1	3	0	0	4	-	8
% Articulated Trucks	0%	0%	0%	0%	0%	-	0%	0%	25.0%	0%	7.7%	-	0%	0.5%	6.7%	0%	0.7%	-	20.0%	0.8%	0%	0%	1.1%	-	0.9%
Buses and Single-Unit Trucks	0	0	1	0	1	-	0	0	0	0	0	-	0	7	0	0	7	-	0	7	0	0	7	-	15
% Buses and Single-Unit Trucks	0%	0%	1.7%	0%	1.5%	-	0%	0%	0%	0%	0%	-	0%	1.7%	0%	0%	1.6%	-	0%	1.9%	0%	0%	1.8%	-	1.7%
Pedestrians	-	-	-	-	-	6	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

9. Corinth Street at Lamar Street - TMC

Tue May 1, 2018

Full Length (4:30PM-6:30PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 518148, Location: 32.765066, -96.789386, Site Code: 9



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	Lamar Street Eastbound							Lamar Street Westbound							Corinth Street Northbound							Corinth Street Southbound							Int
	L	T	R	U	App	Ped*		L	T	R	U	App	Ped*		L	T	R	U	App	Ped*		L	T	R	U	App	Ped*		
2018-05-01 4:30PM	20	120	1	0	141	0		46	36	12	0	94	0		11	102	154	0	267	0		16	83	15	0	114	1		616
4:45PM	16	129	6	3	154	0		50	37	12	0	99	0		7	97	159	0	263	0		17	97	12	0	126	0		642
Hourly Total	36	249	7	3	295	0		96	73	24	0	193	0		18	199	313	0	530	0		33	180	27	0	240	1		1258
5:00PM	11	137	2	1	151	1		45	47	9	0	101	0		12	89	110	0	211	1		16	122	20	0	158	0		621
5:15PM	14	120	1	0	135	0		50	25	10	0	85	0		7	61	133	0	201	0		26	94	10	0	130	0		551
5:30PM	12	137	1	0	150	0		58	22	9	0	89	0		10	71	134	0	215	0		12	83	17	0	112	0		566
5:45PM	12	114	2	0	128	0		37	21	7	0	65	0		4	59	148	0	211	0		14	72	13	0	99	0		503
Hourly Total	49	508	6	1	564	1		190	115	35	0	340	0		33	280	525	0	838	1		68	371	60	0	499	0		2241
6:00PM	14	106	4	1	125	1		46	19	9	0	74	0		3	54	126	0	183	1		17	85	19	0	121	0		503
6:15PM	11	79	2	0	92	0		39	25	4	0	68	0		5	59	114	0	178	0		8	77	10	0	95	0		433
Hourly Total	25	185	6	1	217	1		85	44	13	0	142	0		8	113	240	0	361	1		25	162	29	0	216	0		936
Total	110	942	19	5	1076	2		371	232	72	0	675	0		59	592	1078	0	1729	2		126	713	116	0	955	1		4435
% Approach	10.2%	87.5%	1.8%	0.5%	-	-		55.0%	34.4%	10.7%	0%	-	-	3.4%	34.2%	62.3%	0%	-	-	13.2%	74.7%	12.1%	0%	-	-	-	-		
% Total	2.5%	21.2%	0.4%	0.1%	24.3%	-		8.4%	5.2%	1.6%	0%	15.2%	-	1.3%	13.3%	24.3%	0%	39.0%	-	2.8%	16.1%	2.6%	0%	21.5%	-	-	-		
Lights	95	904	19	5	1023	-		351	208	61	0	620	-	59	583	1045	0	1687	-	124	704	107	0	935	-	4265			
% Lights	86.4%	96.0%	100%	100%	95.1%	-		94.6%	89.7%	84.7%	0%	91.9%	-	100%	98.5%	96.9%	0%	97.6%	-	98.4%	98.7%	92.2%	0%	97.9%	-	96.2%			
Articulated Trucks	4	10	0	0	14	-		7	7	1	0	15	-	0	2	5	0	7	-	0	1	2	0	3	-	39			
% Articulated Trucks	3.6%	1.1%	0%	0%	1.3%	-		1.9%	3.0%	1.4%	0%	2.2%	-	0%	0.3%	0.5%	0%	0.4%	-	0%	0.1%	1.7%	0%	0.3%	-	0.9%			
Buses and Single-Unit Trucks	11	28	0	0	39	-		13	17	10	0	40	-	0	7	28	0	35	-	2	8	7	0	17	-	131			
% Buses and Single-Unit Trucks	10.0%	3.0%	0%	0%	3.6%	-		3.5%	7.3%	13.9%	0%	5.9%	-	0%	1.2%	2.6%	0%	2.0%	-	1.6%	1.1%	6.0%	0%	1.8%	-	3.0%			
Pedestrians	-	-	-	-	-	2		-	-	-	-	0		-	-	-	-	1		-	-	-	-	-	0				
% Pedestrians	-	-	-	-	-	100%		-	-	-	-	-		-	-	-	-	50.0%		-	-	-	-	-	0%				
Bicycles on Crosswalk	-	-	-	-	-	0		-	-	-	-	0		-	-	-	-	1		-	-	-	-	-	1				
% Bicycles on Crosswalk	-	-	-	-	-	0%		-	-	-	-	-		-	-	-	-	50.0%		-	-	-	-	-	100%				

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

9. Corinth Street at Lamar Street - TMC

Tue May 1, 2018

PM Peak (4:30PM - 5:30PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 518148, Location: 32.765066, -96.789386, Site Code: 9



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	Lamar Street Eastbound							Lamar Street Westbound							Corinth Street Northbound							Corinth Street Southbound							Int
	L	T	R	U	App	Ped*		L	T	R	U	App	Ped*		L	T	R	U	App	Ped*		L	T	R	U	App	Ped*		
2018-05-01 4:30PM	20	120	1	0	141	0		46	36	12	0	94	0		11	102	154	0	267	0		16	83	15	0	114	1	616	
4:45PM	16	129	6	3	154	0		50	37	12	0	99	0		7	97	159	0	263	0		17	97	12	0	126	0	642	
5:00PM	11	137	2	1	151	1		45	47	9	0	101	0		12	89	110	0	211	1		16	122	20	0	158	0	621	
5:15PM	14	120	1	0	135	0		50	25	10	0	85	0		7	61	133	0	201	0		26	94	10	0	130	0	551	
Total	61	506	10	4	581	1		191	145	43	0	379	0		37	349	556	0	942	1		75	396	57	0	528	1	2430	
% Approach	10.5%	87.1%	1.7%	0.7%	-	-		50.4%	38.3%	11.3%	0%	-	-	3.9%	37.0%	59.0%	0%	-	-	14.2%	75.0%	10.8%	0%	-	-	-			
% Total	2.5%	20.8%	0.4%	0.2%	23.9%	-		7.9%	6.0%	1.8%	0%	15.6%	-	1.5%	14.4%	22.9%	0%	38.8%	-	3.1%	16.3%	2.3%	0%	21.7%	-	-			
PHF	0.763	0.923	0.417	0.333	0.943	-		0.955	0.771	0.896	-	0.938	-	0.771	0.855	0.874	-	0.882	-	0.721	0.811	0.713	-	0.835	-	0.946			
Lights	52	482	10	4	548	-		177	130	35	0	342	-	37	344	536	0	917	-	73	388	50	0	511	-	2318			
% Lights	85.2%	95.3%	100%	100%	94.3%	-		92.7%	89.7%	81.4%	0%	90.2%	-	100%	98.6%	96.4%	0%	97.3%	-	97.3%	98.0%	87.7%	0%	96.8%	-	95.4%			
Articulated Trucks	3	6	0	0	9	-		6	3	1	0	10	-	0	1	3	0	4	-	0	1	2	0	3	-	26			
% Articulated Trucks	4.9%	1.2%	0%	0%	1.5%	-		3.1%	2.1%	2.3%	0%	2.6%	-	0%	0.3%	0.5%	0%	0.4%	-	0%	0.3%	3.5%	0%	0.6%	-	1.1%			
Buses and Single-Unit Trucks	6	18	0	0	24	-		8	12	7	0	27	-	0	4	17	0	21	-	2	7	5	0	14	-	86			
% Buses and Single-Unit Trucks	9.8%	3.6%	0%	0%	4.1%	-		4.2%	8.3%	16.3%	0%	7.1%	-	0%	1.1%	3.1%	0%	2.2%	-	2.7%	1.8%	8.8%	0%	2.7%	-	3.5%			
Pedestrians	-	-	-	-	-	1		-	-	-	-	0		-	-	-	-	-	1		-	-	-	-	-	0			
% Pedestrians	-	-	-	-	-	100%		-	-	-	-	0		-	-	-	-	-	100%		-	-	-	-	-	0%			
Bicycles on Crosswalk	-	-	-	-	-	0		-	-	-	-	0		-	-	-	-	-	0		-	-	-	-	-	1			
% Bicycles on Crosswalk	-	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	-	0%		-	-	-	-	-	100%			

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

9. Corinth Street at Lamar Street - TMC

Sat Apr 28, 2018

Full Length (12PM-2PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 518134, Location: 32.765053, -96.789323



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	Corinth Street Eastbound						Corinth Street Westbound						Lamar Street Northbound						Lamar Street Southbound						Int
	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	
2018-04-28 12:00PM	7	37	46	0	90	0	8	55	14	0	77	0	46	26	5	0	77	0	3	20	5	1	29	1	273
12:15PM	4	42	39	0	85	0	4	55	9	0	68	0	44	34	18	0	96	0	13	30	2	1	46	0	295
12:30PM	7	44	49	0	100	0	14	56	13	0	83	0	41	25	7	0	73	0	10	45	5	1	61	0	317
12:45PM	6	38	54	1	99	0	5	55	11	0	71	0	34	25	4	0	63	0	17	33	5	1	56	0	289
Hourly Total	24	161	188	1	374	0	31	221	47	0	299	0	165	110	34	0	309	0	43	128	17	4	192	1	1174
1:00PM	1	42	48	0	91	0	7	49	13	0	69	0	37	22	4	0	63	0	10	35	6	0	51	0	274
1:15PM	6	52	56	0	114	0	1	40	10	0	51	0	43	22	5	1	71	0	10	42	6	0	58	0	294
1:30PM	2	50	59	0	111	0	2	41	8	0	51	1	39	36	6	0	81	0	8	29	1	0	38	0	281
1:45PM	7	43	49	0	99	0	2	58	13	1	74	0	50	27	7	0	84	0	13	29	7	0	49	0	306
Hourly Total	16	187	212	0	415	0	12	188	44	1	245	1	169	107	22	1	299	0	41	135	20	0	196	0	1155
Total	40	348	400	1	789	0	43	409	91	1	544	1	334	217	56	1	608	0	84	263	37	4	388	1	2329
% Approach	5.1%	44.1%	50.7%	0.1%	-	-	7.9%	75.2%	16.7%	0.2%	-	-	54.9%	35.7%	9.2%	0.2%	-	-	21.6%	67.8%	9.5%	1.0%	-	-	-
% Total	1.7%	14.9%	17.2%	0%	33.9%	-	1.8%	17.6%	3.9%	0%	23.4%	-	14.3%	9.3%	2.4%	0%	26.1%	-	3.6%	11.3%	1.6%	0.2%	16.7%	-	-
Lights	39	338	384	1	762	-	41	398	89	1	529	-	321	206	52	1	580	-	73	248	36	4	361	-	2232
% Lights	97.5%	97.1%	96.0%	100%	96.6%	-	95.3%	97.3%	97.8%	100%	97.2%	-	96.1%	94.9%	92.9%	100%	95.4%	-	86.9%	94.3%	97.3%	100%	93.0%	-	95.8%
Articulated Trucks	0	1	7	0	8	-	1	3	0	0	4	-	4	1	2	0	7	-	2	6	0	0	8	-	27
% Articulated Trucks	0%	0.3%	1.8%	0%	1.0%	-	2.3%	0.7%	0%	0%	0.7%	-	1.2%	0.5%	3.6%	0%	1.2%	-	2.4%	2.3%	0%	0%	2.1%	-	1.2%
Buses and Single-Unit Trucks	1	9	9	0	19	-	1	8	2	0	11	-	9	10	2	0	21	-	9	9	1	0	19	-	70
% Buses and Single-Unit Trucks	2.5%	2.6%	2.3%	0%	2.4%	-	2.3%	2.0%	2.2%	0%	2.0%	-	2.7%	4.6%	3.6%	0%	3.5%	-	10.7%	3.4%	2.7%	0%	4.9%	-	3.0%
Pedestrians	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	-	1
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-100%	-	-	-	-	-	-	-	-	-	-	-	-100%	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	0
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	0%	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

9. Corinth Street at Lamar Street - TMC

Sat Apr 28, 2018

Midday Peak (WKND) (12:15PM - 1:15PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 518134, Location: 32.765053, -96.789323



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	Corinth Street Eastbound						Corinth Street Westbound						Lamar Street Northbound						Lamar Street Southbound						Int
	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	
2018-04-28 12:15PM	4	42	39	0	85	0	4	55	9	0	68	0	44	34	18	0	96	0	13	30	2	1	46	0	295
12:30PM	7	44	49	0	100	0	14	56	13	0	83	0	41	25	7	0	73	0	10	45	5	1	61	0	317
12:45PM	6	38	54	1	99	0	5	55	11	0	71	0	34	25	4	0	63	0	17	33	5	1	56	0	289
1:00PM	1	42	48	0	91	0	7	49	13	0	69	0	37	22	4	0	63	0	10	35	6	0	51	0	274
Total	18	166	190	1	375	0	30	215	46	0	291	0	156	106	33	0	295	0	50	143	18	3	214	0	1175
% Approach	4.8%	44.3%	50.7%	0.3%	-	-	10.3%	73.9%	15.8%	0%	-	-	52.9%	35.9%	11.2%	0%	-	-	23.4%	66.8%	8.4%	1.4%	-	-	-
% Total	1.5%	14.1%	16.2%	0.1%	31.9%	-	2.6%	18.3%	3.9%	0%	24.8%	-	13.3%	9.0%	2.8%	0%	25.1%	-	4.3%	12.2%	1.5%	0.3%	18.2%	-	-
PHF	0.643	0.943	0.880	0.250	0.938	-	0.536	0.960	0.885	-	0.877	-	0.886	0.779	0.458	-	0.768	-	0.735	0.794	0.750	0.750	0.877	-	0.927
Lights	18	162	182	1	363	-	28	210	46	0	284	-	150	101	30	0	281	-	45	133	18	3	199	-	1127
% Lights	100%	97.6%	95.8%	100%	96.8%	-	93.3%	97.7%	100%	0%	97.6%	-	96.2%	95.3%	90.9%	0%	95.3%	-	90.0%	93.0%	100%	100%	93.0%	-	95.9%
Articulated Trucks	0	1	5	0	6	-	1	1	0	0	2	-	2	0	2	0	4	-	1	6	0	0	7	-	19
% Articulated Trucks	0%	0.6%	2.6%	0%	1.6%	-	3.3%	0.5%	0%	0%	0.7%	-	1.3%	0%	6.1%	0%	1.4%	-	2.0%	4.2%	0%	0%	3.3%	-	1.6%
Buses and Single-Unit Trucks	0	3	3	0	6	-	1	4	0	0	5	-	4	5	1	0	10	-	4	4	0	0	8	-	29
% Buses and Single-Unit Trucks	0%	1.8%	1.6%	0%	1.6%	-	3.3%	1.9%	0%	0%	1.7%	-	2.6%	4.7%	3.0%	0%	3.4%	-	8.0%	2.8%	0%	0%	3.7%	-	2.5%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

10. Lamar Street at Cockrell Avenue - TMC

Tue May 1, 2018

Full Length (4:30PM-6:30PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 518149, Location: 32.76542, -96.790822, Site Code: 10



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	Lamar Street Eastbound						Lamar Street Westbound						Cockrell Avenue Northbound						Cockrell Avenue Southbound						Int
	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	
2018-05-01 4:30PM	0	147	30	0	177	0	1	60	1	0	62	0	6	1	1	0	8	0	3	1	0	0	4	1	251
4:45PM	0	137	28	0	165	0	4	45	5	1	55	0	9	0	1	0	10	0	4	3	0	0	7	1	237
Hourly Total	0	284	58	0	342	0	5	105	6	1	117	0	15	1	2	0	18	0	7	4	0	0	11	2	488
5:00PM	1	144	46	0	191	0	2	67	3	1	73	0	3	0	0	0	3	1	10	5	0	0	15	0	282
5:15PM	0	130	31	0	161	0	1	40	3	1	45	0	7	0	0	0	7	0	5	2	0	0	7	0	220
5:30PM	0	149	21	0	170	0	2	41	5	0	48	0	4	1	4	0	9	0	1	2	0	0	3	0	230
5:45PM	0	137	28	0	165	0	0	37	0	1	38	0	4	0	1	0	5	1	0	2	0	0	2	0	210
Hourly Total	1	560	126	0	687	0	5	185	11	3	204	0	18	1	5	0	24	2	16	11	0	0	27	0	942
6:00PM	0	115	20	0	135	0	0	38	1	0	39	1	2	0	1	0	3	1	3	0	0	0	3	0	180
6:15PM	1	80	27	0	108	0	0	36	2	2	40	0	3	0	4	0	7	0	2	1	1	0	4	0	159
Hourly Total	1	195	47	0	243	0	0	74	3	2	79	1	5	0	5	0	10	1	5	1	1	0	7	0	339
Total	2	1039	231	0	1272	0	10	364	20	6	400	1	38	2	12	0	52	3	28	16	1	0	45	2	1769
% Approach	0.2%	81.7%	18.2%	0%	-	-	2.5%	91.0%	5.0%	1.5%	-	-	73.1%	3.8%	23.1%	0%	-	-	62.2%	35.6%	2.2%	0%	-	-	-
% Total	0.1%	58.7%	13.1%	0%	71.9%	-	0.6%	20.6%	1.1%	0.3%	22.6%	-	2.1%	0.1%	0.7%	0%	2.9%	-	1.6%	0.9%	0.1%	0%	2.5%	-	-
Lights	2	987	231	0	1220	-	9	334	20	6	369	-	38	2	12	0	52	-	28	15	1	0	44	-	1685
% Lights	100%	95.0%	100%	0%	95.9%	-	90.0%	91.8%	100%	100%	92.3%	-	100%	100%	100%	0%	100%	-	100%	93.8%	100%	0%	97.8%	-	95.3%
Articulated Trucks	0	12	0	0	12	-	1	8	0	0	9	-	0	0	0	0	0	-	0	0	0	0	0	-	21
% Articulated Trucks	0%	1.2%	0%	0%	0.9%	-	10.0%	2.2%	0%	0%	2.3%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	1.2%
Buses and Single-Unit Trucks	0	40	0	0	40	-	0	22	0	0	22	-	0	0	0	0	0	-	0	1	0	0	1	-	63
% Buses and Single-Unit Trucks	0%	3.8%	0%	0%	3.1%	-	0%	6.0%	0%	0%	5.5%	-	0%	0%	0%	0%	0%	-	0%	6.3%	0%	0%	2.2%	-	3.6%
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	-	-	1
% Pedestrians	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	-	-	50.0%
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	3	-	-	-	-	-	-	-	1
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-100%	-	-	-	-	-	-100%	-	-	-	-	-	-	-	50.0%

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

10. Lamar Street at Cockrell Avenue - TMC

Tue May 1, 2018

PM Peak (4:30PM - 5:30PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 518149, Location: 32.76542, -96.790822, Site Code: 10



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg Direction	Lamar Street Eastbound						Lamar Street Westbound						Cockrell Avenue Northbound						Cockrell Avenue Southbound						Int
	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	
2018-05-01 4:30PM	0	147	30	0	177	0	1	60	1	0	62	0	6	1	1	0	8	0	3	1	0	0	4	1	251
4:45PM	0	137	28	0	165	0	4	45	5	1	55	0	9	0	1	0	10	0	4	3	0	0	7	1	237
5:00PM	1	144	46	0	191	0	2	67	3	1	73	0	3	0	0	0	3	1	10	5	0	0	15	0	282
5:15PM	0	130	31	0	161	0	1	40	3	1	45	0	7	0	0	0	7	0	5	2	0	0	7	0	220
Total	1	558	135	0	694	0	8	212	12	3	235	0	25	1	2	0	28	1	22	11	0	0	33	2	990
% Approach	0.1%	80.4%	19.5%	0%	-	-	3.4%	90.2%	5.1%	1.3%	-	-	89.3%	3.6%	7.1%	0%	-	-	66.7%	33.3%	0%	0%	-	-	-
% Total	0.1%	56.4%	13.6%	0%	70.1%	-	0.8%	21.4%	1.2%	0.3%	23.7%	-	2.5%	0.1%	0.2%	0%	2.8%	-	2.2%	1.1%	0%	0%	3.3%	-	-
PHF	0.250	0.949	0.734	-	0.908	-	0.500	0.791	0.600	0.750	0.805	-	0.694	0.250	0.500	-	0.700	-	0.550	0.550	-	-	0.550	-	0.878
Lights	1	524	135	0	660	-	7	193	12	3	215	-	25	1	2	0	28	-	22	10	0	0	32	-	935
% Lights	100%	93.9%	100%	0%	95.1%	-	87.5%	91.0%	100%	100%	91.5%	-	100%	100%	100%	0%	100%	-	100%	90.9%	0%	0%	97.0%	-	94.4%
Articulated Trucks	0	7	0	0	7	-	1	4	0	0	5	-	0	0	0	0	0	-	0	0	0	0	0	-	12
% Articulated Trucks	0%	1.3%	0%	0%	1.0%	-	12.5%	1.9%	0%	0%	2.1%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	1.2%
Buses and Single-Unit Trucks	0	27	0	0	27	-	0	15	0	0	15	-	0	0	0	0	0	-	0	1	0	0	1	-	43
% Buses and Single-Unit Trucks	0%	4.8%	0%	0%	3.9%	-	0%	7.1%	0%	0%	6.4%	-	0%	0%	0%	0%	0%	-	0%	9.1%	0%	0%	3.0%	-	4.3%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-50.0%
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	1	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-100%	-	-	-	-	-	-	-50.0%

* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

10. Lamar Street at Cockrell Avenue - TMC

Sat Apr 28, 2018

Full Length (12PM-2PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 518137, Location: 32.765414, -96.790777



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	Lamar Street Eastbound							Lamar Street Westbound							Cockrell Avenue Northbound							Cockrell Avenue Southbound							Int
	L	T	R	U	App	Ped*		L	T	R	U	App	Ped*		L	T	R	U	App	Ped*		L	T	R	U	App	Ped*		
2018-04-28 12:00PM	3	40	2	1	46	1		2	24	6	0	32	0		1	1	1	0	3	0		6	1	2	0	9	0		90
12:15PM	2	50	1	0	53	0		0	43	8	0	51	0		3	4	3	0	10	0		3	1	0	0	4	0		118
12:30PM	3	41	5	0	49	0		1	53	5	0	59	0		4	3	3	0	10	2		6	0	0	0	6	0		124
12:45PM	1	38	3	0	42	0		1	45	10	0	56	0		7	1	3	0	11	0		5	1	2	0	8	0		117
Hourly Total	9	169	11	1	190	1		4	165	29	0	198	0		15	9	10	0	34	2		20	3	4	0	27	0		449
1:00PM	2	32	3	0	37	0		0	44	18	0	62	0		3	0	0	0	3	0		2	0	1	0	3	0		105
1:15PM	1	36	2	0	39	2		0	48	7	0	55	0		0	1	0	0	1	0		2	1	3	0	6	0		101
1:30PM	1	38	3	1	43	0		0	37	16	0	53	0		0	0	0	0	0	0		5	0	2	0	7	0		103
1:45PM	4	40	2	1	47	0		0	41	15	0	56	0		2	1	0	0	3	0		1	0	3	0	4	0		110
Hourly Total	8	146	10	2	166	2		0	170	56	0	226	0		5	2	0	0	7	0		10	1	9	0	20	0		419
Total	17	315	21	3	356	3		4	335	85	0	424	0		20	11	10	0	41	2		30	4	13	0	47	0		868
% Approach	4.8%	88.5%	5.9%	0.8%	-	-		0.9%	79.0%	20.0%	0%	-	-		48.8%	26.8%	24.4%	0%	-	-		63.8%	8.5%	27.7%	0%	-	-		-
% Total	2.0%	36.3%	2.4%	0.3%	41.0%	-		0.5%	38.6%	9.8%	0%	48.8%	-		2.3%	1.3%	1.2%	0%	4.7%	-		3.5%	0.5%	1.5%	0%	5.4%	-		-
Lights	16	301	21	3	341	-		4	311	84	0	399	-		20	11	9	0	40	-		29	4	12	0	45	-		825
% Lights	94.1%	95.6%	100%	100%	95.8%	-		100%	92.8%	98.8%	0%	94.1%	-		100%	100%	90.0%	0%	97.6%	-		96.7%	100%	92.3%	0%	95.7%	-		95.0%
Articulated Trucks	0	1	0	0	1	-		0	8	0	0	8	-		0	0	0	0	0	-		0	0	0	0	0	-		9
% Articulated Trucks	0%	0.3%	0%	0%	0.3%	-		0%	2.4%	0%	0%	1.9%	-		0%	0%	0%	0%	0%	-		0%	0%	0%	0%	0%	-		1.0%
Buses and Single-Unit Trucks	1	13	0	0	14	-		0	16	1	0	17	-		0	0	1	0	1	-		1	0	1	0	2	-		34
% Buses and Single-Unit Trucks	5.9%	4.1%	0%	0%	3.9%	-		0%	4.8%	1.2%	0%	4.0%	-		0%	0%	10.0%	0%	2.4%	-		3.3%	0%	7.7%	0%	4.3%	-		3.9%
Pedestrians	-	-	-	-	-	3		-	-	-	-	0		-	-	-	-	-	2		-	-	-	-	-	0		-	
% Pedestrians	-	-	-	-	-	100%		-	-	-	-	0%		-	-	-	-	-	100%		-	-	-	-	-	0%		-	
Bicycles on Crosswalk	-	-	-	-	-	0		-	-	-	-	0		-	-	-	-	-	0		-	-	-	-	-	0		-	
% Bicycles on Crosswalk	-	-	-	-	-	0%		-	-	-	-	0%		-	-	-	-	-	0%		-	-	-	-	-	0%		-	

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

10. Lamar Street at Cockrell Avenue - TMC

Sat Apr 28, 2018

Midday Peak (WKND) (12:15PM - 1:15PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 518137, Location: 32.765414, -96.790777



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg Direction	Lamar Street Eastbound						Lamar Street Westbound						Cockrell Avenue Northbound						Cockrell Avenue Southbound						Int
	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	
2018-04-28 12:15PM	2	50	1	0	53	0	0	43	8	0	51	0	3	4	3	0	10	0	3	1	0	0	4	0	118
12:30PM	3	41	5	0	49	0	1	53	5	0	59	0	4	3	3	0	10	2	6	0	0	0	6	0	124
12:45PM	1	38	3	0	42	0	1	45	10	0	56	0	7	1	3	0	11	0	5	1	2	0	8	0	117
1:00PM	2	32	3	0	37	0	0	44	18	0	62	0	3	0	0	0	3	0	2	0	1	0	3	0	105
Total	8	161	12	0	181	0	2	185	41	0	228	0	17	8	9	0	34	2	16	2	3	0	21	0	464
% Approach	4.4%	89.0%	6.6%	0%	-	-	0.9%	81.1%	18.0%	0%	-	-	50.0%	23.5%	26.5%	0%	-	-	76.2%	9.5%	14.3%	0%	-	-	-
% Total	1.7%	34.7%	2.6%	0%	39.0%	-	0.4%	39.9%	8.8%	0%	49.1%	-	3.7%	1.7%	1.9%	0%	7.3%	-	3.4%	0.4%	0.6%	0%	4.5%	-	-
PHF	0.667	0.805	0.600	-	0.854	-	0.500	0.873	0.569	-	0.919	-	0.607	0.500	0.750	-	0.773	-	0.667	0.500	0.375	-	0.656	-	0.935
Lights	8	155	12	0	175	-	2	170	41	0	213	-	17	8	8	0	33	-	16	2	2	0	20	-	441
% Lights	100%	96.3%	100%	0%	96.7%	-	100%	91.9%	100%	0%	93.4%	-	100%	100%	88.9%	0%	97.1%	-	100%	100%	66.7%	0%	95.2%	-	95.0%
Articulate d Trucks	0	0	0	0	0	-	0	7	0	0	7	-	0	0	0	0	0	-	0	0	0	0	0	-	7
% Articulate d Trucks	0%	0%	0%	0%	0%	-	0%	3.8%	0%	0%	3.1%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	1.5%
Buses and Single-Unit Trucks	0	6	0	0	6	-	0	8	0	0	8	-	0	0	1	0	1	-	0	0	1	0	1	-	16
% Buses and Single-Unit Trucks	0%	3.7%	0%	0%	3.3%	-	0%	4.3%	0%	0%	3.5%	-	0%	0%	11.1%	0%	2.9%	-	0%	0%	33.3%	0%	4.8%	-	3.4%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-100%	-	-	-	-	-	-	
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	

* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Synchro™ Output - 2018 Existing Traffic

PM Peak Hour

HCM Signalized Intersection Capacity Analysis 7: Corinth & Riverfront

05/23/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	↔	↕	↔	↔	↕	↔	↔	↕	↔	↔	↕	↔	
Traffic Volume (vph)	537	40	663	3	21	70	124	397	8	5	647	131	
Future Volume (vph)	537	40	663	3	21	70	124	397	8	5	647	131	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	
Flt Protected	0.95	1.00	1.00	1.00	0.90	1.00	0.95	1.00	0.95	1.00	1.00	1.00	
Satd. Flow (prot)	1770	1863	1583	1673	1770	1857	1770	1857	1770	3539	1583	1583	
Flt Permitted	0.69	1.00	1.00	1.00	0.27	1.00	0.27	1.00	0.51	1.00	1.00	1.00	
Satd. Flow (perm)	1294	1863	1583	1669	498	1857	498	1857	944	3539	1583	1583	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	584	43	721	3	23	76	135	432	9	5	703	142	
RTOR Reduction (vph)	0	0	279	0	49	0	0	1	0	0	0	68	
Lane Group Flow (vph)	584	43	442	0	53	0	135	440	0	5	703	74	
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	NA	Perm	NA	Perm	
Protected Phases	4	4	4	4	4	4	1	6	6	2	2	2	
Permitted Phases	4	4	4	4	4	4	6	6	6	2	2	2	
Actuated Green, G (s)	40.0	40.0	40.0	40.0	40.0	64.6	64.6	64.6	64.6	50.0	50.0	50.0	
Effective Green, g (s)	40.0	40.0	40.0	40.0	64.6	64.6	64.6	64.6	64.6	50.0	50.0	50.0	
Actuated g/C Ratio	0.35	0.35	0.35	0.35	0.35	0.56	0.56	0.56	0.56	0.44	0.44	0.44	
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	451	660	552	582	387	1046	387	1046	411	1544	690	690	
v/s Ratio Prot	0.02				0.03	c0.24				c0.20			
v/s Ratio Perm	c0.45	0.28	0.28	0.03	0.03	0.17	0.03	0.17	0.01	0.01	0.05	0.05	
v/c Ratio	1.29	0.07	0.80	0.09	0.09	0.35	0.42	0.35	0.42	0.01	0.46	0.11	
Uniform Delay, d1	37.3	24.9	33.7	25.1	13.3	14.3	18.3	22.7	19.1	18.3	22.7	19.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	148.4	0.0	8.2	0.1	0.5	0.3	0.5	0.3	0.1	1.0	0.3	0.3	
Delay (s)	185.7	24.9	41.9	25.1	13.9	14.6	18.4	23.7	19.4	18.4	23.7	19.4	
Level of Service	F	C	D	C	B	B	B	B	B	C	C	B	
Approach Delay (s)	103.7			25.1	14.4		14.4			22.9			
Approach LOS	F			C	B		B			C			
Intersection Summary													
HCM 2000 Control Delay	59.1											HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.80												
Actuated Cycle Length (s)	114.6											Sum of lost time (s)	15.0
Intersection Capacity Utilization	85.3%											ICU Level of Service	E
Analysis Period (min)	15												
c Critical Lane Group													

PM Peak Hour

HCM 2010 Signalized Intersection Capacity Analysis
1: Cadiz & Griffin

05/23/2018

2nd-Term O (O2), veh/h	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0
3rd-Term O (O3), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of O Factor (f_B%), s	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
%ile Back of O (50%), veh/h	0.0	3.2	0.0	1.7	0.0	0.3	0.0	0.0	0.0
%ile Storage Ratio (RO%), s	0.00	0.23	0.00	0.09	0.00	0.02	0.00	0.00	0.00
Initial O (Cb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) O (Oe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat O (Os), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial O Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data									
Assigned Mvmt	0	12	0	14	0	16	0	0	0
Lane Assignment			T+R			T+R			
Lanes in Grp	0	0	0	1	0	1	0	0	0
Grp Vol (V), veh/h	0	0	0	341	0	29	0	0	0
Grp Sat Flow (S), veh/h	0	0	0	1583	0	1777	0	0	0
Q Serve Time (q_s), s	0.0	0.0	0.0	13.0	0.0	0.7	0.0	0.0	0.0
Cycle O Clear Time (g_c), s	0.0	0.0	0.0	13.0	0.0	0.7	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.27	0.00	0.00	0.00
Lane Grp Cap (C), veh/h	0	0	0	587	0	848	0	0	0
W/C Ratio (X)	0.00	0.00	0.00	0.58	0.00	0.03	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	587	0	848	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	18.9	0.0	10.4	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	4.2	0.0	0.1	0.0	0.0	0.0
Initial O Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	23.1	0.0	10.5	0.0	0.0	0.0
1st-Term O (O1), veh/h	0.0	0.0	0.0	5.6	0.0	0.3	0.0	0.0	0.0
2nd-Term O (O2), veh/h	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0
3rd-Term O (O3), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of O Factor (f_B%), s	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
%ile Back of O (50%), veh/h	0.0	0.0	0.0	6.3	0.0	0.3	0.0	0.0	0.0
%ile Storage Ratio (RO%), s	0.00	0.00	0.00	0.35	0.00	0.02	0.00	0.00	0.00
Initial O (Cb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) O (Oe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat O (Os), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial O Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary									
HCM 2010 Ctrl Delay	15.2								
HCM 2010 LOS	B								

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Baseline

Synchro 9 Report
Page 3

HCM 2010 Signalized Intersection Capacity Analysis
3: Cadiz & Hotel

05/23/2018

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	6	10	13	309	171	16
Future Volume (veh/h)	6	10	13	309	171	16
Number	3	18	1	6	2	12
Initial O, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	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
Adj Sat Flow, veh/h	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	7	11	14	336	186	17
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Opposing Right Turn Influence	Yes	Yes	Yes	Yes	Yes	Yes
Cap, veh/h	59	53	969	2903	2437	221
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.03	0.01	0.82	0.74	0.74
Ln Grp Delay, s/veh	35.5	36.6	1.9	1.4	2.7	2.7
Ln Grp LOS	D	D	A	A	A	A
Approach Vol, veh/h	18	18	350	203	203	203
Approach Delay, s/veh	36.2	36.2	1.4	2.7	2.7	2.7
Approach LOS	D	D	A	A	A	A
Timer						
Assigned Phs	1	2	3	4	5	6
Case No	1.2	8.0	9.0	4.0	6.0	6.0
Phs Duration (G+Y+Rc), s	5.7	60.0	8.1	65.7	65.7	65.7
Change Period (Y+Rc), s	5.0	*5.2	5.6	*5.2	*5.2	*5.2
Max Green (Gmax), s	20.0	*55	74.4	*55	*55	*55
Max Allow Headway (MAH), s	3.8	5.3	4.0	5.3	5.3	5.3
Max O Clear (g_c+1), s	2.1	3.2	2.5	3.4	3.4	3.4
Green Ext Time (g_e), s	0.0	3.8	0.0	3.8	3.8	3.8
Prob of Phs Cal (p_c)	0.25	1.00	0.31	1.00	1.00	1.00
Prob of Max Out (p_x)	0.00	0.00	0.00	0.00	0.00	0.00
Left-Turn Movement Data						
Assigned Mvmt	1	5	3			
Mvmt Sat Flow, veh/h	1774	0	1774			
Through Movement Data						
Assigned Mvmt		2	8			6
Mvmt Sat Flow, veh/h		3376	0			3632
Right-Turn Movement Data						
Assigned Mvmt			12	18		16
Mvmt Sat Flow, veh/h			297	1583		0
Left Lane Group Data						
Assigned Mvmt	1	5	3	0	0	0
Lane Assignment		(P/Pm)				

