

BURY

DRAFT TRAFFIC IMPACT ANALYSIS APPENDIX

*Austin Oaks
Austin, Travis County, Texas*

June 26, 2014

TBPE #F-1048

Draft

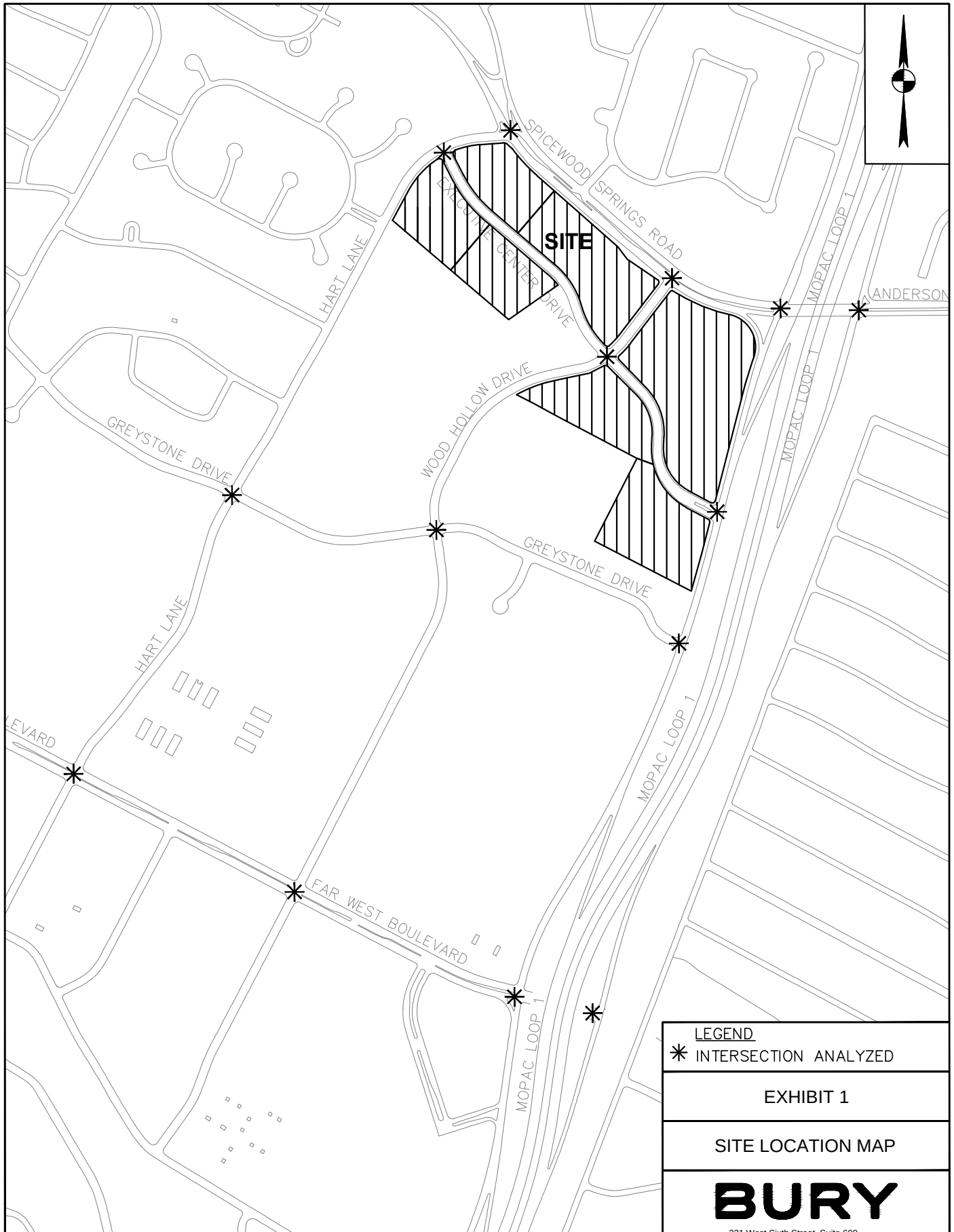
This Document is released for Review Only
under the authority of Bobak J. Tehrany, P.E.
Texas Professional Engineers No. 116095,
on June 26, 2014.

LET'S SOLVE IT.

APPENDIX

EXHIBIT 1

SITE LOCATION MAP



LEGEND

* INTERSECTION ANALYZED

EXHIBIT 1

SITE LOCATION MAP

BURY

221 West Sixth Street, Suite 600
Austin, Texas 78701
Tel. (512) 328-0011 Fax (512) 328-0325
TBPE Registration Number F-1048
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FILE:

PROJECT No.: 103363-10002

SCALE: N.T.S.

EXHIBIT 2

CONCEPTUAL PLAN

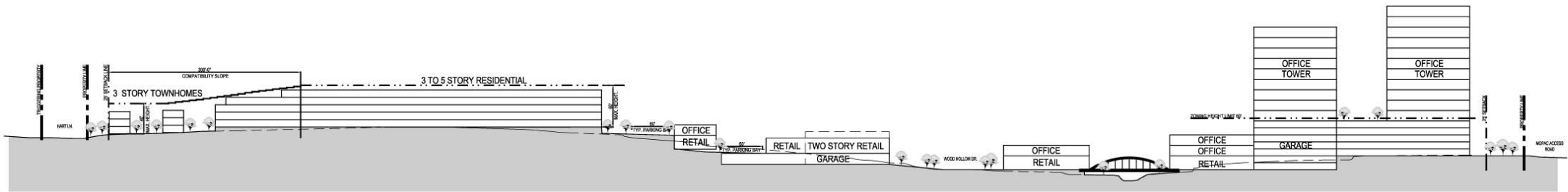


AUSTIN OAKS MASTER PLAN PROGRAM

2/27/2014							
Block	Areas	Program			Parking Required	Parking Provided	Program Totals
A	4.18 Acres	Multifamily 255 Units			383 Spaces	390 Spaces	Multifamily 575 Units
B	3.88 Acres	Two Story Retailer 34,000 sf	Retail 24,500 sf	Office 14,000 sf	339 Spaces	340 Spaces	Retail 75,700 sf
C	6.12 Acres	Retail 51,200 sf	Restaurant 8,000 sf	Office / Tower 300,000 sf	1,311 Spaces	1,314 Spaces	Restaurant 10,400 sf
D	2.79 Acres	Office Tower 311,300 sf			1,038 Spaces	1,040 Spaces	Two Story Retailer 34,000 sf
E	4.63 Acres	Office Tower 112,800 sf			376 Spaces	380 Spaces	Total Retail 120,100 sf
F	3.73 Acres	Office Tower 140,000 sf		Restaurant 2,400 sf	491 Spaces	500 Spaces	Office 878,100 sf
G	6.07 Acres	Multifamily 320 Units			480 Spaces	485 Spaces	
TOTAL	31.39 Acres				4,417 Spaces	4,449 Spaces	

MASTER PLAN

64 HERITAGE TREE CLUSTERS ON SITE
18 HERITAGE TREE CLUSTERS RELOCATED (DASHED RED)



LONGITUDINAL SECTION

SITE PLAN



EXHIBIT 3

SCOPING AGREEMENT AND TRIP GENERATION



TRAFFIC IMPACT ANALYSIS SCOPE AND STUDY AREA

Project Name: Austin Oaks Date: April 21, 2014
Location: SW Corner of Mopac (Loop 1) and Spicewood Springs Rd.
Owner's Agent: Bury, Inc. Phone: 512-328-0011
(Bobak J. Tehrany, P.E.)

- 1. Intersections.** Level of Service calculations for a.m. and p.m. peak hours must be performed for the following intersections, showing (a) existing traffic conditions and (b) projected traffic conditions for each phase, identifying site, non-site, and total traffic:

Note: New traffic counts are required for all intersections. Existing signal timings will be used for the intersection analyses in order to maintain adequate traffic progression, unless alternative timing proposals are approved by the Austin Transportation Department.

- a. Far West Boulevard and Hart Lane
- b. Far West Boulevard and Wood Hollow Drive
- c. Far West Boulevard and Mopac/Loop 1 (2 intersections)
- d. Greystone Drive and Hart Lane
- e. Greystone Drive and Wood Hollow Drive
- f. Greystone Drive and Mopac/Loop 1 SFR
- g. Executive Center Drive and Hart Lane
- h. Executive Center Drive and Wood Hollow Drive
- i. Executive Center Drive and Mopac/Loop 1 SFR
- j. Spicewood Springs Road and Hart Lane
- k. Spicewood Springs Road and Wood Hollow Drive
- l. Spicewood Springs Road and Mopac/Loop 1 (2 intersections)
- m. All site driveways

24-hour bi-directional tube counts shall be performed at the following intersections:

- a. Hart Lane between Far West Blvd. and Greystone Drive
- b. Hart Lane between Greystone Drive and Executive Center Drive
- c. Wood Hollow Drive between Far West Blvd. and Greystone Drive
- d. Wood Hollow Drive between Greystone Drive and Executive Center Drive
- e. Greystone Drive between Hart Lane and Wood Hollow Drive
- f. Greystone Drive between Wood Hollow Drive and Mopac/Loop 1 SFR

- 2. 2030 Planning Level Analysis.** A planning level analysis will be performed to document Level of Service calculations for 2030 a.m. and p.m. peak hours assuming traffic forecasts from CAMPO for the following intersections assuming CAMPO roadway geometric conditions:

N/A

- 3. Roadways.** A capacity analysis must be performed for the following roadway segments.

N/A

4. Neighborhood Impacts. Neighborhood impacts must be evaluated for the following street segments, based upon the desirable operation levels described in Sec. 25-6-114 of the Land Development Code:

- a. Hart Lane between Far West Blvd. and Greystone Drive
- b. Hart Lane between Greystone Drive and Executive Center Drive
- c. Wood Hollow Drive between Far West Blvd. and Greystone Drive
- d. Wood Hollow Drive between Greystone Drive and Executive Center Drive
- e. Greystone Drive between Hart Lane and Wood Hollow Drive
- f. Greystone Drive between Wood Hollow Drive and Mopac/Loop 1 SFR

5. Data Assumptions. The following assumptions must be included in the analysis. Any change in these assumptions must be approved by the transportation planner prior to submittal of the TIA.

a. Background Traffic

Average annual growth rate to be determined from TxDOT ADT maps and previous intersection and roadway counts: A 2.0% growth rate may be applied.

Other Projects to be Included:

C8-2013-0053.0A	Northwest Skyline
SP-2013-0058CT	Austin Oaks Restaurant

b. Internal trips

To be assumed for all land uses during the a.m. and p.m. peak hour periods based on ITE Trip Generation, 9th edition. The following internal capture rates may be assumed.

A 5.0% internal capture reduction will be applied to account for the interaction of the mixed land uses within this redevelopment project.

c. Pass-by Trips

To be assumed for all land uses during the a.m. and p.m. peak hour periods based upon data provided in ITE Trip Generation, 9th edition. The following pass-by reductions may be assumed.

Land Use	A.M. Peak Hour	P.M. Peak Hour
High-Turnover (Sit-Down) Restaurant	0%	43%
Shopping Center	0%	34%

d. Traffic Distribution

To be determined based on existing and historical distribution data.

Direction/Roadway	Site Traffic Distribution
West Spicewood Springs Rd.	20%
East Anderson Lane	20%
North Mopac/Loop 1	25%
South Mopac/Loop 1	25%
South Hart Lane	5%
South Wood Hollow Drive	5%
TOTAL	100%

e. Transit Trips

No transit trip reductions will be taken for this project.

6. Other Considerations:

- a. Each development phase to be analyzed, if proposed.
- b. Submit a CD containing
 - a. electronic PDF of the TIA,
 - b. Synchro files,
 - c. spreadsheets for trip distribution, trip generation, cost estimates, and
 - d. CAD file for the site plan.
- c. All intersections must be modeled in one Synchro file.
- d. A site plan for the proposed project.
- e. City of Austin timing sheets to be included in the Appendix of the TIA
- f. Map showing bicycle routes, transit routes and stops within ½ mile of the project, if applicable.
- g. Site driveway analysis to include queue study.

This scope and study is based upon the assumed development uses and intensities discussed in meeting on April 21, 2014. Any change in these assumptions may require a change in the scope. For more detailed guidelines on preparation of the TIA, please see Sec. 2.0 – Traffic Impact Analysis from the Transportation Criteria Manual.

Prepared by: Joe R. Almazan Phone: 974-2674
Joe R. Almazan

Proposed - Austin Oaks Phase I
Summary of Multi-Use Trip Generation
Average Weekday Driveway Volumes
April 04, 2014

Land Use	Size	24 Hour Two-Way Volume	AM Pk Hour		PM Pk Hour	
			Enter	Exit	Enter	Exit
Shopping Center	51.2 Th.Sq.Ft. GLA	4395	63	40	199	207
High Turnover (Sit-Down) Restaurant	8 Th.Sq.Ft. GFA	1017	48	44	53	37
General Office Building	300 Th.Sq.Ft. GFA	3109	397	54	71	344
Total Driveway Volume			8521	508 138	323	588
Total Peak Hour Pass-By Trips			0	0	117	114
Total Peak Hour Vol. Added to Adjacent Streets			508	138	206	474

Note: A zero indicates no data available.

TRIP GENERATION BY MICROTRANS

Proposed - Austin Oaks Phase I
Summary of Multi-Use Trip Generation
Saturday and Sunday Driveway Volumes
April 04, 2014

Land Use	Size	Saturday			Sunday		
		24 Hr 2-Way Vol.	Peak Enter	Hour Exit	24 Hr 2-Way Vol.	Peak Enter	Hour Exit
Shopping Center	51.2 Th.Sq.Ft. GLA	6060	288	266	5015	0	0
High Turnover (Sit-Down) Restaurant	8 Th.Sq.Ft. GFA	1267	60	53	1055	81	66
General Office Building	300 Th.Sq.Ft. GFA	660	49	41	184	15	11
Total Driveway Volume		7987	397	360	6254	96	77
Total Peak Hour Pass-By Trips			108	100			
Total Pk Hr Vol Added to Adjacent Streets			289	260			

Note: A zero indicates no data available.

TRIP GENERATION BY MICROTRANS

Proposed - Austin Oaks Phase II
Summary of Multi-Use Trip Generation
Average Weekday Driveway Volumes
April 04, 2014

Land Use	Size		24 Hour	AM Pk Hour		PM Pk Hour	
			Two-Way Volume	Enter	Exit	Enter	Exit
Shopping Center	31.5 Th.Sq.Ft.	GLA	3205	48	30	144	150
Shopping Center	19 Th.Sq.Ft.	GLA	2307	35	23	102	107
General Office Building	14 Th.Sq.Ft.	GFA	294	34	5	16	78
General Office Building	304.7 Th.Sq.Ft.	GFA	3146	402	55	71	349
Total Driveway Volume			8952	519	113	333	684
Total Peak Hour Pass-By Trips				0	0	143	150
Total Peak Hour Vol. Added to Adjacent Streets				519	113	190	534

Note: A zero indicates no data available.

TRIP GENERATION BY MICROTRANS

Proposed - Austin Oaks Phase II
Summary of Multi-Use Trip Generation
Saturday and Sunday Driveway Volumes
April 04, 2014

Land Use	Size	Saturday			Sunday		
		24 Hr 2-Way Vol.	Peak Enter	Hour Exit	24 Hr 2-Way Vol.	Peak Enter	Hour Exit
Shopping Center	31.5 Th.Sq.Ft. GLA	4463	210	194	4707	0	0
Shopping Center	19 Th.Sq.Ft. GLA	3245	151	140	4511	0	0
General Office Building	14 Th.Sq.Ft. GFA	48	4	3	13	2	2
General Office Building	304.7 Th.Sq.Ft. GFA	671	49	42	187	15	11
Total Driveway Volume		8427	414	379	9418	17	13
Total Peak Hour Pass-By Trips			138	127			
Total Pk Hr Vol Added to Adjacent Streets			276	252			

Note: A zero indicates no data available.

TRIP GENERATION BY MICROTRANS

Proposed - Austin Oaks Phase III
Summary of Multi-Use Trip Generation
Average Weekday Driveway Volumes
April 04, 2014

Land Use	Size	24 Hour Two-Way Volume	AM Pk Hour Enter	AM Pk Hour Exit	PM Pk Hour Enter	PM Pk Hour Exit
Residential Condominium / Townhouse						
	13 Dwelling Units	109	2	8	8	4
Apartments	282 Dwelling Units	1832	28	114	112	60
Residential Condominium / Townhouse						
	23 Dwelling Units	179	3	13	12	6
Apartments	292 Dwelling Units	1893	29	117	116	62
Total Driveway Volume		4013	62	252	248	132
Total Peak Hour Pass-By Trips			0	0	0	0
Total Peak Hour Vol. Added to Adjacent Streets			62	252	248	132

Note: A zero indicates no data available.

TRIP GENERATION BY MICROTRANS

Proposed - Austin Oaks Phase III
Summary of Multi-Use Trip Generation
Saturday and Sunday Driveway Volumes
April 04, 2014

Land Use	Size	Saturday			Sunday		
		24 Hr 2-Way Vol.	Peak Enter	Hour Exit	24 Hr 2-Way Vol.	Peak Enter	Hour Exit
Residential Condominium / Townhouse	13 Dwelling Units						
		475	25	21	398	26	27
Apartments	282 Dwelling Units						
		1958	0	0	1709	0	0
Residential Condominium / Townhouse	23 Dwelling Units						
		511	27	23	429	27	28
Apartments	292 Dwelling Units						
		2036	0	0	1774	0	0
Total Driveway Volume		4980	52	44	4310	53	55
Total Peak Hour Pass-By Trips			0	0			
Total Pk Hr Vol Added to Adjacent Streets			52	44			

Note: A zero indicates no data available.

TRIP GENERATION BY MICROTRANS

Proposed - Austin Oaks Phase IV
Summary of Multi-Use Trip Generation
Average Weekday Driveway Volumes
April 04, 2014

Land Use	Size	24 Hour Two-Way Volume	AM Pk Hour		PM Pk Hour	
			Enter	Exit	Enter	Exit
General Office Building						
112.8 Th.Sq.Ft. GFA		1464	182	25	35	170
General Office Building						
140 Th.Sq.Ft. GFA		1729	216	29	40	196
High Turnover (Sit-Down) Restaurant						
2.4 Th.Sq.Ft. GFA		305	14	13	16	11
Total Driveway Volume		3498	412	67	91	377
Total Peak Hour Pass-By Trips			0	0	7	5
Total Peak Hour Vol. Added to Adjacent Streets			412	67	84	372

Note: A zero indicates no data available.

TRIP GENERATION BY MICROTRANS

Proposed - Austin Oaks Phase IV
Summary of Multi-Use Trip Generation
Saturday and Sunday Driveway Volumes
April 04, 2014

Land Use	Size	Saturday			Sunday		
		24 Hr 2-Way Vol.	Peak Enter	Hour Exit	24 Hr 2-Way Vol.	Peak Enter	Hour Exit
General Office Building							
112.8 Th.Sq.Ft. GFA	260	22	19		79	8	6
General Office Building							
140 Th.Sq.Ft. GFA	318	26	22		96	9	7
High Turnover (Sit-Down) Restaurant							
2.4 Th.Sq.Ft. GFA	380	18	16		316	24	20
Total Driveway Volume		958	66	57	491	41	33
Total Peak Hour Pass-By Trips			0	0			
Total Pk Hr Vol Added to Adjacent Streets			66	57			

Note: A zero indicates no data available.

TRIP GENERATION BY MICROTRANS

EXHIBIT 4

RECOMMENDED IMPROVEMENTS

AUSTIN OAKS TIA
RECOMMENDED IMPROVEMENTS

INTERSECTION	PHASE I (2018)	2018 PRO-RATA	PHASE II (2023)	2023 PRO-RATA	PHASE III (2028)	2028 PRO-RATA	PHASE IV (2028)	2031 PRO-RATA
Far West Boulevard & Hart Lane	-	*	Restripe SB Hart Lane Approach to provide SBLT, and 1 shared thru right lane. Signal Modification for NB and SB Hart Lane approaches. Revise Splits.	*	N/A	*	N/A	*
Far West Boulevard & Wood Hollow Dr	-	*	Signal Modifications for NB and SB Woodhollow Drive approaches. Revise Splits.	*		*		*
Far West Boulevard & Mopac SB FR	Revise Splits	*	N/A	*	N/A	*	N/A	*
Far West Boulevard & Mopac NB FR	Revise Splits	*	N/A	*	N/A	*	N/A	*
Spicewood Springs Road & Mopac SB FR	Revise Splits	*	N/A	*	N/A	*	N/A	*
Spicewood Springs Road & Mopac NB FR	Revise Splits	*	N/A	*	N/A	*	N/A	*
Spicewood Springs Road & Wood Hollow Drive / Private Driveway	Restripe NB Woodhollow Drive to provide 3 lanes; 1 NBLT, 1 shared thru-right lane, 1 NBRT. Revise Splits	*	N/A	*	N/A	*	N/A	*
Greystone Drive & Hart Lane	-	*	Stripe NB and SB Hart Lane to provide 2 lanes, 1 Shared left-thru, and 1 shared thru-right lane. Restripe EB and WB Greystone Drive approaches to provide shared left thru, and shared thru right turn lanes.	*	N/A	*	N/A	*
Greystone Drive & Wood Hollow Drive	-	*	Restripe EB and WB Greystone approaches to provide 1 shared left-thru, and 1 shared thru-right turn lane.	*	N/A	*	N/A	*
Executive Center Drive & Wood Hollow Drive	Traffic Signal	*	N/A	*	N/A	*	N/A	*
Executive Center Drive & Hart Lane	-	*	Stripe NB Executive Center Drive approach to provide 2 lanes; NBLT and NBRT.	*	N/A	*	N/A	*
Spicewood Springs Road & Hart Lane	Green Signal for NBThru Movement on Spicewood Springs Road	*	N/A	*	N/A	*	N/A	*

* TO BE DETERMINED

NBLT - Northbound Left-Turn Lane
SBLT - Southbound Left-Turn Lane
WBLT - Westbound Left-Turn Lane
EBLT - Eastbound Left-Turn Lane

NBRT - Northbound Right-Turn Lane
SBRT - Southbound Right-Turn Lane
WBRT - Westbound Right-Turn Lane
EBRT - Eastbound Right-Turn Lane

EXHIBIT 5

EXISTING TURNING MOVEMENTS AND TRAFFIC COUNTS

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : farwest-hartam
Site Code : 00000027
Start Date : 3/27/2014
Page No : 1

Groups Printed- Autos

	Hart Ln Southbound					Far West Westbound					Hart Ln Northbound					Far West Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00	12	7	5	0	24	28	24	11	0	63	1	9	5	0	15	2	82	7	0	91	193
07:15	14	18	1	0	33	38	39	9	0	86	1	8	12	0	21	0	97	8	0	105	245
07:30	38	39	4	0	81	56	43	10	0	109	6	11	30	0	47	6	109	22	0	137	374
07:45	51	77	15	0	143	66	51	19	0	136	13	24	39	0	76	12	137	18	0	167	522
Total	115	141	25	0	281	188	157	49	0	394	21	52	86	0	159	20	425	55	0	500	1334
08:00	53	102	4	0	159	61	50	12	0	123	13	31	29	0	73	17	185	33	0	235	590
08:15	34	30	2	0	66	41	74	16	0	131	14	26	44	0	84	9	148	15	0	172	453
08:30	52	19	7	0	78	15	70	18	0	103	5	18	32	0	55	12	142	14	0	168	404
08:45	49	19	8	0	76	17	50	34	0	101	5	16	26	0	47	11	152	14	0	177	401
Total	188	170	21	0	379	134	244	80	0	458	37	91	131	0	259	49	627	76	0	752	1848
Grand Total	303	311	46	0	660	322	401	129	0	852	58	143	217	0	418	69	1052	131	0	1252	3182
Apprch %	45.9	47.1	7	0		37.8	47.1	15.1	0		13.9	34.2	51.9	0		5.5	84	10.5	0		
Total %	9.5	9.8	1.4	0	20.7	10.1	12.6	4.1	0	26.8	1.8	4.5	6.8	0	13.1	2.2	33.1	4.1	0	39.3	

	Hart Ln Southbound					Far West Westbound					Hart Ln Northbound					Far West Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45																					
07:45	51	77	15	0	143	66	51	19	0	136	13	24	39	0	76	12	137	18	0	167	522
08:00	53	102	4	0	159	61	50	12	0	123	13	31	29	0	73	17	185	33	0	235	590
08:15	34	30	2	0	66	41	74	16	0	131	14	26	44	0	84	9	148	15	0	172	453
08:30	52	19	7	0	78	15	70	18	0	103	5	18	32	0	55	12	142	14	0	168	404
Total Volume	190	228	28	0	446	183	245	65	0	493	45	99	144	0	288	50	612	80	0	742	1969
% App. Total	42.6	51.1	6.3	0		37.1	49.7	13.2	0		15.6	34.4	50	0		6.7	82.5	10.8	0		
PHF	.896	.559	.467	.000	.701	.693	.828	.855	.000	.906	.804	.798	.818	.000	.857	.735	.827	.606	.000	.789	.834

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626

512-832-8650

File Name : farwest-hartam

Site Code : 00000027

Start Date : 3/27/2014

Page No : 2

	Hart Ln Southbound					Far West Westbound					Hart Ln Northbound					Far West Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total

Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30					07:30					07:45					08:00				
+0 mins.	38	39	4	0	81	56	43	10	0	109	13	24	39	0	76	17	185	33	0	235
+15 mins.	51	77	15	0	143	66	51	19	0	136	13	31	29	0	73	9	148	15	0	172
+30 mins.	53	102	4	0	159	61	50	12	0	123	14	26	44	0	84	12	142	14	0	168
+45 mins.	34	30	2	0	66	41	74	16	0	131	5	18	32	0	55	11	152	14	0	177
Total Volume	176	248	25	0	449	224	218	57	0	499	45	99	144	0	288	49	627	76	0	752
% App. Total	39.2	55.2	5.6	0		44.9	43.7	11.4	0		15.6	34.4	50	0		6.5	83.4	10.1	0	
PHF	.830	.608	.417	.000	.706	.848	.736	.750	.000	.917	.804	.798	.818	.000	.857	.721	.847	.576	.000	.800

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : FarWest-HartPM
Site Code : 00000027
Start Date : 3/27/2014
Page No : 1

Groups Printed- Autos

	Hart Ln Southbound					Far West Westbound					Hart Ln Northbound					Far West Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
16:00	38	11	14	0	63	34	104	20	0	158	13	26	29	0	68	10	121	9	0	140	429
16:15	33	27	10	0	70	50	100	43	0	193	15	20	38	0	73	10	132	5	0	147	483
16:30	44	21	11	0	76	38	115	38	0	191	13	35	21	0	69	7	99	11	0	117	453
16:45	46	13	9	0	68	36	117	26	0	179	9	23	32	0	64	12	138	9	0	159	470
Total	161	72	44	0	277	158	436	127	0	721	50	104	120	0	274	39	490	34	0	563	1835
17:00	31	16	14	0	61	35	129	31	0	195	18	39	31	0	88	10	123	10	0	143	487
17:15	34	19	14	0	67	25	113	35	0	173	14	31	12	0	57	10	128	14	0	152	449
17:30	14	19	9	0	42	44	121	45	0	210	17	37	21	0	75	14	114	6	0	134	461
17:45	29	16	16	0	61	29	116	28	0	173	14	33	27	0	74	12	102	13	0	127	435
Total	108	70	53	0	231	133	479	139	0	751	63	140	91	0	294	46	467	43	0	556	1832
Grand Total	269	142	97	0	508	291	915	266	0	1472	113	244	211	0	568	85	957	77	0	1119	3667
Apprch %	53	28	19.1	0		19.8	62.2	18.1	0		19.9	43	37.1	0		7.6	85.5	6.9	0		
Total %	7.3	3.9	2.6	0	13.9	7.9	25	7.3	0	40.1	3.1	6.7	5.8	0	15.5	2.3	26.1	2.1	0	30.5	

	Hart Ln Southbound					Far West Westbound					Hart Ln Northbound					Far West Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:15																					
16:15	33	27	10	0	70	50	100	43	0	193	15	20	38	0	73	10	132	5	0	147	483
16:30	44	21	11	0	76	38	115	38	0	191	13	35	21	0	69	7	99	11	0	117	453
16:45	46	13	9	0	68	36	117	26	0	179	9	23	32	0	64	12	138	9	0	159	470
17:00	31	16	14	0	61	35	129	31	0	195	18	39	31	0	88	10	123	10	0	143	487
Total Volume	154	77	44	0	275	159	461	138	0	758	55	117	122	0	294	39	492	35	0	566	1893
% App. Total	56	28	16	0		21	60.8	18.2	0		18.7	39.8	41.5	0		6.9	86.9	6.2	0		
PHF	.837	.713	.786	.000	.905	.795	.893	.802	.000	.972	.764	.750	.803	.000	.835	.813	.891	.795	.000	.890	.972

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : FarWest-HartPM
Site Code : 00000027
Start Date : 3/27/2014
Page No : 2

Start Time	Hart Ln Southbound					Far West Westbound					Hart Ln Northbound					Far West Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	16:00					16:15					16:15					16:45				
+0 mins.	38	11	14	0	63	50	100	43	0	193	15	20	38	0	73	12	138	9	0	159
+15 mins.	33	27	10	0	70	38	115	38	0	191	13	35	21	0	69	10	123	10	0	143
+30 mins.	44	21	11	0	76	36	117	26	0	179	9	23	32	0	64	10	128	14	0	152
+45 mins.	46	13	9	0	68	35	129	31	0	195	18	39	31	0	88	14	114	6	0	134
Total Volume	161	72	44	0	277	159	461	138	0	758	55	117	122	0	294	46	503	39	0	588
% App. Total	58.1	26	15.9	0		21	60.8	18.2	0		18.7	39.8	41.5	0		7.8	85.5	6.6	0	
PHF	.875	.667	.786	.000	.911	.795	.893	.802	.000	.972	.764	.750	.803	.000	.835	.821	.911	.696	.000	.925

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : FarWest-WoodhollowAM
Site Code : 00000034
Start Date : 3/27/2014
Page No : 1

Groups Printed- Autos

	Wood Hollow Dr Southbound					Far West Blvd Westbound					Wood Hollow Dr Northbound					Far West Blvd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00	26	3	4	0	33	13	73	9	0	95	2	6	32	0	40	5	76	0	0	81	249
07:15	34	15	10	0	59	25	71	8	0	104	0	6	44	0	50	5	116	5	0	126	339
07:30	51	15	12	0	78	21	95	10	0	126	2	12	39	0	53	10	147	4	0	161	418
07:45	64	28	15	0	107	30	129	6	0	165	8	15	63	0	86	12	208	8	0	228	586
Total	175	61	41	0	277	89	368	33	0	490	12	39	178	0	229	32	547	17	0	596	1592
08:00	53	33	10	0	96	27	144	13	0	184	3	25	67	0	95	23	246	18	0	287	662
08:15	65	21	12	0	98	24	143	21	0	188	6	11	75	0	92	16	257	10	0	283	661
08:30	66	26	11	0	103	29	107	24	0	160	5	10	55	0	70	20	221	9	0	250	583
08:45	53	27	16	0	96	24	114	26	0	164	8	29	63	0	100	9	214	5	0	228	588
Total	237	107	49	0	393	104	508	84	0	696	22	75	260	0	357	68	938	42	0	1048	2494
Grand Total	412	168	90	0	670	193	876	117	0	1186	34	114	438	0	586	100	1485	59	0	1644	4086
Apprch %	61.5	25.1	13.4	0		16.3	73.9	9.9	0		5.8	19.5	74.7	0		6.1	90.3	3.6	0		
Total %	10.1	4.1	2.2	0	16.4	4.7	21.4	2.9	0	29	0.8	2.8	10.7	0	14.3	2.4	36.3	1.4	0	40.2	

	Wood Hollow Dr Southbound					Far West Blvd Westbound					Wood Hollow Dr Northbound					Far West Blvd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00																					
08:00	53	33	10	0	96	27	144	13	0	184	3	25	67	0	95	23	246	18	0	287	662
08:15	65	21	12	0	98	24	143	21	0	188	6	11	75	0	92	16	257	10	0	283	661
08:30	66	26	11	0	103	29	107	24	0	160	5	10	55	0	70	20	221	9	0	250	583
08:45	53	27	16	0	96	24	114	26	0	164	8	29	63	0	100	9	214	5	0	228	588
Total Volume	237	107	49	0	393	104	508	84	0	696	22	75	260	0	357	68	938	42	0	1048	2494
% App. Total	60.3	27.2	12.5	0		14.9	73	12.1	0		6.2	21	72.8	0		6.5	89.5	4	0		
PHF	.898	.811	.766	.000	.954	.897	.882	.808	.000	.926	.688	.647	.867	.000	.893	.739	.912	.583	.000	.913	.942

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : FarWest-WoodhollowAM
Site Code : 00000034
Start Date : 3/27/2014
Page No : 2

	Wood Hollow Dr Southbound					Far West Blvd Westbound					Wood Hollow Dr Northbound					Far West Blvd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total

Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45					07:45					08:00					07:45				
+0 mins.	64	28	15	0	107	30	129	6	0	165	3	25	67	0	95	12	208	8	0	228
+15 mins.	53	33	10	0	96	27	144	13	0	184	6	11	75	0	92	23	246	18	0	287
+30 mins.	65	21	12	0	98	24	143	21	0	188	5	10	55	0	70	16	257	10	0	283
+45 mins.	66	26	11	0	103	29	107	24	0	160	8	29	63	0	100	20	221	9	0	250
Total Volume	248	108	48	0	404	110	523	64	0	697	22	75	260	0	357	71	932	45	0	1048
% App. Total	61.4	26.7	11.9	0		15.8	75	9.2	0		6.2	21	72.8	0		6.8	88.9	4.3	0	
PHF	.939	.818	.800	.000	.944	.917	.908	.667	.000	.927	.688	.647	.867	.000	.893	.772	.907	.625	.000	.913

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : FarWest-WoodhollowPM
Site Code : 00000034
Start Date : 3/27/2014
Page No : 1

Groups Printed- Autos

	Wood Hollow Dr Southbound					Far West Blvd Westbound					Wood Hollow Dr Northbound					Far West Blvd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
16:00	31	16	9	0	56	45	149	30	0	224	8	28	61	0	97	24	182	11	0	217	594
16:15	28	22	8	0	58	48	147	19	0	214	12	26	57	0	95	15	195	9	0	219	586
16:30	29	18	6	0	53	56	154	34	0	244	15	30	49	0	94	22	205	14	0	241	632
16:45	24	25	8	0	57	39	140	19	0	198	19	37	55	0	111	12	174	10	0	196	562
Total	112	81	31	0	224	188	590	102	0	880	54	121	222	0	397	73	756	44	0	873	2374
17:00	28	16	11	0	55	46	138	28	0	212	22	34	57	0	113	30	173	14	0	217	597
17:15	56	25	8	0	89	46	162	33	0	241	19	39	101	0	159	25	191	14	0	230	719
17:30	32	27	4	0	63	52	133	29	0	214	28	48	73	0	149	17	150	16	0	183	609
17:45	23	21	10	0	54	56	168	24	0	248	20	43	52	0	115	18	166	12	0	196	613
Total	139	89	33	0	261	200	601	114	0	915	89	164	283	0	536	90	680	56	0	826	2538
Grand Total	251	170	64	0	485	388	1191	216	0	1795	143	285	505	0	933	163	1436	100	0	1699	4912
Apprch %	51.8	35.1	13.2	0		21.6	66.4	12	0		15.3	30.5	54.1	0		9.6	84.5	5.9	0		
Total %	5.1	3.5	1.3	0	9.9	7.9	24.2	4.4	0	36.5	2.9	5.8	10.3	0	19	3.3	29.2	2	0	34.6	

	Wood Hollow Dr Southbound					Far West Blvd Westbound					Wood Hollow Dr Northbound					Far West Blvd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	28	16	11	0	55	46	138	28	0	212	22	34	57	0	113	30	173	14	0	217	597
17:15	56	25	8	0	89	46	162	33	0	241	19	39	101	0	159	25	191	14	0	230	719
17:30	32	27	4	0	63	52	133	29	0	214	28	48	73	0	149	17	150	16	0	183	609
17:45	23	21	10	0	54	56	168	24	0	248	20	43	52	0	115	18	166	12	0	196	613
Total Volume	139	89	33	0	261	200	601	114	0	915	89	164	283	0	536	90	680	56	0	826	2538
% App. Total	53.3	34.1	12.6	0		21.9	65.7	12.5	0		16.6	30.6	52.8	0		10.9	82.3	6.8	0		
PHF	.621	.824	.750	.000	.733	.893	.894	.864	.000	.922	.795	.854	.700	.000	.843	.750	.890	.875	.000	.898	.882

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : FarWest-WoodhollowPM
Site Code : 00000034
Start Date : 3/27/2014
Page No : 2

	Wood Hollow Dr Southbound					Far West Blvd Westbound					Wood Hollow Dr Northbound					Far West Blvd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	16:45					17:00					17:00					16:30				
+0 mins.	24	25	8	0	57	46	138	28	0	212	22	34	57	0	113	22	205	14	0	241
+15 mins.	28	16	11	0	55	46	162	33	0	241	19	39	101	0	159	12	174	10	0	196
+30 mins.	56	25	8	0	89	52	133	29	0	214	28	48	73	0	149	30	173	14	0	217
+45 mins.	32	27	4	0	63	56	168	24	0	248	20	43	52	0	115	25	191	14	0	230
Total Volume	140	93	31	0	264	200	601	114	0	915	89	164	283	0	536	89	743	52	0	884
% App. Total	53	35.2	11.7	0		21.9	65.7	12.5	0		16.6	30.6	52.8	0		10.1	84	5.9	0	
PHF	.625	.861	.705	.000	.742	.893	.894	.864	.000	.922	.795	.854	.700	.000	.843	.742	.906	.929	.000	.917

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : FarWest-MopacSBam
Site Code : 00000032
Start Date : 3/26/2014
Page No : 1

Groups Printed- Autos

	Loop 1 - SB MoPac Service Rd Southbound					Far West Blvd Westbound					Northbound					Far West Blvd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00	37	87	134	0	258	4	60	0	0	64	0	0	0	0	0	0	70	102	0	172	494
07:15	25	74	142	0	241	3	82	0	0	85	0	0	0	0	0	0	88	117	0	205	531
07:30	30	94	158	0	282	1	90	0	0	91	0	0	0	0	0	0	141	106	0	247	620
07:45	26	105	174	0	305	7	122	0	0	129	0	0	0	0	0	0	170	99	0	269	703
Total	118	360	608	0	1086	15	354	0	0	369	0	0	0	0	0	0	469	424	0	893	2348
08:00	38	113	191	0	342	2	95	0	0	97	0	0	0	0	0	0	196	109	0	305	744
08:15	24	126	204	0	354	6	126	0	0	132	0	0	0	0	0	0	180	100	0	280	766
08:30	29	128	209	0	366	4	125	0	0	129	0	0	0	0	0	0	168	89	0	257	752
08:45	28	102	188	0	318	4	122	0	0	126	0	0	0	0	0	0	170	107	0	277	721
Total	119	469	792	0	1380	16	468	0	0	484	0	0	0	0	0	0	714	405	0	1119	2983
Grand Total	237	829	1400	0	2466	31	822	0	0	853	0	0	0	0	0	0	1183	829	0	2012	5331
Apprch %	9.6	33.6	56.8	0		3.6	96.4	0	0		0	0	0	0	0	0	58.8	41.2	0		
Total %	4.4	15.6	26.3	0	46.3	0.6	15.4	0	0	16	0	0	0	0	0	0	22.2	15.6	0	37.7	

	Loop 1 - SB MoPac Service Rd Southbound					Far West Blvd Westbound					Northbound					Far West Blvd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00																					
08:00	38	113	191	0	342	2	95	0	0	97	0	0	0	0	0	0	196	109	0	305	744
08:15	24	126	204	0	354	6	126	0	0	132	0	0	0	0	0	0	180	100	0	280	766
08:30	29	128	209	0	366	4	125	0	0	129	0	0	0	0	0	0	168	89	0	257	752
08:45	28	102	188	0	318	4	122	0	0	126	0	0	0	0	0	0	170	107	0	277	721
Total Volume	119	469	792	0	1380	16	468	0	0	484	0	0	0	0	0	0	714	405	0	1119	2983
% App. Total	8.6	34	57.4	0		3.3	96.7	0	0		0	0	0	0	0	0	63.8	36.2	0		
PHF	.783	.916	.947	.000	.943	.667	.929	.000	.000	.917	.000	.000	.000	.000	.000	.000	.911	.929	.000	.917	.974

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : FarWest-MopacSBam
Site Code : 00000032
Start Date : 3/26/2014
Page No : 2

Start Time	Loop 1 - SB MoPac Service Rd Southbound					Far West Blvd Westbound					Northbound					Far West Blvd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	

Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00					07:45					07:00					08:00				
+0 mins.	38	113	191	0	342	7	122	0	0	129	0	0	0	0	0	0	196	109	0	305
+15 mins.	24	126	204	0	354	2	95	0	0	97	0	0	0	0	0	0	180	100	0	280
+30 mins.	29	128	209	0	366	6	126	0	0	132	0	0	0	0	0	0	168	89	0	257
+45 mins.	28	102	188	0	318	4	125	0	0	129	0	0	0	0	0	0	170	107	0	277
Total Volume	119	469	792	0	1380	19	468	0	0	487	0	0	0	0	0	0	714	405	0	1119
% App. Total	8.6	34	57.4	0		3.9	96.1	0	0		0	0	0	0		0	63.8	36.2	0	
PHF	.783	.916	.947	.000	.943	.679	.929	.000	.000	.922	.000	.000	.000	.000	.000	.000	.911	.929	.000	.917

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : FarWest-MopacSBpm
Site Code : 00000032
Start Date : 3/26/2014
Page No : 1

Groups Printed- Autos

	Loop 1 - SB MoPac Service Rd Southbound					Far West Blvd Westbound					Northbound					Far West Blvd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
16:00	73	53	148	0	274	5	103	0	0	108	0	0	0	0	0	0	199	86	0	285	667
16:15	76	62	139	0	277	4	64	0	0	68	0	0	0	0	0	0	205	99	0	304	649
16:30	60	50	161	5	276	5	70	0	0	75	0	0	0	0	0	0	206	90	0	296	647
16:45	63	61	166	3	293	2	90	0	0	92	0	0	0	0	0	0	231	83	0	314	699
Total	272	226	614	8	1120	16	327	0	0	343	0	0	0	0	0	0	841	358	0	1199	2662
17:00	82	78	187	0	347	1	108	0	0	109	0	0	0	0	0	0	249	93	0	342	798
17:15	74	100	199	0	373	3	71	0	0	74	0	0	0	0	0	0	289	84	0	373	820
17:30	89	111	270	4	474	4	99	0	0	103	0	0	0	0	0	0	274	75	0	349	926
17:45	89	77	168	0	334	1	94	9	0	104	0	0	0	0	0	0	213	91	0	304	742
Total	334	366	824	4	1528	9	372	9	0	390	0	0	0	0	0	0	1025	343	0	1368	3286
Grand Total	606	592	1438	12	2648	25	699	9	0	733	0	0	0	0	0	0	1866	701	0	2567	5948
Apprch %	22.9	22.4	54.3	0.5		3.4	95.4	1.2	0		0	0	0	0	0	0	72.7	27.3	0		
Total %	10.2	10	24.2	0.2	44.5	0.4	11.8	0.2	0	12.3	0	0	0	0	0	0	31.4	11.8	0	43.2	

	Loop 1 - SB MoPac Service Rd Southbound					Far West Blvd Westbound					Northbound					Far West Blvd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	82	78	187	0	347	1	108	0	0	109	0	0	0	0	0	0	249	93	0	342	798
17:15	74	100	199	0	373	3	71	0	0	74	0	0	0	0	0	0	289	84	0	373	820
17:30	89	111	270	4	474	4	99	0	0	103	0	0	0	0	0	0	274	75	0	349	926
17:45	89	77	168	0	334	1	94	9	0	104	0	0	0	0	0	0	213	91	0	304	742
Total Volume	334	366	824	4	1528	9	372	9	0	390	0	0	0	0	0	0	1025	343	0	1368	3286
% App. Total	21.9	24	53.9	0.3		2.3	95.4	2.3	0		0	0	0	0	0	0	74.9	25.1	0		
PHF	.938	.824	.763	.250	.806	.563	.861	.250	.000	.894	.000	.000	.000	.000	.000	.000	.887	.922	.000	.917	.887

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : FarWest-MopacSBpm
Site Code : 00000032
Start Date : 3/26/2014
Page No : 2

Loop 1 - SB MoPac Service Rd Southbound						Far West Blvd Westbound					Northbound					Far West Blvd Eastbound					Int. Total
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	17:00					17:00					16:00					16:45				
+0 mins.	82	78	187	0	347	1	108	0	0	109	0	0	0	0	0	0	231	83	0	314
+15 mins.	74	100	199	0	373	3	71	0	0	74	0	0	0	0	0	0	249	93	0	342
+30 mins.	89	111	270	4	474	4	99	0	0	103	0	0	0	0	0	0	289	84	0	373
+45 mins.	89	77	168	0	334	1	94	9	0	104	0	0	0	0	0	0	274	75	0	349
Total Volume	334	366	824	4	1528	9	372	9	0	390	0	0	0	0	0	0	1043	335	0	1378
% App. Total	21.9	24	53.9	0.3		2.3	95.4	2.3	0		0	0	0	0		0	75.7	24.3	0	
PHF	.938	.824	.763	.250	.806	.563	.861	.250	.000	.894	.000	.000	.000	.000	.000	.000	.902	.901	.000	.924

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : farwest-mopacnbam
Site Code : 00000027
Start Date : 3/26/2014
Page No : 1

Groups Printed- Autos

	Southbound					Westbound					Mopac Frontage Northbound					Far West Eastbound						
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total	
07:00	0	0	0	0	0	0	0	0	0	0	67	3	0	0	70	101	0	0	0	0	101	171
07:15	0	0	0	0	0	0	0	0	0	0	87	7	0	0	94	108	0	0	0	0	108	202
07:30	0	0	0	0	0	0	0	0	0	0	92	3	0	0	95	175	0	0	0	0	175	270
07:45	0	0	0	0	0	0	0	0	0	0	130	2	0	0	132	195	0	0	0	0	195	327
Total	0	0	0	0	0	0	0	0	0	0	376	15	0	0	391	579	0	0	0	0	579	970
08:00	0	0	0	0	0	0	0	0	0	0	96	0	0	0	96	236	0	0	0	0	236	332
08:15	0	0	0	0	0	0	0	0	0	0	130	0	0	0	130	218	0	0	0	0	218	348
08:30	0	0	0	0	0	0	0	0	0	0	128	0	0	0	128	199	0	0	0	0	199	327
08:45	0	0	0	0	0	0	0	0	0	0	127	0	0	0	127	197	0	0	0	0	197	324
Total	0	0	0	0	0	0	0	0	0	0	481	0	0	0	481	850	0	0	0	0	850	1331
Grand Total	0	0	0	0	0	0	0	0	0	0	857	15	0	0	872	1429	0	0	0	0	1429	2301
Apprch %	0	0	0	0	0	0	0	0	0	0	98.3	1.7	0	0	0	100	0	0	0	0	0	
Total %	0	0	0	0	0	0	0	0	0	0	37.2	0.7	0	0	37.9	62.1	0	0	0	0	62.1	

	Southbound					Westbound					Mopac Frontage Northbound					Far West Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45																					
07:45	0	0	0	0	0	0	0	0	0	0	130	2	0	0	132	195	0	0	0	195	327
08:00	0	0	0	0	0	0	0	0	0	0	96	0	0	0	96	236	0	0	0	236	332
08:15	0	0	0	0	0	0	0	0	0	0	130	0	0	0	130	218	0	0	0	218	348
08:30	0	0	0	0	0	0	0	0	0	0	128	0	0	0	128	199	0	0	0	199	327
Total Volume	0	0	0	0	0	0	0	0	0	0	484	2	0	0	486	848	0	0	0	848	1334
% App. Total	0	0	0	0	0	0	0	0	0	0	99.6	0.4	0	0	0	100	0	0	0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.931	.250	.000	.000	.920	.898	.000	.000	.000	.898	.958

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : farwest-mopacnbam
Site Code : 00000027
Start Date : 3/26/2014
Page No : 2

	Southbound					Westbound					Mopac Frontage Northbound					Far West Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1 Peak Hour for Each Approach Begins at:																					
	07:00					07:00					07:45					08:00					
+0 mins.	0	0	0	0	0	0	0	0	0	0	130	2	0	0	132	236	0	0	0	0	236
+15 mins.	0	0	0	0	0	0	0	0	0	0	96	0	0	0	96	218	0	0	0	0	218
+30 mins.	0	0	0	0	0	0	0	0	0	0	130	0	0	0	130	199	0	0	0	0	199
+45 mins.	0	0	0	0	0	0	0	0	0	0	128	0	0	0	128	197	0	0	0	0	197
Total Volume	0	0	0	0	0	0	0	0	0	0	484	2	0	0	486	850	0	0	0	0	850
% App. Total	0	0	0	0	0	0	0	0	0	0	99.6	0.4	0	0	100	100	0	0	0	0	100
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.931	.250	.000	.000	.920	.900	.000	.000	.000	.000	.900

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : FarWest-MopacNBpm
Site Code : 00000027
Start Date : 3/26/2014
Page No : 1

Groups Printed- Autos

	Southbound					Westbound					Mopac Frontage Northbound					Far West Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
16:00	0	0	0	0	0	0	0	0	0	0	81	4	0	0	85	289	0	0	0	289	374
16:15	0	0	0	0	0	0	0	0	0	0	66	2	0	0	68	257	0	0	0	257	325
16:30	0	0	0	0	0	0	0	0	0	0	82	8	0	0	90	322	0	0	0	322	412
16:45	0	0	0	0	0	0	0	0	0	0	86	6	0	0	92	299	0	0	0	299	391
Total	0	0	0	0	0	0	0	0	0	0	315	20	0	0	335	1167	0	0	0	1167	1502
17:00	0	0	0	0	0	0	0	0	0	0	74	10	0	0	84	401	0	0	0	401	485
17:15	0	0	0	0	0	0	0	0	0	0	66	1	0	0	67	339	0	0	0	339	406
17:30	0	0	0	0	0	0	0	0	0	0	100	5	0	0	105	329	0	0	0	329	434
17:45	0	0	0	0	0	0	0	0	0	0	70	3	0	0	73	248	0	0	0	248	321
Total	0	0	0	0	0	0	0	0	0	0	310	19	0	0	329	1317	0	0	0	1317	1646
Grand Total	0	0	0	0	0	0	0	0	0	0	625	39	0	0	664	2484	0	0	0	2484	3148
Apprch %	0	0	0	0	0	0	0	0	0	0	94.1	5.9	0	0	100	100	0	0	0	100	
Total %	0	0	0	0	0	0	0	0	0	0	19.9	1.2	0	0	21.1	78.9	0	0	0	78.9	

	Southbound					Westbound					Mopac Frontage Northbound					Far West Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:45																					
16:45	0	0	0	0	0	0	0	0	0	0	86	6	0	0	92	299	0	0	0	299	391
17:00	0	0	0	0	0	0	0	0	0	0	74	10	0	0	84	401	0	0	0	401	485
17:15	0	0	0	0	0	0	0	0	0	0	66	1	0	0	67	339	0	0	0	339	406
17:30	0	0	0	0	0	0	0	0	0	0	100	5	0	0	105	329	0	0	0	329	434
Total Volume	0	0	0	0	0	0	0	0	0	0	326	22	0	0	348	1368	0	0	0	1368	1716
% App. Total	0	0	0	0	0	0	0	0	0	0	93.7	6.3	0	0	100	100	0	0	0	100	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.815	.550	.000	.000	.829	.853	.000	.000	.000	.853	.885

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : FarWest-MopacNBpm
Site Code : 00000027
Start Date : 3/26/2014
Page No : 2

Start Time	Southbound					Westbound					Mopac Frontage Northbound					Far West Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	16:00					16:00					16:45					16:45				
+0 mins.	0	0	0	0	0	0	0	0	0	0	86	6	0	0	92	299	0	0	0	299
+15 mins.	0	0	0	0	0	0	0	0	0	0	74	10	0	0	84	401	0	0	0	401
+30 mins.	0	0	0	0	0	0	0	0	0	0	66	1	0	0	67	339	0	0	0	339
+45 mins.	0	0	0	0	0	0	0	0	0	0	100	5	0	0	105	329	0	0	0	329
Total Volume	0	0	0	0	0	0	0	0	0	0	326	22	0	0	348	1368	0	0	0	1368
% App. Total	0	0	0	0	0	0	0	0	0	0	93.7	6.3	0	0	100	100	0	0	0	100
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.815	.550	.000	.000	.829	.853	.000	.000	.000	.853

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626

512-832-8650

File Name : Spice-MopacSBam

Site Code : 00000021

Start Date : 3/26/2014

Page No : 1

Groups Printed- Autos

	Loop 1 -SB MoPac Service Rd Southbound					Spicewood Springs Rd Westbound					Loop 1 - SB MoPac Service Rd Northbound					Spicewood Springs Rd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00	42	68	33	0	143	63	59	0	0	122	0	0	0	0	0	0	70	70	0	140	405
07:15	59	134	48	0	241	84	98	0	0	182	0	0	0	0	0	0	100	103	0	203	626
07:30	62	229	91	0	382	100	131	0	0	231	0	0	0	0	0	0	150	122	0	272	885
07:45	86	298	151	0	535	149	166	0	0	315	0	0	0	0	0	0	185	161	0	346	1196
Total	249	729	323	0	1301	396	454	0	0	850	0	0	0	0	0	0	505	456	0	961	3112
08:00	78	237	154	0	469	118	212	0	0	330	0	0	0	0	0	0	199	146	0	345	1144
08:15	72	262	149	0	483	157	237	0	0	394	0	0	0	0	0	0	185	157	0	342	1219
08:30	84	242	125	0	451	124	203	0	0	327	0	0	0	0	0	0	255	116	0	371	1149
08:45	68	238	160	0	466	102	184	0	0	286	0	0	0	0	0	0	243	95	0	338	1090
Total	302	979	588	0	1869	501	836	0	0	1337	0	0	0	0	0	0	882	514	0	1396	4602
Grand Total	551	1708	911	0	3170	897	1290	0	0	2187	0	0	0	0	0	0	1387	970	0	2357	7714
Apprch %	17.4	53.9	28.7	0		41	59	0	0		0	0	0	0	0	0	58.8	41.2	0		
Total %	7.1	22.1	11.8	0	41.1	11.6	16.7	0	0	28.4	0	0	0	0	0	0	18	12.6	0	30.6	

	Loop 1 -SB MoPac Service Rd Southbound					Spicewood Springs Rd Westbound					Loop 1 - SB MoPac Service Rd Northbound					Spicewood Springs Rd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45																					
07:45	86	298	151	0	535	149	166	0	0	315	0	0	0	0	0	0	185	161	0	346	1196
08:00	78	237	154	0	469	118	212	0	0	330	0	0	0	0	0	0	199	146	0	345	1144
08:15	72	262	149	0	483	157	237	0	0	394	0	0	0	0	0	0	185	157	0	342	1219
08:30	84	242	125	0	451	124	203	0	0	327	0	0	0	0	0	0	255	116	0	371	1149
Total Volume	320	1039	579	0	1938	548	818	0	0	1366	0	0	0	0	0	0	824	580	0	1404	4708
% App. Total	16.5	53.6	29.9	0		40.1	59.9	0	0		0	0	0	0	0	0	58.7	41.3	0		
PHF	.930	.872	.940	.000	.906	.873	.863	.000	.000	.867	.000	.000	.000	.000	.000	.000	.808	.901	.000	.946	.966

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : Spice-MopacSBam
Site Code : 00000021
Start Date : 3/26/2014
Page No : 2

	Loop 1 -SB MoPac Service Rd Southbound					Spicewood Springs Rd Westbound					Loop 1 - SB MoPac Service Rd Northbound					Spicewood Springs Rd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total

Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:45					07:45					07:00					07:45				
+0 mins.	86	298	151	0	535	149	166	0	0	315	0	0	0	0	0	0	185	161	0	346
+15 mins.	78	237	154	0	469	118	212	0	0	330	0	0	0	0	0	0	199	146	0	345
+30 mins.	72	262	149	0	483	157	237	0	0	394	0	0	0	0	0	0	185	157	0	342
+45 mins.	84	242	125	0	451	124	203	0	0	327	0	0	0	0	0	0	255	116	0	371
Total Volume	320	1039	579	0	1938	548	818	0	0	1366	0	0	0	0	0	0	824	580	0	1404
% App. Total	16.5	53.6	29.9	0		40.1	59.9	0	0		0	0	0	0		0	58.7	41.3	0	
PHF	.930	.872	.940	.000	.906	.873	.863	.000	.000	.867	.000	.000	.000	.000	.000	.000	.808	.901	.000	.946

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : Spice-MopacSBpm
Site Code : 00000021
Start Date : 3/26/2014
Page No : 1

Groups Printed- Autos

	Loop 1 - SB MoPac Service Rd Southbound					Spicewood Springs Rd Westbound					Loop 1 - SB Mopac Service Rd Northbound					Spicewood Springs Rd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
16:00	65	37	71	0	173	120	153	0	0	273	0	0	0	0	0	0	164	67	0	231	677
16:15	73	30	56	0	159	147	184	0	0	331	0	0	0	0	0	0	172	53	0	225	715
16:30	88	21	59	0	168	125	190	0	0	315	0	0	0	0	0	0	185	67	0	252	735
16:45	87	30	63	0	180	134	260	0	0	394	0	0	0	0	0	0	190	50	0	240	814
Total	313	118	249	0	680	526	787	0	0	1313	0	0	0	0	0	0	711	237	0	948	2941
17:00	123	39	94	0	256	138	207	0	0	345	0	0	0	0	0	0	247	68	0	315	916
17:15	147	58	78	0	283	172	294	0	0	466	0	0	0	0	0	0	276	75	0	351	1100
17:30	144	52	64	0	260	122	298	0	0	420	0	0	0	0	0	0	303	66	0	369	1049
17:45	136	31	107	0	274	128	347	0	0	475	0	0	0	0	0	0	268	61	0	329	1078
Total	550	180	343	0	1073	560	1146	0	0	1706	0	0	0	0	0	0	1094	270	0	1364	4143
Grand Total	863	298	592	0	1753	1086	1933	0	0	3019	0	0	0	0	0	0	1805	507	0	2312	7084
Apprch %	49.2	17	33.8	0		36	64	0	0		0	0	0	0		0	78.1	21.9	0		
Total %	12.2	4.2	8.4	0	24.7	15.3	27.3	0	0	42.6	0	0	0	0	0	0	25.5	7.2	0	32.6	

	Loop 1 - SB MoPac Service Rd Southbound					Spicewood Springs Rd Westbound					Loop 1 - SB Mopac Service Rd Northbound					Spicewood Springs Rd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	123	39	94	0	256	138	207	0	0	345	0	0	0	0	0	0	247	68	0	315	916
17:15	147	58	78	0	283	172	294	0	0	466	0	0	0	0	0	0	276	75	0	351	1100
17:30	144	52	64	0	260	122	298	0	0	420	0	0	0	0	0	0	303	66	0	369	1049
17:45	136	31	107	0	274	128	347	0	0	475	0	0	0	0	0	0	268	61	0	329	1078
Total Volume	550	180	343	0	1073	560	1146	0	0	1706	0	0	0	0	0	0	1094	270	0	1364	4143
% App. Total	51.3	16.8	32	0		32.8	67.2	0	0		0	0	0	0		0	80.2	19.8	0		
PHF	.935	.776	.801	.000	.948	.814	.826	.000	.000	.898	.000	.000	.000	.000	.000	.000	.903	.900	.000	.924	.942

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626

512-832-8650

File Name : Spice-MopacSBpm

Site Code : 00000021

Start Date : 3/26/2014

Page No : 2

	Loop 1 - SB MoPac Service Rd Southbound					Spicewood Springs Rd Westbound					Loop 1 - SB Mopac Service Rd Northbound					Spicewood Springs Rd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	17:00					17:00					16:00					17:00				
+0 mins.	123	39	94	0	256	138	207	0	0	345	0	0	0	0	0	0	247	68	0	315
+15 mins.	147	58	78	0	283	172	294	0	0	466	0	0	0	0	0	0	276	75	0	351
+30 mins.	144	52	64	0	260	122	298	0	0	420	0	0	0	0	0	0	303	66	0	369
+45 mins.	136	31	107	0	274	128	347	0	0	475	0	0	0	0	0	0	268	61	0	329
Total Volume	550	180	343	0	1073	560	1146	0	0	1706	0	0	0	0	0	0	1094	270	0	1364
% App. Total	51.3	16.8	32	0		32.8	67.2	0	0		0	0	0	0		0	80.2	19.8	0	
PHF	.935	.776	.801	.000	.948	.814	.826	.000	.000	.898	.000	.000	.000	.000	.000	.000	.903	.900	.000	.924

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : Spicewood-MopacNBam
Site Code : 00000034
Start Date : 3/26/2014
Page No : 1

Groups Printed- Autos

	Loop 1 - NB MoPac Service Rd Southbound					Spicewood Springs Rd Westbound					Loop 1 - NB MoPac Service Rd Northbound					Spicewood Springs Rd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00	0	0	0	0	0	0	69	13	0	82	33	1	57	0	91	24	98	0	0	122	295
07:15	0	0	0	0	0	0	107	26	0	133	65	0	88	0	153	28	108	0	0	136	422
07:30	0	0	0	0	0	0	130	35	1	166	60	0	99	0	159	37	153	0	0	190	515
07:45	0	0	0	0	0	0	197	41	0	238	53	3	102	0	158	60	183	0	0	243	639
Total	0	0	0	0	0	0	503	115	1	619	211	4	346	0	561	149	542	0	0	691	1871
08:00	0	0	0	0	0	0	210	38	0	248	78	2	134	0	214	65	204	0	0	269	731
08:15	0	0	0	0	0	0	210	70	0	280	76	5	109	0	190	57	202	0	0	259	729
08:30	0	0	0	0	0	0	228	56	0	284	98	4	112	0	214	69	190	0	0	259	757
08:45	0	0	0	0	0	0	203	57	0	260	84	1	111	0	196	74	189	0	0	263	719
Total	0	0	0	0	0	0	851	221	0	1072	336	12	466	0	814	265	785	0	0	1050	2936
Grand Total	0	0	0	0	0	0	1354	336	1	1691	547	16	812	0	1375	414	1327	0	0	1741	4807
Apprch %	0	0	0	0	0	0	80.1	19.9	0.1	39.8	1.2	59.1	0	28.6	8.6	27.6	0	0	36.2		
Total %	0	0	0	0	0	0	28.2	7	0	35.2	11.4	0.3	16.9	0	28.6	8.6	27.6	0	0	36.2	

	Loop 1 - NB MoPac Service Rd Southbound					Spicewood Springs Rd Westbound					Loop 1 - NB MoPac Service Rd Northbound					Spicewood Springs Rd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00																					
08:00	0	0	0	0	0	0	210	38	0	248	78	2	134	0	214	65	204	0	0	269	731
08:15	0	0	0	0	0	0	210	70	0	280	76	5	109	0	190	57	202	0	0	259	729
08:30	0	0	0	0	0	0	228	56	0	284	98	4	112	0	214	69	190	0	0	259	757
08:45	0	0	0	0	0	0	203	57	0	260	84	1	111	0	196	74	189	0	0	263	719
Total Volume	0	0	0	0	0	0	851	221	0	1072	336	12	466	0	814	265	785	0	0	1050	2936
% App. Total	0	0	0	0	0	0	79.4	20.6	0	41.3	1.5	57.2	0	28.6	8.6	27.6	0	0	36.2		
PHF	.000	.000	.000	.000	.000	.000	.933	.789	.000	.944	.857	.600	.869	.000	.951	.895	.962	.000	.000	.976	.970

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : Spicewood-MopacNBam
Site Code : 00000034
Start Date : 3/26/2014
Page No : 2

	Loop 1 - NB MoPac Service Rd Southbound					Spicewood Springs Rd Westbound					Loop 1 - NB MoPac Service Rd Northbound					Spicewood Springs Rd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1 Peak Hour for Each Approach Begins at:																					
	07:00					08:00					08:00					08:00					
+0 mins.	0	0	0	0	0	0	210	38	0	248	78	2	134	0	214	65	204	0	0	269	
+15 mins.	0	0	0	0	0	0	210	70	0	280	76	5	109	0	190	57	202	0	0	259	
+30 mins.	0	0	0	0	0	0	228	56	0	284	98	4	112	0	214	69	190	0	0	259	
+45 mins.	0	0	0	0	0	0	203	57	0	260	84	1	111	0	196	74	189	0	0	263	
Total Volume	0	0	0	0	0	0	851	221	0	1072	336	12	466	0	814	265	785	0	0	1050	
% App. Total	0	0	0	0	0	0	79.4	20.6	0		41.3	1.5	57.2	0		25.2	74.8	0	0		
PHF	.000	.000	.000	.000	.000	.000	.933	.789	.000	.944	.857	.600	.869	.000	.951	.895	.962	.000	.000	.976	

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : Spicewood-MopacNBpm
Site Code : 00000034
Start Date : 3/26/2014
Page No : 1

Groups Printed- Autos

	Loop 1 - NB MoPac Service Rd Southbound					Spicewood Springs Rd Westbound					Loop 1 - NB MoPac Service Rd Northbound					Spicewood Springs Rd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
16:00	0	0	0	0	0	0	212	85	0	297	75	12	123	0	210	75	145	0	0	220	727
16:15	0	0	0	0	0	0	239	108	1	348	41	6	100	0	147	102	174	0	0	276	771
16:30	0	0	0	0	0	0	222	125	0	347	44	5	117	0	166	92	187	0	0	279	792
16:45	0	0	0	0	0	0	235	117	1	353	57	8	114	0	179	99	159	0	0	258	790
Total	0	0	0	0	0	0	908	435	2	1345	217	31	454	0	702	368	665	0	0	1033	3080
17:00	0	0	0	0	0	0	206	100	0	306	54	8	109	0	171	103	203	0	0	306	783
17:15	0	0	0	0	0	0	278	95	0	373	45	10	133	0	188	122	224	0	0	346	907
17:30	0	0	0	0	0	0	255	101	0	356	63	13	111	0	187	112	278	0	0	390	933
17:45	0	0	0	0	0	0	266	90	1	357	74	7	142	0	223	102	255	0	0	357	937
Total	0	0	0	0	0	0	1005	386	1	1392	236	38	495	0	769	439	960	0	0	1399	3560
Grand Total	0	0	0	0	0	0	1913	821	3	2737	453	69	949	0	1471	807	1625	0	0	2432	6640
Apprch %	0	0	0	0	0	0	69.9	30	0.1		30.8	4.7	64.5	0		33.2	66.8	0	0		
Total %	0	0	0	0	0	0	28.8	12.4	0	41.2	6.8	1	14.3	0	22.2	12.2	24.5	0	0	36.6	

	Loop 1 - NB MoPac Service Rd Southbound					Spicewood Springs Rd Westbound					Loop 1 - NB MoPac Service Rd Northbound					Spicewood Springs Rd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	0	0	0	0	0	0	206	100	0	306	54	8	109	0	171	103	203	0	0	306	783
17:15	0	0	0	0	0	0	278	95	0	373	45	10	133	0	188	122	224	0	0	346	907
17:30	0	0	0	0	0	0	255	101	0	356	63	13	111	0	187	112	278	0	0	390	933
17:45	0	0	0	0	0	0	266	90	1	357	74	7	142	0	223	102	255	0	0	357	937
Total Volume	0	0	0	0	0	0	1005	386	1	1392	236	38	495	0	769	439	960	0	0	1399	3560
% App. Total	0	0	0	0	0	0	72.2	27.7	0.1		30.7	4.9	64.4	0		31.4	68.6	0	0		
PHF	.000	.000	.000	.000	.000	.000	.904	.955	.250	.933	.797	.731	.871	.000	.862	.900	.863	.000	.000	.897	.950

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : Spicewood-MopacNBpm
Site Code : 00000034
Start Date : 3/26/2014
Page No : 2

	Loop 1 - NB MoPac Service Rd Southbound					Spicewood Springs Rd Westbound					Loop 1 - NB MoPac Service Rd Northbound					Spicewood Springs Rd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1 Peak Hour for Each Approach Begins at:																					
	16:00					17:00					17:00					17:00					
+0 mins.	0	0	0	0	0	0	206	100	0	306	54	8	109	0	171	103	203	0	0	306	
+15 mins.	0	0	0	0	0	0	278	95	0	373	45	10	133	0	188	122	224	0	0	346	
+30 mins.	0	0	0	0	0	0	255	101	0	356	63	13	111	0	187	112	278	0	0	390	
+45 mins.	0	0	0	0	0	0	266	90	1	357	74	7	142	0	223	102	255	0	0	357	
Total Volume	0	0	0	0	0	0	1005	386	1	1392	236	38	495	0	769	439	960	0	0	1399	
% App. Total	0	0	0	0	0	0	72.2	27.7	0.1		30.7	4.9	64.4	0		31.4	68.6	0	0		
PHF	.000	.000	.000	.000	.000	.000	.904	.955	.250	.933	.797	.731	.871	.000	.862	.900	.863	.000	.000	.897	

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : Spice-WoodhollowAM
Site Code : 00000028
Start Date : 3/27/2014
Page No : 1

Groups Printed- Autos

	Spicewood Springs Rd Southbound					Wood Hollow Dr Westbound					Spicewood Springs Rd Northbound					Wood Hollow Dr Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00	1	111	14	0	126	0	0	1	0	1	20	75	1	0	96	0	0	11	0	11	234
07:15	2	194	9	0	205	0	0	0	0	0	32	124	3	0	159	4	0	29	0	33	397
07:30	1	236	19	0	256	0	0	2	0	2	67	132	2	0	201	9	0	33	1	43	502
07:45	1	269	27	0	297	0	0	1	0	1	74	148	2	0	224	4	0	43	0	47	569
Total	5	810	69	0	884	0	0	4	0	4	193	479	8	0	680	17	0	116	1	134	1702
08:00	1	257	17	0	275	3	0	1	0	4	71	151	2	1	225	15	1	37	0	53	557
08:15	2	213	23	0	238	1	0	0	0	1	89	184	4	1	278	10	2	26	0	38	555
08:30	3	227	24	1	255	2	0	0	0	2	89	201	2	0	292	14	1	25	0	40	589
08:45	2	166	14	0	182	0	0	1	0	1	72	156	3	1	232	10	0	49	0	59	474
Total	8	863	78	1	950	6	0	2	0	8	321	692	11	3	1027	49	4	137	0	190	2175
Grand Total	13	1673	147	1	1834	6	0	6	0	12	514	1171	19	3	1707	66	4	253	1	324	3877
Apprch %	0.7	91.2	8	0.1		50	0	50	0		30.1	68.6	1.1	0.2		20.4	1.2	78.1	0.3		
Total %	0.3	43.2	3.8	0	47.3	0.2	0	0.2	0	0.3	13.3	30.2	0.5	0.1	44	1.7	0.1	6.5	0	8.4	

	Spicewood Springs Rd Southbound					Wood Hollow Dr Westbound					Spicewood Springs Rd Northbound					Wood Hollow Dr Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45																					
07:45	1	269	27	0	297	0	0	1	0	1	74	148	2	0	224	4	0	43	0	47	569
08:00	1	257	17	0	275	3	0	1	0	4	71	151	2	1	225	15	1	37	0	53	557
08:15	2	213	23	0	238	1	0	0	0	1	89	184	4	1	278	10	2	26	0	38	555
08:30	3	227	24	1	255	2	0	0	0	2	89	201	2	0	292	14	1	25	0	40	589
Total Volume	7	966	91	1	1065	6	0	2	0	8	323	684	10	2	1019	43	4	131	0	178	2270
% App. Total	0.7	90.7	8.5	0.1		75	0	25	0		31.7	67.1	1	0.2		24.2	2.2	73.6	0		
PHF	.583	.898	.843	.250	.896	.500	.000	.500	.000	.500	.907	.851	.625	.500	.872	.717	.500	.762	.000	.840	.963

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : Spice-WoodhollowAM
Site Code : 00000028
Start Date : 3/27/2014
Page No : 2

	Spicewood Springs Rd Southbound					Wood Hollow Dr Westbound					Spicewood Springs Rd Northbound					Wood Hollow Dr Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total

Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30					07:30					08:00					08:00				
+0 mins.	1	236	19	0	256	0	0	2	0	2	71	151	2	1	225	15	1	37	0	53
+15 mins.	1	269	27	0	297	0	0	1	0	1	89	184	4	1	278	10	2	26	0	38
+30 mins.	1	257	17	0	275	3	0	1	0	4	89	201	2	0	292	14	1	25	0	40
+45 mins.	2	213	23	0	238	1	0	0	0	1	72	156	3	1	232	10	0	49	0	59
Total Volume	5	975	86	0	1066	4	0	4	0	8	321	692	11	3	1027	49	4	137	0	190
% App. Total	0.5	91.5	8.1	0		50	0	50	0		31.3	67.4	1.1	0.3		25.8	2.1	72.1	0	
PHF	.625	.906	.796	.000	.897	.333	.000	.500	.000	.500	.902	.861	.688	.750	.879	.817	.500	.699	.000	.805

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : Spice-WoodhollowPM
Site Code : 00000028
Start Date : 3/27/2014
Page No : 1

Groups Printed- Autos

	Spicewood Springs Rd Southbound					Wood Hollow Dr Westbound					Spicewood Springs Rd Northbound					Wood Hollow Dr Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
16:00	4	206	15	0	225	2	2	0	0	4	28	183	2	2	215	23	1	54	1	79	523
16:15	1	185	7	0	193	2	0	1	0	3	23	165	0	0	188	25	2	29	0	56	440
16:30	1	190	4	0	195	3	1	1	0	5	17	147	0	2	166	23	1	38	0	62	428
16:45	0	126	4	0	130	4	2	0	0	6	24	121	1	2	148	30	5	38	1	74	358
Total	6	707	30	0	743	11	5	2	0	18	92	616	3	6	717	101	9	159	2	271	1749
17:00	1	263	5	0	269	0	0	3	0	3	23	162	0	1	186	56	1	82	0	139	597
17:15	1	256	8	2	267	1	1	6	0	8	21	189	0	0	210	48	1	61	0	110	595
17:30	1	206	5	1	213	0	0	3	0	3	23	198	0	0	221	38	0	59	0	97	534
17:45	2	135	4	1	142	0	3	1	0	4	24	147	1	1	173	18	5	40	0	63	382
Total	5	860	22	4	891	1	4	13	0	18	91	696	1	2	790	160	7	242	0	409	2108
Grand Total	11	1567	52	4	1634	12	9	15	0	36	183	1312	4	8	1507	261	16	401	2	680	3857
Apprch %	0.7	95.9	3.2	0.2		33.3	25	41.7	0		12.1	87.1	0.3	0.5		38.4	2.4	59	0.3		
Total %	0.3	40.6	1.3	0.1	42.4	0.3	0.2	0.4	0	0.9	4.7	34	0.1	0.2	39.1	6.8	0.4	10.4	0.1	17.6	

	Spicewood Springs Rd Southbound					Wood Hollow Dr Westbound					Spicewood Springs Rd Northbound					Wood Hollow Dr Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	1	263	5	0	269	0	0	3	0	3	23	162	0	1	186	56	1	82	0	139	597
17:15	1	256	8	2	267	1	1	6	0	8	21	189	0	0	210	48	1	61	0	110	595
17:30	1	206	5	1	213	0	0	3	0	3	23	198	0	0	221	38	0	59	0	97	534
17:45	2	135	4	1	142	0	3	1	0	4	24	147	1	1	173	18	5	40	0	63	382
Total Volume	5	860	22	4	891	1	4	13	0	18	91	696	1	2	790	160	7	242	0	409	2108
% App. Total	0.6	96.5	2.5	0.4		5.6	22.2	72.2	0		11.5	88.1	0.1	0.3		39.1	1.7	59.2	0		
PHF	.625	.817	.688	.500	.828	.250	.333	.542	.000	.563	.948	.879	.250	.500	.894	.714	.350	.738	.000	.736	.883

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : Spice-WoodhollowPM
Site Code : 00000028
Start Date : 3/27/2014
Page No : 2

	Spicewood Springs Rd Southbound					Wood Hollow Dr Westbound					Spicewood Springs Rd Northbound					Wood Hollow Dr Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	17:00					16:30					17:00					16:45				
+0 mins.	1	263	5	0	269	3	1	1	0	5	23	162	0	1	186	30	5	38	1	74
+15 mins.	1	256	8	2	267	4	2	0	0	6	21	189	0	0	210	56	1	82	0	139
+30 mins.	1	206	5	1	213	0	0	3	0	3	23	198	0	0	221	48	1	61	0	110
+45 mins.	2	135	4	1	142	1	1	6	0	8	24	147	1	1	173	38	0	59	0	97
Total Volume	5	860	22	4	891	8	4	10	0	22	91	696	1	2	790	172	7	240	1	420
% App. Total	0.6	96.5	2.5	0.4		36.4	18.2	45.5	0		11.5	88.1	0.1	0.3		41	1.7	57.1	0.2	
PHF	.625	.817	.688	.500	.828	.500	.500	.417	.000	.688	.948	.879	.250	.500	.894	.768	.350	.732	.250	.755

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : Hart-GreyAM
Site Code : 00000008
Start Date : 3/27/2014
Page No : 1

Groups Printed- Autos

	Hart Lane Southbound					Greystone Dr Westbound					Hart Lane Northbound					Greystone Dr Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00	5	5	0	0	10	4	5	1	0	10	1	3	1	0	5	2	14	7	0	23	48
07:15	3	14	2	0	19	16	4	1	0	21	3	13	1	0	17	4	33	7	0	44	101
07:30	2	36	3	0	41	18	20	1	0	39	5	13	6	0	24	3	23	24	0	50	154
07:45	1	75	6	0	82	23	16	3	0	42	13	25	7	0	45	7	44	47	0	98	267
Total	11	130	11	0	152	61	45	6	0	112	22	54	15	0	91	16	114	85	0	215	570
08:00	5	88	4	0	97	17	12	1	0	30	15	31	6	0	52	8	55	38	0	101	280
08:15	6	41	4	0	51	18	16	0	0	34	12	35	13	0	60	9	26	17	0	52	197
08:30	2	38	11	0	51	14	12	3	0	29	5	22	5	0	32	11	18	20	0	49	161
08:45	4	42	5	0	51	13	22	2	0	37	8	32	7	0	47	6	35	13	0	54	189
Total	17	209	24	0	250	62	62	6	0	130	40	120	31	0	191	34	134	88	0	256	827
Grand Total	28	339	35	0	402	123	107	12	0	242	62	174	46	0	282	50	248	173	0	471	1397
Apprch %	7	84.3	8.7	0		50.8	44.2	5	0		22	61.7	16.3	0		10.6	52.7	36.7	0		
Total %	2	24.3	2.5	0	28.8	8.8	7.7	0.9	0	17.3	4.4	12.5	3.3	0	20.2	3.6	17.8	12.4	0	33.7	

	Hart Lane Southbound					Greystone Dr Westbound					Hart Lane Northbound					Greystone Dr Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45																					
07:45	1	75	6	0	82	23	16	3	0	42	13	25	7	0	45	7	44	47	0	98	267
08:00	5	88	4	0	97	17	12	1	0	30	15	31	6	0	52	8	55	38	0	101	280
08:15	6	41	4	0	51	18	16	0	0	34	12	35	13	0	60	9	26	17	0	52	197
08:30	2	38	11	0	51	14	12	3	0	29	5	22	5	0	32	11	18	20	0	49	161
Total Volume	14	242	25	0	281	72	56	7	0	135	45	113	31	0	189	35	143	122	0	300	905
% App. Total	5	86.1	8.9	0		53.3	41.5	5.2	0		23.8	59.8	16.4	0		11.7	47.7	40.7	0		
PHF	.583	.688	.568	.000	.724	.783	.875	.583	.000	.804	.750	.807	.596	.000	.788	.795	.650	.649	.000	.743	.808

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626

512-832-8650

File Name : Hart-GreyAM

Site Code : 00000008

Start Date : 3/27/2014

Page No : 2

	Hart Lane Southbound					Greystone Dr Westbound					Hart Lane Northbound					Greystone Dr Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total

Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:45					07:30					08:00					07:30				
+0 mins.	1	75	6	0	82	18	20	1	0	39	15	31	6	0	52	3	23	24	0	50
+15 mins.	5	88	4	0	97	23	16	3	0	42	12	35	13	0	60	7	44	47	0	98
+30 mins.	6	41	4	0	51	17	12	1	0	30	5	22	5	0	32	8	55	38	0	101
+45 mins.	2	38	11	0	51	18	16	0	0	34	8	32	7	0	47	9	26	17	0	52
Total Volume	14	242	25	0	281	76	64	5	0	145	40	120	31	0	191	27	148	126	0	301
% App. Total	5	86.1	8.9	0		52.4	44.1	3.4	0		20.9	62.8	16.2	0		9	49.2	41.9	0	
PHF	.583	.688	.568	.000	.724	.826	.800	.417	.000	.863	.667	.857	.596	.000	.796	.750	.673	.670	.000	.745

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626

512-832-8650

File Name : Hart-GreyPM

Site Code : 00000008

Start Date : 3/27/2014

Page No : 1

Groups Printed- Autos

	Hart Ln Southbound					Greystone Dr Westbound					Hart Ln Northbound					Greystone Dr Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
16:00	3	11	2	0	16	15	24	4	0	43	19	21	13	0	53	2	19	12	0	33	145
16:15	1	29	3	0	33	12	23	6	0	41	8	27	7	0	42	7	9	13	0	29	145
16:30	3	26	7	0	36	17	33	3	0	53	16	30	10	0	56	3	13	26	0	42	187
16:45	2	30	9	0	41	11	30	12	0	53	22	49	14	0	85	4	13	17	0	34	213
Total	9	96	21	0	126	55	110	25	0	190	65	127	44	0	236	16	54	68	0	138	690
17:00	2	38	9	0	49	19	31	12	0	62	19	44	14	0	77	11	10	11	0	32	220
17:15	5	31	14	0	50	25	26	15	0	66	23	38	13	0	74	10	21	11	0	42	232
17:30	1	23	20	0	44	18	26	10	0	54	17	56	8	0	81	5	19	6	0	30	209
17:45	5	18	10	0	33	19	38	8	0	65	27	38	12	0	77	7	17	14	0	38	213
Total	13	110	53	0	176	81	121	45	0	247	86	176	47	0	309	33	67	42	0	142	874
Grand Total	22	206	74	0	302	136	231	70	0	437	151	303	91	0	545	49	121	110	0	280	1564
Apprch %	7.3	68.2	24.5	0		31.1	52.9	16	0		27.7	55.6	16.7	0		17.5	43.2	39.3	0		
Total %	1.4	13.2	4.7	0	19.3	8.7	14.8	4.5	0	27.9	9.7	19.4	5.8	0	34.8	3.1	7.7	7	0	17.9	

	Hart Ln Southbound					Greystone Dr Westbound					Hart Ln Northbound					Greystone Dr Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:45																					
16:45	2	30	9	0	41	11	30	12	0	53	22	49	14	0	85	4	13	17	0	34	213
17:00	2	38	9	0	49	19	31	12	0	62	19	44	14	0	77	11	10	11	0	32	220
17:15	5	31	14	0	50	25	26	15	0	66	23	38	13	0	74	10	21	11	0	42	232
17:30	1	23	20	0	44	18	26	10	0	54	17	56	8	0	81	5	19	6	0	30	209
Total Volume	10	122	52	0	184	73	113	49	0	235	81	187	49	0	317	30	63	45	0	138	874
% App. Total	5.4	66.3	28.3	0		31.1	48.1	20.9	0		25.6	59	15.5	0		21.7	45.7	32.6	0		
PHF	.500	.803	.650	.000	.920	.730	.911	.817	.000	.890	.880	.835	.875	.000	.932	.682	.750	.662	.000	.821	.942

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : Hart-GreyPM
Site Code : 00000008
Start Date : 3/27/2014
Page No : 2

	Hart Ln Southbound					Greystone Dr Westbound					Hart Ln Northbound					Greystone Dr Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:45					17:00					16:45					16:30				
+0 mins.	2	30	9	0	41	19	31	12	0	62	22	49	14	0	85	3	13	26	0	42
+15 mins.	2	38	9	0	49	25	26	15	0	66	19	44	14	0	77	4	13	17	0	34
+30 mins.	5	31	14	0	50	18	26	10	0	54	23	38	13	0	74	11	10	11	0	32
+45 mins.	1	23	20	0	44	19	38	8	0	65	17	56	8	0	81	10	21	11	0	42
Total Volume	10	122	52	0	184	81	121	45	0	247	81	187	49	0	317	28	57	65	0	150
% App. Total	5.4	66.3	28.3	0		32.8	49	18.2	0		25.6	59	15.5	0		18.7	38	43.3	0	
PHF	.500	.803	.650	.000	.920	.810	.796	.750	.000	.936	.880	.835	.875	.000	.932	.636	.679	.625	.000	.893

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : Grey-WoodhollowAM
Site Code : 00000024
Start Date : 3/26/2014
Page No : 1

Groups Printed- Autos

	Woodhollow Southbound					Greystone Westbound					Woodhollow Northbound					Greystone Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00	0	8	1	0	9	7	16	6	0	29	4	12	6	0	22	4	23	19	0	46	106
07:15	8	13	5	0	26	5	21	2	0	28	4	9	2	0	15	3	27	17	0	47	116
07:30	7	33	5	0	45	16	26	8	0	50	3	32	11	0	46	6	32	21	0	59	200
07:45	3	36	14	0	53	10	34	5	0	49	4	28	9	0	41	9	27	60	0	96	239
Total	18	90	25	0	133	38	97	21	0	156	15	81	28	0	124	22	109	117	0	248	661
08:00	5	30	8	0	43	10	19	10	0	39	4	31	8	0	43	9	26	39	0	74	199
08:15	4	41	11	0	56	15	33	6	0	54	10	22	13	0	45	5	33	33	0	71	226
08:30	3	25	5	0	33	9	20	5	0	34	7	36	13	0	56	7	23	30	0	60	183
08:45	8	23	5	0	36	14	28	13	0	55	9	35	12	0	56	9	22	20	0	51	198
Total	20	119	29	0	168	48	100	34	0	182	30	124	46	0	200	30	104	122	0	256	806
Grand Total	38	209	54	0	301	86	197	55	0	338	45	205	74	0	324	52	213	239	0	504	1467
Apprch %	12.6	69.4	17.9	0		25.4	58.3	16.3	0		13.9	63.3	22.8	0		10.3	42.3	47.4	0		
Total %	2.6	14.2	3.7	0	20.5	5.9	13.4	3.7	0	23	3.1	14	5	0	22.1	3.5	14.5	16.3	0	34.4	

	Woodhollow Southbound					Greystone Westbound					Woodhollow Northbound					Greystone Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30																					
07:30	7	33	5	0	45	16	26	8	0	50	3	32	11	0	46	6	32	21	0	59	200
07:45	3	36	14	0	53	10	34	5	0	49	4	28	9	0	41	9	27	60	0	96	239
08:00	5	30	8	0	43	10	19	10	0	39	4	31	8	0	43	9	26	39	0	74	199
08:15	4	41	11	0	56	15	33	6	0	54	10	22	13	0	45	5	33	33	0	71	226
Total Volume	19	140	38	0	197	51	112	29	0	192	21	113	41	0	175	29	118	153	0	300	864
% App. Total	9.6	71.1	19.3	0		26.6	58.3	15.1	0		12	64.6	23.4	0		9.7	39.3	51	0		
PHF	.679	.854	.679	.000	.879	.797	.824	.725	.000	.889	.525	.883	.788	.000	.951	.806	.894	.638	.000	.781	.904

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : Grey-WoodhollowAM
Site Code : 00000024
Start Date : 3/26/2014
Page No : 2

	Woodhollow Southbound					Greystone Westbound					Woodhollow Northbound					Greystone Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total

Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30					07:30					08:00					07:45				
+0 mins.	7	33	5	0	45	16	26	8	0	50	4	31	8	0	43	9	27	60	0	96
+15 mins.	3	36	14	0	53	10	34	5	0	49	10	22	13	0	45	9	26	39	0	74
+30 mins.	5	30	8	0	43	10	19	10	0	39	7	36	13	0	56	5	33	33	0	71
+45 mins.	4	41	11	0	56	15	33	6	0	54	9	35	12	0	56	7	23	30	0	60
Total Volume	19	140	38	0	197	51	112	29	0	192	30	124	46	0	200	30	109	162	0	301
% App. Total	9.6	71.1	19.3	0		26.6	58.3	15.1	0		15	62	23	0		10	36.2	53.8	0	
PHF	.679	.854	.679	.000	.879	.797	.824	.725	.000	.889	.750	.861	.885	.000	.893	.833	.826	.675	.000	.784

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : Grey-WoodhollowPM
Site Code : 00000024
Start Date : 3/26/2014
Page No : 1

Groups Printed- Autos

	Woodhollow Southbound					Greystone Westbound					Woodhollow Northbound					Greystone Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
16:00	2	20	3	0	25	5	35	4	0	44	13	40	15	0	68	3	16	12	0	31	168
16:15	1	20	6	0	27	12	34	5	0	51	11	32	15	0	58	7	18	6	0	31	167
16:30	7	30	7	0	44	19	39	4	0	62	9	30	20	0	59	2	9	9	0	20	185
16:45	4	23	4	0	31	16	44	10	0	70	14	44	15	0	73	2	25	12	0	39	213
Total	14	93	20	0	127	52	152	23	0	227	47	146	65	0	258	14	68	39	0	121	733
17:00	8	28	2	0	38	28	40	10	0	78	19	46	21	0	86	7	20	20	0	47	249
17:15	8	28	6	0	42	24	49	14	0	87	14	55	13	0	82	8	15	10	0	33	244
17:30	2	23	6	0	31	15	68	14	0	97	22	53	16	0	91	5	16	10	0	31	250
17:45	3	32	10	0	45	16	55	18	0	89	19	44	17	0	80	12	15	7	0	34	248
Total	21	111	24	0	156	83	212	56	0	351	74	198	67	0	339	32	66	47	0	145	991
Grand Total	35	204	44	0	283	135	364	79	0	578	121	344	132	0	597	46	134	86	0	266	1724
Apprch %	12.4	72.1	15.5	0		23.4	63	13.7	0		20.3	57.6	22.1	0		17.3	50.4	32.3	0		
Total %	2	11.8	2.6	0	16.4	7.8	21.1	4.6	0	33.5	7	20	7.7	0	34.6	2.7	7.8	5	0	15.4	

	Woodhollow Southbound					Greystone Westbound					Woodhollow Northbound					Greystone Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	8	28	2	0	38	28	40	10	0	78	19	46	21	0	86	7	20	20	0	47	249
17:15	8	28	6	0	42	24	49	14	0	87	14	55	13	0	82	8	15	10	0	33	244
17:30	2	23	6	0	31	15	68	14	0	97	22	53	16	0	91	5	16	10	0	31	250
17:45	3	32	10	0	45	16	55	18	0	89	19	44	17	0	80	12	15	7	0	34	248
Total Volume	21	111	24	0	156	83	212	56	0	351	74	198	67	0	339	32	66	47	0	145	991
% App. Total	13.5	71.2	15.4	0		23.6	60.4	16	0		21.8	58.4	19.8	0		22.1	45.5	32.4	0		
PHF	.656	.867	.600	.000	.867	.741	.779	.778	.000	.905	.841	.900	.798	.000	.931	.667	.825	.588	.000	.771	.991

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : Grey-WoodhollowPM
Site Code : 00000024
Start Date : 3/26/2014
Page No : 2

	Woodhollow Southbound					Greystone Westbound					Woodhollow Northbound					Greystone Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	17:00					17:00					17:00					16:45					
+0 mins.	8	28	2	0	38	28	40	10	0	78	19	46	21	0	86	2	25	12	0	39	
+15 mins.	8	28	6	0	42	24	49	14	0	87	14	55	13	0	82	7	20	20	0	47	
+30 mins.	2	23	6	0	31	15	68	14	0	97	22	53	16	0	91	8	15	10	0	33	
+45 mins.	3	32	10	0	45	16	55	18	0	89	19	44	17	0	80	5	16	10	0	31	
Total Volume	21	111	24	0	156	83	212	56	0	351	74	198	67	0	339	22	76	52	0	150	
% App. Total	13.5	71.2	15.4	0		23.6	60.4	16	0		21.8	58.4	19.8	0		14.7	50.7	34.7	0		
PHF	.656	.867	.600	.000	.867	.741	.779	.778	.000	.905	.841	.900	.798	.000	.931	.688	.760	.650	.000	.798	

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : Grey-MopacSBam
Site Code : 00000028
Start Date : 3/26/2014
Page No : 1

Groups Printed- Autos

	Loop 1 - SB Mopac Service Rd Southbound					Greystone Dr Westbound					Loop 1 - SB Mopac Service Rd Northbound					Greystone Dr Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00	0	443	26	0	469	0	0	0	0	0	0	0	0	0	0	0	0	33	0	33	502
07:15	0	675	20	0	695	0	0	0	0	0	0	0	0	0	0	0	0	37	0	37	732
07:30	0	722	24	0	746	0	0	0	0	0	0	0	0	0	0	0	0	64	0	64	810
07:45	0	794	38	0	832	0	0	0	0	0	0	0	0	0	0	0	0	41	0	41	873
Total	0	2634	108	0	2742	0	0	0	0	0	0	0	0	0	0	0	0	175	0	175	2917
08:00	0	768	38	0	806	0	0	0	0	0	0	0	0	0	0	0	0	39	0	39	845
08:15	0	763	41	0	804	0	0	0	0	0	0	0	0	0	0	0	0	58	0	58	862
08:30	0	674	34	0	708	0	0	0	0	0	0	0	0	0	0	0	0	49	0	49	757
08:45	0	657	36	0	693	0	0	0	0	0	0	0	0	0	0	0	0	46	0	46	739
Total	0	2862	149	0	3011	0	0	0	0	0	0	0	0	0	0	0	0	192	0	192	3203
Grand Total	0	5496	257	0	5753	0	0	0	0	0	0	0	0	0	0	0	0	367	0	367	6120
Apprch %	0	95.5	4.5	0		0	0	0	0	0	0	0	0	0	0	0	0	100	0		
Total %	0	89.8	4.2	0	94	0	0	0	0	0	0	0	0	0	0	0	0	6	0	6	

	Loop 1 - SB Mopac Service Rd Southbound					Greystone Dr Westbound					Loop 1 - SB Mopac Service Rd Northbound					Greystone Dr Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30																					
07:30	0	722	24	0	746	0	0	0	0	0	0	0	0	0	0	0	0	64	0	64	810
07:45	0	794	38	0	832	0	0	0	0	0	0	0	0	0	0	0	0	41	0	41	873
08:00	0	768	38	0	806	0	0	0	0	0	0	0	0	0	0	0	0	39	0	39	845
08:15	0	763	41	0	804	0	0	0	0	0	0	0	0	0	0	0	0	58	0	58	862
Total Volume	0	3047	141	0	3188	0	0	0	0	0	0	0	0	0	0	0	0	202	0	202	3390
% App. Total	0	95.6	4.4	0		0	0	0	0	0	0	0	0	0	0	0	0	100	0		
PHF	.000	.959	.860	.000	.958	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.789	.000	.789	.971

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : Grey-MopacSBam
Site Code : 00000028
Start Date : 3/26/2014
Page No : 2

	Loop 1 - SB Mopac Service Rd Southbound					Greystone Dr Westbound					Loop 1 - SB Mopac Service Rd Northbound					Greystone Dr Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	07:30					07:00					07:00					07:30					
+0 mins.	0	722	24	0	746	0	0	0	0	0	0	0	0	0	0	0	0	64	0	64	
+15 mins.	0	794	38	0	832	0	0	0	0	0	0	0	0	0	0	0	0	41	0	41	
+30 mins.	0	768	38	0	806	0	0	0	0	0	0	0	0	0	0	0	0	39	0	39	
+45 mins.	0	763	41	0	804	0	0	0	0	0	0	0	0	0	0	0	0	58	0	58	
Total Volume	0	3047	141	0	3188	0	0	0	0	0	0	0	0	0	0	0	0	202	0	202	
% App. Total	0	95.6	4.4	0		0	0	0	0		0	0	0	0		0	0	100	0		
PHF	.000	.959	.860	.000	.958	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.789	.000	.789	

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : Grey-MopacSBpm
Site Code : 00000028
Start Date : 3/26/2014
Page No : 1

Groups Printed- Autos

	Loop 1 - SB MoPac Service Rd Southbound					Westbound					Loop 1 - SB MoPac Service Rd Northbound					Greystone Dr Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
16:00	0	360	40	0	400	0	0	0	0	0	0	0	0	0	0	0	0	31	0	31	431
16:15	0	353	57	0	410	0	0	0	0	0	0	0	0	0	0	0	0	35	0	35	445
16:30	0	288	71	0	359	0	0	0	0	0	0	0	0	0	0	0	0	21	0	21	380
16:45	0	297	61	0	358	0	0	0	0	0	0	0	0	0	0	0	0	34	0	34	392
Total	0	1298	229	0	1527	0	0	0	0	0	0	0	0	0	0	0	0	121	0	121	1648
17:00	0	412	78	0	490	0	0	0	0	0	0	0	0	0	0	0	0	56	0	56	546
17:15	0	439	95	0	534	0	0	0	0	0	0	0	0	0	0	0	0	39	0	39	573
17:30	0	350	76	0	426	0	0	0	0	0	0	0	0	0	0	0	0	37	0	37	463
17:45	0	312	72	0	384	0	0	0	0	0	0	0	0	0	0	0	0	29	0	29	413
Total	0	1513	321	0	1834	0	0	0	0	0	0	0	0	0	0	0	0	161	0	161	1995
Grand Total	0	2811	550	0	3361	0	0	0	0	0	0	0	0	0	0	0	0	282	0	282	3643
Apprch %	0	83.6	16.4	0		0	0	0	0	0	0	0	0	0	0	0	0	100	0		
Total %	0	77.2	15.1	0	92.3	0	0	0	0	0	0	0	0	0	0	0	0	7.7	0	7.7	

	Loop 1 - SB MoPac Service Rd Southbound					Westbound					Loop 1 - SB MoPac Service Rd Northbound					Greystone Dr Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	0	412	78	0	490	0	0	0	0	0	0	0	0	0	0	0	0	56	0	56	546
17:15	0	439	95	0	534	0	0	0	0	0	0	0	0	0	0	0	0	39	0	39	573
17:30	0	350	76	0	426	0	0	0	0	0	0	0	0	0	0	0	0	37	0	37	463
17:45	0	312	72	0	384	0	0	0	0	0	0	0	0	0	0	0	0	29	0	29	413
Total Volume	0	1513	321	0	1834	0	0	0	0	0	0	0	0	0	0	0	0	161	0	161	1995
% App. Total	0	82.5	17.5	0		0	0	0	0	0	0	0	0	0	0	0	0	100	0		
PHF	.000	.862	.845	.000	.859	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.719	.000	.719	.870

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : Grey-MopacSBpm
Site Code : 00000028
Start Date : 3/26/2014
Page No : 2

	Loop 1 - SB MoPac Service Rd Southbound					Westbound					Loop 1 - SB MoPac Service Rd Northbound					Greystone Dr Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	17:00					16:00					16:00					16:45				
+0 mins.	0	412	78	0	490	0	0	0	0	0	0	0	0	0	0	0	0	34	0	34
+15 mins.	0	439	95	0	534	0	0	0	0	0	0	0	0	0	0	0	0	56	0	56
+30 mins.	0	350	76	0	426	0	0	0	0	0	0	0	0	0	0	0	0	39	0	39
+45 mins.	0	312	72	0	384	0	0	0	0	0	0	0	0	0	0	0	0	37	0	37
Total Volume	0	1513	321	0	1834	0	0	0	0	0	0	0	0	0	0	0	0	166	0	166
% App. Total	0	82.5	17.5	0		0	0	0	0		0	0	0	0		0	0	100	0	
PHF	.000	.862	.845	.000	.859	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.741	.000	.741

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : Exc-MopacSBam
Site Code : 00000002
Start Date : 3/26/2014
Page No : 1

Groups Printed- Autos

	Loop 1 - SB MoPac Service Rd Southbound					Westbound					Loop 1 - SB MoPac Service Rd Northbound					Executive Center Dr Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00	0	346	13	0	359	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	361
07:15	0	462	12	0	474	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	474
07:30	0	652	17	0	669	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5	674
07:45	0	614	13	0	627	0	0	0	0	0	0	0	0	0	0	0	0	9	0	9	636
Total	0	2074	55	0	2129	0	0	0	0	0	0	0	0	0	0	0	0	16	0	16	2145
08:00	0	671	28	0	699	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	702
08:15	0	622	29	0	651	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	652
08:30	0	588	26	0	614	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	617
08:45	0	500	28	0	528	0	0	0	0	0	0	0	0	0	0	0	0	12	0	12	540
Total	0	2381	111	0	2492	0	0	0	0	0	0	0	0	0	0	0	0	19	0	19	2511
Grand Total	0	4455	166	0	4621	0	0	0	0	0	0	0	0	0	0	0	0	35	0	35	4656
Apprch %	0	96.4	3.6	0		0	0	0	0	0	0	0	0	0	0	0	0	100	0		
Total %	0	95.7	3.6	0	99.2	0	0	0	0	0	0	0	0	0	0	0	0	0.8	0	0.8	

	Loop 1 - SB MoPac Service Rd Southbound					Westbound					Loop 1 - SB MoPac Service Rd Northbound					Executive Center Dr Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30																					
07:30	0	652	17	0	669	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5	674
07:45	0	614	13	0	627	0	0	0	0	0	0	0	0	0	0	0	0	9	0	9	636
08:00	0	671	28	0	699	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	702
08:15	0	622	29	0	651	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	652
Total Volume	0	2559	87	0	2646	0	0	0	0	0	0	0	0	0	0	0	0	18	0	18	2664
% App. Total	0	96.7	3.3	0		0	0	0	0	0	0	0	0	0	0	0	0	100	0		
PHF	.000	.953	.750	.000	.946	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.500	.000	.500	.949

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : Exc-MopacSBam
Site Code : 00000002
Start Date : 3/26/2014
Page No : 2

	Loop 1 - SB MoPac Service Rd Southbound					Westbound					Loop 1 - SB MoPac Service Rd Northbound					Executive Center Dr Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	07:30					07:00					07:00					08:00					
+0 mins.	0	652	17	0	669	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	
+15 mins.	0	614	13	0	627	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
+30 mins.	0	671	28	0	699	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	
+45 mins.	0	622	29	0	651	0	0	0	0	0	0	0	0	0	0	0	0	12	0	12	
Total Volume	0	2559	87	0	2646	0	0	0	0	0	0	0	0	0	0	0	0	19	0	19	
% App. Total	0	96.7	3.3	0		0	0	0	0		0	0	0	0		0	0	100	0		
PHF	.000	.953	.750	.000	.946	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.396	.000	.396	

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : Exc-MopacSBpm
Site Code : 00000002
Start Date : 3/26/2014
Page No : 1

Groups Printed- Autos

	Loop 1 - SB Mopac Service Rd Southbound					Westbound					Loop 1 - SB Mopac Service Rd Northbound					Executive Center Dr Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
16:00	0	370	9	0	379	0	0	0	0	0	0	0	0	0	0	0	0	27	0	27	406
16:15	0	375	9	0	384	0	0	0	0	0	0	0	0	0	0	0	0	37	0	37	421
16:30	0	377	5	0	382	0	0	0	0	0	0	0	0	0	0	0	0	29	0	29	411
16:45	0	353	6	0	359	0	0	0	0	0	0	0	0	0	0	0	0	21	0	21	380
Total	0	1475	29	0	1504	0	0	0	0	0	0	0	0	0	0	0	0	114	0	114	1618
17:00	0	420	8	0	428	0	0	0	0	0	0	0	0	0	0	0	0	50	0	50	478
17:15	0	459	9	0	468	0	0	0	0	0	0	0	0	0	0	0	0	51	0	51	519
17:30	0	506	4	0	510	0	0	0	0	0	0	0	0	0	0	0	0	33	0	33	543
17:45	0	406	5	0	411	0	0	0	0	0	0	0	0	0	0	0	0	30	0	30	441
Total	0	1791	26	0	1817	0	0	0	0	0	0	0	0	0	0	0	0	164	0	164	1981
Grand Total	0	3266	55	0	3321	0	0	0	0	0	0	0	0	0	0	0	0	278	0	278	3599
Apprch %	0	98.3	1.7	0		0	0	0	0		0	0	0	0		0	0	100	0		
Total %	0	90.7	1.5	0	92.3	0	0	0	0	0	0	0	0	0	0	0	0	7.7	0	7.7	

	Loop 1 - SB Mopac Service Rd Southbound					Westbound					Loop 1 - SB Mopac Service Rd Northbound					Executive Center Dr Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	0	420	8	0	428	0	0	0	0	0	0	0	0	0	0	0	0	50	0	50	478
17:15	0	459	9	0	468	0	0	0	0	0	0	0	0	0	0	0	0	51	0	51	519
17:30	0	506	4	0	510	0	0	0	0	0	0	0	0	0	0	0	0	33	0	33	543
17:45	0	406	5	0	411	0	0	0	0	0	0	0	0	0	0	0	0	30	0	30	441
Total Volume	0	1791	26	0	1817	0	0	0	0	0	0	0	0	0	0	0	0	164	0	164	1981
% App. Total	0	98.6	1.4	0		0	0	0	0		0	0	0	0		0	0	100	0		
PHF	.000	.885	.722	.000	.891	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.804	.000	.804	.912

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626

512-832-8650

File Name : Exc-MopacSBpm

Site Code : 00000002

Start Date : 3/26/2014

Page No : 2

	Loop 1 - SB Mopac Service Rd Southbound					Westbound					Loop 1 - SB Mopac Service Rd Northbound					Executive Center Dr Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	17:00					16:00					16:00					17:00				
+0 mins.	0	420	8	0	428	0	0	0	0	0	0	0	0	0	0	0	0	50	0	50
+15 mins.	0	459	9	0	468	0	0	0	0	0	0	0	0	0	0	0	0	51	0	51
+30 mins.	0	506	4	0	510	0	0	0	0	0	0	0	0	0	0	0	0	33	0	33
+45 mins.	0	406	5	0	411	0	0	0	0	0	0	0	0	0	0	0	0	30	0	30
Total Volume	0	1791	26	0	1817	0	0	0	0	0	0	0	0	0	0	0	0	164	0	164
% App. Total	0	98.6	1.4	0		0	0	0	0		0	0	0	0		0	0	100	0	
PHF	.000	.885	.722	.000	.891	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.804	.000	.804

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : Exc-WoodhollowAM
Site Code : 00000002
Start Date : 3/27/2014
Page No : 1

Groups Printed- Autos

	Wood Hollow Dr Southbound					Executive Center Dr Westbound					Wood Hollow Dr Northbound					Executive Center Dr Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00	6	4	5	0	15	0	2	0	0	2	1	18	2	0	21	0	3	1	0	4	42
07:15	7	15	8	0	30	0	2	1	0	3	4	23	2	0	29	0	3	0	0	3	65
07:30	13	25	14	0	52	1	1	0	0	2	4	29	4	0	37	4	2	2	0	8	99
07:45	13	33	14	0	60	0	1	0	0	1	3	30	8	0	41	3	5	4	0	12	114
Total	39	77	41	0	157	1	6	1	0	8	12	100	16	0	128	7	13	7	0	27	320
08:00	18	39	24	0	81	0	0	4	0	4	6	46	10	0	62	1	1	0	0	2	149
08:15	21	47	31	1	100	0	4	2	0	6	2	41	7	0	50	1	3	1	0	5	161
08:30	25	42	30	0	97	0	1	2	0	3	7	35	8	0	50	4	2	2	0	8	158
08:45	26	43	32	0	101	1	4	9	0	14	9	45	7	0	61	2	7	1	0	10	186
Total	90	171	117	1	379	1	9	17	0	27	24	167	32	0	223	8	13	4	0	25	654
Grand Total	129	248	158	1	536	2	15	18	0	35	36	267	48	0	351	15	26	11	0	52	974
Apprch %	24.1	46.3	29.5	0.2		5.7	42.9	51.4	0		10.3	76.1	13.7	0		28.8	50	21.2	0		
Total %	13.2	25.5	16.2	0.1	55	0.2	1.5	1.8	0	3.6	3.7	27.4	4.9	0	36	1.5	2.7	1.1	0	5.3	

	Wood Hollow Dr Southbound					Executive Center Dr Westbound					Wood Hollow Dr Northbound					Executive Center Dr Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00																					
08:00	18	39	24	0	81	0	0	4	0	4	6	46	10	0	62	1	1	0	0	2	149
08:15	21	47	31	1	100	0	4	2	0	6	2	41	7	0	50	1	3	1	0	5	161
08:30	25	42	30	0	97	0	1	2	0	3	7	35	8	0	50	4	2	2	0	8	158
08:45	26	43	32	0	101	1	4	9	0	14	9	45	7	0	61	2	7	1	0	10	186
Total Volume	90	171	117	1	379	1	9	17	0	27	24	167	32	0	223	8	13	4	0	25	654
% App. Total	23.7	45.1	30.9	0.3		3.7	33.3	63	0		10.8	74.9	14.3	0		32	52	16	0		
PHF	.865	.910	.914	.250	.938	.250	.563	.472	.000	.482	.667	.908	.800	.000	.899	.500	.464	.500	.000	.625	.879

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : Exc-WoodhollowAM
Site Code : 00000002
Start Date : 3/27/2014
Page No : 2

	Wood Hollow Dr Southbound					Executive Center Dr Westbound					Wood Hollow Dr Northbound					Executive Center Dr Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total

Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00					08:00					08:00					07:00				
+0 mins.	18	39	24	0	81	0	0	4	0	4	6	46	10	0	62	0	3	1	0	4
+15 mins.	21	47	31	1	100	0	4	2	0	6	2	41	7	0	50	0	3	0	0	3
+30 mins.	25	42	30	0	97	0	1	2	0	3	7	35	8	0	50	4	2	2	0	8
+45 mins.	26	43	32	0	101	1	4	9	0	14	9	45	7	0	61	3	5	4	0	12
Total Volume	90	171	117	1	379	1	9	17	0	27	24	167	32	0	223	7	13	7	0	27
% App. Total	23.7	45.1	30.9	0.3		3.7	33.3	63	0		10.8	74.9	14.3	0		25.9	48.1	25.9	0	
PHF	.865	.910	.914	.250	.938	.250	.563	.472	.000	.482	.667	.908	.800	.000	.899	.438	.650	.438	.000	.563

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : Exc-WoodhollowPM
Site Code : 00000002
Start Date : 3/27/2014
Page No : 1

Groups Printed- Autos

	Wood Hollow Dr Southbound					Executive Center Dr Westbound					Wood Hollow Dr Northbound					Executive Center Dr Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
16:00	4	24	12	0	40	0	5	8	0	13	6	55	2	0	63	7	6	2	0	15	131
16:15	3	36	2	0	41	2	5	15	0	22	2	49	0	0	51	12	13	1	0	26	140
16:30	3	26	8	0	37	3	0	14	0	17	4	34	4	0	42	7	9	1	0	17	113
16:45	6	25	4	0	35	2	3	11	0	16	3	40	3	0	46	17	11	0	0	28	125
Total	16	111	26	0	153	7	13	48	0	68	15	178	9	0	202	43	39	4	0	86	509
17:00	2	22	7	0	31	4	5	17	0	26	0	58	0	0	58	17	10	5	0	32	147
17:15	5	30	3	0	38	12	2	40	0	54	1	77	1	0	79	12	23	11	0	46	217
17:30	4	31	2	0	37	0	2	17	0	19	5	57	1	0	63	12	6	2	0	20	139
17:45	2	27	3	0	32	2	3	23	0	28	1	57	4	0	62	14	14	5	0	33	155
Total	13	110	15	0	138	18	12	97	0	127	7	249	6	0	262	55	53	23	0	131	658
Grand Total	29	221	41	0	291	25	25	145	0	195	22	427	15	0	464	98	92	27	0	217	1167
Apprch %	10	75.9	14.1	0		12.8	12.8	74.4	0		4.7	92	3.2	0		45.2	42.4	12.4	0		
Total %	2.5	18.9	3.5	0	24.9	2.1	2.1	12.4	0	16.7	1.9	36.6	1.3	0	39.8	8.4	7.9	2.3	0	18.6	

	Wood Hollow Dr Southbound					Executive Center Dr Westbound					Wood Hollow Dr Northbound					Executive Center Dr Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	2	22	7	0	31	4	5	17	0	26	0	58	0	0	58	17	10	5	0	32	147
17:15	5	30	3	0	38	12	2	40	0	54	1	77	1	0	79	12	23	11	0	46	217
17:30	4	31	2	0	37	0	2	17	0	19	5	57	1	0	63	12	6	2	0	20	139
17:45	2	27	3	0	32	2	3	23	0	28	1	57	4	0	62	14	14	5	0	33	155
Total Volume	13	110	15	0	138	18	12	97	0	127	7	249	6	0	262	55	53	23	0	131	658
% App. Total	9.4	79.7	10.9	0		14.2	9.4	76.4	0		2.7	95	2.3	0		42	40.5	17.6	0		
PHF	.650	.887	.536	.000	.908	.375	.600	.606	.000	.588	.350	.808	.375	.000	.829	.809	.576	.523	.000	.712	.758

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : Exc-WoodhollowPM
Site Code : 00000002
Start Date : 3/27/2014
Page No : 2

	Wood Hollow Dr Southbound					Executive Center Dr Westbound					Wood Hollow Dr Northbound					Executive Center Dr Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	16:00					17:00					17:00					17:00				
+0 mins.	4	24	12	0	40	4	5	17	0	26	0	58	0	0	58	17	10	5	0	32
+15 mins.	3	36	2	0	41	12	2	40	0	54	1	77	1	0	79	12	23	11	0	46
+30 mins.	3	26	8	0	37	0	2	17	0	19	5	57	1	0	63	12	6	2	0	20
+45 mins.	6	25	4	0	35	2	3	23	0	28	1	57	4	0	62	14	14	5	0	33
Total Volume	16	111	26	0	153	18	12	97	0	127	7	249	6	0	262	55	53	23	0	131
% App. Total	10.5	72.5	17	0		14.2	9.4	76.4	0		2.7	95	2.3	0		42	40.5	17.6	0	
PHF	.667	.771	.542	.000	.933	.375	.600	.606	.000	.588	.350	.808	.375	.000	.829	.809	.576	.523	.000	.712

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : Exc-HartAM
Site Code : 00000021
Start Date : 3/27/2014
Page No : 1

Groups Printed- Autos

	Hart Ln Southbound					Executive Center Dr Westbound					Hart Ln Northbound					Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00	4	12	0	0	16	2	0	2	0	4	0	9	1	0	10	0	0	0	0	0	30
07:15	6	16	0	0	22	2	0	3	0	5	0	14	3	0	17	0	0	0	0	0	44
07:30	6	20	0	0	26	2	0	2	0	4	0	26	1	0	27	0	0	0	0	0	57
07:45	9	67	0	0	76	2	0	2	0	4	0	27	2	0	29	0	0	0	0	0	109
Total	25	115	0	0	140	8	0	9	0	17	0	76	7	0	83	0	0	0	0	0	240
08:00	21	90	0	0	111	2	0	2	0	4	0	47	5	0	52	0	0	0	0	0	167
08:15	19	69	0	0	88	2	0	1	0	3	0	63	4	0	67	0	0	0	0	0	158
08:30	13	56	0	0	69	0	0	7	0	7	0	41	1	0	42	0	1	0	0	1	119
08:45	17	44	0	0	61	2	0	3	0	5	0	47	6	0	53	0	0	0	0	0	119
Total	70	259	0	0	329	6	0	13	0	19	0	198	16	0	214	0	1	0	0	1	563
Grand Total	95	374	0	0	469	14	0	22	0	36	0	274	23	0	297	0	1	0	0	1	803
Apprch %	20.3	79.7	0	0		38.9	0	61.1	0		0	92.3	7.7	0		0	100	0	0		
Total %	11.8	46.6	0	0	58.4	1.7	0	2.7	0	4.5	0	34.1	2.9	0	37	0	0.1	0	0	0.1	

	Hart Ln Southbound					Executive Center Dr Westbound					Hart Ln Northbound					Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00																					
08:00	21	90	0	0	111	2	0	2	0	4	0	47	5	0	52	0	0	0	0	0	167
08:15	19	69	0	0	88	2	0	1	0	3	0	63	4	0	67	0	0	0	0	0	158
08:30	13	56	0	0	69	0	0	7	0	7	0	41	1	0	42	0	1	0	0	1	119
08:45	17	44	0	0	61	2	0	3	0	5	0	47	6	0	53	0	0	0	0	0	119
Total Volume	70	259	0	0	329	6	0	13	0	19	0	198	16	0	214	0	1	0	0	1	563
% App. Total	21.3	78.7	0	0		31.6	0	68.4	0		0	92.5	7.5	0		0	100	0	0		
PHF	.833	.719	.000	.000	.741	.750	.000	.464	.000	.679	.000	.786	.667	.000	.799	.000	.250	.000	.000	.250	.843

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : Exc-HartAM
Site Code : 00000021
Start Date : 3/27/2014
Page No : 2

	Hart Ln Southbound					Executive Center Dr Westbound					Hart Ln Northbound					Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	07:45					08:00					08:00					07:45					
+0 mins.	9	67	0	0	76	2	0	2	0	4	0	47	5	0	52	0	0	0	0	0	
+15 mins.	21	90	0	0	111	2	0	1	0	3	0	63	4	0	67	0	0	0	0	0	
+30 mins.	19	69	0	0	88	0	0	7	0	7	0	41	1	0	42	0	0	0	0	0	
+45 mins.	13	56	0	0	69	2	0	3	0	5	0	47	6	0	53	0	1	0	0	1	
Total Volume	62	282	0	0	344	6	0	13	0	19	0	198	16	0	214	0	1	0	0	1	
% App. Total	18	82	0	0		31.6	0	68.4	0		0	92.5	7.5	0		0	100	0	0		
PHF	.738	.783	.000	.000	.775	.750	.000	.464	.000	.679	.000	.786	.667	.000	.799	.000	.250	.000	.000	.250	

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : Exc-HartPM
Site Code : 00000021
Start Date : 3/27/2014
Page No : 1

Groups Printed- Autos

	Hart Ln Southbound					Executive Center Westbound					Hart Ln Northbound					Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
16:00	5	38	0	0	43	3	0	12	0	15	0	46	2	0	48	0	0	0	0	0	106
16:15	1	41	0	0	42	2	0	17	0	19	0	44	4	0	48	0	0	0	0	0	109
16:30	1	58	0	0	59	2	0	15	0	17	0	49	0	0	49	0	0	0	0	0	125
16:45	5	44	0	0	49	3	0	10	0	13	0	46	1	0	47	0	0	0	0	0	109
Total	12	181	0	0	193	10	0	54	0	64	0	185	7	0	192	0	0	0	0	0	449
17:00	5	37	0	0	42	6	0	19	0	25	0	51	3	0	54	0	0	0	0	0	121
17:15	4	47	0	0	51	7	0	36	0	43	0	83	4	0	87	0	0	0	0	0	181
17:30	0	53	0	0	53	2	0	18	0	20	0	68	0	0	68	0	0	0	0	0	141
17:45	5	29	0	0	34	1	0	15	0	16	0	48	0	0	48	0	1	0	0	1	99
Total	14	166	0	0	180	16	0	88	0	104	0	250	7	0	257	0	1	0	0	1	542
Grand Total	26	347	0	0	373	26	0	142	0	168	0	435	14	0	449	0	1	0	0	1	991
Apprch %	7	93	0	0		15.5	0	84.5	0		0	96.9	3.1	0		0	100	0	0		
Total %	2.6	35	0	0	37.6	2.6	0	14.3	0	17	0	43.9	1.4	0	45.3	0	0.1	0	0	0.1	

	Hart Ln Southbound					Executive Center Westbound					Hart Ln Northbound					Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:45																					
16:45	5	44	0	0	49	3	0	10	0	13	0	46	1	0	47	0	0	0	0	0	109
17:00	5	37	0	0	42	6	0	19	0	25	0	51	3	0	54	0	0	0	0	0	121
17:15	4	47	0	0	51	7	0	36	0	43	0	83	4	0	87	0	0	0	0	0	181
17:30	0	53	0	0	53	2	0	18	0	20	0	68	0	0	68	0	0	0	0	0	141
Total Volume	14	181	0	0	195	18	0	83	0	101	0	248	8	0	256	0	0	0	0	0	552
% App. Total	7.2	92.8	0	0		17.8	0	82.2	0		0	96.9	3.1	0		0	0	0	0		
PHF	.700	.854	.000	.000	.920	.643	.000	.576	.000	.587	.000	.747	.500	.000	.736	.000	.000	.000	.000	.000	.762

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : Exc-HartPM
Site Code : 00000021
Start Date : 3/27/2014
Page No : 2

	Hart Ln Southbound					Executive Center Westbound					Hart Ln Northbound					Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:30					17:00					17:00					17:00				
+0 mins.	1	58	0	0	59	6	0	19	0	25	0	51	3	0	54	0	0	0	0	0
+15 mins.	5	44	0	0	49	7	0	36	0	43	0	83	4	0	87	0	0	0	0	0
+30 mins.	5	37	0	0	42	2	0	18	0	20	0	68	0	0	68	0	0	0	0	0
+45 mins.	4	47	0	0	51	1	0	15	0	16	0	48	0	0	48	0	1	0	0	1
Total Volume	15	186	0	0	201	16	0	88	0	104	0	250	7	0	257	0	1	0	0	1
% App. Total	7.5	92.5	0	0		15.4	0	84.6	0		0	97.3	2.7	0		0	100	0	0	
PHF	.750	.802	.000	.000	.852	.571	.000	.611	.000	.605	.000	.753	.438	.000	.739	.000	.250	.000	.000	.250

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : Spice-HartAM
Site Code : 00000032
Start Date : 3/27/2014
Page No : 1

Groups Printed- Autos

	Southbound					Spicewood Springs Westbound					Hart Ln Northbound					Spicewood Springs Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00	0	0	0	0	0	7	73	0	0	80	2	0	6	0	8	0	97	9	0	106	194
07:15	0	0	0	0	0	8	93	0	0	101	7	0	14	0	21	0	165	17	0	182	304
07:30	0	0	0	0	0	19	118	0	0	137	12	0	21	0	33	0	226	23	0	249	419
07:45	0	0	0	0	0	33	107	0	0	140	15	0	23	0	38	0	239	69	0	308	486
Total	0	0	0	0	0	67	391	0	0	458	36	0	64	0	100	0	727	118	0	845	1403
08:00	0	0	0	0	0	33	164	0	0	197	20	0	32	0	52	0	290	79	0	369	618
08:15	0	0	0	0	0	41	178	0	0	219	22	0	38	0	60	0	248	51	0	299	578
08:30	0	0	0	0	0	32	223	0	0	255	26	0	35	0	61	0	242	39	0	281	597
08:45	0	0	0	0	0	35	219	0	0	254	20	0	27	0	47	0	254	41	0	295	596
Total	0	0	0	0	0	141	784	0	0	925	88	0	132	0	220	0	1034	210	0	1244	2389
Grand Total	0	0	0	0	0	208	1175	0	0	1383	124	0	196	0	320	0	1761	328	0	2089	3792
Apprch %	0	0	0	0	0	15	85	0	0	38.8	38.8	0	61.2	0	84.3	0	84.3	15.7	0	55.1	
Total %	0	0	0	0	0	5.5	31	0	0	36.5	3.3	0	5.2	0	8.4	0	46.4	8.6	0	55.1	

	Southbound					Spicewood Springs Westbound					Hart Ln Northbound					Spicewood Springs Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00																					
08:00	0	0	0	0	0	33	164	0	0	197	20	0	32	0	52	0	290	79	0	369	618
08:15	0	0	0	0	0	41	178	0	0	219	22	0	38	0	60	0	248	51	0	299	578
08:30	0	0	0	0	0	32	223	0	0	255	26	0	35	0	61	0	242	39	0	281	597
08:45	0	0	0	0	0	35	219	0	0	254	20	0	27	0	47	0	254	41	0	295	596
Total Volume	0	0	0	0	0	141	784	0	0	925	88	0	132	0	220	0	1034	210	0	1244	2389
% App. Total	0	0	0	0	0	15.2	84.8	0	0	40	40	0	60	0	84.3	0	83.1	16.9	0	55.1	
PHF	.000	.000	.000	.000	.000	.860	.879	.000	.000	.907	.846	.000	.868	.000	.902	.000	.891	.665	.000	.843	.966

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626
512-832-8650

File Name : Spice-HartAM
Site Code : 00000032
Start Date : 3/27/2014
Page No : 2

	Southbound					Spicewood Springs Westbound					Hart Ln Northbound					Spicewood Springs Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total

Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00					08:00					08:00					07:45				
+0 mins.	0	0	0	0	0	33	164	0	0	197	20	0	32	0	52	0	239	69	0	308
+15 mins.	0	0	0	0	0	41	178	0	0	219	22	0	38	0	60	0	290	79	0	369
+30 mins.	0	0	0	0	0	32	223	0	0	255	26	0	35	0	61	0	248	51	0	299
+45 mins.	0	0	0	0	0	35	219	0	0	254	20	0	27	0	47	0	242	39	0	281
Total Volume	0	0	0	0	0	141	784	0	0	925	88	0	132	0	220	0	1019	238	0	1257
% App. Total	0	0	0	0	0	15.2	84.8	0	0		40	0	60	0		0	81.1	18.9	0	
PHF	.000	.000	.000	.000	.000	.860	.879	.000	.000	.907	.846	.000	.868	.000	.902	.000	.878	.753	.000	.852

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626

512-832-8650

File Name : Spice-HartPM

Site Code : 00000032

Start Date : 3/27/2014

Page No : 1

Groups Printed- Autos

	Southbound					Spicewood Springs Westbound					Hart Ln Northbound					Spicewood Springs Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
16:00	0	0	0	0	0	28	212	0	0	240	30	0	23	0	53	0	177	20	0	197	490
16:15	0	0	0	0	0	24	196	0	0	220	30	0	42	0	72	0	154	27	0	181	473
16:30	0	0	0	0	0	28	208	0	0	236	32	0	33	0	65	0	187	33	0	220	521
16:45	0	0	0	0	0	21	235	0	0	256	33	0	33	0	66	0	170	36	0	206	528
Total	0	0	0	0	0	101	851	0	0	952	125	0	131	0	256	0	688	116	0	804	2012
17:00	0	0	0	0	0	22	242	0	0	264	42	0	45	0	87	0	177	26	0	203	554
17:15	0	0	0	0	0	31	254	0	0	285	59	0	71	0	130	0	211	29	0	240	655
17:30	0	0	0	0	0	31	257	0	0	288	46	0	43	0	89	0	166	28	0	194	571
17:45	0	0	0	0	0	25	266	0	0	291	37	0	37	0	74	0	192	21	0	213	578
Total	0	0	0	0	0	109	1019	0	0	1128	184	0	196	0	380	0	746	104	0	850	2358
Grand Total	0	0	0	0	0	210	1870	0	0	2080	309	0	327	0	636	0	1434	220	0	1654	4370
Apprch %	0	0	0	0	0	10.1	89.9	0	0	48.6	0	0	51.4	0	48.6	0	86.7	13.3	0	0	0
Total %	0	0	0	0	0	4.8	42.8	0	0	47.6	7.1	0	7.5	0	14.6	0	32.8	5	0	37.8	0

	Southbound					Spicewood Springs Westbound					Hart Ln Northbound					Spicewood Springs Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	0	0	0	0	0	22	242	0	0	264	42	0	45	0	87	0	177	26	0	203	554
17:15	0	0	0	0	0	31	254	0	0	285	59	0	71	0	130	0	211	29	0	240	655
17:30	0	0	0	0	0	31	257	0	0	288	46	0	43	0	89	0	166	28	0	194	571
17:45	0	0	0	0	0	25	266	0	0	291	37	0	37	0	74	0	192	21	0	213	578
Total Volume	0	0	0	0	0	109	1019	0	0	1128	184	0	196	0	380	0	746	104	0	850	2358
% App. Total	0	0	0	0	0	9.7	90.3	0	0	48.4	0	0	51.6	0	48.4	0	87.8	12.2	0	0	0
PHF	.000	.000	.000	.000	.000	.879	.958	.000	.000	.969	.780	.000	.690	.000	.731	.000	.884	.897	.000	.885	.900

GRAM Traffic, Inc.