Baseline

Synchro 9 Report
Page 4

PM Peak Hour

HCM 2010 TWSC

6: Riverfront & 35E South / 30 East Off-Ramp

05/23/2018

HCM 2010 TWSC

10: Cockrell & Lamar

05/23/2018

Intersection													
1.2													
Int Delay, s/veh	EBL	EBT	WBT	WBR	SBL	SBR							
Lane Configurations	↑↑↑	↑↑↑	↑↑↑	↑↑↑	↑	↑							
Traffic Vol, veh/h	0	1495	766	0	119	73							
Future Vol, veh/h	0	1495	766	0	119	73							
Conflicting Peds, #/hr	0	0	0	0	0	0							
Sign Control	Free	Free	Free	Free	Stop	Stop							
RT Channelized	-	None	-	None	-	None							
Storage Length	-	-	-	-	0	0							
Veh in Median Storage, #	-	0	0	-	2	-							
Grade, %	-	0	0	-	0	-							
Peak Hour Factor	92	92	92	92	92	92							
Heavy Vehicles, %	2	2	2	2	2	2							
Mvmt Flow	0	1625	833	0	129	79							
Major/Minor	Major1	Minor2											
Conflicting Flow All	-	0	-	0	1483	416							
Stage 1	-	-	-	-	833	-							
Stage 2	-	-	-	-	650	-							
Critical Hdwy	-	-	-	-	5.74	7.14							
Critical Hdwy Stg 1	-	-	-	-	6.64	-							
Critical Hdwy Stg 2	-	-	-	-	6.04	-							
Follow-up Hdwy	-	-	-	-	3.82	3.92							
Pd Cap-1 Maneuver	0	-	-	-	0	*321	*746						
Stage 1	0	-	-	-	0	*766	-						
Stage 2	0	-	-	-	0	*438	-						
Platoon blocked, %	-	-	-	-	1	1							
Mov Cap-1 Maneuver	-	-	-	-	-	*321	*746						
Mov Cap-2 Maneuver	-	-	-	-	-	*410	-						
Stage 1	-	-	-	-	-	*766	-						
Stage 2	-	-	-	-	-	*438	-						
Approach	EB	WB	SB										
HCM Control Delay, s	0	0	15										
HCM LOS			C										
Minor Lane/Major Mvmt	EBT	WBT	SBLn1	SBLn2									
Capacity (veh/h)	-	-	410	746									
HCM Lane V/C Ratio	-	-	0.315	0.106									
HCM Control Delay (s)	-	-	17.8	10.4									
HCM Lane LOS	-	-	C	B									
HCM 95th %tile Q(veh)	-	-	1.3	0.4									

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

Baseline

Synchro 9 Report
 Page 1

Intersection												
1.2												
Int Delay, s/veh	EBL	EBT	WBT	WBR	NBL	NBT	SBL	SBR				
Lane Configurations	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	25	1	2	22	11	0	1	558	135	8	212	12
Future Vol, veh/h	25	1	2	22	11	0	1	558	135	8	212	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None	-	None	-	None	-	None
Storage Length	-	-	150	-	-	150	-	-	-	150	-	-
Veh in Median Storage, #	-	0	-	0	-	0	-	0	-	0	-	0
Grade, %	-	0	-	0	-	0	-	0	-	0	-	0
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	27	1	2	24	12	0	1	607	147	9	230	13
Major/Minor	Minor2	Minor1	Major1	Major2								
Conflicting Flow All	565	1009	122	815	943	377	243	0	0	753	0	0
Stage 1	254	254	-	682	682	-	-	-	-	-	-	-
Stage 2	311	755	-	133	261	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pd Cap-1 Maneuver	408	239	906	269	261	621	1320	-	-	853	-	-
Stage 1	728	696	-	406	448	-	-	-	-	-	-	-
Stage 2	674	415	-	857	691	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	390	236	906	265	258	621	1320	-	-	853	-	-
Mov Cap-2 Maneuver	390	236	-	265	258	-	-	-	-	-	-	-
Stage 1	727	689	-	406	448	-	-	-	-	-	-	-
Stage 2	656	415	-	845	684	-	-	-	-	-	-	-
Approach	EB	WB	NB	SB								
HCM Control Delay, s	14.8	20.8	0	0.3								
HCM LOS	B	C										
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR		
Capacity (veh/h)	1320	-	-	380	906	263	-	853	-	-		
HCM Lane V/C Ratio	0.001	-	-	0.074	0.002	0.136	-	0.01	-	-		
HCM Control Delay (s)	7.7	-	-	15.2	9	20.8	0	9.3	-	-		
HCM Lane LOS	A	-	-	C	A	C	A	A	-	-		
HCM 95th %tile Q(veh)	0	-	-	0.2	0	0.5	-	0	-	-		

Baseline

Synchro 9 Report
 Page 2

PM Peak Hour

HCM 2010 TWSC 11: Drive 1 & Riverfront

05/23/2018

Intersection										
Int Delay, s/veh	0									
Movement	EBT	EBR	WBL	WBT	NBL	NBR				
Lane Configurations	↑↑	↑↑	↑	↑↑	↑	↑				
Traffic Vol, veh/h	1250	0	0	335	0	0				
Future Vol, veh/h	1250	0	0	335	0	0				
Conflicting Peds, #/hr	0	0	0	0	0	0				
Sign Control	Free	Free	Free	Free	Stop	Stop				
RT Channelized	-	None	-	None	-	None				
Storage Length	-	-	150	-	0	0				
Veh in Median Storage, #	0	-	-	0	0	0				
Grade, %	0	-	-	0	0	0				
Peak Hour Factor	92	92	92	92	92	92				
Heavy Vehicles, %	2	2	2	2	2	2				
Mvmt Flow	1359	0	0	364	0	0				
Major/Minor	Major1	Major2	Minor1							
Conflicting Flow All	0	0	1359	0	1541	679				
Stage 1	-	-	-	-	1359	-				
Stage 2	-	-	-	-	182	-				
Critical Hdwy	-	-	4.14	-	6.84	6.94				
Critical Hdwy Stg 1	-	-	-	-	5.84	-				
Critical Hdwy Stg 2	-	-	-	-	5.84	-				
Follow-up Hdwy	-	-	2.22	-	3.52	3.32				
Pd Cap-1 Maneuver	-	-	502	-	106	394				
Stage 1	-	-	-	-	204	-				
Stage 2	-	-	-	-	831	-				
Platoon blocked, %	-	-	-	-	-	-				
Mov Cap-1 Maneuver	-	-	502	-	106	394				
Mov Cap-2 Maneuver	-	-	-	-	106	-				
Stage 1	-	-	-	-	204	-				
Stage 2	-	-	-	-	831	-				
Approach	EB	WB	NB							
HCM Control Delay, s	0	0	0							
HCM LOS			A							
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT				
Capacity (veh/h)	-	-	-	-	-	502				
HCM Lane V/C Ratio	-	-	-	-	-	-				
HCM Control Delay (\$)	0	0	-	0	-	-				
HCM Lane LOS	A	A	-	A	-	A				
HCM 95th %tile Q(veh)	-	-	-	-	-	0				

HCM 2010 TWSC 12: Drive 2 & Riverfront

05/23/2018

Intersection										
Int Delay, s/veh	0									
Movement	EBT	EBR	WBL	WBT	NBL	NBR				
Lane Configurations	↑↑	↑↑	↑	↑↑	↑	↑				
Traffic Vol, veh/h	1250	0	0	335	0	0				
Future Vol, veh/h	1250	0	0	335	0	0				
Conflicting Peds, #/hr	0	0	0	0	0	0				
Sign Control	Free	Free	Free	Free	Stop	Stop				
RT Channelized	-	None	-	None	-	None				
Storage Length	-	-	-	-	0	0				
Veh in Median Storage, #	0	-	-	0	0	0				
Grade, %	0	-	-	0	0	0				
Peak Hour Factor	92	92	92	92	92	92				
Heavy Vehicles, %	2	2	2	2	2	2				
Mvmt Flow	1359	0	0	364	0	0				
Major/Minor	Major1	Major2	Minor1							
Conflicting Flow All	0	0	-	-	-	679				
Stage 1	-	-	-	-	-	-				
Stage 2	-	-	-	-	-	-				
Critical Hdwy	-	-	-	-	-	6.94				
Critical Hdwy Stg 1	-	-	-	-	-	-				
Critical Hdwy Stg 2	-	-	-	-	-	-				
Follow-up Hdwy	-	-	-	-	-	3.32				
Pd Cap-1 Maneuver	-	-	0	-	0	394				
Stage 1	-	-	0	-	0	-				
Stage 2	-	-	0	-	0	-				
Platoon blocked, %	-	-	-	-	-	-				
Mov Cap-1 Maneuver	-	-	-	-	-	394				
Mov Cap-2 Maneuver	-	-	-	-	-	-				
Stage 1	-	-	-	-	-	-				
Stage 2	-	-	-	-	-	-				
Approach	EB	WB	NB							
HCM Control Delay, s	0	0	0							
HCM LOS			A							
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT					
Capacity (veh/h)	-	-	-	-	-					
HCM Lane V/C Ratio	-	-	-	-	-					
HCM Control Delay (\$)	0	0	-	0	-					
HCM Lane LOS	A	A	-	A	-					
HCM 95th %tile Q(veh)	-	-	-	-	-					

PM Peak Hour

HCM 2010 TWSC
13: Drive 3 & Riverfront

05/23/2018

Intersection									
Int. Delay, s/veh	0								
Movement	EBT	EBR	WBL	WBT	NBL	NBR			
Lane Configurations	↑↑		↑	↑↑		↑			
Traffic Vol, veh/h	1250	0	0	335	0	0			
Future Vol, veh/h	1250	0	0	335	0	0			
Conflicting Peds, #/hr	0	0	0	0	0	0			
Sign Control	Free	Free	Free	Free	Stop	Stop			
RT Channelized	-	None	-	None	-	None			
Storage Length	-	-	150	-	0	0			
Veh in Median Storage, #	0	-	-	0	0	-			
Grade, %	0	-	-	0	0	-			
Peak Hour Factor	92	92	92	92	92	92			
Heavy Vehicles, %	2	2	2	2	2	2			
Mvmt Flow	1359	0	0	364	0	0			
Major/Minor	Major1	Major2	Minor1						
Conflicting Flow All	0	0	1359	0	1541	679			
Stage 1	-	-	-	-	1359	-			
Stage 2	-	-	-	-	182	-			
Critical Hdwy	-	-	4.14	-	6.84	6.94			
Critical Hdwy Stg 1	-	-	-	-	5.84	-			
Critical Hdwy Stg 2	-	-	-	-	5.84	-			
Follow-up Hdwy	-	-	2.22	-	3.52	3.32			
Pd. Cap-1 Maneuver	-	-	502	-	106	394			
Stage 1	-	-	-	-	204	-			
Stage 2	-	-	-	-	831	-			
Platoon blocked, %	-	-	-	-	-	-			
Mov Cap-1 Maneuver	-	-	502	-	106	394			
Mov Cap-2 Maneuver	-	-	-	-	106	-			
Stage 1	-	-	-	-	204	-			
Stage 2	-	-	-	-	831	-			
Approach	EB	WB	WB	NB					
HCM Control Delay, s	0	0	0	0					
HCM LOS				A					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT			
Capacity (veh/h)	-	-	-	-	-	502			
HCM Lane V/C Ratio	-	-	-	-	-	-			
HCM Control Delay (s)	0	0	-	-	0	-			
HCM Lane LOS	A	A	-	-	A	-			
HCM 95th %tile Q(veh)	-	-	-	-	-	0			

Saturday Peak Hour

HCM Signalized Intersection Capacity Analysis 7: Corinth & Riverfront

05/23/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	196	4	205	4	4	11	119	222	9	8	287	121
Future Volume (vph)	196	4	205	4	4	11	119	222	9	8	287	121
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00
Flt Protected	0.95	1.00	1.00	0.99	0.99	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1695	1695	1770	1852	1770	1852	1770	3539	1583
Flt Permitted	0.74	1.00	1.00	0.97	0.97	0.51	1.00	0.60	1.00	0.60	1.00	1.00
Satd. Flow (perm)	1386	1863	1583	1659	1659	953	1852	1124	3539	1583	1583	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	213	4	223	4	4	12	129	241	10	9	312	132
RTOR Reduction (vph)	0	0	175	0	9	0	0	1	0	0	0	61
Lane Group Flow (vph)	213	4	48	0	11	0	129	250	0	9	312	71
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	NA	Perm	NA	Perm
Protected Phases	4	4	4	4	4	1	6	2	2	2	2	2
Permitted Phases	4	4	4	4	4	6	6	6	6	6	6	6
Actuated Green, G (s)	20.0	20.0	20.0	20.0	20.0	63.7	63.7	63.7	63.7	50.4	50.4	50.4
Effective Green, g (s)	20.0	20.0	20.0	20.0	20.0	63.7	63.7	63.7	63.7	50.4	50.4	50.4
Actuated g/C Ratio	0.21	0.21	0.21	0.21	0.21	0.68	0.68	0.68	0.68	0.54	0.54	0.54
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	295	397	337	354	354	720	1259	604	1903	851	851	851
v/s Ratio Prot	0.00	0.00	0.00	0.02	0.14	0.02	0.14	0.09	0.09	0.09	0.09	0.09
v/s Ratio Perm	c0.15	0.03	0.01	0.11	0.11	0.02	0.14	0.01	0.01	0.04	0.04	0.04
v/c Ratio	0.72	0.01	0.14	0.03	0.18	0.20	0.20	0.01	0.16	0.16	0.16	0.08
Uniform Delay, d1	34.3	29.0	29.9	29.2	29.2	5.3	5.6	10.1	11.0	10.5	10.5	10.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	8.4	0.0	0.2	0.0	0.1	0.1	0.1	0.0	0.2	0.2	0.2	0.2
Delay (s)	42.7	29.1	30.1	29.2	29.2	5.5	5.6	10.1	11.2	10.7	10.7	10.7
Level of Service	D	C	C	C	C	A	A	A	B	B	B	B
Approach Delay (s)	36.2	36.2	36.2	29.2	29.2	5.6	5.6	11.0	11.0	11.0	11.0	11.0
Approach LOS	D	D	D	C	C	A	A	A	B	B	B	B
Intersection Summary												
HCM 2000 Control Delay	18.3 HCM 2000 Level of Service B											
HCM 2000 Volume to Capacity ratio	0.34											
Actuated Cycle Length (s)	93.7 Sum of lost time (s) 15.0											
Intersection Capacity Utilization	60.0% ICU Level of Service B											
Analysis Period (min)	15											
c Critical Lane Group												

Saturday Peak Hour

HCM 2010 Signalized Intersection Capacity Analysis
1: Cadiz & Griffin

05/23/2018

Movement	EBL	EBR	NBL	NBT	SBT	SBR
2nd-Term O (O2), veh/h	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term O (O3), veh/h	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of O Factor (f_B%), s	0.00	1.00	0.00	1.00	0.00	0.00
%ile Back of O (50%), veh/h	0.0	0.3	0.0	1.0	0.0	0.0
%ile Storage Ratio (RO%), s	0.00	0.02	0.00	0.11	0.00	0.00
Initial O (Cb), veh	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) O (Oe), veh	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
Sat O (Os), veh	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0.0	0.0	0.0	0.0	0.0	0.0
Initial O Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data						
Assigned Mvmt	0	12	0	14	0	16
Lane Assignment		T+R		T+R		
Lanes in Grp	0	0	0	1	0	1
Grp Vol (V), veh/h	0	0	0	178	0	27
Grp Sat Flow (S), veh/h	0	0	0	1583	0	1727
Q Serve Time (q_s), s	0.0	0.0	0.0	4.6	0.0	0.3
Cycle O Clear Time (g_c), s	0.0	0.0	0.0	4.6	0.0	0.3
Prot RT Sat Flow (s_R), veh/h	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.45
Lane Grp Cap (C), veh/h	0	0	0	341	0	928
W/C Ratio (X)	0.00	0.00	0.00	0.52	0.00	0.03
Avail Cap (c_a), veh/h	0	0	0	817	0	928
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	16.0	0.0	5.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.2	0.0	0.0
Initial O Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	17.2	0.0	5.0
1st-Term O (O1), veh/h	0.0	0.0	0.0	2.0	0.0	0.2
2nd-Term O (O2), veh/h	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term O (O3), veh/h	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of O Factor (f_B%), s	0.00	1.00	0.00	1.00	0.00	0.00
%ile Back of O (50%), veh/h	0.0	0.0	0.0	2.1	0.0	0.2
%ile Storage Ratio (RO%), s	0.00	0.00	0.00	0.23	0.00	0.01
Initial O (Cb), veh	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) O (Oe), veh	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
Sat O (Os), veh	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0.0	0.0	0.0	0.0	0.0	0.0
Initial O Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary						
HCM 2010 Ctrl Delay	11.5					
HCM 2010 LOS	B					

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Baseline

Synchro 9 Report
Page 3

HCM 2010 Signalized Intersection Capacity Analysis
3: Cadiz & Hotel

05/23/2018

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	8	23	81	579	270	31
Future Volume (veh/h)	8	23	81	579	270	31
Number	3	18	1	6	2	12
Initial O, veh	0	0	0	0	0	0
Ped/Bike Adj (A_pbT)	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
Adj Sat Flow, veh/h	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	9	25	88	629	293	34
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Opposing Right Turn Influence	Yes	Yes	Yes	Yes	Yes	Yes
Cap, veh/h	95	85	865	2856	2266	261
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.05	0.03	0.81	0.71	0.71
Ln Grp Delay, s/veh	35.3	37.1	2.4	1.9	3.8	3.8
Ln Grp LOS	D	D	A	A	A	A
Approach Vol, veh/h	34			717	327	
Approach Delay, s/veh	36.6			2.0	3.8	
Approach LOS	D			A	A	
Timer						
Assigned Phs	1	2	3	4	5	6
Case No	1	2	8			
Phs Duration (G+Y+Rc), s	1.2	8.0	9.0			4.0
Change Period (Y+Rc), s	7.6	60.0	9.7			67.6
Max Green (Gmax), s	5.0	*5.2	5.6			*5.2
Max Allow Headway (MAH), s	20.0	*55	74.4			*55
Max O Clear (g_c+1), s	3.8	5.3	4.0			5.3
Green Ext Time (g_ext), s	2.9	4.3	3.2			5.2
Prob of Phs Cal (p_c)	0.2	7.8	0.1			7.8
Prob of Max Out (p_x)	0.85	1.00	0.52			1.00
Left-Turn Movement Data						
Assigned Mvmt	1	5	3			
Mvmt Sat Flow, veh/h	1774	0	1774			
Through Movement Data						
Assigned Mvmt		2	8			6
Mvmt Sat Flow, veh/h		3292	0			3632
Right-Turn Movement Data						
Assigned Mvmt			12			16
Mvmt Sat Flow, veh/h			368			1583
Left Lane Group Data						
Assigned Mvmt	1	5	3	0	0	0
Lane Assignment	(P/Pm)					

Baseline

Synchro 9 Report
Page 4

Saturday Peak Hour

HCM 2010 TWSC

6: Riverfront & 35E South / 30 East Off-Ramp

05/23/2018

HCM 2010 TWSC

10: Cockrell & Lamar

05/23/2018

Intersection										
Int Delay, s/veh										
1.4										
Movement	EBL	EBT	WBT	WBR	SBL	SBR				
Lane Configurations	↑↑↑	↑↑↑	↑↑↑	↑↑↑	↑	↑				
Traffic Vol, veh/h	0	424	638	0	60	104				
Future Vol, veh/h	0	424	638	0	60	104				
Conflicting Peds, #/hr	0	0	0	0	0	0				
Sign Control	Free	Free	Free	Free	Stop	Stop				
RT Channelized	-	None	-	None	-	None				
Storage Length	-	-	-	-	0	0				
Yeh in Median Storage, #	-	0	0	-	2	-				
Grade, %	-	0	0	-	0	-				
Peak Hour Factor	92	92	92	92	92	92				
Heavy Vehicles, %	2	2	2	2	2	2				
Mvmt Flow	0	461	693	0	65	113				
Major/Minor	Major1	Major2	Minor2							
Conflicting Flow All	-	0	-	0	877	347				
Stage 1	-	-	-	693	-	-				
Stage 2	-	-	-	184	-	-				
Critical Hdwy	-	-	-	5.74	7.14	-				
Critical Hdwy Stg 1	-	-	-	6.64	-	-				
Critical Hdwy Stg 2	-	-	-	6.04	-	-				
Follow-up Hdwy	-	-	-	3.82	3.92	-				
Pd Cap-1 Maneuver	0	-	-	0	*665	*765				
Stage 1	0	-	-	0	*785	-				
Stage 2	0	-	-	0	*762	-				
Platoon blocked, %	-	-	-	1	1	-				
Mov Cap-1 Maneuver	-	-	-	-	*665	*765				
Mov Cap-2 Maneuver	-	-	-	-	*699	-				
Stage 1	-	-	-	-	*785	-				
Stage 2	-	-	-	-	*762	-				
Approach	EB	WB	SB							
HCM Control Delay, s	0	0	10.6							
HCM LOS			B							
Minor Lane/Major Mvmt	EBT	WBT	SBLn1	SBLn2						
Capacity (veh/h)	-	-	699	765						
HCM Lane V/C Ratio	-	-	0.093	0.148						
HCM Control Delay (s)	-	-	10.7	10.5						
HCM Lane LOS	-	-	B	B						
HCM 95th %tile Q(veh)	-	-	0.3	0.5						

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

Baseline

Synchro 9 Report
 Page 1

Intersection										
Int Delay, s/veh										
1.5										
Movement	EBL	EBT	WBT	WBR	NBL	NBT	SBL	SBR		
Lane Configurations	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	17	8	9	16	2	3	8	161	12	2
Future Vol, veh/h	17	8	9	16	2	3	8	161	12	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None	-	None	-	None
Storage Length	-	150	-	-	150	150	-	-	150	-
Yeh in Median Storage, #	-	0	-	0	-	0	-	0	-	0
Grade, %	-	0	-	0	-	0	-	0	-	0
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	9	10	17	2	3	9	175	13	2
201	45									
Major/Minor	Minor2	Minor1	Major1	Major2						
Conflicting Flow All	334	433	123	308	449	94	246	0	188	0
Stage 1	228	228	-	199	199	-	-	-	-	-
Stage 2	106	205	-	109	250	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	4.14	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	2.22	-
Pd Cap-1 Maneuver	596	514	905	621	504	944	1317	-	-	-
Stage 1	754	714	-	784	735	-	-	-	-	-
Stage 2	888	731	-	885	699	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	588	510	905	602	500	944	1317	-	-	-
Mov Cap-2 Maneuver	588	510	-	602	500	-	-	-	-	-
Stage 1	749	713	-	779	730	-	-	-	-	-
Stage 2	876	726	-	864	698	-	-	-	-	-
Approach	EB	WB	NB	SB						
HCM Control Delay, s	11	10.9	0.3	0.1						
HCM LOS	B	B								
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn2	SBL	SBT	SBR	
Capacity (veh/h)	1317	-	-	561	905	589	944	1384	-	-
HCM Lane V/C Ratio	0.007	-	-	0.048	0.011	0.033	0.003	0.002	-	-
HCM Control Delay (s)	7.8	-	-	11.7	9	11.3	8.8	7.6	-	-
HCM Lane LOS	A	-	-	B	A	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0	0.1	0	0	-	-

Baseline

Synchro 9 Report
 Page 2

Saturday Peak Hour

HCM 2010 TWSC
11: Drive 1 & Riverfront

05/23/2018

Intersection										
Int Delay, s/veh	0									
Movement	EBT	EBR	WBL	WBT	NBL	NBR				
Lane Configurations	↑↑	↑↑	↑	↑↑	↑	↑				
Traffic Vol, veh/h	467	0	0	646	0	0				
Future Vol, veh/h	467	0	0	646	0	0				
Conflicting Peds, #/hr	0	0	0	0	0	0				
Sign Control	Free	Free	Free	Free	Stop	Stop				
RT Channelized	-	None	-	None	-	None				
Storage Length	-	-	150	-	-	-				
Veh in Median Storage, #	0	-	-	0	0	-				
Grade, %	0	-	-	0	0	-				
Peak Hour Factor	92	92	92	92	92	92				
Heavy Vehicles, %	2	2	2	2	2	2				
Mvmt Flow	508	0	0	702	0	0				
Major/Minor	Major1	Major2	Minor1							
Conflicting Flow All	0	0	508	0	859	254				
Stage 1	-	-	-	-	508	-				
Stage 2	-	-	-	-	351	-				
Critical Hdwy	-	-	4.14	-	6.84	6.94				
Critical Hdwy Stg 1	-	-	-	-	5.84	-				
Critical Hdwy Stg 2	-	-	-	-	5.84	-				
Follow-up Hdwy	-	-	2.22	-	3.52	3.32				
Pd Cap-1 Maneuver	-	-	1053	-	296	745				
Stage 1	-	-	-	-	569	-				
Stage 2	-	-	-	-	684	-				
Platoon blocked, %	-	-	-	-	-	-				
Mov Cap-1 Maneuver	-	-	1053	-	296	745				
Mov Cap-2 Maneuver	-	-	-	-	296	-				
Stage 1	-	-	-	-	569	-				
Stage 2	-	-	-	-	684	-				
Approach	EB	WB	WB	NB						
HCM Control Delay, s	0	0	0	0						
HCM LOS				A						
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT				
Capacity (veh/h)	-	-	-	-	-	1053				
HCM Lane V/C Ratio	-	-	-	-	-	-				
HCM Control Delay (\$)	0	0	-	0	-	-				
HCM Lane LOS	A	A	-	A	-	A				
HCM 95th %tile Q(veh)	-	-	-	-	-	0				

Baseline
Synchro 9 Report
Page 3

HCM 2010 TWSC
12: Drive 2 & Riverfront

05/23/2018

Intersection										
Int Delay, s/veh	0									
Movement	EBT	EBR	WBL	WBT	NBL	NBR				
Lane Configurations	↑↑	↑↑	↑	↑↑	↑	↑				
Traffic Vol, veh/h	467	0	0	646	0	0				
Future Vol, veh/h	467	0	0	646	0	0				
Conflicting Peds, #/hr	0	0	0	0	0	0				
Sign Control	Free	Free	Free	Free	Stop	Stop				
RT Channelized	-	None	-	None	-	None				
Storage Length	-	-	-	-	-	0				
Veh in Median Storage, #	0	-	-	0	0	-				
Grade, %	0	-	-	0	0	-				
Peak Hour Factor	92	92	92	92	92	92				
Heavy Vehicles, %	2	2	2	2	2	2				
Mvmt Flow	508	0	0	702	0	0				
Major/Minor	Major1	Major2	Minor1							
Conflicting Flow All	0	0	-	-	-	254				
Stage 1	-	-	-	-	-	-				
Stage 2	-	-	-	-	-	-				
Critical Hdwy	-	-	-	-	-	6.94				
Critical Hdwy Stg 1	-	-	-	-	-	-				
Critical Hdwy Stg 2	-	-	-	-	-	-				
Follow-up Hdwy	-	-	-	-	-	3.32				
Pd Cap-1 Maneuver	-	-	0	-	0	745				
Stage 1	-	-	-	-	0	-				
Stage 2	-	-	-	-	0	-				
Platoon blocked, %	-	-	-	-	-	-				
Mov Cap-1 Maneuver	-	-	-	-	-	745				
Mov Cap-2 Maneuver	-	-	-	-	-	-				
Stage 1	-	-	-	-	-	-				
Stage 2	-	-	-	-	-	-				
Approach	EB	WB	WB	NB						
HCM Control Delay, s	0	0	0	0						
HCM LOS				A						
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT					
Capacity (veh/h)	-	-	-	-	-					
HCM Lane V/C Ratio	-	-	-	-	-					
HCM Control Delay (\$)	0	0	-	0	-					
HCM Lane LOS	A	A	-	A	-					
HCM 95th %tile Q(veh)	-	-	-	-	-					

Baseline
Synchro 9 Report
Page 4

Saturday Peak Hour

HCM 2010 TWSC
13: Drive 3 & Riverfront

05/23/2018

Intersection									
Int. Delay, s/veh	0								
Movement	EBT	EBR	WBL	WBT	NBL	NBR			
Lane Configurations	↑↑			↑↑		↑↑			
Traffic Vol, veh/h	467	0	0	646	0	0			
Future Vol, veh/h	467	0	0	646	0	0			
Conflicting Peds, #/hr	0	0	0	0	0	0			
Sign Control	Free	Free	Free	Free	Stop	Stop			
RT Channelized	-	None	-	None	-	None			
Storage Length	-	-	150	-	0	0			
Veh in Median Storage, #	0	-	-	0	0	-			
Grade, %	0	-	-	0	0	-			
Peak Hour Factor	92	92	92	92	92	92			
Heavy Vehicles, %	2	2	2	2	2	2			
Mvmt Flow	508	0	0	702	0	0			
Major/Minor	Major1	Major2	Minor1						
Conflicting Flow All	0	0	508	0	859	254			
Stage 1	-	-	-	-	508	-			
Stage 2	-	-	-	-	351	-			
Critical Hdwy	-	-	4.14	-	6.84	6.94			
Critical Hdwy Stg 1	-	-	-	-	5.84	-			
Critical Hdwy Stg 2	-	-	-	-	5.84	-			
Follow-up Hdwy	-	-	2.22	-	3.52	3.32			
Pct Cap-1 Maneuver	-	-	1053	-	296	745			
Stage 1	-	-	-	-	569	-			
Stage 2	-	-	-	-	684	-			
Platoon blocked, %	-	-	-	-	-	-			
Mov Cap-1 Maneuver	-	-	1053	-	296	745			
Mov Cap-2 Maneuver	-	-	-	-	296	-			
Stage 1	-	-	-	-	569	-			
Stage 2	-	-	-	-	684	-			
Approach	EB	WB	WB	NB					
HCM Control Delay, s	0	0	0	0					
HCM LOS				A					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT			
Capacity (veh/h)	-	-	-	-	-	1053			
HCM Lane V/C Ratio	0	0	0	0	0	0			
HCM Control Delay (s)	A	A	A	A	A	A			
HCM Lane LOS	A	A	A	A	A	A			
HCM 95th %tile Q(veh)	-	-	-	-	-	0			

Synchro™ Output - 2020 Background Traffic

PM Peak Hour

HCM 2010 Signalized Intersection Capacity Analysis
1: Cadiz & Griffin

HCM 2010 Signalized Intersection Capacity Analysis
1: Cadiz & Griffin

05/23/2018

05/23/2018

	EBL	EBS	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBS	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1 1 1	1 1 1	1 1 1	1 1 1	1 1 1	1 1 1	1 1 1	1 1 1	1 1 1	1 1 1	1 1 1	1 1 1
Traffic Volume (veh/h)	112	711	0	0	91	7	31	221	320	0	0	0
Future Volume (veh/h)	112	711	0	0	91	7	31	221	320	0	0	0
Number	5	2	12	1	6	16	7	4	14	0	0	0
Initial Q, 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	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	1863	1863	0	0	1863	1900	1863	1863	1900	1863	1900	1863
Adj Flow Rate, veh/h	122	773	0	0	99	8	34	240	348	0	0	0
Adj No. of Lanes	1	3	0	0	4	0	1	3	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes	No	No	No	No	No	No	No	No	No	No	No
Cap, veh/h	696	2427	0	0	2915	228	658	1257	587	0	0	0
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
Prop Arrive On Green	0.48	0.48	0.00	0.00	0.48	0.48	0.37	0.37	0.37	0.48	0.48	0.48
Ln Grp Delay, s/veh	12.3	12.4	0.0	0.0	10.4	10.5	15.3	16.3	23.4	0.0	0.0	0.0
Ln Grp LOS	B	B	B	B	B	B	B	B	C	B	B	C
Approach Vol, veh/h	895	124	0	0	107	0	622	0	0	0	0	0
Approach Delay, s/veh	12.4	12.4	0	0	10.5	0	20.2	0	0	0	0	0
Approach LOS	B	B	B	B	B	B	C	B	C	B	B	C
Timer	1	2	3	4	5	6	7	8	0	0	0	0
Assigned Phs	2	2	0	0	0	0	0	0	0	0	0	0
Case No	60	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Phs Duration (G+Y+Rc), s	41.0	34.0	34.0	41.0	34.0	41.0	34.0	41.0	34.0	41.0	34.0	41.0
Change Period (Y+Rc), s	*5.2	6.2	6.2	*5.2	6.2	6.2	*5.2	6.2	6.2	*5.2	6.2	6.2
Max Green (Gmax), s	*36	27.8	27.8	*36	27.8	27.8	*36	27.8	27.8	*36	27.8	27.8
Max Allow Headway (MAH), s	5.0	5.2	5.2	5.0	5.2	5.2	5.0	5.2	5.2	5.0	5.2	5.2
Max O Clear (G_c+I1), s	9.0	15.3	15.3	9.0	15.3	15.3	9.0	15.3	15.3	9.0	15.3	15.3
Green Ext Time (G_e), s	7.0	3.1	3.1	7.0	3.1	3.1	7.0	3.1	3.1	7.0	3.1	3.1
Prob of Phs Cal (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Left-Turn Movement Data												
Assigned Mvmt	5	7	7	7	7	7	1	1	1	1	1	1
Mvmt Sat Flow, veh/h	1281	1774	1774	1281	1774	1774	0	0	0	0	0	0
Through Movement Data												
Assigned Mvmt	2	4	4	4	4	4	6	6	6	6	6	6
Mvmt Sat Flow, veh/h	5253	3390	3390	5253	3390	3390	6367	6367	6367	6367	6367	6367
Right-Turn Movement Data												
Assigned Mvmt	12	14	14	14	14	14	16	16	16	16	16	16
Mvmt Sat Flow, veh/h	0	1583	1583	0	1583	1583	478	478	478	478	478	478
Left Lane Group Data												
Assigned Mvmt	0	5	0	7	0	1	0	0	0	0	0	0
Lane Assignment	T	T	T	T	T	T	T	T	T	T	T	T

Baseline Synchro 9 Report Page 2

Baseline Synchro 9 Report Page 1

PM Peak Hour

HCM 2010 Signalized Intersection Capacity Analysis
1: Cadiz & Griffin

05/23/2018

2nd-Term O (O2), veh/h	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
3rd-Term O (O3), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of O Factor (f_B%), s	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
%ile Back of O (50%), veh/h	0.0	3.4	0.0	1.7	0.0	0.3	0.0	0.0	0.0	0.0
%ile Storage Ratio (RO%)	0.00	0.24	0.00	0.19	0.00	0.02	0.00	0.00	0.00	0.00
Initial Q (Cb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Oe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat O (Os), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial O Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data										
Assigned Mvmt	0	12	0	14	0	16	0	16	0	0
Lane Assignment		T+R		T+R		T+R		T+R		
Lanes in Grp	0	0	0	1	0	1	0	1	0	0
Grp Vol (V), veh/h	0	0	0	348	0	30	0	0	0	0
Grp Sat Flow (S), veh/h	0	0	0	1583	0	1778	0	0	0	0
Q Serve Time (q_s), s	0.0	0.0	0.0	13.3	0.0	0.7	0.0	0.0	0.0	0.0
Cycle O Clear Time (g_c), s	0.0	0.0	0.0	13.3	0.0	0.7	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.27	0.00	0.00	0.00	0.00
Lane Grp Cap (C), veh/h	0	0	0	587	0	849	0	0	0	0
W/C Ratio (X)	0.00	0.00	0.00	0.59	0.00	0.04	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	587	0	849	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	19.0	0.0	10.4	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	4.4	0.0	0.1	0.0	0.0	0.0	0.0
Initial O Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	23.4	0.0	10.5	0.0	0.0	0.0	0.0
1st-Term O (O1), veh/h	0.0	0.0	0.0	5.8	0.0	0.3	0.0	0.0	0.0	0.0
2nd-Term O (O2), veh/h	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term O (O3), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of O Factor (f_B%), s	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
%ile Back of O (50%), veh/h	0.0	0.0	0.0	6.5	0.0	0.3	0.0	0.0	0.0	0.0
%ile Storage Ratio (RO%)	0.00	0.00	0.00	0.71	0.00	0.02	0.00	0.00	0.00	0.00
Initial Q (Cb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Oe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat O (Os), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial O Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary										
HCM 2010 Ctrl Delay	15.3									
HCM 2010 LOS	B									