3751 FM 1105 Bldg A
Georgetown, TX 78626

512-832-8650

File Name : Spice-HartPM

Site Code : 00000032

Start Date : 3/27/2014

Page No : 2

	Southbound					Spicewood Springs Westbound					Hart Ln Northbound					Spicewood Springs Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:00					17:00					17:00					16:30				
+0 mins.	0	0	0	0	0	22	242	0	0	264	42	0	45	0	87	0	187	33	0	220
+15 mins.	0	0	0	0	0	31	254	0	0	285	59	0	71	0	130	0	170	36	0	206
+30 mins.	0	0	0	0	0	31	257	0	0	288	46	0	43	0	89	0	177	26	0	203
+45 mins.	0	0	0	0	0	25	266	0	0	291	37	0	37	0	74	0	211	29	0	240
Total Volume	0	0	0	0	0	109	1019	0	0	1128	184	0	196	0	380	0	745	124	0	869
% App. Total	0	0	0	0	0	9.7	90.3	0	0		48.4	0	51.6	0		0	85.7	14.3	0	
PHF	.000	.000	.000	.000	.000	.879	.958	.000	.000	.969	.780	.000	.690	.000	.731	.000	.883	.861	.000	.905

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1				GRAM Traffic, Inc. 3751 FM 1105 Bldg A Georgetown, TX 7862										Page 1		
2																
3														Hart Lane		
4														Between Greystone Dr & Far West		
5														Site Code: 742		
6														Station ID: 27920		
7																
8																
9																
10		01-Apr-14	Northbound	Hour Totals		Southbound		Hour Totals		Combined Totals						
11		Tue	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon				
12	12:00		6	41			3	50								
13	12:15		4	34			1	57								
14	12:30		2	41			1	41								
15	12:45		1	64	13	180	3	48	8	196	21	376				
16	01:00		1	52			1	42								
17	01:15		0	57			2	42								
18	01:30		0	45			0	46								
19	01:45		1	41	2	195	1	45	4	175	6	370				
20	02:00		0	32			4	62								
21	02:15		0	44			2	57								
22	02:30		2	47			0	47								
23	02:45		0	50	2	173	0	53	6	219	8	392				
24	03:00		0	54			0	67								
25	03:15		0	44			1	75								
26	03:30		3	83			1	65								
27	03:45		0	69	3	250	1	59	3	266	6	516				
28	04:00		0	69			0	58								
29	04:15		0	63			1	117								
30	04:30		1	95			0	94								
31	04:45		1	87	2	314	1	65	2	334	4	648				
32	05:00		0	90			2	66								
33	05:15		1	87			5	78								
34	05:30		1	82			12	78								
35	05:45		2	77	4	336	9	57	28	279	32	615				
36	06:00		5	75			8	46								
37	06:15		6	74			11	54								
38	06:30		15	86			17	40								
39	06:45		19	52	45	287	32	37	68	177	113	464				
40	07:00		13	38			30	31								
41	07:15		26	43			63	38								
42	07:30		31	33			98	31								
43	07:45		45	27	115	141	183	36	374	136	489	277				
44	08:00		53	26			129	19								
45	08:15		48	31			67	18								
46	08:30		46	27			67	24								
47	08:45		48	23	195	107	73	27	336	88	531	195				
48	09:00		51	19			65	27								
49	09:15		44	24			40	8								
50	09:30		27	10			32	12								
51	09:45		30	24	152	77	46	5	183	52	335	129				
52	10:00		36	13			29	9								
53	10:15		27	10			30	8								
54	10:30		37	5			28	5								
55	10:45		35	11	135	39	29	7	116	29	251	68				
56	11:00		38	6			41	6								
57	11:15		30	8			47	11								
58	11:30		41	5			24	5								
59	11:45		30	7	139	26	47	4	159	26	298	52				
60	Total		807	2125			1287	1977			2094	4102				
61	Percent		27.5%	72.5%			39.4%	60.6%			33.8%	66.2%				
63	Grand Total		807	2125			1287	1977			2094	4102				
64	Percent		27.5%	72.5%			39.4%	60.6%			33.8%	66.2%				

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1				GRAM Traffic, Inc. 3751 FM 1105 Bldg A Georgetown, TX 7862										Page 1		
2																
3														Hart Lane		
4														Between Greystone Dr & Executive		
5														Site Code: 740		
6														Station ID:		
7																
8																
9																
10		01-Apr-14	Northbound	Hour Totals		Southbound		Hour Totals		Combined Totals						
11		Tue	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon				
12	12:00		3	31			1	38								
13	12:15		5	23			0	38								
14	12:30		1	43			1	41								
15	12:45		0	47	9	144	0	36	2	153	11	297				
16	01:00		0	39			2	33								
17	01:15		1	48			0	32								
18	01:30		0	36			0	37								
19	01:45		2	28	3	151	1	33	3	135	6	286				
20	02:00		0	26			0	39								
21	02:15		0	35			0	42								
22	02:30		1	38			0	26								
23	02:45		0	30	1	129	0	33	0	140	1	269				
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25	03:15		0	33			0	39								
26	03:30		1	48			0	35								
27	03:45		1	46	2	164	0	33	0	151	2	315				
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29	04:15		0	56			1	77								
30	04:30		1	69			1	59								
31	04:45		1	61	2	232	1	36	3	211	5	443				
32	05:00		1	72			1	52								
33	05:15		1	68			4	45								
34	05:30		1	68			5	57								
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36	06:00		3	51			4	36								
37	06:15		3	56			7	35								
38	06:30		12	66			9	26								
39	06:45		12	31	30	204	18	17	38	114	68	318				
40	07:00		12	23			22	18								
41	07:15		24	38			31	20								
42	07:30		22	26			58	20								
43	07:45		36	20	94	107	50	24	161	82	255	189				
44	08:00		37	20			76	15								
45	08:15		43	20			46	17								
46	08:30		37	19			48	20								
47	08:45		39	15	156	74	60	13	230	65	386	139				
48	09:00		36	15			33	18								
49	09:15		27	15			21	9								
50	09:30		19	10			24	7								
51	09:45		29	17	111	57	28	2	106	36	217	93				
52	10:00		25	6			22	3								
53	10:15		20	6			18	2								
54	10:30		29	3			21	5								
55	10:45		22	7	96	22	20	5	81	15	177	37				
56	11:00		31	3			28	3								
57	11:15		30	7			34	7								
58	11:30		33	2			25	1								
59	11:45		25	3	119	15	34	1	121	12	240	27				
60	Total		628	1568			758	1312			1386	2880				
61	Percent		28.6%	71.4%			36.6%	63.4%			32.5%	67.5%				
63	Grand Total		628	1568			758	1312			1386	2880				
64	Percent		28.6%	71.4%			36.6%	63.4%			32.5%	67.5%				

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1				GRAM Traffic, Inc. 3751 FM 1105 Bldg A Georgetown, TX 7862										Page 1		
2																
3														Wood Hollow Dr		
4														Between Greystone Dr & Far West		
5														Site Code:		
6														Station ID:		
7																
8																
9																
10		01-Apr-14	Northbound	Hour Totals		Southbound		Hour Totals		Combined Totals						
11		Tue	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon				
12	12:00		6	68			12	53								
13	12:15		3	69			10	50								
14	12:30		5	49			4	46								
15	12:45		5	57	19	243	6	55	32	204	51	447				
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17	01:15		6	65			3	50								
18	01:30		3	62			1	50								
19	01:45		1	51	12	238	6	41	12	194	24	432				
20	02:00		2	64			4	52								
21	02:15		3	57			6	39								
22	02:30		1	65			1	38								
23	02:45		1	48	7	234	1	51	12	180	19	414				
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25	03:15		1	60			2	53								
26	03:30		2	66			0	40								
27	03:45		0	69	5	257	0	49	4	180	9	437				
28	04:00		1	75			0	45								
29	04:15		2	63			1	55								
30	04:30		1	73			2	53								
31	04:45		4	94	8	305	0	59	3	212	11	517				
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33	05:15		3	106			3	84								
34	05:30		3	91			4	58								
35	05:45		4	80	14	367	7	49	17	256	31	623				
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37	06:15		6	77			10	36								
38	06:30		6	63			18	39								
39	06:45		9	50	27	262	20	29	60	141	87	403				
40	07:00		33	61			27	48								
41	07:15		31	42			56	36								
42	07:30		36	47			93	39								
43	07:45		53	40	153	190	111	30	287	153	440	343				
44	08:00		37	51			81	29								
45	08:15		45	42			77	36								
46	08:30		52	43			75	23								
47	08:45		57	31	191	167	53	25	286	113	477	280				
48	09:00		44	30			48	35								
49	09:15		33	29			44	21								
50	09:30		46	35			42	31								
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52	10:00		43	33			31	24								
53	10:15		39	16			44	23								
54	10:30		50	26			22	27								
55	10:45		41	21	173	96	38	14	135	88	308	184				
56	11:00		37	21			34	12								
57	11:15		53	16			38	16								
58	11:30		49	23			54	8								
59	11:45		74	16	213	76	48	8	174	44	387	120				
60	Total		987	2550			1188	1870			2175	4420				
61	Percent		27.9%	72.1%			38.8%	61.2%			33.0%	67.0%				
63	Grand Total		987	2550			1188	1870			2175	4420				
64	Percent		27.9%	72.1%			38.8%	61.2%			33.0%	67.0%				

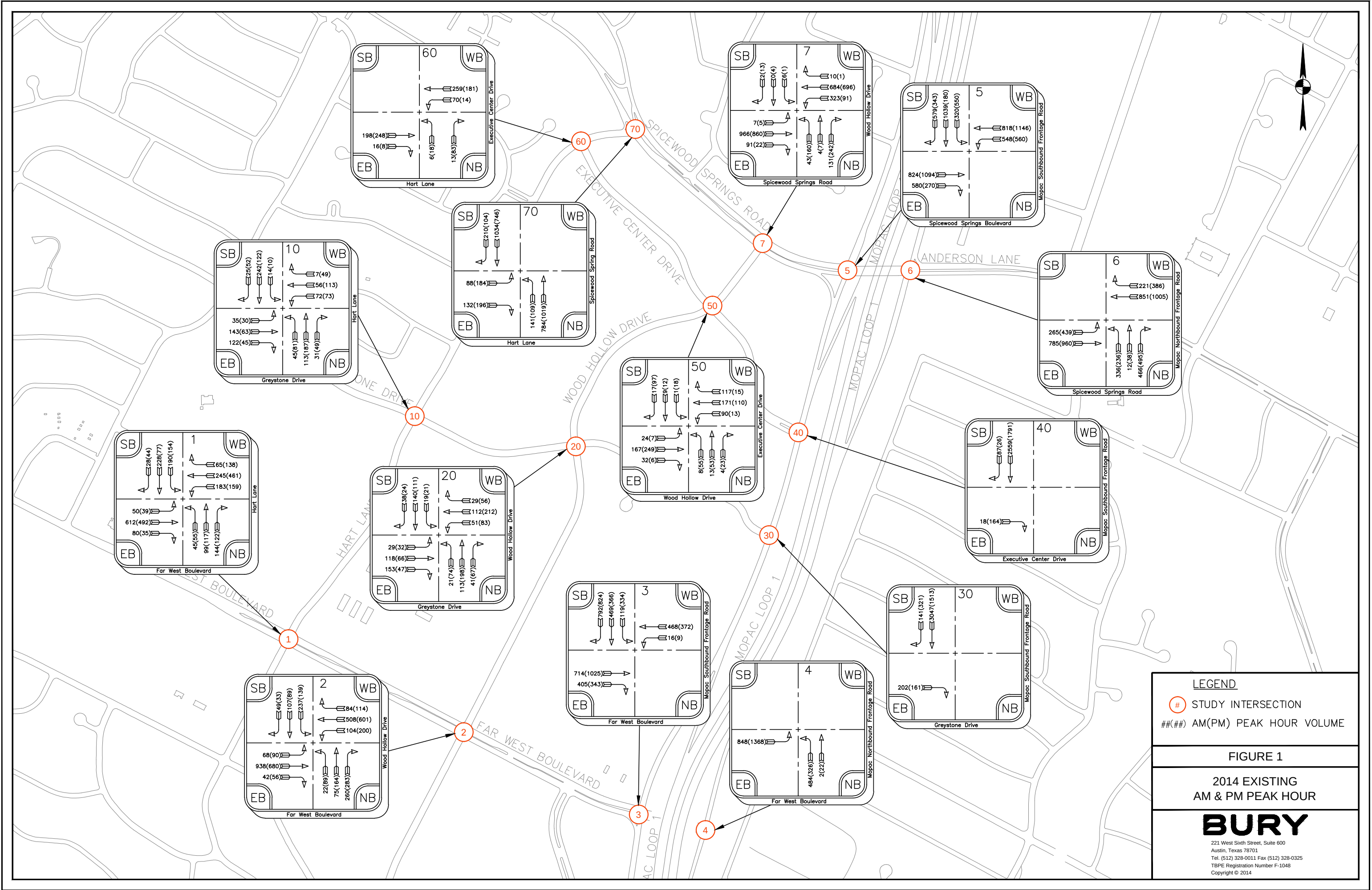
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1				GRAM Traffic, Inc. 3751 FM 1105 Bldg A Georgetown, TX 7862										Page 1		
2																
3														Wood Hollow Dr		
4														Between Greystone Dr & Executive		
5														Site Code:		
6														Station ID:		
7																
8																
9																
10		01-Apr-14	Northbound	Hour Totals		Southbound		Hour Totals		Combined Totals						
11		Tue	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon				
12	12:00		5	53			4	47								
13	12:15		1	58			7	27								
14	12:30		8	50			1	28								
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17	01:15		4	59			1	33								
18	01:30		4	48			1	40								
19	01:45		1	44	10	199	3	27	7	136	17	335				
20	02:00		3	49			4	37								
21	02:15		1	43			3	30								
22	02:30		0	43			0	28								
23	02:45		0	42	4	177	0	36	7	131	11	308				
24	03:00		1	38			2	18								
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29	04:15		2	41			1	42								
30	04:30		2	53			1	30								
31	04:45		2	75	6	231	0	36	3	131	9	362				
32	05:00		1	70			3	52								
33	05:15		5	98			0	57								
34	05:30		5	67			1	40								
35	05:45		4	53	15	288	3	35	7	184	22	472				
36	06:00		3	71			3	26								
37	06:15		5	63			2	26								
38	06:30		9	46			13	20								
39	06:45		13	44	30	224	9	26	27	98	57	322				
40	07:00		27	54			13	31								
41	07:15		25	46			33	23								
42	07:30		32	42			56	25								
43	07:45		55	28	139	170	68	24	170	103	309	273				
44	08:00		36	33			46	28								
45	08:15		52	27			48	21								
46	08:30		48	24			38	20								
47	08:45		46	20	182	104	34	15	166	84	348	188				
48	09:00		46	16			26	19								
49	09:15		29	11			25	10								
50	09:30		40	25			27	16								
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52	10:00		37	17			20	13								
53	10:15		29	14			19	17								
54	10:30		43	15			11	13								
55	10:45		33	11	142	57	22	9	72	52	214	109				
56	11:00		31	10			22	9								
57	11:15		44	5			29	9								
58	11:30		42	10			41	3								
59	11:45		60	7	177	32	32	1	124	22	301	54				
60	Total		879	1939			699	1238			1578	3177				
61	Percent		31.2%	68.8%			36.1%	63.9%			33.2%	66.8%				
63	Grand Total		879	1939			699	1238			1578	3177				
64	Percent		31.2%	68.8%			36.1%	63.9%			33.2%	66.8%				

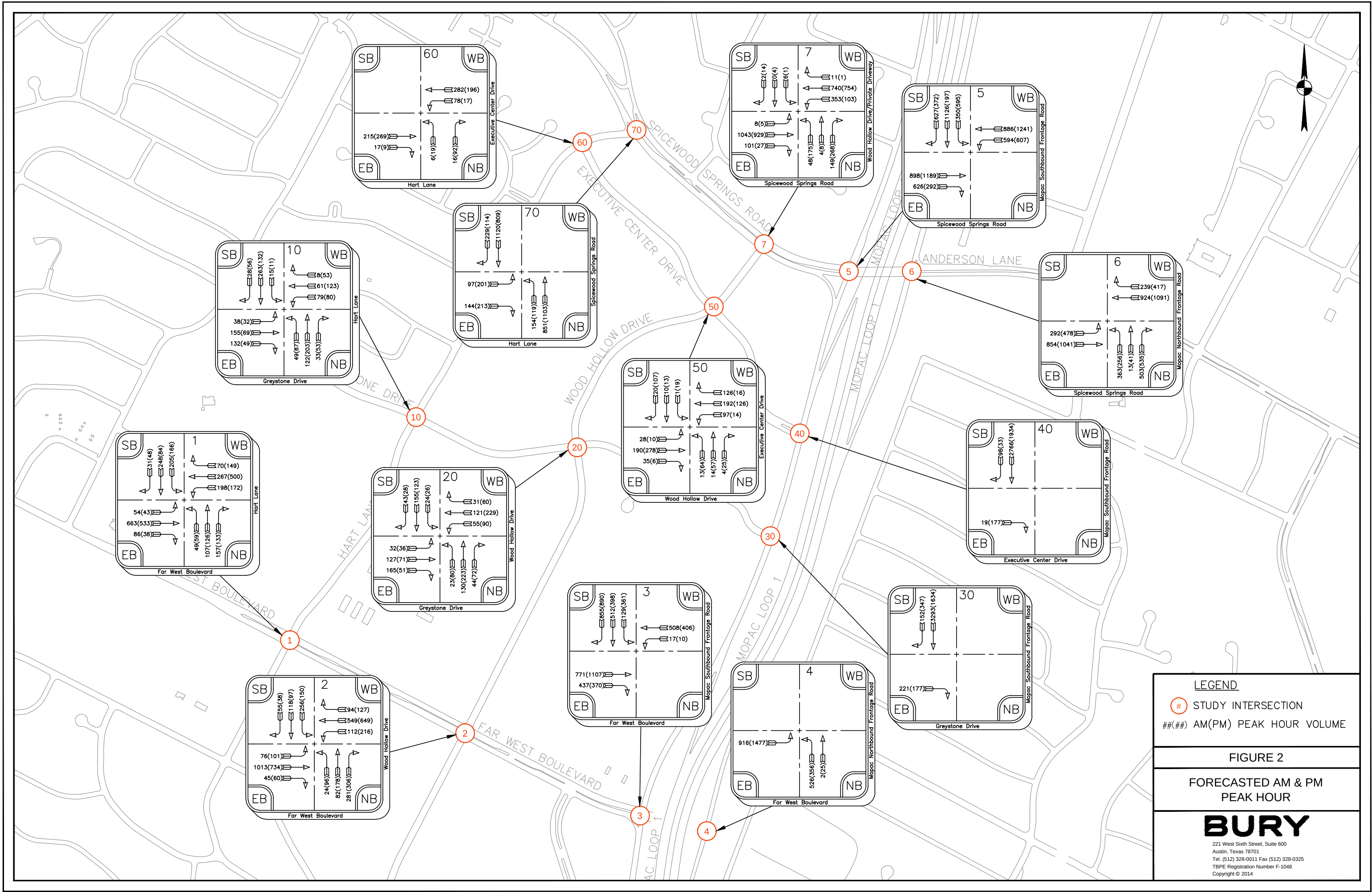
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1				GRAM Traffic, Inc. 3751 FM 1105 Bldg A Georgetown, TX 7862										Page 1		
2																
3														Greystone Dr		
4														Between Wood Hollow & Hart Ln		
5														Site Code: 739		
6														Station ID: 27917		
7																
8																
9																
10		01-Apr-14	Eastbound	Hour Totals		Westbound		Hour Totals		Combined Totals						
11		Tue	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon				
12	12:00		7	31			5	37								
13	12:15		1	28			2	32								
14	12:30		1	27			4	41								
15	12:45		1	39	10	125	1	37	12	147	22	272				
16	01:00		3	31			1	34								
17	01:15		0	33			2	38								
18	01:30		1	27			2	39								
19	01:45		0	31	4	122	5	46	10	157	14	279				
20	02:00		2	41			4	48								
21	02:15		0	23			3	54								
22	02:30		1	38			0	59								
23	02:45		0	34	3	136	0	47	7	208	10	344				
24	03:00		0	58			0	44								
25	03:15		3	39			1	68								
26	03:30		1	38			2	58								
27	03:45		0	29	4	164	3	47	6	217	10	381				
28	04:00		0	29			1	63								
29	04:15		1	31			0	71								
30	04:30		1	41			0	55								
31	04:45		1	26	3	127	0	62	1	251	4	378				
32	05:00		3	29			3	85								
33	05:15		6	36			3	86								
34	05:30		2	48			7	87								
35	05:45		9	25	20	138	5	76	18	334	38	472				
36	06:00		10	34			6	62								
37	06:15		9	35			5	52								
38	06:30		20	37			8	51								
39	06:45		23	31	62	137	22	51	41	216	103	353				
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41	07:15		39	25			31	43								
42	07:30		56	25			43	50								
43	07:45		82	19	211	92	63	43	158	181	369	273				
44	08:00		62	17			33	35								
45	08:15		59	18			37	28								
46	08:30		39	13			32	28								
47	08:45		40	15	200	63	27	26	129	117	329	180				
48	09:00		46	16			30	27								
49	09:15		39	15			41	22								
50	09:30		30	9			35	16								
51	09:45		32	13	147	53	40	14	146	79	293	132				
52	10:00		38	6			22	22								
53	10:15		36	7			30	8								
54	10:30		31	3			26	5								
55	10:45		28	10	133	26	16	10	94	45	227	71				
56	11:00		22	5			32	11								
57	11:15		23	3			26	7								
58	11:30		36	2			35	12								
59	11:45		37	4	118	14	40	4	133	34	251	48				
60	Total		915	1197			755	1986			1670	3183				
61	Percent		43.3%	56.7%			27.5%	72.5%			34.4%	65.6%				
63	Grand Total		915	1197			755	1986			1670	3183				
64	Percent		43.3%	56.7%			27.5%	72.5%			34.4%	65.6%				

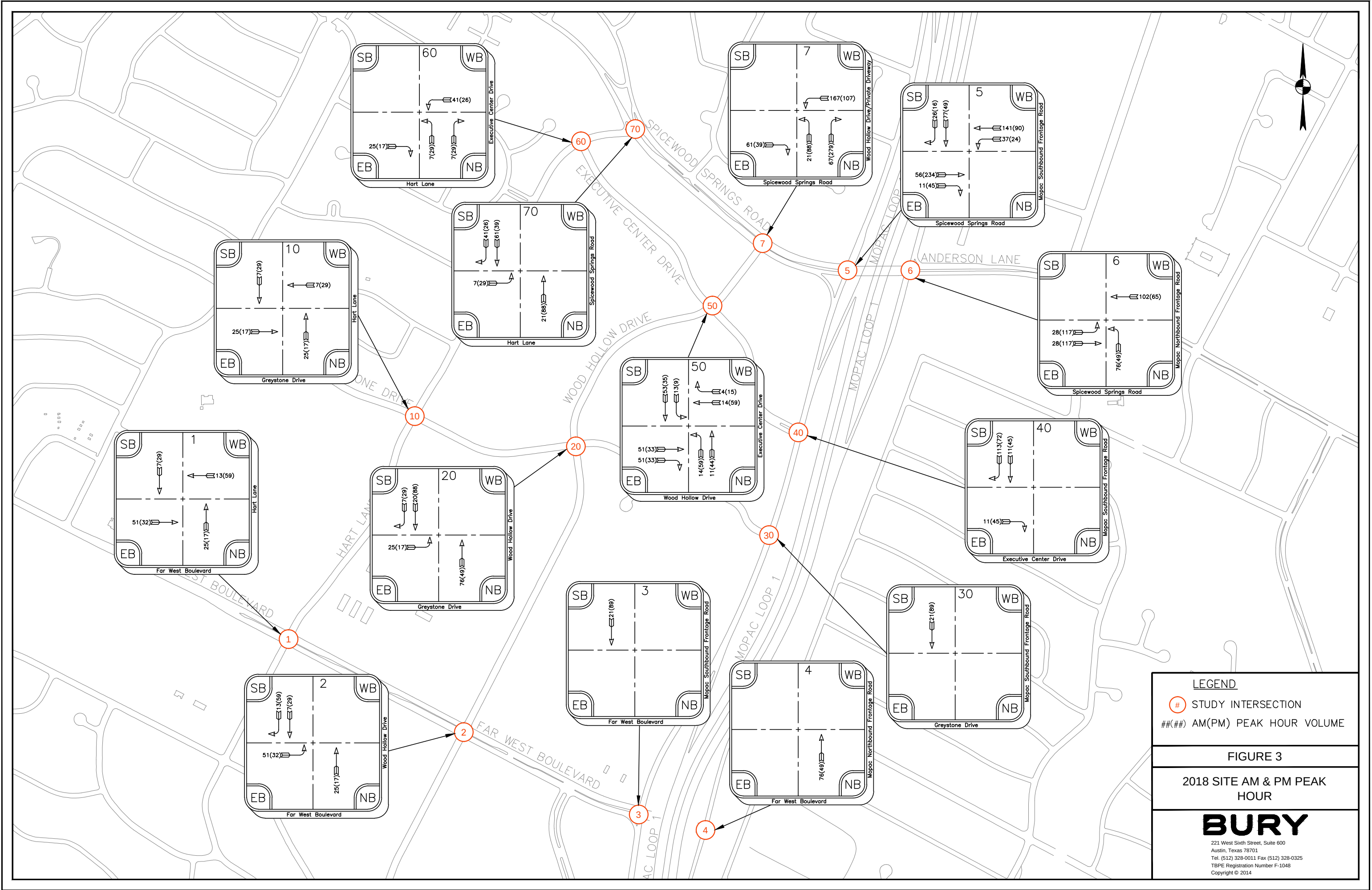
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1				GRAM Traffic, Inc. 3751 FM 1105 Bldg A Georgetown, TX 7862										Page 1			
2																	
3														Greystone Dr			
4														Between Wood Hollow Dr & MoPa			
5														Site Code:			
6														Station ID:			
7																	
8																	
9																	
10		01-Apr-14	Westbound		Hour Totals		Eastbound		Hour Totals		Combined Totals						
11		Tue	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon					
12	12:00		7	64			2	46									
13	12:15		15	63			4	43									
14	12:30		10	53			6	42									
15	12:45		8	46	40	226	5	42	17	173	57	399					
16	01:00		8	49			2	37									
17	01:15		8	53			1	39									
18	01:30		1	59			4	38									
19	01:45		7	49	24	210	0	50	7	164	31	374					
20	02:00		6	52			1	43									
21	02:15		6	60			1	40									
22	02:30		1	38			0	36									
23	02:45		1	50	14	200	1	30	3	149	17	349					
24	03:00		1	40			2	34									
25	03:15		2	57			2	29									
26	03:30		5	57			1	38									
27	03:45		3	53	11	207	2	31	7	132	18	339					
28	04:00		2	78			2	35									
29	04:15		2	70			4	27									
30	04:30		4	68			1	40									
31	04:45		1	64	9	280	4	22	11	124	20	404					
32	05:00		3	91			9	38									
33	05:15		3	130			8	40									
34	05:30		8	88			5	40									
35	05:45		4	92	18	401	18	26	40	144	58	545					
36	06:00		7	83			13	37									
37	06:15		8	72			17	32									
38	06:30		8	72			28	49									
39	06:45		21	68	44	295	23	41	81	159	125	454					
40	07:00		18	62			42	33									
41	07:15		28	57			47	38									
42	07:30		28	74			50	37									
43	07:45		35	53	109	246	46	29	185	137	294	383					
44	08:00		34	42			40	28									
45	08:15		41	49			52	21									
46	08:30		37	41			36	15									
47	08:45		38	48	150	180	61	23	189	87	339	267					
48	09:00		35	45			44	22									
49	09:15		33	23			36	17									
50	09:30		34	32			42	16									
51	09:45		38	30	140	130	41	13	163	68	303	198					
52	10:00		29	26			45	14									
53	10:15		37	30			39	8									
54	10:30		27	20			29	8									
55	10:45		27	19	120	95	40	14	153	44	273	139					
56	11:00		37	12			25	2									
57	11:15		28	18			32	8									
58	11:30		54	14			47	5									
59	11:45		50	8	169	52	55	4	159	19	328	71					
60	Total		848	2522			1015	1400			1863	3922					
61	Percent		25.2%	74.8%			42.0%	58.0%			32.2%	67.8%					
63	Grand Total		848	2522			1015	1400			1863	3922					
64	Percent		25.2%	74.8%			42.0%	58.0%			32.2%	67.8%					

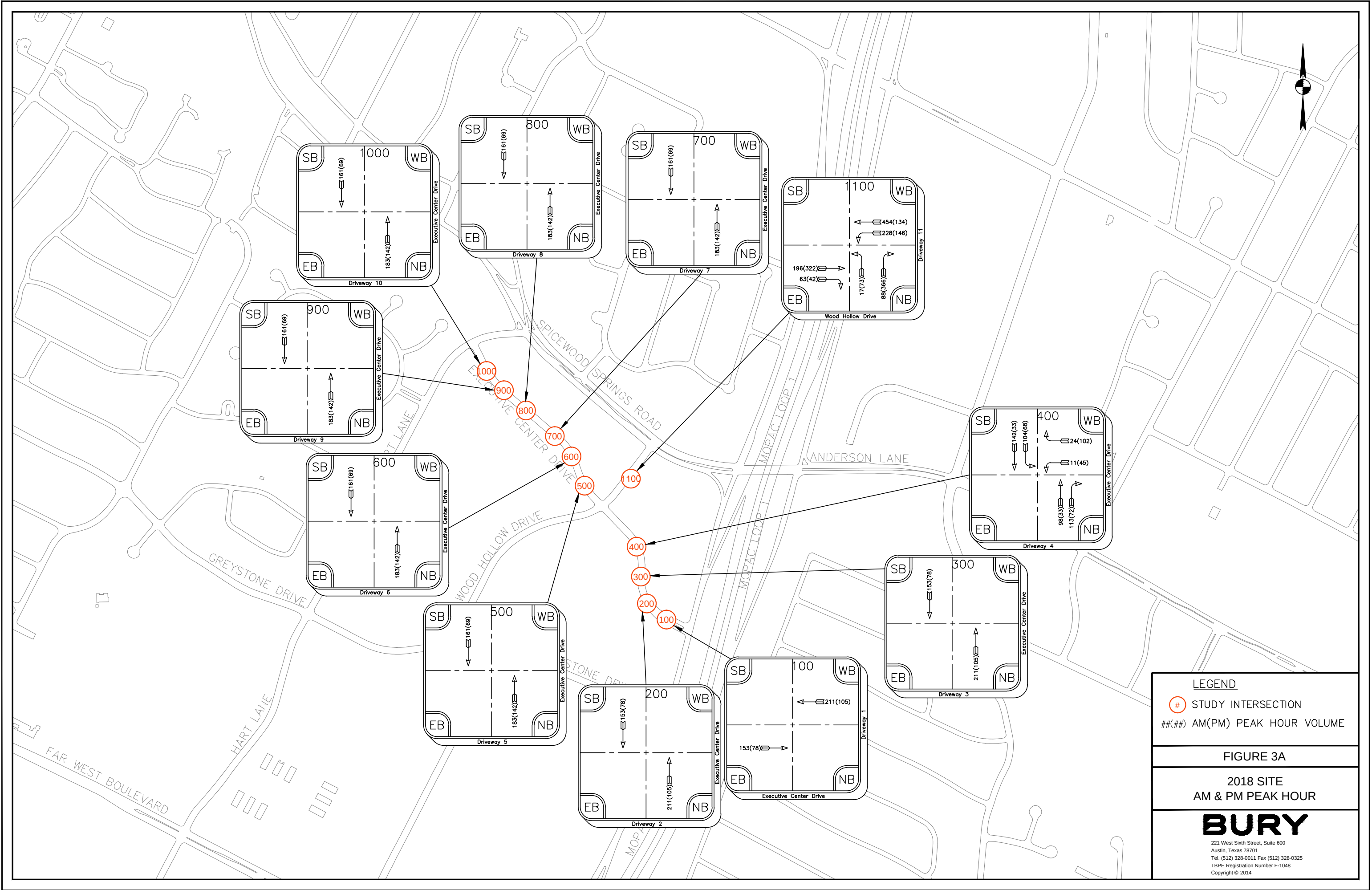
EXHIBIT 6

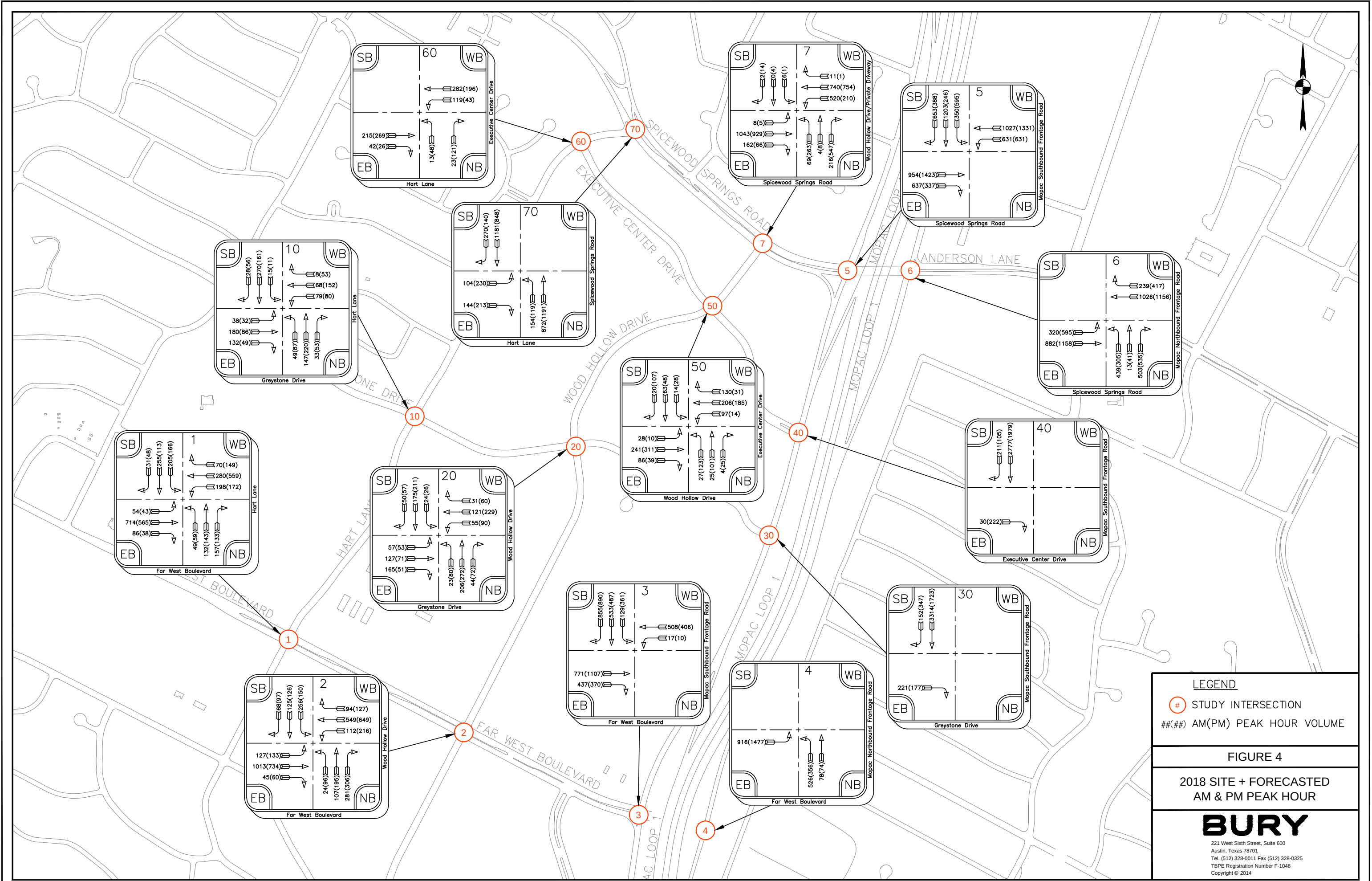
EXISTING AND PROJECTED TRAFFIC VOLUME FIGURES











LEGEND

STUDY INTERSECTION

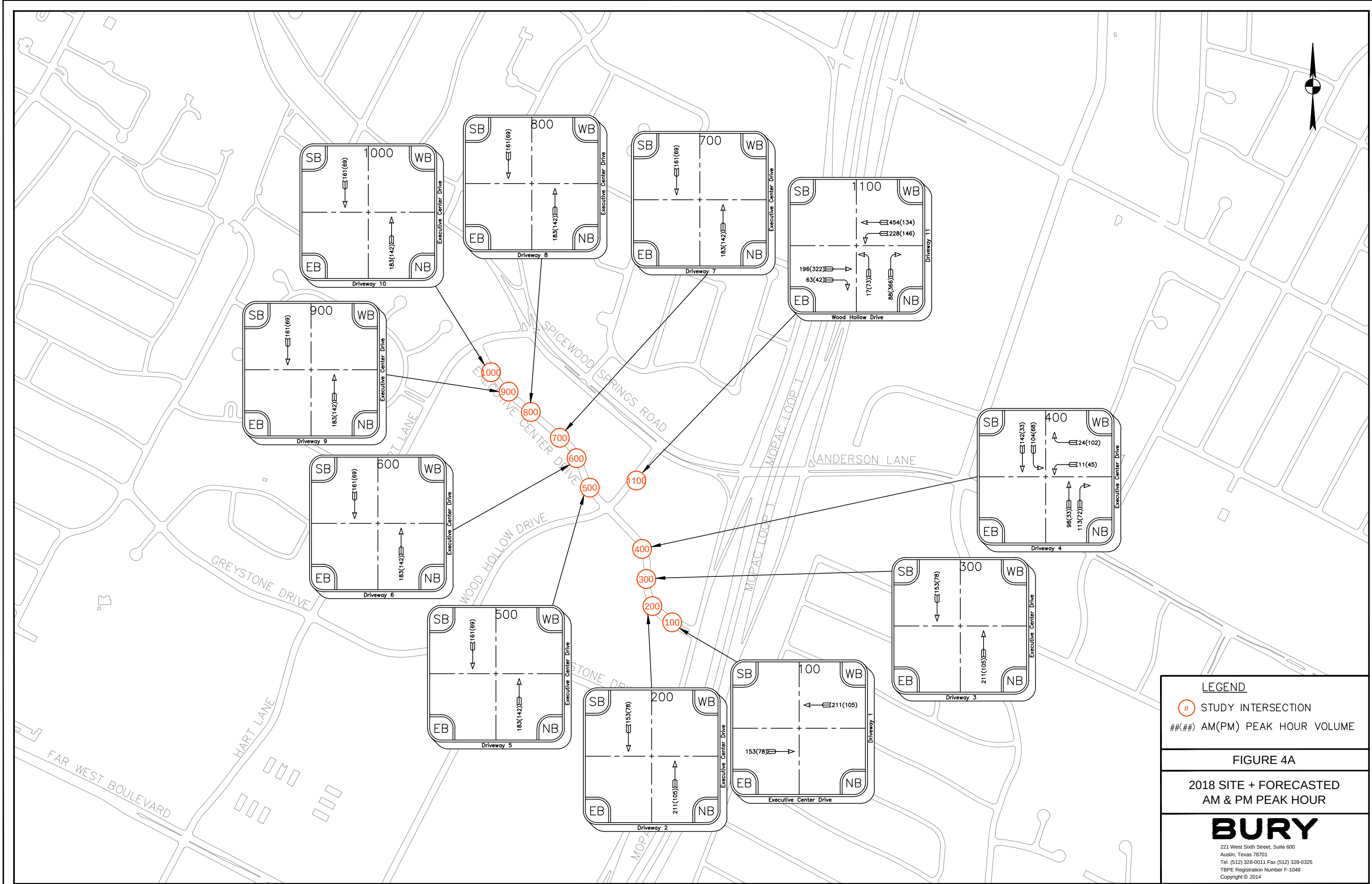
##(##) AM(PM) PEAK HOUR VOLUME

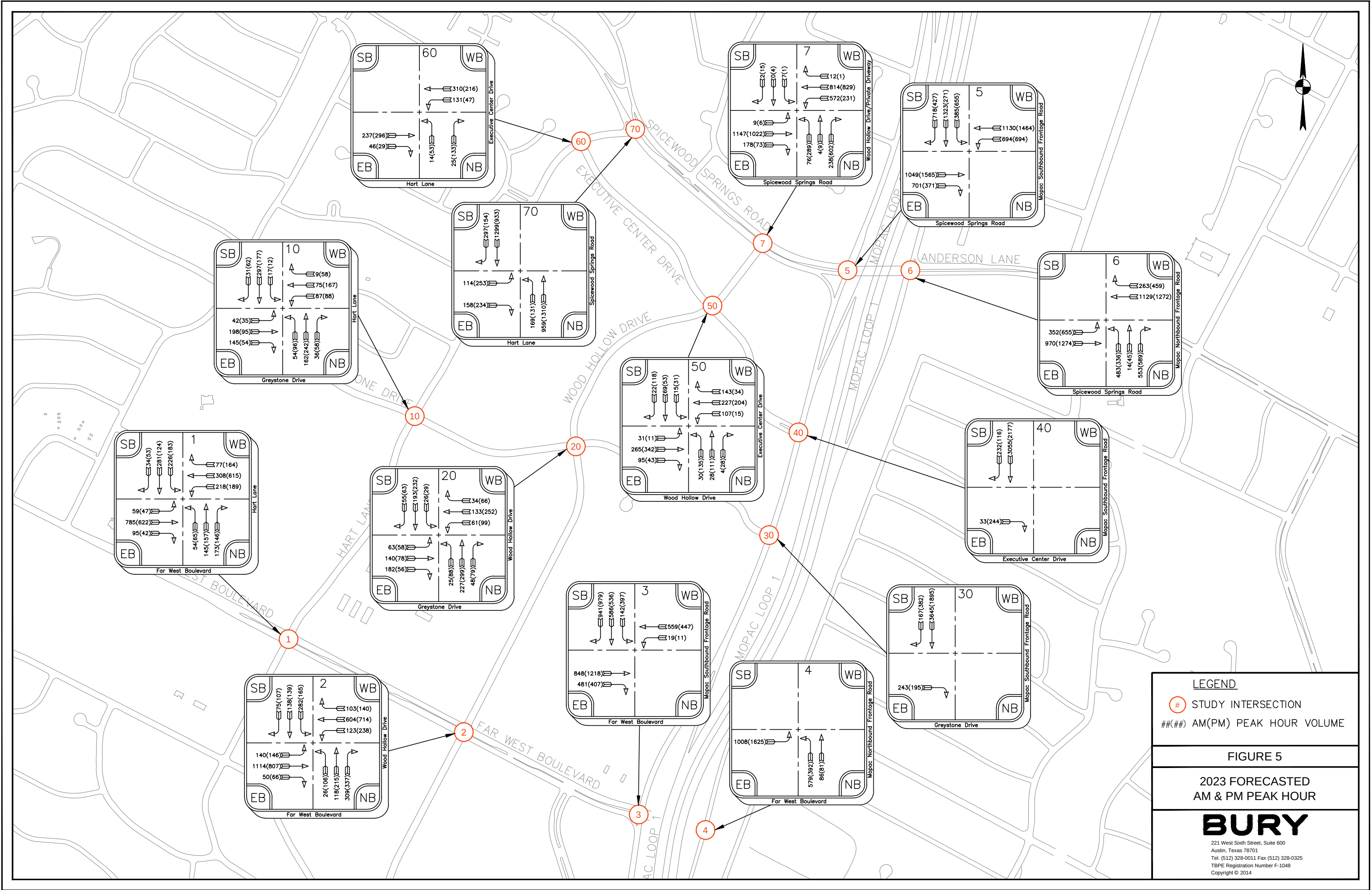
FIGURE 4

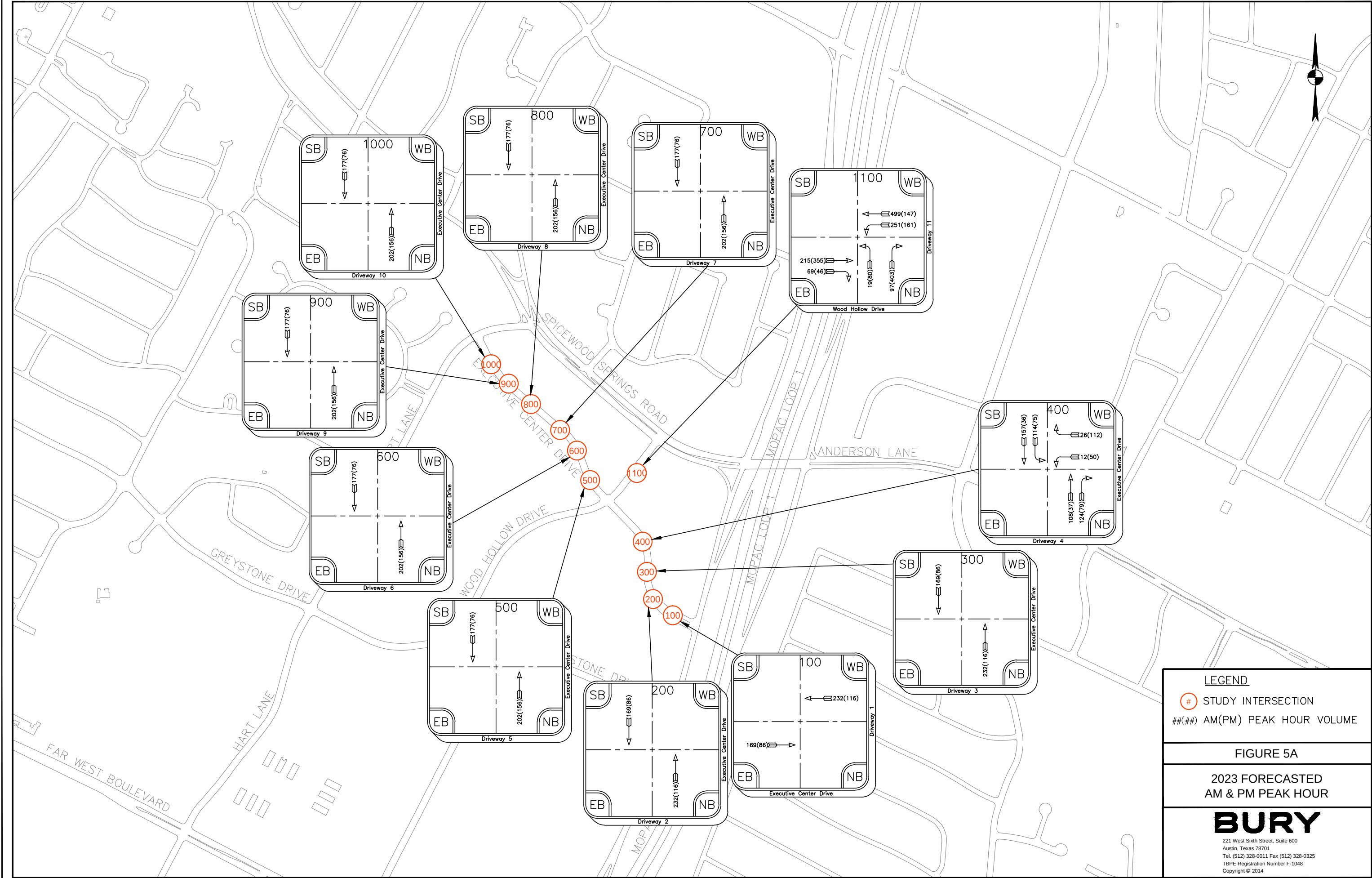
2018 SITE + FORECASTED
AM & PM PEAK HOUR

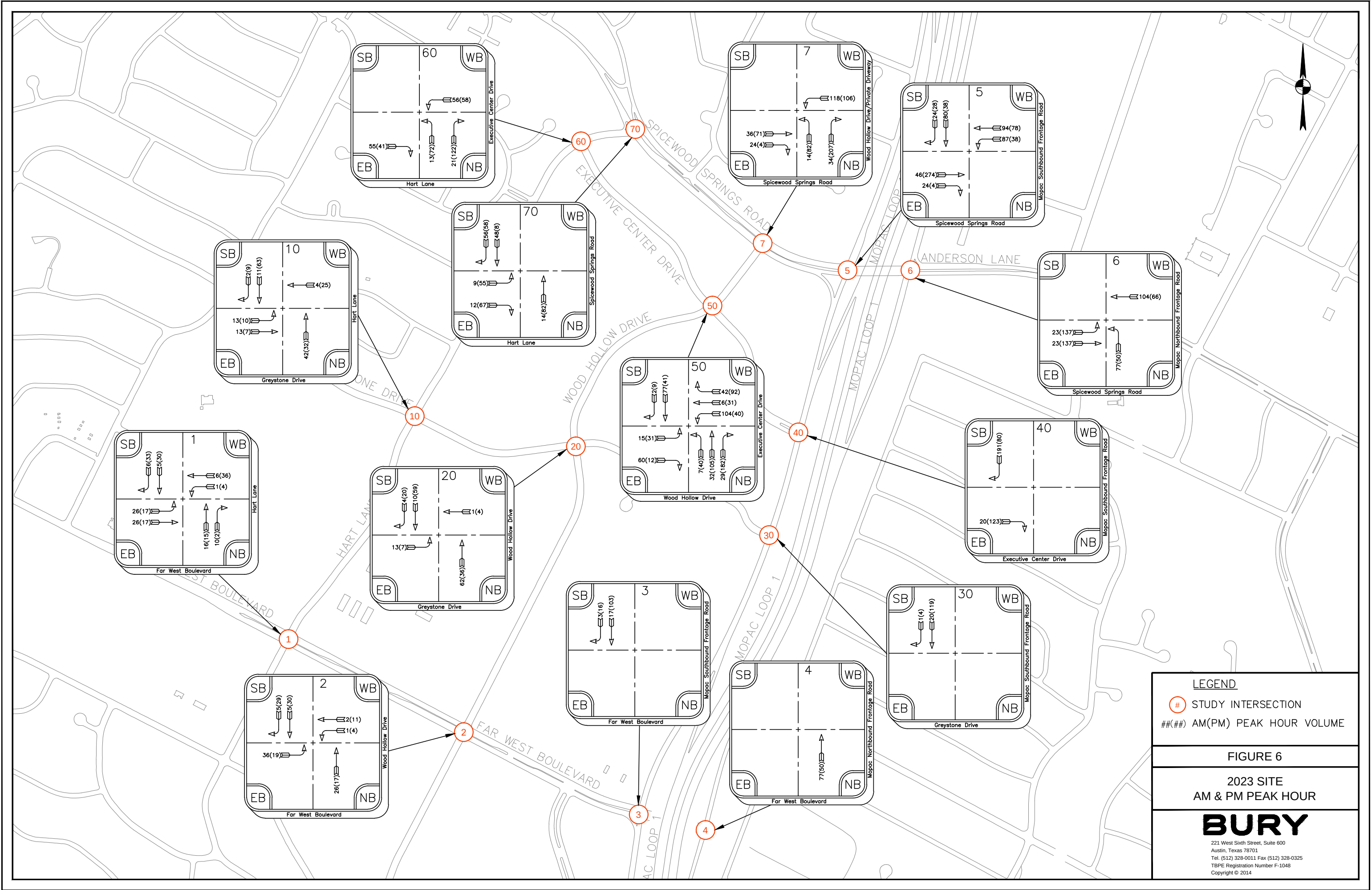
BURY

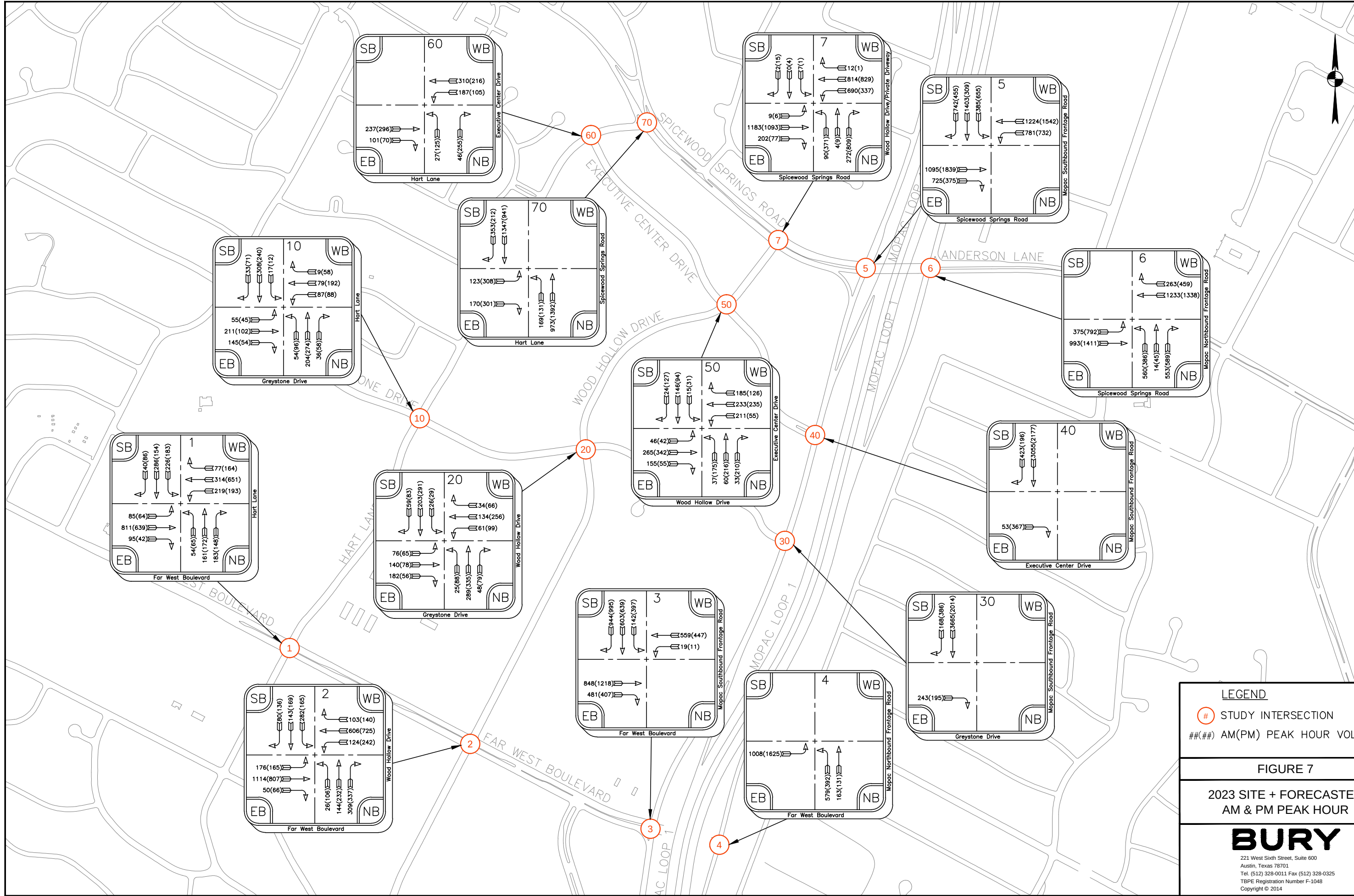
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STUDY INTERSECTION

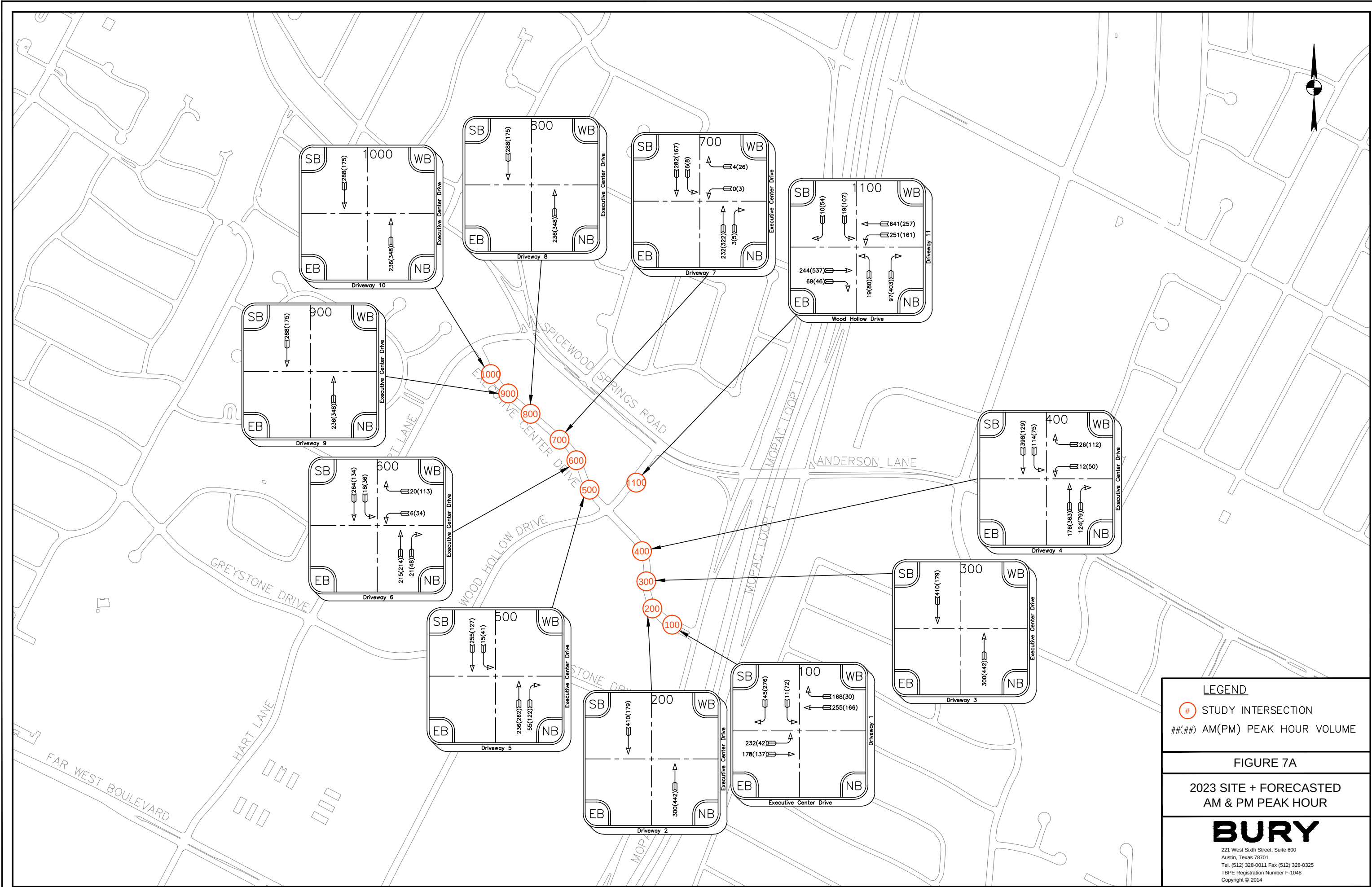
##(##) AM(PM) PEAK HOUR VOLUME

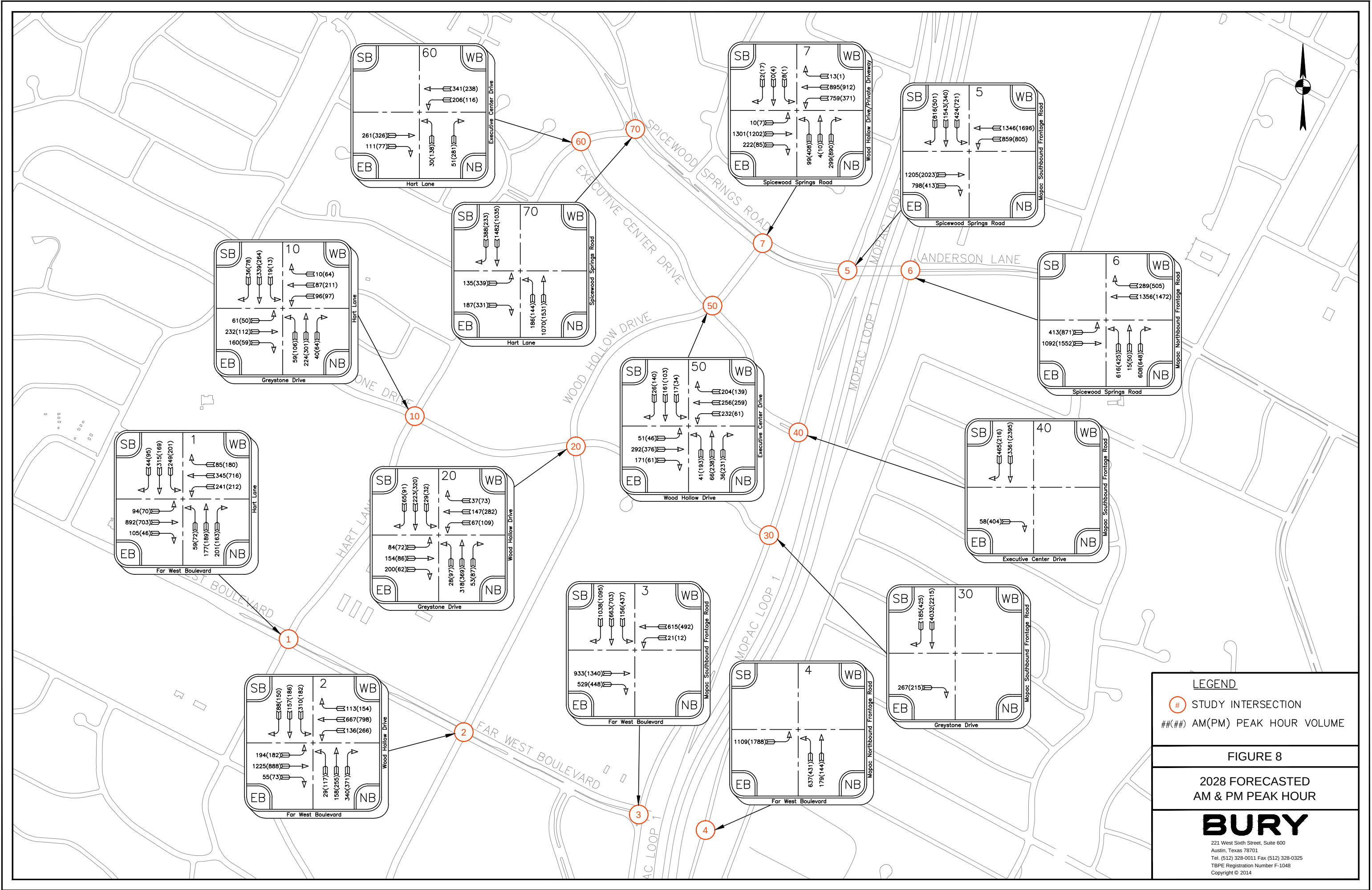
FIGURE 7

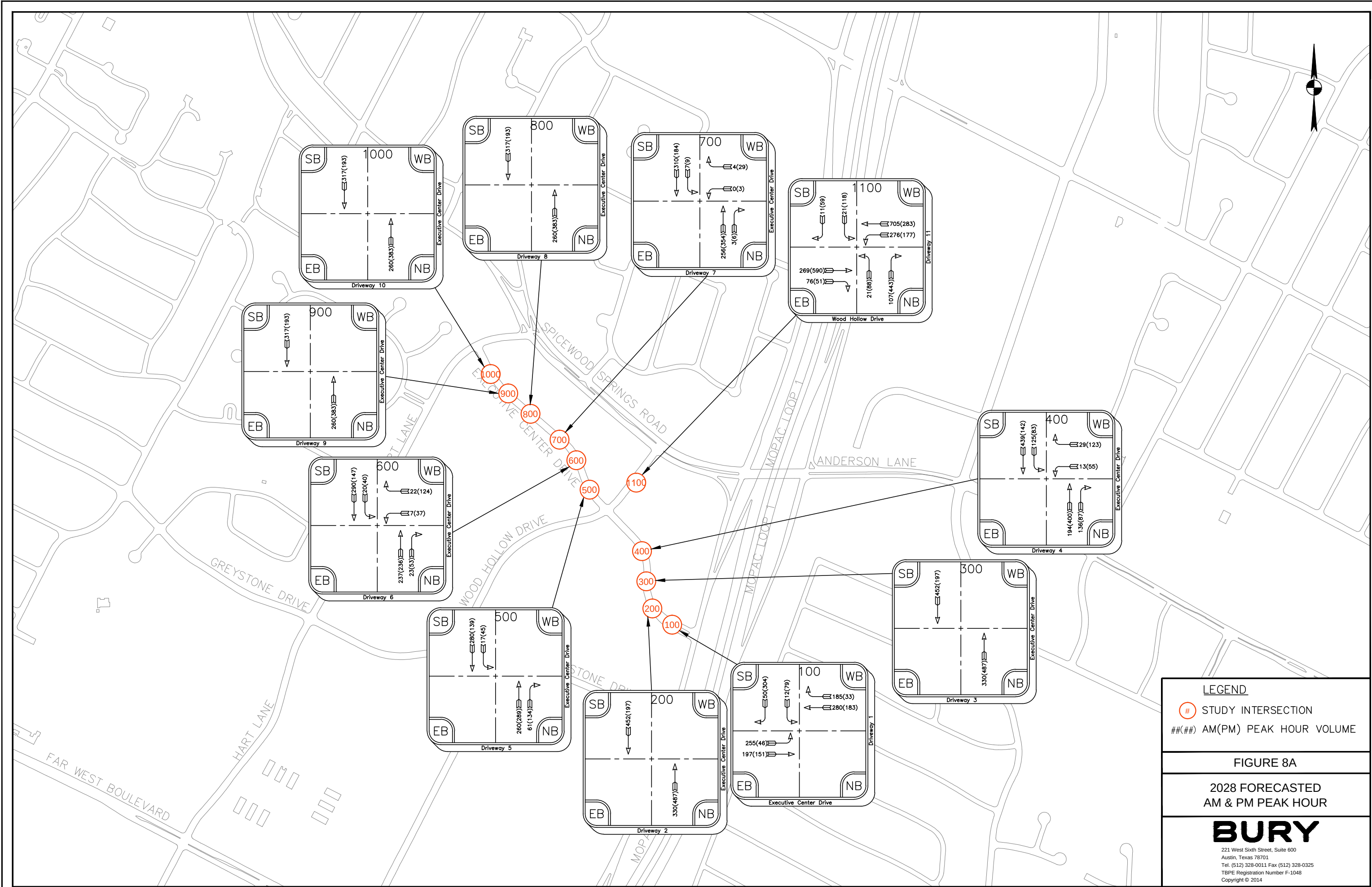
2023 SITE + FORECASTED
AM & PM PEAK HOUR

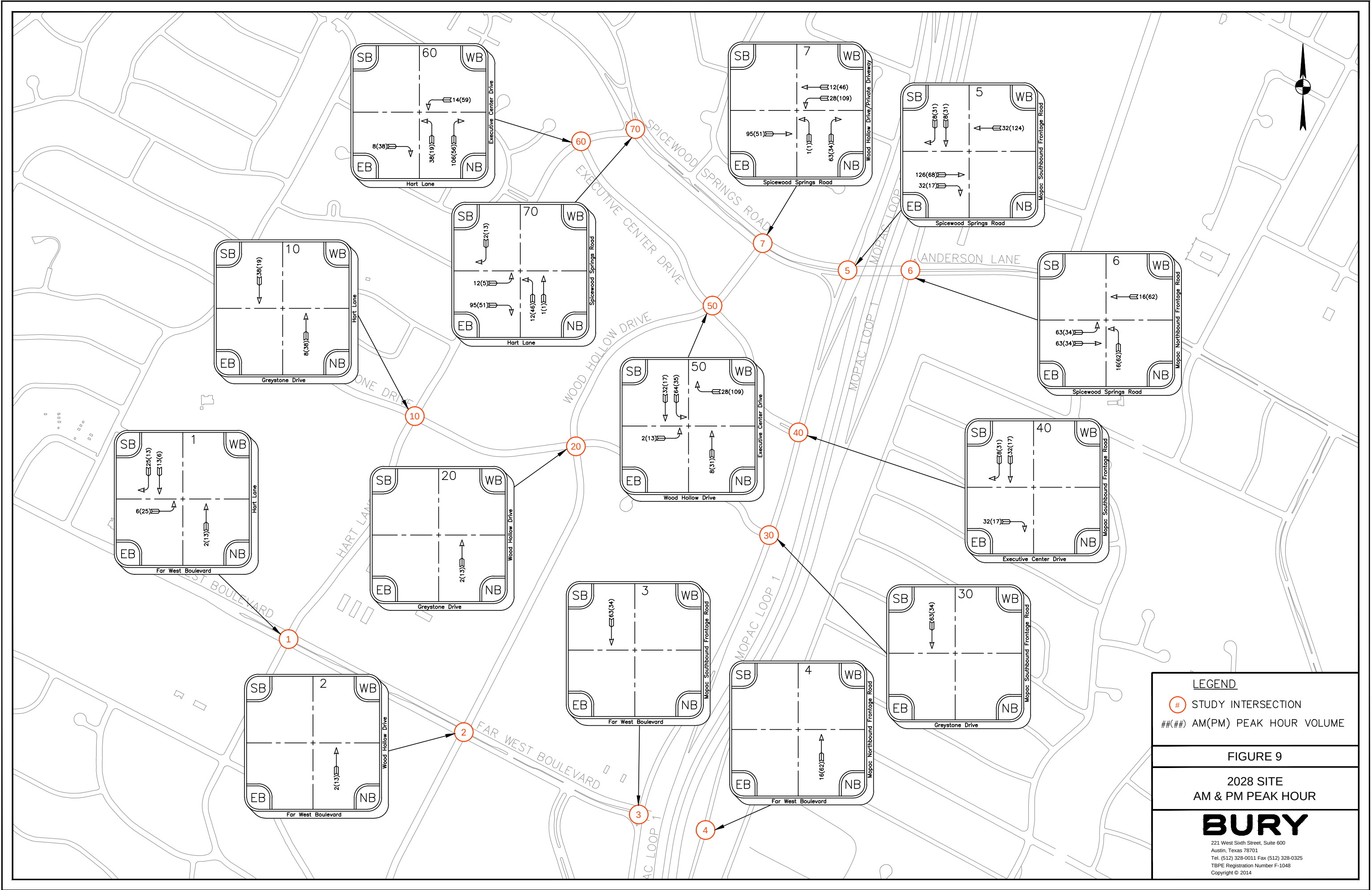
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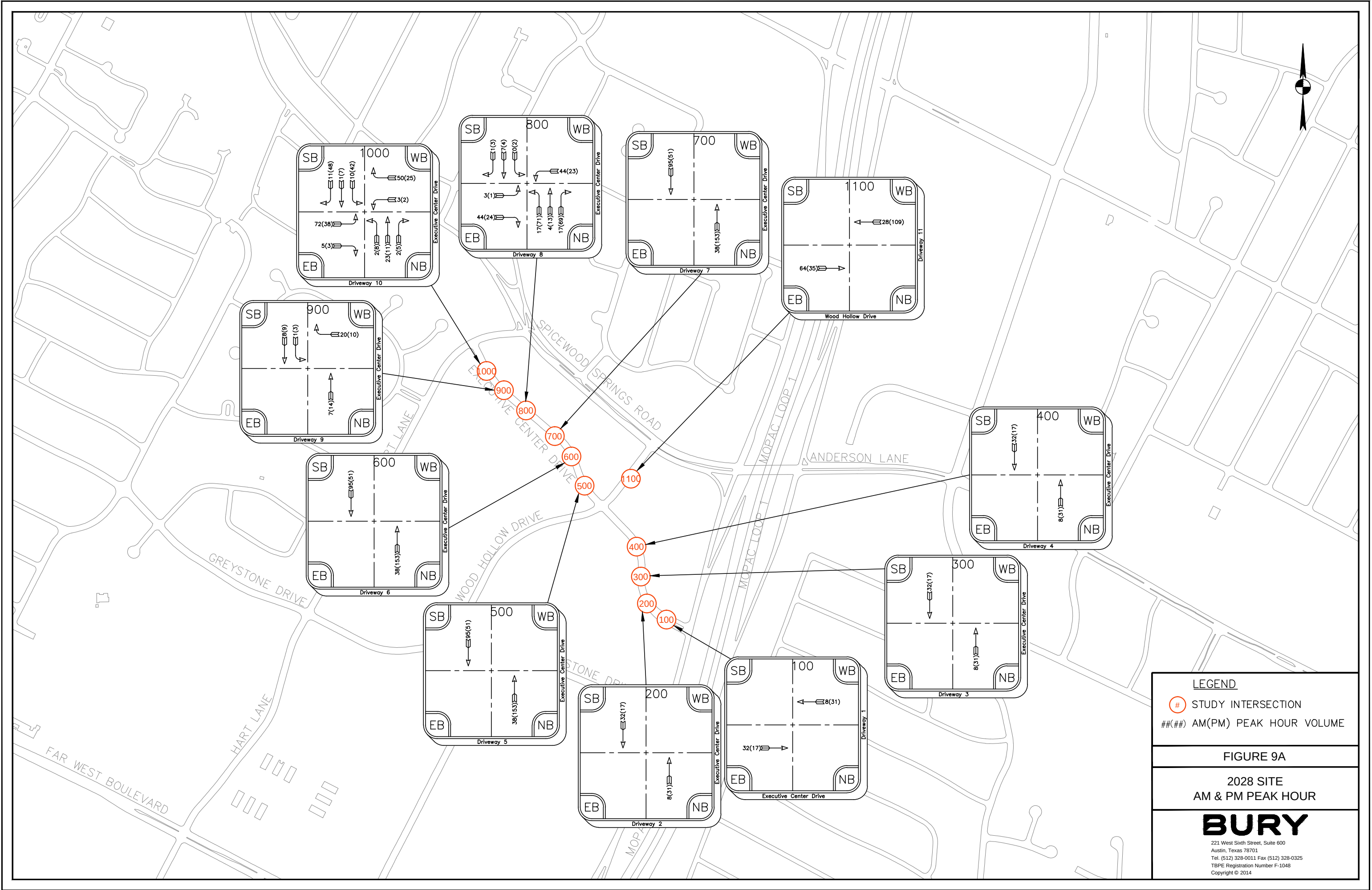
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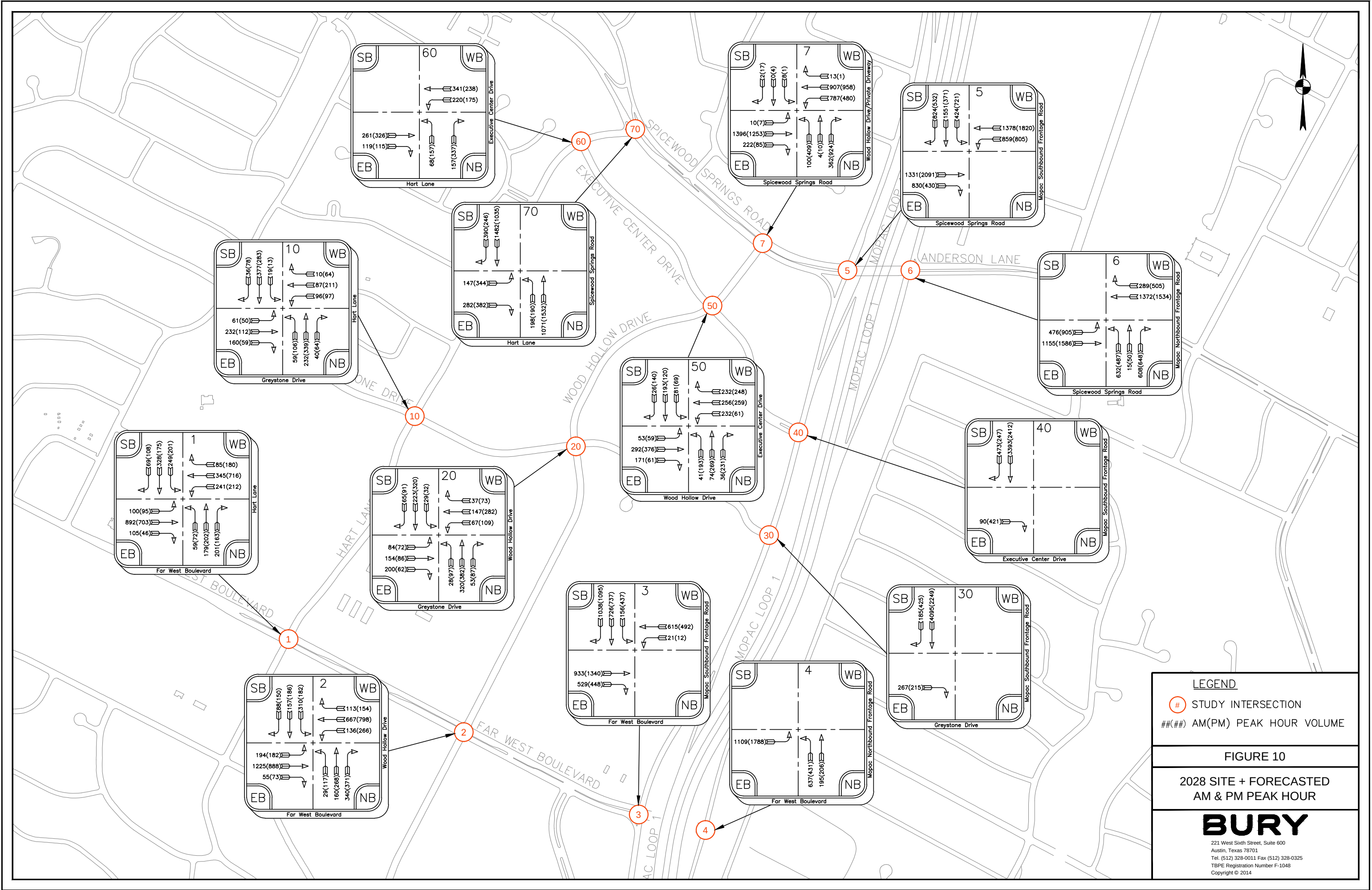












LEGEND

STUDY INTERSECTION

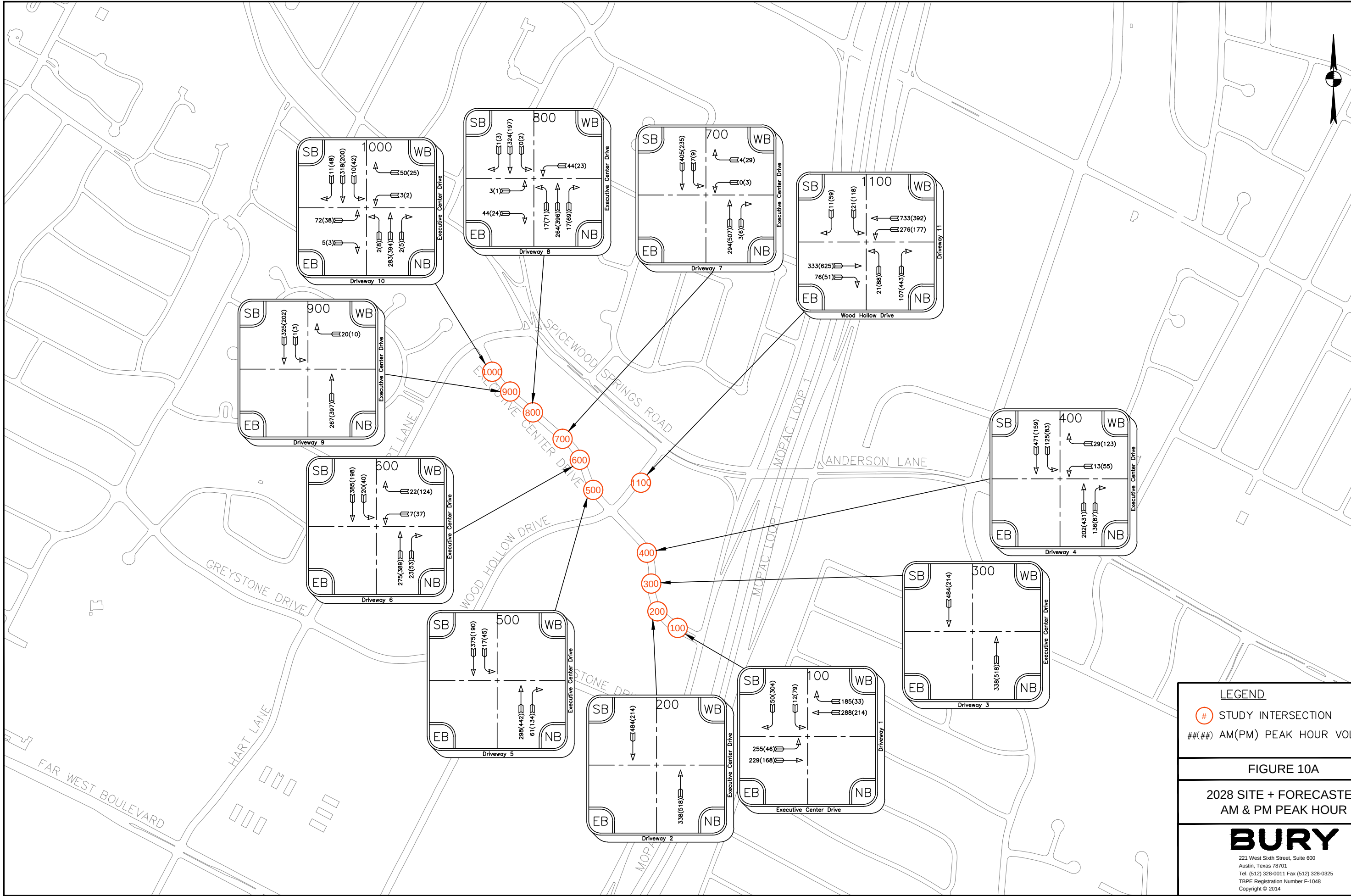
##(##) AM(PM) PEAK HOUR VOLUME

FIGURE 10

2028 SITE + FORECASTED
AM & PM PEAK HOUR

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STUDY INTERSECTION

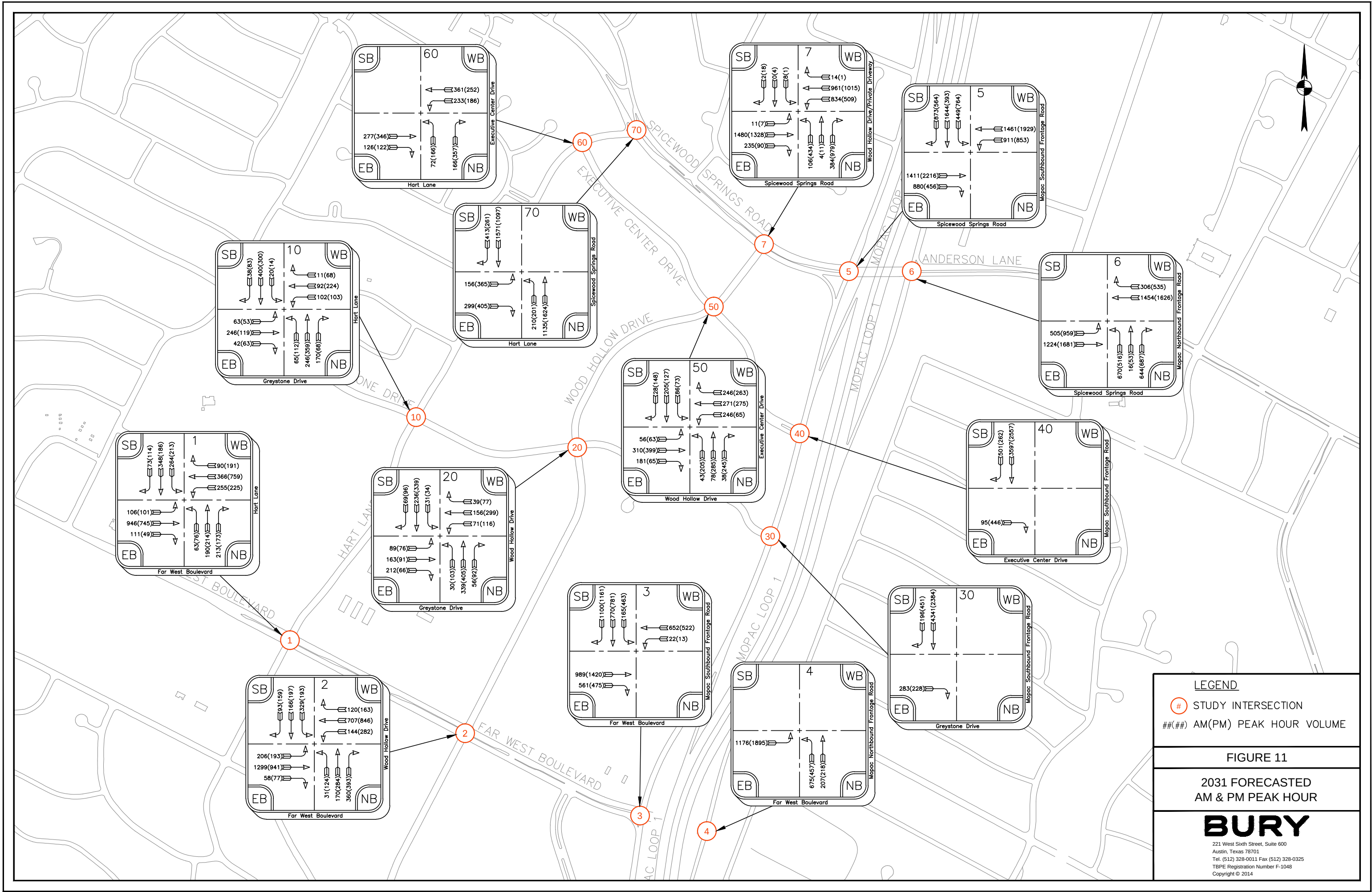
##(##) AM(PM) PEAK HOUR VOLUME

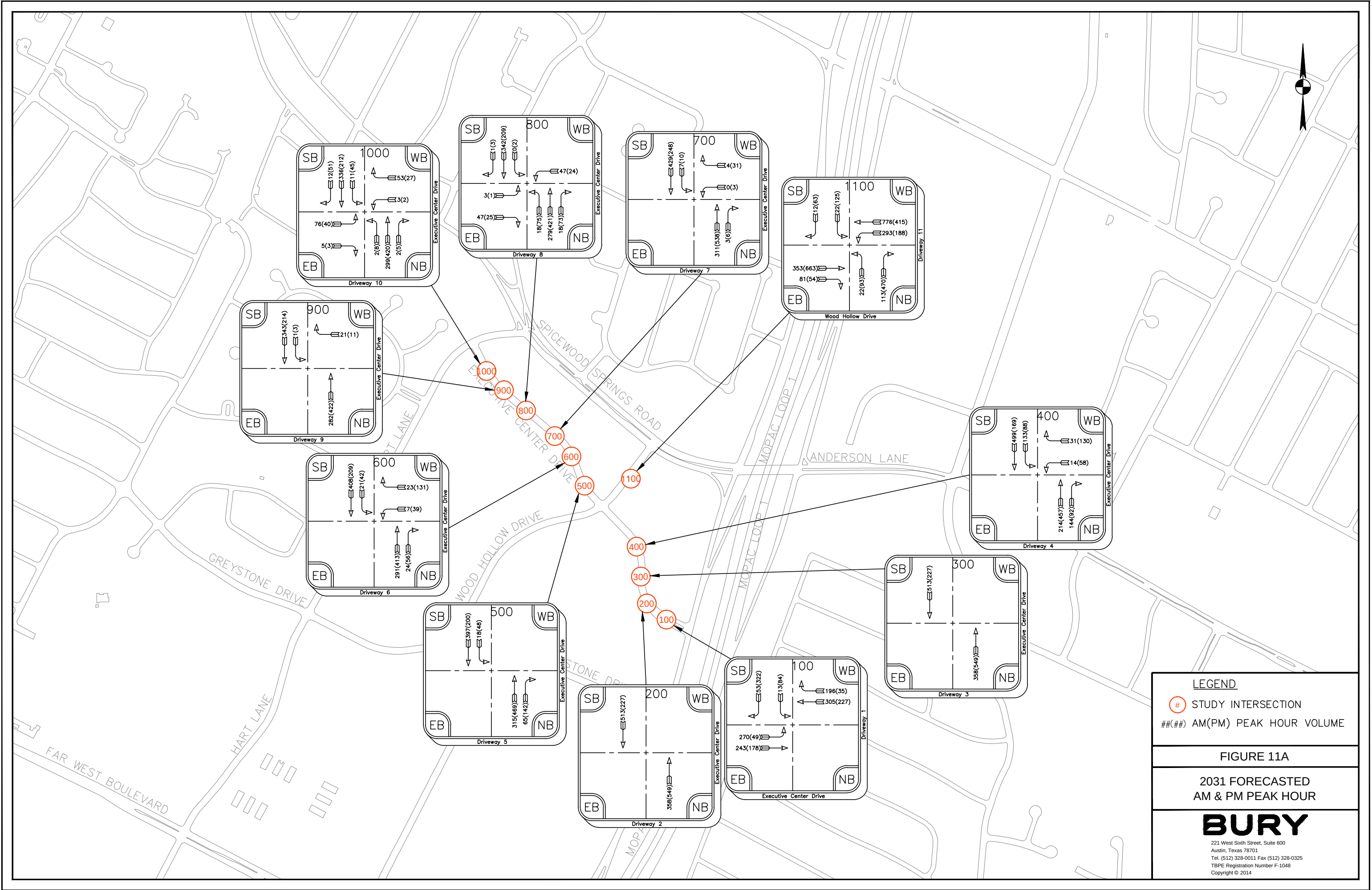
FIGURE 10A

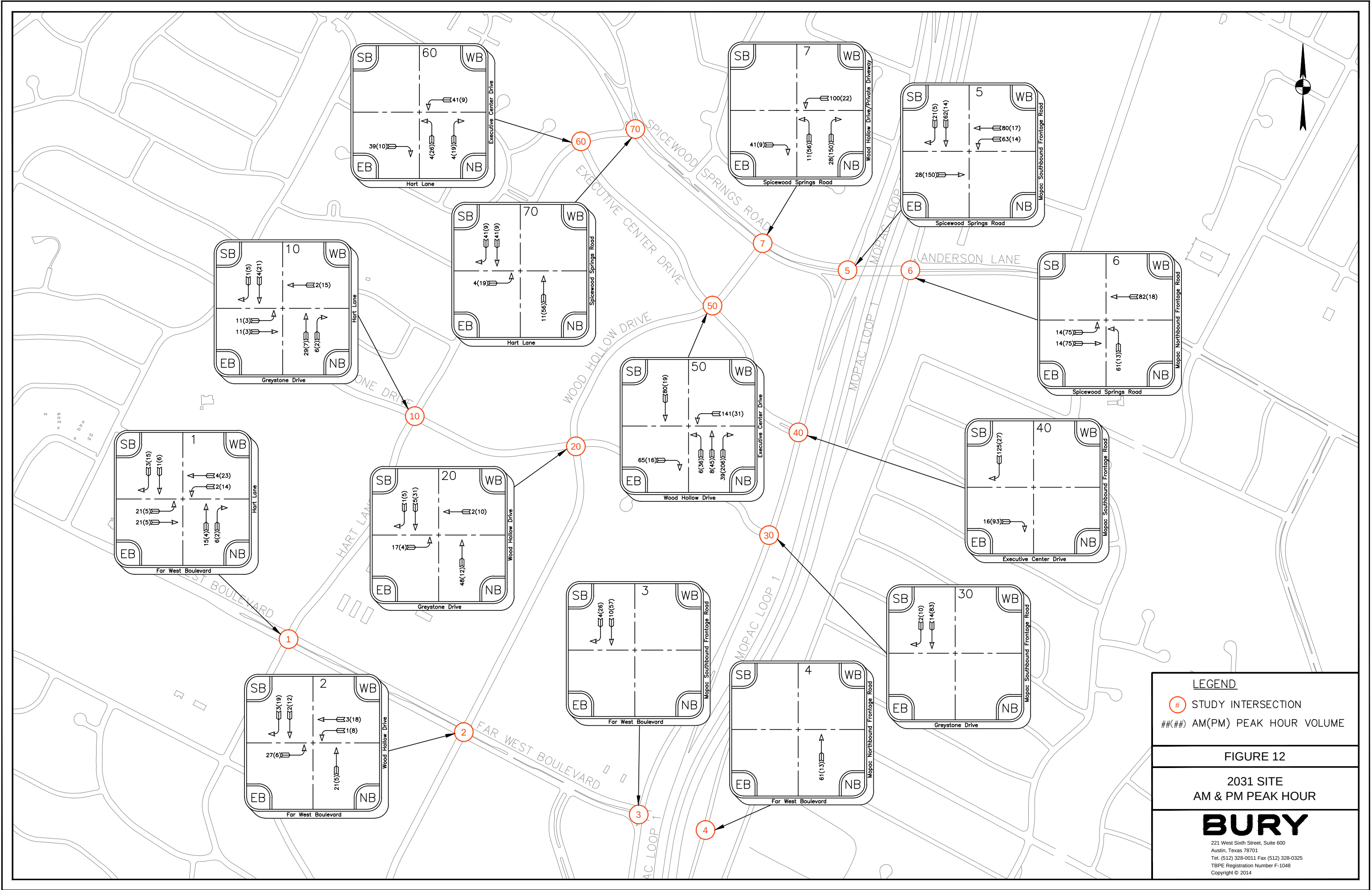
2028 SITE + FORECASTED
AM & PM PEAK HOUR

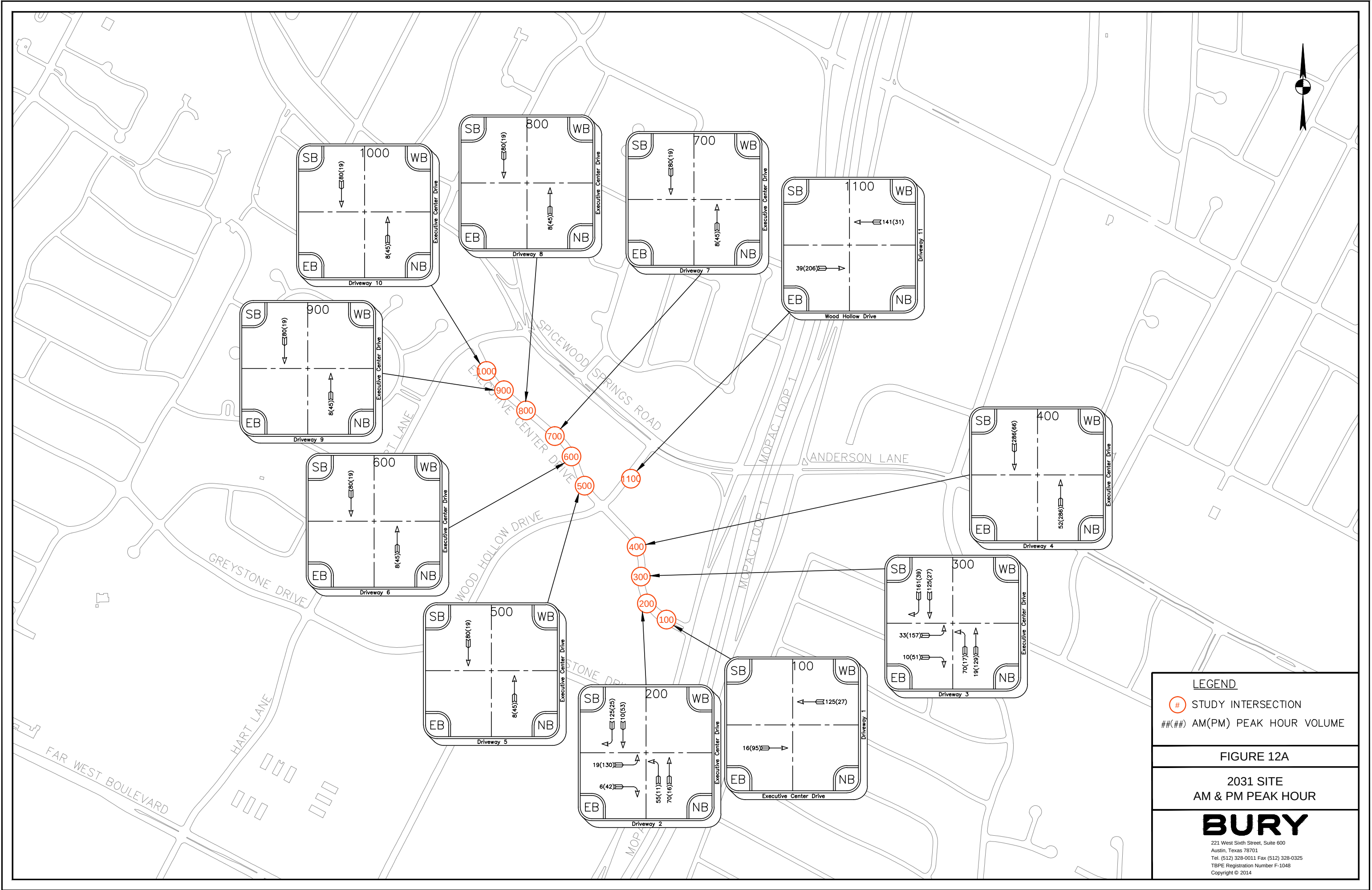
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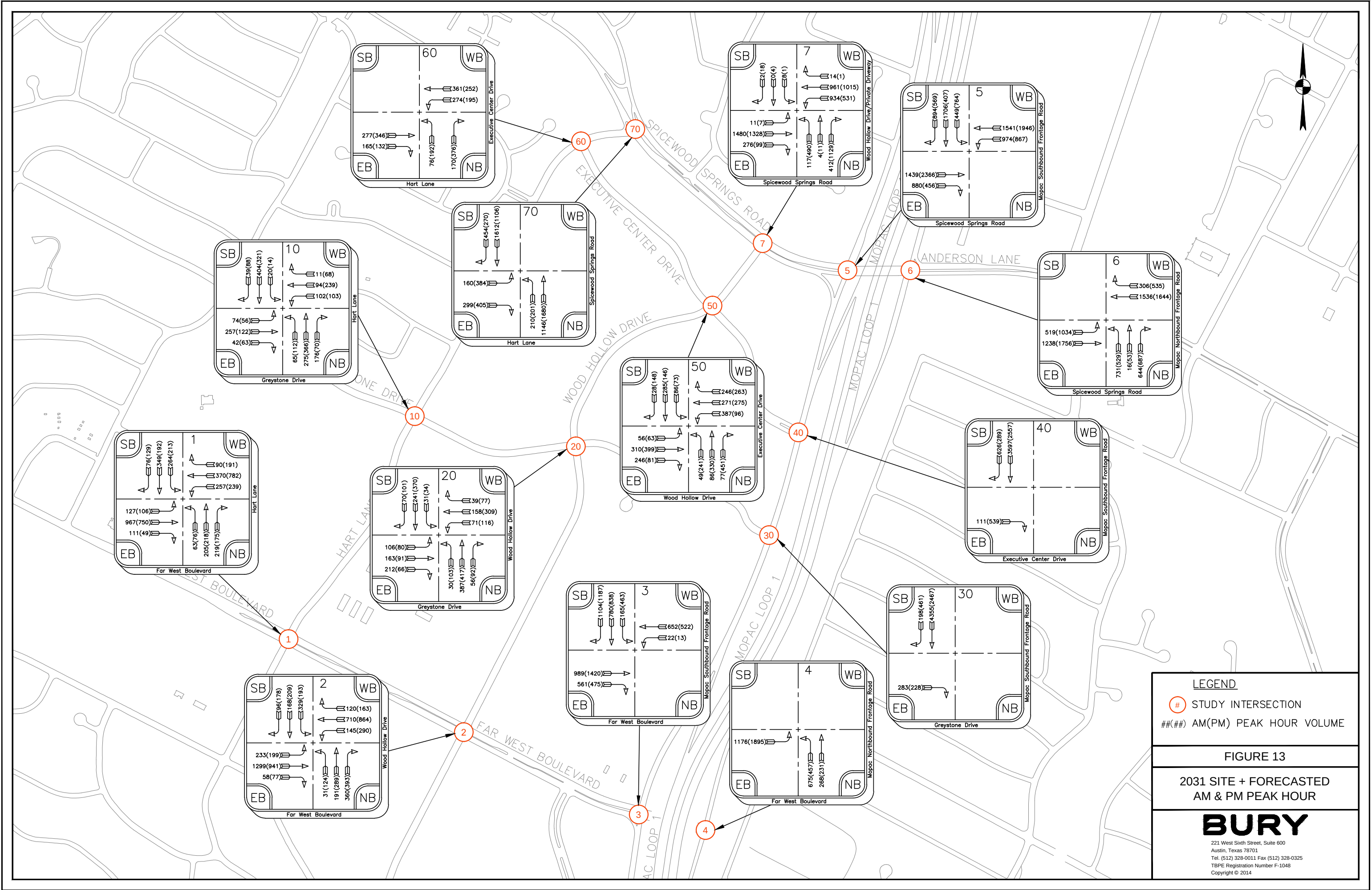
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LEGEND

STUDY INTERSECTION

##(##) AM(PM) PEAK HOUR VOLUME

FIGURE 13

2031 SITE + FORECASTED
AM & PM PEAK HOUR

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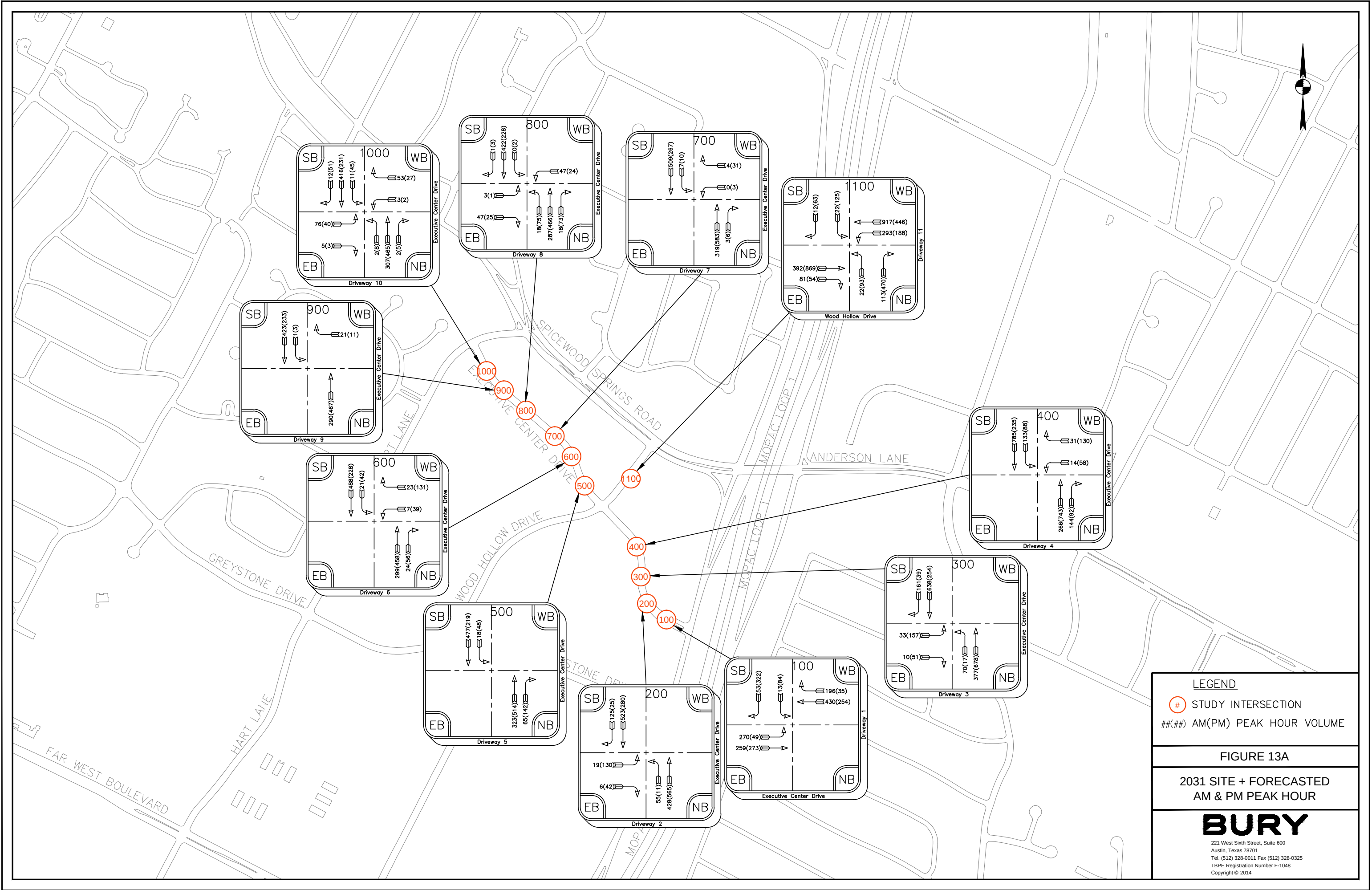


EXHIBIT 7

SUMMARY OF ADJUSTED DAILY AND PEAK HOUR TRIPS

**SUMMARY OF ADJUSTED DAILY
AND PEAK HOUR TRIP GENERATIONS (AUSTIN OAKS)**

AM PEAK HOUR

Land Use	Unadjusted		Internal Capture		Pass-By	Transit	Adjusted	
	Enter	Exit	Enter	Exit			Enter	Exit
Existing								
General Office Building	550	75	5%	5%	0%	0%	523	71
Existing Subtotal	550	75					523	71
Phase I - 2018								
Shopping Center	63	40	5%	5%	0%	0%	60	38
High Turnover (Sit-Down) Restaurant	48	44	5%	5%	0%	0%	46	42
General Office Building	397	54	5%	5%	0%	0%	377	51
Phase I Subtotal	508	138					483	131
Phase II - 2023								
Shopping Center	83	53	5%	5%	0%	0%	79	50
General Office Building	436	60	5%	5%	0%	0%	414	57
Phase II Subtotal	519	113					493	107
Phase III - 2028								
Apartment	57	231	5%	5%	0%	0%	54	219
Condominium/Townhouse	5	21	5%	5%	0%	0%	5	20
Phase III Subtotal	62	252					59	239
Phase IV - 2031								
General Office Building	398	54	5%	5%	0%	0%	378	51
High Turnover (Sit-Down) Restaurant	14	13	5%	5%	0%	0%	13	12
Phase IV Subtotal	412	67					391	64
Total Proposed	1,501	570					1,426	542
Net Increase	951	495					903	470

PM PEAK HOUR

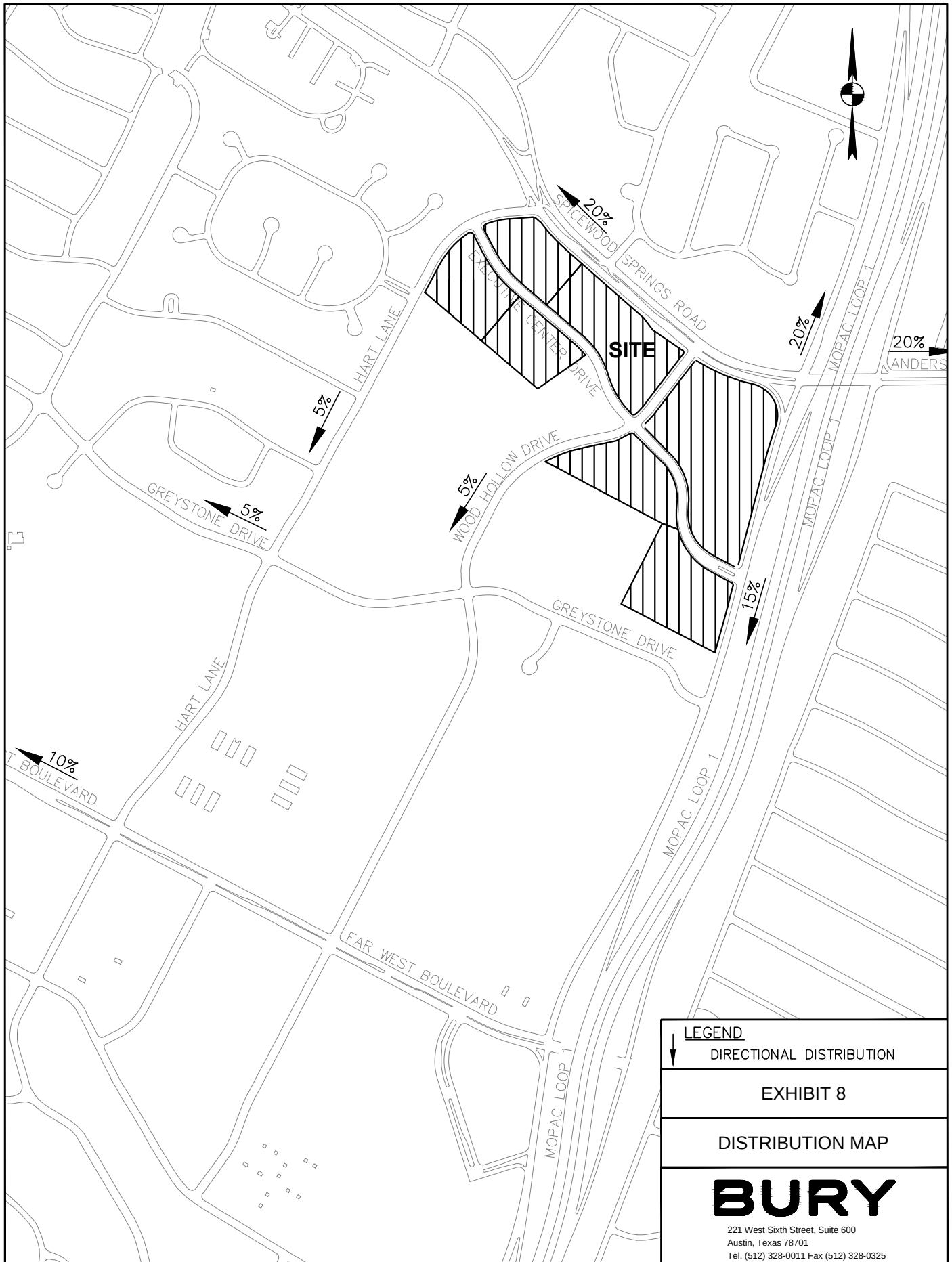
Land Use	Unadjusted		Internal Capture		Pass-By	Transit	Adjusted	
	Enter	Exit	Enter	Exit			Enter	Exit
Existing								
General Office Building	99	484	5%	5%	0%	0%	94	460
Existing Subtotal	99	484					94	460
Phase I - 2018								
Shopping Center	199	207	5%	5%	34%	0%	121	126
High Turnover (Sit-Down) Restaurant	53	37	5%	5%	43%	0%	28	19
General Office Building	71	344	5%	5%	0%	0%	67	327
Phase I Subtotal	323	588					216	472
Phase II - 2023								
Shopping Center	246	257	5%	5%	34%	0%	150	157
General Office Building	87	427	5%	5%	0%	0%	83	406
Phase II Subtotal	333	684					233	562
Phase III - 2028								
Apartment	228	122	5%	5%	0%	0%	217	116
Condominium/Townhouse	20	10	5%	5%	0%	0%	19	10
Phase III Subtotal	248	132					236	125
Phase IV - 2031								
General Office Building	75	366	5%	5%	0%	0%	71	348
High Turnover (Sit-Down) Restaurant	16	11	5%	5%	43%	0%	8	6
Phase IV Subtotal	91	377					80	353
Total Proposed	995	1,781					764	1,514
Net Increase	896	1,297					670	1,054

DAILY VOLUMES

Land Use	Unadjusted 24 Hour Volumes	Adjusted 24 Hour Volumes
Existing		
General Office Building	4,248	4,036
Existing Subtotal	4,248	4,036
Phase I - 2018		
Shopping Center	4,395	3,428
High Turnover (Sit-Down) Restaurant	1,017	747
General Office Building	3,109	2,954
Phase I Subtotal	8,521	7,129
Phase II - 2023		
Shopping Center	5,512	4,299
General Office Building	3,440	3,268
Phase II Subtotal	8,952	7,567
Phase III - 2028		
Apartment	3,725	3,539
Condominium/Townhouse	288	274
Phase III Subtotal	4,013	3,812
Phase IV - 2031		
General Office Building	3,193	3,033
High Turnover (Sit-Down) Restaurant	305	224
Phase IV Subtotal	3,498	3,258
Total Proposed	24,984	21,766
Net Increase	20,736	17,731

EXHIBIT 8

TRAFFIC DISTRIBUTION MAP



LEGEND ↓ DIRECTIONAL DISTRIBUTION
EXHIBIT 8
DISTRIBUTION MAP
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FILE:

PROJECT No.: 103363-10002

SCALE: N.T.S.

EXHIBIT 9

**SYNCHRO ANALYSIS RESULTS
AND SIGNAL TIMING**

Austin Oaks Mixed Use Development
1: Hart Lane & Far West Boulevard

2014 Existing AM
5/7/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	50	612	80	183	245	65	45	99	144	190	228	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	170		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.977				0.850		0.926			0.987	
Flt Protected	0.950			0.950				0.992			0.985	
Satd. Flow (prot)	1770	3458	0	1770	3539	1583	0	3251	0	0	3441	0
Flt Permitted	0.478			0.240				0.992			0.985	
Satd. Flow (perm)	890	3458	0	447	3539	1583	0	3251	0	0	3441	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		17				101		161			7	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		362			1265			236			237	
Travel Time (s)		7.1			24.6			5.4			5.4	
Peak Hour Factor	0.73	0.83	0.61	0.69	0.83	0.85	0.80	0.80	0.82	0.90	0.56	0.47
Adj. Flow (vph)	68	737	131	265	295	76	56	124	176	211	407	60
Shared Lane Traffic (%)												
Lane Group Flow (vph)	68	868	0	265	295	76	0	356	0	0	678	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Split	NA		Split	NA	
Protected Phases	5	2		1	6		4	4		8	8	
Permitted Phases	2			6		6						
Detector Phase	5	2		1	6	6	4	4		8	8	

Austin Oaks Mixed Use Development
1: Hart Lane & Far West Boulevard

2014 Existing AM
5/7/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	8.0	18.0		8.0	18.0	18.0	12.0	12.0		12.0	12.0	
Minimum Split (s)	13.0	23.0		13.0	23.0	23.0	17.0	17.0		17.0	17.0	
Total Split (s)	13.0	52.0		22.0	61.0	61.0	26.0	26.0		30.0	30.0	
Total Split (%)	10.0%	40.0%		16.9%	46.9%	46.9%	20.0%	20.0%		23.1%	23.1%	
Maximum Green (s)	8.0	47.0		17.0	56.0	56.0	21.0	21.0		25.0	25.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0		5.0			5.0	
Lead/Lag	Lead	Lead		Lag	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	
Walk Time (s)		7.0			7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		12.0			12.0	12.0	21.0	21.0		21.0	21.0	
Pedestrian Calls (#/hr)		0			0	0	0	0		0	0	
Act Effect Green (s)	49.6	49.6		58.0	58.0	58.0		14.5			31.9	
Actuated g/C Ratio	0.38	0.38		0.45	0.45	0.45		0.11			0.25	
v/c Ratio	0.17	0.65		0.78	0.19	0.10		0.70			0.80	
Control Delay	28.9	36.1		81.6	46.1	22.4		37.7			53.7	
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Delay	28.9	36.1		81.6	46.1	22.4		37.7			53.7	
LOS	C	D		F	D	C		D			D	
Approach Delay		35.6			58.0			37.7			53.7	
Approach LOS		D			E			D			D	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 100 (77%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.80

Intersection Signal Delay: 46.1

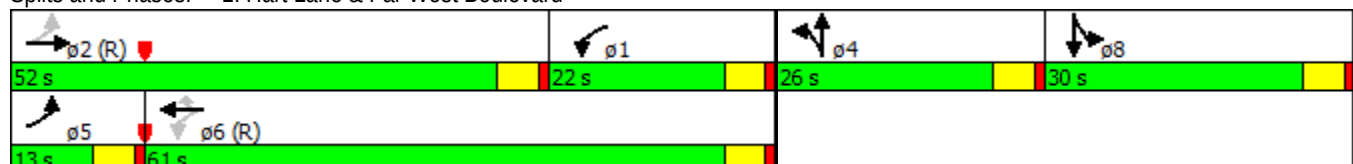
Intersection LOS: D

Intersection Capacity Utilization 69.0%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 1: Hart Lane & Far West Boulevard



Austin Oaks Mixed Use Development
2: Wood Hollow Drive & Far West Boulevard

2014 Existing AM
5/7/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	68	938	42	104	508	84	22	75	260	237	107	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	335		0	165		0	120		120	0		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	75			35			50			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.951	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1771	0
Flt Permitted	0.435			0.227			0.950			0.950		
Satd. Flow (perm)	810	3539	1583	423	3539	1583	1770	1863	1583	1770	1771	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			101			104			209		16	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1265			1235			599			222	
Travel Time (s)		24.6			24.1			13.6			5.0	
Peak Hour Factor	0.74	0.91	0.58	0.90	0.88	0.81	0.69	0.65	0.87	0.90	0.81	0.77
Adj. Flow (vph)	92	1031	72	116	577	104	32	115	299	263	132	64
Shared Lane Traffic (%)												
Lane Group Flow (vph)	92	1031	72	116	577	104	32	115	299	263	196	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	L NA	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		3	3		7	7	
Permitted Phases	6		6	2		2			3			
Detector Phase	1	6	6	5	2	2	3	3	3	7	7	

Austin Oaks Mixed Use Development
2: Wood Hollow Drive & Far West Boulevard

2014 Existing AM
5/7/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	8.0	8.0	8.0	5.0	5.0	
Minimum Split (s)	11.0	40.0	40.0	12.0	40.0	40.0	15.0	15.0	15.0	15.0	15.0	
Total Split (s)	16.0	67.0	67.0	16.0	67.0	67.0	19.0	19.0	19.0	28.0	28.0	
Total Split (%)	12.3%	51.5%	51.5%	12.3%	51.5%	51.5%	14.6%	14.6%	14.6%	21.5%	21.5%	
Maximum Green (s)	11.0	62.0	62.0	11.0	62.0	62.0	14.0	14.0	14.0	23.0	23.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
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	
Recall Mode	None	C-Min	C-Min	Max	C-Min	C-Min	Min	Min	Min	Max	Max	
Walk Time (s)		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		12.0	12.0		12.0	12.0	21.0	21.0	21.0	21.0	21.0	
Pedestrian Calls (#/hr)		0	0		0	0	0	0	0	0	0	
Act Effect Green (s)	48.4	48.4	48.4	28.6	28.6	28.6	14.8	14.8	14.8	35.8	35.8	
Actuated g/C Ratio	0.37	0.37	0.37	0.22	0.22	0.22	0.11	0.11	0.11	0.28	0.28	
v/c Ratio	0.17	0.78	0.11	0.56	0.74	0.24	0.16	0.54	0.82	0.54	0.39	
Control Delay	31.2	45.3	5.0	51.9	53.9	11.8	51.5	63.0	35.5	48.1	41.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	31.2	45.3	5.0	51.9	53.9	11.8	51.5	63.0	35.5	48.1	41.3	
LOS	C	D	A	D	D	B	D	E	D	D	D	
Approach Delay		41.8			48.2			43.8			45.2	
Approach LOS		D			D			D			D	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 10 (8%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.82

Intersection Signal Delay: 44.4

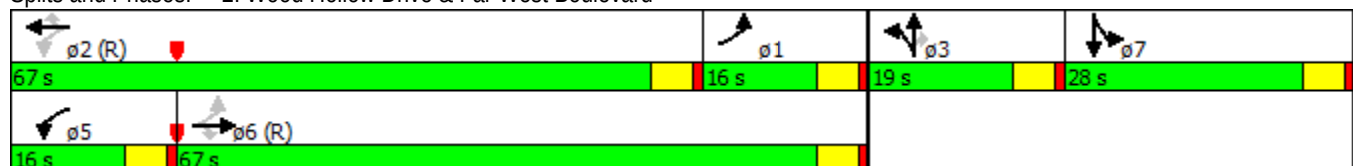
Intersection LOS: D

Intersection Capacity Utilization 67.7%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 2: Wood Hollow Drive & Far West Boulevard



Austin Oaks Mixed Use Development
3: Far West Boulevard & Mopac SB FR

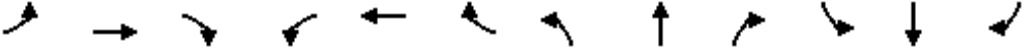
2014 Existing AM
5/7/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑						↑↑	↑
Volume (vph)	0	714	405	16	468	0	0	0	0	119	469	792
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									0.850
Flt Protected				0.950							0.989	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	3500	1583
Flt Permitted				0.950							0.989	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	3500	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			393									162
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		1235			406			400			362	
Travel Time (s)		24.1			7.9			5.5			4.9	
Peak Hour Factor	0.92	0.91	0.93	0.67	0.93	0.92	0.92	0.92	0.92	0.78	0.92	0.95
Adj. Flow (vph)	0	785	435	24	503	0	0	0	0	153	510	834
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	785	435	24	503	0	0	0	0	0	663	834
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	L NA	Right	Left	Left	Right	Left	Left	R NA
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	custom	Prot	NA					custom	NA	custom
Protected Phases		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Permitted Phases										4		
Detector Phase		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Switch Phase												
Minimum Initial (s)				10.0								
Minimum Split (s)				15.0								

Lane Group	ø1	ø2	ø4	ø8	ø22
Lane Configurations					
Volume (vph)					
Ideal Flow (vphpl)					
Lane Util. Factor					
Frt					
Flt Protected					
Satd. Flow (prot)					
Flt Permitted					
Satd. Flow (perm)					
Right Turn on Red					
Satd. Flow (RTOR)					
Link Speed (mph)					
Link Distance (ft)					
Travel Time (s)					
Peak Hour Factor					
Adj. Flow (vph)					
Shared Lane Traffic (%)					
Lane Group Flow (vph)					
Enter Blocked Intersection					
Lane Alignment					
Median Width(ft)					
Link Offset(ft)					
Crosswalk Width(ft)					
Two way Left Turn Lane					
Headway Factor					
Turning Speed (mph)					
Number of Detectors					
Detector Template					
Leading Detector (ft)					
Trailing Detector (ft)					
Detector 1 Position(ft)					
Detector 1 Size(ft)					
Detector 1 Type					
Detector 1 Channel					
Detector 1 Extend (s)					
Detector 1 Queue (s)					
Detector 1 Delay (s)					
Detector 2 Position(ft)					
Detector 2 Size(ft)					
Detector 2 Type					
Detector 2 Channel					
Detector 2 Extend (s)					
Turn Type					
Protected Phases	1	2	4	8	22
Permitted Phases					
Detector Phase					
Switch Phase					
Minimum Initial (s)	4.0	10.0	10.0	4.0	1.0
Minimum Split (s)	9.0	15.0	25.0	9.0	20.0

Austin Oaks Mixed Use Development
3: Far West Boulevard & Mopac SB FR

2014 Existing AM
5/7/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)				21.0								
Total Split (%)				16.2%								
Maximum Green (s)				16.0								
Yellow Time (s)				4.0								
All-Red Time (s)				1.0								
Lost Time Adjust (s)				0.0								
Total Lost Time (s)				5.0								
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0								
Recall Mode				Min								
Act Effect Green (s)		49.0	24.0	16.0	45.0						50.0	75.0
Actuated g/C Ratio		0.38	0.18	0.12	0.35						0.38	0.58
v/c Ratio		0.59	0.71	0.11	0.41						0.49	0.85
Control Delay		34.4	18.6	34.7	2.7						31.9	28.1
Queue Delay		0.0	0.0	0.0	0.0						0.0	0.0
Total Delay		34.4	18.6	34.7	2.7						31.9	28.1
LOS		C	B	C	A						C	C
Approach Delay		28.8			4.2						29.8	
Approach LOS		C			A						C	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 106 (82%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 95

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 25.2

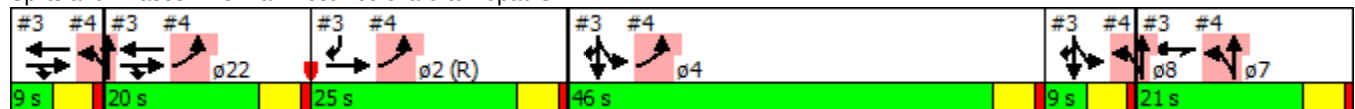
Intersection LOS: C

Intersection Capacity Utilization 86.9%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 3: Far West Boulevard & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø8	ø22
Total Split (s)	9.0	25.0	46.0	9.0	20.0
Total Split (%)	7%	19%	35%	7%	15%
Maximum Green (s)	4.0	20.0	41.0	4.0	15.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)					
Total Lost Time (s)					
Lead/Lag		Lag	Lead	Lag	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	C-Min	Min	Min	None
Act Effect Green (s)					
Actuated g/C Ratio					
v/c Ratio					
Control Delay					
Queue Delay					
Total Delay					
LOS					
Approach Delay					
Approach LOS					
Intersection Summary					

Austin Oaks Mixed Use Development
4: Mopac NB FR & Far West Boulevard

2014 Existing AM
5/7/2014

												
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Lane Configurations	LT	LT	LT	LT	LT	LT						
Volume (vph)	848	0	484	2	0	0						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Lane Util. Factor	0.97	1.00	0.95	0.95	1.00	1.00						
Fr t												
Flt Protected	0.950		0.950	0.954								
Satd. Flow (prot)	3433	0	1681	1688	0	0						
Flt Permitted	0.950		0.950	0.954								
Satd. Flow (perm)	3433	0	1681	1688	0	0						
Right Turn on Red		Yes				Yes						
Satd. Flow (RTOR)												
Link Speed (mph)	35			50	50							
Link Distance (ft)	406			308	472							
Travel Time (s)	7.9			4.2	6.4							
Peak Hour Factor	0.90	0.92	0.93	0.25	0.92	0.92						
Adj. Flow (vph)	942	0	520	8	0	0						
Shared Lane Traffic (%)			49%									
Lane Group Flow (vph)	942	0	265	263	0	0						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Right	Left	Left	Left	Right						
Median Width(ft)	24			12	12							
Link Offset(ft)	0			0	0							
Crosswalk Width(ft)	16			16	16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00						
Turning Speed (mph)	15	9	15			9						
Number of Detectors	1		1	2								
Detector Template	Left		Left	Thru								
Leading Detector (ft)	20		20	100								
Trailing Detector (ft)	0		0	0								
Detector 1 Position(ft)	0		0	0								
Detector 1 Size(ft)	20		20	6								
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0								
Detector 1 Queue (s)	0.0		0.0	0.0								
Detector 1 Delay (s)	0.0		0.0	0.0								
Detector 2 Position(ft)				94								
Detector 2 Size(ft)				6								
Detector 2 Type				Cl+Ex								
Detector 2 Channel												
Detector 2 Extend (s)				0.0								
Turn Type	Prot		Split	NA								
Protected Phases	2 4 22		1 7 8	1 7 8			1	2	4	7	8	22
Permitted Phases												
Detector Phase	2 4 22		1 7 8	1 7 8								
Switch Phase												
Minimum Initial (s)							4.0	10.0	10.0	10.0	4.0	1.0
Minimum Split (s)							9.0	15.0	25.0	15.0	9.0	20.0



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Total Split (s)							9.0	25.0	46.0	21.0	9.0	20.0
Total Split (%)							7%	19%	35%	16%	7%	15%
Maximum Green (s)							4.0	20.0	41.0	16.0	4.0	15.0
Yellow Time (s)							4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)							1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag								Lag	Lead		Lag	Lead
Lead-Lag Optimize?								Yes	Yes		Yes	Yes
Vehicle Extension (s)							3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode							Min	C-Min	Min	Min	Min	None
Act Effect Green (s)	84.1		35.9	35.9								
Actuated g/C Ratio	0.65		0.28	0.28								
v/c Ratio	0.42		0.57	0.56								
Control Delay	3.2		47.0	46.7								
Queue Delay	0.5		0.0	0.0								
Total Delay	3.7		47.0	46.7								
LOS	A		D	D								
Approach Delay	3.7			46.9								
Approach LOS	A			D								

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 106 (82%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 95

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 19.2

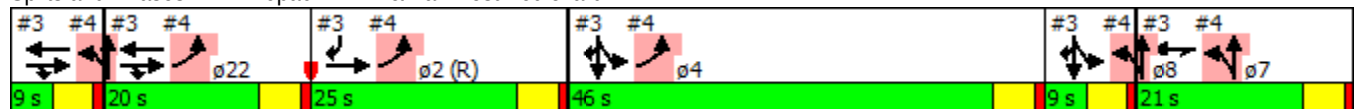
Intersection LOS: B

Intersection Capacity Utilization 100.1%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 4: Mopac NB FR & Far West Boulevard



Austin Oaks Mixed Use Development
5: Spicewood Springs Road & Mopac SB FR

2014 Existing AM
5/7/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑					↑	↑↑	↑
Volume (vph)	0	824	580	548	818	0	0	0	0	320	1039	579
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	60		0	0		0	150		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			75			25			75		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.999	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1610	3387	1583
Flt Permitted				0.950						0.950	0.999	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1610	3387	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			185									206
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		294			386			782			882	
Travel Time (s)		5.7			7.5			10.7			12.0	
Peak Hour Factor	0.92	0.81	0.90	0.87	0.86	0.92	0.92	0.92	0.92	0.93	0.87	0.94
Adj. Flow (vph)	0	1017	644	630	951	0	0	0	0	344	1194	616
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	0	1017	644	630	951	0	0	0	0	310	1228	616
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Prot	Prot	NA					Split	NA	Prot
Protected Phases		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5
Permitted Phases												
Detector Phase		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

Austin Oaks Mixed Use Development
5: Spicewood Springs Road & Mopac SB FR

2014 Existing AM
5/7/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)		27.0	27.0	51.0	72.0					37.0	37.0	37.0
Actuated g/C Ratio		0.21	0.21	0.39	0.55					0.28	0.28	0.28
v/c Ratio		1.38	1.36	0.91	0.49					0.68	1.28	1.03
Control Delay		216.1	202.7	41.6	7.8					49.8	170.7	75.8
Queue Delay		0.1	0.0	40.2	5.6					0.0	0.0	0.0
Total Delay		216.1	202.7	81.7	13.4					49.8	170.7	75.8
LOS		F	F	F	B					D	F	E
Approach Delay		210.9			40.6						126.1	
Approach LOS		F			D						F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 8 (6%), Referenced to phase 2:EBWB, Start of Green

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.41

Intersection Signal Delay: 127.2

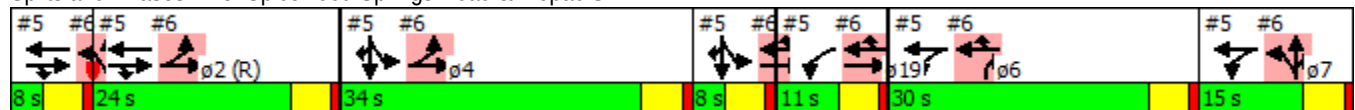
Intersection LOS: F

Intersection Capacity Utilization 104.1%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 5: Spicewood Springs Road & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0	5.0	6.0
Minimum Split (s)	8.0	10.0	10.0	8.0	10.0	10.0	11.0
Total Split (s)	8.0	24.0	34.0	8.0	30.0	15.0	11.0
Total Split (%)	6%	18%	26%	6%	23%	12%	8%
Maximum Green (s)	3.0	19.0	29.0	3.0	25.0	10.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Austin Oaks Mixed Use Development
6: Mopac NB FR & Spicewood Springs Road

2014 Existing AM
5/7/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	265	785	0	0	851	221	336	12	466	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		325	0		0	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	75			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.91	0.95	1.00	1.00	1.00
Frt						0.850		0.890	0.850			
Flt Protected	0.950						0.950	0.990				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	1681	1494	1504	0	0	0
Flt Permitted	0.950						0.950	0.990				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	1681	1494	1504	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						280		89	203			
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		386			594			563			407	
Travel Time (s)		7.5			11.6			7.7			5.6	
Peak Hour Factor	0.90	0.96	0.92	0.92	0.93	0.79	0.86	0.60	0.87	0.92	0.92	0.92
Adj. Flow (vph)	294	818	0	0	915	280	391	20	536	0	0	0
Shared Lane Traffic (%)							16%		43%			
Lane Group Flow (vph)	294	818	0	0	915	280	328	313	306	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Prot	Split	NA	custom			
Protected Phases	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			
Permitted Phases												
Detector Phase	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			

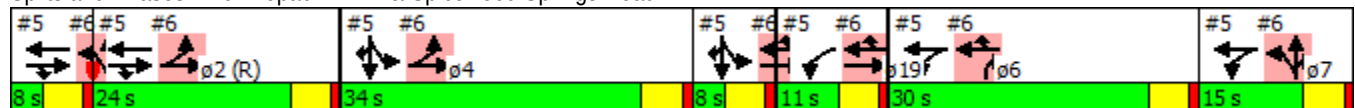
Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)	53.0	72.0			44.0	44.0	18.0	18.0	40.0			
Actuated g/C Ratio	0.41	0.55			0.34	0.34	0.14	0.14	0.31			
v/c Ratio	0.41	0.42			0.76	0.39	1.41	1.11	0.51			
Control Delay	5.0	0.2			43.4	5.1	250.1	121.5	15.4			
Queue Delay	2.9	2.5			4.2	0.0	0.0	0.2	0.0			
Total Delay	7.8	2.7			47.6	5.1	250.1	121.6	15.4			
LOS	A	A			D	A	F	F	B			
Approach Delay		4.1			37.7			131.8				
Approach LOS		A			D			F				

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 8 (6%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.41
Intersection Signal Delay: 53.6
Intersection LOS: D
Intersection Capacity Utilization 104.1%
ICU Level of Service G
Analysis Period (min) 15

Splits and Phases: 6: Mopac NB FR & Spicewood Springs Road



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0	5.0	6.0
Minimum Split (s)	8.0	10.0	10.0	8.0	10.0	10.0	11.0
Total Split (s)	8.0	24.0	34.0	8.0	30.0	15.0	11.0
Total Split (%)	6%	18%	26%	6%	23%	12%	8%
Maximum Green (s)	3.0	19.0	29.0	3.0	25.0	10.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Austin Oaks Mixed Use Development
7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road

2014 Existing AM
5/7/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	7	966	91	323	684	10	43	4	131	6	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	0		100	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.991			0.996				0.850		0.977	
Flt Protected	0.950			0.950				0.957			0.960	
Satd. Flow (prot)	1770	5040	0	1770	3525	0	0	1783	1583	0	1747	0
Flt Permitted	0.362			0.072				0.738			0.809	
Satd. Flow (perm)	674	5040	0	134	3525	0	0	1375	1583	0	1472	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11			3				211		101	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		480			275			522			161	
Travel Time (s)		9.4			5.4			11.9			3.7	
Peak Hour Factor	0.72	0.50	0.76	0.50	0.92	0.50	0.91	0.85	0.62	0.58	0.90	0.84
Adj. Flow (vph)	10	1932	120	646	743	20	47	5	211	10	0	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	10	2052	0	646	763	0	0	52	211	0	12	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2			6			4		4	8		
Detector Phase	5	2		1	6		4	4	4	8	8	

Austin Oaks Mixed Use Development
7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road

2014 Existing AM
5/7/2014

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	20.0		21.0	20.0		15.0	15.0	15.0	11.0	11.0	
Minimum Split (s)	10.0	25.0		26.0	25.0		20.0	20.0	20.0	16.0	16.0	
Total Split (s)	29.0	72.0		29.0	72.0		29.0	29.0	29.0	29.0	29.0	
Total Split (%)	22.3%	55.4%		22.3%	55.4%		22.3%	22.3%	22.3%	22.3%	22.3%	
Maximum Green (s)	24.0	67.0		24.0	67.0		24.0	24.0	24.0	24.0	24.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0			5.0	5.0		5.0	
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min		Min	C-Min		Min	Min	Min	Min	Min	
Walk Time (s)							6.0	6.0	6.0	6.0	6.0	
Flash Dont Walk (s)							24.0	24.0	24.0	24.0	24.0	
Pedestrian Calls (#/hr)							0	0	0	0	0	
Act Effect Green (s)	68.8	65.6		94.2	94.2			15.0	15.0		15.0	
Actuated g/C Ratio	0.53	0.50		0.72	0.72			0.12	0.12		0.12	
v/c Ratio	0.02	0.81		1.22	0.30			0.33	0.57		0.05	
Control Delay	14.9	29.6		148.3	10.9			59.2	13.4		0.3	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	14.9	29.6		148.3	10.9			59.2	13.4		0.3	
LOS	B	C		F	B			E	B		A	
Approach Delay		29.6			73.9			22.4			0.3	
Approach LOS		C			E			C			A	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 55 (42%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.22

Intersection Signal Delay: 45.6

Intersection LOS: D

Intersection Capacity Utilization 63.6%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road



Austin Oaks Mixed Use Development
10: Hart Lane & Greystone Drive

2014 Existing AM
5/7/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	35	143	122	72	56	7	45	113	31	14	242	25
Peak Hour Factor	0.80	0.65	0.65	0.78	0.88	0.58	0.75	0.81	0.60	0.58	0.69	0.57
Hourly flow rate (vph)	44	220	188	92	64	12	60	140	52	24	351	44
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	264	188	156	12	251	419						
Volume Left (vph)	44	0	92	0	60	24						
Volume Right (vph)	0	188	0	12	52	44						
Hadj (s)	0.12	-0.67	0.33	-0.67	-0.04	-0.02						
Departure Headway (s)	7.3	6.5	8.0	7.0	6.7	6.4						
Degree Utilization, x	0.53	0.34	0.35	0.02	0.47	0.74						
Capacity (veh/h)	460	522	393	448	490	537						
Control Delay (s)	17.1	11.6	14.1	9.0	15.6	25.2						
Approach Delay (s)	14.8		13.7		15.6	25.2						
Approach LOS	B		B		C	D						
Intersection Summary												
Delay			18.2									
Level of Service			C									
Intersection Capacity Utilization			52.4%	ICU Level of Service		A						
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
20: Wood Hollow Drive & Greystone Drive

2014 Existing AM
5/7/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	29	118	153	51	112	29	21	113	41	19	140	38
Peak Hour Factor	0.81	0.89	0.64	0.80	0.82	0.72	0.53	0.88	0.79	0.68	0.85	0.68
Hourly flow rate (vph)	36	133	239	64	137	40	40	128	52	28	165	56
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2				
Volume Total (vph)	168	239	200	40	104	116	110	138				
Volume Left (vph)	36	0	64	0	40	0	28	0				
Volume Right (vph)	0	239	0	40	0	52	0	56				
Hadj (s)	0.14	-0.67	0.19	-0.67	0.22	-0.28	0.16	-0.25				
Departure Headway (s)	6.4	5.6	6.6	5.7	6.8	6.3	6.7	6.3				
Degree Utilization, x	0.30	0.37	0.37	0.06	0.20	0.20	0.21	0.24				
Capacity (veh/h)	538	617	517	584	494	530	500	533				
Control Delay (s)	10.8	10.6	12.2	7.9	10.3	9.7	10.3	10.1				
Approach Delay (s)	10.7		11.5		10.0		10.2					
Approach LOS	B		B		B		B					
Intersection Summary												
Delay			10.6									
Level of Service			B									
Intersection Capacity Utilization			36.1%	ICU Level of Service					A			
Analysis Period (min)			15									



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations					  	
Volume (veh/h)	0	202	0	0	3047	141
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.79	0.92	0.92	0.96	0.86
Hourly flow rate (vph)	0	256	0	0	3174	164
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	3256	1140	3338			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	3256	1140	3338			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	0	100			
cM capacity (veh/h)	7	195	82			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	256	1270	1270	799		
Volume Left	0	0	0	0		
Volume Right	256	0	0	164		
cSH	195	1700	1700	1700		
Volume to Capacity	1.31	0.75	0.75	0.47		
Queue Length 95th (ft)	358	0	0	0		
Control Delay (s)	220.2	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	220.2	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay		15.7				
Intersection Capacity Utilization		81.2%		ICU Level of Service		D
Analysis Period (min)		15				



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	18	0	0	2559	87
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.50	0.92	0.92	0.95	0.75
Hourly flow rate (vph)	0	36	0	0	2694	116
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2752	956	2810			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2752	956	2810			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	86	100			
cM capacity (veh/h)	16	258	135			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	36	1077	1077	655		
Volume Left	0	0	0	0		
Volume Right	36	0	0	116		
cSH	258	1700	1700	1700		
Volume to Capacity	0.14	0.63	0.63	0.39		
Queue Length 95th (ft)	12	0	0	0		
Control Delay (s)	21.2	0.0	0.0	0.0		
Lane LOS	C					
Approach Delay (s)	21.2	0.0				
Approach LOS	C					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			61.4%		ICU Level of Service	B
Analysis Period (min)			15			

Austin Oaks Mixed Use Development
50: Executive Center Drive & Wood Hollow Drive

2014 Existing AM
5/7/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	24	167	32	90	171	117	8	13	4	1	9	17
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.67	0.91	1.00	0.86	0.91	0.91	0.50	0.46	0.50	0.25	0.56	0.47
Hourly flow rate (vph)	36	184	32	105	188	129	16	28	8	4	16	36
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh												
Upstream signal (ft)					522							
pX, platoon unblocked												
vC, conflicting volume	316			216			777	797	200	755	749	252
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	316			216			777	797	200	755	749	252
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97			92			94	90	99	99	95	95
cM capacity (veh/h)	1244			1354			265	286	841	274	305	786
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	251	421	52	56								
Volume Left	36	105	16	4								
Volume Right	32	129	8	36								
cSH	1244	1354	310	497								
Volume to Capacity	0.03	0.08	0.17	0.11								
Queue Length 95th (ft)	2	6	15	10								
Control Delay (s)	1.4	2.5	19.0	13.2								
Lane LOS	A	A	C	B								
Approach Delay (s)	1.4	2.5	19.0	13.2								
Approach LOS			C	B								
Intersection Summary												
Average Delay			4.0									
Intersection Capacity Utilization			48.0%	ICU Level of Service					A			
Analysis Period (min)			15									

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	198	16	70	259	6	13
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.79	0.67	0.83	0.72	0.75	0.46
Hourly flow rate (vph)	251	24	84	360	8	28
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			275		791	263
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			275		791	263
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			93		98	96
cM capacity (veh/h)			1289		335	776
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	275	444	36			
Volume Left	0	84	8			
Volume Right	24	0	28			
cSH	1700	1289	601			
Volume to Capacity	0.16	0.07	0.06			
Queue Length 95th (ft)	0	5	5			
Control Delay (s)	0.0	2.1	11.4			
Lane LOS		A	B			
Approach Delay (s)	0.0	2.1	11.4			
Approach LOS			B			
Intersection Summary						
Average Delay		1.8				
Intersection Capacity Utilization		42.2%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations				 	 		
Volume (veh/h)	88	132	141	784	1034	210	
Sign Control	Stop			Free	Free		
Grade	0%			0%	0%		
Peak Hour Factor	0.85	0.87	0.86	0.88	0.89	0.67	
Hourly flow rate (vph)	104	152	164	891	1162	313	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None	None		
Median storage veh							
Upstream signal (ft)				1092			
pX, platoon unblocked	0.96						
vC, conflicting volume	2092	738	1162				
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2051	738	1162				
tC, single (s)	6.8	6.9	4.1				
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2				
p0 queue free %	0	58	73				
cM capacity (veh/h)	33	361	597				
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	104	152	164	445	445	775	701
Volume Left	104	0	164	0	0	0	0
Volume Right	0	152	0	0	0	0	313
cSH	33	361	597	1700	1700	1700	1700
Volume to Capacity	3.10	0.42	0.27	0.26	0.26	0.46	0.41
Queue Length 95th (ft)	Err	51	28	0	0	0	0
Control Delay (s)	Err	22.0	13.3	0.0	0.0	0.0	0.0
Lane LOS	F	C	B				
Approach Delay (s)	4068.6		2.1			0.0	
Approach LOS	F						
Intersection Summary							
Average Delay			373.6				
Intersection Capacity Utilization			58.0%		ICU Level of Service		B
Analysis Period (min)			15				

Austin Oaks Mixed Use Development
1: Hart Lane & Far West Boulevard

2014 Existing PM
5/7/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	492	35	159	461	138	55	117	122	154	77	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	170		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.989				0.850		0.940			0.976	
Flt Protected	0.950			0.950				0.991			0.974	
Satd. Flow (prot)	1770	3500	0	1770	3539	1583	0	3297	0	0	3364	0
Flt Permitted	0.375			0.426				0.991			0.974	
Satd. Flow (perm)	699	3500	0	794	3539	1583	0	3297	0	0	3364	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8				172		107			14	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		362			1265			236			237	
Travel Time (s)		7.1			24.6			5.4			5.4	
Peak Hour Factor	0.81	0.89	0.80	0.80	0.89	0.80	0.76	0.75	0.80	0.84	0.71	0.79
Adj. Flow (vph)	48	553	44	199	518	172	72	156	152	183	108	56
Shared Lane Traffic (%)												
Lane Group Flow (vph)	48	597	0	199	518	172	0	380	0	0	347	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Split	NA		Split	NA	
Protected Phases	5	2		1	6		4	4		8	8	
Permitted Phases	2			6		6						
Detector Phase	5	2		1	6	6	4	4		8	8	

Austin Oaks Mixed Use Development
1: Hart Lane & Far West Boulevard

2014 Existing PM
5/7/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	8.0	18.0		8.0	18.0	18.0	12.0	12.0		12.0	12.0	
Minimum Split (s)	13.0	24.0		13.0	24.0	24.0	33.0	33.0		33.0	33.0	
Total Split (s)	13.0	62.0		15.0	64.0	64.0	28.0	28.0		25.0	25.0	
Total Split (%)	10.0%	47.7%		11.5%	49.2%	49.2%	21.5%	21.5%		19.2%	19.2%	
Maximum Green (s)	8.0	57.0		10.0	59.0	59.0	23.0	23.0		20.0	20.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0		5.0			5.0	
Lead/Lag	Lead	Lead		Lag	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	
Walk Time (s)		7.0			7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		12.0			12.0	12.0	21.0	21.0		21.0	21.0	
Pedestrian Calls (#/hr)		0			0	0	0	0		0	0	
Act Effect Green (s)	67.0	67.0		69.3	69.3	69.3		16.7			18.2	
Actuated g/C Ratio	0.52	0.52		0.53	0.53	0.53		0.13			0.14	
v/c Ratio	0.11	0.33		0.41	0.27	0.19		0.74			0.72	
Control Delay	19.0	19.9		29.6	25.0	8.4		47.3			59.6	
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Delay	19.0	19.9		29.6	25.0	8.4		47.3			59.6	
LOS	B	B		C	C	A		D			E	
Approach Delay		19.9			22.8			47.3			59.6	
Approach LOS		B			C			D			E	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 20 (15%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 31.7

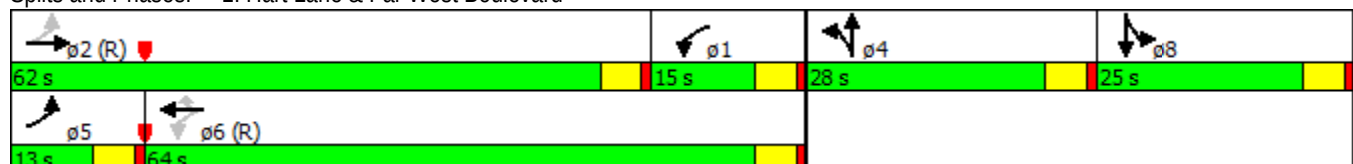
Intersection LOS: C

Intersection Capacity Utilization 60.5%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 1: Hart Lane & Far West Boulevard



Austin Oaks Mixed Use Development
2: Wood Hollow Drive & Far West Boulevard

2014 Existing PM
5/7/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	90	680	56	200	601	114	89	164	283	139	89	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	335		0	165		0	120		120	0		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	75			35			50			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.957	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1783	0
Flt Permitted	0.344			0.181			0.950			0.950		
Satd. Flow (perm)	641	3539	1583	337	3539	1583	1770	1863	1583	1770	1783	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			101			133			262		13	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1265			1235			599			222	
Travel Time (s)		24.6			24.1			13.6			5.0	
Peak Hour Factor	0.75	0.89	0.88	0.88	0.89	0.86	0.80	0.85	0.70	0.62	0.82	0.75
Adj. Flow (vph)	120	764	64	227	675	133	111	193	404	224	109	44
Shared Lane Traffic (%)												
Lane Group Flow (vph)	120	764	64	227	675	133	111	193	404	224	153	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	L NA	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		3	3		7	7	
Permitted Phases	6		6	2		2			3			
Detector Phase	1	6	6	5	2	2	3	3	3	7	7	

Austin Oaks Mixed Use Development
2: Wood Hollow Drive & Far West Boulevard

2014 Existing PM
5/7/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	8.0	8.0	8.0	5.0	5.0	
Minimum Split (s)	10.0	22.0	22.0	10.0	22.0	22.0	31.0	31.0	31.0	31.0	31.0	
Total Split (s)	20.0	68.0	68.0	16.0	64.0	64.0	20.0	20.0	20.0	26.0	26.0	
Total Split (%)	15.4%	52.3%	52.3%	12.3%	49.2%	49.2%	15.4%	15.4%	15.4%	20.0%	20.0%	
Maximum Green (s)	15.0	63.0	63.0	11.0	59.0	59.0	15.0	15.0	15.0	21.0	21.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
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	
Recall Mode	None	C-Min	C-Min	Max	C-Min	C-Min	Min	Min	Min	Max	Max	
Walk Time (s)		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		12.0	12.0		12.0	12.0	21.0	21.0	21.0	21.0	21.0	
Pedestrian Calls (#/hr)		0	0		0	0	0	0	0	0	0	
Act Effect Green (s)	36.8	36.8	36.8	33.1	33.1	33.1	25.4	25.4	25.4	36.8	36.8	
Actuated g/C Ratio	0.28	0.28	0.28	0.25	0.25	0.25	0.20	0.20	0.20	0.28	0.28	
v/c Ratio	0.39	0.76	0.12	1.10	0.75	0.26	0.32	0.53	0.78	0.45	0.30	
Control Delay	43.1	47.0	4.4	112.1	55.2	12.4	45.7	51.2	27.1	45.4	39.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	43.1	47.0	4.4	112.1	55.2	12.4	45.7	51.2	27.1	45.4	39.3	
LOS	D	D	A	F	E	B	D	D	C	D	D	
Approach Delay		43.6			62.2			36.6			43.0	
Approach LOS		D			E			D			D	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 20 (15%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 95

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.10

Intersection Signal Delay: 48.2

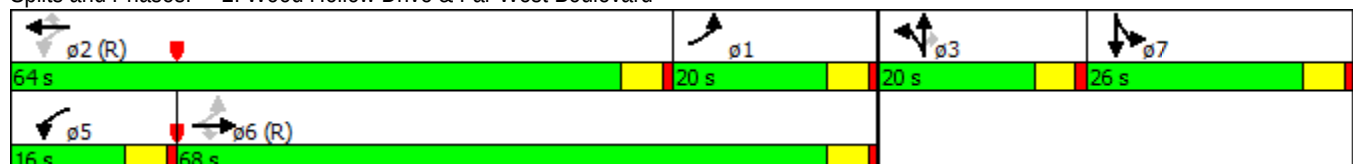
Intersection LOS: D

Intersection Capacity Utilization 62.9%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 2: Wood Hollow Drive & Far West Boulevard



Austin Oaks Mixed Use Development
3: Far West Boulevard & Mopac SB FR

2014 Existing PM
5/7/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑						↑↑	↑
Volume (vph)	0	1025	343	9	372	0	0	0	0	334	366	824
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									0.850
Flt Protected				0.950							0.978	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	3461	1583
Flt Permitted				0.950							0.978	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	3461	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			230									356
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		1235			406			400			362	
Travel Time (s)		24.1			7.9			5.5			4.9	
Peak Hour Factor	0.92	0.89	0.92	0.56	0.86	0.92	0.92	0.92	0.92	0.94	0.82	0.76
Adj. Flow (vph)	0	1152	373	16	433	0	0	0	0	355	446	1084
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1152	373	16	433	0	0	0	0	0	801	1084
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	L NA	Right	Left	Left	Right	Left	Left	R NA
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	custom	Prot	NA					custom	NA	custom
Protected Phases		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Permitted Phases										4		
Detector Phase		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Switch Phase												
Minimum Initial (s)				10.0								
Minimum Split (s)				15.0								

Lane Group	ø1	ø2	ø4	ø8	ø22
Lane Configurations					
Volume (vph)					
Ideal Flow (vphpl)					
Lane Util. Factor					
Frt					
Flt Protected					
Satd. Flow (prot)					
Flt Permitted					
Satd. Flow (perm)					
Right Turn on Red					
Satd. Flow (RTOR)					
Link Speed (mph)					
Link Distance (ft)					
Travel Time (s)					
Peak Hour Factor					
Adj. Flow (vph)					
Shared Lane Traffic (%)					
Lane Group Flow (vph)					
Enter Blocked Intersection					
Lane Alignment					
Median Width(ft)					
Link Offset(ft)					
Crosswalk Width(ft)					
Two way Left Turn Lane					
Headway Factor					
Turning Speed (mph)					
Number of Detectors					
Detector Template					
Leading Detector (ft)					
Trailing Detector (ft)					
Detector 1 Position(ft)					
Detector 1 Size(ft)					
Detector 1 Type					
Detector 1 Channel					
Detector 1 Extend (s)					
Detector 1 Queue (s)					
Detector 1 Delay (s)					
Detector 2 Position(ft)					
Detector 2 Size(ft)					
Detector 2 Type					
Detector 2 Channel					
Detector 2 Extend (s)					
Turn Type					
Protected Phases	1	2	4	8	22
Permitted Phases					
Detector Phase					
Switch Phase					
Minimum Initial (s)	4.0	13.0	10.0	4.0	1.0
Minimum Split (s)	9.0	18.0	15.0	9.0	6.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)				41.0								
Total Split (%)				31.5%								
Maximum Green (s)				36.0								
Yellow Time (s)				4.0								
All-Red Time (s)				1.0								
Lost Time Adjust (s)				0.0								
Total Lost Time (s)				5.0								
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0								
Recall Mode				Min								
Act Effect Green (s)		61.6	41.6	18.4	65.0						35.0	55.0
Actuated g/C Ratio		0.47	0.32	0.14	0.50						0.27	0.42
v/c Ratio		0.69	0.56	0.06	0.24						0.86	1.24
Control Delay		33.4	20.3	25.0	2.7						55.8	141.1
Queue Delay		49.6	0.0	0.0	0.0						0.0	0.0
Total Delay		83.0	20.3	25.0	2.7						55.8	141.1
LOS		F	C	C	A						E	F
Approach Delay		67.7			3.5						104.8	
Approach LOS		E			A						F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.24

Intersection Signal Delay: 78.4

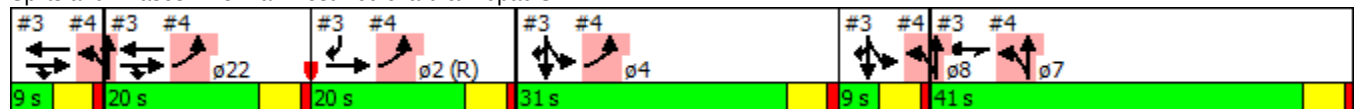
Intersection LOS: E

Intersection Capacity Utilization 88.3%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 3: Far West Boulevard & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø8	ø22
Total Split (s)	9.0	20.0	31.0	9.0	20.0
Total Split (%)	7%	15%	24%	7%	15%
Maximum Green (s)	4.0	15.0	26.0	4.0	15.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)					
Total Lost Time (s)					
Lead/Lag		Lag	Lead	Lag	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	C-Min	Min	Min	None
Act Effect Green (s)					
Actuated g/C Ratio					
v/c Ratio					
Control Delay					
Queue Delay					
Total Delay					
LOS					
Approach Delay					
Approach LOS					
Intersection Summary					

Austin Oaks Mixed Use Development
4: Mopac NB FR & Far West Boulevard

2014 Existing PM
5/7/2014

												
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Lane Configurations	LT	RT	LT	LT	RT	RT						
Volume (vph)	1368	0	326	22	0	0						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Lane Util. Factor	0.97	1.00	0.95	0.95	1.00	1.00						
Fr												
Flt Protected	0.950		0.950	0.961								
Satd. Flow (prot)	3433	0	1681	1701	0	0						
Flt Permitted	0.950		0.950	0.961								
Satd. Flow (perm)	3433	0	1681	1701	0	0						
Right Turn on Red		Yes				Yes						
Satd. Flow (RTOR)												
Link Speed (mph)	35			50	50							
Link Distance (ft)	406			308	472							
Travel Time (s)	7.9			4.2	6.4							
Peak Hour Factor	0.85	0.92	0.81	0.55	0.92	0.92						
Adj. Flow (vph)	1609	0	402	40	0	0						
Shared Lane Traffic (%)			45%									
Lane Group Flow (vph)	1609	0	221	221	0	0						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Right	Left	Left	Left	Right						
Median Width(ft)	24			12	12							
Link Offset(ft)	0			0	0							
Crosswalk Width(ft)	16			16	16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00						
Turning Speed (mph)	15	9	15			9						
Number of Detectors	1		1	2								
Detector Template	Left		Left	Thru								
Leading Detector (ft)	20		20	100								
Trailing Detector (ft)	0		0	0								
Detector 1 Position(ft)	0		0	0								
Detector 1 Size(ft)	20		20	6								
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0								
Detector 1 Queue (s)	0.0		0.0	0.0								
Detector 1 Delay (s)	0.0		0.0	0.0								
Detector 2 Position(ft)				94								
Detector 2 Size(ft)				6								
Detector 2 Type				Cl+Ex								
Detector 2 Channel												
Detector 2 Extend (s)				0.0								
Turn Type	Prot		Split	NA								
Protected Phases	2 4 22		1 7 8	1 7 8			1	2	4	7	8	22
Permitted Phases												
Detector Phase	2 4 22		1 7 8	1 7 8								
Switch Phase												
Minimum Initial (s)							4.0	13.0	10.0	10.0	4.0	1.0
Minimum Split (s)							9.0	18.0	15.0	15.0	9.0	6.0



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Total Split (s)							9.0	20.0	31.0	41.0	9.0	20.0
Total Split (%)							7%	15%	24%	32%	7%	15%
Maximum Green (s)							4.0	15.0	26.0	36.0	4.0	15.0
Yellow Time (s)							4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)							1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag								Lag	Lead		Lag	Lead
Lead-Lag Optimize?								Yes	Yes		Yes	Yes
Vehicle Extension (s)							3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode							Min	C-Min	Min	Min	Min	None
Act Effect Green (s)	66.0		54.0	54.0								
Actuated g/C Ratio	0.51		0.42	0.42								
v/c Ratio	0.92		0.32	0.31								
Control Delay	32.7		27.2	27.1								
Queue Delay	45.6		0.0	0.0								
Total Delay	78.3		27.2	27.1								
LOS	E		C	C								
Approach Delay	78.3			27.1								
Approach LOS	E			C								

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.24

Intersection Signal Delay: 67.2

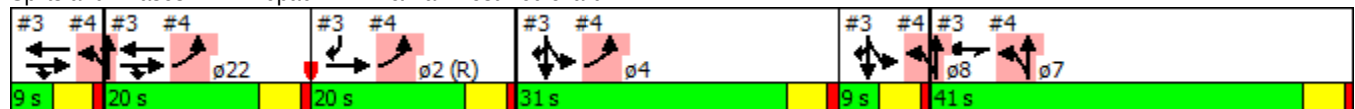
Intersection LOS: E

Intersection Capacity Utilization 101.5%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 4: Mopac NB FR & Far West Boulevard



Austin Oaks Mixed Use Development
5: Spicewood Springs Road & Mopac SB FR

2014 Existing PM
5/7/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑					↑	↑↑	↑
Volume (vph)	0	1094	270	560	1146	0	0	0	0	550	180	343
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	60		0	0		0	150		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			75			25			75		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.973	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1610	3299	1583
Flt Permitted				0.950						0.950	0.973	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1610	3299	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			166									160
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		294			386			782			882	
Travel Time (s)		5.7			7.5			10.7			12.0	
Peak Hour Factor	0.92	0.90	0.90	0.81	0.83	0.92	0.92	0.92	0.92	0.94	0.78	0.80
Adj. Flow (vph)	0	1216	300	691	1381	0	0	0	0	585	231	429
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	1216	300	691	1381	0	0	0	0	292	524	429
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Prot	Prot	NA					Split	NA	Prot
Protected Phases		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5
Permitted Phases												
Detector Phase		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5

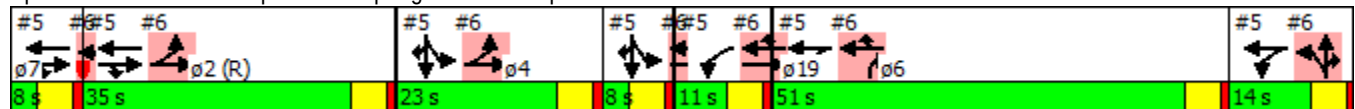
Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)		38.0	38.0	71.0	103.0					26.0	26.0	26.0
Actuated g/C Ratio		0.25	0.25	0.47	0.69					0.17	0.17	0.17
v/c Ratio		1.36	0.57	0.83	0.57					1.05	1.01dl	1.06
Control Delay		209.2	29.4	34.1	9.9					124.8	82.7	96.5
Queue Delay		0.3	0.0	16.9	9.2					0.0	0.0	0.0
Total Delay		209.5	29.4	51.0	19.1					124.8	82.7	96.5
LOS		F	C	D	B					F	F	F
Approach Delay		173.9			29.7						97.3	
Approach LOS		F			C						F	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 89 (59%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.39
Intersection Signal Delay: 92.4 Intersection LOS: F
Intersection Capacity Utilization 87.7% ICU Level of Service E
Analysis Period (min) 15
dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 5: Spicewood Springs Road & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0	5.0	6.0
Minimum Split (s)	8.0	10.0	10.0	8.0	10.0	10.0	11.0
Total Split (s)	8.0	35.0	23.0	8.0	51.0	14.0	11.0
Total Split (%)	5%	23%	15%	5%	34%	9%	7%
Maximum Green (s)	3.0	30.0	18.0	3.0	46.0	9.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Austin Oaks Mixed Use Development
6: Mopac NB FR & Spicewood Springs Road

2014 Existing PM
5/7/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 				
Volume (vph)	439	960	0	0	1005	386	236	38	495	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		325	0		0	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	75			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.91	0.95	1.00	1.00	1.00
Flt						0.850		0.887	0.850			
Flt Protected	0.950						0.950	0.996				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	1681	1498	1504	0	0	0
Flt Permitted	0.950						0.950	0.996				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	1681	1498	1504	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						263		83	160			
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		386			594			563			407	
Travel Time (s)		7.5			11.6			7.7			5.6	
Peak Hour Factor	0.90	0.86	0.92	0.92	0.90	0.95	0.80	0.73	0.87	0.92	0.92	0.92
Adj. Flow (vph)	488	1116	0	0	1117	406	295	52	569	0	0	0
Shared Lane Traffic (%)							10%		44%			
Lane Group Flow (vph)	488	1116	0	0	1117	406	265	332	319	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Prot	Split	NA	custom			
Protected Phases	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			
Permitted Phases												
Detector Phase	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

Austin Oaks Mixed Use Development
6: Mopac NB FR & Spicewood Springs Road

2014 Existing PM
5/7/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)	53.0	72.0			65.0	65.0	17.0	17.0	60.0			
Actuated g/C Ratio	0.35	0.48			0.43	0.43	0.11	0.11	0.40			
v/c Ratio	0.78	0.66			0.73	0.49	1.39	1.37	0.46			
Control Delay	21.1	0.3			38.6	12.0	252.6	224.0	18.0			
Queue Delay	52.9	12.2			2.0	0.0	0.0	0.3	0.0			
Total Delay	74.0	12.4			40.7	12.0	252.6	224.3	18.0			
LOS	E	B			D	B	F	F	B			
Approach Delay		31.2			33.0			160.6				
Approach LOS		C			C			F				

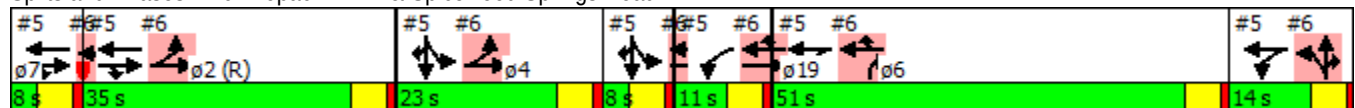
Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 89 (59%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.39
Intersection Signal Delay: 61.2
Intersection Capacity Utilization 87.7%
Analysis Period (min) 15

Intersection LOS: E

ICU Level of Service E

Splits and Phases: 6: Mopac NB FR & Spicewood Springs Road



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0	5.0	6.0
Minimum Split (s)	8.0	10.0	10.0	8.0	10.0	10.0	11.0
Total Split (s)	8.0	35.0	23.0	8.0	51.0	14.0	11.0
Total Split (%)	5%	23%	15%	5%	34%	9%	7%
Maximum Green (s)	3.0	30.0	18.0	3.0	46.0	9.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Austin Oaks Mixed Use Development
7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road

2014 Existing PM
5/7/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	5	860	22	91	696	1	160	7	242	1	4	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	0		100	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.996			0.999				0.850		0.919	
Flt Protected	0.950			0.950				0.956			0.995	
Satd. Flow (prot)	1770	5065	0	1770	3536	0	0	1781	1583	0	1703	0
Flt Permitted	0.351			0.186				0.750			0.972	
Satd. Flow (perm)	654	5065	0	346	3536	0	0	1397	1583	0	1664	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			1				199		24	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		480			275			522			161	
Travel Time (s)		9.4			5.4			11.9			3.7	
Peak Hour Factor	0.62	0.82	0.69	0.95	0.88	0.25	0.71	0.35	0.74	0.25	0.33	0.54
Adj. Flow (vph)	8	1049	32	96	791	4	225	20	327	4	12	24
Shared Lane Traffic (%)												
Lane Group Flow (vph)	8	1081	0	96	795	0	0	245	327	0	40	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2			6			4		4	8		
Detector Phase	5	2		1	6		4	4	4	8	8	

Austin Oaks Mixed Use Development
7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road

2014 Existing PM
5/7/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	20.0		21.0	20.0		15.0	15.0	15.0	5.0	5.0	
Minimum Split (s)	10.0	25.0		26.0	25.0		35.0	35.0	35.0	35.0	35.0	
Total Split (s)	29.0	82.0		34.0	87.0		34.0	34.0	34.0	34.0	34.0	
Total Split (%)	19.3%	54.7%		22.7%	58.0%		22.7%	22.7%	22.7%	22.7%	22.7%	
Maximum Green (s)	24.0	77.0		29.0	82.0		29.0	29.0	29.0	29.0	29.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0			5.0	5.0		5.0	
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min		Min	C-Min		Min	Min	Min	Min	Min	
Walk Time (s)							6.0	6.0	6.0	6.0	6.0	
Flash Dont Walk (s)							24.0	24.0	24.0	24.0	24.0	
Pedestrian Calls (#/hr)							0	0	0	0	0	
Act Effect Green (s)	80.0	80.0		99.9	99.9			34.0	34.0		34.0	
Actuated g/C Ratio	0.53	0.53		0.67	0.67			0.23	0.23		0.23	
v/c Ratio	0.02	0.40		0.22	0.34			0.78	0.64		0.10	
Control Delay	19.8	22.0		12.6	11.6			70.5	24.8		22.1	
Queue Delay	0.0	0.2		0.0	0.2			0.0	6.7		0.0	
Total Delay	19.8	22.2		12.6	11.8			70.5	31.5		22.1	
LOS	B	C		B	B			E	C		C	
Approach Delay		22.2			11.8			48.2			22.1	
Approach LOS		C			B			D			C	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 55 (37%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 24.4

Intersection LOS: C

Intersection Capacity Utilization 63.0%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road



Austin Oaks Mixed Use Development
10: Hart Lane & Greystone Drive

2014 Existing PM
5/7/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	30	63	45	73	113	49	81	187	49	10	122	52
Peak Hour Factor	0.68	0.75	0.66	0.73	0.91	0.82	0.88	0.83	0.88	0.50	0.80	0.65
Hourly flow rate (vph)	44	84	68	100	124	60	92	225	56	20	152	80
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	128	68	224	60	373	253						
Volume Left (vph)	44	0	100	0	92	20						
Volume Right (vph)	0	68	0	60	56	80						
Hadj (s)	0.21	-0.67	0.26	-0.67	-0.01	-0.14						
Departure Headway (s)	7.2	6.3	7.1	6.1	5.9	6.0						
Degree Utilization, x	0.26	0.12	0.44	0.10	0.61	0.42						
Capacity (veh/h)	447	503	472	537	580	552						
Control Delay (s)	11.5	9.0	14.4	8.6	17.7	13.3						
Approach Delay (s)	10.7		13.2		17.7	13.3						
Approach LOS	B		B		C	B						
Intersection Summary												
Delay			14.3									
Level of Service			B									
Intersection Capacity Utilization			54.1%	ICU Level of Service		A						
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
20: Wood Hollow Drive & Greystone Drive

2014 Existing PM
5/7/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	32	66	47	83	212	56	74	198	67	21	111	24
Peak Hour Factor	0.67	0.82	0.59	0.74	0.78	0.78	0.84	0.90	0.80	0.66	0.87	0.60
Hourly flow rate (vph)	48	80	80	112	272	72	88	220	84	32	128	40
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2				
Volume Total (vph)	128	80	384	72	198	194	96	104				
Volume Left (vph)	48	0	112	0	88	0	32	0				
Volume Right (vph)	0	80	0	72	0	84	0	40				
Hadj (s)	0.22	-0.67	0.18	-0.67	0.26	-0.27	0.20	-0.24				
Departure Headway (s)	7.2	6.3	6.8	5.9	7.1	6.5	7.3	6.9				
Degree Utilization, x	0.26	0.14	0.72	0.12	0.39	0.35	0.19	0.20				
Capacity (veh/h)	467	528	518	579	477	522	457	484				
Control Delay (s)	11.5	9.2	24.0	8.5	13.3	11.9	10.9	10.4				
Approach Delay (s)	10.6		21.6		12.6		10.6					
Approach LOS	B		C		B		B					
Intersection Summary												
Delay			15.2									
Level of Service			C									
Intersection Capacity Utilization			48.5%	ICU Level of Service					A			
Analysis Period (min)			15									



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	161	0	0	1513	321
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.72	0.92	0.92	0.86	0.84
Hourly flow rate (vph)	0	224	0	0	1759	382
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1950	778	2141			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1950	778	2141			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	34	100			
cM capacity (veh/h)	56	339	249			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	224	704	704	734		
Volume Left	0	0	0	0		
Volume Right	224	0	0	382		
cSH	339	1700	1700	1700		
Volume to Capacity	0.66	0.41	0.41	0.43		
Queue Length 95th (ft)	111	0	0	0		
Control Delay (s)	33.9	0.0	0.0	0.0		
Lane LOS	D					
Approach Delay (s)	33.9	0.0				
Approach LOS	D					
Intersection Summary						
Average Delay			3.2			
Intersection Capacity Utilization			53.0%		ICU Level of Service	A
Analysis Period (min)			15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations					  	
Volume (veh/h)	0	164	0	0	1791	26
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.80	0.92	0.92	0.89	0.72
Hourly flow rate (vph)	0	205	0	0	2012	36
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2030	689	2048			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2030	689	2048			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	47	100			
cM capacity (veh/h)	50	388	271			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	205	805	805	439		
Volume Left	0	0	0	0		
Volume Right	205	0	0	36		
cSH	388	1700	1700	1700		
Volume to Capacity	0.53	0.47	0.47	0.26		
Queue Length 95th (ft)	74	0	0	0		
Control Delay (s)	24.2	0.0	0.0	0.0		
Lane LOS	C					
Approach Delay (s)	24.2	0.0				
Approach LOS	C					
Intersection Summary						
Average Delay			2.2			
Intersection Capacity Utilization			52.0%		ICU Level of Service	A
Analysis Period (min)			15			

Austin Oaks Mixed Use Development
50: Executive Center Drive & Wood Hollow Drive

2014 Existing PM
5/7/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	7	249	6	13	110	15	55	53	23	18	12	97
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.35	0.81	0.38	0.65	0.89	0.54	0.81	0.58	0.52	0.38	0.60	0.61
Hourly flow rate (vph)	20	307	16	20	124	28	68	91	44	47	20	159
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh												
Upstream signal (ft)					522							
pX, platoon unblocked												
vC, conflicting volume	151			323			702	547	315	623	541	137
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	151			323			702	547	315	623	541	137
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			98			75	79	94	85	95	83
cM capacity (veh/h)	1430			1237			275	431	725	306	435	911
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	343	171	204	226								
Volume Left	20	20	68	47								
Volume Right	16	28	44	159								
cSH	1430	1237	391	603								
Volume to Capacity	0.01	0.02	0.52	0.38								
Queue Length 95th (ft)	1	1	72	43								
Control Delay (s)	0.6	1.1	23.7	14.5								
Lane LOS	A	A	C	B								
Approach Delay (s)	0.6	1.1	23.7	14.5								
Approach LOS			C	B								
Intersection Summary												
Average Delay			9.0									
Intersection Capacity Utilization			35.6%	ICU Level of Service					A			
Analysis Period (min)			15									

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	248	8	14	181	18	83
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.75	0.50	0.70	0.85	0.64	0.58
Hourly flow rate (vph)	331	16	20	213	28	143
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			347		592	339
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			347		592	339
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			98		94	80
cM capacity (veh/h)			1212		461	704
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	347	233	171			
Volume Left	0	20	28			
Volume Right	16	0	143			
cSH	1700	1212	648			
Volume to Capacity	0.20	0.02	0.26			
Queue Length 95th (ft)	0	1	26			
Control Delay (s)	0.0	0.8	12.5			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.8	12.5			
Approach LOS			B			
Intersection Summary						
Average Delay			3.1			
Intersection Capacity Utilization			33.9%	ICU Level of Service		A
Analysis Period (min)			15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations							
Volume (veh/h)	184	196	109	1019	746	104	
Sign Control	Stop			Free	Free		
Grade	0%			0%	0%		
Peak Hour Factor	0.78	0.69	0.88	0.96	0.88	0.90	
Hourly flow rate (vph)	236	284	124	1061	848	116	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None	None		
Median storage veh							
Upstream signal (ft)				1092			
pX, platoon unblocked	0.91						
vC, conflicting volume	1684	482	848				
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1561	482	848				
tC, single (s)	6.8	6.9	4.1				
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2				
p0 queue free %	0	46	84				
cM capacity (veh/h)	79	531	785				
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	236	284	124	531	531	565	398
Volume Left	236	0	124	0	0	0	0
Volume Right	0	284	0	0	0	0	116
cSH	79	531	785	1700	1700	1700	1700
Volume to Capacity	2.98	0.54	0.16	0.31	0.31	0.33	0.23
Queue Length 95th (ft)	584	78	14	0	0	0	0
Control Delay (s)	1005.0	19.3	10.4	0.0	0.0	0.0	0.0
Lane LOS	F	C	B				
Approach Delay (s)	466.5		1.1			0.0	
Approach LOS	F						
Intersection Summary							
Average Delay			91.4				
Intersection Capacity Utilization			50.2%		ICU Level of Service		A
Analysis Period (min)			15				

Austin Oaks Mixed Use Development
1: Hart Lane & Far West Boulevard

2018 Forecasted AM
5/7/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	54	663	86	198	267	70	49	107	157	205	248	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	170		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.977				0.850		0.926			0.987	
Flt Protected	0.950			0.950				0.992			0.985	
Satd. Flow (prot)	1770	3458	0	1770	3539	1583	0	3251	0	0	3441	0
Flt Permitted	0.438			0.168				0.992			0.985	
Satd. Flow (perm)	816	3458	0	313	3539	1583	0	3251	0	0	3441	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		17				101		162			7	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		362			1265			236			237	
Travel Time (s)		7.1			24.6			5.4			5.4	
Peak Hour Factor	0.73	0.83	0.61	0.69	0.83	0.85	0.80	0.80	0.82	0.90	0.56	0.47
Adj. Flow (vph)	74	799	141	287	322	82	61	134	191	228	443	66
Shared Lane Traffic (%)												
Lane Group Flow (vph)	74	940	0	287	322	82	0	386	0	0	737	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Split	NA		Split	NA	
Protected Phases	5	2		1	6		4	4		8	8	
Permitted Phases	2			6		6						
Detector Phase	5	2		1	6	6	4	4		8	8	

Austin Oaks Mixed Use Development
1: Hart Lane & Far West Boulevard

2018 Forecasted AM
5/7/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	8.0	18.0		8.0	18.0	18.0	12.0	12.0		12.0	12.0	
Minimum Split (s)	13.0	23.0		13.0	23.0	23.0	17.0	17.0		17.0	17.0	
Total Split (s)	13.0	52.0		22.0	61.0	61.0	26.0	26.0		30.0	30.0	
Total Split (%)	10.0%	40.0%		16.9%	46.9%	46.9%	20.0%	20.0%		23.1%	23.1%	
Maximum Green (s)	8.0	47.0		17.0	56.0	56.0	21.0	21.0		25.0	25.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0		5.0			5.0	
Lead/Lag	Lead	Lead		Lag	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	
Walk Time (s)		7.0			7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		12.0			12.0	12.0	21.0	21.0		21.0	21.0	
Pedestrian Calls (#/hr)		0			0	0	0	0		0	0	
Act Effect Green (s)	44.3	44.3		55.3	55.3	55.3		15.4			33.9	
Actuated g/C Ratio	0.34	0.34		0.43	0.43	0.43		0.12			0.26	
v/c Ratio	0.22	0.79		0.91	0.21	0.11		0.73			0.82	
Control Delay	31.0	43.6		99.4	47.4	20.2		39.9			53.9	
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Delay	31.0	43.6		99.4	47.4	20.2		39.9			53.9	
LOS	C	D		F	D	C		D			D	
Approach Delay		42.7			65.8			39.9			53.9	
Approach LOS		D			E			D			D	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 100 (77%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.91

Intersection Signal Delay: 50.9

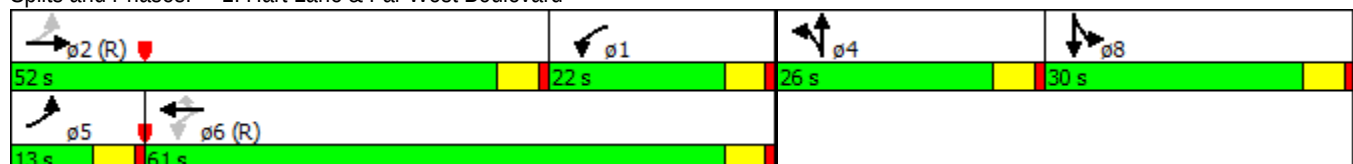
Intersection LOS: D

Intersection Capacity Utilization 72.5%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 1: Hart Lane & Far West Boulevard



Austin Oaks Mixed Use Development
2: Wood Hollow Drive & Far West Boulevard

2018 Forecasted AM
5/7/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	76	1013	45	112	549	94	24	82	281	256	118	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	335		0	165		0	120		120	0		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	75			35			50			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.951	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1771	0
Flt Permitted	0.391			0.203			0.950			0.950		
Satd. Flow (perm)	728	3539	1583	378	3539	1583	1770	1863	1583	1770	1771	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			101			116			195		16	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1265			1235			599			222	
Travel Time (s)		24.6			24.1			13.6			5.0	
Peak Hour Factor	0.74	0.91	0.58	0.90	0.88	0.81	0.69	0.65	0.87	0.90	0.81	0.77
Adj. Flow (vph)	103	1113	78	124	624	116	35	126	323	284	146	71
Shared Lane Traffic (%)												
Lane Group Flow (vph)	103	1113	78	124	624	116	35	126	323	284	217	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	L NA	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		3	3		7	7	
Permitted Phases	6		6	2		2			3			
Detector Phase	1	6	6	5	2	2	3	3	3	7	7	

Austin Oaks Mixed Use Development
2: Wood Hollow Drive & Far West Boulevard

2018 Forecasted AM
5/7/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	8.0	8.0	8.0	5.0	5.0	
Minimum Split (s)	11.0	40.0	40.0	12.0	40.0	40.0	15.0	15.0	15.0	15.0	15.0	
Total Split (s)	16.0	67.0	67.0	16.0	67.0	67.0	19.0	19.0	19.0	28.0	28.0	
Total Split (%)	12.3%	51.5%	51.5%	12.3%	51.5%	51.5%	14.6%	14.6%	14.6%	21.5%	21.5%	
Maximum Green (s)	11.0	62.0	62.0	11.0	62.0	62.0	14.0	14.0	14.0	23.0	23.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
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	
Recall Mode	None	C-Min	C-Min	Max	C-Min	C-Min	Min	Min	Min	Max	Max	
Walk Time (s)		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		12.0	12.0		12.0	12.0	21.0	21.0	21.0	21.0	21.0	
Pedestrian Calls (#/hr)		0	0		0	0	0	0	0	0	0	
Act Effect Green (s)	51.6	51.6	51.6	30.8	30.8	30.8	17.4	17.4	17.4	30.1	30.1	
Actuated g/C Ratio	0.40	0.40	0.40	0.24	0.24	0.24	0.13	0.13	0.13	0.23	0.23	
v/c Ratio	0.19	0.79	0.11	0.60	0.75	0.25	0.15	0.51	0.85	0.69	0.52	
Control Delay	27.9	40.5	4.6	51.2	52.7	10.9	50.7	59.6	42.1	57.9	47.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	27.9	40.5	4.6	51.2	52.7	10.9	50.7	59.6	42.1	57.9	47.9	
LOS	C	D	A	D	D	B	D	E	D	E	D	
Approach Delay		37.4			46.9			47.3			53.6	
Approach LOS		D			D			D			D	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 10 (8%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 44.1

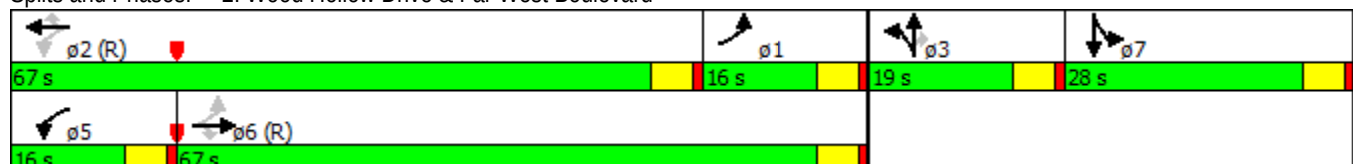
Intersection LOS: D

Intersection Capacity Utilization 72.1%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 2: Wood Hollow Drive & Far West Boulevard



Austin Oaks Mixed Use Development
3: Far West Boulevard & Mopac SB FR

2018 Forecasted AM

5/7/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑						↑↑	↑
Volume (vph)	0	771	437	17	508	0	0	0	0	129	512	855
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									0.850
Flt Protected				0.950							0.989	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	3500	1583
Flt Permitted				0.950							0.989	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	3500	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			394									136
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		1235			406			400			362	
Travel Time (s)		24.1			7.9			5.5			4.9	
Peak Hour Factor	0.92	0.91	0.93	0.67	0.93	0.92	0.92	0.92	0.92	0.78	0.92	0.95
Adj. Flow (vph)	0	847	470	25	546	0	0	0	0	165	557	900
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	847	470	25	546	0	0	0	0	0	722	900
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	L NA	Right	Left	Left	Right	Left	Left	R NA
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	custom	Prot	NA					custom	NA	custom
Protected Phases		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Permitted Phases										4		
Detector Phase		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Switch Phase												
Minimum Initial (s)				10.0								
Minimum Split (s)				15.0								

Lane Group	ø1	ø2	ø4	ø8	ø22
Lane Configurations					
Volume (vph)					
Ideal Flow (vphpl)					
Lane Util. Factor					
Frt					
Flt Protected					
Satd. Flow (prot)					
Flt Permitted					
Satd. Flow (perm)					
Right Turn on Red					
Satd. Flow (RTOR)					
Link Speed (mph)					
Link Distance (ft)					
Travel Time (s)					
Peak Hour Factor					
Adj. Flow (vph)					
Shared Lane Traffic (%)					
Lane Group Flow (vph)					
Enter Blocked Intersection					
Lane Alignment					
Median Width(ft)					
Link Offset(ft)					
Crosswalk Width(ft)					
Two way Left Turn Lane					
Headway Factor					
Turning Speed (mph)					
Number of Detectors					
Detector Template					
Leading Detector (ft)					
Trailing Detector (ft)					
Detector 1 Position(ft)					
Detector 1 Size(ft)					
Detector 1 Type					
Detector 1 Channel					
Detector 1 Extend (s)					
Detector 1 Queue (s)					
Detector 1 Delay (s)					
Detector 2 Position(ft)					
Detector 2 Size(ft)					
Detector 2 Type					
Detector 2 Channel					
Detector 2 Extend (s)					
Turn Type					
Protected Phases	1	2	4	8	22
Permitted Phases					
Detector Phase					
Switch Phase					
Minimum Initial (s)	4.0	10.0	10.0	4.0	1.0
Minimum Split (s)	9.0	15.0	25.0	9.0	20.0

Austin Oaks Mixed Use Development
3: Far West Boulevard & Mopac SB FR

2018 Forecasted AM
5/7/2014

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)				21.0								
Total Split (%)				16.2%								
Maximum Green (s)				16.0								
Yellow Time (s)				4.0								
All-Red Time (s)				1.0								
Lost Time Adjust (s)				0.0								
Total Lost Time (s)				5.0								
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0								
Recall Mode				Min								
Act Effect Green (s)		49.0	24.0	16.0	45.0						50.0	75.0
Actuated g/C Ratio		0.38	0.18	0.12	0.35						0.38	0.58
v/c Ratio		0.64	0.77	0.12	0.45						0.54	0.93
Control Delay		36.0	20.0	39.6	1.6						32.8	38.0
Queue Delay		0.2	0.0	0.0	0.7						0.0	0.0
Total Delay		36.1	20.0	39.6	2.3						32.8	38.0
LOS		D	C	D	A						C	D
Approach Delay		30.4			3.9						35.7	
Approach LOS		C			A						D	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 106 (82%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 95

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 28.5

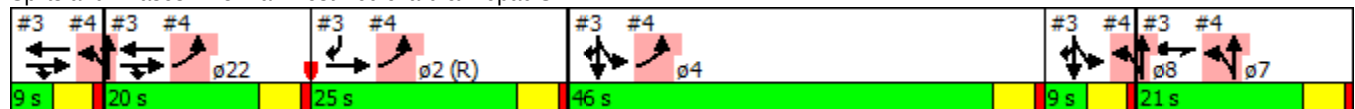
Intersection LOS: C

Intersection Capacity Utilization 94.0%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 3: Far West Boulevard & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø8	ø22
Total Split (s)	9.0	25.0	46.0	9.0	20.0
Total Split (%)	7%	19%	35%	7%	15%
Maximum Green (s)	4.0	20.0	41.0	4.0	15.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)					
Total Lost Time (s)					
Lead/Lag		Lag	Lead	Lag	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	C-Min	Min	Min	None
Act Effect Green (s)					
Actuated g/C Ratio					
v/c Ratio					
Control Delay					
Queue Delay					
Total Delay					
LOS					
Approach Delay					
Approach LOS					
Intersection Summary					

Austin Oaks Mixed Use Development
4: Mopac NB FR & Far West Boulevard

2018 Forecasted AM
5/7/2014

												
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Lane Configurations	LT		LT	LT								
Volume (vph)	916	0	526	2	0	0						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Lane Util. Factor	0.97	1.00	0.95	0.95	1.00	1.00						
Fr												
Flt Protected	0.950		0.950	0.954								
Satd. Flow (prot)	3433	0	1681	1688	0	0						
Flt Permitted	0.950		0.950	0.954								
Satd. Flow (perm)	3433	0	1681	1688	0	0						
Right Turn on Red		Yes				Yes						
Satd. Flow (RTOR)												
Link Speed (mph)	35			50	50							
Link Distance (ft)	406			308	472							
Travel Time (s)	7.9			4.2	6.4							
Peak Hour Factor	0.90	0.92	0.93	0.25	0.92	0.92						
Adj. Flow (vph)	1018	0	566	8	0	0						
Shared Lane Traffic (%)			49%									
Lane Group Flow (vph)	1018	0	289	285	0	0						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Right	Left	Left	Left	Right						
Median Width(ft)	24			12	12							
Link Offset(ft)	0			0	0							
Crosswalk Width(ft)	16			16	16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00						
Turning Speed (mph)	15	9	15			9						
Number of Detectors	1		1	2								
Detector Template	Left		Left	Thru								
Leading Detector (ft)	20		20	100								
Trailing Detector (ft)	0		0	0								
Detector 1 Position(ft)	0		0	0								
Detector 1 Size(ft)	20		20	6								
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0								
Detector 1 Queue (s)	0.0		0.0	0.0								
Detector 1 Delay (s)	0.0		0.0	0.0								
Detector 2 Position(ft)				94								
Detector 2 Size(ft)				6								
Detector 2 Type				Cl+Ex								
Detector 2 Channel												
Detector 2 Extend (s)				0.0								
Turn Type	Prot		Split	NA								
Protected Phases	2 4 22		1 7 8	1 7 8			1	2	4	7	8	22
Permitted Phases												
Detector Phase	2 4 22		1 7 8	1 7 8								
Switch Phase												
Minimum Initial (s)							4.0	10.0	10.0	10.0	4.0	1.0
Minimum Split (s)							9.0	15.0	25.0	15.0	9.0	20.0



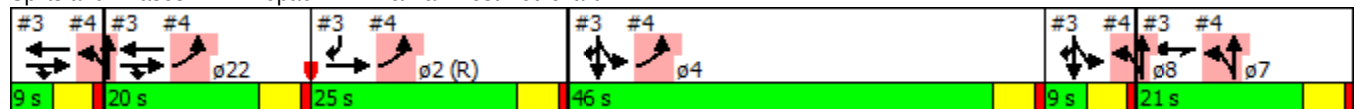
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Total Split (s)							9.0	25.0	46.0	21.0	9.0	20.0
Total Split (%)							7%	19%	35%	16%	7%	15%
Maximum Green (s)							4.0	20.0	41.0	16.0	4.0	15.0
Yellow Time (s)							4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)							1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag								Lag	Lead		Lag	Lead
Lead-Lag Optimize?								Yes	Yes		Yes	Yes
Vehicle Extension (s)							3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode							Min	C-Min	Min	Min	Min	None
Act Effect Green (s)	86.0		34.0	34.0								
Actuated g/C Ratio	0.66		0.26	0.26								
v/c Ratio	0.45		0.66	0.65								
Control Delay	3.2		51.1	50.6								
Queue Delay	0.6		0.0	0.0								
Total Delay	3.8		51.1	50.6								
LOS	A		D	D								
Approach Delay	3.8			50.8								
Approach LOS	A			D								

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 106 (82%), Referenced to phase 2:EBT, Start of Green
Natural Cycle: 95
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.93
Intersection Signal Delay: 20.8
Intersection Capacity Utilization 107.1%
Analysis Period (min) 15

Intersection LOS: C
ICU Level of Service G

Splits and Phases: 4: Mopac NB FR & Far West Boulevard



Austin Oaks Mixed Use Development
5: Spicewood Springs Road & Mopac SB FR

2018 Forecasted AM

5/7/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑					↑	↑↑	↑
Volume (vph)	0	898	626	594	886	0	0	0	0	350	1126	627
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	60		0	0		0	150		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			75			25			75		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.999	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1610	3387	1583
Flt Permitted				0.950						0.950	0.999	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1610	3387	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			185									187
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		294			386			782			882	
Travel Time (s)		5.7			7.5			10.7			12.0	
Peak Hour Factor	0.92	0.81	0.90	0.87	0.86	0.92	0.92	0.92	0.92	0.93	0.87	0.94
Adj. Flow (vph)	0	1109	696	683	1030	0	0	0	0	376	1294	667
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	0	1109	696	683	1030	0	0	0	0	338	1332	667
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Prot	Prot	NA					Split	NA	Prot
Protected Phases		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5
Permitted Phases												
Detector Phase		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

Austin Oaks Mixed Use Development
5: Spicewood Springs Road & Mopac SB FR

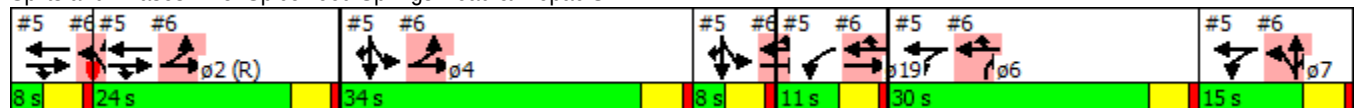
2018 Forecasted AM
5/7/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)		27.0	27.0	51.0	72.0					37.0	37.0	37.0
Actuated g/C Ratio		0.21	0.21	0.39	0.55					0.28	0.28	0.28
v/c Ratio		1.51	1.47	0.98	0.53					0.74	1.38	1.14
Control Delay		267.5	247.1	51.5	7.7					53.2	215.2	113.8
Queue Delay		0.2	0.0	38.2	15.3					0.0	0.0	0.0
Total Delay		267.7	247.1	89.8	23.0					53.2	215.2	113.8
LOS		F	F	F	C					D	F	F
Approach Delay		259.7			49.6						162.8	
Approach LOS		F			D						F	

Intersection Summary

Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 8 (6%), Referenced to phase 2:EBWB, Start of Green	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.53	
Intersection Signal Delay: 159.6	Intersection LOS: F
Intersection Capacity Utilization 111.7%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 5: Spicewood Springs Road & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0	5.0	6.0
Minimum Split (s)	8.0	10.0	10.0	8.0	10.0	10.0	11.0
Total Split (s)	8.0	24.0	34.0	8.0	30.0	15.0	11.0
Total Split (%)	6%	18%	26%	6%	23%	12%	8%
Maximum Green (s)	3.0	19.0	29.0	3.0	25.0	10.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Austin Oaks Mixed Use Development
6: Mopac NB FR & Spicewood Springs Road

2018 Forecasted AM
5/7/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 				
Volume (vph)	292	854	0	0	924	239	363	13	503	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		325	0		0	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	75			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.91	0.95	1.00	1.00	1.00
Frt						0.850		0.890	0.850			
Flt Protected	0.950						0.950	0.990				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	1681	1494	1504	0	0	0
Flt Permitted	0.950						0.950	0.990				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	1681	1494	1504	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						303		89	185			
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		386			594			563			407	
Travel Time (s)		7.5			11.6			7.7			5.6	
Peak Hour Factor	0.90	0.96	0.92	0.92	0.93	0.79	0.86	0.60	0.87	0.92	0.92	0.92
Adj. Flow (vph)	324	890	0	0	994	303	422	22	578	0	0	0
Shared Lane Traffic (%)							16%		43%			
Lane Group Flow (vph)	324	890	0	0	994	303	354	339	329	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Prot	Split	NA	custom			
Protected Phases	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			
Permitted Phases												
Detector Phase	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)	53.0	72.0			44.0	44.0	18.0	18.0	40.0			
Actuated g/C Ratio	0.41	0.55			0.34	0.34	0.14	0.14	0.31			
v/c Ratio	0.45	0.45			0.83	0.41	1.53	1.20	0.56			
Control Delay	6.0	0.5			46.8	5.1	294.9	153.0	19.8			
Queue Delay	4.4	4.6			20.1	0.0	0.0	0.2	0.0			
Total Delay	10.3	5.1			66.8	5.1	294.9	153.3	19.8			
LOS	B	A			E	A	F	F	B			
Approach Delay		6.5			52.4			159.4				
Approach LOS		A			D			F				

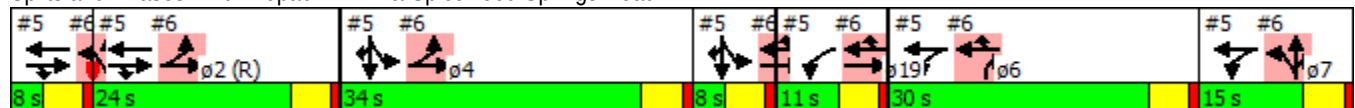
Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 8 (6%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.53
Intersection Signal Delay: 67.6
Intersection Capacity Utilization 111.7%
Analysis Period (min) 15

Intersection LOS: E

ICU Level of Service H

Splits and Phases: 6: Mopac NB FR & Spicewood Springs Road



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0	5.0	6.0
Minimum Split (s)	8.0	10.0	10.0	8.0	10.0	10.0	11.0
Total Split (s)	8.0	24.0	34.0	8.0	30.0	15.0	11.0
Total Split (%)	6%	18%	26%	6%	23%	12%	8%
Maximum Green (s)	3.0	19.0	29.0	3.0	25.0	10.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Austin Oaks Mixed Use Development
7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road

2018 Forecasted AM
5/7/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	1043	101	353	740	11	48	4	149	6	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	0		100	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.991			0.996				0.850		0.977	
Flt Protected	0.950			0.950				0.956			0.960	
Satd. Flow (prot)	1770	5040	0	1770	3525	0	0	1781	1583	0	1747	0
Flt Permitted	0.341			0.092				0.736			0.806	
Satd. Flow (perm)	635	5040	0	171	3525	0	0	1371	1583	0	1467	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11			3				240		101	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		480			275			522			161	
Travel Time (s)		9.4			5.4			11.9			3.7	
Peak Hour Factor	0.72	0.50	0.76	0.50	0.92	0.50	0.91	0.85	0.62	0.58	0.90	0.84
Adj. Flow (vph)	11	2086	133	706	804	22	53	5	240	10	0	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	2219	0	706	826	0	0	58	240	0	12	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2			6			4		4	8		
Detector Phase	5	2		1	6		4	4	4	8	8	

Austin Oaks Mixed Use Development
7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road

2018 Forecasted AM
5/7/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	20.0		21.0	20.0		15.0	15.0	15.0	11.0	11.0	
Minimum Split (s)	10.0	25.0		26.0	25.0		20.0	20.0	20.0	16.0	16.0	
Total Split (s)	29.0	72.0		29.0	72.0		29.0	29.0	29.0	29.0	29.0	
Total Split (%)	22.3%	55.4%		22.3%	55.4%		22.3%	22.3%	22.3%	22.3%	22.3%	
Maximum Green (s)	24.0	67.0		24.0	67.0		24.0	24.0	24.0	24.0	24.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0			5.0	5.0		5.0	
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min		Min	C-Min		Min	Min	Min	Min	Min	
Walk Time (s)							6.0	6.0	6.0	6.0	6.0	
Flash Dont Walk (s)							24.0	24.0	24.0	24.0	24.0	
Pedestrian Calls (#/hr)							0	0	0	0	0	
Act Effect Green (s)	69.9	66.7		80.3	79.5		15.1	15.1			15.1	
Actuated g/C Ratio	0.54	0.51		0.62	0.61		0.12	0.12			0.12	
v/c Ratio	0.02	0.86		1.37	0.38		0.36	0.61			0.05	
Control Delay	14.9	31.6		210.4	22.1		60.2	13.5			0.3	
Queue Delay	0.0	0.0		0.0	0.3		0.0	0.0			0.0	
Total Delay	14.9	31.6		210.4	22.5		60.2	13.5			0.3	
LOS	B	C		F	C		E	B			A	
Approach Delay		31.5			109.1			22.6			0.3	
Approach LOS		C			F			C			A	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 55 (42%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.37

Intersection Signal Delay: 59.9

Intersection LOS: E

Intersection Capacity Utilization 67.0%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road



Austin Oaks Mixed Use Development
10: Hart Lane & Greystone Drive

2018 Forecasted AM
5/7/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	38	155	132	79	61	8	49	122	33	15	263	28
Peak Hour Factor	0.80	0.65	0.65	0.78	0.88	0.58	0.75	0.81	0.60	0.58	0.69	0.57
Hourly flow rate (vph)	48	238	203	101	69	14	65	151	55	26	381	49
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	286	203	171	14	271	456						
Volume Left (vph)	48	0	101	0	65	26						
Volume Right (vph)	0	203	0	14	55	49						
Hadj (s)	0.12	-0.67	0.33	-0.67	-0.04	-0.02						
Departure Headway (s)	7.8	6.9	8.6	7.5	7.2	6.7						
Degree Utilization, x	0.62	0.39	0.41	0.03	0.54	0.85						
Capacity (veh/h)	445	493	396	442	459	456						
Control Delay (s)	21.2	13.1	16.1	9.6	18.6	37.6						
Approach Delay (s)	17.8		15.7		18.6	37.6						
Approach LOS	C		C		C	E						
Intersection Summary												
Delay			24.1									
Level of Service			C									
Intersection Capacity Utilization			56.3%	ICU Level of Service				B				
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
20: Wood Hollow Drive & Greystone Drive

2018 Forecasted AM
5/7/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	32	127	165	55	121	31	23	130	44	24	155	43
Peak Hour Factor	0.81	0.89	0.64	0.80	0.82	0.72	0.53	0.88	0.79	0.68	0.85	0.68
Hourly flow rate (vph)	40	143	258	69	148	43	43	148	56	35	182	63
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2				
Volume Total (vph)	182	258	216	43	117	130	126	154				
Volume Left (vph)	40	0	69	0	43	0	35	0				
Volume Right (vph)	0	258	0	43	0	56	0	63				
Hadj (s)	0.14	-0.67	0.19	-0.67	0.22	-0.27	0.17	-0.25				
Departure Headway (s)	6.6	5.8	6.9	6.0	7.1	6.6	7.0	6.6				
Degree Utilization, x	0.34	0.42	0.41	0.07	0.23	0.24	0.25	0.28				
Capacity (veh/h)	517	591	497	557	477	510	484	516				
Control Delay (s)	11.7	11.7	13.5	8.3	11.0	10.4	11.0	10.9				
Approach Delay (s)	11.7		12.6		10.7		11.0					
Approach LOS	B		B		B		B					
Intersection Summary												
Delay			11.5									
Level of Service			B									
Intersection Capacity Utilization			43.2%	ICU Level of Service					A			
Analysis Period (min)			15									



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations					  	
Volume (veh/h)	0	221	0	0	3293	152
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.79	0.92	0.92	0.96	0.86
Hourly flow rate (vph)	0	280	0	0	3430	177
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	3519	1232	3607			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	3519	1232	3607			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	0	100			
cM capacity (veh/h)	5	169	64			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	280	1372	1372	863		
Volume Left	0	0	0	0		
Volume Right	280	0	0	177		
cSH	169	1700	1700	1700		
Volume to Capacity	1.66	0.81	0.81	0.51		
Queue Length 95th (ft)	482	0	0	0		
Control Delay (s)	368.4	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	368.4	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay			26.5			
Intersection Capacity Utilization			87.4%		ICU Level of Service	E
Analysis Period (min)			15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	19	0	0	2766	98
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.50	0.92	0.92	0.95	0.75
Hourly flow rate (vph)	0	38	0	0	2912	131
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2977	1036	3042			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2977	1036	3042			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	83	100			
cM capacity (veh/h)	11	229	109			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	38	1165	1165	713		
Volume Left	0	0	0	0		
Volume Right	38	0	0	131		
cSH	229	1700	1700	1700		
Volume to Capacity	0.17	0.69	0.69	0.42		
Queue Length 95th (ft)	15	0	0	0		
Control Delay (s)	23.9	0.0	0.0	0.0		
Lane LOS	C					
Approach Delay (s)	23.9	0.0				
Approach LOS	C					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			65.6%		ICU Level of Service	C
Analysis Period (min)			15			

Austin Oaks Mixed Use Development
50: Executive Center Drive & Wood Hollow Drive

2018 Forecasted AM
5/7/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	28	190	35	97	192	126	13	14	4	1	10	20
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.67	0.91	1.00	0.86	0.91	0.91	0.50	0.46	0.50	0.25	0.56	0.47
Hourly flow rate (vph)	42	209	35	113	211	138	26	30	8	4	18	43
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh												
Upstream signal (ft)					522							
pX, platoon unblocked												
vC, conflicting volume	349			244			867	885	226	839	833	280
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	349			244			867	885	226	839	833	280
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97			91			88	88	99	98	93	94
cM capacity (veh/h)	1209			1322			223	251	813	234	269	759
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	286	462	64	64								
Volume Left	42	113	26	4								
Volume Right	35	138	8	43								
cSH	1209	1322	260	461								
Volume to Capacity	0.03	0.09	0.25	0.14								
Queue Length 95th (ft)	3	7	24	12								
Control Delay (s)	1.5	2.6	23.3	14.1								
Lane LOS	A	A	C	B								
Approach Delay (s)	1.5	2.6	23.3	14.1								
Approach LOS			C	B								
Intersection Summary												
Average Delay			4.6									
Intersection Capacity Utilization			54.8%		ICU Level of Service				A			
Analysis Period (min)			15									

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	215	17	78	282	6	16
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.79	0.67	0.83	0.72	0.75	0.46
Hourly flow rate (vph)	272	25	94	392	8	35
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			298		864	285
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			298		864	285
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			93		97	95
cM capacity (veh/h)			1264		300	754
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	298	486	43			
Volume Left	0	94	8			
Volume Right	25	0	35			
cSH	1700	1264	588			
Volume to Capacity	0.18	0.07	0.07			
Queue Length 95th (ft)	0	6	6			
Control Delay (s)	0.0	2.2	11.6			
Lane LOS		A	B			
Approach Delay (s)	0.0	2.2	11.6			
Approach LOS			B			
Intersection Summary						
Average Delay		1.9				
Intersection Capacity Utilization		44.8%		ICU Level of Service	A	
Analysis Period (min)		15				



Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations							
Volume (veh/h)	97	144	154	851	1120	229	
Sign Control	Stop			Free	Free		
Grade	0%			0%	0%		
Peak Hour Factor	0.85	0.87	0.86	0.88	0.89	0.67	
Hourly flow rate (vph)	114	166	179	967	1258	342	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None	None		
Median storage veh							
Upstream signal (ft)				1092			
pX, platoon unblocked	0.91						
vC, conflicting volume	2271	800	1258				
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2198	800	1258				
tC, single (s)	6.8	6.9	4.1				
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2				
p0 queue free %	0	50	67				
cM capacity (veh/h)	23	328	548				
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	114	166	179	484	484	839	761
Volume Left	114	0	179	0	0	0	0
Volume Right	0	166	0	0	0	0	342
cSH	23	328	548	1700	1700	1700	1700
Volume to Capacity	4.88	0.50	0.33	0.28	0.28	0.49	0.45
Queue Length 95th (ft)	Err	67	35	0	0	0	0
Control Delay (s)	Err	26.7	14.7	0.0	0.0	0.0	0.0
Lane LOS	F	D	B				
Approach Delay (s)	4096.3		2.3	0.0			
Approach LOS	F						
Intersection Summary							
Average Delay			379.4				
Intersection Capacity Utilization			62.2%	ICU Level of Service		B	
Analysis Period (min)			15				

Austin Oaks Mixed Use Development
1: Hart Lane & Far West Boulevard

2018 Forecasted PM
5/7/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	43	533	38	172	500	149	59	126	133	166	84	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	170		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.989				0.850		0.940			0.976	
Flt Protected	0.950			0.950				0.991			0.974	
Satd. Flow (prot)	1770	3500	0	1770	3539	1583	0	3297	0	0	3364	0
Flt Permitted	0.344			0.406				0.991			0.974	
Satd. Flow (perm)	641	3500	0	756	3539	1583	0	3297	0	0	3364	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8				186		110			15	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		362			1265			236			237	
Travel Time (s)		7.1			24.6			5.4			5.4	
Peak Hour Factor	0.81	0.89	0.80	0.80	0.89	0.80	0.76	0.75	0.80	0.84	0.71	0.79
Adj. Flow (vph)	53	599	48	215	562	186	78	168	166	198	118	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	53	647	0	215	562	186	0	412	0	0	377	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Split	NA		Split	NA	
Protected Phases	5	2		1	6		4	4		8	8	
Permitted Phases	2			6		6						
Detector Phase	5	2		1	6	6	4	4		8	8	

Austin Oaks Mixed Use Development
1: Hart Lane & Far West Boulevard

2018 Forecasted PM
5/7/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	8.0	18.0		8.0	18.0	18.0	12.0	12.0		12.0	12.0	
Minimum Split (s)	13.0	24.0		13.0	24.0	24.0	33.0	33.0		33.0	33.0	
Total Split (s)	13.0	62.0		15.0	64.0	64.0	28.0	28.0		25.0	25.0	
Total Split (%)	10.0%	47.7%		11.5%	49.2%	49.2%	21.5%	21.5%		19.2%	19.2%	
Maximum Green (s)	8.0	57.0		10.0	59.0	59.0	23.0	23.0		20.0	20.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0		5.0			5.0	
Lead/Lag	Lead	Lead		Lag	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	
Walk Time (s)		7.0			7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		12.0			12.0	12.0	21.0	21.0		21.0	21.0	
Pedestrian Calls (#/hr)		0			0	0	0	0		0	0	
Act Effect Green (s)	64.6	64.6		67.0	67.0	67.0		17.7			19.3	
Actuated g/C Ratio	0.50	0.50		0.52	0.52	0.52		0.14			0.15	
v/c Ratio	0.14	0.37		0.47	0.31	0.21		0.76			0.73	
Control Delay	21.0	22.1		28.3	23.1	5.8		48.3			59.3	
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Delay	21.0	22.1		28.3	23.1	5.8		48.3			59.3	
LOS	C	C		C	C	A		D			E	
Approach Delay		22.0			20.9			48.3			59.3	
Approach LOS		C			C			D			E	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 20 (15%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.76

Intersection Signal Delay: 31.7

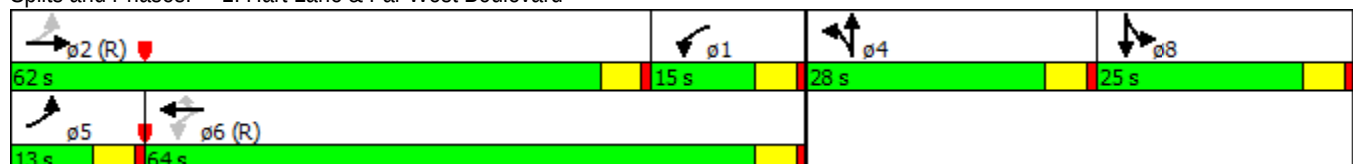
Intersection LOS: C

Intersection Capacity Utilization 62.1%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 1: Hart Lane & Far West Boulevard



Austin Oaks Mixed Use Development
2: Wood Hollow Drive & Far West Boulevard

2018 Forecasted PM
5/7/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	101	734	60	216	649	127	96	178	306	150	97	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	335		0	165		0	120		120	0		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	75			35			50			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.955	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1779	0
Flt Permitted	0.305			0.163			0.950			0.950		
Satd. Flow (perm)	568	3539	1583	304	3539	1583	1770	1863	1583	1770	1779	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			101			148			243		14	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1265			1235			599			222	
Travel Time (s)		24.6			24.1			13.6			5.0	
Peak Hour Factor	0.75	0.89	0.88	0.88	0.89	0.86	0.80	0.85	0.70	0.62	0.82	0.75
Adj. Flow (vph)	135	825	68	245	729	148	120	209	437	242	118	51
Shared Lane Traffic (%)												
Lane Group Flow (vph)	135	825	68	245	729	148	120	209	437	242	169	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	L NA	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		3	3		7	7	
Permitted Phases	6		6	2		2			3			
Detector Phase	1	6	6	5	2	2	3	3	3	7	7	

Austin Oaks Mixed Use Development
2: Wood Hollow Drive & Far West Boulevard

2018 Forecasted PM
5/7/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	8.0	8.0	8.0	5.0	5.0	
Minimum Split (s)	10.0	22.0	22.0	10.0	22.0	22.0	31.0	31.0	31.0	31.0	31.0	
Total Split (s)	20.0	68.0	68.0	16.0	64.0	64.0	20.0	20.0	20.0	26.0	26.0	
Total Split (%)	15.4%	52.3%	52.3%	12.3%	49.2%	49.2%	15.4%	15.4%	15.4%	20.0%	20.0%	
Maximum Green (s)	15.0	63.0	63.0	11.0	59.0	59.0	15.0	15.0	15.0	21.0	21.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
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	
Recall Mode	None	C-Min	C-Min	Max	C-Min	C-Min	Min	Min	Min	Max	Max	
Walk Time (s)		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		12.0	12.0		12.0	12.0	21.0	21.0	21.0	21.0	21.0	
Pedestrian Calls (#/hr)		0	0		0	0	0	0	0	0	0	
Act Effect Green (s)	39.6	39.6	39.6	35.6	35.6	35.6	34.6	34.6	34.6	24.8	24.8	
Actuated g/C Ratio	0.30	0.30	0.30	0.27	0.27	0.27	0.27	0.27	0.27	0.19	0.19	
v/c Ratio	0.43	0.77	0.12	1.18	0.75	0.27	0.25	0.42	0.73	0.72	0.48	
Control Delay	42.4	43.8	3.5	130.7	51.9	11.2	40.5	43.6	27.3	63.2	49.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	42.4	43.8	3.5	130.7	51.9	11.2	40.5	43.6	27.3	63.2	49.3	
LOS	D	D	A	F	D	B	D	D	C	E	D	
Approach Delay		41.0			63.7			33.8			57.5	
Approach LOS		D			E			C			E	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 20 (15%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 95

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.18

Intersection Signal Delay: 49.0

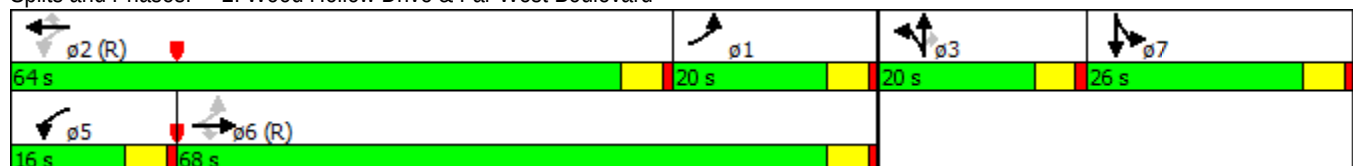
Intersection LOS: D

Intersection Capacity Utilization 66.6%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 2: Wood Hollow Drive & Far West Boulevard



Austin Oaks Mixed Use Development
3: Far West Boulevard & Mopac SB FR

2018 Forecasted PM
5/7/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑						↑↑	↑
Volume (vph)	0	1107	370	10	406	0	0	0	0	361	398	890
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									0.850
Flt Protected				0.950							0.978	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	3461	1583
Flt Permitted				0.950							0.978	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	3461	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			229									321
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		1235			406			400			362	
Travel Time (s)		24.1			7.9			5.5			4.9	
Peak Hour Factor	0.92	0.89	0.92	0.56	0.86	0.92	0.92	0.92	0.92	0.94	0.82	0.76
Adj. Flow (vph)	0	1244	402	18	472	0	0	0	0	384	485	1171
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1244	402	18	472	0	0	0	0	0	869	1171
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	L NA	Right	Left	Left	Right	Left	Left	R NA
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	custom	Prot	NA					custom	NA	custom
Protected Phases		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Permitted Phases										4		
Detector Phase		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Switch Phase												
Minimum Initial (s)				10.0								
Minimum Split (s)				15.0								

Lane Group	ø1	ø2	ø4	ø8	ø22
Lane Configurations					
Volume (vph)					
Ideal Flow (vphpl)					
Lane Util. Factor					
Frt					
Flt Protected					
Satd. Flow (prot)					
Flt Permitted					
Satd. Flow (perm)					
Right Turn on Red					
Satd. Flow (RTOR)					
Link Speed (mph)					
Link Distance (ft)					
Travel Time (s)					
Peak Hour Factor					
Adj. Flow (vph)					
Shared Lane Traffic (%)					
Lane Group Flow (vph)					
Enter Blocked Intersection					
Lane Alignment					
Median Width(ft)					
Link Offset(ft)					
Crosswalk Width(ft)					
Two way Left Turn Lane					
Headway Factor					
Turning Speed (mph)					
Number of Detectors					
Detector Template					
Leading Detector (ft)					
Trailing Detector (ft)					
Detector 1 Position(ft)					
Detector 1 Size(ft)					
Detector 1 Type					
Detector 1 Channel					
Detector 1 Extend (s)					
Detector 1 Queue (s)					
Detector 1 Delay (s)					
Detector 2 Position(ft)					
Detector 2 Size(ft)					
Detector 2 Type					
Detector 2 Channel					
Detector 2 Extend (s)					
Turn Type					
Protected Phases	1	2	4	8	22
Permitted Phases					
Detector Phase					
Switch Phase					
Minimum Initial (s)	4.0	13.0	10.0	4.0	1.0
Minimum Split (s)	9.0	18.0	15.0	9.0	6.0

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)				41.0								
Total Split (%)				31.5%								
Maximum Green (s)				36.0								
Yellow Time (s)				4.0								
All-Red Time (s)				1.0								
Lost Time Adjust (s)				0.0								
Total Lost Time (s)				5.0								
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0								
Recall Mode				Min								
Act Effect Green (s)		59.6	39.6	20.4	65.0						35.0	55.0
Actuated g/C Ratio		0.46	0.30	0.16	0.50						0.27	0.42
v/c Ratio		0.77	0.63	0.06	0.27						0.93	1.37
Control Delay		36.8	24.0	22.6	2.7						63.8	198.8
Queue Delay		49.4	0.0	0.0	0.0						0.0	0.0
Total Delay		86.2	24.0	22.6	2.7						63.8	198.8
LOS		F	C	C	A						E	F
Approach Delay		71.0			3.4						141.3	
Approach LOS		E			A						F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.37

Intersection Signal Delay: 97.4

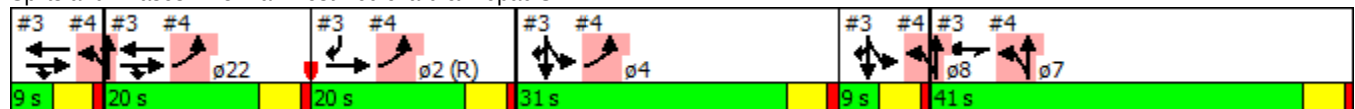
Intersection LOS: F

Intersection Capacity Utilization 95.6%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 3: Far West Boulevard & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø8	ø22
Total Split (s)	9.0	20.0	31.0	9.0	20.0
Total Split (%)	7%	15%	24%	7%	15%
Maximum Green (s)	4.0	15.0	26.0	4.0	15.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)					
Total Lost Time (s)					
Lead/Lag		Lag	Lead	Lag	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	C-Min	Min	Min	None
Act Effect Green (s)					
Actuated g/C Ratio					
v/c Ratio					
Control Delay					
Queue Delay					
Total Delay					
LOS					
Approach Delay					
Approach LOS					
Intersection Summary					

Austin Oaks Mixed Use Development
4: Mopac NB FR & Far West Boulevard

2018 Forecasted PM
5/7/2014

												
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Lane Configurations	LT		LT	LT								
Volume (vph)	1477	0	356	25	0	0						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Lane Util. Factor	0.97	1.00	0.95	0.95	1.00	1.00						
Fr												
Flt Protected	0.950		0.950	0.961								
Satd. Flow (prot)	3433	0	1681	1701	0	0						
Flt Permitted	0.950		0.950	0.961								
Satd. Flow (perm)	3433	0	1681	1701	0	0						
Right Turn on Red		Yes				Yes						
Satd. Flow (RTOR)												
Link Speed (mph)	35			50	50							
Link Distance (ft)	406			308	472							
Travel Time (s)	7.9			4.2	6.4							
Peak Hour Factor	0.85	0.92	0.81	0.55	0.92	0.92						
Adj. Flow (vph)	1738	0	440	45	0	0						
Shared Lane Traffic (%)			45%									
Lane Group Flow (vph)	1738	0	242	243	0	0						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Right	Left	Left	Left	Right						
Median Width(ft)	24			12	12							
Link Offset(ft)	0			0	0							
Crosswalk Width(ft)	16			16	16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00						
Turning Speed (mph)	15	9	15			9						
Number of Detectors	1		1	2								
Detector Template	Left		Left	Thru								
Leading Detector (ft)	20		20	100								
Trailing Detector (ft)	0		0	0								
Detector 1 Position(ft)	0		0	0								
Detector 1 Size(ft)	20		20	6								
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0								
Detector 1 Queue (s)	0.0		0.0	0.0								
Detector 1 Delay (s)	0.0		0.0	0.0								
Detector 2 Position(ft)				94								
Detector 2 Size(ft)				6								
Detector 2 Type				Cl+Ex								
Detector 2 Channel												
Detector 2 Extend (s)				0.0								
Turn Type	Prot		Split	NA								
Protected Phases	2 4 22		1 7 8	1 7 8			1	2	4	7	8	22
Permitted Phases												
Detector Phase	2 4 22		1 7 8	1 7 8								
Switch Phase												
Minimum Initial (s)							4.0	13.0	10.0	10.0	4.0	1.0
Minimum Split (s)							9.0	18.0	15.0	15.0	9.0	6.0



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Total Split (s)							9.0	20.0	31.0	41.0	9.0	20.0
Total Split (%)							7%	15%	24%	32%	7%	15%
Maximum Green (s)							4.0	15.0	26.0	36.0	4.0	15.0
Yellow Time (s)							4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)							1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag								Lag	Lead		Lag	Lead
Lead-Lag Optimize?								Yes	Yes		Yes	Yes
Vehicle Extension (s)							3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode							Min	C-Min	Min	Min	Min	None
Act Effect Green (s)	66.0		54.0	54.0								
Actuated g/C Ratio	0.51		0.42	0.42								
v/c Ratio	1.00		0.35	0.34								
Control Delay	42.4		27.8	27.7								
Queue Delay	37.7		0.0	0.0								
Total Delay	80.1		27.8	27.7								
LOS	F		C	C								
Approach Delay	80.1			27.7								
Approach LOS	F			C								

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.37

Intersection Signal Delay: 68.7

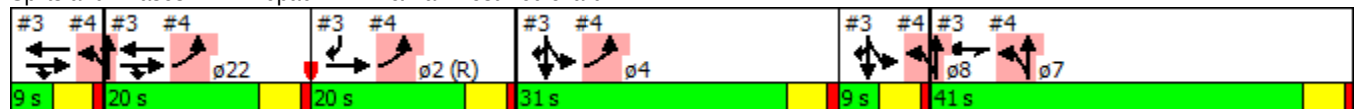
Intersection LOS: E

Intersection Capacity Utilization 108.7%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 4: Mopac NB FR & Far West Boulevard



Austin Oaks Mixed Use Development
5: Spicewood Springs Road & Mopac SB FR

2018 Forecasted PM

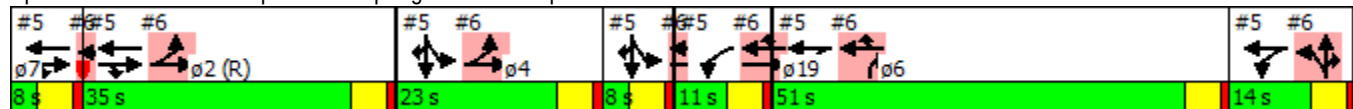
5/7/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑					↑	↑↑	↑
Volume (vph)	0	1189	292	607	1241	0	0	0	0	595	197	372
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	60		0	0		0	150		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			75			25			75		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.973	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1610	3299	1583
Flt Permitted				0.950						0.950	0.973	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1610	3299	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			160									160
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		294			386			782			882	
Travel Time (s)		5.7			7.5			10.7			12.0	
Peak Hour Factor	0.92	0.90	0.90	0.81	0.83	0.92	0.92	0.92	0.92	0.94	0.78	0.80
Adj. Flow (vph)	0	1321	324	749	1495	0	0	0	0	633	253	465
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	1321	324	749	1495	0	0	0	0	316	570	465
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Prot	Prot	NA					Split	NA	Prot
Protected Phases		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5
Permitted Phases												
Detector Phase		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effct Green (s)	38.0	38.0	71.0	103.0					26.0	26.0	26.0	
Actuated g/C Ratio	0.25	0.25	0.47	0.69					0.17	0.17	0.17	
v/c Ratio	1.47	0.62	0.89	0.62					1.13	1.09dl	1.15	
Control Delay	255.6	28.8	39.1	10.4					148.5	98.3	125.6	
Queue Delay	0.6	0.2	39.2	28.0					0.0	0.0	0.0	
Total Delay	256.1	29.0	78.3	38.4					148.5	98.3	125.6	
LOS	F	C	E	D					F	F	F	
Approach Delay	211.4			51.7						119.4		
Approach LOS	F			D						F		
Intersection Summary												
Area Type:	Other											
Cycle Length: 150												
Actuated Cycle Length: 150												
Offset: 89 (59%), Referenced to phase 2:EBWB, Start of Green												
Natural Cycle: 120												
Control Type: Actuated-Coordinated												
Maximum v/c Ratio: 1.52												
Intersection Signal Delay: 119.3							Intersection LOS: F					
Intersection Capacity Utilization 112.3%							ICU Level of Service H					
Analysis Period (min) 15												
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												

Splits and Phases: 5: Spicewood Springs Road & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0	5.0	6.0
Minimum Split (s)	8.0	15.0	10.0	8.0	15.0	10.0	11.0
Total Split (s)	8.0	35.0	23.0	8.0	51.0	14.0	11.0
Total Split (%)	5%	23%	15%	5%	34%	9%	7%
Maximum Green (s)	3.0	30.0	18.0	3.0	46.0	9.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Austin Oaks Mixed Use Development
6: Mopac NB FR & Spicewood Springs Road

2018 Forecasted PM
5/7/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 				
Volume (vph)	478	1041	0	0	1091	417	256	41	535	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		325	0		0	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	75			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.91	0.95	1.00	1.00	1.00
Flt						0.850		0.887	0.850			
Flt Protected	0.950						0.950	0.996				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	1681	1498	1504	0	0	0
Flt Permitted	0.950						0.950	0.996				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	1681	1498	1504	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						236		83	160			
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		386			594			563			407	
Travel Time (s)		7.5			11.6			7.7			5.6	
Peak Hour Factor	0.90	0.86	0.92	0.92	0.90	0.95	0.80	0.73	0.87	0.92	0.92	0.92
Adj. Flow (vph)	531	1210	0	0	1212	439	320	56	615	0	0	0
Shared Lane Traffic (%)							10%		44%			
Lane Group Flow (vph)	531	1210	0	0	1212	439	288	359	344	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Prot	Split	NA	custom			
Protected Phases	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			
Permitted Phases												
Detector Phase	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)	53.0	72.0			65.0	65.0	17.0	17.0	60.0			
Actuated g/C Ratio	0.35	0.48			0.43	0.43	0.11	0.11	0.40			
v/c Ratio	0.85	0.71			0.79	0.54	1.52	1.48	0.49			
Control Delay	23.5	0.6			41.3	16.2	299.6	268.9	19.8			
Queue Delay	51.3	39.0			7.0	0.0	0.0	0.3	0.0			
Total Delay	74.8	39.6			48.3	16.2	299.6	269.2	19.8			
LOS	E	D			D	B	F	F	B			
Approach Delay		50.4			39.7			191.4				
Approach LOS		D			D			F				

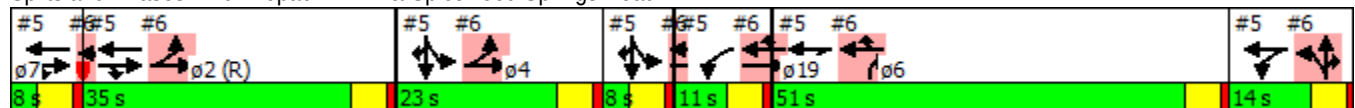
Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 89 (59%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.52
Intersection Signal Delay: 78.3
Intersection Capacity Utilization 112.3%
Analysis Period (min) 15

Intersection LOS: E

ICU Level of Service H

Splits and Phases: 6: Mopac NB FR & Spicewood Springs Road



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0	5.0	6.0
Minimum Split (s)	8.0	15.0	10.0	8.0	15.0	10.0	11.0
Total Split (s)	8.0	35.0	23.0	8.0	51.0	14.0	11.0
Total Split (%)	5%	23%	15%	5%	34%	9%	7%
Maximum Green (s)	3.0	30.0	18.0	3.0	46.0	9.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Austin Oaks Mixed Use Development
7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road

2018 Forecasted PM

5/7/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	5	929	27	103	754	1	175	8	268	1	4	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	0		100	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.999				0.850		0.916	
Flt Protected	0.950			0.950				0.956			0.995	
Satd. Flow (prot)	1770	5060	0	1770	3536	0	0	1781	1583	0	1698	0
Flt Permitted	0.329			0.152				0.744			0.973	
Satd. Flow (perm)	613	5060	0	283	3536	0	0	1386	1583	0	1660	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5							200		26	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		480			275			522			161	
Travel Time (s)		9.4			5.4			11.9			3.7	
Peak Hour Factor	0.62	0.82	0.69	0.95	0.88	0.25	0.71	0.35	0.74	0.25	0.33	0.54
Adj. Flow (vph)	8	1133	39	108	857	4	246	23	362	4	12	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	8	1172	0	108	861	0	0	269	362	0	42	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2			6			4		4	8		
Detector Phase	5	2		1	6		4	4	4	8	8	

Austin Oaks Mixed Use Development
7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road

2018 Forecasted PM
5/7/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	20.0		21.0	20.0		15.0	15.0	15.0	11.0	11.0	
Minimum Split (s)	10.0	25.0		26.0	25.0		35.0	35.0	35.0	35.0	35.0	
Total Split (s)	29.0	82.0		34.0	87.0		34.0	34.0	34.0	34.0	34.0	
Total Split (%)	19.3%	54.7%		22.7%	58.0%		22.7%	22.7%	22.7%	22.7%	22.7%	
Maximum Green (s)	24.0	77.0		29.0	82.0		29.0	29.0	29.0	29.0	29.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0			5.0	5.0		5.0	
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min		Min	C-Min		Min	Min	Min	Min	Min	
Walk Time (s)							6.0	6.0	6.0	6.0	6.0	
Flash Dont Walk (s)							24.0	24.0	24.0	24.0	24.0	
Pedestrian Calls (#/hr)							0	0	0	0	0	
Act Effect Green (s)	74.9	74.9		95.0	95.0		39.1	39.1			39.1	
Actuated g/C Ratio	0.50	0.50		0.63	0.63		0.26	0.26			0.26	
v/c Ratio	0.02	0.46		0.28	0.38		0.75	0.65			0.09	
Control Delay	21.4	25.5		13.1	12.1		64.0	26.5			20.3	
Queue Delay	0.0	0.6		0.0	0.2		0.0	3.2			0.0	
Total Delay	21.4	26.2		13.1	12.3		64.0	29.7			20.3	
LOS	C	C		B	B		E	C			C	
Approach Delay		26.1			12.4		44.3				20.3	
Approach LOS		C			B		D				C	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 55 (37%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.75

Intersection Signal Delay: 25.4

Intersection LOS: C

Intersection Capacity Utilization 65.3%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road



Austin Oaks Mixed Use Development
10: Hart Lane & Greystone Drive

2018 Forecasted PM
5/7/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	32	69	49	80	123	53	87	203	53	11	132	56
Peak Hour Factor	0.68	0.75	0.66	0.73	0.91	0.82	0.88	0.83	0.88	0.50	0.80	0.65
Hourly flow rate (vph)	47	92	74	110	135	65	99	245	60	22	165	86
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	139	74	245	65	404	273						
Volume Left (vph)	47	0	110	0	99	22						
Volume Right (vph)	0	74	0	65	60	86						
Hadj (s)	0.20	-0.67	0.26	-0.67	-0.01	-0.14						
Departure Headway (s)	7.6	6.7	7.4	6.5	6.2	6.4						
Degree Utilization, x	0.29	0.14	0.50	0.12	0.69	0.48						
Capacity (veh/h)	414	461	452	510	556	515						
Control Delay (s)	12.6	9.6	16.5	9.1	22.0	15.1						
Approach Delay (s)	11.5		15.0		22.0	15.1						
Approach LOS	B		B		C	C						
Intersection Summary												
Delay			16.8									
Level of Service			C									
Intersection Capacity Utilization			59.3%	ICU Level of Service				B				
Analysis Period (min)			15									

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	36	71	51	90	229	60	80	223	72	26	123	28
Peak Hour Factor	0.67	0.82	0.59	0.74	0.78	0.78	0.84	0.90	0.80	0.66	0.87	0.60
Hourly flow rate (vph)	54	87	86	122	294	77	95	248	90	39	141	47
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2				
Volume Total (vph)	140	86	415	77	219	214	110	117				
Volume Left (vph)	54	0	122	0	95	0	39	0				
Volume Right (vph)	0	86	0	77	0	90	0	47				
Hadj (s)	0.23	-0.67	0.18	-0.67	0.25	-0.26	0.21	-0.24				
Departure Headway (s)	7.6	6.7	7.1	6.2	7.4	6.9	7.7	7.3				
Degree Utilization, x	0.30	0.16	0.82	0.13	0.45	0.41	0.24	0.24				
Capacity (veh/h)	446	501	500	555	460	501	438	465				
Control Delay (s)	12.6	9.8	33.1	9.0	15.1	13.4	11.9	11.3				
Approach Delay (s)	11.5		29.3		14.3		11.6					
Approach LOS	B		D		B		B					
Intersection Summary												
Delay			18.7									
Level of Service			C									
Intersection Capacity Utilization			51.9%	ICU Level of Service					A			
Analysis Period (min)			15									



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations					  	
Volume (veh/h)	0	177	0	0	1634	347
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.72	0.92	0.92	0.86	0.84
Hourly flow rate (vph)	0	246	0	0	1900	413
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2107	840	2313			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2107	840	2313			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	20	100			
cM capacity (veh/h)	44	309	213			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	246	760	760	793		
Volume Left	0	0	0	0		
Volume Right	246	0	0	413		
cSH	309	1700	1700	1700		
Volume to Capacity	0.80	0.45	0.45	0.47		
Queue Length 95th (ft)	161	0	0	0		
Control Delay (s)	50.1	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	50.1	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay			4.8			
Intersection Capacity Utilization			56.9%		ICU Level of Service	B
Analysis Period (min)			15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	177	0	0	1934	33
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.80	0.92	0.92	0.89	0.72
Hourly flow rate (vph)	0	221	0	0	2173	46
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2196	747	2219			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2196	747	2219			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	38	100			
cM capacity (veh/h)	38	355	232			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	221	869	869	480		
Volume Left	0	0	0	0		
Volume Right	221	0	0	46		
cSH	355	1700	1700	1700		
Volume to Capacity	0.62	0.51	0.51	0.28		
Queue Length 95th (ft)	100	0	0	0		
Control Delay (s)	30.5	0.0	0.0	0.0		
Lane LOS	D					
Approach Delay (s)	30.5	0.0				
Approach LOS	D					
Intersection Summary						
Average Delay			2.8			
Intersection Capacity Utilization			55.7%		ICU Level of Service	B
Analysis Period (min)			15			

Austin Oaks Mixed Use Development
50: Executive Center Drive & Wood Hollow Drive

2018 Forecasted PM
5/7/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	10	278	6	14	126	16	64	57	25	19	13	107
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.35	0.81	0.38	0.65	0.89	0.54	0.81	0.58	0.52	0.38	0.60	0.61
Hourly flow rate (vph)	29	343	16	22	142	30	79	98	48	50	22	175
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh												
Upstream signal (ft)					522							
pX, platoon unblocked	0.99						0.99	0.99		0.99	0.99	0.99
vC, conflicting volume	171			359			794	623	351	705	616	156
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	162			359			789	616	351	699	609	147
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			98			65	75	93	80	94	80
cM capacity (veh/h)	1407			1200			229	388	692	256	391	894
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	388	193	225	247								
Volume Left	29	22	79	50								
Volume Right	16	30	48	175								
cSH	1407	1200	337	553								
Volume to Capacity	0.02	0.02	0.67	0.45								
Queue Length 95th (ft)	2	1	114	57								
Control Delay (s)	0.7	1.0	34.7	16.7								
Lane LOS	A	A	D	C								
Approach Delay (s)	0.7	1.0	34.7	16.7								
Approach LOS			D	C								
Intersection Summary												
Average Delay			11.8									
Intersection Capacity Utilization			38.7%		ICU Level of Service				A			
Analysis Period (min)			15									

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	269	9	17	196	19	92
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.75	0.50	0.70	0.85	0.64	0.58
Hourly flow rate (vph)	359	18	24	231	30	159
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			377		647	368
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			377		647	368
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			98		93	77
cM capacity (veh/h)			1182		427	678
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	377	255	188			
Volume Left	0	24	30			
Volume Right	18	0	159			
cSH	1700	1182	620			
Volume to Capacity	0.22	0.02	0.30			
Queue Length 95th (ft)	0	2	32			
Control Delay (s)	0.0	0.9	13.3			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.9	13.3			
Approach LOS			B			
Intersection Summary						
Average Delay		3.4				
Intersection Capacity Utilization		37.8%		ICU Level of Service	A	
Analysis Period (min)		15				



Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations							
Volume (veh/h)	201	213	119	1103	809	114	
Sign Control	Stop			Free	Free		
Grade	0%			0%	0%		
Peak Hour Factor	0.78	0.69	0.88	0.96	0.88	0.90	
Hourly flow rate (vph)	258	309	135	1149	919	127	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None	None		
Median storage veh							
Upstream signal (ft)				1092			
pX, platoon unblocked	0.89						
vC, conflicting volume	1828	523	919				
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1682	523	919				
tC, single (s)	6.8	6.9	4.1				
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2				
p0 queue free %	0	38	82				
cM capacity (veh/h)	62	499	738				
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	258	309	135	574	574	613	433
Volume Left	258	0	135	0	0	0	0
Volume Right	0	309	0	0	0	0	127
cSH	62	499	738	1700	1700	1700	1700
Volume to Capacity	4.16	0.62	0.18	0.34	0.34	0.36	0.25
Queue Length 95th (ft)	Err	104	17	0	0	0	0
Control Delay (s)	Err	23.2	11.0	0.0	0.0	0.0	0.0
Lane LOS	F	C	B				
Approach Delay (s)	4562.0		1.2			0.0	
Approach LOS	F						
Intersection Summary							
Average Delay			892.5				
Intersection Capacity Utilization			53.7%		ICU Level of Service		A
Analysis Period (min)			15				

Austin Oaks Mixed Use Development
1: Hart Lane & Far West Boulevard

2018 Site+Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	54	714	86	198	280	70	49	132	157	205	255	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	170		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.979				0.850		0.931			0.987	
Flt Protected	0.950			0.950				0.993			0.985	
Satd. Flow (prot)	1770	3465	0	1770	3539	1583	0	3272	0	0	3441	0
Flt Permitted	0.426			0.134				0.993			0.985	
Satd. Flow (perm)	794	3465	0	250	3539	1583	0	3272	0	0	3441	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16				101		140			7	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		362			1265			236			237	
Travel Time (s)		7.1			24.6			5.4			5.4	
Peak Hour Factor	0.73	0.83	0.61	0.69	0.83	0.85	0.80	0.80	0.82	0.90	0.56	0.47
Adj. Flow (vph)	74	860	141	287	337	82	61	165	191	228	455	66
Shared Lane Traffic (%)												
Lane Group Flow (vph)	74	1001	0	287	337	82	0	417	0	0	749	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Split	NA		Split	NA	
Protected Phases	5	2		1	6		4	4		8	8	
Permitted Phases	2			6		6						
Detector Phase	5	2		1	6	6	4	4		8	8	

Austin Oaks Mixed Use Development
1: Hart Lane & Far West Boulevard

2018 Site+Forecasted AM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	8.0	18.0		8.0	18.0	18.0	12.0	12.0		12.0	12.0	
Minimum Split (s)	13.0	23.0		13.0	23.0	23.0	17.0	17.0		17.0	17.0	
Total Split (s)	13.0	52.0		22.0	61.0	61.0	26.0	26.0		30.0	30.0	
Total Split (%)	10.0%	40.0%		16.9%	46.9%	46.9%	20.0%	20.0%		23.1%	23.1%	
Maximum Green (s)	8.0	47.0		17.0	56.0	56.0	21.0	21.0		25.0	25.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0		5.0			5.0	
Lead/Lag	Lead	Lead		Lag	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	
Walk Time (s)		7.0			7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		12.0			12.0	12.0	21.0	21.0		21.0	21.0	
Pedestrian Calls (#/hr)		0			0	0	0	0		0	0	
Act Effect Green (s)	44.1	44.1		55.6	55.6	55.6		16.8			32.2	
Actuated g/C Ratio	0.34	0.34		0.43	0.43	0.43		0.13			0.25	
v/c Ratio	0.22	0.84		0.94	0.22	0.11		0.77			0.88	
Control Delay	30.6	46.5		103.6	44.5	17.9		45.4			59.7	
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Delay	30.6	46.5		103.6	44.5	17.9		45.4			59.7	
LOS	C	D		F	D	B		D			E	
Approach Delay		45.4			65.4			45.4			59.7	
Approach LOS		D			E			D			E	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 100 (77%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.94

Intersection Signal Delay: 53.8

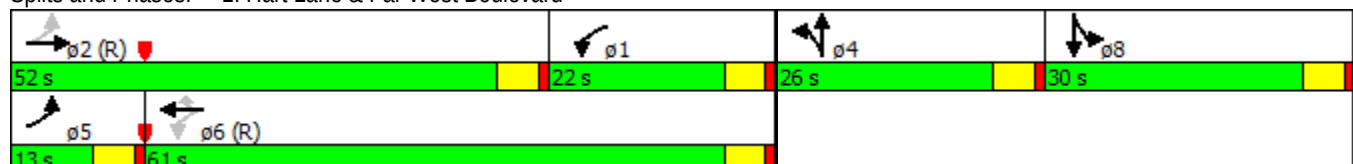
Intersection LOS: D

Intersection Capacity Utilization 74.2%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 1: Hart Lane & Far West Boulevard



Austin Oaks Mixed Use Development
2: Wood Hollow Drive & Far West Boulevard

2018 Site+Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	127	1013	45	112	549	94	24	107	281	256	125	68
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	335		0	165		0	120		120	0		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	75			35			50			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.945	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1760	0
Flt Permitted	0.391			0.202			0.950			0.950		
Satd. Flow (perm)	728	3539	1583	376	3539	1583	1770	1863	1583	1770	1760	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			101			116			195		19	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1265			1235			599			222	
Travel Time (s)		24.6			24.1			13.6			5.0	
Peak Hour Factor	0.74	0.91	0.58	0.90	0.88	0.81	0.69	0.65	0.87	0.90	0.81	0.77
Adj. Flow (vph)	172	1113	78	124	624	116	35	165	323	284	154	88
Shared Lane Traffic (%)												
Lane Group Flow (vph)	172	1113	78	124	624	116	35	165	323	284	242	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	L NA	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		3	3		7	7	
Permitted Phases	6		6	2		2			3			
Detector Phase	1	6	6	5	2	2	3	3	3	7	7	

Austin Oaks Mixed Use Development
2: Wood Hollow Drive & Far West Boulevard

2018 Site+Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	8.0	8.0	8.0	5.0	5.0	
Minimum Split (s)	11.0	40.0	40.0	12.0	40.0	40.0	15.0	15.0	15.0	15.0	15.0	
Total Split (s)	16.0	67.0	67.0	16.0	67.0	67.0	19.0	19.0	19.0	28.0	28.0	
Total Split (%)	12.3%	51.5%	51.5%	12.3%	51.5%	51.5%	14.6%	14.6%	14.6%	21.5%	21.5%	
Maximum Green (s)	11.0	62.0	62.0	11.0	62.0	62.0	14.0	14.0	14.0	23.0	23.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
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	
Recall Mode	None	C-Min	C-Min	Max	C-Min	C-Min	Min	Min	Min	Max	Max	
Walk Time (s)		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		12.0	12.0		12.0	12.0	21.0	21.0	21.0	21.0	21.0	
Pedestrian Calls (#/hr)		0	0		0	0	0	0	0	0	0	
Act Effect Green (s)	51.6	51.6	51.6	30.8	30.8	30.8	17.5	17.5	17.5	29.9	29.9	
Actuated g/C Ratio	0.40	0.40	0.40	0.24	0.24	0.24	0.13	0.13	0.13	0.23	0.23	
v/c Ratio	0.32	0.79	0.11	0.60	0.75	0.25	0.15	0.66	0.85	0.70	0.58	
Control Delay	32.5	39.4	4.1	50.2	51.9	9.8	50.7	66.2	41.6	58.2	49.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	32.5	39.4	4.1	50.2	51.9	9.8	50.7	66.2	41.6	58.2	49.5	
LOS	C	D	A	D	D	A	D	E	D	E	D	
Approach Delay		36.5			46.0			49.9			54.2	
Approach LOS		D			D			D			D	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 10 (8%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 44.0

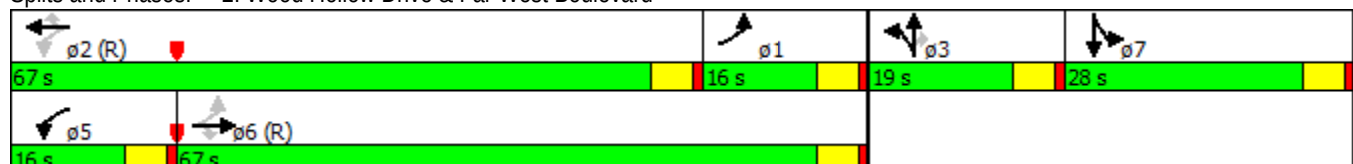
Intersection LOS: D

Intersection Capacity Utilization 72.1%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 2: Wood Hollow Drive & Far West Boulevard



Austin Oaks Mixed Use Development
3: Far West Boulevard & Mopac SB FR

2018 Site+Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑						↑↑	↑
Volume (vph)	0	771	437	17	508	0	0	0	0	129	533	855
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									0.850
Flt Protected				0.950							0.989	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	3500	1583
Flt Permitted				0.950							0.989	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	3500	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			394									136
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		1235			406			400			362	
Travel Time (s)		24.1			7.9			5.5			4.9	
Peak Hour Factor	0.92	0.91	0.93	0.67	0.93	0.92	0.92	0.92	0.92	0.78	0.92	0.95
Adj. Flow (vph)	0	847	470	25	546	0	0	0	0	165	579	900
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	847	470	25	546	0	0	0	0	0	744	900
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	L NA	Right	Left	Left	Right	Left	Left	R NA
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	custom	Prot	NA					custom	NA	custom
Protected Phases		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Permitted Phases										4		
Detector Phase		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Switch Phase												
Minimum Initial (s)				10.0								
Minimum Split (s)				15.0								

Lane Group	ø1	ø2	ø4	ø8	ø22
Lane Configurations					
Volume (vph)					
Ideal Flow (vphpl)					
Lane Util. Factor					
Frt					
Flt Protected					
Satd. Flow (prot)					
Flt Permitted					
Satd. Flow (perm)					
Right Turn on Red					
Satd. Flow (RTOR)					
Link Speed (mph)					
Link Distance (ft)					
Travel Time (s)					
Peak Hour Factor					
Adj. Flow (vph)					
Shared Lane Traffic (%)					
Lane Group Flow (vph)					
Enter Blocked Intersection					
Lane Alignment					
Median Width(ft)					
Link Offset(ft)					
Crosswalk Width(ft)					
Two way Left Turn Lane					
Headway Factor					
Turning Speed (mph)					
Number of Detectors					
Detector Template					
Leading Detector (ft)					
Trailing Detector (ft)					
Detector 1 Position(ft)					
Detector 1 Size(ft)					
Detector 1 Type					
Detector 1 Channel					
Detector 1 Extend (s)					
Detector 1 Queue (s)					
Detector 1 Delay (s)					
Detector 2 Position(ft)					
Detector 2 Size(ft)					
Detector 2 Type					
Detector 2 Channel					
Detector 2 Extend (s)					
Turn Type					
Protected Phases	1	2	4	8	22
Permitted Phases					
Detector Phase					
Switch Phase					
Minimum Initial (s)	4.0	10.0	10.0	4.0	1.0
Minimum Split (s)	9.0	15.0	25.0	9.0	20.0

Austin Oaks Mixed Use Development
3: Far West Boulevard & Mopac SB FR

2018 Site+Forecasted AM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)				21.0								
Total Split (%)				16.2%								
Maximum Green (s)				16.0								
Yellow Time (s)				4.0								
All-Red Time (s)				1.0								
Lost Time Adjust (s)				0.0								
Total Lost Time (s)				5.0								
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0								
Recall Mode				Min								
Act Effct Green (s)	49.0		24.0	16.0	45.0						50.0	75.0
Actuated g/C Ratio	0.38		0.18	0.12	0.35						0.38	0.58
v/c Ratio	0.64		0.77	0.12	0.45						0.55	0.93
Control Delay	36.0		20.1	53.5	0.6						35.5	34.9
Queue Delay	0.2		0.0	0.0	0.9						0.0	0.0
Total Delay	36.2		20.1	53.5	1.6						35.5	34.9
LOS	D		C	D	A						D	C
Approach Delay	30.4					3.8					35.2	
Approach LOS	C					A					D	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 106 (82%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 95

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.98

Intersection Signal Delay: 28.3

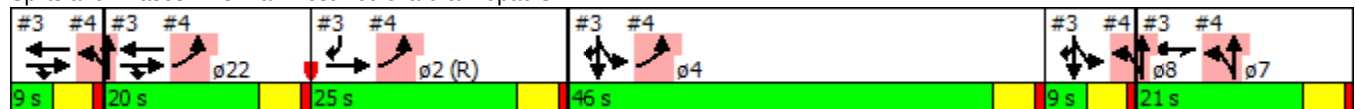
Intersection LOS: C

Intersection Capacity Utilization 96.0%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 3: Far West Boulevard & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø8	ø22
Total Split (s)	9.0	25.0	46.0	9.0	20.0
Total Split (%)	7%	19%	35%	7%	15%
Maximum Green (s)	4.0	20.0	41.0	4.0	15.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)					
Total Lost Time (s)					
Lead/Lag		Lag	Lead	Lag	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	C-Min	Min	Min	None
Act Effect Green (s)					
Actuated g/C Ratio					
v/c Ratio					
Control Delay					
Queue Delay					
Total Delay					
LOS					
Approach Delay					
Approach LOS					
Intersection Summary					

Austin Oaks Mixed Use Development
4: Mopac NB FR & Far West Boulevard

2018 Site+Forecasted AM

5/15/2014

												
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Lane Configurations	LT	LT	LT	LT	LT	LT						
Volume (vph)	916	0	526	78	0	0						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Lane Util. Factor	0.97	1.00	0.95	0.95	1.00	1.00						
Fr												
Flt Protected	0.950		0.950	0.985								
Satd. Flow (prot)	3433	0	1681	1743	0	0						
Flt Permitted	0.950		0.950	0.985								
Satd. Flow (perm)	3433	0	1681	1743	0	0						
Right Turn on Red		Yes				Yes						
Satd. Flow (RTOR)												
Link Speed (mph)	35			50	50							
Link Distance (ft)	406			308	472							
Travel Time (s)	7.9			4.2	6.4							
Peak Hour Factor	0.90	0.92	0.93	0.25	0.92	0.92						
Adj. Flow (vph)	1018	0	566	312	0	0						
Shared Lane Traffic (%)			24%									
Lane Group Flow (vph)	1018	0	430	448	0	0						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Right	Left	Left	Left	Right						
Median Width(ft)	24			12	12							
Link Offset(ft)	0			0	0							
Crosswalk Width(ft)	16			16	16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00						
Turning Speed (mph)	15	9	15			9						
Number of Detectors	1		1	2								
Detector Template	Left		Left	Thru								
Leading Detector (ft)	20		20	100								
Trailing Detector (ft)	0		0	0								
Detector 1 Position(ft)	0		0	0								
Detector 1 Size(ft)	20		20	6								
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0								
Detector 1 Queue (s)	0.0		0.0	0.0								
Detector 1 Delay (s)	0.0		0.0	0.0								
Detector 2 Position(ft)				94								
Detector 2 Size(ft)				6								
Detector 2 Type				Cl+Ex								
Detector 2 Channel												
Detector 2 Extend (s)				0.0								
Turn Type	Prot		Split	NA								
Protected Phases	2 4 22		1 7 8	1 7 8			1	2	4	7	8	22
Permitted Phases												
Detector Phase	2 4 22		1 7 8	1 7 8								
Switch Phase												
Minimum Initial (s)							4.0	10.0	10.0	10.0	4.0	1.0
Minimum Split (s)							9.0	15.0	25.0	15.0	9.0	20.0



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Total Split (s)							9.0	25.0	46.0	21.0	9.0	20.0
Total Split (%)							7%	19%	35%	16%	7%	15%
Maximum Green (s)							4.0	20.0	41.0	16.0	4.0	15.0
Yellow Time (s)							4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)							1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag								Lag	Lead		Lag	Lead
Lead-Lag Optimize?								Yes	Yes		Yes	Yes
Vehicle Extension (s)							3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode							Min	C-Min	Min	Min	Min	None
Act Effect Green (s)	86.0		34.0	34.0								
Actuated g/C Ratio	0.66		0.26	0.26								
v/c Ratio	0.45		0.98	0.98								
Control Delay	2.7		85.9	86.4								
Queue Delay	0.6		0.0	0.0								
Total Delay	3.4		85.9	86.4								
LOS	A		F	F								
Approach Delay	3.4			86.2								
Approach LOS	A			F								

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 106 (82%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 95

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.98

Intersection Signal Delay: 41.7

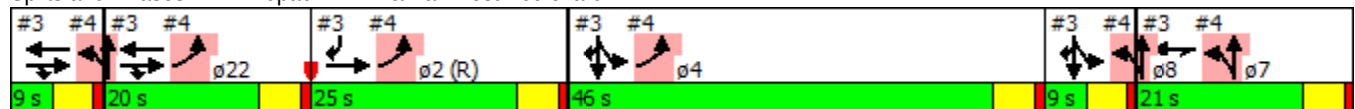
Intersection LOS: D

Intersection Capacity Utilization 109.1%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 4: Mopac NB FR & Far West Boulevard



Austin Oaks Mixed Use Development
5: Spicewood Springs Road & Mopac SB FR

2018 Site+Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑					↑	↑↑	↑
Volume (vph)	0	954	637	631	1027	0	0	0	0	350	1203	653
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	60		0	0		0	150		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			75			25			75		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.999	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1610	3387	1583
Flt Permitted				0.950						0.950	0.999	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1610	3387	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			185									185
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		294			386			782			882	
Travel Time (s)		5.7			7.5			10.7			12.0	
Peak Hour Factor	0.92	0.81	0.90	0.87	0.86	0.92	0.92	0.92	0.92	0.93	0.87	0.94
Adj. Flow (vph)	0	1178	708	725	1194	0	0	0	0	376	1383	695
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	0	1178	708	725	1194	0	0	0	0	338	1421	695
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Prot	Prot	NA					Split	NA	Prot
Protected Phases		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5
Permitted Phases												
Detector Phase		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

Austin Oaks Mixed Use Development
5: Spicewood Springs Road & Mopac SB FR

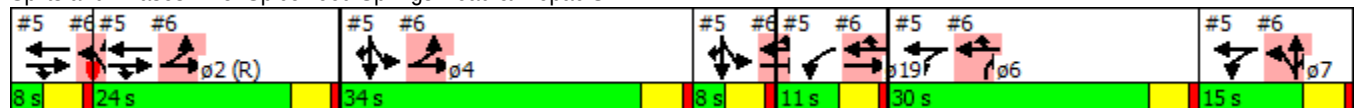
2018 Site+Forecasted AM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)		27.0	27.0	51.0	72.0					37.0	37.0	37.0
Actuated g/C Ratio		0.21	0.21	0.39	0.55					0.28	0.28	0.28
v/c Ratio		1.60	1.49	1.04	0.61					0.74	1.48	1.19
Control Delay		306.8	256.1	62.8	7.8					53.2	254.1	133.8
Queue Delay		0.3	0.0	22.0	49.6					0.0	0.0	0.0
Total Delay		307.1	256.1	84.8	57.4					53.2	254.1	133.8
LOS		F	F	F	E					D	F	F
Approach Delay		288.0			67.7						192.4	
Approach LOS		F			E						F	

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 8 (6%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.67
Intersection Signal Delay: 183.0 Intersection LOS: F
Intersection Capacity Utilization 115.8% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 5: Spicewood Springs Road & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0	5.0	6.0
Minimum Split (s)	8.0	10.0	10.0	8.0	10.0	10.0	11.0
Total Split (s)	8.0	24.0	34.0	8.0	30.0	15.0	11.0
Total Split (%)	6%	18%	26%	6%	23%	12%	8%
Maximum Green (s)	3.0	19.0	29.0	3.0	25.0	10.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Austin Oaks Mixed Use Development
6: Mopac NB FR & Spicewood Springs Road

2018 Site+Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	320	882	0	0	1026	239	439	13	503	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		325	0		0	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	75			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.91	0.95	1.00	1.00	1.00
Frt						0.850		0.909	0.850			
Flt Protected	0.950						0.950	0.984				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	1681	1516	1504	0	0	0
Flt Permitted	0.950						0.950	0.984				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	1681	1516	1504	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						303		50	185			
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		386			594			563			407	
Travel Time (s)		7.5			11.6			7.7			5.6	
Peak Hour Factor	0.90	0.96	0.92	0.92	0.93	0.79	0.86	0.60	0.87	0.92	0.92	0.92
Adj. Flow (vph)	356	919	0	0	1103	303	510	22	578	0	0	0
Shared Lane Traffic (%)							24%		39%			
Lane Group Flow (vph)	356	919	0	0	1103	303	388	369	353	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Prot	Split	NA	custom			
Protected Phases	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			
Permitted Phases												
Detector Phase	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			

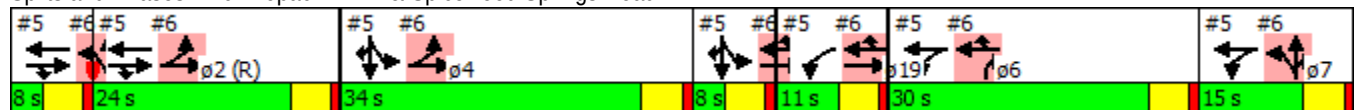
Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)	53.0	72.0			44.0	44.0	18.0	18.0	40.0			
Actuated g/C Ratio	0.41	0.55			0.34	0.34	0.14	0.14	0.31			
v/c Ratio	0.49	0.47			0.92	0.41	1.67	1.46	0.60			
Control Delay	6.1	0.8			54.6	5.1	355.2	263.3	22.2			
Queue Delay	7.0	6.8			45.9	0.0	0.0	0.2	0.0			
Total Delay	13.1	7.5			100.4	5.1	355.2	263.5	22.2			
LOS	B	A			F	A	F	F	C			
Approach Delay		9.1			79.9			218.8				
Approach LOS		A			E			F				

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 8 (6%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.67
Intersection Signal Delay: 96.8
Intersection LOS: F
Intersection Capacity Utilization 115.8%
ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 6: Mopac NB FR & Spicewood Springs Road



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0	5.0	6.0
Minimum Split (s)	8.0	10.0	10.0	8.0	10.0	10.0	11.0
Total Split (s)	8.0	24.0	34.0	8.0	30.0	15.0	11.0
Total Split (%)	6%	18%	26%	6%	23%	12%	8%
Maximum Green (s)	3.0	19.0	29.0	3.0	25.0	10.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Austin Oaks Mixed Use Development
7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road

2018 Site+Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	1043	162	520	740	11	69	4	216	6	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	0		100	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.986			0.996				0.850		0.977	
Flt Protected	0.950			0.950				0.955			0.960	
Satd. Flow (prot)	1770	5014	0	1770	3525	0	0	1779	1583	0	1747	0
Flt Permitted	0.341			0.090				0.731			0.806	
Satd. Flow (perm)	635	5014	0	168	3525	0	0	1362	1583	0	1467	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19			3				307		101	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1093			275			251			161	
Travel Time (s)		21.3			5.4			5.7			3.7	
Peak Hour Factor	0.72	0.50	0.76	0.50	0.92	0.50	0.91	0.85	0.62	0.58	0.90	0.84
Adj. Flow (vph)	11	2086	213	1040	804	22	76	5	348	10	0	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	2299	0	1040	826	0	0	81	348	0	12	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2			6			4		4	8		
Detector Phase	5	2		1	6		4	4	4	8	8	

Austin Oaks Mixed Use Development
7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road

2018 Site+Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	20.0		21.0	20.0		15.0	15.0	15.0	11.0	11.0	
Minimum Split (s)	10.0	25.0		26.0	25.0		20.0	20.0	20.0	16.0	16.0	
Total Split (s)	29.0	72.0		29.0	72.0		29.0	29.0	29.0	29.0	29.0	
Total Split (%)	22.3%	55.4%		22.3%	55.4%		22.3%	22.3%	22.3%	22.3%	22.3%	
Maximum Green (s)	24.0	67.0		24.0	67.0		24.0	24.0	24.0	24.0	24.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0			5.0	5.0		5.0	
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min		Min	C-Min		Min	Min	Min	Min	Min	
Walk Time (s)							6.0	6.0	6.0	6.0	6.0	
Flash Dont Walk (s)							24.0	24.0	24.0	24.0	24.0	
Pedestrian Calls (#/hr)							0	0	0	0	0	
Act Effect Green (s)	70.2	67.0		79.2	78.4			16.9	16.9		16.9	
Actuated g/C Ratio	0.54	0.52		0.61	0.60			0.13	0.13		0.13	
v/c Ratio	0.02	0.89		2.14	0.39			0.46	0.74		0.04	
Control Delay	14.9	33.2		541.6	23.1			60.4	18.8		0.3	
Queue Delay	0.0	0.0		0.0	0.4			0.0	0.0		0.0	
Total Delay	14.9	33.2		541.6	23.5			60.4	18.8		0.3	
LOS	B	C		F	C			E	B		A	
Approach Delay		33.1			312.3			26.7			0.3	
Approach LOS		C			F			C			A	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 55 (42%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 2.14

Intersection Signal Delay: 145.2

Intersection LOS: F

Intersection Capacity Utilization 77.6%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road



Austin Oaks Mixed Use Development
10: Hart Lane & Greystone Drive

2018 Site+Forecasted AM
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	38	180	132	79	68	8	49	147	33	15	270	28
Peak Hour Factor	0.80	0.65	0.65	0.78	0.88	0.58	0.75	0.81	0.60	0.58	0.69	0.57
Hourly flow rate (vph)	48	277	203	101	77	14	65	181	55	26	391	49
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	324	203	179	14	302	466						
Volume Left (vph)	48	0	101	0	65	26						
Volume Right (vph)	0	203	0	14	55	49						
Hadj (s)	0.11	-0.67	0.32	-0.67	-0.03	-0.02						
Departure Headway (s)	8.1	7.3	9.0	8.0	7.6	7.1						
Degree Utilization, x	0.73	0.41	0.45	0.03	0.64	0.93						
Capacity (veh/h)	427	473	385	428	453	493						
Control Delay (s)	29.0	14.1	18.0	10.1	23.2	50.5						
Approach Delay (s)	23.2		17.4		23.2	50.5						
Approach LOS	C		C		C	F						
Intersection Summary												
Delay			31.0									
Level of Service			D									
Intersection Capacity Utilization			59.1%		ICU Level of Service				B			
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
20: Wood Hollow Drive & Greystone Drive

2018 Site+Forecasted AM
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	57	127	165	55	121	31	23	206	44	24	175	50
Peak Hour Factor	0.81	0.89	0.64	0.80	0.82	0.72	0.53	0.88	0.79	0.68	0.85	0.68
Hourly flow rate (vph)	70	143	258	69	148	43	43	234	56	35	206	74
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2				
Volume Total (vph)	213	258	216	43	160	173	138	176				
Volume Left (vph)	70	0	69	0	43	0	35	0				
Volume Right (vph)	0	258	0	43	0	56	0	74				
Hadj (s)	0.20	-0.67	0.19	-0.67	0.17	-0.19	0.16	-0.26				
Departure Headway (s)	7.1	6.3	7.4	6.5	7.3	7.0	7.4	6.9				
Degree Utilization, x	0.42	0.45	0.44	0.08	0.33	0.33	0.28	0.34				
Capacity (veh/h)	486	553	464	516	468	491	464	493				
Control Delay (s)	14.0	13.0	15.0	8.9	12.6	12.2	12.0	12.3				
Approach Delay (s)	13.5		14.0		12.4		12.2					
Approach LOS	B		B		B		B					
Intersection Summary												
Delay			13.0									
Level of Service			B									
Intersection Capacity Utilization			47.5%	ICU Level of Service					A			
Analysis Period (min)			15									



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations					  	
Volume (veh/h)	0	221	0	0	3314	152
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.79	0.92	0.92	0.96	0.86
Hourly flow rate (vph)	0	280	0	0	3452	177
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	3540	1239	3629			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	3540	1239	3629			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	0	100			
cM capacity (veh/h)	4	167	63			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	280	1381	1381	867		
Volume Left	0	0	0	0		
Volume Right	280	0	0	177		
cSH	167	1700	1700	1700		
Volume to Capacity	1.68	0.81	0.81	0.51		
Queue Length 95th (ft)	487	0	0	0		
Control Delay (s)	377.1	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	377.1	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay			27.0			
Intersection Capacity Utilization			87.8%		ICU Level of Service	E
Analysis Period (min)			15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations					  	
Volume (veh/h)	0	30	0	0	2777	211
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.50	0.92	0.92	0.95	0.75
Hourly flow rate (vph)	0	60	0	0	2923	281
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	3064	1115	3204			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	3064	1115	3204			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	70	100			
cM capacity (veh/h)	10	202	93			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	60	1169	1169	866		
Volume Left	0	0	0	0		
Volume Right	60	0	0	281		
cSH	202	1700	1700	1700		
Volume to Capacity	0.30	0.69	0.69	0.51		
Queue Length 95th (ft)	30	0	0	0		
Control Delay (s)	30.1	0.0	0.0	0.0		
Lane LOS	D					
Approach Delay (s)	30.1	0.0				
Approach LOS	D					
Intersection Summary						
Average Delay			0.6			
Intersection Capacity Utilization			68.4%		ICU Level of Service	C
Analysis Period (min)			15			

Austin Oaks Mixed Use Development
50: Executive Center Drive & Wood Hollow Drive

2018 Site+Forecasted AM

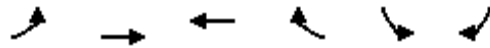
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	28	241	86	97	206	130	27	25	4	14	63	20
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.67	0.91	1.00	0.86	0.91	0.91	0.50	0.46	0.50	0.25	0.56	0.47
Hourly flow rate (vph)	42	265	86	113	226	143	54	54	8	56	112	43
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh												
Upstream signal (ft)					522							
pX, platoon unblocked												
vC, conflicting volume	369			351			1014	986	308	950	958	298
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	369			351			1014	986	308	950	958	298
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	96			91			52	75	99	68	50	94
cM capacity (veh/h)	1189			1208			113	217	732	174	225	742
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	393	482	116	211								
Volume Left	42	113	54	56								
Volume Right	86	143	8	43								
cSH	1189	1208	158	240								
Volume to Capacity	0.04	0.09	0.74	0.88								
Queue Length 95th (ft)	3	8	113	182								
Control Delay (s)	1.2	2.7	74.0	74.5								
Lane LOS	A	A	F	F								
Approach Delay (s)	1.2	2.7	74.0	74.5								
Approach LOS			F	F								
Intersection Summary												
Average Delay			21.7									
Intersection Capacity Utilization			61.4%		ICU Level of Service				B			
Analysis Period (min)			15									

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	215	42	119	282	13	23
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.79	0.67	0.83	0.72	0.75	0.46
Hourly flow rate (vph)	272	63	143	392	17	50
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			335		982	303
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			335		982	303
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			88		93	93
cM capacity (veh/h)			1224		244	736
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	335	535	67			
Volume Left	0	143	17			
Volume Right	63	0	50			
cSH	1700	1224	485			
Volume to Capacity	0.20	0.12	0.14			
Queue Length 95th (ft)	0	10	12			
Control Delay (s)	0.0	3.2	13.6			
Lane LOS		A	B			
Approach Delay (s)	0.0	3.2	13.6			
Approach LOS			B			
Intersection Summary						
Average Delay			2.8			
Intersection Capacity Utilization			48.6%	ICU Level of Service	A	
Analysis Period (min)			15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations				 	 		
Volume (veh/h)	104	144	154	872	1181	270	
Sign Control	Stop			Free	Free		
Grade	0%			0%	0%		
Peak Hour Factor	0.85	0.87	0.86	0.88	0.89	0.67	
Hourly flow rate (vph)	122	166	179	991	1327	403	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None	None		
Median storage veh							
Upstream signal (ft)				1093			
pX, platoon unblocked	0.90						
vC, conflicting volume	2382	865	1327				
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2317	865	1327				
tC, single (s)	6.8	6.9	4.1				
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2				
p0 queue free %	0	44	65				
cM capacity (veh/h)	19	297	516				
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	122	166	179	495	495	885	845
Volume Left	122	0	179	0	0	0	0
Volume Right	0	166	0	0	0	0	403
cSH	19	297	516	1700	1700	1700	1700
Volume to Capacity	6.54	0.56	0.35	0.29	0.29	0.52	0.50
Queue Length 95th (ft)	Err	79	38	0	0	0	0
Control Delay (s)	Err	31.4	15.6	0.0	0.0	0.0	0.0
Lane LOS	F	D	C				
Approach Delay (s)	4267.9		2.4			0.0	
Approach LOS	F						
Intersection Summary							
Average Delay			386.3				
Intersection Capacity Utilization			65.6%		ICU Level of Service		C
Analysis Period (min)			15				



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	0	153	211	0	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	166	229	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	229				396	229
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	229				396	229
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	1339				609	810
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	166	229	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1339	1700	1700			
Volume to Capacity	0.00	0.13	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS			A			
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS			A			
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			14.4%	ICU Level of Service		A
Analysis Period (min)			15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	0	0	211	153	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	229	166	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	396	166	166			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	396	166	166			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	609	878	1412			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	0	229	166			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1412	1700			
Volume to Capacity	0.00	0.00	0.10			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			14.4%	ICU Level of Service	A	
Analysis Period (min)			15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	0	0	211	153	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	229	166	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	396	166	166			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	396	166	166			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	609	878	1412			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	0	229	166			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1412	1700			
Volume to Capacity	0.00	0.00	0.10			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		14.4%		ICU Level of Service	A	
Analysis Period (min)		15				

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	11	24	98	113	104	142
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	26	107	123	113	154
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	548	168			229	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	548	168			229	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	97	97			92	
cM capacity (veh/h)	455	876			1339	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	38	229	267			
Volume Left	12	0	113			
Volume Right	26	123	0			
cSH	679	1700	1339			
Volume to Capacity	0.06	0.13	0.08			
Queue Length 95th (ft)	4	0	7			
Control Delay (s)	10.6	0.0	3.8			
Lane LOS	B		A			
Approach Delay (s)	10.6	0.0	3.8			
Approach LOS	B					
Intersection Summary						
Average Delay			2.6			
Intersection Capacity Utilization			38.6%	ICU Level of Service	A	
Analysis Period (min)			15			

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	183	0	0	161
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	199	0	0	175
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	374	199			199	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	374	199			199	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	627	842			1373	
Direction, Lane #	NB 1	SB 1				
Volume Total	199	175				
Volume Left	0	0				
Volume Right	0	0				
cSH	1700	1373				
Volume to Capacity	0.12	0.00				
Queue Length 95th (ft)	0	0				
Control Delay (s)	0.0	0.0				
Lane LOS						
Approach Delay (s)	0.0	0.0				
Approach LOS						
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			19.6%	ICU Level of Service		A
Analysis Period (min)			15			

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	183	0	0	161
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	199	0	0	175
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	374	199			199	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	374	199			199	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	627	842			1373	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	0	199	175			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1373			
Volume to Capacity	0.00	0.12	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		19.6%		ICU Level of Service	A	
Analysis Period (min)		15				

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	183	0	0	161
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	199	0	0	175
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	374	199			199	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	374	199			199	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	627	842			1373	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	0	199	175			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1373			
Volume to Capacity	0.00	0.12	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			13.0%	ICU Level of Service	A	
Analysis Period (min)			15			

Austin Oaks Mixed Use Development
800: Executive Center Drive & Driveway 8

2018 Site+Forecasted AM

5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	0	0	0	183	0	0	161	0
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	0	0	0	0	0	0	0	199	0	0	175	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	374	374	175	374	374	199	175			199		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	374	374	175	374	374	199	175			199		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	100	100	100	100			100		
cM capacity (veh/h)	583	557	868	583	557	842	1401			1373		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	0	0	199	175								
Volume Left	0	0	0	0								
Volume Right	0	0	0	0								
cSH	1700	1700	1401	1373								
Volume to Capacity	0.00	0.00	0.00	0.00								
Queue Length 95th (ft)	0	0	0	0								
Control Delay (s)	0.0	0.0	0.0	0.0								
Lane LOS	A	A										
Approach Delay (s)	0.0	0.0	0.0	0.0								
Approach LOS	A	A										
Intersection Summary												
Average Delay			0.0									
Intersection Capacity Utilization			13.0%	ICU Level of Service					A			
Analysis Period (min)			15									

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	183	0	0	161
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	199	0	0	175
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	374	199			199	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	374	199			199	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	627	842			1373	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	0	199	175			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1373			
Volume to Capacity	0.00	0.12	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		13.0%	ICU Level of Service	A		
Analysis Period (min)		15				

Austin Oaks Mixed Use Development
1000: Executive Center Drive & Driveway 10

2018 Site+Forecasted AM

5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	0	0	0	183	0	0	161	0
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	0	0	0	0	0	0	0	199	0	0	175	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	374	374	175	374	374	199	175			199		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	374	374	175	374	374	199	175			199		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	100	100	100	100			100		
cM capacity (veh/h)	583	557	868	583	557	842	1401			1373		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	0	0	199	175								
Volume Left	0	0	0	0								
Volume Right	0	0	0	0								
cSH	1700	1700	1401	1373								
Volume to Capacity	0.00	0.00	0.00	0.00								
Queue Length 95th (ft)	0	0	0	0								
Control Delay (s)	0.0	0.0	0.0	0.0								
Lane LOS	A	A										
Approach Delay (s)	0.0	0.0	0.0	0.0								
Approach LOS	A	A										
Intersection Summary												
Average Delay			0.0									
Intersection Capacity Utilization			13.0%	ICU Level of Service					A			
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
1100: Driveway 11 & Wood Hollow Drive

2018 Site+Forecasted AM

5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	196	63	228	454	0	17	0	88	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		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
Hourly flow rate (vph)	0	213	68	248	493	0	18	0	96	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh												
Upstream signal (ft)					251							
pX, platoon unblocked	0.47						0.47	0.47		0.47	0.47	0.47
vC, conflicting volume	493			282			1236	1236	247	1332	1271	493
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			282			934	934	247	1139	1007	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			81			81	100	88	100	100	100
cM capacity (veh/h)	756			1281			98	100	791	62	90	505
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1							
Volume Total	282	741	18	96	0							
Volume Left	0	248	18	0	0							
Volume Right	68	0	0	96	0							
cSH	1700	1281	98	791	1700							
Volume to Capacity	0.17	0.19	0.19	0.12	0.00							
Queue Length 95th (ft)	0	18	16	10	0							
Control Delay (s)	0.0	4.4	50.3	10.2	0.0							
Lane LOS		A	F	B	A							
Approach Delay (s)	0.0	4.4	16.7		0.0							
Approach LOS			C		A							
Intersection Summary												
Average Delay			4.5									
Intersection Capacity Utilization			64.0%		ICU Level of Service				B			
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
1: Hart Lane & Far West Boulevard

2018 Site+Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	43	565	38	172	559	149	59	143	133	166	113	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	170		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.987				0.850		0.941			0.969	
Flt Protected	0.950			0.950				0.991			0.981	
Satd. Flow (prot)	1770	3493	0	1770	3539	1583	0	3300	0	0	3364	0
Flt Permitted	0.262			0.341				0.991			0.981	
Satd. Flow (perm)	488	3493	0	635	3539	1583	0	3300	0	0	3364	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9				175		97			22	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		362			1265			236			237	
Travel Time (s)		7.1			24.6			5.4			5.4	
Peak Hour Factor	0.73	0.83	0.61	0.69	0.83	0.85	0.80	0.80	0.82	0.90	0.56	0.47
Adj. Flow (vph)	59	681	62	249	673	175	74	179	162	184	202	102
Shared Lane Traffic (%)												
Lane Group Flow (vph)	59	743	0	249	673	175	0	415	0	0	488	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Split	NA		Split	NA	
Protected Phases	5	2		1	6		4	4		8	8	
Permitted Phases	2			6		6						
Detector Phase	5	2		1	6	6	4	4		8	8	

Austin Oaks Mixed Use Development
1: Hart Lane & Far West Boulevard

2018 Site+Forecasted PM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	8.0	18.0		8.0	18.0	18.0	12.0	12.0		12.0	12.0	
Minimum Split (s)	13.0	24.0		13.0	24.0	24.0	33.0	33.0		33.0	33.0	
Total Split (s)	13.0	62.0		15.0	64.0	64.0	28.0	28.0		25.0	25.0	
Total Split (%)	10.0%	47.7%		11.5%	49.2%	49.2%	21.5%	21.5%		19.2%	19.2%	
Maximum Green (s)	8.0	57.0		10.0	59.0	59.0	23.0	23.0		20.0	20.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0		5.0			5.0	
Lead/Lag	Lead	Lead		Lag	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	
Walk Time (s)		7.0			7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		12.0			12.0	12.0	21.0	21.0		21.0	21.0	
Pedestrian Calls (#/hr)		0			0	0	0	0		0	0	
Act Effect Green (s)	57.4	57.4		62.3	62.3	62.3		18.4			23.6	
Actuated g/C Ratio	0.44	0.44		0.48	0.48	0.48		0.14			0.18	
v/c Ratio	0.20	0.48		0.63	0.40	0.21		0.75			0.78	
Control Delay	26.5	28.6		27.0	16.5	1.9		49.5			57.3	
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Delay	26.5	28.6		27.0	16.5	1.9		49.5			57.3	
LOS	C	C		C	B	A		D			E	
Approach Delay		28.4			16.5			49.5			57.3	
Approach LOS		C			B			D			E	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 20 (15%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 31.9

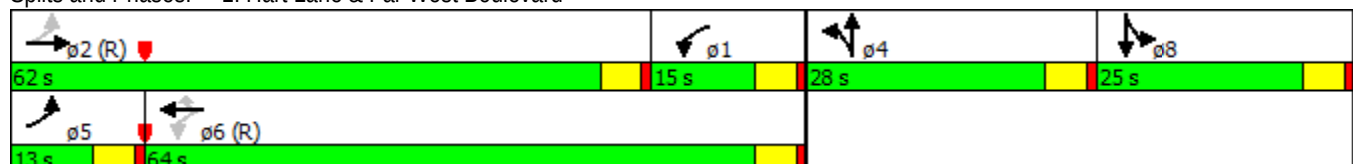
Intersection LOS: C

Intersection Capacity Utilization 63.0%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 1: Hart Lane & Far West Boulevard



Austin Oaks Mixed Use Development
2: Wood Hollow Drive & Far West Boulevard

2018 Site+Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	133	734	60	216	649	127	96	195	306	150	126	97
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	335		0	165		0	120		120	0		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	75			35			50			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.933	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1738	0
Flt Permitted	0.298			0.161			0.950			0.950		
Satd. Flow (perm)	555	3539	1583	300	3539	1583	1770	1863	1583	1770	1738	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			103			157			213		27	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1265			1235			599			222	
Travel Time (s)		24.6			24.1			13.6			5.0	
Peak Hour Factor	0.74	0.91	0.58	0.90	0.88	0.81	0.69	0.65	0.87	0.90	0.81	0.77
Adj. Flow (vph)	180	807	103	240	738	157	139	300	352	167	156	126
Shared Lane Traffic (%)												
Lane Group Flow (vph)	180	807	103	240	738	157	139	300	352	167	282	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	L NA	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		3	3		7	7	
Permitted Phases	6		6	2		2			3			
Detector Phase	1	6	6	5	2	2	3	3	3	7	7	

Austin Oaks Mixed Use Development
2: Wood Hollow Drive & Far West Boulevard

2018 Site+Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	8.0	8.0	8.0	5.0	5.0	
Minimum Split (s)	10.0	22.0	22.0	10.0	22.0	22.0	31.0	31.0	31.0	31.0	31.0	
Total Split (s)	20.0	68.0	68.0	16.0	64.0	64.0	20.0	20.0	20.0	26.0	26.0	
Total Split (%)	15.4%	52.3%	52.3%	12.3%	49.2%	49.2%	15.4%	15.4%	15.4%	20.0%	20.0%	
Maximum Green (s)	15.0	63.0	63.0	11.0	59.0	59.0	15.0	15.0	15.0	21.0	21.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
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	
Recall Mode	None	C-Min	C-Min	Max	C-Min	C-Min	Min	Min	Min	Max	Max	
Walk Time (s)		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		12.0	12.0		12.0	12.0	21.0	21.0	21.0	21.0	21.0	
Pedestrian Calls (#/hr)		0	0		0	0	0	0	0	0	0	
Act Effect Green (s)	38.9	38.9	38.9	35.9	35.9	35.9	37.5	37.5	37.5	22.6	22.6	
Actuated g/C Ratio	0.30	0.30	0.30	0.28	0.28	0.28	0.29	0.29	0.29	0.17	0.17	
v/c Ratio	0.61	0.76	0.19	1.16	0.75	0.28	0.27	0.56	0.58	0.54	0.87	
Control Delay	39.4	33.6	3.1	140.1	53.1	11.0	39.5	45.7	20.5	56.6	73.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	39.4	33.6	3.1	140.1	53.1	11.0	39.5	45.7	20.5	56.6	73.2	
LOS	D	C	A	F	D	B	D	D	C	E	E	
Approach Delay		31.7			65.7			33.4			67.1	
Approach LOS		C			E			C			E	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 20 (15%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.16

Intersection Signal Delay: 47.8

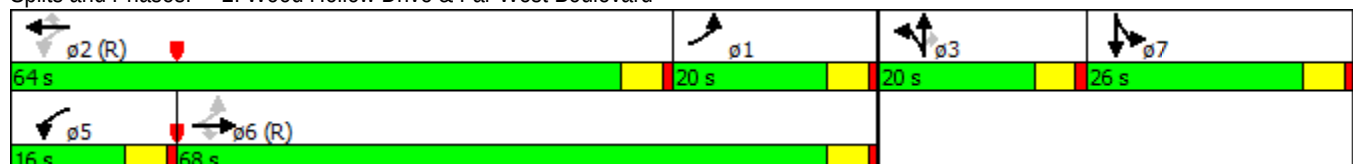
Intersection LOS: D

Intersection Capacity Utilization 68.1%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 2: Wood Hollow Drive & Far West Boulevard



Austin Oaks Mixed Use Development
3: Far West Boulevard & Mopac SB FR

2018 Site+Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑						↑↑	↑
Volume (vph)	0	1107	370	10	406	0	0	0	0	361	487	890
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									0.850
Flt Protected				0.950							0.977	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	3458	1583
Flt Permitted				0.950							0.977	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	3458	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			232									352
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		1235			406			400			362	
Travel Time (s)		24.1			7.9			5.5			4.9	
Peak Hour Factor	0.92	0.91	0.93	0.67	0.93	0.92	0.92	0.92	0.92	0.78	0.92	0.95
Adj. Flow (vph)	0	1216	398	15	437	0	0	0	0	463	529	937
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1216	398	15	437	0	0	0	0	0	992	937
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	L NA	Right	Left	Left	Right	Left	Left	R NA
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	custom	Prot	NA					custom	NA	custom
Protected Phases		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Permitted Phases										4		
Detector Phase		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Switch Phase												
Minimum Initial (s)				10.0								
Minimum Split (s)				15.0								

Lane Group	ø1	ø2	ø4	ø8	ø22
Lane Configurations					
Volume (vph)					
Ideal Flow (vphpl)					
Lane Util. Factor					
Frt					
Flt Protected					
Satd. Flow (prot)					
Flt Permitted					
Satd. Flow (perm)					
Right Turn on Red					
Satd. Flow (RTOR)					
Link Speed (mph)					
Link Distance (ft)					
Travel Time (s)					
Peak Hour Factor					
Adj. Flow (vph)					
Shared Lane Traffic (%)					
Lane Group Flow (vph)					
Enter Blocked Intersection					
Lane Alignment					
Median Width(ft)					
Link Offset(ft)					
Crosswalk Width(ft)					
Two way Left Turn Lane					
Headway Factor					
Turning Speed (mph)					
Number of Detectors					
Detector Template					
Leading Detector (ft)					
Trailing Detector (ft)					
Detector 1 Position(ft)					
Detector 1 Size(ft)					
Detector 1 Type					
Detector 1 Channel					
Detector 1 Extend (s)					
Detector 1 Queue (s)					
Detector 1 Delay (s)					
Detector 2 Position(ft)					
Detector 2 Size(ft)					
Detector 2 Type					
Detector 2 Channel					
Detector 2 Extend (s)					
Turn Type					
Protected Phases	1	2	4	8	22
Permitted Phases					
Detector Phase					
Switch Phase					
Minimum Initial (s)	4.0	13.0	10.0	4.0	1.0
Minimum Split (s)	9.0	18.0	15.0	9.0	6.0