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Baseline

Synchro 9 Report
Page 3

HCM 2010 Signalized Intersection Capacity Analysis
3: Cadiz & Hotel

05/23/2018

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	6	10	13	315	174	16
Future Volume (veh/h)	6	10	13	315	174	16
Number	3	18	1	6	2	12
Initial Q, veh	0	0	0	0	0	0
Peel-Bike Adj (A_pbT)	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
Adj Sat Flow, veh/h	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	7	11	14	342	189	17
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Opposing Right Turn Influence	Yes	Yes	Yes	Yes	Yes	Yes
Cap, veh/h	59	53	966	2903	2441	217
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.03	0.01	0.82	0.74	0.74
Ln Grp Delay, s/veh	35.5	36.6	1.9	1.4	2.7	2.7
Ln Grp LOS	D	D	A	A	A	A
Approach Vol, veh/h	18	18	356	206	206	206
Approach Delay, s/veh	36.2	36.2	1.4	2.7	2.7	2.7
Approach LOS	D	D	A	A	A	A
Timer						
Assigned Phs	1	2	3	4	5	6
Case No	1	2	8	8	7	8
Phs Duration (G+Y+Rc), s	1.2	8.0	9.0	4.0	4.0	4.0
Change Period (Y+Rc), s	5.7	60.0	8.1	65.7	65.7	65.7
Max Green (Gmax), s	5.0	*5.2	5.6	*5.2	*5.2	*5.2
Max Allow Headway (MAH), s	20.0	*55	74.4	*55	*55	*55
Max O Clear (g_c+I), s	3.8	5.3	4.0	5.3	5.3	5.3
Green Ext Time (g_e), s	2.1	3.2	2.5	3.4	3.4	3.4
Prob of Phs Cal (p_c)	0.00	0.25	1.00	0.31	1.00	1.00
Prob of Max Out (p_x)	0.00	0.00	0.00	0.00	0.00	0.00
Left-Turn Movement Data						
Assigned Mvmt	1	5	3			
Mvmt Sat Flow, veh/h	1774	0	1774			
Through Movement Data						
Assigned Mvmt		2	8			6
Mvmt Sat Flow, veh/h		3381	0			3632
Right-Turn Movement Data						
Assigned Mvmt			12	18		16
Mvmt Sat Flow, veh/h			293	1583		0
Left Lane Group Data						
Assigned Mvmt	1	5	3	0	0	0
Lane Assignment		(P/Pm)				

Baseline

Synchro 9 Report
Page 4

PM Peak Hour

HCM Signalized Intersection Capacity Analysis 2: Cadiz & Lamar

05/23/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Lane Configurations	50	457	152	143	150	92	40	364	262	114	14	44		
Traffic Volume (vph)	50	457	152	143	150	92	40	364	262	114	14	44		
Future Volume (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Ideal Flow (vphpl)	5.0	6.0	6.0	6.0	6.0	5.0	5.3	5.3	5.3	4.5	4.5	4.5		
Total Lost time (s)	1.00	0.95	1.00	0.95	1.00	0.95	1.00	0.95	1.00	0.95	1.00	0.95		
Lane Util. Factor	1.00	0.96	1.00	0.94	1.00	0.94	1.00	0.94	1.00	0.96	1.00	0.85		
Flt Protected	0.95	1.00	0.95	1.00	0.95	1.00	1.00	0.95	1.00	0.96	1.00	0.85		
Satd. Flow (prot)	1770	3407	1770	3337	1770	3337	3320	3320	1783	1583	1783	1583		
Flt Permitted	0.59	1.00	0.59	0.23	1.00	1.00	1.00	0.96	1.00	0.96	1.00	1.00		
Satd. Flow (perm)	1098	3407	1098	422	3337	3320	3320	1783	1583	1783	1583			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	54	497	165	155	163	100	43	396	285	124	15	48		
RTOR Reduction (vph)	0	19	0	0	54	0	0	72	0	0	0	43		
Lane Group Flow (vph)	54	643	0	155	209	0	0	652	0	0	139	5		
Turn Type	pm+pt	NA	NA	pm+pt	NA	Split	NA	Split	NA	Split	NA	Perm		
Permitted Phases	1	6	5	2	8	8	8	8	8	4	4	4		
Protected Phases	6	6	2	2	2	2	2	2	2	2	2	2		
Actuated Green, G (s)	56.7	55.7	57.8	57.8	57.8	33.8	33.8	33.8	33.8	15.1	15.1	15.1		
Effective Green, g (s)	56.7	55.7	57.8	57.8	57.8	33.8	33.8	33.8	33.8	15.1	15.1	15.1		
Actuated g/C Ratio	0.41	0.40	0.41	0.41	0.41	0.24	0.24	0.24	0.24	0.11	0.11	0.11		
Clearance Time (s)	5.0	6.0	6.0	6.0	6.0	5.3	5.3	5.3	5.3	4.5	4.5	4.5		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		
Lane Grp Cap (vph)	503	1362	309	1384	309	805	805	805	805	193	171	171		
v/s Ratio Prot	0.01	c0.19	0.05	0.06	c0.20	c0.20	c0.20	c0.20	c0.20	0.08	0.08	0.08		
v/s Ratio Perm	0.03	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.00	0.00	0.00		
v/c Ratio	0.11	0.47	0.50	0.15	0.15	0.81	0.81	0.81	0.81	0.72	0.03	0.03		
Uniform Delay, d1	25.8	30.9	27.8	25.4	27.8	49.7	49.7	49.7	49.7	60.1	55.6	55.6		
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Incremental Delay, d2	0.1	1.2	1.3	0.2	0.2	6.2	6.2	6.2	6.2	12.4	0.1	0.1		
Delay (s)	25.9	32.1	29.1	25.7	29.1	55.9	55.9	55.9	55.9	72.5	55.6	55.6		
Level of Service	C	C	C	C	C	E	E	E	E	E	E	E		
Approach Delay (s)	C	C	C	C	C	E	E	E	E	E	E	E		
Approach LOS	C	C	C	C	C	E	E	E	E	E	E	E		
Intersection Summary														
HCM 2000 Control Delay												42.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio												0.61		
Actuated Cycle Length (s)												139.3	Sum of lost time (s)	20.8
Intersection Capacity Utilization												69.4%	ICU Level of Service	C
Analysis Period (min)												15		
Critical Lane Group														

Baseline

Synchro 9 Report Page 1

HCM Signalized Intersection Capacity Analysis 4: Cadiz & Riverfront

05/23/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Lane Configurations	447	1189	0	0	287	40	226	238	73	55	0	260		
Traffic Volume (vph)	447	1189	0	0	287	40	226	238	73	55	0	260		
Future Volume (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Ideal Flow (vphpl)	4.5	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8		
Total Lost time (s)	1.00	0.91	0.91	0.95	1.00	1.00	0.95	1.00	0.95	1.00	1.00	0.85		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.85	1.00	0.96	1.00	0.96	1.00	1.00	0.85		
Flt Protected	0.95	1.00	1.00	1.00	0.85	1.00	0.95	1.00	0.95	1.00	1.00	0.85		
Satd. Flow (prot)	3433	5085	3539	1583	1770	3415	1770	3415	1770	1770	1583	1583		
Flt Permitted	0.55	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	0.47	1.00	1.00		
Satd. Flow (perm)	1998	5085	3539	1583	1770	3415	1770	3415	1770	873	1583	1583		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	486	1292	0	0	312	43	246	259	79	60	0	283		
RTOR Reduction (vph)	0	0	0	0	21	0	20	0	0	0	0	206		
Lane Group Flow (vph)	486	1292	0	0	312	22	246	318	0	60	0	77		
Turn Type	pm+pt	NA	NA	NA	NA	NA	NA	NA	NA	D, Pm	NA	Perm		
Permitted Phases	1	6	2	2	4	4	4	4	4	4	4	4		
Protected Phases	6	6	2	2	2	2	2	2	2	2	2	2		
Actuated Green, G (s)	94.5	93.2	73.2	73.2	39.2	39.2	39.2	39.2	39.2	39.2	39.2	39.2		
Effective Green, g (s)	94.5	93.2	73.2	73.2	39.2	39.2	39.2	39.2	39.2	39.2	39.2	39.2		
Actuated g/C Ratio	0.66	0.65	0.51	0.51	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27		
Clearance Time (s)	4.5	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8		
Lane Grp Cap (vph)	1465	3291	1798	804	481	929	0.09	0.09	0.09	0.07	0.05	0.05		
v/s Ratio Prot	0.04	c0.25	0.09	0.09	0.01	c0.14	0.01	0.01	0.01	0.07	0.07	0.07		
v/s Ratio Perm	0.18	0.39	0.17	0.17	0.03	0.51	0.34	0.34	0.34	0.25	0.18	0.18		
v/c Ratio	1.18	12.0	19.1	17.6	44.3	42.1	42.1	42.1	42.1	41.0	40.1	40.1		
Uniform Delay, d1	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Progression Factor	0.6	0.4	0.2	0.2	0.1	3.8	1.0	2.6	2.6	0.9	0.9	0.9		
Incremental Delay, d2	12.4	12.4	19.3	17.7	48.2	43.1	43.1	43.1	43.1	41.0	41.0	41.0		
Delay (s)	12.4	12.4	19.3	17.7	48.2	43.1	43.1	43.1	43.1	41.0	41.0	41.0		
Level of Service	B	B	B	B	D	D	D	D	D	D	D	D		
Approach Delay (s)	B	B	B	B	D	D	D	D	D	D	D	D		
Approach LOS	B	B	B	B	D	D	D	D	D	D	D	D		
Intersection Summary														
HCM 2000 Control Delay												22.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio												0.44		
Actuated Cycle Length (s)												144.0	Sum of lost time (s)	16.1
Intersection Capacity Utilization												53.7%	ICU Level of Service	A
Analysis Period (min)												15		
Critical Lane Group														

Baseline

Synchro 9 Report Page 2

PM Peak Hour

HCM Signalized Intersection Capacity Analysis 7: Corinth & Riverfront

05/23/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	548	41	676	3	21	71	126	405	8	5	660	134
Future Volume (vph)	548	41	676	3	21	71	126	405	8	5	660	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1672	1770	1857	1770	1857	1770	3539	1583	1583
Flt Permitted	0.70	1.00	1.00	1.00	0.20	1.00	0.47	1.00	1.00	0.47	1.00	1.00
Satd. Flow (perm)	1310	1863	1583	1669	364	1857	885	3539	1583	885	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	596	45	735	3	23	77	137	440	9	5	717	146
RTOR Reduction (vph)	0	0	159	0	41	0	0	1	0	0	0	75
Lane Group Flow (vph)	596	45	576	0	62	0	137	448	0	5	717	71
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	NA	Perm	NA	Perm
Protected Phases	4	4	4	4	4	4	1	6	6	2	2	2
Permitted Phases	4	4	4	4	4	4	6	6	6	2	2	2
Actuated Green, G (s)	60.0	60.0	60.0	60.0	60.0	57.9	57.9	57.9	42.0	42.0	42.0	42.0
Effective Green, g (s)	60.0	60.0	60.0	60.0	60.0	57.9	57.9	57.9	42.0	42.0	42.0	42.0
Actuated g/C Ratio	0.47	0.47	0.47	0.47	0.47	0.45	0.45	0.45	0.33	0.33	0.33	0.33
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	614	873	742	782	284	840	290	1162	519	290	1162	519
v/s Ratio Prot	0.02				0.04	c0.24				c0.20		
v/s Ratio Perm	c0.46		0.36	0.04	0.18		0.01			0.01		0.05
v/c Ratio	0.97	0.05	0.78	0.08	0.48	0.53	0.02	0.62	0.14	0.02	0.62	0.14
Uniform Delay, d1	33.1	18.5	28.3	18.7	23.3	25.3	29.0	36.2	30.2	29.0	36.2	30.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	28.9	0.0	5.1	0.0	1.3	0.7	0.1	2.5	0.6	0.1	2.5	0.6
Delay (s)	62.0	18.5	33.4	18.8	24.6	25.9	29.1	38.6	30.8	29.1	38.6	30.8
Level of Service	E	B	C	B	C	C	C	D	D	C	D	C
Approach Delay (s)	45.3			18.8		25.6				37.3		
Approach LOS	D			B		C				D		
Intersection Summary												
HCM 2000 Control Delay	38.1 HCM 2000 Level of Service D											
HCM 2000 Volume to Capacity ratio	0.81											
Actuated Cycle Length (s)	127.9 Sum of lost time (s) 15.0											
Intersection Capacity Utilization	86.3% ICU Level of Service E											
Analysis Period (min)	15											
c Critical Lane Group												

PM Peak Hour

HCM 2010 TWSC

6: Riverfront & 35E South / 30 East Off-Ramp

05/23/2018

HCM 2010 TWSC

10: Cockrell & Lamar

05/23/2018

Intersection												
1.2												
Int Delay, s/veh	EBL	EBT	WBT	WBR	SBL	SBR						
Lane Configurations	↑↑↑	↑↑↑	↑↑↑	↑↑↑	↑	↑						
Traffic Vol, veh/h	0	1525	781	0	121	74						
Future Vol, veh/h	0	1525	781	0	121	74						
Conflicting Peds, #/hr	0	0	0	0	0	0						
Sign Control	Free	Free	Free	Free	Stop	Stop						
RT Channelized	-	None	-	None	-	None						
Storage Length	-	-	-	-	0	0						
Yeh in Median Storage, #	-	0	0	-	2	-						
Grade, %	-	0	0	-	0	-						
Peak Hour Factor	92	92	92	92	92	92						
Heavy Vehicles, %	2	2	2	2	2	2						
Mvmt Flow	0	1658	849	0	132	80						
Major/Minor	Major1	Minor2										
Conflicting Flow All	-	0	-	0	1512	424						
Stage 1	-	-	-	-	849	-						
Stage 2	-	-	-	-	663	-						
Critical Hdwy	-	-	-	-	5.74	7.14						
Critical Hdwy Stg 1	-	-	-	-	6.64	-						
Critical Hdwy Stg 2	-	-	-	-	6.04	-						
Follow-up Hdwy	-	-	-	-	3.82	3.92						
Pd Cap-1 Maneuver	0	-	-	-	308	*746						
Stage 1	0	-	-	-	0	754						
Stage 2	0	-	-	-	0	432						
Platoon blocked, %	-	-	-	-	1	1						
Mov Cap-1 Maneuver	-	-	-	-	308	*746						
Mov Cap-2 Maneuver	-	-	-	-	403	-						
Stage 1	-	-	-	-	754	-						
Stage 2	-	-	-	-	432	-						
Approach	EB	WB	SB									
HCM Control Delay, s	0	0	15.2									
HCM LOS	-	-	C									
Minor Lane/Major Mvmt	EBT	WBT	SBLn1	SBLn2								
Capacity (veh/h)	-	-	403	746								
HCM Lane V/C Ratio	-	-	0.326	0.108								
HCM Control Delay (s)	-	-	18.2	10.4								
HCM Lane LOS	-	-	C	B								
HCM 95th %tile Q(veh)	-	-	1.4	0.4								

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

Baseline

Synchro 9 Report
 Page 1

Intersection												
1.2												
Int Delay, s/veh	EBL	EBT	WBT	WBR	NBL	NBT	SBL	SBR				
Lane Configurations	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	26	1	2	22	11	0	1	569	138	8	216	12
Future Vol, veh/h	26	1	2	22	11	0	1	569	138	8	216	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None	-	None	-	None	-	None
Storage Length	-	-	150	-	-	150	-	-	-	150	-	-
Yeh in Median Storage, #	-	0	-	0	-	0	-	0	-	0	-	0
Grade, %	-	0	-	0	-	0	-	0	-	0	-	0
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	1	2	24	12	0	1	618	150	9	235	13
Major/Minor	Minor2	Minor1	Major1	Major2								
Conflicting Flow All	576	1080	124	831	961	384	248	0	0	768	0	0
Stage 1	259	259	-	696	696	-	-	-	-	-	-	-
Stage 2	317	771	-	135	265	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pd Cap-1 Maneuver	400	232	904	262	255	614	1315	-	-	842	-	-
Stage 1	723	692	-	398	441	-	-	-	-	-	-	-
Stage 2	669	408	-	854	688	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	382	229	904	258	252	614	1315	-	-	842	-	-
Mov Cap-2 Maneuver	382	229	-	258	252	-	-	-	-	-	-	-
Stage 1	722	685	-	398	441	-	-	-	-	-	-	-
Stage 2	650	408	-	842	681	-	-	-	-	-	-	-
Approach	EB	WB	NB	SB								
HCM Control Delay, s	15.1	21.3	0	0.3								
HCM LOS	C	C	-	-								
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR		
Capacity (veh/h)	1315	-	-	373	904	256	-	842	-	-	-	-
HCM Lane V/C Ratio	0.001	-	-	0.079	0.002	0.14	-	0.01	-	-	-	-
HCM Control Delay (s)	7.7	-	-	15.5	9	21.3	0	9.3	-	-	-	-
HCM Lane LOS	A	-	-	C	A	C	A	A	-	-	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0	0.5	-	0	-	-	-	-

Baseline

Synchro 9 Report
 Page 2

PM Peak Hour

HCM 2010 TWSC
11: Drive 1 & Riverfront

05/23/2018

Intersection										
Int Delay, s/veh	0									
Movement	EBT	EBR	WBL	WBT	NBL	NBR				
Lane Configurations	↑↑	↑↑	↑	↑↑	↑	↑				
Traffic Vol, veh/h	1275	0	0	342	0	0				
Future Vol, veh/h	1275	0	0	342	0	0				
Conflicting Peds, #/hr	0	0	0	0	0	0				
Sign Control	Free	Free	Free	Free	Stop	Stop				
RT Channelized	-	None	-	None	-	None				
Storage Length	-	-	150	-	0	0				
Veh in Median Storage, #	0	-	-	0	0	0				
Grade, %	0	-	-	0	0	0				
Peak Hour Factor	92	92	92	92	92	92				
Heavy Vehicles, %	2	2	2	2	2	2				
Mvmt Flow	1386	0	0	372	0	0				
Major/Minor	Major1	Major2	Minor1							
Conflicting Flow All	0	0	1386	0	1572	693				
Stage 1	-	-	-	-	1386	-				
Stage 2	-	-	-	-	186	-				
Critical Hdwy	-	-	4.14	-	6.84	6.94				
Critical Hdwy Stg 1	-	-	-	-	5.84	-				
Critical Hdwy Stg 2	-	-	-	-	5.84	-				
Follow-up Hdwy	-	-	2.22	-	3.52	3.32				
Pd Cap-1 Maneuver	-	-	490	-	101	386				
Stage 1	-	-	-	-	197	-				
Stage 2	-	-	-	-	827	-				
Platoon blocked, %	-	-	-	-	-	-				
Mov Cap-1 Maneuver	-	-	490	-	101	386				
Mov Cap-2 Maneuver	-	-	-	-	101	-				
Stage 1	-	-	-	-	197	-				
Stage 2	-	-	-	-	827	-				
Approach	EB	WB	WB	NB						
HCM Control Delay, s	0	0	0	0						
HCM LOS				A						
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT				
Capacity (veh/h)	-	-	-	-	-	490				
HCM Lane V/C Ratio	-	-	-	-	-	-				
HCM Control Delay (\$)	0	0	-	0	-	0				
HCM Lane LOS	A	A	-	A	-	A				
HCM 95th %tile Q(veh)	-	-	-	-	-	0				

HCM 2010 TWSC
12: Drive 2 & Riverfront

05/23/2018

Intersection										
Int Delay, s/veh	0									
Movement	EBT	EBR	WBL	WBT	NBL	NBR				
Lane Configurations	↑↑	↑↑	↑	↑↑	↑	↑				
Traffic Vol, veh/h	1275	0	0	342	0	0				
Future Vol, veh/h	1275	0	0	342	0	0				
Conflicting Peds, #/hr	0	0	0	0	0	0				
Sign Control	Free	Free	Free	Free	Stop	Stop				
RT Channelized	-	None	-	None	-	None				
Storage Length	-	-	-	-	0	0				
Veh in Median Storage, #	0	-	-	0	0	0				
Grade, %	0	-	-	0	0	0				
Peak Hour Factor	92	92	92	92	92	92				
Heavy Vehicles, %	2	2	2	2	2	2				
Mvmt Flow	1386	0	0	372	0	0				
Major/Minor	Major1	Major2	Minor1							
Conflicting Flow All	0	0	-	-	-	693				
Stage 1	-	-	-	-	-	-				
Stage 2	-	-	-	-	-	-				
Critical Hdwy	-	-	-	-	-	6.94				
Critical Hdwy Stg 1	-	-	-	-	-	-				
Critical Hdwy Stg 2	-	-	-	-	-	-				
Follow-up Hdwy	-	-	-	-	-	3.32				
Pd Cap-1 Maneuver	-	-	0	-	0	386				
Stage 1	-	-	0	-	0	-				
Stage 2	-	-	0	-	0	-				
Platoon blocked, %	-	-	-	-	-	-				
Mov Cap-1 Maneuver	-	-	-	-	-	386				
Mov Cap-2 Maneuver	-	-	-	-	-	-				
Stage 1	-	-	-	-	-	-				
Stage 2	-	-	-	-	-	-				
Approach	EB	WB	WB	NB						
HCM Control Delay, s	0	0	0	0						
HCM LOS				A						
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT					
Capacity (veh/h)	-	-	-	-	-					
HCM Lane V/C Ratio	-	-	-	-	-					
HCM Control Delay (\$)	0	0	-	0	-					
HCM Lane LOS	A	A	-	A	-					
HCM 95th %tile Q(veh)	-	-	-	-	-					

PM Peak Hour

HCM 2010 TWSC
13: Drive 3 & Riverfront

05/23/2018

Intersection										
Int. Delay, s/veh	0									
Movement	EBT	EBR	WBL	WBT	NBL	NBR				
Lane Configurations	↑↑		↑	↑↑	↑	↑				
Traffic Vol, veh/h	1275	0	0	342	0	0				
Future Vol, veh/h	1275	0	0	342	0	0				
Conflicting Peds, #/hr	0	0	0	0	0	0				
Sign Control	Free	Free	Free	Free	Stop	Stop				
RT Channelized	-	None	-	None	-	None				
Storage Length	-	-	150	-	0	0				
Veh in Median Storage, #	0	-	-	0	0	-				
Grade, %	0	-	-	0	0	-				
Peak Hour Factor	92	92	92	92	92	92				
Heavy Vehicles, %	2	2	2	2	2	2				
Mvmt Flow	1386	0	0	372	0	0				
Major/Minor	Major1	Major2	Minor1							
Conflicting Flow All	0	0	1386	0	1572	693				
Stage 1	-	-	-	-	1386	-				
Stage 2	-	-	-	-	186	-				
Critical Hdwy	-	-	4.14	-	6.84	6.94				
Critical Hdwy Stg 1	-	-	-	-	5.84	-				
Critical Hdwy Stg 2	-	-	-	-	5.84	-				
Follow-up Hdwy	-	-	2.22	-	3.52	3.32				
Pdt Cap-1 Maneuver	-	-	490	-	101	386				
Stage 1	-	-	-	-	197	-				
Stage 2	-	-	-	-	827	-				
Platoon blocked, %	-	-	-	-	-	-				
Mov Cap-1 Maneuver	-	-	490	-	101	386				
Mov Cap-2 Maneuver	-	-	-	-	101	-				
Stage 1	-	-	-	-	197	-				
Stage 2	-	-	-	-	827	-				
Approach	EB	WB	NB							
HCM Control Delay, s	0	0	0							
HCM LOS				A						
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT				
Capacity (veh/h)	-	-	-	-	-	490				
HCM Lane V/C Ratio	-	-	-	-	-	-				
HCM Control Delay (s)	0	0	-	-	0	-				
HCM Lane LOS	A	A	-	-	A	-				
HCM 95th %tile Q(veh)	-	-	-	-	-	0				

Saturday Peak Hour

HCM Signalized Intersection Capacity Analysis
2: Cadiz & Lamar

05/23/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	45	145	60	119	134	99	49	173	136	159	13	42
Traffic Volume (vph)	45	145	60	119	134	99	49	173	136	159	13	42
Future Volume (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Ideal Flow (vphpl)	5.0	6.0	6.0	5.0	6.0	6.0	5.3	5.3	5.3	4.5	4.5	4.5
Total Lost time (s)	1.00	0.95	1.00	0.95	1.00	0.95	0.95	0.95	0.95	1.00	1.00	1.00
Lane Util. Factor	1.00	0.96	1.00	0.94	1.00	0.94	0.94	0.94	0.94	1.00	0.85	0.85
Flt Protected	0.95	1.00	0.95	1.00	0.95	1.00	0.99	0.99	0.99	0.96	1.00	1.00
Satd. Flow (prot)	1770	3384	1770	3313	1770	3313	3315	3315	3315	1780	1583	1583
Flt Permitted	0.59	1.00	0.55	1.00	0.99	1.00	0.99	0.99	0.99	0.96	1.00	1.00
Satd. Flow (perm)	1107	3384	1017	3313	1017	3313	3315	3315	3315	1780	1583	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	49	158	65	129	146	108	53	188	148	173	14	46
RTOR Reduction (vph)	0	23	0	0	57	0	0	71	0	0	0	39
Lane Group Flow (vph)	49	200	0	129	197	0	0	318	0	0	187	7
Turn Type	pm+pt	NA	NA	pm+pt	NA	NA	Split	NA	NA	Split	NA	Perm
Protected Phases	1	6		5	2		8	8		4	4	
Permitted Phases	6			2								4
Actuated Green, G (s)	56.4	55.4		57.0	57.0		17.1	17.1		17.4	17.4	
Effective Green, g (s)	56.4	55.4		57.0	57.0		17.1	17.1		17.4	17.4	
Actuated g/C Ratio	0.46	0.46		0.47	0.47		0.14	0.14		0.14	0.14	
Clearance Time (s)	5.0	6.0		5.0	6.0		5.3	5.3		4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	564	1540		544	1551		465	465		254	226	
v/s Ratio Prot	0.01	c0.06		c0.02	0.06		c0.10	c0.11		c0.11		
v/s Ratio Perm	0.03			c0.09								0.00
v/c Ratio	0.09	0.13		0.24	0.13		0.68	0.68		0.74	0.03	
Uniform Delay, d1	18.3	19.2		18.7	18.3		49.7	49.7		50.0	44.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.2		0.2	0.2		4.1	4.1		10.6	0.1	
Delay (s)	18.4	19.4		18.9	18.5		53.8	53.8		60.5	44.9	
Level of Service	B	B		B	B		D	D		E	D	
Approach Delay (s)	19.2			18.6			53.8			57.4		
Approach LOS	B			B			D			E		
Intersection Summary												
HCM 2000 Control Delay												36.5
HCM 2000 Volume to Capacity ratio												0.39
Actuated Cycle Length (s)												121.7
Intersection Capacity Utilization												54.0%
Analysis Period (min)												15
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis
4: Cadiz & Riverfront

05/23/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	135	356	0	0	300	43	199	199	73	47	0	160
Traffic Volume (vph)	135	356	0	0	300	43	199	199	73	47	0	160
Future Volume (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Ideal Flow (vphpl)	4.5	5.8		5.8	5.8		5.8	5.8		5.8	5.8	5.8
Total Lost time (s)	0.97	0.91		0.95	1.00		0.91	0.91		1.00	1.00	1.00
Lane Util. Factor	1.00	1.00		1.00	0.85		0.98	0.98		1.00	0.85	0.85
Flt Protected	0.95	1.00		1.00	1.00		0.98	0.98		0.95	1.00	1.00
Satd. Flow (prot)	3433	5085		3539	1583		4865	4865		1770	1583	1583
Flt Permitted	0.54	1.00		1.00	1.00		0.98	0.98		0.38	1.00	1.00
Satd. Flow (perm)	1962	5085		3539	1583		4865	4865		708	1583	1583
Peak-hour factor, PHF	0.92	0.92		0.92	0.92		0.92	0.92		0.92	0.92	0.92
Adj. Flow (vph)	147	387		0	326		47	216		79	51	174
RTOR Reduction (vph)	0	0		0	0		23	0		18	0	127
Lane Group Flow (vph)	147	387		0	326		24	0		493	0	47
Turn Type	pm+pt	NA		NA	Perm		NA	Perm		D,Pm	NA	Perm
Protected Phases	1	6		2			4	4				4
Permitted Phases	6			2			4	4		4		4
Actuated Green, G (s)	94.5	93.2		73.2	73.2		39.2	39.2		39.2	39.2	39.2
Effective Green, g (s)	94.5	93.2		73.2	73.2		39.2	39.2		39.2	39.2	39.2
Actuated g/C Ratio	0.66	0.65		0.51	0.51		0.27	0.27		0.27	0.27	0.27
Clearance Time (s)	4.5	5.8		5.8	5.8		5.8	5.8		5.8	5.8	5.8
Lane Grp Cap (vph)	1445	3291		1798	804		1324	1324		192	430	430
v/s Ratio Prot	0.01	c0.08		c0.09			0.02	0.10		0.07	0.03	0.03
v/s Ratio Perm	0.06			0.18	0.03		0.37	0.27		0.27	0.11	0.11
v/c Ratio	0.10	0.12		0.18	0.03		0.37	0.27		0.27	0.11	0.11
Uniform Delay, d1	9.8	9.7		19.2	17.7		42.4	41.1		41.1	39.3	39.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.1	0.1		0.2	0.1		0.8	0.8		3.4	0.5	0.5
Delay (s)	9.9	9.8		19.4	17.7		43.2	44.5		44.5	39.8	39.8
Level of Service	A	A		B	B		D	D		D	D	D
Approach Delay (s)	9.8			19.2			43.2			40.9		
Approach LOS	A			B			D			D		
Intersection Summary												
HCM 2000 Control Delay												26.6
HCM 2000 Volume to Capacity ratio												0.23
Actuated Cycle Length (s)												144.0
Intersection Capacity Utilization												43.9%
Analysis Period (min)												15
c Critical Lane Group												

Saturday Peak Hour

HCM Signalized Intersection Capacity Analysis 7: Corinth & Riverfront

05/23/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	200	4	209	4	4	11	121	226	9	8	293	123
Future Volume (vph)	200	4	209	4	4	11	121	226	9	8	293	123
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00
Flt Protected	0.95	1.00	1.00	0.99	0.99	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1695	1695	1770	1852	1770	1852	1770	3539	1583
Flt Permitted	0.74	1.00	1.00	0.97	0.97	0.51	1.00	0.60	1.00	0.60	1.00	1.00
Satd. Flow (perm)	1386	1863	1583	1659	1659	947	1852	1119	1852	1119	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	217	4	227	4	4	12	132	246	10	9	318	134
RTOR Reduction (vph)	0	0	178	0	9	0	0	1	0	0	0	62
Lane Group Flow (vph)	217	4	49	0	11	0	132	255	0	9	318	72
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	NA	Perm	NA	Perm
Protected Phases	4	4	4	4	4	1	6	2	2	2	2	2
Permitted Phases	4	4	4	4	4	6	6	6	6	6	6	6
Actuated Green, G (s)	20.4	20.4	20.4	20.4	20.4	63.8	63.8	63.8	63.8	50.4	50.4	50.4
Effective Green, g (s)	20.4	20.4	20.4	20.4	20.4	63.8	63.8	63.8	63.8	50.4	50.4	50.4
Actuated g/C Ratio	0.22	0.22	0.22	0.22	0.22	0.68	0.68	0.68	0.68	0.54	0.54	0.54
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	300	403	342	359	359	714	1254	598	1893	846	846	846
v/s Ratio Prot	0.00	0.00	0.00	0.02	0.02	c0.14	c0.14	0.02	0.09	0.01	0.09	0.05
v/s Ratio Perm	0.72	0.01	0.14	0.03	0.03	0.18	0.20	0.02	0.17	0.02	0.17	0.08
Uniform Delay, d1	34.3	29.0	29.8	29.1	29.1	5.5	5.7	10.3	11.2	10.7	10.7	10.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	8.4	0.0	0.2	0.0	0.0	0.1	0.1	0.0	0.2	0.0	0.2	0.2
Delay (s)	42.6	29.0	30.0	29.1	29.1	5.6	5.8	10.3	11.4	10.9	10.9	10.9
Level of Service	D	C	C	C	C	A	A	B	B	B	B	B
Approach Delay (s)	36.1	36.1	36.1	29.1	29.1	5.7	5.7	11.2	11.2	11.2	11.2	11.2
Approach LOS	D	D	D	C	C	A	A	B	B	B	B	B

Intersection Summary	
HCM 2000 Control Delay	18.3
HCM 2000 Volume to Capacity ratio	0.35
Actual Cycle Length (s)	94.2
Intersection Capacity Utilization	60.2%
Analysis Period (min)	15
c Critical Lane Group	

Saturday Peak Hour

HCM 2010 Signalized Intersection Capacity Analysis
1: Cadiz & Griffin

05/23/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	<div style="display: flex; justify-content: space-between;"> ← → ↗ ↘ ← → ↗ ↘ ← → ↗ ↘ </div>											
Traffic Volume (veh/h)	44	124	0	0	80	11	26	171	167	0	0	0
Future Volume (veh/h)	44	124	0	0	80	11	26	171	167	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q, veh	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	1.00			
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/hln	1863	1863	0	0	1863	1900	1863	1863	1900			
Adj Flow Rate, veh/h	48	135	0	0	87	12	28	186	182			
Adj No. of Lanes	1	3	0	0	4	0	1	3	0			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Opposing Right Turn Influence	Yes No Yes Yes											
Cap, veh/h	840	2733	0	0	3107	406	382	730	341			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Prop Arrive On Green	0.54	0.54	0.00	0.00	0.54	0.54	0.22	0.22	0.22			
Ln Grp Delay, s/veh	5.4	5.1	0.0	0.0	5.0	5.0	14.5	15.2	17.3			
Ln Grp LOS	A	A	A	A	A	A	B	B	B			
Approach Vol, veh/h	183			99				396				
Approach Delay, s/veh	5.2			5.0				16.1				
Approach LOS	A			A				B				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2 2 2 4 6 6 6											
Case No	6.0 10.0 8.0											
Phs Duration (G+Y+Rc), s	30.0 16.1 30.0											
Change Period (Y+Rc), s	*5.2 6.2 *5.2											
Max Green (Gmax), s	*25 23.8 *25											
Max Allow Headway (MAH), s	4.9 5.2 4.9											
Max O Clear (G_c+I1), s	3.2 6.7 2.3											
Green Ext Time (G_ext), s	1.5 2.1 1.5											
Prob of Phs Cal (p_c)	1.00 0.99 0.97											
Prob of Max Out (p_x)	0.00 0.02 0.00											
Left-Turn Movement Data												
Assigned Mvmt	5 7 1											
Mvmt Sat Flow, veh/h	1291 1774 0											
Through Movement Data												
Assigned Mvmt	2 4 6											
Mvmt Sat Flow, veh/h	5253 3390 6042											
Right-Turn Movement Data												
Assigned Mvmt	12 14 16											
Mvmt Sat Flow, veh/h	0 1583 755											
Left Lane Group Data												
Assigned Mvmt	0 5 0 7 0 1 0 0											
Lane Assignment												