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)				41.0								
Total Split (%)				31.5%								
Maximum Green (s)				36.0								
Yellow Time (s)				4.0								
All-Red Time (s)				1.0								
Lost Time Adjust (s)				0.0								
Total Lost Time (s)				5.0								
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0								
Recall Mode				Min								
Act Effect Green (s)		53.8	33.8	26.2	65.0						35.0	55.0
Actuated g/C Ratio		0.41	0.26	0.20	0.50						0.27	0.42
v/c Ratio		0.83	0.68	0.04	0.25						1.07	1.07
Control Delay		44.6	27.9	17.9	3.0						93.8	75.9
Queue Delay		48.6	0.0	0.0	0.0						0.0	0.0
Total Delay		93.2	27.9	17.9	3.0						93.8	75.9
LOS		F	C	B	A						F	E
Approach Delay		77.1			3.5						85.1	
Approach LOS		E			A						F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.07

Intersection Signal Delay: 72.6

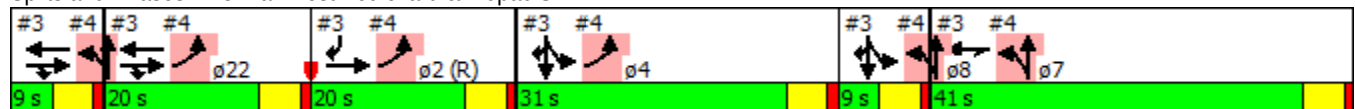
Intersection LOS: E

Intersection Capacity Utilization 96.8%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 3: Far West Boulevard & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø8	ø22
Total Split (s)	9.0	20.0	31.0	9.0	20.0
Total Split (%)	7%	15%	24%	7%	15%
Maximum Green (s)	4.0	15.0	26.0	4.0	15.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)					
Total Lost Time (s)					
Lead/Lag		Lag	Lead	Lag	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	C-Min	Min	Min	None
Act Effect Green (s)					
Actuated g/C Ratio					
v/c Ratio					
Control Delay					
Queue Delay					
Total Delay					
LOS					
Approach Delay					
Approach LOS					
Intersection Summary					

Austin Oaks Mixed Use Development
4: Mopac NB FR & Far West Boulevard

2018 Site+Forecasted PM
5/15/2014

												
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Lane Configurations	LT		LT	LT								
Volume (vph)	1477	0	356	74	0	0						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Lane Util. Factor	0.97	1.00	0.95	0.95	1.00	1.00						
Fr												
Flt Protected	0.950		0.950	0.993								
Satd. Flow (prot)	3433	0	1681	1757	0	0						
Flt Permitted	0.950		0.950	0.993								
Satd. Flow (perm)	3433	0	1681	1757	0	0						
Right Turn on Red		Yes				Yes						
Satd. Flow (RTOR)												
Link Speed (mph)	35			50	50							
Link Distance (ft)	406			308	472							
Travel Time (s)	7.9			4.2	6.4							
Peak Hour Factor	0.90	0.92	0.93	0.25	0.92	0.92						
Adj. Flow (vph)	1641	0	383	296	0	0						
Shared Lane Traffic (%)			13%									
Lane Group Flow (vph)	1641	0	333	346	0	0						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Right	Left	Left	Left	Right						
Median Width(ft)	24			12	12							
Link Offset(ft)	0			0	0							
Crosswalk Width(ft)	16			16	16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00						
Turning Speed (mph)	15	9	15			9						
Number of Detectors	1		1	2								
Detector Template	Left		Left	Thru								
Leading Detector (ft)	20		20	100								
Trailing Detector (ft)	0		0	0								
Detector 1 Position(ft)	0		0	0								
Detector 1 Size(ft)	20		20	6								
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0								
Detector 1 Queue (s)	0.0		0.0	0.0								
Detector 1 Delay (s)	0.0		0.0	0.0								
Detector 2 Position(ft)				94								
Detector 2 Size(ft)				6								
Detector 2 Type				Cl+Ex								
Detector 2 Channel												
Detector 2 Extend (s)				0.0								
Turn Type	Prot		Split	NA								
Protected Phases	2 4 22		1 7 8	1 7 8			1	2	4	7	8	22
Permitted Phases												
Detector Phase	2 4 22		1 7 8	1 7 8								
Switch Phase												
Minimum Initial (s)							4.0	13.0	10.0	10.0	4.0	1.0
Minimum Split (s)							9.0	18.0	15.0	15.0	9.0	6.0



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Total Split (s)							9.0	20.0	31.0	41.0	9.0	20.0
Total Split (%)							7%	15%	24%	32%	7%	15%
Maximum Green (s)							4.0	15.0	26.0	36.0	4.0	15.0
Yellow Time (s)							4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)							1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag								Lag	Lead		Lag	Lead
Lead-Lag Optimize?								Yes	Yes		Yes	Yes
Vehicle Extension (s)							3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode							Min	C-Min	Min	Min	Min	None
Act Effect Green (s)	66.0		54.0	54.0								
Actuated g/C Ratio	0.51		0.42	0.42								
v/c Ratio	0.94		0.48	0.47								
Control Delay	27.6		30.6	30.4								
Queue Delay	44.7		0.0	0.0								
Total Delay	72.3		30.6	30.4								
LOS	E		C	C								
Approach Delay	72.3			30.5								
Approach LOS	E			C								

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.07

Intersection Signal Delay: 60.1

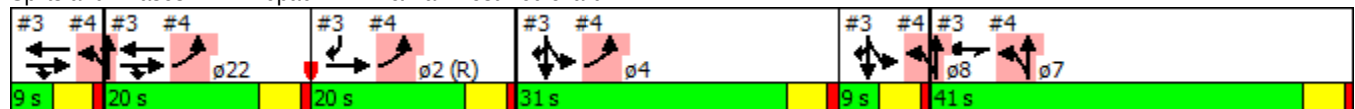
Intersection LOS: E

Intersection Capacity Utilization 110.0%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 4: Mopac NB FR & Far West Boulevard



Austin Oaks Mixed Use Development
5: Spicewood Springs Road & Mopac SB FR

2018 Site+Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑					↑	↑↑	↑
Volume (vph)	0	1423	337	631	1331	0	0	0	0	595	246	388
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	60		0	0		0	150		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			75			25			75		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.974	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1610	3302	1583
Flt Permitted				0.950						0.950	0.974	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1610	3302	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			160									160
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		294			386			782			882	
Travel Time (s)		5.7			7.5			10.7			12.0	
Peak Hour Factor	0.92	0.81	0.90	0.87	0.86	0.92	0.92	0.92	0.92	0.93	0.87	0.94
Adj. Flow (vph)	0	1757	374	725	1548	0	0	0	0	640	283	413
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	1757	374	725	1548	0	0	0	0	320	603	413
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Prot	Prot	NA					Split	NA	Prot
Protected Phases		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5
Permitted Phases												
Detector Phase		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5

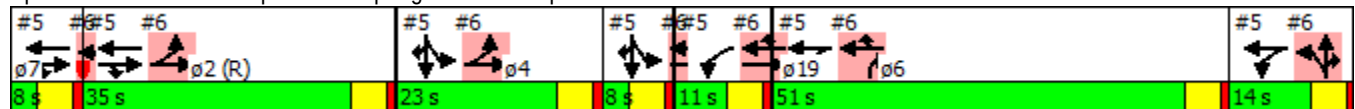
Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)		38.0	38.0	71.0	103.0					26.0	26.0	26.0
Actuated g/C Ratio		0.25	0.25	0.47	0.69					0.17	0.17	0.17
v/c Ratio		1.96	0.72	0.87	0.64					1.15	1.10dl	1.02
Control Delay		458.9	16.6	35.7	10.3					152.9	110.8	85.7
Queue Delay		1.0	0.9	39.8	40.9					0.0	0.0	0.0
Total Delay		459.9	17.6	75.5	51.1					152.9	110.8	85.7
LOS		F	B	E	D					F	F	F
Approach Delay		382.3			58.9						113.1	
Approach LOS		F			E						F	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 89 (59%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.96
Intersection Signal Delay: 191.6 Intersection LOS: F
Intersection Capacity Utilization 121.6% ICU Level of Service H
Analysis Period (min) 15
dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 5: Spicewood Springs Road & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0	5.0	6.0
Minimum Split (s)	8.0	15.0	10.0	8.0	15.0	10.0	11.0
Total Split (s)	8.0	35.0	23.0	8.0	51.0	14.0	11.0
Total Split (%)	5%	23%	15%	5%	34%	9%	7%
Maximum Green (s)	3.0	30.0	18.0	3.0	46.0	9.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Austin Oaks Mixed Use Development
6: Mopac NB FR & Spicewood Springs Road

2018 Site+Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	595	1158	0	0	1156	417	305	41	535	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		325	0		0	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	75			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.91	0.95	1.00	1.00	1.00
Frt						0.850		0.892	0.850			
Flt Protected	0.950						0.950	0.995				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	1681	1504	1504	0	0	0
Flt Permitted	0.950						0.950	0.995				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	1681	1504	1504	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						173		69	160			
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		386			594			563			407	
Travel Time (s)		7.5			11.6			7.7			5.6	
Peak Hour Factor	0.90	0.96	0.92	0.92	0.93	0.79	0.86	0.60	0.87	0.92	0.92	0.92
Adj. Flow (vph)	661	1206	0	0	1243	528	355	68	615	0	0	0
Shared Lane Traffic (%)							10%		43%			
Lane Group Flow (vph)	661	1206	0	0	1243	528	319	368	351	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Prot	Split	NA	custom			
Protected Phases	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			
Permitted Phases												
Detector Phase	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			

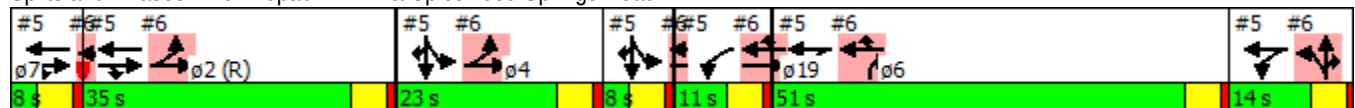
Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)	53.0	72.0			65.0	65.0	17.0	17.0	60.0			
Actuated g/C Ratio	0.35	0.48			0.43	0.43	0.11	0.11	0.40			
v/c Ratio	1.06	0.71			0.81	0.67	1.68	1.59	0.50			
Control Delay	53.0	1.2			42.3	27.0	365.4	318.8	20.3			
Queue Delay	18.8	49.5			11.0	0.0	0.0	0.3	0.0			
Total Delay	71.8	50.6			53.4	27.0	365.4	319.1	20.3			
LOS	E	D			D	C	F	F	C			
Approach Delay		58.2			45.5			232.3				
Approach LOS		E			D			F				

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 89 (59%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.96
Intersection Signal Delay: 92.0 Intersection LOS: F
Intersection Capacity Utilization 121.6% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 6: Mopac NB FR & Spicewood Springs Road



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0	5.0	6.0
Minimum Split (s)	8.0	15.0	10.0	8.0	15.0	10.0	11.0
Total Split (s)	8.0	35.0	23.0	8.0	51.0	14.0	11.0
Total Split (%)	5%	23%	15%	5%	34%	9%	7%
Maximum Green (s)	3.0	30.0	18.0	3.0	46.0	9.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Austin Oaks Mixed Use Development
7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road

2018 Site+Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	5	929	66	210	754	1	263	8	547	1	4	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	0		100	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993							0.850		0.900	
Flt Protected	0.950			0.950				0.954			0.996	
Satd. Flow (prot)	1770	5050	0	1770	3539	0	0	1777	1583	0	1670	0
Flt Permitted	0.342			0.063				0.716			0.977	
Satd. Flow (perm)	637	5050	0	117	3539	0	0	1334	1583	0	1638	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7							318		17	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1093			275			251			161	
Travel Time (s)		21.3			5.4			5.7			3.7	
Peak Hour Factor	0.72	0.50	0.76	0.50	0.92	0.50	0.91	0.85	0.62	0.58	0.90	0.84
Adj. Flow (vph)	7	1858	87	420	820	2	289	9	882	2	4	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	7	1945	0	420	822	0	0	298	882	0	23	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2			6			4		4	8		
Detector Phase	5	2		1	6		4	4	4	8	8	

Austin Oaks Mixed Use Development
7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road

2018 Site+Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	20.0		21.0	20.0		15.0	15.0	15.0	11.0	11.0	
Minimum Split (s)	10.0	25.0		26.0	25.0		35.0	35.0	35.0	35.0	35.0	
Total Split (s)	29.0	82.0		34.0	87.0		34.0	34.0	34.0	34.0	34.0	
Total Split (%)	19.3%	54.7%		22.7%	58.0%		22.7%	22.7%	22.7%	22.7%	22.7%	
Maximum Green (s)	24.0	77.0		29.0	82.0		29.0	29.0	29.0	29.0	29.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0			5.0	5.0		5.0	
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min		Min	C-Min		Min	Min	Min	Min	Min	
Walk Time (s)							6.0	6.0	6.0	6.0	6.0	
Flash Dont Walk (s)							24.0	24.0	24.0	24.0	24.0	
Pedestrian Calls (#/hr)							0	0	0	0	0	
Act Effect Green (s)	77.9	73.4		96.2	96.2			32.6	32.6		32.6	
Actuated g/C Ratio	0.52	0.49		0.64	0.64			0.22	0.22		0.22	
v/c Ratio	0.02	0.79		1.07	0.36			1.03	1.49		0.06	
Control Delay	16.8	34.2		104.4	11.7			116.7	254.3		24.7	
Queue Delay	0.0	47.9		0.0	0.2			0.0	0.9		0.0	
Total Delay	16.8	82.0		104.4	11.8			116.7	255.2		24.7	
LOS	B	F		F	B			F	F		C	
Approach Delay		81.8			43.1			220.2			24.7	
Approach LOS		F			D			F			C	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 55 (37%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.49

Intersection Signal Delay: 107.7

Intersection LOS: F

Intersection Capacity Utilization 75.0%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road



Austin Oaks Mixed Use Development
10: Hart Lane & Greystone Drive

2018 Site+Forecasted PM

5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	32	86	49	80	152	53	87	220	53	11	161	56
Peak Hour Factor	0.80	0.65	0.65	0.78	0.88	0.58	0.75	0.81	0.60	0.58	0.69	0.57
Hourly flow rate (vph)	40	132	75	103	173	91	116	272	88	19	233	98
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	172	75	275	91	476	351						
Volume Left (vph)	40	0	103	0	116	19						
Volume Right (vph)	0	75	0	91	88	98						
Hadj (s)	0.15	-0.67	0.22	-0.67	-0.03	-0.12						
Departure Headway (s)	8.8	7.9	8.5	7.6	7.1	7.4						
Degree Utilization, x	0.42	0.17	0.65	0.19	0.94	0.72						
Capacity (veh/h)	396	434	418	464	499	472						
Control Delay (s)	16.9	11.3	24.7	11.2	53.1	27.1						
Approach Delay (s)	15.2		21.3		53.1	27.1						
Approach LOS	C		C		F	D						
Intersection Summary												
Delay			32.2									
Level of Service			D									
Intersection Capacity Utilization			64.2%		ICU Level of Service				C			
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
20: Wood Hollow Drive & Greystone Drive

2018 Site+Forecasted PM

5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	53	71	51	90	229	60	80	272	72	26	211	57
Peak Hour Factor	0.81	0.89	0.64	0.80	0.82	0.72	0.53	0.88	0.79	0.68	0.85	0.68
Hourly flow rate (vph)	65	80	80	112	279	83	151	309	91	38	248	84
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2				
Volume Total (vph)	145	80	392	83	305	246	162	208				
Volume Left (vph)	65	0	113	0	151	0	38	0				
Volume Right (vph)	0	80	0	83	0	91	0	84				
Hadj (s)	0.26	-0.67	0.18	-0.67	0.28	-0.23	0.15	-0.25				
Departure Headway (s)	8.5	7.5	7.8	7.0	7.9	7.4	8.0	7.6				
Degree Utilization, x	0.34	0.17	0.85	0.16	0.67	0.50	0.36	0.44				
Capacity (veh/h)	401	446	392	494	443	466	429	453				
Control Delay (s)	14.6	10.8	40.3	10.1	24.1	16.4	14.3	15.3				
Approach Delay (s)	13.3		35.0		20.7		14.9					
Approach LOS	B		D		C		B					
Intersection Summary												
Delay			22.5									
Level of Service			C									
Intersection Capacity Utilization			57.6%	ICU Level of Service					B			
Analysis Period (min)			15									



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations					  	
Volume (veh/h)	0	177	0	0	1723	347
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.79	0.92	0.92	0.96	0.86
Hourly flow rate (vph)	0	224	0	0	1795	403
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1997	800	2198			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1997	800	2198			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	32	100			
cM capacity (veh/h)	52	328	236			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	224	718	718	762		
Volume Left	0	0	0	0		
Volume Right	224	0	0	403		
cSH	328	1700	1700	1700		
Volume to Capacity	0.68	0.42	0.42	0.45		
Queue Length 95th (ft)	119	0	0	0		
Control Delay (s)	36.7	0.0	0.0	0.0		
Lane LOS	E					
Approach Delay (s)	36.7	0.0				
Approach LOS	E					
Intersection Summary						
Average Delay			3.4			
Intersection Capacity Utilization			58.7%		ICU Level of Service	B
Analysis Period (min)			15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	222	0	0	1979	105
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.50	0.92	0.92	0.95	0.75
Hourly flow rate (vph)	0	444	0	0	2083	140
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2153	764	2223			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2153	764	2223			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	0	100			
cM capacity (veh/h)	41	346	231			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	444	833	833	557		
Volume Left	0	0	0	0		
Volume Right	444	0	0	140		
cSH	346	1700	1700	1700		
Volume to Capacity	1.28	0.49	0.49	0.33		
Queue Length 95th (ft)	510	0	0	0		
Control Delay (s)	179.2	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	179.2	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay			29.8			
Intersection Capacity Utilization			61.0%		ICU Level of Service	B
Analysis Period (min)			15			

Austin Oaks Mixed Use Development
50: Executive Center Drive & Wood Hollow Drive

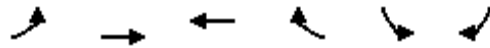
2018 Site+Forecasted PM
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	10	311	39	14	185	31	123	101	25	28	48	107
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.67	0.91	1.00	0.86	0.91	0.91	0.50	0.46	0.50	0.25	0.56	0.47
Hourly flow rate (vph)	15	342	39	16	203	34	246	220	50	112	86	228
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh												
Upstream signal (ft)					522							
pX, platoon unblocked												
vC, conflicting volume	237			381			915	661	361	804	663	220
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	237			381			915	661	361	804	663	220
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			99			0	41	93	23	77	72
cM capacity (veh/h)	1330			1178			148	373	683	146	372	819
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	396	254	516	425								
Volume Left	15	16	246	112								
Volume Right	39	34	50	228								
cSH	1330	1178	222	334								
Volume to Capacity	0.01	0.01	2.33	1.28								
Queue Length 95th (ft)	1	1	1035	490								
Control Delay (s)	0.4	0.6	644.8	177.9								
Lane LOS	A	A	F	F								
Approach Delay (s)	0.4	0.6	644.8	177.9								
Approach LOS			F	F								
Intersection Summary												
Average Delay			256.8									
Intersection Capacity Utilization			56.0%		ICU Level of Service				B			
Analysis Period (min)			15									

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	269	26	43	196	48	121
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.79	0.67	0.83	0.72	0.75	0.46
Hourly flow rate (vph)	341	39	52	272	64	263
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			379		736	360
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			379		736	360
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			96		83	62
cM capacity (veh/h)			1179		369	685
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	379	324	327			
Volume Left	0	52	64			
Volume Right	39	0	263			
cSH	1700	1179	587			
Volume to Capacity	0.22	0.04	0.56			
Queue Length 95th (ft)	0	3	85			
Control Delay (s)	0.0	1.7	18.6			
Lane LOS		A	C			
Approach Delay (s)	0.0	1.7	18.6			
Approach LOS			C			
Intersection Summary						
Average Delay		6.4				
Intersection Capacity Utilization		48.5%		ICU Level of Service	A	
Analysis Period (min)		15				



Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations				 	 		
Volume (veh/h)	230	213	119	1191	848	140	
Sign Control	Stop			Free	Free		
Grade	0%			0%	0%		
Peak Hour Factor	0.85	0.87	0.86	0.88	0.89	0.67	
Hourly flow rate (vph)	271	245	138	1353	953	209	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None	None		
Median storage veh							
Upstream signal (ft)				1093			
pX, platoon unblocked	0.90						
vC, conflicting volume	2011	581	953				
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1899	581	953				
tC, single (s)	6.8	6.9	4.1				
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2				
p0 queue free %	0	46	81				
cM capacity (veh/h)	44	457	717				
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	271	245	138	677	677	635	527
Volume Left	271	0	138	0	0	0	0
Volume Right	0	245	0	0	0	0	209
cSH	44	457	717	1700	1700	1700	1700
Volume to Capacity	6.12	0.54	0.19	0.40	0.40	0.37	0.31
Queue Length 95th (ft)	Err	77	18	0	0	0	0
Control Delay (s)	Err	21.6	11.2	0.0	0.0	0.0	0.0
Lane LOS	F	C	B				
Approach Delay (s)	5259.6		1.0	0.0			
Approach LOS	F						
Intersection Summary							
Average Delay			855.9				
Intersection Capacity Utilization			57.2%	ICU Level of Service			B
Analysis Period (min)			15				



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	0	78	105	0	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	85	114	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	114				199	114
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	114				199	114
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	1475				790	938
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	85	114	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1475	1700	1700			
Volume to Capacity	0.00	0.07	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS			A			
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS			A			
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			8.9%	ICU Level of Service	A	
Analysis Period (min)			15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	0	0	105	78	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	114	85	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	199	85	85			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	199	85	85			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	790	974	1512			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	0	114	85			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1512	1700			
Volume to Capacity	0.00	0.00	0.05			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			8.9%	ICU Level of Service		A
Analysis Period (min)			15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	0	0	105	78	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	114	85	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	199	85	85			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	199	85	85			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	790	974	1512			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	0	114	85			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1512	1700			
Volume to Capacity	0.00	0.00	0.05			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization		8.9%		ICU Level of Service		A
Analysis Period (min)		15				

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	45	102	33	72	68	33
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	49	111	36	78	74	36
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	259	75			114	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	259	75			114	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	93	89			95	
cM capacity (veh/h)	694	986			1475	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	160	114	110			
Volume Left	49	0	74			
Volume Right	111	78	0			
cSH	874	1700	1475			
Volume to Capacity	0.18	0.07	0.05			
Queue Length 95th (ft)	17	0	4			
Control Delay (s)	10.0	0.0	5.2			
Lane LOS	B		A			
Approach Delay (s)	10.0	0.0	5.2			
Approach LOS	B					
Intersection Summary						
Average Delay			5.7			
Intersection Capacity Utilization			27.6%	ICU Level of Service		A
Analysis Period (min)			15			

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	142	0	0	69
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	154	0	0	75
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	229	154			154	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	229	154			154	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	759	892			1426	
Direction, Lane #	NB 1	SB 1				
Volume Total	154	75				
Volume Left	0	0				
Volume Right	0	0				
cSH	1700	1426				
Volume to Capacity	0.09	0.00				
Queue Length 95th (ft)	0	0				
Control Delay (s)	0.0	0.0				
Lane LOS						
Approach Delay (s)	0.0	0.0				
Approach LOS						
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			17.5%	ICU Level of Service		A
Analysis Period (min)			15			

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	142	0	0	69
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	154	0	0	75
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	229	154			154	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	229	154			154	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	759	892			1426	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	0	154	75			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1426			
Volume to Capacity	0.00	0.09	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		17.5%		ICU Level of Service	A	
Analysis Period (min)		15				

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	142	0	0	69
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	154	0	0	75
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	229	154			154	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	229	154			154	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	759	892			1426	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	0	154	75			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1426			
Volume to Capacity	0.00	0.09	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		10.8%		ICU Level of Service	A	
Analysis Period (min)		15				

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	0	0	0	142	0	0	69	0
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	0	0	0	0	0	0	0	154	0	0	75	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	229	229	75	229	229	154	75			154		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	229	229	75	229	229	154	75			154		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	100	100	100	100			100		
cM capacity (veh/h)	726	670	986	726	670	892	1524			1426		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	0	0	154	75								
Volume Left	0	0	0	0								
Volume Right	0	0	0	0								
cSH	1700	1700	1524	1426								
Volume to Capacity	0.00	0.00	0.00	0.00								
Queue Length 95th (ft)	0	0	0	0								
Control Delay (s)	0.0	0.0	0.0	0.0								
Lane LOS	A	A										
Approach Delay (s)	0.0	0.0	0.0	0.0								
Approach LOS	A	A										
Intersection Summary												
Average Delay			0.0									
Intersection Capacity Utilization			10.8%	ICU Level of Service					A			
Analysis Period (min)			15									

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	142	0	0	69
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	154	0	0	75
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	229	154			154	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	229	154			154	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	759	892			1426	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	0	154	75			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1426			
Volume to Capacity	0.00	0.09	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		10.8%		ICU Level of Service	A	
Analysis Period (min)		15				

Austin Oaks Mixed Use Development
1000: Executive Center Drive & Driveway 10

2018 Site+Forecasted PM

5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	0	0	0	142	0	0	69	0
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	0	0	0	0	0	0	0	154	0	0	75	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	229	229	75	229	229	154	75			154		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	229	229	75	229	229	154	75			154		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	100	100	100	100			100		
cM capacity (veh/h)	726	670	986	726	670	892	1524			1426		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	0	0	154	75								
Volume Left	0	0	0	0								
Volume Right	0	0	0	0								
cSH	1700	1700	1524	1426								
Volume to Capacity	0.00	0.00	0.00	0.00								
Queue Length 95th (ft)	0	0	0	0								
Control Delay (s)	0.0	0.0	0.0	0.0								
Lane LOS	A	A										
Approach Delay (s)	0.0	0.0	0.0	0.0								
Approach LOS	A	A										
Intersection Summary												
Average Delay			0.0									
Intersection Capacity Utilization			10.8%	ICU Level of Service					A			
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
1100: Driveway 11 & Wood Hollow Drive

2018 Site+Forecasted PM

5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	322	42	146	134	0	73	0	366	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		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
Hourly flow rate (vph)	0	350	46	159	146	0	79	0	398	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh												
Upstream signal (ft)					251							
pX, platoon unblocked	0.92						0.92	0.92		0.92	0.92	0.92
vC, conflicting volume	146			396			836	836	373	1234	859	146
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	28			396			778	778	373	1211	803	28
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			86			69	100	41	100	100	100
cM capacity (veh/h)	1459			1163			258	260	673	54	252	964
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1							
Volume Total	396	304	79	398	0							
Volume Left	0	159	79	0	0							
Volume Right	46	0	0	398	0							
cSH	1700	1163	258	673	1700							
Volume to Capacity	0.23	0.14	0.31	0.59	0.00							
Queue Length 95th (ft)	0	12	31	97	0							
Control Delay (s)	0.0	5.1	25.0	17.8	0.0							
Lane LOS		A	C	C	A							
Approach Delay (s)	0.0	5.1	19.0		0.0							
Approach LOS			C		A							
Intersection Summary												
Average Delay			9.0									
Intersection Capacity Utilization			48.8%	ICU Level of Service					A			
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
1: Hart Lane & Far West Boulevard

2023 Forecasted AM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	785	95	218	308	77	54	145	173	226	281	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	170		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.979				0.850		0.931			0.987	
Flt Protected	0.950			0.950				0.993			0.985	
Satd. Flow (prot)	1770	3465	0	1770	3539	1583	0	3272	0	0	3441	0
Flt Permitted	0.408			0.105				0.993			0.985	
Satd. Flow (perm)	760	3465	0	196	3539	1583	0	3272	0	0	3441	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16				101		142			7	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		362			1265			236			237	
Travel Time (s)		7.1			24.6			5.4			5.4	
Peak Hour Factor	0.73	0.83	0.61	0.69	0.83	0.85	0.80	0.80	0.82	0.90	0.56	0.47
Adj. Flow (vph)	81	946	156	316	371	91	68	181	211	251	502	72
Shared Lane Traffic (%)												
Lane Group Flow (vph)	81	1102	0	316	371	91	0	460	0	0	825	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Split	NA		Split	NA	
Protected Phases	5	2		1	6		4	4		8	8	
Permitted Phases	2			6		6						
Detector Phase	5	2		1	6	6	4	4		8	8	

Austin Oaks Mixed Use Development
1: Hart Lane & Far West Boulevard

2023 Forecasted AM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	8.0	18.0		8.0	18.0	18.0	12.0	12.0		12.0	12.0	
Minimum Split (s)	13.0	23.0		13.0	23.0	23.0	17.0	17.0		17.0	17.0	
Total Split (s)	13.0	52.0		22.0	61.0	61.0	26.0	26.0		30.0	30.0	
Total Split (%)	10.0%	40.0%		16.9%	46.9%	46.9%	20.0%	20.0%		23.1%	23.1%	
Maximum Green (s)	8.0	47.0		17.0	56.0	56.0	21.0	21.0		25.0	25.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0		5.0			5.0	
Lead/Lag	Lead	Lead		Lag	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	
Walk Time (s)		7.0			7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		12.0			12.0	12.0	21.0	21.0		21.0	21.0	
Pedestrian Calls (#/hr)		0			0	0	0	0		0	0	
Act Effect Green (s)	45.5	45.5		58.6	58.6	58.6		17.8			28.2	
Actuated g/C Ratio	0.35	0.35		0.45	0.45	0.45		0.14			0.22	
v/c Ratio	0.25	0.90		1.01	0.23	0.12		0.81			1.10	
Control Delay	30.2	50.4		112.9	40.7	19.0		48.7			109.1	
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Delay	30.2	50.4		112.9	40.7	19.0		48.7			109.1	
LOS	C	D		F	D	B		D			F	
Approach Delay		49.0			67.5			48.7			109.1	
Approach LOS		D			E			D			F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 100 (77%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.10

Intersection Signal Delay: 68.7

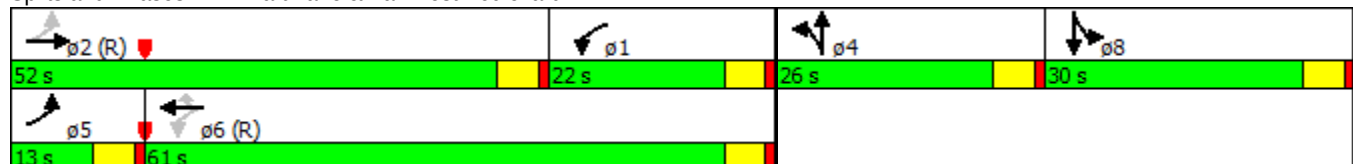
Intersection LOS: E

Intersection Capacity Utilization 80.0%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 1: Hart Lane & Far West Boulevard



Austin Oaks Mixed Use Development
2: Wood Hollow Drive & Far West Boulevard

2023 Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	140	1114	50	123	604	103	26	118	309	282	138	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	335		0	165		0	120		120	0		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	75			35			50			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.946	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1762	0
Flt Permitted	0.336			0.176			0.950			0.950		
Satd. Flow (perm)	626	3539	1583	328	3539	1583	1770	1863	1583	1770	1762	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			101			127			180		19	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1265			1235			599			222	
Travel Time (s)		24.6			24.1			13.6			5.0	
Peak Hour Factor	0.74	0.91	0.58	0.90	0.88	0.81	0.69	0.65	0.87	0.90	0.81	0.77
Adj. Flow (vph)	189	1224	86	137	686	127	38	182	355	313	170	97
Shared Lane Traffic (%)												
Lane Group Flow (vph)	189	1224	86	137	686	127	38	182	355	313	267	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	L NA	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		3	3		7	7	
Permitted Phases	6		6	2		2			3			
Detector Phase	1	6	6	5	2	2	3	3	3	7	7	

Austin Oaks Mixed Use Development
2: Wood Hollow Drive & Far West Boulevard

2023 Forecasted AM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	8.0	8.0	8.0	5.0	5.0	
Minimum Split (s)	11.0	40.0	40.0	12.0	40.0	40.0	15.0	15.0	15.0	15.0	15.0	
Total Split (s)	16.0	67.0	67.0	16.0	67.0	67.0	19.0	19.0	19.0	28.0	28.0	
Total Split (%)	12.3%	51.5%	51.5%	12.3%	51.5%	51.5%	14.6%	14.6%	14.6%	21.5%	21.5%	
Maximum Green (s)	11.0	62.0	62.0	11.0	62.0	62.0	14.0	14.0	14.0	23.0	23.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
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	
Recall Mode	None	C-Min	C-Min	Max	C-Min	C-Min	Min	Min	Min	Max	Max	
Walk Time (s)		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		12.0	12.0		12.0	12.0	21.0	21.0	21.0	21.0	21.0	
Pedestrian Calls (#/hr)		0	0		0	0	0	0	0	0	0	
Act Effect Green (s)	55.4	55.4	55.4	33.7	33.7	33.7	20.6	20.6	20.6	23.0	23.0	
Actuated g/C Ratio	0.43	0.43	0.43	0.26	0.26	0.26	0.16	0.16	0.16	0.18	0.18	
v/c Ratio	0.34	0.81	0.12	0.66	0.75	0.25	0.14	0.62	0.88	1.00	0.82	
Control Delay	32.9	38.2	4.1	49.2	49.6	8.7	52.0	62.5	50.6	104.2	68.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	32.9	38.2	4.1	49.2	49.6	8.7	52.0	62.5	50.6	104.2	68.0	
LOS	C	D	A	D	D	A	D	E	D	F	E	
Approach Delay		35.6			44.0			54.5			87.6	
Approach LOS		D			D			D			F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 10 (8%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.00

Intersection Signal Delay: 49.2

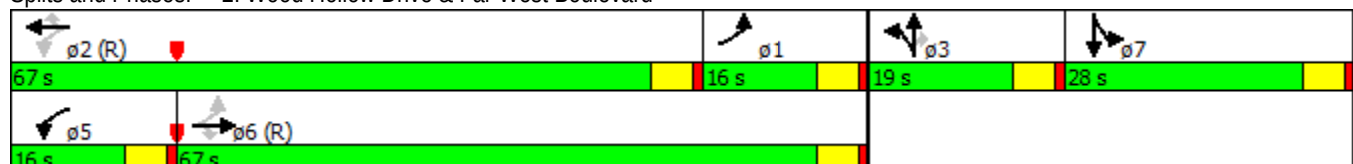
Intersection LOS: D

Intersection Capacity Utilization 78.1%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 2: Wood Hollow Drive & Far West Boulevard



Austin Oaks Mixed Use Development
3: Far West Boulevard & Mopac SB FR

2023 Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑						↑↑	↑
Volume (vph)	0	848	481	19	559	0	0	0	0	142	586	941
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									0.850
Flt Protected				0.950							0.989	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	3500	1583
Flt Permitted				0.950							0.989	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	3500	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			393									110
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		1235			406			400			362	
Travel Time (s)		24.1			7.9			5.5			4.9	
Peak Hour Factor	0.92	0.91	0.93	0.67	0.93	0.92	0.92	0.92	0.92	0.78	0.92	0.95
Adj. Flow (vph)	0	932	517	28	601	0	0	0	0	182	637	991
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	932	517	28	601	0	0	0	0	0	819	991
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	L NA	Right	Left	Left	Right	Left	Left	R NA
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	custom	Prot	NA					custom	NA	custom
Protected Phases		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Permitted Phases										4		
Detector Phase		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Switch Phase												
Minimum Initial (s)				10.0								
Minimum Split (s)				15.0								

Lane Group	ø1	ø2	ø4	ø8	ø22
Lane Configurations					
Volume (vph)					
Ideal Flow (vphpl)					
Lane Util. Factor					
Frt					
Flt Protected					
Satd. Flow (prot)					
Flt Permitted					
Satd. Flow (perm)					
Right Turn on Red					
Satd. Flow (RTOR)					
Link Speed (mph)					
Link Distance (ft)					
Travel Time (s)					
Peak Hour Factor					
Adj. Flow (vph)					
Shared Lane Traffic (%)					
Lane Group Flow (vph)					
Enter Blocked Intersection					
Lane Alignment					
Median Width(ft)					
Link Offset(ft)					
Crosswalk Width(ft)					
Two way Left Turn Lane					
Headway Factor					
Turning Speed (mph)					
Number of Detectors					
Detector Template					
Leading Detector (ft)					
Trailing Detector (ft)					
Detector 1 Position(ft)					
Detector 1 Size(ft)					
Detector 1 Type					
Detector 1 Channel					
Detector 1 Extend (s)					
Detector 1 Queue (s)					
Detector 1 Delay (s)					
Detector 2 Position(ft)					
Detector 2 Size(ft)					
Detector 2 Type					
Detector 2 Channel					
Detector 2 Extend (s)					
Turn Type					
Protected Phases	1	2	4	8	22
Permitted Phases					
Detector Phase					
Switch Phase					
Minimum Initial (s)	4.0	10.0	10.0	4.0	1.0
Minimum Split (s)	9.0	15.0	25.0	9.0	20.0

Austin Oaks Mixed Use Development
3: Far West Boulevard & Mopac SB FR

2023 Forecasted AM
5/15/2014

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)				21.0								
Total Split (%)				16.2%								
Maximum Green (s)				16.0								
Yellow Time (s)				4.0								
All-Red Time (s)				1.0								
Lost Time Adjust (s)				0.0								
Total Lost Time (s)				5.0								
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0								
Recall Mode				Min								
Act Effect Green (s)		49.0	24.0	16.0	45.0						50.0	75.0
Actuated g/C Ratio		0.38	0.18	0.12	0.35						0.38	0.58
v/c Ratio		0.70	0.84	0.13	0.49						0.61	1.03
Control Delay		38.7	22.6	53.6	0.5						36.4	55.2
Queue Delay		0.3	0.0	0.0	1.3						0.0	0.0
Total Delay		38.9	22.6	53.6	1.8						36.4	55.2
LOS		D	C	D	A						D	E
Approach Delay		33.1			4.1						46.7	
Approach LOS		C			A						D	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 106 (82%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.09

Intersection Signal Delay: 34.7

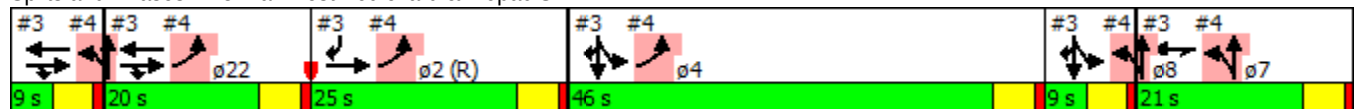
Intersection LOS: C

Intersection Capacity Utilization 105.7%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 3: Far West Boulevard & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø8	ø22
Total Split (s)	9.0	25.0	46.0	9.0	20.0
Total Split (%)	7%	19%	35%	7%	15%
Maximum Green (s)	4.0	20.0	41.0	4.0	15.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)					
Total Lost Time (s)					
Lead/Lag		Lag	Lead	Lag	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	C-Min	Min	Min	None
Act Effect Green (s)					
Actuated g/C Ratio					
v/c Ratio					
Control Delay					
Queue Delay					
Total Delay					
LOS					
Approach Delay					
Approach LOS					
Intersection Summary					

Austin Oaks Mixed Use Development
4: Mopac NB FR & Far West Boulevard

2023 Forecasted AM

5/15/2014

												
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Lane Configurations												
Volume (vph)	1008	0	579	86	0	0						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Lane Util. Factor	0.97	1.00	0.95	0.95	1.00	1.00						
Fr												
Flt Protected	0.950		0.950	0.985								
Satd. Flow (prot)	3433	0	1681	1743	0	0						
Flt Permitted	0.950		0.950	0.985								
Satd. Flow (perm)	3433	0	1681	1743	0	0						
Right Turn on Red		Yes				Yes						
Satd. Flow (RTOR)												
Link Speed (mph)	35			50	50							
Link Distance (ft)	406			308	472							
Travel Time (s)	7.9			4.2	6.4							
Peak Hour Factor	0.90	0.92	0.93	0.25	0.92	0.92						
Adj. Flow (vph)	1120	0	623	344	0	0						
Shared Lane Traffic (%)			24%									
Lane Group Flow (vph)	1120	0	473	494	0	0						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Right	Left	Left	Left	Right						
Median Width(ft)	24			12	12							
Link Offset(ft)	0			0	0							
Crosswalk Width(ft)	16			16	16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00						
Turning Speed (mph)	15	9	15			9						
Number of Detectors	1		1	2								
Detector Template	Left		Left	Thru								
Leading Detector (ft)	20		20	100								
Trailing Detector (ft)	0		0	0								
Detector 1 Position(ft)	0		0	0								
Detector 1 Size(ft)	20		20	6								
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0								
Detector 1 Queue (s)	0.0		0.0	0.0								
Detector 1 Delay (s)	0.0		0.0	0.0								
Detector 2 Position(ft)				94								
Detector 2 Size(ft)				6								
Detector 2 Type				Cl+Ex								
Detector 2 Channel												
Detector 2 Extend (s)				0.0								
Turn Type	Prot		Split	NA								
Protected Phases	2 4 22		1 7 8	1 7 8			1	2	4	7	8	22
Permitted Phases												
Detector Phase	2 4 22		1 7 8	1 7 8								
Switch Phase												
Minimum Initial (s)							4.0	10.0	10.0	10.0	4.0	1.0
Minimum Split (s)							9.0	15.0	25.0	15.0	9.0	20.0

Austin Oaks Mixed Use Development
4: Mopac NB FR & Far West Boulevard

2023 Forecasted AM
5/15/2014



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Total Split (s)							9.0	25.0	46.0	21.0	9.0	20.0
Total Split (%)							7%	19%	35%	16%	7%	15%
Maximum Green (s)							4.0	20.0	41.0	16.0	4.0	15.0
Yellow Time (s)							4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)							1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag								Lag	Lead		Lag	Lead
Lead-Lag Optimize?								Yes	Yes		Yes	Yes
Vehicle Extension (s)							3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode							Min	C-Min	Min	Min	Min	None
Act Effect Green (s)	86.0		34.0	34.0								
Actuated g/C Ratio	0.66		0.26	0.26								
v/c Ratio	0.49		1.08	1.09								
Control Delay	3.1		110.6	112.3								
Queue Delay	1.0		0.0	0.0								
Total Delay	4.0		110.6	112.3								
LOS	A		F	F								
Approach Delay	4.0			111.5								
Approach LOS	A			F								

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 106 (82%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.09

Intersection Signal Delay: 53.8

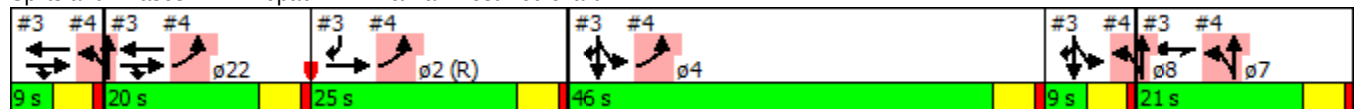
Intersection LOS: D

Intersection Capacity Utilization 118.8%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 4: Mopac NB FR & Far West Boulevard



Austin Oaks Mixed Use Development
5: Spicewood Springs Road & Mopac SB FR

2023 Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑					↑	↑↑	↑
Volume (vph)	0	1049	701	694	1130	0	0	0	0	385	1323	718
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	60		0	0		0	150		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			75			25			75		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.999	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1610	3387	1583
Flt Permitted				0.950						0.950	0.999	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1610	3387	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			185									185
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		294			386			782			882	
Travel Time (s)		5.7			7.5			10.7			12.0	
Peak Hour Factor	0.92	0.81	0.90	0.87	0.86	0.92	0.92	0.92	0.92	0.93	0.87	0.94
Adj. Flow (vph)	0	1295	779	798	1314	0	0	0	0	414	1521	764
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	0	1295	779	798	1314	0	0	0	0	373	1562	764
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Prot	Prot	NA					Split	NA	Prot
Protected Phases		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5
Permitted Phases												
Detector Phase		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

Austin Oaks Mixed Use Development
5: Spicewood Springs Road & Mopac SB FR

2023 Forecasted AM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)		27.0	27.0	51.0	72.0					37.0	37.0	37.0
Actuated g/C Ratio		0.21	0.21	0.39	0.55					0.28	0.28	0.28
v/c Ratio		1.76	1.64	1.15	0.67					0.81	1.62	1.31
Control Delay		374.1	318.8	98.8	8.1					58.7	316.5	182.0
Queue Delay		0.7	0.0	1.3	49.4					0.0	0.0	0.0
Total Delay		374.8	318.8	100.1	57.6					58.7	316.5	182.0
LOS		F	F	F	E					E	F	F
Approach Delay		353.8			73.6						242.8	
Approach LOS		F			E						F	

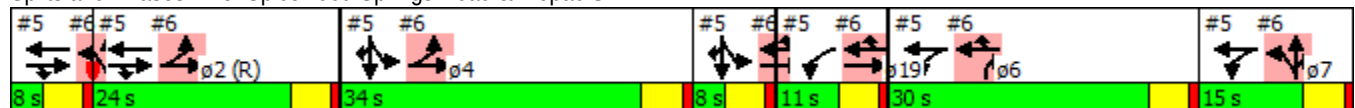
Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 8 (6%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.81
Intersection Signal Delay: 224.3
Intersection Capacity Utilization 126.2%
Analysis Period (min) 15

Intersection LOS: F

ICU Level of Service H

Splits and Phases: 5: Spicewood Springs Road & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0	5.0	6.0
Minimum Split (s)	8.0	10.0	10.0	8.0	10.0	10.0	11.0
Total Split (s)	8.0	24.0	34.0	8.0	30.0	15.0	11.0
Total Split (%)	6%	18%	26%	6%	23%	12%	8%
Maximum Green (s)	3.0	19.0	29.0	3.0	25.0	10.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Austin Oaks Mixed Use Development
6: Mopac NB FR & Spicewood Springs Road

2023 Forecasted AM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	352	970	0	0	1129	263	483	14	553	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		325	0		0	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	75			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.91	0.95	1.00	1.00	1.00
Frt						0.850		0.910	0.850			
Flt Protected	0.950						0.950	0.983				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	1681	1516	1504	0	0	0
Flt Permitted	0.950						0.950	0.983				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	1681	1516	1504	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						305		49	185			
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		386			594			563			407	
Travel Time (s)		7.5			11.6			7.7			5.6	
Peak Hour Factor	0.90	0.96	0.92	0.92	0.93	0.79	0.86	0.60	0.87	0.92	0.92	0.92
Adj. Flow (vph)	391	1010	0	0	1214	333	562	23	636	0	0	0
Shared Lane Traffic (%)							25%		39%			
Lane Group Flow (vph)	391	1010	0	0	1214	333	421	412	388	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Prot	Split	NA	custom			
Protected Phases	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			
Permitted Phases												
Detector Phase	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

Austin Oaks Mixed Use Development
6: Mopac NB FR & Spicewood Springs Road

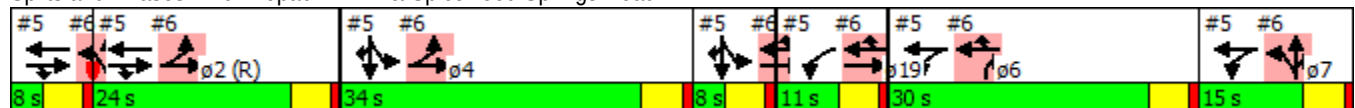
2023 Forecasted AM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)	53.0	72.0			44.0	44.0	18.0	18.0	40.0			
Actuated g/C Ratio	0.41	0.55			0.34	0.34	0.14	0.14	0.31			
v/c Ratio	0.54	0.52			1.01	0.45	1.81	1.63	0.66			
Control Delay	7.3	1.4			72.2	6.8	415.0	334.2	25.7			
Queue Delay	14.7	25.4			32.8	0.0	0.0	0.2	0.0			
Total Delay	22.0	26.8			105.0	6.8	415.0	334.3	25.7			
LOS	C	C			F	A	F	F	C			
Approach Delay		25.5			83.9			264.1				
Approach LOS		C			F			F				

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 8 (6%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.81
Intersection Signal Delay: 117.0 Intersection LOS: F
Intersection Capacity Utilization 126.2% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 6: Mopac NB FR & Spicewood Springs Road



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0	5.0	6.0
Minimum Split (s)	8.0	10.0	10.0	8.0	10.0	10.0	11.0
Total Split (s)	8.0	24.0	34.0	8.0	30.0	15.0	11.0
Total Split (%)	6%	18%	26%	6%	23%	12%	8%
Maximum Green (s)	3.0	19.0	29.0	3.0	25.0	10.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Austin Oaks Mixed Use Development
7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road

2023 Forecasted AM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	1147	178	572	814	12	76	4	238	7	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	0		100	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.986			0.996				0.850		0.981	
Flt Protected	0.950			0.950				0.955			0.959	
Satd. Flow (prot)	1770	5014	0	1770	3525	0	0	1779	1583	0	1752	0
Flt Permitted	0.314			0.088				0.728			0.792	
Satd. Flow (perm)	585	5014	0	164	3525	0	0	1356	1583	0	1447	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19			3				306		101	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1093			275			251			161	
Travel Time (s)		21.3			5.4			5.7			3.7	
Peak Hour Factor	0.72	0.50	0.76	0.50	0.92	0.50	0.91	0.85	0.62	0.58	0.90	0.84
Adj. Flow (vph)	12	2294	234	1144	885	24	84	5	384	12	0	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	12	2528	0	1144	909	0	0	89	384	0	14	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2			6			4		4	8		
Detector Phase	5	2		1	6		4	4	4	8	8	

Austin Oaks Mixed Use Development
7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road

2023 Forecasted AM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	20.0		21.0	20.0		15.0	15.0	15.0	11.0	11.0	
Minimum Split (s)	10.0	25.0		26.0	25.0		20.0	20.0	20.0	16.0	16.0	
Total Split (s)	29.0	72.0		29.0	72.0		29.0	29.0	29.0	29.0	29.0	
Total Split (%)	22.3%	55.4%		22.3%	55.4%		22.3%	22.3%	22.3%	22.3%	22.3%	
Maximum Green (s)	24.0	67.0		24.0	67.0		24.0	24.0	24.0	24.0	24.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0			5.0	5.0		5.0	
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min		Min	C-Min		Min	Min	Min	Min	Min	
Walk Time (s)							6.0	6.0	6.0	6.0	6.0	
Flash Dont Walk (s)							24.0	24.0	24.0	24.0	24.0	
Pedestrian Calls (#/hr)							0	0	0	0	0	
Act Effect Green (s)	69.9	67.0		79.2	78.8			17.7	17.7		17.7	
Actuated g/C Ratio	0.54	0.52		0.61	0.61			0.14	0.14		0.14	
v/c Ratio	0.02	0.97		2.41	0.43			0.48	0.80		0.05	
Control Delay	15.2	43.3		660.4	22.9			60.1	25.3		0.3	
Queue Delay	0.0	0.0		0.0	0.5			0.0	0.0		0.0	
Total Delay	15.2	43.3		660.4	23.4			60.1	25.3		0.3	
LOS	B	D		F	C			E	C		A	
Approach Delay		43.2			378.4			31.8			0.3	
Approach LOS		D			F			C			A	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 55 (42%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 2.41

Intersection Signal Delay: 177.5

Intersection LOS: F

Intersection Capacity Utilization 82.8%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road



Austin Oaks Mixed Use Development
10: Hart Lane & Greystone Drive

2023 Forecasted AM
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	42	198	145	87	75	9	54	162	36	17	297	31
Peak Hour Factor	0.80	0.65	0.65	0.78	0.88	0.58	0.75	0.81	0.60	0.58	0.69	0.57
Hourly flow rate (vph)	52	305	223	112	85	16	72	200	60	29	430	54
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	357	223	197	16	332	514						
Volume Left (vph)	53	0	112	0	72	29						
Volume Right (vph)	0	223	0	16	60	54						
Hadj (s)	0.11	-0.67	0.32	-0.67	-0.03	-0.02						
Departure Headway (s)	8.3	7.5	9.2	8.2	7.9	7.6						
Degree Utilization, x	0.82	0.47	0.50	0.04	0.73	1.0						
Capacity (veh/h)	425	471	368	414	441	467						
Control Delay (s)	38.4	15.7	20.0	10.3	29.6	93.0						
Approach Delay (s)	29.7		19.3		29.6	93.0						
Approach LOS	D		C		D	F						
Intersection Summary												
Delay			48.2									
Level of Service			E									
Intersection Capacity Utilization			63.8%		ICU Level of Service				B			
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
20: Wood Hollow Drive & Greystone Drive

2023 Forecasted AM
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	63	140	182	61	133	34	25	227	48	26	193	55
Peak Hour Factor	0.81	0.89	0.64	0.80	0.82	0.72	0.53	0.88	0.79	0.68	0.85	0.68
Hourly flow rate (vph)	78	157	284	76	162	47	47	258	61	38	227	81
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2				
Volume Total (vph)	235	284	238	47	176	190	152	194				
Volume Left (vph)	78	0	76	0	47	0	38	0				
Volume Right (vph)	0	284	0	47	0	61	0	81				
Hadj (s)	0.20	-0.67	0.19	-0.67	0.17	-0.19	0.16	-0.26				
Departure Headway (s)	7.4	6.6	7.8	6.9	7.7	7.3	7.7	7.3				
Degree Utilization, x	0.49	0.52	0.51	0.09	0.38	0.39	0.32	0.39				
Capacity (veh/h)	467	530	436	491	440	470	445	472				
Control Delay (s)	16.1	15.3	17.5	9.4	14.0	13.6	13.2	13.7				
Approach Delay (s)	15.6		16.1		13.8		13.5					
Approach LOS	C		C		B		B					
Intersection Summary												
Delay			14.8									
Level of Service			B									
Intersection Capacity Utilization			50.9%	ICU Level of Service					A			
Analysis Period (min)			15									



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	243	0	0	3645	167
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.79	0.92	0.92	0.96	0.86
Hourly flow rate (vph)	0	308	0	0	3797	194
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	3894	1363	3991			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	3894	1363	3991			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	0	100			
cM capacity (veh/h)	2	138	44			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	308	1519	1519	954		
Volume Left	0	0	0	0		
Volume Right	308	0	0	194		
cSH	138	1700	1700	1700		
Volume to Capacity	2.23	0.89	0.89	0.56		
Queue Length 95th (ft)	643	0	0	0		
Control Delay (s)	630.2	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	630.2	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay		45.1				
Intersection Capacity Utilization		95.9%		ICU Level of Service		F
Analysis Period (min)		15				



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	33	0	0	3055	232
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.50	0.92	0.92	0.95	0.75
Hourly flow rate (vph)	0	66	0	0	3216	309
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	3370	1227	3525			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	3370	1227	3525			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	61	100			
cM capacity (veh/h)	6	170	69			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	66	1286	1286	952		
Volume Left	0	0	0	0		
Volume Right	66	0	0	309		
cSH	170	1700	1700	1700		
Volume to Capacity	0.39	0.76	0.76	0.56		
Queue Length 95th (ft)	42	0	0	0		
Control Delay (s)	39.0	0.0	0.0	0.0		
Lane LOS	E					
Approach Delay (s)	39.0	0.0				
Approach LOS	E					
Intersection Summary						
Average Delay			0.7			
Intersection Capacity Utilization			74.2%		ICU Level of Service	D
Analysis Period (min)			15			

Austin Oaks Mixed Use Development
50: Executive Center Drive & Wood Hollow Drive

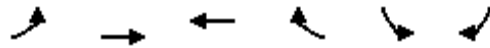
2023 Forecasted AM
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	31	265	95	107	227	143	30	28	4	15	69	22
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.67	0.91	1.00	0.86	0.91	0.91	0.50	0.46	0.50	0.25	0.56	0.47
Hourly flow rate (vph)	46	291	95	124	249	157	60	61	8	60	123	47
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh												
Upstream signal (ft)					522							
pX, platoon unblocked												
vC, conflicting volume	407			386			1117	1087	339	1047	1056	328
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	407			386			1117	1087	339	1047	1056	328
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	96			89			22	67	99	56	36	93
cM capacity (veh/h)	1152			1172			77	185	704	136	193	713
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	432	531	129	230								
Volume Left	46	124	60	60								
Volume Right	95	157	8	47								
cSH	1152	1172	115	201								
Volume to Capacity	0.04	0.11	1.12	1.14								
Queue Length 95th (ft)	3	9	197	281								
Control Delay (s)	1.3	2.9	193.4	156.1								
Lane LOS	A	A	F	F								
Approach Delay (s)	1.3	2.9	193.4	156.1								
Approach LOS			F	F								
Intersection Summary												
Average Delay			47.6									
Intersection Capacity Utilization			66.8%		ICU Level of Service				C			
Analysis Period (min)			15									

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	237	46	131	310	14	25
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.79	0.67	0.83	0.72	0.75	0.46
Hourly flow rate (vph)	300	69	158	431	19	54
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			369		1081	334
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			369		1081	334
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			87		91	92
cM capacity (veh/h)			1190		209	708
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	369	588	73			
Volume Left	0	158	19			
Volume Right	69	0	54			
cSH	1700	1190	440			
Volume to Capacity	0.22	0.13	0.17			
Queue Length 95th (ft)	0	11	15			
Control Delay (s)	0.0	3.4	14.8			
Lane LOS		A	B			
Approach Delay (s)	0.0	3.4	14.8			
Approach LOS			B			
Intersection Summary						
Average Delay		3.0				
Intersection Capacity Utilization		52.2%		ICU Level of Service	A	
Analysis Period (min)		15				



Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations							
Volume (veh/h)	114	158	169	959	1299	297	
Sign Control	Stop			Free	Free		
Grade	0%			0%	0%		
Peak Hour Factor	0.85	0.87	0.86	0.88	0.89	0.67	
Hourly flow rate (vph)	134	182	197	1090	1460	443	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None	None		
Median storage veh							
Upstream signal (ft)				1093			
pX, platoon unblocked	0.89						
vC, conflicting volume	2619	951	1460				
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2570	951	1460				
tC, single (s)	6.8	6.9	4.1				
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2				
p0 queue free %	0	30	57				
cM capacity (veh/h)	11	260	459				
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	134	182	197	545	545	973	930
Volume Left	134	0	197	0	0	0	0
Volume Right	0	182	0	0	0	0	443
cSH	11	260	459	1700	1700	1700	1700
Volume to Capacity	12.49	0.70	0.43	0.32	0.32	0.57	0.55
Queue Length 95th (ft)	Err	117	53	0	0	0	0
Control Delay (s)	Err	45.6	18.6	0.0	0.0	0.0	0.0
Lane LOS	F	E	C				
Approach Delay (s)	4273.7		2.8	0.0			
Approach LOS	F						
Intersection Summary							
Average Delay			386.0				
Intersection Capacity Utilization			71.1%	ICU Level of Service			C
Analysis Period (min)			15				



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	0	169	232	0	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	184	252	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	252				436	252
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	252				436	252
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	1313				578	786
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	184	252	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1313	1700	1700			
Volume to Capacity	0.00	0.15	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS			A			
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS			A			
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			15.5%	ICU Level of Service		A
Analysis Period (min)			15			

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	0	0	232	169	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	252	184	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	436	184	184			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	436	184	184			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	578	859	1391			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	0	252	184			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1391	1700			
Volume to Capacity	0.00	0.00	0.11			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		15.5%		ICU Level of Service	A	
Analysis Period (min)		15				

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	0	0	232	169	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	252	184	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	436	184	184			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	436	184	184			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	578	859	1391			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	0	252	184			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1391	1700			
Volume to Capacity	0.00	0.00	0.11			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		15.5%		ICU Level of Service	A	
Analysis Period (min)		15				

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	12	26	108	124	114	157
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	13	28	117	135	124	171
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	603	185			252	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	603	185			252	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	97	97			91	
cM capacity (veh/h)	418	857			1313	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	41	252	295			
Volume Left	13	0	124			
Volume Right	28	135	0			
cSH	644	1700	1313			
Volume to Capacity	0.06	0.15	0.09			
Queue Length 95th (ft)	5	0	8			
Control Delay (s)	11.0	0.0	3.9			
Lane LOS	B		A			
Approach Delay (s)	11.0	0.0	3.9			
Approach LOS	B					
Intersection Summary						
Average Delay		2.7				
Intersection Capacity Utilization		41.2%		ICU Level of Service		A
Analysis Period (min)		15				

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	202	0	0	177
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	220	0	0	192
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	412	220			220	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	412	220			220	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	596	820			1350	
Direction, Lane #	NB 1	SB 1				
Volume Total	220	192				
Volume Left	0	0				
Volume Right	0	0				
cSH	1700	1350				
Volume to Capacity	0.13	0.00				
Queue Length 95th (ft)	0	0				
Control Delay (s)	0.0	0.0				
Lane LOS						
Approach Delay (s)	0.0	0.0				
Approach LOS						
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			20.6%	ICU Level of Service		A
Analysis Period (min)			15			

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	202	0	0	177
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	220	0	0	192
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	412	220			220	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	412	220			220	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	596	820			1350	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	0	220	192			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1350			
Volume to Capacity	0.00	0.13	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			20.6%	ICU Level of Service		A
Analysis Period (min)			15			

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	202	0	0	177
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	220	0	0	192
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	412	220			220	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	412	220			220	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	596	820			1350	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	0	220	192			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1350			
Volume to Capacity	0.00	0.13	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		14.0%		ICU Level of Service	A	
Analysis Period (min)		15				

Austin Oaks Mixed Use Development
800: Executive Center Drive & Driveway 8

2023 Forecasted AM
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	0	0	0	202	0	0	177	0
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	0	0	0	0	0	0	0	220	0	0	192	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	412	412	192	412	412	220	192			220		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	412	412	192	412	412	220	192			220		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	100	100	100	100			100		
cM capacity (veh/h)	550	530	849	550	530	820	1381			1350		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	0	0	220	192								
Volume Left	0	0	0	0								
Volume Right	0	0	0	0								
cSH	1700	1700	1381	1350								
Volume to Capacity	0.00	0.00	0.00	0.00								
Queue Length 95th (ft)	0	0	0	0								
Control Delay (s)	0.0	0.0	0.0	0.0								
Lane LOS	A	A										
Approach Delay (s)	0.0	0.0	0.0	0.0								
Approach LOS	A	A										
Intersection Summary												
Average Delay			0.0									
Intersection Capacity Utilization			14.0%	ICU Level of Service						A		
Analysis Period (min)			15									

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	202	0	0	177
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	220	0	0	192
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	412	220			220	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	412	220			220	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	596	820			1350	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	0	220	192			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1350			
Volume to Capacity	0.00	0.13	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		14.0%		ICU Level of Service	A	
Analysis Period (min)		15				

Austin Oaks Mixed Use Development
1000: Executive Center Drive & Driveway 10

2023 Forecasted AM
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	0	0	0	202	0	0	177	0
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	0	0	0	0	0	0	0	220	0	0	192	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	412	412	192	412	412	220	192			220		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	412	412	192	412	412	220	192			220		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	100	100	100	100			100		
cM capacity (veh/h)	550	530	849	550	530	820	1381			1350		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	0	0	220	192								
Volume Left	0	0	0	0								
Volume Right	0	0	0	0								
cSH	1700	1700	1381	1350								
Volume to Capacity	0.00	0.00	0.00	0.00								
Queue Length 95th (ft)	0	0	0	0								
Control Delay (s)	0.0	0.0	0.0	0.0								
Lane LOS	A	A										
Approach Delay (s)	0.0	0.0	0.0	0.0								
Approach LOS	A	A										
Intersection Summary												
Average Delay			0.0									
Intersection Capacity Utilization			14.0%	ICU Level of Service					A			
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
1100: Driveway 11 & Wood Hollow Drive

2023 Forecasted AM

5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	215	69	251	499	0	19	0	97	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		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
Hourly flow rate (vph)	0	234	75	273	542	0	21	0	105	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh												
Upstream signal (ft)					251							
pX, platoon unblocked	0.45						0.45	0.45		0.45	0.45	0.45
vC, conflicting volume	542			309			1359	1359	271	1465	1397	542
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			309			1185	1185	271	1421	1269	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			78			66	100	86	100	100	100
cM capacity (veh/h)	724			1252			62	66	767	37	59	484
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1							
Volume Total	309	815	21	105	0							
Volume Left	0	273	21	0	0							
Volume Right	75	0	0	105	0							
cSH	1700	1252	62	767	1700							
Volume to Capacity	0.18	0.22	0.34	0.14	0.00							
Queue Length 95th (ft)	0	21	31	12	0							
Control Delay (s)	0.0	4.8	90.4	10.4	0.0							
Lane LOS		A	F	B	A							
Approach Delay (s)	0.0	4.8	23.5		0.0							
Approach LOS			C		A							
Intersection Summary												
Average Delay			5.5									
Intersection Capacity Utilization			69.0%		ICU Level of Service				C			
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
1: Hart Lane & Far West Boulevard

2023 Forecasted PM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	47	622	42	189	615	164	65	157	146	183	124	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	170		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.987				0.850		0.941			0.968	
Flt Protected	0.950			0.950				0.991			0.981	
Satd. Flow (prot)	1770	3493	0	1770	3539	1583	0	3300	0	0	3361	0
Flt Permitted	0.203			0.277				0.991			0.981	
Satd. Flow (perm)	378	3493	0	516	3539	1583	0	3300	0	0	3361	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9				193		98			22	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		362			1265			236			237	
Travel Time (s)		7.1			24.6			5.4			5.4	
Peak Hour Factor	0.73	0.83	0.61	0.69	0.83	0.85	0.80	0.80	0.82	0.90	0.56	0.47
Adj. Flow (vph)	64	749	69	274	741	193	81	196	178	203	221	113
Shared Lane Traffic (%)												
Lane Group Flow (vph)	64	818	0	274	741	193	0	455	0	0	537	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Split	NA		Split	NA	
Protected Phases	5	2		1	6		4	4		8	8	
Permitted Phases	2			6		6						
Detector Phase	5	2		1	6	6	4	4		8	8	

Austin Oaks Mixed Use Development
1: Hart Lane & Far West Boulevard

2023 Forecasted PM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	8.0	18.0		8.0	18.0	18.0	12.0	12.0		12.0	12.0	
Minimum Split (s)	13.0	24.0		13.0	24.0	24.0	33.0	33.0		33.0	33.0	
Total Split (s)	13.0	62.0		15.0	64.0	64.0	28.0	28.0		25.0	25.0	
Total Split (%)	10.0%	47.7%		11.5%	49.2%	49.2%	21.5%	21.5%		19.2%	19.2%	
Maximum Green (s)	8.0	57.0		10.0	59.0	59.0	23.0	23.0		20.0	20.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0		5.0			5.0	
Lead/Lag	Lead	Lead		Lag	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	
Walk Time (s)		7.0			7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		12.0			12.0	12.0	21.0	21.0		21.0	21.0	
Pedestrian Calls (#/hr)		0			0	0	0	0		0	0	
Act Effect Green (s)	51.4	51.4		59.0	59.0	59.0		19.3			26.1	
Actuated g/C Ratio	0.40	0.40		0.45	0.45	0.45		0.15			0.20	
v/c Ratio	0.27	0.59		0.76	0.46	0.23		0.79			0.78	
Control Delay	30.4	34.1		33.9	14.0	1.3		52.0			55.7	
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Delay	30.4	34.1		33.9	14.0	1.3		52.0			55.7	
LOS	C	C		C	B	A		D			E	
Approach Delay		33.8			16.5			52.0			55.7	
Approach LOS		C			B			D			E	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 20 (15%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 115

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay: 33.5

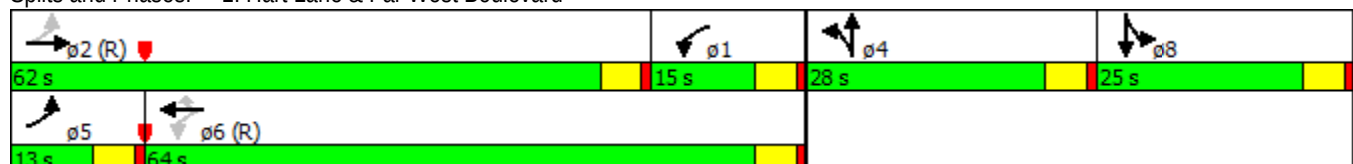
Intersection LOS: C

Intersection Capacity Utilization 67.0%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 1: Hart Lane & Far West Boulevard



Austin Oaks Mixed Use Development
2: Wood Hollow Drive & Far West Boulevard

2023 Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	146	807	66	238	714	140	106	215	337	165	139	107
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	335		0	165		0	120		120	0		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	75			35			50			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.933	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1738	0
Flt Permitted	0.258			0.141			0.950			0.950		
Satd. Flow (perm)	481	3539	1583	263	3539	1583	1770	1863	1583	1770	1738	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			114			173			212		27	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1265			1235			599			222	
Travel Time (s)		24.6			24.1			13.6			5.0	
Peak Hour Factor	0.74	0.91	0.58	0.90	0.88	0.81	0.69	0.65	0.87	0.90	0.81	0.77
Adj. Flow (vph)	197	887	114	264	811	173	154	331	387	183	172	139
Shared Lane Traffic (%)												
Lane Group Flow (vph)	197	887	114	264	811	173	154	331	387	183	311	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	L NA	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		3	3		7	7	
Permitted Phases	6		6	2		2			3			
Detector Phase	1	6	6	5	2	2	3	3	3	7	7	

Austin Oaks Mixed Use Development
2: Wood Hollow Drive & Far West Boulevard

2023 Forecasted PM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	8.0	8.0	8.0	5.0	5.0	
Minimum Split (s)	10.0	22.0	22.0	10.0	22.0	22.0	31.0	31.0	31.0	31.0	31.0	
Total Split (s)	20.0	68.0	68.0	16.0	64.0	64.0	20.0	20.0	20.0	26.0	26.0	
Total Split (%)	15.4%	52.3%	52.3%	12.3%	49.2%	49.2%	15.4%	15.4%	15.4%	20.0%	20.0%	
Maximum Green (s)	15.0	63.0	63.0	11.0	59.0	59.0	15.0	15.0	15.0	21.0	21.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
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	
Recall Mode	None	C-Min	C-Min	Max	C-Min	C-Min	Min	Min	Min	Max	Max	
Walk Time (s)		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		12.0	12.0		12.0	12.0	21.0	21.0	21.0	21.0	21.0	
Pedestrian Calls (#/hr)		0	0		0	0	0	0	0	0	0	
Act Effect Green (s)	42.8	42.8	42.8	39.4	39.4	39.4	35.2	35.2	35.2	21.0	21.0	
Actuated g/C Ratio	0.33	0.33	0.33	0.30	0.30	0.30	0.27	0.27	0.27	0.16	0.16	
v/c Ratio	0.65	0.76	0.19	1.28	0.76	0.29	0.32	0.66	0.66	0.64	1.03	
Control Delay	36.2	26.6	1.7	176.4	49.5	9.6	42.4	50.8	26.0	62.3	107.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	36.2	26.6	1.7	176.4	49.5	9.6	42.4	50.8	26.0	62.3	107.2	
LOS	D	C	A	F	D	A	D	D	C	E	F	
Approach Delay		25.8			70.8			38.3			90.5	
Approach LOS		C			E			D			F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 20 (15%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.28

Intersection Signal Delay: 51.8

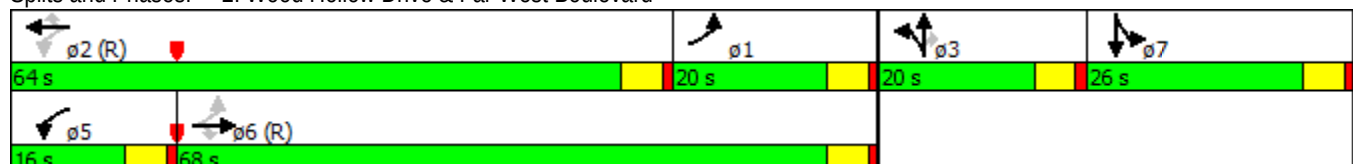
Intersection LOS: D

Intersection Capacity Utilization 72.7%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 2: Wood Hollow Drive & Far West Boulevard



Austin Oaks Mixed Use Development
3: Far West Boulevard & Mopac SB FR

2023 Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑						↑↑	↑
Volume (vph)	0	1218	407	11	447	0	0	0	0	397	536	979
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									0.850
Flt Protected				0.950							0.977	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	3458	1583
Flt Permitted				0.950							0.977	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	3458	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			232									313
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		1235			406			400			362	
Travel Time (s)		24.1			7.9			5.5			4.9	
Peak Hour Factor	0.92	0.91	0.93	0.67	0.93	0.92	0.92	0.92	0.92	0.78	0.92	0.95
Adj. Flow (vph)	0	1338	438	16	481	0	0	0	0	509	583	1031
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1338	438	16	481	0	0	0	0	0	1092	1031
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	L NA	Right	Left	Left	Right	Left	Left	R NA
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	custom	Prot	NA					custom	NA	custom
Protected Phases		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Permitted Phases										4		
Detector Phase		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Switch Phase												
Minimum Initial (s)				10.0								
Minimum Split (s)				15.0								

Lane Group	ø1	ø2	ø4	ø8	ø22
Lane Configurations					
Volume (vph)					
Ideal Flow (vphpl)					
Lane Util. Factor					
Frt					
Flt Protected					
Satd. Flow (prot)					
Flt Permitted					
Satd. Flow (perm)					
Right Turn on Red					
Satd. Flow (RTOR)					
Link Speed (mph)					
Link Distance (ft)					
Travel Time (s)					
Peak Hour Factor					
Adj. Flow (vph)					
Shared Lane Traffic (%)					
Lane Group Flow (vph)					
Enter Blocked Intersection					
Lane Alignment					
Median Width(ft)					
Link Offset(ft)					
Crosswalk Width(ft)					
Two way Left Turn Lane					
Headway Factor					
Turning Speed (mph)					
Number of Detectors					
Detector Template					
Leading Detector (ft)					
Trailing Detector (ft)					
Detector 1 Position(ft)					
Detector 1 Size(ft)					
Detector 1 Type					
Detector 1 Channel					
Detector 1 Extend (s)					
Detector 1 Queue (s)					
Detector 1 Delay (s)					
Detector 2 Position(ft)					
Detector 2 Size(ft)					
Detector 2 Type					
Detector 2 Channel					
Detector 2 Extend (s)					
Turn Type					
Protected Phases	1	2	4	8	22
Permitted Phases					
Detector Phase					
Switch Phase					
Minimum Initial (s)	4.0	13.0	10.0	4.0	1.0
Minimum Split (s)	9.0	18.0	15.0	9.0	6.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)				41.0								
Total Split (%)				31.5%								
Maximum Green (s)				36.0								
Yellow Time (s)				4.0								
All-Red Time (s)				1.0								
Lost Time Adjust (s)				0.0								
Total Lost Time (s)				5.0								
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0								
Recall Mode				Min								
Act Effect Green (s)		51.4	31.4	28.6	65.0						35.0	55.0
Actuated g/C Ratio		0.40	0.24	0.22	0.50						0.27	0.42
v/c Ratio		0.96	0.78	0.04	0.27						1.17	1.21
Control Delay		56.3	33.7	16.7	3.0						131.3	131.4
Queue Delay		44.1	0.0	0.0	0.0						0.0	0.0
Total Delay		100.4	33.7	16.7	3.0						131.3	131.4
LOS		F	C	B	A						F	F
Approach Delay		83.9			3.5						131.4	
Approach LOS		F			A						F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.21

Intersection Signal Delay: 97.7

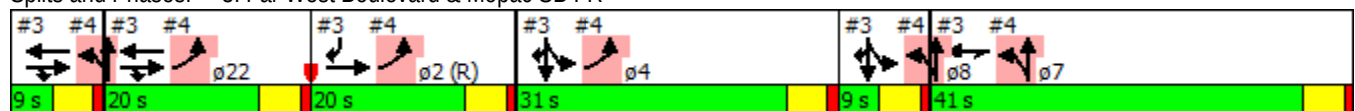
Intersection LOS: F

Intersection Capacity Utilization 106.6%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 3: Far West Boulevard & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø8	ø22
Total Split (s)	9.0	20.0	31.0	9.0	20.0
Total Split (%)	7%	15%	24%	7%	15%
Maximum Green (s)	4.0	15.0	26.0	4.0	15.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)					
Total Lost Time (s)					
Lead/Lag		Lag	Lead	Lag	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	C-Min	Min	Min	None
Act Effect Green (s)					
Actuated g/C Ratio					
v/c Ratio					
Control Delay					
Queue Delay					
Total Delay					
LOS					
Approach Delay					
Approach LOS					
Intersection Summary					

Austin Oaks Mixed Use Development
4: Mopac NB FR & Far West Boulevard

2023 Forecasted PM
5/15/2014

												
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Lane Configurations	LT	RT	LT	LT	RT	RT						
Volume (vph)	1625	0	392	81	0	0						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Lane Util. Factor	0.97	1.00	0.95	0.95	1.00	1.00						
Fr												
Flt Protected	0.950		0.950	0.993								
Satd. Flow (prot)	3433	0	1681	1757	0	0						
Flt Permitted	0.950		0.950	0.993								
Satd. Flow (perm)	3433	0	1681	1757	0	0						
Right Turn on Red		Yes				Yes						
Satd. Flow (RTOR)												
Link Speed (mph)	35			50	50							
Link Distance (ft)	406			308	472							
Travel Time (s)	7.9			4.2	6.4							
Peak Hour Factor	0.90	0.92	0.93	0.25	0.92	0.92						
Adj. Flow (vph)	1806	0	422	324	0	0						
Shared Lane Traffic (%)			13%									
Lane Group Flow (vph)	1806	0	367	379	0	0						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Right	Left	Left	Left	Right						
Median Width(ft)	24			12	12							
Link Offset(ft)	0			0	0							
Crosswalk Width(ft)	16			16	16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00						
Turning Speed (mph)	15	9	15			9						
Number of Detectors	1		1	2								
Detector Template	Left		Left	Thru								
Leading Detector (ft)	20		20	100								
Trailing Detector (ft)	0		0	0								
Detector 1 Position(ft)	0		0	0								
Detector 1 Size(ft)	20		20	6								
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0								
Detector 1 Queue (s)	0.0		0.0	0.0								
Detector 1 Delay (s)	0.0		0.0	0.0								
Detector 2 Position(ft)				94								
Detector 2 Size(ft)				6								
Detector 2 Type				Cl+Ex								
Detector 2 Channel												
Detector 2 Extend (s)				0.0								
Turn Type	Prot		Split	NA								
Protected Phases	2 4 22		1 7 8	1 7 8			1	2	4	7	8	22
Permitted Phases												
Detector Phase	2 4 22		1 7 8	1 7 8								
Switch Phase												
Minimum Initial (s)							4.0	13.0	10.0	10.0	4.0	1.0
Minimum Split (s)							9.0	18.0	15.0	15.0	9.0	6.0



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Total Split (s)							9.0	20.0	31.0	41.0	9.0	20.0
Total Split (%)							7%	15%	24%	32%	7%	15%
Maximum Green (s)							4.0	15.0	26.0	36.0	4.0	15.0
Yellow Time (s)							4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)							1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag								Lag	Lead		Lag	Lead
Lead-Lag Optimize?								Yes	Yes		Yes	Yes
Vehicle Extension (s)							3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode							Min	C-Min	Min	Min	Min	None
Act Effect Green (s)	66.0		54.0	54.0								
Actuated g/C Ratio	0.51		0.42	0.42								
v/c Ratio	1.04		0.53	0.52								
Control Delay	41.1		31.8	31.5								
Queue Delay	26.2		0.0	0.0								
Total Delay	67.3		31.8	31.5								
LOS	E		C	C								
Approach Delay	67.3			31.7								
Approach LOS	E			C								

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.21

Intersection Signal Delay: 56.9

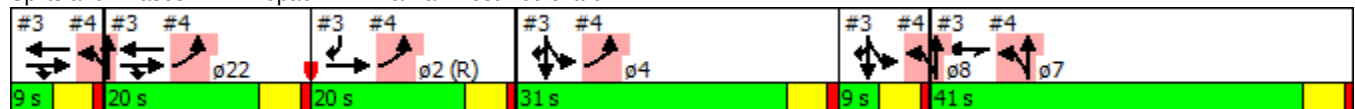
Intersection LOS: E

Intersection Capacity Utilization 119.8%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 4: Mopac NB FR & Far West Boulevard



Austin Oaks Mixed Use Development
5: Spicewood Springs Road & Mopac SB FR

2023 Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑					↑	↑↑	↑
Volume (vph)	0	1565	371	694	1464	0	0	0	0	655	271	427
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	60		0	0		0	150		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			75			25			75		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.974	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1610	3302	1583
Flt Permitted				0.950						0.950	0.974	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1610	3302	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			160									160
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		294			386			782			882	
Travel Time (s)		5.7			7.5			10.7			12.0	
Peak Hour Factor	0.92	0.81	0.90	0.87	0.86	0.92	0.92	0.92	0.92	0.93	0.87	0.94
Adj. Flow (vph)	0	1932	412	798	1702	0	0	0	0	704	311	454
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	1932	412	798	1702	0	0	0	0	352	663	454
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Prot	Prot	NA					Split	NA	Prot
Protected Phases		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5
Permitted Phases												
Detector Phase		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

Austin Oaks Mixed Use Development
5: Spicewood Springs Road & Mopac SB FR

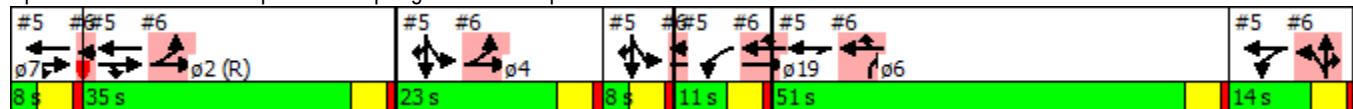
2023 Forecasted PM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)		38.0	38.0	71.0	103.0					26.0	26.0	26.0
Actuated g/C Ratio		0.25	0.25	0.47	0.69					0.17	0.17	0.17
v/c Ratio		2.16	0.79	0.95	0.70					1.26	1.21dl	1.12
Control Delay		544.7	20.7	44.2	11.3					191.8	142.8	116.1
Queue Delay		1.2	1.8	43.3	48.2					0.0	0.0	0.0
Total Delay		545.9	22.6	87.5	59.5					191.8	142.8	116.1
LOS		F	C	F	E					F	F	F
Approach Delay		453.9			68.4						146.3	
Approach LOS		F			E						F	

Intersection Summary

Area Type: Other
 Cycle Length: 150
 Actuated Cycle Length: 150
 Offset: 89 (59%), Referenced to phase 2:EBWB, Start of Green
 Natural Cycle: 140
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 2.16
 Intersection Signal Delay: 229.7
 Intersection LOS: F
 Intersection Capacity Utilization 133.3%
 ICU Level of Service H
 Analysis Period (min) 15
 dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 5: Spicewood Springs Road & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0	5.0	6.0
Minimum Split (s)	8.0	15.0	10.0	8.0	15.0	10.0	11.0
Total Split (s)	8.0	35.0	23.0	8.0	51.0	14.0	11.0
Total Split (%)	5%	23%	15%	5%	34%	9%	7%
Maximum Green (s)	3.0	30.0	18.0	3.0	46.0	9.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Austin Oaks Mixed Use Development
6: Mopac NB FR & Spicewood Springs Road

2023 Forecasted PM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 				
Volume (vph)	655	1274	0	0	1272	459	336	45	589	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		325	0		0	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	75			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.91	0.95	1.00	1.00	1.00
Flt						0.850		0.892	0.850			
Flt Protected	0.950						0.950	0.995				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	1681	1504	1504	0	0	0
Flt Permitted	0.950						0.950	0.995				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	1681	1504	1504	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						149		69	160			
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		386			594			563			407	
Travel Time (s)		7.5			11.6			7.7			5.6	
Peak Hour Factor	0.90	0.96	0.92	0.92	0.93	0.79	0.86	0.60	0.87	0.92	0.92	0.92
Adj. Flow (vph)	728	1327	0	0	1368	581	391	75	677	0	0	0
Shared Lane Traffic (%)							10%		43%			
Lane Group Flow (vph)	728	1327	0	0	1368	581	352	405	386	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Prot	Split	NA	custom			
Protected Phases	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			
Permitted Phases												
Detector Phase	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

Austin Oaks Mixed Use Development
6: Mopac NB FR & Spicewood Springs Road

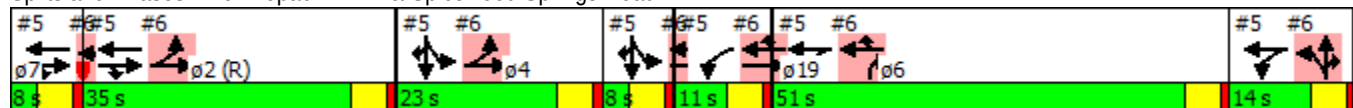
2023 Forecasted PM
5/15/2014

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)	53.0	72.0			65.0	65.0	17.0	17.0	60.0			
Actuated g/C Ratio	0.35	0.48			0.43	0.43	0.11	0.11	0.40			
v/c Ratio	1.16	0.78			0.89	0.75	1.85	1.75	0.55			
Control Delay	99.4	2.4			47.9	33.3	437.5	386.1	22.8			
Queue Delay	2.8	49.1			46.7	0.0	0.0	0.3	0.0			
Total Delay	102.2	51.5			94.6	33.3	437.5	386.4	22.8			
LOS	F	D			F	C	F	F	C			
Approach Delay		69.5			76.3			279.4				
Approach LOS		E			E			F				

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 89 (59%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 2.16
Intersection Signal Delay: 118.7 Intersection LOS: F
Intersection Capacity Utilization 133.3% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 6: Mopac NB FR & Spicewood Springs Road



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0	5.0	6.0
Minimum Split (s)	8.0	15.0	10.0	8.0	15.0	10.0	11.0
Total Split (s)	8.0	35.0	23.0	8.0	51.0	14.0	11.0
Total Split (%)	5%	23%	15%	5%	34%	9%	7%
Maximum Green (s)	3.0	30.0	18.0	3.0	46.0	9.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Austin Oaks Mixed Use Development
7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road

2023 Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	6	1022	73	231	829	1	289	9	602	1	4	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	0		100	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993							0.850		0.899	
Flt Protected	0.950			0.950				0.954			0.996	
Satd. Flow (prot)	1770	5050	0	1770	3539	0	0	1777	1583	0	1668	0
Flt Permitted	0.316			0.060				0.716			0.917	
Satd. Flow (perm)	589	5050	0	112	3539	0	0	1334	1583	0	1536	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7							316		18	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1093			275			251			161	
Travel Time (s)		21.3			5.4			5.7			3.7	
Peak Hour Factor	0.72	0.50	0.76	0.50	0.92	0.50	0.91	0.85	0.62	0.58	0.90	0.84
Adj. Flow (vph)	8	2044	96	462	901	2	318	11	971	2	4	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	8	2140	0	462	903	0	0	329	971	0	24	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2			6			4		4	8		
Detector Phase	5	2		1	6		4	4	4	8	8	

Austin Oaks Mixed Use Development
7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road

2023 Forecasted PM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	20.0		21.0	20.0		15.0	15.0	15.0	11.0	11.0	
Minimum Split (s)	10.0	25.0		26.0	25.0		35.0	35.0	35.0	35.0	35.0	
Total Split (s)	29.0	82.0		34.0	87.0		34.0	34.0	34.0	34.0	34.0	
Total Split (%)	19.3%	54.7%		22.7%	58.0%		22.7%	22.7%	22.7%	22.7%	22.7%	
Maximum Green (s)	24.0	77.0		29.0	82.0		29.0	29.0	29.0	29.0	29.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0			5.0	5.0		5.0	
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min		Min	C-Min		Min	Min	Min	Min	Min	
Walk Time (s)							6.0	6.0	6.0	6.0	6.0	
Flash Dont Walk (s)							24.0	24.0	24.0	24.0	24.0	
Pedestrian Calls (#/hr)							0	0	0	0	0	
Act Effect Green (s)	80.2	76.1		99.8	99.8			29.9	29.9		29.9	
Actuated g/C Ratio	0.53	0.51		0.67	0.67			0.20	0.20		0.20	
v/c Ratio	0.02	0.83		1.17	0.38			1.24	1.71		0.07	
Control Delay	17.2	35.1		138.6	11.2			183.7	350.4		24.8	
Queue Delay	0.0	47.7		0.0	0.2			0.0	1.2		0.0	
Total Delay	17.2	82.8		138.6	11.4			183.7	351.6		24.8	
LOS	B	F		F	B			F	F		C	
Approach Delay		82.5			54.4			309.1			24.8	
Approach LOS		F			D			F			C	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 55 (37%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.71

Intersection Signal Delay: 135.2

Intersection LOS: F

Intersection Capacity Utilization 80.3%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road



Austin Oaks Mixed Use Development
10: Hart Lane & Greystone Drive

2023 Forecasted PM
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	35	95	54	88	167	58	96	242	58	12	177	62
Peak Hour Factor	0.80	0.65	0.65	0.78	0.88	0.58	0.75	0.81	0.60	0.58	0.69	0.57
Hourly flow rate (vph)	44	146	83	113	190	100	128	299	97	21	257	109
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	190	83	303	100	523	386						
Volume Left (vph)	44	0	113	0	128	21						
Volume Right (vph)	0	83	0	100	97	109						
Hadj (s)	0.15	-0.67	0.22	-0.67	-0.03	-0.12						
Departure Headway (s)	9.0	8.2	8.6	7.8	7.6	7.7						
Degree Utilization, x	0.47	0.19	0.73	0.22	1.0	0.82						
Capacity (veh/h)	375	416	398	449	476	460						
Control Delay (s)	18.6	11.9	30.3	11.7	99.7	37.4						
Approach Delay (s)	16.6		25.7		99.7	37.4						
Approach LOS	C		D		F	E						
Intersection Summary												
Delay			51.4									
Level of Service			F									
Intersection Capacity Utilization			69.2%	ICU Level of Service					C			
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
20: Wood Hollow Drive & Greystone Drive

2023 Forecasted PM

5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	58	78	56	99	252	66	88	299	79	29	232	63
Peak Hour Factor	0.81	0.89	0.64	0.80	0.82	0.72	0.53	0.88	0.79	0.68	0.85	0.68
Hourly flow rate (vph)	72	88	88	124	307	92	166	340	100	43	273	93
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2				
Volume Total (vph)	159	88	431	92	336	270	179	229				
Volume Left (vph)	72	0	124	0	166	0	43	0				
Volume Right (vph)	0	88	0	92	0	100	0	93				
Hadj (s)	0.26	-0.67	0.18	-0.67	0.28	-0.23	0.15	-0.25				
Departure Headway (s)	8.9	8.0	8.2	7.3	8.3	7.8	8.5	8.1				
Degree Utilization, x	0.39	0.19	0.98	0.19	0.77	0.58	0.42	0.51				
Capacity (veh/h)	392	433	432	475	425	448	418	429				
Control Delay (s)	16.4	11.7	65.8	10.8	33.2	19.9	16.3	18.1				
Approach Delay (s)	14.8		56.2		27.3		17.3					
Approach LOS	B		F		D		C					
Intersection Summary												
Delay			31.8									
Level of Service			D									
Intersection Capacity Utilization			62.0%	ICU Level of Service					B			
Analysis Period (min)			15									



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	195	0	0	1895	382
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.79	0.92	0.92	0.96	0.86
Hourly flow rate (vph)	0	247	0	0	1974	444
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2196	880	2418			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2196	880	2418			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	15	100			
cM capacity (veh/h)	38	290	193			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	247	790	790	839		
Volume Left	0	0	0	0		
Volume Right	247	0	0	444		
cSH	290	1700	1700	1700		
Volume to Capacity	0.85	0.46	0.46	0.49		
Queue Length 95th (ft)	182	0	0	0		
Control Delay (s)	60.4	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	60.4	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay			5.6			
Intersection Capacity Utilization			63.9%		ICU Level of Service	B
Analysis Period (min)			15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	244	0	0	2177	116
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.50	0.92	0.92	0.95	0.75
Hourly flow rate (vph)	0	488	0	0	2292	155
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2369	841	2446			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2369	841	2446			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	0	100			
cM capacity (veh/h)	29	308	189			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	488	917	917	613		
Volume Left	0	0	0	0		
Volume Right	488	0	0	155		
cSH	308	1700	1700	1700		
Volume to Capacity	1.58	0.54	0.54	0.36		
Queue Length 95th (ft)	721	0	0	0		
Control Delay (s)	308.3	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	308.3	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay			51.3			
Intersection Capacity Utilization			66.4%		ICU Level of Service	C
Analysis Period (min)			15			

Austin Oaks Mixed Use Development
50: Executive Center Drive & Wood Hollow Drive

2023 Forecasted PM
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	11	342	43	15	204	34	135	111	28	31	53	118
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.67	0.91	1.00	0.86	0.91	0.91	0.50	0.46	0.50	0.25	0.56	0.47
Hourly flow rate (vph)	16	376	43	17	224	37	270	241	56	124	95	251
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh												
Upstream signal (ft)					522							
pX, platoon unblocked												
vC, conflicting volume	262			419			1006	727	397	885	729	243
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	262			419			1006	727	397	885	729	243
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			98			0	29	91	0	72	68
cM capacity (veh/h)	1303			1140			116	341	652	102	340	796
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	435	279	567	470								
Volume Left	16	17	270	124								
Volume Right	43	37	56	251								
cSH	1303	1140	181	259								
Volume to Capacity	0.01	0.02	3.13	1.81								
Queue Length 95th (ft)	1	1	Err	797								
Control Delay (s)	0.4	0.7	Err	414.0								
Lane LOS	A	A	F	F								
Approach Delay (s)	0.4	0.7	Err	414.0								
Approach LOS			F	F								
Intersection Summary												
Average Delay			3350.4									
Intersection Capacity Utilization			60.7%		ICU Level of Service				B			
Analysis Period (min)			15									

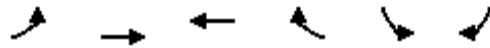
						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	296	29	47	216	53	133
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.79	0.67	0.83	0.72	0.75	0.46
Hourly flow rate (vph)	375	43	57	300	71	289
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			418		810	396
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			418		810	396
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			95		79	56
cM capacity (veh/h)			1141		332	653
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	418	357	360			
Volume Left	0	57	71			
Volume Right	43	0	289			
cSH	1700	1141	549			
Volume to Capacity	0.25	0.05	0.66			
Queue Length 95th (ft)	0	4	119			
Control Delay (s)	0.0	1.7	23.2			
Lane LOS		A	C			
Approach Delay (s)	0.0	1.7	23.2			
Approach LOS			C			
Intersection Summary						
Average Delay		7.9				
Intersection Capacity Utilization		52.4%		ICU Level of Service	A	
Analysis Period (min)		15				



Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations							
Volume (veh/h)	253	234	131	1310	933	154	
Sign Control	Stop			Free	Free		
Grade	0%			0%	0%		
Peak Hour Factor	0.85	0.87	0.86	0.88	0.89	0.67	
Hourly flow rate (vph)	298	269	152	1489	1048	230	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None	None		
Median storage veh							
Upstream signal (ft)				1093			
pX, platoon unblocked	0.89						
vC, conflicting volume	2212	639	1048				
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2115	639	1048				
tC, single (s)	6.8	6.9	4.1				
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2				
p0 queue free %	0	36	77				
cM capacity (veh/h)	30	419	660				
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	298	269	152	744	744	699	579
Volume Left	298	0	152	0	0	0	0
Volume Right	0	269	0	0	0	0	230
cSH	30	419	660	1700	1700	1700	1700
Volume to Capacity	9.99	0.64	0.23	0.44	0.44	0.41	0.34
Queue Length 95th (ft)	Err	109	22	0	0	0	0
Control Delay (s)	Err	27.8	12.1	0.0	0.0	0.0	0.0
Lane LOS	F	D	B				
Approach Delay (s)	5265.8		1.1	0.0			
Approach LOS	F						
Intersection Summary							
Average Delay			856.5				
Intersection Capacity Utilization			62.0%	ICU Level of Service			B
Analysis Period (min)			15				

Austin Oaks Mixed Use Development
100: Executive Center Drive & Driveway 1

2023 Forecasted PM
5/15/2014



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	0	86	116	0	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	93	126	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	126				220	126
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	126				220	126
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	1460				769	924
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	93	126	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1460	1700	1700			
Volume to Capacity	0.00	0.07	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS			A			
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS			A			
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization		9.4%		ICU Level of Service		A
Analysis Period (min)		15				

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	0	0	116	86	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	126	93	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	220	93	93			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	220	93	93			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	769	964	1501			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	0	126	93			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1501	1700			
Volume to Capacity	0.00	0.00	0.05			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		9.4%		ICU Level of Service	A	
Analysis Period (min)		15				

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	0	0	116	86	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	126	93	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	220	93	93			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	220	93	93			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	769	964	1501			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	0	126	93			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1501	1700			
Volume to Capacity	0.00	0.00	0.05			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		9.4%		ICU Level of Service	A	
Analysis Period (min)		15				

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	50	112	37	79	75	36
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	54	122	40	86	82	39
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	285	83			126	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	285	83			126	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	92	88			94	
cM capacity (veh/h)	666	976			1460	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	176	126	121			
Volume Left	54	0	82			
Volume Right	122	86	0			
cSH	853	1700	1460			
Volume to Capacity	0.21	0.07	0.06			
Queue Length 95th (ft)	19	0	4			
Control Delay (s)	10.3	0.0	5.3			
Lane LOS	B		A			
Approach Delay (s)	10.3	0.0	5.3			
Approach LOS	B					
Intersection Summary						
Average Delay		5.8				
Intersection Capacity Utilization		29.0%		ICU Level of Service	A	
Analysis Period (min)		15				

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	156	0	0	76
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	170	0	0	83
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	252	170			170	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	252	170			170	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	736	874			1408	
Direction, Lane #	NB 1	SB 1				
Volume Total	170	83				
Volume Left	0	0				
Volume Right	0	0				
cSH	1700	1408				
Volume to Capacity	0.10	0.00				
Queue Length 95th (ft)	0	0				
Control Delay (s)	0.0	0.0				
Lane LOS						
Approach Delay (s)	0.0	0.0				
Approach LOS						
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		18.2%		ICU Level of Service	A	
Analysis Period (min)		15				

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	156	0	0	76
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	170	0	0	83
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	252	170			170	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	252	170			170	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	736	874			1408	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	0	170	83			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1408			
Volume to Capacity	0.00	0.10	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			18.2%	ICU Level of Service	A	
Analysis Period (min)			15			

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	156	0	0	76
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	170	0	0	83
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	252	170			170	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	252	170			170	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	736	874			1408	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	0	170	83			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1408			
Volume to Capacity	0.00	0.10	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		11.5%		ICU Level of Service	A	
Analysis Period (min)		15				

Austin Oaks Mixed Use Development
800: Executive Center Drive & Driveway 8

2023 Forecasted PM
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	0	0	0	156	0	0	76	0
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	0	0	0	0	0	0	0	170	0	0	83	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	252	252	83	252	252	170	83			170		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	252	252	83	252	252	170	83			170		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	100	100	100	100			100		
cM capacity (veh/h)	701	651	977	701	651	874	1515			1408		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	0	0	170	83								
Volume Left	0	0	0	0								
Volume Right	0	0	0	0								
cSH	1700	1700	1515	1408								
Volume to Capacity	0.00	0.00	0.00	0.00								
Queue Length 95th (ft)	0	0	0	0								
Control Delay (s)	0.0	0.0	0.0	0.0								
Lane LOS	A	A										
Approach Delay (s)	0.0	0.0	0.0	0.0								
Approach LOS	A	A										
Intersection Summary												
Average Delay			0.0									
Intersection Capacity Utilization			11.5%	ICU Level of Service					A			
Analysis Period (min)			15									

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	156	0	0	76
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	170	0	0	83
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	252	170			170	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	252	170			170	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	736	874			1408	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	0	170	83			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1408			
Volume to Capacity	0.00	0.10	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		11.5%		ICU Level of Service	A	
Analysis Period (min)		15				

Austin Oaks Mixed Use Development
1000: Executive Center Drive & Driveway 10

2023 Forecasted PM
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	0	0	0	156	0	0	76	0
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	0	0	0	0	0	0	0	170	0	0	83	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	252	252	83	252	252	170	83			170		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	252	252	83	252	252	170	83			170		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	100	100	100	100			100		
cM capacity (veh/h)	701	651	977	701	651	874	1515			1408		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	0	0	170	83								
Volume Left	0	0	0	0								
Volume Right	0	0	0	0								
cSH	1700	1700	1515	1408								
Volume to Capacity	0.00	0.00	0.00	0.00								
Queue Length 95th (ft)	0	0	0	0								
Control Delay (s)	0.0	0.0	0.0	0.0								
Lane LOS	A	A										
Approach Delay (s)	0.0	0.0	0.0	0.0								
Approach LOS	A	A										
Intersection Summary												
Average Delay			0.0									
Intersection Capacity Utilization			11.5%	ICU Level of Service					A			
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
1100: Driveway 11 & Wood Hollow Drive

2023 Forecasted PM
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	355	46	161	147	0	80	0	403	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		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
Hourly flow rate (vph)	0	386	50	175	160	0	87	0	438	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh												
Upstream signal (ft)					251							
pX, platoon unblocked	0.91						0.91	0.91		0.91	0.91	0.91
vC, conflicting volume	160			436			921	921	411	1359	946	160
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	32			436			865	865	411	1345	893	32
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			84			60	100	32	100	100	100
cM capacity (veh/h)	1443			1124			220	225	641	33	217	951
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1							
Volume Total	436	335	87	438	0							
Volume Left	0	175	87	0	0							
Volume Right	50	0	0	438	0							
cSH	1700	1124	220	641	1700							
Volume to Capacity	0.26	0.16	0.40	0.68	0.00							
Queue Length 95th (ft)	0	14	44	134	0							
Control Delay (s)	0.0	5.3	31.7	21.9	0.0							
Lane LOS		A	D	C	A							
Approach Delay (s)	0.0	5.3	23.5		0.0							
Approach LOS			C		A							
Intersection Summary												
Average Delay			10.9									
Intersection Capacity Utilization			53.1%		ICU Level of Service				A			
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
1: Hart Lane & Far West Boulevard

2023 Site+Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	85	811	95	219	314	77	54	161	183	226	286	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	170		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.979				0.850		0.932			0.985	
Flt Protected	0.950			0.950				0.993			0.985	
Satd. Flow (prot)	1770	3465	0	1770	3539	1583	0	3275	0	0	3434	0
Flt Permitted	0.400			0.105				0.993			0.985	
Satd. Flow (perm)	745	3465	0	196	3539	1583	0	3275	0	0	3434	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15				101		139			8	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		362			1265			236			237	
Travel Time (s)		7.1			24.6			5.4			5.4	
Peak Hour Factor	0.73	0.83	0.61	0.69	0.83	0.85	0.80	0.80	0.82	0.90	0.56	0.47
Adj. Flow (vph)	116	977	156	317	378	91	68	201	223	251	511	85
Shared Lane Traffic (%)												
Lane Group Flow (vph)	116	1133	0	317	378	91	0	492	0	0	847	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Split	NA		Split	NA	
Protected Phases	5	2		1	6		4	4		8	8	
Permitted Phases	2			6		6						
Detector Phase	5	2		1	6	6	4	4		8	8	

Austin Oaks Mixed Use Development
1: Hart Lane & Far West Boulevard

2023 Site+Forecasted AM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	8.0	18.0		8.0	18.0	18.0	12.0	12.0		12.0	12.0	
Minimum Split (s)	13.0	23.0		13.0	23.0	23.0	17.0	17.0		17.0	17.0	
Total Split (s)	13.0	52.0		22.0	61.0	61.0	26.0	26.0		30.0	30.0	
Total Split (%)	10.0%	40.0%		16.9%	46.9%	46.9%	20.0%	20.0%		23.1%	23.1%	
Maximum Green (s)	8.0	47.0		17.0	56.0	56.0	21.0	21.0		25.0	25.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0		5.0			5.0	
Lead/Lag	Lead	Lead		Lag	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	
Walk Time (s)		7.0			7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		12.0			12.0	12.0	21.0	21.0		21.0	21.0	
Pedestrian Calls (#/hr)		0			0	0	0	0		0	0	
Act Effect Green (s)	46.0	46.0		56.0	56.0	56.0		18.7			27.3	
Actuated g/C Ratio	0.35	0.35		0.43	0.43	0.43		0.14			0.21	
v/c Ratio	0.36	0.92		1.05	0.25	0.12		0.83			1.17	
Control Delay	32.1	51.9		121.9	41.3	18.7		51.4			133.8	
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Delay	32.1	51.9		121.9	41.3	18.7		51.4			133.8	
LOS	C	D		F	D	B		D			F	
Approach Delay		50.1			71.2			51.4			133.8	
Approach LOS		D			E			D			F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 100 (77%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.17

Intersection Signal Delay: 76.2

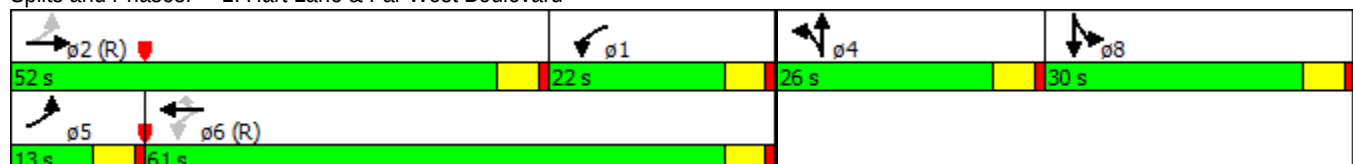
Intersection LOS: E

Intersection Capacity Utilization 81.9%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 1: Hart Lane & Far West Boulevard



Austin Oaks Mixed Use Development
2: Wood Hollow Drive & Far West Boulevard

2023 Site+Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	176	1114	50	124	606	103	26	144	309	282	143	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	335		0	165		0	120		120	0		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	75			35			50			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.944	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1758	0
Flt Permitted	0.334			0.175			0.950			0.950		
Satd. Flow (perm)	622	3539	1583	326	3539	1583	1770	1863	1583	1770	1758	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			101			127			180		20	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1265			1235			599			222	
Travel Time (s)		24.6			24.1			13.6			5.0	
Peak Hour Factor	0.74	0.91	0.58	0.90	0.88	0.81	0.69	0.65	0.87	0.90	0.81	0.77
Adj. Flow (vph)	238	1224	86	138	689	127	38	222	355	313	177	104
Shared Lane Traffic (%)												
Lane Group Flow (vph)	238	1224	86	138	689	127	38	222	355	313	281	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	L NA	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		3	3		7	7	
Permitted Phases	6		6	2		2			3			
Detector Phase	1	6	6	5	2	2	3	3	3	7	7	

Austin Oaks Mixed Use Development
2: Wood Hollow Drive & Far West Boulevard

2023 Site+Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	8.0	8.0	8.0	5.0	5.0	
Minimum Split (s)	11.0	40.0	40.0	12.0	40.0	40.0	15.0	15.0	15.0	15.0	15.0	
Total Split (s)	16.0	67.0	67.0	16.0	67.0	67.0	19.0	19.0	19.0	28.0	28.0	
Total Split (%)	12.3%	51.5%	51.5%	12.3%	51.5%	51.5%	14.6%	14.6%	14.6%	21.5%	21.5%	
Maximum Green (s)	11.0	62.0	62.0	11.0	62.0	62.0	14.0	14.0	14.0	23.0	23.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
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	
Recall Mode	None	C-Min	C-Min	Max	C-Min	C-Min	Min	Min	Min	Max	Max	
Walk Time (s)		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		12.0	12.0		12.0	12.0	21.0	21.0	21.0	21.0	21.0	
Pedestrian Calls (#/hr)		0	0		0	0	0	0	0	0	0	
Act Effect Green (s)	55.4	55.4	55.4	33.8	33.8	33.8	20.6	20.6	20.6	23.0	23.0	
Actuated g/C Ratio	0.43	0.43	0.43	0.26	0.26	0.26	0.16	0.16	0.16	0.18	0.18	
v/c Ratio	0.43	0.81	0.12	0.67	0.75	0.25	0.14	0.76	0.88	1.00	0.86	
Control Delay	35.8	38.0	3.9	49.1	49.2	8.6	52.0	70.0	50.6	104.2	72.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	35.8	38.0	3.9	49.1	49.2	8.6	52.0	70.0	50.6	104.2	72.9	
LOS	D	D	A	D	D	A	D	E	D	F	E	
Approach Delay		35.8			43.8			57.7			89.4	
Approach LOS		D			D			E			F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 10 (8%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.00

Intersection Signal Delay: 50.1

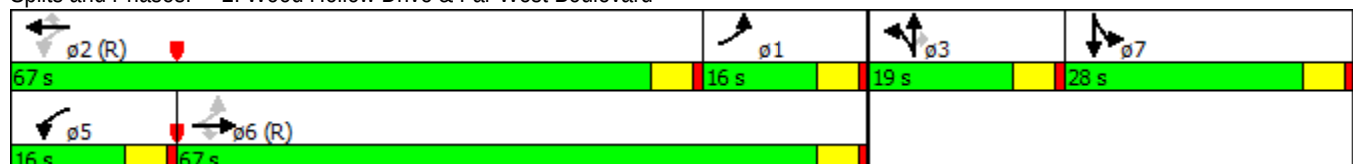
Intersection LOS: D

Intersection Capacity Utilization 78.1%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 2: Wood Hollow Drive & Far West Boulevard



Austin Oaks Mixed Use Development
3: Far West Boulevard & Mopac SB FR

2023 Site+Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑						↑↑	↑
Volume (vph)	0	848	481	19	559	0	0	0	0	142	603	944
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									0.850
Flt Protected				0.950							0.989	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	3500	1583
Flt Permitted				0.950							0.989	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	3500	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			393									110
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		1235			406			400			362	
Travel Time (s)		24.1			7.9			5.5			4.9	
Peak Hour Factor	0.92	0.91	0.93	0.67	0.93	0.92	0.92	0.92	0.92	0.78	0.92	0.95
Adj. Flow (vph)	0	932	517	28	601	0	0	0	0	182	655	994
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	932	517	28	601	0	0	0	0	0	837	994
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	L NA	Right	Left	Left	Right	Left	Left	R NA
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	custom	Prot	NA					custom	NA	custom
Protected Phases		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Permitted Phases										4		
Detector Phase		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Switch Phase												
Minimum Initial (s)				10.0								
Minimum Split (s)				15.0								

Lane Group	ø1	ø2	ø4	ø8	ø22
Lane Configurations					
Volume (vph)					
Ideal Flow (vphpl)					
Lane Util. Factor					
Frt					
Flt Protected					
Satd. Flow (prot)					
Flt Permitted					
Satd. Flow (perm)					
Right Turn on Red					
Satd. Flow (RTOR)					
Link Speed (mph)					
Link Distance (ft)					
Travel Time (s)					
Peak Hour Factor					
Adj. Flow (vph)					
Shared Lane Traffic (%)					
Lane Group Flow (vph)					
Enter Blocked Intersection					
Lane Alignment					
Median Width(ft)					
Link Offset(ft)					
Crosswalk Width(ft)					
Two way Left Turn Lane					
Headway Factor					
Turning Speed (mph)					
Number of Detectors					
Detector Template					
Leading Detector (ft)					
Trailing Detector (ft)					
Detector 1 Position(ft)					
Detector 1 Size(ft)					
Detector 1 Type					
Detector 1 Channel					
Detector 1 Extend (s)					
Detector 1 Queue (s)					
Detector 1 Delay (s)					
Detector 2 Position(ft)					
Detector 2 Size(ft)					
Detector 2 Type					
Detector 2 Channel					
Detector 2 Extend (s)					
Turn Type					
Protected Phases	1	2	4	8	22
Permitted Phases					
Detector Phase					
Switch Phase					
Minimum Initial (s)	4.0	10.0	10.0	4.0	1.0
Minimum Split (s)	9.0	15.0	25.0	9.0	20.0

Austin Oaks Mixed Use Development
3: Far West Boulevard & Mopac SB FR

2023 Site+Forecasted AM
5/15/2014

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)				21.0								
Total Split (%)				16.2%								
Maximum Green (s)				16.0								
Yellow Time (s)				4.0								
All-Red Time (s)				1.0								
Lost Time Adjust (s)				0.0								
Total Lost Time (s)				5.0								
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0								
Recall Mode				Min								
Act Effect Green (s)		49.0	24.0	16.0	45.0						50.0	75.0
Actuated g/C Ratio		0.38	0.18	0.12	0.35						0.38	0.58
v/c Ratio		0.70	0.84	0.13	0.49						0.62	1.04
Control Delay		38.7	22.6	54.2	0.5						36.0	52.8
Queue Delay		0.3	0.0	0.0	1.5						0.0	0.0
Total Delay		38.9	22.6	54.2	2.0						36.0	52.8
LOS		D	C	D	A						D	D
Approach Delay		33.1			4.3						45.1	
Approach LOS		C			A						D	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 106 (82%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.55

Intersection Signal Delay: 34.1

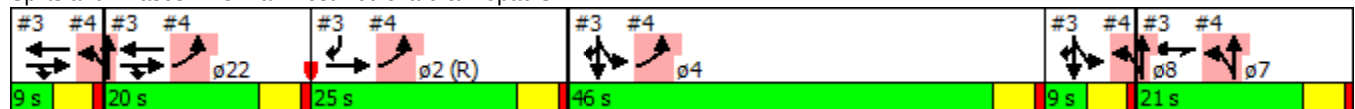
Intersection LOS: C

Intersection Capacity Utilization 107.9%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 3: Far West Boulevard & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø8	ø22
Total Split (s)	9.0	25.0	46.0	9.0	20.0
Total Split (%)	7%	19%	35%	7%	15%
Maximum Green (s)	4.0	20.0	41.0	4.0	15.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)					
Total Lost Time (s)					
Lead/Lag		Lag	Lead	Lag	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	C-Min	Min	Min	None
Act Effect Green (s)					
Actuated g/C Ratio					
v/c Ratio					
Control Delay					
Queue Delay					
Total Delay					
LOS					
Approach Delay					
Approach LOS					
Intersection Summary					



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Lane Configurations												
Volume (vph)	1008	0	579	163	0	0						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Lane Util. Factor	0.97	1.00	0.95	0.95	1.00	1.00						
Frt												
Flt Protected	0.950		0.950	0.996								
Satd. Flow (prot)	3433	0	1681	1763	0	0						
Flt Permitted	0.950		0.950	0.996								
Satd. Flow (perm)	3433	0	1681	1763	0	0						
Right Turn on Red		Yes				Yes						
Satd. Flow (RTOR)												
Link Speed (mph)	35			50	50							
Link Distance (ft)	406			308	472							
Travel Time (s)	7.9			4.2	6.4							
Peak Hour Factor	0.90	0.92	0.93	0.25	0.92	0.92						
Adj. Flow (vph)	1120	0	623	652	0	0						
Shared Lane Traffic (%)			10%									
Lane Group Flow (vph)	1120	0	561	714	0	0						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Right	Left	Left	Left	Right						
Median Width(ft)	24			12	12							
Link Offset(ft)	0			0	0							
Crosswalk Width(ft)	16			16	16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00						
Turning Speed (mph)	15	9	15			9						
Number of Detectors	1		1	2								
Detector Template	Left		Left	Thru								
Leading Detector (ft)	20		20	100								
Trailing Detector (ft)	0		0	0								
Detector 1 Position(ft)	0		0	0								
Detector 1 Size(ft)	20		20	6								
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0								
Detector 1 Queue (s)	0.0		0.0	0.0								
Detector 1 Delay (s)	0.0		0.0	0.0								
Detector 2 Position(ft)				94								
Detector 2 Size(ft)				6								
Detector 2 Type				Cl+Ex								
Detector 2 Channel												
Detector 2 Extend (s)				0.0								
Turn Type	Prot		Split	NA								
Protected Phases	2 4 22		1 7 8	1 7 8			1	2	4	7	8	22
Permitted Phases												
Detector Phase	2 4 22		1 7 8	1 7 8								
Switch Phase												
Minimum Initial (s)							4.0	10.0	10.0	10.0	4.0	1.0
Minimum Split (s)							9.0	15.0	25.0	15.0	9.0	20.0



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Total Split (s)							9.0	25.0	46.0	21.0	9.0	20.0
Total Split (%)							7%	19%	35%	16%	7%	15%
Maximum Green (s)							4.0	20.0	41.0	16.0	4.0	15.0
Yellow Time (s)							4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)							1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag								Lag	Lead		Lag	Lead
Lead-Lag Optimize?								Yes	Yes		Yes	Yes
Vehicle Extension (s)							3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode							Min	C-Min	Min	Min	Min	None
Act Effect Green (s)	86.0		34.0	34.0								
Actuated g/C Ratio	0.66		0.26	0.26								
v/c Ratio	0.49		1.28	1.55								
Control Delay	3.2		181.2	291.3								
Queue Delay	1.0		0.0	0.0								
Total Delay	4.1		181.2	291.3								
LOS	A		F	F								
Approach Delay	4.1			242.8								
Approach LOS	A			F								

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 106 (82%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.55

Intersection Signal Delay: 131.2

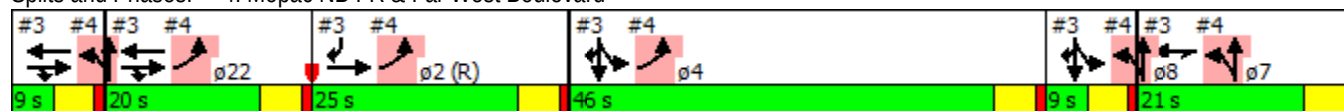
Intersection LOS: F

Intersection Capacity Utilization 121.1%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 4: Mopac NB FR & Far West Boulevard



Austin Oaks Mixed Use Development
5: Spicewood Springs Road & Mopac SB FR

2023 Site+Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑					↑	↑↑	↑
Volume (vph)	0	1095	725	781	1224	0	0	0	0	385	1403	742
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	60		0	0		0	150		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			75			25			75		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.999	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1610	3387	1583
Flt Permitted				0.950						0.950	0.999	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1610	3387	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			185									185
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		294			386			782			882	
Travel Time (s)		5.7			7.5			10.7			12.0	
Peak Hour Factor	0.92	0.81	0.90	0.87	0.86	0.92	0.92	0.92	0.92	0.93	0.87	0.94
Adj. Flow (vph)	0	1352	806	898	1423	0	0	0	0	414	1613	789
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	0	1352	806	898	1423	0	0	0	0	373	1654	789
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Prot	Prot	NA					Split	NA	Prot
Protected Phases		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5
Permitted Phases												
Detector Phase		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

Austin Oaks Mixed Use Development
5: Spicewood Springs Road & Mopac SB FR

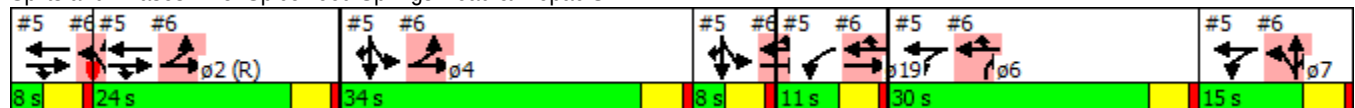
2023 Site+Forecasted AM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)		27.0	27.0	51.0	72.0					37.0	37.0	37.0
Actuated g/C Ratio		0.21	0.21	0.39	0.55					0.28	0.28	0.28
v/c Ratio		1.84	1.70	1.29	0.73					0.81	1.72	1.36
Control Delay		407.1	342.3	162.0	8.6					58.7	357.7	199.9
Queue Delay		0.9	0.0	1.2	49.2					0.0	0.0	0.0
Total Delay		408.0	342.3	163.2	57.8					58.7	357.7	199.9
LOS		F	F	F	E					E	F	F
Approach Delay		383.5			98.6						273.9	
Approach LOS		F			F						F	

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 8 (6%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.97
Intersection Signal Delay: 250.5 Intersection LOS: F
Intersection Capacity Utilization 134.0% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 5: Spicewood Springs Road & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0	5.0	6.0
Minimum Split (s)	8.0	10.0	10.0	8.0	10.0	10.0	11.0
Total Split (s)	8.0	24.0	34.0	8.0	30.0	15.0	11.0
Total Split (%)	6%	18%	26%	6%	23%	12%	8%
Maximum Green (s)	3.0	19.0	29.0	3.0	25.0	10.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Austin Oaks Mixed Use Development
6: Mopac NB FR & Spicewood Springs Road

2023 Site+Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	375	993	0	0	1233	263	560	14	553	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		325	0		0	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	75			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.91	0.95	1.00	1.00	1.00
Frt						0.850		0.924	0.850			
Flt Protected	0.950						0.950	0.978				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	1681	1532	1504	0	0	0
Flt Permitted	0.950						0.950	0.978				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	1681	1532	1504	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						280		33	185			
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		386			594			563			407	
Travel Time (s)		7.5			11.6			7.7			5.6	
Peak Hour Factor	0.90	0.96	0.92	0.92	0.93	0.79	0.86	0.60	0.87	0.92	0.92	0.92
Adj. Flow (vph)	417	1034	0	0	1326	333	651	23	636	0	0	0
Shared Lane Traffic (%)							30%		35%			
Lane Group Flow (vph)	417	1034	0	0	1326	333	456	441	413	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Prot	Split	NA	custom			
Protected Phases	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			
Permitted Phases												
Detector Phase	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			

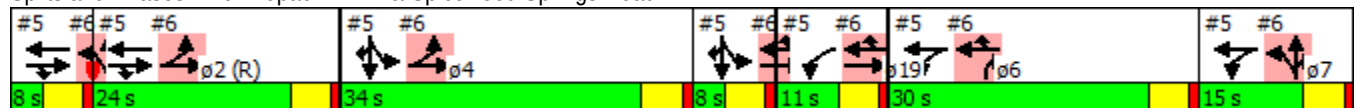
Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)	53.0	72.0			44.0	44.0	18.0	18.0	40.0			
Actuated g/C Ratio	0.41	0.55			0.34	0.34	0.14	0.14	0.31			
v/c Ratio	0.58	0.53			1.11	0.46	1.97	1.84	0.70			
Control Delay	7.7	1.7			101.1	8.5	479.2	421.8	28.5			
Queue Delay	26.3	35.8			1.4	0.0	0.0	0.2	0.0			
Total Delay	33.9	37.5			102.5	8.5	479.2	422.0	28.5			
LOS	C	D			F	A	F	F	C			
Approach Delay		36.5			83.6			317.9				
Approach LOS		D			F			F				

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 8 (6%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.97
Intersection Signal Delay: 137.6
Intersection LOS: F
Intersection Capacity Utilization 134.0%
ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 6: Mopac NB FR & Spicewood Springs Road



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0	5.0	6.0
Minimum Split (s)	8.0	10.0	10.0	8.0	10.0	10.0	11.0
Total Split (s)	8.0	24.0	34.0	8.0	30.0	15.0	11.0
Total Split (%)	6%	18%	26%	6%	23%	12%	8%
Maximum Green (s)	3.0	19.0	29.0	3.0	25.0	10.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Austin Oaks Mixed Use Development
7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road

2023 Site+Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	1183	202	690	814	12	90	4	272	7	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	0		100	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.985			0.996				0.850		0.981	
Flt Protected	0.950			0.950				0.955			0.959	
Satd. Flow (prot)	1770	5009	0	1770	3525	0	0	1779	1583	0	1752	0
Flt Permitted	0.314			0.087				0.726			0.795	
Satd. Flow (perm)	585	5009	0	162	3525	0	0	1352	1583	0	1453	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		22			3				306		101	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1093			275			251			161	
Travel Time (s)		21.3			5.4			5.7			3.7	
Peak Hour Factor	0.72	0.50	0.76	0.50	0.92	0.50	0.91	0.85	0.62	0.58	0.90	0.84
Adj. Flow (vph)	12	2366	266	1380	885	24	99	5	439	12	0	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	12	2632	0	1380	909	0	0	104	439	0	14	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2			6			4		4	8		
Detector Phase	5	2		1	6		4	4	4	8	8	

Austin Oaks Mixed Use Development
7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road

2023 Site+Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	20.0		21.0	20.0		15.0	15.0	15.0	11.0	11.0	
Minimum Split (s)	10.0	25.0		26.0	25.0		20.0	20.0	20.0	16.0	16.0	
Total Split (s)	29.0	72.0		29.0	72.0		29.0	29.0	29.0	29.0	29.0	
Total Split (%)	22.3%	55.4%		22.3%	55.4%		22.3%	22.3%	22.3%	22.3%	22.3%	
Maximum Green (s)	24.0	67.0		24.0	67.0		24.0	24.0	24.0	24.0	24.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0			5.0	5.0		5.0	
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min		Min	C-Min		Min	Min	Min	Min	Min	
Walk Time (s)							6.0	6.0	6.0	6.0	6.0	
Flash Dont Walk (s)							24.0	24.0	24.0	24.0	24.0	
Pedestrian Calls (#/hr)							0	0	0	0	0	
Act Effect Green (s)	69.5	67.0		77.2	77.2			19.7	19.7		19.7	
Actuated g/C Ratio	0.53	0.52		0.59	0.59			0.15	0.15		0.15	
v/c Ratio	0.02	1.02		3.09	0.43			0.51	0.88		0.05	
Control Delay	15.4	52.8		963.3	23.5			58.7	35.5		0.3	
Queue Delay	0.0	0.0		0.0	0.4			0.0	0.0		0.0	
Total Delay	15.4	52.8		963.3	24.0			58.7	35.5		0.3	
LOS	B	D		F	C			E	D		A	
Approach Delay		52.7			590.3			39.9			0.3	
Approach LOS		D			F			D			A	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 55 (42%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 3.09

Intersection Signal Delay: 275.4

Intersection LOS: F

Intersection Capacity Utilization 90.6%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road



Austin Oaks Mixed Use Development
10: Hart Lane & Greystone Drive

2023 Site+Forecasted AM

5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	55	211	145	87	79	9	54	204	36	17	308	33
Peak Hour Factor	0.80	0.65	0.65	0.78	0.88	0.58	0.75	0.81	0.60	0.58	0.69	0.57
Hourly flow rate (vph)	69	325	223	112	90	16	72	252	60	29	446	58
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	393	223	201	16	384	534						
Volume Left (vph)	69	0	112	0	72	29						
Volume Right (vph)	0	223	0	16	60	58						
Hadj (s)	0.12	-0.67	0.31	-0.67	-0.02	-0.02						
Departure Headway (s)	8.6	7.8	9.6	8.6	8.2	8.1						
Degree Utilization, x	0.94	0.48	0.54	0.04	0.87	1.0						
Capacity (veh/h)	412	456	355	397	427	456						
Control Delay (s)	58.1	16.7	22.0	10.8	45.5	133.8						
Approach Delay (s)	43.1		21.2		45.5	133.8						
Approach LOS	E		C		E	F						
Intersection Summary												
Delay			68.5									
Level of Service			F									
Intersection Capacity Utilization			67.5%	ICU Level of Service						C		
Analysis Period (min)			15									

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	76	140	182	61	134	34	25	289	48	26	203	59
Peak Hour Factor	0.81	0.89	0.64	0.80	0.82	0.72	0.53	0.88	0.79	0.68	0.85	0.68
Hourly flow rate (vph)	94	157	284	76	163	47	47	328	61	38	239	87
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2				
Volume Total (vph)	251	284	240	47	211	225	158	206				
Volume Left (vph)	94	0	76	0	47	0	38	0				
Volume Right (vph)	0	284	0	47	0	61	0	87				
Hadj (s)	0.22	-0.67	0.19	-0.67	0.15	-0.16	0.16	-0.26				
Departure Headway (s)	7.8	6.9	8.1	7.2	7.8	7.5	8.0	7.5				
Degree Utilization, x	0.54	0.54	0.54	0.09	0.46	0.47	0.35	0.43				
Capacity (veh/h)	451	499	420	470	437	452	432	457				
Control Delay (s)	18.3	16.5	18.9	9.8	16.1	15.8	14.0	15.0				
Approach Delay (s)	17.4		17.4		16.0		14.5					
Approach LOS	C		C		C		B					
Intersection Summary												
Delay			16.4									
Level of Service			C									
Intersection Capacity Utilization			53.8%	ICU Level of Service					A			
Analysis Period (min)			15									



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations					  	
Volume (veh/h)	0	243	0	0	3665	168
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.79	0.92	0.92	0.96	0.86
Hourly flow rate (vph)	0	308	0	0	3818	195
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	3915	1370	4013			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	3915	1370	4013			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	0	100			
cM capacity (veh/h)	2	136	43			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	308	1527	1527	959		
Volume Left	0	0	0	0		
Volume Right	308	0	0	195		
cSH	136	1700	1700	1700		
Volume to Capacity	2.26	0.90	0.90	0.56		
Queue Length 95th (ft)	647	0	0	0		
Control Delay (s)	642.5	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	642.5	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay			45.7			
Intersection Capacity Utilization			96.3%		ICU Level of Service	F
Analysis Period (min)			15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations					  	
Volume (veh/h)	0	53	0	0	3055	423
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.50	0.92	0.92	0.95	0.75
Hourly flow rate (vph)	0	106	0	0	3216	564
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	3498	1354	3780			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	3498	1354	3780			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	24	100			
cM capacity (veh/h)	5	140	54			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	106	1286	1286	1207		
Volume Left	0	0	0	0		
Volume Right	106	0	0	564		
cSH	140	1700	1700	1700		
Volume to Capacity	0.76	0.76	0.76	0.71		
Queue Length 95th (ft)	114	0	0	0		
Control Delay (s)	85.0	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	85.0	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay			2.3			
Intersection Capacity Utilization			78.4%		ICU Level of Service	D
Analysis Period (min)			15			

Austin Oaks Mixed Use Development
50: Executive Center Drive & Wood Hollow Drive

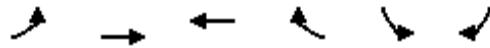
2023 Site+Forecasted AM
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	46	265	155	211	233	185	37	60	33	15	146	24
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.67	0.91	1.00	0.86	0.91	0.91	0.50	0.46	0.50	0.25	0.56	0.47
Hourly flow rate (vph)	69	291	155	245	256	203	74	130	66	60	261	51
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh												
Upstream signal (ft)					522							
pX, platoon unblocked												
vC, conflicting volume	459			446			1536	1456	369	1486	1432	358
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	459			446			1536	1456	369	1486	1432	358
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	94			78			0	0	90	0	0	93
cM capacity (veh/h)	1102			1114			0	95	677	0	98	687
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	515	705	270	372								
Volume Left	69	245	74	60								
Volume Right	155	203	66	51								
cSH	1102	1114	0	0								
Volume to Capacity	0.06	0.22	Err	Err								
Queue Length 95th (ft)	5	21	Err	Err								
Control Delay (s)	1.8	5.0	Err	Err								
Lane LOS	A	A	F	F								
Approach Delay (s)	1.8	5.0	Err	Err								
Approach LOS			F	F								
Intersection Summary												
Average Delay			Err									
Intersection Capacity Utilization			88.0%	ICU Level of Service				E				
Analysis Period (min)			15									

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	237	101	187	310	27	46
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.79	0.67	0.83	0.72	0.75	0.46
Hourly flow rate (vph)	300	151	225	431	36	100
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			451		1257	375
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			451		1257	375
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			80		76	85
cM capacity (veh/h)			1110		151	671
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	451	656	136			
Volume Left	0	225	36			
Volume Right	151	0	100			
cSH	1700	1110	351			
Volume to Capacity	0.27	0.20	0.39			
Queue Length 95th (ft)	0	19	45			
Control Delay (s)	0.0	4.7	21.6			
Lane LOS		A	C			
Approach Delay (s)	0.0	4.7	21.6			
Approach LOS			C			
Intersection Summary						
Average Delay			4.9			
Intersection Capacity Utilization			59.6%	ICU Level of Service		B
Analysis Period (min)			15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations							
Volume (veh/h)	123	170	169	973	1347	353	
Sign Control	Stop			Free	Free		
Grade	0%			0%	0%		
Peak Hour Factor	0.85	0.87	0.86	0.88	0.89	0.67	
Hourly flow rate (vph)	145	195	197	1106	1513	527	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None	None		
Median storage veh							
Upstream signal (ft)				1093			
pX, platoon unblocked	0.88						
vC, conflicting volume	2723	1020	1513				
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2686	1020	1513				
tC, single (s)	6.8	6.9	4.1				
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2				
p0 queue free %	0	17	55				
cM capacity (veh/h)	9	234	438				
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	145	195	197	553	553	1009	1031
Volume Left	145	0	197	0	0	0	0
Volume Right	0	195	0	0	0	0	527
cSH	9	234	438	1700	1700	1700	1700
Volume to Capacity	16.92	0.83	0.45	0.33	0.33	0.59	0.61
Queue Length 95th (ft)	Err	162	57	0	0	0	0
Control Delay (s)	Err	67.8	19.8	0.0	0.0	0.0	0.0
Lane LOS	F	F	C				
Approach Delay (s)	4293.2		3.0			0.0	
Approach LOS	F						
Intersection Summary							
Average Delay			397.6				
Intersection Capacity Utilization			74.7%		ICU Level of Service		D
Analysis Period (min)			15				



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↰	↰		↰	
Volume (veh/h)	232	178	255	168	11	45
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	252	193	277	183	12	49
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	460				1066	368
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	460				1066	368
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	77				94	93
cM capacity (veh/h)	1101				190	677
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	446	460	61			
Volume Left	252	0	12			
Volume Right	0	183	49			
cSH	1101	1700	450			
Volume to Capacity	0.23	0.27	0.14			
Queue Length 95th (ft)	22	0	12			
Control Delay (s)	6.3	0.0	14.2			
Lane LOS	A		B			
Approach Delay (s)	6.3	0.0	14.2			
Approach LOS			B			
Intersection Summary						
Average Delay		3.8				
Intersection Capacity Utilization		59.3%		ICU Level of Service	B	
Analysis Period (min)		15				



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	0	0	300	410	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	326	446	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	772	446	446			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	772	446	446			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	368	613	1115			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	0	326	446			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1115	1700			
Volume to Capacity	0.00	0.00	0.26			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			24.9%	ICU Level of Service	A	
Analysis Period (min)			15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	0	0	300	410	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	326	446	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	772	446	446			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	772	446	446			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	368	613	1115			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	0	326	446			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1115	1700			
Volume to Capacity	0.00	0.00	0.26			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		24.9%		ICU Level of Service	A	
Analysis Period (min)		15				

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	12	26	176	124	114	398
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	13	28	191	135	124	433
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	939	259			326	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	939	259			326	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	95	96			90	
cM capacity (veh/h)	264	780			1234	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	41	326	557			
Volume Left	13	0	124			
Volume Right	28	135	0			
cSH	482	1700	1234			
Volume to Capacity	0.09	0.19	0.10			
Queue Length 95th (ft)	7	0	8			
Control Delay (s)	13.2	0.0	2.7			
Lane LOS	B		A			
Approach Delay (s)	13.2	0.0	2.7			
Approach LOS	B					
Intersection Summary						
Average Delay		2.2				
Intersection Capacity Utilization		57.4%		ICU Level of Service		B
Analysis Period (min)		15				

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	236	55	15	255
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	257	60	16	277
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	596	286			316	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	596	286			316	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			99	
cM capacity (veh/h)	460	753			1244	
Direction, Lane #	NB 1	SB 1				
Volume Total	316	293				
Volume Left	0	16				
Volume Right	60	0				
cSH	1700	1244				
Volume to Capacity	0.19	0.01				
Queue Length 95th (ft)	0	1				
Control Delay (s)	0.0	0.6				
Lane LOS		A				
Approach Delay (s)	0.0	0.6				
Approach LOS						
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		29.0%		ICU Level of Service		A
Analysis Period (min)		15				

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	6	20	215	21	18	264
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	22	234	23	20	287
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	571	245			257	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	571	245			257	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	97			99	
cM capacity (veh/h)	475	794			1308	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	28	257	307			
Volume Left	7	0	20			
Volume Right	22	23	0			
cSH	687	1700	1308			
Volume to Capacity	0.04	0.15	0.01			
Queue Length 95th (ft)	3	0	1			
Control Delay (s)	10.5	0.0	0.6			
Lane LOS	B		A			
Approach Delay (s)	10.5	0.0	0.6			
Approach LOS	B					
Intersection Summary						
Average Delay		0.8				
Intersection Capacity Utilization		38.7%		ICU Level of Service	A	
Analysis Period (min)		15				

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	4	232	3	6	282
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	4	252	3	7	307
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	573	254			255	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	573	254			255	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	99			100	
cM capacity (veh/h)	478	785			1310	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	4	255	313			
Volume Left	0	0	7			
Volume Right	4	3	0			
cSH	785	1700	1310			
Volume to Capacity	0.01	0.15	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	9.6	0.0	0.2			
Lane LOS	A		A			
Approach Delay (s)	9.6	0.0	0.2			
Approach LOS	A					
Intersection Summary						
Average Delay		0.2				
Intersection Capacity Utilization		29.7%		ICU Level of Service		A
Analysis Period (min)		15				

Austin Oaks Mixed Use Development
800: Executive Center Drive & Driveway 8

2023 Site+Forecasted AM

5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	0	0	0	236	0	0	288	0
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	0	0	0	0	0	0	0	257	0	0	313	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	570	570	313	570	570	257	313			257		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	570	570	313	570	570	257	313			257		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	100	100	100	100			100		
cM capacity (veh/h)	433	432	727	433	432	782	1247			1308		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	0	0	257	313								
Volume Left	0	0	0	0								
Volume Right	0	0	0	0								
cSH	1700	1700	1247	1308								
Volume to Capacity	0.00	0.00	0.00	0.00								
Queue Length 95th (ft)	0	0	0	0								
Control Delay (s)	0.0	0.0	0.0	0.0								
Lane LOS	A	A										
Approach Delay (s)	0.0	0.0	0.0	0.0								
Approach LOS	A	A										
Intersection Summary												
Average Delay			0.0									
Intersection Capacity Utilization			18.5%	ICU Level of Service					A			
Analysis Period (min)			15									

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	236	0	0	288
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	257	0	0	313
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	570	257			257	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	570	257			257	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	483	782			1308	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	0	257	313			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1308			
Volume to Capacity	0.00	0.15	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		18.5%		ICU Level of Service	A	
Analysis Period (min)		15				

Austin Oaks Mixed Use Development
1000: Executive Center Drive & Driveway 10

2023 Site+Forecasted AM

5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	0	0	0	236	0	0	288	0
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	0	0	0	0	0	0	0	257	0	0	313	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	570	570	313	570	570	257	313			257		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	570	570	313	570	570	257	313			257		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	100	100	100	100			100		
cM capacity (veh/h)	433	432	727	433	432	782	1247			1308		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	0	0	257	313								
Volume Left	0	0	0	0								
Volume Right	0	0	0	0								
cSH	1700	1700	1247	1308								
Volume to Capacity	0.00	0.00	0.00	0.00								
Queue Length 95th (ft)	0	0	0	0								
Control Delay (s)	0.0	0.0	0.0	0.0								
Lane LOS	A	A										
Approach Delay (s)	0.0	0.0	0.0	0.0								
Approach LOS	A	A										
Intersection Summary												
Average Delay			0.0									
Intersection Capacity Utilization			18.5%	ICU Level of Service					A			
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
1100: Driveway 11 & Wood Hollow Drive

2023 Site+Forecasted AM

5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	244	69	251	641	0	19	0	97	19	0	10
Sign Control		Free			Free			Stop			Stop	
Grade		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
Hourly flow rate (vph)	0	265	75	273	697	0	21	0	105	21	0	11
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh												
Upstream signal (ft)					251							
pX, platoon unblocked	0.44						0.44	0.44		0.44	0.44	0.44
vC, conflicting volume	697			340			1556	1545	303	1651	1583	697
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			340			1626	1602	303	1840	1686	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			78			30	100	86	0	100	98
cM capacity (veh/h)	719			1219			29	36	737	18	32	481
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1							
Volume Total	340	970	21	105	32							
Volume Left	0	273	21	0	21							
Volume Right	75	0	0	105	11							
cSH	1700	1219	29	737	27							
Volume to Capacity	0.20	0.22	0.70	0.14	1.16							
Queue Length 95th (ft)	0	21	57	12	93							
Control Delay (s)	0.0	4.9	269.0	10.7	437.0							
Lane LOS		A	F	B	F							
Approach Delay (s)	0.0	4.9	53.0		437.0							
Approach LOS			F		F							
Intersection Summary												
Average Delay			17.2									
Intersection Capacity Utilization			83.0%		ICU Level of Service				E			
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
1: Hart Lane & Far West Boulevard

2023 Site+Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	64	639	42	193	651	164	65	172	148	183	154	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	170		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.988				0.850		0.943			0.958	
Flt Protected	0.950			0.950				0.992			0.985	
Satd. Flow (prot)	1770	3497	0	1770	3539	1583	0	3311	0	0	3340	0
Flt Permitted	0.120			0.229				0.992			0.985	
Satd. Flow (perm)	224	3497	0	427	3539	1583	0	3311	0	0	3340	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9				193		85			36	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		362			1265			236			237	
Travel Time (s)		7.1			24.6			5.4			5.4	
Peak Hour Factor	0.73	0.83	0.61	0.69	0.83	0.85	0.80	0.80	0.82	0.90	0.56	0.47
Adj. Flow (vph)	88	770	69	280	784	193	81	215	180	203	275	183
Shared Lane Traffic (%)												
Lane Group Flow (vph)	88	839	0	280	784	193	0	476	0	0	661	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Split	NA		Split	NA	
Protected Phases	5	2		1	6		4	4		8	8	
Permitted Phases	2			6		6						
Detector Phase	5	2		1	6	6	4	4		8	8	

Austin Oaks Mixed Use Development
1: Hart Lane & Far West Boulevard

2023 Site+Forecasted PM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	8.0	18.0		8.0	18.0	18.0	12.0	12.0		12.0	12.0	
Minimum Split (s)	13.0	24.0		13.0	24.0	24.0	33.0	33.0		33.0	33.0	
Total Split (s)	13.0	62.0		15.0	64.0	64.0	28.0	28.0		25.0	25.0	
Total Split (%)	10.0%	47.7%		11.5%	49.2%	49.2%	21.5%	21.5%		19.2%	19.2%	
Maximum Green (s)	8.0	57.0		10.0	59.0	59.0	23.0	23.0		20.0	20.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0		5.0			5.0	
Lead/Lag	Lead	Lead		Lag	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	
Walk Time (s)		7.0			7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		12.0			12.0	12.0	21.0	21.0		21.0	21.0	
Pedestrian Calls (#/hr)		0			0	0	0	0		0	0	
Act Effect Green (s)	41.5	41.5		48.8	48.8	48.8		20.5			32.6	
Actuated g/C Ratio	0.32	0.32		0.38	0.38	0.38		0.16			0.25	
v/c Ratio	0.52	0.75		0.88	0.59	0.27		0.80			0.76	
Control Delay	42.2	43.5		47.8	13.3	1.2		53.9			50.5	
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Delay	42.2	43.5		47.8	13.3	1.2		53.9			50.5	
LOS	D	D		D	B	A		D			D	
Approach Delay		43.4			19.1			53.9			50.5	
Approach LOS		D			B			D			D	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 20 (15%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 115

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 37.1

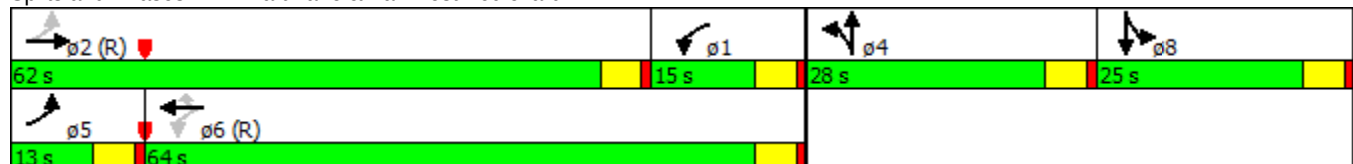
Intersection LOS: D

Intersection Capacity Utilization 70.1%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 1: Hart Lane & Far West Boulevard



Austin Oaks Mixed Use Development
2: Wood Hollow Drive & Far West Boulevard

2023 Site+Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	165	807	66	242	725	140	106	232	337	165	169	136
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	335		0	165		0	120		120	0		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	75			35			50			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.931	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1734	0
Flt Permitted	0.252			0.138			0.950			0.950		
Satd. Flow (perm)	469	3539	1583	257	3539	1583	1770	1863	1583	1770	1734	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			114			173			197		28	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1265			1235			599			222	
Travel Time (s)		24.6			24.1			13.6			5.0	
Peak Hour Factor	0.74	0.91	0.58	0.90	0.88	0.81	0.69	0.65	0.87	0.90	0.81	0.77
Adj. Flow (vph)	223	887	114	269	824	173	154	357	387	183	209	177
Shared Lane Traffic (%)												
Lane Group Flow (vph)	223	887	114	269	824	173	154	357	387	183	386	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	L NA	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		3	3		7	7	
Permitted Phases	6		6	2		2			3			
Detector Phase	1	6	6	5	2	2	3	3	3	7	7	

Austin Oaks Mixed Use Development
2: Wood Hollow Drive & Far West Boulevard

2023 Site+Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	8.0	8.0	8.0	5.0	5.0	
Minimum Split (s)	10.0	22.0	22.0	10.0	22.0	22.0	31.0	31.0	31.0	31.0	31.0	
Total Split (s)	20.0	68.0	68.0	16.0	64.0	64.0	20.0	20.0	20.0	26.0	26.0	
Total Split (%)	15.4%	52.3%	52.3%	12.3%	49.2%	49.2%	15.4%	15.4%	15.4%	20.0%	20.0%	
Maximum Green (s)	15.0	63.0	63.0	11.0	59.0	59.0	15.0	15.0	15.0	21.0	21.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
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	
Recall Mode	None	C-Min	C-Min	Max	C-Min	C-Min	Min	Min	Min	Max	Max	
Walk Time (s)		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		12.0	12.0		12.0	12.0	21.0	21.0	21.0	21.0	21.0	
Pedestrian Calls (#/hr)		0	0		0	0	0	0	0	0	0	
Act Effect Green (s)	43.1	43.1	43.1	40.0	40.0	40.0	34.9	34.9	34.9	21.0	21.0	
Actuated g/C Ratio	0.33	0.33	0.33	0.31	0.31	0.31	0.27	0.27	0.27	0.16	0.16	
v/c Ratio	0.75	0.76	0.19	1.30	0.76	0.29	0.32	0.72	0.68	0.64	1.27	
Control Delay	37.2	20.2	1.1	185.0	48.6	9.1	43.0	53.6	28.5	62.3	187.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	37.2	20.2	1.1	185.0	48.6	9.1	43.0	53.6	28.5	62.3	187.0	
LOS	D	C	A	F	D	A	D	D	C	E	F	
Approach Delay		21.5			72.2			41.0			146.9	
Approach LOS		C			E			D			F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 20 (15%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.30

Intersection Signal Delay: 60.2

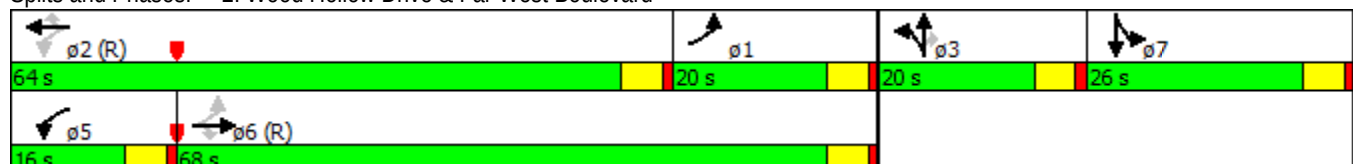
Intersection LOS: E

Intersection Capacity Utilization 76.3%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 2: Wood Hollow Drive & Far West Boulevard



Austin Oaks Mixed Use Development
3: Far West Boulevard & Mopac SB FR

2023 Site+Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑						↑↑	↑
Volume (vph)	0	1218	407	11	447	0	0	0	0	397	639	995
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									0.850
Flt Protected				0.950							0.979	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	3465	1583
Flt Permitted				0.950							0.979	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	3465	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			232									313
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		1235			406			400			362	
Travel Time (s)		24.1			7.9			5.5			4.9	
Peak Hour Factor	0.92	0.91	0.93	0.67	0.93	0.92	0.92	0.92	0.92	0.78	0.92	0.95
Adj. Flow (vph)	0	1338	438	16	481	0	0	0	0	509	695	1047
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1338	438	16	481	0	0	0	0	0	1204	1047
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	L NA	Right	Left	Left	Right	Left	Left	R NA
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	custom	Prot	NA					custom	NA	custom
Protected Phases		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Permitted Phases										4		
Detector Phase		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Switch Phase												
Minimum Initial (s)				10.0								
Minimum Split (s)				15.0								

Lane Group	ø1	ø2	ø4	ø8	ø22
Lane Configurations					
Volume (vph)					
Ideal Flow (vphpl)					
Lane Util. Factor					
Frt					
Flt Protected					
Satd. Flow (prot)					
Flt Permitted					
Satd. Flow (perm)					
Right Turn on Red					
Satd. Flow (RTOR)					
Link Speed (mph)					
Link Distance (ft)					
Travel Time (s)					
Peak Hour Factor					
Adj. Flow (vph)					
Shared Lane Traffic (%)					
Lane Group Flow (vph)					
Enter Blocked Intersection					
Lane Alignment					
Median Width(ft)					
Link Offset(ft)					
Crosswalk Width(ft)					
Two way Left Turn Lane					
Headway Factor					
Turning Speed (mph)					
Number of Detectors					
Detector Template					
Leading Detector (ft)					
Trailing Detector (ft)					
Detector 1 Position(ft)					
Detector 1 Size(ft)					
Detector 1 Type					
Detector 1 Channel					
Detector 1 Extend (s)					
Detector 1 Queue (s)					
Detector 1 Delay (s)					
Detector 2 Position(ft)					
Detector 2 Size(ft)					
Detector 2 Type					
Detector 2 Channel					
Detector 2 Extend (s)					
Turn Type					
Protected Phases	1	2	4	8	22
Permitted Phases					
Detector Phase					
Switch Phase					
Minimum Initial (s)	4.0	13.0	10.0	4.0	1.0
Minimum Split (s)	9.0	18.0	15.0	9.0	6.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)				41.0								
Total Split (%)				31.5%								
Maximum Green (s)				36.0								
Yellow Time (s)				4.0								
All-Red Time (s)				1.0								
Lost Time Adjust (s)				0.0								
Total Lost Time (s)				5.0								
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0								
Recall Mode				Min								
Act Effect Green (s)		45.3	25.3	34.7	65.0						35.0	55.0
Actuated g/C Ratio		0.35	0.19	0.27	0.50						0.27	0.42
v/c Ratio		1.09	0.89	0.03	0.27						1.29	1.23
Control Delay		93.6	44.3	15.7	3.0						178.3	139.3
Queue Delay		7.4	0.0	0.0	0.0						0.0	0.0
Total Delay		101.0	44.3	15.7	3.0						178.3	139.3
LOS		F	D	B	A						F	F
Approach Delay		87.0			3.4						160.2	
Approach LOS		F			A						F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.29

Intersection Signal Delay: 114.2

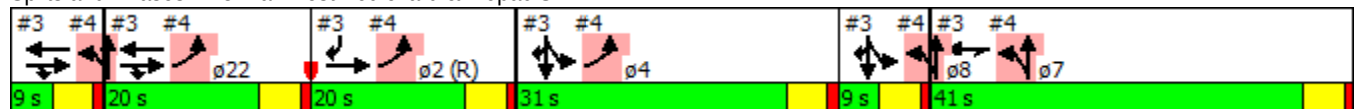
Intersection LOS: F

Intersection Capacity Utilization 108.9%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 3: Far West Boulevard & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø8	ø22
Total Split (s)	9.0	20.0	31.0	9.0	20.0
Total Split (%)	7%	15%	24%	7%	15%
Maximum Green (s)	4.0	15.0	26.0	4.0	15.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)					
Total Lost Time (s)					
Lead/Lag		Lag	Lead	Lag	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	C-Min	Min	Min	None
Act Effect Green (s)					
Actuated g/C Ratio					
v/c Ratio					
Control Delay					
Queue Delay					
Total Delay					
LOS					
Approach Delay					
Approach LOS					
Intersection Summary					

Austin Oaks Mixed Use Development
4: Mopac NB FR & Far West Boulevard

2023 Site+Forecasted PM

5/15/2014

												
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Lane Configurations												
Volume (vph)	1625	0	392	131	0	0						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Lane Util. Factor	0.97	1.00	0.95	0.95	1.00	1.00						
Frt												
Flt Protected	0.950		0.950	0.996								
Satd. Flow (prot)	3433	0	1681	1763	0	0						
Flt Permitted	0.950		0.950	0.996								
Satd. Flow (perm)	3433	0	1681	1763	0	0						
Right Turn on Red		Yes				Yes						
Satd. Flow (RTOR)												
Link Speed (mph)	35			50	50							
Link Distance (ft)	406			308	472							
Travel Time (s)	7.9			4.2	6.4							
Peak Hour Factor	0.90	0.92	0.93	0.25	0.92	0.92						
Adj. Flow (vph)	1806	0	422	524	0	0						
Shared Lane Traffic (%)			10%									
Lane Group Flow (vph)	1806	0	380	566	0	0						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Right	Left	Left	Left	Right						
Median Width(ft)	24			12	12							
Link Offset(ft)	0			0	0							
Crosswalk Width(ft)	16			16	16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00						
Turning Speed (mph)	15	9	15			9						
Number of Detectors	1		1	2								
Detector Template	Left		Left	Thru								
Leading Detector (ft)	20		20	100								
Trailing Detector (ft)	0		0	0								
Detector 1 Position(ft)	0		0	0								
Detector 1 Size(ft)	20		20	6								
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0								
Detector 1 Queue (s)	0.0		0.0	0.0								
Detector 1 Delay (s)	0.0		0.0	0.0								
Detector 2 Position(ft)				94								
Detector 2 Size(ft)				6								
Detector 2 Type				Cl+Ex								
Detector 2 Channel												
Detector 2 Extend (s)				0.0								
Turn Type	Prot		Split	NA								
Protected Phases	2 4 22		1 7 8	1 7 8			1	2	4	7	8	22
Permitted Phases												
Detector Phase	2 4 22		1 7 8	1 7 8								
Switch Phase												
Minimum Initial (s)							4.0	13.0	10.0	10.0	4.0	1.0
Minimum Split (s)							9.0	18.0	15.0	15.0	9.0	6.0



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Total Split (s)							9.0	20.0	31.0	41.0	9.0	20.0
Total Split (%)							7%	15%	24%	32%	7%	15%
Maximum Green (s)							4.0	15.0	26.0	36.0	4.0	15.0
Yellow Time (s)							4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)							1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag								Lag	Lead		Lag	Lead
Lead-Lag Optimize?								Yes	Yes		Yes	Yes
Vehicle Extension (s)							3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode							Min	C-Min	Min	Min	Min	None
Act Effect Green (s)	66.0		54.0	54.0								
Actuated g/C Ratio	0.51		0.42	0.42								
v/c Ratio	1.04		0.54	0.77								
Control Delay	38.3		32.3	41.4								
Queue Delay	26.2		0.0	0.0								
Total Delay	64.5		32.3	41.4								
LOS	E		C	D								
Approach Delay	64.5			37.7								
Approach LOS	E			D								

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.29

Intersection Signal Delay: 55.3

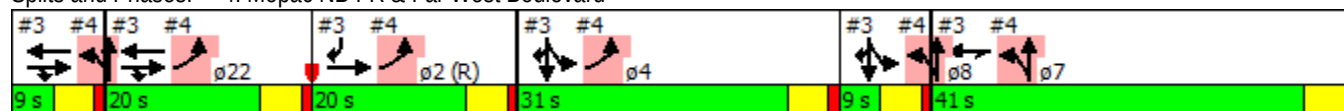
Intersection LOS: E

Intersection Capacity Utilization 122.1%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 4: Mopac NB FR & Far West Boulevard



Austin Oaks Mixed Use Development
5: Spicewood Springs Road & Mopac SB FR

2023 Site+Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑					↑	↑↑	↑
Volume (vph)	0	1839	375	732	1542	0	0	0	0	655	309	455
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	60		0	0		0	150		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			75			25			75		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.976	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1610	3309	1583
Flt Permitted				0.950						0.950	0.976	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1610	3309	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			160									160
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		294			386			782			882	
Travel Time (s)		5.7			7.5			10.7			12.0	
Peak Hour Factor	0.92	0.81	0.90	0.87	0.86	0.92	0.92	0.92	0.92	0.93	0.87	0.94
Adj. Flow (vph)	0	2270	417	841	1793	0	0	0	0	704	355	484
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	2270	417	841	1793	0	0	0	0	352	707	484
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Prot	Prot	NA					Split	NA	Prot
Protected Phases		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5
Permitted Phases												
Detector Phase		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)		38.0	38.0	71.0	103.0					26.0	26.0	26.0
Actuated g/C Ratio		0.25	0.25	0.47	0.69					0.17	0.17	0.17
v/c Ratio		2.53	0.80	1.00	0.74					1.26	1.23	1.19
Control Delay		712.0	25.6	52.8	11.5					191.8	169.6	142.7
Queue Delay		1.4	2.1	34.3	48.1					0.0	0.0	0.0
Total Delay		713.4	27.7	87.1	59.6					191.8	169.6	142.7
LOS		F	C	F	E					F	F	F
Approach Delay		607.0			68.4						166.2	
Approach LOS		F			E						F	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 89 (59%), Referenced to phase 2:EBWB, Start of Green

Natural Cycle: 140

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 2.53

Intersection Signal Delay: 301.2

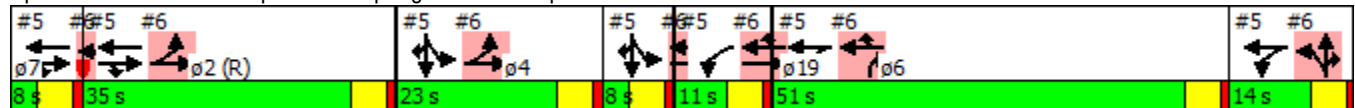
Intersection LOS: F

Intersection Capacity Utilization 144.5%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 5: Spicewood Springs Road & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0	5.0	6.0
Minimum Split (s)	8.0	15.0	10.0	8.0	15.0	10.0	11.0
Total Split (s)	8.0	35.0	23.0	8.0	51.0	14.0	11.0
Total Split (%)	5%	23%	15%	5%	34%	9%	7%
Maximum Green (s)	3.0	30.0	18.0	3.0	46.0	9.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Austin Oaks Mixed Use Development
6: Mopac NB FR & Spicewood Springs Road

2023 Site+Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	792	1411	0	0	1338	459	386	45	589	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		325	0		0	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	75			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.91	0.95	1.00	1.00	1.00
Frt						0.850		0.895	0.850			
Flt Protected	0.950						0.950	0.994				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	1681	1508	1504	0	0	0
Flt Permitted	0.950						0.950	0.994				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	1681	1508	1504	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						124		64	160			
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		386			594			563			407	
Travel Time (s)		7.5			11.6			7.7			5.6	
Peak Hour Factor	0.90	0.96	0.92	0.92	0.93	0.79	0.86	0.60	0.87	0.92	0.92	0.92
Adj. Flow (vph)	880	1470	0	0	1439	581	449	75	677	0	0	0
Shared Lane Traffic (%)							10%		42%			
Lane Group Flow (vph)	880	1470	0	0	1439	581	404	404	393	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Prot	Split	NA	custom			
Protected Phases	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			
Permitted Phases												
Detector Phase	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			

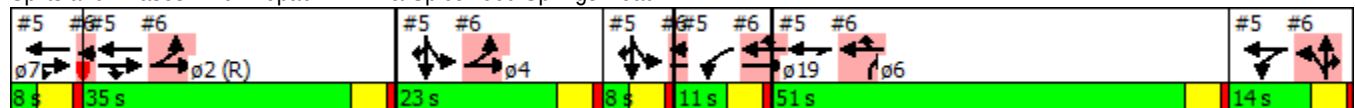
Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)	53.0	72.0			65.0	65.0	17.0	17.0	60.0			
Actuated g/C Ratio	0.35	0.48			0.43	0.43	0.11	0.11	0.40			
v/c Ratio	1.41	0.87			0.94	0.77	2.13	1.78	0.56			
Control Delay	207.0	5.6			53.2	35.9	553.8	398.0	23.3			
Queue Delay	2.7	48.3			44.8	0.0	0.0	0.3	0.0			
Total Delay	209.7	53.9			98.0	35.9	553.8	398.3	23.3			
LOS	F	D			F	D	F	F	C			
Approach Delay		112.3			80.1			327.9				
Approach LOS		F			F			F				

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 89 (59%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 2.53
Intersection Signal Delay: 147.1
Intersection LOS: F
Intersection Capacity Utilization 144.5%
ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 6: Mopac NB FR & Spicewood Springs Road



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0	5.0	6.0
Minimum Split (s)	8.0	15.0	10.0	8.0	15.0	10.0	11.0
Total Split (s)	8.0	35.0	23.0	8.0	51.0	14.0	11.0
Total Split (%)	5%	23%	15%	5%	34%	9%	7%
Maximum Green (s)	3.0	30.0	18.0	3.0	46.0	9.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Austin Oaks Mixed Use Development
7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road

2023 Site+Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	6	1093	77	337	829	1	371	9	809	1	4	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	0		100	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993							0.850		0.899	
Flt Protected	0.950			0.950				0.954			0.996	
Satd. Flow (prot)	1770	5050	0	1770	3539	0	0	1777	1583	0	1668	0
Flt Permitted	0.316			0.059				0.714			0.663	
Satd. Flow (perm)	589	5050	0	110	3539	0	0	1330	1583	0	1110	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7							315		18	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1093			275			251			161	
Travel Time (s)		21.3			5.4			5.7			3.7	
Peak Hour Factor	0.72	0.50	0.76	0.50	0.92	0.50	0.91	0.85	0.62	0.58	0.90	0.84
Adj. Flow (vph)	8	2186	101	674	901	2	408	11	1305	2	4	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	8	2287	0	674	903	0	0	419	1305	0	24	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2			6			4		4	8		
Detector Phase	5	2		1	6		4	4	4	8	8	

Austin Oaks Mixed Use Development
7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road

2023 Site+Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	20.0		21.0	20.0		15.0	15.0	15.0	11.0	11.0	
Minimum Split (s)	10.0	25.0		26.0	25.0		35.0	35.0	35.0	35.0	35.0	
Total Split (s)	29.0	82.0		34.0	87.0		34.0	34.0	34.0	34.0	34.0	
Total Split (%)	19.3%	54.7%		22.7%	58.0%		22.7%	22.7%	22.7%	22.7%	22.7%	
Maximum Green (s)	24.0	77.0		29.0	82.0		29.0	29.0	29.0	29.0	29.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0			5.0	5.0		5.0	
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min		Min	C-Min		Min	Min	Min	Min	Min	
Walk Time (s)							6.0	6.0	6.0	6.0	6.0	
Flash Dont Walk (s)							24.0	24.0	24.0	24.0	24.0	
Pedestrian Calls (#/hr)							0	0	0	0	0	
Act Effect Green (s)	81.0	76.9		100.6	100.6			29.1	29.1		29.1	
Actuated g/C Ratio	0.54	0.51		0.67	0.67			0.19	0.19		0.19	
v/c Ratio	0.02	0.88		1.71	0.38			1.62	2.33		0.10	
Control Delay	17.2	37.6		358.3	11.6			335.0	622.0		25.4	
Queue Delay	0.0	47.5		0.0	0.2			0.0	2.6		0.0	
Total Delay	17.2	85.1		358.3	11.8			335.0	624.5		25.4	
LOS	B	F		F	B			F	F		C	
Approach Delay		84.8			159.9			554.2			25.4	
Approach LOS		F			F			F			C	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 55 (37%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 140

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 2.33

Intersection Signal Delay: 249.6

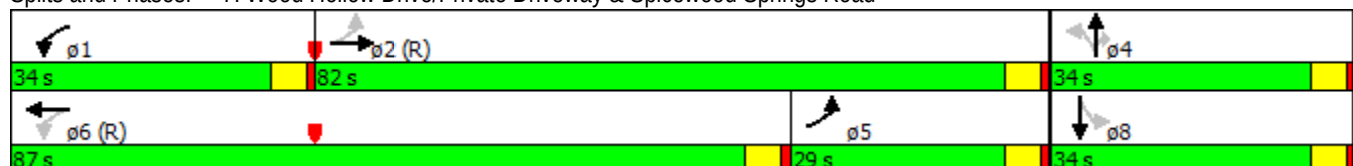
Intersection LOS: F

Intersection Capacity Utilization 94.6%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road



												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	45	102	54	88	192	58	96	274	58	12	240	71
Peak Hour Factor	0.80	0.65	0.65	0.78	0.88	0.58	0.75	0.81	0.60	0.58	0.69	0.57
Hourly flow rate (vph)	56	157	83	113	218	100	128	338	97	21	348	125
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	213	83	331	100	563	493						
Volume Left (vph)	56	0	113	0	128	21						
Volume Right (vph)	0	83	0	100	97	125						
Hadj (s)	0.17	-0.67	0.20	-0.67	-0.02	-0.11						
Departure Headway (s)	9.5	8.7	9.1	8.2	8.2	8.1						
Degree Utilization, x	0.56	0.20	0.84	0.23	1.0	1.0						
Capacity (veh/h)	366	405	386	431	448	458						
Control Delay (s)	22.9	12.6	43.1	12.4	166.7	103.5						
Approach Delay (s)	20.0		36.0		166.7	103.5						
Approach LOS	C		E		F	F						
Intersection Summary												
Delay			93.3									
Level of Service			F									
Intersection Capacity Utilization			77.0%	ICU Level of Service					D			
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
20: Wood Hollow Drive & Greystone Drive

2023 Site+Forecasted PM

5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	65	78	56	99	256	66	88	335	79	29	291	83
Peak Hour Factor	0.81	0.89	0.64	0.80	0.82	0.72	0.53	0.88	0.79	0.68	0.85	0.68
Hourly flow rate (vph)	80	88	88	124	312	92	166	381	100	43	342	122
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2				
Volume Total (vph)	168	88	436	92	356	290	214	293				
Volume Left (vph)	80	0	124	0	166	0	43	0				
Volume Right (vph)	0	88	0	92	0	100	0	122				
Hadj (s)	0.27	-0.67	0.18	-0.67	0.27	-0.21	0.13	-0.26				
Departure Headway (s)	9.2	8.3	8.6	7.7	8.5	8.0	8.6	8.2				
Degree Utilization, x	0.43	0.20	1.0	0.20	0.84	0.65	0.51	0.67				
Capacity (veh/h)	379	417	415	453	419	437	404	428				
Control Delay (s)	17.9	12.2	82.1	11.4	41.4	23.4	18.9	24.8				
Approach Delay (s)	15.9		69.8		33.4		22.3					
Approach LOS	C		F		D		C					
Intersection Summary												
Delay			38.1									
Level of Service			E									
Intersection Capacity Utilization			65.9%	ICU Level of Service					C			
Analysis Period (min)			15									



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	195	0	0	2014	386
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.79	0.92	0.92	0.96	0.86
Hourly flow rate (vph)	0	247	0	0	2098	449
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2322	924	2547			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2322	924	2547			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	9	100			
cM capacity (veh/h)	31	271	172			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	247	839	839	868		
Volume Left	0	0	0	0		
Volume Right	247	0	0	449		
cSH	271	1700	1700	1700		
Volume to Capacity	0.91	0.49	0.49	0.51		
Queue Length 95th (ft)	205	0	0	0		
Control Delay (s)	74.3	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	74.3	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay			6.6			
Intersection Capacity Utilization			66.3%		ICU Level of Service	C
Analysis Period (min)			15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	367	0	0	2177	196
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.50	0.92	0.92	0.95	0.75
Hourly flow rate (vph)	0	734	0	0	2292	261
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2422	895	2553			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2422	895	2553			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	0	100			
cM capacity (veh/h)	27	284	171			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	734	917	917	720		
Volume Left	0	0	0	0		
Volume Right	734	0	0	261		
cSH	284	1700	1700	1700		
Volume to Capacity	2.59	0.54	0.54	0.42		
Queue Length 95th (ft)	1520	0	0	0		
Control Delay (s)	751.3	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	751.3	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay		167.8				
Intersection Capacity Utilization		75.8%		ICU Level of Service		D
Analysis Period (min)		15				

Austin Oaks Mixed Use Development
50: Executive Center Drive & Wood Hollow Drive

2023 Site+Forecasted PM

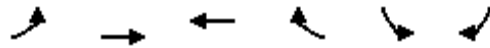
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	42	342	55	55	235	126	175	216	210	31	94	127
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.67	0.91	1.00	0.86	0.91	0.91	0.50	0.46	0.50	0.25	0.56	0.47
Hourly flow rate (vph)	63	376	55	64	258	138	350	470	420	124	168	270
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh												
Upstream signal (ft)					522							
pX, platoon unblocked												
vC, conflicting volume	397			431			1338	1053	403	1639	1012	327
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	397			431			1338	1053	403	1639	1012	327
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	95			94			0	0	35	0	21	62
cM capacity (veh/h)	1162			1129			26	202	647	0	214	714
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	494	461	1240	562								
Volume Left	63	64	350	124								
Volume Right	55	138	420	270								
cSH	1162	1129	76	0								
Volume to Capacity	0.05	0.06	16.24	Err								
Queue Length 95th (ft)	4	4	Err	Err								
Control Delay (s)	1.6	1.7	Err	Err								
Lane LOS	A	A	F	F								
Approach Delay (s)	1.6	1.7	Err	Err								
Approach LOS			F	F								
Intersection Summary												
Average Delay			Err									
Intersection Capacity Utilization			92.1%		ICU Level of Service				F			
Analysis Period (min)			15									

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	296	70	105	216	125	255
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.79	0.67	0.83	0.72	0.75	0.46
Hourly flow rate (vph)	375	104	127	300	167	554
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			479		980	427
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			479		980	427
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			88		32	12
cM capacity (veh/h)			1083		245	628
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	479	427	721			
Volume Left	0	127	167			
Volume Right	104	0	554			
cSH	1700	1083	461			
Volume to Capacity	0.28	0.12	1.56			
Queue Length 95th (ft)	0	10	985			
Control Delay (s)	0.0	3.5	286.8			
Lane LOS		A	F			
Approach Delay (s)	0.0	3.5	286.8			
Approach LOS			F			
Intersection Summary						
Average Delay		128.1				
Intersection Capacity Utilization		69.6%		ICU Level of Service		C
Analysis Period (min)		15				



Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations				 	 		
Volume (veh/h)	308	301	131	1392	941	212	
Sign Control	Stop			Free	Free		
Grade	0%			0%	0%		
Peak Hour Factor	0.85	0.87	0.86	0.88	0.89	0.67	
Hourly flow rate (vph)	362	346	152	1582	1057	316	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None	None		
Median storage veh							
Upstream signal (ft)				1093			
pX, platoon unblocked	0.89						
vC, conflicting volume	2311	687	1057				
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2227	687	1057				
tC, single (s)	6.8	6.9	4.1				
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2				
p0 queue free %	0	11	77				
cM capacity (veh/h)	25	389	654				
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	362	346	152	791	791	705	669
Volume Left	362	0	152	0	0	0	0
Volume Right	0	346	0	0	0	0	316
cSH	25	389	654	1700	1700	1700	1700
Volume to Capacity	14.52	0.89	0.23	0.47	0.47	0.41	0.39
Queue Length 95th (ft)	Err	225	22	0	0	0	0
Control Delay (s)	Err	54.9	12.2	0.0	0.0	0.0	0.0
Lane LOS	F	F	B				
Approach Delay (s)	5141.9		1.1	0.0			
Approach LOS	F						
Intersection Summary							
Average Delay			954.9				
Intersection Capacity Utilization			67.1%	ICU Level of Service			C
Analysis Period (min)			15				



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	42	137	166	30	72	276
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	46	149	180	33	78	300
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	213				437	197
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	213				437	197
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	97				86	64
cM capacity (veh/h)	1357				557	844
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	195	213	378			
Volume Left	46	0	78			
Volume Right	0	33	300			
cSH	1357	1700	763			
Volume to Capacity	0.03	0.13	0.50			
Queue Length 95th (ft)	3	0	70			
Control Delay (s)	2.0	0.0	14.3			
Lane LOS	A		B			
Approach Delay (s)	2.0	0.0	14.3			
Approach LOS			B			
Intersection Summary						
Average Delay			7.4			
Intersection Capacity Utilization			51.1%	ICU Level of Service		A
Analysis Period (min)			15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	0	0	442	179	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	480	195	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	675	195	195			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	675	195	195			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	419	847	1379			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	0	480	195			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1379	1700			
Volume to Capacity	0.00	0.00	0.11			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			26.6%	ICU Level of Service	A	
Analysis Period (min)			15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	0	0	442	179	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	480	195	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	675	195	195			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	675	195	195			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	419	847	1379			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	0	480	195			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1379	1700			
Volume to Capacity	0.00	0.00	0.11			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			26.6%	ICU Level of Service		A
Analysis Period (min)			15			

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	50	112	363	79	75	129
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	54	122	395	86	82	140
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	741	438			480	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	741	438			480	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	85	80			92	
cM capacity (veh/h)	355	619			1082	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	176	480	222			
Volume Left	54	0	82			
Volume Right	122	86	0			
cSH	503	1700	1082			
Volume to Capacity	0.35	0.28	0.08			
Queue Length 95th (ft)	39	0	6			
Control Delay (s)	15.9	0.0	3.6			
Lane LOS	C		A			
Approach Delay (s)	15.9	0.0	3.6			
Approach LOS	C					
Intersection Summary						
Average Delay			4.1			
Intersection Capacity Utilization			54.5%	ICU Level of Service	A	
Analysis Period (min)			15			

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	262	122	41	127
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	285	133	45	138
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	578	351			417	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	578	351			417	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			96	
cM capacity (veh/h)	459	692			1142	
Direction, Lane #	NB 1	SB 1				
Volume Total	417	183				
Volume Left	0	45				
Volume Right	133	0				
cSH	1700	1142				
Volume to Capacity	0.25	0.04				
Queue Length 95th (ft)	0	3				
Control Delay (s)	0.0	2.3				
Lane LOS		A				
Approach Delay (s)	0.0	2.3				
Approach LOS						
Intersection Summary						
Average Delay		0.7				
Intersection Capacity Utilization		36.8%		ICU Level of Service		A
Analysis Period (min)		15				

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	34	113	214	48	36	134
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	37	123	233	52	39	146
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	483	259			285	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	483	259			285	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	93	84			97	
cM capacity (veh/h)	526	780			1277	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	160	285	185			
Volume Left	37	0	39			
Volume Right	123	52	0			
cSH	702	1700	1277			
Volume to Capacity	0.23	0.17	0.03			
Queue Length 95th (ft)	22	0	2			
Control Delay (s)	11.6	0.0	1.9			
Lane LOS	B		A			
Approach Delay (s)	11.6	0.0	1.9			
Approach LOS	B					
Intersection Summary						
Average Delay		3.5				
Intersection Capacity Utilization		42.1%		ICU Level of Service	A	
Analysis Period (min)		15				

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	3	26	322	5	8	167
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	28	350	5	9	182
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	552	353			355	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	552	353			355	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	96			99	
cM capacity (veh/h)	491	691			1203	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	32	355	190			
Volume Left	3	0	9			
Volume Right	28	5	0			
cSH	663	1700	1203			
Volume to Capacity	0.05	0.21	0.01			
Queue Length 95th (ft)	4	0	1			
Control Delay (s)	10.7	0.0	0.4			
Lane LOS	B		A			
Approach Delay (s)	10.7	0.0	0.4			
Approach LOS	B					
Intersection Summary						
Average Delay		0.7				
Intersection Capacity Utilization		27.3%		ICU Level of Service		A
Analysis Period (min)		15				

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	0	0	0	348	0	0	175	0
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	0	0	0	0	0	0	0	378	0	0	190	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	568	568	190	568	568	378	190			378		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	568	568	190	568	568	378	190			378		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	100	100	100	100			100		
cM capacity (veh/h)	433	432	852	433	432	668	1384			1180		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	0	0	378	190								
Volume Left	0	0	0	0								
Volume Right	0	0	0	0								
cSH	1700	1700	1384	1180								
Volume to Capacity	0.00	0.00	0.00	0.00								
Queue Length 95th (ft)	0	0	0	0								
Control Delay (s)	0.0	0.0	0.0	0.0								
Lane LOS	A	A										
Approach Delay (s)	0.0	0.0	0.0	0.0								
Approach LOS	A	A										
Intersection Summary												
Average Delay			0.0									
Intersection Capacity Utilization			21.6%		ICU Level of Service				A			
Analysis Period (min)			15									

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	348	0	0	175
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	378	0	0	190
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	568	378			378	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	568	378			378	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	484	668			1180	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	0	378	190			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1180			
Volume to Capacity	0.00	0.22	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			21.6%	ICU Level of Service	A	
Analysis Period (min)			15			

Austin Oaks Mixed Use Development
1000: Executive Center Drive & Driveway 10

2023 Site+Forecasted PM

5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	0	0	0	348	0	0	175	0
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	0	0	0	0	0	0	0	378	0	0	190	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	568	568	190	568	568	378	190			378		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	568	568	190	568	568	378	190			378		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	100	100	100	100			100		
cM capacity (veh/h)	433	432	852	433	432	668	1384			1180		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	0	0	378	190								
Volume Left	0	0	0	0								
Volume Right	0	0	0	0								
cSH	1700	1700	1384	1180								
Volume to Capacity	0.00	0.00	0.00	0.00								
Queue Length 95th (ft)	0	0	0	0								
Control Delay (s)	0.0	0.0	0.0	0.0								
Lane LOS	A	A										
Approach Delay (s)	0.0	0.0	0.0	0.0								
Approach LOS	A	A										
Intersection Summary												
Average Delay			0.0									
Intersection Capacity Utilization			21.6%	ICU Level of Service					A			
Analysis Period (min)			15									

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	537	46	161	257	0	80	0	403	107	0	54
Sign Control		Free			Free			Stop			Stop	
Grade		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
Hourly flow rate (vph)	0	584	50	175	279	0	87	0	438	116	0	59
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)					251							
pX, platoon unblocked	0.83						0.83	0.83		0.83	0.83	0.83
vC, conflicting volume	279			634			1297	1238	609	1676	1263	279
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	28			634			1255	1184	609	1712	1214	28
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			82			12	100	12	0	100	93
cM capacity (veh/h)	1315			949			99	128	495	6	123	868
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1							
Volume Total	634	454	87	438	175							
Volume Left	0	175	87	0	116							
Volume Right	50	0	0	438	59							
cSH	1700	949	99	495	9							
Volume to Capacity	0.37	0.18	0.88	0.88	19.91							
Queue Length 95th (ft)	0	17	126	243	Err							
Control Delay (s)	0.0	5.0	138.5	46.0	Err							
Lane LOS		A	F	E	F							
Approach Delay (s)	0.0	5.0	61.3		Err							
Approach LOS			F		F							
Intersection Summary												
Average Delay			997.9									
Intersection Capacity Utilization			79.4%		ICU Level of Service				D			
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
1: Hart Lane & Far West Boulevard

2028 Forecasted AM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	94	892	105	241	345	85	59	177	201	249	315	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	170		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.979				0.850		0.932			0.985	
Flt Protected	0.950			0.950				0.993			0.985	
Satd. Flow (prot)	1770	3465	0	1770	3539	1583	0	3275	0	0	3434	0
Flt Permitted	0.375			0.103				0.993			0.985	
Satd. Flow (perm)	699	3465	0	192	3539	1583	0	3275	0	0	3434	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15				101		137			8	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		362			1265			236			237	
Travel Time (s)		7.1			24.6			5.4			5.4	
Peak Hour Factor	0.73	0.83	0.61	0.69	0.83	0.85	0.80	0.80	0.82	0.90	0.56	0.47
Adj. Flow (vph)	129	1075	172	349	416	100	74	221	245	277	562	94
Shared Lane Traffic (%)												
Lane Group Flow (vph)	129	1247	0	349	416	100	0	540	0	0	933	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Split	NA		Split	NA	
Protected Phases	5	2		1	6		4	4		8	8	
Permitted Phases	2			6		6						
Detector Phase	5	2		1	6	6	4	4		8	8	

Austin Oaks Mixed Use Development
1: Hart Lane & Far West Boulevard

2028 Forecasted AM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	8.0	18.0		8.0	18.0	18.0	12.0	12.0		12.0	12.0	
Minimum Split (s)	13.0	23.0		13.0	23.0	23.0	17.0	17.0		17.0	17.0	
Total Split (s)	13.0	52.0		22.0	61.0	61.0	26.0	26.0		30.0	30.0	
Total Split (%)	10.0%	40.0%		16.9%	46.9%	46.9%	20.0%	20.0%		23.1%	23.1%	
Maximum Green (s)	8.0	47.0		17.0	56.0	56.0	21.0	21.0		25.0	25.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0		5.0			5.0	
Lead/Lag	Lead	Lead		Lag	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	
Walk Time (s)		7.0			7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		12.0			12.0	12.0	21.0	21.0		21.0	21.0	
Pedestrian Calls (#/hr)		0			0	0	0	0		0	0	
Act Effect Green (s)	47.0	47.0		56.0	56.0	56.0		19.9			26.1	
Actuated g/C Ratio	0.36	0.36		0.43	0.43	0.43		0.15			0.20	
v/c Ratio	0.41	0.99		1.21	0.27	0.14		0.88			1.34	
Control Delay	33.0	63.4		171.2	42.4	20.3		55.8			203.8	
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Delay	33.0	63.4		171.2	42.4	20.3		55.8			203.8	
LOS	C	E		F	D	C		E			F	
Approach Delay		60.6			91.8			55.8			203.8	
Approach LOS		E			F			E			F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 100 (77%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.34

Intersection Signal Delay: 103.1

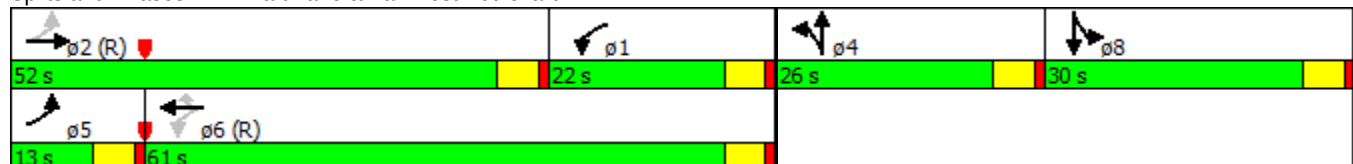
Intersection LOS: F

Intersection Capacity Utilization 88.4%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 1: Hart Lane & Far West Boulevard



Austin Oaks Mixed Use Development
2: Wood Hollow Drive & Far West Boulevard

2028 Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	194	1225	55	136	667	113	29	158	340	310	157	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	335		0	165		0	120		120	0		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	75			35			50			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.944	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1758	0
Flt Permitted	0.287			0.154			0.950			0.950		
Satd. Flow (perm)	535	3539	1583	287	3539	1583	1770	1863	1583	1770	1758	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			101			140			167		20	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1265			1235			599			222	
Travel Time (s)		24.6			24.1			13.6			5.0	
Peak Hour Factor	0.74	0.91	0.58	0.90	0.88	0.81	0.69	0.65	0.87	0.90	0.81	0.77
Adj. Flow (vph)	262	1346	95	151	758	140	42	243	391	344	194	114
Shared Lane Traffic (%)												
Lane Group Flow (vph)	262	1346	95	151	758	140	42	243	391	344	308	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	L NA	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		3	3		7	7	
Permitted Phases	6		6	2		2			3			
Detector Phase	1	6	6	5	2	2	3	3	3	7	7	

Austin Oaks Mixed Use Development
2: Wood Hollow Drive & Far West Boulevard

2028 Forecasted AM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	8.0	8.0	8.0	5.0	5.0	
Minimum Split (s)	11.0	40.0	40.0	12.0	40.0	40.0	15.0	15.0	15.0	15.0	15.0	
Total Split (s)	16.0	67.0	67.0	16.0	67.0	67.0	19.0	19.0	19.0	28.0	28.0	
Total Split (%)	12.3%	51.5%	51.5%	12.3%	51.5%	51.5%	14.6%	14.6%	14.6%	21.5%	21.5%	
Maximum Green (s)	11.0	62.0	62.0	11.0	62.0	62.0	14.0	14.0	14.0	23.0	23.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
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	
Recall Mode	None	C-Min	C-Min	Max	C-Min	C-Min	Min	Min	Min	Max	Max	
Walk Time (s)		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		12.0	12.0		12.0	12.0	21.0	21.0	21.0	21.0	21.0	
Pedestrian Calls (#/hr)		0	0		0	0	0	0	0	0	0	
Act Effect Green (s)	58.5	58.5	58.5	36.9	36.9	36.9	17.5	17.5	17.5	23.0	23.0	
Actuated g/C Ratio	0.45	0.45	0.45	0.28	0.28	0.28	0.13	0.13	0.13	0.18	0.18	
v/c Ratio	0.48	0.85	0.12	0.73	0.75	0.26	0.18	0.97	1.09	1.10	0.94	
Control Delay	36.7	36.5	4.1	47.0	46.5	7.7	54.4	105.4	104.8	129.2	86.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	36.7	36.5	4.1	47.0	46.5	7.7	54.4	105.4	104.8	129.2	86.5	
LOS	D	D	A	D	D	A	D	F	F	F	F	
Approach Delay		34.7			41.4			101.9			109.0	
Approach LOS		C			D			F			F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 10 (8%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.10

Intersection Signal Delay: 59.5

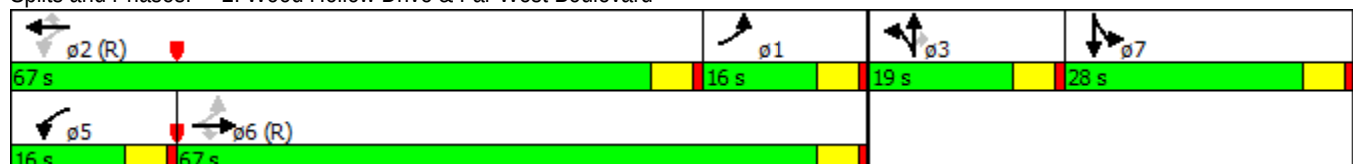
Intersection LOS: E

Intersection Capacity Utilization 84.6%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 2: Wood Hollow Drive & Far West Boulevard



Austin Oaks Mixed Use Development
3: Far West Boulevard & Mopac SB FR

2028 Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑						↑↑	↑
Volume (vph)	0	933	529	21	615	0	0	0	0	156	663	1038
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									0.850
Flt Protected				0.950							0.989	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	3500	1583
Flt Permitted				0.950							0.989	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	3500	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			394									101
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		1235			406			400			362	
Travel Time (s)		24.1			7.9			5.5			4.9	
Peak Hour Factor	0.92	0.91	0.93	0.67	0.93	0.92	0.92	0.92	0.92	0.78	0.92	0.95
Adj. Flow (vph)	0	1025	569	31	661	0	0	0	0	200	721	1093
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1025	569	31	661	0	0	0	0	0	921	1093
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	L NA	Right	Left	Left	Right	Left	Left	R NA
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	custom	Prot	NA					custom	NA	custom
Protected Phases		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Permitted Phases										4		
Detector Phase		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Switch Phase												
Minimum Initial (s)				10.0								
Minimum Split (s)				15.0								

Lane Group	ø1	ø2	ø4	ø8	ø22
Lane Configurations					
Volume (vph)					
Ideal Flow (vphpl)					
Lane Util. Factor					
Frt					
Flt Protected					
Satd. Flow (prot)					
Flt Permitted					
Satd. Flow (perm)					
Right Turn on Red					
Satd. Flow (RTOR)					
Link Speed (mph)					
Link Distance (ft)					
Travel Time (s)					
Peak Hour Factor					
Adj. Flow (vph)					
Shared Lane Traffic (%)					
Lane Group Flow (vph)					
Enter Blocked Intersection					
Lane Alignment					
Median Width(ft)					
Link Offset(ft)					
Crosswalk Width(ft)					
Two way Left Turn Lane					
Headway Factor					
Turning Speed (mph)					
Number of Detectors					
Detector Template					
Leading Detector (ft)					
Trailing Detector (ft)					
Detector 1 Position(ft)					
Detector 1 Size(ft)					
Detector 1 Type					
Detector 1 Channel					
Detector 1 Extend (s)					
Detector 1 Queue (s)					
Detector 1 Delay (s)					
Detector 2 Position(ft)					
Detector 2 Size(ft)					
Detector 2 Type					
Detector 2 Channel					
Detector 2 Extend (s)					
Turn Type					
Protected Phases	1	2	4	8	22
Permitted Phases					
Detector Phase					
Switch Phase					
Minimum Initial (s)	4.0	10.0	10.0	4.0	1.0
Minimum Split (s)	9.0	15.0	25.0	9.0	20.0

Austin Oaks Mixed Use Development
3: Far West Boulevard & Mopac SB FR

2028 Forecasted AM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)				21.0								
Total Split (%)				16.2%								
Maximum Green (s)				16.0								
Yellow Time (s)				4.0								
All-Red Time (s)				1.0								
Lost Time Adjust (s)				0.0								
Total Lost Time (s)				5.0								
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0								
Recall Mode				Min								
Act Effect Green (s)		49.0	24.0	16.0	45.0						50.0	75.0
Actuated g/C Ratio		0.38	0.18	0.12	0.35						0.38	0.58
v/c Ratio		0.77	0.93	0.14	0.54						0.68	1.14
Control Delay		38.4	26.9	54.1	0.5						37.0	93.8
Queue Delay		0.6	0.0	0.0	2.4						0.0	0.0
Total Delay		39.0	26.9	54.1	3.0						37.0	93.8
LOS		D	C	D	A						D	F
Approach Delay		34.7			5.2						67.8	
Approach LOS		C			A						E	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 106 (82%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.70

Intersection Signal Delay: 45.4

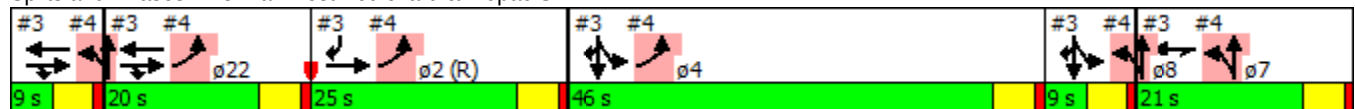
Intersection LOS: D

Intersection Capacity Utilization 118.7%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 3: Far West Boulevard & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø8	ø22
Total Split (s)	9.0	25.0	46.0	9.0	20.0
Total Split (%)	7%	19%	35%	7%	15%
Maximum Green (s)	4.0	20.0	41.0	4.0	15.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)					
Total Lost Time (s)					
Lead/Lag		Lag	Lead	Lag	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	C-Min	Min	Min	None
Act Effect Green (s)					
Actuated g/C Ratio					
v/c Ratio					
Control Delay					
Queue Delay					
Total Delay					
LOS					
Approach Delay					
Approach LOS					
Intersection Summary					

Austin Oaks Mixed Use Development
4: Mopac NB FR & Far West Boulevard

2028 Forecasted AM
5/15/2014

												
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Lane Configurations												
Volume (vph)	1109	0	637	179	0	0						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Lane Util. Factor	0.97	1.00	0.95	0.95	1.00	1.00						
Fr												
Flt Protected	0.950		0.950	0.996								
Satd. Flow (prot)	3433	0	1681	1763	0	0						
Flt Permitted	0.950		0.950	0.996								
Satd. Flow (perm)	3433	0	1681	1763	0	0						
Right Turn on Red		Yes				Yes						
Satd. Flow (RTOR)												
Link Speed (mph)	35			50	50							
Link Distance (ft)	406			308	472							
Travel Time (s)	7.9			4.2	6.4							
Peak Hour Factor	0.90	0.92	0.93	0.25	0.92	0.92						
Adj. Flow (vph)	1232	0	685	716	0	0						
Shared Lane Traffic (%)			10%									
Lane Group Flow (vph)	1232	0	616	785	0	0						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Right	Left	Left	Left	Right						
Median Width(ft)	24			12	12							
Link Offset(ft)	0			0	0							
Crosswalk Width(ft)	16			16	16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00						
Turning Speed (mph)	15	9	15			9						
Number of Detectors	1		1	2								
Detector Template	Left		Left	Thru								
Leading Detector (ft)	20		20	100								
Trailing Detector (ft)	0		0	0								
Detector 1 Position(ft)	0		0	0								
Detector 1 Size(ft)	20		20	6								
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0								
Detector 1 Queue (s)	0.0		0.0	0.0								
Detector 1 Delay (s)	0.0		0.0	0.0								
Detector 2 Position(ft)				94								
Detector 2 Size(ft)				6								
Detector 2 Type				Cl+Ex								
Detector 2 Channel												
Detector 2 Extend (s)				0.0								
Turn Type	Prot		Split	NA								
Protected Phases	2 4 22		1 7 8	1 7 8			1	2	4	7	8	22
Permitted Phases												
Detector Phase	2 4 22		1 7 8	1 7 8								
Switch Phase												
Minimum Initial (s)							4.0	10.0	10.0	10.0	4.0	1.0
Minimum Split (s)							9.0	15.0	25.0	15.0	9.0	20.0



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Total Split (s)							9.0	25.0	46.0	21.0	9.0	20.0
Total Split (%)							7%	19%	35%	16%	7%	15%
Maximum Green (s)							4.0	20.0	41.0	16.0	4.0	15.0
Yellow Time (s)							4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)							1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag								Lag	Lead		Lag	Lead
Lead-Lag Optimize?								Yes	Yes		Yes	Yes
Vehicle Extension (s)							3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode							Min	C-Min	Min	Min	Min	None
Act Effect Green (s)	86.0		34.0	34.0								
Actuated g/C Ratio	0.66		0.26	0.26								
v/c Ratio	0.54		1.40	1.70								
Control Delay	3.6		231.4	356.5								
Queue Delay	1.7		0.0	0.0								
Total Delay	5.3		231.4	356.5								
LOS	A		F	F								
Approach Delay	5.3			301.5								
Approach LOS	A			F								

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 106 (82%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.70

Intersection Signal Delay: 162.9

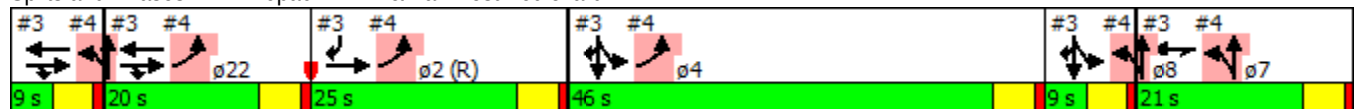
Intersection LOS: F

Intersection Capacity Utilization 131.9%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 4: Mopac NB FR & Far West Boulevard



Austin Oaks Mixed Use Development
5: Spicewood Springs Road & Mopac SB FR

2028 Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑					↑	↑↑	↑
Volume (vph)	0	1205	798	859	1346	0	0	0	0	424	1543	816
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	60		0	0		0	150		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			75			25			75		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.999	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1610	3387	1583
Flt Permitted				0.950						0.950	0.999	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1610	3387	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			185									185
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		294			386			782			882	
Travel Time (s)		5.7			7.5			10.7			12.0	
Peak Hour Factor	0.92	0.81	0.90	0.87	0.86	0.92	0.92	0.92	0.92	0.93	0.87	0.94
Adj. Flow (vph)	0	1488	887	987	1565	0	0	0	0	456	1774	868
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	0	1488	887	987	1565	0	0	0	0	410	1820	868
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Prot	Prot	NA					Split	NA	Prot
Protected Phases		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5
Permitted Phases												
Detector Phase		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

Austin Oaks Mixed Use Development
5: Spicewood Springs Road & Mopac SB FR

2028 Forecasted AM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)		27.0	27.0	51.0	72.0					37.0	37.0	37.0
Actuated g/C Ratio		0.21	0.21	0.39	0.55					0.28	0.28	0.28
v/c Ratio		2.02	1.87	1.42	0.80					0.90	1.89	1.49
Control Delay		487.0	415.5	218.2	10.4					67.9	432.4	257.6
Queue Delay		1.5	0.0	1.2	48.9					0.0	0.0	0.1
Total Delay		488.6	415.5	219.4	59.3					67.9	432.4	257.7
LOS		F	F	F	E					E	F	F
Approach Delay		461.3			121.2						335.2	
Approach LOS		F			F						F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 8 (6%), Referenced to phase 2:EBWB, Start of Green

Natural Cycle: 140

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 2.16

Intersection Signal Delay: 304.5

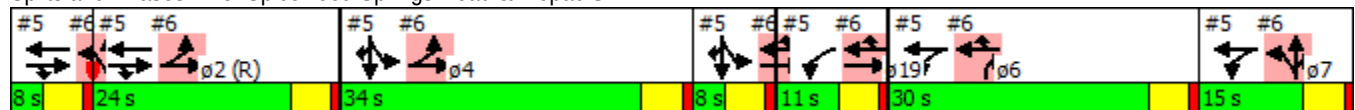
Intersection LOS: F

Intersection Capacity Utilization 166.7%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 5: Spicewood Springs Road & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0	5.0	6.0
Minimum Split (s)	8.0	10.0	10.0	8.0	10.0	10.0	11.0
Total Split (s)	8.0	24.0	34.0	8.0	30.0	15.0	11.0
Total Split (%)	6%	18%	26%	6%	23%	12%	8%
Maximum Green (s)	3.0	19.0	29.0	3.0	25.0	10.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Austin Oaks Mixed Use Development
6: Mopac NB FR & Spicewood Springs Road

2028 Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	413	1092	0	0	1356	289	616	15	608	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		325	0		0	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	75			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.91	0.95	1.00	1.00	1.00
Frt						0.850		0.924	0.850			
Flt Protected	0.950						0.950	0.978				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	1681	1532	1504	0	0	0
Flt Permitted	0.950						0.950	0.978				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	1681	1532	1504	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						280		33	185			
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		386			594			563			407	
Travel Time (s)		7.5			11.6			7.7			5.6	
Peak Hour Factor	0.90	0.96	0.92	0.92	0.93	0.79	0.86	0.60	0.87	0.92	0.92	0.92
Adj. Flow (vph)	459	1138	0	0	1458	366	716	25	699	0	0	0
Shared Lane Traffic (%)							30%		35%			
Lane Group Flow (vph)	459	1138	0	0	1458	366	501	485	454	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Prot	Split	NA	custom			
Protected Phases	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			
Permitted Phases												
Detector Phase	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

Austin Oaks Mixed Use Development
6: Mopac NB FR & Spicewood Springs Road

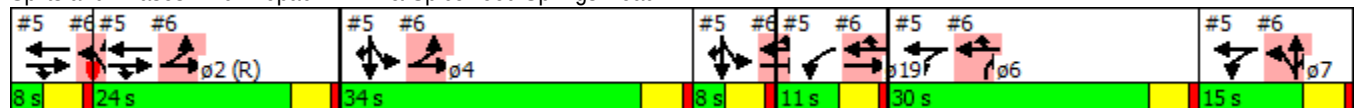
2028 Forecasted AM
5/15/2014

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)	53.0	72.0			44.0	44.0	18.0	18.0	40.0			
Actuated g/C Ratio	0.41	0.55			0.34	0.34	0.14	0.14	0.31			
v/c Ratio	0.64	0.58			1.22	0.51	2.16	2.02	0.77			
Control Delay	9.3	2.8			143.7	10.9	562.8	500.6	33.5			
Queue Delay	55.2	50.1			1.5	0.0	0.0	0.2	0.0			
Total Delay	64.5	52.8			145.2	10.9	562.8	500.8	33.5			
LOS	E	D			F	B	F	F	C			
Approach Delay		56.2			118.3			375.0				
Approach LOS		E			F			F				

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 8 (6%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 2.16
Intersection Signal Delay: 173.9 Intersection LOS: F
Intersection Capacity Utilization 166.7% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 6: Mopac NB FR & Spicewood Springs Road



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0	5.0	6.0
Minimum Split (s)	8.0	10.0	10.0	8.0	10.0	10.0	11.0
Total Split (s)	8.0	24.0	34.0	8.0	30.0	15.0	11.0
Total Split (%)	6%	18%	26%	6%	23%	12%	8%
Maximum Green (s)	3.0	19.0	29.0	3.0	25.0	10.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Austin Oaks Mixed Use Development
7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road

2028 Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	1301	222	759	895	13	99	4	299	8	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	0		100	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.985			0.996				0.850		0.983	
Flt Protected	0.950			0.950				0.954			0.958	
Satd. Flow (prot)	1770	5009	0	1770	3525	0	0	1777	1583	0	1754	0
Flt Permitted	0.287			0.066				0.724			0.785	
Satd. Flow (perm)	535	5009	0	123	3525	0	0	1349	1583	0	1437	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		22			3				305		101	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1093			275			251			161	
Travel Time (s)		21.3			5.4			5.7			3.7	
Peak Hour Factor	0.72	0.50	0.76	0.50	0.92	0.50	0.91	0.85	0.62	0.58	0.90	0.84
Adj. Flow (vph)	14	2602	292	1518	973	26	109	5	482	14	0	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	2894	0	1518	999	0	0	114	482	0	16	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2			6			4		4	8		
Detector Phase	5	2		1	6		4	4	4	8	8	

Austin Oaks Mixed Use Development
7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road

2028 Forecasted AM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	20.0		21.0	20.0		15.0	15.0	15.0	11.0	11.0	
Minimum Split (s)	10.0	25.0		26.0	25.0		20.0	20.0	20.0	16.0	16.0	
Total Split (s)	29.0	72.0		29.0	72.0		29.0	29.0	29.0	29.0	29.0	
Total Split (%)	22.3%	55.4%		22.3%	55.4%		22.3%	22.3%	22.3%	22.3%	22.3%	
Maximum Green (s)	24.0	67.0		24.0	67.0		24.0	24.0	24.0	24.0	24.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0			5.0	5.0		5.0	
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min		Min	C-Min		Min	Min	Min	Min	Min	
Walk Time (s)							6.0	6.0	6.0	6.0	6.0	
Flash Dont Walk (s)							24.0	24.0	24.0	24.0	24.0	
Pedestrian Calls (#/hr)							0	0	0	0	0	
Act Effect Green (s)	68.6	67.0		90.5	90.5		21.6	21.6			21.6	
Actuated g/C Ratio	0.53	0.52		0.70	0.70		0.17	0.17			0.17	
v/c Ratio	0.04	1.12		3.62	0.41		0.51	0.93			0.05	
Control Delay	16.1	89.0		1195.1	13.9		57.1	45.3			0.3	
Queue Delay	0.0	0.0		0.0	0.4		0.0	0.0			0.0	
Total Delay	16.1	89.0		1195.1	14.3		57.1	45.3			0.3	
LOS	B	F		F	B		E	D			A	
Approach Delay		88.7			726.5			47.6			0.3	
Approach LOS		F			F			D			A	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 55 (42%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 3.62

Intersection Signal Delay: 350.3

Intersection LOS: F

Intersection Capacity Utilization 97.1%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road



Austin Oaks Mixed Use Development
10: Hart Lane & Greystone Drive

2028 Forecasted AM
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	61	232	160	96	87	10	59	224	40	19	339	36
Peak Hour Factor	0.80	0.65	0.65	0.78	0.88	0.58	0.75	0.81	0.60	0.58	0.69	0.57
Hourly flow rate (vph)	76	357	246	123	99	17	79	277	67	33	491	63
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	433	246	222	17	422	587						
Volume Left (vph)	76	0	123	0	79	33						
Volume Right (vph)	0	246	0	17	67	63						
Hadj (s)	0.12	-0.67	0.31	-0.67	-0.02	-0.02						
Departure Headway (s)	8.9	8.2	9.9	9.0	8.5	8.5						
Degree Utilization, x	1.0	0.56	0.61	0.04	0.99	1.0						
Capacity (veh/h)	410	429	354	395	422	436						
Control Delay (s)	96.1	19.8	26.2	11.2	71.1	208.4						
Approach Delay (s)	68.5		25.1		71.1	208.4						
Approach LOS	F		D		F	F						
Intersection Summary												
Delay			106.3									
Level of Service			F									
Intersection Capacity Utilization			72.9%	ICU Level of Service					C			
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
20: Wood Hollow Drive & Greystone Drive

2028 Forecasted AM
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	84	154	200	67	147	37	28	318	53	29	223	65
Peak Hour Factor	0.81	0.89	0.64	0.80	0.82	0.72	0.53	0.88	0.79	0.68	0.85	0.68
Hourly flow rate (vph)	104	173	312	84	179	51	53	361	67	43	262	96
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2				
Volume Total (vph)	277	313	263	51	234	248	174	227				
Volume Left (vph)	104	0	84	0	53	0	43	0				
Volume Right (vph)	0	313	0	51	0	67	0	96				
Hadj (s)	0.22	-0.67	0.19	-0.67	0.15	-0.16	0.16	-0.26				
Departure Headway (s)	8.1	7.3	8.5	7.6	8.2	7.9	8.4	8.0				
Degree Utilization, x	0.63	0.63	0.62	0.11	0.53	0.54	0.40	0.50				
Capacity (veh/h)	422	478	404	446	419	434	414	428				
Control Delay (s)	22.6	20.6	23.3	10.4	19.0	18.8	15.7	17.5				
Approach Delay (s)	21.5		21.2		18.9		16.7					
Approach LOS	C		C		C		C					
Intersection Summary												
Delay			19.7									
Level of Service			C									
Intersection Capacity Utilization			57.9%	ICU Level of Service					B			
Analysis Period (min)			15									



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations					  	
Volume (veh/h)	0	267	0	0	4032	185
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.79	0.92	0.92	0.96	0.86
Hourly flow rate (vph)	0	338	0	0	4200	215
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	4308	1508	4415			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	4308	1508	4415			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	0	100			
cM capacity (veh/h)	1	110	29			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	338	1680	1680	1055		
Volume Left	0	0	0	0		
Volume Right	338	0	0	215		
cSH	110	1700	1700	1700		
Volume to Capacity	3.08	0.99	0.99	0.62		
Queue Length 95th (ft)	Err	0	0	0		
Control Delay (s)	Err	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	Err	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay		711.0				
Intersection Capacity Utilization		105.2%		ICU Level of Service		G
Analysis Period (min)		15				



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations					  	
Volume (veh/h)	0	58	0	0	3361	465
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.50	0.92	0.92	0.95	0.75
Hourly flow rate (vph)	0	116	0	0	3538	620
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	3848	1489	4158			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	3848	1489	4158			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	0	100			
cM capacity (veh/h)	3	113	38			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	116	1415	1415	1328		
Volume Left	0	0	0	0		
Volume Right	116	0	0	620		
cSH	113	1700	1700	1700		
Volume to Capacity	1.03	0.83	0.83	0.78		
Queue Length 95th (ft)	170	0	0	0		
Control Delay (s)	164.4	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	164.4	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay			4.5			
Intersection Capacity Utilization			85.6%	ICU Level of Service	E	
Analysis Period (min)			15			

Austin Oaks Mixed Use Development
50: Executive Center Drive & Wood Hollow Drive

2028 Forecasted AM

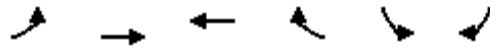
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	51	292	171	232	256	204	41	66	36	17	161	26
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.67	0.91	1.00	0.86	0.91	0.91	0.50	0.46	0.50	0.25	0.56	0.47
Hourly flow rate (vph)	76	321	171	270	281	224	82	143	72	68	288	55
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)					522							
pX, platoon unblocked												
vC, conflicting volume	505			492			1691	1604	406	1635	1577	393
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	505			492			1691	1604	406	1635	1577	393
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	93			75			0	0	89	0	0	92
cM capacity (veh/h)	1059			1072			0	73	645	0	76	656
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	568	775	297	411								
Volume Left	76	270	82	68								
Volume Right	171	224	72	55								
cSH	1059	1072	0	0								
Volume to Capacity	0.07	0.25	Err	Err								
Queue Length 95th (ft)	6	25	Err	Err								
Control Delay (s)	1.9	5.5	Err	Err								
Lane LOS	A	A	F	F								
Approach Delay (s)	1.9	5.5	Err	Err								
Approach LOS			F	F								
Intersection Summary												
Average Delay			Err									
Intersection Capacity Utilization			95.7%		ICU Level of Service				F			
Analysis Period (min)			15									

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	261	111	206	341	30	51
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.79	0.67	0.83	0.72	0.75	0.46
Hourly flow rate (vph)	330	166	248	474	40	111
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			496		1383	413
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			496		1383	413
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			77		67	83
cM capacity (veh/h)			1068		122	639
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	496	722	151			
Volume Left	0	248	40			
Volume Right	166	0	111			
cSH	1700	1068	300			
Volume to Capacity	0.29	0.23	0.50			
Queue Length 95th (ft)	0	23	66			
Control Delay (s)	0.0	5.2	28.5			
Lane LOS		A	D			
Approach Delay (s)	0.0	5.2	28.5			
Approach LOS			D			
Intersection Summary						
Average Delay		5.9				
Intersection Capacity Utilization		64.6%	ICU Level of Service	C		
Analysis Period (min)		15				



Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations							
Volume (veh/h)	135	187	186	1070	1482	388	
Sign Control	Stop			Free	Free		
Grade	0%			0%	0%		
Peak Hour Factor	0.85	0.87	0.86	0.88	0.89	0.67	
Hourly flow rate (vph)	159	215	216	1216	1665	579	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None	None		
Median storage veh							
Upstream signal (ft)				1093			
pX, platoon unblocked	0.90						
vC, conflicting volume	2995	1122	1665				
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2995	1122	1665				
tC, single (s)	6.8	6.9	4.1				
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2				
p0 queue free %	0	0	43				
cM capacity (veh/h)	4	200	382				
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	159	215	216	608	608	1110	1134
Volume Left	159	0	216	0	0	0	0
Volume Right	0	215	0	0	0	0	579
cSH	4	200	382	1700	1700	1700	1700
Volume to Capacity	38.06	1.07	0.57	0.36	0.36	0.65	0.67
Queue Length 95th (ft)	Err	249	84	0	0	0	0
Control Delay (s)	Err	134.5	26.0	0.0	0.0	0.0	0.0
Lane LOS	F	F	D				
Approach Delay (s)	4326.2		3.9			0.0	
Approach LOS	F						
Intersection Summary							
Average Delay			400.6				
Intersection Capacity Utilization			81.1%		ICU Level of Service		D
Analysis Period (min)			15				



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	255	197	280	185	12	50
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	277	214	304	201	13	54
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	505				1173	405
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	505				1173	405
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	74				92	92
cM capacity (veh/h)	1059				157	646
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	491	505	67			
Volume Left	277	0	13			
Volume Right	0	201	54			
cSH	1059	1700	403			
Volume to Capacity	0.26	0.30	0.17			
Queue Length 95th (ft)	26	0	15			
Control Delay (s)	6.7	0.0	15.7			
Lane LOS	A		C			
Approach Delay (s)	6.7	0.0	15.7			
Approach LOS			C			
Intersection Summary						
Average Delay		4.1				
Intersection Capacity Utilization		64.3%		ICU Level of Service		C
Analysis Period (min)		15				

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	0	0	330	452	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	359	491	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	850	491	491			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	850	491	491			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	331	577	1072			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	0	359	491			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1072	1700			
Volume to Capacity	0.00	0.00	0.29			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		27.1%		ICU Level of Service	A	
Analysis Period (min)		15				

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	0	0	330	452	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	359	491	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	850	491	491			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	850	491	491			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	331	577	1072			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	0	359	491			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1072	1700			
Volume to Capacity	0.00	0.00	0.29			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		27.1%		ICU Level of Service	A	
Analysis Period (min)		15				

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	13	29	194	136	125	439
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	14	32	211	148	136	477
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1034	285			359	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1034	285			359	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	94	96			89	
cM capacity (veh/h)	228	754			1200	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	46	359	613			
Volume Left	14	0	136			
Volume Right	32	148	0			
cSH	440	1700	1200			
Volume to Capacity	0.10	0.21	0.11			
Queue Length 95th (ft)	9	0	10			
Control Delay (s)	14.1	0.0	2.9			
Lane LOS	B		A			
Approach Delay (s)	14.1	0.0	2.9			
Approach LOS	B					
Intersection Summary						
Average Delay		2.4				
Intersection Capacity Utilization		61.9%		ICU Level of Service		B
Analysis Period (min)		15				

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	260	61	17	280
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	283	66	18	304
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	657	316			349	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	657	316			349	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			98	
cM capacity (veh/h)	423	725			1210	
Direction, Lane #	NB 1	SB 1				
Volume Total	349	323				
Volume Left	0	18				
Volume Right	66	0				
cSH	1700	1210				
Volume to Capacity	0.21	0.02				
Queue Length 95th (ft)	0	1				
Control Delay (s)	0.0	0.6				
Lane LOS		A				
Approach Delay (s)	0.0	0.6				
Approach LOS						
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		32.0%		ICU Level of Service		A
Analysis Period (min)		15				

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	7	22	237	23	20	290
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	8	24	258	25	22	315
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	629	270			283	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	629	270			283	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	98	97			98	
cM capacity (veh/h)	439	769			1280	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	32	283	337			
Volume Left	8	0	22			
Volume Right	24	25	0			
cSH	651	1700	1280			
Volume to Capacity	0.05	0.17	0.02			
Queue Length 95th (ft)	4	0	1			
Control Delay (s)	10.8	0.0	0.7			
Lane LOS	B		A			
Approach Delay (s)	10.8	0.0	0.7			
Approach LOS	B					
Intersection Summary						
Average Delay		0.9				
Intersection Capacity Utilization		41.7%		ICU Level of Service		A
Analysis Period (min)		15				

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	4	256	3	7	310
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	4	278	3	8	337
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	632	280			282	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	632	280			282	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	99			99	
cM capacity (veh/h)	442	759			1281	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	4	282	345			
Volume Left	0	0	8			
Volume Right	4	3	0			
cSH	759	1700	1281			
Volume to Capacity	0.01	0.17	0.01			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	9.8	0.0	0.2			
Lane LOS	A		A			
Approach Delay (s)	9.8	0.0	0.2			
Approach LOS	A					
Intersection Summary						
Average Delay		0.2				
Intersection Capacity Utilization		31.9%		ICU Level of Service	A	
Analysis Period (min)		15				

Austin Oaks Mixed Use Development
800: Executive Center Drive & Driveway 8

2028 Forecasted AM
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	0	0	0	260	0	0	317	0
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	0	0	0	0	0	0	0	283	0	0	345	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	627	627	345	627	627	283	345			283		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	627	627	345	627	627	283	345			283		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	100	100	100	100			100		
cM capacity (veh/h)	396	400	698	396	400	756	1214			1280		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	0	0	283	345								
Volume Left	0	0	0	0								
Volume Right	0	0	0	0								
cSH	1700	1700	1214	1280								
Volume to Capacity	0.00	0.00	0.00	0.00								
Queue Length 95th (ft)	0	0	0	0								
Control Delay (s)	0.0	0.0	0.0	0.0								
Lane LOS	A	A										
Approach Delay (s)	0.0	0.0	0.0	0.0								
Approach LOS	A	A										
Intersection Summary												
Average Delay			0.0									
Intersection Capacity Utilization			20.0%		ICU Level of Service				A			
Analysis Period (min)			15									

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	260	0	0	317
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	283	0	0	345
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	627	283			283	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	627	283			283	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	447	756			1280	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	0	283	345			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1280			
Volume to Capacity	0.00	0.17	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		20.0%		ICU Level of Service	A	
Analysis Period (min)		15				

Austin Oaks Mixed Use Development
1000: Executive Center Drive & Driveway 10

2028 Forecasted AM
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	0	0	0	260	0	0	317	0
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	0	0	0	0	0	0	0	283	0	0	345	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	627	627	345	627	627	283	345			283		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	627	627	345	627	627	283	345			283		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	100	100	100	100			100		
cM capacity (veh/h)	396	400	698	396	400	756	1214			1280		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	0	0	283	345								
Volume Left	0	0	0	0								
Volume Right	0	0	0	0								
cSH	1700	1700	1214	1280								
Volume to Capacity	0.00	0.00	0.00	0.00								
Queue Length 95th (ft)	0	0	0	0								
Control Delay (s)	0.0	0.0	0.0	0.0								
Lane LOS	A	A										
Approach Delay (s)	0.0	0.0	0.0	0.0								
Approach LOS	A	A										
Intersection Summary												
Average Delay			0.0									
Intersection Capacity Utilization			20.0%	ICU Level of Service					A			
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
1100: Driveway 11 & Wood Hollow Drive

2028 Forecasted AM
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	269	76	276	705	0	21	0	107	21	0	11
Sign Control		Free			Free			Stop			Stop	
Grade		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
Hourly flow rate (vph)	0	292	83	300	766	0	23	0	116	23	0	12
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh												
Upstream signal (ft)					251							
pX, platoon unblocked	0.35						0.35	0.35		0.35	0.35	0.35
vC, conflicting volume	766			375			1712	1700	334	1816	1741	766
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			375			2104	2070	334	2401	2187	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			75			0	100	84	0	100	97
cM capacity (veh/h)	570			1183			10	14	708	5	12	381
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1							
Volume Total	375	1066	23	116	35							
Volume Left	0	300	23	0	23							
Volume Right	83	0	0	116	12							
cSH	1700	1183	10	708	8							
Volume to Capacity	0.22	0.25	2.22	0.16	4.24							
Queue Length 95th (ft)	0	25	95	15	Err							
Control Delay (s)	0.0	5.6	1280.0	11.1	Err							
Lane LOS		A	F	B	F							
Approach Delay (s)	0.0	5.6	219.3		Err							
Approach LOS			F		F							
Intersection Summary												
Average Delay			237.9									
Intersection Capacity Utilization			89.6%		ICU Level of Service				E			
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
1: Hart Lane & Far West Boulevard

2028 Forecasted PM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	70	703	46	212	716	180	72	189	163	201	169	95
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	170		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.988				0.850		0.943			0.958	
Flt Protected	0.950			0.950				0.992			0.985	
Satd. Flow (prot)	1770	3497	0	1770	3539	1583	0	3311	0	0	3340	0
Flt Permitted	0.115			0.184				0.992			0.985	
Satd. Flow (perm)	214	3497	0	343	3539	1583	0	3311	0	0	3340	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9				212		87			37	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		362			1265			236			237	
Travel Time (s)		7.1			24.6			5.4			5.4	
Peak Hour Factor	0.73	0.83	0.61	0.69	0.83	0.85	0.80	0.80	0.82	0.90	0.56	0.47
Adj. Flow (vph)	96	847	75	307	863	212	90	236	199	223	302	202
Shared Lane Traffic (%)												
Lane Group Flow (vph)	96	922	0	307	863	212	0	525	0	0	727	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Split	NA		Split	NA	
Protected Phases	5	2		1	6		4	4		8	8	
Permitted Phases	2			6		6						
Detector Phase	5	2		1	6	6	4	4		8	8	

Austin Oaks Mixed Use Development
1: Hart Lane & Far West Boulevard

2028 Forecasted PM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	8.0	18.0		8.0	18.0	18.0	12.0	12.0		12.0	12.0	
Minimum Split (s)	13.0	24.0		13.0	24.0	24.0	33.0	33.0		33.0	33.0	
Total Split (s)	13.0	62.0		15.0	64.0	64.0	28.0	28.0		25.0	25.0	
Total Split (%)	10.0%	47.7%		11.5%	49.2%	49.2%	21.5%	21.5%		19.2%	19.2%	
Maximum Green (s)	8.0	57.0		10.0	59.0	59.0	23.0	23.0		20.0	20.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0		5.0			5.0	
Lead/Lag	Lead	Lead		Lag	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	
Walk Time (s)		7.0			7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		12.0			12.0	12.0	21.0	21.0		21.0	21.0	
Pedestrian Calls (#/hr)		0			0	0	0	0		0	0	
Act Effect Green (s)	42.8	42.8		54.5	54.5	54.5		21.4			26.0	
Actuated g/C Ratio	0.33	0.33		0.42	0.42	0.42		0.16			0.20	
v/c Ratio	0.58	0.80		0.85	0.58	0.27		0.85			1.04	
Control Delay	43.2	44.4		45.7	11.5	1.2		57.3			92.9	
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Delay	43.2	44.4		45.7	11.5	1.2		57.3			92.9	
LOS	D	D		D	B	A		E			F	
Approach Delay		44.3			17.5			57.3			92.9	
Approach LOS		D			B			E			F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 20 (15%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 115

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.04

Intersection Signal Delay: 45.7

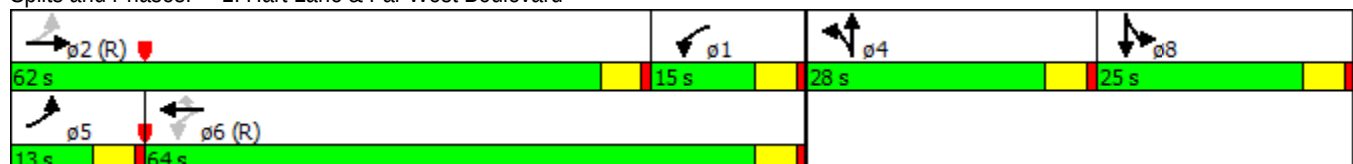
Intersection LOS: D

Intersection Capacity Utilization 75.4%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 1: Hart Lane & Far West Boulevard



Austin Oaks Mixed Use Development
2: Wood Hollow Drive & Far West Boulevard

2028 Forecasted PM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	182	888	73	266	798	154	117	255	371	182	186	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	335		0	165		0	120		120	0		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	75			35			50			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.931	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1734	0
Flt Permitted	0.215			0.123			0.950			0.950		
Satd. Flow (perm)	400	3539	1583	229	3539	1583	1770	1863	1583	1770	1734	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			126			190			197		28	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1265			1235			599			222	
Travel Time (s)		24.6			24.1			13.6			5.0	
Peak Hour Factor	0.74	0.91	0.58	0.90	0.88	0.81	0.69	0.65	0.87	0.90	0.81	0.77
Adj. Flow (vph)	246	976	126	296	907	190	170	392	426	202	230	195
Shared Lane Traffic (%)												
Lane Group Flow (vph)	246	976	126	296	907	190	170	392	426	202	425	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	L NA	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		3	3		7	7	
Permitted Phases	6		6	2		2			3			
Detector Phase	1	6	6	5	2	2	3	3	3	7	7	

Austin Oaks Mixed Use Development
2: Wood Hollow Drive & Far West Boulevard

2028 Forecasted PM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	8.0	8.0	8.0	5.0	5.0	
Minimum Split (s)	10.0	22.0	22.0	10.0	22.0	22.0	31.0	31.0	31.0	31.0	31.0	
Total Split (s)	20.0	68.0	68.0	16.0	64.0	64.0	20.0	20.0	20.0	26.0	26.0	
Total Split (%)	15.4%	52.3%	52.3%	12.3%	49.2%	49.2%	15.4%	15.4%	15.4%	20.0%	20.0%	
Maximum Green (s)	15.0	63.0	63.0	11.0	59.0	59.0	15.0	15.0	15.0	21.0	21.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
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	
Recall Mode	None	C-Min	C-Min	Max	C-Min	C-Min	Min	Min	Min	Max	Max	
Walk Time (s)		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		12.0	12.0		12.0	12.0	21.0	21.0	21.0	21.0	21.0	
Pedestrian Calls (#/hr)		0	0		0	0	0	0	0	0	0	
Act Effect Green (s)	47.7	47.7	47.7	43.5	43.5	43.5	30.3	30.3	30.3	21.0	21.0	
Actuated g/C Ratio	0.37	0.37	0.37	0.33	0.33	0.33	0.23	0.23	0.23	0.16	0.16	
v/c Ratio	0.80	0.75	0.19	1.44	0.77	0.29	0.41	0.90	0.82	0.71	1.40	
Control Delay	38.7	16.4	0.9	231.7	44.3	7.7	48.8	74.0	39.9	66.2	237.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	38.7	16.4	0.9	231.7	44.3	7.7	48.8	74.0	39.9	66.2	237.3	
LOS	D	B	A	F	D	A	D	E	D	E	F	
Approach Delay		19.0			79.1			55.0			182.2	
Approach LOS		B			E			D			F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 20 (15%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 115

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.44

Intersection Signal Delay: 69.9

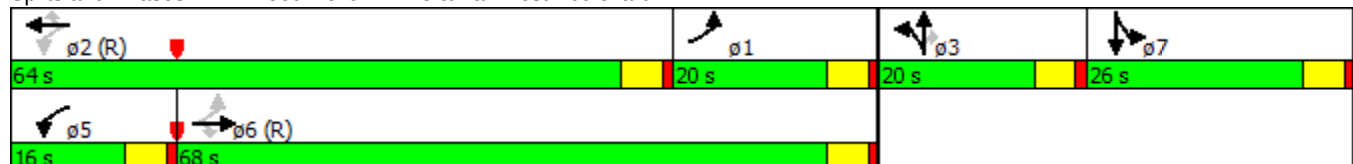
Intersection LOS: E

Intersection Capacity Utilization 81.6%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 2: Wood Hollow Drive & Far West Boulevard



Austin Oaks Mixed Use Development
3: Far West Boulevard & Mopac SB FR

2028 Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑						↑↑	↑
Volume (vph)	0	1340	448	12	492	0	0	0	0	437	703	1095
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Fr t			0.850									0.850
Flt Protected				0.950							0.979	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	3465	1583
Flt Permitted				0.950							0.979	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	3465	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			232									276
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		1235			406			400			362	
Travel Time (s)		24.1			7.9			5.5			4.9	
Peak Hour Factor	0.92	0.91	0.93	0.67	0.93	0.92	0.92	0.92	0.92	0.78	0.92	0.95
Adj. Flow (vph)	0	1473	482	18	529	0	0	0	0	560	764	1153
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1473	482	18	529	0	0	0	0	0	1324	1153
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	L NA	Right	Left	Left	Right	Left	Left	R NA
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	custom	Prot	NA					custom	NA	custom
Protected Phases		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Permitted Phases										4		
Detector Phase		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Switch Phase												
Minimum Initial (s)				10.0								
Minimum Split (s)				15.0								

Lane Group	ø1	ø2	ø4	ø8	ø22
Lane Configurations					
Volume (vph)					
Ideal Flow (vphpl)					
Lane Util. Factor					
Frt					
Flt Protected					
Satd. Flow (prot)					
Flt Permitted					
Satd. Flow (perm)					
Right Turn on Red					
Satd. Flow (RTOR)					
Link Speed (mph)					
Link Distance (ft)					
Travel Time (s)					
Peak Hour Factor					
Adj. Flow (vph)					
Shared Lane Traffic (%)					
Lane Group Flow (vph)					
Enter Blocked Intersection					
Lane Alignment					
Median Width(ft)					
Link Offset(ft)					
Crosswalk Width(ft)					
Two way Left Turn Lane					
Headway Factor					
Turning Speed (mph)					
Number of Detectors					
Detector Template					
Leading Detector (ft)					
Trailing Detector (ft)					
Detector 1 Position(ft)					
Detector 1 Size(ft)					
Detector 1 Type					
Detector 1 Channel					
Detector 1 Extend (s)					
Detector 1 Queue (s)					
Detector 1 Delay (s)					
Detector 2 Position(ft)					
Detector 2 Size(ft)					
Detector 2 Type					
Detector 2 Channel					
Detector 2 Extend (s)					
Turn Type					
Protected Phases	1	2	4	8	22
Permitted Phases					
Detector Phase					
Switch Phase					
Minimum Initial (s)	4.0	13.0	10.0	4.0	1.0
Minimum Split (s)	9.0	18.0	15.0	9.0	6.0

Austin Oaks Mixed Use Development
3: Far West Boulevard & Mopac SB FR

2028 Forecasted PM
5/15/2014

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)				41.0								
Total Split (%)				31.5%								
Maximum Green (s)				36.0								
Yellow Time (s)				4.0								
All-Red Time (s)				1.0								
Lost Time Adjust (s)				0.0								
Total Lost Time (s)				5.0								
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0								
Recall Mode				Min								
Act Effect Green (s)		44.0	24.0	36.0	65.0						35.0	55.0
Actuated g/C Ratio		0.34	0.18	0.28	0.50						0.27	0.42
v/c Ratio		1.23	1.00	0.04	0.30						1.42	1.39
Control Delay		148.6	65.6	16.4	3.1						231.6	209.1
Queue Delay		2.1	0.0	0.0	0.3						0.0	0.0
Total Delay		150.7	65.6	16.4	3.4						231.6	209.1
LOS		F	E	B	A						F	F
Approach Delay		129.7			3.9						221.1	
Approach LOS		F			A						F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.42

Intersection Signal Delay: 161.4

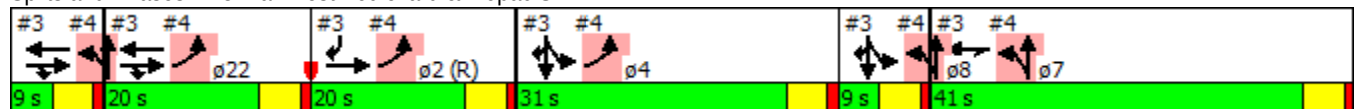
Intersection LOS: F

Intersection Capacity Utilization 119.9%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 3: Far West Boulevard & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø8	ø22
Total Split (s)	9.0	20.0	31.0	9.0	20.0
Total Split (%)	7%	15%	24%	7%	15%
Maximum Green (s)	4.0	15.0	26.0	4.0	15.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)					
Total Lost Time (s)					
Lead/Lag		Lag	Lead	Lag	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	C-Min	Min	Min	None
Act Effect Green (s)					
Actuated g/C Ratio					
v/c Ratio					
Control Delay					
Queue Delay					
Total Delay					
LOS					
Approach Delay					
Approach LOS					
Intersection Summary					

Austin Oaks Mixed Use Development
4: Mopac NB FR & Far West Boulevard

2028 Forecasted PM
5/15/2014

												
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Lane Configurations												
Volume (vph)	1788	0	431	144	0	0						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Lane Util. Factor	0.97	1.00	0.95	0.95	1.00	1.00						
Frt												
Flt Protected	0.950		0.950	0.996								
Satd. Flow (prot)	3433	0	1681	1763	0	0						
Flt Permitted	0.950		0.950	0.996								
Satd. Flow (perm)	3433	0	1681	1763	0	0						
Right Turn on Red		Yes				Yes						
Satd. Flow (RTOR)												
Link Speed (mph)	35			50	50							
Link Distance (ft)	406			308	472							
Travel Time (s)	7.9			4.2	6.4							
Peak Hour Factor	0.90	0.92	0.93	0.25	0.92	0.92						
Adj. Flow (vph)	1987	0	463	576	0	0						
Shared Lane Traffic (%)			10%									
Lane Group Flow (vph)	1987	0	417	622	0	0						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Right	Left	Left	Left	Right						
Median Width(ft)	24			12	12							
Link Offset(ft)	0			0	0							
Crosswalk Width(ft)	16			16	16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00						
Turning Speed (mph)	15	9	15			9						
Number of Detectors	1		1	2								
Detector Template	Left		Left	Thru								
Leading Detector (ft)	20		20	100								
Trailing Detector (ft)	0		0	0								
Detector 1 Position(ft)	0		0	0								
Detector 1 Size(ft)	20		20	6								
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0								
Detector 1 Queue (s)	0.0		0.0	0.0								
Detector 1 Delay (s)	0.0		0.0	0.0								
Detector 2 Position(ft)				94								
Detector 2 Size(ft)				6								
Detector 2 Type				Cl+Ex								
Detector 2 Channel												
Detector 2 Extend (s)				0.0								
Turn Type	Prot		Split	NA								
Protected Phases	2 4 22		1 7 8	1 7 8			1	2	4	7	8	22
Permitted Phases												
Detector Phase	2 4 22		1 7 8	1 7 8								
Switch Phase												
Minimum Initial (s)							4.0	13.0	10.0	10.0	4.0	1.0
Minimum Split (s)							9.0	18.0	15.0	15.0	9.0	6.0



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Total Split (s)							9.0	20.0	31.0	41.0	9.0	20.0
Total Split (%)							7%	15%	24%	32%	7%	15%
Maximum Green (s)							4.0	15.0	26.0	36.0	4.0	15.0
Yellow Time (s)							4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)							1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag								Lag	Lead		Lag	Lead
Lead-Lag Optimize?								Yes	Yes		Yes	Yes
Vehicle Extension (s)							3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode							Min	C-Min	Min	Min	Min	None
Act Effect Green (s)	66.0		54.0	54.0								
Actuated g/C Ratio	0.51		0.42	0.42								
v/c Ratio	1.14		0.60	0.85								
Control Delay	83.8		33.9	47.0								
Queue Delay	0.9		0.0	0.0								
Total Delay	84.7		33.9	47.0								
LOS	F		C	D								
Approach Delay	84.7			41.8								
Approach LOS	F			D								

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.42

Intersection Signal Delay: 69.9

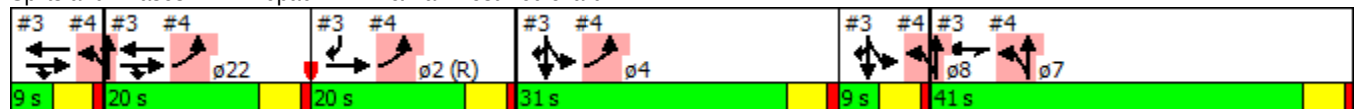
Intersection LOS: E

Intersection Capacity Utilization 133.1%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 4: Mopac NB FR & Far West Boulevard



Austin Oaks Mixed Use Development
5: Spicewood Springs Road & Mopac SB FR

2028 Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑					↑	↑↑	↑
Volume (vph)	0	2023	413	805	1696	0	0	0	0	721	340	501
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	60		0	0		0	150		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			75			25			75		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.976	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1610	3309	1583
Flt Permitted				0.950						0.950	0.976	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1610	3309	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			160									160
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		294			386			782			882	
Travel Time (s)		5.7			7.5			10.7			12.0	
Peak Hour Factor	0.92	0.81	0.90	0.87	0.86	0.92	0.92	0.92	0.92	0.93	0.87	0.94
Adj. Flow (vph)	0	2498	459	925	1972	0	0	0	0	775	391	533
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	2498	459	925	1972	0	0	0	0	387	779	533
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Prot	Prot	NA					Split	NA	Prot
Protected Phases		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5
Permitted Phases												
Detector Phase		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

Austin Oaks Mixed Use Development
5: Spicewood Springs Road & Mopac SB FR

2028 Forecasted PM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)		38.0	38.0	71.0	103.0					26.0	26.0	26.0
Actuated g/C Ratio		0.25	0.25	0.47	0.69					0.17	0.17	0.17
v/c Ratio		2.79	0.88	1.11	0.81					1.39	1.36	1.31
Control Delay		825.1	32.1	82.9	13.7					239.1	218.1	190.0
Queue Delay		1.6	5.7	1.2	47.7					0.0	0.0	0.0
Total Delay		826.7	37.8	84.1	61.4					239.1	218.1	190.0
LOS		F	D	F	E					F	F	F
Approach Delay		704.2			68.7						214.1	
Approach LOS		F			E						F	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 89 (59%), Referenced to phase 2:EBWB, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 2.79

Intersection Signal Delay: 350.2

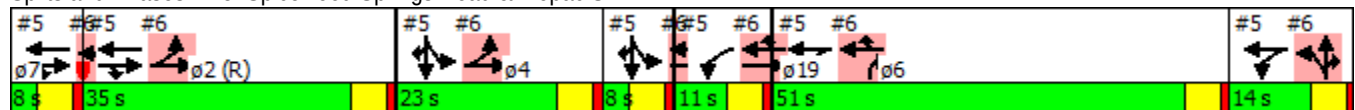
Intersection LOS: F

Intersection Capacity Utilization 158.5%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 5: Spicewood Springs Road & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0	5.0	6.0
Minimum Split (s)	8.0	15.0	10.0	8.0	15.0	10.0	11.0
Total Split (s)	8.0	35.0	23.0	8.0	51.0	14.0	11.0
Total Split (%)	5%	23%	15%	5%	34%	9%	7%
Maximum Green (s)	3.0	30.0	18.0	3.0	46.0	9.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Austin Oaks Mixed Use Development
6: Mopac NB FR & Spicewood Springs Road

2028 Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 				
Volume (vph)	871	1552	0	0	1472	505	425	50	648	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		325	0		0	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	75			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.91	0.95	1.00	1.00	1.00
Frt						0.850		0.894	0.850			
Flt Protected	0.950						0.950	0.995				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	1681	1508	1504	0	0	0
Flt Permitted	0.950						0.950	0.995				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	1681	1508	1504	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						124		64	160			
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		386			594			563			407	
Travel Time (s)		7.5			11.6			7.7			5.6	
Peak Hour Factor	0.90	0.96	0.92	0.92	0.93	0.79	0.86	0.60	0.87	0.92	0.92	0.92
Adj. Flow (vph)	968	1617	0	0	1583	639	494	83	745	0	0	0
Shared Lane Traffic (%)							10%		42%			
Lane Group Flow (vph)	968	1617	0	0	1583	639	445	445	432	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Prot	Split	NA	custom			
Protected Phases	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			
Permitted Phases												
Detector Phase	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

Austin Oaks Mixed Use Development
6: Mopac NB FR & Spicewood Springs Road

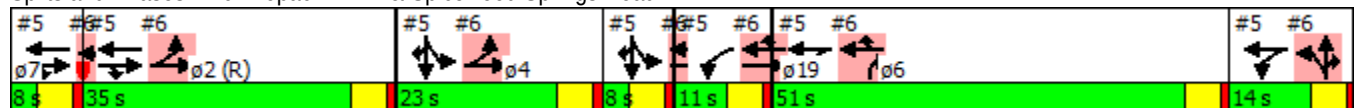
2028 Forecasted PM
5/15/2014

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)	53.0	72.0			65.0	65.0	17.0	17.0	60.0			
Actuated g/C Ratio	0.35	0.48			0.43	0.43	0.11	0.11	0.40			
v/c Ratio	1.55	0.95			1.03	0.85	2.34	1.96	0.62			
Control Delay	269.9	9.7			73.2	42.1	646.8	475.2	26.2			
Queue Delay	2.7	45.2			27.5	0.0	0.0	0.4	0.0			
Total Delay	272.6	54.9			100.7	42.1	646.8	475.6	26.2			
LOS	F	D			F	D	F	F	C			
Approach Delay		136.4			83.9			386.4				
Approach LOS		F			F			F				

Intersection Summary

Area Type: Other
 Cycle Length: 150
 Actuated Cycle Length: 150
 Offset: 89 (59%), Referenced to phase 2:EBWB, Start of Green
 Natural Cycle: 150
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 2.79
 Intersection Signal Delay: 171.3
 Intersection LOS: F
 Intersection Capacity Utilization 158.5%
 ICU Level of Service H
 Analysis Period (min) 15

Splits and Phases: 6: Mopac NB FR & Spicewood Springs Road



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0	5.0	6.0
Minimum Split (s)	8.0	15.0	10.0	8.0	15.0	10.0	11.0
Total Split (s)	8.0	35.0	23.0	8.0	51.0	14.0	11.0
Total Split (%)	5%	23%	15%	5%	34%	9%	7%
Maximum Green (s)	3.0	30.0	18.0	3.0	46.0	9.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Austin Oaks Mixed Use Development
7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road

2028 Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	7	1202	85	371	912	1	408	10	890	1	4	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	0		100	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993							0.850		0.896	
Flt Protected	0.950			0.950				0.954			0.996	
Satd. Flow (prot)	1770	5050	0	1770	3539	0	0	1777	1583	0	1662	0
Flt Permitted	0.289			0.075				0.713			0.663	
Satd. Flow (perm)	538	5050	0	140	3539	0	0	1328	1583	0	1107	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7							314		20	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1093			275			251			161	
Travel Time (s)		21.3			5.4			5.7			3.7	
Peak Hour Factor	0.72	0.50	0.76	0.50	0.92	0.50	0.91	0.85	0.62	0.58	0.90	0.84
Adj. Flow (vph)	10	2404	112	742	991	2	448	12	1435	2	4	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	10	2516	0	742	993	0	0	460	1435	0	26	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2			6			4		4	8		
Detector Phase	5	2		1	6		4	4	4	8	8	

Austin Oaks Mixed Use Development
7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road

2028 Forecasted PM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	20.0		21.0	20.0		15.0	15.0	15.0	11.0	11.0	
Minimum Split (s)	10.0	25.0		26.0	25.0		35.0	35.0	35.0	35.0	35.0	
Total Split (s)	29.0	82.0		34.0	87.0		34.0	34.0	34.0	34.0	34.0	
Total Split (%)	19.3%	54.7%		22.7%	58.0%		22.7%	22.7%	22.7%	22.7%	22.7%	
Maximum Green (s)	24.0	77.0		29.0	82.0		29.0	29.0	29.0	29.0	29.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0			5.0	5.0		5.0	
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min		Min	C-Min		Min	Min	Min	Min	Min	
Walk Time (s)							6.0	6.0	6.0	6.0	6.0	
Flash Dont Walk (s)							24.0	24.0	24.0	24.0	24.0	
Pedestrian Calls (#/hr)							0	0	0	0	0	
Act Effect Green (s)	80.2	77.0		85.4	85.1			29.0	29.0		29.0	
Actuated g/C Ratio	0.53	0.51		0.57	0.57			0.19	0.19		0.19	
v/c Ratio	0.02	0.97		1.88	0.49			1.80	2.57		0.11	
Control Delay	17.9	47.1		431.3	24.8			407.3	728.7		24.2	
Queue Delay	0.0	44.1		0.0	0.5			0.0	4.3		0.0	
Total Delay	17.9	91.2		431.3	25.3			407.3	733.0		24.2	
LOS	B	F		F	C			F	F		C	
Approach Delay		90.9			198.9			654.0			24.2	
Approach LOS		F			F			F			C	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 55 (37%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 2.57

Intersection Signal Delay: 293.6

Intersection LOS: F

Intersection Capacity Utilization 101.9%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road



Austin Oaks Mixed Use Development
10: Hart Lane & Greystone Drive

2028 Forecasted PM
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	50	112	59	97	211	64	106	301	64	13	264	78
Peak Hour Factor	0.80	0.65	0.65	0.78	0.88	0.58	0.75	0.81	0.60	0.58	0.69	0.57
Hourly flow rate (vph)	62	172	91	124	240	110	141	372	107	22	383	137
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	235	91	364	110	620	542						
Volume Left (vph)	63	0	124	0	141	22						
Volume Right (vph)	0	91	0	110	107	137						
Hadj (s)	0.17	-0.67	0.20	-0.67	-0.02	-0.11						
Departure Headway (s)	9.7	8.8	9.2	8.4	8.5	8.4						
Degree Utilization, x	0.63	0.22	0.93	0.26	1.0	1.0						
Capacity (veh/h)	362	399	364	424	436	435						
Control Delay (s)	26.5	13.1	59.8	13.0	244.4	163.5						
Approach Delay (s)	22.8		49.0		244.4	163.5						
Approach LOS	C		E		F	F						
Intersection Summary												
Delay			138.0									
Level of Service			F									
Intersection Capacity Utilization			83.4%	ICU Level of Service				E				
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
20: Wood Hollow Drive & Greystone Drive

2028 Forecasted PM
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	72	86	62	109	282	73	97	369	87	32	320	91
Peak Hour Factor	0.81	0.89	0.64	0.80	0.82	0.72	0.53	0.88	0.79	0.68	0.85	0.68
Hourly flow rate (vph)	89	97	97	136	344	101	183	419	110	47	376	134
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2				
Volume Total (vph)	186	97	480	101	393	320	235	322				
Volume Left (vph)	89	0	136	0	183	0	47	0				
Volume Right (vph)	0	97	0	101	0	110	0	134				
Hadj (s)	0.27	-0.67	0.18	-0.67	0.27	-0.21	0.13	-0.26				
Departure Headway (s)	9.5	8.6	8.9	8.1	8.7	8.2	8.8	8.4				
Degree Utilization, x	0.49	0.23	1.0	0.23	0.95	0.73	0.57	0.75				
Capacity (veh/h)	362	402	398	433	409	429	397	421				
Control Delay (s)	20.1	13.0	133.5	12.2	61.0	29.5	21.7	31.4				
Approach Delay (s)	17.6		112.4		46.8		27.3					
Approach LOS	C		F		E		D					
Intersection Summary												
Delay			55.7									
Level of Service			F									
Intersection Capacity Utilization			71.2%	ICU Level of Service					C			
Analysis Period (min)			15									



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	215	0	0	2215	425
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.79	0.92	0.92	0.96	0.86
Hourly flow rate (vph)	0	272	0	0	2307	494
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2554	1016	2801			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2554	1016	2801			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	0	100			
cM capacity (veh/h)	22	236	136			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	272	923	923	956		
Volume Left	0	0	0	0		
Volume Right	272	0	0	494		
cSH	236	1700	1700	1700		
Volume to Capacity	1.16	0.54	0.54	0.56		
Queue Length 95th (ft)	316	0	0	0		
Control Delay (s)	151.0	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	151.0	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay			13.4			
Intersection Capacity Utilization			72.3%		ICU Level of Service	C
Analysis Period (min)			15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	404	0	0	2395	216
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.50	0.92	0.92	0.95	0.75
Hourly flow rate (vph)	0	808	0	0	2521	288
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2665	984	2809			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2665	984	2809			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	0	100			
cM capacity (veh/h)	18	247	135			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	808	1008	1008	792		
Volume Left	0	0	0	0		
Volume Right	808	0	0	288		
cSH	247	1700	1700	1700		
Volume to Capacity	3.27	0.59	0.59	0.47		
Queue Length 95th (ft)	Err	0	0	0		
Control Delay (s)	Err	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	Err	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay		2233.6				
Intersection Capacity Utilization		82.8%		ICU Level of Service	E	
Analysis Period (min)		15				

Austin Oaks Mixed Use Development
50: Executive Center Drive & Wood Hollow Drive

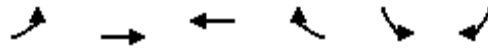
2028 Forecasted PM
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	46	376	61	61	259	139	193	238	231	34	103	140
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.67	0.91	1.00	0.86	0.91	0.91	0.50	0.46	0.50	0.25	0.56	0.47
Hourly flow rate (vph)	69	413	61	71	285	153	386	517	462	136	184	298
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh												
Upstream signal (ft)					522							
pX, platoon unblocked												
vC, conflicting volume	437			474			1474	1160	444	1805	1114	361
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	437			474			1474	1160	444	1805	1114	361
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	94			93			0	0	25	0	0	56
cM capacity (veh/h)	1122			1088			0	172	614	0	183	684
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	543	508	1365	618								
Volume Left	69	71	386	136								
Volume Right	61	153	462	298								
cSH	1122	1088	0	0								
Volume to Capacity	0.06	0.07	Err	Err								
Queue Length 95th (ft)	5	5	Err	Err								
Control Delay (s)	1.7	1.8	Err	Err								
Lane LOS	A	A	F	F								
Approach Delay (s)	1.7	1.8	Err	Err								
Approach LOS			F	F								
Intersection Summary												
Average Delay			Err									
Intersection Capacity Utilization			100.6%		ICU Level of Service				G			
Analysis Period (min)			15									

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	326	77	116	238	138	281
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.79	0.67	0.83	0.72	0.75	0.46
Hourly flow rate (vph)	413	115	140	331	184	611
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			528		1080	470
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			528		1080	470
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			87		12	0
cM capacity (veh/h)			1039		209	593
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	528	470	795			
Volume Left	0	140	184			
Volume Right	115	0	611			
cSH	1700	1039	416			
Volume to Capacity	0.31	0.13	1.91			
Queue Length 95th (ft)	0	12	1324			
Control Delay (s)	0.0	3.7	440.7			
Lane LOS		A	F			
Approach Delay (s)	0.0	3.7	440.7			
Approach LOS			F			
Intersection Summary						
Average Delay		196.4				
Intersection Capacity Utilization		75.7%		ICU Level of Service		D
Analysis Period (min)		15				



Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations							
Volume (veh/h)	339	331	144	1531	1035	233	
Sign Control	Stop			Free	Free		
Grade	0%			0%	0%		
Peak Hour Factor	0.85	0.87	0.86	0.88	0.89	0.67	
Hourly flow rate (vph)	399	380	167	1740	1163	348	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None	None		
Median storage veh							
Upstream signal (ft)				1093			
pX, platoon unblocked	0.83						
vC, conflicting volume	2542	755	1163				
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2450	755	1163				
tC, single (s)	6.8	6.9	4.1				
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2				
p0 queue free %	0	0	72				
cM capacity (veh/h)	15	351	596				
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	399	380	167	870	870	775	735
Volume Left	399	0	167	0	0	0	0
Volume Right	0	380	0	0	0	0	348
cSH	15	351	596	1700	1700	1700	1700
Volume to Capacity	25.94	1.08	0.28	0.51	0.51	0.46	0.43
Queue Length 95th (ft)	Err	348	29	0	0	0	0
Control Delay (s)	Err	107.4	13.4	0.0	0.0	0.0	0.0
Lane LOS	F	F	B				
Approach Delay (s)	5169.7		1.2			0.0	
Approach LOS	F						
Intersection Summary							
Average Delay			960.4				
Intersection Capacity Utilization			72.8%		ICU Level of Service		C
Analysis Period (min)			15				



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	46	151	183	33	79	304
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	50	164	199	36	86	330
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	235				481	217
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	235				481	217
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	96				84	60
cM capacity (veh/h)	1333				524	823
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	214	235	416			
Volume Left	50	0	86			
Volume Right	0	36	330			
cSH	1333	1700	736			
Volume to Capacity	0.04	0.14	0.57			
Queue Length 95th (ft)	3	0	90			
Control Delay (s)	2.1	0.0	16.1			
Lane LOS	A		C			
Approach Delay (s)	2.1	0.0	16.1			
Approach LOS			C			
Intersection Summary						
Average Delay		8.2				
Intersection Capacity Utilization		55.2%		ICU Level of Service	B	
Analysis Period (min)		15				



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	0	0	487	197	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	529	214	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	743	214	214			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	743	214	214			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	382	826	1356			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	0	529	214			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1356	1700			
Volume to Capacity	0.00	0.00	0.13			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		29.0%		ICU Level of Service	A	
Analysis Period (min)		15				



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	0	0	487	197	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	529	214	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	743	214	214			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	743	214	214			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	382	826	1356			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	0	529	214			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1356	1700			
Volume to Capacity	0.00	0.00	0.13			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			29.0%	ICU Level of Service	A	
Analysis Period (min)			15			

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	55	123	400	87	83	142
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	60	134	435	95	90	154
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	817	482			529	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	817	482			529	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	81	77			91	
cM capacity (veh/h)	316	584			1038	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	193	529	245			
Volume Left	60	0	90			
Volume Right	134	95	0			
cSH	463	1700	1038			
Volume to Capacity	0.42	0.31	0.09			
Queue Length 95th (ft)	51	0	7			
Control Delay (s)	18.2	0.0	3.8			
Lane LOS	C		A			
Approach Delay (s)	18.2	0.0	3.8			
Approach LOS	C					
Intersection Summary						
Average Delay			4.6			
Intersection Capacity Utilization			59.0%	ICU Level of Service	B	
Analysis Period (min)			15			

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	289	134	45	139
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	314	146	49	151
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	636	387			460	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	636	387			460	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			96	
cM capacity (veh/h)	422	661			1101	
Direction, Lane #	NB 1	SB 1				
Volume Total	460	200				
Volume Left	0	49				
Volume Right	146	0				
cSH	1700	1101				
Volume to Capacity	0.27	0.04				
Queue Length 95th (ft)	0	3				
Control Delay (s)	0.0	2.4				
Lane LOS		A				
Approach Delay (s)	0.0	2.4				
Approach LOS						
Intersection Summary						
Average Delay			0.7			
Intersection Capacity Utilization			39.8%	ICU Level of Service		A
Analysis Period (min)			15			

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	37	124	236	53	40	147
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	40	135	257	58	43	160
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	532	285			314	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	532	285			314	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	92	82			97	
cM capacity (veh/h)	490	754			1246	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	175	314	203			
Volume Left	40	0	43			
Volume Right	135	58	0			
cSH	671	1700	1246			
Volume to Capacity	0.26	0.18	0.03			
Queue Length 95th (ft)	26	0	3			
Control Delay (s)	12.2	0.0	2.0			
Lane LOS	B		A			
Approach Delay (s)	12.2	0.0	2.0			
Approach LOS	B					
Intersection Summary						
Average Delay		3.7				
Intersection Capacity Utilization		45.3%		ICU Level of Service	A	
Analysis Period (min)		15				

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	3	29	354	6	9	184
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	32	385	7	10	200
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	608	388			391	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	608	388			391	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	95			99	
cM capacity (veh/h)	455	660			1167	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	35	391	210			
Volume Left	3	0	10			
Volume Right	32	7	0			
cSH	633	1700	1167			
Volume to Capacity	0.05	0.23	0.01			
Queue Length 95th (ft)	4	0	1			
Control Delay (s)	11.0	0.0	0.5			
Lane LOS	B		A			
Approach Delay (s)	11.0	0.0	0.5			
Approach LOS	B					
Intersection Summary						
Average Delay		0.8				
Intersection Capacity Utilization		29.0%		ICU Level of Service		A
Analysis Period (min)		15				

Austin Oaks Mixed Use Development
800: Executive Center Drive & Driveway 8

2028 Forecasted PM
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	0	0	0	383	0	0	193	0
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	0	0	0	0	0	0	0	416	0	0	210	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	626	626	210	626	626	416	210			416		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	626	626	210	626	626	416	210			416		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	100	100	100	100			100		
cM capacity (veh/h)	397	401	830	397	401	636	1361			1143		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	0	0	416	210								
Volume Left	0	0	0	0								
Volume Right	0	0	0	0								
cSH	1700	1700	1361	1143								
Volume to Capacity	0.00	0.00	0.00	0.00								
Queue Length 95th (ft)	0	0	0	0								
Control Delay (s)	0.0	0.0	0.0	0.0								
Lane LOS	A	A										
Approach Delay (s)	0.0	0.0	0.0	0.0								
Approach LOS	A	A										
Intersection Summary												
Average Delay			0.0									
Intersection Capacity Utilization			23.5%	ICU Level of Service					A			
Analysis Period (min)			15									

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	383	0	0	193
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	416	0	0	210
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	626	416			416	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	626	416			416	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	448	636			1143	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	0	416	210			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1143			
Volume to Capacity	0.00	0.24	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		23.5%		ICU Level of Service	A	
Analysis Period (min)		15				

Austin Oaks Mixed Use Development
1000: Executive Center Drive & Driveway 10

2028 Forecasted PM
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	0	0	0	383	0	0	193	0
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	0	0	0	0	0	0	0	416	0	0	210	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	626	626	210	626	626	416	210			416		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	626	626	210	626	626	416	210			416		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	100	100	100	100			100		
cM capacity (veh/h)	397	401	830	397	401	636	1361			1143		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	0	0	416	210								
Volume Left	0	0	0	0								
Volume Right	0	0	0	0								
cSH	1700	1700	1361	1143								
Volume to Capacity	0.00	0.00	0.00	0.00								
Queue Length 95th (ft)	0	0	0	0								
Control Delay (s)	0.0	0.0	0.0	0.0								
Lane LOS	A	A										
Approach Delay (s)	0.0	0.0	0.0	0.0								
Approach LOS	A	A										
Intersection Summary												
Average Delay			0.0									
Intersection Capacity Utilization			23.5%	ICU Level of Service					A			
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
1100: Driveway 11 & Wood Hollow Drive

2028 Forecasted PM
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	590	51	177	283	0	88	0	443	118	0	59
Sign Control		Free			Free			Stop			Stop	
Grade		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
Hourly flow rate (vph)	0	641	55	192	308	0	96	0	482	128	0	64
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh												
Upstream signal (ft)					251							
pX, platoon unblocked	0.72						0.72	0.72		0.72	0.72	0.72
vC, conflicting volume	308			697			1426	1361	669	1843	1389	308
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			697			1397	1308	669	1976	1346	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			79			0	100	0	0	100	92
cM capacity (veh/h)	1170			899			65	90	458	0	86	782
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1							
Volume Total	697	500	96	482	192							
Volume Left	0	192	96	0	128							
Volume Right	55	0	0	482	64							
cSH	1700	899	65	458	0							
Volume to Capacity	0.41	0.21	1.46	1.05	Err							
Queue Length 95th (ft)	0	20	204	375	Err							
Control Delay (s)	0.0	5.5	380.1	86.8	Err							
Lane LOS		A	F	F	F							
Approach Delay (s)	0.0	5.5	135.4		Err							
Approach LOS			F		F							
Intersection Summary												
Average Delay			Err									
Intersection Capacity Utilization			85.6%		ICU Level of Service				E			
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
1: Hart Lane & Far West Boulevard

2028 Site+Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	100	892	105	241	345	85	59	179	201	249	328	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	170		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.979				0.850		0.932			0.978	
Flt Protected	0.950			0.950				0.993			0.986	
Satd. Flow (prot)	1770	3465	0	1770	3539	1583	0	3275	0	0	3413	0
Flt Permitted	0.375			0.103				0.993			0.986	
Satd. Flow (perm)	699	3465	0	192	3539	1583	0	3275	0	0	3413	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15				101		137			13	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		362			1265			236			237	
Travel Time (s)		7.1			24.6			5.4			5.4	
Peak Hour Factor	0.73	0.83	0.61	0.69	0.83	0.85	0.80	0.80	0.82	0.90	0.56	0.47
Adj. Flow (vph)	137	1075	172	349	416	100	74	224	245	277	586	147
Shared Lane Traffic (%)												
Lane Group Flow (vph)	137	1247	0	349	416	100	0	543	0	0	1010	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Split	NA		Split	NA	
Protected Phases	5	2		1	6		4	4		8	8	
Permitted Phases	2			6		6						
Detector Phase	5	2		1	6	6	4	4		8	8	

Austin Oaks Mixed Use Development
1: Hart Lane & Far West Boulevard

2028 Site+Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	8.0	18.0		8.0	18.0	18.0	12.0	12.0		12.0	12.0	
Minimum Split (s)	13.0	23.0		13.0	23.0	23.0	17.0	17.0		17.0	17.0	
Total Split (s)	13.0	52.0		22.0	61.0	61.0	26.0	26.0		30.0	30.0	
Total Split (%)	10.0%	40.0%		16.9%	46.9%	46.9%	20.0%	20.0%		23.1%	23.1%	
Maximum Green (s)	8.0	47.0		17.0	56.0	56.0	21.0	21.0		25.0	25.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0		5.0			5.0	
Lead/Lag	Lead	Lead		Lag	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	
Walk Time (s)		7.0			7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		12.0			12.0	12.0	21.0	21.0		21.0	21.0	
Pedestrian Calls (#/hr)		0			0	0	0	0		0	0	
Act Effect Green (s)	47.0	47.0		56.0	56.0	56.0		20.0			26.0	
Actuated g/C Ratio	0.36	0.36		0.43	0.43	0.43		0.15			0.20	
v/c Ratio	0.43	0.99		1.21	0.27	0.14		0.88			1.46	
Control Delay	33.6	63.4		171.2	42.4	20.3		56.1			251.2	
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Delay	33.6	63.4		171.2	42.4	20.3		56.1			251.2	
LOS	C	E		F	D	C		E			F	
Approach Delay		60.5			91.8			56.1			251.2	
Approach LOS		E			F			E			F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 100 (77%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.46

Intersection Signal Delay: 117.6

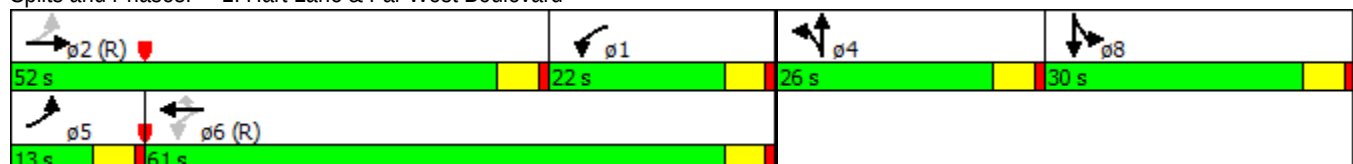
Intersection LOS: F

Intersection Capacity Utilization 89.6%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 1: Hart Lane & Far West Boulevard



Austin Oaks Mixed Use Development
2: Wood Hollow Drive & Far West Boulevard

2028 Site+Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	194	1225	55	136	667	113	29	160	340	310	157	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	335		0	165		0	120		120	0		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	75			35			50			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.944	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1758	0
Flt Permitted	0.287			0.154			0.950			0.950		
Satd. Flow (perm)	535	3539	1583	287	3539	1583	1770	1863	1583	1770	1758	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			101			140			167		20	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1265			1235			599			222	
Travel Time (s)		24.6			24.1			13.6			5.0	
Peak Hour Factor	0.74	0.91	0.58	0.90	0.88	0.81	0.69	0.65	0.87	0.90	0.81	0.77
Adj. Flow (vph)	262	1346	95	151	758	140	42	246	391	344	194	114
Shared Lane Traffic (%)												
Lane Group Flow (vph)	262	1346	95	151	758	140	42	246	391	344	308	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	L NA	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		3	3		7	7	
Permitted Phases	6		6	2		2			3			
Detector Phase	1	6	6	5	2	2	3	3	3	7	7	

Austin Oaks Mixed Use Development
2: Wood Hollow Drive & Far West Boulevard

2028 Site+Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	8.0	8.0	8.0	5.0	5.0	
Minimum Split (s)	11.0	40.0	40.0	12.0	40.0	40.0	15.0	15.0	15.0	15.0	15.0	
Total Split (s)	16.0	67.0	67.0	16.0	67.0	67.0	19.0	19.0	19.0	28.0	28.0	
Total Split (%)	12.3%	51.5%	51.5%	12.3%	51.5%	51.5%	14.6%	14.6%	14.6%	21.5%	21.5%	
Maximum Green (s)	11.0	62.0	62.0	11.0	62.0	62.0	14.0	14.0	14.0	23.0	23.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
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	
Recall Mode	None	C-Min	C-Min	Max	C-Min	C-Min	Min	Min	Min	Max	Max	
Walk Time (s)		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		12.0	12.0		12.0	12.0	21.0	21.0	21.0	21.0	21.0	
Pedestrian Calls (#/hr)		0	0		0	0	0	0	0	0	0	
Act Effect Green (s)	58.5	58.5	58.5	36.9	36.9	36.9	17.5	17.5	17.5	23.0	23.0	
Actuated g/C Ratio	0.45	0.45	0.45	0.28	0.28	0.28	0.13	0.13	0.13	0.18	0.18	
v/c Ratio	0.48	0.85	0.12	0.73	0.75	0.26	0.18	0.98	1.09	1.10	0.94	
Control Delay	36.6	36.3	4.1	47.0	46.5	7.7	54.4	108.2	104.8	129.2	86.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	36.6	36.3	4.1	47.0	46.5	7.7	54.4	108.2	104.8	129.2	86.5	
LOS	D	D	A	D	D	A	D	F	F	F	F	
Approach Delay		34.5			41.4			102.9			109.0	
Approach LOS		C			D			F			F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 10 (8%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.10

Intersection Signal Delay: 59.6

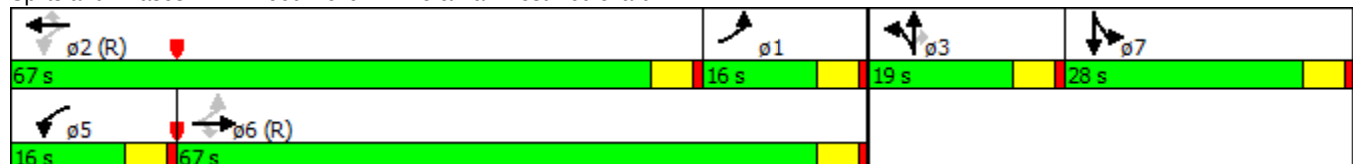
Intersection LOS: E

Intersection Capacity Utilization 84.6%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 2: Wood Hollow Drive & Far West Boulevard



Austin Oaks Mixed Use Development
3: Far West Boulevard & Mopac SB FR

2028 Site+Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑						↑↑	↑
Volume (vph)	0	933	529	21	615	0	0	0	0	156	726	1038
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									0.850
Flt Protected				0.950							0.990	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	3504	1583
Flt Permitted				0.950							0.990	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	3504	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			394									101
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		1235			406			400			362	
Travel Time (s)		24.1			7.9			5.5			4.9	
Peak Hour Factor	0.92	0.91	0.93	0.67	0.93	0.92	0.92	0.92	0.92	0.78	0.92	0.95
Adj. Flow (vph)	0	1025	569	31	661	0	0	0	0	200	789	1093
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1025	569	31	661	0	0	0	0	0	989	1093
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	L NA	Right	Left	Left	Right	Left	Left	R NA
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	custom	Prot	NA					custom	NA	custom
Protected Phases		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Permitted Phases										4		
Detector Phase		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Switch Phase												
Minimum Initial (s)				10.0								
Minimum Split (s)				15.0								

Lane Group	ø1	ø2	ø4	ø8	ø22
Lane Configurations					
Volume (vph)					
Ideal Flow (vphpl)					
Lane Util. Factor					
Frt					
Flt Protected					
Satd. Flow (prot)					
Flt Permitted					
Satd. Flow (perm)					
Right Turn on Red					
Satd. Flow (RTOR)					
Link Speed (mph)					
Link Distance (ft)					
Travel Time (s)					
Peak Hour Factor					
Adj. Flow (vph)					
Shared Lane Traffic (%)					
Lane Group Flow (vph)					
Enter Blocked Intersection					
Lane Alignment					
Median Width(ft)					
Link Offset(ft)					
Crosswalk Width(ft)					
Two way Left Turn Lane					
Headway Factor					
Turning Speed (mph)					
Number of Detectors					
Detector Template					
Leading Detector (ft)					
Trailing Detector (ft)					
Detector 1 Position(ft)					
Detector 1 Size(ft)					
Detector 1 Type					
Detector 1 Channel					
Detector 1 Extend (s)					
Detector 1 Queue (s)					
Detector 1 Delay (s)					
Detector 2 Position(ft)					
Detector 2 Size(ft)					
Detector 2 Type					
Detector 2 Channel					
Detector 2 Extend (s)					
Turn Type					
Protected Phases	1	2	4	8	22
Permitted Phases					
Detector Phase					
Switch Phase					
Minimum Initial (s)	4.0	10.0	10.0	4.0	1.0
Minimum Split (s)	9.0	15.0	25.0	9.0	20.0

Austin Oaks Mixed Use Development
3: Far West Boulevard & Mopac SB FR

2028 Site+Forecasted AM
5/15/2014

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)				21.0								
Total Split (%)				16.2%								
Maximum Green (s)				16.0								
Yellow Time (s)				4.0								
All-Red Time (s)				1.0								
Lost Time Adjust (s)				0.0								
Total Lost Time (s)				5.0								
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0								
Recall Mode				Min								
Act Effect Green (s)		49.0	24.0	16.0	45.0						50.0	75.0
Actuated g/C Ratio		0.38	0.18	0.12	0.35						0.38	0.58
v/c Ratio		0.77	0.93	0.14	0.54						0.73	1.14
Control Delay		38.4	26.9	54.1	0.5						38.5	96.2
Queue Delay		0.6	0.0	0.0	2.4						0.0	0.0
Total Delay		39.1	26.9	54.1	3.0						38.5	96.2
LOS		D	C	D	A						D	F
Approach Delay		34.7			5.2						68.8	
Approach LOS		C			A						E	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 106 (82%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.84

Intersection Signal Delay: 46.3

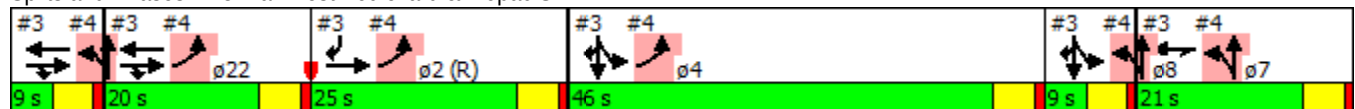
Intersection LOS: D

Intersection Capacity Utilization 119.1%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 3: Far West Boulevard & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø8	ø22
Total Split (s)	9.0	25.0	46.0	9.0	20.0
Total Split (%)	7%	19%	35%	7%	15%
Maximum Green (s)	4.0	20.0	41.0	4.0	15.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)					
Total Lost Time (s)					
Lead/Lag		Lag	Lead	Lag	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	C-Min	Min	Min	None
Act Effect Green (s)					
Actuated g/C Ratio					
v/c Ratio					
Control Delay					
Queue Delay					
Total Delay					
LOS					
Approach Delay					
Approach LOS					
Intersection Summary					

Austin Oaks Mixed Use Development
4: Mopac NB FR & Far West Boulevard

2028 Site+Forecasted AM

5/15/2014

												
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Lane Configurations												
Volume (vph)	1109	0	637	195	0	0						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Lane Util. Factor	0.97	1.00	0.95	0.95	1.00	1.00						
Frt												
Flt Protected	0.950		0.950	0.996								
Satd. Flow (prot)	3433	0	1681	1763	0	0						
Flt Permitted	0.950		0.950	0.996								
Satd. Flow (perm)	3433	0	1681	1763	0	0						
Right Turn on Red		Yes				Yes						
Satd. Flow (RTOR)												
Link Speed (mph)	35			50	50							
Link Distance (ft)	406			308	472							
Travel Time (s)	7.9			4.2	6.4							
Peak Hour Factor	0.90	0.92	0.93	0.25	0.92	0.92						
Adj. Flow (vph)	1232	0	685	780	0	0						
Shared Lane Traffic (%)			10%									
Lane Group Flow (vph)	1232	0	616	849	0	0						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Right	Left	Left	Left	Right						
Median Width(ft)	24			12	12							
Link Offset(ft)	0			0	0							
Crosswalk Width(ft)	16			16	16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00						
Turning Speed (mph)	15	9	15			9						
Number of Detectors	1		1	2								
Detector Template	Left		Left	Thru								
Leading Detector (ft)	20		20	100								
Trailing Detector (ft)	0		0	0								
Detector 1 Position(ft)	0		0	0								
Detector 1 Size(ft)	20		20	6								
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0								
Detector 1 Queue (s)	0.0		0.0	0.0								
Detector 1 Delay (s)	0.0		0.0	0.0								
Detector 2 Position(ft)				94								
Detector 2 Size(ft)				6								
Detector 2 Type				Cl+Ex								
Detector 2 Channel												
Detector 2 Extend (s)				0.0								
Turn Type	Prot		Split	NA								
Protected Phases	2 4 22		1 7 8	1 7 8			1	2	4	7	8	22
Permitted Phases												
Detector Phase	2 4 22		1 7 8	1 7 8								
Switch Phase												
Minimum Initial (s)							4.0	10.0	10.0	10.0	4.0	1.0
Minimum Split (s)							9.0	15.0	25.0	15.0	9.0	20.0



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Total Split (s)							9.0	25.0	46.0	21.0	9.0	20.0
Total Split (%)							7%	19%	35%	16%	7%	15%
Maximum Green (s)							4.0	20.0	41.0	16.0	4.0	15.0
Yellow Time (s)							4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)							1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag								Lag	Lead		Lag	Lead
Lead-Lag Optimize?								Yes	Yes		Yes	Yes
Vehicle Extension (s)							3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode							Min	C-Min	Min	Min	Min	None
Act Effect Green (s)	86.0		34.0	34.0								
Actuated g/C Ratio	0.66		0.26	0.26								
v/c Ratio	0.54		1.40	1.84								
Control Delay	4.0		231.4	416.1								
Queue Delay	1.8		0.0	0.0								
Total Delay	5.8		231.4	416.1								
LOS	A		F	F								
Approach Delay	5.8			338.4								
Approach LOS	A			F								

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 106 (82%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.84

Intersection Signal Delay: 186.5

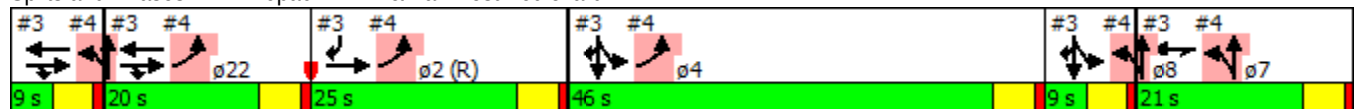
Intersection LOS: F

Intersection Capacity Utilization 132.3%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 4: Mopac NB FR & Far West Boulevard



Austin Oaks Mixed Use Development
5: Spicewood Springs Road & Mopac SB FR

2028 Site+Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑					↑	↑↑	↑
Volume (vph)	0	1331	830	859	1378	0	0	0	0	424	1551	824
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	60		0	0		0	150		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			75			25			75		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.999	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1610	3387	1583
Flt Permitted				0.950						0.950	0.999	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1610	3387	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			185									185
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		294			386			782			882	
Travel Time (s)		5.7			7.5			10.7			12.0	
Peak Hour Factor	0.92	0.81	0.90	0.87	0.86	0.92	0.92	0.92	0.92	0.93	0.87	0.94
Adj. Flow (vph)	0	1643	922	987	1602	0	0	0	0	456	1783	877
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	0	1643	922	987	1602	0	0	0	0	410	1829	877
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Prot	Prot	NA					Split	NA	Prot
Protected Phases		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5
Permitted Phases												
Detector Phase		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

Austin Oaks Mixed Use Development
5: Spicewood Springs Road & Mopac SB FR

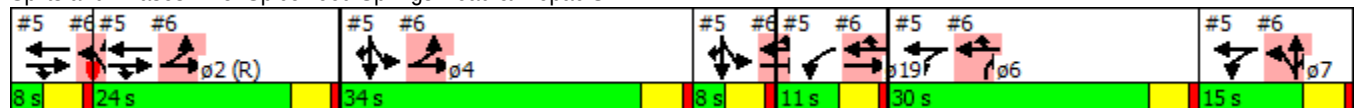
2028 Site+Forecasted AM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)		27.0	27.0	51.0	72.0					37.0	37.0	37.0
Actuated g/C Ratio		0.21	0.21	0.39	0.55					0.28	0.28	0.28
v/c Ratio		2.24	1.94	1.42	0.82					0.90	1.90	1.51
Control Delay		579.7	447.7	218.3	10.9					67.9	436.4	264.3
Queue Delay		2.0	0.0	1.2	48.7					0.0	0.0	0.2
Total Delay		581.8	447.7	219.5	59.6					67.9	436.4	264.5
LOS		F	F	F	E					E	F	F
Approach Delay		533.6			120.6						339.5	
Approach LOS		F			F						F	

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 8 (6%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 2.24
Intersection Signal Delay: 331.2
Intersection LOS: F
Intersection Capacity Utilization 169.6%
ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 5: Spicewood Springs Road & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0	5.0	6.0
Minimum Split (s)	8.0	10.0	10.0	8.0	10.0	10.0	11.0
Total Split (s)	8.0	24.0	34.0	8.0	30.0	15.0	11.0
Total Split (%)	6%	18%	26%	6%	23%	12%	8%
Maximum Green (s)	3.0	19.0	29.0	3.0	25.0	10.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Austin Oaks Mixed Use Development
6: Mopac NB FR & Spicewood Springs Road

2028 Site+Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	476	1155	0	0	1372	289	632	15	608	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		325	0		0	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	75			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.91	0.95	1.00	1.00	1.00
Frt						0.850		0.927	0.850			
Flt Protected	0.950						0.950	0.977				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	1681	1535	1504	0	0	0
Flt Permitted	0.950						0.950	0.977				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	1681	1535	1504	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						276		30	185			
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		386			594			563			407	
Travel Time (s)		7.5			11.6			7.7			5.6	
Peak Hour Factor	0.90	0.96	0.92	0.92	0.93	0.79	0.86	0.60	0.87	0.92	0.92	0.92
Adj. Flow (vph)	529	1203	0	0	1475	366	735	25	699	0	0	0
Shared Lane Traffic (%)							31%		34%			
Lane Group Flow (vph)	529	1203	0	0	1475	366	507	491	461	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Prot	Split	NA	custom			
Protected Phases	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			
Permitted Phases												
Detector Phase	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			