HCM 2010 Signalized Intersection Capacity Analysis
1: Cadiz & Griffin

05/23/2018

Lanes in Grp	0 1 0 0 1 0 0 0 0 0 0 0											
Grp Vol (V), veh/h	0 48 0 28 0 0 0 0 0 0 0 0											
Grp Sat Flow (S), veh/hln	0 1291 0 1774 0 0 0 0 0 0 0 0											
Q Serve Time (g_s), s	0.0 0.8 0.0 0.6 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0											
Cycle Q Clear Time (g_c), s	0.0 1.2 0.0 0.6 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0											
Perm LT Sat Flow (S_L), veh/hln	0 1291 0 1774 0 0 0 0 0 0 0 0											
Shared LT Sat Flow (S_sh), veh/hln	0 0 0 0 0 0 0 0 0 0 0 0											
Perm LT Eff Green (g_p), s	0.0 24.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0											
Perm LT Serve Time (g_s), s	0.0 24.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0											
Perm LT O Serve Time (g_ps), s	0.0 0.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0											
Time to First Blk (g_f), s	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 24.8 0.0 0.0 0.0											
Serve Time pre-Blk (g_ls), s	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0											
Prop LT Inside Lane (P_L)	0.00 1.00 0.00 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00											
Lane Grp Cap (C), veh/h	0 840 0 382 0 0 0 0 0 0 0 0											
V/C Ratio (X)	0.00 0.06 0.00 0.07 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00											
Avail Cap (c-a), veh/h	0 840 0 915 0 0 0 0 0 0 0 0											
Upstream Filter (f)	0.00 1.00 0.00 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00											
Uniform Delay (d1), s/veh	0.0 5.3 0.0 14.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0											
Incr Delay (d2), s/veh	0.0 0.1 0.0 0.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0											
Initial Q Delay (d3), s/veh	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0											
Control Delay (d), s/veh	0.0 5.4 0.0 14.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0											
1st-Term Q (Q1), veh/hln	0.0 0.3 0.0 0.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0											
2nd-Term Q (Q2), veh/hln	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0											
3rd-Term Q (Q3), veh/hln	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0											
%ile Back of Q Factor (f_B%)	0.00 1.00 0.00 1.00 0.00 1.00 0.00 0.00 0.00 0.00 0.00 0.00											
%ile Back of Q (50%), veh/hln	0.0 0.3 0.0 0.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0											
%ile Storage Ratio (RQ%)	0.00 0.05 0.00 0.05 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00											
Initial Q (Ob), 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											
Final (Residual) Q (Oe), 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											
Sat Delay (ds), 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											
Sat Q (Os), 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											
Sat Cap (cs), veh/h	0 0 0 0 0 0 0 0 0 0 0 0											
Initial Q Clear Time (tc), h	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0											
Middle Lane Group Data												
Assigned Mvmt	0 2 0 0 4 0 6 0 0 0 0 0											
Lane Assignment	T T T T T T T											
Lanes in Grp	0 3 0 2 0 3 0 0 0 0 0 0											
Grp Vol (V), veh/h	0 135 0 186 0 71 0 0 0 0 0 0											
Grp Sat Flow (S), veh/hln	0 1695 0 1695 0 1602 0 0 0 0 0 0											
Q Serve Time (g_s), s	0.0 0.6 0.0 2.1 0.0 0.3 0.0 0.0 0.0 0.0 0.0 0.0											
Cycle Q Clear Time (g_c), s	0.0 0.6 0.0 2.1 0.0 0.3 0.0 0.0 0.0 0.0 0.0 0.0											
Lane Grp Cap (C), veh/h	0 2733 0 730 0 2583 0 0 0 0 0 0											
V/C Ratio (X)	0.00 0.05 0.00 0.25 0.00 0.03 0.00 0.00 0.00 0.00 0.00 0.00											
Avail Cap (c-a), veh/h	0 2733 0 1749 0 2583 0 0 0 0 0 0											
Upstream Filter (f)	0.00 1.00 0.00 1.00 0.00 1.00 0.00 0.00 0.00 0.00 0.00 0.00											
Uniform Delay (d1), s/veh	0.0 5.1 0.0 15.0 0.0 5.0 0.0 0.0 0.0 0.0 0.0 0.0											
Incr Delay (d2), s/veh	0.0 0.0 0.0 0.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0											
Initial Q Delay (d3), s/veh	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0											
Control Delay (d), s/veh	0.0 5.1 0.0 15.2 0.0 5.0 0.0 0.0 0.0 0.0 0.0 0.0											
1st-Term Q (Q1), veh/hln	0.0 0.3 0.0 1.0 0.0 0.1 0.0 0.0 0.0 0.0 0.0 0.0											

Saturday Peak Hour

HCM 2010 Signalized Intersection Capacity Analysis
1: Cadiz & Griffin

05/23/2018

2nd-Term O (O2), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term O (O3), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of O Factor (f_B%), veh/h	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
%ile Back of O (50%), veh/h	0.0	0.3	0.0	1.1	0.0	0.1	0.0	0.0	0.0
%ile Storage Ratio (RO%), veh/h	0.00	0.02	0.00	0.11	0.00	0.01	0.00	0.00	0.00
Initial Q (Cb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Oe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat O (Os), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0	0
Initial O Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data									
Assigned Mvmt	0	12	0	14	0	16	0	0	0
Lane Assignment			T+R			T+R			
Lanes in Grp	0	0	0	1	0	1	0	0	0
Grp Vol (V), veh/h	0	0	0	182	0	28	0	0	0
Grp Sat Flow (S), veh/h	0	0	0	1583	0	1730	0	0	0
Q Serve Time (q_s), s	0.0	0.0	0.0	4.7	0.0	0.3	0.0	0.0	0.0
Cycle O Clear Time (q_c), s	0.0	0.0	0.0	4.7	0.0	0.3	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.44	0.00	0.00	0.00
Lane Grp Cap (C), veh/h	0	0	0	341	0	930	0	0	0
W/C Ratio (X)	0.00	0.00	0.00	0.53	0.00	0.03	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	817	0	930	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	16.0	0.0	5.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0
Initial O Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	17.3	0.0	5.0	0.0	0.0	0.0
1st-Term O (O1), veh/h	0.0	0.0	0.0	2.0	0.0	0.2	0.0	0.0	0.0
2nd-Term O (O2), veh/h	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
3rd-Term O (O3), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of O Factor (f_B%), veh/h	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
%ile Back of O (50%), veh/h	0.0	0.0	0.0	2.1	0.0	0.2	0.0	0.0	0.0
%ile Storage Ratio (RO%), veh/h	0.00	0.00	0.00	0.23	0.00	0.01	0.00	0.00	0.00
Initial O (Cb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Oe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat O (Os), veh	0	0	0	0	0	0	0	0	0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0	0
Initial O Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary									
HCM 2010 Ctrl Delay	11.6								
HCM 2010 LOS	B								

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Baseline

Synchro 9 Report
Page 3

HCM 2010 Signalized Intersection Capacity Analysis
3: Cadiz & Hotel

05/23/2018

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	8	23	83	591	275	32
Future Volume (veh/h)	8	23	83	591	275	32
Number	3	18	1	6	2	12
Initial O, veh	0	0	0	0	0	0
Ped/Bike Adj (A_pbT)	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
Adj Sat Flow, veh/h	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	9	25	90	642	299	35
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Opposing Right Turn Influence	Yes	Yes	Yes	Yes	Yes	Yes
Cap, veh/h	95	85	860	2856	2262	263
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.05	0.03	0.81	0.71	0.71
Ln Grp Delay, s/veh	35.3	37.1	2.4	1.9	3.9	3.9
Ln Grp LOS	D	D	A	A	A	A
Approach Vol, veh/h	34	34	732	334	334	34
Approach Delay, s/veh	36.6	36.6	2.0	3.9	3.9	3.9
Approach LOS	D	D	A	A	A	A
Timer						
Assigned Phs	1	2	3	4	5	6
Case No	1	2	8			
Phs Duration (G+Y+Rc), s	1.2	8.0	9.0	4.0	4.0	4.0
Change Period (Y+Rc), s	7.7	60.0	9.7	67.7		
Max Green (Gmax), s	5.0	*5.2	5.6	*5.2		
Max Allow Headway (MAH), s	20.0	*55	74.4	*55		
Max O Clear (g_c+I), s	3.8	5.3	4.0	5.3		
Green Ext Time (g_ext), s	3.0	4.4	3.2	5.3		
Prob of Phs Cal (p_c)	0.2	8.0	0.1	8.0		
Prob of Max Out (p_x)	0.86	1.00	0.52	1.00		
Left-Turn Movement Data	0.00	0.00	0.00	0.00	0.00	0.00
Assigned Mvmt	1	5	3			
Mvmt Sat Flow, veh/h	1774	0	1774			
Through Movement Data						
Assigned Mvmt		2	8		6	
Mvmt Sat Flow, veh/h		3289	0		3632	
Right-Turn Movement Data						
Assigned Mvmt			12	18		16
Mvmt Sat Flow, veh/h			371	1583		0
Left Lane Group Data						
Assigned Mvmt	1	5	3	0	0	0
Lane Assignment		(P/Pm)				

Baseline

Synchro 9 Report
Page 4

Saturday Peak Hour

HCM 2010 TWSC

6: Riverfront & 35E South / 30 East Off-Ramp

05/23/2018

HCM 2010 TWSC

10: Cockrell & Lamar

05/23/2018

Intersection										
Int Delay, s/veh										
1.4										
Movement	EBL	EBT	WBT	WBR	SBL	SBR				
Lane Configurations	↑↑↑	↑↑↑	↑↑↑	↑↑↑	↑	↑				
Traffic Vol, veh/h	0	433	651	0	61	106				
Future Vol, veh/h	0	433	651	0	61	106				
Conflicting Peds, #/hr	0	0	0	0	0	0				
Sign Control	Free	Free	Free	Free	Stop	Stop				
RT Channelized	-	None	-	None	-	None				
Storage Length	-	-	-	-	0	0				
Yeh in Median Storage, #	-	0	0	-	2	-				
Grade, %	-	0	0	-	0	-				
Peak Hour Factor	92	92	92	92	92	92				
Heavy Vehicles, %	2	2	2	2	2	2				
Mvmt Flow	0	471	708	0	66	115				
Major/Minor	Major1	Major2	Minor2							
Conflicting Flow All	-	0	-	0	896	354				
Stage 1	-	-	-	708	-	-				
Stage 2	-	-	-	188	-	-				
Critical Hdwy	-	-	-	5.74	7.14	-				
Critical Hdwy Stg 1	-	-	-	6.64	-	-				
Critical Hdwy Stg 2	-	-	-	6.04	-	-				
Follow-up Hdwy	-	-	-	3.82	3.92	-				
Pd Cap-1 Maneuver	0	-	-	0	*650	*765				
Stage 1	0	-	-	0	*785	-				
Stage 2	0	-	-	0	*758	-				
Platoon blocked, %	-	-	-	1	1	-				
Mov Cap-1 Maneuver	-	-	-	-	*650	*765				
Mov Cap-2 Maneuver	-	-	-	-	*693	-				
Stage 1	-	-	-	-	*785	-				
Stage 2	-	-	-	-	*758	-				
Approach	EB	WB	SB							
HCM Control Delay, s	0	0	10.6							
HCM LOS			B							
Minor Lane/Major Mvmt	EBT	WBT	SBLn1	SBLn2						
Capacity (veh/h)	-	-	693	765						
HCM Lane V/C Ratio	-	-	0.096	0.151						
HCM Control Delay (s)	-	-	10.7	10.5						
HCM Lane LOS	-	-	B	B						
HCM 95th %tile Q(veh)	-	-	0.3	0.5						
Notes	-: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon									

Baseline

Synchro 9 Report
Page 1

Intersection										
Int Delay, s/veh										
1.5										
Movement	EBL	EBT	WBT	WBR	NBL	NBT	SBL	SBR		
Lane Configurations	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	17	8	9	16	2	3	8	164	12	2
Future Vol, veh/h	17	8	9	16	2	3	8	164	12	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None	-	None	-	None
Storage Length	-	150	-	-	150	150	-	-	150	-
Yeh in Median Storage, #	-	0	-	0	-	0	-	0	-	0
Grade, %	-	0	-	0	-	0	-	0	-	0
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	9	10	17	2	3	9	178	13	2
205	46									
Major/Minor	Minor2	Minor1	Major1	Major2						
Conflicting Flow All	341	442	126	313	457	96	251	0	0	191
Stage 1	233	233	-	202	202	-	-	-	-	-
Stage 2	108	209	-	111	255	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22
Pd Cap-1 Maneuver	589	508	901	616	498	942	1311	-	-	1380
Stage 1	749	711	-	781	733	-	-	-	-	-
Stage 2	886	728	-	882	695	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	581	504	901	597	494	942	1311	-	-	1380
Mov Cap-2 Maneuver	581	504	-	597	494	-	-	-	-	-
Stage 1	744	710	-	776	728	-	-	-	-	-
Stage 2	874	723	-	860	694	-	-	-	-	-
Approach	EB	WB	NB	SB						
HCM Control Delay, s	11.1	11	0.3	0.1						
HCM LOS	B	B								
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn2	SBL	SBT	SBR	
Capacity (veh/h)	1311	-	-	554	901	583	942	1380	-	-
HCM Lane V/C Ratio	0.007	-	-	0.049	0.011	0.034	0.003	0.002	-	-
HCM Control Delay (s)	7.8	-	-	11.8	9	11.4	8.8	7.6	-	-
HCM Lane LOS	A	-	-	B	A	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0	0.1	0	0	-	-

Baseline

Synchro 9 Report
Page 2

Saturday Peak Hour

HCM 2010 TWSC
11: Drive 1 & Riverfront

05/23/2018

Intersection									
Int Delay, s/veh	0								
Movement	EBT	EBR	WBL	WBT	NBL	NBR			
Lane Configurations	↑↑	↑↑	↑	↑↑	↑	↑			
Traffic Vol, veh/h	476	0	0	659	0	0			
Future Vol, veh/h	476	0	0	659	0	0			
Conflicting Peds, #/hr	0	0	0	0	0	0			
Sign Control	Free	Free	Free	Free	Stop	Stop			
RT Channelized	-	None	-	None	-	None			
Storage Length	-	-	150	-	0	0			
Veh in Median Storage, #	0	-	-	0	0	0			
Grade, %	0	-	-	0	0	0			
Peak Hour Factor	92	92	92	92	92	92			
Heavy Vehicles, %	2	2	2	2	2	2			
Mvmt Flow	517	0	0	716	0	0			

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	517	0	875 259
Stage 1	-	-	-	-	517
Stage 2	-	-	-	-	358
Critical Hdwy	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	5.84	-
Follow-up Hdwy	-	2.22	-	3.52	3.32
Pd Cap-1 Maneuver	-	-	1045	-	289 740
Stage 1	-	-	-	-	563
Stage 2	-	-	-	-	678
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1045	-	289 740
Mov Cap-2 Maneuver	-	-	-	-	289
Stage 1	-	-	-	-	563
Stage 2	-	-	-	-	678

Approach	EB	WB	NB		
HCM Control Delay, s	0	0	0	0	
HCM LOS	A				

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	-	-	1045
HCM Lane V/C Ratio	-	-	-	-	-	-
HCM Control Delay (\$)	0	0	-	-	0	-
HCM Lane LOS	A	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	-	-	0

HCM 2010 TWSC
12: Drive 2 & Riverfront

05/23/2018

Intersection									
Int Delay, s/veh	0								
Movement	EBT	EBR	WBL	WBT	NBL	NBR			
Lane Configurations	↑↑	↑↑	↑	↑↑	↑	↑			
Traffic Vol, veh/h	476	0	0	659	0	0			
Future Vol, veh/h	476	0	0	659	0	0			
Conflicting Peds, #/hr	0	0	0	0	0	0			
Sign Control	Free	Free	Free	Free	Stop	Stop			
RT Channelized	-	None	-	None	-	None			
Storage Length	-	-	-	-	0	0			
Veh in Median Storage, #	0	-	-	0	0	0			
Grade, %	0	-	-	0	0	0			
Peak Hour Factor	92	92	92	92	92	92			
Heavy Vehicles, %	2	2	2	2	2	2			
Mvmt Flow	517	0	0	716	0	0			

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	-	-	259
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.32
Pd Cap-1 Maneuver	-	-	0	-	740
Stage 1	-	-	-	-	0
Stage 2	-	-	-	-	0
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	740
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB		
HCM Control Delay, s	0	0	0	0	
HCM LOS	A				

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (\$)	0	0	-	-	-
HCM Lane LOS	A	A	-	-	-
HCM 95th %tile Q(veh)	-	-	-	-	-

Saturday Peak Hour

HCM 2010 TWSC
13: Drive 3 & Riverfront

05/23/2018

Intersection										
Int. Delay, s/veh	0									
Movement	EBT	EBR	WBL	WBT	NBL	NBR				
Lane Configurations	↑↑		↑	↑↑	↑	↑				
Traffic Vol, veh/h	476	0	0	659	0	0				
Future Vol, veh/h	476	0	0	659	0	0				
Conflicting Peds, #/hr	0	0	0	0	0	0				
Sign Control	Free	Free	Free	Free	Stop	Stop				
RT Channelized	-	None	-	None	-	None				
Storage Length	-	-	150	-	0	0				
Veh in Median Storage, #	0	-	-	0	0	-				
Grade, %	0	-	-	0	0	-				
Peak Hour Factor	92	92	92	92	92	92				
Heavy Vehicles, %	2	2	2	2	2	2				
Mvmt Flow	517	0	0	716	0	0				
Major/Minor	Major1	Major2	Minor1							
Conflicting Flow All	0	0	517	0	875	259				
Stage 1	-	-	-	-	517	-				
Stage 2	-	-	-	-	358	-				
Critical Hdwy	-	-	4.14	-	6.84	6.94				
Critical Hdwy Stg 1	-	-	-	-	5.84	-				
Critical Hdwy Stg 2	-	-	-	-	5.84	-				
Follow-up Hdwy	-	-	2.22	-	3.52	3.32				
Pdt Cap-1 Maneuver	-	-	1045	-	289	740				
Stage 1	-	-	-	-	563	-				
Stage 2	-	-	-	-	678	-				
Platoon blocked, %	-	-	-	-	-	-				
Mov Cap-1 Maneuver	-	-	1045	-	289	740				
Mov Cap-2 Maneuver	-	-	-	-	289	-				
Stage 1	-	-	-	-	563	-				
Stage 2	-	-	-	-	678	-				
Approach	EB	WB	WB	NB						
HCM Control Delay, s	0	0	0	0						
HCM LOS				A						
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT				
Capacity (veh/h)	-	-	-	-	-	1045				
HCM Lane V/C Ratio	-	-	-	-	-	-				
HCM Control Delay (s)	0	0	-	-	-	0				
HCM Lane LOS	A	A	-	-	-	A				
HCM 95th %tile Q(veh)	-	-	-	-	-	0				



Synchro™ Output - 2020 Background Plus Site Traffic

PM Peak Hour

HCM 2010 Signalized Intersection Capacity Analysis
1: Cadiz & Griffin

05/23/2018

2nd-Term O (O2), veh/h	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0
3rd-Term O (O3), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of O Factor (f_B%), s	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
%ile Back of O (50%), veh/h	0.0	3.4	0.0	1.8	0.0	0.3	0.0	0.0	0.0
%ile Storage Ratio (RO%), s	0.00	0.24	0.00	0.20	0.00	0.02	0.00	0.00	0.00
Initial Q (Cb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Oe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat O (Os), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0	0
Initial O Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data									
Assigned Mvmt	0	12	0	14	0	16	0	0	0
Lane Assignment			T+R			T+R			
Lanes in Grp	0	0	0	1	0	1	0	0	0
Grp Vol (V), veh/h	0	0	0	362	0	30	0	0	0
Grp Sat Flow (S), veh/h/s	0	0	0	1583	0	1778	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	14.0	0.0	0.7	0.0	0.0	0.0
Cycle O Clear Time (g_c), s	0.0	0.0	0.0	14.0	0.0	0.7	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.27	0.00	0.00	0.00
Lane Grp Cap (C), veh/h	0	0	0	587	0	849	0	0	0
W/C Ratio (X)	0.00	0.00	0.00	0.62	0.00	0.04	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	587	0	849	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	19.3	0.0	10.4	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	4.8	0.0	0.1	0.0	0.0	0.0
Initial O Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	24.1	0.0	10.5	0.0	0.0	0.0
1st-Term O (O1), veh/h	0.0	0.0	0.0	6.0	0.0	0.3	0.0	0.0	0.0
2nd-Term O (O2), veh/h	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0
3rd-Term O (O3), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of O Factor (f_B%), s	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
%ile Back of O (50%), veh/h	0.0	0.0	0.0	6.8	0.0	0.3	0.0	0.0	0.0
%ile Storage Ratio (RO%), s	0.00	0.00	0.00	0.74	0.00	0.02	0.00	0.00	0.00
Initial Q (Cb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Oe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat O (Os), veh	0	0	0	0	0	0	0	0	0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0	0
Initial O Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary									
HCM 2010 Ctrl Delay	15.5								
HCM 2010 LOS	B								

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

5:00 pm Baseline

Synchro 9 Report
Page 3

HCM 2010 Signalized Intersection Capacity Analysis
3: Cadiz & Hotel

05/23/2018

Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations	↔	↔	↔	↔	↔	↔		
Traffic Volume (veh/h)	6	39	26	368	203	16		
Future Volume (veh/h)	6	39	26	368	203	16		
Number	3	18	1	6	2	12		
Initial Q, veh	0	0	0	0	0	0		
Ped/Bike Adj (A_pbT)	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		
Adj Sat Flow, veh/h/s	1863	1863	1863	1863	1863	1900		
Adj Flow Rate, veh/h	7	42	28	400	221	17		
Adj No. of Lanes	1	1	1	2	2	0		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Opposing Right Turn Influence	Yes	Yes	Yes	Yes	Yes	Yes		
Cap, veh/h	120	107	909	2805	2367	181		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Prop Arrive On Green	0.07	0.07	0.02	0.79	0.71	0.71		
Ln Grp Delay, s/veh	33.9	36.8	2.5	2.0	3.6	3.6		
Ln Grp LOS	C	D	A	A	A	A		
Approach Vol, veh/h	49		428	238				
Approach Delay, s/veh	36.4		2.0	3.6				
Approach LOS	D		A	A				
Timer								
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.2	8.0	9.0	6.0				
Phs Duration (G+Y+Rc), s	6.4	60.0	10.8	66.4				
Change Period (Y+Rc), s	5.0	*5.2	5.6	*5.2				
Max Green (Gmax), s	20.0	*55	74.4	*55				
Max Allow Headway (MAH), s	3.8	5.2	4.0	5.2				
Max O Clear (g_c+I), s	2.3	3.6	4.0	4.0				
Green Ext Time (g_e), s	0.0	4.7	0.2	4.7				
Prob of Phs Cal (p_c)	0.45	1.00	0.65	1.00				
Prob of Max Out (p_x)	0.00	0.00	0.00	0.00				
Left-Turn Movement Data								
Assigned Mvmt	1	5	3					
Mvmt Sat Flow, veh/h	1774	0	1774					
Through Movement Data								
Assigned Mvmt		2	8					
Mvmt Sat Flow, veh/h		3426	0					
Right-Turn Movement Data								
Assigned Mvmt			12	18				
Mvmt Sat Flow, veh/h			255	1583				
Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment		(P/Pm)						

5:00 pm Baseline

Synchro 9 Report
Page 4

PM Peak Hour

HCM Signalized Intersection Capacity Analysis 7: Corinth & Riverfront

05/23/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
Traffic Volume (vph)	601	41	716	3	21	71	155	405	8	5	660	192	
Future Volume (vph)	601	41	716	3	21	71	155	405	8	5	660	192	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	
Flt Protected	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	1.00	1.00	1.00	
Satd. Flow (prot)	1770	1863	1583	1672	1770	1857	1770	1857	1770	3539	1583	1583	
Flt Permitted	0.70	1.00	1.00	1.00	1.00	1.00	0.48	1.00	0.48	1.00	1.00	1.00	
Satd. Flow (perm)	1308	1863	1583	1669	1669	361	1857	903	3539	1583	1583	1583	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	653	45	778	3	23	77	168	440	9	5	717	209	
RTOR Reduction (vph)	0	0	160	0	41	0	0	1	0	0	0	107	
Lane Group Flow (vph)	653	45	618	0	62	0	168	448	0	5	717	102	
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	NA	Perm	NA	Perm	
Protected Phases	4	4	4	4	4	1	6	2	2	2	2	2	
Permitted Phases	4	4	4	4	4	6	6	2	2	2	2	2	
Actuated Green, G (s)	60.0	60.0	60.0	60.0	60.0	58.7	58.7	42.0	42.0	42.0	42.0	42.0	
Effective Green, g (s)	60.0	60.0	60.0	60.0	60.0	58.7	58.7	42.0	42.0	42.0	42.0	42.0	
Actuated g/C Ratio	0.47	0.47	0.47	0.47	0.47	0.46	0.46	0.33	0.33	0.33	0.33	0.33	
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	609	868	737	778	778	292	846	294	1154	516	516	516	
v/s Ratio Prot	c0.50	0.02	0.39	0.04	0.04	0.05	c0.24	c0.20	c0.20	c0.20	c0.20	c0.20	
v/c Ratio	1.07	0.05	0.84	0.08	0.08	0.58	0.53	0.02	0.62	0.20	0.62	0.20	
Uniform Delay, d1	34.3	18.8	30.1	19.0	23.7	25.1	29.4	36.6	31.2	31.2	31.2	31.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	57.4	0.0	8.3	0.0	2.7	0.6	0.1	2.5	0.9	0.9	0.9	0.9	
Delay (s)	91.7	18.8	38.4	19.1	26.5	25.7	29.5	39.2	32.1	32.1	32.1	32.1	
Level of Service	F	B	D	B	C	C	C	D	D	C	D	C	
Approach Delay (s)	61.4	19.1	25.9	19.1	25.9	25.9	37.5	37.5	37.5	37.5	37.5	37.5	
Approach LOS	E	B	C	B	C	C	D	D	D	D	D	D	
Intersection Summary													
HCM 2000 Control Delay	45.9											HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.86												
Actuated Cycle Length (s)	128.7											Sum of lost time (s)	15.0
Intersection Capacity Utilization	89.3%											ICU Level of Service	E
Analysis Period (min)	15												
c Critical Lane Group													

PM Peak Hour

HCM 2010 TWSC

6: Riverfront & 35E South / 30 East Off-Ramp

05/23/2018

HCM 2010 TWSC

10: Cockrell & Lamar

05/23/2018

Intersection												
Int Delay, s/veh												
2												
Movement	EBL	EBT	WBT	WBR	SBL	SBR						
Lane Configurations	↑↑↑	↑↑↑	↑↑↑	↑↑↑	↑	↑						
Traffic Vol, veh/h	0	1554	887	0	194	74						
Future Vol, veh/h	0	1554	887	0	194	74						
Conflicting Peds, #/hr	0	0	0	0	0	0						
Sign Control	Free	Free	Free	Free	Stop	Stop						
RT Channelized	-	None	-	None	-	None						
Storage Length	-	-	-	-	0	0						
Yeh in Median Storage, #	-	0	0	-	2	-						
Grade, %	-	0	0	-	0	-						
Peak Hour Factor	92	92	92	92	92	92						
Heavy Vehicles, %	2	2	2	2	2	2						
Mvmt Flow	0	1689	964	0	211	80						
Major/Minor	Major1	Major2	Minor2									
Conflicting Flow All	-	0	-	0	1640	482						
Stage 1	-	-	-	964	-	-						
Stage 2	-	-	-	676	-	-						
Critical Hdwy	-	-	-	5.74	7.14	-						
Critical Hdwy Stg 1	-	-	-	6.64	-	-						
Critical Hdwy Stg 2	-	-	-	6.04	-	-						
Follow-up Hdwy	-	-	-	3.82	3.92	-						
Pd Cap-1 Maneuver	0	-	-	0	*301	*709						
Stage 1	0	-	-	0	*728	-						
Stage 2	0	-	-	0	*425	-						
Platoon blocked, %	-	-	-	1	1	-						
Mov Cap-1 Maneuver	-	-	-	-	*301	*709						
Mov Cap-2 Maneuver	-	-	-	-	*396	-						
Stage 1	-	-	-	-	*728	-						
Stage 2	-	-	-	-	*425	-						
Approach	EB	WB	WB	SB								
HCM Control Delay, s	0	0	0	20.3								
HCM LOS	-	-	-	C								
Minor Lane/Major Mvmt	EBT	WBT	SBLn1	SBLn2								
Capacity (veh/h)	-	-	396	709								
HCM Lane V/C Ratio	-	-	0.532	0.113								
HCM Control Delay (s)	-	-	24	10.7								
HCM Lane LOS	-	-	C	B								
HCM 95th %tile Q(veh)	-	-	3	0.4								

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

5:00 pm Baseline

Synchro 9 Report
 Page 1

Intersection												
Int Delay, s/veh												
1.2												
Movement	EBL	EBT	WBT	WBR	NBL	NBR	SBL	SBT	SBR			
Lane Configurations	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	26	1	2	22	11	0	1	569	138	8	216	12
Future Vol, veh/h	26	1	2	22	11	0	1	569	138	8	216	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None	-	None	-	None	-	None
Storage Length	-	-	150	-	-	150	-	-	-	150	-	-
Yeh in Median Storage, #	-	0	-	0	-	0	-	0	-	0	-	0
Grade, %	-	0	-	0	-	0	-	0	-	0	-	0
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	1	2	24	12	0	1	618	150	9	235	13
Major/Minor	Minor2	Minor1	Major1	Major2								
Conflicting Flow All	576	1080	124	831	961	384	248	0	0	768	0	0
Stage 1	259	259	-	696	696	-	-	-	-	-	-	-
Stage 2	317	771	-	135	265	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pd Cap-1 Maneuver	400	232	904	262	255	614	1315	-	-	842	-	-
Stage 1	723	692	-	398	441	-	-	-	-	-	-	-
Stage 2	669	408	-	854	688	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	382	229	904	258	252	614	1315	-	-	842	-	-
Mov Cap-2 Maneuver	382	229	-	258	252	-	-	-	-	-	-	-
Stage 1	722	685	-	398	441	-	-	-	-	-	-	-
Stage 2	650	408	-	842	681	-	-	-	-	-	-	-
Approach	EB	WB	WB	NB	SB							
HCM Control Delay, s	15.1	21.3	21.3	0	0.3							
HCM LOS	C	C	C	-	-							
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn2	SBL	SBT	SBR			
Capacity (veh/h)	1315	-	-	373	904	256	-	842	-			
HCM Lane V/C Ratio	0.001	-	-	0.079	0.002	0.14	-	0.01	-			
HCM Control Delay (s)	7.7	-	-	15.5	9	21.3	0	9.3	-			
HCM Lane LOS	A	-	-	C	A	C	A	A	-			
HCM 95th %tile Q(veh)	0	-	-	0.3	0	0.5	-	0	-			

5:00 pm Baseline

Synchro 9 Report
 Page 2

PM Peak Hour

HCM 2010 TWSC 11: Drive 1 & Riverfront

05/23/2018

Intersection										
Int Delay, s/veh	0.9									
Movement	EBT	EBR	WBL	WBT	NBL	NBR				
Lane Configurations	↑↑	↑↑	↑	↑↑	↑	↑				
Traffic Vol, veh/h	1421	58	15	474	40	0				
Future Vol, veh/h	1421	58	15	474	40	0				
Conflicting Peds, #/hr	0	0	0	0	0	0				
Sign Control	Free	Free	Free	Free	Free	Stop				
RT Channelized	-	None	-	None	-	None				
Storage Length	-	-	150	-	0	0				
Veh in Median Storage, #	0	-	-	0	2	-				
Grade, %	0	-	-	0	0	-				
Peak Hour Factor	92	92	92	92	92	92				
Heavy Vehicles, %	2	2	2	2	2	2				
Mvmt Flow	1545	63	16	515	43	0				
Major/Minor	Major1	Major2	Minor1							
Conflicting Flow All	0	0	1608	0	1866	804				
Stage 1	-	-	-	-	1576	-				
Stage 2	-	-	-	-	290	-				
Critical Hdwy	-	-	4.14	-	6.84	6.94				
Critical Hdwy Stg 1	-	-	-	-	5.84	-				
Critical Hdwy Stg 2	-	-	-	-	5.84	-				
Follow-up Hdwy	-	-	2.22	-	3.52	3.32				
Pd Cap-1 Maneuver	-	-	402	-	64	326				
Stage 1	-	-	-	-	156	-				
Stage 2	-	-	-	-	734	-				
Platoon blocked, %	-	-	-	-	-	-				
Mov Cap-1 Maneuver	-	-	402	-	61	326				
Mov Cap-2 Maneuver	-	-	-	-	146	-				
Stage 1	-	-	-	-	156	-				
Stage 2	-	-	-	-	705	-				
Approach	EB	WB	NB							
HCM Control Delay, s	0	0.4	39.8							
HCM LOS			E							
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT				
Capacity (veh/h)	146	-	-	-	402	-				
HCM Lane V/C Ratio	0.298	-	-	-	0.041	-				
HCM Control Delay (s)	39.8	0	-	-	14.3	-				
HCM Lane LOS	E	A	-	-	B	-				
HCM 95th %tile Q(veh)	1.2	-	-	-	0.1	-				

5:00 pm Baseline

Synchro 9 Report
Page 3

HCM 2010 TWSC 12: Drive 2 & Riverfront

05/23/2018

Intersection										
Int Delay, s/veh	0.1									
Movement	EBT	EBR	WBL	WBT	NBL	NBR				
Lane Configurations	↑↑	↑↑	↑	↑↑	↑	↑				
Traffic Vol, veh/h	1392	29	0	489	0	13				
Future Vol, veh/h	1392	29	0	489	0	13				
Conflicting Peds, #/hr	0	0	0	0	0	0				
Sign Control	Free	Free	Free	Free	Stop	Stop				
RT Channelized	-	None	-	None	-	None				
Storage Length	-	-	-	-	-	0				
Veh in Median Storage, #	0	-	-	0	0	-				
Grade, %	0	-	-	0	0	-				
Peak Hour Factor	92	92	92	92	92	92				
Heavy Vehicles, %	2	2	2	2	2	2				
Mvmt Flow	1513	32	0	532	0	14				
Major/Minor	Major1	Major2	Minor1							
Conflicting Flow All	0	0	-	-	-	772				
Stage 1	-	-	-	-	-	-				
Stage 2	-	-	-	-	-	-				
Critical Hdwy	-	-	-	-	-	6.94				
Critical Hdwy Stg 1	-	-	-	-	-	-				
Critical Hdwy Stg 2	-	-	-	-	-	-				
Follow-up Hdwy	-	-	-	-	-	3.32				
Pd Cap-1 Maneuver	-	-	0	-	0	342				
Stage 1	-	-	0	-	0	-				
Stage 2	-	-	0	-	0	-				
Platoon blocked, %	-	-	-	-	-	-				
Mov Cap-1 Maneuver	-	-	-	-	-	342				
Mov Cap-2 Maneuver	-	-	-	-	-	-				
Stage 1	-	-	-	-	-	-				
Stage 2	-	-	-	-	-	-				
Approach	EB	WB	NB							
HCM Control Delay, s	0	0	16							
HCM LOS			C							
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT					
Capacity (veh/h)	342	-	-	-	-					
HCM Lane V/C Ratio	0.041	-	-	-	-					
HCM Control Delay (s)	16	-	-	-	-					
HCM Lane LOS	C	-	-	-	-					
HCM 95th %tile Q(veh)	0.1	-	-	-	-					

5:00 pm Baseline

Synchro 9 Report
Page 4

PM Peak Hour

HCM 2010 TWSC
13: Drive 3 & Riverfront

05/23/2018

Intersection										
Int. Delay, s/veh	7.4									
Movement	EBT	EBR	WBL	WBT	NBL	NBR				
Lane Configurations	↑↑	↑	↑	↑↑	↑	↑				
Traffic Vol, veh/h	1288	117	73	357	132	79				
Future Vol, veh/h	1288	117	73	357	132	79				
Conflicting Peds, #/hr	0	0	0	0	0	0				
Sign Control	Free	Free	Free	Free	Stop	Stop				
RT Channelized	-	None	-	None	-	None				
Storage Length	-	-	150	-	0	0				
Veh in Median Storage, #	0	-	-	0	2	-				
Grade, %	0	-	-	0	0	-				
Peak Hour Factor	92	92	92	92	92	92				
Heavy Vehicles, %	2	2	2	2	2	2				
Mvmt Flow	1400	127	79	388	143	86				
Major/Minor	Major1	Major2	Minor1							
Conflicting Flow All	0	0	1527	0	1817	764				
Stage 1	-	-	-	-	1464	-				
Stage 2	-	-	-	-	353	-				
Critical Hdwy	-	-	4.14	-	6.84	6.94				
Critical Hdwy Stg 1	-	-	-	-	5.84	-				
Critical Hdwy Stg 2	-	-	-	-	5.84	-				
Follow-up Hdwy	-	-	2.22	-	3.52	3.32				
Pd. Cap-1 Maneuver	-	-	432	-	-69	346				
Stage 1	-	-	-	-	179	-				
Stage 2	-	-	-	-	682	-				
Platoon blocked, %	-	-	-	-	-	-				
Mov Cap-1 Maneuver	-	-	432	-	-56	346				
Mov Cap-2 Maneuver	-	-	-	-	165	-				
Stage 1	-	-	-	-	179	-				
Stage 2	-	-	-	-	557	-				
Approach	EB	WB	NB							
HCM Control Delay, s	0	2.6	66.1							
HCM LOS			F							
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT				
Capacity (veh/h)	165	346	-	-	432	-				
HCM Lane V/C Ratio	0.87	0.248	-	-	0.184	-				
HCM Control Delay (s)	94.4	18.8	-	-	15.2	-				
HCM Lane LOS	F	C	-	-	C	-				
HCM 95th %tile Q(veh)	6.1	1	-	-	0.7	-				
Notes										
-: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon										

Saturday Peak Hour

HCM Signalized Intersection Capacity Analysis
2: Cadiz & Lamar

05/23/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	45	145	90	119	134	99	63	215	136	159	13	42
Future Volume (vph)	45	145	90	119	134	99	63	215	136	159	13	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.0	5.0	6.0	6.0	5.0	5.3	5.3	5.3	4.5	4.5	4.5
Lane Util. Factor	1.00	0.95	1.00	0.95	1.00	0.95	0.95	0.95	0.95	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	0.95	0.99	0.99	0.99	0.96	1.00	0.85
Satd. Flow (prot)	1770	3336	1770	3313	3339	3339	3339	3339	3339	1780	1583	1583
Flt Permitted	0.59	1.00	1.00	0.53	1.00	0.99	0.99	0.99	0.99	0.96	1.00	0.85
Satd. Flow (perm)	1107	3336	1107	3336	3313	3339	3339	3339	3339	1780	1583	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	49	158	98	129	146	108	68	234	148	173	14	46
RTOR Reduction (vph)	0	51	0	0	59	0	0	44	0	0	0	40
Lane Group Flow (vph)	49	205	0	129	195	0	0	406	0	0	187	6
Turn Type	pm+pt	NA	NA	pm+pt	NA	NA	Split	NA	NA	Split	NA	Perm
Protected Phases	1	6		5	2		8	8		4		4
Permitted Phases	6			2								4
Actuated Green, G (s)	56.4	55.4		57.1	57.1		20.8	20.8		17.4		17.4
Effective Green, g (s)	56.4	55.4		57.1	57.1		20.8	20.8		17.4		17.4
Actuated g/C Ratio	0.45	0.44		0.45	0.45		0.17	0.17		0.14		0.14
Clearance Time (s)	5.0	6.0		5.0	6.0		5.3	5.3		4.5		4.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0		3.0
Lane Grp Cap (vph)	547	1469		517	1503		552	552		246		218
v/s Ratio Prot	0.01	c0.06		c0.02	0.06		c0.12	c0.12		c0.11		
v/s Ratio Perm	0.03			c0.09								0.00
v/c Ratio	0.09	0.14		0.25	0.13		0.74	0.74		0.76		0.03
Uniform Delay, d1	20.0	21.0		20.3	19.9		49.9	49.9		52.2		46.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00		1.00
Incremental Delay, d2	0.1	0.2		0.3	0.2		5.1	5.1		12.9		0.1
Delay (s)	20.1	21.2		20.6	20.1		54.9	54.9		65.1		46.9
Level of Service	C	C		C	C		D	D		E		D
Approach Delay (s)	21.0			20.3			54.9	54.9		61.5		
Approach LOS	C			C			D	D		E		
Intersection Summary												
HCM 2000 Control Delay	38.8											
HCM 2000 Volume to Capacity ratio	0.42											
Actuated Cycle Length (s)	125.8											
Intersection Capacity Utilization	55.5%											
Analysis Period (min)	15											
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis
4: Cadiz & Riverfront

05/23/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	135	462	0	413	114	199	199	199	118	107	0	160
Future Volume (vph)	135	462	0	413	114	199	199	199	118	107	0	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	5.8		5.8	5.8		5.8	5.8		5.8		5.8
Lane Util. Factor	0.97	0.91		0.95	1.00		0.91	0.91		1.00		1.00
Flt Protected	1.00	1.00		1.00	1.00		0.85	0.97		1.00		0.85
Satd. Flow (prot)	3433	5085		3539	5883		4818	4818		5883		5883
Flt Permitted	0.46	1.00		1.00	1.00		0.98	0.98		0.35		1.00
Satd. Flow (perm)	1669	5085		3539	5883		4818	4818		646		1583
Peak-hour factor, PHF	0.92	0.92		0.92	0.92		0.92	0.92		0.92		0.92
Adj. Flow (vph)	147	502		449	124		216	216		128		174
RTOR Reduction (vph)	0	0		0	0		61	0		37		0
Lane Group Flow (vph)	147	502		449	63		0	523		116		0
Turn Type	pm+pt	NA		NA	Perm		NA	NA		D,Pm		Perm
Protected Phases	1	6		2			4	4				4
Permitted Phases	6			2			4	4				4
Actuated Green, G (s)	94.5	93.2		73.2	73.2		39.2	39.2		39.2		39.2
Effective Green, g (s)	94.5	93.2		73.2	73.2		39.2	39.2		39.2		39.2
Actuated g/C Ratio	0.66	0.65		0.51	0.51		0.27	0.27		0.27		0.27
Clearance Time (s)	4.5	5.8		5.8	5.8		5.8	5.8		5.8		5.8
Lane Grp Cap (vph)	1285	3291		1798	804		1311	1311		175		430
v/s Ratio Prot	0.01	c0.10		c0.13			0.04	0.11		c0.18		0.03
v/s Ratio Perm	0.06			0.25	0.08		0.40	0.40		0.66		0.11
v/c Ratio	0.11	0.15		0.25	0.13		0.66	0.66		0.66		0.11
Uniform Delay, d1	11.2	9.9		19.9	18.1		42.8	42.8		46.5		39.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00		1.00
Incremental Delay, d2	0.2	0.1		0.3	0.2		0.9	0.9		1.81		0.5
Delay (s)	11.4	10.0		20.3	18.3		43.7	43.7		64.6		39.8
Level of Service	B	B		C	B		D	D		E		D
Approach Delay (s)	10.3			19.8			43.7	43.7		49.7		
Approach LOS	B			B			D	D		D		
Intersection Summary												
HCM 2000 Control Delay	27.5											
HCM 2000 Volume to Capacity ratio	0.36											
Actuated Cycle Length (s)	144.0											
Intersection Capacity Utilization	49.3%											
Analysis Period (min)	15											
c Critical Lane Group												

Saturday Peak Hour

HCM Signalized Intersection Capacity Analysis 7: Corinth & Riverfront

05/23/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	257	4	251	4	4	11	151	226	9	8	293	183
Future Volume (vph)	257	4	251	4	4	11	151	226	9	8	293	183
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00
Flt Protected	0.95	1.00	1.00	0.99	0.99	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1695	1695	1770	1852	1770	1852	1770	3539	1583
Flt Permitted	0.74	1.00	1.00	0.97	0.97	0.51	1.00	0.51	1.00	0.60	1.00	1.00
Satd. Flow (perm)	1386	1863	1583	1665	1665	943	1852	943	1852	1119	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	279	4	273	4	4	12	164	246	10	9	318	199
RTOR Reduction (vph)	0	0	202	0	9	0	0	1	0	0	0	100
Lane Group Flow (vph)	279	4	71	0	11	0	164	255	0	9	318	99
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	NA	Perm	NA	Perm
Protected Phases	4	4	4	4	4	1	6	2				
Permitted Phases	4	4	4	4	4	6	6	2				
Actuated Green, G (s)	26.3	26.3	26.3	26.3	26.3	65.3	65.3	50.6	50.6	50.6	50.6	50.6
Effective Green, g (s)	26.3	26.3	26.3	26.3	26.3	65.3	65.3	50.6	50.6	50.6	50.6	50.6
Actuated g/C Ratio	0.26	0.26	0.26	0.26	0.26	0.64	0.64	0.50	0.50	0.50	0.50	0.50
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	358	482	409	430	430	685	1190	557	1762	788		
v/s Ratio Prot	0.00					c0.02	0.14				0.09	
v/s Ratio Perm	c0.20		0.04	0.01	0.03	c0.13		0.01			0.02	0.18
v/c Ratio	0.78	0.01	0.17	0.03	0.03	0.24	0.21	0.02	0.18	0.13	0.02	0.18
Uniform Delay, d1	35.0	28.0	29.2	28.1	28.1	7.3	7.5	12.9	14.1	13.7	1.00	1.00
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	10.3	0.0	0.2	0.0	0.0	0.2	0.1	0.1	0.2	0.3	0.1	0.2
Delay (s)	45.2	28.0	29.4	28.1	28.1	7.5	7.6	13.0	14.3	14.0	1.00	1.00
Level of Service	D	C	C	C	C	A	A	B	B	B	B	B
Approach Delay (s)		37.3		28.1		7.6		14.2				
Approach LOS		D		C		A		B				
Intersection Summary												
HCM 2000 Control Delay	21.0 HCM 2000 Level of Service C											
HCM 2000 Volume to Capacity ratio	0.41											
Actuated Cycle Length (s)	101.6 Sum of lost time (s) 15.0											
Intersection Capacity Utilization	63.4% ICU Level of Service B											
Analysis Period (min)	15											
c Critical Lane Group												

Saturday Peak Hour

HCM 2010 Signalized Intersection Capacity Analysis
1: Cadiz & Griffin

05/23/2018

Movement	EBL	EBR	NBL	NBT	SBT	SBR
2nd-Term O (O2), veh/h	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term O (O3), veh/h	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of O Factor (f_B%), s	0.00	1.00	0.00	1.00	0.00	0.00
%ile Back of O (50%), veh/h	0.0	0.3	0.0	1.1	0.0	0.0
%ile Storage Ratio (RO%), s	0.00	0.02	0.00	0.12	0.00	0.01
Initial Q (Cb), veh	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Oe), veh	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
Sat O (Os), veh	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0.0	0.0	0.0	0.0	0.0	0.0
Initial O Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data						
Assigned Mvmt	0	12	0	14	0	16
Lane Assignment		T+R		T+R		
Lanes in Grp	0	0	0	1	0	1
Grp Vol (V), veh/h	0	0	0	197	0	28
Grp Sat Flow (S), veh/h	0	0	0	1583	0	1730
Q Serve Time (g_s), s	0.0	0.0	0.0	5.1	0.0	0.3
Cycle O Clear Time (g_c), s	0.0	0.0	0.0	5.1	0.0	0.3
Prot RT Sat Flow (s_R), veh/h	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.44
Lane Grp Cap (C), veh/h	0	0	0	342	0	929
W/C Ratio (X)	0.00	0.00	0.00	0.58	0.00	0.03
Avail Cap (c_a), veh/h	0	0	0	816	0	929
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	16.2	0.0	5.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.5	0.0	0.0
Initial O Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	17.7	0.0	5.0
1st-Term O (O1), veh/h	0.0	0.0	0.0	2.2	0.0	0.2
2nd-Term O (O2), veh/h	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term O (O3), veh/h	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of O Factor (f_B%), s	0.00	1.00	0.00	1.00	0.00	0.00
%ile Back of O (50%), veh/h	0.0	0.0	0.0	2.4	0.0	0.2
%ile Storage Ratio (RO%), s	0.00	0.00	0.00	0.26	0.00	0.01
Initial Q (Cb), veh	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Oe), veh	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
Sat O (Os), veh	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0.0	0.0	0.0	0.0	0.0	0.0
Initial O Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary						
HCM 2010 Ctrl Delay	12.0					
HCM 2010 LOS	B					

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

5:00 pm Baseline

Synchro 9 Report
Page 3

HCM 2010 Signalized Intersection Capacity Analysis
3: Cadiz & Hotel

05/23/2018

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	8	53	97	648	305	32
Future Volume (veh/h)	8	53	97	648	305	32
Number	3	18	1	6	2	12
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	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
Adj Sat Flow, veh/h	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	9	58	105	704	332	35
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Opposing Right Turn Influence	Yes	Yes	Yes	Yes	Yes	Yes
Cap, veh/h	137	123	816	2787	2217	232
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.08	0.04	0.79	0.69	0.69
Ln Grp Delay, s/veh	34.4	38.1	2.9	2.5	4.7	4.7
Ln Grp LOS	C	D	A	A	A	A
Approach Vol, veh/h	67	67	809	367	367	367
Approach Delay, s/veh	37.6	37.6	2.5	4.7	4.7	4.7
Approach LOS	D	D	A	A	A	A
Timer						
Assigned Phs	1	2	3	4	5	6
Case No	1	2	8			8
Phs Duration (G+Y+Rc), s	1.2	8.0	9.0	4.0	4.0	4.0
Change Period (Y+Rc), s	8.1	60.0	11.8	68.1		68.1
Max Green (Gmax), s	5.0	*5.2	5.6	*5.2		*5.2
Max Allow Headway (MAH), s	20.0	*55	74.4	*55		*55
Max O Clear (g_c+I1), s	3.8	5.3	4.0	5.3		5.3
Green Ext Time (g_ext), s	3.3	4.9	4.8	6.2		6.2
Prob of Phs Cal (p_c)	0.90	1.00	0.77	1.00		1.00
Prob of Max Out (p_x)	0.00	0.00	0.00	0.00		0.00
Left-Turn Movement Data						
Assigned Mvmt	1	5	3			
Mvmt Sat Flow, veh/h	1774	0	1774			
Through Movement Data						
Assigned Mvmt		2	8			6
Mvmt Sat Flow, veh/h		3327	0			3632
Right-Turn Movement Data						
Assigned Mvmt			12	18		16
Mvmt Sat Flow, veh/h			339	1583		0
Left Lane Group Data						
Assigned Mvmt	1	5	3	0	0	0
Lane Assignment	(P/Pm)					

5:00 pm Baseline

Synchro 9 Report
Page 4

Saturday Peak Hour

HCM 2010 Signalized Intersection Capacity Analysis
3: Cadiz & Hotel

05/23/2018

Lanes in Grp	1	0	1	0	0	0	0	0
Grp Vol (v), veh/h	105	0	9	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1774	0	1774	0	0	0	0	0
Q Serve Time (g.s), s	1.3	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Cycle O.C Clear Time (g.c), s	1.3	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s/l), veh/h/ln	1011	0	1774	0	0	0	0	0
Shared LT Sat Flow (s.sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g.p), s	56.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g.u), s	51.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT O Serve Time (g.ps), s	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g.f), s	0.0	54.8	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre-Blk (g.f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P.L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	816	0	137	0	0	0	0	0
V/C Ratio (X)	0.13	0.00	0.07	0.00	0.00	0.00	0.00	0.00
Avail Cap (c.a), veh/h	1190	0	1651	0	0	0	0	0
Upstream Filter (f)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	2.8	0.0	34.2	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	2.9	0.0	34.4	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.6	0.0	0.2	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f.B%)	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
%ile Storage Ratio (RO%)	0.6	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Initial Q (Ob), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Oe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Os), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lanes in Grp	0	1	0	0	0	2	0	0
Grp Vol (v), veh/h	0	181	0	0	0	704	0	0
Grp Sat Flow (s), veh/h/ln	0	1770	0	0	0	1770	0	0
Q Serve Time (g.s), s	0.0	2.9	0.0	0.0	0.0	4.2	0.0	0.0
Cycle O Clear Time (g.c), s	0.0	2.9	0.0	0.0	0.0	4.2	0.0	0.0
Lane Grp Cap (c), veh/h	0.00	1213	0	0	0	2787	0	0
V/C Ratio (X)	0.00	0.15	0.00	0.00	0.00	0.25	0.00	0.00
Avail Cap (c.a), veh/h	0	1213	0	0	0	2787	0	0
Upstream Filter (f)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	4.4	0.0	0.0	0.0	2.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	4.7	0.0	0.0	0.0	2.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.4	0.0	0.0	0.0	2.0	0.0	0.0

5:00 pm Baseline

Synchro 9 Report
Page 5

HCM 2010 Signalized Intersection Capacity Analysis
3: Cadiz & Hotel

05/23/2018

3rd-Term Q (Q3), veh/ln	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f.B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	1.4	0.0	0.0	0.0	2.0	0.0	0.0
%ile Storage Ratio (RO%)	0.00	0.06	0.00	0.00	0.00	0.10	0.00	0.00
Initial Q (Ob), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Oe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Os), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lanes in Grp	0	1	1	0	0	0	0	0
Grp Vol (v), veh/h	0	186	58	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1803	1583	0	0	0	0	0
Q Serve Time (g.s), s	0.0	2.9	2.8	0.0	0.0	0.0	0.0	0.0
Cycle O Clear Time (g.c), s	0.0	2.9	2.8	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s.R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g.R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P.R)	0.00	0.19	1.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	1236	123	0	0	0	0	0
V/C Ratio (X)	0.00	0.15	0.47	0.00	0.00	0.00	0.00	0.00
Avail Cap (c.a), veh/h	0	1236	1474	0	0	0	0	0
Upstream Filter (f)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	4.4	35.3	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	2.8	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	4.7	38.1	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.4	1.2	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f.B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Storage Ratio (RO%)	0.00	0.06	0.11	0.00	0.00	0.00	0.00	0.00
Initial Q (Ob), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Oe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Os), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay	5.0							
HCM 2010 LOS	A							
Notes								
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.								

5:00 pm Baseline

Synchro 9 Report
Page 6

Saturday Peak Hour

HCM 2010 Signalized Intersection Capacity Analysis
8: Corinth & Cockrell

05/23/2018

2nd-Term O (O2), veh/h	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
3rd-Term O (O3), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%), veh/h	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/h	0.0	0.0	0.0	5.2	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RO%), veh/h	0.00	0.00	0.00	0.82	0.00	0.00	0.00	0.00	0.00
Initial Q (Cb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Oe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat O (Os), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data									
Assigned Mvmt	0	12	0	14	0	16	0	18	0
Lane Assignment	R	R	R	R	R	R	R	T+R	R
Lanes in Grp	0	1	0	1	0	1	0	1	1
Grp Vol (V), veh/h	0	9	0	30	0	112	0	473	0
Grp Sat Flow (S), veh/h	0	1583	0	1583	0	1583	0	1673	0
Q Serve Time (g_s), s	0.0	0.2	0.0	0.6	0.0	2.4	0.0	11.6	0.0
Cycle Q Clear Time (g_c), s	0.0	0.2	0.0	0.6	0.0	2.4	0.0	11.6	0.0
Prot RT Sat Flow (S_R), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.07
Lane Grp Cap (C), veh/h	0	602	0	649	0	602	0	686	0
V/C Ratio (X)	0.00	0.01	0.00	0.05	0.00	0.19	0.00	0.69	0.00
Avail Cap (c_a), veh/h	0	602	0	649	0	602	0	686	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	9.7	0.0	8.9	0.0	10.3	0.0	12.1	0.0
Inc Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.7	0.0	5.6	0.0
Initial O Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.7	0.0	9.0	0.0	11.0	0.0	17.7	0.0
1st-Term O (O1), veh/h	0.0	0.1	0.0	0.2	0.0	1.0	0.0	5.3	0.0
2nd-Term O (O2), veh/h	0.0	0.0	0.0	0.0	0.0	0.1	0.0	1.1	0.0
3rd-Term O (O3), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%), veh/h	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/h	0.0	0.1	0.0	0.3	0.0	1.1	0.0	6.3	0.0
%ile Storage Ratio (RO%), veh/h	0.00	0.01	0.00	0.07	0.00	0.11	0.00	0.08	0.00
Initial Q (Cb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Oe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat O (Os), veh	0	0	0	0	0	0	0	0	0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary									
HCM 2010 Ctrl Delay	14.8								
HCM 2010 LOS	B								

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

5:00 pm Baseline

Synchro 9 Report
Page 9

HCM 2010 Signalized Intersection Capacity Analysis
9: Corinth & Lamar

05/23/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	←	↑	↑	←	↑	↑	←	↑	↑	←	↑	↑
Traffic Volume (veh/h)	18	169	194	61	219	47	159	136	62	51	176	18
Future Volume (veh/h)	18	169	194	61	219	47	159	136	62	51	176	18
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Peak-Bike Adj (A_pbT)	1.00	1.00	1.00	1.00	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	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	20	184	211	66	238	51	173	148	67	55	191	20
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap, veh/h	321	385	344	274	714	150	642	1429	585	611	1282	574
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
Prop Arrive On Green	0.01	0.22	0.22	0.04	0.25	0.25	0.09	0.40	0.40	0.05	0.36	0.36
Ln Grp Delay, s/veh	20.8	24.5	26.2	20.7	21.8	21.9	11.8	13.0	13.3	12.4	15.1	14.3
Ln Grp LOS	C	C	C	C	C	C	B	B	B	B	B	B
Approach Vol, veh/h	415			355			388			266		
Approach Delay, s/veh	25.2			21.6			12.5			14.5		
Approach LOS	C			C			B			B		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Case No	1.1	3.0	1.1	4.0	1.1	4.0	1.1	4.0				
Phs Duration (G+Y+Rc), s	11.1	30.0	7.9	20.0	8.3	32.8	6.0	21.9				
Change Period (Y+Rc), s	5.0	*.5	5.0	*.5	5.0	*.5	5.0	*.5				
Max Green (Gmax), s	7.0	*.25	7.0	*.25	7.0	*.25	7.0	*.25				
Max Allow Headway (MAH), s	3.8	5.2	3.8	5.4	3.8	5.2	3.8	5.4				
Max O Clear (g_c+I1), s	6.1	4.5	4.0	10.3	3.3	4.0	2.6	6.7				
Green Ext Time (g_e), s	0.0	2.6	0.0	3.7	0.0	2.6	0.0	4.0				
Prob of Phs Cal (p_c)	1.00	1.00	0.72	1.00	1.00	1.00	0.32	1.00				
Prob of Max Out (p_x)	1.00	0.00	1.00	0.18	1.00	0.00	0.36	0.10				
Left-Turn Movement Data												
Assigned Mvmt	1			3			5			7		
Mvmt Sat Flow, veh/h	1774			1774			1774			1774		
Through Movement Data												
Assigned Mvmt	2			4			6			8		
Mvmt Sat Flow, veh/h	3539			1770			3545			2911		
Right-Turn Movement Data												
Assigned Mvmt	12			14			16			18		
Mvmt Sat Flow, veh/h	1583			1583			1452			613		
Left Lane Group Data												
Assigned Mvmt	1			3			5			7		
Lane Assignment	(Pr/Pm)			(Pr/Pm)			(Pr/Pm)			(Pr/Pm)		

5:00 pm Baseline

Synchro 9 Report
Page 10

Saturday Peak Hour

HCM 2010 TWSC

6: Riverfront & 35E South / 30 East Off-Ramp

05/23/2018

HCM 2010 TWSC

10: Cockrell & Lamar

05/23/2018

Intersection												
Int Delay, s/veh												
1.9												
Movement	EBL	EBT	WBT	WBR	SBL	SBR						
Lane Configurations	↑↑↑	↑↑↑	↑↑↑	↑↑↑	↑	↑						
Traffic Vol, veh/h	0	463	764	0	136	106						
Future Vol, veh/h	0	463	764	0	136	106						
Conflicting Peds, #/hr	0	0	0	0	0	0						
Sign Control	Free	Free	Free	Free	Stop	Stop						
RT Channelized	-	None	-	None	-	None						
Storage Length	-	-	-	-	0	0						
Yeh in Median Storage, #	-	0	0	-	2	-						
Grade, %	-	0	0	-	0	-						
Peak Hour Factor	92	92	92	92	92	92						
Heavy Vehicles, %	2	2	2	2	2	2						
Mvmt Flow	0	503	830	0	148	115						
Major/Minor	Major1	Major2	Minor2									
Conflicting Flow All	-	0	-	0	1031	415						
Stage 1	-	-	-	830	-	-						
Stage 2	-	-	-	201	-	-						
Critical Hdwy	-	-	-	5.74	7.14	-						
Critical Hdwy Stg 1	-	-	-	6.64	-	-						
Critical Hdwy Stg 2	-	-	-	6.04	-	-						
Follow-up Hdwy	-	-	-	3.82	3.92	-						
Pd Cap-1 Maneuver	0	-	-	0	*594	*746						
Stage 1	0	-	-	0	*766	-						
Stage 2	0	-	-	0	*747	-						
Platoon blocked, %	-	-	-	1	1	-						
Mov Cap-1 Maneuver	-	-	-	-	*594	*746						
Mov Cap-2 Maneuver	-	-	-	-	*666	-						
Stage 1	-	-	-	-	*766	-						
Stage 2	-	-	-	-	*747	-						
Approach	EB	WB	SB									
HCM Control Delay, s	0	0	11.4									
HCM LOS			B									
Minor Lane/Major Mvmt	EBT	WBT	SBLn1	SBLn2								
Capacity (veh/h)	-	-	666	746								
HCM Lane V/C Ratio	-	-	0.222	0.154								
HCM Control Delay (s)	-	-	11.9	10.7								
HCM Lane LOS	-	-	B	B								
HCM 95th %tile Q(veh)	-	-	0.8	0.5								

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

5:00 pm Baseline

Synchro 9 Report
 Page 1

Intersection												
Int Delay, s/veh												
1.5												
Movement	EBL	EBT	WBT	WBR	NBL	NBR	SBL	SBR				
Lane Configurations	↑	↑	↑	↑	↑	↑	↑	↑				
Traffic Vol, veh/h	17	8	9	16	2	3	8	164	12	2	189	42
Future Vol, veh/h	17	8	9	16	2	3	8	164	12	2	189	42
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None	-	None	-	None	-	None
Storage Length	-	-	150	-	-	150	-	-	-	150	-	-
Yeh in Median Storage, #	-	0	-	0	-	0	-	0	-	0	-	0
Grade, %	-	0	-	0	-	0	-	0	-	0	-	0
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	9	10	17	2	3	9	178	13	2	205	46
Major/Minor	Minor2	Minor1	Major1	Major2								
Conflicting Flow All	341	442	126	313	457	96	251	0	0	191	0	0
Stage 1	233	233	-	202	202	-	-	-	-	-	-	-
Stage 2	108	209	-	111	255	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pd Cap-1 Maneuver	589	508	901	616	498	942	1311	-	-	1380	-	-
Stage 1	749	711	-	781	733	-	-	-	-	-	-	-
Stage 2	886	728	-	882	695	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	581	504	901	597	494	942	1311	-	-	1380	-	-
Mov Cap-2 Maneuver	581	504	-	597	494	-	-	-	-	-	-	-
Stage 1	744	710	-	776	728	-	-	-	-	-	-	-
Stage 2	874	723	-	860	694	-	-	-	-	-	-	-
Approach	EB	WB	NB	SB								
HCM Control Delay, s	11.1	11	0.3	0.1								
HCM LOS	B	B										
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn2	SBL	SBLn2	SBR	SBRn2		
Capacity (veh/h)	1311	-	554	901	583	942	1380	-	-	-		
HCM Lane V/C Ratio	0.007	-	0.049	0.011	0.034	0.003	0.002	-	-	-		
HCM Control Delay (s)	7.8	-	11.8	9	11.4	8.8	7.6	-	-	-		
HCM Lane LOS	A	-	B	A	B	A	A	-	-	-		
HCM 95th %tile Q(veh)	0	-	0.2	0	0.1	0	0	-	-	-		

5:00 pm Baseline

Synchro 9 Report
 Page 2

Saturday Peak Hour

HCM 2010 TWSC
11: Drive 1 & Riverfront

05/23/2018

Intersection										
Int Delay, s/veh										
0.5										
Movement	EBT	EBR	WBL	WBT	NBL	NBR				
Lane Configurations	↑↑	↑	↑	↑↑	↑	↑				
Traffic Vol, veh/h	627	60	15	800	42	0				
Future Vol, veh/h	627	60	15	800	42	0				
Conflicting Peds, #/hr	0	0	0	0	0	0				
Sign Control	Free	Free	Free	Free	Free	Stop				
RT Channelized	-	None	-	None	-	None				
Storage Length	-	-	150	-	-	0				
Veh in Median Storage, #	0	-	-	0	2	-				
Grade, %	0	-	-	0	0	-				
Peak Hour Factor	92	92	92	92	92	92				
Heavy Vehicles, %	2	2	2	2	2	2				
Mvmt Flow	682	65	16	870	46	0				
Major/Minor	Major1	Major2	Minor1							
Conflicting Flow All	0	0	747	0	1181	373				
Stage 1	-	-	-	-	714	-				
Stage 2	-	-	-	-	467	-				
Critical Hdwy	-	-	4.14	-	6.84	6.94				
Critical Hdwy Stg 1	-	-	-	-	5.84	-				
Critical Hdwy Stg 2	-	-	-	-	5.84	-				
Follow-up Hdwy	-	-	2.22	-	3.52	3.32				
Pd Cap-1 Maneuver	-	-	857	-	183	624				
Stage 1	-	-	-	-	446	-				
Stage 2	-	-	-	-	597	-				
Platoon blocked, %	-	-	-	-	-	-				
Mov Cap-1 Maneuver	-	-	857	-	180	624				
Mov Cap-2 Maneuver	-	-	-	-	371	-				
Stage 1	-	-	-	-	446	-				
Stage 2	-	-	-	-	586	-				
Approach	EB	WB	WB	NB						
HCM Control Delay, s	0	0.2	0.2	16.1						
HCM LOS				C						
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT				
Capacity (veh/h)	371	-	-	-	857	-				
HCM Lane V/C Ratio	0.123	-	-	-	0.019	-				
HCM Control Delay (s)	16.1	0	-	-	9.3	-				
HCM Lane LOS	C	A	-	-	A	-				
HCM 95th %tile Q(veh)	0.4	-	-	-	0.1	-				

5:00 pm Baseline Synchro 9 Report Page 3

HCM 2010 TWSC
12: Drive 2 & Riverfront

05/23/2018

Intersection										
Int Delay, s/veh										
0.1										
Movement	EBT	EBR	WBL	WBT	NBL	NBR				
Lane Configurations	↑↑	↑	↑	↑↑	↑	↑				
Traffic Vol, veh/h	597	30	0	815	0	14				
Future Vol, veh/h	597	30	0	815	0	14				
Conflicting Peds, #/hr	0	0	0	0	0	0				
Sign Control	Free	Free	Free	Free	Stop	Stop				
RT Channelized	-	None	-	None	-	None				
Storage Length	-	-	-	-	-	0				
Veh in Median Storage, #	0	-	-	0	0	-				
Grade, %	0	-	-	0	0	-				
Peak Hour Factor	92	92	92	92	92	92				
Heavy Vehicles, %	2	2	2	2	2	2				
Mvmt Flow	649	33	0	886	0	15				
Major/Minor	Major1	Major2	Minor1							
Conflicting Flow All	0	0	-	-	-	341				
Stage 1	-	-	-	-	-	-				
Stage 2	-	-	-	-	-	-				
Critical Hdwy	-	-	-	-	-	6.94				
Critical Hdwy Stg 1	-	-	-	-	-	-				
Critical Hdwy Stg 2	-	-	-	-	-	-				
Follow-up Hdwy	-	-	-	-	-	3.32				
Pd Cap-1 Maneuver	-	-	0	-	0	655				
Stage 1	-	-	0	-	0	-				
Stage 2	-	-	0	-	0	-				
Platoon blocked, %	-	-	-	-	-	-				
Mov Cap-1 Maneuver	-	-	-	-	-	655				
Mov Cap-2 Maneuver	-	-	-	-	-	-				
Stage 1	-	-	-	-	-	-				
Stage 2	-	-	-	-	-	-				
Approach	EB	WB	WB	NB						
HCM Control Delay, s	0	0	0	10.6						
HCM LOS				B						
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT					
Capacity (veh/h)	655	-	-	-	-					
HCM Lane V/C Ratio	0.023	-	-	-	-					
HCM Control Delay (s)	10.6	-	-	-	-					
HCM Lane LOS	B	-	-	-	-					
HCM 95th %tile Q(veh)	0.1	-	-	-	-					

5:00 pm Baseline Synchro 9 Report Page 4

Saturday Peak Hour

HCM 2010 TWSC
13: Drive 3 & Riverfront

05/23/2018

Intersection									
Int. Delay, s/veh	2.9								
Movement	EBT	EBR	WBL	WBT	NBL	NBR			
Lane Configurations	↑↑		↑	↑↑		↑			
Traffic Vol, veh/h	490	121	75	674	141	85			
Future Vol, veh/h	490	121	75	674	141	85			
Conflicting Peds, #/hr	0	0	0	0	0	0			
Sign Control	Free	Free	Free	Free	Stop	Stop			
RT Channelized	-	None	-	None	-	None			
Storage Length	-	-	150	-	0	0			
Veh in Median Storage, #	0	-	-	0	2	-			
Grade, %	0	-	-	0	0	-			
Peak Hour Factor	92	92	92	92	92	92			
Heavy Vehicles, %	2	2	2	2	2	2			
Mvmt Flow	533	132	82	733	153	92			
Major/Minor	Major1	Major2	Minor1						
Conflicting Flow All	0	0	664	0	1127	332			
Stage 1	-	-	-	-	598	-			
Stage 2	-	-	-	-	529	-			
Critical Hdwy	-	-	4.14	-	6.84	6.94			
Critical Hdwy Stg 1	-	-	-	-	5.84	-			
Critical Hdwy Stg 2	-	-	-	-	5.84	-			
Follow-up Hdwy	-	-	2.22	-	3.52	3.32			
Pd. Cap-1 Maneuver	-	-	921	-	198	664			
Stage 1	-	-	-	-	512	-			
Stage 2	-	-	-	-	555	-			
Platoon blocked, %	-	-	-	-	-	-			
Mov Cap-1 Maneuver	-	-	921	-	180	664			
Mov Cap-2 Maneuver	-	-	-	-	379	-			
Stage 1	-	-	-	-	512	-			
Stage 2	-	-	-	-	506	-			
Approach	EB	WB	NB						
HCM Control Delay, s	0	0.9	17.2						
HCM LOS	C								
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT			
Capacity (veh/h)	379	664	-	-	921	-			
HCM Lane V/C Ratio	0.404	0.139	-	-	0.089	-			
HCM Control Delay (s)	20.8	11.3	-	-	9.3	-			
HCM Lane LOS	C		B		A				
HCM 95th %tile Q(veh)	1.9	0.5	-	-	0.3	-			



Synchro™ Output - 2025 Background Traffic

PM Peak Hour

HCM 2010 Signalized Intersection Capacity Analysis 1: Cadiz & Griffin

05/23/2018

2nd-Term O (O2), veh/h	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
3rd-Term O (O3), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of O Factor (f_B%), s	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
%ile Back of O (50%), veh/h	0.0	3.5	0.0	2.0	0.0	0.3	0.0	0.0	0.0	0.0
%ile Storage Ratio (RO%), s	0.00	0.25	0.00	0.22	0.00	0.02	0.00	0.00	0.00	0.00
Initial Q (Cb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Oe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat O (Os), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0	0	0
Initial O Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data										
Assigned Mvmt	0	12	0	14	0	16	0	16	0	0
Lane Assignment			T+R			T+R				
Lanes in Grp	0	0	0	1	0	1	0	0	0	0
Grp Vol (V), veh/h	0	0	0	390	0	31	0	0	0	0
Grp Sat Flow (S), veh/h/s	0	0	0	1583	0	1781	0	0	0	0
Q Serve Time (q_s), s	0.0	0.0	0.0	15.4	0.0	0.7	0.0	0.0	0.0	0.0
Cycle O Clear Time (g_c), s	0.0	0.0	0.0	15.4	0.0	0.7	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.26	0.00	0.00	0.00	0.00
Lane Grp Cap (C), veh/h	0	0	0	587	0	850	0	0	0	0
W/C Ratio (X)	0.00	0.00	0.00	0.66	0.00	0.04	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	587	0	850	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	19.7	0.0	10.4	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	5.8	0.0	0.1	0.0	0.0	0.0	0.0
Initial O Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	25.6	0.0	10.5	0.0	0.0	0.0	0.0
1st-Term O (O1), veh/h	0.0	0.0	0.0	6.7	0.0	0.3	0.0	0.0	0.0	0.0
2nd-Term O (O2), veh/h	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term O (O3), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of O Factor (f_B%), s	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
%ile Back of O (50%), veh/h	0.0	0.0	0.0	7.7	0.0	0.4	0.0	0.0	0.0	0.0
%ile Storage Ratio (RO%), s	0.00	0.00	0.00	0.84	0.00	0.02	0.00	0.00	0.00	0.00
Initial Q (Cb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Oe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat O (Os), veh	0	0	0	0	0	0	0	0	0	0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0	0	0
Initial O Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary										
HCM 2010 Ctrl Delay	16.0									
HCM 2010 LOS	B									

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Baseline

Synchro 9 Report
Page 3

HCM 2010 Signalized Intersection Capacity Analysis 3: Cadiz & Hotel

05/23/2018

Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations	↔	↔	↔	↔	↔	↔		
Traffic Volume (veh/h)	6	57	37	491	229	17		
Future Volume (veh/h)	6	57	37	491	229	17		
Number	3	18	1	6	2	12		
Initial Q, veh	0	0	0	0	0	0		
Peed-Bike Adj (A_pbT)	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		
Adj Sat Flow, veh/h/s	1863	1863	1863	1863	1863	1900		
Adj Flow Rate, veh/h	7	62	40	534	249	18		
Adj No. of Lanes	1	1	1	2	2	0		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Opposing Right Turn Influence	Yes	Yes	Yes	Yes	Yes	Yes		
Cap, veh/h	141	125	877	2772	2336	168		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Prop Arrive On Green	0.08	0.08	0.02	0.78	0.70	0.70		
Ln Grp Delay, s/veh	33.6	37.7	2.7	2.3	4.1	4.1		
Ln Grp LOS	C	D	A	A	A	A		
Approach Vol, veh/h	69			574	267			
Approach Delay, s/veh	37.2			2.4	4.1			
Approach LOS	D			A	A			
Timer								
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1	2	8					
Phs Duration (G+Y+Rc), s	1.2	8.0	9.0					4.0
Change Period (Y+Rc), s	6.7	60.0	11.8					66.7
Max Green (Gmax), s	5.0	*5.2	5.6					*5.2
Max Allow Headway (MAH), s	20.0	*55	74.4					*55
Max O Clear (g_c+I1), s	3.8	5.2	4.0					5.2
Green Ext Time (g_ext), s	2.5	3.9	4.9					5.0
Prob of Phs Cal (p_c)	0.1	6.2	0.2					1.00
Prob of Max Out (p_x)	0.00	0.00	0.00					0.00
Left-Turn Movement Data								
Assigned Mvmt	1	5	3					
Mvmt Sat Flow, veh/h	1774	0	1774					
Through Movement Data								
Assigned Mvmt		2	8					6
Mvmt Sat Flow, veh/h		3442	0					3632
Right-Turn Movement Data								
Assigned Mvmt			12	18				16
Mvmt Sat Flow, veh/h			241	1583				0
Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment		(P/Pm)						

Baseline

Synchro 9 Report
Page 4

PM Peak Hour

HCM 2010 Signalized Intersection Capacity Analysis
3: Cadiz & Hotel

05/23/2018

Lanes in Grp	1	0	1	0	0	0	0	0	0
Grp Vol (v), veh/h	40	0	7	0	0	0	0	0	0
Grp Sat Flow (s), veh/hIn	1774	0	1774	0	0	0	0	0	0
Q Serve Time (g.s), s	0.5	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g.c), s	0.5	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s,l), veh/hIn	1108	0	1774	0	0	0	0	0	0
Shared LT Sat Flow (s,sh), veh/hIn	0	0	0	0	0	0	0	0	0
Perm LT Eff Green (g.p), s	56.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g.u), s	52.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT O Serve Time (g.ps), s	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g.f), s	0.0	54.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre-Blk (g.fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	877	0	141	0	0	0	0	0	0
V/C Ratio (X)	0.05	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c-a), veh/h	1289	0	1680	0	0	0	0	0	0
Upstream Filter (f)	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	2.7	0.0	33.4	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Initial O Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	2.7	0.0	33.6	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term O (Q1), veh/h	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term O (Q2), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term O (Q3), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of O Factor (f.B%)	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
%ile Storage Ratio (RO%)	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Initial O (Ob), veh/h	0.04	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Initial O (Ob), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) O (Oe), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat O (Os), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0	0
Initial O Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data									
Assigned Mvmt	0	2	8	0	0	6	0	0	0
Lanes in Grp	0	1	0	0	0	2	0	0	0
Grp Vol (v), veh/h	0	131	0	0	0	534	0	0	0
Grp Sat Flow (s), veh/hIn	0	1770	0	0	0	1770	0	0	0
Q Serve Time (g.s), s	0.0	1.9	0.0	0.0	0.0	3.0	0.0	0.0	0.0
Cycle O Clear Time (g.c), s	0.0	1.9	0.0	0.0	0.0	3.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1234	0	0	0	2772	0	0	0
V/C Ratio (X)	0.00	0.11	0.00	0.00	0.00	0.19	0.00	0.00	0.00
Avail Cap (c-a), veh/h	0	1234	0	0	0	2772	0	0	0
Upstream Filter (f)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	3.9	0.0	0.0	0.0	2.2	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Initial O Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	4.1	0.0	0.0	0.0	2.3	0.0	0.0	0.0
1st-Term O (Q1), veh/h	0.0	0.9	0.0	0.0	0.0	1.4	0.0	0.0	0.0

Baseline

Synchro 9 Report
Page 5

HCM 2010 Signalized Intersection Capacity Analysis
3: Cadiz & Hotel

05/23/2018

2nd-Term O (Q2), veh/hIn	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
3rd-Term O (Q3), veh/hIn	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of O Factor (f.B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00
%ile Back of O (50%), veh/hIn	0.0	1.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0
%ile Storage Ratio (RO%)	0.00	0.04	0.00	0.00	0.00	0.07	0.00	0.00	0.00
Initial O (Ob), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) O (Oe), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat O (Os), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0	0
Initial O Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data									
Assigned Mvmt	0	12	18	0	0	16	0	0	0
Lanes in Grp	0	1	1	0	0	0	0	0	0
Grp Vol (v), veh/h	0	136	62	0	0	0	0	0	0
Grp Sat Flow (s), veh/hIn	0	1820	1583	0	0	0	0	0	0
Q Serve Time (g.s), s	0.0	1.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0
Cycle O Clear Time (g.c), s	0.0	1.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s,r), veh/hIn	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g,r), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.13	1.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	1270	125	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.11	0.49	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c-a), veh/h	0	1270	1499	0	0	0	0	0	0
Upstream Filter (f)	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	3.9	34.7	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	3.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial O Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	4.1	37.7	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term O (Q1), veh/hIn	0.0	0.9	1.3	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term O (Q2), veh/hIn	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term O (Q3), veh/hIn	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of O Factor (f.B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00
%ile Back of O (50%), veh/hIn	0.0	1.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RO%)	0.00	0.04	0.12	0.00	0.00	0.00	0.00	0.00	0.00
Initial O (Ob), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) O (Oe), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat O (Os), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0	0
Initial O Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary									
HCM 2010 Ctrl Delay	5.5								
HCM 2010 LOS	A								
Notes									
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.									