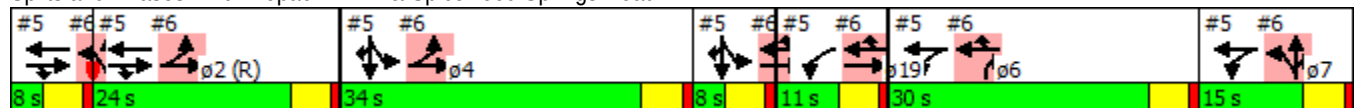
Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)	53.0	72.0			44.0	44.0	18.0	18.0	40.0			
Actuated g/C Ratio	0.41	0.55			0.34	0.34	0.14	0.14	0.31			
v/c Ratio	0.73	0.61			1.23	0.51	2.19	2.06	0.78			
Control Delay	11.0	3.9			149.4	11.3	574.0	519.1	34.5			
Queue Delay	54.3	50.0			1.6	0.0	0.0	0.2	0.0			
Total Delay	65.3	53.9			151.0	11.3	574.0	519.3	34.5			
LOS	E	D			F	B	F	F	C			
Approach Delay		57.4			123.2			385.1				
Approach LOS		E			F			F				

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 8 (6%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 2.24
Intersection Signal Delay: 176.5
Intersection LOS: F
Intersection Capacity Utilization 169.6%
ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 6: Mopac NB FR & Spicewood Springs Road



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0	5.0	6.0
Minimum Split (s)	8.0	10.0	10.0	8.0	10.0	10.0	11.0
Total Split (s)	8.0	24.0	34.0	8.0	30.0	15.0	11.0
Total Split (%)	6%	18%	26%	6%	23%	12%	8%
Maximum Green (s)	3.0	19.0	29.0	3.0	25.0	10.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Austin Oaks Mixed Use Development
7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road

2028 Site+Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	1396	222	787	907	13	100	4	362	8	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	0		100	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.986			0.996				0.850		0.983	
Flt Protected	0.950			0.950				0.954			0.958	
Satd. Flow (prot)	1770	5014	0	1770	3525	0	0	1777	1583	0	1754	0
Flt Permitted	0.283			0.066				0.724			0.792	
Satd. Flow (perm)	527	5014	0	123	3525	0	0	1349	1583	0	1450	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20			3				305		101	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1093			275			251			161	
Travel Time (s)		21.3			5.4			5.7			3.7	
Peak Hour Factor	0.72	0.50	0.76	0.50	0.92	0.50	0.91	0.85	0.62	0.58	0.90	0.84
Adj. Flow (vph)	14	2792	292	1574	986	26	110	5	584	14	0	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	3084	0	1574	1012	0	0	115	584	0	16	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2			6			4		4	8		
Detector Phase	5	2		1	6		4	4	4	8	8	

Austin Oaks Mixed Use Development
7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road

2028 Site+Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	20.0		21.0	20.0		15.0	15.0	15.0	11.0	11.0	
Minimum Split (s)	10.0	25.0		26.0	25.0		20.0	20.0	20.0	16.0	16.0	
Total Split (s)	29.0	72.0		29.0	72.0		29.0	29.0	29.0	29.0	29.0	
Total Split (%)	22.3%	55.4%		22.3%	55.4%		22.3%	22.3%	22.3%	22.3%	22.3%	
Maximum Green (s)	24.0	67.0		24.0	67.0		24.0	24.0	24.0	24.0	24.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0			5.0	5.0		5.0	
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min		Min	C-Min		Min	Min	Min	Min	Min	
Walk Time (s)							6.0	6.0	6.0	6.0	6.0	
Flash Dont Walk (s)							24.0	24.0	24.0	24.0	24.0	
Pedestrian Calls (#/hr)							0	0	0	0	0	
Act Effect Green (s)	68.3	67.0		88.3	88.3			24.0	24.0		24.0	
Actuated g/C Ratio	0.53	0.52		0.68	0.68			0.18	0.18		0.18	
v/c Ratio	0.04	1.19		4.07	0.42			0.46	1.08		0.05	
Control Delay	16.2	119.5		1395.3	14.6			54.2	86.5		0.2	
Queue Delay	0.0	0.0		0.0	0.5			0.0	0.0		0.0	
Total Delay	16.2	119.5		1395.3	15.2			54.2	86.5		0.2	
LOS	B	F		F	B			D	F		A	
Approach Delay		119.0			855.2			81.2			0.2	
Approach LOS		F			F			F			A	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 55 (42%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 4.07

Intersection Signal Delay: 412.1

Intersection LOS: F

Intersection Capacity Utilization 100.5%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road



Austin Oaks Mixed Use Development
10: Hart Lane & Greystone Drive

2028 Site+Forecasted AM
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	61	232	160	96	87	10	59	232	40	19	377	36
Peak Hour Factor	0.80	0.65	0.65	0.78	0.88	0.58	0.75	0.81	0.60	0.58	0.69	0.57
Hourly flow rate (vph)	76	357	246	123	99	17	79	286	67	33	546	63
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	433	246	222	17	432	642						
Volume Left (vph)	76	0	123	0	79	33						
Volume Right (vph)	0	246	0	17	67	63						
Hadj (s)	0.12	-0.67	0.31	-0.67	-0.02	-0.01						
Departure Headway (s)	9.0	8.2	9.9	9.0	8.5	8.5						
Degree Utilization, x	1.0	0.56	0.61	0.04	1.0	1.0						
Capacity (veh/h)	409	428	354	395	432	428						
Control Delay (s)	97.0	19.9	26.2	11.2	77.4	264.9						
Approach Delay (s)	69.0		25.2		77.4	264.9						
Approach LOS	F		D		F	F						
Intersection Summary												
Delay			128.7									
Level of Service			F									
Intersection Capacity Utilization			74.4%		ICU Level of Service					D		
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
20: Wood Hollow Drive & Greystone Drive

2028 Site+Forecasted AM

5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	84	154	200	67	147	37	28	320	53	29	223	65
Peak Hour Factor	0.81	0.89	0.64	0.80	0.82	0.72	0.53	0.88	0.79	0.68	0.85	0.68
Hourly flow rate (vph)	104	173	312	84	179	51	53	364	67	43	262	96
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2				
Volume Total (vph)	277	313	263	51	235	249	174	227				
Volume Left (vph)	104	0	84	0	53	0	43	0				
Volume Right (vph)	0	313	0	51	0	67	0	96				
Hadj (s)	0.22	-0.67	0.19	-0.67	0.15	-0.15	0.16	-0.26				
Departure Headway (s)	8.1	7.3	8.5	7.7	8.2	7.9	8.4	8.0				
Degree Utilization, x	0.63	0.63	0.62	0.11	0.54	0.55	0.40	0.50				
Capacity (veh/h)	422	478	404	446	419	434	414	428				
Control Delay (s)	22.6	20.6	23.3	10.4	19.1	18.9	15.8	17.5				
Approach Delay (s)	21.6		21.2		19.0		16.8					
Approach LOS	C		C		C		C					
Intersection Summary												
Delay			19.7									
Level of Service			C									
Intersection Capacity Utilization			58.0%	ICU Level of Service					B			
Analysis Period (min)			15									



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations					  	
Volume (veh/h)	0	267	0	0	4095	185
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.79	0.92	0.92	0.96	0.86
Hourly flow rate (vph)	0	338	0	0	4266	215
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	4373	1529	4481			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	4373	1529	4481			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	0	100			
cM capacity (veh/h)	1	106	28			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	338	1706	1706	1068		
Volume Left	0	0	0	0		
Volume Right	338	0	0	215		
cSH	106	1700	1700	1700		
Volume to Capacity	3.19	1.00	1.00	0.63		
Queue Length 95th (ft)	Err	0	0	0		
Control Delay (s)	Err	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	Err	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay		701.3				
Intersection Capacity Utilization		106.4%		ICU Level of Service		G
Analysis Period (min)		15				



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	90	0	0	3393	473
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.50	0.92	0.92	0.95	0.75
Hourly flow rate (vph)	0	180	0	0	3572	631
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	3887	1506	4202			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	3887	1506	4202			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	0	100			
cM capacity (veh/h)	2	110	36			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	180	1429	1429	1345		
Volume Left	0	0	0	0		
Volume Right	180	0	0	631		
cSH	110	1700	1700	1700		
Volume to Capacity	1.64	0.84	0.84	0.79		
Queue Length 95th (ft)	342	0	0	0		
Control Delay (s)	391.7	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	391.7	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay		16.1				
Intersection Capacity Utilization		88.3%		ICU Level of Service	E	
Analysis Period (min)		15				

Austin Oaks Mixed Use Development
50: Executive Center Drive & Wood Hollow Drive

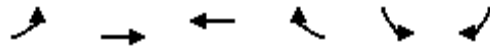
2028 Site+Forecasted AM
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	53	292	171	232	256	232	41	74	36	81	193	26
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.67	0.91	1.00	0.86	0.91	0.91	0.50	0.46	0.50	0.25	0.56	0.47
Hourly flow rate (vph)	79	321	171	270	281	255	82	161	72	324	345	55
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh												
Upstream signal (ft)					522							
pX, platoon unblocked	0.51						0.51	0.51		0.51	0.51	0.51
vC, conflicting volume	536			492			1741	1640	406	1665	1598	409
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			492			1968	1773	406	1822	1691	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	91			75			0	0	89	0	0	90
cM capacity (veh/h)	834			1072			0	29	645	0	32	558
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	571	806	315	724								
Volume Left	79	270	82	324								
Volume Right	171	255	72	55								
cSH	834	1072	0	0								
Volume to Capacity	0.09	0.25	Err	Err								
Queue Length 95th (ft)	8	25	Err	Err								
Control Delay (s)	2.5	5.5	Err	Err								
Lane LOS	A	A	F	F								
Approach Delay (s)	2.5	5.5	Err	Err								
Approach LOS			F	F								
Intersection Summary												
Average Delay			Err									
Intersection Capacity Utilization			100.7%	ICU Level of Service					G			
Analysis Period (min)			15									

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	261	119	220	341	68	157
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.79	0.67	0.83	0.72	0.75	0.46
Hourly flow rate (vph)	330	178	265	474	91	341
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			508		1423	419
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			508		1423	419
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			75		19	46
cM capacity (veh/h)			1057		112	634
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	508	739	432			
Volume Left	0	265	91			
Volume Right	178	0	341			
cSH	1700	1057	321			
Volume to Capacity	0.30	0.25	1.35			
Queue Length 95th (ft)	0	25	536			
Control Delay (s)	0.0	5.6	207.6			
Lane LOS		A	F			
Approach Delay (s)	0.0	5.6	207.6			
Approach LOS			F			
Intersection Summary						
Average Delay		55.9				
Intersection Capacity Utilization		74.5%		ICU Level of Service		D
Analysis Period (min)		15				



Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations							
Volume (veh/h)	147	282	198	1071	1482	390	
Sign Control	Stop			Free	Free		
Grade	0%			0%	0%		
Peak Hour Factor	0.85	0.87	0.86	0.88	0.89	0.67	
Hourly flow rate (vph)	173	324	230	1217	1665	582	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None	None		
Median storage veh							
Upstream signal (ft)				1093			
pX, platoon unblocked	0.89						
vC, conflicting volume	3025	1124	1665				
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	3028	1124	1665				
tC, single (s)	6.8	6.9	4.1				
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2				
p0 queue free %	0	0	40				
cM capacity (veh/h)	4	200	382				
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	173	324	230	609	609	1110	1137
Volume Left	173	0	230	0	0	0	0
Volume Right	0	324	0	0	0	0	582
cSH	4	200	382	1700	1700	1700	1700
Volume to Capacity	48.25	1.62	0.60	0.36	0.36	0.65	0.67
Queue Length 95th (ft)	Err	532	95	0	0	0	0
Control Delay (s)	Err	344.7	27.7	0.0	0.0	0.0	0.0
Lane LOS	F	F	D				
Approach Delay (s)	3703.6		4.4			0.0	
Approach LOS	F						
Intersection Summary							
Average Delay			440.7				
Intersection Capacity Utilization			82.5%		ICU Level of Service		E
Analysis Period (min)			15				



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	255	229	288	185	12	50
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	277	249	313	201	13	54
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	514				1217	414
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	514				1217	414
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	74				91	91
cM capacity (veh/h)	1051				147	639
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	526	514	67			
Volume Left	277	0	13			
Volume Right	0	201	54			
cSH	1051	1700	388			
Volume to Capacity	0.26	0.30	0.17			
Queue Length 95th (ft)	27	0	16			
Control Delay (s)	6.5	0.0	16.2			
Lane LOS	A		C			
Approach Delay (s)	6.5	0.0	16.2			
Approach LOS			C			
Intersection Summary						
Average Delay		4.1				
Intersection Capacity Utilization		66.4%		ICU Level of Service		C
Analysis Period (min)		15				



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	0	0	338	484	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	367	526	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	893	526	526			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	893	526	526			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	312	552	1041			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	0	367	526			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1041	1700			
Volume to Capacity	0.00	0.00	0.31			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			28.8%	ICU Level of Service	A	
Analysis Period (min)			15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	0	0	338	484	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	367	526	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	893	526	526			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	893	526	526			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	312	552	1041			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	0	367	526			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1041	1700			
Volume to Capacity	0.00	0.00	0.31			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		28.8%		ICU Level of Service	A	
Analysis Period (min)		15				

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	13	29	202	136	125	471
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	14	32	220	148	136	512
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1077	293			367	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1077	293			367	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	93	96			89	
cM capacity (veh/h)	215	746			1191	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	46	367	648			
Volume Left	14	0	136			
Volume Right	32	148	0			
cSH	422	1700	1191			
Volume to Capacity	0.11	0.22	0.11			
Queue Length 95th (ft)	9	0	10			
Control Delay (s)	14.6	0.0	2.8			
Lane LOS	B		A			
Approach Delay (s)	14.6	0.0	2.8			
Approach LOS	B					
Intersection Summary						
Average Delay		2.4				
Intersection Capacity Utilization		64.0%		ICU Level of Service		B
Analysis Period (min)		15				

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	298	61	17	375
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	324	66	18	408
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	802	357			390	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	802	357			390	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			98	
cM capacity (veh/h)	348	687			1168	
Direction, Lane #	NB 1	SB 1				
Volume Total	390	426				
Volume Left	0	18				
Volume Right	66	0				
cSH	1700	1168				
Volume to Capacity	0.23	0.02				
Queue Length 95th (ft)	0	1				
Control Delay (s)	0.0	0.5				
Lane LOS		A				
Approach Delay (s)	0.0	0.5				
Approach LOS						
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		36.9%		ICU Level of Service		A
Analysis Period (min)		15				

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	7	22	275	23	20	385
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	8	24	299	25	22	418
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	773	311			324	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	773	311			324	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	98	97			98	
cM capacity (veh/h)	361	729			1236	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	32	324	440			
Volume Left	8	0	22			
Volume Right	24	25	0			
cSH	585	1700	1236			
Volume to Capacity	0.05	0.19	0.02			
Queue Length 95th (ft)	4	0	1			
Control Delay (s)	11.5	0.0	0.6			
Lane LOS	B		A			
Approach Delay (s)	11.5	0.0	0.6			
Approach LOS	B					
Intersection Summary						
Average Delay		0.8				
Intersection Capacity Utilization		46.6%		ICU Level of Service		A
Analysis Period (min)		15				

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	4	294	3	7	405
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	4	320	3	8	440
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	777	321			323	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	777	321			323	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	99			99	
cM capacity (veh/h)	363	720			1237	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	4	323	448			
Volume Left	0	0	8			
Volume Right	4	3	0			
cSH	720	1700	1237			
Volume to Capacity	0.01	0.19	0.01			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	10.0	0.0	0.2			
Lane LOS	B		A			
Approach Delay (s)	10.0	0.0	0.2			
Approach LOS	B					
Intersection Summary						
Average Delay		0.2				
Intersection Capacity Utilization		36.9%		ICU Level of Service		A
Analysis Period (min)		15				

Austin Oaks Mixed Use Development
800: Executive Center Drive & Driveway 8

2028 Site+Forecasted AM

5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	3	0	44	44	0	0	17	264	17	0	324	1
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	3	0	48	48	0	0	18	287	18	0	352	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	686	695	353	734	686	296	353			305		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	686	695	353	734	686	296	353			305		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	100	93	85	100	100	98			100		
cM capacity (veh/h)	357	360	691	309	364	743	1205			1255		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	51	48	324	353								
Volume Left	3	48	18	0								
Volume Right	48	0	18	1								
cSH	652	309	1205	1255								
Volume to Capacity	0.08	0.15	0.02	0.00								
Queue Length 95th (ft)	6	14	1	0								
Control Delay (s)	11.0	18.8	0.6	0.0								
Lane LOS	B	C	A									
Approach Delay (s)	11.0	18.8	0.6	0.0								
Approach LOS	B	C										
Intersection Summary												
Average Delay			2.1									
Intersection Capacity Utilization			44.7%		ICU Level of Service				A			
Analysis Period (min)			15									

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	20	267	0	1	325
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	22	290	0	1	353
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	646	290			290	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	646	290			290	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	97			100	
cM capacity (veh/h)	436	749			1272	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	22	290	354			
Volume Left	0	0	1			
Volume Right	22	0	0			
cSH	749	1700	1272			
Volume to Capacity	0.03	0.17	0.00			
Queue Length 95th (ft)	2	0	0			
Control Delay (s)	10.0	0.0	0.0			
Lane LOS	A		A			
Approach Delay (s)	10.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		27.9%		ICU Level of Service		A
Analysis Period (min)		15				

Austin Oaks Mixed Use Development
1000: Executive Center Drive & Driveway 10

2028 Site+Forecasted AM

5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	72	0	5	3	0	50	2	283	2	10	318	11
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	78	0	5	3	0	54	2	308	2	11	346	12
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	741	688	352	692	692	309	358			310		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	741	688	352	692	692	309	358			310		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	74	100	99	99	100	93	100			99		
cM capacity (veh/h)	305	366	692	353	363	731	1201			1251		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	84	58	312	368								
Volume Left	78	3	2	11								
Volume Right	5	54	2	12								
cSH	317	689	1201	1251								
Volume to Capacity	0.26	0.08	0.00	0.01								
Queue Length 95th (ft)	26	7	0	1								
Control Delay (s)	20.4	10.7	0.1	0.3								
Lane LOS	C	B	A	A								
Approach Delay (s)	20.4	10.7	0.1	0.3								
Approach LOS	C	B										
Intersection Summary												
Average Delay			3.0									
Intersection Capacity Utilization			41.8%	ICU Level of Service					A			
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
1100: Driveway 11 & Wood Hollow Drive

2028 Site+Forecasted AM

5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	333	76	276	733	0	21	0	107	21	0	11
Sign Control		Free			Free			Stop			Stop	
Grade		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
Hourly flow rate (vph)	0	362	83	300	797	0	23	0	116	23	0	12
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)					251							
pX, platoon unblocked	0.37						0.37	0.37		0.37	0.37	0.37
vC, conflicting volume	797			445			1812	1800	403	1916	1841	797
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			445			2354	2321	403	2640	2435	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			73			0	100	82	0	100	97
cM capacity (veh/h)	593			1116			7	10	647	4	8	396
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1							
Volume Total	445	1097	23	116	35							
Volume Left	0	300	23	0	23							
Volume Right	83	0	0	116	12							
cSH	1700	1116	7	647	6							
Volume to Capacity	0.26	0.27	3.27	0.18	6.26							
Queue Length 95th (ft)	0	27	Err	16	Err							
Control Delay (s)	0.0	6.0	Err	11.8	Err							
Lane LOS		A	F	B	F							
Approach Delay (s)	0.0	6.0	1650.3		Err							
Approach LOS			F		F							
Intersection Summary												
Average Delay			340.5									
Intersection Capacity Utilization			94.5%		ICU Level of Service				F			
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
1: Hart Lane & Far West Boulevard

2028 Site+Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	95	703	46	212	716	180	72	202	163	201	175	108
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	170		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.988				0.850		0.945			0.955	
Flt Protected	0.950			0.950				0.992			0.986	
Satd. Flow (prot)	1770	3497	0	1770	3539	1583	0	3318	0	0	3333	0
Flt Permitted	0.115			0.183				0.992			0.986	
Satd. Flow (perm)	214	3497	0	341	3539	1583	0	3318	0	0	3333	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9				212		78			44	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		362			1265			236			237	
Travel Time (s)		7.1			24.6			5.4			5.4	
Peak Hour Factor	0.73	0.83	0.61	0.69	0.83	0.85	0.80	0.80	0.82	0.90	0.56	0.47
Adj. Flow (vph)	130	847	75	307	863	212	90	252	199	223	312	230
Shared Lane Traffic (%)												
Lane Group Flow (vph)	130	922	0	307	863	212	0	541	0	0	765	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Split	NA		Split	NA	
Protected Phases	5	2		1	6		4	4		8	8	
Permitted Phases	2			6		6						
Detector Phase	5	2		1	6	6	4	4		8	8	

Austin Oaks Mixed Use Development
1: Hart Lane & Far West Boulevard

2028 Site+Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	8.0	18.0		8.0	18.0	18.0	12.0	12.0		12.0	12.0	
Minimum Split (s)	13.0	24.0		13.0	24.0	24.0	33.0	33.0		33.0	33.0	
Total Split (s)	13.0	62.0		15.0	64.0	64.0	28.0	28.0		25.0	25.0	
Total Split (%)	10.0%	47.7%		11.5%	49.2%	49.2%	21.5%	21.5%		19.2%	19.2%	
Maximum Green (s)	8.0	57.0		10.0	59.0	59.0	23.0	23.0		20.0	20.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0		5.0			5.0	
Lead/Lag	Lead	Lead		Lag	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	
Walk Time (s)		7.0			7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		12.0			12.0	12.0	21.0	21.0		21.0	21.0	
Pedestrian Calls (#/hr)		0			0	0	0	0		0	0	
Act Effect Green (s)	42.8	42.8		54.5	54.5	54.5		22.3			25.2	
Actuated g/C Ratio	0.33	0.33		0.42	0.42	0.42		0.17			0.19	
v/c Ratio	0.78	0.80		0.86	0.58	0.27		0.85			1.12	
Control Delay	61.9	44.4		45.9	11.5	1.2		58.4			118.2	
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Delay	61.9	44.4		45.9	11.5	1.2		58.4			118.2	
LOS	E	D		D	B	A		E			F	
Approach Delay		46.6			17.6			58.4			118.2	
Approach LOS		D			B			E			F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 20 (15%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 115

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.12

Intersection Signal Delay: 52.2

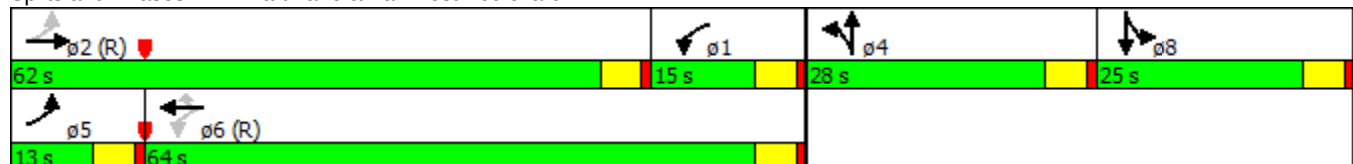
Intersection LOS: D

Intersection Capacity Utilization 76.3%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 1: Hart Lane & Far West Boulevard



Austin Oaks Mixed Use Development
2: Wood Hollow Drive & Far West Boulevard

2028 Site+Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	182	888	73	266	798	154	117	268	371	182	186	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	335		0	165		0	120		120	0		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	75			35			50			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.931	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1734	0
Flt Permitted	0.215			0.123			0.950			0.950		
Satd. Flow (perm)	400	3539	1583	229	3539	1583	1770	1863	1583	1770	1734	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			126			190			188		28	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1265			1235			599			222	
Travel Time (s)		24.6			24.1			13.6			5.0	
Peak Hour Factor	0.74	0.91	0.58	0.90	0.88	0.81	0.69	0.65	0.87	0.90	0.81	0.77
Adj. Flow (vph)	246	976	126	296	907	190	170	412	426	202	230	195
Shared Lane Traffic (%)												
Lane Group Flow (vph)	246	976	126	296	907	190	170	412	426	202	425	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	L NA	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		3	3		7	7	
Permitted Phases	6		6	2		2			3			
Detector Phase	1	6	6	5	2	2	3	3	3	7	7	

Austin Oaks Mixed Use Development
2: Wood Hollow Drive & Far West Boulevard

2028 Site+Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	8.0	8.0	8.0	5.0	5.0	
Minimum Split (s)	10.0	22.0	22.0	10.0	22.0	22.0	31.0	31.0	31.0	31.0	31.0	
Total Split (s)	20.0	68.0	68.0	16.0	64.0	64.0	20.0	20.0	20.0	26.0	26.0	
Total Split (%)	15.4%	52.3%	52.3%	12.3%	49.2%	49.2%	15.4%	15.4%	15.4%	20.0%	20.0%	
Maximum Green (s)	15.0	63.0	63.0	11.0	59.0	59.0	15.0	15.0	15.0	21.0	21.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
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	
Recall Mode	None	C-Min	C-Min	Max	C-Min	C-Min	Min	Min	Min	Max	Max	
Walk Time (s)		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		12.0	12.0		12.0	12.0	21.0	21.0	21.0	21.0	21.0	
Pedestrian Calls (#/hr)		0	0		0	0	0	0	0	0	0	
Act Effect Green (s)	47.7	47.7	47.7	43.5	43.5	43.5	30.3	30.3	30.3	21.0	21.0	
Actuated g/C Ratio	0.37	0.37	0.37	0.33	0.33	0.33	0.23	0.23	0.23	0.16	0.16	
v/c Ratio	0.80	0.75	0.19	1.44	0.77	0.29	0.41	0.95	0.83	0.71	1.40	
Control Delay	38.3	16.3	0.9	231.7	44.2	7.7	48.8	81.8	42.0	66.2	237.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	38.3	16.3	0.9	231.7	44.2	7.7	48.8	81.8	42.0	66.2	237.3	
LOS	D	B	A	F	D	A	D	F	D	E	F	
Approach Delay		18.9			79.1			59.4			182.2	
Approach LOS		B			E			E			F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 20 (15%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 125

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.44

Intersection Signal Delay: 70.8

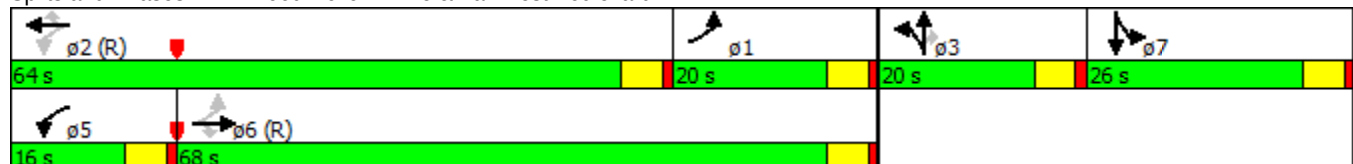
Intersection LOS: E

Intersection Capacity Utilization 81.6%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 2: Wood Hollow Drive & Far West Boulevard



Austin Oaks Mixed Use Development
3: Far West Boulevard & Mopac SB FR

2028 Site+Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑						↑↑	↑
Volume (vph)	0	1340	448	12	492	0	0	0	0	437	737	1095
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									0.850
Flt Protected				0.950							0.980	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	3468	1583
Flt Permitted				0.950							0.980	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	3468	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			232									276
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		1235			406			400			362	
Travel Time (s)		24.1			7.9			5.5			4.9	
Peak Hour Factor	0.92	0.91	0.93	0.67	0.93	0.92	0.92	0.92	0.92	0.78	0.92	0.95
Adj. Flow (vph)	0	1473	482	18	529	0	0	0	0	560	801	1153
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1473	482	18	529	0	0	0	0	0	1361	1153
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	L NA	Right	Left	Left	Right	Left	Left	R NA
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	custom	Prot	NA					custom	NA	custom
Protected Phases		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Permitted Phases										4		
Detector Phase		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Switch Phase												
Minimum Initial (s)				10.0								
Minimum Split (s)				15.0								

Lane Group	ø1	ø2	ø4	ø8	ø22
Lane Configurations					
Volume (vph)					
Ideal Flow (vphpl)					
Lane Util. Factor					
Frt					
Flt Protected					
Satd. Flow (prot)					
Flt Permitted					
Satd. Flow (perm)					
Right Turn on Red					
Satd. Flow (RTOR)					
Link Speed (mph)					
Link Distance (ft)					
Travel Time (s)					
Peak Hour Factor					
Adj. Flow (vph)					
Shared Lane Traffic (%)					
Lane Group Flow (vph)					
Enter Blocked Intersection					
Lane Alignment					
Median Width(ft)					
Link Offset(ft)					
Crosswalk Width(ft)					
Two way Left Turn Lane					
Headway Factor					
Turning Speed (mph)					
Number of Detectors					
Detector Template					
Leading Detector (ft)					
Trailing Detector (ft)					
Detector 1 Position(ft)					
Detector 1 Size(ft)					
Detector 1 Type					
Detector 1 Channel					
Detector 1 Extend (s)					
Detector 1 Queue (s)					
Detector 1 Delay (s)					
Detector 2 Position(ft)					
Detector 2 Size(ft)					
Detector 2 Type					
Detector 2 Channel					
Detector 2 Extend (s)					
Turn Type					
Protected Phases	1	2	4	8	22
Permitted Phases					
Detector Phase					
Switch Phase					
Minimum Initial (s)	4.0	13.0	10.0	4.0	1.0
Minimum Split (s)	9.0	18.0	15.0	9.0	6.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)				41.0								
Total Split (%)				31.5%								
Maximum Green (s)				36.0								
Yellow Time (s)				4.0								
All-Red Time (s)				1.0								
Lost Time Adjust (s)				0.0								
Total Lost Time (s)				5.0								
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0								
Recall Mode				Min								
Act Effect Green (s)		44.0	24.0	36.0	65.0						35.0	55.0
Actuated g/C Ratio		0.34	0.18	0.28	0.50						0.27	0.42
v/c Ratio		1.23	1.00	0.04	0.30						1.46	1.39
Control Delay		148.5	65.4	16.7	3.1						247.6	209.1
Queue Delay		2.1	0.0	0.0	0.3						0.0	0.0
Total Delay		150.6	65.4	16.7	3.4						247.6	209.1
LOS		F	E	B	A						F	F
Approach Delay		129.6			3.9						229.9	
Approach LOS		F			A						F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.46

Intersection Signal Delay: 166.2

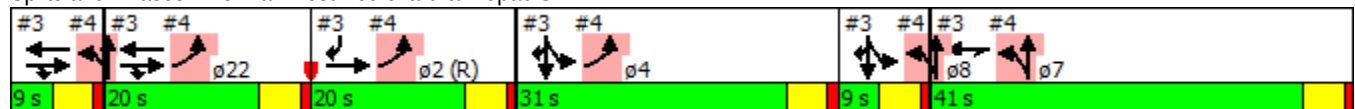
Intersection LOS: F

Intersection Capacity Utilization 121.5%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 3: Far West Boulevard & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø8	ø22
Total Split (s)	9.0	20.0	31.0	9.0	20.0
Total Split (%)	7%	15%	24%	7%	15%
Maximum Green (s)	4.0	15.0	26.0	4.0	15.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)					
Total Lost Time (s)					
Lead/Lag		Lag	Lead	Lag	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	C-Min	Min	Min	None
Act Effect Green (s)					
Actuated g/C Ratio					
v/c Ratio					
Control Delay					
Queue Delay					
Total Delay					
LOS					
Approach Delay					
Approach LOS					
Intersection Summary					

Austin Oaks Mixed Use Development
4: Mopac NB FR & Far West Boulevard

2028 Site+Forecasted PM

5/15/2014

												
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Lane Configurations												
Volume (vph)	1788	0	431	206	0	0						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Lane Util. Factor	0.97	1.00	0.95	0.95	1.00	1.00						
Fr												
Flt Protected	0.950		0.950	0.997								
Satd. Flow (prot)	3433	0	1681	1764	0	0						
Flt Permitted	0.950		0.950	0.997								
Satd. Flow (perm)	3433	0	1681	1764	0	0						
Right Turn on Red		Yes				Yes						
Satd. Flow (RTOR)												
Link Speed (mph)	35			50	50							
Link Distance (ft)	406			308	472							
Travel Time (s)	7.9			4.2	6.4							
Peak Hour Factor	0.90	0.92	0.93	0.25	0.92	0.92						
Adj. Flow (vph)	1987	0	463	824	0	0						
Shared Lane Traffic (%)			10%									
Lane Group Flow (vph)	1987	0	417	870	0	0						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Right	Left	Left	Left	Right						
Median Width(ft)	24			12	12							
Link Offset(ft)	0			0	0							
Crosswalk Width(ft)	16			16	16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00						
Turning Speed (mph)	15	9	15			9						
Number of Detectors	1		1	2								
Detector Template	Left		Left	Thru								
Leading Detector (ft)	20		20	100								
Trailing Detector (ft)	0		0	0								
Detector 1 Position(ft)	0		0	0								
Detector 1 Size(ft)	20		20	6								
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0								
Detector 1 Queue (s)	0.0		0.0	0.0								
Detector 1 Delay (s)	0.0		0.0	0.0								
Detector 2 Position(ft)				94								
Detector 2 Size(ft)				6								
Detector 2 Type				Cl+Ex								
Detector 2 Channel												
Detector 2 Extend (s)				0.0								
Turn Type	Prot		Split	NA								
Protected Phases	2 4 22		1 7 8	1 7 8			1	2	4	7	8	22
Permitted Phases												
Detector Phase	2 4 22		1 7 8	1 7 8								
Switch Phase												
Minimum Initial (s)							4.0	13.0	10.0	10.0	4.0	1.0
Minimum Split (s)							9.0	18.0	15.0	15.0	9.0	6.0



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Total Split (s)							9.0	20.0	31.0	41.0	9.0	20.0
Total Split (%)							7%	15%	24%	32%	7%	15%
Maximum Green (s)							4.0	15.0	26.0	36.0	4.0	15.0
Yellow Time (s)							4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)							1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag								Lag	Lead		Lag	Lead
Lead-Lag Optimize?								Yes	Yes		Yes	Yes
Vehicle Extension (s)							3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode							Min	C-Min	Min	Min	Min	None
Act Effect Green (s)	66.0		54.0	54.0								
Actuated g/C Ratio	0.51		0.42	0.42								
v/c Ratio	1.14		0.60	1.19								
Control Delay	83.8		33.9	133.1								
Queue Delay	0.9		0.0	0.0								
Total Delay	84.7		33.9	133.1								
LOS	F		C	F								
Approach Delay	84.7			101.0								
Approach LOS	F			F								

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.46

Intersection Signal Delay: 91.1

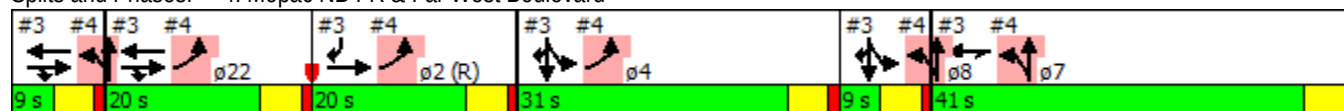
Intersection LOS: F

Intersection Capacity Utilization 134.7%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 4: Mopac NB FR & Far West Boulevard



Austin Oaks Mixed Use Development
5: Spicewood Springs Road & Mopac SB FR

2028 Site+Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑					↑	↑↑	↑
Volume (vph)	0	2091	430	805	1820	0	0	0	0	721	371	532
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	60		0	0		0	150		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			75			25			75		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.977	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1610	3312	1583
Flt Permitted				0.950						0.950	0.977	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1610	3312	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			160									160
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		294			386			782			882	
Travel Time (s)		5.7			7.5			10.7			12.0	
Peak Hour Factor	0.92	0.81	0.90	0.87	0.86	0.92	0.92	0.92	0.92	0.93	0.87	0.94
Adj. Flow (vph)	0	2581	478	925	2116	0	0	0	0	775	426	566
Shared Lane Traffic (%)										49%		
Lane Group Flow (vph)	0	2581	478	925	2116	0	0	0	0	395	806	566
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Prot	Prot	NA					Split	NA	Prot
Protected Phases		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5
Permitted Phases												
Detector Phase		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5

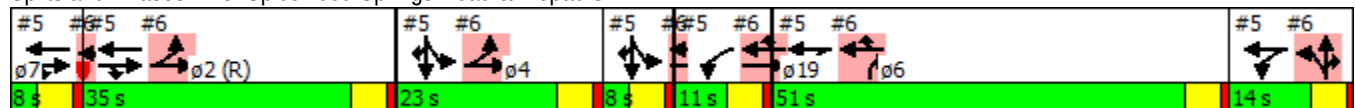
Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)		38.0	38.0	71.0	103.0					26.0	26.0	26.0
Actuated g/C Ratio		0.25	0.25	0.47	0.69					0.17	0.17	0.17
v/c Ratio		2.88	0.92	1.11	0.87					1.42	1.40	1.39
Control Delay		866.3	35.1	79.1	15.0					250.3	235.9	223.3
Queue Delay		1.6	9.4	1.4	47.2					0.0	0.0	0.0
Total Delay		867.9	44.5	80.5	62.2					250.3	235.9	223.3
LOS		F	D	F	E					F	F	F
Approach Delay		739.2			67.8						235.1	
Approach LOS		F			E						F	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 89 (59%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 2.88
Intersection Signal Delay: 366.4
Intersection LOS: F
Intersection Capacity Utilization 164.1%
ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 5: Spicewood Springs Road & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0	5.0	6.0
Minimum Split (s)	8.0	15.0	10.0	8.0	15.0	10.0	11.0
Total Split (s)	8.0	35.0	23.0	8.0	51.0	14.0	11.0
Total Split (%)	5%	23%	15%	5%	34%	9%	7%
Maximum Green (s)	3.0	30.0	18.0	3.0	46.0	9.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Austin Oaks Mixed Use Development
6: Mopac NB FR & Spicewood Springs Road

2028 Site+Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	905	1586	0	0	1534	505	487	50	648	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		325	0		0	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	75			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.91	0.95	1.00	1.00	1.00
Frt						0.850		0.904	0.850			
Flt Protected	0.950						0.950	0.991				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	1681	1519	1504	0	0	0
Flt Permitted	0.950						0.950	0.991				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	1681	1519	1504	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						124		48	160			
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		386			594			563			407	
Travel Time (s)		7.5			11.6			7.7			5.6	
Peak Hour Factor	0.90	0.96	0.92	0.92	0.93	0.79	0.86	0.60	0.87	0.92	0.92	0.92
Adj. Flow (vph)	1006	1652	0	0	1649	639	566	83	745	0	0	0
Shared Lane Traffic (%)							15%		40%			
Lane Group Flow (vph)	1006	1652	0	0	1649	639	481	466	447	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Prot	Split	NA	custom			
Protected Phases	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			
Permitted Phases												
Detector Phase	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			

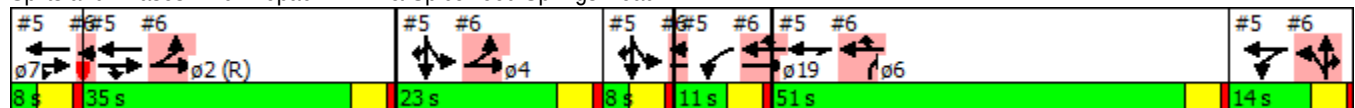
Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)	53.0	72.0			65.0	65.0	17.0	17.0	60.0			
Actuated g/C Ratio	0.35	0.48			0.43	0.43	0.11	0.11	0.40			
v/c Ratio	1.61	0.97			1.08	0.85	2.53	2.18	0.64			
Control Delay	296.9	11.7			86.8	42.1	729.2	570.8	27.3			
Queue Delay	2.6	43.2			11.2	0.0	0.0	0.4	0.0			
Total Delay	299.5	54.9			98.0	42.1	729.2	571.2	27.3			
LOS	F	D			F	D	F	F	C			
Approach Delay		147.5			82.4			451.3				
Approach LOS		F			F			F				

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 89 (59%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 2.88
Intersection Signal Delay: 190.8 Intersection LOS: F
Intersection Capacity Utilization 164.1% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 6: Mopac NB FR & Spicewood Springs Road



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0	5.0	6.0
Minimum Split (s)	8.0	15.0	10.0	8.0	15.0	10.0	11.0
Total Split (s)	8.0	35.0	23.0	8.0	51.0	14.0	11.0
Total Split (%)	5%	23%	15%	5%	34%	9%	7%
Maximum Green (s)	3.0	30.0	18.0	3.0	46.0	9.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Austin Oaks Mixed Use Development
7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road

2028 Site+Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	7	1253	85	480	958	1	409	10	924	1	4	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	0		100	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.994							0.850		0.896	
Flt Protected	0.950			0.950				0.954			0.996	
Satd. Flow (prot)	1770	5055	0	1770	3539	0	0	1777	1583	0	1662	0
Flt Permitted	0.275			0.074				0.713			0.663	
Satd. Flow (perm)	512	5055	0	138	3539	0	0	1328	1583	0	1107	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7							314		20	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1093			275			251			161	
Travel Time (s)		21.3			5.4			5.7			3.7	
Peak Hour Factor	0.72	0.50	0.76	0.50	0.92	0.50	0.91	0.85	0.62	0.58	0.90	0.84
Adj. Flow (vph)	10	2506	112	960	1041	2	449	12	1490	2	4	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	10	2618	0	960	1043	0	0	461	1490	0	26	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2			6			4		4	8		
Detector Phase	5	2		1	6		4	4	4	8	8	

Austin Oaks Mixed Use Development
7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road

2028 Site+Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	20.0		21.0	20.0		15.0	15.0	15.0	11.0	11.0	
Minimum Split (s)	10.0	25.0		26.0	25.0		35.0	35.0	35.0	35.0	35.0	
Total Split (s)	29.0	82.0		34.0	87.0		34.0	34.0	34.0	34.0	34.0	
Total Split (%)	19.3%	54.7%		22.7%	58.0%		22.7%	22.7%	22.7%	22.7%	22.7%	
Maximum Green (s)	24.0	77.0		29.0	82.0		29.0	29.0	29.0	29.0	29.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0			5.0	5.0		5.0	
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min		Min	C-Min		Min	Min	Min	Min	Min	
Walk Time (s)							6.0	6.0	6.0	6.0	6.0	
Flash Dont Walk (s)							24.0	24.0	24.0	24.0	24.0	
Pedestrian Calls (#/hr)							0	0	0	0	0	
Act Effect Green (s)	79.6	77.0		86.0	86.0			29.0	29.0		29.0	
Actuated g/C Ratio	0.53	0.51		0.57	0.57			0.19	0.19		0.19	
v/c Ratio	0.02	1.01		2.44	0.51			1.80	2.67		0.11	
Control Delay	18.3	55.6		672.4	24.5			409.0	772.4		24.2	
Queue Delay	0.0	37.4		0.0	0.6			0.0	5.0		0.0	
Total Delay	18.3	93.0		672.4	25.0			409.0	777.3		24.2	
LOS	B	F		F	C			F	F		C	
Approach Delay		92.7			335.3			690.3			24.2	
Approach LOS		F			F			F			C	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 55 (37%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 2.67

Intersection Signal Delay: 342.4

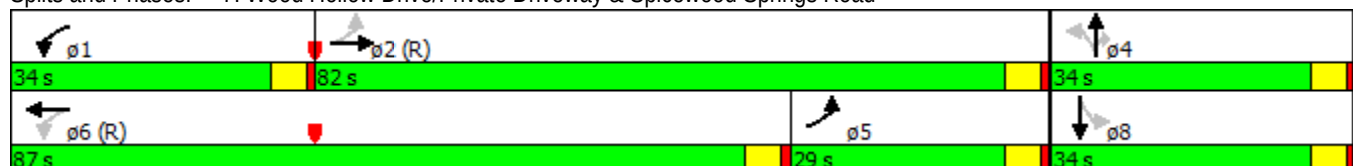
Intersection LOS: F

Intersection Capacity Utilization 105.0%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road



Austin Oaks Mixed Use Development
10: Hart Lane & Greystone Drive

2028 Site+Forecasted PM

5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	50	112	59	97	211	64	106	339	64	13	283	78
Peak Hour Factor	0.80	0.65	0.65	0.78	0.88	0.58	0.75	0.81	0.60	0.58	0.69	0.57
Hourly flow rate (vph)	62	172	91	124	240	110	141	419	107	22	410	137
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	235	91	364	110	667	569						
Volume Left (vph)	63	0	124	0	141	22						
Volume Right (vph)	0	91	0	110	107	137						
Hadj (s)	0.17	-0.67	0.20	-0.67	-0.02	-0.10						
Departure Headway (s)	9.7	8.8	9.2	8.4	8.5	8.4						
Degree Utilization, x	0.63	0.22	0.93	0.26	1.0	1.0						
Capacity (veh/h)	362	399	364	424	427	436						
Control Delay (s)	26.5	13.1	59.8	13.0	292.0	189.7						
Approach Delay (s)	22.8		48.9		292.0	189.7						
Approach LOS	C		E		F	F						
Intersection Summary												
Delay			163.7									
Level of Service			F									
Intersection Capacity Utilization			86.4%	ICU Level of Service				E				
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
20: Wood Hollow Drive & Greystone Drive

2028 Site+Forecasted PM

5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	72	86	62	109	282	73	97	382	87	32	320	91
Peak Hour Factor	0.81	0.89	0.64	0.80	0.82	0.72	0.53	0.88	0.79	0.68	0.85	0.68
Hourly flow rate (vph)	89	97	97	136	344	101	183	434	110	47	376	134
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2				
Volume Total (vph)	186	97	480	101	400	327	235	322				
Volume Left (vph)	89	0	136	0	183	0	47	0				
Volume Right (vph)	0	97	0	101	0	110	0	134				
Hadj (s)	0.27	-0.67	0.18	-0.67	0.26	-0.20	0.13	-0.26				
Departure Headway (s)	9.5	8.6	8.9	8.1	8.7	8.3	8.8	8.4				
Degree Utilization, x	0.49	0.23	1.0	0.23	0.97	0.75	0.57	0.75				
Capacity (veh/h)	359	402	398	434	410	429	397	420				
Control Delay (s)	20.1	13.0	134.9	12.2	65.0	30.9	21.8	31.6				
Approach Delay (s)	17.7		113.5		49.7		27.5					
Approach LOS	C		F		E		D					
Intersection Summary												
Delay			57.0									
Level of Service			F									
Intersection Capacity Utilization			71.5%	ICU Level of Service					C			
Analysis Period (min)			15									



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	215	0	0	2249	425
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.79	0.92	0.92	0.96	0.86
Hourly flow rate (vph)	0	272	0	0	2343	494
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2590	1028	2837			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2590	1028	2837			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	0	100			
cM capacity (veh/h)	21	231	132			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	272	937	937	963		
Volume Left	0	0	0	0		
Volume Right	272	0	0	494		
cSH	231	1700	1700	1700		
Volume to Capacity	1.18	0.55	0.55	0.57		
Queue Length 95th (ft)	324	0	0	0		
Control Delay (s)	159.3	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	159.3	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay			13.9			
Intersection Capacity Utilization			72.9%		ICU Level of Service	C
Analysis Period (min)			15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations					  	
Volume (veh/h)	0	421	0	0	2412	247
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.50	0.92	0.92	0.95	0.75
Hourly flow rate (vph)	0	842	0	0	2539	329
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2704	1011	2868			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2704	1011	2868			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	0	100			
cM capacity (veh/h)	17	237	128			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	842	1016	1016	837		
Volume Left	0	0	0	0		
Volume Right	842	0	0	329		
cSH	237	1700	1700	1700		
Volume to Capacity	3.55	0.60	0.60	0.49		
Queue Length 95th (ft)	Err	0	0	0		
Control Delay (s)	Err	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	Err	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay		2269.1				
Intersection Capacity Utilization		84.8%		ICU Level of Service	E	
Analysis Period (min)		15				

Austin Oaks Mixed Use Development
50: Executive Center Drive & Wood Hollow Drive

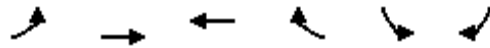
2028 Site+Forecasted PM
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	59	376	61	61	259	248	193	269	231	69	120	140
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.67	0.91	1.00	0.86	0.91	0.91	0.50	0.46	0.50	0.25	0.56	0.47
Hourly flow rate (vph)	88	413	61	71	285	273	386	585	462	276	214	298
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)					522							
pX, platoon unblocked												
vC, conflicting volume	557			474			1588	1319	444	1937	1213	421
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	557			474			1588	1319	444	1937	1213	421
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	91			93			0	0	25	0	0	53
cM capacity (veh/h)	1014			1088			0	134	614	0	155	633
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	562	628	1433	788								
Volume Left	88	71	386	276								
Volume Right	61	273	462	298								
cSH	1014	1088	0	0								
Volume to Capacity	0.09	0.07	Err	Err								
Queue Length 95th (ft)	7	5	Err	Err								
Control Delay (s)	2.3	1.7	Err	Err								
Lane LOS	A	A	F	F								
Approach Delay (s)	2.3	1.7	Err	Err								
Approach LOS			F	F								
Intersection Summary												
Average Delay			Err									
Intersection Capacity Utilization			106.4%		ICU Level of Service				G			
Analysis Period (min)			15									

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	326	115	175	238	157	337
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.79	0.67	0.83	0.72	0.75	0.46
Hourly flow rate (vph)	413	172	211	331	209	733
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			584		1251	498
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			584		1251	498
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			79		0	0
cM capacity (veh/h)			990		150	572
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	584	541	942			
Volume Left	0	211	209			
Volume Right	172	0	733			
cSH	1700	990	352			
Volume to Capacity	0.34	0.21	2.68			
Queue Length 95th (ft)	0	20	1957			
Control Delay (s)	0.0	5.3	785.7			
Lane LOS		A	F			
Approach Delay (s)	0.0	5.3	785.7			
Approach LOS			F			
Intersection Summary						
Average Delay		359.3				
Intersection Capacity Utilization		85.8%		ICU Level of Service	E	
Analysis Period (min)		15				



Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations				 	 		
Volume (veh/h)	344	382	190	1532	1035	246	
Sign Control	Stop			Free	Free		
Grade	0%			0%	0%		
Peak Hour Factor	0.85	0.87	0.86	0.88	0.89	0.67	
Hourly flow rate (vph)	405	439	221	1741	1163	367	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None	None		
Median storage veh							
Upstream signal (ft)				1093			
pX, platoon unblocked	0.83						
vC, conflicting volume	2659	765	1163				
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2587	765	1163				
tC, single (s)	6.8	6.9	4.1				
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2				
p0 queue free %	0	0	63				
cM capacity (veh/h)	11	346	596				
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	405	439	221	870	870	775	755
Volume Left	405	0	221	0	0	0	0
Volume Right	0	439	0	0	0	0	367
cSH	11	346	596	1700	1700	1700	1700
Volume to Capacity	37.75	1.27	0.37	0.51	0.51	0.46	0.44
Queue Length 95th (ft)	Err	498	43	0	0	0	0
Control Delay (s)	Err	174.2	14.5	0.0	0.0	0.0	0.0
Lane LOS	F	F	B				
Approach Delay (s)	4886.5	1.6		0.0			
Approach LOS	F						
Intersection Summary							
Average Delay			951.7				
Intersection Capacity Utilization			76.0%	ICU Level of Service			D
Analysis Period (min)			15				



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	46	168	214	33	79	304
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	50	183	233	36	86	330
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	268				533	251
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	268				533	251
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	96				82	58
cM capacity (veh/h)	1295				488	788
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	233	268	416			
Volume Left	50	0	86			
Volume Right	0	36	330			
cSH	1295	1700	699			
Volume to Capacity	0.04	0.16	0.60			
Queue Length 95th (ft)	3	0	99			
Control Delay (s)	2.0	0.0	17.4			
Lane LOS	A		C			
Approach Delay (s)	2.0	0.0	17.4			
Approach LOS			C			
Intersection Summary						
Average Delay		8.4				
Intersection Capacity Utilization		57.8%		ICU Level of Service		B
Analysis Period (min)		15				



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	0	0	518	214	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	563	233	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	796	233	233			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	796	233	233			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	356	807	1335			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	0	563	233			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1335	1700			
Volume to Capacity	0.00	0.00	0.14			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		30.6%		ICU Level of Service	A	
Analysis Period (min)		15				



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	0	0	518	214	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	563	233	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	796	233	233			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	796	233	233			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	356	807	1335			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	0	563	233			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1335	1700			
Volume to Capacity	0.00	0.00	0.14			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			30.6%	ICU Level of Service	A	
Analysis Period (min)			15			

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	55	123	431	87	83	159
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	60	134	468	95	90	173
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	869	516			563	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	869	516			563	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	80	76			91	
cM capacity (veh/h)	294	559			1008	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	193	563	263			
Volume Left	60	0	90			
Volume Right	134	95	0			
cSH	437	1700	1008			
Volume to Capacity	0.44	0.33	0.09			
Queue Length 95th (ft)	56	0	7			
Control Delay (s)	19.6	0.0	3.6			
Lane LOS	C		A			
Approach Delay (s)	19.6	0.0	3.6			
Approach LOS	C					
Intersection Summary						
Average Delay		4.7				
Intersection Capacity Utilization		61.5%		ICU Level of Service		B
Analysis Period (min)		15				

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	442	134	45	190
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	480	146	49	207
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	858	553			626	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	858	553			626	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			95	
cM capacity (veh/h)	311	532			956	
Direction, Lane #	NB 1	SB 1				
Volume Total	626	255				
Volume Left	0	49				
Volume Right	146	0				
cSH	1700	956				
Volume to Capacity	0.37	0.05				
Queue Length 95th (ft)	0	4				
Control Delay (s)	0.0	2.1				
Lane LOS		A				
Approach Delay (s)	0.0	2.1				
Approach LOS						
Intersection Summary						
Average Delay		0.6				
Intersection Capacity Utilization		50.6%		ICU Level of Service		A
Analysis Period (min)		15				

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	37	124	389	53	40	198
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	40	135	423	58	43	215
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	754	452			480	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	754	452			480	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	89	78			96	
cM capacity (veh/h)	362	608			1082	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	175	480	259			
Volume Left	40	0	43			
Volume Right	135	58	0			
cSH	526	1700	1082			
Volume to Capacity	0.33	0.28	0.04			
Queue Length 95th (ft)	36	0	3			
Control Delay (s)	15.2	0.0	1.7			
Lane LOS	C		A			
Approach Delay (s)	15.2	0.0	1.7			
Approach LOS	C					
Intersection Summary						
Average Delay		3.4				
Intersection Capacity Utilization		56.0%		ICU Level of Service		B
Analysis Period (min)		15				

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	3	29	507	6	9	235
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	32	551	7	10	255
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	829	554			558	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	829	554			558	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	94			99	
cM capacity (veh/h)	337	532			1013	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	35	558	265			
Volume Left	3	0	10			
Volume Right	32	7	0			
cSH	504	1700	1013			
Volume to Capacity	0.07	0.33	0.01			
Queue Length 95th (ft)	6	0	1			
Control Delay (s)	12.7	0.0	0.4			
Lane LOS	B		A			
Approach Delay (s)	12.7	0.0	0.4			
Approach LOS	B					
Intersection Summary						
Average Delay		0.6				
Intersection Capacity Utilization		37.0%		ICU Level of Service		A
Analysis Period (min)		15				

Austin Oaks Mixed Use Development
800: Executive Center Drive & Driveway 8

2028 Site+Forecasted PM

5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	1	0	24	23	0	0	71	396	69	2	197	3
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	1	0	26	25	0	0	77	430	75	2	214	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	842	880	216	868	844	468	217			505		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	842	880	216	868	844	468	217			505		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	97	90	100	100	94			100		
cM capacity (veh/h)	271	269	824	252	282	595	1352			1059		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	27	25	583	220								
Volume Left	1	25	77	2								
Volume Right	26	0	75	3								
cSH	762	252	1352	1059								
Volume to Capacity	0.04	0.10	0.06	0.00								
Queue Length 95th (ft)	3	8	5	0								
Control Delay (s)	9.9	20.9	1.6	0.1								
Lane LOS	A	C	A	A								
Approach Delay (s)	9.9	20.9	1.6	0.1								
Approach LOS	A	C										
Intersection Summary												
Average Delay			2.0									
Intersection Capacity Utilization			57.6%	ICU Level of Service					B			
Analysis Period (min)			15									

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	10	397	0	3	202
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	11	432	0	3	220
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	658	432			432	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	658	432			432	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	98			100	
cM capacity (veh/h)	428	624			1128	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	11	432	223			
Volume Left	0	0	3			
Volume Right	11	0	0			
cSH	624	1700	1128			
Volume to Capacity	0.02	0.25	0.00			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	10.9	0.0	0.1			
Lane LOS	B		A			
Approach Delay (s)	10.9	0.0	0.1			
Approach LOS	B					
Intersection Summary						
Average Delay		0.2				
Intersection Capacity Utilization		30.9%		ICU Level of Service		A
Analysis Period (min)		15				

Austin Oaks Mixed Use Development
1000: Executive Center Drive & Driveway 10

2028 Site+Forecasted PM

5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	38	0	3	2	0	25	8	394	5	42	200	48
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	41	0	3	2	0	27	9	428	5	46	217	52
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	810	786	243	786	809	431	270			434		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	810	786	243	786	809	431	270			434		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	85	100	100	99	100	96	99			96		
cM capacity (veh/h)	275	309	795	297	299	624	1294			1126		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	45	29	442	315								
Volume Left	41	2	9	46								
Volume Right	3	27	5	52								
cSH	289	577	1294	1126								
Volume to Capacity	0.15	0.05	0.01	0.04								
Queue Length 95th (ft)	13	4	1	3								
Control Delay (s)	19.7	11.6	0.2	1.6								
Lane LOS	C	B	A	A								
Approach Delay (s)	19.7	11.6	0.2	1.6								
Approach LOS	C	B										
Intersection Summary												
Average Delay			2.2									
Intersection Capacity Utilization			53.2%	ICU Level of Service					A			
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
1100: Driveway 11 & Wood Hollow Drive

2028 Site+Forecasted PM

5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	625	51	177	392	0	88	0	443	118	0	59
Sign Control		Free			Free			Stop			Stop	
Grade		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
Hourly flow rate (vph)	0	679	55	192	426	0	96	0	482	128	0	64
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)					251							
pX, platoon unblocked	0.53						0.53	0.53		0.53	0.53	0.53
vC, conflicting volume	426			735			1582	1518	707	1999	1546	426
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			735			1656	1534	707	2447	1587	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			78			0	100	0	0	100	89
cM capacity (veh/h)	856			870			30	48	435	0	44	572
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1							
Volume Total	735	618	96	482	192							
Volume Left	0	192	96	0	128							
Volume Right	55	0	0	482	64							
cSH	1700	870	30	435	0							
Volume to Capacity	0.43	0.22	3.15	1.11	Err							
Queue Length 95th (ft)	0	21	Err	416	Err							
Control Delay (s)	0.0	5.3	Err	105.7	Err							
Lane LOS		A	F	F	F							
Approach Delay (s)	0.0	5.3	1745.3		Err							
Approach LOS			F		F							
Intersection Summary												
Average Delay			Err									
Intersection Capacity Utilization			93.2%		ICU Level of Service				F			
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
1: Hart Lane & Far West Boulevard

2031 Forecasted AM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	106	946	111	255	366	90	63	190	213	264	348	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	170		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.979				0.850		0.932			0.978	
Flt Protected	0.950			0.950				0.993			0.986	
Satd. Flow (prot)	1770	3465	0	1770	3539	1583	0	3275	0	0	3413	0
Flt Permitted	0.357			0.103				0.993			0.986	
Satd. Flow (perm)	665	3465	0	192	3539	1583	0	3275	0	0	3413	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15				106		136			13	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		362			1265			236			237	
Travel Time (s)		7.1			24.6			5.4			5.4	
Peak Hour Factor	0.73	0.83	0.61	0.69	0.83	0.85	0.80	0.80	0.82	0.90	0.56	0.47
Adj. Flow (vph)	145	1140	182	370	441	106	79	238	260	293	621	155
Shared Lane Traffic (%)												
Lane Group Flow (vph)	145	1322	0	370	441	106	0	577	0	0	1069	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Split	NA		Split	NA	
Protected Phases	5	2		1	6		4	4		8	8	
Permitted Phases	2			6		6						
Detector Phase	5	2		1	6	6	4	4		8	8	

Austin Oaks Mixed Use Development
1: Hart Lane & Far West Boulevard

2031 Forecasted AM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	8.0	18.0		8.0	18.0	18.0	12.0	12.0		12.0	12.0	
Minimum Split (s)	13.0	23.0		13.0	23.0	23.0	17.0	17.0		17.0	17.0	
Total Split (s)	13.0	52.0		22.0	61.0	61.0	26.0	26.0		30.0	30.0	
Total Split (%)	10.0%	40.0%		16.9%	46.9%	46.9%	20.0%	20.0%		23.1%	23.1%	
Maximum Green (s)	8.0	47.0		17.0	56.0	56.0	21.0	21.0		25.0	25.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0		5.0			5.0	
Lead/Lag	Lead	Lead		Lag	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	
Walk Time (s)		7.0			7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		12.0			12.0	12.0	21.0	21.0		21.0	21.0	
Pedestrian Calls (#/hr)		0			0	0	0	0		0	0	
Act Effect Green (s)	47.0	47.0		56.0	56.0	56.0		20.4			25.6	
Actuated g/C Ratio	0.36	0.36		0.43	0.43	0.43		0.16			0.20	
v/c Ratio	0.47	1.05		1.28	0.29	0.14		0.92			1.57	
Control Delay	34.7	78.7		197.1	42.9	20.4		61.6			297.9	
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Delay	34.7	78.7		197.1	42.9	20.4		61.6			297.9	
LOS	C	E		F	D	C		E			F	
Approach Delay		74.3			102.5			61.6			297.9	
Approach LOS		E			F			E			F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 100 (77%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.57

Intersection Signal Delay: 138.2

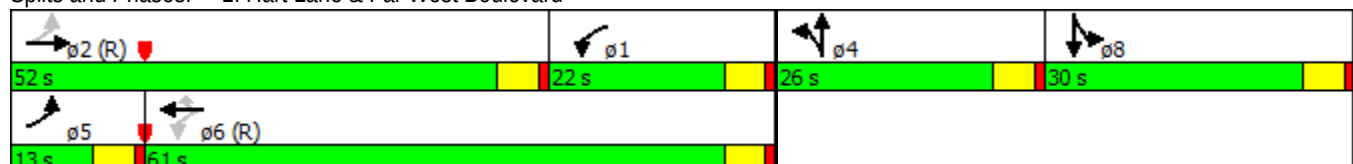
Intersection LOS: F

Intersection Capacity Utilization 94.0%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 1: Hart Lane & Far West Boulevard



Austin Oaks Mixed Use Development
2: Wood Hollow Drive & Far West Boulevard

2031 Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	206	1299	58	144	707	120	31	170	360	329	166	93
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	335		0	165		0	120		120	0		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	75			35			50			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.944	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1758	0
Flt Permitted	0.261			0.144			0.950			0.950		
Satd. Flow (perm)	486	3539	1583	268	3539	1583	1770	1863	1583	1770	1758	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			101			148			161		20	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1265			1235			599			222	
Travel Time (s)		24.6			24.1			13.6			5.0	
Peak Hour Factor	0.74	0.91	0.58	0.90	0.88	0.81	0.69	0.65	0.87	0.90	0.81	0.77
Adj. Flow (vph)	278	1427	100	160	803	148	45	262	414	366	205	121
Shared Lane Traffic (%)												
Lane Group Flow (vph)	278	1427	100	160	803	148	45	262	414	366	326	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	L NA	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		3	3		7	7	
Permitted Phases	6		6	2		2			3			
Detector Phase	1	6	6	5	2	2	3	3	3	7	7	

Austin Oaks Mixed Use Development
2: Wood Hollow Drive & Far West Boulevard

2031 Forecasted AM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	8.0	8.0	8.0	5.0	5.0	
Minimum Split (s)	11.0	40.0	40.0	12.0	40.0	40.0	15.0	15.0	15.0	15.0	15.0	
Total Split (s)	16.0	67.0	67.0	16.0	67.0	67.0	19.0	19.0	19.0	28.0	28.0	
Total Split (%)	12.3%	51.5%	51.5%	12.3%	51.5%	51.5%	14.6%	14.6%	14.6%	21.5%	21.5%	
Maximum Green (s)	11.0	62.0	62.0	11.0	62.0	62.0	14.0	14.0	14.0	23.0	23.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
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	
Recall Mode	None	C-Min	C-Min	Max	C-Min	C-Min	Min	Min	Min	Max	Max	
Walk Time (s)		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		12.0	12.0		12.0	12.0	21.0	21.0	21.0	21.0	21.0	
Pedestrian Calls (#/hr)		0	0		0	0	0	0	0	0	0	
Act Effect Green (s)	59.9	59.9	59.9	38.8	38.8	38.8	16.1	16.1	16.1	23.0	23.0	
Actuated g/C Ratio	0.46	0.46	0.46	0.30	0.30	0.30	0.12	0.12	0.12	0.18	0.18	
v/c Ratio	0.51	0.88	0.13	0.77	0.76	0.26	0.21	1.14	1.23	1.17	1.00	
Control Delay	37.8	35.7	4.1	45.3	44.9	7.2	55.6	152.1	155.2	151.5	99.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	37.8	35.7	4.1	45.3	44.9	7.2	55.6	152.1	155.2	151.5	99.1	
LOS	D	D	A	D	D	A	E	F	F	F	F	
Approach Delay		34.2			39.9			147.9			126.8	
Approach LOS		C			D			F			F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 10 (8%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.23

Intersection Signal Delay: 69.4

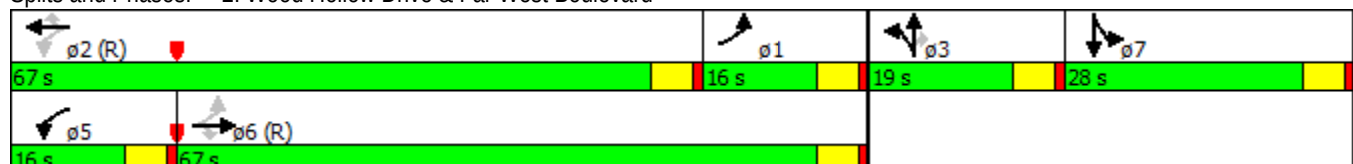
Intersection LOS: E

Intersection Capacity Utilization 88.9%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 2: Wood Hollow Drive & Far West Boulevard



Austin Oaks Mixed Use Development
3: Far West Boulevard & Mopac SB FR

2031 Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑						↑↑	↑
Volume (vph)	0	989	561	22	652	0	0	0	0	165	770	1100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									0.850
Flt Protected				0.950							0.990	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	3504	1583
Flt Permitted				0.950							0.990	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	3504	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			394									101
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		1235			406			400			362	
Travel Time (s)		24.1			7.9			5.5			4.9	
Peak Hour Factor	0.92	0.91	0.93	0.67	0.93	0.92	0.92	0.92	0.92	0.78	0.92	0.95
Adj. Flow (vph)	0	1087	603	33	701	0	0	0	0	212	837	1158
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1087	603	33	701	0	0	0	0	0	1049	1158
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	L NA	Right	Left	Left	Right	Left	Left	R NA
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	custom	Prot	NA					custom	NA	custom
Protected Phases		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Permitted Phases										4		
Detector Phase		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Switch Phase												
Minimum Initial (s)				10.0								
Minimum Split (s)				15.0								

Lane Group	ø1	ø2	ø4	ø8	ø22
Lane Configurations					
Volume (vph)					
Ideal Flow (vphpl)					
Lane Util. Factor					
Frt					
Flt Protected					
Satd. Flow (prot)					
Flt Permitted					
Satd. Flow (perm)					
Right Turn on Red					
Satd. Flow (RTOR)					
Link Speed (mph)					
Link Distance (ft)					
Travel Time (s)					
Peak Hour Factor					
Adj. Flow (vph)					
Shared Lane Traffic (%)					
Lane Group Flow (vph)					
Enter Blocked Intersection					
Lane Alignment					
Median Width(ft)					
Link Offset(ft)					
Crosswalk Width(ft)					
Two way Left Turn Lane					
Headway Factor					
Turning Speed (mph)					
Number of Detectors					
Detector Template					
Leading Detector (ft)					
Trailing Detector (ft)					
Detector 1 Position(ft)					
Detector 1 Size(ft)					
Detector 1 Type					
Detector 1 Channel					
Detector 1 Extend (s)					
Detector 1 Queue (s)					
Detector 1 Delay (s)					
Detector 2 Position(ft)					
Detector 2 Size(ft)					
Detector 2 Type					
Detector 2 Channel					
Detector 2 Extend (s)					
Turn Type					
Protected Phases	1	2	4	8	22
Permitted Phases					
Detector Phase					
Switch Phase					
Minimum Initial (s)	4.0	10.0	10.0	4.0	1.0
Minimum Split (s)	9.0	15.0	25.0	9.0	20.0

Austin Oaks Mixed Use Development
3: Far West Boulevard & Mopac SB FR

2031 Forecasted AM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)				21.0								
Total Split (%)				16.2%								
Maximum Green (s)				16.0								
Yellow Time (s)				4.0								
All-Red Time (s)				1.0								
Lost Time Adjust (s)				0.0								
Total Lost Time (s)				5.0								
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0								
Recall Mode				Min								
Act Effect Green (s)		49.0	24.0	16.0	45.0						50.0	75.0
Actuated g/C Ratio		0.38	0.18	0.12	0.35						0.38	0.58
v/c Ratio		0.82	0.98	0.15	0.57						0.78	1.21
Control Delay		38.3	32.0	53.9	0.7						39.2	123.9
Queue Delay		1.3	0.0	0.0	3.5						0.0	0.0
Total Delay		39.6	32.0	53.9	4.2						39.2	123.9
LOS		D	C	D	A						D	F
Approach Delay		36.9			6.5						83.6	
Approach LOS		D			A						F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 106 (82%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 95

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.95

Intersection Signal Delay: 54.3

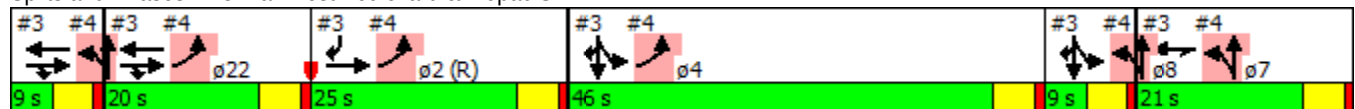
Intersection LOS: D

Intersection Capacity Utilization 126.3%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 3: Far West Boulevard & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø8	ø22
Total Split (s)	9.0	25.0	46.0	9.0	20.0
Total Split (%)	7%	19%	35%	7%	15%
Maximum Green (s)	4.0	20.0	41.0	4.0	15.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)					
Total Lost Time (s)					
Lead/Lag		Lag	Lead	Lag	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	C-Min	Min	Min	None
Act Effect Green (s)					
Actuated g/C Ratio					
v/c Ratio					
Control Delay					
Queue Delay					
Total Delay					
LOS					
Approach Delay					
Approach LOS					
Intersection Summary					

Austin Oaks Mixed Use Development
4: Mopac NB FR & Far West Boulevard

2031 Forecasted AM
5/15/2014

												
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Lane Configurations	LT		LT	LT								
Volume (vph)	1176	0	675	207	0	0						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Lane Util. Factor	0.97	1.00	0.95	0.95	1.00	1.00						
Fr												
Flt Protected	0.950		0.950	0.996								
Satd. Flow (prot)	3433	0	1681	1763	0	0						
Flt Permitted	0.950		0.950	0.996								
Satd. Flow (perm)	3433	0	1681	1763	0	0						
Right Turn on Red		Yes				Yes						
Satd. Flow (RTOR)												
Link Speed (mph)	35			50	50							
Link Distance (ft)	406			308	472							
Travel Time (s)	7.9			4.2	6.4							
Peak Hour Factor	0.90	0.92	0.93	0.25	0.92	0.92						
Adj. Flow (vph)	1307	0	726	828	0	0						
Shared Lane Traffic (%)			10%									
Lane Group Flow (vph)	1307	0	653	901	0	0						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Right	Left	Left	Left	Right						
Median Width(ft)	24			12	12							
Link Offset(ft)	0			0	0							
Crosswalk Width(ft)	16			16	16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00						
Turning Speed (mph)	15	9	15			9						
Number of Detectors	1		1	2								
Detector Template	Left		Left	Thru								
Leading Detector (ft)	20		20	100								
Trailing Detector (ft)	0		0	0								
Detector 1 Position(ft)	0		0	0								
Detector 1 Size(ft)	20		20	6								
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0								
Detector 1 Queue (s)	0.0		0.0	0.0								
Detector 1 Delay (s)	0.0		0.0	0.0								
Detector 2 Position(ft)				94								
Detector 2 Size(ft)				6								
Detector 2 Type				Cl+Ex								
Detector 2 Channel												
Detector 2 Extend (s)				0.0								
Turn Type	Prot		Split	NA								
Protected Phases	2 4 22		1 7 8	1 7 8			1	2	4	7	8	22
Permitted Phases												
Detector Phase	2 4 22		1 7 8	1 7 8								
Switch Phase												
Minimum Initial (s)							4.0	10.0	10.0	10.0	4.0	1.0
Minimum Split (s)							9.0	15.0	25.0	15.0	9.0	20.0

Austin Oaks Mixed Use Development
4: Mopac NB FR & Far West Boulevard

2031 Forecasted AM
5/15/2014



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Total Split (s)							9.0	25.0	46.0	21.0	9.0	20.0
Total Split (%)							7%	19%	35%	16%	7%	15%
Maximum Green (s)							4.0	20.0	41.0	16.0	4.0	15.0
Yellow Time (s)							4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)							1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag								Lag	Lead		Lag	Lead
Lead-Lag Optimize?								Yes	Yes		Yes	Yes
Vehicle Extension (s)							3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode							Min	C-Min	Min	Min	Min	None
Act Effect Green (s)	86.0		34.0	34.0								
Actuated g/C Ratio	0.66		0.26	0.26								
v/c Ratio	0.58		1.49	1.95								
Control Delay	4.5		266.1	464.9								
Queue Delay	2.9		0.0	0.0								
Total Delay	7.4		266.1	464.9								
LOS	A		F	F								
Approach Delay	7.4			381.4								
Approach LOS	A			F								

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 106 (82%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 95

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.95

Intersection Signal Delay: 210.5

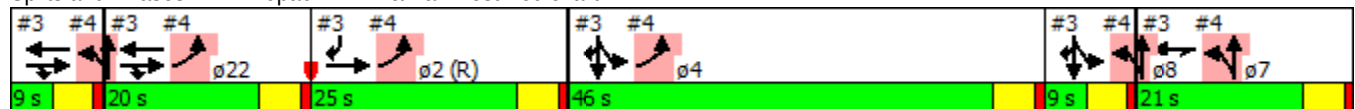
Intersection LOS: F

Intersection Capacity Utilization 139.5%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 4: Mopac NB FR & Far West Boulevard



Austin Oaks Mixed Use Development
5: Spicewood Springs Road & Mopac SB FR

2031 Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑					↑	↑↑	↑
Volume (vph)	0	1411	880	911	1461	0	0	0	0	449	1644	873
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	60		0	0		0	150		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			75			25			75		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.999	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1610	3387	1583
Flt Permitted				0.950						0.950	0.999	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1610	3387	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			185									185
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		294			386			782			882	
Travel Time (s)		5.7			7.5			10.7			12.0	
Peak Hour Factor	0.92	0.81	0.90	0.87	0.86	0.92	0.92	0.92	0.92	0.93	0.87	0.94
Adj. Flow (vph)	0	1742	978	1047	1699	0	0	0	0	483	1890	929
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	0	1742	978	1047	1699	0	0	0	0	435	1938	929
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Prot	Prot	NA					Split	NA	Prot
Protected Phases		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5
Permitted Phases												
Detector Phase		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

Austin Oaks Mixed Use Development
5: Spicewood Springs Road & Mopac SB FR

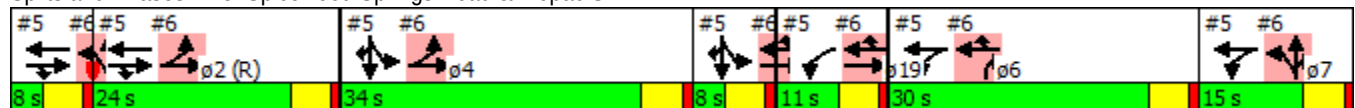
2031 Forecasted AM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)		27.0	27.0	51.0	72.0					37.0	37.0	37.0
Actuated g/C Ratio		0.21	0.21	0.39	0.55					0.28	0.28	0.28
v/c Ratio		2.37	2.06	1.51	0.87					0.95	2.01	1.60
Control Delay		639.2	499.7	256.3	12.6					77.1	485.8	302.8
Queue Delay		2.4	0.0	1.2	48.1					0.0	0.0	0.5
Total Delay		641.6	499.7	257.5	60.8					77.1	485.8	303.3
LOS		F	F	F	E					E	F	F
Approach Delay		590.6			135.8						380.6	
Approach LOS		F			F						F	

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 8 (6%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 2.37
Intersection Signal Delay: 369.1
Intersection LOS: F
Intersection Capacity Utilization 179.5%
ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 5: Spicewood Springs Road & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0	5.0	6.0
Minimum Split (s)	8.0	10.0	10.0	8.0	10.0	10.0	11.0
Total Split (s)	8.0	24.0	34.0	8.0	30.0	15.0	11.0
Total Split (%)	6%	18%	26%	6%	23%	12%	8%
Maximum Green (s)	3.0	19.0	29.0	3.0	25.0	10.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Austin Oaks Mixed Use Development
6: Mopac NB FR & Spicewood Springs Road

2031 Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 				
Volume (vph)	505	1224	0	0	1454	306	670	16	644	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		325	0		0	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	75			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.91	0.95	1.00	1.00	1.00
Frt						0.850		0.927	0.850			
Flt Protected	0.950						0.950	0.977				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	1681	1535	1504	0	0	0
Flt Permitted	0.950						0.950	0.977				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	1681	1535	1504	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						276		30	185			
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		386			594			563			407	
Travel Time (s)		7.5			11.6			7.7			5.6	
Peak Hour Factor	0.90	0.96	0.92	0.92	0.93	0.79	0.86	0.60	0.87	0.92	0.92	0.92
Adj. Flow (vph)	561	1275	0	0	1563	387	779	27	740	0	0	0
Shared Lane Traffic (%)							31%		34%			
Lane Group Flow (vph)	561	1275	0	0	1563	387	538	520	488	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Prot	Split	NA	custom			
Protected Phases	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			
Permitted Phases												
Detector Phase	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

Austin Oaks Mixed Use Development
6: Mopac NB FR & Spicewood Springs Road

2031 Forecasted AM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)	53.0	72.0			44.0	44.0	18.0	18.0	40.0			
Actuated g/C Ratio	0.41	0.55			0.34	0.34	0.14	0.14	0.31			
v/c Ratio	0.78	0.65			1.31	0.54	2.32	2.18	0.83			
Control Delay	12.3	4.8			179.7	12.7	632.0	571.9	38.6			
Queue Delay	53.8	50.0			1.8	0.0	0.0	0.3	0.0			
Total Delay	66.1	54.8			181.5	12.7	632.0	572.2	38.6			
LOS	E	D			F	B	F	F	D			
Approach Delay		58.3			148.0			424.6				
Approach LOS		E			F			F				

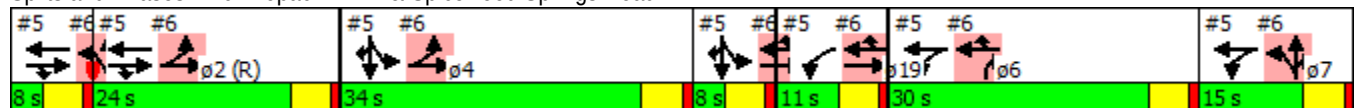
Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 8 (6%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 2.37
Intersection Signal Delay: 197.3
Intersection Capacity Utilization 179.5%
Analysis Period (min) 15

Intersection LOS: F

ICU Level of Service H

Splits and Phases: 6: Mopac NB FR & Spicewood Springs Road



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0	5.0	6.0
Minimum Split (s)	8.0	10.0	10.0	8.0	10.0	10.0	11.0
Total Split (s)	8.0	24.0	34.0	8.0	30.0	15.0	11.0
Total Split (%)	6%	18%	26%	6%	23%	12%	8%
Maximum Green (s)	3.0	19.0	29.0	3.0	25.0	10.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Austin Oaks Mixed Use Development
7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road

2031 Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	11	1480	235	834	961	14	106	4	384	8	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	0		100	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.986			0.996				0.850		0.983	
Flt Protected	0.950			0.950				0.954			0.958	
Satd. Flow (prot)	1770	5014	0	1770	3525	0	0	1777	1583	0	1754	0
Flt Permitted	0.267			0.066				0.723			0.789	
Satd. Flow (perm)	497	5014	0	123	3525	0	0	1347	1583	0	1445	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20			3				305		101	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1093			275			251			161	
Travel Time (s)		21.3			5.4			5.7			3.7	
Peak Hour Factor	0.72	0.50	0.76	0.50	0.92	0.50	0.91	0.85	0.62	0.58	0.90	0.84
Adj. Flow (vph)	15	2960	309	1668	1045	28	116	5	619	14	0	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	15	3269	0	1668	1073	0	0	121	619	0	16	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2			6			4		4	8		
Detector Phase	5	2		1	6		4	4	4	8	8	

Austin Oaks Mixed Use Development
7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road

2031 Forecasted AM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	20.0		21.0	20.0		15.0	15.0	15.0	11.0	11.0	
Minimum Split (s)	10.0	25.0		26.0	25.0		20.0	20.0	20.0	16.0	16.0	
Total Split (s)	29.0	72.0		29.0	72.0		29.0	29.0	29.0	29.0	29.0	
Total Split (%)	22.3%	55.4%		22.3%	55.4%		22.3%	22.3%	22.3%	22.3%	22.3%	
Maximum Green (s)	24.0	67.0		24.0	67.0		24.0	24.0	24.0	24.0	24.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0			5.0	5.0		5.0	
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min		Min	C-Min		Min	Min	Min	Min	Min	
Walk Time (s)							6.0	6.0	6.0	6.0	6.0	
Flash Dont Walk (s)							24.0	24.0	24.0	24.0	24.0	
Pedestrian Calls (#/hr)							0	0	0	0	0	
Act Effect Green (s)	67.9	67.0		88.8	88.8			24.0	24.0		24.0	
Actuated g/C Ratio	0.52	0.52		0.68	0.68			0.18	0.18		0.18	
v/c Ratio	0.04	1.26		4.31	0.45			0.49	1.15		0.05	
Control Delay	16.5	150.1		1501.9	14.8			55.1	110.1		0.2	
Queue Delay	0.0	0.0		0.0	0.7			0.0	0.0		0.0	
Total Delay	16.5	150.1		1501.9	15.5			55.1	110.1		0.2	
LOS	B	F		F	B			E	F		A	
Approach Delay		149.5			920.0			101.1			0.2	
Approach LOS		F			F			F			A	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 55 (42%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 4.31

Intersection Signal Delay: 455.3

Intersection LOS: F

Intersection Capacity Utilization 105.0%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road



Austin Oaks Mixed Use Development
10: Hart Lane & Greystone Drive

2031 Forecasted AM
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	63	246	42	102	92	11	65	246	170	20	400	38
Peak Hour Factor	0.80	0.65	0.65	0.78	0.88	0.58	0.75	0.81	0.60	0.58	0.69	0.57
Hourly flow rate (vph)	79	378	65	131	105	19	87	304	283	34	580	67
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	457	65	235	19	674	681						
Volume Left (vph)	79	0	131	0	87	34						
Volume Right (vph)	0	65	0	19	283	67						
Hadj (s)	0.12	-0.67	0.31	-0.67	-0.19	-0.01						
Departure Headway (s)	9.0	8.3	9.9	9.0	8.4	8.6						
Degree Utilization, x	1.0	0.15	0.65	0.05	1.0	1.0						
Capacity (veh/h)	402	430	354	395	433	424						
Control Delay (s)	120.3	11.5	28.4	11.2	289.5	311.6						
Approach Delay (s)	106.8		27.1		289.5	311.6						
Approach LOS	F		D		F	F						
Intersection Summary												
Delay			220.5									
Level of Service			F									
Intersection Capacity Utilization			87.1%	ICU Level of Service				E				
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
20: Wood Hollow Drive & Greystone Drive

2031 Forecasted AM
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	89	163	212	71	156	39	30	339	56	31	236	69
Peak Hour Factor	0.81	0.89	0.64	0.80	0.82	0.72	0.53	0.88	0.79	0.68	0.85	0.68
Hourly flow rate (vph)	110	183	331	89	190	54	57	385	71	46	278	101
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2				
Volume Total (vph)	293	331	279	54	249	263	184	240				
Volume Left (vph)	110	0	89	0	57	0	46	0				
Volume Right (vph)	0	331	0	54	0	71	0	101				
Hadj (s)	0.22	-0.67	0.19	-0.67	0.15	-0.15	0.16	-0.26				
Departure Headway (s)	8.4	7.5	8.8	7.9	8.5	8.2	8.6	8.2				
Degree Utilization, x	0.68	0.69	0.68	0.12	0.59	0.60	0.44	0.55				
Capacity (veh/h)	413	465	394	430	409	423	403	417				
Control Delay (s)	26.5	24.5	27.4	10.8	21.6	21.4	17.1	19.6				
Approach Delay (s)	25.4		24.7		21.5		18.5					
Approach LOS	D		C		C		C					
Intersection Summary												
Delay			22.7									
Level of Service			C									
Intersection Capacity Utilization			60.6%	ICU Level of Service					B			
Analysis Period (min)			15									



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations					 	
Volume (veh/h)	0	283	0	0	4341	196
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.79	0.92	0.92	0.96	0.86
Hourly flow rate (vph)	0	358	0	0	4522	228
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	4636	1621	4750			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	4636	1621	4750			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	0	100			
cM capacity (veh/h)	1	92	21			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	358	1809	1809	1132		
Volume Left	0	0	0	0		
Volume Right	358	0	0	228		
cSH	92	1700	1700	1700		
Volume to Capacity	3.90	1.06	1.06	0.67		
Queue Length 95th (ft)	Err	0	0	0		
Control Delay (s)	Err	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	Err	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay		701.2				
Intersection Capacity Utilization		112.4%		ICU Level of Service		H
Analysis Period (min)		15				



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations					  	
Volume (veh/h)	0	95	0	0	3597	501
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.50	0.92	0.92	0.95	0.75
Hourly flow rate (vph)	0	190	0	0	3786	668
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	4120	1596	4454			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	4120	1596	4454			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	0	100			
cM capacity (veh/h)	2	95	28			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	190	1515	1515	1425		
Volume Left	0	0	0	0		
Volume Right	190	0	0	668		
cSH	95	1700	1700	1700		
Volume to Capacity	1.99	0.89	0.89	0.84		
Queue Length 95th (ft)	405	0	0	0		
Control Delay (s)	554.0	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	554.0	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay		22.7				
Intersection Capacity Utilization		93.2%		ICU Level of Service		F
Analysis Period (min)		15				

Austin Oaks Mixed Use Development
50: Executive Center Drive & Wood Hollow Drive

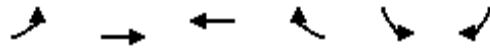
2031 Forecasted AM
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	56	310	181	246	271	246	43	78	38	86	205	28
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.67	0.91	1.00	0.86	0.91	0.91	0.50	0.46	0.50	0.25	0.56	0.47
Hourly flow rate (vph)	84	341	181	286	298	270	86	170	76	344	366	60
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh												
Upstream signal (ft)					522							
pX, platoon unblocked	0.43						0.43	0.43		0.43	0.43	0.43
vC, conflicting volume	568			522			1846	1739	431	1764	1694	433
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			522			2300	2052	431	2111	1948	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	88			73			0	0	88	0	0	87
cM capacity (veh/h)	702			1045			0	15	624	0	18	469
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	605	854	332	770								
Volume Left	84	286	86	344								
Volume Right	181	270	76	60								
cSH	702	1045	0	0								
Volume to Capacity	0.12	0.27	Err	Err								
Queue Length 95th (ft)	10	28	Err	Err								
Control Delay (s)	3.1	5.9	Err	Err								
Lane LOS	A	A	F	F								
Approach Delay (s)	3.1	5.9	Err	Err								
Approach LOS			F	F								
Intersection Summary												
Average Delay			Err									
Intersection Capacity Utilization			106.3%	ICU Level of Service					G			
Analysis Period (min)			15									

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	277	126	233	361	72	166
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.79	0.67	0.83	0.72	0.75	0.46
Hourly flow rate (vph)	351	188	281	501	96	361
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			539		1507	445
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			539		1507	445
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			73		1	41
cM capacity (veh/h)			1030		97	613
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	539	782	457			
Volume Left	0	281	96			
Volume Right	188	0	361			
cSH	1700	1030	289			
Volume to Capacity	0.32	0.27	1.58			
Queue Length 95th (ft)	0	28	682			
Control Delay (s)	0.0	5.9	309.2			
Lane LOS		A	F			
Approach Delay (s)	0.0	5.9	309.2			
Approach LOS			F			
Intersection Summary						
Average Delay		82.1				
Intersection Capacity Utilization		78.3%		ICU Level of Service		D
Analysis Period (min)		15				



Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations							
Volume (veh/h)	156	299	210	1135	1571	413	
Sign Control	Stop			Free	Free		
Grade	0%			0%	0%		
Peak Hour Factor	0.85	0.87	0.86	0.88	0.89	0.67	
Hourly flow rate (vph)	184	344	244	1290	1765	616	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None	None		
Median storage veh							
Upstream signal (ft)				1093			
pX, platoon unblocked	0.88						
vC, conflicting volume	3207	1191	1765				
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	3235	1191	1765				
tC, single (s)	6.8	6.9	4.1				
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2				
p0 queue free %	0	0	30				
cM capacity (veh/h)	2	180	350				
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	184	344	244	645	645	1177	1205
Volume Left	184	0	244	0	0	0	0
Volume Right	0	344	0	0	0	0	616
cSH	2	180	350	1700	1700	1700	1700
Volume to Capacity	95.95	1.91	0.70	0.38	0.38	0.69	0.71
Queue Length 95th (ft)	Err	638	126	0	0	0	0
Control Delay (s)	Err	473.0	36.0	0.0	0.0	0.0	0.0
Lane LOS	F	F	E				
Approach Delay (s)	3789.2		5.7	0.0			
Approach LOS	F						
Intersection Summary							
Average Delay			451.6				
Intersection Capacity Utilization			86.9%	ICU Level of Service		E	
Analysis Period (min)			15				



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	270	243	305	196	13	53
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	293	264	332	213	14	58
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	545				1289	438
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	545				1289	438
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	71				89	91
cM capacity (veh/h)	1024				129	619
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	558	545	72			
Volume Left	293	0	14			
Volume Right	0	213	58			
cSH	1024	1700	354			
Volume to Capacity	0.29	0.32	0.20			
Queue Length 95th (ft)	30	0	19			
Control Delay (s)	6.8	0.0	17.7			
Lane LOS	A		C			
Approach Delay (s)	6.8	0.0	17.7			
Approach LOS			C			
Intersection Summary						
Average Delay			4.3			
Intersection Capacity Utilization			69.7%	ICU Level of Service		C
Analysis Period (min)			15			

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	0	0	358	513	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	389	558	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	947	558	558			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	947	558	558			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	290	529	1013			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	0	389	558			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1013	1700			
Volume to Capacity	0.00	0.00	0.33			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		30.3%		ICU Level of Service	A	
Analysis Period (min)		15				

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	0	0	358	513	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	389	558	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	947	558	558			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	947	558	558			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	290	529	1013			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	0	389	558			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1013	1700			
Volume to Capacity	0.00	0.00	0.33			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		30.3%		ICU Level of Service	A	
Analysis Period (min)		15				

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	14	31	214	144	133	499
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	15	34	233	157	145	542
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1142	311			389	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1142	311			389	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	92	95			88	
cM capacity (veh/h)	194	729			1169	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	49	389	687			
Volume Left	15	0	145			
Volume Right	34	157	0			
cSH	393	1700	1169			
Volume to Capacity	0.12	0.23	0.12			
Queue Length 95th (ft)	11	0	11			
Control Delay (s)	15.5	0.0	3.0			
Lane LOS	C		A			
Approach Delay (s)	15.5	0.0	3.0			
Approach LOS	C					
Intersection Summary						
Average Delay			2.5			
Intersection Capacity Utilization			67.0%	ICU Level of Service		C
Analysis Period (min)			15			

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	315	65	18	397
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	342	71	20	432
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	848	378			413	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	848	378			413	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			98	
cM capacity (veh/h)	326	669			1146	
Direction, Lane #	NB 1	SB 1				
Volume Total	413	451				
Volume Left	0	20				
Volume Right	71	0				
cSH	1700	1146				
Volume to Capacity	0.24	0.02				
Queue Length 95th (ft)	0	1				
Control Delay (s)	0.0	0.5				
Lane LOS		A				
Approach Delay (s)	0.0	0.5				
Approach LOS						
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		38.9%		ICU Level of Service		A
Analysis Period (min)		15				

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	7	23	291	24	21	408
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	8	25	316	26	23	443
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	818	329			342	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	818	329			342	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	98	96			98	
cM capacity (veh/h)	339	712			1217	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	33	342	466			
Volume Left	8	0	23			
Volume Right	25	26	0			
cSH	567	1700	1217			
Volume to Capacity	0.06	0.20	0.02			
Queue Length 95th (ft)	5	0	1			
Control Delay (s)	11.7	0.0	0.6			
Lane LOS	B		A			
Approach Delay (s)	11.7	0.0	0.6			
Approach LOS	B					
Intersection Summary						
Average Delay		0.8				
Intersection Capacity Utilization		48.6%		ICU Level of Service	A	
Analysis Period (min)		15				

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	4	311	3	7	429
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	4	338	3	8	466
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	821	340			341	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	821	340			341	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	99			99	
cM capacity (veh/h)	342	703			1218	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	4	341	474			
Volume Left	0	0	8			
Volume Right	4	3	0			
cSH	703	1700	1218			
Volume to Capacity	0.01	0.20	0.01			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	10.2	0.0	0.2			
Lane LOS	B		A			
Approach Delay (s)	10.2	0.0	0.2			
Approach LOS	B					
Intersection Summary						
Average Delay		0.2				
Intersection Capacity Utilization		38.2%		ICU Level of Service		A
Analysis Period (min)		15				

Austin Oaks Mixed Use Development
800: Executive Center Drive & Driveway 8

2031 Forecasted AM

5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	3	0	47	47	0	0	18	279	18	0	342	1
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	3	0	51	51	0	0	20	303	20	0	372	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	724	734	372	776	725	313	373			323		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	724	734	372	776	725	313	373			323		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	100	92	82	100	100	98			100		
cM capacity (veh/h)	336	342	674	287	346	727	1186			1237		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	54	51	342	373								
Volume Left	3	51	20	0								
Volume Right	51	0	20	1								
cSH	635	287	1186	1237								
Volume to Capacity	0.09	0.18	0.02	0.00								
Queue Length 95th (ft)	7	16	1	0								
Control Delay (s)	11.2	20.2	0.6	0.0								
Lane LOS	B	C	A									
Approach Delay (s)	11.2	20.2	0.6	0.0								
Approach LOS	B	C										
Intersection Summary												
Average Delay			2.3									
Intersection Capacity Utilization			46.6%		ICU Level of Service				A			
Analysis Period (min)			15									

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	21	282	0	1	343
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	23	307	0	1	373
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	682	307			307	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	682	307			307	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	97			100	
cM capacity (veh/h)	415	733			1254	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	23	307	374			
Volume Left	0	0	1			
Volume Right	23	0	0			
cSH	733	1700	1254			
Volume to Capacity	0.03	0.18	0.00			
Queue Length 95th (ft)	2	0	0			
Control Delay (s)	10.1	0.0	0.0			
Lane LOS	B		A			
Approach Delay (s)	10.1	0.0	0.0			
Approach LOS	B					
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		28.8%		ICU Level of Service		A
Analysis Period (min)		15				

Austin Oaks Mixed Use Development
1000: Executive Center Drive & Driveway 10

2031 Forecasted AM
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	76	0	5	3	0	53	2	299	2	11	336	12
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	83	0	5	3	0	58	2	325	2	12	365	13
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	784	727	372	732	733	326	378			327		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	784	727	372	732	733	326	378			327		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	71	100	99	99	100	92	100			99		
cM capacity (veh/h)	283	346	674	331	344	715	1180			1232		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	88	61	329	390								
Volume Left	83	3	2	12								
Volume Right	5	58	2	13								
cSH	294	673	1180	1232								
Volume to Capacity	0.30	0.09	0.00	0.01								
Queue Length 95th (ft)	31	7	0	1								
Control Delay (s)	22.4	10.9	0.1	0.3								
Lane LOS	C	B	A	A								
Approach Delay (s)	22.4	10.9	0.1	0.3								
Approach LOS	C	B										
Intersection Summary												
Average Delay			3.2									
Intersection Capacity Utilization			43.7%		ICU Level of Service				A			
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
1100: Driveway 11 & Wood Hollow Drive

2031 Forecasted AM
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	353	81	293	776	0	22	0	113	22	0	12
Sign Control		Free			Free			Stop			Stop	
Grade		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
Hourly flow rate (vph)	0	384	88	318	843	0	24	0	123	24	0	13
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh												
Upstream signal (ft)					251							
pX, platoon unblocked	0.36						0.36	0.36		0.36	0.36	0.36
vC, conflicting volume	843			472			1921	1908	428	2031	1952	843
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			472			2674	2638	428	2980	2760	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			71			0	100	80	0	100	97
cM capacity (veh/h)	582			1090			4	6	627	2	5	389
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1							
Volume Total	472	1162	24	123	37							
Volume Left	0	318	24	0	24							
Volume Right	88	0	0	123	13							
cSH	1700	1090	4	627	3							
Volume to Capacity	0.28	0.29	6.12	0.20	12.36							
Queue Length 95th (ft)	0	31	Err	18	Err							
Control Delay (s)	0.0	6.7	Err	12.1	Err							
Lane LOS		A	F	B	F							
Approach Delay (s)	0.0	6.7	1639.6		Err							
Approach LOS			F		F							
Intersection Summary												
Average Delay			340.0									
Intersection Capacity Utilization			99.2%		ICU Level of Service				F			
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
1: Hart Lane & Far West Boulevard

2031 Forecasted PM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	101	745	49	225	759	191	76	214	173	213	186	114
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	170		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.988				0.850		0.945			0.955	
Flt Protected	0.950			0.950				0.992			0.986	
Satd. Flow (prot)	1770	3497	0	1770	3539	1583	0	3318	0	0	3333	0
Flt Permitted	0.108			0.167				0.992			0.986	
Satd. Flow (perm)	201	3497	0	311	3539	1583	0	3318	0	0	3333	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9				225		78			43	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		362			1265			236			237	
Travel Time (s)		7.1			24.6			5.4			5.4	
Peak Hour Factor	0.73	0.83	0.61	0.69	0.83	0.85	0.80	0.80	0.82	0.90	0.56	0.47
Adj. Flow (vph)	138	898	80	326	914	225	95	268	211	237	332	243
Shared Lane Traffic (%)												
Lane Group Flow (vph)	138	978	0	326	914	225	0	574	0	0	812	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Split	NA		Split	NA	
Protected Phases	5	2		1	6		4	4		8	8	
Permitted Phases	2			6		6						
Detector Phase	5	2		1	6	6	4	4		8	8	

Austin Oaks Mixed Use Development
1: Hart Lane & Far West Boulevard

2031 Forecasted PM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	8.0	18.0		8.0	18.0	18.0	12.0	12.0		12.0	12.0	
Minimum Split (s)	13.0	24.0		13.0	24.0	24.0	33.0	33.0		33.0	33.0	
Total Split (s)	13.0	62.0		15.0	64.0	64.0	28.0	28.0		25.0	25.0	
Total Split (%)	10.0%	47.7%		11.5%	49.2%	49.2%	21.5%	21.5%		19.2%	19.2%	
Maximum Green (s)	8.0	57.0		10.0	59.0	59.0	23.0	23.0		20.0	20.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0		5.0			5.0	
Lead/Lag	Lead	Lead		Lag	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	
Walk Time (s)		7.0			7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		12.0			12.0	12.0	21.0	21.0		21.0	21.0	
Pedestrian Calls (#/hr)		0			0	0	0	0		0	0	
Act Effect Green (s)	45.2	45.2		59.0	59.0	59.0		22.3			20.7	
Actuated g/C Ratio	0.35	0.35		0.45	0.45	0.45		0.17			0.16	
v/c Ratio	0.83	0.80		0.85	0.57	0.27		0.91			1.43	
Control Delay	67.1	43.0		46.1	11.3	1.2		64.4			242.5	
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Delay	67.1	43.0		46.1	11.3	1.2		64.4			242.5	
LOS	E	D		D	B	A		E			F	
Approach Delay		46.0			17.5			64.4			242.5	
Approach LOS		D			B			E			F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 20 (15%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 135

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.43

Intersection Signal Delay: 78.4

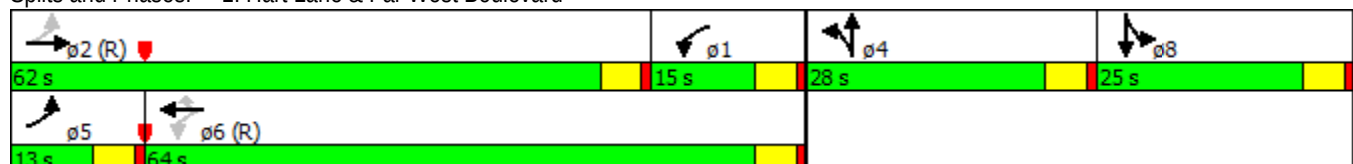
Intersection LOS: E

Intersection Capacity Utilization 79.9%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 1: Hart Lane & Far West Boulevard



Austin Oaks Mixed Use Development
2: Wood Hollow Drive & Far West Boulevard

2031 Forecasted PM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	193	941	77	282	846	163	124	284	393	193	197	159
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	335		0	165		0	120		120	0		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	75			35			50			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.931	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1734	0
Flt Permitted	0.196			0.115			0.950			0.950		
Satd. Flow (perm)	365	3539	1583	214	3539	1583	1770	1863	1583	1770	1734	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			133			201			188		28	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1265			1235			599			222	
Travel Time (s)		24.6			24.1			13.6			5.0	
Peak Hour Factor	0.74	0.91	0.58	0.90	0.88	0.81	0.69	0.65	0.87	0.90	0.81	0.77
Adj. Flow (vph)	261	1034	133	313	961	201	180	437	452	214	243	206
Shared Lane Traffic (%)												
Lane Group Flow (vph)	261	1034	133	313	961	201	180	437	452	214	449	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	L NA	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		3	3		7	7	
Permitted Phases	6		6	2		2			3			
Detector Phase	1	6	6	5	2	2	3	3	3	7	7	

Austin Oaks Mixed Use Development
2: Wood Hollow Drive & Far West Boulevard

2031 Forecasted PM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	8.0	8.0	8.0	5.0	5.0	
Minimum Split (s)	10.0	22.0	22.0	10.0	22.0	22.0	31.0	31.0	31.0	31.0	31.0	
Total Split (s)	20.0	68.0	68.0	16.0	64.0	64.0	20.0	20.0	20.0	26.0	26.0	
Total Split (%)	15.4%	52.3%	52.3%	12.3%	49.2%	49.2%	15.4%	15.4%	15.4%	20.0%	20.0%	
Maximum Green (s)	15.0	63.0	63.0	11.0	59.0	59.0	15.0	15.0	15.0	21.0	21.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
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	
Recall Mode	None	C-Min	C-Min	Max	C-Min	C-Min	Min	Min	Min	Max	Max	
Walk Time (s)		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		12.0	12.0		12.0	12.0	21.0	21.0	21.0	21.0	21.0	
Pedestrian Calls (#/hr)		0	0		0	0	0	0	0	0	0	
Act Effect Green (s)	50.7	50.7	50.7	45.8	45.8	45.8	27.3	27.3	27.3	21.0	21.0	
Actuated g/C Ratio	0.39	0.39	0.39	0.35	0.35	0.35	0.21	0.21	0.21	0.16	0.16	
v/c Ratio	0.83	0.75	0.19	1.52	0.77	0.29	0.48	1.12	0.94	0.75	1.48	
Control Delay	38.9	14.3	0.8	267.2	42.2	6.9	52.8	127.9	58.6	69.2	269.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	38.9	14.3	0.8	267.2	42.2	6.9	52.8	127.9	58.6	69.2	269.5	
LOS	D	B	A	F	D	A	D	F	E	E	F	
Approach Delay		17.5			85.2			85.9			204.8	
Approach LOS		B			F			F			F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 20 (15%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 135

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.52

Intersection Signal Delay: 81.6

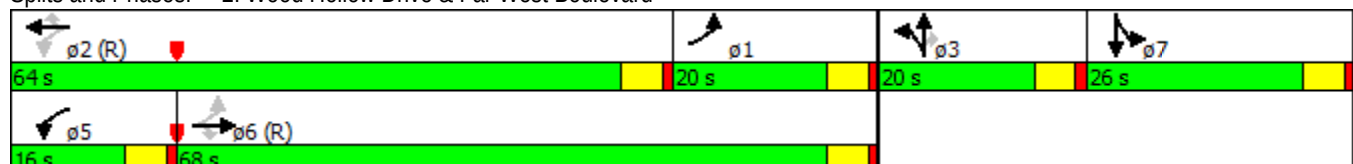
Intersection LOS: F

Intersection Capacity Utilization 85.3%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 2: Wood Hollow Drive & Far West Boulevard



Austin Oaks Mixed Use Development
3: Far West Boulevard & Mopac SB FR

2031 Forecasted PM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑						↑↑	↑
Volume (vph)	0	1420	475	13	522	0	0	0	0	463	781	1161
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									0.850
Flt Protected				0.950							0.980	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	3468	1583
Flt Permitted				0.950							0.980	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	3468	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			233									253
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		1235			406			400			362	
Travel Time (s)		24.1			7.9			5.5			4.9	
Peak Hour Factor	0.92	0.91	0.93	0.67	0.93	0.92	0.92	0.92	0.92	0.78	0.92	0.95
Adj. Flow (vph)	0	1560	511	19	561	0	0	0	0	594	849	1222
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1560	511	19	561	0	0	0	0	0	1443	1222
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	L NA	Right	Left	Left	Right	Left	Left	R NA
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	custom	Prot	NA					custom	NA	custom
Protected Phases		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Permitted Phases										4		
Detector Phase		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Switch Phase												
Minimum Initial (s)				10.0								
Minimum Split (s)				15.0								

Lane Group	ø1	ø2	ø4	ø8	ø22
Lane Configurations					
Volume (vph)					
Ideal Flow (vphpl)					
Lane Util. Factor					
Frt					
Flt Protected					
Satd. Flow (prot)					
Flt Permitted					
Satd. Flow (perm)					
Right Turn on Red					
Satd. Flow (RTOR)					
Link Speed (mph)					
Link Distance (ft)					
Travel Time (s)					
Peak Hour Factor					
Adj. Flow (vph)					
Shared Lane Traffic (%)					
Lane Group Flow (vph)					
Enter Blocked Intersection					
Lane Alignment					
Median Width(ft)					
Link Offset(ft)					
Crosswalk Width(ft)					
Two way Left Turn Lane					
Headway Factor					
Turning Speed (mph)					
Number of Detectors					
Detector Template					
Leading Detector (ft)					
Trailing Detector (ft)					
Detector 1 Position(ft)					
Detector 1 Size(ft)					
Detector 1 Type					
Detector 1 Channel					
Detector 1 Extend (s)					
Detector 1 Queue (s)					
Detector 1 Delay (s)					
Detector 2 Position(ft)					
Detector 2 Size(ft)					
Detector 2 Type					
Detector 2 Channel					
Detector 2 Extend (s)					
Turn Type					
Protected Phases	1	2	4	8	22
Permitted Phases					
Detector Phase					
Switch Phase					
Minimum Initial (s)	4.0	13.0	10.0	4.0	1.0
Minimum Split (s)	9.0	18.0	15.0	9.0	6.0

Austin Oaks Mixed Use Development
3: Far West Boulevard & Mopac SB FR

2031 Forecasted PM
5/15/2014

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)				41.0								
Total Split (%)				31.5%								
Maximum Green (s)				36.0								
Yellow Time (s)				4.0								
All-Red Time (s)				1.0								
Lost Time Adjust (s)				0.0								
Total Lost Time (s)				5.0								
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0								
Recall Mode				Min								
Act Effect Green (s)		44.0	24.0	36.0	65.0						35.0	55.0
Actuated g/C Ratio		0.34	0.18	0.28	0.50						0.27	0.42
v/c Ratio		1.30	1.06	0.04	0.32						1.55	1.50
Control Delay		177.9	80.4	18.1	3.1						284.9	256.0
Queue Delay		2.4	0.0	0.0	0.4						0.0	0.0
Total Delay		180.3	80.4	18.1	3.5						284.9	256.0
LOS		F	F	B	A						F	F
Approach Delay		155.7			4.0						271.6	
Approach LOS		F			A						F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 140

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.55

Intersection Signal Delay: 197.2

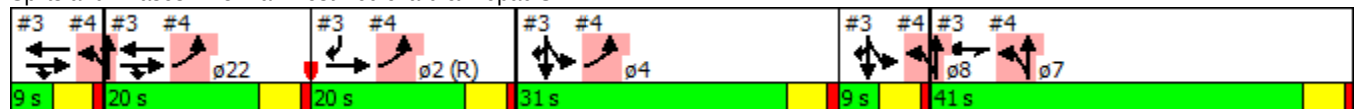
Intersection LOS: F

Intersection Capacity Utilization 128.9%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 3: Far West Boulevard & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø8	ø22
Total Split (s)	9.0	20.0	31.0	9.0	20.0
Total Split (%)	7%	15%	24%	7%	15%
Maximum Green (s)	4.0	15.0	26.0	4.0	15.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)					
Total Lost Time (s)					
Lead/Lag		Lag	Lead	Lag	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	C-Min	Min	Min	None
Act Effect Green (s)					
Actuated g/C Ratio					
v/c Ratio					
Control Delay					
Queue Delay					
Total Delay					
LOS					
Approach Delay					
Approach LOS					
Intersection Summary					

Austin Oaks Mixed Use Development
4: Mopac NB FR & Far West Boulevard

2031 Forecasted PM
5/15/2014

												
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Lane Configurations												
Volume (vph)	1895	0	457	218	0	0						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Lane Util. Factor	0.97	1.00	0.95	0.95	1.00	1.00						
Frt												
Flt Protected	0.950		0.950	0.997								
Satd. Flow (prot)	3433	0	1681	1764	0	0						
Flt Permitted	0.950		0.950	0.997								
Satd. Flow (perm)	3433	0	1681	1764	0	0						
Right Turn on Red		Yes				Yes						
Satd. Flow (RTOR)												
Link Speed (mph)	35			50	50							
Link Distance (ft)	406			308	472							
Travel Time (s)	7.9			4.2	6.4							
Peak Hour Factor	0.90	0.92	0.93	0.25	0.92	0.92						
Adj. Flow (vph)	2106	0	491	872	0	0						
Shared Lane Traffic (%)			10%									
Lane Group Flow (vph)	2106	0	442	921	0	0						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Right	Left	Left	Left	Right						
Median Width(ft)	24			12	12							
Link Offset(ft)	0			0	0							
Crosswalk Width(ft)	16			16	16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00						
Turning Speed (mph)	15	9	15			9						
Number of Detectors	1		1	2								
Detector Template	Left		Left	Thru								
Leading Detector (ft)	20		20	100								
Trailing Detector (ft)	0		0	0								
Detector 1 Position(ft)	0		0	0								
Detector 1 Size(ft)	20		20	6								
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0								
Detector 1 Queue (s)	0.0		0.0	0.0								
Detector 1 Delay (s)	0.0		0.0	0.0								
Detector 2 Position(ft)				94								
Detector 2 Size(ft)				6								
Detector 2 Type				Cl+Ex								
Detector 2 Channel												
Detector 2 Extend (s)				0.0								
Turn Type	Prot		Split	NA								
Protected Phases	2 4 22		1 7 8	1 7 8			1	2	4	7	8	22
Permitted Phases												
Detector Phase	2 4 22		1 7 8	1 7 8								
Switch Phase												
Minimum Initial (s)							4.0	13.0	10.0	10.0	4.0	1.0
Minimum Split (s)							9.0	18.0	15.0	15.0	9.0	6.0

Austin Oaks Mixed Use Development
4: Mopac NB FR & Far West Boulevard

2031 Forecasted PM
5/15/2014



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Total Split (s)							9.0	20.0	31.0	41.0	9.0	20.0
Total Split (%)							7%	15%	24%	32%	7%	15%
Maximum Green (s)							4.0	15.0	26.0	36.0	4.0	15.0
Yellow Time (s)							4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)							1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag								Lag	Lead		Lag	Lead
Lead-Lag Optimize?								Yes	Yes		Yes	Yes
Vehicle Extension (s)							3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode							Min	C-Min	Min	Min	Min	None
Act Effect Green (s)	66.0		54.0	54.0								
Actuated g/C Ratio	0.51		0.42	0.42								
v/c Ratio	1.21		0.63	1.26								
Control Delay	114.9		35.2	160.9								
Queue Delay	0.9		0.0	0.0								
Total Delay	115.8		35.2	160.9								
LOS	F		D	F								
Approach Delay	115.8			120.1								
Approach LOS	F			F								

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 140

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.55

Intersection Signal Delay: 117.5

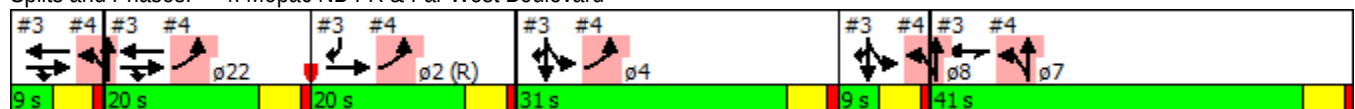
Intersection LOS: F

Intersection Capacity Utilization 142.0%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 4: Mopac NB FR & Far West Boulevard



Austin Oaks Mixed Use Development
5: Spicewood Springs Road & Mopac SB FR

2031 Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑					↑	↑↑	↑
Volume (vph)	0	2216	456	853	1929	0	0	0	0	764	393	564
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	60		0	0		0	150		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			75			25			75		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.977	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1610	3312	1583
Flt Permitted				0.950						0.950	0.977	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1610	3312	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			160									160
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		294			386			782			882	
Travel Time (s)		5.7			7.5			10.7			12.0	
Peak Hour Factor	0.92	0.81	0.90	0.87	0.86	0.92	0.92	0.92	0.92	0.93	0.87	0.94
Adj. Flow (vph)	0	2736	507	980	2243	0	0	0	0	822	452	600
Shared Lane Traffic (%)										49%		
Lane Group Flow (vph)	0	2736	507	980	2243	0	0	0	0	419	855	600
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Prot	Prot	NA					Split	NA	Prot
Protected Phases		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5
Permitted Phases												
Detector Phase		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

Austin Oaks Mixed Use Development
5: Spicewood Springs Road & Mopac SB FR

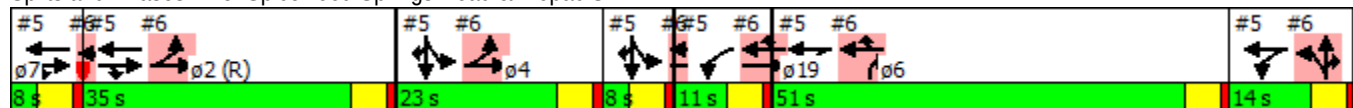
2031 Forecasted PM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)		38.0	38.0	71.0	103.0					26.0	26.0	26.0
Actuated g/C Ratio		0.25	0.25	0.47	0.69					0.17	0.17	0.17
v/c Ratio		3.05	0.97	1.17	0.92					1.50	1.49	1.48
Control Delay		943.2	41.5	107.5	17.6					284.5	270.6	258.3
Queue Delay		1.7	18.1	1.3	46.1					0.0	0.0	0.0
Total Delay		944.9	59.6	108.8	63.7					284.5	270.6	258.3
LOS		F	E	F	E					F	F	F
Approach Delay		806.5			77.4						269.8	
Approach LOS		F			E						F	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 89 (59%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 3.05
Intersection Signal Delay: 404.1
Intersection LOS: F
Intersection Capacity Utilization 173.7%
ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 5: Spicewood Springs Road & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0	5.0	6.0
Minimum Split (s)	8.0	15.0	10.0	8.0	15.0	10.0	11.0
Total Split (s)	8.0	35.0	23.0	8.0	51.0	14.0	11.0
Total Split (%)	5%	23%	15%	5%	34%	9%	7%
Maximum Green (s)	3.0	30.0	18.0	3.0	46.0	9.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Austin Oaks Mixed Use Development
6: Mopac NB FR & Spicewood Springs Road

2031 Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	959	1681	0	0	1626	535	516	53	687	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		325	0		0	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	75			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.91	0.95	1.00	1.00	1.00
Frt						0.850		0.904	0.850			
Flt Protected	0.950						0.950	0.991				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	1681	1519	1504	0	0	0
Flt Permitted	0.950						0.950	0.991				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	1681	1519	1504	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						124		48	160			
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		386			594			563			407	
Travel Time (s)		7.5			11.6			7.7			5.6	
Peak Hour Factor	0.90	0.96	0.92	0.92	0.93	0.79	0.86	0.60	0.87	0.92	0.92	0.92
Adj. Flow (vph)	1066	1751	0	0	1748	677	600	88	790	0	0	0
Shared Lane Traffic (%)							15%		40%			
Lane Group Flow (vph)	1066	1751	0	0	1748	677	510	494	474	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Prot	Split	NA	custom			
Protected Phases	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			
Permitted Phases												
Detector Phase	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

Austin Oaks Mixed Use Development
6: Mopac NB FR & Spicewood Springs Road

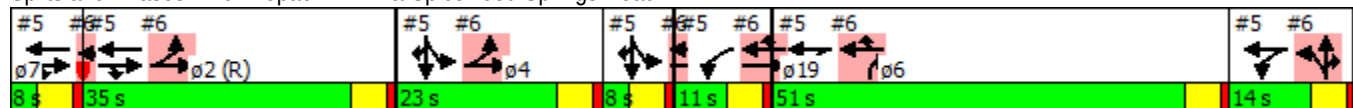
2031 Forecasted PM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)	53.0	72.0			65.0	65.0	17.0	17.0	60.0			
Actuated g/C Ratio	0.35	0.48			0.43	0.43	0.11	0.11	0.40			
v/c Ratio	1.71	1.03			1.14	0.90	2.68	2.31	0.68			
Control Delay	339.6	27.5			110.6	47.8	796.0	627.7	29.5			
Queue Delay	2.6	29.3			1.3	0.0	0.0	0.4	0.0			
Total Delay	342.3	56.8			111.9	47.8	796.0	628.1	29.5			
LOS	F	E			F	D	F	F	C			
Approach Delay		164.8			94.0			494.0				
Approach LOS		F			F			F				

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 89 (59%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 3.05
Intersection Signal Delay: 211.7 Intersection LOS: F
Intersection Capacity Utilization 173.7% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 6: Mopac NB FR & Spicewood Springs Road



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0	5.0	6.0
Minimum Split (s)	8.0	15.0	10.0	8.0	15.0	10.0	11.0
Total Split (s)	8.0	35.0	23.0	8.0	51.0	14.0	11.0
Total Split (%)	5%	23%	15%	5%	34%	9%	7%
Maximum Green (s)	3.0	30.0	18.0	3.0	46.0	9.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Austin Oaks Mixed Use Development
7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road

2031 Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	7	1328	90	509	1015	1	434	11	979	1	4	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	0		100	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.994							0.850		0.895	
Flt Protected	0.950			0.950				0.954			0.996	
Satd. Flow (prot)	1770	5055	0	1770	3539	0	0	1777	1583	0	1660	0
Flt Permitted	0.258			0.072				0.712			0.663	
Satd. Flow (perm)	481	5055	0	134	3539	0	0	1326	1583	0	1105	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6							314		21	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1093			275			251			161	
Travel Time (s)		21.3			5.4			5.7			3.7	
Peak Hour Factor	0.72	0.50	0.76	0.50	0.92	0.50	0.91	0.85	0.62	0.58	0.90	0.84
Adj. Flow (vph)	10	2656	118	1018	1103	2	477	13	1579	2	4	21
Shared Lane Traffic (%)												
Lane Group Flow (vph)	10	2774	0	1018	1105	0	0	490	1579	0	27	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2			6			4		4	8		
Detector Phase	5	2		1	6		4	4	4	8	8	

Austin Oaks Mixed Use Development
7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road

2031 Forecasted PM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	20.0		21.0	20.0		15.0	15.0	15.0	11.0	11.0	
Minimum Split (s)	10.0	25.0		26.0	25.0		35.0	35.0	35.0	35.0	35.0	
Total Split (s)	29.0	82.0		34.0	87.0		34.0	34.0	34.0	34.0	34.0	
Total Split (%)	19.3%	54.7%		22.7%	58.0%		22.7%	22.7%	22.7%	22.7%	22.7%	
Maximum Green (s)	24.0	77.0		29.0	82.0		29.0	29.0	29.0	29.0	29.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0			5.0	5.0		5.0	
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min		Min	C-Min		Min	Min	Min	Min	Min	
Walk Time (s)							6.0	6.0	6.0	6.0	6.0	
Flash Dont Walk (s)							24.0	24.0	24.0	24.0	24.0	
Pedestrian Calls (#/hr)							0	0	0	0	0	
Act Effect Green (s)	78.6	77.0		87.2	87.2			29.0	29.0		29.0	
Actuated g/C Ratio	0.52	0.51		0.58	0.58			0.19	0.19		0.19	
v/c Ratio	0.02	1.07		2.58	0.54			1.91	2.82		0.12	
Control Delay	18.6	74.5		736.5	23.4			457.0	843.1		23.8	
Queue Delay	0.0	15.4		0.0	0.8			0.0	5.7		0.0	
Total Delay	18.6	89.9		736.5	24.2			457.0	848.8		23.8	
LOS	B	F		F	C			F	F		C	
Approach Delay		89.7			365.7			756.0			23.8	
Approach LOS		F			F			F			C	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 55 (37%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 2.82

Intersection Signal Delay: 370.0

Intersection LOS: F

Intersection Capacity Utilization 109.9%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road



Austin Oaks Mixed Use Development
10: Hart Lane & Greystone Drive

2031 Forecasted PM
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	112	359	68	103	224	68	53	119	63	14	300	83
Peak Hour Factor	0.80	0.65	0.65	0.78	0.88	0.58	0.75	0.81	0.60	0.58	0.69	0.57
Hourly flow rate (vph)	140	552	105	132	255	117	71	147	105	24	435	146
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	692	105	387	117	323	605						
Volume Left (vph)	140	0	132	0	71	24						
Volume Right (vph)	0	105	0	117	105	146						
Hadj (s)	0.14	-0.67	0.20	-0.67	-0.12	-0.10						
Departure Headway (s)	9.4	8.6	9.5	8.6	9.3	9.0						
Degree Utilization, x	1.0	0.25	1.0	0.28	0.84	1.0						
Capacity (veh/h)	387	412	387	412	381	412						
Control Delay (s)	398.1	13.3	82.3	13.8	45.4	262.8						
Approach Delay (s)	347.6		66.4		45.4	262.8						
Approach LOS	F		F		E	F						
Intersection Summary												
Delay			217.2									
Level of Service			F									
Intersection Capacity Utilization			88.4%	ICU Level of Service				E				
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
20: Wood Hollow Drive & Greystone Drive

2031 Forecasted PM

5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	76	91	66	116	299	77	103	405	92	34	339	96
Peak Hour Factor	0.81	0.89	0.64	0.80	0.82	0.72	0.53	0.88	0.79	0.68	0.85	0.68
Hourly flow rate (vph)	94	102	103	145	365	107	194	460	116	50	399	141
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2				
Volume Total (vph)	196	103	510	107	424	347	249	341				
Volume Left (vph)	94	0	145	0	194	0	50	0				
Volume Right (vph)	0	103	0	107	0	116	0	141				
Hadj (s)	0.27	-0.67	0.18	-0.67	0.26	-0.20	0.13	-0.26				
Departure Headway (s)	9.7	8.8	9.0	8.2	8.8	8.4	9.0	8.7				
Degree Utilization, x	0.53	0.25	1.0	0.24	1.0	0.81	0.63	0.82				
Capacity (veh/h)	355	397	401	426	411	423	388	410				
Control Delay (s)	22.0	13.6	169.0	12.7	85.4	37.2	24.8	39.3				
Approach Delay (s)	19.1		141.9		63.7		33.2					
Approach LOS	C		F		F		D					
Intersection Summary												
Delay			71.1									
Level of Service			F									
Intersection Capacity Utilization			75.0%	ICU Level of Service					D			
Analysis Period (min)			15									



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	228	0	0	2384	451
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.79	0.92	0.92	0.96	0.86
Hourly flow rate (vph)	0	289	0	0	2483	524
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2746	1090	3008			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2746	1090	3008			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	0	100			
cM capacity (veh/h)	16	210	112			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	289	993	993	1021		
Volume Left	0	0	0	0		
Volume Right	289	0	0	524		
cSH	210	1700	1700	1700		
Volume to Capacity	1.37	0.58	0.58	0.60		
Queue Length 95th (ft)	410	0	0	0		
Control Delay (s)	238.7	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	238.7	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay			20.9			
Intersection Capacity Utilization			76.9%		ICU Level of Service	D
Analysis Period (min)			15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations					  	
Volume (veh/h)	0	446	0	0	2557	262
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.50	0.92	0.92	0.95	0.75
Hourly flow rate (vph)	0	892	0	0	2692	349
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2866	1072	3041			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2866	1072	3041			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	0	100			
cM capacity (veh/h)	13	216	109			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	892	1077	1077	888		
Volume Left	0	0	0	0		
Volume Right	892	0	0	349		
cSH	216	1700	1700	1700		
Volume to Capacity	4.13	0.63	0.63	0.52		
Queue Length 95th (ft)	Err	0	0	0		
Control Delay (s)	Err	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	Err	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay		2267.8				
Intersection Capacity Utilization		89.5%		ICU Level of Service	E	
Analysis Period (min)		15				

Austin Oaks Mixed Use Development
50: Executive Center Drive & Wood Hollow Drive

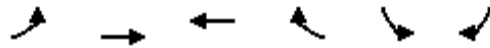
2031 Forecasted PM
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	63	399	65	65	275	263	205	285	245	73	127	148
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.67	0.91	1.00	0.86	0.91	0.91	0.50	0.46	0.50	0.25	0.56	0.47
Hourly flow rate (vph)	94	438	65	76	302	289	410	620	490	292	227	315
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh												
Upstream signal (ft)					522							
pX, platoon unblocked												
vC, conflicting volume	591			503			1685	1401	471	2057	1289	447
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	591			503			1685	1401	471	2057	1289	447
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	90			93			0	0	17	0	0	49
cM capacity (veh/h)	984			1061			0	118	593	0	137	612
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	597	667	1520	834								
Volume Left	94	76	410	292								
Volume Right	65	289	490	315								
cSH	984	1061	0	0								
Volume to Capacity	0.10	0.07	Err	Err								
Queue Length 95th (ft)	8	6	Err	Err								
Control Delay (s)	2.5	1.8	Err	Err								
Lane LOS	A	A	F	F								
Approach Delay (s)	2.5	1.8	Err	Err								
Approach LOS			F	F								
Intersection Summary												
Average Delay			Err									
Intersection Capacity Utilization			112.5%		ICU Level of Service				H			
Analysis Period (min)			15									

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	346	122	186	252	166	357
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.79	0.67	0.83	0.72	0.75	0.46
Hourly flow rate (vph)	438	182	224	350	221	776
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			620		1327	529
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			620		1327	529
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			77		0	0
cM capacity (veh/h)			960		131	550
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	620	574	997			
Volume Left	0	224	221			
Volume Right	182	0	776			
cSH	1700	960	322			
Volume to Capacity	0.36	0.23	3.10			
Queue Length 95th (ft)	0	23	Err			
Control Delay (s)	0.0	5.6	Err			
Lane LOS		A	F			
Approach Delay (s)	0.0	5.6	Err			
Approach LOS			F			
Intersection Summary						
Average Delay		4552.2				
Intersection Capacity Utilization		90.3%		ICU Level of Service	E	
Analysis Period (min)		15				



Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations							
Volume (veh/h)	365	405	201	1624	1097	261	
Sign Control	Stop			Free	Free		
Grade	0%			0%	0%		
Peak Hour Factor	0.85	0.87	0.86	0.88	0.89	0.67	
Hourly flow rate (vph)	429	466	234	1845	1233	390	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None	None		
Median storage veh							
Upstream signal (ft)				1093			
pX, platoon unblocked	0.81						
vC, conflicting volume	2818	811	1233				
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2775	811	1233				
tC, single (s)	6.8	6.9	4.1				
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2				
p0 queue free %	0	0	58				
cM capacity (veh/h)	7	322	561				
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	429	466	234	923	923	822	800
Volume Left	429	0	234	0	0	0	0
Volume Right	0	466	0	0	0	0	390
cSH	7	322	561	1700	1700	1700	1700
Volume to Capacity	59.47	1.44	0.42	0.54	0.54	0.48	0.47
Queue Length 95th (ft)	Err	622	51	0	0	0	0
Control Delay (s)	Err	247.2	15.9	0.0	0.0	0.0	0.0
Lane LOS	F	F	C				
Approach Delay (s)	4926.4		1.8	0.0			
Approach LOS	F						
Intersection Summary							
Average Delay			960.0				
Intersection Capacity Utilization			80.0%	ICU Level of Service		D	
Analysis Period (min)			15				



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	49	178	227	35	84	322
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	53	193	247	38	91	350
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	285				566	266
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	285				566	266
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	96				80	55
cM capacity (veh/h)	1277				465	773
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	247	285	441			
Volume Left	53	0	91			
Volume Right	0	38	350			
cSH	1277	1700	680			
Volume to Capacity	0.04	0.17	0.65			
Queue Length 95th (ft)	3	0	120			
Control Delay (s)	2.0	0.0	19.5			
Lane LOS	A		C			
Approach Delay (s)	2.0	0.0	19.5			
Approach LOS			C			
Intersection Summary						
Average Delay		9.4				
Intersection Capacity Utilization		60.7%		ICU Level of Service	B	
Analysis Period (min)		15				

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	0	0	549	227	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	597	247	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	843	247	247			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	843	247	247			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	334	792	1319			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	0	597	247			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1319	1700			
Volume to Capacity	0.00	0.00	0.15			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		32.2%		ICU Level of Service	A	
Analysis Period (min)		15				



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	0	0	549	227	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	597	247	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	843	247	247			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	843	247	247			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	334	792	1319			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	0	597	247			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1319	1700			
Volume to Capacity	0.00	0.00	0.15			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			32.2%	ICU Level of Service	A	
Analysis Period (min)			15			

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	58	130	457	92	88	169
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	63	141	497	100	96	184
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	922	547			597	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	922	547			597	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	77	74			90	
cM capacity (veh/h)	271	537			980	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	204	597	279			
Volume Left	63	0	96			
Volume Right	141	100	0			
cSH	412	1700	980			
Volume to Capacity	0.50	0.35	0.10			
Queue Length 95th (ft)	67	0	8			
Control Delay (s)	22.0	0.0	3.8			
Lane LOS	C		A			
Approach Delay (s)	22.0	0.0	3.8			
Approach LOS	C					
Intersection Summary						
Average Delay		5.1				
Intersection Capacity Utilization		64.6%		ICU Level of Service		C
Analysis Period (min)		15				

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	469	142	48	200
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	510	154	52	217
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	909	587			664	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	909	587			664	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			94	
cM capacity (veh/h)	288	510			925	
Direction, Lane #	NB 1	SB 1				
Volume Total	664	270				
Volume Left	0	52				
Volume Right	154	0				
cSH	1700	925				
Volume to Capacity	0.39	0.06				
Queue Length 95th (ft)	0	4				
Control Delay (s)	0.0	2.2				
Lane LOS		A				
Approach Delay (s)	0.0	2.2				
Approach LOS						
Intersection Summary						
Average Delay		0.6				
Intersection Capacity Utilization		53.2%		ICU Level of Service		A
Analysis Period (min)		15				

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	39	131	413	56	42	209
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	42	142	449	61	46	227
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	798	479			510	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	798	479			510	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	88	76			96	
cM capacity (veh/h)	340	586			1055	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	185	510	273			
Volume Left	42	0	46			
Volume Right	142	61	0			
cSH	503	1700	1055			
Volume to Capacity	0.37	0.30	0.04			
Queue Length 95th (ft)	42	0	3			
Control Delay (s)	16.3	0.0	1.8			
Lane LOS	C		A			
Approach Delay (s)	16.3	0.0	1.8			
Approach LOS	C					
Intersection Summary						
Average Delay		3.6				
Intersection Capacity Utilization		58.7%		ICU Level of Service		B
Analysis Period (min)		15				

									
Movement	WBL	WBR	NBT	NBR	SBL	SBT			
Lane Configurations									
Volume (veh/h)	3	31	538	6	10	248			
Sign Control	Stop		Free			Free			
Grade	0%		0%			0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92			
Hourly flow rate (vph)	3	34	585	7	11	270			
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type			None			None			
Median storage veh									
Upstream signal (ft)									
pX, platoon unblocked									
vC, conflicting volume	879	588			591				
vC1, stage 1 conf vol									
vC2, stage 2 conf vol									
vCu, unblocked vol	879	588			591				
tC, single (s)	6.4	6.2			4.1				
tC, 2 stage (s)									
tF (s)	3.5	3.3			2.2				
p0 queue free %	99	93			99				
cM capacity (veh/h)	314	509			984				
Direction, Lane #	WB 1	NB 1	SB 1						
Volume Total	37	591	280						
Volume Left	3	0	11						
Volume Right	34	7	0						
cSH	482	1700	984						
Volume to Capacity	0.08	0.35	0.01						
Queue Length 95th (ft)	6	0	1						
Control Delay (s)	13.1	0.0	0.4						
Lane LOS	B		A						
Approach Delay (s)	13.1	0.0	0.4						
Approach LOS	B								
Intersection Summary									
Average Delay		0.7							
Intersection Capacity Utilization		38.7%	ICU Level of Service	A					
Analysis Period (min)		15							

Austin Oaks Mixed Use Development
800: Executive Center Drive & Driveway 8

2031 Forecasted PM
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	1	0	25	24	0	0	75	421	73	2	209	3
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	1	0	27	26	0	0	82	458	79	2	227	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	893	933	229	921	895	497	230			537		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	893	933	229	921	895	497	230			537		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	97	89	100	100	94			100		
cM capacity (veh/h)	249	249	810	231	262	573	1337			1031		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	28	26	618	233								
Volume Left	1	26	82	2								
Volume Right	27	0	79	3								
cSH	746	231	1337	1031								
Volume to Capacity	0.04	0.11	0.06	0.00								
Queue Length 95th (ft)	3	9	5	0								
Control Delay (s)	10.0	22.5	1.6	0.1								
Lane LOS	B	C	A	A								
Approach Delay (s)	10.0	22.5	1.6	0.1								
Approach LOS	B	C										
Intersection Summary												
Average Delay			2.1									
Intersection Capacity Utilization			60.0%	ICU Level of Service				B				
Analysis Period (min)			15									

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	11	422	0	3	214
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	12	459	0	3	233
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	698	459			459	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	698	459			459	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	98			100	
cM capacity (veh/h)	405	602			1102	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	12	459	236			
Volume Left	0	0	3			
Volume Right	12	0	0			
cSH	602	1700	1102			
Volume to Capacity	0.02	0.27	0.00			
Queue Length 95th (ft)	2	0	0			
Control Delay (s)	11.1	0.0	0.1			
Lane LOS	B		A			
Approach Delay (s)	11.1	0.0	0.1			
Approach LOS	B					
Intersection Summary						
Average Delay		0.2				
Intersection Capacity Utilization		32.2%		ICU Level of Service	A	
Analysis Period (min)		15				

Austin Oaks Mixed Use Development
1000: Executive Center Drive & Driveway 10

2031 Forecasted PM
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	0	3	2	0	27	8	420	5	45	212	51
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	43	0	3	2	0	29	9	457	5	49	230	55
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	862	835	258	836	860	459	286			462		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	862	835	258	836	860	459	286			462		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	83	100	100	99	100	95	99			96		
cM capacity (veh/h)	252	288	780	274	278	602	1276			1099		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	47	32	471	335								
Volume Left	43	2	9	49								
Volume Right	3	29	5	55								
cSH	264	556	1276	1099								
Volume to Capacity	0.18	0.06	0.01	0.04								
Queue Length 95th (ft)	16	4	1	3								
Control Delay (s)	21.5	11.9	0.2	1.6								
Lane LOS	C	B	A	A								
Approach Delay (s)	21.5	11.9	0.2	1.6								
Approach LOS	C	B										
Intersection Summary												
Average Delay			2.3									
Intersection Capacity Utilization			56.4%	ICU Level of Service						B		
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
1100: Driveway 11 & Wood Hollow Drive