Baseline

Synchro 9 Report
Page 6

PM Peak Hour

HCM Signalized Intersection Capacity Analysis
2: Cadiz & Lamar

05/23/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	52	480	206	150	157	96	65	450	275	120	15	46
Future Volume (vph)	52	480	206	150	157	96	65	450	275	120	15	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.3	6.0	5.3	4.5	4.5	4.5
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	1.00	0.95	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	0.95	1.00	1.00	0.95	1.00	0.96	1.00	0.85
Satd. Flow (prot)	1770	3380	1770	3338	3341	3341	1770	3341	1770	1783	1583	1583
Flt Permitted	0.58	1.00	0.16	1.00	1.00	1.00	1.00	1.00	0.96	1.00	1.00	1.00
Satd. Flow (perm)	1085	3380	289	3338	3341	3341	1085	3341	289	1783	1583	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	57	522	224	163	171	104	71	489	299	130	16	50
RTOR Reduction (vph)	0	29	0	0	54	0	0	45	0	0	0	45
Lane Group Flow (vph)	57	717	0	163	221	0	0	814	0	0	146	5
Turn Type	pm+pt	NA	NA	pm+pt	NA	NA	Split	NA	NA	Split	NA	Perm
Protected Phases	1	6		5	2		8	8		4		4
Permitted Phases	6			2								4
Actuated Green, G (s)	56.5	55.5	57.7	57.7	57.7	40.7	40.7	489	299	130	16	50
Effective Green, g (s)	56.5	55.5	57.7	57.7	57.7	40.7	40.7	489	299	130	16	50
Actuated g/C Ratio	0.38	0.38	0.39	0.39	0.39	0.28	0.28	0.28	0.11	0.11	0.11	0.11
Clearance Time (s)	5.0	6.0	6.0	5.0	6.0	5.3	5.3	6.0	5.3	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	473	1269		262	1303		920			191		170
v/s Ratio Prot	0.01	c0.21		c0.06	0.07		c0.24			c0.08		
v/s Ratio Perm	0.04			c0.18								0.00
v/c Ratio	0.12	0.57		0.62	0.17		0.88			0.76		0.03
Uniform Delay, d1	29.8	36.6		33.0	29.4		51.3			64.1		59.1
Progression Factor	1.00	1.00		1.00	1.00		1.00			1.00		1.00
Incremental Delay, d2	0.1	1.8		4.5	0.3		10.2			16.5		0.1
Delay (s)	29.9	38.4		37.5	29.7		61.5			80.6		59.1
Level of Service	C	D		D	C		E			F		E
Approach Delay (s)	37.8			32.6			61.5			75.2		
Approach LOS	D			C			E			E		
Intersection Summary												
HCM 2000 Control Delay	48.9											
HCM 2000 Volume to Capacity ratio	0.71											
Actual Cycle Length (s)	147.8											
Intersection Capacity Utilization	76.1%											
Analysis Period (min)	15											
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis
4: Cadiz & Riverfront

05/23/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	469	1409	0	0	484	156	238	318	77	58	0	433
Future Volume (vph)	469	1409	0	0	484	156	238	318	77	58	0	433
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	5.8		5.8	5.8		5.8		5.8	5.8		5.8
Lane Util. Factor	0.97	0.91		0.95	1.00		0.91		0.91	1.00		1.00
Flt Protected	1.00	1.00		1.00	1.00		0.85		0.98	1.00		0.85
Satd. Flow (prot)	0.95	1.00		1.00	1.00		0.98		0.98	0.95		1.00
Flt Permitted	0.42	1.00		1.00	1.00		0.98		0.98	0.27		1.00
Satd. Flow (perm)	1503	5085		3539	1583		4900		4900	1770		1583
Peak-hour factor, PHF	0.92	0.92		0.92	0.92		0.92		0.92	0.92		0.92
Adj. Flow (vph)	510	1532		0	526	170	259	346	84	63		471
RTOR Reduction (vph)	0	0		0	0	84	0	12	0	0		302
Lane Group Flow (vph)	510	1532		0	526	86	0	677	0	63		169
Turn Type	pm+pt	NA		NA	Perm	NA	Perm	NA	NA	D,Pm		Perm
Protected Phases	1	6		2			4					4
Permitted Phases	6			2			4			4		4
Actuated Green, G (s)	94.5	93.2		73.2	73.2		39.2		39.2	39.2		39.2
Effective Green, g (s)	94.5	93.2		73.2	73.2		39.2		39.2	39.2		39.2
Actuated g/C Ratio	0.66	0.65		0.51	0.51		0.27		0.27	0.27		0.27
Clearance Time (s)	4.5	5.8		5.8	5.8		5.8		5.8	5.8		5.8
Lane Grp Cap (vph)	1194	3291		1798	804		1333		136			430
v/s Ratio Prot	0.05	c0.30		0.15			0.05		0.14	0.13		0.11
v/s Ratio Perm	0.23			0.29	0.11		0.51		0.46	0.39		0.39
v/c Ratio	16.1	12.8		20.4	18.4		44.2		43.6	42.7		42.7
Uniform Delay, d1	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00
Progression Factor	1.1	0.5		0.4	0.3		1.4		1.4	10.9		2.7
Incremental Delay, d2	17.2	13.3		20.9	18.7		45.6		45.6	54.6		45.4
Delay (s)	B	B		C	B		D		D	D		D
Level of Service	B	B		C	B		D		D	D		D
Approach Delay (s)	14.3			20.3			45.6		46.5			
Approach LOS	B			C			D		D			
Intersection Summary												
HCM 2000 Control Delay	25.1											
HCM 2000 Volume to Capacity ratio	0.49											
Actual Cycle Length (s)	144.0											
Intersection Capacity Utilization	67.9%											
Analysis Period (min)	15											
c Critical Lane Group												

PM Peak Hour

HCM Signalized Intersection Capacity Analysis 7: Corinth & Riverfront

05/23/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	575	43	756	3	22	75	179	425	9	5	693	140
Future Volume (vph)	575	43	756	3	22	75	179	425	9	5	693	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.90	1.00	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1671	1770	1857	1770	1857	1770	3539	1583	1583
Flt Permitted	0.69	1.00	1.00	1.00	0.17	1.00	0.46	1.00	0.46	1.00	1.00	1.00
Satd. Flow (perm)	1294	1863	1583	1668	325	1857	859	3539	1583	1583	1583	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	625	47	822	3	24	82	195	462	10	5	753	152
RTOR Reduction (vph)	0	0	157	0	44	0	0	1	0	0	0	74
Lane Group Flow (vph)	625	47	665	0	65	0	195	471	0	5	753	78
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	NA	Perm	NA	Perm
Protected Phases	4	4	4	4	1	6	2	2	2	2	2	2
Permitted Phases	4	4	4	4	6	6	6	6	6	6	6	6
Actuated Green, G (s)	60.0	60.0	60.0	60.0	59.2	59.2	59.2	42.0	42.0	42.0	42.0	42.0
Effective Green, g (s)	60.0	60.0	60.0	60.0	59.2	59.2	42.0	42.0	42.0	42.0	42.0	42.0
Actuated g/C Ratio	0.46	0.46	0.46	0.46	0.46	0.46	0.33	0.33	0.33	0.33	0.33	0.33
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	600	865	735	774	285	850	279	1150	514	219	1150	514
v/s Ratio Prot	0.03				c0.06	0.25				0.21		
v/s Ratio Perm	c0.48	0.42	0.42	0.04	c0.25	0.01	0.01	0.05	0.05	0.01	0.05	0.05
v/c Ratio	1.04	0.05	0.90	0.08	0.68	0.55	0.02	0.65	0.15	0.02	0.65	0.15
Uniform Delay, d1	34.6	19.0	31.9	19.3	24.6	25.4	29.6	37.4	30.9	29.6	37.4	30.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	48.0	0.0	14.5	0.0	6.6	0.8	0.1	2.9	0.6	0.1	2.9	0.6
Delay (s)	82.6	19.0	46.5	19.3	31.2	26.2	29.7	40.3	31.6	29.7	40.3	31.6
Level of Service	F	B	D	B	C	C	C	D	D	C	D	C
Approach Delay (s)	60.7			19.3	27.7		38.8			38.8		
Approach LOS	E			B	C		D			D		
Intersection Summary												
HCM 2000 Control Delay	46.1 HCM 2000 Level of Service D											
HCM 2000 Volume to Capacity ratio	0.89											
Actuated Cycle Length (s)	129.2 Sum of lost time (s) 15.0											
Intersection Capacity Utilization	88.9% ICU Level of Service E											
Analysis Period (min)	15											
c Critical Lane Group												

PM Peak Hour

HCM 2010 TWSC

6: Riverfront & 35E South / 30 East Off-Ramp

05/23/2018

HCM 2010 TWSC

10: Cockrell & Lamar

05/23/2018

Intersection												
Int Delay, s/veh												3.1
Movement	EBL	EBT	WBT	WBR	SBL	SBR						
Lane Configurations	↑↑↑	↑↑↑	↑↑↑	↑↑↑	↑	↑						
Traffic Vol, veh/h	0	1647	1003	0	241	78						
Future Vol, veh/h	0	1647	1003	0	241	78						
Conflicting Peds, #/hr	0	0	0	0	0	0						
Sign Control	Free	Free	Free	Free	Stop	Stop						
RT Channelized	-	None	-	None	-	None						
Storage Length	-	-	-	-	0	0						
Vel in Median Storage, #	-	0	0	-	2	-						
Grade, %	-	0	0	-	0	-						
Peak Hour Factor	92	92	92	92	92	92						
Heavy Vehicles, %	2	2	2	2	2	2						
Mvmt Flow	0	1790	1090	0	262	85						
Major/Minor	Major1	Major2	Minor1	Minor2								
Conflicting Flow All	-	0	-	0	1806	545						
Stage 1	-	-	-	-	1090	-						
Stage 2	-	-	-	-	716	-						
Critical Hdwy	-	-	-	-	5.74	7.14						
Critical Hdwy Stg 1	-	-	-	-	6.64	-						
Critical Hdwy Stg 2	-	-	-	-	6.04	-						
Follow-up Hdwy	-	-	-	-	3.82	3.92						
Pd Cap-1 Maneuver	0	-	-	-	0	*.255 *691						
Stage 1	0	-	-	-	0	*709						
Stage 2	0	-	-	-	0	*405						
Platoon blocked, %	-	-	-	-	1	1						
Mov Cap-1 Maneuver	-	-	-	-	*.255	*691						
Mov Cap-2 Maneuver	-	-	-	-	*374	-						
Stage 1	-	-	-	-	*709	-						
Stage 2	-	-	-	-	*405	-						
Approach	EB	WB	SB									
HCM Control Delay, s	0	0	28.6									
HCM LOS			D									
Minor Lane/Major Mvmt	EBT	WBT	SBLn1	SBLn2								
Capacity (veh/h)	-	-	374	691								
HCM Lane V/C Ratio	-	-	0.7	0.123								
HCM Control Delay (s)	-	-	34.3	10.9								
HCM Lane LOS	-	-	D	B								
HCM 95th %tile Q(veh)	-	-	5.1	0.4								

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

Baseline

Synchro 9 Report
 Page 1

Intersection												
Int Delay, s/veh												9.6
Movement	EBL	EBT	WBT	WBR	SBL	SBR						
Lane Configurations	↑	↑	↑	↑	↑	↑						
Traffic Vol, veh/h	27	92	2	24	103	0	1	598	145	9	227	13
Future Vol, veh/h	27	92	2	24	103	0	1	598	145	9	227	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None	-	None	-	None	-	None
Storage Length	-	150	-	-	150	150	-	-	150	-	-	-
Vel in Median Storage, #	-	0	-	0	-	0	-	0	-	0	-	0
Grade, %	-	0	-	0	-	0	-	0	-	0	-	0
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	29	100	2	26	112	0	1	650	158	10	247	14
Major/Minor	Minor1	Minor2	Major1	Major2								
Conflicting Flow All	656	1083	130	924	1011	404	261	0	0	808	0	0
Stage 1	273	273	-	731	731	-	-	-	-	-	-	-
Stage 2	383	810	-	193	280	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pd Cap-1 Maneuver	351	216	896	224	238	596	1300	-	-	813	-	-
Stage 1	710	683	-	379	425	-	-	-	-	-	-	-
Stage 2	611	391	-	790	678	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	218	213	896	140	235	596	1300	-	-	813	-	-
Mov Cap-2 Maneuver	218	213	-	140	235	-	-	-	-	-	-	-
Stage 1	709	675	-	379	425	-	-	-	-	-	-	-
Stage 2	450	391	-	663	670	-	-	-	-	-	-	-
Approach	EB	WB	SB									
HCM Control Delay, s	44	51	0									
HCM LOS	E	F										
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR		
Capacity (veh/h)	1300	-	-	214	896	208	-	813	-	-		
HCM Lane V/C Ratio	0.001	-	-	0.604	0.002	0.664	-	0.012	-	-		
HCM Control Delay (s)	7.8	-	-	44.6	9	51	0	9.5	-	-		
HCM Lane LOS	A	-	-	E	A	F	A	A	-	-		
HCM 95th %tile Q(veh)	0	-	-	3.5	0	4	-	0	-	-		

Baseline

Synchro 9 Report
 Page 2

PM Peak Hour

HCM 2010 TWSC
11: Drive 1 & Riverfront

05/23/2018

Intersection									
Int Delay, s/veh	0								
Movement	EBT	EBR	WBL	WBT	NBL	NBR			
Lane Configurations	↑↑	↑↑	↑	↑↑	↑	↑			
Traffic Vol, veh/h	1385	0	0	405	0	0			
Future Vol, veh/h	1385	0	0	405	0	0			
Conflicting Peds, #/hr	0	0	0	0	0	0			
Sign Control	Free	Free	Free	Free	Stop	Stop			
RT Channelized	-	None	-	None	-	None			
Storage Length	-	-	150	-	0	0			
Veh in Median Storage, #	0	-	-	0	0	-			
Grade, %	0	-	-	0	0	-			
Peak Hour Factor	92	92	92	92	92	92			
Heavy Vehicles, %	2	2	2	2	2	2			
Mvmt Flow	1505	0	0	440	0	0			
Major/Minor	Major1	Major2	Minor1						
Conflicting Flow All	0	0	1505	0	1725	753			
Stage 1	-	-	-	-	1505	-			
Stage 2	-	-	-	-	220	-			
Critical Hdwy	-	-	4.14	-	6.84	6.94			
Critical Hdwy Stg 1	-	-	-	-	5.84	-			
Critical Hdwy Stg 2	-	-	-	-	5.84	-			
Follow-up Hdwy	-	-	2.22	-	3.52	3.32			
Pd Cap-1 Maneuver	-	-	441	-	80	352			
Stage 1	-	-	-	-	170	-			
Stage 2	-	-	-	-	795	-			
Platoon blocked, %	-	-	-	-	-	-			
Mov Cap-1 Maneuver	-	-	441	-	80	352			
Mov Cap-2 Maneuver	-	-	-	-	80	-			
Stage 1	-	-	-	-	170	-			
Stage 2	-	-	-	-	795	-			
Approach	EB	WB	NB						
HCM Control Delay, s	0	0	0						
HCM LOS			A						
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT			
Capacity (veh/h)	-	-	-	-	-	441			
HCM Lane V/C Ratio	-	-	-	-	-	-			
HCM Control Delay (\$)	0	0	-	-	0	-			
HCM Lane LOS	A	A	-	-	A	-			
HCM 95th %tile Q(veh)	-	-	-	-	-	0			

Baseline
Synchro 9 Report
Page 3

HCM 2010 TWSC
12: Drive 2 & Riverfront

05/23/2018

Intersection									
Int Delay, s/veh	0								
Movement	EBT	EBR	WBL	WBT	NBL	NBR			
Lane Configurations	↑↑	↑↑	↑	↑↑	↑	↑			
Traffic Vol, veh/h	1385	0	0	405	0	0			
Future Vol, veh/h	1385	0	0	405	0	0			
Conflicting Peds, #/hr	0	0	0	0	0	0			
Sign Control	Free	Free	Free	Free	Stop	Stop			
RT Channelized	-	None	-	None	-	None			
Storage Length	-	-	-	-	0	0			
Veh in Median Storage, #	0	-	-	0	0	-			
Grade, %	0	-	-	0	0	-			
Peak Hour Factor	92	92	92	92	92	92			
Heavy Vehicles, %	2	2	2	2	2	2			
Mvmt Flow	1505	0	0	440	0	0			
Major/Minor	Major1	Major2	Minor1						
Conflicting Flow All	0	0	-	-	-	753			
Stage 1	-	-	-	-	-	-			
Stage 2	-	-	-	-	-	-			
Critical Hdwy	-	-	-	-	-	6.94			
Critical Hdwy Stg 1	-	-	-	-	-	-			
Critical Hdwy Stg 2	-	-	-	-	-	-			
Follow-up Hdwy	-	-	-	-	-	3.32			
Pd Cap-1 Maneuver	-	-	0	-	0	352			
Stage 1	-	-	0	-	0	-			
Stage 2	-	-	0	-	0	-			
Platoon blocked, %	-	-	-	-	-	-			
Mov Cap-1 Maneuver	-	-	-	-	-	352			
Mov Cap-2 Maneuver	-	-	-	-	-	-			
Stage 1	-	-	-	-	-	-			
Stage 2	-	-	-	-	-	-			
Approach	EB	WB	NB						
HCM Control Delay, s	0	0	0						
HCM LOS			A						
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT				
Capacity (veh/h)	-	-	-	-	-	-			
HCM Lane V/C Ratio	-	-	-	-	-	-			
HCM Control Delay (\$)	0	0	-	-	-	-			
HCM Lane LOS	A	A	-	-	-	-			
HCM 95th %tile Q(veh)	-	-	-	-	-	-			

Baseline
Synchro 9 Report
Page 4

PM Peak Hour

HCM 2010 TWSC
13: Drive 3 & Riverfront

05/23/2018

Intersection									
Int. Delay, s/veh	0								
Movement	EBT	EBR	WBL	WBT	NBL	NBR			
Lane Configurations	↑↑		↑	↑↑		↑			
Traffic Vol. veh/h	1385	0	0	405	0	0			
Future Vol. veh/h	1385	0	0	405	0	0			
Conflicting Peds. #/hr	0	0	0	0	0	0			
Sign Control	Free	Free	Free	Free	Stop	Stop			
RT Channelized	-	None	-	None	-	None			
Storage Length	-	-	150	-	0	0			
Veh in Median Storage. #	0	-	-	0	0	-			
Grade, %	0	-	-	0	0	-			
Peak Hour Factor	92	92	92	92	92	92			
Heavy Vehicles, %	2	2	2	2	2	2			
Mvmt Flow	1505	0	0	440	0	0			
Major/Minor	Major1	Major2	Minor1						
Conflicting Flow All	0	0	1505	0	1725	753			
Stage 1	-	-	1505	-	-	-			
Stage 2	-	-	-	-	220	-			
Critical Hdwy	-	4.14	-	6.84	6.94	-			
Critical Hdwy Stg 1	-	-	-	5.84	-	-			
Critical Hdwy Stg 2	-	-	-	5.84	-	-			
Follow-up Hdwy	-	2.22	-	3.52	3.32	-			
Pd. Cap-1 Maneuver	-	441	-	80	352	-			
Stage 1	-	-	-	170	-	-			
Stage 2	-	-	-	795	-	-			
Platoon blocked, %	-	-	-	-	-	-			
Mov Cap-1 Maneuver	-	441	-	80	352	-			
Mov Cap-2 Maneuver	-	-	-	80	-	-			
Stage 1	-	-	-	170	-	-			
Stage 2	-	-	-	795	-	-			
Approach	EB	WB	NB						
HCM Control Delay, s	0	0	0						
HCM LOS			A						
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT			
Capacity (veh/h)	-	-	-	-	-	441			
HCM Lane V/C Ratio	-	-	-	-	-	-			
HCM Control Delay (s)	0	0	-	-	0	-			
HCM Lane LOS	A	A	-	-	A	-			
HCM 95th %tile Q(veh)	-	-	-	-	-	0			

Saturday Peak Hour

HCM Signalized Intersection Capacity Analysis
2: Cadiz & Lamar

05/23/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
Traffic Volume (vph)	47	152	109	125	140	104	74	250	142	167	14	44	
Future Volume (vph)	47	152	109	125	140	104	74	250	142	167	14	44	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)	5.0	6.0	5.0	6.0	6.0	5.0	5.3				4.5	4.5	
Lane Util. Factor	1.00	0.95	1.00	0.95	1.00	0.95	1.00	0.95	1.00	1.00	1.00	0.85	
Flt Protected	0.95	1.00	0.95	1.00	0.95	1.00	0.95	1.00	0.95	1.00	0.96	1.00	
Satd. Flow (prot)	1770	3318	1770	3313	1770	3313	3351			1780	1583		
Flt Permitted	0.59	1.00	0.50	1.00	0.99	1.00	0.99			0.96	1.00		
Satd. Flow (perm)	1096	3318	939	3313			3351			1780	1583		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	51	165	118	136	152	113	80	272	154	182	15	48	
RTOR Reduction (vph)	0	68	0	0	63	0	0	36	0	0	0	41	
Lane Group Flow (vph)	51	215	0	136	202	0	0	470	0	0	197	7	
Turn Type	pm+pt	NA	NA	pm+pt	NA	Split	NA	Split	NA	Split	NA	Perm	
Protected Phases	1	6		5	2		8	8		4		4	
Permitted Phases	6			2								4	
Actuated Green, G (s)	56.4	55.4	57.1	57.1	57.1	57.1	24.0	24.0	18.1	18.1	18.1	18.1	
Effective Green, g (s)	56.4	55.4	57.1	57.1	57.1	57.1	24.0	24.0	18.1	18.1	18.1	18.1	
Actuated g/C Ratio	0.43	0.43	0.44	0.44	0.44	0.44	0.18	0.18	0.14	0.14	0.14	0.14	
Clearance Time (s)	5.0	6.0	5.0	6.0	6.0	5.3	3.0	3.0	4.5	4.5	3.0	3.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0							
Lane Grp Cap (vph)	527	1410	488	1451			617		247		219		
v/s Ratio Prot	0.01	c0.06		c0.03	0.06		c0.14		c0.11				
v/s Ratio Perm	0.03			c0.10									
v/c Ratio	0.10	0.15	0.28	0.14	0.14	0.28	0.76	0.76	0.80	0.80	0.03	0.00	
Uniform Delay, d1	22.0	23.0	22.4	21.9	21.9	21.9	50.4	50.4	54.3	54.3	48.5		
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.1	0.2	0.3	0.2	0.2	0.2	5.5	5.5	16.2	16.2	0.1	0.1	
Delay (s)	22.1	23.3	22.7	22.1	22.1	22.1	56.0	56.0	70.6	70.6	48.6		
Level of Service	C	C	C	C	C	C	E	E	E	E	D	D	
Approach Delay (s)	23.1			22.3			56.0		66.2				
Approach LOS	C			C			E		E		E	E	
Intersection Summary													
HCM 2000 Control Delay	41.2											HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.46												
Actual Cycle Length (s)	130.3											Sum of lost time (s)	20.8
Intersection Capacity Utilization	57.9%											ICU Level of Service	B
Analysis Period (min)	15												
c Critical Lane Group													

HCM Signalized Intersection Capacity Analysis
4: Cadiz & Riverfront

05/23/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	
Traffic Volume (vph)	141	534	0	498	159	209	277	77	77	49	0	328	
Future Volume (vph)	141	534	0	498	159	209	277	77	77	49	0	328	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)	4.5	5.8		5.8	5.8		5.8			5.8		5.8	
Lane Util. Factor	0.97	0.91		0.95	1.00		0.91			1.00		1.00	
Flt Protected	1.00	1.00		1.00	1.00		0.85			1.00		0.85	
Satd. Flow (prot)	0.95	1.00		1.00	1.00		0.98			0.95		1.00	
Flt Permitted	0.41	1.00		1.00	1.00		0.98			0.31		1.00	
Satd. Flow (perm)	1473	5085		3539	1583		4890			1770		1583	
Peak-hour factor, PHF	0.92	0.92		0.92	0.92		0.92			0.92		0.92	
Adj. Flow (vph)	153	580		541	173		227			301		357	
RTOR Reduction (vph)	0	0		0	0		85			0		0	
Lane Group Flow (vph)	153	580		541	88		0			597		0	
Turn Type	pm+pt	NA		NA	Perm		NA			D,Pm		Perm	
Protected Phases	1	6		2			4					4	
Permitted Phases	6			2			4					4	
Actuated Green, G (s)	94.5	93.2		73.2	73.2		39.2			39.2		39.2	
Effective Green, g (s)	94.5	93.2		73.2	73.2		39.2			39.2		39.2	
Actuated g/C Ratio	0.66	0.65		0.51	0.51		0.27			0.27		0.27	
Clearance Time (s)	4.5	5.8		5.8	5.8		5.8			5.8		5.8	
Lane Grp Cap (vph)	1177	3291		1798	804		1331			159		430	
v/s Ratio Prot	0.01	c0.11		c0.15			0.12			0.06		0.06	
v/s Ratio Perm	0.07			0.30	0.11		0.45			0.33		0.23	
v/c Ratio	0.13	0.18		0.30	0.11		0.45			0.33		0.23	
Uniform Delay, d1	12.5	10.1		20.5	18.4		43.4			41.9		40.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00			1.00		1.00	
Incremental Delay, d2	0.2	0.1		0.4	0.3		1.1			5.6		1.2	
Delay (s)	12.7	10.2		21.0	18.7		44.5			47.5		41.9	
Level of Service	B	B		C	B		D			D		D	
Approach Delay (s)	10.7			20.4			44.5			42.6			
Approach LOS	B			C			D			D		D	
Intersection Summary													
HCM 2000 Control Delay	27.2											HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.33												
Actual Cycle Length (s)	144.0											Sum of lost time (s)	16.1
Intersection Capacity Utilization	60.2%											ICU Level of Service	B
Analysis Period (min)	15												
c Critical Lane Group													

Saturday Peak Hour

HCM Signalized Intersection Capacity Analysis 7: Corinth & Riverfront

05/23/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	210	4	266	4	4	12	173	238	10	9	307	130
Future Volume (vph)	210	4	266	4	4	12	173	238	10	9	307	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00
Flt Protected	0.95	1.00	1.00	0.99	0.99	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1691	1691	1770	1851	1770	1851	1770	3539	1583
Flt Permitted	0.74	1.00	1.00	0.97	0.97	0.50	1.00	0.50	1.00	0.59	1.00	1.00
Satd. Flow (perm)	1385	1863	1583	1659	1659	931	1851	931	1851	1105	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	228	4	289	4	4	13	188	259	11	10	334	141
RTOR Reduction (vph)	0	0	223	0	10	0	0	1	0	0	0	68
Lane Group Flow (vph)	228	4	66	0	11	0	188	269	0	10	334	73
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	NA	Perm	NA	Perm
Protected Phases							1	6				2
Permitted Phases	4		4	4			6		2			2
Actuated Green, G (s)	22.2	22.2	22.2	22.2	22.2	65.5	65.5	65.5	50.6	50.6	50.6	50.6
Effective Green, g (s)	22.2	22.2	22.2	22.2	22.2	65.5	65.5	65.5	50.6	50.6	50.6	50.6
Actuated g/C Ratio	0.23	0.23	0.23	0.23	0.23	0.67	0.67	0.67	0.52	0.52	0.52	0.52
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	314	423	359	376	709	1240	572	1832	819			
v/s Ratio Prot		0.00			c0.03	0.15						0.09
v/s Ratio Perm	c0.16		0.04	0.01	c0.15		0.01					0.05
v/c Ratio	0.73	0.01	0.18	0.03	0.27	0.22	0.02	0.18	0.09	0.02	0.18	0.09
Uniform Delay, d1	34.9	29.2	30.4	29.4	6.1	6.2	11.5	12.5	11.9	11.5	12.5	11.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	8.1	0.0	0.2	0.0	0.2	0.1	0.1	0.2	0.2	0.1	0.2	0.2
Delay (s)	43.0	29.2	30.7	29.4	6.3	6.3	11.5	12.8	12.1	11.5	12.8	12.1
Level of Service	D	C	C	C	A	A	B	B	B	B	B	B
Approach Delay (s)		36.1		29.4		6.3						12.5
Approach LOS		D		C		A						B
Intersection Summary												
HCM 2000 Control Delay	19.1 HCM 2000 Level of Service B											
HCM 2000 Volume to Capacity ratio	0.40											
Actuated Cycle Length (s)	97.7 Sum of lost time (s) 15.0											
Intersection Capacity Utilization	60.8% ICU Level of Service B											
Analysis Period (min)	15											
c Critical Lane Group												

Saturday Peak Hour

HCM 2010 Signalized Intersection Capacity Analysis
1: Cadiz & Griffin

05/23/2018

2nd-Term O (O2), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term O (O3), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of O Factor (f_B%), s	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
%ile Back of O (50%), veh/h	0.0	0.3	0.0	1.2	0.0	0.2	0.0	0.0	0.0
%ile Storage Ratio (RO%)	0.00	0.02	0.00	0.13	0.00	0.01	0.00	0.00	0.00
Initial Q (Cb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Oe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat O (Os), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0	0
Initial O Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data									
Assigned Mvmt	0	12	0	14	0	16	0	0	0
Lane Assignment			T+R			T+R			
Lanes in Grp	0	0	0	1	0	1	0	0	0
Grp Vol (V), veh/h	0	0	0	216	0	29	0	0	0
Grp Sat Flow (S), veh/h	0	0	0	1583	0	1726	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	5.7	0.0	0.4	0.0	0.0	0.0
Cycle O Clear Time (g_c), s	0.0	0.0	0.0	5.7	0.0	0.4	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.45	0.00	0.00	0.00
Lane Grp Cap (C), veh/h	0	0	0	350	0	921	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.62	0.00	0.03	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	811	0	921	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	16.3	0.0	5.1	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0
Initial O Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	18.1	0.0	5.2	0.0	0.0	0.0
1st-Term O (O1), veh/h	0.0	0.0	0.0	2.5	0.0	0.2	0.0	0.0	0.0
2nd-Term O (O2), veh/h	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
3rd-Term O (O3), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of O Factor (f_B%), s	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
%ile Back of O (50%), veh/h	0.0	0.0	0.0	2.6	0.0	0.2	0.0	0.0	0.0
%ile Storage Ratio (RO%)	0.00	0.00	0.00	0.29	0.00	0.01	0.00	0.00	0.00
Initial Q (Cb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Oe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat O (Os), veh	0	0	0	0	0	0	0	0	0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0	0
Initial O Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary									
HCM 2010 Ctrl Delay	12.2								
HCM 2010 LOS	B								

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Baseline

Synchro 9 Report
Page 3

HCM 2010 Signalized Intersection Capacity Analysis
3: Cadiz & Hotel

05/23/2018

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	9	71	110	780	335	33
Future Volume (veh/h)	9	71	110	780	335	33
Number	3	18	1	6	2	12
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	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
Adj Sat Flow, veh/h	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	10	77	120	848	364	36
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Opposing Right Turn Influence	Yes	Yes	Yes	Yes	Yes	Yes
Cap, veh/h	151	134	789	2767	2203	217
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.08	0.04	0.78	0.68	0.68
Ln Grp Delay, s/veh	34.3	39.5	3.1	2.8	5.1	5.1
Ln Grp LOS	C	D	A	A	A	A
Approach Vol, veh/h	87			968	400	
Approach Delay, s/veh	38.9			2.9	5.1	
Approach LOS	D			A	A	
Timer						
Assigned Phs	1	2	3	4	5	6
Case No	1	2	8			8
Phs Duration (G+Y+Rc), s	1.2	8.0	9.0	4.0		4.0
Change Period (Y+Rc), s	8.5	60.0	12.5	68.5		68.5
Max Green (Gmax), s	5.0	*5.2	5.6	*5.2		*5.2
Max Allow Headway (MAH), s	20.0	*55	74.4	*55		*55
Max O Clear (g_c+I1), s	3.8	5.2	4.0	5.2		5.2
Green Ext Time (g_e), s	3.5	5.3	5.8	7.6		7.6
Prob of Phs Cal (p_c)	0.93	1.00	0.86	1.00		1.00
Prob of Max Out (p_x)	0.00	0.00	0.00	0.00		0.00
Left-Turn Movement Data						
Assigned Mvmt	1	5	3			
Mvmt Sat Flow, veh/h	1774	0	1774			
Through Movement Data						
Assigned Mvmt		2	8			6
Mvmt Sat Flow, veh/h		3349	0			3632
Right-Turn Movement Data						
Assigned Mvmt			12	18		16
Mvmt Sat Flow, veh/h			320	1583		0
Left Lane Group Data						
Assigned Mvmt	1	5	3	0	0	0
Lane Assignment		(P/Pm)				

Baseline

Synchro 9 Report
Page 4

Saturday Peak Hour

HCM 2010 Signalized Intersection Capacity Analysis 8: Corinth & Cockrell

05/23/2018

2nd-Term O (O2), veh/ln	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
3rd-Term O (O3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%), veh/ln	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	0.00	0.00	0.00	4.9	0.00	0.00	0.00	0.00	0.00
%ile Storage Ratio (RO%), veh/ln	0.00	0.00	0.00	0.78	0.00	0.00	0.00	0.00	0.00
Initial Q (Cb), veh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Final (Residual) Q (Oe), veh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sat Delay (ds), s/veh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sat O (Os), veh/h	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sat Cap (cs), veh/h	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q Clear Time (tc), h	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Right Lane Group Data									
Assigned Mvmt	0	12	0	14	0	16	0	18	0
Lane Assignment		R	R	R	R	R	R	T+R	
Lanes in Grp	0	1	0	1	0	1	0	1	0
Grp Vol (V), veh/h	0	10	0	32	0	117	0	465	0
Grp Sat Flow (S), veh/h/ln	0	1583	0	1583	0	1583	0	1672	0
Q Serve Time (q_s), s	0.00	0.2	0.00	0.6	0.00	2.5	0.00	11.4	0.00
Cycle O Clear Time (q_c), s	0.00	0.2	0.00	0.6	0.00	2.5	0.00	11.4	0.00
Prot RT Sat Flow (s_R), veh/h/ln	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Prot RT Eff Green (g_R), s	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.08	0.00
Lane Grp Cap (C), veh/h	0	602	0	649	0	602	0	686	0
V/C Ratio (X)	0.00	0.02	0.00	0.05	0.00	0.19	0.00	0.68	0.00
Avail Cap (c_a), veh/h	0	602	0	649	0	602	0	686	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	0.00	9.7	0.00	8.9	0.00	10.4	0.00	12.1	0.00
Incr Delay (d2), s/veh	0.00	0.1	0.00	0.1	0.00	0.7	0.00	5.3	0.00
Initial O Delay (d3), s/veh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Control Delay (d), s/veh	0.00	9.7	0.00	9.0	0.00	11.1	0.00	17.4	0.00
1st-Term O (O1), veh/ln	0.00	0.1	0.00	0.3	0.00	1.1	0.00	5.2	0.00
2nd-Term O (O2), veh/ln	0.00	0.00	0.00	0.00	0.00	0.1	0.00	1.0	0.00
3rd-Term O (O3), veh/ln	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
%ile Back of Q Factor (f_B%), veh/ln	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.00	0.1	0.00	0.3	0.00	1.2	0.00	6.2	0.00
%ile Storage Ratio (RO%), veh/ln	0.00	0.02	0.00	0.07	0.00	0.12	0.00	0.08	0.00
Initial Q (Cb), veh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Final (Residual) Q (Oe), veh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sat Delay (ds), s/veh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sat O (Os), veh/h	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sat Cap (cs), veh/h	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q Clear Time (tc), h	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Intersection Summary									
HCM 2010 Ctrl Delay	14.6								
HCM 2010 LOS	B								

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Baseline

HCM 2010 Signalized Intersection Capacity Analysis 9: Corinth & Lamar

05/23/2018

EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement											
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	65	224	204	32	276	49	167	114	35	54	153
Future Volume (veh/h)	65	224	204	32	276	49	167	114	35	54	153
Number	7	4	14	3	8	18	1	6	16	5	2
Initial Q, veh	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	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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	71	243	222	35	300	53	182	124	38	59	166
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	2
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap, veh/h	314	427	374	247	650	114	640	1583	450	630	1273
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
Prop Arrive On Green	0.04	0.24	0.24	0.02	0.22	0.22	0.09	0.40	0.40	0.05	0.36
Ln Grp Delay, s/veh	20.4	24.5	24.9	21.2	24.6	24.7	11.9	12.9	13.1	12.6	15.4
Ln Grp LOS	C	C	C	C	C	C	B	B	B	B	B
Approach Vol, veh/h	536			388			344			296	
Approach Delay, s/veh	24.1			24.3			12.4			14.7	
Approach LOS	C			C			B			B	
Timer											
Assigned Phs	1	2	3	4	5	6	7	8			
Case No	1.1	3.0	1.1	4.0	1.1	4.0	1.1	4.0			
Phs Duration (G+Y+Rc), s	11.4	30.0	6.5	21.6	8.4	32.9	8.1	20.0			
Change Period (Y+Rc), s	5.0	*5	5.0	*5	5.0	*5	5.0	*5			
Max Green (Gmax), s	7.0	*25	7.0	*25	7.0	*25	7.0	*25			
Max Allow Headway (MAH), s	3.8	5.1	3.8	5.4	3.8	5.1	3.8	5.4			
Max O Clear (g_c+I1), s	6.4	4.2	3.1	10.7	3.4	3.5	4.1	8.1			
Green Ext Time (g_ext), s	0.0	2.2	0.0	4.4	0.0	2.2	0.0	4.7			
Prob of Phs Cal (p_c)	1.00	1.00	0.49	1.00	1.00	1.00	0.75	1.00			
Prob of Max Out (p_x)	1.00	0.00	0.83	0.27	1.00	0.00	1.00	0.18			
Left-Turn Movement Data											
Assigned Mvmt	1										
Mvmt Sat Flow, veh/h	1774										
Through Movement Data											
Assigned Mvmt	2										
Mvmt Sat Flow, veh/h	3539										
Right-Turn Movement Data											
Assigned Mvmt	12										
Mvmt Sat Flow, veh/h	1583										
Left Lane Group Data											
Assigned Mvmt	1										
Lane Assignment	(Pr/Pm)	(Pr/Pm)	(Pr/Pm)	(Pr/Pm)	(Pr/Pm)	(Pr/Pm)	(Pr/Pm)	(Pr/Pm)	(Pr/Pm)	(Pr/Pm)	(Pr/Pm)

Baseline

Saturday Peak Hour

HCM 2010 TWSC

6: Riverfront & 35E South / 30 East Off-Ramp

05/23/2018

Intersection									
Int Delay, s/veh 2.1									
Movement	EBL	EBT	WBT	WBR	SBL	SBR			
Lane Configurations	↑↑↑	↑↑↑	↑↑↑	↑↑↑	↑	↑			
Traffic Vol, veh/h	0	500	866	0	178	111			
Future Vol, veh/h	0	500	866	0	178	111			
Conflicting Peds, #/hr	0	0	0	0	0	0			
Sign Control	Free	Free	Free	Free	Stop	Stop			
RT Channelized	-	None	-	None	-	None			
Storage Length	-	-	-	-	0	0			
Yeh in Median Storage, #	-	0	0	-	2	-			
Grade, %	-	0	0	-	0	-			
Peak Hour Factor	92	92	92	92	92	92			
Heavy Vehicles, %	2	2	2	2	2	2			
Mvmt Flow	0	543	941	0	193	121			

Major/Minor	Major1	Minor2		
Conflicting Flow All	0	0	1158	471
Stage 1	-	-	941	-
Stage 2	-	-	217	-
Critical Hdwy	-	-	5.74	7.14
Critical Hdwy Stg 1	-	-	6.64	-
Critical Hdwy Stg 2	-	-	6.04	-
Follow-up Hdwy	-	-	3.82	3.92
Pd Cap-1 Maneuver	0	-	*601	*709
Stage 1	0	-	0	*728
Stage 2	0	-	0	*733
Platoon blocked, %	-	-	1	1
Mov Cap-1 Maneuver	-	-	*601	*709
Mov Cap-2 Maneuver	-	-	*652	-
Stage 1	-	-	*728	-
Stage 2	-	-	*733	-

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

Minor Lane/Major Mvmt	EBT	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	652	709
HCM Lane V/C Ratio	-	-	0.297	0.17
HCM Control Delay (s)	-	-	12.8	11.1
HCM Lane LOS	-	-	B	B
HCM 95th %tile Q(veh)	-	-	1.2	0.6

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

HCM 2010 TWSC

10: Cockrell & Lamar

05/23/2018

Intersection									
Int Delay, s/veh 5.4									
Movement	EBL	EBT	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	18	100	10	17	93	3	9	172	13
Future Vol, veh/h	18	100	10	17	93	3	9	172	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None	-	None	-
Storage Length	-	150	-	-	150	150	-	-	150
Yeh in Median Storage, #	-	0	-	0	-	0	-	0	-
Grade, %	-	0	-	0	-	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	20	109	11	18	101	3	10	187	14

Major/Minor	Minor2	Minor1	Major1	Major2
Conflicting Flow All	407	464	132	380
Stage 1	243	243	-	214
Stage 2	164	221	-	166
Critical Hdwy	7.54	6.54	6.94	7.54
Critical Hdwy Stg 1	6.54	5.54	-	6.54
Critical Hdwy Stg 2	6.54	5.54	-	6.54
Follow-up Hdwy	3.52	4.02	3.32	4.02
Pd Cap-1 Maneuver	529	494	893	552
Stage 1	739	703	-	768
Stage 2	822	719	-	820
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	439	489	893	449
Mov Cap-2 Maneuver	439	489	-	449
Stage 1	733	702	-	762
Stage 2	698	713	-	684

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.7	14.9	0.4	0.1
HCM LOS	B	B	B	B

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1298	-	481	893	474	935	1368	-	-
HCM Lane V/C Ratio	0.008	-	0.267	0.012	0.252	0.003	0.002	-	-
HCM Control Delay (s)	7.8	-	15.2	9.1	15.1	8.9	7.6	-	-
HCM Lane LOS	A	-	C	A	C	A	A	-	-
HCM 95th %tile Q(veh)	0	-	1.1	0	1	0	0	-	-

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

Saturday Peak Hour

HCM 2010 TWSC
11: Drive 1 & Riverfront

05/23/2018

Intersection										
Int Delay, s/veh	0									
Movement	EBT	EBR	WBL	WBT	NBL	NBR				
Lane Configurations	↑↑	↑↑	↑	↑↑	↑	↑				
Traffic Vol, veh/h	546	0	0	738	0	0				
Future Vol, veh/h	546	0	0	738	0	0				
Conflicting Peds, #/hr	0	0	0	0	0	0				
Sign Control	Free	Free	Free	Free	Stop	Stop				
RT Channelized	-	None	-	None	-	None				
Storage Length	-	-	150	-	-	0				
Veh in Median Storage, #	0	-	-	0	0	-				
Grade, %	0	-	-	0	0	-				
Peak Hour Factor	92	92	92	92	92	92				
Heavy Vehicles, %	2	2	2	2	2	2				
Mvmt Flow	593	0	0	802	0	0				
Major/Minor	Major1	Major2	Minor1							
Conflicting Flow All	0	0	593	0	994	297				
Stage 1	-	-	-	-	593	-				
Stage 2	-	-	-	-	401	-				
Critical Hdwy	-	-	4.14	-	6.84	6.94				
Critical Hdwy Stg 1	-	-	-	-	5.84	-				
Critical Hdwy Stg 2	-	-	-	-	5.84	-				
Follow-up Hdwy	-	-	2.22	-	3.52	3.32				
Pd Cap-1 Maneuver	-	-	979	-	242	699				
Stage 1	-	-	-	-	515	-				
Stage 2	-	-	-	-	645	-				
Platoon blocked, %	-	-	-	-	-	-				
Mov Cap-1 Maneuver	-	-	979	-	242	699				
Mov Cap-2 Maneuver	-	-	-	-	242	-				
Stage 1	-	-	-	-	515	-				
Stage 2	-	-	-	-	645	-				
Approach	EB	WB	NB							
HCM Control Delay, s	0	0	0							
HCM LOS							A			
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT				
Capacity (veh/h)	-	-	-	-	-	979				
HCM Lane V/C Ratio	-	-	-	-	-	-				
HCM Control Delay (\$)	0	0	-	-	0	-				
HCM Lane LOS	A	A	-	-	A	-				
HCM 95th %tile Q(veh)	-	-	-	-	-	0				

HCM 2010 TWSC
12: Drive 2 & Riverfront

05/23/2018

Intersection										
Int Delay, s/veh	0									
Movement	EBT	EBR	WBL	WBT	NBL	NBR				
Lane Configurations	↑↑	↑↑	↑	↑↑	↑	↑				
Traffic Vol, veh/h	546	0	0	738	0	0				
Future Vol, veh/h	546	0	0	738	0	0				
Conflicting Peds, #/hr	0	0	0	0	0	0				
Sign Control	Free	Free	Free	Free	Stop	Stop				
RT Channelized	-	None	-	None	-	None				
Storage Length	-	-	-	-	-	0				
Veh in Median Storage, #	0	-	-	0	0	-				
Grade, %	0	-	-	0	0	-				
Peak Hour Factor	92	92	92	92	92	92				
Heavy Vehicles, %	2	2	2	2	2	2				
Mvmt Flow	593	0	0	802	0	0				
Major/Minor	Major1	Major2	Minor1							
Conflicting Flow All	0	0	-	-	-	297				
Stage 1	-	-	-	-	-	-				
Stage 2	-	-	-	-	-	-				
Critical Hdwy	-	-	-	-	-	6.94				
Critical Hdwy Stg 1	-	-	-	-	-	-				
Critical Hdwy Stg 2	-	-	-	-	-	-				
Follow-up Hdwy	-	-	-	-	-	3.32				
Pd Cap-1 Maneuver	-	-	0	-	0	699				
Stage 1	-	-	-	-	0	-				
Stage 2	-	-	-	-	0	-				
Platoon blocked, %	-	-	-	-	-	-				
Mov Cap-1 Maneuver	-	-	-	-	-	699				
Mov Cap-2 Maneuver	-	-	-	-	-	-				
Stage 1	-	-	-	-	-	-				
Stage 2	-	-	-	-	-	-				
Approach	EB	WB	NB							
HCM Control Delay, s	0	0	0							
HCM LOS							A			
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT					
Capacity (veh/h)	-	-	-	-	-	-				
HCM Lane V/C Ratio	-	-	-	-	-	-				
HCM Control Delay (\$)	0	0	-	-	-	-				
HCM Lane LOS	A	A	-	-	A	-				
HCM 95th %tile Q(veh)	-	-	-	-	-	-				

Saturday Peak Hour

HCM 2010 TWSC
13: Drive 3 & Riverfront

05/23/2018

Intersection									
Int. Delay, s/veh	0								
Movement	EBT	EBR	WBL	WBT	NBL	NBR			
Lane Configurations	↑↑		↑	↑↑	↑	↑			
Traffic Vol, veh/h	546	0	0	738	0	0			
Future Vol, veh/h	546	0	0	738	0	0			
Conflicting Peds, #/hr	0	0	0	0	0	0			
Sign Control	Free	Free	Free	Free	Stop	Stop			
RT Channelized	-	None	-	None	-	None			
Storage Length	-	-	150	-	0	0			
Veh in Median Storage, #	0	-	-	0	0	-			
Grade, %	0	-	-	0	0	-			
Peak Hour Factor	92	92	92	92	92	92			
Heavy Vehicles, %	2	2	2	2	2	2			
Mvmt Flow	593	0	0	802	0	0			
Major/Minor	Major1	Major2	Minor1						
Conflicting Flow All	0	0	593	0	994	297			
Stage 1	-	-	-	-	593	-			
Stage 2	-	-	-	-	401	-			
Critical Hdwy	-	-	4.14	-	6.84	6.94			
Critical Hdwy Stg 1	-	-	-	-	5.84	-			
Critical Hdwy Stg 2	-	-	-	-	5.84	-			
Follow-up Hdwy	-	-	2.22	-	3.52	3.32			
Pd. Cap-1 Maneuver	-	-	979	-	242	699			
Stage 1	-	-	-	-	515	-			
Stage 2	-	-	-	-	645	-			
Platoon blocked, %	-	-	-	-	-	-			
Mov Cap-1 Maneuver	-	-	979	-	242	699			
Mov Cap-2 Maneuver	-	-	-	-	242	-			
Stage 1	-	-	-	-	515	-			
Stage 2	-	-	-	-	645	-			
Approach	EB	WB	WB	NB					
HCM Control Delay, s	0	0	0	0					
HCM LOS				A					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT			
Capacity (veh/h)	-	-	-	-	-	979			
HCM Lane V/C Ratio	-	-	-	-	-	-			
HCM Control Delay (s)	0	0	-	-	0	-			
HCM Lane LOS	A	A	-	-	A	-			
HCM 95th %tile Q(veh)	-	-	-	-	-	0			



Synchro™ Output - 2025 Background Plus Site Traffic

PM Peak Hour

HCM 2010 Signalized Intersection Capacity Analysis
1: Cadiz & Griffin

05/23/2018

2nd-Term O (O2), veh/h	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0
3rd-Term O (O3), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of O Factor (f_B%), s	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
%ile Back of O (50%), veh/h	0.0	3.5	0.0	2.1	0.0	0.3	0.0	0.0	0.0
%ile Storage Ratio (RO%), s	0.00	0.25	0.00	0.23	0.00	0.02	0.00	0.00	0.00
Initial Q (Cb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Oe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat O (Os), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial O Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data									
Assigned Mvmt	0	12	0	14	0	16	0	0	0
Lane Assignment		T+R		T+R		T+R			
Lanes in Grp	0	0	0	1	0	1	0	0	0
Grp Vol (V), veh/h	0	0	0	404	0	31	0	0	0
Grp Sat Flow (S), veh/h	0	0	0	1583	0	1781	0	0	0
Q Serve Time (q_s), s	0.0	0.0	0.0	16.2	0.0	0.7	0.0	0.0	0.0
Cycle O Clear Time (g_c), s	0.0	0.0	0.0	16.2	0.0	0.7	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.26	0.00	0.00	0.00
Lane Grp Cap (C), veh/h	0	0	0	587	0	850	0	0	0
W/C Ratio (X)	0.00	0.00	0.00	0.69	0.00	0.04	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	587	0	850	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	19.9	0.0	10.4	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	6.5	0.0	0.1	0.0	0.0	0.0
Initial O Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	26.4	0.0	10.5	0.0	0.0	0.0
1st-Term O (O1), veh/h	0.0	0.0	0.0	7.1	0.0	0.3	0.0	0.0	0.0
2nd-Term O (O2), veh/h	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0
3rd-Term O (O3), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of O Factor (f_B%), s	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
%ile Back of O (50%), veh/h	0.0	0.0	0.0	8.1	0.0	0.4	0.0	0.0	0.0
%ile Storage Ratio (RO%), s	0.00	0.00	0.00	0.89	0.00	0.02	0.00	0.00	0.00
Initial Q (Cb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Oe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat O (Os), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial O Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary									
HCM 2010 Ctrl Delay	16.3								
HCM 2010 LOS	B								

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Baseline

Synchro 9 Report
Page 3

HCM 2010 Signalized Intersection Capacity Analysis
3: Cadiz & Hotel

05/23/2018

	↖	↗	↖	↗	↖	↗	↖	↗	↖	↗
Movement	EBL	EBR	NBL	NBT	SBT	SBR				
Lane Configurations	↖	↗	↖	↗	↖	↗				
Traffic Volume (veh/h)	6	86	50	544	258	17				
Future Volume (veh/h)	6	86	50	544	258	17				
Number	3	18	1	6	2	12				
Initial Q, veh	0	0	0	0	0	0				
Ped-Bike Adj (A_pbT)	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				
Adj Sat Flow, veh/h	1863	1863	1863	1863	1863	1900				
Adj Flow Rate, veh/h	7	93	54	591	280	18				
Adj No. of Lanes	1	1	1	2	2	0				
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				
Percent Heavy Veh, %	2	2	2	2	2	2				
Opposing Right Turn Influence	Yes	Yes	Yes	Yes	Yes	Yes				
Cap, veh/h	158	141	845	2744	2319	148				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				
Prop Arrive On Green	0.09	0.09	0.03	0.78	0.69	0.69				
Ln Grp Delay, s/veh	33.3	40.3	3.0	2.6	4.5	4.5				
Ln Grp LOS	C	D	A	A	A	A				
Approach Vol, veh/h	100			645	298					
Approach Delay, s/veh	39.8			2.6	4.5					
Approach LOS	D			A	A					
Timer										
Assigned Phs	1	2	3	4	5	6	7	8		
Case No	1	2	8							
Phs Duration (G+Y+Rc), s	1.2	8.0	9.0							
Change Period (Y+Rc), s	7.1	60.0	12.7							
Max Green (Gmax), s	5.0	*5.2	5.6							
Max Allow Headway (MAH), s	20.0	*55	74.4							
Max O Clear (g_c+1), s	3.8	5.2	4.0							
Green Ext Time (g_e), s	2.7	4.3	6.5							
Prob of Phs Cal (p_c)	0.1	7.1	0.3							
Prob of Max Out (p_x)	0.70	1.00	0.89							
Left-Turn Movement Data										
Assigned Mvmt	1	5	3							
Mvmt Sat Flow, veh/h	1774	0	1774							
Through Movement Data										
Assigned Mvmt		2	8							
Mvmt Sat Flow, veh/h		3471	0							
Right-Turn Movement Data										
Assigned Mvmt			12			16				
Mvmt Sat Flow, veh/h			216			1583				
Left Lane Group Data										
Assigned Mvmt	1	5	3	0	0	0	0	0	0	0
Lane Assignment	(P/Pm)									

Baseline

Synchro 9 Report
Page 4

PM Peak Hour

HCM Signalized Intersection Capacity Analysis 7: Corinth & Riverfront

05/23/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	628	43	796	3	22	75	208	425	9	5	693	198
Future Volume (vph)	628	43	796	3	22	75	208	425	9	5	693	198
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1671	1770	1857	1770	1857	1770	3539	1583	1583
Flt Permitted	0.69	1.00	1.00	1.00	0.17	1.00	0.47	1.00	0.47	1.00	1.00	1.00
Satd. Flow (perm)	1293	1863	1583	1668	323	1857	870	3539	1583	1583	1583	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	683	47	865	3	24	82	226	462	10	5	753	215
RTOR Reduction (vph)	0	0	158	0	44	0	0	1	0	0	0	105
Lane Group Flow (vph)	683	47	707	0	65	0	226	471	0	5	753	110
Turn Type	Perm	NA	Perm	Perm	NA	NA	pm+pt	NA	Perm	NA	Perm	Perm
Protected Phases	4	4	4	4	4	4	1	6	2	2	2	2
Permitted Phases	4	4	4	4	4	4	6	6	2	2	2	2
Actuated Green, G (s)	60.0	60.0	60.0	60.0	60.0	59.7	59.7	59.7	42.0	42.0	42.0	42.0
Effective Green, g (s)	60.0	60.0	60.0	60.0	60.0	59.7	59.7	59.7	42.0	42.0	42.0	42.0
Actuated g/C Ratio	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.32	0.32	0.32	0.32
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	598	861	732	771	290	854	281	1146	512	281	1146	512
v/s Ratio Prot	c0.53	0.03	0.45	0.04	c0.08	0.25	c0.08	0.25	0.01	0.01	0.07	0.21
v/c Ratio	1.14	0.05	0.97	0.08	0.78	0.55	0.02	0.66	0.02	0.66	0.22	0.22
Uniform Delay, d1	34.8	19.2	33.9	19.5	25.2	25.3	29.8	37.7	31.9	37.7	31.9	31.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	82.7	0.0	24.9	0.0	12.4	0.8	0.1	3.0	1.0	3.0	1.0	1.0
Delay (s)	117.5	19.2	58.7	19.5	37.6	26.1	29.9	40.6	32.8	40.6	32.8	32.8
Level of Service	F	B	E	B	B	C	C	D	C	D	D	C
Approach Delay (s)	82.7	19.5	37.6	26.1	29.8	38.8	38.8	38.8	38.8	38.8	38.8	38.8
Approach LOS	F	B	E	B	B	C	C	D	C	D	D	C
Intersection Summary												
HCM 2000 Control Delay	57.1 HCM 2000 Level of Service E											
HCM 2000 Volume to Capacity ratio	0.99											
Actuated Cycle Length (s)	129.7 Sum of lost time (s) 15.0											
Intersection Capacity Utilization	91.9% ICU Level of Service F											
Analysis Period (min)	15											
c Critical Lane Group												

PM Peak Hour

HCM 2010 TWSC

6: Riverfront & 35E South / 30 East Off-Ramp

05/23/2018

HCM 2010 TWSC

10: Cockrell & Lamar

05/23/2018

Intersection												
Int Delay, s/veh	6.8											
Movement	EBL	EBT	WBT	WBR	SBL	SBR						
Lane Configurations	↑↑↑	↑↑↑	↑↑↑	↑↑↑	↑	↑						
Traffic Vol, veh/h	0	1676	1109	0	314	78						
Future Vol, veh/h	0	1676	1109	0	314	78						
Conflicting Peds, #/hr	0	0	0	0	0	0						
Sign Control	Free	Free	Free	Free	Stop	Stop						
RT Channelized	-	None	-	None	-	None						
Storage Length	-	-	-	-	0	0						
Veh in Median Storage, #	-	0	0	-	2	-						
Grade, %	-	0	0	-	0	-						
Peak Hour Factor	92	92	92	92	92	92						
Heavy Vehicles, %	2	2	2	2	2	2						
Mvmt Flow	0	1822	1205	0	341	85						
Major/Minor	Major1	Minor2										
Conflicting Flow All	-	0	-	0	1924	603						
Stage 1	-	-	-	1205	-	-						
Stage 2	-	-	-	729	-	-						
Critical Hdwy	-	-	-	5.74	7.14	-						
Critical Hdwy Stg 1	-	-	-	6.64	-	-						
Critical Hdwy Stg 2	-	-	-	6.04	-	-						
Follow-up Hdwy	-	-	-	3.82	3.92	-						
Pd Cap-1 Maneuver	0	-	-	0	*248	*654						
Stage 1	0	-	-	0	*671	-						
Stage 2	0	-	-	0	*398	-						
Platoon blocked, %	-	-	-	-	1	1						
Mov Cap-1 Maneuver	-	-	-	-	*248	*654						
Mov Cap-2 Maneuver	-	-	-	-	*366	-						
Stage 1	-	-	-	-	*671	-						
Stage 2	-	-	-	-	*398	-						
Approach	EB	WB	SB									
HCM Control Delay, s	0	0	54.9									
HCM LOS			F									
Minor Lane/Major Mvmt	EBT	WBT	SBLn1	SBLn2								
Capacity (veh/h)	-	-	366	654								
HCM Lane V/C Ratio	-	-	0.933	0.13								
HCM Control Delay (s)	-	-	65.7	11.3								
HCM Lane LOS	-	-	F	B								
HCM 95th %tile Q(veh)	-	-	9.9	0.4								

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

Baseline

Synchro 9 Report
 Page 1

Intersection												
Int Delay, s/veh	9.6											
Movement	EBL	EBT	WBT	WBR	SBL	SBR						
Lane Configurations	↑	↑	↑	↑	↑	↑						
Traffic Vol, veh/h	27	92	2	24	103	0	1	598	145	9	227	13
Future Vol, veh/h	27	92	2	24	103	0	1	598	145	9	227	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None	-	None	-	None	-	None
Storage Length	-	150	-	-	150	150	-	-	150	-	-	-
Veh in Median Storage, #	-	0	-	0	-	0	-	0	-	0	-	0
Grade, %	-	0	-	0	-	0	-	0	-	0	-	0
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	29	100	2	26	112	0	1	650	158	10	247	14
Major/Minor	Minor2	Minor1	Major1	Major2								
Conflicting Flow All	656	1083	130	924	1011	404	261	0	0	808	0	0
Stage 1	273	273	-	731	731	-	-	-	-	-	-	-
Stage 2	383	810	-	193	280	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pd Cap-1 Maneuver	351	216	896	224	238	596	1300	-	-	813	-	-
Stage 1	710	683	-	379	425	-	-	-	-	-	-	-
Stage 2	611	391	-	790	678	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	218	213	896	140	235	596	1300	-	-	813	-	-
Mov Cap-2 Maneuver	218	213	-	140	235	-	-	-	-	-	-	-
Stage 1	709	675	-	379	425	-	-	-	-	-	-	-
Stage 2	450	391	-	663	670	-	-	-	-	-	-	-
Approach	EB	WB	SB									
HCM Control Delay, s	44	51	0									
HCM LOS	E	F										
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR		
Capacity (veh/h)	1300	-	214	896	208	-	-	813	-	-		
HCM Lane V/C Ratio	0.001	-	0.604	0.002	0.664	-	-	0.012	-	-		
HCM Control Delay (s)	7.8	-	44.6	9	51	0	9.5	-	-	-		
HCM Lane LOS	A	-	E	A	F	A	A	-	-	-		
HCM 95th %tile Q(veh)	0	-	3.5	0	4	-	0	-	-	-		

Baseline

Synchro 9 Report
 Page 2

PM Peak Hour

HCM 2010 TWSC
11: Drive 1 & Riverfront

05/23/2018

Intersection										
1										
Int Delay, s/veh	0.1									
Movement	EBT	EBR	WBL	WBT	NBL	NBR				
Lane Configurations	↑↑	↑↑	↑	↑↑	↑	↑				
Traffic Vol, veh/h	1531	58	15	537	40	0				
Future Vol, veh/h	1531	58	15	537	40	0				
Conflicting Peds, #/hr	0	0	0	0	0	0				
Sign Control	Free	Free	Free	Free	Free	Stop				
RT Channelized	-	None	-	None	-	None				
Storage Length	-	-	150	-	0	0				
Veh in Median Storage, #	0	-	-	0	2	-				
Grade, %	0	-	-	0	0	-				
Peak Hour Factor	92	92	92	92	92	92				
Heavy Vehicles, %	2	2	2	2	2	2				
Mvmt Flow	1664	63	16	584	43	0				
Major/Minor	Major1	Major2	Minor1							
Conflicting Flow All	0	0	1727	0	2020	864				
Stage 1	-	-	-	-	1696	-				
Stage 2	-	-	-	-	324	-				
Critical Hdwy	-	-	4.14	-	6.84	6.94				
Critical Hdwy Stg 1	-	-	-	-	5.84	-				
Critical Hdwy Stg 2	-	-	-	-	5.84	-				
Follow-up Hdwy	-	-	2.22	-	3.52	3.32				
Pd Cap-1 Maneuver	-	-	362	-	51	297				
Stage 1	-	-	-	-	134	-				
Stage 2	-	-	-	-	705	-				
Platoon blocked, %	-	-	-	-	-	-				
Mov Cap-1 Maneuver	-	-	362	-	49	297				
Mov Cap-2 Maneuver	-	-	-	-	126	-				
Stage 1	-	-	-	-	134	-				
Stage 2	-	-	-	-	674	-				
Approach	EB	WB	WB	NB						
HCM Control Delay, s	0	0.4	0.4	47.9						
HCM LOS					E					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT				
Capacity (veh/h)	126	-	-	-	362	-				
HCM Lane V/C Ratio	0.345	-	-	-	0.045	-				
HCM Control Delay (s)	47.9	0	-	-	15.4	-				
HCM Lane LOS	E	A	-	-	C	-				
HCM 95th %tile Q(veh)	1.4	-	-	-	0.1	-				

HCM 2010 TWSC
12: Drive 2 & Riverfront

05/23/2018

Intersection										
0.1										
Int Delay, s/veh	0.1									
Movement	EBT	EBR	WBL	WBT	NBL	NBR				
Lane Configurations	↑↑	↑↑	↑	↑↑	↑	↑				
Traffic Vol, veh/h	1502	29	0	552	0	13				
Future Vol, veh/h	1502	29	0	552	0	13				
Conflicting Peds, #/hr	0	0	0	0	0	0				
Sign Control	Free	Free	Free	Free	Free	Stop				
RT Channelized	-	None	-	None	-	None				
Storage Length	-	-	-	-	-	0				
Veh in Median Storage, #	0	-	-	0	0	-				
Grade, %	0	-	-	0	0	-				
Peak Hour Factor	92	92	92	92	92	92				
Heavy Vehicles, %	2	2	2	2	2	2				
Mvmt Flow	1633	32	0	600	0	14				
Major/Minor	Major1	Major2	Minor1							
Conflicting Flow All	0	0	-	-	-	832				
Stage 1	-	-	-	-	-	-				
Stage 2	-	-	-	-	-	-				
Critical Hdwy	-	-	-	-	-	6.94				
Critical Hdwy Stg 1	-	-	-	-	-	-				
Critical Hdwy Stg 2	-	-	-	-	-	-				
Follow-up Hdwy	-	-	-	-	-	3.32				
Pd Cap-1 Maneuver	-	-	0	-	0	312				
Stage 1	-	-	0	-	0	-				
Stage 2	-	-	0	-	0	-				
Platoon blocked, %	-	-	-	-	-	-				
Mov Cap-1 Maneuver	-	-	-	-	-	312				
Mov Cap-2 Maneuver	-	-	-	-	-	-				
Stage 1	-	-	-	-	-	-				
Stage 2	-	-	-	-	-	-				
Approach	EB	WB	WB	NB						
HCM Control Delay, s	0	0	0	17.1						
HCM LOS					C					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT					
Capacity (veh/h)	312	-	-	-	-					
HCM Lane V/C Ratio	0.045	-	-	-	-					
HCM Control Delay (s)	17.1	-	-	-	-					
HCM Lane LOS	C	-	-	-	-					
HCM 95th %tile Q(veh)	0.1	-	-	-	-					

PM Peak Hour

HCM 2010 TWSC
13: Drive 3 & Riverfront

05/23/2018

Intersection										
Int. Delay, s/veh										9.6
Movement	EBT	EBR	WBL	WBT	NBL	NBR				
Lane Configurations	↑↑		↑	↑↑	↑	↑				
Traffic Vol, veh/h	1398	117	73	420	132	79				
Future Vol, veh/h	1398	117	73	420	132	79				
Conflicting Peds, #/hr	0	0	0	0	0	0				
Sign Control	Free	Free	Free	Free	Stop	Stop				
RT Channelized	-	None	-	None	-	None				
Storage Length	-	-	150	-	0	0				
Veh in Median Storage, #	0	-	-	0	2	-				
Grade, %	0	-	-	0	0	-				
Peak Hour Factor	92	92	92	92	92	92				
Heavy Vehicles, %	2	2	2	2	2	2				
Mvmt Flow	1520	127	79	457	143	86				
Major/Minor	Major1	Major2	Minor1							
Conflicting Flow All	0	0	1647	0	1970	823				
Stage 1	-	-	-	-	1583	-				
Stage 2	-	-	-	-	387	-				
Critical Hdwy	-	-	4.14	-	6.84	6.94				
Critical Hdwy Stg 1	-	-	-	-	5.84	-				
Critical Hdwy Stg 2	-	-	-	-	5.84	-				
Follow-up Hdwy	-	-	2.22	-	3.52	3.32				
Pdt Cap-1 Maneuver	-	-	389	-	55	317				
Stage 1	-	-	-	-	154	-				
Stage 2	-	-	-	-	656	-				
Platoon blocked, %	-	-	-	-	-	-				
Mov Cap-1 Maneuver	-	-	389	-	44	317				
Mov Cap-2 Maneuver	-	-	-	-	142	-				
Stage 1	-	-	-	-	154	-				
Stage 2	-	-	-	-	523	-				
Approach	EB	WB	NB							
HCM Control Delay, s	0	2.5	95.3							
HCM LOS			F							
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT				
Capacity (veh/h)	142	317	-	-	389	-				
HCM Lane V/C Ratio	1.01	0.271	-	-	0.204	-				
HCM Control Delay (s)	140.1	20.5	-	-	16.6	-				
HCM Lane LOS	F	C	-	-	C	-				
HCM 95th %tile Q(veh)	7.4	1.1	-	-	0.8	-				
Notes										
-: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon										