2031 Forecasted PM
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	663	54	188	415	0	93	0	470	125	0	63
Sign Control		Free			Free			Stop			Stop	
Grade		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
Hourly flow rate (vph)	0	721	59	204	451	0	101	0	511	136	0	68
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh												
Upstream signal (ft)					251							
pX, platoon unblocked	0.48						0.48	0.48		0.48	0.48	0.48
vC, conflicting volume	451			779			1678	1610	750	2121	1639	451
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			779			1869	1727	750	2786	1788	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			76			0	100	0	0	100	87
cM capacity (veh/h)	784			838			19	32	411	0	30	524
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1							
Volume Total	779	655	101	511	204							
Volume Left	0	204	101	0	136							
Volume Right	59	0	0	511	68							
cSH	1700	838	19	411	0							
Volume to Capacity	0.46	0.24	5.37	1.24	Err							
Queue Length 95th (ft)	0	24	Err	535	Err							
Control Delay (s)	0.0	5.8	Err	156.9	Err							
Lane LOS		A	F	F	F							
Approach Delay (s)	0.0	5.8	1782.7		Err							
Approach LOS			F		F							
Intersection Summary												
Average Delay			Err									
Intersection Capacity Utilization			97.9%		ICU Level of Service				F			
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
1: Hart Lane & Far West Boulevard

2031 Site+Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	127	967	111	257	370	90	63	205	219	264	349	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	170		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.980				0.850		0.933			0.977	
Flt Protected	0.950			0.950				0.993			0.987	
Satd. Flow (prot)	1770	3468	0	1770	3539	1583	0	3279	0	0	3413	0
Flt Permitted	0.353			0.103				0.993			0.987	
Satd. Flow (perm)	658	3468	0	192	3539	1583	0	3279	0	0	3413	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15				106		132			14	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		362			1265			236			237	
Travel Time (s)		7.1			24.6			5.4			5.4	
Peak Hour Factor	0.73	0.83	0.61	0.69	0.83	0.85	0.80	0.80	0.82	0.90	0.56	0.47
Adj. Flow (vph)	174	1165	182	372	446	106	79	256	267	293	623	162
Shared Lane Traffic (%)												
Lane Group Flow (vph)	174	1347	0	372	446	106	0	602	0	0	1078	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Split	NA		Split	NA	
Protected Phases	5	2		1	6		4	4		8	8	
Permitted Phases	2			6		6						
Detector Phase	5	2		1	6	6	4	4		8	8	

Austin Oaks Mixed Use Development
1: Hart Lane & Far West Boulevard

2031 Site+Forecasted AM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	8.0	18.0		8.0	18.0	18.0	12.0	12.0		12.0	12.0	
Minimum Split (s)	13.0	23.0		13.0	23.0	23.0	17.0	17.0		17.0	17.0	
Total Split (s)	13.0	52.0		22.0	61.0	61.0	26.0	26.0		30.0	30.0	
Total Split (%)	10.0%	40.0%		16.9%	46.9%	46.9%	20.0%	20.0%		23.1%	23.1%	
Maximum Green (s)	8.0	47.0		17.0	56.0	56.0	21.0	21.0		25.0	25.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0		5.0			5.0	
Lead/Lag	Lead	Lead		Lag	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	
Walk Time (s)		7.0			7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		12.0			12.0	12.0	21.0	21.0		21.0	21.0	
Pedestrian Calls (#/hr)		0			0	0	0	0		0	0	
Act Effect Green (s)	47.0	47.0		56.0	56.0	56.0		20.8			25.2	
Actuated g/C Ratio	0.36	0.36		0.43	0.43	0.43		0.16			0.19	
v/c Ratio	0.57	1.07		1.29	0.29	0.14		0.95			1.61	
Control Delay	38.3	84.6		199.5	42.8	20.3		66.8			313.6	
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Delay	38.3	84.6		199.5	42.8	20.3		66.8			313.6	
LOS	D	F		F	D	C		E			F	
Approach Delay		79.3			103.3			66.8			313.6	
Approach LOS		E			F			E			F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 100 (77%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.61

Intersection Signal Delay: 144.1

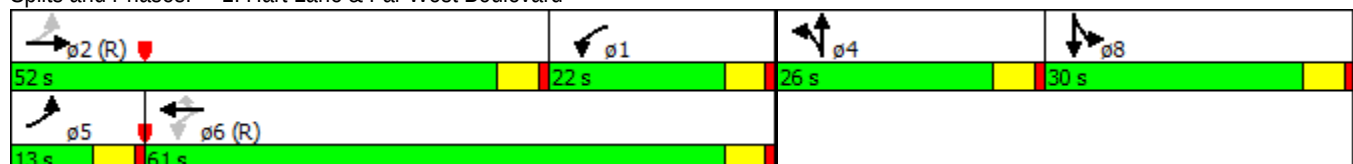
Intersection LOS: F

Intersection Capacity Utilization 95.4%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 1: Hart Lane & Far West Boulevard



Austin Oaks Mixed Use Development
2: Wood Hollow Drive & Far West Boulevard

2031 Site+Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	233	1299	58	145	710	120	31	191	360	329	168	96
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	335		0	165		0	120		120	0		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	75			35			50			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.944	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1758	0
Flt Permitted	0.260			0.142			0.950			0.950		
Satd. Flow (perm)	484	3539	1583	265	3539	1583	1770	1863	1583	1770	1758	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			101			148			161		20	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1265			1235			599			222	
Travel Time (s)		24.6			24.1			13.6			5.0	
Peak Hour Factor	0.74	0.91	0.58	0.90	0.88	0.81	0.69	0.65	0.87	0.90	0.81	0.77
Adj. Flow (vph)	315	1427	100	161	807	148	45	294	414	366	207	125
Shared Lane Traffic (%)												
Lane Group Flow (vph)	315	1427	100	161	807	148	45	294	414	366	332	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	L NA	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		3	3		7	7	
Permitted Phases	6		6	2		2			3			
Detector Phase	1	6	6	5	2	2	3	3	3	7	7	

Austin Oaks Mixed Use Development
2: Wood Hollow Drive & Far West Boulevard

2031 Site+Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	8.0	8.0	8.0	5.0	5.0	
Minimum Split (s)	11.0	40.0	40.0	12.0	40.0	40.0	15.0	15.0	15.0	15.0	15.0	
Total Split (s)	16.0	67.0	67.0	16.0	67.0	67.0	19.0	19.0	19.0	28.0	28.0	
Total Split (%)	12.3%	51.5%	51.5%	12.3%	51.5%	51.5%	14.6%	14.6%	14.6%	21.5%	21.5%	
Maximum Green (s)	11.0	62.0	62.0	11.0	62.0	62.0	14.0	14.0	14.0	23.0	23.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
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	
Recall Mode	None	C-Min	C-Min	Max	C-Min	C-Min	Min	Min	Min	Max	Max	
Walk Time (s)		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		12.0	12.0		12.0	12.0	21.0	21.0	21.0	21.0	21.0	
Pedestrian Calls (#/hr)		0	0		0	0	0	0	0	0	0	
Act Effect Green (s)	59.9	59.9	59.9	39.1	39.1	39.1	16.1	16.1	16.1	23.0	23.0	
Actuated g/C Ratio	0.46	0.46	0.46	0.30	0.30	0.30	0.12	0.12	0.12	0.18	0.18	
v/c Ratio	0.59	0.88	0.13	0.78	0.76	0.26	0.21	1.28	1.23	1.17	1.02	
Control Delay	39.6	35.7	4.1	45.2	44.7	7.2	55.6	199.3	155.2	151.5	103.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	39.6	35.7	4.1	45.2	44.7	7.2	55.6	199.3	155.2	151.5	103.2	
LOS	D	D	A	D	D	A	E	F	F	F	F	
Approach Delay		34.7			39.8			166.5			128.5	
Approach LOS		C			D			F			F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 10 (8%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 115

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.28

Intersection Signal Delay: 73.3

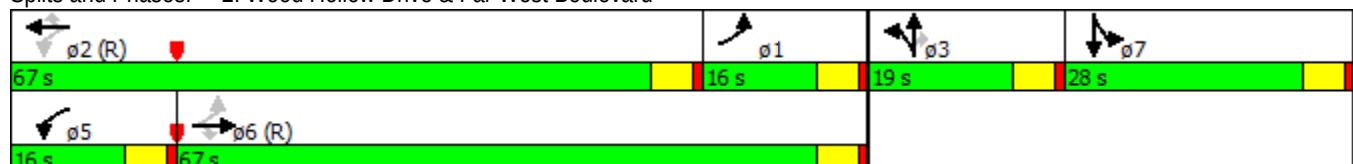
Intersection LOS: E

Intersection Capacity Utilization 88.9%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 2: Wood Hollow Drive & Far West Boulevard



Austin Oaks Mixed Use Development
3: Far West Boulevard & Mopac SB FR

2031 Site+Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑						↑↑	↑
Volume (vph)	0	989	561	22	652	0	0	0	0	165	780	1104
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									0.850
Flt Protected				0.950							0.990	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	3504	1583
Flt Permitted				0.950							0.990	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	3504	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			394									101
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		1235			406			400			362	
Travel Time (s)		24.1			7.9			5.5			4.9	
Peak Hour Factor	0.92	0.91	0.93	0.67	0.93	0.92	0.92	0.92	0.92	0.78	0.92	0.95
Adj. Flow (vph)	0	1087	603	33	701	0	0	0	0	212	848	1162
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1087	603	33	701	0	0	0	0	0	1060	1162
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	L NA	Right	Left	Left	Right	Left	Left	R NA
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	custom	Prot	NA					custom	NA	custom
Protected Phases		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Permitted Phases										4		
Detector Phase		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Switch Phase												
Minimum Initial (s)				10.0								
Minimum Split (s)				15.0								

Lane Group	ø1	ø2	ø4	ø8	ø22
Lane Configurations					
Volume (vph)					
Ideal Flow (vphpl)					
Lane Util. Factor					
Frt					
Flt Protected					
Satd. Flow (prot)					
Flt Permitted					
Satd. Flow (perm)					
Right Turn on Red					
Satd. Flow (RTOR)					
Link Speed (mph)					
Link Distance (ft)					
Travel Time (s)					
Peak Hour Factor					
Adj. Flow (vph)					
Shared Lane Traffic (%)					
Lane Group Flow (vph)					
Enter Blocked Intersection					
Lane Alignment					
Median Width(ft)					
Link Offset(ft)					
Crosswalk Width(ft)					
Two way Left Turn Lane					
Headway Factor					
Turning Speed (mph)					
Number of Detectors					
Detector Template					
Leading Detector (ft)					
Trailing Detector (ft)					
Detector 1 Position(ft)					
Detector 1 Size(ft)					
Detector 1 Type					
Detector 1 Channel					
Detector 1 Extend (s)					
Detector 1 Queue (s)					
Detector 1 Delay (s)					
Detector 2 Position(ft)					
Detector 2 Size(ft)					
Detector 2 Type					
Detector 2 Channel					
Detector 2 Extend (s)					
Turn Type					
Protected Phases	1	2	4	8	22
Permitted Phases					
Detector Phase					
Switch Phase					
Minimum Initial (s)	4.0	10.0	10.0	4.0	1.0
Minimum Split (s)	9.0	15.0	25.0	9.0	20.0

Austin Oaks Mixed Use Development
3: Far West Boulevard & Mopac SB FR

2031 Site+Forecasted AM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)				21.0								
Total Split (%)				16.2%								
Maximum Green (s)				16.0								
Yellow Time (s)				4.0								
All-Red Time (s)				1.0								
Lost Time Adjust (s)				0.0								
Total Lost Time (s)				5.0								
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0								
Recall Mode				Min								
Act Effect Green (s)		49.0	24.0	16.0	45.0						50.0	75.0
Actuated g/C Ratio		0.38	0.18	0.12	0.35						0.38	0.58
v/c Ratio		0.82	0.98	0.15	0.57						0.79	1.22
Control Delay		38.3	32.0	53.9	0.7						39.1	125.5
Queue Delay		1.4	0.0	0.0	3.6						0.0	0.0
Total Delay		39.6	32.0	53.9	4.3						39.1	125.5
LOS		D	C	D	A						D	F
Approach Delay		36.9			6.5						84.3	
Approach LOS		D			A						F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 106 (82%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 2.48

Intersection Signal Delay: 54.8

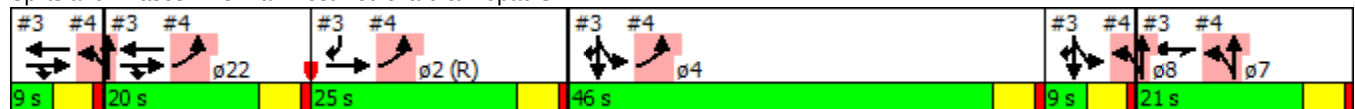
Intersection LOS: D

Intersection Capacity Utilization 128.2%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 3: Far West Boulevard & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø8	ø22
Total Split (s)	9.0	25.0	46.0	9.0	20.0
Total Split (%)	7%	19%	35%	7%	15%
Maximum Green (s)	4.0	20.0	41.0	4.0	15.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)					
Total Lost Time (s)					
Lead/Lag		Lag	Lead	Lag	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	C-Min	Min	Min	None
Act Effect Green (s)					
Actuated g/C Ratio					
v/c Ratio					
Control Delay					
Queue Delay					
Total Delay					
LOS					
Approach Delay					
Approach LOS					
Intersection Summary					

Austin Oaks Mixed Use Development
4: Mopac NB FR & Far West Boulevard

2031 Site+Forecasted AM

5/15/2014

												
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Lane Configurations												
Volume (vph)	1176	0	675	268	0	0						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Lane Util. Factor	0.97	1.00	0.95	0.95	1.00	1.00						
Fr												
Flt Protected	0.950		0.950	0.997								
Satd. Flow (prot)	3433	0	1681	1764	0	0						
Flt Permitted	0.950		0.950	0.997								
Satd. Flow (perm)	3433	0	1681	1764	0	0						
Right Turn on Red		Yes				Yes						
Satd. Flow (RTOR)												
Link Speed (mph)	35			50	50							
Link Distance (ft)	406			308	472							
Travel Time (s)	7.9			4.2	6.4							
Peak Hour Factor	0.90	0.92	0.93	0.25	0.92	0.92						
Adj. Flow (vph)	1307	0	726	1072	0	0						
Shared Lane Traffic (%)			10%									
Lane Group Flow (vph)	1307	0	653	1145	0	0						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Right	Left	Left	Left	Right						
Median Width(ft)	24			12	12							
Link Offset(ft)	0			0	0							
Crosswalk Width(ft)	16			16	16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00						
Turning Speed (mph)	15	9	15			9						
Number of Detectors	1		1	2								
Detector Template	Left		Left	Thru								
Leading Detector (ft)	20		20	100								
Trailing Detector (ft)	0		0	0								
Detector 1 Position(ft)	0		0	0								
Detector 1 Size(ft)	20		20	6								
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0								
Detector 1 Queue (s)	0.0		0.0	0.0								
Detector 1 Delay (s)	0.0		0.0	0.0								
Detector 2 Position(ft)				94								
Detector 2 Size(ft)				6								
Detector 2 Type				Cl+Ex								
Detector 2 Channel												
Detector 2 Extend (s)				0.0								
Turn Type	Prot		Split	NA								
Protected Phases	2 4 22		1 7 8	1 7 8			1	2	4	7	8	22
Permitted Phases												
Detector Phase	2 4 22		1 7 8	1 7 8								
Switch Phase												
Minimum Initial (s)							4.0	10.0	10.0	10.0	4.0	1.0
Minimum Split (s)							9.0	15.0	25.0	15.0	9.0	20.0



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Total Split (s)							9.0	25.0	46.0	21.0	9.0	20.0
Total Split (%)							7%	19%	35%	16%	7%	15%
Maximum Green (s)							4.0	20.0	41.0	16.0	4.0	15.0
Yellow Time (s)							4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)							1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag								Lag	Lead		Lag	Lead
Lead-Lag Optimize?								Yes	Yes		Yes	Yes
Vehicle Extension (s)							3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode							Min	C-Min	Min	Min	Min	None
Act Effect Green (s)	86.0		34.0	34.0								
Actuated g/C Ratio	0.66		0.26	0.26								
v/c Ratio	0.58		1.49	2.48								
Control Delay	4.6		266.1	696.4								
Queue Delay	3.0		0.0	0.0								
Total Delay	7.5		266.1	696.4								
LOS	A		F	F								
Approach Delay	7.5			540.1								
Approach LOS	A			F								

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 106 (82%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 2.48

Intersection Signal Delay: 315.9

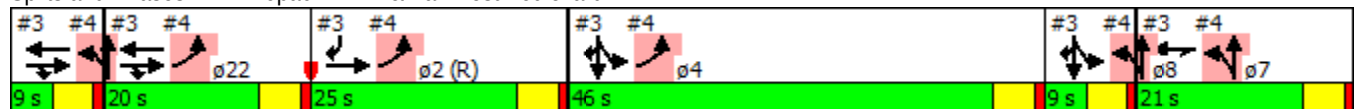
Intersection LOS: F

Intersection Capacity Utilization 141.3%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 4: Mopac NB FR & Far West Boulevard



Austin Oaks Mixed Use Development
5: Spicewood Springs Road & Mopac SB FR

2031 Site+Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑					↑	↑↑	↑
Volume (vph)	0	1439	880	974	1541	0	0	0	0	449	1706	894
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	60		0	0		0	150		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			75			25			75		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.999	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1610	3387	1583
Flt Permitted				0.950						0.950	0.999	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1610	3387	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			185									185
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		294			386			782			882	
Travel Time (s)		5.7			7.5			10.7			12.0	
Peak Hour Factor	0.92	0.81	0.90	0.87	0.86	0.92	0.92	0.92	0.92	0.93	0.87	0.94
Adj. Flow (vph)	0	1777	978	1120	1792	0	0	0	0	483	1961	951
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	0	1777	978	1120	1792	0	0	0	0	435	2009	951
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Prot	Prot	NA					Split	NA	Prot
Protected Phases		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5
Permitted Phases												
Detector Phase		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

Austin Oaks Mixed Use Development
5: Spicewood Springs Road & Mopac SB FR

2031 Site+Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)		27.0	27.0	51.0	72.0					37.0	37.0	37.0
Actuated g/C Ratio		0.21	0.21	0.39	0.55					0.28	0.28	0.28
v/c Ratio		2.42	2.06	1.61	0.91					0.95	2.09	1.63
Control Delay		660.2	499.6	302.8	14.2					77.1	518.0	319.2
Queue Delay		2.6	0.0	1.2	47.1					0.0	0.0	0.5
Total Delay		662.8	499.6	304.0	61.3					77.1	518.0	319.7
LOS		F	F	F	E					E	F	F
Approach Delay		604.8			154.7						406.0	
Approach LOS		F			F						F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 8 (6%), Referenced to phase 2:EBWB, Start of Green

Natural Cycle: 140

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 2.42

Intersection Signal Delay: 385.7

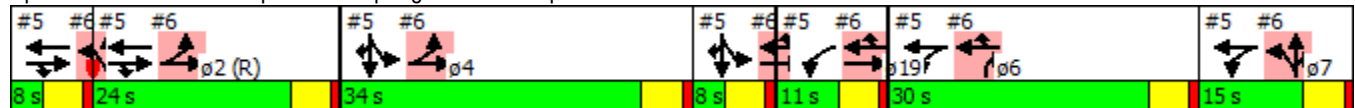
Intersection LOS: F

Intersection Capacity Utilization 183.7%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 5: Spicewood Springs Road & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0	5.0	6.0
Minimum Split (s)	8.0	10.0	10.0	8.0	10.0	10.0	11.0
Total Split (s)	8.0	24.0	34.0	8.0	30.0	15.0	11.0
Total Split (%)	6%	18%	26%	6%	23%	12%	8%
Maximum Green (s)	3.0	19.0	29.0	3.0	25.0	10.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Austin Oaks Mixed Use Development
6: Mopac NB FR & Spicewood Springs Road

2031 Site+Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 				
Volume (vph)	519	1238	0	0	1536	306	731	16	644	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		325	0		0	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	75			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.91	0.95	1.00	1.00	1.00
Frt						0.850		0.937	0.850			
Flt Protected	0.950						0.950	0.974				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	1681	1547	1504	0	0	0
Flt Permitted	0.950						0.950	0.974				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	1681	1547	1504	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						261		23	185			
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		386			594			563			407	
Travel Time (s)		7.5			11.6			7.7			5.6	
Peak Hour Factor	0.90	0.96	0.92	0.92	0.93	0.79	0.86	0.60	0.87	0.92	0.92	0.92
Adj. Flow (vph)	577	1290	0	0	1652	387	850	27	740	0	0	0
Shared Lane Traffic (%)							34%		31%			
Lane Group Flow (vph)	577	1290	0	0	1652	387	561	545	511	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Prot	Split	NA	custom			
Protected Phases	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			
Permitted Phases												
Detector Phase	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

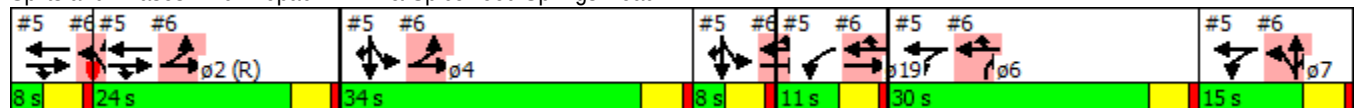
												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)	53.0	72.0			44.0	44.0	18.0	18.0	40.0			
Actuated g/C Ratio	0.41	0.55			0.34	0.34	0.14	0.14	0.31			
v/c Ratio	0.80	0.66			1.38	0.55	2.42	2.33	0.87			
Control Delay	13.0	5.1			210.9	14.0	675.2	635.3	43.0			
Queue Delay	53.4	50.0			2.0	0.0	0.1	0.4	0.0			
Total Delay	66.4	55.1			212.9	14.0	675.3	635.7	43.0			
LOS	E	E			F	B	F	F	D			
Approach Delay		58.6			175.1			462.1				
Approach LOS		E			F			F				

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 8 (6%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 2.42
Intersection Signal Delay: 219.8
Intersection Capacity Utilization 183.7%
Analysis Period (min) 15

Intersection LOS: F
ICU Level of Service H

Splits and Phases: 6: Mopac NB FR & Spicewood Springs Road



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0	5.0	6.0
Minimum Split (s)	8.0	10.0	10.0	8.0	10.0	10.0	11.0
Total Split (s)	8.0	24.0	34.0	8.0	30.0	15.0	11.0
Total Split (%)	6%	18%	26%	6%	23%	12%	8%
Maximum Green (s)	3.0	19.0	29.0	3.0	25.0	10.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Austin Oaks Mixed Use Development
7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road

2031 Site+Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	11	1480	276	934	961	14	117	4	412	8	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	0		100	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.984			0.996				0.850		0.983	
Flt Protected	0.950			0.950				0.954			0.958	
Satd. Flow (prot)	1770	5004	0	1770	3525	0	0	1777	1583	0	1754	0
Flt Permitted	0.267			0.066				0.723			0.784	
Satd. Flow (perm)	497	5004	0	123	3525	0	0	1347	1583	0	1436	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		24			3				305		101	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1093			275			251			161	
Travel Time (s)		21.3			5.4			5.7			3.7	
Peak Hour Factor	0.72	0.50	0.76	0.50	0.92	0.50	0.91	0.85	0.62	0.58	0.90	0.84
Adj. Flow (vph)	15	2960	363	1868	1045	28	129	5	665	14	0	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	15	3323	0	1868	1073	0	0	134	665	0	16	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2			6			4		4	8		
Detector Phase	5	2		1	6		4	4	4	8	8	

Austin Oaks Mixed Use Development
7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road

2031 Site+Forecasted AM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	20.0		21.0	20.0		15.0	15.0	15.0	11.0	11.0	
Minimum Split (s)	10.0	25.0		26.0	25.0		20.0	20.0	20.0	16.0	16.0	
Total Split (s)	29.0	72.0		29.0	72.0		29.0	29.0	29.0	29.0	29.0	
Total Split (%)	22.3%	55.4%		22.3%	55.4%		22.3%	22.3%	22.3%	22.3%	22.3%	
Maximum Green (s)	24.0	67.0		24.0	67.0		24.0	24.0	24.0	24.0	24.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0			5.0	5.0		5.0	
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min		Min	C-Min		Min	Min	Min	Min	Min	
Walk Time (s)							6.0	6.0	6.0	6.0	6.0	
Flash Dont Walk (s)							24.0	24.0	24.0	24.0	24.0	
Pedestrian Calls (#/hr)							0	0	0	0	0	
Act Effect Green (s)	67.9	67.0		88.8	88.8			24.0	24.0		24.0	
Actuated g/C Ratio	0.52	0.52		0.68	0.68			0.18	0.18		0.18	
v/c Ratio	0.04	1.28		4.83	0.45			0.54	1.23		0.05	
Control Delay	16.5	159.7		1733.0	14.8			57.1	143.9		0.3	
Queue Delay	0.0	0.0		0.0	0.7			0.0	0.0		0.0	
Total Delay	16.5	159.7		1733.0	15.5			57.1	143.9		0.3	
LOS	B	F		F	B			E	F		A	
Approach Delay		159.0			1106.4			129.4			0.3	
Approach LOS		F			F			F			A	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 55 (42%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 4.83

Intersection Signal Delay: 548.1

Intersection LOS: F

Intersection Capacity Utilization 111.5%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road



Austin Oaks Mixed Use Development
10: Hart Lane & Greystone Drive

2031 Site+Forecasted AM

5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	74	257	42	102	94	11	65	275	176	20	404	39
Peak Hour Factor	0.80	0.65	0.65	0.78	0.88	0.58	0.75	0.81	0.60	0.58	0.69	0.57
Hourly flow rate (vph)	92	395	65	131	107	19	87	340	293	34	586	68
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	488	65	238	19	720	688						
Volume Left (vph)	93	0	131	0	87	34						
Volume Right (vph)	0	65	0	19	293	68						
Hadj (s)	0.13	-0.67	0.31	-0.67	-0.19	-0.02						
Departure Headway (s)	9.1	8.3	9.9	9.0	8.4	8.6						
Degree Utilization, x	1.0	0.15	0.66	0.05	1.0	1.0						
Capacity (veh/h)	403	429	355	395	432	424						
Control Delay (s)	149.7	11.5	28.8	11.2	337.6	320.6						
Approach Delay (s)	133.5		27.5		337.6	320.6						
Approach LOS	F		D		F	F						
Intersection Summary												
Delay			245.6									
Level of Service			F									
Intersection Capacity Utilization			90.2%	ICU Level of Service				E				
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
20: Wood Hollow Drive & Greystone Drive

2031 Site+Forecasted AM

5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	106	163	212	71	158	39	30	387	56	31	241	70
Peak Hour Factor	0.81	0.89	0.64	0.80	0.82	0.72	0.53	0.88	0.79	0.68	0.85	0.68
Hourly flow rate (vph)	131	183	331	89	193	54	57	440	71	46	284	103
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2				
Volume Total (vph)	314	331	281	54	276	291	187	245				
Volume Left (vph)	131	0	89	0	57	0	46	0				
Volume Right (vph)	0	331	0	54	0	71	0	103				
Hadj (s)	0.24	-0.67	0.19	-0.67	0.14	-0.14	0.16	-0.26				
Departure Headway (s)	8.6	7.7	9.0	8.2	8.6	8.3	8.9	8.4				
Degree Utilization, x	0.75	0.71	0.71	0.12	0.66	0.67	0.46	0.57				
Capacity (veh/h)	405	455	385	417	407	419	385	408				
Control Delay (s)	32.2	26.1	29.7	11.1	25.6	25.6	18.0	21.0				
Approach Delay (s)	29.1		26.7		25.6		19.7					
Approach LOS	D		D		D		C					
Intersection Summary												
Delay			25.6									
Level of Service			D									
Intersection Capacity Utilization			63.2%	ICU Level of Service					B			
Analysis Period (min)			15									



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	283	0	0	4355	198
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.79	0.92	0.92	0.96	0.86
Hourly flow rate (vph)	0	358	0	0	4536	230
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	4652	1627	4767			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	4652	1627	4767			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	0	100			
cM capacity (veh/h)	1	91	21			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	358	1815	1815	1138		
Volume Left	0	0	0	0		
Volume Right	358	0	0	230		
cSH	91	1700	1700	1700		
Volume to Capacity	3.94	1.07	1.07	0.67		
Queue Length 95th (ft)	Err	0	0	0		
Control Delay (s)	Err	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	Err	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay		698.9				
Intersection Capacity Utilization		112.7%		ICU Level of Service		H
Analysis Period (min)		15				



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations					  	
Volume (veh/h)	0	111	0	0	3597	626
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.50	0.92	0.92	0.95	0.75
Hourly flow rate (vph)	0	222	0	0	3786	835
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	4204	1679	4621			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	4204	1679	4621			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	0	100			
cM capacity (veh/h)	1	84	24			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	222	1515	1515	1592		
Volume Left	0	0	0	0		
Volume Right	222	0	0	835		
cSH	84	1700	1700	1700		
Volume to Capacity	2.65	0.89	0.89	0.94		
Queue Length 95th (ft)	530	0	0	0		
Control Delay (s)	854.8	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	854.8	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay			39.2			
Intersection Capacity Utilization			97.0%		ICU Level of Service	F
Analysis Period (min)			15			

Austin Oaks Mixed Use Development
50: Executive Center Drive & Wood Hollow Drive

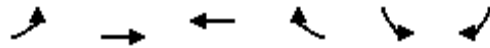
2031 Site+Forecasted AM
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	56	310	246	387	271	246	49	86	77	86	285	28
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.67	0.91	1.00	0.86	0.91	0.91	0.50	0.46	0.50	0.25	0.56	0.47
Hourly flow rate (vph)	84	341	246	450	298	270	98	187	154	344	509	60
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh												
Upstream signal (ft)					522							
pX, platoon unblocked	0.39						0.39	0.39		0.39	0.39	0.39
vC, conflicting volume	568			587			2278	2099	464	2211	2087	433
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			587			3505	3044	464	3334	3013	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	87			54			0	0	74	0	0	86
cM capacity (veh/h)	630			988			0	2	598	0	2	421
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	670	1018	439	913								
Volume Left	84	450	98	344								
Volume Right	246	270	154	60								
cSH	630	988	0	0								
Volume to Capacity	0.13	0.46	Err	Err								
Queue Length 95th (ft)	11	61	Err	Err								
Control Delay (s)	3.5	9.6	Err	Err								
Lane LOS	A	A	F	F								
Approach Delay (s)	3.5	9.6	Err	Err								
Approach LOS			F	F								
Intersection Summary												
Average Delay			Err									
Intersection Capacity Utilization			123.2%	ICU Level of Service					H			
Analysis Period (min)			15									

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	277	165	274	361	76	170
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.79	0.67	0.83	0.72	0.75	0.46
Hourly flow rate (vph)	351	246	330	501	101	370
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			597		1635	474
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			597		1635	474
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			66		0	37
cM capacity (veh/h)			980		74	591
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	597	832	471			
Volume Left	0	330	101			
Volume Right	246	0	370			
cSH	1700	980	235			
Volume to Capacity	0.35	0.34	2.00			
Queue Length 95th (ft)	0	37	865			
Control Delay (s)	0.0	7.2	500.5			
Lane LOS		A	F			
Approach Delay (s)	0.0	7.2	500.5			
Approach LOS			F			
Intersection Summary						
Average Delay		127.2				
Intersection Capacity Utilization		83.5%		ICU Level of Service		E
Analysis Period (min)		15				



Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations							
Volume (veh/h)	160	299	210	1146	1612	454	
Sign Control	Stop			Free	Free		
Grade	0%			0%	0%		
Peak Hour Factor	0.85	0.87	0.86	0.88	0.89	0.67	
Hourly flow rate (vph)	188	344	244	1302	1811	678	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None	None		
Median storage veh							
Upstream signal (ft)				1093			
pX, platoon unblocked	0.88						
vC, conflicting volume	3290	1244	1811				
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	3330	1244	1811				
tC, single (s)	6.8	6.9	4.1				
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2				
p0 queue free %	0	0	27				
cM capacity (veh/h)	1	166	335				
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	188	344	244	651	651	1207	1281
Volume Left	188	0	244	0	0	0	0
Volume Right	0	344	0	0	0	0	678
cSH	1	166	335	1700	1700	1700	1700
Volume to Capacity	127.38	2.08	0.73	0.38	0.38	0.71	0.75
Queue Length 95th (ft)	Err	676	136	0	0	0	0
Control Delay (s)	Err	549.8	39.8	0.0	0.0	0.0	0.0
Lane LOS	F	F	E				
Approach Delay (s)	3893.7		6.3			0.0	
Approach LOS	F						
Intersection Summary							
Average Delay			455.6				
Intersection Capacity Utilization			89.6%		ICU Level of Service		E
Analysis Period (min)			15				



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↰	↰		↰	
Volume (veh/h)	270	259	430	196	13	53
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	293	282	467	213	14	58
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	680				1442	574
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	680				1442	574
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	68				86	89
cM capacity (veh/h)	912				99	518
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	575	680	72			
Volume Left	293	0	14			
Volume Right	0	213	58			
cSH	912	1700	282			
Volume to Capacity	0.32	0.40	0.25			
Queue Length 95th (ft)	35	0	25			
Control Delay (s)	7.6	0.0	22.0			
Lane LOS	A		C			
Approach Delay (s)	7.6	0.0	22.0			
Approach LOS			C			
Intersection Summary						
Average Delay		4.5				
Intersection Capacity Utilization		77.1%		ICU Level of Service		D
Analysis Period (min)		15				



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	19	6	55	428	523	125
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	21	7	60	465	568	136
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1221	636	704			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1221	636	704			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	89	99	93			
cM capacity (veh/h)	185	478	893			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	27	525	704			
Volume Left	21	60	0			
Volume Right	7	0	136			
cSH	217	893	1700			
Volume to Capacity	0.13	0.07	0.41			
Queue Length 95th (ft)	11	5	0			
Control Delay (s)	23.9	1.8	0.0			
Lane LOS	C	A				
Approach Delay (s)	23.9	1.8	0.0			
Approach LOS	C					
Intersection Summary						
Average Delay			1.3			
Intersection Capacity Utilization			74.0%	ICU Level of Service		D
Analysis Period (min)			15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	33	10	70	377	638	161
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	36	11	76	410	693	175
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1343	781	868			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1343	781	868			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	76	97	90			
cM capacity (veh/h)	151	395	776			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	47	486	868			
Volume Left	36	76	0			
Volume Right	11	0	175			
cSH	176	776	1700			
Volume to Capacity	0.26	0.10	0.51			
Queue Length 95th (ft)	25	8	0			
Control Delay (s)	32.6	2.7	0.0			
Lane LOS	D	A				
Approach Delay (s)	32.6	2.7	0.0			
Approach LOS	D					
Intersection Summary						
Average Delay			2.0			
Intersection Capacity Utilization			80.4%	ICU Level of Service		D
Analysis Period (min)			15			

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	14	31	266	144	133	785
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	15	34	289	157	145	853
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1510	367			446	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1510	367			446	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	87	95			87	
cM capacity (veh/h)	115	678			1115	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	49	446	998			
Volume Left	15	0	145			
Volume Right	34	157	0			
cSH	269	1700	1115			
Volume to Capacity	0.18	0.26	0.13			
Queue Length 95th (ft)	16	0	11			
Control Delay (s)	21.3	0.0	3.2			
Lane LOS	C		A			
Approach Delay (s)	21.3	0.0	3.2			
Approach LOS	C					
Intersection Summary						
Average Delay		2.8				
Intersection Capacity Utilization		84.8%		ICU Level of Service	E	
Analysis Period (min)		15				

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	323	65	18	477
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	351	71	20	518
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	944	386			422	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	944	386			422	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			98	
cM capacity (veh/h)	286	661			1137	
Direction, Lane #	NB 1	SB 1				
Volume Total	422	538				
Volume Left	0	20				
Volume Right	71	0				
cSH	1700	1137				
Volume to Capacity	0.25	0.02				
Queue Length 95th (ft)	0	1				
Control Delay (s)	0.0	0.5				
Lane LOS		A				
Approach Delay (s)	0.0	0.5				
Approach LOS						
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		43.0%		ICU Level of Service		A
Analysis Period (min)		15				

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	7	23	299	24	21	488
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	8	25	325	26	23	530
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	914	338			351	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	914	338			351	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	97	96			98	
cM capacity (veh/h)	297	704			1208	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	33	351	553			
Volume Left	8	0	23			
Volume Right	25	26	0			
cSH	534	1700	1208			
Volume to Capacity	0.06	0.21	0.02			
Queue Length 95th (ft)	5	0	1			
Control Delay (s)	12.2	0.0	0.5			
Lane LOS	B		A			
Approach Delay (s)	12.2	0.0	0.5			
Approach LOS	B					
Intersection Summary						
Average Delay		0.7				
Intersection Capacity Utilization		52.7%		ICU Level of Service		A
Analysis Period (min)		15				

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	4	319	3	7	509
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	4	347	3	8	553
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	917	348			350	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	917	348			350	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	99			99	
cM capacity (veh/h)	300	695			1209	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	4	350	561			
Volume Left	0	0	8			
Volume Right	4	3	0			
cSH	695	1700	1209			
Volume to Capacity	0.01	0.21	0.01			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	10.2	0.0	0.2			
Lane LOS	B		A			
Approach Delay (s)	10.2	0.0	0.2			
Approach LOS	B					
Intersection Summary						
Average Delay		0.2				
Intersection Capacity Utilization		42.4%		ICU Level of Service		A
Analysis Period (min)		15				

Austin Oaks Mixed Use Development
800: Executive Center Drive & Driveway 8

2031 Site+Forecasted AM

5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	3	0	47	47	0	0	18	287	18	0	422	1
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	3	0	51	51	0	0	20	312	20	0	459	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	820	830	459	871	821	322	460			332		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	820	830	459	871	821	322	460			332		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	100	92	79	100	100	98			100		
cM capacity (veh/h)	290	300	602	245	304	719	1101			1228		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	54	51	351	460								
Volume Left	3	51	20	0								
Volume Right	51	0	20	1								
cSH	565	245	1101	1228								
Volume to Capacity	0.10	0.21	0.02	0.00								
Queue Length 95th (ft)	8	19	1	0								
Control Delay (s)	12.0	23.5	0.6	0.0								
Lane LOS	B	C	A									
Approach Delay (s)	12.0	23.5	0.6	0.0								
Approach LOS	B	C										
Intersection Summary												
Average Delay			2.3									
Intersection Capacity Utilization			47.0%		ICU Level of Service				A			
Analysis Period (min)			15									

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	21	290	0	1	423
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	23	315	0	1	460
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	777	315			315	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	777	315			315	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	97			100	
cM capacity (veh/h)	365	725			1245	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	23	315	461			
Volume Left	0	0	1			
Volume Right	23	0	0			
cSH	725	1700	1245			
Volume to Capacity	0.03	0.19	0.00			
Queue Length 95th (ft)	2	0	0			
Control Delay (s)	10.1	0.0	0.0			
Lane LOS	B		A			
Approach Delay (s)	10.1	0.0	0.0			
Approach LOS	B					
Intersection Summary						
Average Delay		0.3				
Intersection Capacity Utilization		33.1%		ICU Level of Service	A	
Analysis Period (min)		15				

Austin Oaks Mixed Use Development
1000: Executive Center Drive & Driveway 10

2031 Site+Forecasted AM

5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	76	0	5	3	0	53	2	307	2	11	416	12
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	83	0	5	3	0	58	2	334	2	12	452	13
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	879	823	459	827	828	335	465			336		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	879	823	459	827	828	335	465			336		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	66	100	99	99	100	92	100			99		
cM capacity (veh/h)	244	305	602	285	303	707	1096			1223		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	88	61	338	477								
Volume Left	83	3	2	12								
Volume Right	5	58	2	13								
cSH	253	655	1096	1223								
Volume to Capacity	0.35	0.09	0.00	0.01								
Queue Length 95th (ft)	37	8	0	1								
Control Delay (s)	26.6	11.1	0.1	0.3								
Lane LOS	D	B	A	A								
Approach Delay (s)	26.6	11.1	0.1	0.3								
Approach LOS	D	B										
Intersection Summary												
Average Delay			3.3									
Intersection Capacity Utilization			47.9%		ICU Level of Service				A			
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
1100: Driveway 11 & Wood Hollow Drive

2031 Site+Forecasted AM

5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	392	81	293	917	0	22	0	113	22	0	12
Sign Control		Free						Stop			Stop	
Grade		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
Hourly flow rate (vph)	0	426	88	318	997	0	24	0	123	24	0	13
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None					None					
Median storage veh												
Upstream signal (ft)					251							
pX, platoon unblocked	0.35						0.35	0.35		0.35	0.35	0.35
vC, conflicting volume	997			514			2117	2104	470	2227	2148	997
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	77			514			3244	3207	470	3554	3332	77
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			70			0	100	79	0	100	96
cM capacity (veh/h)	538			1051			1	2	593	1	2	348
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1							
Volume Total	514	1315	24	123	37							
Volume Left	0	318	24	0	24							
Volume Right	88	0	0	123	13							
cSH	1700	1051	1	593	1							
Volume to Capacity	0.30	0.30	16.57	0.21	34.34							
Queue Length 95th (ft)	0	32	Err	19	Err							
Control Delay (s)	0.0	7.9	Err	12.6	Err							
Lane LOS		A	F	B	F							
Approach Delay (s)	0.0	7.9	1640.0		Err							
Approach LOS			F		F							
Intersection Summary												
Average Delay			308.3									
Intersection Capacity Utilization			108.6%		ICU Level of Service				G			
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
1: Hart Lane & Far West Boulevard

2031 Site+Forecasted PM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	106	750	49	239	782	191	76	218	175	213	192	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	170		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.988				0.850		0.945			0.952	
Flt Protected	0.950			0.950				0.992			0.986	
Satd. Flow (prot)	1770	3497	0	1770	3539	1583	0	3318	0	0	3322	0
Flt Permitted	0.107			0.165				0.992			0.986	
Satd. Flow (perm)	199	3497	0	307	3539	1583	0	3318	0	0	3322	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9				225		78			51	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		362			1265			236			237	
Travel Time (s)		7.1			24.6			5.4			5.4	
Peak Hour Factor	0.73	0.83	0.61	0.69	0.83	0.85	0.80	0.80	0.82	0.90	0.56	0.47
Adj. Flow (vph)	145	904	80	346	942	225	95	272	213	237	343	274
Shared Lane Traffic (%)												
Lane Group Flow (vph)	145	984	0	346	942	225	0	580	0	0	854	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Split	NA		Split	NA	
Protected Phases	5	2		1	6		4	4		8	8	
Permitted Phases	2			6		6						
Detector Phase	5	2		1	6	6	4	4		8	8	

Austin Oaks Mixed Use Development
1: Hart Lane & Far West Boulevard

2031 Site+Forecasted PM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	8.0	18.0		8.0	18.0	18.0	12.0	12.0		12.0	12.0	
Minimum Split (s)	13.0	24.0		13.0	24.0	24.0	33.0	33.0		33.0	33.0	
Total Split (s)	13.0	62.0		15.0	64.0	64.0	28.0	28.0		25.0	25.0	
Total Split (%)	10.0%	47.7%		11.5%	49.2%	49.2%	21.5%	21.5%		19.2%	19.2%	
Maximum Green (s)	8.0	57.0		10.0	59.0	59.0	23.0	23.0		20.0	20.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0		5.0			5.0	
Lead/Lag	Lead	Lead		Lag	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	
Walk Time (s)		7.0			7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		12.0			12.0	12.0	21.0	21.0		21.0	21.0	
Pedestrian Calls (#/hr)		0			0	0	0	0		0	0	
Act Effect Green (s)	45.4	45.4		59.0	59.0	59.0		22.4			20.6	
Actuated g/C Ratio	0.35	0.35		0.45	0.45	0.45		0.17			0.16	
v/c Ratio	0.87	0.80		0.91	0.59	0.27		0.91			1.50	
Control Delay	74.8	43.0		52.9	11.5	1.1		65.3			269.9	
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Delay	74.8	43.0		52.9	11.5	1.1		65.3			269.9	
LOS	E	D		D	B	A		E			F	
Approach Delay		47.1			19.4			65.3			269.9	
Approach LOS		D			B			E			F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 20 (15%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 145

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.50

Intersection Signal Delay: 86.1

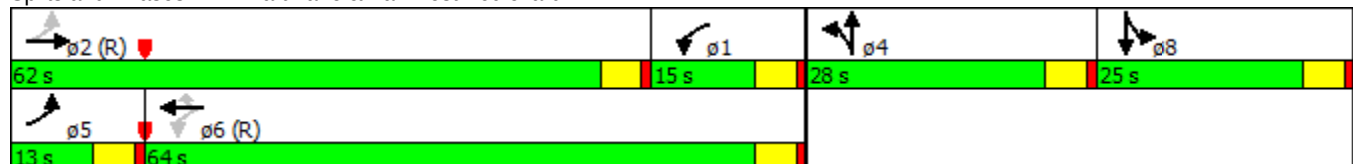
Intersection LOS: F

Intersection Capacity Utilization 81.7%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 1: Hart Lane & Far West Boulevard



Austin Oaks Mixed Use Development
2: Wood Hollow Drive & Far West Boulevard

2031 Site+Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	199	941	77	290	864	163	124	289	393	193	209	178
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	335		0	165		0	120		120	0		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	75			35			50			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.929	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1730	0
Flt Permitted	0.189			0.112			0.950			0.950		
Satd. Flow (perm)	352	3539	1583	209	3539	1583	1770	1863	1583	1770	1730	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			133			201			184		30	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1265			1235			599			222	
Travel Time (s)		24.6			24.1			13.6			5.0	
Peak Hour Factor	0.74	0.91	0.58	0.90	0.88	0.81	0.69	0.65	0.87	0.90	0.81	0.77
Adj. Flow (vph)	269	1034	133	322	982	201	180	445	452	214	258	231
Shared Lane Traffic (%)												
Lane Group Flow (vph)	269	1034	133	322	982	201	180	445	452	214	489	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	L NA	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		3	3		7	7	
Permitted Phases	6		6	2		2			3			
Detector Phase	1	6	6	5	2	2	3	3	3	7	7	

Austin Oaks Mixed Use Development
2: Wood Hollow Drive & Far West Boulevard

2031 Site+Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	8.0	8.0	8.0	5.0	5.0	
Minimum Split (s)	10.0	22.0	22.0	10.0	22.0	22.0	31.0	31.0	31.0	31.0	31.0	
Total Split (s)	20.0	68.0	68.0	16.0	64.0	64.0	20.0	20.0	20.0	26.0	26.0	
Total Split (%)	15.4%	52.3%	52.3%	12.3%	49.2%	49.2%	15.4%	15.4%	15.4%	20.0%	20.0%	
Maximum Green (s)	15.0	63.0	63.0	11.0	59.0	59.0	15.0	15.0	15.0	21.0	21.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
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	
Recall Mode	None	C-Min	C-Min	Max	C-Min	C-Min	Min	Min	Min	Max	Max	
Walk Time (s)		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		12.0	12.0		12.0	12.0	21.0	21.0	21.0	21.0	21.0	
Pedestrian Calls (#/hr)		0	0		0	0	0	0	0	0	0	
Act Effect Green (s)	51.4	51.4	51.4	46.6	46.6	46.6	26.6	26.6	26.6	21.0	21.0	
Actuated g/C Ratio	0.40	0.40	0.40	0.36	0.36	0.36	0.20	0.20	0.20	0.16	0.16	
v/c Ratio	0.86	0.74	0.19	1.56	0.77	0.29	0.50	1.17	0.96	0.75	1.61	
Control Delay	42.4	13.8	0.8	285.3	41.5	6.6	53.9	145.5	64.0	69.2	321.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	42.4	13.8	0.8	285.3	41.5	6.6	53.9	145.5	64.0	69.2	321.8	
LOS	D	B	A	F	D	A	D	F	E	E	F	
Approach Delay		17.9			89.0			96.0			244.9	
Approach LOS		B			F			F			F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 20 (15%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 125

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.61

Intersection Signal Delay: 92.2

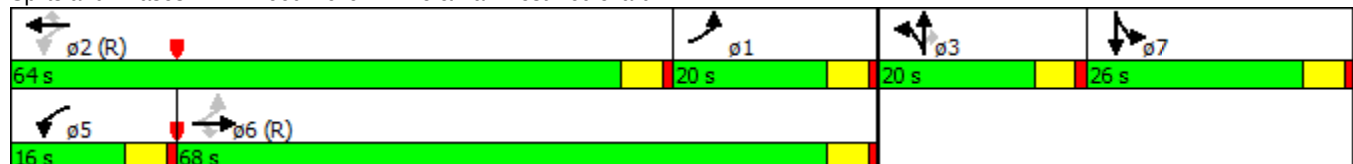
Intersection LOS: F

Intersection Capacity Utilization 87.5%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 2: Wood Hollow Drive & Far West Boulevard



Austin Oaks Mixed Use Development
3: Far West Boulevard & Mopac SB FR

2031 Site+Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑						↑↑	↑
Volume (vph)	0	1420	475	13	522	0	0	0	0	463	838	1187
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									0.850
Flt Protected				0.950							0.981	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	3472	1583
Flt Permitted				0.950							0.981	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	3472	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			233									253
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		1235			406			400			362	
Travel Time (s)		24.1			7.9			5.5			4.9	
Peak Hour Factor	0.92	0.91	0.93	0.67	0.93	0.92	0.92	0.92	0.92	0.78	0.92	0.95
Adj. Flow (vph)	0	1560	511	19	561	0	0	0	0	594	911	1249
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1560	511	19	561	0	0	0	0	0	1505	1249
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	L NA	Right	Left	Left	Right	Left	Left	R NA
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	custom	Prot	NA					custom	NA	custom
Protected Phases		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Permitted Phases										4		
Detector Phase		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Switch Phase												
Minimum Initial (s)				10.0								
Minimum Split (s)				15.0								

Lane Group	ø1	ø2	ø4	ø8	ø22
Lane Configurations					
Volume (vph)					
Ideal Flow (vphpl)					
Lane Util. Factor					
Frt					
Flt Protected					
Satd. Flow (prot)					
Flt Permitted					
Satd. Flow (perm)					
Right Turn on Red					
Satd. Flow (RTOR)					
Link Speed (mph)					
Link Distance (ft)					
Travel Time (s)					
Peak Hour Factor					
Adj. Flow (vph)					
Shared Lane Traffic (%)					
Lane Group Flow (vph)					
Enter Blocked Intersection					
Lane Alignment					
Median Width(ft)					
Link Offset(ft)					
Crosswalk Width(ft)					
Two way Left Turn Lane					
Headway Factor					
Turning Speed (mph)					
Number of Detectors					
Detector Template					
Leading Detector (ft)					
Trailing Detector (ft)					
Detector 1 Position(ft)					
Detector 1 Size(ft)					
Detector 1 Type					
Detector 1 Channel					
Detector 1 Extend (s)					
Detector 1 Queue (s)					
Detector 1 Delay (s)					
Detector 2 Position(ft)					
Detector 2 Size(ft)					
Detector 2 Type					
Detector 2 Channel					
Detector 2 Extend (s)					
Turn Type					
Protected Phases	1	2	4	8	22
Permitted Phases					
Detector Phase					
Switch Phase					
Minimum Initial (s)	4.0	13.0	10.0	4.0	1.0
Minimum Split (s)	9.0	18.0	15.0	9.0	6.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)				41.0								
Total Split (%)				31.5%								
Maximum Green (s)				36.0								
Yellow Time (s)				4.0								
All-Red Time (s)				1.0								
Lost Time Adjust (s)				0.0								
Total Lost Time (s)				5.0								
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0								
Recall Mode				Min								
Act Effect Green (s)		44.0	24.0	36.0	65.0						35.0	55.0
Actuated g/C Ratio		0.34	0.18	0.28	0.50						0.27	0.42
v/c Ratio		1.30	1.06	0.04	0.32						1.61	1.53
Control Delay		177.8	80.2	18.1	3.1						312.5	270.4
Queue Delay		2.4	0.0	0.0	0.4						0.0	0.0
Total Delay		180.2	80.2	18.1	3.5						312.5	270.4
LOS		F	F	B	A						F	F
Approach Delay		155.5			4.0						293.4	
Approach LOS		F			A						F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.61

Intersection Signal Delay: 209.5

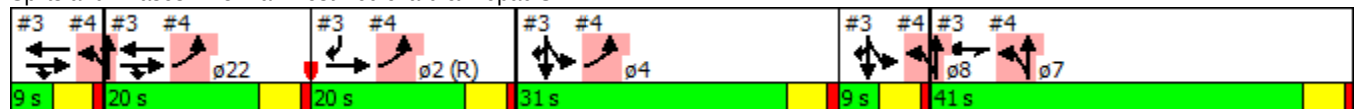
Intersection LOS: F

Intersection Capacity Utilization 130.8%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 3: Far West Boulevard & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø8	ø22
Total Split (s)	9.0	20.0	31.0	9.0	20.0
Total Split (%)	7%	15%	24%	7%	15%
Maximum Green (s)	4.0	15.0	26.0	4.0	15.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)					
Total Lost Time (s)					
Lead/Lag		Lag	Lead	Lag	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	C-Min	Min	Min	None
Act Effect Green (s)					
Actuated g/C Ratio					
v/c Ratio					
Control Delay					
Queue Delay					
Total Delay					
LOS					
Approach Delay					
Approach LOS					
Intersection Summary					

Austin Oaks Mixed Use Development
4: Mopac NB FR & Far West Boulevard

2031 Site+Forecasted PM

5/15/2014

												
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Lane Configurations	LT	LT	LT	LT	LT	LT						
Volume (vph)	1895	0	457	231	0	0						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Lane Util. Factor	0.97	1.00	0.95	0.95	1.00	1.00						
Fr												
Flt Protected	0.950		0.950	0.997								
Satd. Flow (prot)	3433	0	1681	1764	0	0						
Flt Permitted	0.950		0.950	0.997								
Satd. Flow (perm)	3433	0	1681	1764	0	0						
Right Turn on Red		Yes				Yes						
Satd. Flow (RTOR)												
Link Speed (mph)	35			50	50							
Link Distance (ft)	406			308	472							
Travel Time (s)	7.9			4.2	6.4							
Peak Hour Factor	0.90	0.92	0.93	0.25	0.92	0.92						
Adj. Flow (vph)	2106	0	491	924	0	0						
Shared Lane Traffic (%)			10%									
Lane Group Flow (vph)	2106	0	442	973	0	0						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Right	Left	Left	Left	Right						
Median Width(ft)	24			12	12							
Link Offset(ft)	0			0	0							
Crosswalk Width(ft)	16			16	16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00						
Turning Speed (mph)	15	9	15			9						
Number of Detectors	1		1	2								
Detector Template	Left		Left	Thru								
Leading Detector (ft)	20		20	100								
Trailing Detector (ft)	0		0	0								
Detector 1 Position(ft)	0		0	0								
Detector 1 Size(ft)	20		20	6								
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0								
Detector 1 Queue (s)	0.0		0.0	0.0								
Detector 1 Delay (s)	0.0		0.0	0.0								
Detector 2 Position(ft)				94								
Detector 2 Size(ft)				6								
Detector 2 Type				Cl+Ex								
Detector 2 Channel												
Detector 2 Extend (s)				0.0								
Turn Type	Prot		Split	NA								
Protected Phases	2 4 22		1 7 8	1 7 8			1	2	4	7	8	22
Permitted Phases												
Detector Phase	2 4 22		1 7 8	1 7 8								
Switch Phase												
Minimum Initial (s)							4.0	13.0	10.0	10.0	4.0	1.0
Minimum Split (s)							9.0	18.0	15.0	15.0	9.0	6.0



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Total Split (s)							9.0	20.0	31.0	41.0	9.0	20.0
Total Split (%)							7%	15%	24%	32%	7%	15%
Maximum Green (s)							4.0	15.0	26.0	36.0	4.0	15.0
Yellow Time (s)							4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)							1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag								Lag	Lead		Lag	Lead
Lead-Lag Optimize?								Yes	Yes		Yes	Yes
Vehicle Extension (s)							3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode							Min	C-Min	Min	Min	Min	None
Act Effect Green (s)	66.0		54.0	54.0								
Actuated g/C Ratio	0.51		0.42	0.42								
v/c Ratio	1.21		0.63	1.33								
Control Delay	114.9		35.2	190.2								
Queue Delay	0.9		0.0	0.0								
Total Delay	115.8		35.2	190.2								
LOS	F		D	F								
Approach Delay	115.8			141.8								
Approach LOS	F			F								

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.61

Intersection Signal Delay: 126.3

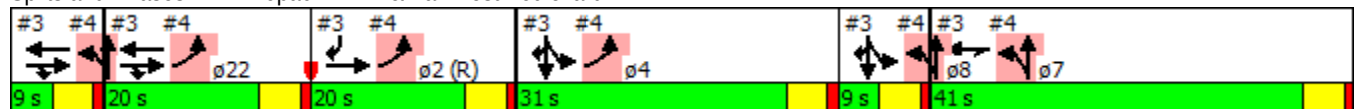
Intersection LOS: F

Intersection Capacity Utilization 144.0%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 4: Mopac NB FR & Far West Boulevard



Austin Oaks Mixed Use Development
5: Spicewood Springs Road & Mopac SB FR

2031 Site+Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑					↑	↑↑	↑
Volume (vph)	0	2366	456	867	1946	0	0	0	0	764	407	569
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	60		0	0		0	150		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			75			25			75		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.977	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1610	3312	1583
Flt Permitted				0.950						0.950	0.977	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1610	3312	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			160									160
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		294			386			782			882	
Travel Time (s)		5.7			7.5			10.7			12.0	
Peak Hour Factor	0.92	0.81	0.90	0.87	0.86	0.92	0.92	0.92	0.92	0.93	0.87	0.94
Adj. Flow (vph)	0	2921	507	997	2263	0	0	0	0	822	468	605
Shared Lane Traffic (%)										49%		
Lane Group Flow (vph)	0	2921	507	997	2263	0	0	0	0	419	871	605
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Prot	Prot	NA					Split	NA	Prot
Protected Phases		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5
Permitted Phases												
Detector Phase		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

Austin Oaks Mixed Use Development
5: Spicewood Springs Road & Mopac SB FR

2031 Site+Forecasted PM
5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)		38.0	38.0	71.0	103.0					26.0	26.0	26.0
Actuated g/C Ratio		0.25	0.25	0.47	0.69					0.17	0.17	0.17
v/c Ratio		3.26	0.97	1.19	0.93					1.50	1.52	1.49
Control Delay		1035.0	42.4	116.5	17.9					284.5	282.1	263.5
Queue Delay		1.9	18.8	1.3	45.8					0.0	0.0	0.0
Total Delay		1036.9	61.2	117.7	63.8					284.5	282.1	263.5
LOS		F	E	F	E					F	F	F
Approach Delay		892.6			80.3						276.7	
Approach LOS		F			F						F	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 89 (59%), Referenced to phase 2:EBWB, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 3.26

Intersection Signal Delay: 448.1

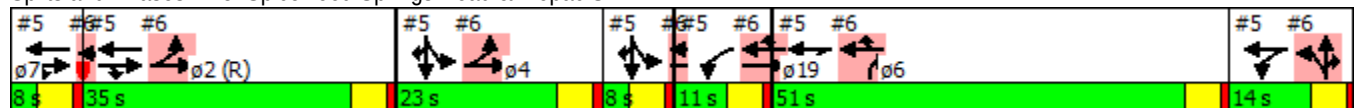
Intersection LOS: F

Intersection Capacity Utilization 178.6%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 5: Spicewood Springs Road & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0	5.0	6.0
Minimum Split (s)	8.0	15.0	10.0	8.0	15.0	10.0	11.0
Total Split (s)	8.0	35.0	23.0	8.0	51.0	14.0	11.0
Total Split (%)	5%	23%	15%	5%	34%	9%	7%
Maximum Green (s)	3.0	30.0	18.0	3.0	46.0	9.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Austin Oaks Mixed Use Development
6: Mopac NB FR & Spicewood Springs Road

2031 Site+Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 				
Volume (vph)	1034	1756	0	0	1644	535	529	53	687	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		325	0		0	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	75			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.91	0.95	1.00	1.00	1.00
Frt						0.850		0.906	0.850			
Flt Protected	0.950						0.950	0.990				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	1681	1520	1504	0	0	0
Flt Permitted	0.950						0.950	0.990				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	1681	1520	1504	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						124		46	160			
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		386			594			563			407	
Travel Time (s)		7.5			11.6			7.7			5.6	
Peak Hour Factor	0.90	0.96	0.92	0.92	0.93	0.79	0.86	0.60	0.87	0.92	0.92	0.92
Adj. Flow (vph)	1149	1829	0	0	1768	677	615	88	790	0	0	0
Shared Lane Traffic (%)							16%		40%			
Lane Group Flow (vph)	1149	1829	0	0	1768	677	517	502	474	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Prot	Split	NA	custom			
Protected Phases	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			
Permitted Phases												
Detector Phase	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			

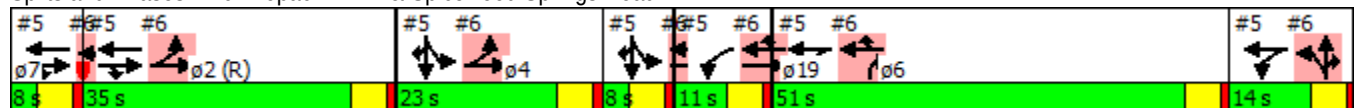
Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)	53.0	72.0			65.0	65.0	17.0	17.0	60.0			
Actuated g/C Ratio	0.35	0.48			0.43	0.43	0.11	0.11	0.40			
v/c Ratio	1.84	1.08			1.15	0.90	2.72	2.36	0.68			
Control Delay	398.5	48.3			115.7	47.8	812.1	648.9	29.5			
Queue Delay	2.6	11.7			1.3	0.0	0.0	0.4	0.0			
Total Delay	401.1	60.0			117.0	47.8	812.1	649.4	29.5			
LOS	F	E			F	D	F	F	C			
Approach Delay		191.6			97.8			508.9				
Approach LOS		F			F			F				

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 89 (59%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 3.26
Intersection Signal Delay: 227.0 Intersection LOS: F
Intersection Capacity Utilization 178.6% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 6: Mopac NB FR & Spicewood Springs Road



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0	5.0	6.0
Minimum Split (s)	8.0	15.0	10.0	8.0	15.0	10.0	11.0
Total Split (s)	8.0	35.0	23.0	8.0	51.0	14.0	11.0
Total Split (%)	5%	23%	15%	5%	34%	9%	7%
Maximum Green (s)	3.0	30.0	18.0	3.0	46.0	9.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Austin Oaks Mixed Use Development
7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road

2031 Site+Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	7	1328	99	531	1015	1	490	11	1129	1	4	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	0		100	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993							0.850		0.895	
Flt Protected	0.950			0.950				0.953			0.996	
Satd. Flow (prot)	1770	5050	0	1770	3539	0	0	1775	1583	0	1660	0
Flt Permitted	0.258			0.072				0.711			0.663	
Satd. Flow (perm)	481	5050	0	134	3539	0	0	1324	1583	0	1105	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7							314		21	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1093			275			251			161	
Travel Time (s)		21.3			5.4			5.7			3.7	
Peak Hour Factor	0.72	0.50	0.76	0.50	0.92	0.50	0.91	0.85	0.62	0.58	0.90	0.84
Adj. Flow (vph)	10	2656	130	1062	1103	2	538	13	1821	2	4	21
Shared Lane Traffic (%)												
Lane Group Flow (vph)	10	2786	0	1062	1105	0	0	551	1821	0	27	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2			6			4		4	8		
Detector Phase	5	2		1	6		4	4	4	8	8	

Austin Oaks Mixed Use Development
7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road

2031 Site+Forecasted PM

5/15/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	20.0		21.0	20.0		15.0	15.0	15.0	11.0	11.0	
Minimum Split (s)	10.0	25.0		26.0	25.0		35.0	35.0	35.0	35.0	35.0	
Total Split (s)	29.0	82.0		34.0	87.0		34.0	34.0	34.0	34.0	34.0	
Total Split (%)	19.3%	54.7%		22.7%	58.0%		22.7%	22.7%	22.7%	22.7%	22.7%	
Maximum Green (s)	24.0	77.0		29.0	82.0		29.0	29.0	29.0	29.0	29.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0			5.0	5.0		5.0	
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min		Min	C-Min		Min	Min	Min	Min	Min	
Walk Time (s)							6.0	6.0	6.0	6.0	6.0	
Flash Dont Walk (s)							24.0	24.0	24.0	24.0	24.0	
Pedestrian Calls (#/hr)							0	0	0	0	0	
Act Effect Green (s)	78.6	77.0		87.2	87.2			29.0	29.0		29.0	
Actuated g/C Ratio	0.52	0.51		0.58	0.58			0.19	0.19		0.19	
v/c Ratio	0.02	1.07		2.70	0.54			2.16	3.26		0.12	
Control Delay	18.6	76.5		785.9	23.4			563.0	1035.8		23.8	
Queue Delay	0.0	13.1		0.0	0.8			0.0	6.4		0.0	
Total Delay	18.6	89.6		785.9	24.2			563.0	1042.2		23.8	
LOS	B	F		F	C			F	F		C	
Approach Delay		89.4			397.5			930.9			23.8	
Approach LOS		F			F			F			C	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 55 (37%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 3.26

Intersection Signal Delay: 451.0

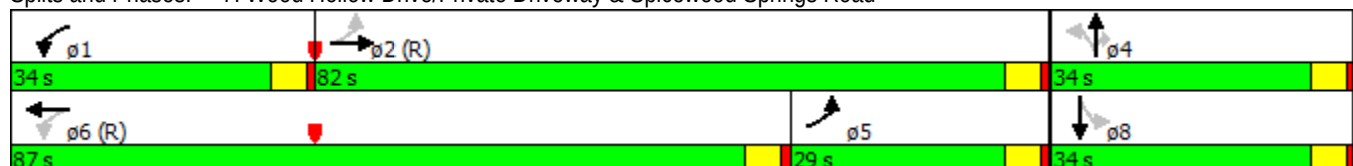
Intersection LOS: F

Intersection Capacity Utilization 119.4%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road



Austin Oaks Mixed Use Development
10: Hart Lane & Greystone Drive

2031 Site+Forecasted PM

5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	115	362	68	103	239	68	53	126	65	14	321	88
Peak Hour Factor	0.80	0.65	0.65	0.78	0.88	0.58	0.75	0.81	0.60	0.58	0.69	0.57
Hourly flow rate (vph)	144	557	105	132	272	117	71	156	108	24	465	154
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	701	105	404	117	335	644						
Volume Left (vph)	144	0	132	0	71	24						
Volume Right (vph)	0	105	0	117	108	154						
Hadj (s)	0.14	-0.67	0.20	-0.67	-0.12	-0.10						
Departure Headway (s)	9.5	8.7	9.6	8.7	9.3	9.0						
Degree Utilization, x	1.0	0.25	1.0	0.28	0.87	1.0						
Capacity (veh/h)	384	409	383	409	373	412						
Control Delay (s)	413.4	13.4	97.5	13.9	50.0	310.9						
Approach Delay (s)	361.4		78.7		50.0	310.9						
Approach LOS	F		F		E	F						
Intersection Summary												
Delay			238.2									
Level of Service			F									
Intersection Capacity Utilization			90.6%	ICU Level of Service				E				
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
20: Wood Hollow Drive & Greystone Drive

2031 Site+Forecasted PM

5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	80	91	66	116	309	77	103	417	92	34	370	101
Peak Hour Factor	0.81	0.89	0.64	0.80	0.82	0.72	0.53	0.88	0.79	0.68	0.85	0.68
Hourly flow rate (vph)	99	102	103	145	377	107	194	474	116	50	435	149
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2				
Volume Total (vph)	201	103	522	107	431	353	268	366				
Volume Left (vph)	99	0	145	0	194	0	50	0				
Volume Right (vph)	0	103	0	107	0	116	0	149				
Hadj (s)	0.28	-0.67	0.17	-0.67	0.26	-0.20	0.13	-0.25				
Departure Headway (s)	9.8	8.9	9.2	8.4	8.9	8.5	9.1	8.7				
Degree Utilization, x	0.55	0.26	1.0	0.25	1.0	0.83	0.67	0.88				
Capacity (veh/h)	353	392	400	419	410	419	388	401				
Control Delay (s)	23.0	13.8	188.8	12.9	94.0	40.7	27.7	48.9				
Approach Delay (s)	19.9		158.8		70.0		39.9					
Approach LOS	C		F		F		E					
Intersection Summary												
Delay			79.2									
Level of Service			F									
Intersection Capacity Utilization			77.1%	ICU Level of Service					D			
Analysis Period (min)			15									



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	228	0	0	2467	461
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.79	0.92	0.92	0.96	0.86
Hourly flow rate (vph)	0	289	0	0	2570	536
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2838	1125	3106			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2838	1125	3106			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	0	100			
cM capacity (veh/h)	14	199	102			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	289	1028	1028	1050		
Volume Left	0	0	0	0		
Volume Right	289	0	0	536		
cSH	199	1700	1700	1700		
Volume to Capacity	1.45	0.60	0.60	0.62		
Queue Length 95th (ft)	435	0	0	0		
Control Delay (s)	272.0	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	272.0	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay			23.1			
Intersection Capacity Utilization			78.7%		ICU Level of Service	D
Analysis Period (min)			15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	539	0	0	2557	289
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.50	0.92	0.92	0.95	0.75
Hourly flow rate (vph)	0	1078	0	0	2692	385
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2884	1090	3077			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2884	1090	3077			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	0	100			
cM capacity (veh/h)	13	210	105			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	1078	1077	1077	924		
Volume Left	0	0	0	0		
Volume Right	1078	0	0	385		
cSH	210	1700	1700	1700		
Volume to Capacity	5.13	0.63	0.63	0.54		
Queue Length 95th (ft)	Err	0	0	0		
Control Delay (s)	Err	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	Err	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay		2594.3				
Intersection Capacity Utilization		95.9%		ICU Level of Service		F
Analysis Period (min)		15				

Austin Oaks Mixed Use Development
50: Executive Center Drive & Wood Hollow Drive

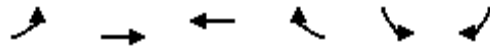
2031 Site+Forecasted PM
5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	63	399	81	96	275	263	241	330	451	73	146	148
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.67	0.91	1.00	0.86	0.91	0.91	0.50	0.46	0.50	0.25	0.56	0.47
Hourly flow rate (vph)	94	438	81	112	302	289	482	717	902	292	261	315
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)					522							
pX, platoon unblocked												
vC, conflicting volume	591			519			1782	1481	479	2598	1377	447
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	591			519			1782	1481	479	2598	1377	447
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	90			89			0	0	0	0	0	49
cM capacity (veh/h)	984			1047			0	101	587	0	117	612
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	613	703	2101	868								
Volume Left	94	112	482	292								
Volume Right	81	289	902	315								
cSH	984	1047	0	0								
Volume to Capacity	0.10	0.11	Err	Err								
Queue Length 95th (ft)	8	9	Err	Err								
Control Delay (s)	2.4	2.6	Err	Err								
Lane LOS	A	A	F	F								
Approach Delay (s)	2.4	2.6	Err	Err								
Approach LOS			F	F								
Intersection Summary												
Average Delay			Err									
Intersection Capacity Utilization			141.1%		ICU Level of Service				H			
Analysis Period (min)			15									

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	346	132	195	252	192	376
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.79	0.67	0.83	0.72	0.75	0.46
Hourly flow rate (vph)	438	197	235	350	256	817
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			635		1356	536
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			635		1356	536
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			75		0	0
cM capacity (veh/h)			948		124	544
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	635	585	1073			
Volume Left	0	235	256			
Volume Right	197	0	817			
cSH	1700	948	301			
Volume to Capacity	0.37	0.25	3.57			
Queue Length 95th (ft)	0	24	Err			
Control Delay (s)	0.0	5.9	Err			
Lane LOS		A	F			
Approach Delay (s)	0.0	5.9	Err			
Approach LOS			F			
Intersection Summary						
Average Delay		4681.6				
Intersection Capacity Utilization		94.1%		ICU Level of Service		F
Analysis Period (min)		15				



Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations				 	 		
Volume (veh/h)	384	405	201	1680	1106	270	
Sign Control	Stop			Free	Free		
Grade	0%			0%	0%		
Peak Hour Factor	0.85	0.87	0.86	0.88	0.89	0.67	
Hourly flow rate (vph)	452	466	234	1909	1243	403	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None	None		
Median storage veh							
Upstream signal (ft)				1093			
pX, platoon unblocked	0.81						
vC, conflicting volume	2866	823	1243				
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	2835	823	1243				
tC, single (s)	6.8	6.9	4.1				
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2				
p0 queue free %	0	0	58				
cM capacity (veh/h)	7	317	556				
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	452	466	234	955	955	828	817
Volume Left	452	0	234	0	0	0	0
Volume Right	0	466	0	0	0	0	403
cSH	7	317	556	1700	1700	1700	1700
Volume to Capacity	69.38	1.47	0.42	0.56	0.56	0.49	0.48
Queue Length 95th (ft)	Err	636	52	0	0	0	0
Control Delay (s)	Err	258.8	16.1	0.0	0.0	0.0	0.0
Lane LOS	F	F	C				
Approach Delay (s)	5055.9		1.8	0.0			
Approach LOS	F						
Intersection Summary							
Average Delay			986.3				
Intersection Capacity Utilization			81.6%	ICU Level of Service		D	
Analysis Period (min)			15				



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	49	273	254	35	84	322
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	53	297	276	38	91	350
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	314				698	295
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	314				698	295
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	96				77	53
cM capacity (veh/h)	1246				389	744
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	350	314	441			
Volume Left	53	0	91			
Volume Right	0	38	350			
cSH	1246	1700	626			
Volume to Capacity	0.04	0.18	0.70			
Queue Length 95th (ft)	3	0	144			
Control Delay (s)	1.6	0.0	23.3			
Lane LOS	A		C			
Approach Delay (s)	1.6	0.0	23.3			
Approach LOS			C			
Intersection Summary						
Average Delay		9.8				
Intersection Capacity Utilization		67.1%		ICU Level of Service		C
Analysis Period (min)		15				



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	130	42	11	565	280	25
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	141	46	12	614	304	27
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	956	318	332			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	956	318	332			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	50	94	99			
cM capacity (veh/h)	283	723	1228			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	187	626	332			
Volume Left	141	12	0			
Volume Right	46	0	27			
cSH	333	1228	1700			
Volume to Capacity	0.56	0.01	0.20			
Queue Length 95th (ft)	82	1	0			
Control Delay (s)	28.8	0.3	0.0			
Lane LOS	D	A				
Approach Delay (s)	28.8	0.3	0.0			
Approach LOS	D					
Intersection Summary						
Average Delay			4.9			
Intersection Capacity Utilization			55.0%	ICU Level of Service		A
Analysis Period (min)			15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	157	51	17	678	254	39
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	171	55	18	737	276	42
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1071	297	318			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1071	297	318			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	29	93	99			
cM capacity (veh/h)	241	742	1242			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	226	755	318			
Volume Left	171	18	0			
Volume Right	55	0	42			
cSH	289	1242	1700			
Volume to Capacity	0.78	0.01	0.19			
Queue Length 95th (ft)	152	1	0			
Control Delay (s)	51.1	0.4	0.0			
Lane LOS	F	A				
Approach Delay (s)	51.1	0.4	0.0			
Approach LOS	F					
Intersection Summary						
Average Delay			9.1			
Intersection Capacity Utilization			67.8%	ICU Level of Service		C
Analysis Period (min)			15			

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	58	130	743	92	88	235
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	63	141	808	100	96	255
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1304	858			908	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1304	858			908	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	59	60			87	
cM capacity (veh/h)	154	357			750	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	204	908	351			
Volume Left	63	0	96			
Volume Right	141	100	0			
cSH	254	1700	750			
Volume to Capacity	0.80	0.53	0.13			
Queue Length 95th (ft)	155	0	11			
Control Delay (s)	59.3	0.0	4.0			
Lane LOS	F		A			
Approach Delay (s)	59.3	0.0	4.0			
Approach LOS	F					
Intersection Summary						
Average Delay		9.2				
Intersection Capacity Utilization		83.1%		ICU Level of Service	E	
Analysis Period (min)		15				

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	514	142	48	219
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	559	154	52	238
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	978	636			713	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	978	636			713	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			94	
cM capacity (veh/h)	261	478			887	
Direction, Lane #	NB 1	SB 1				
Volume Total	713	290				
Volume Left	0	52				
Volume Right	154	0				
cSH	1700	887				
Volume to Capacity	0.42	0.06				
Queue Length 95th (ft)	0	5				
Control Delay (s)	0.0	2.2				
Lane LOS		A				
Approach Delay (s)	0.0	2.2				
Approach LOS						
Intersection Summary						
Average Delay		0.6				
Intersection Capacity Utilization		56.1%		ICU Level of Service		B
Analysis Period (min)		15				

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	39	131	458	56	42	228
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	42	142	498	61	46	248
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	867	528			559	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	867	528			559	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	86	74			95	
cM capacity (veh/h)	309	550			1012	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	185	559	293			
Volume Left	42	0	46			
Volume Right	142	61	0			
cSH	466	1700	1012			
Volume to Capacity	0.40	0.33	0.05			
Queue Length 95th (ft)	47	0	4			
Control Delay (s)	17.7	0.0	1.7			
Lane LOS	C		A			
Approach Delay (s)	17.7	0.0	1.7			
Approach LOS	C					
Intersection Summary						
Average Delay		3.6				
Intersection Capacity Utilization		62.1%		ICU Level of Service		B
Analysis Period (min)		15				

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	3	31	583	6	10	267
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	34	634	7	11	290
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	949	637			640	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	949	637			640	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	93			99	
cM capacity (veh/h)	286	477			944	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	37	640	301			
Volume Left	3	0	11			
Volume Right	34	7	0			
cSH	451	1700	944			
Volume to Capacity	0.08	0.38	0.01			
Queue Length 95th (ft)	7	0	1			
Control Delay (s)	13.7	0.0	0.4			
Lane LOS	B		A			
Approach Delay (s)	13.7	0.0	0.4			
Approach LOS	B					
Intersection Summary						
Average Delay		0.7				
Intersection Capacity Utilization		41.0%		ICU Level of Service		A
Analysis Period (min)		15				

Austin Oaks Mixed Use Development
800: Executive Center Drive & Driveway 8

2031 Site+Forecasted PM

5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	1	0	25	24	0	0	75	466	73	2	228	3
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	1	0	27	26	0	0	82	507	79	2	248	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	963	1003	249	990	965	546	251			586		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	963	1003	249	990	965	546	251			586		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	97	87	100	100	94			100		
cM capacity (veh/h)	224	227	789	207	239	537	1314			989		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	28	26	667	253								
Volume Left	1	26	82	2								
Volume Right	27	0	79	3								
cSH	719	207	1314	989								
Volume to Capacity	0.04	0.13	0.06	0.00								
Queue Length 95th (ft)	3	11	5	0								
Control Delay (s)	10.2	24.9	1.6	0.1								
Lane LOS	B	C	A	A								
Approach Delay (s)	10.2	24.9	1.6	0.1								
Approach LOS	B	C										
Intersection Summary												
Average Delay			2.1									
Intersection Capacity Utilization			63.4%	ICU Level of Service							B	
Analysis Period (min)			15									

									
Movement	WBL	WBR	NBT	NBR	SBL	SBT			
Lane Configurations									
Volume (veh/h)	0	11	467	0	3	233			
Sign Control	Stop		Free			Free			
Grade	0%		0%			0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92			
Hourly flow rate (vph)	0	12	508	0	3	253			
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type			None			None			
Median storage veh)									
Upstream signal (ft)									
pX, platoon unblocked									
vC, conflicting volume	767	508			508				
vC1, stage 1 conf vol									
vC2, stage 2 conf vol									
vCu, unblocked vol	767	508			508				
tC, single (s)	6.4	6.2			4.1				
tC, 2 stage (s)									
tF (s)	3.5	3.3			2.2				
p0 queue free %	100	98			100				
cM capacity (veh/h)	369	565			1057				
Direction, Lane #	WB 1	NB 1	SB 1						
Volume Total	12	508	257						
Volume Left	0	0	3						
Volume Right	12	0	0						
cSH	565	1700	1057						
Volume to Capacity	0.02	0.30	0.00						
Queue Length 95th (ft)	2	0	0						
Control Delay (s)	11.5	0.0	0.1						
Lane LOS	B		A						
Approach Delay (s)	11.5	0.0	0.1						
Approach LOS	B								
Intersection Summary									
Average Delay		0.2							
Intersection Capacity Utilization		34.6%	ICU Level of Service	A					
Analysis Period (min)		15							

Austin Oaks Mixed Use Development
1000: Executive Center Drive & Driveway 10

2031 Site+Forecasted PM

5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	0	3	2	0	27	8	465	5	45	231	51
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	43	0	3	2	0	29	9	505	5	49	251	55
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	932	905	279	905	930	508	307			511		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	932	905	279	905	930	508	307			511		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	81	100	100	99	100	95	99			95		
cM capacity (veh/h)	225	262	760	246	253	565	1254			1054		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	47	32	520	355								
Volume Left	43	2	9	49								
Volume Right	3	29	5	55								
cSH	236	518	1254	1054								
Volume to Capacity	0.20	0.06	0.01	0.05								
Queue Length 95th (ft)	18	5	1	4								
Control Delay (s)	24.0	12.4	0.2	1.6								
Lane LOS	C	B	A	A								
Approach Delay (s)	24.0	12.4	0.2	1.6								
Approach LOS	C	B										
Intersection Summary												
Average Delay			2.3									
Intersection Capacity Utilization			58.0%		ICU Level of Service				B			
Analysis Period (min)			15									

Austin Oaks Mixed Use Development
1100: Driveway 12 & Wood Hollow Drive

2031 Site+Forecasted PM

5/15/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	869	54	188	446	0	93	0	470	125	0	63
Sign Control		Free			Free			Stop			Stop	
Grade		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
Hourly flow rate (vph)	0	945	59	204	485	0	101	0	511	136	0	68
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)					251							
pX, platoon unblocked	0.47						0.47	0.47		0.47	0.47	0.47
vC, conflicting volume	485			1003			1936	1867	974	2378	1897	485
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			1003			2423	2278	974	3360	2340	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			70			0	100	0	0	100	87
cM capacity (veh/h)	766			690			7	13	306	0	12	512
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1							
Volume Total	1003	689	101	511	204							
Volume Left	0	204	101	0	136							
Volume Right	59	0	0	511	68							
cSH	1700	690	7	306	0							
Volume to Capacity	0.59	0.30	14.46	1.67	Err							
Queue Length 95th (ft)	0	31	Err	793	Err							
Control Delay (s)	0.0	7.3	Err	346.1	Err							
Lane LOS		A	F	F	F							
Approach Delay (s)	0.0	7.3	1940.6		Err							
Approach LOS			F		F							
Intersection Summary												
Average Delay			Err									
Intersection Capacity Utilization			110.3%		ICU Level of Service				H			
Analysis Period (min)			15									

[illegible]

[illegible]

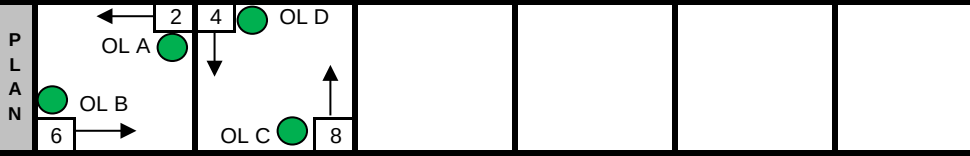
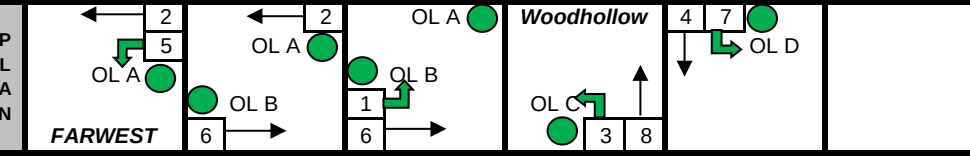
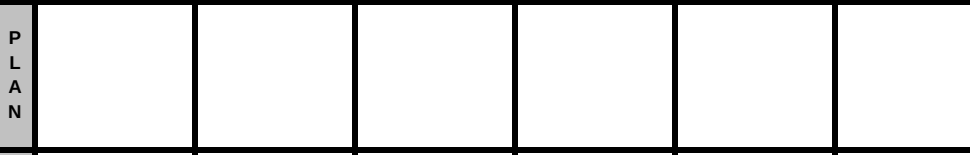
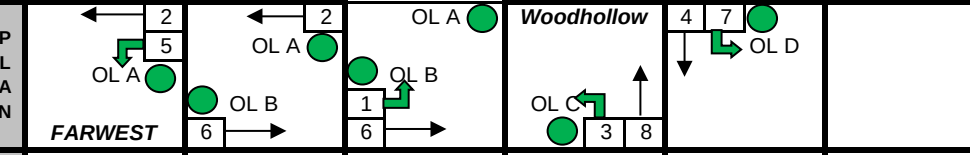
[illegible]

FLAGS	PHASES	PHASE DATA TABLE #	PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8	PH 9	PH 10	PH 11	PH 12	PH 13	PH 14	PH 15	PH 16	PH 17	PH 18
OMITPHAS																				
OMIT PED		PHASE TIMING																		
MIN RECAL																				
MAXRECAL																				
SOFT RCL																				
CDT'L SRVC																				
PED RECAL		MIN GREEN																		
DUAL ETRY		PASSAGE																		
SIMGAP		MAXGRN 1																		
REDREST		MAXGRN 2																		
AUTO PED		CONDSERV																		
REST WALK		YEL CHG																		
PED RECY		RED CLR																		
RED LOCK		WALK																		
YEL LOCK		PED CLR																		
NO EXT		ADDED INI																		
NO ADD INI		TIME TO RED																		
NOGAPRED		TIME BEFOR																		
NO RANGE		MIN GAP																		
NOMAX LOK		MAX INIT GRN																		

FLAGS	PHASES	PHASE DATA TABLE #	PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8	PH 9	PH 10	PH 11	PH 12	PH 13	PH 14	PH 15	PH 16	PH 17	PH 18
OMITPHAS																				
OMIT PED		PHASE TIMING																		
MIN RECAL																				
MAXRECAL																				
SOFT RCL																				
CDT'L SRVC																				
PED RECAL		MIN GREEN																		
DUAL ETRY		PASSAGE																		
SIMGAP		MAXGRN 1																		
REDREST		MAXGRN 2																		
AUTO PED		CONDSERV																		
REST WALK		YEL CHG																		
PED RECY		RED CLR																		
RED LOCK		WALK																		
YEL LOCK		PED CLR																		
NO EXT		ADDED INI																		
NO ADD INI		TIME TO RED																		
NOGAPRED		TIME BEFOR																		
NO RANGE		MIN GAP																		
NOMAX LOK		MAX INIT GRN																		

NOTES:

TO QUICKLY FIGURE SECONDS FOR PHASE 8 NORTH AND SOUTH BOUND ONLY: PHASE 8 MINUS PHASE 3 THEN SUBTRACT THE CLEARANCE

TRAFFIC SIGNAL INTERSECTION:										DATE:	GRP:	LOC:	VRS:	HUB:	ZONE:	SEC:	ENGINEER:	CITY OF AUSTIN										TRAFFIC SIGNAL TIMING & PHASING SHEETS																	
Farwest @ Woodhollow										1/26/2012		446E						4 + 2 + PHASEMODE					4 + 1 + ACT CONFIG					#1	#2	#3	#4	#5	1 + ACTIVE CONTROL PARAMETERS												
4 + 2 + RINGS										STARTUP		2, 6		PHASE		1	2			CONTROL MODE:		SCHEDULE																							
PHASE 1	RING 1:		1, 2, a, 3, 4, b							REDSTRT		1, 3, 4, 5, 7 - 20		OVERLAP		1	1			MAN PLN:		12	FREE PLN:		1	DFSCHED:		1																	
	RING 2:		5, 6, a, 7, 8, b							PED		2, 4, 6, 8		PREEMPT		1	1			4 + 7 + MISC					4 + 2 + COORD CONFIG																				
PHASE 2	RING 1:		1, 2, a, 3, b, 4, c							YELFLASH				CABINET		2	2			TRANSITION MODE:		3:30		START UP FLASH:		1																			
	RING 2:		5, 6, a, 8, b, 7, c							FLASH/ENT				DETECTOR		2	3			SYNCHRO MODE:		BEST		RED REVERT:		2																			
2 + 3 + PL # + PLAN MODE										FLASH/EXIT				COORD		1	1			MAX DWELL TIME:		0		FLASH CLR:		6																			
PL	PLAN MODE	MAX GRN	PH DATA	PH SEQ	OL DATA	ACT CONF	ENA	OFF		CYCLE	HOLD / YLD	SCHEDULE										SPECIAL FUNCTIONS										AUXILIARY													
												EV	ENA	HR	M	S	M	T	W	T	F	S	PL	1	2	3	4	5	6	7	8	1	2	3	4										
1												1	ENA	0	0	X	X	X	X	X	X	X	5																						
2												2	ENA	6	30		X	X	X	X	X		10																						
3												3	ENA	7	0	X						X	11																						
4												4	ENA	9	0		X	X	X	X	X		11																						
5	COORD	MAX 1	4	1	1	1	A	10		5	65	5	ENA	15	30		X	X	X	X	X		6																						
6	COORD	MAX 1	2	1	1	2	A	20		5	130	2, 6	6	ENA	19	0		X	X	X	X	X	11																						
													7	ENA	23	0	X	X	X	X	X	X	5																						
													8																																
10	COORD	MAX 1	2	1	1	2	A	10		5	130	2, 6	9																																
11	COORD	MAX 1	2	1	1	2	A	10		5	120	2, 6	10																																
20	FREE	MAX 2	1	1	1	1							11																																
33	FLASH	NONE	1	1	1	1							12																																
PRIORITY SEQUENCE	PHASES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20																								
	TABLE 1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																								
	TABLE 2	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0																								
	TABLE 3	3																																											
	TABLE 4	4																																											
NOTE: ZERO DENOTES THE HIGHEST PRIORITY																																													
PED PRAMS & FLAGS	PHASES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20																								
	ENABLE	X	X	X	X																																								
	CALLPHAS	2	4	6	8																																								
	OVERLAP																																												
SIGNAL PHASING DIAGRAM - (SECONDS)																																													
PLAN																							PLAN																						
	5	39 + 4 + 1	16 + 4 + 1																																										
PLAN																							PLAN																						

[illegible]

[illegible]

[illegible][illegible]

NOTES:

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TRAFFIC SIGNAL INTERSECTION:						DATE:	GRP:	LOC:	VRS:	HUB:	ZONE:	SEC:	ENGINEER:	CITY OF AUSTIN																											
Far West @ Loop 1						3/1/2013		447F							TRAFFIC SIGNAL TIMING & PHASING SHEETS																										
4 + 2 + RINGS						4 + 2 + PHASEMODE						4 + 1 + ACT CONFIG				#1	#2	#3	#4	#8	1 + ACTIVE CONTROL PARAMETERS																				
						STARTUP							PHASE							4	9	CONTROL MODE:				SCHEDULE															
PHASE 4	RING 1:	1, a, 22, 2, b, 4, c, 24, d, 7, e				REDSTRT	ALL PHASES						OVERLAP							1	1	MAN PLN:	8		FREE PLN:	1		DFSCHED:	1												
	RING 2:					PED	ALL PHASES						PREEMPT							1	1	4 + 7 + MISC				4 + 2 + COORD CONFIG															
PHASE 9	RING 1:	1, a, 22, 2, b, 4, c, 24, d, 8, e, 7, f				YELFLASH							CABINET							2	2	TRANSITION MODE:				3:30		START UP FLASH:		1											
	RING 2:					FLASH/ENT							DETECTOR							2	2	SYNCHRO MODE:				BEST		RED REVERT:		2											
2 + 3 + PL # + PLAN MODE						FLASH/EXIT							COORD							1	1	MAX DWELL TIME:				50		FLASH CLR:		6											
PL	PLAN MODE	MAX GRN	PH DATA	PH SEQ	OL DATA	ACT CONF	ENA	OFF	VAR	CYCLE	HOLD / YLD	SCHEDULE												AUXILIARY																	
												EV	ENA	HR	M	S	M	T	W	T	F	S	PL	1	2	3	4	5	6	7	8	1	2	3	4						
1	COORD	NONE	5	1	1	8	B	0	5	120	2	1	ENA	0	0	X	X	X	X	X	X	X	25																		
2	COORD	NONE	5	1	1	8	B	106	5	130	2	2	ENA	6	0	X	X	X	X	X	X	X	8																		
3	COORD	NONE	5	1	1	8	B	0	5	130	2	3	ENA	6	30		X	X	X	X	X	2																			
4												4	ENA	7	0	X						X	7																		
5												5	ENA	9	0		X	X	X	X	X	1																			
6												6	ENA	15	30		X	X	X	X	X	3																			
7	COORD	NONE	4	1	1	4	B	0	5	120	2	7	ENA	19	0		X	X	X	X	X	1																			
8	COORD	NONE	4	1	1	4	B	0	5	80	2	8	ENA	23	0	X	X	X	X	X	X	8																			
9												9																													
10												10																													
20	FREE	MAX I	4	1	1	4						11																													
25	FLASH	NONE										12																													
PRIORITY SEQUENCE	PHASES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20																				
	TABLE 1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																				
	TABLE 2	2																																							
	TABLE 3	3																																							
	TABLE 4	4																																							

FLAGS		PHASES				PHASE DATA TABLE # 4				PH 1 EB ADV CLEARANCE	PH 2 EB FAR WEST	PH 3	PH 4 SB LOOP 1	PH 5	PH 6	PH 7 NB LOOP 1	PH 8	PH 9	PH 10	PH 11	PH 12	PH 13	PH 14	PH 15	PH 16	PH 22 EB FAR WEST	PH 24															
OMITPHAS	3, 5, 6, 8 - 21, 23, 25 - 30																																									
OMIT PED																																										
MIN RECAL	1, 2, 4, 7																																									
MAXRECAL	1, 2, 4, 7																																									
SOFT RCL																																										
CDT'L SRVC																																										
PED RECAL	22				MIN GREEN				4.0	13.0		10.0			10.0										1.0	1.0																
DUAL ETRY					PASSAGE				1.0	2.0		2.0			2.0										0.0	0.0																
SIMGAP					MAXGRN 1				4.0	30.0		30.0			30.0										14.0	1.0																
REDREST					MAXGRN 2				4.0	30.0		30.0			30.0										14.0	1.0																
AUTO PED					CONDSERV				0.0	0.0		0.0			0.0										0.0	0.0																
REST WALK	2				YEL CHG				4.0	4.0		4.0			4.0										4.0	4.0																
PED RECY					RED CLR				1.0	1.0		1.0			1.0										1.0	1.0																
RED LOCK					WALK																																					
YEL LOCK					PED CLR																																					
NO EXT					ADDED INI																																					
NO ADD INI					TIME TO RED																																					
NOGAPRED					TIME BEFOR																																					
NOMAX LOK					MAX INIT GRN																																					
2+ 3 + PL # +		PHASE		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	22	23		PHASE		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	22	23
MIN SPLIT		PLAN	1	9	15		15			15	9									20		MIN	PLAN																			
NOM SPLIT		CYCLE	120	9	27		30			25	9									20		NOM	CYCLE																			
MAX SPLIT				9	45		35			35	9									20		MAX																				
NOTE: PLAN 20 = FREE MODE PLAN 33 = FLASH MODE	PLAN	2	9	15		25			15	9										20		MIN	PLAN																			
	CYCLE	130	9	25		46			21	9										20		NOM	CYCLE																			
			9	45		60			35	9										20		MAX																				
	PLAN	3	9	15		20			20	9										20		MIN	PLAN	7	9	15		15			15						20	20				
	CYCLE	130	9	20		31			41	9										20		NOM	CYCLE	120	9	27		34			30						20	20				
			9	40		45			55	9										20		MAX			9	45		35			35							20	20			
	PLAN																				MIN	PLAN	8	9	14		10			10						20						
	CYCLE																				NOM	CYCLE	80	9	15		18			18						20						
Change ONLY the following:				1	2	3	4	5	6	7	8	9			33	34	35	36	37	38	39	40	41	42	43																	
INPUT CHANNELS	FUNCTION TYPE								VEH							VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH					
	FUNCTION INDEX								4							13	14	15	16	17	18	19	20	21	22	23																
	UNIT								1							1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
	CONNECTOR / BUI								C1S							C1S	C1S	C1S	C1S	C1S	C1S	C1S	C1S	C1S	C1S	C1S	C1S	C1S	C1S	C1S	C1S	C1S	C1S	C1S	C1S							
	PIN								NONE							41	41	39	39	NONE	NONE	45	45	NONE	39	41																
	CHANNEL IN 1																																									
	CHANNEL IN 2																																									
LOGIC																																										
OUTPUT CHANNELS				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21																		
	FUNCTION TYPE			OVL	OVL	ovlped	OVL	OVL	ovlped	OVL	OVL	ovlped	OVL	OVL	ovlped	OVL	ovlped	OVL	OVL																							
	FUNCTION INDEX			1	2	13	5	6	15	3	4	14	7	8	16	9	13	3	4																							
	CONNECTOR / BUI 1			cs1	cs1	cs1	cs1	cs1	cs1	cs1	cs1	cs1	cs1	cs1	cs1	cs1	cs1	cs1	cs1																							
	PIN 1			16	12	10	7	4	2	32	29	27	24	21	19	97	94	88	85																							
	CONNECTOR / BUI 2			cs1	cs1	cs1	cs1	cs1	cs1	cs1	cs1	cs1	cs1	cs1	cs1	cs1	cs1	cs1	cs1																							
	PIN 2			17	13	none	8	5	none	33	30	none	25	22	none	98	none	89	86																							
	CONNECTOR / BUI 3			cs1	cs1	cs1	cs1	cs1	cs1	cs1	cs1	cs1	cs1	cs1	cs1	cs1	cs1	cs1	cs1																							
PIN 3			18	15	11	9	6	3	34	31	28	26	23	20	99	96	90	87																								

FLAGS	PHASES	PHASE DATA TABLE # 3	PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8	PH 9	PH 10	PH 11	PH 12	PH 13	PH 14	PH 15	PH 16	PH 17	PH 18
OMITPHAS																				
OMIT PED		PHASE TIMING																		
MIN RECAL																				
MAXRECAL																				
SOFT RCL																				
CDT'L SRVC																				
PED RECAL		MIN GREEN																		
DUAL ETRY		PASSAGE																		
SIMGAP		MAXGRN 1																		
REDREST		MAXGRN 2																		
AUTO PED		CONDSERV																		
REST WALK		YEL CHG																		
PED RECY		RED CLR																		
RED LOCK		WALK																		
YEL LOCK		PED CLR																		
NO EXT		ADDED INI																		
NO ADD INI		TIME TO RED																		
NOGAPRED		TIME BEFOR																		
NO RANGE		MIN GAP																		
NOMAX LOK		MAX INIT GRN																		

FLAGS	PHASES	PHASE DATA TABLE # 4	PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8	PH 9	PH 10	PH 11	PH 12	PH 13	PH 14	PH 15	PH 16	PH 17	PH 18
OMITPHAS																				
OMIT PED		PHASE TIMING																		
MIN RECAL																				
MAXRECAL																				
SOFT RCL																				
CDT'L SRVC																				
PED RECAL		MIN GREEN																		
DUAL ETRY		PASSAGE																		
SIMGAP		MAXGRN 1																		
REDREST		MAXGRN 2																		
AUTO PED		CONDSERV																		
REST WALK		YEL CHG																		
PED RECY		RED CLR																		
RED LOCK		WALK																		
YEL LOCK		PED CLR																		
NO EXT		ADDED INI																		
NO ADD INI		TIME TO RED																		
NOGAPRED		TIME BEFOR																		
NO RANGE		MIN GAP																		
NOMAX LOK		MAX INIT GRN																		

NOTES:

TO QUICKLY FIGURE SECONDS FOR PHASE 8 NORTH AND SOUTH BOUND ONLY: PHASE 8 MINUS PHASE 3 THEN SUBTRACT THE CLEARANCE

[illegible]

PHASES		TYPE		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	19	OVERLAPS						A	B	C	D	E	F	G	H	I	J	K	M	N	O	P	Q										
P = PRIMARY S = SECONDARY M = MODIFIED	OVERLAP CONFIGURATION	OVL A	2	P	X	X									X	X							OVERLAP SETTINGS	FLAGS / PARAM	ENABLE						X	X	X	X	X	X	X	X	X			X	X	X	X	X							
			1-1	P																						PED OVERLAP														X	X	X	X	X									
				M																						FLASH YELLOW																											
				S																						ALT FLASH HZ																											
		OVL B	2	P				X	X			X		X											FLAGS	RECALL PRIMARY																											
			1-1	P																						RECALL SEC																											
				M																						PED RECALL													X	X	X												
				S																						PED RECYCLE																											
		OVL C	2	P	X	X	X			X	X		X		X	X	X							X	PARAMETERS	AUTO EXTEND																											
			1-1	P																						MIN GREEN																											
				M																						MAX GREEN																											
			S																					GREEN CLEAR																													
		OVL D	2	P			X			X	X		X		X									X		YEL CLEAR						4	4	4	4	4	4	4	4	4	4	0	0	0	0	0							
		OVL E	2	P					X	X						X	X							X		RED CLEAR						1	1	1	1	1	1	1	1	1	1	0	0	0	0	0							
		OVL F	2	P	X							X	X	X												WALK																5	5	5	5	5							
		OVL G	2	P		X	X	X	X	X					X	X	X	X						X		PED CLEAR																12	21	18	17	12							
		OVL H	2	P		X	X	X							X			X								RESERVICE																											
		OVL I	2	P						X														PRE - EMPT						1	3	4	5	6	SETTINGS						1	3	4	5	6								
		OVL J	2	P																				PRE EMPT FLAGS	ENABLE							X					TIMING	STRT MIN GRN															
		OVL K	2	P																					NO MEM LOK							X							PHASE FLAGS	STRT WALK													
		OVL L	2	P																					MAN ENABLE															STRT PED CLR													
		OVL M	2	P		X											X	X							NO OVER FLSH															ENT 1 PHASE							2						
		OVL N	2	P				X	X			X		X									X		NO OVER NEXT																ENT 2 PHASE												
		OVL O	2	P					X	X					X	X									X	OMIT IN DELAY														DWELL PHASE							2						
		OVL P	2	P	X						X	X	X													RE MAX PRES														INITIAL DWELL													
		OVL Q	2	P		X											X	X								PED NOT DARK														DWELL PED													
																										MIN PRESENCE														RECAL PHASE													
																										DELAY														EXIT PHASE							4						
FLAGS	PHASES							PHASE DATA TABLE # 8	PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8	PH 19	PH 10	PH 11	PH 12	PH 13	PH 14	PH 15		PH 16	PH 17	PH 18																										
OMITPHAS	3, 8 - 18, 20								PHASE TIMING	EB ADV CLEAR	EB ANDERSON	PH 3	SB LOOP 1	WB ADV CLEAR	NB RT, WB ANDERSON	NB LOOP 1	PH 19	PH 10	PH 11	PH 12	PH 13	PH 14	PH 15	PH 16	PH 17	PH 18																											
OMIT PED																																																					
MIN RECAL																																																					
MAXRECAL	1, 2, 4, 5, 6, 7																																																				
SOFT RCL																																																					
CDT'L SRVC																																																					
PED RECAL	4							MIN GREEN	3.0	10.0		5.0	3.0	10.0	5.0		6.0																																				
DUAL ETRY								PASSAGE	0.0	3.5		2.5	0.0	2.5	1.5		0.0																																				
SIMGAP								MAXGRN 1	3.0	30.0		30.0	3.0	30.0	30.0		6.0																																				
REDREST								MAXGRN 2	3.0	30.0		30.0	3.0	30.0	30.0		6.0																																				
AUTO PED	1, 2, 4, 5, 6, 7							CONDSERV	0.0	0.0		0.0	0.0	0.0	0.0		0.0																																				
REST WALK	4							YEL CHG	4.0	4.0		4.0	4.0	4.0	4.0		4.0																																				
PED RECY								RED CLR	1.0	1.0		1.0	1.0	1.0	1.0		1.0																																				
RED LOCK								WALK																																													
YEL LOCK								PED CLR																																													
NO EXT	1, 5							ADDED INI																																													
NO ADD INI								TIME TO RED																																													
NOGAPRED								TIME BEFOR																																													
NO RANGE								MIN GAP																																													
NOMAX LOK								MAX INIT GRN																																													

FLAGS	PHASES	PHASE DATA TABLE # 3	PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8	PH 9	PH 10	PH 11	PH 12	PH 13	PH 14	PH 15	PH 16	PH 17	PH 18
OMITPHAS		PHASE TIMING																		
OMIT PED																				
MIN RECAL																				
MAXRECAL																				
SOFT RCL																				
CDT'L SRVC																				
PED RECAL		MIN GREEN																		
DUAL ETRY		PASSAGE																		
SIMGAP		MAXGRN 1																		
REDREST		MAXGRN 2																		
AUTO PED		CONDSERV																		
REST WALK		YEL CHG																		
PED RECY		RED CLR																		
RED LOCK		WALK																		
YEL LOCK		PED CLR																		
NO EXT		ADDED INI																		
NO ADD INI		TIME TO RED																		
NOGAPRED		TIME BEFOR																		
NO RANGE		MIN GAP																		
NOMAX LOK		MAX INIT GRN																		

FLAGS	PHASES	PHASE DATA TABLE # 4	PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8	PH 9	PH 10	PH 11	PH 12	PH 13	PH 14	PH 15	PH 16	PH 17	PH 18
OMITPHAS		PHASE TIMING																		
OMIT PED																				
MIN RECAL																				
MAXRECAL																				
SOFT RCL																				
CDT'L SRVC																				
PED RECAL		MIN GREEN																		
DUAL ETRY		PASSAGE																		
SIMGAP		MAXGRN 1																		
REDREST		MAXGRN 2																		
AUTO PED		CONDSERV																		
REST WALK		YEL CHG																		
PED RECY		RED CLR																		
RED LOCK		WALK																		
YEL LOCK		PED CLR																		
NO EXT		ADDED INI																		
NO ADD INI		TIME TO RED																		
NOGAPRED		TIME BEFOR																		
NO RANGE		MIN GAP																		
NOMAX LOK		MAX INIT GRN																		

NOTES:

Using Video detection

TRAFFIC SIGNAL INTERSECTION:							DATE:	GRP:	LOC:	VRS:	HUB:	ZONE:	SEC:	ENGINEER:	CITY OF AUSTIN																								
Spicewood @ Woodhollow							8/10/2012		99B							TRAFFIC SIGNAL TIMING & PHASING SHEETS																							
4 + 2 + RINGS							4 + 2 + PHASEMODE					4 + 1 + ACT CONFIG					#1	#2	#3	#4	#5	1 + ACTIVE CONTROL PARAMETERS																	
PHASE 1							RING 1:	1, 2, a, 3, 4, b					STARTUP	2, 6					PHASE	1					CONTROL MODE:					SCHEDULE									
PHASE 2							RING 2:	5, 6, a, 7, 8, b					REDSTRT	1, 3 - 5, 7 - 10					OVERLAP	1					MAN PLN:					1	FREE PLN:					1	DFSCHED:	1	
PHASE 1							RING 1:						PED	4, 8					PREEMPT	1					4 + 7 + MISC					4 + 2 + COORD CONFIG									
PHASE 2							RING 2:						YELFLASH	2, 6					CABINET	3					TRANSITION MODE:					3:30	START UP FLASH:					1			
2 + 3 + PL # + PLAN MODE							FLASH/ENT					DETECTOR					2					SYNCHRO MODE:					BEST	RED REVERT:					2						
FLASH/EXIT <td colspan="5">COORD</td> <td colspan="5">1</td> <td colspan="5">MAX DWELL TIME:</td> <td>0</td> <td colspan="5">FLASH CLR:</td> <td>6</td>							COORD					1					MAX DWELL TIME:					0	FLASH CLR:					6											
PL	PLAN MODE	MAX GRN	PH DATA	PH SEQ	OL DATA	ACT CONF	ENA	OFF	VAR	CYCLE	HOLD / YLD	SCHEDULE																SPECIAL FUNCTIONS								AUXILIARY			
EV	ENA	HR	M	S	M	T	W	T	F	S	PL	1	2	3	4	5	6	7	8	1	2	3	4																
1	COORD	MAX 1	3	1	1	1	A	82	5	120	2, 6	1	ENA	0	0	X	X	X	X	X	X	X	20																
2												2	ENA	6	0	X	X	X	X	X	X	X	4																
3												3	ENA	6	30		X	X	X	X	X		6																
4	COORD	MAX 1	1	1	1	1	A	53	5	90	2, 6	4		7	30		X	X	X	X	X	6																	
5	COORD	MAX 1	3	1	1	1	A	65	5	130	2, 6	5	ENA	8	0	X						X	5																
6	COORD	MAX 1	3	1	1	1	A	55	5	130	2, 6	6	ENA	9	0		X	X	X	X	X	5																	
7												7	ENA	15	30		X	X	X	X	X	8																	
8	COORD	MAX 1	3	1	1	1	A	55	5	130	2, 6	8	ENA	19	30		X	X	X	X	X	1																	
9												9	ENA	21	0	X	X	X	X	X	X	20																	
10												10																											
20												11																											
33												12																											
PRIORITY SEQUENCE	PHASES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20																		
	TABLE 1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																		
	TABLE 2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																		
	TABLE 3																																						
	TABLE 4																																						
PED PRAMS & FLAGS	PHASES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20																		
	ENABLE	X	X	X	X																																		
	CALLPHAS	2	4	6	8																																		
	OVERLAP																																						
SIGNAL PHASING DIAGRAM - NUMBERS REPRESENT GREEN TIME (SECONDS)																																							
PLAN																																							
1	18 + 4 + 1	50 + 4 + 1	13 + 4 + 1	19 + 4 + 1																																			
4	5 + 4 + 1	43 + 4 + 1	5 + 4 + 1	17 + 4 + 1																																			
5	24 + 4 + 1	38 + 4 + 1	24 + 4 + 1	24 + 4 + 1																																			
6	24 + 4 + 1	38 + 4 + 1	24 + 4 + 1	24 + 4 + 1																																			
PLAN																																							
8	29 + 4 + 1	77 + 4 + 1	24 + 4 + 1	29 + 4 + 1																																			

FLAGS		PHASES				PHASE DATA TABLE # 1				PH 1		PH 2		PH 3		PH 4		PH 5		PH 6		PH 7		PH 8		PH 9		PH 10		PH 11		PH 12		PH 13		PH 14		PH 15		PH 16		PH 17		PH 18			
OMITPHAS		3, 7								WB "P"/L/T		EB SPICEWOOD				NB Woodhollow		eb "P"/L/T		WB SPICEWOOD				SB Woodhollow																							
OMIT PED		1 - 7				PHASE TIMING				WB "P"/L/T		EB SPICEWOOD				NB Woodhollow		eb "P"/L/T		WB SPICEWOOD				SB Woodhollow																							
MIN RECAL		2, 4, 6, 8																																													
MAXRECAL																																															
SOFT RCL																																															
CDT'L SRVC																																															
PED RECAL						MIN GREEN				5.0		20.0				8.0		5.0		20.0				8.0																							
DUAL ETRY		4, 8				PASSAGE				1.5		2.0				2.0		1.5		2.0				2.0																							
SIMGAP						MAXGRN 1				15.0		96.0				35.0		15.0		96.0				35.0																							
REDREST						MAXGRN 2				15.0		75.0				35.0		15.0		75.0				35.0																							
AUTO PED						CONDSERV				0.0		0.0				0.0		0.0		0.0				0.0																							
REST WALK						YEL CHG				4.0		4.0				4.0		4.0		4.0				4.0																							
PED RECY						RED CLR				1.0		1.0				1.0		1.0		1.0				1.0																							
RED LOCK						WALK										6.0								6.0																							
YEL LOCK						PED CLR										24.0								24.0																							
NO EXT						ADDED INI																																									
NO ADD INI						TIME TO RED																																									
NORANGE						TIME BEFOR																																									
NOMAX LOK		1, 4, 5, 8				MAX INIT GRN																																									
2+ 3 + PL # +		PHASE				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18			PHASE				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
MIN SPLIT		PLAN	1	10	25		13	10	25		13												MIN	PLAN	5	10	25		10	10	25		10														
NOM SPLIT		CYCLE	120	23	73		24	18	78		24												NOM	CYCLE	130	29	72		29	29	72		29														
MAX SPLIT				25	100		32	25	100		32												MAX			32	110		30	30	110		30														
NOTE: PLAN 20 = FREE MODE PLAN 33 = FLASH MODE		PLAN																					MIN	PLAN	6	10	25		10	10	25		10														
		CYCLE																						NOM	CYCLE	130	29	72		29	29	72		29													
																								MAX			32	##		30	30	##		30													
		PLAN																						MIN	PLAN																						
		CYCLE																						NOM	CYCLE																						
																									MAX																						
		PLAN	4	10	25		10	10	25		10													MIN	PLAN	8	10	25		10	10	25		10													
		CYCLE	90	10	58		22	10	58		22													NOM	CYCLE	150	34	82		34	29	87		34													
			20	75		30	20	75		30													MAX			32	##		30	30	##		30														
Change ONLY the following:				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21																							
INPUT CHANNELS	FUNCTION TYPE																																														
	FUNCTION INDEX																																														
	UNIT																																														
	CONNECTOR / BUI																																														
	PIN																																														
	CHANNEL IN 1																																														
	CHANNEL IN 2																																														
	LOGIC																																														
OUTPUT CHANNELS				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21																							
	FUNCTION TYPE																																														
	FUNCTION INDEX																																														
	CONNECTOR / BUI 1																																														
	PIN 1																																														
	CONNECTOR / BUI 2																																														
	PIN 2																																														
	CONNECTOR / BUI 3																																														
PIN 3																																															

FLAGS	PHASES	PHASE DATA TABLE # 3	PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8	PH 9	PH 10	PH 11	PH 12	PH 13	PH 14	PH 15	PH 16	PH 17	PH 18	
OMITPHAS	3, 7		PHASE TIMING	WB "P"/L/T	EB SPICEWOOD		NB Woodhollow	eb "P"/L/T	WB SPICEWOOD		SB Woodhollow										
OMIT PED	1 - 7																				
MIN RECAL	1, 2, 4, 6, 8																				
MAXRECAL																					
SOFT RCL																					
CDT'L SRVC																					
PED RECAL		MIN GREEN	21.0	20.0		15.0	5.0	20.0		11.0											
DUAL ETRY	4, 8	PASSAGE	1.5	2.0		2.0	1.5	2.0		2.0											
SIMGAP		MAXGRN 1	15.0	96.0		35.0	15.0	96.0		35.0											
REDREST		MAXGRN 2	15.0	75.0		35.0	15.0	75.0		35.0											
AUTO PED		CONDSERV	0.0	0.0		0.0	0.0	0.0		0.0											
REST WALK		YEL CHG	4.0	4.0		4.0	4.0	4.0		4.0											
PED RECY		RED CLR	1.0	1.0		1.0	1.0	1.0		1.0											
RED LOCK		WALK				6.0				6.0											
YEL LOCK		PED CLR				24.0				24.0											
NO EXT		ADDED INI																			
NO ADD INI		TIME TO RED																			
NOGAPRED		TIME BEFOR																			
NORANGE		MIN GAP																			
NOMAX LOK	1, 4, 5, 8	MAX INIT GRN																			

FLAGS	PHASES	PHASE DATA TABLE # 4	PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8	PH 9	PH 10	PH 11	PH 12	PH 13	PH 14	PH 15	PH 16	PH 17	PH 18	
OMITPHAS	1, 3, 5, 7		PHASE TIMING	WB "P"/L/T	EB SPICEWOOD		NB Woodhollow	eb "P"/L/T	WB SPICEWOOD		SB Woodhollow										
OMIT PED	1 - 7																				
MIN RECAL	2, 4, 6, 8																				
MAXRECAL																					
SOFT RCL																					
CDT'L SRVC																					
PED RECAL		MIN GREEN	5.0	20.0		12.0	5.0	20.0		12.0											
DUAL ETRY	4, 8	PASSAGE	1.5	2.0		2.0	1.5	2.0		2.0											
SIMGAP		MAXGRN 1	15.0	96.0		35.0	15.0	96.0		35.0											
REDREST		MAXGRN 2	15.0	75.0		35.0	15.0	75.0		35.0											
AUTO PED		CONDSERV	0.0	0.0		0.0	0.0	0.0		0.0											
REST WALK		YEL CHG	4.0	4.0		4.0	4.0	4.0		4.0											
PED RECY		RED CLR	1.0	1.0		1.0	1.0	1.0		1.0											
RED LOCK		WALK				6.0				6.0											
YEL LOCK		PED CLR				24.0				24.0											
NO EXT		ADDED INI																			
NO ADD INI		TIME TO RED																			
NOGAPRED		TIME BEFOR																			
NORANGE		MIN GAP																			
NOMAX LOK	1, 4, 5, 8	MAX INIT GRN																			

NOTES:

EXHIBIT 10

**SYNCHRO ANALYSIS RESULTS FOR
INTERSECTIONS WITH IMPROVEMENTS**

Lanes, Volumes, Timings
1: Hart Lane & Far West Boulevard

2018 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	54	714	86	198	280	70	49	132	157	205	255	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	170		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.979				0.850		0.931			0.987	
Flt Protected	0.950			0.950				0.993			0.985	
Satd. Flow (prot)	1770	3465	0	1770	3539	1583	0	3272	0	0	3441	0
Flt Permitted	0.426			0.134				0.993			0.985	
Satd. Flow (perm)	794	3465	0	250	3539	1583	0	3272	0	0	3441	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16				101		140			7	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		362			1265			236			237	
Travel Time (s)		7.1			24.6			5.4			5.4	
Peak Hour Factor	0.73	0.83	0.61	0.69	0.83	0.85	0.80	0.80	0.82	0.90	0.56	0.47
Adj. Flow (vph)	74	860	141	287	337	82	61	165	191	228	455	66
Shared Lane Traffic (%)												
Lane Group Flow (vph)	74	1001	0	287	337	82	0	417	0	0	749	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Split	NA		Split	NA	
Protected Phases	5	2		1	6		4	4		8	8	
Permitted Phases	2			6		6						
Detector Phase	5	2		1	6	6	4	4		8	8	

Lanes, Volumes, Timings
1: Hart Lane & Far West Boulevard

2018 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	8.0	18.0		8.0	18.0	18.0	12.0	12.0		12.0	12.0	
Minimum Split (s)	13.0	23.0		13.0	23.0	23.0	17.0	17.0		17.0	17.0	
Total Split (s)	13.0	52.0		22.0	61.0	61.0	26.0	26.0		30.0	30.0	
Total Split (%)	10.0%	40.0%		16.9%	46.9%	46.9%	20.0%	20.0%		23.1%	23.1%	
Maximum Green (s)	8.0	47.0		17.0	56.0	56.0	21.0	21.0		25.0	25.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0		5.0			5.0	
Lead/Lag	Lead	Lead		Lag	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	
Walk Time (s)		7.0			7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		12.0			12.0	12.0	21.0	21.0		21.0	21.0	
Pedestrian Calls (#/hr)		0			0	0	0	0		0	0	
Act Effect Green (s)	44.1	44.1		55.6	55.6	55.6		16.8			32.2	
Actuated g/C Ratio	0.34	0.34		0.43	0.43	0.43		0.13			0.25	
v/c Ratio	0.22	0.84		0.94	0.22	0.11		0.77			0.88	
Control Delay	30.6	46.5		103.6	44.5	17.9		45.4			59.7	
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Delay	30.6	46.5		103.6	44.5	17.9		45.4			59.7	
LOS	C	D		F	D	B		D			E	
Approach Delay		45.4			65.4			45.4			59.7	
Approach LOS		D			E			D			E	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 100 (77%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.94

Intersection Signal Delay: 53.8

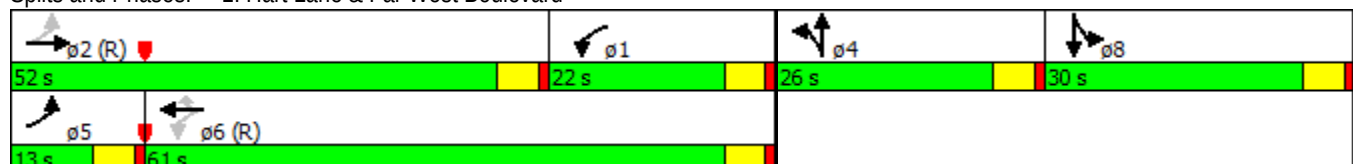
Intersection LOS: D

Intersection Capacity Utilization 74.2%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 1: Hart Lane & Far West Boulevard



Lanes, Volumes, Timings
2: Wood Hollow Drive & Far West Boulevard

2018 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	127	1013	45	112	549	94	24	107	281	256	125	68
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	335		0	165		0	120		120	0		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	75			35			50			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.945	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1760	0
Flt Permitted	0.391			0.202			0.950			0.950		
Satd. Flow (perm)	728	3539	1583	376	3539	1583	1770	1863	1583	1770	1760	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			101			116			195		19	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1265			1235			599			222	
Travel Time (s)		24.6			24.1			13.6			5.0	
Peak Hour Factor	0.74	0.91	0.58	0.90	0.88	0.81	0.69	0.65	0.87	0.90	0.81	0.77
Adj. Flow (vph)	172	1113	78	124	624	116	35	165	323	284	154	88
Shared Lane Traffic (%)												
Lane Group Flow (vph)	172	1113	78	124	624	116	35	165	323	284	242	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	L NA	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		3	3		7	7	
Permitted Phases	6		6	2		2			3			
Detector Phase	1	6	6	5	2	2	3	3	3	7	7	

Lanes, Volumes, Timings
2: Wood Hollow Drive & Far West Boulevard

2018 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	8.0	8.0	8.0	5.0	5.0	
Minimum Split (s)	11.0	40.0	40.0	12.0	40.0	40.0	15.0	15.0	15.0	15.0	15.0	
Total Split (s)	16.0	67.0	67.0	16.0	67.0	67.0	19.0	19.0	19.0	28.0	28.0	
Total Split (%)	12.3%	51.5%	51.5%	12.3%	51.5%	51.5%	14.6%	14.6%	14.6%	21.5%	21.5%	
Maximum Green (s)	11.0	62.0	62.0	11.0	62.0	62.0	14.0	14.0	14.0	23.0	23.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
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	
Recall Mode	None	C-Min	C-Min	Max	C-Min	C-Min	Min	Min	Min	Max	Max	
Walk Time (s)		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		12.0	12.0		12.0	12.0	21.0	21.0	21.0	21.0	21.0	
Pedestrian Calls (#/hr)		0	0		0	0	0	0	0	0	0	
Act Effect Green (s)	51.6	51.6	51.6	30.8	30.8	30.8	17.5	17.5	17.5	29.9	29.9	
Actuated g/C Ratio	0.40	0.40	0.40	0.24	0.24	0.24	0.13	0.13	0.13	0.23	0.23	
v/c Ratio	0.32	0.79	0.11	0.60	0.75	0.25	0.15	0.66	0.85	0.70	0.58	
Control Delay	32.5	39.4	4.1	50.4	52.0	9.9	50.7	66.2	41.6	58.2	49.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	32.5	39.4	4.1	50.4	52.0	9.9	50.7	66.2	41.6	58.2	49.5	
LOS	C	D	A	D	D	A	D	E	D	E	D	
Approach Delay		36.5			46.1			49.9			54.2	
Approach LOS		D			D			D			D	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 10 (8%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 44.0

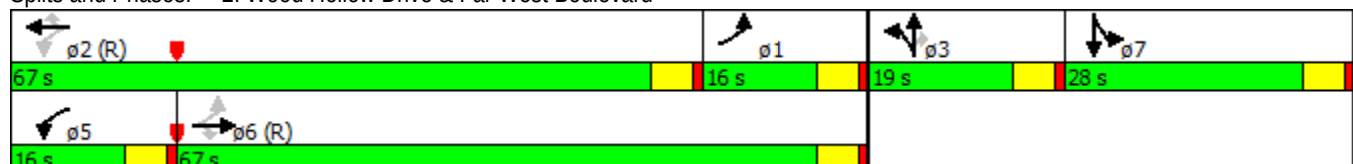
Intersection LOS: D

Intersection Capacity Utilization 72.1%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 2: Wood Hollow Drive & Far West Boulevard



Lanes, Volumes, Timings
3: Far West Boulevard & Mopac SB FR

2018 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑						↑↑	↑
Volume (vph)	0	771	437	17	508	0	0	0	0	129	533	855
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Fr t			0.850									0.850
Flt Protected				0.950							0.989	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	3500	1583
Flt Permitted				0.950							0.989	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	3500	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			394									136
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		1235			406			400			362	
Travel Time (s)		24.1			7.9			5.5			4.9	
Peak Hour Factor	0.92	0.91	0.93	0.67	0.93	0.92	0.92	0.92	0.92	0.78	0.92	0.95
Adj. Flow (vph)	0	847	470	25	546	0	0	0	0	165	579	900
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	847	470	25	546	0	0	0	0	0	744	900
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	L NA	Right	Left	Left	Right	Left	Left	R NA
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	custom	Prot	NA					custom	NA	custom
Protected Phases		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Permitted Phases										4		
Detector Phase		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Switch Phase												
Minimum Initial (s)				10.0								
Minimum Split (s)				15.0								

Lane Group	ø1	ø2	ø4	ø8	ø22
Lane Configurations					
Volume (vph)					
Ideal Flow (vphpl)					
Lane Util. Factor					
Frt					
Flt Protected					
Satd. Flow (prot)					
Flt Permitted					
Satd. Flow (perm)					
Right Turn on Red					
Satd. Flow (RTOR)					
Link Speed (mph)					
Link Distance (ft)					
Travel Time (s)					
Peak Hour Factor					
Adj. Flow (vph)					
Shared Lane Traffic (%)					
Lane Group Flow (vph)					
Enter Blocked Intersection					
Lane Alignment					
Median Width(ft)					
Link Offset(ft)					
Crosswalk Width(ft)					
Two way Left Turn Lane					
Headway Factor					
Turning Speed (mph)					
Number of Detectors					
Detector Template					
Leading Detector (ft)					
Trailing Detector (ft)					
Detector 1 Position(ft)					
Detector 1 Size(ft)					
Detector 1 Type					
Detector 1 Channel					
Detector 1 Extend (s)					
Detector 1 Queue (s)					
Detector 1 Delay (s)					
Detector 2 Position(ft)					
Detector 2 Size(ft)					
Detector 2 Type					
Detector 2 Channel					
Detector 2 Extend (s)					
Turn Type					
Protected Phases	1	2	4	8	22
Permitted Phases					
Detector Phase					
Switch Phase					
Minimum Initial (s)	4.0	10.0	10.0	4.0	1.0
Minimum Split (s)	9.0	15.0	25.0	9.0	20.0

Lanes, Volumes, Timings
3: Far West Boulevard & Mopac SB FR

2018 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)				21.0								
Total Split (%)				16.2%								
Maximum Green (s)				16.0								
Yellow Time (s)				4.0								
All-Red Time (s)				1.0								
Lost Time Adjust (s)				0.0								
Total Lost Time (s)				5.0								
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0								
Recall Mode				Min								
Act Effect Green (s)		49.0	24.0	16.0	45.0						50.0	75.0
Actuated g/C Ratio		0.38	0.18	0.12	0.35						0.38	0.58
v/c Ratio		0.64	0.77	0.12	0.45						0.55	0.93
Control Delay		36.0	20.1	51.6	0.9						35.2	34.7
Queue Delay		0.2	0.0	0.0	0.9						0.0	0.0
Total Delay		36.2	20.1	51.6	1.8						35.2	34.7
LOS		D	C	D	A						D	C
Approach Delay		30.4			4.0						34.9	
Approach LOS		C			A						C	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 106 (82%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 95

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.96

Intersection Signal Delay: 28.2

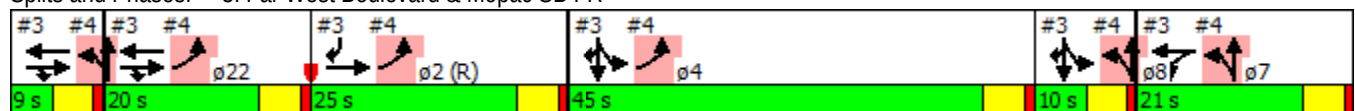
Intersection LOS: C

Intersection Capacity Utilization 96.0%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 3: Far West Boulevard & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø8	ø22
Total Split (s)	9.0	25.0	45.0	10.0	20.0
Total Split (%)	7%	19%	35%	8%	15%
Maximum Green (s)	4.0	20.0	40.0	5.0	15.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)					
Total Lost Time (s)					
Lead/Lag		Lag	Lead	Lag	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	C-Min	Min	Min	None
Act Effect Green (s)					
Actuated g/C Ratio					
v/c Ratio					
Control Delay					
Queue Delay					
Total Delay					
LOS					
Approach Delay					
Approach LOS					
Intersection Summary					

Lanes, Volumes, Timings
4: Mopac NB FR & Far West Boulevard

2018 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Lane Configurations												
Volume (vph)	916	0	526	78	0	0						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Lane Util. Factor	0.97	1.00	0.95	0.95	1.00	1.00						
Frt												
Flt Protected	0.950		0.950	0.985								
Satd. Flow (prot)	3433	0	1681	1743	0	0						
Flt Permitted	0.950		0.950	0.985								
Satd. Flow (perm)	3433	0	1681	1743	0	0						
Right Turn on Red		Yes				Yes						
Satd. Flow (RTOR)												
Link Speed (mph)	35			50	50							
Link Distance (ft)	406			308	472							
Travel Time (s)	7.9			4.2	6.4							
Peak Hour Factor	0.90	0.92	0.93	0.25	0.92	0.92						
Adj. Flow (vph)	1018	0	566	312	0	0						
Shared Lane Traffic (%)			24%									
Lane Group Flow (vph)	1018	0	430	448	0	0						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Right	Left	Left	Left	Right						
Median Width(ft)	24			12	12							
Link Offset(ft)	0			0	0							
Crosswalk Width(ft)	16			16	16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00						
Turning Speed (mph)	15	9	15			9						
Number of Detectors	1		1	2								
Detector Template	Left		Left	Thru								
Leading Detector (ft)	20		20	100								
Trailing Detector (ft)	0		0	0								
Detector 1 Position(ft)	0		0	0								
Detector 1 Size(ft)	20		20	6								
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0								
Detector 1 Queue (s)	0.0		0.0	0.0								
Detector 1 Delay (s)	0.0		0.0	0.0								
Detector 2 Position(ft)				94								
Detector 2 Size(ft)				6								
Detector 2 Type				Cl+Ex								
Detector 2 Channel												
Detector 2 Extend (s)				0.0								
Turn Type	Prot		Split	NA								
Protected Phases	2 4 22		1 7 8	1 7 8			1	2	4	7	8	22
Permitted Phases												
Detector Phase	2 4 22		1 7 8	1 7 8								
Switch Phase												
Minimum Initial (s)							4.0	10.0	10.0	10.0	4.0	1.0
Minimum Split (s)							9.0	15.0	25.0	15.0	9.0	20.0

Lanes, Volumes, Timings
4: Mopac NB FR & Far West Boulevard

2018 Site+Forecasted AM W/Improvements

6/2/2014



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Total Split (s)							9.0	25.0	45.0	21.0	10.0	20.0
Total Split (%)							7%	19%	35%	16%	8%	15%
Maximum Green (s)							4.0	20.0	40.0	16.0	5.0	15.0
Yellow Time (s)							4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)							1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag								Lag	Lead		Lag	Lead
Lead-Lag Optimize?								Yes	Yes		Yes	Yes
Vehicle Extension (s)							3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode							Min	C-Min	Min	Min	Min	None
Act Effect Green (s)	85.0		35.0	35.0								
Actuated g/C Ratio	0.65		0.27	0.27								
v/c Ratio	0.45		0.95	0.96								
Control Delay	2.9		78.7	78.8								
Queue Delay	0.7		0.0	0.0								
Total Delay	3.6		78.7	78.8								
LOS	A		E	E								
Approach Delay	3.6			78.7								
Approach LOS	A			E								

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 106 (82%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 95

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.96

Intersection Signal Delay: 38.4

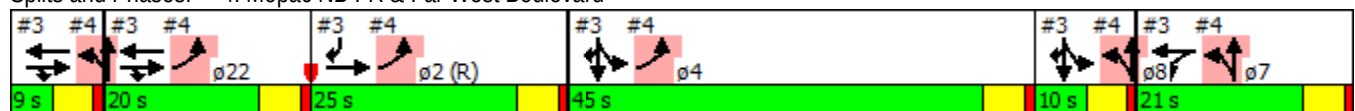
Intersection LOS: D

Intersection Capacity Utilization 109.1%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 4: Mopac NB FR & Far West Boulevard



Lanes, Volumes, Timings
5: Spicewood Springs Road & Mopac SB FR

2018 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑					↑	↑↑	↑
Volume (vph)	0	954	637	631	1027	0	0	0	0	350	1203	653
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	60		0	0		0	150		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			75			25			75		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.999	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1610	3387	1583
Flt Permitted				0.950						0.950	0.999	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1610	3387	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			185									185
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		294			386			782			882	
Travel Time (s)		5.7			7.5			10.7			12.0	
Peak Hour Factor	0.92	0.81	0.90	0.87	0.86	0.92	0.92	0.92	0.92	0.93	0.87	0.94
Adj. Flow (vph)	0	1178	708	725	1194	0	0	0	0	376	1383	695
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	0	1178	708	725	1194	0	0	0	0	338	1421	695
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Prot	Prot	NA					Split	NA	Prot
Protected Phases		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5
Permitted Phases												
Detector Phase		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

Lanes, Volumes, Timings
5: Spicewood Springs Road & Mopac SB FR

2018 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)		35.0	35.0	42.0	71.0					38.0	38.0	38.0
Actuated g/C Ratio		0.27	0.27	0.32	0.55					0.29	0.29	0.29
v/c Ratio		1.24	1.26	1.27	0.62					0.72	1.44	1.17
Control Delay		144.0	150.7	159.6	9.6					51.2	236.7	124.9
Queue Delay		0.6	0.3	0.9	48.0					0.0	0.0	0.6
Total Delay		144.6	151.0	160.6	57.6					51.2	236.7	125.5
LOS		F	F	F	E					D	F	F
Approach Delay		147.0			96.5						179.7	
Approach LOS		F			F						F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 8 (6%), Referenced to phase 2:EBWB, Start of Green

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.44

Intersection Signal Delay: 144.3

Intersection LOS: F

Intersection Capacity Utilization 115.8%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 5: Spicewood Springs Road & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0	5.0	6.0
Minimum Split (s)	8.0	10.0	10.0	8.0	10.0	10.0	11.0
Total Split (s)	23.0	17.0	33.0	10.0	26.0	10.0	11.0
Total Split (%)	18%	13%	25%	8%	20%	8%	8%
Maximum Green (s)	18.0	12.0	28.0	5.0	21.0	5.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Lanes, Volumes, Timings
6: Mopac NB FR & Spicewood Springs Road

2018 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	320	882	0	0	1026	239	439	13	503	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		325	0		0	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	75			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.91	0.95	1.00	1.00	1.00
Frt						0.850		0.909	0.850			
Flt Protected	0.950						0.950	0.984				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	1681	1516	1504	0	0	0
Flt Permitted	0.950						0.950	0.984				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	1681	1516	1504	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						299		55	353			
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		386			594			563			407	
Travel Time (s)		7.5			11.6			7.7			5.6	
Peak Hour Factor	0.90	0.96	0.92	0.92	0.93	0.79	0.86	0.60	0.87	0.92	0.92	0.92
Adj. Flow (vph)	356	919	0	0	1103	303	510	22	578	0	0	0
Shared Lane Traffic (%)							24%		39%			
Lane Group Flow (vph)	356	919	0	0	1103	303	388	369	353	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Prot	Split	NA	custom			
Protected Phases	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			
Permitted Phases												
Detector Phase	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

Lanes, Volumes, Timings
6: Mopac NB FR & Spicewood Springs Road

2018 Site+Forecasted AM W/Improvements

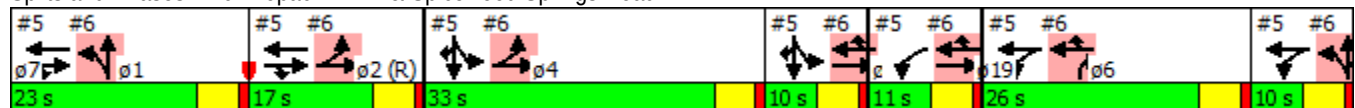
6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)	45.0	66.0			42.0	42.0	28.0	28.0	31.0			
Actuated g/C Ratio	0.35	0.51			0.32	0.32	0.22	0.22	0.24			
v/c Ratio	0.58	0.51			0.97	0.42	1.07	1.00	0.56			
Control Delay	14.6	8.6			62.8	5.6	115.8	90.3	7.8			
Queue Delay	9.4	9.9			42.8	0.0	0.0	2.9	0.0			
Total Delay	23.9	18.5			105.6	5.6	115.8	93.1	7.8			
LOS	C	B			F	A	F	F	A			
Approach Delay		20.0			84.1			73.9				
Approach LOS		B			F			E				

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 8 (6%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.44
Intersection Signal Delay: 59.6
Intersection LOS: E
Intersection Capacity Utilization 115.8%
ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 6: Mopac NB FR & Spicewood Springs Road



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0	5.0	6.0
Minimum Split (s)	8.0	10.0	10.0	8.0	10.0	10.0	11.0
Total Split (s)	23.0	17.0	33.0	10.0	26.0	10.0	11.0
Total Split (%)	18%	13%	25%	8%	20%	8%	8%
Maximum Green (s)	18.0	12.0	28.0	5.0	21.0	5.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	1043	162	520	740	11	69	4	216	6	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	0		100	0		0
Storage Lanes	1		0	1		0	1		1	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.986			0.996			0.854	0.850		0.977	
Flt Protected	0.950			0.950			0.950				0.960	
Satd. Flow (prot)	1770	5014	0	1770	3525	0	1770	1511	1504	0	1747	0
Flt Permitted	0.341			0.097			0.750				0.477	
Satd. Flow (perm)	635	5014	0	181	3525	0	1397	1511	1504	0	868	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15			6			171	177		101	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1093			275			251			161	
Travel Time (s)		21.3			5.4			5.7			3.7	
Peak Hour Factor	0.72	0.50	0.76	0.50	0.92	0.50	0.91	0.85	0.62	0.58	0.90	0.84
Adj. Flow (vph)	11	2086	213	1040	804	22	76	5	348	10	0	2
Shared Lane Traffic (%)									49%			
Lane Group Flow (vph)	11	2299	0	1040	826	0	76	176	177	0	12	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2			6			4		4	8		
Detector Phase	5	2		1	6		4	4	4	8	8	

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	20.0		21.0	20.0		15.0	15.0	15.0	11.0	11.0	
Minimum Split (s)	10.0	25.0		26.0	25.0		20.0	20.0	20.0	16.0	16.0	
Total Split (s)	10.0	56.0		56.0	102.0		18.0	18.0	18.0	18.0	18.0	
Total Split (%)	7.7%	43.1%		43.1%	78.5%		13.8%	13.8%	13.8%	13.8%	13.8%	
Maximum Green (s)	5.0	51.0		51.0	97.0		13.0	13.0	13.0	13.0	13.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0		5.0	
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min		Min	C-Min		Min	Min	Min	Min	Min	
Walk Time (s)							6.0	6.0	6.0	6.0	6.0	
Flash Dont Walk (s)							24.0	24.0	24.0	24.0	24.0	
Pedestrian Calls (#/hr)							0	0	0	0	0	
Act Effect Green (s)	55.2	51.0		96.3	96.3		13.0	13.0	13.0		13.0	
Actuated g/C Ratio	0.42	0.39		0.74	0.74		0.10	0.10	0.10		0.10	
v/c Ratio	0.03	1.16		1.37	0.32		0.55	0.58	0.57		0.07	
Control Delay	21.5	115.7		203.7	11.9		71.2	16.7	15.5		0.7	
Queue Delay	0.0	0.1		0.8	0.2		0.0	3.5	3.3		0.0	
Total Delay	21.5	115.9		204.5	12.1		71.2	20.3	18.8		0.7	
LOS	C	F		F	B		E	C	B		A	
Approach Delay		115.4			119.3			28.7			0.7	
Approach LOS		F			F			C			A	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 55 (42%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.37

Intersection Signal Delay: 108.6

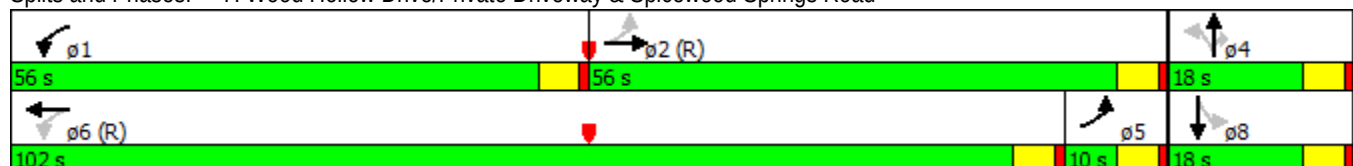
Intersection LOS: F

Intersection Capacity Utilization 77.6%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road



Lanes, Volumes, Timings
50: Executive Center Drive & Wood Hollow Drive

2018 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	28	241	86	97	206	130	27	25	4	14	63	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. 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
Frt		0.963				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1794	0	1770	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.617			0.509			0.685			0.722		
Satd. Flow (perm)	1149	1794	0	948	1863	1583	1276	1863	1583	1345	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		39				143			36			43
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		255			271			301			140	
Travel Time (s)		5.8			6.2			6.8			3.2	
Peak Hour Factor	0.67	0.91	1.00	0.86	0.91	0.91	0.50	0.46	0.50	0.25	0.56	0.47
Adj. Flow (vph)	42	265	86	113	226	143	54	54	8	56	112	43
Shared Lane Traffic (%)												
Lane Group Flow (vph)	42	351	0	113	226	143	54	54	8	56	112	43
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6		6	8		8	4		4
Detector Phase	2	2		6	6	6	8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	21.0	21.0		21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0

Lanes, Volumes, Timings
50: Executive Center Drive & Wood Hollow Drive

2018 Site+Forecasted AM W/Improvements

6/2/2014

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	35.0	35.0		35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0
Total Split (%)	58.3%	58.3%		58.3%	58.3%	58.3%	41.7%	41.7%	41.7%	41.7%	41.7%	41.7%
Maximum Green (s)	30.0	30.0		30.0	30.0	30.0	20.0	20.0	20.0	20.0	20.0	20.0
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
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
Recall Mode	C-Max	C-Max		C-Max	C-Max	C-Max	Max	Max	Max	Max	Max	Max
Walk Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0	0	0	0	0
Act Effect Green (s)	30.0	30.0		30.0	30.0	30.0	20.0	20.0	20.0	20.0	20.0	20.0
Actuated g/C Ratio	0.50	0.50		0.50	0.50	0.50	0.33	0.33	0.33	0.33	0.33	0.33
v/c Ratio	0.07	0.38		0.24	0.24	0.17	0.13	0.09	0.01	0.12	0.18	0.08
Control Delay	8.3	9.7		10.2	9.4	2.3	15.0	14.3	0.0	14.9	15.2	5.7
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	8.3	9.7		10.2	9.4	2.3	15.0	14.3	0.0	14.9	15.2	5.7
LOS	A	A		B	A	A	B	B	A	B	B	A
Approach Delay		9.5			7.5			13.6			13.2	
Approach LOS		A			A			B			B	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 60

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 45

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.38

Intersection Signal Delay: 9.8

Intersection LOS: A

Intersection Capacity Utilization 44.0%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 50: Executive Center Drive & Wood Hollow Drive



Lanes, Volumes, Timings
70: Spicewood Springs Road & Hart Lane

2018 Site+Forecasted AM W/Improvements

6/2/2014

							ø5	ø6	ø8
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø5	ø6	ø8
Lane Configurations									
Volume (vph)	104	144	154	872	1181	270			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900			
Storage Length (ft)	0	0	225			0			
Storage Lanes	1	1	1			0			
Taper Length (ft)	25		150						
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95			
Frt		0.850			0.965				
Flt Protected	0.950		0.950						
Satd. Flow (prot)	1770	1583	1770	3539	3415	0			
Flt Permitted	0.950		0.950						
Satd. Flow (perm)	1770	1583	1770	3539	3415	0			
Right Turn on Red		Yes				Yes			
Satd. Flow (RTOR)		13			54				
Link Speed (mph)	30			35	35				
Link Distance (ft)	358			1093	145				
Travel Time (s)	8.1			21.3	2.8				
Peak Hour Factor	0.85	0.87	0.86	0.88	0.89	0.67			
Adj. Flow (vph)	122	166	179	991	1327	403			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	122	166	179	991	1730	0			
Enter Blocked Intersection	No	No	No	No	No	No			
Lane Alignment	L NA	Right	Left	R NA	Left	Right			
Median Width(ft)	18			18	6				
Link Offset(ft)	0			0	0				
Crosswalk Width(ft)	16			16	16				
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00			
Turning Speed (mph)	15	9	15			9			
Number of Detectors	1	1	1	2	2				
Detector Template	Left	Right	Left	Thru	Thru				
Leading Detector (ft)	20	20	20	100	100				
Trailing Detector (ft)	0	0	0	0	0				
Detector 1 Position(ft)	0	0	0	0	0				
Detector 1 Size(ft)	20	20	20	6	6				
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel									
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0				
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0				
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0				
Detector 2 Position(ft)				94	94				
Detector 2 Size(ft)				6	6				
Detector 2 Type				Cl+Ex	Cl+Ex				
Detector 2 Channel									
Detector 2 Extend (s)				0.0	0.0				
Turn Type	Prot	pm+ov	Prot	NA	NA				
Protected Phases	2!	3	3	6 8!	4		5	6	8
Permitted Phases		2							
Detector Phase	2	3	3	6 8	4				

Lanes, Volumes, Timings
70: Spicewood Springs Road & Hart Lane

2018 Site+Forecasted AM W/Improvements

6/2/2014



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø5	ø6	ø8
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Minimum Split (s)	9.0	9.0	9.0		23.0		23.0	9.0	9.0
Total Split (s)	33.0	15.0	15.0		42.0		23.0	10.0	57.0
Total Split (%)	36.7%	16.7%	16.7%		46.7%		26%	11%	63%
Maximum Green (s)	28.0	10.0	10.0		37.0		18.0	5.0	52.0
Yellow Time (s)	4.0	4.0	4.0		4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0				
Total Lost Time (s)	5.0	5.0	5.0		5.0				
Lead/Lag		Lead	Lead		Lag		Lead	Lag	
Lead-Lag Optimize?		Yes	Yes		Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0	3.0
Recall Mode	Min	None	None		None		None	None	None
Walk Time (s)					7.0		7.0		
Flash Dont Walk (s)					11.0		11.0		
Pedestrian Calls (#/hr)					0		0		
Act Effect Green (s)	10.2	25.2	10.0	72.3	37.0				
Actuated g/C Ratio	0.14	0.35	0.14	1.00	0.51				
v/c Ratio	0.49	0.30	0.73	0.28	0.97				
Control Delay	35.3	17.1	50.3	0.2	34.9				
Queue Delay	0.0	0.0	0.0	0.0	0.0				
Total Delay	35.3	17.1	50.3	0.2	34.9				
LOS	D	B	D	A	C				
Approach Delay	24.8			7.9	34.9				
Approach LOS	C			A	C				

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 72.3

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.97

Intersection Signal Delay: 24.1

Intersection LOS: C

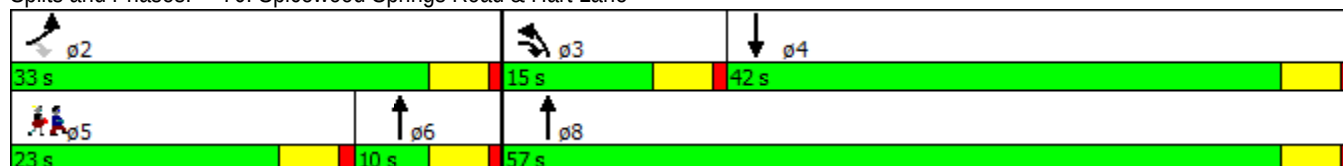
Intersection Capacity Utilization 68.1%

ICU Level of Service C

Analysis Period (min) 15

! Phase conflict between lane groups.

Splits and Phases: 70: Spicewood Springs Road & Hart Lane



HCM Unsignalized Intersection Capacity Analysis 2018 Site+Forecasted AM W/Improvements

10: Hart Lane & Greystone Drive

6/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	38	180	132	79	68	8	49	147	33	15	270	28
Peak Hour Factor	0.80	0.65	0.65	0.78	0.88	0.58	0.75	0.81	0.60	0.58	0.69	0.57
Hourly flow rate (vph)	48	277	203	101	77	14	65	181	55	26	391	49
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	324	203	179	14	302	466						
Volume Left (vph)	48	0	101	0	65	26						
Volume Right (vph)	0	203	0	14	55	49						
Hadj (s)	0.11	-0.67	0.32	-0.67	-0.03	-0.02						
Departure Headway (s)	8.1	7.3	9.0	8.0	7.6	7.1						
Degree Utilization, x	0.73	0.41	0.45	0.03	0.64	0.93						
Capacity (veh/h)	427	473	385	428	453	493						
Control Delay (s)	29.0	14.1	18.0	10.1	23.2	50.5						
Approach Delay (s)	23.2		17.4		23.2	50.5						
Approach LOS	C		C		C	F						
Intersection Summary												
Delay			31.0									
Level of Service			D									
Intersection Capacity Utilization			59.1%		ICU Level of Service				B			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 2018 Site+Forecasted AM W/Improvements

20: Wood Hollow Drive & Greystone Drive

6/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	57	127	165	55	121	31	23	206	44	24	175	50
Peak Hour Factor	0.81	0.89	0.64	0.80	0.82	0.72	0.53	0.88	0.79	0.68	0.85	0.68
Hourly flow rate (vph)	70	143	258	69	148	43	43	234	56	35	206	74
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2				
Volume Total (vph)	213	258	216	43	160	173	138	176				
Volume Left (vph)	70	0	69	0	43	0	35	0				
Volume Right (vph)	0	258	0	43	0	56	0	74				
Hadj (s)	0.20	-0.67	0.19	-0.67	0.17	-0.19	0.16	-0.26				
Departure Headway (s)	7.1	6.3	7.4	6.5	7.3	7.0	7.4	6.9				
Degree Utilization, x	0.42	0.45	0.44	0.08	0.33	0.33	0.28	0.34				
Capacity (veh/h)	486	553	464	516	468	491	464	493				
Control Delay (s)	14.0	13.0	15.0	8.9	12.6	12.2	12.0	12.3				
Approach Delay (s)	13.5		14.0		12.4		12.2					
Approach LOS	B		B		B		B					
Intersection Summary												
Delay			13.0									
Level of Service			B									
Intersection Capacity Utilization			47.5%	ICU Level of Service					A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 2018 Site+Forecasted AM W/Improvements

30: Greystone Drive & Mopac SB FR

6/2/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations					  	
Volume (veh/h)	0	221	0	0	3314	152
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.79	0.92	0.92	0.96	0.86
Hourly flow rate (vph)	0	280	0	0	3452	177
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	3540	1239	3629			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	3540	1239	3629			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	0	100			
cM capacity (veh/h)	4	167	63			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	280	1381	1381	867		
Volume Left	0	0	0	0		
Volume Right	280	0	0	177		
cSH	167	1700	1700	1700		
Volume to Capacity	1.68	0.81	0.81	0.51		
Queue Length 95th (ft)	487	0	0	0		
Control Delay (s)	377.1	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	377.1	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay			27.0			
Intersection Capacity Utilization			87.8%		ICU Level of Service	E
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2018 Site+Forecasted AM W/Improvements

40: Mopac SB FR & Executive Center Drive

6/2/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations					  	
Volume (veh/h)	0	30	0	0	2777	211
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.50	0.92	0.92	0.95	0.75
Hourly flow rate (vph)	0	60	0	0	2923	281
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	3064	1115	3204			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	3064	1115	3204			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	70	100			
cM capacity (veh/h)	10	202	93			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	60	1169	1169	866		
Volume Left	0	0	0	0		
Volume Right	60	0	0	281		
cSH	202	1700	1700	1700		
Volume to Capacity	0.30	0.69	0.69	0.51		
Queue Length 95th (ft)	30	0	0	0		
Control Delay (s)	30.1	0.0	0.0	0.0		
Lane LOS	D					
Approach Delay (s)	30.1	0.0				
Approach LOS	D					
Intersection Summary						
Average Delay			0.6			
Intersection Capacity Utilization			68.4%		ICU Level of Service	C
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2018 Site+Forecasted AM W/Improvements

60: Executive Center Drive & Hart Lane

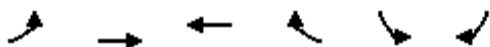
6/2/2014

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	215	42	119	282	13	23
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.79	0.67	0.83	0.72	0.75	0.46
Hourly flow rate (vph)	272	63	143	392	17	50
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)				358		
pX, platoon unblocked						
vC, conflicting volume			335		982	303
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			335		982	303
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			88		93	93
cM capacity (veh/h)			1224		244	736
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	335	535	67			
Volume Left	0	143	17			
Volume Right	63	0	50			
cSH	1700	1224	485			
Volume to Capacity	0.20	0.12	0.14			
Queue Length 95th (ft)	0	10	12			
Control Delay (s)	0.0	3.2	13.6			
Lane LOS		A	B			
Approach Delay (s)	0.0	3.2	13.6			
Approach LOS			B			
Intersection Summary						
Average Delay		2.8				
Intersection Capacity Utilization		48.6%	ICU Level of Service	A		
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis 2018 Site+Forecasted AM W/Improvements

100: Executive Center Drive & Driveway 1

6/2/2014



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	0	153	211	0	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	166	229	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)		893				
pX, platoon unblocked						
vC, conflicting volume	229				396	229
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	229				396	229
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	1339				609	810
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	166	229	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1339	1700	1700			
Volume to Capacity	0.00	0.13	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS			A			
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS			A			
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			14.4%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2018 Site+Forecasted AM W/Improvements

200: Executive Center Drive & Driveway 2

6/2/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	0	0	211	153	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	229	166	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)					735	
pX, platoon unblocked						
vC, conflicting volume	396	166	166			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	396	166	166			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	609	878	1412			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	0	229	166			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1412	1700			
Volume to Capacity	0.00	0.00	0.10			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			14.4%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2018 Site+Forecasted AM W/Improvements

300: Executive Center Drive & Driveway 3

6/2/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	0	0	211	153	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	229	166	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)					569	
pX, platoon unblocked						
vC, conflicting volume	396	166	166			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	396	166	166			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	609	878	1412			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	0	229	166			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1412	1700			
Volume to Capacity	0.00	0.00	0.10			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			14.4%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2018 Site+Forecasted AM W/Improvements

400: Executive Center Drive & Driveway 4

6/2/2014

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	11	24	98	113	104	142
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	26	107	123	113	154
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						301
pX, platoon unblocked	0.99					
vC, conflicting volume	548	168			229	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	543	168			229	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	97	97			92	
cM capacity (veh/h)	456	876			1339	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	38	229	267			
Volume Left	12	0	113			
Volume Right	26	123	0			
cSH	679	1700	1339			
Volume to Capacity	0.06	0.13	0.08			
Queue Length 95th (ft)	4	0	7			
Control Delay (s)	10.6	0.0	3.8			
Lane LOS	B		A			
Approach Delay (s)	10.6	0.0	3.8			
Approach LOS	B					
Intersection Summary						
Average Delay		2.6				
Intersection Capacity Utilization		38.6%		ICU Level of Service		A
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis 2018 Site+Forecasted AM W/Improvements

500: Executive Center Drive & Driveway 5

6/2/2014

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	183	0	0	161
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	199	0	0	175
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			140			
pX, platoon unblocked						
vC, conflicting volume	374	199			199	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	374	199			199	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	627	842			1373	
Direction, Lane #	NB 1	SB 1				
Volume Total	199	175				
Volume Left	0	0				
Volume Right	0	0				
cSH	1700	1373				
Volume to Capacity	0.12	0.00				
Queue Length 95th (ft)	0	0				
Control Delay (s)	0.0	0.0				
Lane LOS						
Approach Delay (s)	0.0	0.0				
Approach LOS						
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			19.6%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2018 Site+Forecasted AM W/Improvements

600: Executive Center Drive & Driveway 6

6/2/2014

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	183	0	0	161
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	199	0	0	175
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			352			
pX, platoon unblocked						
vC, conflicting volume	374	199			199	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	374	199			199	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	627	842			1373	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	0	199	175			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1373			
Volume to Capacity	0.00	0.12	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			19.6%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2018 Site+Forecasted AM W/Improvements

700: Executive Center Drive & Driveway 7

6/2/2014

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	183	0	0	161
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	199	0	0	175
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			536			
pX, platoon unblocked						
vC, conflicting volume	374	199			199	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	374	199			199	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	627	842			1373	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	0	199	175			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1373			
Volume to Capacity	0.00	0.12	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		13.0%		ICU Level of Service	A	
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis 2018 Site+Forecasted AM W/Improvements

800: Executive Center Drive & Driveway 8

6/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	0	0	0	183	0	0	161	0
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	0	0	0	0	0	0	0	199	0	0	175	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)								676				
pX, platoon unblocked												
vC, conflicting volume	374	374	175	374	374	199	175			199		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	374	374	175	374	374	199	175			199		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	100	100	100	100			100		
cM capacity (veh/h)	583	557	868	583	557	842	1401			1373		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	0	0	199	175								
Volume Left	0	0	0	0								
Volume Right	0	0	0	0								
cSH	1700	1700	1401	1373								
Volume to Capacity	0.00	0.00	0.00	0.00								
Queue Length 95th (ft)	0	0	0	0								
Control Delay (s)	0.0	0.0	0.0	0.0								
Lane LOS	A	A										
Approach Delay (s)	0.0	0.0	0.0	0.0								
Approach LOS	A	A										
Intersection Summary												
Average Delay			0.0									
Intersection Capacity Utilization			13.0%	ICU Level of Service						A		
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 2018 Site+Forecasted AM W/Improvements

900: Executive Center Drive & Driveway 9

6/2/2014

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	183	0	0	161
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	199	0	0	175
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			872			
pX, platoon unblocked						
vC, conflicting volume	374	199			199	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	374	199			199	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	627	842			1373	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	0	199	175			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1373			
Volume to Capacity	0.00	0.12	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		13.0%		ICU Level of Service	A	
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis 2018 Site+Forecasted AM W/Improvements

1000: Executive Center Drive & Driveway 10

6/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	0	0	0	183	0	0	161	0
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	0	0	0	0	0	0	0	199	0	0	175	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)								1039				
pX, platoon unblocked												
vC, conflicting volume	374	374	175	374	374	199	175			199		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	374	374	175	374	374	199	175			199		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	100	100	100	100			100		
cM capacity (veh/h)	583	557	868	583	557	842	1401			1373		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	0	0	199	175								
Volume Left	0	0	0	0								
Volume Right	0	0	0	0								
cSH	1700	1700	1401	1373								
Volume to Capacity	0.00	0.00	0.00	0.00								
Queue Length 95th (ft)	0	0	0	0								
Control Delay (s)	0.0	0.0	0.0	0.0								
Lane LOS	A	A										
Approach Delay (s)	0.0	0.0	0.0	0.0								
Approach LOS	A	A										
Intersection Summary												
Average Delay			0.0									
Intersection Capacity Utilization			13.0%	ICU Level of Service					A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 2018 Site+Forecasted AM W/Improvements 1100: Driveway 11 & Wood Hollow Drive

6/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	196	63	228	454	0	17	0	88	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		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
Hourly flow rate (vph)	0	213	68	248	493	0	18	0	96	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)		271			251							
pX, platoon unblocked	0.63			0.95			0.66	0.66	0.95	0.66	0.66	0.63
vC, conflicting volume	493			282			1236	1236	247	1332	1271	493
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			214			923	923	178	1068	975	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			81			87	100	88	100	100	100
cM capacity (veh/h)	1031			1285			141	144	820	99	134	689
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1							
Volume Total	282	741	18	96	0							
Volume Left	0	248	18	0	0							
Volume Right	68	0	0	96	0							
cSH	1700	1285	141	820	1700							
Volume to Capacity	0.17	0.19	0.13	0.12	0.00							
Queue Length 95th (ft)	0	18	11	10	0							
Control Delay (s)	0.0	4.4	34.4	10.0	0.0							
Lane LOS		A	D	A	A							
Approach Delay (s)	0.0	4.4	13.9		0.0							
Approach LOS			B		A							
Intersection Summary												
Average Delay			4.2									
Intersection Capacity Utilization			64.0%		ICU Level of Service				B			
Analysis Period (min)			15									

Lanes, Volumes, Timings
1: Hart Lane & Far West Boulevard

2018 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	43	565	38	172	559	149	59	143	133	166	113	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	170		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.987				0.850		0.941			0.969	
Flt Protected	0.950			0.950				0.991			0.981	
Satd. Flow (prot)	1770	3493	0	1770	3539	1583	0	3300	0	0	3364	0
Flt Permitted	0.262			0.341				0.991			0.981	
Satd. Flow (perm)	488	3493	0	635	3539	1583	0	3300	0	0	3364	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9				175		97			22	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		362			1265			236			237	
Travel Time (s)		7.1			24.6			5.4			5.4	
Peak Hour Factor	0.73	0.83	0.61	0.69	0.83	0.85	0.80	0.80	0.82	0.90	0.56	0.47
Adj. Flow (vph)	59	681	62	249	673	175	74	179	162	184	202	102
Shared Lane Traffic (%)												
Lane Group Flow (vph)	59	743	0	249	673	175	0	415	0	0	488	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Split	NA		Split	NA	
Protected Phases	5	2		1	6		4	4		8	8	
Permitted Phases	2			6		6						
Detector Phase	5	2		1	6	6	4	4		8	8	

Lanes, Volumes, Timings
1: Hart Lane & Far West Boulevard

2018 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	8.0	18.0		8.0	18.0	18.0	12.0	12.0		12.0	12.0	
Minimum Split (s)	13.0	24.0		13.0	24.0	24.0	33.0	33.0		33.0	33.0	
Total Split (s)	13.0	62.0		15.0	64.0	64.0	28.0	28.0		25.0	25.0	
Total Split (%)	10.0%	47.7%		11.5%	49.2%	49.2%	21.5%	21.5%		19.2%	19.2%	
Maximum Green (s)	8.0	57.0		10.0	59.0	59.0	23.0	23.0		20.0	20.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0		5.0			5.0	
Lead/Lag	Lead	Lead		Lag	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	
Walk Time (s)		7.0			7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		12.0			12.0	12.0	21.0	21.0		21.0	21.0	
Pedestrian Calls (#/hr)		0			0	0	0	0		0	0	
Act Effect Green (s)	57.4	57.4		62.3	62.3	62.3		18.4			23.6	
Actuated g/C Ratio	0.44	0.44		0.48	0.48	0.48		0.14			0.18	
v/c Ratio	0.20	0.48		0.63	0.40	0.21		0.75			0.78	
Control Delay	26.5	28.6		26.7	16.3	1.9		49.5			57.3	
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	
Total Delay	26.5	28.6		26.7	16.3	1.9		49.5			57.3	
LOS	C	C		C	B	A		D			E	
Approach Delay		28.4			16.4			49.5			57.3	
Approach LOS		C			B			D			E	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 20 (15%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 31.8

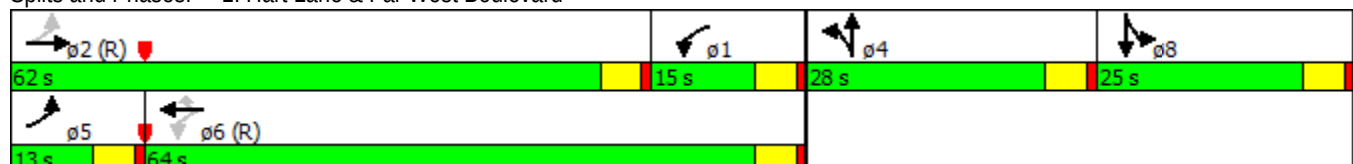
Intersection LOS: C

Intersection Capacity Utilization 63.0%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 1: Hart Lane & Far West Boulevard



Lanes, Volumes, Timings
2: Wood Hollow Drive & Far West Boulevard

2018 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	133	734	60	216	649	127	96	195	306	150	126	97
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	335		0	165		0	120		120	0		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	75			35			50			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.933	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1738	0
Flt Permitted	0.298			0.161			0.950			0.950		
Satd. Flow (perm)	555	3539	1583	300	3539	1583	1770	1863	1583	1770	1738	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			103			157			213		27	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1265			1235			599			222	
Travel Time (s)		24.6			24.1			13.6			5.0	
Peak Hour Factor	0.74	0.91	0.58	0.90	0.88	0.81	0.69	0.65	0.87	0.90	0.81	0.77
Adj. Flow (vph)	180	807	103	240	738	157	139	300	352	167	156	126
Shared Lane Traffic (%)												
Lane Group Flow (vph)	180	807	103	240	738	157	139	300	352	167	282	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	L NA	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		3	3		7	7	
Permitted Phases	6		6	2		2			3			
Detector Phase	1	6	6	5	2	2	3	3	3	7	7	

Lanes, Volumes, Timings
2: Wood Hollow Drive & Far West Boulevard

2018 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	8.0	8.0	8.0	5.0	5.0	
Minimum Split (s)	10.0	22.0	22.0	10.0	22.0	22.0	31.0	31.0	31.0	31.0	31.0	
Total Split (s)	20.0	68.0	68.0	16.0	64.0	64.0	20.0	20.0	20.0	26.0	26.0	
Total Split (%)	15.4%	52.3%	52.3%	12.3%	49.2%	49.2%	15.4%	15.4%	15.4%	20.0%	20.0%	
Maximum Green (s)	15.0	63.0	63.0	11.0	59.0	59.0	15.0	15.0	15.0	21.0	21.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
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	
Recall Mode	None	C-Min	C-Min	Max	C-Min	C-Min	Min	Min	Min	Max	Max	
Walk Time (s)		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		12.0	12.0		12.0	12.0	21.0	21.0	21.0	21.0	21.0	
Pedestrian Calls (#/hr)		0	0		0	0	0	0	0	0	0	
Act Effect Green (s)	38.9	38.9	38.9	35.9	35.9	35.9	37.5	37.5	37.5	22.6	22.6	
Actuated g/C Ratio	0.30	0.30	0.30	0.28	0.28	0.28	0.29	0.29	0.29	0.17	0.17	
v/c Ratio	0.61	0.76	0.19	1.16	0.75	0.28	0.27	0.56	0.58	0.54	0.87	
Control Delay	39.4	33.6	3.1	140.3	49.0	7.6	39.5	45.7	20.5	56.6	73.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	39.4	33.6	3.1	140.3	49.0	7.6	39.5	45.7	20.5	56.6	73.2	
LOS	D	C	A	F	D	A	D	D	C	E	E	
Approach Delay		31.7			62.5			33.4			67.1	
Approach LOS		C			E			C			E	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 20 (15%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.16

Intersection Signal Delay: 46.8

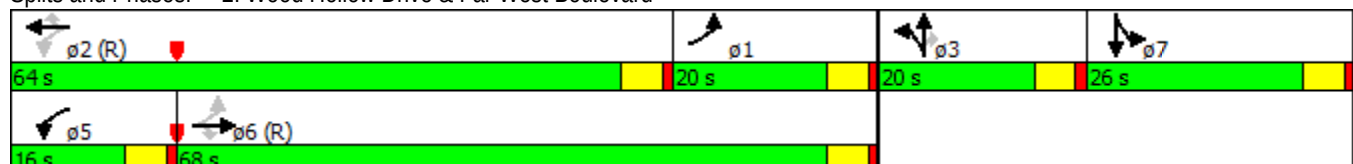
Intersection LOS: D

Intersection Capacity Utilization 68.1%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 2: Wood Hollow Drive & Far West Boulevard



Lanes, Volumes, Timings
3: Far West Boulevard & Mopac SB FR

2018 Site+Forecasted PM W/Improvements

6/2/2014

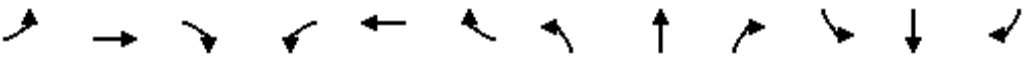
												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑						↑↑	↑
Volume (vph)	0	1107	370	10	406	0	0	0	0	361	487	890
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									0.850
Flt Protected				0.950							0.977	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	3458	1583
Flt Permitted				0.950							0.977	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	3458	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			226									136
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		1235			406			400			362	
Travel Time (s)		24.1			7.9			5.5			4.9	
Peak Hour Factor	0.92	0.91	0.93	0.67	0.93	0.92	0.92	0.92	0.92	0.78	0.92	0.95
Adj. Flow (vph)	0	1216	398	15	437	0	0	0	0	463	529	937
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1216	398	15	437	0	0	0	0	0	992	937
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	L NA	Right	Left	Left	Right	Left	Left	R NA
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	custom	Prot	NA					custom	NA	custom
Protected Phases		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Permitted Phases										4		
Detector Phase		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Switch Phase												
Minimum Initial (s)				10.0								
Minimum Split (s)				15.0								

Lane Group	ø1	ø2	ø4	ø8	ø22
Lane Configurations					
Volume (vph)					
Ideal Flow (vphpl)					
Lane Util. Factor					
Frt					
Flt Protected					
Satd. Flow (prot)					
Flt Permitted					
Satd. Flow (perm)					
Right Turn on Red					
Satd. Flow (RTOR)					
Link Speed (mph)					
Link Distance (ft)					
Travel Time (s)					
Peak Hour Factor					
Adj. Flow (vph)					
Shared Lane Traffic (%)					
Lane Group Flow (vph)					
Enter Blocked Intersection					
Lane Alignment					
Median Width(ft)					
Link Offset(ft)					
Crosswalk Width(ft)					
Two way Left Turn Lane					
Headway Factor					
Turning Speed (mph)					
Number of Detectors					
Detector Template					
Leading Detector (ft)					
Trailing Detector (ft)					
Detector 1 Position(ft)					
Detector 1 Size(ft)					
Detector 1 Type					
Detector 1 Channel					
Detector 1 Extend (s)					
Detector 1 Queue (s)					
Detector 1 Delay (s)					
Detector 2 Position(ft)					
Detector 2 Size(ft)					
Detector 2 Type					
Detector 2 Channel					
Detector 2 Extend (s)					
Turn Type					
Protected Phases	1	2	4	8	22
Permitted Phases					
Detector Phase					
Switch Phase					
Minimum Initial (s)	4.0	13.0	10.0	4.0	1.0
Minimum Split (s)	9.0	18.0	15.0	9.0	6.0

Lanes, Volumes, Timings
3: Far West Boulevard & Mopac SB FR

2018 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)				15.0								
Total Split (%)				11.5%								
Maximum Green (s)				10.0								
Yellow Time (s)				4.0								
All-Red Time (s)				1.0								
Lost Time Adjust (s)				0.0								
Total Lost Time (s)				5.0								
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0								
Recall Mode				Min								
Act Effect Green (s)		64.0	21.0	10.0	36.0						41.0	84.0
Actuated g/C Ratio		0.49	0.16	0.08	0.28						0.32	0.65
v/c Ratio		0.70	0.89	0.11	0.45						0.91	0.88
Control Delay		44.6	48.8	59.7	8.3						55.8	26.9
Queue Delay		7.3	0.0	0.0	0.0						0.0	0.0
Total Delay		51.9	48.8	59.7	8.3						55.8	26.9
LOS		D	D	E	A						E	C
Approach Delay		51.1			10.0						41.7	
Approach LOS		D			A						D	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.91

Intersection Signal Delay: 41.9

Intersection LOS: D

Intersection Capacity Utilization 96.8%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 3: Far West Boulevard & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø8	ø22
Total Split (s)	17.0	43.0	33.0	13.0	9.0
Total Split (%)	13%	33%	25%	10%	7%
Maximum Green (s)	12.0	38.0	28.0	8.0	4.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)					
Total Lost Time (s)					
Lead/Lag		Lag	Lead	Lag	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	C-Min	Min	Min	None
Act Effect Green (s)					
Actuated g/C Ratio					
v/c Ratio					
Control Delay					
Queue Delay					
Total Delay					
LOS					
Approach Delay					
Approach LOS					
Intersection Summary					

Lanes, Volumes, Timings
4: Mopac NB FR & Far West Boulevard

2018 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Lane Configurations												
Volume (vph)	1477	0	356	74	0	0						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Lane Util. Factor	0.97	1.00	0.95	0.95	1.00	1.00						
Frt												
Flt Protected	0.950		0.950	0.993								
Satd. Flow (prot)	3433	0	1681	1757	0	0						
Flt Permitted	0.950		0.950	0.993								
Satd. Flow (perm)	3433	0	1681	1757	0	0						
Right Turn on Red		Yes				Yes						
Satd. Flow (RTOR)												
Link Speed (mph)	35			50	50							
Link Distance (ft)	406			308	472							
Travel Time (s)	7.9			4.2	6.4							
Peak Hour Factor	0.90	0.92	0.93	0.25	0.92	0.92						
Adj. Flow (vph)	1641	0	383	296	0	0						
Shared Lane Traffic (%)			13%									
Lane Group Flow (vph)	1641	0	333	346	0	0						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Right	Left	Left	Left	Right						
Median Width(ft)	24			12	12							
Link Offset(ft)	0			0	0							
Crosswalk Width(ft)	16			16	16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00						
Turning Speed (mph)	15	9	15			9						
Number of Detectors	1		1	2								
Detector Template	Left		Left	Thru								
Leading Detector (ft)	20		20	100								
Trailing Detector (ft)	0		0	0								
Detector 1 Position(ft)	0		0	0								
Detector 1 Size(ft)	20		20	6								
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0								
Detector 1 Queue (s)	0.0		0.0	0.0								
Detector 1 Delay (s)	0.0		0.0	0.0								
Detector 2 Position(ft)				94								
Detector 2 Size(ft)				6								
Detector 2 Type				Cl+Ex								
Detector 2 Channel												
Detector 2 Extend (s)				0.0								
Turn Type	Prot		Split	NA								
Protected Phases	2 4 22		1 7 8	1 7 8			1	2	4	7	8	22
Permitted Phases												
Detector Phase	2 4 22		1 7 8	1 7 8								
Switch Phase												
Minimum Initial (s)							4.0	13.0	10.0	10.0	4.0	1.0
Minimum Split (s)							9.0	18.0	15.0	15.0	9.0	6.0

Lanes, Volumes, Timings
4: Mopac NB FR & Far West Boulevard

2018 Site+Forecasted PM W/Improvements

6/2/2014



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Total Split (s)							17.0	43.0	33.0	15.0	13.0	9.0
Total Split (%)							13%	33%	25%	12%	10%	7%
Maximum Green (s)							12.0	38.0	28.0	10.0	8.0	4.0
Yellow Time (s)							4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)							1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag								Lag	Lead		Lag	Lead
Lead-Lag Optimize?								Yes	Yes		Yes	Yes
Vehicle Extension (s)							3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode							Min	C-Min	Min	Min	Min	None
Act Effect Green (s)	80.0		40.0	40.0								
Actuated g/C Ratio	0.62		0.31	0.31								
v/c Ratio	0.78		0.64	0.64								
Control Delay	19.4		45.7	45.2								
Queue Delay	6.3		0.0	0.0								
Total Delay	25.7		45.7	45.2								
LOS	C		D	D								
Approach Delay	25.7			45.5								
Approach LOS	C			D								

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.91

Intersection Signal Delay: 31.5

Intersection LOS: C

Intersection Capacity Utilization 110.0%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 4: Mopac NB FR & Far West Boulevard



Lanes, Volumes, Timings
5: Spicewood Springs Road & Mopac SB FR

2018 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑					↑	↑↑	↑
Volume (vph)	0	1423	337	631	1331	0	0	0	0	595	246	388
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	60		0	0		0	150		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			75			25			75		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.974	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1610	3302	1583
Flt Permitted				0.950						0.950	0.974	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1610	3302	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			160									160
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		294			386			782			882	
Travel Time (s)		5.7			7.5			10.7			12.0	
Peak Hour Factor	0.92	0.81	0.90	0.87	0.86	0.92	0.92	0.92	0.92	0.93	0.87	0.94
Adj. Flow (vph)	0	1757	374	725	1548	0	0	0	0	640	283	413
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	1757	374	725	1548	0	0	0	0	320	603	413
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Prot	Prot	NA					Split	NA	Prot
Protected Phases		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5
Permitted Phases												
Detector Phase		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

Lanes, Volumes, Timings
5: Spicewood Springs Road & Mopac SB FR

2018 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)		59.0	59.0	48.0	101.0					28.0	28.0	28.0
Actuated g/C Ratio		0.39	0.39	0.32	0.67					0.19	0.19	0.19
v/c Ratio		1.26	0.52	1.28	0.65					1.07	1.02dl	0.97
Control Delay		148.1	9.5	168.1	16.2					127.1	91.5	73.6
Queue Delay		1.2	0.5	1.2	48.9					0.0	0.0	0.9
Total Delay		149.3	10.0	169.3	65.1					127.1	91.5	74.5
LOS		F	B	F	E					F	F	E
Approach Delay		124.9			98.4						94.8	
Approach LOS		F			F						F	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 89 (59%), Referenced to phase 2:EBWB, Start of Green

Natural Cycle: 140

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.28

Intersection Signal Delay: 107.4

Intersection LOS: F

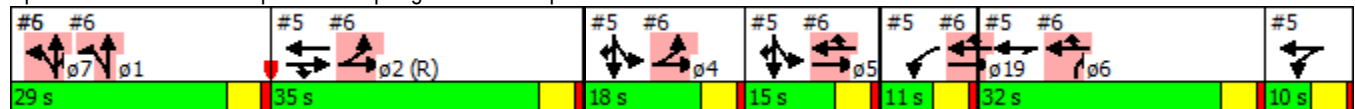
Intersection Capacity Utilization 121.6%

ICU Level of Service H

Analysis Period (min) 15

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 5: Spicewood Springs Road & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0	5.0	6.0
Minimum Split (s)	8.0	15.0	10.0	8.0	15.0	10.0	11.0
Total Split (s)	29.0	35.0	18.0	15.0	32.0	10.0	11.0
Total Split (%)	19%	23%	12%	10%	21%	7%	7%
Maximum Green (s)	24.0	30.0	13.0	10.0	27.0	5.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Lanes, Volumes, Timings
6: Mopac NB FR & Spicewood Springs Road

2018 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	595	1158	0	0	1156	417	305	41	535	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		325	0		0	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	75			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.91	0.95	1.00	1.00	1.00
Frt						0.850		0.892	0.850			
Flt Protected	0.950						0.950	0.995				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	1681	1504	1504	0	0	0
Flt Permitted	0.950						0.950	0.995				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	1681	1504	1504	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						341		79	344			
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		386			594			563			407	
Travel Time (s)		7.5			11.6			7.7			5.6	
Peak Hour Factor	0.90	0.96	0.92	0.92	0.93	0.79	0.86	0.60	0.87	0.92	0.92	0.92
Adj. Flow (vph)	661	1206	0	0	1243	528	355	68	615	0	0	0
Shared Lane Traffic (%)							10%		43%			
Lane Group Flow (vph)	661	1206	0	0	1243	528	319	368	351	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Prot	Split	NA	custom			
Protected Phases	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			
Permitted Phases												
Detector Phase	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

Lanes, Volumes, Timings
6: Mopac NB FR & Spicewood Springs Road

2018 Site+Forecasted PM W/Improvements

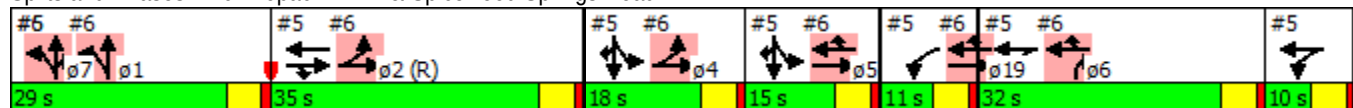
6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)	48.0	74.0			53.0	53.0	34.0	34.0	37.0			
Actuated g/C Ratio	0.32	0.49			0.35	0.35	0.23	0.23	0.25			
v/c Ratio	1.17	0.69			0.99	0.68	0.84	0.92	0.56			
Control Delay	110.4	8.4			72.1	18.5	74.9	72.1	8.5			
Queue Delay	2.8	49.4			38.8	0.0	0.0	2.5	0.0			
Total Delay	113.2	57.9			110.9	18.5	74.9	74.6	8.5			
LOS	F	E			F	B	E	E	A			
Approach Delay		77.5			83.3			52.4				
Approach LOS		E			F			D				

Intersection Summary

Area Type: Other
 Cycle Length: 150
 Actuated Cycle Length: 150
 Offset: 89 (59%), Referenced to phase 2:EBWB, Start of Green
 Natural Cycle: 140
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.28
 Intersection Signal Delay: 74.1
 Intersection LOS: E
 Intersection Capacity Utilization 121.6%
 ICU Level of Service H
 Analysis Period (min) 15

Splits and Phases: 6: Mopac NB FR & Spicewood Springs Road



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0	5.0	6.0
Minimum Split (s)	8.0	15.0	10.0	8.0	15.0	10.0	11.0
Total Split (s)	29.0	35.0	18.0	15.0	32.0	10.0	11.0
Total Split (%)	19%	23%	12%	10%	21%	7%	7%
Maximum Green (s)	24.0	30.0	13.0	10.0	27.0	5.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	5	929	66	210	754	1	263	8	547	1	4	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	0		100	0		0
Storage Lanes	1		0	1		0	1		1	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.993						0.853	0.850		0.900	
Flt Protected	0.950			0.950			0.950				0.996	
Satd. Flow (prot)	1770	5050	0	1770	3539	0	1770	1509	1504	0	1670	0
Flt Permitted	0.342			0.065			0.742				0.679	
Satd. Flow (perm)	637	5050	0	121	3539	0	1382	1509	1504	0	1138	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7						353	353		17	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1093			275			251			161	
Travel Time (s)		21.3			5.4			5.7			3.7	
Peak Hour Factor	0.72	0.50	0.76	0.50	0.92	0.50	0.91	0.85	0.62	0.58	0.90	0.84
Adj. Flow (vph)	7	1858	87	420	820	2	289	9	882	2	4	17
Shared Lane Traffic (%)									50%			
Lane Group Flow (vph)	7	1945	0	420	822	0	289	450	441	0	23	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2			6			4		4	8		
Detector Phase	5	2		1	6		4	4	4	8	8	

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	20.0		21.0	20.0		15.0	15.0	15.0	11.0	11.0	
Minimum Split (s)	10.0	25.0		26.0	25.0		35.0	35.0	35.0	35.0	35.0	
Total Split (s)	10.0	78.0		37.0	105.0		35.0	35.0	35.0	35.0	35.0	
Total Split (%)	6.7%	52.0%		24.7%	70.0%		23.3%	23.3%	23.3%	23.3%	23.3%	
Maximum Green (s)	5.0	73.0		32.0	100.0		30.0	30.0	30.0	30.0	30.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0		5.0	
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min		Min	C-Min		Min	Min	Min	Min	Min	
Walk Time (s)							6.0	6.0	6.0	6.0	6.0	
Flash Dont Walk (s)							24.0	24.0	24.0	24.0	24.0	
Pedestrian Calls (#/hr)							0	0	0	0	0	
Act Effect Green (s)	75.4	70.9		97.4	97.4		32.1	32.1	32.1		32.1	
Actuated g/C Ratio	0.50	0.47		0.65	0.65		0.21	0.21	0.21		0.21	
v/c Ratio	0.02	0.81		0.98	0.36		0.98	0.75	0.74		0.09	
Control Delay	18.0	37.0		83.4	11.4		104.6	21.4	20.1		24.9	
Queue Delay	0.0	6.3		0.0	0.2		0.0	0.9	0.8		0.0	
Total Delay	18.0	43.3		83.4	11.5		104.6	22.2	20.9		24.9	
LOS	B	D		F	B		F	C	C		C	
Approach Delay		43.2			35.8			41.9			24.9	
Approach LOS		D			D			D			C	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 55 (37%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.98

Intersection Signal Delay: 40.7

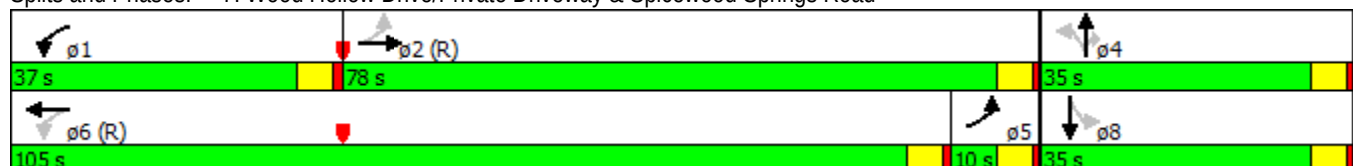
Intersection LOS: D

Intersection Capacity Utilization 70.7%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road



												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	311	39	14	185	31	123	101	25	28	48	107
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. 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
Frt		0.985				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1835	0	1770	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.630			0.442			0.701			0.621		
Satd. Flow (perm)	1174	1835	0	823	1863	1583	1306	1863	1583	1157	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12				36			50			228
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		255			271			301			140	
Travel Time (s)		5.8			6.2			6.8			3.2	
Peak Hour Factor	0.67	0.91	1.00	0.86	0.91	0.91	0.50	0.46	0.50	0.25	0.56	0.47
Adj. Flow (vph)	15	342	39	16	203	34	246	220	50	112	86	228
Shared Lane Traffic (%)												
Lane Group Flow (vph)	15	381	0	16	203	34	246	220	50	112	86	228
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6		6	8		8	4		4
Detector Phase	2	2		6	6	6	8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	21.0	21.0		21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0

Lanes, Volumes, Timings
50: Executive Center Drive & Wood Hollow Drive

2018 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	30.0	30.0		30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Total Split (%)	50.0%	50.0%		50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Maximum Green (s)	25.0	25.0		25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
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
Recall Mode	C-Max	C-Max		C-Max	C-Max	C-Max	Max	Max	Max	Max	Max	Max
Walk Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0	0	0	0	0
Act Effect Green (s)	25.0	25.0		25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Actuated g/C Ratio	0.42	0.42		0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42
v/c Ratio	0.03	0.49		0.05	0.26	0.05	0.45	0.28	0.07	0.23	0.11	0.29
Control Delay	10.7	15.2		11.0	12.6	4.4	16.0	12.8	4.1	13.0	11.2	3.0
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.7	15.2		11.0	12.6	4.4	16.0	12.8	4.1	13.0	11.2	3.0
LOS	B	B		B	B	A	B	B	A	B	B	A
Approach Delay	15.0			11.4			13.5			7.3		
Approach LOS	B			B			B			A		

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 60

Offset: 22 (37%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 45

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.49

Intersection Signal Delay: 11.9

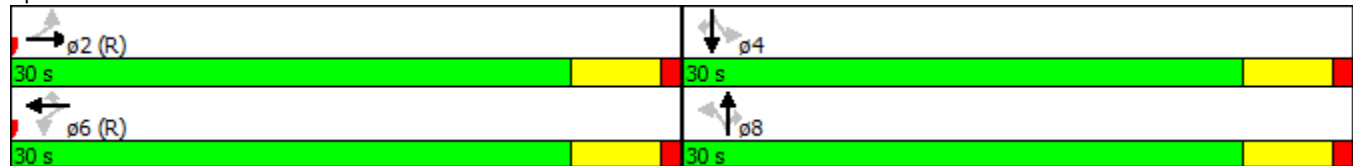
Intersection LOS: B

Intersection Capacity Utilization 40.5%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 50: Executive Center Drive & Wood Hollow Drive



Lanes, Volumes, Timings
70: Spicewood Springs Road & Hart Lane

2018 Site+Forecasted PM W/Improvements

6/2/2014

							ø5	ø6	ø8
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR			
Lane Configurations									
Volume (vph)	230	213	119	1191	848	140			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900			
Storage Length (ft)	0	0	225			0			
Storage Lanes	1	1	1			0			
Taper Length (ft)	25		150						
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95			
Frt		0.850			0.973				
Flt Protected	0.950		0.950						
Satd. Flow (prot)	1770	1583	1770	3539	3444	0			
Flt Permitted	0.950		0.950						
Satd. Flow (perm)	1770	1583	1770	3539	3444	0			
Right Turn on Red		Yes				Yes			
Satd. Flow (RTOR)		12			29				
Link Speed (mph)	30			35	35				
Link Distance (ft)	358			1093	145				
Travel Time (s)	8.1			21.3	2.8				
Peak Hour Factor	0.85	0.87	0.86	0.88	0.89	0.67			
Adj. Flow (vph)	271	245	138	1353	953	209			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	271	245	138	1353	1162	0			
Enter Blocked Intersection	No	No	No	No	No	No			
Lane Alignment	L NA	Right	Left	R NA	Left	Right			
Median Width(ft)	18			18	6				
Link Offset(ft)	0			0	0				
Crosswalk Width(ft)	16			16	16				
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00			
Turning Speed (mph)	15	9	15			9			
Number of Detectors	1	1	1	2	2				
Detector Template	Left	Right	Left	Thru	Thru				
Leading Detector (ft)	20	20	20	100	100				
Trailing Detector (ft)	0	0	0	0	0				
Detector 1 Position(ft)	0	0	0	0	0				
Detector 1 Size(ft)	20	20	20	6	6				
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel									
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0				
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0				
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0				
Detector 2 Position(ft)				94	94				
Detector 2 Size(ft)				6	6				
Detector 2 Type				Cl+Ex	Cl+Ex				
Detector 2 Channel									
Detector 2 Extend (s)				0.0	0.0				
Turn Type	Prot	pm+ov	Prot	NA	NA				
Protected Phases	2!	3	3	6 8!	4		5	6	8
Permitted Phases		2							
Detector Phase	2	3	3	6 8	4				

Lanes, Volumes, Timings
70: Spicewood Springs Road & Hart Lane

2018 Site+Forecasted PM W/Improvements

6/2/2014



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø5	ø6	ø8
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Minimum Split (s)	9.0	9.0	9.0		23.0		23.0	9.0	9.0
Total Split (s)	40.0	19.0	19.0		31.0		23.0	17.0	50.0
Total Split (%)	44.4%	21.1%	21.1%		34.4%		26%	19%	56%
Maximum Green (s)	35.0	14.0	14.0		26.0		18.0	12.0	45.0
Yellow Time (s)	4.0	4.0	4.0		4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0				
Total Lost Time (s)	5.0	5.0	5.0		5.0				
Lead/Lag		Lead	Lead		Lag		Lead	Lag	
Lead-Lag Optimize?		Yes	Yes		Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0	3.0
Recall Mode	Min	None	None		None		None	Min	None
Walk Time (s)					7.0		7.0		
Flash Dont Walk (s)					11.0		11.0		
Pedestrian Calls (#/hr)					0		0		
Act Effect Green (s)	16.0	31.4	10.3	67.7	26.2				
Actuated g/C Ratio	0.24	0.46	0.15	1.00	0.39				
v/c Ratio	0.65	0.33	0.51	0.38	0.86				
Control Delay	31.5	11.8	34.3	0.3	28.5				
Queue Delay	0.0	0.0	0.0	0.0	0.0				
Total Delay	31.5	11.8	34.3	0.3	28.5				
LOS	C	B	C	A	C				
Approach Delay	22.2			3.5	28.5				
Approach LOS	C			A	C				

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 67.7

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.86

Intersection Signal Delay: 15.7

Intersection LOS: B

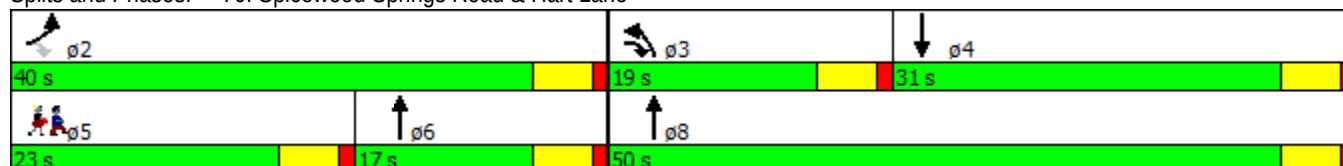
Intersection Capacity Utilization 59.7%

ICU Level of Service B

Analysis Period (min) 15

! Phase conflict between lane groups.

Splits and Phases: 70: Spicewood Springs Road & Hart Lane



HCM Unsignalized Intersection Capacity Analysis 2018 Site+Forecasted PM W/Improvements

10: Hart Lane & Greystone Drive

6/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	32	86	49	80	152	53	87	220	53	11	161	56
Peak Hour Factor	0.80	0.65	0.65	0.78	0.88	0.58	0.75	0.81	0.60	0.58	0.69	0.57
Hourly flow rate (vph)	40	132	75	103	173	91	116	272	88	19	233	98
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total (vph)	172	75	275	91	476	351						
Volume Left (vph)	40	0	103	0	116	19						
Volume Right (vph)	0	75	0	91	88	98						
Hadj (s)	0.15	-0.67	0.22	-0.67	-0.03	-0.12						
Departure Headway (s)	8.8	7.9	8.5	7.6	7.1	7.4						
Degree Utilization, x	0.42	0.17	0.65	0.19	0.94	0.72						
Capacity (veh/h)	396	434	418	464	499	472						
Control Delay (s)	16.9	11.3	24.7	11.2	53.1	27.1						
Approach Delay (s)	15.2		21.3		53.1	27.1						
Approach LOS	C		C		F	D						
Intersection Summary												
Delay			32.2									
Level of Service			D									
Intersection Capacity Utilization			64.2%	ICU Level of Service				C				
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 2018 Site+Forecasted PM W/Improvements

20: Wood Hollow Drive & Greystone Drive

6/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	53	71	51	90	229	60	80	272	72	26	211	57
Peak Hour Factor	0.81	0.89	0.64	0.80	0.82	0.72	0.53	0.88	0.79	0.68	0.85	0.68
Hourly flow rate (vph)	65	80	80	112	279	83	151	309	91	38	248	84
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2				
Volume Total (vph)	145	80	392	83	305	246	162	208				
Volume Left (vph)	65	0	113	0	151	0	38	0				
Volume Right (vph)	0	80	0	83	0	91	0	84				
Hadj (s)	0.26	-0.67	0.18	-0.67	0.28	-0.23	0.15	-0.25				
Departure Headway (s)	8.5	7.5	7.8	7.0	7.9	7.4	8.0	7.6				
Degree Utilization, x	0.34	0.17	0.85	0.16	0.67	0.50	0.36	0.44				
Capacity (veh/h)	401	446	392	494	443	466	429	453				
Control Delay (s)	14.6	10.8	40.3	10.1	24.1	16.4	14.3	15.3				
Approach Delay (s)	13.3		35.0		20.7		14.9					
Approach LOS	B		D		C		B					
Intersection Summary												
Delay			22.5									
Level of Service			C									
Intersection Capacity Utilization			57.6%	ICU Level of Service					B			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 2018 Site+Forecasted PM W/Improvements

30: Greystone Drive & Mopac SB FR

6/2/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↰			↱↱↱	
Volume (veh/h)	0	177	0	0	1723	347
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.79	0.92	0.92	0.96	0.86
Hourly flow rate (vph)	0	224	0	0	1795	403
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1997	800	2198			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1997	800	2198			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	32	100			
cM capacity (veh/h)	52	328	236			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	224	718	718	762		
Volume Left	0	0	0	0		
Volume Right	224	0	0	403		
cSH	328	1700	1700	1700		
Volume to Capacity	0.68	0.42	0.42	0.45		
Queue Length 95th (ft)	119	0	0	0		
Control Delay (s)	36.7	0.0	0.0	0.0		
Lane LOS	E					
Approach Delay (s)	36.7	0.0				
Approach LOS	E					
Intersection Summary						
Average Delay			3.4			
Intersection Capacity Utilization			58.7%		ICU Level of Service	B
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2018 Site+Forecasted PM W/Improvements

40: Mopac SB FR & Executive Center Drive

6/2/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	222	0	0	1979	105
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.50	0.92	0.92	0.95	0.75
Hourly flow rate (vph)	0	444	0	0	2083	140
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2153	764	2223			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2153	764	2223			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	0	100			
cM capacity (veh/h)	41	346	231			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	444	833	833	557		
Volume Left	0	0	0	0		
Volume Right	444	0	0	140		
cSH	346	1700	1700	1700		
Volume to Capacity	1.28	0.49	0.49	0.33		
Queue Length 95th (ft)	510	0	0	0		
Control Delay (s)	179.2	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	179.2	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay			29.8			
Intersection Capacity Utilization			61.0%		ICU Level of Service	B
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2018 Site+Forecasted PM W/Improvements

60: Executive Center Drive & Hart Lane

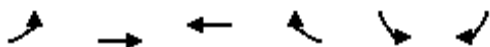
6/2/2014

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	269	26	43	196	48	121
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.79	0.67	0.83	0.72	0.75	0.46
Hourly flow rate (vph)	341	39	52	272	64	263
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)				358		
pX, platoon unblocked						
vC, conflicting volume			379		736	360
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			379		736	360
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			96		83	62
cM capacity (veh/h)			1179		369	685
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	379	324	327			
Volume Left	0	52	64			
Volume Right	39	0	263			
cSH	1700	1179	587			
Volume to Capacity	0.22	0.04	0.56			
Queue Length 95th (ft)	0	3	85			
Control Delay (s)	0.0	1.7	18.6			
Lane LOS		A	C			
Approach Delay (s)	0.0	1.7	18.6			
Approach LOS			C			
Intersection Summary						
Average Delay		6.4				
Intersection Capacity Utilization		48.5%		ICU Level of Service	A	
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis 2018 Site+Forecasted PM W/Improvements

100: Executive Center Drive & Driveway 1

6/2/2014



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	0	78	105	0	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	85	114	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh						
Upstream signal (ft)		893				
pX, platoon unblocked						
vC, conflicting volume	114				199	114
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	114				199	114
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	1475				790	938
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	85	114	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1475	1700	1700			
Volume to Capacity	0.00	0.07	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS			A			
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS			A			
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			8.9%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2018 Site+Forecasted PM W/Improvements

200: Executive Center Drive & Driveway 2

6/2/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	0	0	105	78	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	114	85	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)					735	
pX, platoon unblocked						
vC, conflicting volume	199	85	85			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	199	85	85			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	790	974	1512			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	0	114	85			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1512	1700			
Volume to Capacity	0.00	0.00	0.05			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			8.9%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2018 Site+Forecasted PM W/Improvements

300: Executive Center Drive & Driveway 3

6/2/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	0	0	105	78	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	114	85	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)					569	
pX, platoon unblocked						
vC, conflicting volume	199	85	85			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	199	85	85			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	790	974	1512			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	0	114	85			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1512	1700			
Volume to Capacity	0.00	0.00	0.05			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			8.9%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2018 Site+Forecasted PM W/Improvements

400: Executive Center Drive & Driveway 4

6/2/2014

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	45	102	33	72	68	33
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	49	111	36	78	74	36
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						301
pX, platoon unblocked						
vC, conflicting volume	259	75			114	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	259	75			114	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	93	89			95	
cM capacity (veh/h)	694	986			1475	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	160	114	110			
Volume Left	49	0	74			
Volume Right	111	78	0			
cSH	874	1700	1475			
Volume to Capacity	0.18	0.07	0.05			
Queue Length 95th (ft)	17	0	4			
Control Delay (s)	10.0	0.0	5.2			
Lane LOS	B		A			
Approach Delay (s)	10.0	0.0	5.2			
Approach LOS	B					
Intersection Summary						
Average Delay		5.7				
Intersection Capacity Utilization		27.6%		ICU Level of Service		A
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis 2018 Site+Forecasted PM W/Improvements

500: Executive Center Drive & Driveway 5

6/2/2014

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	142	0	0	69
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	154	0	0	75
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			140			
pX, platoon unblocked	0.98	0.98			0.98	
vC, conflicting volume	229	154			154	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	208	132			132	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	767	902			1429	
Direction, Lane #	NB 1	SB 1				
Volume Total	154	75				
Volume Left	0	0				
Volume Right	0	0				
cSH	1700	1429				
Volume to Capacity	0.09	0.00				
Queue Length 95th (ft)	0	0				
Control Delay (s)	0.0	0.0				
Lane LOS						
Approach Delay (s)	0.0	0.0				
Approach LOS						
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			17.5%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2018 Site+Forecasted PM W/Improvements

600: Executive Center Drive & Driveway 6

6/2/2014

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	142	0	0	69
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	154	0	0	75
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			352			
pX, platoon unblocked						
vC, conflicting volume	229	154			154	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	229	154			154	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	759	892			1426	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	0	154	75			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1426			
Volume to Capacity	0.00	0.09	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			17.5%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2018 Site+Forecasted PM W/Improvements

700: Executive Center Drive & Driveway 7

6/2/2014

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	142	0	0	69
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	154	0	0	75
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			536			
pX, platoon unblocked						
vC, conflicting volume	229	154			154	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	229	154			154	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	759	892			1426	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	0	154	75			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1426			
Volume to Capacity	0.00	0.09	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			10.8%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2018 Site+Forecasted PM W/Improvements

800: Executive Center Drive & Driveway 8

6/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	0	0	0	142	0	0	69	0
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	0	0	0	0	0	0	0	154	0	0	75	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (ft)								676				
pX, platoon unblocked												
vC, conflicting volume	229	229	75	229	229	154	75			154		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	229	229	75	229	229	154	75			154		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	100	100	100	100			100		
cM capacity (veh/h)	726	670	986	726	670	892	1524			1426		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	0	0	154	75								
Volume Left	0	0	0	0								
Volume Right	0	0	0	0								
cSH	1700	1700	1524	1426								
Volume to Capacity	0.00	0.00	0.00	0.00								
Queue Length 95th (ft)	0	0	0	0								
Control Delay (s)	0.0	0.0	0.0	0.0								
Lane LOS	A	A										
Approach Delay (s)	0.0	0.0	0.0	0.0								
Approach LOS	A	A										
Intersection Summary												
Average Delay			0.0									
Intersection Capacity Utilization			10.8%	ICU Level of Service						A		
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 2018 Site+Forecasted PM W/Improvements

900: Executive Center Drive & Driveway 9

6/2/2014

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	142	0	0	69
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	154	0	0	75
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			872			
pX, platoon unblocked						
vC, conflicting volume	229	154			154	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	229	154			154	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	759	892			1426	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	0	154	75			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1426			
Volume to Capacity	0.00	0.09	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			10.8%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2018 Site+Forecasted PM W/Improvements 1000: Executive Center Drive & Driveway 10

6/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	0	0	0	142	0	0	69	0
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	0	0	0	0	0	0	0	154	0	0	75	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)								1039				
pX, platoon unblocked												
vC, conflicting volume	229	229	75	229	229	154	75			154		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	229	229	75	229	229	154	75			154		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	100	100	100	100			100		
cM capacity (veh/h)	726	670	986	726	670	892	1524			1426		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	0	0	154	75								
Volume Left	0	0	0	0								
Volume Right	0	0	0	0								
cSH	1700	1700	1524	1426								
Volume to Capacity	0.00	0.00	0.00	0.00								
Queue Length 95th (ft)	0	0	0	0								
Control Delay (s)	0.0	0.0	0.0	0.0								
Lane LOS	A	A										
Approach Delay (s)	0.0	0.0	0.0	0.0								
Approach LOS	A	A										
Intersection Summary												
Average Delay			0.0									
Intersection Capacity Utilization			10.8%		ICU Level of Service				A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 2018 Site+Forecasted PM W/Improvements

1100: Driveway 11 & Wood Hollow Drive

6/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	322	42	146	134	0	73	0	366	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		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
Hourly flow rate (vph)	0	350	46	159	146	0	79	0	398	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)		271			251							
pX, platoon unblocked	0.92			0.89			0.93	0.93	0.89	0.93	0.93	0.92
vC, conflicting volume	146			396			836	836	373	1234	859	146
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	32			260			598	598	234	1026	622	32
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			86			77	100	44	100	100	100
cM capacity (veh/h)	1458			1162			345	334	717	79	323	961
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1							
Volume Total	396	304	79	398	0							
Volume Left	0	159	79	0	0							
Volume Right	46	0	0	398	0							
cSH	1700	1162	345	717	1700							
Volume to Capacity	0.23	0.14	0.23	0.56	0.00							
Queue Length 95th (ft)	0	12	22	86	0							
Control Delay (s)	0.0	5.1	18.5	16.1	0.0							
Lane LOS		A	C	C	A							
Approach Delay (s)	0.0	5.1	16.5		0.0							
Approach LOS			C		A							
Intersection Summary												
Average Delay			8.0									
Intersection Capacity Utilization			48.8%		ICU Level of Service				A			
Analysis Period (min)			15									

Lanes, Volumes, Timings
1: Hart Lane & Far West Boulevard

2023 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	85	811	95	219	314	77	54	161	183	226	286	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	170		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	1		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.95	0.95	0.95	1.00	1.00	1.00
Frt		0.979				0.850		0.932			0.979	
Flt Protected	0.950			0.950				0.993		0.950		
Satd. Flow (prot)	1770	3465	0	1770	3539	1583	0	3275	0	1770	1824	0
Flt Permitted	0.415			0.114				0.543		0.236		
Satd. Flow (perm)	773	3465	0	212	3539	1583	0	1791	0	440	1824	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15				101		153			7	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		362			1265			236			237	
Travel Time (s)		7.1			24.6			5.4			5.4	
Peak Hour Factor	0.73	0.83	0.61	0.69	0.83	0.85	0.80	0.80	0.82	0.90	0.56	0.47
Adj. Flow (vph)	116	977	156	317	378	91	68	201	223	251	511	85
Shared Lane Traffic (%)												
Lane Group Flow (vph)	116	1133	0	317	378	91	0	492	0	251	596	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2		1	6			4		3	8	
Permitted Phases	2			6		6	4			8		
Detector Phase	5	2		1	6	6	4	4		3	8	

Lanes, Volumes, Timings
1: Hart Lane & Far West Boulevard

2023 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	8.0	18.0		8.0	18.0	18.0	12.0	12.0		8.0	12.0	
Minimum Split (s)	13.0	23.0		13.0	23.0	23.0	17.0	17.0		13.0	17.0	
Total Split (s)	13.0	52.0		26.0	65.0	65.0	36.0	36.0		16.0	52.0	
Total Split (%)	10.0%	40.0%		20.0%	50.0%	50.0%	27.7%	27.7%		12.3%	40.0%	
Maximum Green (s)	8.0	47.0		21.0	60.0	60.0	31.0	31.0		11.0	47.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0		5.0		5.0	5.0	
Lead/Lag	Lead	Lead		Lag	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	
Walk Time (s)		7.0			7.0	7.0	7.0	7.0			7.0	
Flash Dont Walk (s)		12.0			12.0	12.0	21.0	21.0			21.0	
Pedestrian Calls (#/hr)		0			0	0	0	0			0	
Act Effect Green (s)	48.7	48.7		60.9	60.9	60.9		28.8		45.8	45.8	
Actuated g/C Ratio	0.37	0.37		0.47	0.47	0.47		0.22		0.35	0.35	
v/c Ratio	0.33	0.87		0.92	0.23	0.11		0.95		0.91	0.92	
Control Delay	30.9	45.8		58.9	5.3	0.6		63.8		70.3	61.0	
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	
Total Delay	30.9	45.8		58.9	5.3	0.6		63.8		70.3	61.0	
LOS	C	D		E	A	A		E		E	E	
Approach Delay		44.4			26.4			63.8			63.7	
Approach LOS		D			C			E			E	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.95

Intersection Signal Delay: 47.9

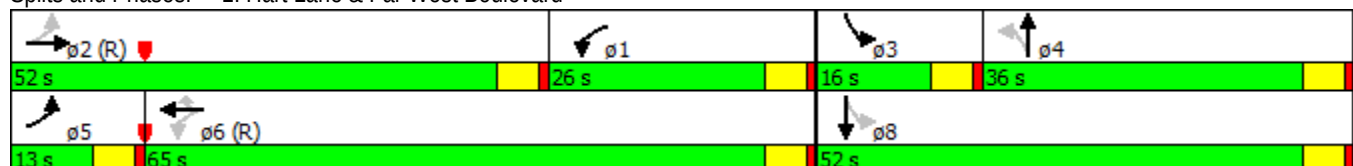
Intersection LOS: D

Intersection Capacity Utilization 83.6%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 1: Hart Lane & Far West Boulevard



Lanes, Volumes, Timings
2: Wood Hollow Drive & Far West Boulevard

2023 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	176	1114	50	124	606	103	26	144	309	282	143	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	335		0	165		0	120		120	0		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	75			35			50			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.944	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1758	0
Flt Permitted	0.319			0.169			0.474			0.543		
Satd. Flow (perm)	594	3539	1583	315	3539	1583	883	1863	1583	1011	1758	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			76			127			193		25	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1265			1235			599			222	
Travel Time (s)		24.6			24.1			13.6			5.0	
Peak Hour Factor	0.74	0.91	0.58	0.90	0.88	0.81	0.69	0.65	0.87	0.90	0.81	0.77
Adj. Flow (vph)	238	1224	86	138	689	127	38	222	355	313	177	104
Shared Lane Traffic (%)												
Lane Group Flow (vph)	238	1224	86	138	689	127	38	222	355	313	281	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	L NA	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	1	6		5	2			3			7	
Permitted Phases	6		6	2		2	3		3	7		
Detector Phase	1	6	6	5	2	2	3	3	3	7	7	

Lanes, Volumes, Timings
2: Wood Hollow Drive & Far West Boulevard

2023 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	8.0	8.0	8.0	5.0	5.0	
Minimum Split (s)	11.0	40.0	40.0	12.0	40.0	40.0	15.0	15.0	15.0	15.0	15.0	
Total Split (s)	14.0	65.0	65.0	15.0	66.0	66.0	50.0	50.0	50.0	50.0	50.0	
Total Split (%)	10.8%	50.0%	50.0%	11.5%	50.8%	50.8%	38.5%	38.5%	38.5%	38.5%	38.5%	
Maximum Green (s)	9.0	60.0	60.0	10.0	61.0	61.0	45.0	45.0	45.0	45.0	45.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
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	
Recall Mode	None	C-Min	C-Min	Max	C-Min	C-Min	Min	Min	Min	Max	Max	
Walk Time (s)		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		12.0	12.0		12.0	12.0	21.0	21.0	21.0	21.0	21.0	
Pedestrian Calls (#/hr)		0	0		0	0	0	0	0	0	0	
Act Effect Green (s)	54.6	54.6	54.6	33.7	33.7	33.7	50.4	50.4	50.4	50.4	50.4	
Actuated g/C Ratio	0.42	0.42	0.42	0.26	0.26	0.26	0.39	0.39	0.39	0.39	0.39	
v/c Ratio	0.45	0.82	0.12	0.72	0.75	0.25	0.11	0.31	0.49	0.80	0.40	
Control Delay	15.7	16.7	1.6	53.1	50.6	8.9	29.1	30.5	16.4	53.6	29.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	15.7	16.7	1.6	53.1	50.6	8.9	29.1	30.5	16.4	53.6	29.5	
LOS	B	B	A	D	D	A	C	C	B	D	C	
Approach Delay		15.8			45.4			22.3			42.2	
Approach LOS		B			D			C			D	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.82

Intersection Signal Delay: 28.7

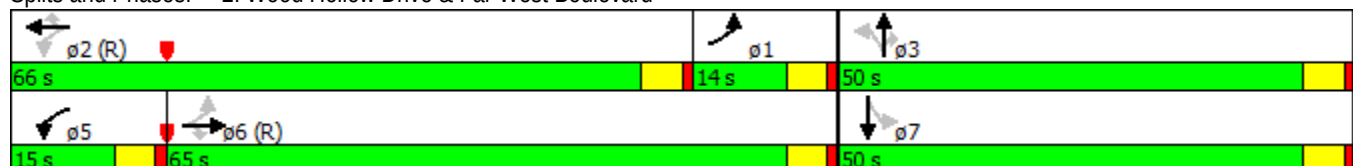
Intersection LOS: C

Intersection Capacity Utilization 78.1%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 2: Wood Hollow Drive & Far West Boulevard



Lanes, Volumes, Timings
3: Far West Boulevard & Mopac SB FR

2023 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑						↑↑	↑
Volume (vph)	0	848	481	19	559	0	0	0	0	142	603	944
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									0.850
Flt Protected				0.950							0.989	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	3500	1583
Flt Permitted				0.950							0.989	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	3500	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			421									104
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		1235			406			400			362	
Travel Time (s)		24.1			7.9			5.5			4.9	
Peak Hour Factor	0.92	0.91	0.93	0.67	0.93	0.92	0.92	0.92	0.92	0.78	0.92	0.95
Adj. Flow (vph)	0	932	517	28	601	0	0	0	0	182	655	994
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	932	517	28	601	0	0	0	0	0	837	994
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	L NA	Right	Left	Left	Right	Left	Left	R NA
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	custom	Prot	NA					custom	NA	custom
Protected Phases		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Permitted Phases										4		
Detector Phase		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Switch Phase												
Minimum Initial (s)				10.0								
Minimum Split (s)				15.0								

Lane Group	ø1	ø2	ø4	ø8	ø22
Lane Configurations					
Volume (vph)					
Ideal Flow (vphpl)					
Lane Util. Factor					
Frt					
Flt Protected					
Satd. Flow (prot)					
Flt Permitted					
Satd. Flow (perm)					
Right Turn on Red					
Satd. Flow (RTOR)					
Link Speed (mph)					
Link Distance (ft)					
Travel Time (s)					
Peak Hour Factor					
Adj. Flow (vph)					
Shared Lane Traffic (%)					
Lane Group Flow (vph)					
Enter Blocked Intersection					
Lane Alignment					
Median Width(ft)					
Link Offset(ft)					
Crosswalk Width(ft)					
Two way Left Turn Lane					
Headway Factor					
Turning Speed (mph)					
Number of Detectors					
Detector Template					
Leading Detector (ft)					
Trailing Detector (ft)					
Detector 1 Position(ft)					
Detector 1 Size(ft)					
Detector 1 Type					
Detector 1 Channel					
Detector 1 Extend (s)					
Detector 1 Queue (s)					
Detector 1 Delay (s)					
Detector 2 Position(ft)					
Detector 2 Size(ft)					
Detector 2 Type					
Detector 2 Channel					
Detector 2 Extend (s)					
Turn Type					
Protected Phases	1	2	4	8	22
Permitted Phases					
Detector Phase					
Switch Phase					
Minimum Initial (s)	4.0	10.0	10.0	4.0	1.0
Minimum Split (s)	9.0	15.0	25.0	9.0	20.0

Lanes, Volumes, Timings
3: Far West Boulevard & Mopac SB FR

2023 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)				13.0								
Total Split (%)				10.0%								
Maximum Green (s)				8.0								
Yellow Time (s)				4.0								
All-Red Time (s)				1.0								
Lost Time Adjust (s)				0.0								
Total Lost Time (s)				5.0								
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0								
Recall Mode				Min								
Act Effect Green (s)		61.0	31.0	8.0	44.0						46.0	76.0
Actuated g/C Ratio		0.47	0.24	0.06	0.34						0.35	0.58
v/c Ratio		0.56	0.74	0.26	0.50						0.68	1.03
Control Delay		27.5	17.4	70.3	2.3						39.9	50.1
Queue Delay		0.4	0.0	0.0	1.8						0.0	0.0
Total Delay		27.8	17.4	70.3	4.1						39.9	50.1
LOS		C	B	E	A						D	D
Approach Delay		24.1			7.1						45.5	
Approach LOS		C			A						D	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 106 (82%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.39

Intersection Signal Delay: 31.4

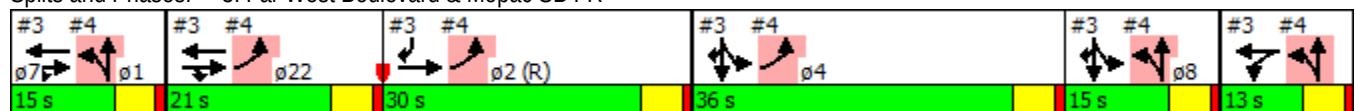
Intersection LOS: C

Intersection Capacity Utilization 107.9%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 3: Far West Boulevard & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø8	ø22
Total Split (s)	15.0	30.0	36.0	15.0	21.0
Total Split (%)	12%	23%	28%	12%	16%
Maximum Green (s)	10.0	25.0	31.0	10.0	16.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)					
Total Lost Time (s)					
Lead/Lag		Lag	Lead	Lag	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	C-Min	Min	Min	None
Act Effect Green (s)					
Actuated g/C Ratio					
v/c Ratio					
Control Delay					
Queue Delay					
Total Delay					
LOS					
Approach Delay					
Approach LOS					
Intersection Summary					

Lanes, Volumes, Timings
4: Mopac NB FR & Far West Boulevard

2023 Site+Forecasted AM W/Improvements

6/2/2014

							ø1	ø2	ø4	ø7	ø8	ø22
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR						
Lane Configurations	LT	RT	LT	TH	TH	LT						
Volume (vph)	1008	0	579	163	0	0						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Lane Util. Factor	0.97	1.00	0.95	0.95	1.00	1.00						
Fr												
Flt Protected	0.950		0.950	0.996								
Satd. Flow (prot)	3433	0	1681	1763	0	0						
Flt Permitted	0.950		0.950	0.996								
Satd. Flow (perm)	3433	0	1681	1763	0	0						
Right Turn on Red		Yes				Yes						
Satd. Flow (RTOR)												
Link Speed (mph)	35			50	50							
Link Distance (ft)	406			308	472							
Travel Time (s)	7.9			4.2	6.4							
Peak Hour Factor	0.90	0.92	0.93	0.25	0.92	0.92						
Adj. Flow (vph)	1120	0	623	652	0	0						
Shared Lane Traffic (%)			10%									
Lane Group Flow (vph)	1120	0	561	714	0	0						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Right	Left	Left	Left	Right						
Median Width(ft)	24			12	12							
Link Offset(ft)	0			0	0							
Crosswalk Width(ft)	16			16	16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00						
Turning Speed (mph)	15	9	15			9						
Number of Detectors	1		1	2								
Detector Template	Left		Left	Thru								
Leading Detector (ft)	20		20	100								
Trailing Detector (ft)	0		0	0								
Detector 1 Position(ft)	0		0	0								
Detector 1 Size(ft)	20		20	6								
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0								
Detector 1 Queue (s)	0.0		0.0	0.0								
Detector 1 Delay (s)	0.0		0.0	0.0								
Detector 2 Position(ft)				94								
Detector 2 Size(ft)				6								
Detector 2 Type				Cl+Ex								
Detector 2 Channel												
Detector 2 Extend (s)				0.0								
Turn Type	Prot		Split	NA								
Protected Phases	2 4 22		1 7 8	1 7 8			1	2	4	7	8	22
Permitted Phases												
Detector Phase	2 4 22		1 7 8	1 7 8								
Switch Phase												
Minimum Initial (s)							4.0	10.0	10.0	10.0	4.0	1.0
Minimum Split (s)							9.0	15.0	25.0	15.0	9.0	20.0

Lanes, Volumes, Timings
4: Mopac NB FR & Far West Boulevard

2023 Site+Forecasted AM W/Improvements

6/2/2014



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Total Split (s)							15.0	30.0	36.0	13.0	15.0	21.0
Total Split (%)							12%	23%	28%	10%	12%	16%
Maximum Green (s)							10.0	25.0	31.0	8.0	10.0	16.0
Yellow Time (s)							4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)							1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag								Lag	Lead		Lag	Lead
Lead-Lag Optimize?								Yes	Yes		Yes	Yes
Vehicle Extension (s)							3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode							Min	C-Min	Min	Min	Min	None
Act Effect Green (s)	82.0		38.0	38.0								
Actuated g/C Ratio	0.63		0.29	0.29								
v/c Ratio	0.52		1.14	1.39								
Control Delay	9.8		127.8	221.6								
Queue Delay	0.6		0.0	0.0								
Total Delay	10.4		127.8	221.6								
LOS	B		F	F								
Approach Delay	10.4			180.3								
Approach LOS	B			F								

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 106 (82%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.39

Intersection Signal Delay: 100.9

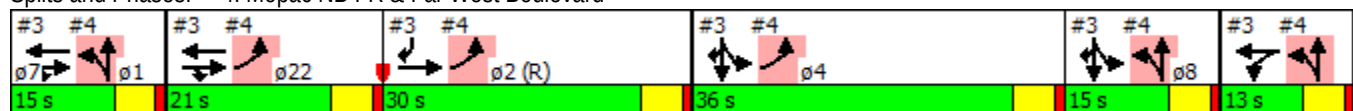
Intersection LOS: F

Intersection Capacity Utilization 121.1%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 4: Mopac NB FR & Far West Boulevard



Lanes, Volumes, Timings
5: Spicewood Springs Road & Mopac SB FR

2023 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑					↑	↑↑	↑
Volume (vph)	0	1095	725	781	1224	0	0	0	0	385	1403	742
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	60		0	0		0	150		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			75			25			75		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.999	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1610	3387	1583
Flt Permitted				0.950						0.950	0.999	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1610	3387	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			185									185
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		294			386			782			882	
Travel Time (s)		5.7			7.5			10.7			12.0	
Peak Hour Factor	0.92	0.81	0.90	0.87	0.86	0.92	0.92	0.92	0.92	0.93	0.87	0.94
Adj. Flow (vph)	0	1352	806	898	1423	0	0	0	0	414	1613	789
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	0	1352	806	898	1423	0	0	0	0	373	1654	789
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Prot	Prot	NA					Split	NA	Prot
Protected Phases		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5
Permitted Phases												
Detector Phase		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

Lanes, Volumes, Timings
5: Spicewood Springs Road & Mopac SB FR

2023 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)		34.0	34.0	42.0	70.0					39.0	39.0	39.0
Actuated g/C Ratio		0.26	0.26	0.32	0.54					0.30	0.30	0.30
v/c Ratio		1.46	1.47	1.57	0.75					0.77	1.63	1.31
Control Delay		239.2	237.8	287.9	12.1					53.7	318.5	178.8
Queue Delay		1.3	0.2	1.2	49.0					0.5	0.1	1.3
Total Delay		240.6	238.0	289.1	61.1					54.1	318.5	180.1
LOS		F	F	F	E					D	F	F
Approach Delay		239.6			149.3						244.7	
Approach LOS		F			F						F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 8 (6%), Referenced to phase 2:EBWB, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.63

Intersection Signal Delay: 212.9

Intersection LOS: F

Intersection Capacity Utilization 134.0%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 5: Spicewood Springs Road & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0	5.0	6.0
Minimum Split (s)	8.0	10.0	10.0	8.0	10.0	10.0	11.0
Total Split (s)	23.0	16.0	32.0	12.0	24.0	12.0	11.0
Total Split (%)	18%	12%	25%	9%	18%	9%	8%
Maximum Green (s)	18.0	11.0	27.0	7.0	19.0	7.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Lanes, Volumes, Timings
6: Mopac NB FR & Spicewood Springs Road

2023 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	375	993	0	0	1233	263	560	14	553	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		325	0		0	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	75			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.91	0.95	1.00	1.00	1.00
Frt						0.850		0.924	0.850			
Flt Protected	0.950						0.950	0.978				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	1681	1532	1504	0	0	0
Flt Permitted	0.950						0.950	0.978				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	1681	1532	1504	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						273		37	338			
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		386			594			563			407	
Travel Time (s)		7.5			11.6			7.7			5.6	
Peak Hour Factor	0.90	0.96	0.92	0.92	0.93	0.79	0.86	0.60	0.87	0.92	0.92	0.92
Adj. Flow (vph)	417	1034	0	0	1326	333	651	23	636	0	0	0
Shared Lane Traffic (%)							30%		35%			
Lane Group Flow (vph)	417	1034	0	0	1326	333	456	441	413	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Prot	Split	NA	custom			
Protected Phases	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			
Permitted Phases												
Detector Phase	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

Lanes, Volumes, Timings
6: Mopac NB FR & Spicewood Springs Road

2023 Site+Forecasted AM W/Improvements

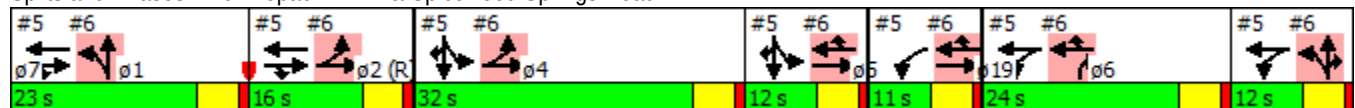
6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)	43.0	66.0			42.0	42.0	30.0	30.0	31.0			
Actuated g/C Ratio	0.33	0.51			0.32	0.32	0.23	0.23	0.24			
v/c Ratio	0.71	0.58			1.16	0.48	1.18	1.15	0.67			
Control Delay	18.6	10.6			121.8	9.6	147.6	136.0	15.0			
Queue Delay	44.5	47.8			2.2	0.0	0.0	0.2	0.0			
Total Delay	63.1	58.4			124.0	9.6	147.6	136.2	15.0			
LOS	E	E			F	A	F	F	B			
Approach Delay		59.8			101.0			102.0				
Approach LOS		E			F			F				

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 8 (6%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.63
Intersection Signal Delay: 87.8
Intersection LOS: F
Intersection Capacity Utilization 134.0%
ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 6: Mopac NB FR & Spicewood Springs Road



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0	5.0	6.0
Minimum Split (s)	8.0	10.0	10.0	8.0	10.0	10.0	11.0
Total Split (s)	23.0	16.0	32.0	12.0	24.0	12.0	11.0
Total Split (%)	18%	12%	25%	9%	18%	9%	8%
Maximum Green (s)	18.0	11.0	27.0	7.0	19.0	7.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	1183	202	690	814	12	90	4	272	7	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	0		100	0		0
Storage Lanes	1		0	1		0	1		1	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.985			0.996			0.853	0.850		0.981	
Flt Protected	0.950			0.950			0.950				0.959	
Satd. Flow (prot)	1770	5009	0	1770	3525	0	1770	1509	1504	0	1752	0
Flt Permitted	0.314			0.083			0.748				0.286	
Satd. Flow (perm)	585	5009	0	155	3525	0	1393	1509	1504	0	523	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19			6			220	219		101	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1093			275			251			161	
Travel Time (s)		21.3			5.4			5.7			3.7	
Peak Hour Factor	0.72	0.50	0.76	0.50	0.92	0.50	0.91	0.85	0.62	0.58	0.90	0.84
Adj. Flow (vph)	12	2366	266	1380	885	24	99	5	439	12	0	2
Shared Lane Traffic (%)									50%			
Lane Group Flow (vph)	12	2632	0	1380	909	0	99	225	219	0	14	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2			6			4		4	8		
Detector Phase	5	2		1	6		4	4	4	8	8	

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	20.0		21.0	20.0		15.0	15.0	15.0	11.0	11.0	
Minimum Split (s)	10.0	25.0		26.0	25.0		20.0	20.0	20.0	16.0	16.0	
Total Split (s)	10.0	62.0		50.0	102.0		18.0	18.0	18.0	18.0	18.0	
Total Split (%)	7.7%	47.7%		38.5%	78.5%		13.8%	13.8%	13.8%	13.8%	13.8%	
Maximum Green (s)	5.0	57.0		45.0	97.0		13.0	13.0	13.0	13.0	13.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0		5.0	
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min		Min	C-Min		Min	Min	Min	Min	Min	
Walk Time (s)							6.0	6.0	6.0	6.0	6.0	
Flash Dont Walk (s)							24.0	24.0	24.0	24.0	24.0	
Pedestrian Calls (#/hr)							0	0	0	0	0	
Act Effect Green (s)	60.4	57.0		97.4	97.4		13.0	13.0	13.0		13.0	
Actuated g/C Ratio	0.46	0.44		0.75	0.75		0.10	0.10	0.10		0.10	
v/c Ratio	0.03	1.19		2.04	0.34		0.71	0.65	0.63		0.10	
Control Delay	19.6	125.2		496.2	10.5		83.9	16.8	15.7		1.3	
Queue Delay	0.0	0.2		0.4	0.2		0.0	4.6	4.1		0.0	
Total Delay	19.6	125.4		496.6	10.8		83.9	21.5	19.8		1.3	
LOS	B	F		F	B		F	C	B		A	
Approach Delay		124.9			303.7			32.2			1.3	
Approach LOS		F			F			C			A	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 55 (42%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 2.04

Intersection Signal Delay: 190.0

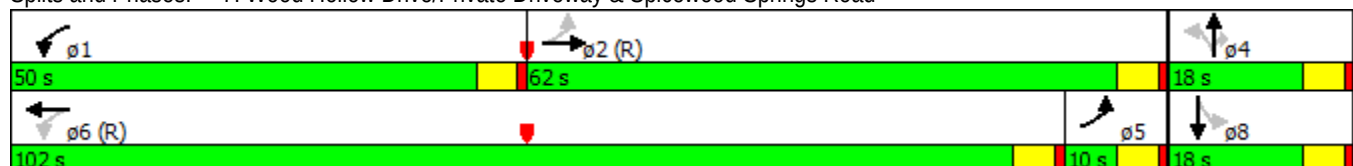
Intersection LOS: F

Intersection Capacity Utilization 90.6%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road



Lanes, Volumes, Timings
50: Executive Center Drive & Wood Hollow Drive

2023 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	46	265	155	211	233	185	37	60	33	15	146	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. 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
Frt		0.948				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1766	0	1770	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.601			0.452			0.506			0.674		
Satd. Flow (perm)	1120	1766	0	842	1863	1583	943	1863	1583	1255	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		74				203			66			51
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		255			271			301			140	
Travel Time (s)		5.8			6.2			6.8			3.2	
Peak Hour Factor	0.67	0.91	1.00	0.86	0.91	0.91	0.50	0.46	0.50	0.25	0.56	0.47
Adj. Flow (vph)	69	291	155	245	256	203	74	130	66	60	261	51
Shared Lane Traffic (%)												
Lane Group Flow (vph)	69	446	0	245	256	203	74	130	66	60	261	51
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6		6	8		8	4		4
Detector Phase	2	2		6	6	6	8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	21.0	21.0		21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0

Lanes, Volumes, Timings
50: Executive Center Drive & Wood Hollow Drive

2023 Site+Forecasted AM W/Improvements

6/2/2014

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	39.0	39.0		39.0	39.0	39.0	21.0	21.0	21.0	21.0	21.0	21.0
Total Split (%)	65.0%	65.0%		65.0%	65.0%	65.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%
Maximum Green (s)	34.0	34.0		34.0	34.0	34.0	16.0	16.0	16.0	16.0	16.0	16.0
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
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
Recall Mode	C-Max	C-Max		C-Max	C-Max	C-Max	Max	Max	Max	Max	Max	Max
Walk Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0	0	0	0	0
Act Effect Green (s)	34.0	34.0		34.0	34.0	34.0	16.0	16.0	16.0	16.0	16.0	16.0
Actuated g/C Ratio	0.57	0.57		0.57	0.57	0.57	0.27	0.27	0.27	0.27	0.27	0.27
v/c Ratio	0.11	0.43		0.51	0.24	0.21	0.29	0.26	0.14	0.18	0.53	0.11
Control Delay	6.6	7.7		12.8	7.3	1.7	21.4	19.1	6.2	18.7	23.3	6.6
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.6	7.7		12.8	7.3	1.7	21.4	19.1	6.2	18.7	23.3	6.6
LOS	A	A		B	A	A	C	B	A	B	C	A
Approach Delay		7.5			7.6			16.6			20.3	
Approach LOS		A			A			B			C	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 60

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.53

Intersection Signal Delay: 11.4

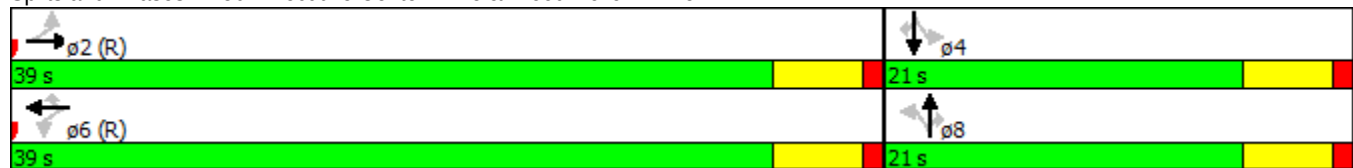
Intersection LOS: B

Intersection Capacity Utilization 62.8%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 50: Executive Center Drive & Wood Hollow Drive



Lanes, Volumes, Timings
70: Spicewood Springs Road & Hart Lane

2023 Site+Forecasted AM W/Improvements

6/2/2014

							ø5	ø6	ø8
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR			
Lane Configurations									
Volume (vph)	123	170	169	973	1347	353			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900			
Storage Length (ft)	0	0	225			0			
Storage Lanes	1	1	1			0			
Taper Length (ft)	25		150						
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95			
Frt		0.850			0.961				
Flt Protected	0.950		0.950						
Satd. Flow (prot)	1770	1583	1770	3539	3401	0			
Flt Permitted	0.950		0.950						
Satd. Flow (perm)	1770	1583	1770	3539	3401	0			
Right Turn on Red		Yes				Yes			
Satd. Flow (RTOR)		22			61				
Link Speed (mph)	30			35	35				
Link Distance (ft)	358			1093	145				
Travel Time (s)	8.1			21.3	2.8				
Peak Hour Factor	0.85	0.87	0.86	0.88	0.89	0.67			
Adj. Flow (vph)	145	195	197	1106	1513	527			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	145	195	197	1106	2040	0			
Enter Blocked Intersection	No	No	No	No	No	No			
Lane Alignment	L NA	Right	Left	R NA	Left	Right			
Median Width(ft)	18			18	6				
Link Offset(ft)	0			0	0				
Crosswalk Width(ft)	16			16	16				
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00			
Turning Speed (mph)	15	9	15			9			
Number of Detectors	1	1	1	2	2				
Detector Template	Left	Right	Left	Thru	Thru				
Leading Detector (ft)	20	20	20	100	100				
Trailing Detector (ft)	0	0	0	0	0				
Detector 1 Position(ft)	0	0	0	0	0				
Detector 1 Size(ft)	20	20	20	6	6				
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel									
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0				
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0				
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0				
Detector 2 Position(ft)				94	94				
Detector 2 Size(ft)				6	6				
Detector 2 Type				Cl+Ex	Cl+Ex				
Detector 2 Channel									
Detector 2 Extend (s)				0.0	0.0				
Turn Type	Prot	pm+ov	Prot	NA	NA				
Protected Phases	2!	3	3	6 8!	4		5	6	8
Permitted Phases		2							
Detector Phase	2	3	3	6 8	4				

Lanes, Volumes, Timings
70: Spicewood Springs Road & Hart Lane

2023 Site+Forecasted AM W/Improvements

6/2/2014



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø5	ø6	ø8
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Minimum Split (s)	9.0	9.0	9.0		23.0		23.0	9.0	9.0
Total Split (s)	34.0	18.0	18.0		68.0		23.0	11.0	86.0
Total Split (%)	28.3%	15.0%	15.0%		56.7%		19%	9%	72%
Maximum Green (s)	29.0	13.0	13.0		63.0		18.0	6.0	81.0
Yellow Time (s)	4.0	4.0	4.0		4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0				
Total Lost Time (s)	5.0	5.0	5.0		5.0				
Lead/Lag		Lead	Lead		Lag		Lead	Lag	
Lead-Lag Optimize?		Yes	Yes		Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0	3.0
Recall Mode	Min	None	None		None		None	None	None
Walk Time (s)					7.0		7.0		
Flash Dont Walk (s)					11.0		11.0		
Pedestrian Calls (#/hr)					0		0		
Act Effect Green (s)	13.8	31.8	13.0	104.9	63.1				
Actuated g/C Ratio	0.13	0.30	0.12	1.00	0.60				
v/c Ratio	0.62	0.39	0.90	0.31	0.99				
Control Delay	55.1	27.9	86.4	0.2	37.9				
Queue Delay	0.0	0.0	0.0	0.0	0.0				
Total Delay	55.1	27.9	86.4	0.2	37.9				
LOS	E	C	F	A	D				
Approach Delay	39.5			13.3	37.9				
Approach LOS	D			B	D				

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 104.9

Natural Cycle: 140

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.99

Intersection Signal Delay: 29.3

Intersection LOS: C

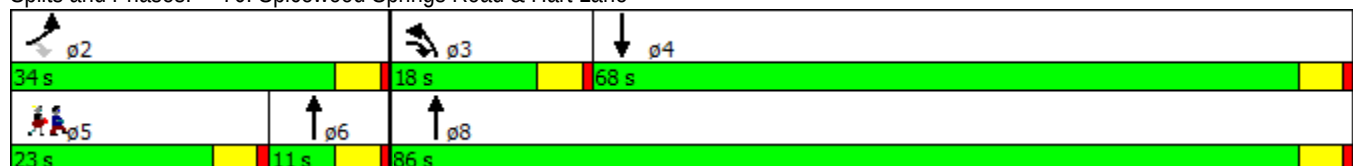
Intersection Capacity Utilization 77.2%

ICU Level of Service D

Analysis Period (min) 15

! Phase conflict between lane groups.

Splits and Phases: 70: Spicewood Springs Road & Hart Lane



HCM Unsignalized Intersection Capacity Analysis 2023 Site+Forecasted AM W/Improvements

10: Hart Lane & Greystone Drive

6/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	55	211	145	87	79	9	54	204	36	17	308	33
Peak Hour Factor	0.80	0.65	0.65	0.78	0.88	0.58	0.75	0.81	0.60	0.58	0.69	0.57
Hourly flow rate (vph)	69	325	223	112	90	16	72	252	60	29	446	58
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2				
Volume Total (vph)	231	385	156	60	198	186	252	281				
Volume Left (vph)	69	0	112	0	72	0	29	0				
Volume Right (vph)	0	223	0	16	0	60	0	58				
Hadj (s)	0.18	-0.37	0.39	-0.15	0.22	-0.19	0.09	-0.11				
Departure Headway (s)	7.9	7.3	8.8	8.2	8.3	7.9	7.9	7.7				
Degree Utilization, x	0.51	0.78	0.38	0.14	0.45	0.41	0.55	0.60				
Capacity (veh/h)	446	480	383	412	414	442	444	450				
Control Delay (s)	17.5	30.8	15.9	11.4	16.7	14.9	19.0	20.4				
Approach Delay (s)	25.8		14.6		15.9		19.8					
Approach LOS	D		B		C		C					
Intersection Summary												
Delay			20.4									
Level of Service			C									
Intersection Capacity Utilization			48.8%	ICU Level of Service					A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 2023 Site+Forecasted AM W/Improvements

20: Wood Hollow Drive & Greystone Drive

6/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	76	140	182	61	134	34	25	289	48	26	203	59
Peak Hour Factor	0.81	0.89	0.64	0.80	0.82	0.72	0.53	0.88	0.79	0.68	0.85	0.68
Hourly flow rate (vph)	94	157	284	76	163	47	47	328	61	38	239	87
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2				
Volume Total (vph)	172	363	158	129	211	225	158	206				
Volume Left (vph)	94	0	76	0	47	0	38	0				
Volume Right (vph)	0	284	0	47	0	61	0	87				
Hadj (s)	0.31	-0.51	0.28	-0.22	0.15	-0.16	0.16	-0.26				
Departure Headway (s)	7.8	7.0	8.2	7.7	7.8	7.5	7.9	7.5				
Degree Utilization, x	0.37	0.70	0.36	0.28	0.46	0.47	0.35	0.43				
Capacity (veh/h)	446	499	420	445	438	453	434	459				
Control Delay (s)	14.2	23.7	14.5	12.4	16.0	15.7	13.9	14.9				
Approach Delay (s)	20.6		13.5		15.9		14.5					
Approach LOS	C		B		C		B					
Intersection Summary												
Delay			16.7									
Level of Service			C									
Intersection Capacity Utilization			50.3%	ICU Level of Service					A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 2023 Site+Forecasted AM W/Improvements

30: Greystone Drive & Mopac SB FR

6/2/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations					  	
Volume (veh/h)	0	243	0	0	3665	168
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.79	0.92	0.92	0.96	0.86
Hourly flow rate (vph)	0	308	0	0	3818	195
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	3915	1370	4013			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	3915	1370	4013			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	0	100			
cM capacity (veh/h)	2	136	43			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	308	1527	1527	959		
Volume Left	0	0	0	0		
Volume Right	308	0	0	195		
cSH	136	1700	1700	1700		
Volume to Capacity	2.26	0.90	0.90	0.56		
Queue Length 95th (ft)	647	0	0	0		
Control Delay (s)	642.5	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	642.5	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay		45.7				
Intersection Capacity Utilization		96.3%		ICU Level of Service		F
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis 2023 Site+Forecasted AM W/Improvements

40: Mopac SB FR & Executive Center Drive

6/2/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations					  	
Volume (veh/h)	0	53	0	0	3055	423
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.50	0.92	0.92	0.95	0.75
Hourly flow rate (vph)	0	106	0	0	3216	564
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	3498	1354	3780			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	3498	1354	3780			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	24	100			
cM capacity (veh/h)	5	140	54			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	106	1286	1286	1207		
Volume Left	0	0	0	0		
Volume Right	106	0	0	564		
cSH	140	1700	1700	1700		
Volume to Capacity	0.76	0.76	0.76	0.71		
Queue Length 95th (ft)	114	0	0	0		
Control Delay (s)	85.0	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	85.0	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay			2.3			
Intersection Capacity Utilization			78.4%	ICU Level of Service		D
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2023 Site+Forecasted AM W/Improvements

60: Executive Center Drive & Hart Lane

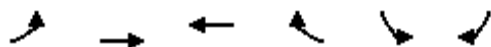
6/2/2014

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	237	101	187	310	27	46
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.79	0.67	0.83	0.72	0.75	0.46
Hourly flow rate (vph)	300	151	225	431	36	100
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)				358		
pX, platoon unblocked						
vC, conflicting volume			451		1257	375
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			451		1257	375
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			80		76	85
cM capacity (veh/h)			1110		151	671
Direction, Lane #	EB 1	WB 1	NB 1	NB 2		
Volume Total	451	656	36	100		
Volume Left	0	225	36	0		
Volume Right	151	0	0	100		
cSH	1700	1110	151	671		
Volume to Capacity	0.27	0.20	0.24	0.15		
Queue Length 95th (ft)	0	19	22	13		
Control Delay (s)	0.0	4.7	36.2	11.3		
Lane LOS		A	E	B		
Approach Delay (s)	0.0	4.7	17.9			
Approach LOS			C			
Intersection Summary						
Average Delay			4.5			
Intersection Capacity Utilization			58.6%	ICU Level of Service		B
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2023 Site+Forecasted AM W/Improvements

100: Executive Center Drive & Driveway 1

6/2/2014



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	232	178	255	168	11	45
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	252	193	277	183	12	49
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)		893				
pX, platoon unblocked						
vC, conflicting volume	460				1066	368
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	460				1066	368
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	77				94	93
cM capacity (veh/h)	1101				190	677
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	446	460	61			
Volume Left	252	0	12			
Volume Right	0	183	49			
cSH	1101	1700	450			
Volume to Capacity	0.23	0.27	0.14			
Queue Length 95th (ft)	22	0	12			
Control Delay (s)	6.3	0.0	14.2			
Lane LOS	A		B			
Approach Delay (s)	6.3	0.0	14.2			
Approach LOS			B			
Intersection Summary						
Average Delay			3.8			
Intersection Capacity Utilization			59.3%		ICU Level of Service	B
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2023 Site+Forecasted AM W/Improvements

200: Executive Center Drive & Driveway 2

6/2/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	0	0	300	410	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	326	446	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)					735	
pX, platoon unblocked						
vC, conflicting volume	772	446	446			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	772	446	446			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	368	613	1115			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	0	326	446			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1115	1700			
Volume to Capacity	0.00	0.00	0.26			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			24.9%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2023 Site+Forecasted AM W/Improvements

300: Executive Center Drive & Driveway 3

6/2/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	0	0	300	410	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	326	446	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)					569	
pX, platoon unblocked	1.00	1.00	1.00			
vC, conflicting volume	772	446	446			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	771	445	445			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	368	613	1114			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	0	326	446			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1114	1700			
Volume to Capacity	0.00	0.00	0.26			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			24.9%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2023 Site+Forecasted AM W/Improvements

400: Executive Center Drive & Driveway 4

6/2/2014

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	12	26	176	124	114	398
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	13	28	191	135	124	433
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						301
pX, platoon unblocked	0.87					
vC, conflicting volume	939	259			326	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	853	259			326	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	95	96			90	
cM capacity (veh/h)	257	780			1234	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	41	326	557			
Volume Left	13	0	124			
Volume Right	28	135	0			
cSH	475	1700	1234			
Volume to Capacity	0.09	0.19	0.10			
Queue Length 95th (ft)	7	0	8			
Control Delay (s)	13.3	0.0	2.7			
Lane LOS	B		A			
Approach Delay (s)	13.3	0.0	2.7			
Approach LOS	B					
Intersection Summary						
Average Delay		2.2				
Intersection Capacity Utilization		57.4%		ICU Level of Service		B
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis 2023 Site+Forecasted AM W/Improvements

500: Executive Center Drive & Driveway 5

6/2/2014



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	236	55	15	255
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	257	60	16	277
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			140			
pX, platoon unblocked	0.96	0.96			0.96	
vC, conflicting volume	596	286			316	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	562	240			271	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			99	
cM capacity (veh/h)	464	769			1245	
Direction, Lane #	NB 1	SB 1				
Volume Total	316	293				
Volume Left	0	16				
Volume Right	60	0				
cSH	1700	1245				
Volume to Capacity	0.19	0.01				
Queue Length 95th (ft)	0	1				
Control Delay (s)	0.0	0.6				
Lane LOS		A				
Approach Delay (s)	0.0	0.6				
Approach LOS						
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			29.0%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2023 Site+Forecasted AM W/Improvements

600: Executive Center Drive & Driveway 6

6/2/2014

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	6	20	215	21	18	264
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	22	234	23	20	287
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			352			
pX, platoon unblocked						
vC, conflicting volume	571	245			257	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	571	245			257	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	97			99	
cM capacity (veh/h)	475	794			1308	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	28	257	307			
Volume Left	7	0	20			
Volume Right	22	23	0			
cSH	687	1700	1308			
Volume to Capacity	0.04	0.15	0.01			
Queue Length 95th (ft)	3	0	1			
Control Delay (s)	10.5	0.0	0.6			
Lane LOS	B		A			
Approach Delay (s)	10.5	0.0	0.6			
Approach LOS	B					
Intersection Summary						
Average Delay			0.8			
Intersection Capacity Utilization			38.7%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2023 Site+Forecasted AM W/Improvements

700: Executive Center Drive & Driveway 7

6/2/2014

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	4	232	3	6	282
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	4	252	3	7	307
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			536			
pX, platoon unblocked						
vC, conflicting volume	573	254			255	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	573	254			255	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	99			100	
cM capacity (veh/h)	478	785			1310	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	4	255	313			
Volume Left	0	0	7			
Volume Right	4	3	0			
cSH	785	1700	1310			
Volume to Capacity	0.01	0.15	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	9.6	0.0	0.2			
Lane LOS	A		A			
Approach Delay (s)	9.6	0.0	0.2			
Approach LOS	A					
Intersection Summary						
Average Delay		0.2				
Intersection Capacity Utilization		29.7%		ICU Level of Service		A
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis 2023 Site+Forecasted AM W/Improvements

800: Executive Center Drive & Driveway 8

6/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	0	0	0	236	0	0	288	0
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	0	0	0	0	0	0	0	257	0	0	313	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (ft)								676				
pX, platoon unblocked												
vC, conflicting volume	570	570	313	570	570	257	313			257		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	570	570	313	570	570	257	313			257		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	100	100	100	100			100		
cM capacity (veh/h)	433	432	727	433	432	782	1247			1308		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	0	0	257	313								
Volume Left	0	0	0	0								
Volume Right	0	0	0	0								
cSH	1700	1700	1247	1308								
Volume to Capacity	0.00	0.00	0.00	0.00								
Queue Length 95th (ft)	0	0	0	0								
Control Delay (s)	0.0	0.0	0.0	0.0								
Lane LOS	A	A										
Approach Delay (s)	0.0	0.0	0.0	0.0								
Approach LOS	A	A										
Intersection Summary												
Average Delay			0.0									
Intersection Capacity Utilization			18.5%	ICU Level of Service						A		
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 2023 Site+Forecasted AM W/Improvements

900: Executive Center Drive & Driveway 9

6/2/2014

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	236	0	0	288
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	257	0	0	313
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			872			
pX, platoon unblocked						
vC, conflicting volume	570	257			257	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	570	257			257	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	483	782			1308	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	0	257	313			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1308			
Volume to Capacity	0.00	0.15	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		18.5%		ICU Level of Service	A	
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis 2023 Site+Forecasted AM W/Improvements 1000: Executive Center Drive & Driveway 10

6/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	0	0	0	236	0	0	288	0
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	0	0	0	0	0	0	0	257	0	0	313	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (ft)								1039				
pX, platoon unblocked												
vC, conflicting volume	570	570	313	570	570	257	313			257		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	570	570	313	570	570	257	313			257		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	100	100	100	100			100		
cM capacity (veh/h)	433	432	727	433	432	782	1247			1308		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	0	0	257	313								
Volume Left	0	0	0	0								
Volume Right	0	0	0	0								
cSH	1700	1700	1247	1308								
Volume to Capacity	0.00	0.00	0.00	0.00								
Queue Length 95th (ft)	0	0	0	0								
Control Delay (s)	0.0	0.0	0.0	0.0								
Lane LOS	A	A										
Approach Delay (s)	0.0	0.0	0.0	0.0								
Approach LOS	A	A										
Intersection Summary												
Average Delay			0.0									
Intersection Capacity Utilization			18.5%	ICU Level of Service						A		
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 2023 Site+Forecasted AM W/Improvements

1100: Driveway 11 & Wood Hollow Drive

6/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	244	69	251	641	0	19	0	97	19	0	10
Sign Control		Free			Free			Stop			Stop	
Grade		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
Hourly flow rate (vph)	0	265	75	273	697	0	21	0	105	21	0	11
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)		271			251							
pX, platoon unblocked	0.31						0.31	0.31		0.31	0.31	0.31
vC, conflicting volume	697			340			1556	1545	303	1651	1583	697
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			340			1678	1644	303	1979	1763	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			78			0	100	86	0	100	97
cM capacity (veh/h)	510			1219			19	24	737	10	21	341
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1							
Volume Total	340	970	21	105	32							
Volume Left	0	273	21	0	21							
Volume Right	75	0	0	105	11							
cSH	1700	1219	19	737	15							
Volume to Capacity	0.20	0.22	1.09	0.14	2.04							
Queue Length 95th (ft)	0	21	72	12	115							
Control Delay (s)	0.0	4.9	520.8	10.7	990.8							
Lane LOS		A	F	B	F							
Approach Delay (s)	0.0	4.9	94.2		990.8							
Approach LOS			F		F							
Intersection Summary												
Average Delay			32.6									
Intersection Capacity Utilization			83.0%		ICU Level of Service				E			
Analysis Period (min)			15									

Lanes, Volumes, Timings
1: Hart Lane & Far West Boulevard

2023 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	64	639	42	193	651	164	65	172	148	183	154	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	170		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	1		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.95	0.95	0.95	1.00	1.00	1.00
Frt		0.988				0.850		0.943			0.940	
Flt Protected	0.950			0.950				0.992		0.950		
Satd. Flow (prot)	1770	3497	0	1770	3539	1583	0	3311	0	1770	1751	0
Flt Permitted	0.190			0.298				0.704		0.241		
Satd. Flow (perm)	354	3497	0	555	3539	1583	0	2350	0	449	1751	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8				193		97			30	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		362			1265			236			237	
Travel Time (s)		7.1			24.6			5.4			5.4	
Peak Hour Factor	0.73	0.83	0.61	0.69	0.83	0.85	0.80	0.80	0.82	0.90	0.56	0.47
Adj. Flow (vph)	88	770	69	280	784	193	81	215	180	203	275	183
Shared Lane Traffic (%)												
Lane Group Flow (vph)	88	839	0	280	784	193	0	476	0	203	458	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2		1	6			4		3	8	
Permitted Phases	2			6		6	4			8		
Detector Phase	5	2		1	6	6	4	4		3	8	

Lanes, Volumes, Timings
1: Hart Lane & Far West Boulevard

2023 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	8.0	18.0		8.0	18.0	18.0	12.0	12.0		8.0	12.0	
Minimum Split (s)	13.0	24.0		13.0	24.0	24.0	33.0	33.0		13.0	33.0	
Total Split (s)	15.0	49.0		27.0	61.0	61.0	41.0	41.0		13.0	54.0	
Total Split (%)	11.5%	37.7%		20.8%	46.9%	46.9%	31.5%	31.5%		10.0%	41.5%	
Maximum Green (s)	10.0	44.0		22.0	56.0	56.0	36.0	36.0		8.0	49.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0		5.0		5.0	5.0	
Lead/Lag	Lead	Lead		Lag	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	
Walk Time (s)		7.0			7.0	7.0	7.0	7.0			7.0	
Flash Dont Walk (s)		12.0			12.0	12.0	21.0	21.0			21.0	
Pedestrian Calls (#/hr)		0			0	0	0	0			0	
Act Effect Green (s)	54.6	54.6		59.6	59.6	59.6		28.1		46.1	46.1	
Actuated g/C Ratio	0.42	0.42		0.46	0.46	0.46		0.22		0.35	0.35	
v/c Ratio	0.35	0.57		0.72	0.48	0.23		0.82		0.70	0.72	
Control Delay	30.7	32.4		31.0	13.1	1.6		49.6		45.3	40.2	
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	
Total Delay	30.7	32.4		31.0	13.1	1.6		49.6		45.3	40.2	
LOS	C	C		C	B	A		D		D	D	
Approach Delay		32.3			15.3			49.6			41.8	
Approach LOS		C			B			D			D	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.82

Intersection Signal Delay: 30.2

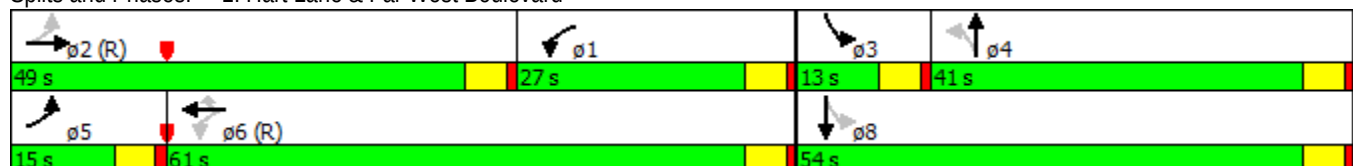
Intersection LOS: C

Intersection Capacity Utilization 71.1%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 1: Hart Lane & Far West Boulevard



Lanes, Volumes, Timings
2: Wood Hollow Drive & Far West Boulevard

2023 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	165	807	66	242	725	140	106	232	337	165	169	136
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	335		0	165		0	120		120	0		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	75			35			50			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.931	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1734	0
Flt Permitted	0.341			0.207			0.382			0.412		
Satd. Flow (perm)	635	3539	1583	386	3539	1583	712	1863	1583	767	1734	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			114			173			279		38	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1265			1235			599			222	
Travel Time (s)		24.6			24.1			13.6			5.0	
Peak Hour Factor	0.74	0.91	0.58	0.90	0.88	0.81	0.69	0.65	0.87	0.90	0.81	0.77
Adj. Flow (vph)	223	887	114	269	824	173	154	357	387	183	209	177
Shared Lane Traffic (%)												
Lane Group Flow (vph)	223	887	114	269	824	173	154	357	387	183	386	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	L NA	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	1	6		5	2			3			7	
Permitted Phases	6		6	2		2	3		3	7		
Detector Phase	1	6	6	5	2	2	3	3	3	7	7	

Lanes, Volumes, Timings
2: Wood Hollow Drive & Far West Boulevard

2023 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	8.0	8.0	8.0	5.0	5.0	
Minimum Split (s)	10.0	22.0	22.0	10.0	22.0	22.0	31.0	31.0	31.0	31.0	31.0	
Total Split (s)	19.0	51.0	51.0	25.0	57.0	57.0	54.0	54.0	54.0	54.0	54.0	
Total Split (%)	14.6%	39.2%	39.2%	19.2%	43.8%	43.8%	41.5%	41.5%	41.5%	41.5%	41.5%	
Maximum Green (s)	14.0	46.0	46.0	20.0	52.0	52.0	49.0	49.0	49.0	49.0	49.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
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	
Recall Mode	None	C-Min	C-Min	Max	C-Min	C-Min	Min	Min	Min	Max	Max	
Walk Time (s)		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		12.0	12.0		12.0	12.0	21.0	21.0	21.0	21.0	21.0	
Pedestrian Calls (#/hr)		0	0		0	0	0	0	0	0	0	
Act Effect Green (s)	40.2	40.2	40.2	39.3	39.3	39.3	54.8	54.8	54.8	54.8	54.8	
Actuated g/C Ratio	0.31	0.31	0.31	0.30	0.30	0.30	0.42	0.42	0.42	0.42	0.42	
v/c Ratio	0.59	0.81	0.20	0.82	0.77	0.29	0.51	0.45	0.47	0.57	0.51	
Control Delay	33.5	32.7	2.8	45.5	40.6	5.2	37.1	30.4	10.0	38.7	28.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	33.5	32.7	2.8	45.5	40.6	5.2	37.1	30.4	10.0	38.7	28.8	
LOS	C	C	A	D	D	A	D	C	A	D	C	
Approach Delay		30.0			36.8			22.8			32.0	
Approach LOS		C			D			C			C	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.82

Intersection Signal Delay: 30.8

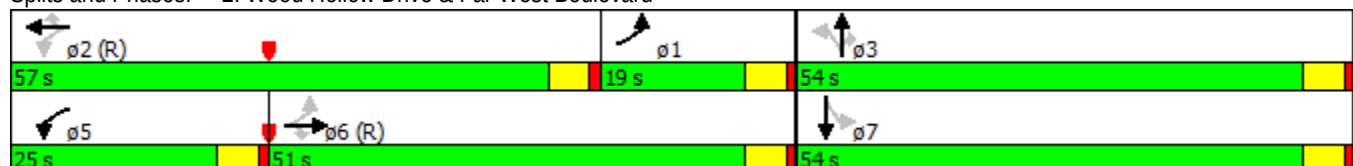
Intersection LOS: C

Intersection Capacity Utilization 76.3%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 2: Wood Hollow Drive & Far West Boulevard



Lanes, Volumes, Timings
3: Far West Boulevard & Mopac SB FR

2023 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1218	407	11	447	0	0	0	0	397	639	995
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									0.850
Flt Protected				0.950							0.979	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	3465	1583
Flt Permitted				0.950							0.979	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	3465	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			230									124
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		1235			406			400			362	
Travel Time (s)		24.1			7.9			5.5			4.9	
Peak Hour Factor	0.92	0.91	0.93	0.67	0.93	0.92	0.92	0.92	0.92	0.78	0.92	0.95
Adj. Flow (vph)	0	1338	438	16	481	0	0	0	0	509	695	1047
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1338	438	16	481	0	0	0	0	0	1204	1047
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	L NA	Right	Left	Left	Right	Left	Left	R NA
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94							94
Detector 2 Size(ft)		6			6							6
Detector 2 Type		Cl+Ex			Cl+Ex							Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							0.0
Turn Type		NA	custom	Prot	NA					Perm	NA	custom
Protected Phases		1 2 22	1 22	7	1 7 22						4 8	2 4 8
Permitted Phases										4 8		
Detector Phase		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Switch Phase												
Minimum Initial (s)				10.0								
Minimum Split (s)				15.0								

Lane Group	ø1	ø2	ø4	ø8	ø22
Lane Configurations					
Volume (vph)					
Ideal Flow (vphpl)					
Lane Util. Factor					
Frt					
Flt Protected					
Satd. Flow (prot)					
Flt Permitted					
Satd. Flow (perm)					
Right Turn on Red					
Satd. Flow (RTOR)					
Link Speed (mph)					
Link Distance (ft)					
Travel Time (s)					
Peak Hour Factor					
Adj. Flow (vph)					
Shared Lane Traffic (%)					
Lane Group Flow (vph)					
Enter Blocked Intersection					
Lane Alignment					
Median Width(ft)					
Link Offset(ft)					
Crosswalk Width(ft)					
Two way Left Turn Lane					
Headway Factor					
Turning Speed (mph)					
Number of Detectors					
Detector Template					
Leading Detector (ft)					
Trailing Detector (ft)					
Detector 1 Position(ft)					
Detector 1 Size(ft)					
Detector 1 Type					
Detector 1 Channel					
Detector 1 Extend (s)					
Detector 1 Queue (s)					
Detector 1 Delay (s)					
Detector 2 Position(ft)					
Detector 2 Size(ft)					
Detector 2 Type					
Detector 2 Channel					
Detector 2 Extend (s)					
Turn Type					
Protected Phases	1	2	4	8	22
Permitted Phases					
Detector Phase					
Switch Phase					
Minimum Initial (s)	4.0	13.0	10.0	4.0	1.0
Minimum Split (s)	9.0	18.0	15.0	9.0	6.0

Lanes, Volumes, Timings
3: Far West Boulevard & Mopac SB FR

2023 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)				15.0								
Total Split (%)				11.5%								
Maximum Green (s)				10.0								
Yellow Time (s)				4.0								
All-Red Time (s)				1.0								
Lost Time Adjust (s)				0.0								
Total Lost Time (s)				5.0								
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0								
Recall Mode				Min								
Act Effect Green (s)		70.0	23.0	10.0	38.0						35.0	82.0
Actuated g/C Ratio		0.54	0.18	0.08	0.29						0.27	0.63
v/c Ratio		0.70	0.93	0.12	0.47						1.29	1.00
Control Delay		29.0	60.4	73.8	6.3						178.3	50.4
Queue Delay		5.9	0.0	0.0	0.0						0.0	0.0
Total Delay		34.9	60.4	73.8	6.3						178.3	50.4
LOS		C	E	E	A						F	D
Approach Delay		41.2			8.5						118.8	
Approach LOS		D			A						F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.29

Intersection Signal Delay: 76.2

Intersection LOS: E

Intersection Capacity Utilization 108.9%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 3: Far West Boulevard & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø8	ø22
Total Split (s)	17.0	47.0	31.0	9.0	11.0
Total Split (%)	13%	36%	24%	7%	8%
Maximum Green (s)	12.0	42.0	26.0	4.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)					
Total Lost Time (s)					
Lead/Lag		Lag	Lead	Lag	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	C-Min	Min	Min	None
Act Effect Green (s)					
Actuated g/C Ratio					
v/c Ratio					
Control Delay					
Queue Delay					
Total Delay					
LOS					
Approach Delay					
Approach LOS					
Intersection Summary					

Lanes, Volumes, Timings
4: Mopac NB FR & Far West Boulevard

2023 Site+Forecasted PM W/Improvements

6/2/2014

							ø1	ø2	ø4	ø7	ø8	ø22
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR						
Lane Configurations	LT	TH	LT	TH	TH	LT						
Volume (vph)	1625	0	392	131	0	0						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Lane Util. Factor	0.97	1.00	0.95	0.95	1.00	1.00						
Frt												
Flt Protected	0.950		0.950	0.996								
Satd. Flow (prot)	3433	0	1681	1763	0	0						
Flt Permitted	0.950		0.950	0.996								
Satd. Flow (perm)	3433	0	1681	1763	0	0						
Right Turn on Red		Yes				Yes						
Satd. Flow (RTOR)												
Link Speed (mph)	35			50	50							
Link Distance (ft)	406			308	472							
Travel Time (s)	7.9			4.2	6.4							
Peak Hour Factor	0.90	0.92	0.93	0.25	0.92	0.92						
Adj. Flow (vph)	1806	0	422	524	0	0						
Shared Lane Traffic (%)			10%									
Lane Group Flow (vph)	1806	0	380	566	0	0						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Right	Left	Left	Left	Right						
Median Width(ft)	24			12	12							
Link Offset(ft)	0			0	0							
Crosswalk Width(ft)	16			16	16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00						
Turning Speed (mph)	15	9	15			9						
Number of Detectors	1		1	2								
Detector Template	Left		Left	Thru								
Leading Detector (ft)	20		20	100								
Trailing Detector (ft)	0		0	0								
Detector 1 Position(ft)	0		0	0								
Detector 1 Size(ft)	20		20	6								
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0								
Detector 1 Queue (s)	0.0		0.0	0.0								
Detector 1 Delay (s)	0.0		0.0	0.0								
Detector 2 Position(ft)				94								
Detector 2 Size(ft)				6								
Detector 2 Type				Cl+Ex								
Detector 2 Channel												
Detector 2 Extend (s)				0.0								
Turn Type	Prot		Split	NA								
Protected Phases	2 4 22		1 7 8	1 7 8			1	2	4	7	8	22
Permitted Phases												
Detector Phase	2 4 22		1 7 8	1 7 8								
Switch Phase												
Minimum Initial (s)							4.0	13.0	10.0	10.0	4.0	1.0
Minimum Split (s)							9.0	18.0	15.0	15.0	9.0	6.0

Lanes, Volumes, Timings
4: Mopac NB FR & Far West Boulevard

2023 Site+Forecasted PM W/Improvements

6/2/2014



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Total Split (s)							17.0	47.0	31.0	15.0	9.0	11.0
Total Split (%)							13%	36%	24%	12%	7%	8%
Maximum Green (s)							12.0	42.0	26.0	10.0	4.0	6.0
Yellow Time (s)							4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)							1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag								Lag	Lead		Lag	Lead
Lead-Lag Optimize?								Yes	Yes		Yes	Yes
Vehicle Extension (s)							3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode							Min	C-Min	Min	Min	Min	None
Act Effect Green (s)	84.0		36.0	36.0								
Actuated g/C Ratio	0.65		0.28	0.28								
v/c Ratio	0.81		0.82	1.16								
Control Delay	16.4		59.3	134.7								
Queue Delay	11.2		0.0	0.0								
Total Delay	27.6		59.3	134.7								
LOS	C		E	F								
Approach Delay	27.6			104.4								
Approach LOS	C			F								

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.29

Intersection Signal Delay: 54.0

Intersection LOS: D

Intersection Capacity Utilization 122.1%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 4: Mopac NB FR & Far West Boulevard



Lanes, Volumes, Timings
5: Spicewood Springs Road & Mopac SB FR

2023 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑					↑	↑↑	↑
Volume (vph)	0	1839	375	732	1542	0	0	0	0	655	309	455
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	60		0	0		0	150		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			75			25			75		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.976	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1610	3309	1583
Flt Permitted				0.950						0.950	0.976	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1610	3309	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			160									160
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		294			386			782			882	
Travel Time (s)		5.7			7.5			10.7			12.0	
Peak Hour Factor	0.92	0.81	0.90	0.87	0.86	0.92	0.92	0.92	0.92	0.93	0.87	0.94
Adj. Flow (vph)	0	2270	417	841	1793	0	0	0	0	704	355	484
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	2270	417	841	1793	0	0	0	0	352	707	484
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Prot	Prot	NA					Split	NA	Prot
Protected Phases		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5
Permitted Phases												
Detector Phase		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

Lanes, Volumes, Timings
5: Spicewood Springs Road & Mopac SB FR

2023 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)		63.0	63.0	48.0	105.0					24.0	24.0	24.0
Actuated g/C Ratio		0.42	0.42	0.32	0.70					0.16	0.16	0.16
v/c Ratio		1.53	0.55	1.49	0.72					1.37	1.34	1.25
Control Delay		259.8	4.9	253.2	18.4					234.4	210.5	165.6
Queue Delay		1.4	0.8	1.2	48.6					0.0	0.0	2.1
Total Delay		261.3	5.8	254.4	67.0					234.4	210.5	167.7
LOS		F	A	F	E					F	F	F
Approach Delay		221.6			126.8						202.5	
Approach LOS		F			F						F	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 89 (59%), Referenced to phase 2:EBWB, Start of Green

Natural Cycle: 140

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.53

Intersection Signal Delay: 180.9

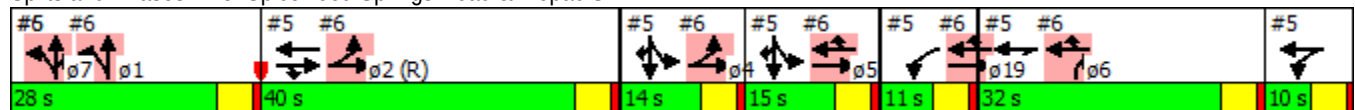
Intersection LOS: F

Intersection Capacity Utilization 144.5%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 5: Spicewood Springs Road & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0	5.0	6.0
Minimum Split (s)	8.0	15.0	10.0	8.0	15.0	10.0	11.0
Total Split (s)	28.0	40.0	14.0	15.0	32.0	10.0	11.0
Total Split (%)	19%	27%	9%	10%	21%	7%	7%
Maximum Green (s)	23.0	35.0	9.0	10.0	27.0	5.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Lanes, Volumes, Timings
6: Mopac NB FR & Spicewood Springs Road

2023 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	792	1411	0	0	1338	459	386	45	589	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		325	0		0	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	75			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.91	0.95	1.00	1.00	1.00
Frt						0.850		0.895	0.850			
Flt Protected	0.950						0.950	0.994				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	1681	1508	1504	0	0	0
Flt Permitted	0.950						0.950	0.994				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	1681	1508	1504	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						292		73	317			
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		386			594			563			407	
Travel Time (s)		7.5			11.6			7.7			5.6	
Peak Hour Factor	0.90	0.96	0.92	0.92	0.93	0.79	0.86	0.60	0.87	0.92	0.92	0.92
Adj. Flow (vph)	880	1470	0	0	1439	581	449	75	677	0	0	0
Shared Lane Traffic (%)							10%		42%			
Lane Group Flow (vph)	880	1470	0	0	1439	581	404	404	393	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Prot	Split	NA	custom			
Protected Phases	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			
Permitted Phases												
Detector Phase	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

Lanes, Volumes, Timings
6: Mopac NB FR & Spicewood Springs Road

2023 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)	49.0	75.0			53.0	53.0	33.0	33.0	37.0			
Actuated g/C Ratio	0.33	0.50			0.35	0.35	0.22	0.22	0.25			
v/c Ratio	1.52	0.83			1.15	0.78	1.09	1.04	0.65			
Control Delay	264.7	10.8			121.0	28.8	127.8	102.2	15.8			
Queue Delay	2.5	48.7			2.7	0.0	0.0	9.5	0.0			
Total Delay	267.3	59.4			123.7	28.8	127.8	111.7	15.8			
LOS	F	E			F	C	F	F	B			
Approach Delay		137.3			96.4			85.7				
Approach LOS		F			F			F				

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 89 (59%), Referenced to phase 2:EBWB, Start of Green

Natural Cycle: 140

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.53

Intersection Signal Delay: 111.3

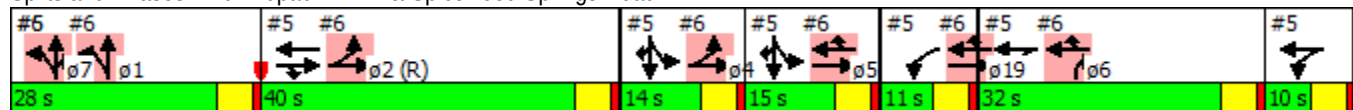
Intersection LOS: F

Intersection Capacity Utilization 144.5%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 6: Mopac NB FR & Spicewood Springs Road



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0	5.0	6.0
Minimum Split (s)	8.0	15.0	10.0	8.0	15.0	10.0	11.0
Total Split (s)	28.0	40.0	14.0	15.0	32.0	10.0	11.0
Total Split (%)	19%	27%	9%	10%	21%	7%	7%
Maximum Green (s)	23.0	35.0	9.0	10.0	27.0	5.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	6	1093	77	337	829	1	371	9	809	1	4	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	0		100	0		0
Storage Lanes	1		0	1		0	1		1	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.993						0.852	0.850		0.899	
Flt Protected	0.950			0.950			0.950				0.996	
Satd. Flow (prot)	1770	5050	0	1770	3539	0	1770	1508	1504	0	1668	0
Flt Permitted	0.316			0.080			0.742				0.700	
Satd. Flow (perm)	589	5050	0	149	3539	0	1382	1508	1504	0	1172	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5						481	481		18	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1093			275			251			161	
Travel Time (s)		21.3			5.4			5.7			3.7	
Peak Hour Factor	0.72	0.50	0.76	0.50	0.92	0.50	0.91	0.85	0.62	0.58	0.90	0.84
Adj. Flow (vph)	8	2186	101	674	901	2	408	11	1305	2	4	18
Shared Lane Traffic (%)									50%			
Lane Group Flow (vph)	8	2287	0	674	903	0	408	664	652	0	24	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2			6			4		4	8		
Detector Phase	5	2		1	6		4	4	4	8	8	

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	20.0		21.0	20.0		15.0	15.0	15.0	11.0	11.0	
Minimum Split (s)	10.0	25.0		26.0	25.0		35.0	35.0	35.0	35.0	35.0	
Total Split (s)	12.0	62.0		46.0	96.0		42.0	42.0	42.0	42.0	42.0	
Total Split (%)	8.0%	41.3%		30.7%	64.0%		28.0%	28.0%	28.0%	28.0%	28.0%	
Maximum Green (s)	7.0	57.0		41.0	91.0		37.0	37.0	37.0	37.0	37.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0		5.0	
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min		Min	C-Min		Min	Min	Min	Min	Min	
Walk Time (s)							6.0	6.0	6.0	6.0	6.0	
Flash Dont Walk (s)							24.0	24.0	24.0	24.0	24.0	
Pedestrian Calls (#/hr)							0	0	0	0	0	
Act Effect Green (s)	61.6	57.0		94.7	94.7		37.0	37.0	37.0		37.0	
Actuated g/C Ratio	0.41	0.38		0.63	0.63		0.25	0.25	0.25		0.25	
v/c Ratio	0.02	1.19		1.26	0.40		1.20	0.90	0.89		0.08	
Control Delay	26.0	131.8		166.9	12.4		162.1	31.7	29.3		21.8	
Queue Delay	0.0	1.1		0.1	0.2		0.0	7.5	5.9		0.0	
Total Delay	26.0	132.8		167.0	12.6		162.1	39.2	35.2		21.8	
LOS	C	F		F	B		F	D	D		C	
Approach Delay		132.5			78.6			66.8			21.8	
Approach LOS		F			E			E			C	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 55 (37%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.26

Intersection Signal Delay: 96.7

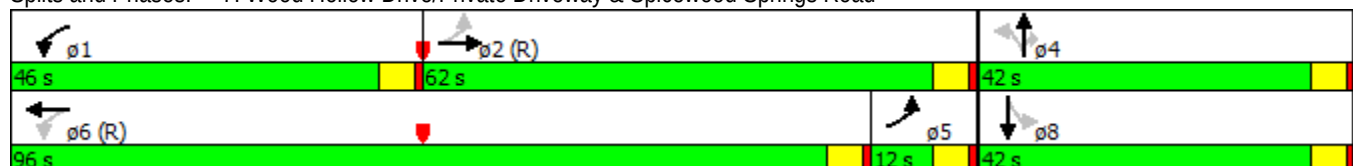
Intersection LOS: F

Intersection Capacity Utilization 81.2%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road



Lanes, Volumes, Timings
50: Executive Center Drive & Wood Hollow Drive

2023 Site+Forecasted PM W/Improvements

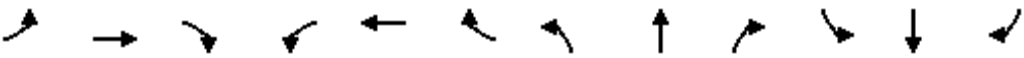
6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	42	342	55	55	235	126	175	216	210	31	94	127
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. 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
Frt		0.981				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1827	0	1770	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.581			0.394			0.651			0.342		
Satd. Flow (perm)	1082	1827	0	734	1863	1583	1213	1863	1583	637	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14				138			269			270
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		255			271			301			140	
Travel Time (s)		5.8			6.2			6.8			3.2	
Peak Hour Factor	0.67	0.91	1.00	0.86	0.91	0.91	0.50	0.46	0.50	0.25