Saturday Peak Hour

HCM Signalized Intersection Capacity Analysis 7: Corinth & Riverfront

05/23/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	267	4	308	4	4	12	203	238	10	9	307	190
Future Volume (vph)	267	4	308	4	4	12	203	238	10	9	307	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00
Flt Protected	0.95	1.00	1.00	0.99	0.92	0.99	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1691	1770	1851	1770	1851	1770	3539	1583	1583
Flt Permitted	0.74	1.00	1.00	0.97	0.49	1.00	0.49	1.00	0.59	1.00	1.00	1.00
Satd. Flow (perm)	1385	1863	1583	1663	917	1851	917	1851	1105	3539	1583	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	290	4	335	4	4	13	221	259	11	10	334	207
RTOR Reduction (vph)	0	0	246	0	10	0	0	1	0	0	0	107
Lane Group Flow (vph)	290	4	89	0	11	0	221	269	0	10	334	100
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	NA	Perm	NA	Perm
Protected Phases	4	4	4	4	4	1	6	2				
Permitted Phases	4	4	4	4	4	6	6	2				
Actuated Green, G (s)	27.8	27.8	27.8	27.8	27.8	67.2	67.2	67.2	50.7	50.7	50.7	50.7
Effective Green, g (s)	27.8	27.8	27.8	27.8	27.8	67.2	67.2	67.2	50.7	50.7	50.7	50.7
Actuated g/C Ratio	0.26	0.26	0.26	0.26	0.26	0.64	0.64	0.64	0.48	0.48	0.48	0.48
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	366	493	419	440	440	680	1184	533	1708	764		
v/s Ratio Prot	0.00					c0.04	0.15				0.09	
v/s Ratio Perm	c0.21		0.06	0.01		c0.17		0.01				0.06
v/c Ratio	0.79	0.01	0.21	0.03		0.33	0.23	0.02	0.20	0.13		
Uniform Delay, d1	35.9	28.4	30.1	28.6		8.0	8.0	14.2	15.5	15.0		
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		
Incremental Delay, d2	11.2	0.0	0.3	0.0		0.3	0.1	0.1	0.3	0.4		
Delay (s)	47.1	28.4	30.3	28.6		8.3	8.1	14.2	15.8	15.3		
Level of Service	D	C	C	C		A	A	B	B	B		
Approach Delay (s)	38.0			28.6		8.2				15.6		
Approach LOS	D			C		A				B		
Intersection Summary												
HCM 2000 Control Delay	21.9 HCM 2000 Level of Service C											
HCM 2000 Volume to Capacity ratio	0.48											
Actuated Cycle Length (s)	105.0 Sum of lost time (s) 15.0											
Intersection Capacity Utilization	64.0% ICU Level of Service B											
Analysis Period (min)	15											
c Critical Lane Group												

Saturday Peak Hour

HCM 2010 Signalized Intersection Capacity Analysis 1: Cadiz & Griffin

05/23/2018

2nd-Term O (O2), veh/in	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term O (O3), veh/in	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%), s	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/in	0.0	0.3	0.0	1.3	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RO%)	0.00	0.02	0.00	0.14	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Cb), 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	0.0
Final (Residual) Q (Oe), 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	0.0
Sat Delay (ds), 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	0.0
Sat O (Os), 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	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data													
Assigned Mvmt	0	12	0	14	0	16	0	16	0	0	0	0	0
Lane Assignment			T+R			T+R							
Lanes in Grp	0	0	0	1	0	1	0	1	0	0	0	0	0
Grp Vol (V), veh/h	0	0	0	232	0	29	0	29	0	0	0	0	0
Grp Sat Flow (S), veh/h/in	0	0	0	1583	0	1726	0	1726	0	0	0	0	0
Q Serve Time (q_s), s	0.0	0.0	0.0	6.2	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle O Clear Time (g_c), s	0.0	0.0	0.0	6.2	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/in	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (C), veh/h	0	0	0	369	0	907	0	907	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.63	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	798	0	907	0	907	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	16.3	0.0	5.4	0.0	5.4	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial O 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	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	18.0	0.0	5.4	0.0	5.4	0.0	0.0	0.0	0.0	0.0
1st-Term O (O1), veh/in	0.0	0.0	0.0	2.7	0.0	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0
2nd-Term O (O2), veh/in	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term O (O3), veh/in	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%), s	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/in	0.0	0.0	0.0	2.9	0.0	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RO%)	0.00	0.00	0.00	0.31	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Initial Q (Cb), 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	0.0
Final (Residual) Q (Oe), 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	0.0
Sat Delay (ds), 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	0.0
Sat O (Os), veh	0	0	0	0	0	0	0	0	0	0	0	0	0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary													
HCM 2010 Ctrl Delay	12.5												
HCM 2010 LOS	B												

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Baseline

Synchro 9 Report
Page 3

HCM 2010 Signalized Intersection Capacity Analysis 3: Cadiz & Hotel

05/23/2018

Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations	↔	↔	↔	↔	↔	↔		
Traffic Volume (veh/h)	9	101	124	837	365	33		
Future Volume (veh/h)	9	101	124	837	365	33		
Number	3	18	1	6	2	12		
Initial Q, veh	0	0	0	0	0	0		
Ped/Bike Adj (A_pbT)	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		
Adj Sat Flow, veh/h/in	1863	1863	1863	1863	1863	1900		
Adj Flow Rate, veh/h	10	110	135	910	397	36		
Adj No. of Lanes	1	1	1	2	2	0		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Opposing Right Turn Influence	Yes	Yes	Yes	Yes	Yes	Yes		
Cap, veh/h	162	145	764	2750	2196	198		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Prop Arrive On Green	0.09	0.09	0.05	0.78	0.67	0.67		
Ln Grp Delay, s/veh	34.2	44.3	3.3	3.1	5.4	5.4		
Ln Grp LOS	C	D	A	A	A	A		
Approach Vol, veh/h	120			1045	433			
Approach Delay, s/veh	43.5			3.1	5.4			
Approach LOS	D			A	A			
Timer								
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.2	8.0	9.0	4.0				
Phs Duration (G+Y+Rc), s	8.9	60.0	13.1	68.9				
Change Period (Y+Rc), s	5.0	*5.2	5.6	*5.2				
Max Green (Gmax), s	20.0	*55	74.4	*55				
Max Allow Headway (MAH), s	3.8	5.2	4.0	5.2				
Max O Clear (g_c+1), s	3.8	5.8	7.6	8.3				
Green Ext Time (g_e), s	0.3	12.7	0.4	12.6				
Prob of Phs Cal (p_c)	0.95	1.00	0.93	1.00				
Prob of Max Out (p_x)	0.00	0.00	0.00	0.00				
Left-Turn Movement Data								
Assigned Mvmt	1	5	3					
Mvmt Sat Flow, veh/h	1774	0	1774					
Through Movement Data								
Assigned Mvmt		2	8					
Mvmt Sat Flow, veh/h		3377	0					
Right-Turn Movement Data								
Assigned Mvmt			12	18				
Mvmt Sat Flow, veh/h			296	1583				
Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment	(P/Pm)							

Baseline

Synchro 9 Report
Page 4

Saturday Peak Hour

HCM 2010 TWSC

6: Riverfront & 35E South / 30 East Off-Ramp

05/23/2018

HCM 2010 TWSC

10: Cockrell & Lamar

05/23/2018

Intersection												
Int Delay, s/veh 2.7												
Movement	EBL	EBT	WBT	WBR	SBL	SBR						
Lane Configurations	↑↑↑	↑↑↑	↑↑↑	↑↑↑	↑	↑						
Traffic Vol, veh/h	0	530	979	0	253	111						
Future Vol, veh/h	0	530	979	0	253	111						
Conflicting Peds, #/hr	0	0	0	0	0	0						
Sign Control	Free	Free	Free	Free	Stop	Stop						
RT Channelized	-	None	-	None	-	None						
Storage Length	-	-	-	-	0	0						
Yeh in Median Storage, #	-	0	0	-	2	-						
Grade, %	-	0	0	-	0	-						
Peak Hour Factor	92	92	92	92	92	92						
Heavy Vehicles, %	2	2	2	2	2	2						
Mvmt Flow	0	576	1064	0	275	121						
Major/Minor	Major1	Minor2										
Conflicting Flow All	-	0	-	0	1294	532						
Stage 1	-	-	-	-	1064	-						
Stage 2	-	-	-	-	230	-						
Critical Hdwy	-	-	-	-	5.74	7.14						
Critical Hdwy Stg 1	-	-	-	-	6.64	-						
Critical Hdwy Stg 2	-	-	-	-	6.04	-						
Follow-up Hdwy	-	-	-	-	3.82	3.92						
Pd Cap-1 Maneuver	0	-	-	-	0	*545 *691						
Stage 1	0	-	-	-	0	*709						
Stage 2	0	-	-	-	0	*722						
Platoon blocked, %	-	-	-	-	1	1						
Mov Cap-1 Maneuver	-	-	-	-	-	*545 *691						
Mov Cap-2 Maneuver	-	-	-	-	-	*625						
Stage 1	-	-	-	-	-	*709						
Stage 2	-	-	-	-	-	*722						
Approach	EB	WB	SB									
HCM Control Delay, s	0	0	14									
HCM LOS			B									
Minor Lane/Major Mvmt	EBT	WBT	SBLn1	SBLn2								
Capacity (veh/h)	-	-	625	691								
HCM Lane V/C Ratio	-	-	0.44	0.175								
HCM Control Delay (s)	-	-	15.2	11.3								
HCM Lane LOS	-	-	C	B								
HCM 95th %tile Q(veh)	-	-	2.2	0.6								

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

Intersection												
Int Delay, s/veh 5.4												
Movement	EBL	EBT	WBT	WBR	SBL	SBR						
Lane Configurations	↑	↑	↑	↑	↑	↑						
Traffic Vol, veh/h	18	100	10	17	93	3	9	172	13	2	198	44
Future Vol, veh/h	18	100	10	17	93	3	9	172	13	2	198	44
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None	-	None	-	None	-	None
Storage Length	-	150	-	-	150	150	-	-	150	-	-	-
Yeh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	20	109	11	18	101	3	10	187	14	2	215	48
Major/Minor	Minor2	Minor1	Major1	Major2								
Conflicting Flow All	407	464	132	380	481	101	263	0	0	201	0	0
Stage 1	243	243	-	214	214	-	-	-	-	-	-	-
Stage 2	164	221	-	166	267	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pd Cap-1 Maneuver	529	494	893	552	483	935	1298	-	-	1368	-	-
Stage 1	739	703	-	768	724	-	-	-	-	-	-	-
Stage 2	822	719	-	820	687	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	439	489	893	449	479	935	1298	-	-	1368	-	-
Mov Cap-2 Maneuver	439	489	-	449	479	-	-	-	-	-	-	-
Stage 1	733	702	-	762	718	-	-	-	-	-	-	-
Stage 2	698	713	-	684	686	-	-	-	-	-	-	-
Approach	EB	WB	NB	SB								
HCM Control Delay, s	14.7	14.9	0.4	0.1								
HCM LOS	B	B										
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR		
Capacity (veh/h)	1298	-	481	893	474	935	1368	-	-	-		
HCM Lane V/C Ratio	0.008	-	0.267	0.012	0.252	0.003	0.002	-	-	-		
HCM Control Delay (s)	7.8	-	15.2	9.1	15.1	8.9	7.6	-	-	-		
HCM Lane LOS	A	-	C	A	C	A	A	-	-	-		
HCM 95th %tile Q(veh)	0	-	1.1	0	1	0	0	-	-	-		

Saturday Peak Hour

HCM 2010 TWSC
11: Drive 1 & Riverfront

05/23/2018

Intersection										
Int. Delay, s/veh	0.5									
Movement	EBT	EBR	WBL	WBT	NBL	NBR				
Lane Configurations	↑↑	↑↑	↑	↑↑	↑	↑				
Traffic Vol, veh/h	697	60	15	879	42	0				
Future Vol, veh/h	697	60	15	879	42	0				
Conflicting Peds, #/hr	0	0	0	0	0	0				
Sign Control	Free	Free	Free	Free	Stop	Stop				
RT Channelized	-	None	-	None	-	None				
Storage Length	-	-	150	-	0	0				
Veh in Median Storage, #	0	-	-	0	2	-				
Grade, %	0	-	-	0	0	-				
Peak Hour Factor	92	92	92	92	92	92				
Heavy Vehicles, %	2	2	2	2	2	2				
Mvmt Flow	758	65	16	955	46	0				

Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	823	0	1300	411
Stage 1	-	-	-	-	790	-
Stage 2	-	-	-	-	510	-
Critical Hdwy	-	4.14	-	6.84	6.94	-
Critical Hdwy Stg 1	-	-	-	5.84	-	-
Critical Hdwy Stg 2	-	-	-	5.84	-	-
Follow-up Hdwy	-	2.22	-	3.52	3.32	-
Pd. Cap-1 Maneuver	-	-	803	-	153	590
Stage 1	-	-	-	-	408	-
Stage 2	-	-	-	-	568	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	803	-	150	590
Mov Cap-2 Maneuver	-	-	-	-	339	-
Stage 1	-	-	-	-	408	-
Stage 2	-	-	-	-	557	-

Approach	EB	WB	NB			
HCM Control Delay, s	0	0.2	17.3			
HCM LOS			C			

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	339	-	-	-	803	-
HCM Lane V/C Ratio	0.135	-	-	-	0.02	-
HCM Control Delay (\$)	17.3	0	-	-	9.6	-
HCM Lane LOS	C	A	-	-	A	-
HCM 95th %tile Q(veh)	0.5	-	-	-	0.1	-

Baseline

HCM 2010 TWSC
12: Drive 2 & Riverfront

05/23/2018

Intersection										
Int. Delay, s/veh	0.1									
Movement	EBT	EBR	WBL	WBT	NBL	NBR				
Lane Configurations	↑↑	↑↑	↑	↑↑	↑	↑				
Traffic Vol, veh/h	667	30	0	894	0	14				
Future Vol, veh/h	667	30	0	894	0	14				
Conflicting Peds, #/hr	0	0	0	0	0	0				
Sign Control	Free	Free	Free	Free	Stop	Stop				
RT Channelized	-	None	-	None	-	None				
Storage Length	-	-	-	-	-	0				
Veh in Median Storage, #	0	-	-	0	0	-				
Grade, %	0	-	-	0	0	-				
Peak Hour Factor	92	92	92	92	92	92				
Heavy Vehicles, %	2	2	2	2	2	2				
Mvmt Flow	725	33	0	972	0	15				

Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	-	-	-	379
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pd. Cap-1 Maneuver	-	-	0	-	0	619
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	-	619
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	619	-	-	-	-
HCM Lane V/C Ratio	0.025	-	-	-	-
HCM Control Delay (\$)	11	-	-	-	-
HCM Lane LOS	B	-	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-	-

Baseline

Saturday Peak Hour

HCM 2010 TWSC
13: Drive 3 & Riverfront

05/23/2018

Intersection												
Int. Delay, s/veh											2.9	
Movement												
	EBT	EBR	WBL	WBT	NBL	NBR						
Lane Configurations	↑↑		↑	↑↑	↑	↑						
Traffic Vol, veh/h	560	121	75	753	141	85						
Future Vol, veh/h	560	121	75	753	141	85						
Conflicting Peds, #/hr	0	0	0	0	0	0						
Sign Control	Free	Free	Free	Free	Stop	Stop						
RT Channelized	-	None	-	None	-	None						
Storage Length	-	-	150	-	0	0						
Veh in Median Storage, #	0	-	-	0	2	-						
Grade, %	0	-	-	0	0	-						
Peak Hour Factor	92	92	92	92	92	92						
Heavy Vehicles, %	2	2	2	2	2	2						
Mvmt Flow	609	132	82	818	153	92						
Major/Minor												
	Major1	Major2	Minor1									
Conflicting Flow All	0	0	740	0	1246	370						
Stage 1	-	-	-	-	674	-						
Stage 2	-	-	-	-	572	-						
Critical Hdwy	-	-	4.14	-	6.84	6.94						
Critical Hdwy Stg 1	-	-	-	-	5.84	-						
Critical Hdwy Stg 2	-	-	-	-	5.84	-						
Follow-up Hdwy	-	-	2.22	-	3.52	3.32						
Pdt Cap-1 Maneuver	-	-	862	-	166	627						
Stage 1	-	-	-	-	468	-						
Stage 2	-	-	-	-	528	-						
Platoon blocked, %	-	-	-	-	-	-						
Mov Cap-1 Maneuver	-	-	862	-	150	627						
Mov Cap-2 Maneuver	-	-	-	-	347	-						
Stage 1	-	-	-	-	468	-						
Stage 2	-	-	-	-	478	-						
Approach												
	EB	WB	NB									
HCM Control Delay, s	0	0.9	18.9									
HCM LOS			C									
Minor Lane/Major Mvmt												
	NBLn1	NBLn2	EBT	EBR	WBL	WBT						
Capacity (veh/h)	347	627	-	-	862	-						
HCM Lane V/C Ratio	0.442	0.147	-	-	0.095	-						
HCM Control Delay (s)	23.3	11.7	-	-	9.6	-						
HCM Lane LOS	C	B	-	-	A	-						
HCM 95th %tile Q(veh)	2.2	0.5	-	-	0.3	-						
Notes												
-: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon												

Synchro™ Output - Mitigation

PM Peak Hour

HCM Signalized Intersection Capacity Analysis

7: Corinth & Riverfront

05/23/2018

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	628	43	796	3	22	75	208	425	9	5	693	198
Future Volume (vph)	628	43	796	3	22	75	208	425	9	5	693	198
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Flt Protected	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1863	1583	1671	1770	1857	1770	1857	1770	1857	1583	1583
Flt Permitted	0.73	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.48	1.00
Satd. Flow (perm)	1358	1863	1583	1668	1668	1668	1668	1668	1668	1668	894	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	683	47	865	3	24	82	226	462	10	5	753	215
RTOR Reduction (vph)	0	0	188	0	41	0	0	1	0	0	0	152
Lane Group Flow (vph)	683	47	697	0	68	0	226	471	0	5	753	63
Turn Type	Perm	NA	Perm	NA	Perm	NA	perm+pt	NA	Perm	NA	Perm	NA
Protected Phases	4	4	4	4	4	4	1	6	2	2	2	2
Permitted Phases	4	4	4	4	4	4	6	6	2	2	2	2
Actuated Green, G (s)	45.0	45.0	45.0	45.0	45.0	45.0	35.0	35.0	21.0	21.0	21.0	21.0
Effective Green, g (s)	45.0	45.0	45.0	45.0	45.0	45.0	35.0	35.0	21.0	21.0	21.0	21.0
Actuated g/C Ratio	0.50	0.50	0.50	0.50	0.50	0.50	0.39	0.39	0.23	0.23	0.23	0.23
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	679	931	791	834	834	834	259	722	208	825	369	369
v/s Ratio Prot	0.03						c0.09	0.25			0.21	
v/s Ratio Perm	c0.50			0.04	0.04	0.04	c0.25		0.01	0.01	0.04	
vic Ratio	1.01	0.05	0.88	0.08	0.08	0.08	0.87	0.65	0.02	0.02	0.91	0.17
Uniform Delay, d1	22.5	11.5	20.1	11.7	11.7	11.7	21.9	22.5	26.6	33.6	27.6	27.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	36.0	0.0	11.3	0.0	0.0	0.0	26.0	2.1	0.2	16.2	1.0	1.0
Delay (s)	58.5	11.6	31.4	11.8	11.8	11.8	47.8	24.7	26.8	49.8	28.6	28.6
Level of Service	E	B	C	B	B	B	D	C	C	C	D	C
Approach Delay (s)	42.4			11.8	11.8	11.8	32.2				45.0	
Approach LOS	D			B	B	B	C				D	
Intersection Summary												
HCM 2000 Control Delay	40.0 HCM 2000 Level of Service D											
HCM 2000 Volume to Capacity ratio	0.99											
Actuated Cycle Length (s)	90.0 Sum of lost time (s)											
Intersection Capacity Utilization	91.9% ICU Level of Service F											
Analysis Period (min)	15											
c Critical Lane Group												

PM Peak Hour

HCM 2010 Signalized Intersection Capacity Analysis 1: Cadiz & Griffin

05/23/2018

2nd-Term Q (Q2), veh/h	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f.B%)	0.0	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
%ile Back of Q (90%), veh/h	0.0	3.5	0.0	2.1	0.0	0.3	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.0	0.25	0.00	0.23	0.00	0.02	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data									
Assigned Mvmt	0	12	0	14	0	16	0	0	0
Lane Assignment				T+R		T+R			
Lanes in Grp	0	0	0	1	0	1	0	0	0
Grip Vol (V), veh/h	0	0	0	404	0	31	0	0	0
Grip Sat Flow (s), veh/h/h	0	0	0	1583	0	1781	0	0	0
Q Serve Time (g.s), s	0.0	0.0	0.0	16.2	0.0	0.7	0.0	0.0	0.0
Cycle Q Clear Time (g.c), s	0.0	0.0	0.0	16.2	0.0	0.7	0.0	0.0	0.0
Prot RT Sat Flow (s.R), veh/h/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g.R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P.R)	0.00	0.00	0.00	1.00	0.00	0.26	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	587	0	850	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.69	0.00	0.04	0.00	0.00	0.00
Avail Cap (c.a), veh/h	0	0	0	587	0	850	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	19.9	0.0	10.4	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	6.5	0.0	0.1	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	26.4	0.0	10.5	0.0	0.0	0.0
1st-Term Q (Q1), veh/h	0.0	0.0	0.0	7.1	0.0	0.3	0.0	0.0	0.0
2nd-Term Q (Q2), veh/h	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f.B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
%ile Back of Q (90%), veh/h	0.0	0.0	0.0	8.1	0.0	0.4	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.89	0.00	0.02	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary									
HCM 2010 Ctrl Delay		16.3							
HCM 2010 LOS		B							

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Baseline

Synchro 9 Report
Page 3

HCM 2010 Signalized Intersection Capacity Analysis 3: Cadiz & Hotel

05/23/2018

Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations	↔	↔	↔	↔	↔	↔		
Traffic Volume (veh/h)	6	86	50	544	258	17		
Future Volume (veh/h)	6	86	50	544	258	17		
Number	3	18	1	6	2	12		
Initial Q, veh	0	0	0	0	0	0		
Ped-Bike Adj (A_pbT)	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		
Adj Sat Flow, veh/h/h	1863	1863	1863	1863	1863	1900		
Adj Flow Rate, veh/h	7	93	54	591	280	18		
Adj No. of Lanes	1	1	1	2	2	0		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh. %	2	2	2	2	2	2		
Opposing Right Turn Influence	Yes	Yes	Yes	Yes	Yes	Yes		
Cap, veh/h	158	141	845	2744	2319	148		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Prop Arrive On Green	0.09	0.09	0.03	0.78	0.69	0.69		
Ln Grp Delay, s/veh	33.3	40.3	3.0	2.6	4.5	4.5		
Ln Grp LOS	C	D	A	A	A	A		
Approach Vol, veh/h	100			645	298			
Approach Delay, s/veh	39.8			2.6	4.5			
Approach LOS	D			A	A			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8					
Case No	1.2	8.0	9.0					
Phs Duration (G+Y+Rc), s	7.1	60.0	12.7					
Change Period (Y+Rc), s	5.0	* 5.2	5.6					
Max Green (Gmax), s	20.0	* 5.5	74.4					
Max Allow Headway (MAH), s	3.8	5.2	4.0					
Max Q Clear (g_c+H), s	2.7	4.3	6.5					
Green Ext Time (g_e), s	0.1	7.1	0.3					
Prob of Phs Call (p_c)	0.70	1.00	0.89					
Prob of Max Out (p_x)	0.00	1.00	0.00					
Left-Turn Movement Data								
Assigned Mvmt	1	5	3					
Mvmt Sat Flow, veh/h	1774	0	1774					
Through Movement Data								
Assigned Mvmt		2	8					
Mvmt Sat Flow, veh/h		3471	0					
Right-Turn Movement Data								
Assigned Mvmt		12	18					
Mvmt Sat Flow, veh/h		216	1583					
Left Lane Group Data								
Assigned Mvmt	1	5	3	0	0	0	0	0
Lane Assignment		(P/Fm)						

Baseline

Synchro 9 Report
Page 4

PM Peak Hour

HCM 2010 TWSC
6: Riverfront & 35E South / 30 East Off-Ramp

05/23/2018

Intersection		6.8										
Int Delay, s/veh		9.6										
Movement	EBL	EBT	WBT	WBR	SBL	SBR						
Lane Configurations	←←←	←←←	←←←	←←←	←	←						←
Traffic Vol, veh/h	0	1676	1109	0	314	78						78
Future Vol, veh/h	0	1676	1109	0	314	78						78
Conflicting Peds. #/hr	0	0	0	0	0	0						0
Sign Control	Free	Free	Free	Free	Stop	Stop						Stop
RT Channelized	-	None	-	None	-	None						-
Storage Length	-	-	-	-	0	0						-
Veh in Median Storage, #	-	0	0	-	2	-						-
Grade, %	-	0	0	-	0	-						-
Peak Hour Factor	92	92	92	92	92	92						92
Heavy Vehicles, %	2	2	2	2	2	2						2
Mvmt Flow	0	1822	1205	0	341	85						
Major/Minor	Major1	Major2	Minor2									Minor2
Conflicting Flow All	-	0	-	0	1934	603						
Stage 1	-	-	-	-	1205	-						-
Stage 2	-	-	-	-	729	-						-
Critical Hdwy	-	-	-	-	5.74	7.14						-
Critical Hdwy Sig 1	-	-	-	-	6.04	-						-
Critical Hdwy Sig 2	-	-	-	-	3.82	3.92						-
Follow-up Hdwy	-	-	-	-	-	-						-
Pot Cap-1 Maneuver	0	-	0	-	248	654						-
Stage 1	0	-	0	-	671	-						-
Stage 2	0	-	0	-	398	-						-
Platoon blocked, %	-	-	-	-	1	1						-
Mov Cap-1 Maneuver	-	-	-	-	248	654						-
Mov Cap-2 Maneuver	-	-	-	-	366	-						-
Stage 1	-	-	-	-	671	-						-
Stage 2	-	-	-	-	398	-						-
Approach	EB	WB	SB									SB
HCM Control Delay, s	0	0	54.9									0.3
HCM LOS	E	F	F									F
Minor Lane/Major Mvmt	EBT	WBT	SBLn1	SBLn2								SBL
Capacity (veh/h)	-	-	366	654								-
HCM Lane V/C Ratio	-	-	0.9333	0.13								-
HCM Control Delay (s)	-	-	65.7	11.3								-
HCM Lane LOS	-	-	F	B								-
HCM 95th %ile Q(veh)	-	-	9.9	0.4								-
Notes	-: Volume exceeds capacity \$: Delay exceeds 300s *: Computation Not Defined **: All major volume in platoon											

Baseline
Synchro 9 Report
Page 1

HCM 2010 TWSC
10: Cockrell & Lamar

05/23/2018

Intersection		9.6										
Int Delay, s/veh		9.6										
Movement	EBL	EBT	WBT	WBR	NBL	NBT	SBL	SBT	SBR			
Lane Configurations	←	←	←	←	←	←	←	←	←	←	←	←
Traffic Vol, veh/h	27	92	2	24	103	0	1	598	145	9	227	13
Future Vol, veh/h	27	92	2	24	103	0	1	598	145	9	227	13
Conflicting Peds. #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None	-	None	-	None	-	None
Storage Length	-	150	-	-	150	150	-	-	150	-	-	-
Veh in Median Storage, #	-	0	-	0	-	0	-	0	-	0	-	0
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	29	100	2	26	112	0	1	650	168	10	247	14
Major/Minor	Minor2	Minor1	Minor1	Minor1	Major1	Major1						
Conflicting Flow All	656	1083	130	924	1011	404	261	0	808	0	0	0
Stage 1	273	273	-	731	731	-	-	-	-	-	-	-
Stage 2	383	810	-	193	280	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	4.14	-	-	-
Critical Hdwy Sig 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Sig 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	2.22	-	-	-
Pot Cap-1 Maneuver	351	216	896	224	238	596	1300	-	813	-	-	-
Stage 1	710	683	-	379	425	-	-	-	-	-	-	-
Stage 2	611	391	-	790	678	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	218	213	896	140	235	596	1300	-	813	-	-	-
Mov Cap-2 Maneuver	218	213	-	140	235	-	-	-	-	-	-	-
Stage 1	709	675	-	379	425	-	-	-	-	-	-	-
Stage 2	450	391	-	663	670	-	-	-	-	-	-	-
Approach	EB	WB	WB	SB	NB	SB						
HCM Control Delay, s	44	51	51	0	0	0.3						
HCM LOS	E	F	F	F	F	F						
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR		
Capacity (veh/h)	1300	-	-	214	896	208	-	813	-	-		
HCM Lane V/C Ratio	0.001	-	-	0.604	0.002	0.664	-	0.012	-	-		
HCM Control Delay (s)	7.8	-	-	44.6	9	51	0	9.5	-	-		
HCM Lane LOS	A	-	-	E	A	F	A	A	-	-		
HCM 95th %ile Q(veh)	0	-	-	3.5	0	4	-	0	-	-		

Baseline
Synchro 9 Report
Page 2

PM Peak Hour

HCM 2010 TWSC
11: Drive 1 & Riverfront

05/23/2018

Intersection										
Int Delay, s/veh	1									
Movement	EBT	EBR	WBL	WBT	NBL	NBR				
Lane Configurations	↑↑	↑↑	↑	↑↑	↑	↑				
Traffic Vol, veh/h	1531	58	15	537	40	0				
Future Vol, veh/h	1531	58	15	537	40	0				
Conflicting Peds, #/hr	0	0	0	0	0	0				
Sign Control	Free	Free	Free	Free	Free	Stop				
RT Channelized	-	None	-	None	-	None				
Storage Length	-	-	150	-	-	0				
Veh in Median Storage, #	0	-	-	0	2	-				
Grade, %	0	-	-	0	0	-				
Peak Hour Factor	92	92	92	92	92	92				
Heavy Vehicles, %	2	2	2	2	2	2				
Mvmt Flow	1664	63	16	584	43	0				
Major/Minor	Major1	Major2	Minor1							
Conflicting Flow All	0	0	1727	0	2020	864				
Stage 1	-	-	-	-	1696	-				
Stage 2	-	-	-	-	324	-				
Critical Hdwy	-	-	4.14	-	6.84	6.94				
Critical Hdwy Stg 1	-	-	-	-	5.84	-				
Critical Hdwy Stg 2	-	-	-	-	5.84	-				
Follow-up Hdwy	-	-	2.22	-	3.52	3.32				
Pd Cap-1 Maneuver	-	-	362	-	51	297				
Stage 1	-	-	-	-	134	-				
Stage 2	-	-	-	-	705	-				
Platoon blocked, %	-	-	-	-	-	-				
Mov Cap-1 Maneuver	-	-	362	-	49	297				
Mov Cap-2 Maneuver	-	-	-	-	126	-				
Stage 1	-	-	-	-	134	-				
Stage 2	-	-	-	-	674	-				
Approach	EB	WB	WB	NB						
HCM Control Delay, s	0	0.4	0.4	47.9						
HCM LOS				E						
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT				
Capacity (veh/h)	126	-	-	-	362	-				
HCM Lane V/C Ratio	0.345	-	-	-	0.045	-				
HCM Control Delay (\$)	47.9	0	-	-	15.4	-				
HCM Lane LOS	E	A	-	-	C	-				
HCM 95th %tile Q(veh)	1.4	-	-	-	0.1	-				

HCM 2010 TWSC
12: Drive 2 & Riverfront

05/23/2018

Intersection										
Int Delay, s/veh	0.1									
Movement	EBT	EBR	WBL	WBT	NBL	NBR				
Lane Configurations	↑↑	↑↑	↑	↑↑	↑	↑				
Traffic Vol, veh/h	1502	29	0	552	0	13				
Future Vol, veh/h	1502	29	0	552	0	13				
Conflicting Peds, #/hr	0	0	0	0	0	0				
Sign Control	Free	Free	Free	Free	Free	Stop				
RT Channelized	-	None	-	None	-	None				
Storage Length	-	-	-	-	-	0				
Veh in Median Storage, #	0	-	-	0	0	-				
Grade, %	0	-	-	0	0	-				
Peak Hour Factor	92	92	92	92	92	92				
Heavy Vehicles, %	2	2	2	2	2	2				
Mvmt Flow	1633	32	0	600	0	14				
Major/Minor	Major1	Major2	Minor1							
Conflicting Flow All	0	0	-	-	-	832				
Stage 1	-	-	-	-	-	-				
Stage 2	-	-	-	-	-	-				
Critical Hdwy	-	-	-	-	-	6.94				
Critical Hdwy Stg 1	-	-	-	-	-	-				
Critical Hdwy Stg 2	-	-	-	-	-	-				
Follow-up Hdwy	-	-	-	-	-	3.32				
Pd Cap-1 Maneuver	-	-	0	-	0	312				
Stage 1	-	-	0	-	0	-				
Stage 2	-	-	0	-	0	-				
Platoon blocked, %	-	-	-	-	-	-				
Mov Cap-1 Maneuver	-	-	-	-	-	312				
Mov Cap-2 Maneuver	-	-	-	-	-	-				
Stage 1	-	-	-	-	-	-				
Stage 2	-	-	-	-	-	-				
Approach	EB	WB	WB	NB						
HCM Control Delay, s	0	0	0	17.1						
HCM LOS				C						
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT					
Capacity (veh/h)	312	-	-	-	-					
HCM Lane V/C Ratio	0.045	-	-	-	-					
HCM Control Delay (\$)	17.1	-	-	-	-					
HCM Lane LOS	C	-	-	-	-					
HCM 95th %tile Q(veh)	0.1	-	-	-	-					

PM Peak Hour

HCM 2010 TWSC
13: Drive 3 & Riverfront

05/23/2018

Intersection												
Int. Delay, s/veh											9.6	
Movement	EBT	EBR	WBL	WBT	NBL	NBR						
Lane Configurations	↑↑		↑	↑↑	↑	↑						
Traffic Vol, veh/h	1398	117	73	420	132	79						
Future Vol, veh/h	1398	117	73	420	132	79						
Conflicting Peds, #/hr	0	0	0	0	0	0						
Sign Control	Free	Free	Free	Free	Stop	Stop						
RT Channelized	-	None	-	None	-	None						
Storage Length	-	-	150	-	0	0						
Veh in Median Storage, #	0	-	-	0	2	-						
Grade, %	0	-	-	0	0	-						
Peak Hour Factor	92	92	92	92	92	92						
Heavy Vehicles, %	2	2	2	2	2	2						
Mvmt Flow	1520	127	79	457	143	86						
Major/Minor												
Major1			Major2			Minor1						
Conflicting Flow All	0	0	1647	0	1970	823						
Stage 1	-	-	-	-	1583	-						
Stage 2	-	-	-	-	387	-						
Critical Hdwy	-	-	4.14	-	6.84	6.94						
Critical Hdwy Stg 1	-	-	-	-	5.84	-						
Critical Hdwy Stg 2	-	-	-	-	5.84	-						
Follow-up Hdwy	-	-	2.22	-	3.52	3.32						
Pd. Cap-1 Maneuver	-	-	389	-	55	317						
Stage 1	-	-	-	-	154	-						
Stage 2	-	-	-	-	656	-						
Platoon blocked, %	-	-	-	-	-	-						
Mov Cap-1 Maneuver	-	-	389	-	44	317						
Mov Cap-2 Maneuver	-	-	-	-	142	-						
Stage 1	-	-	-	-	154	-						
Stage 2	-	-	-	-	523	-						
Approach												
EB	WB	WB	NB									
HCM Control Delay, s	0	2.5	95.3									
HCM LOS			F									
Minor Lane/Major Mvmt												
NBLn1	NBLn2	EBT	EBR	WBL	WBT							
Capacity (veh/h)	142	317	-	-	389	-						
HCM Lane V/C Ratio	1.01	0.271	-	-	0.204	-						
HCM Control Delay (s)	140.1	20.5	-	-	16.6	-						
HCM Lane LOS	F	C	-	-	C	-						
HCM 95th %tile Q(veh)	7.4	1.1	-	-	0.8	-						
Notes												
-: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon												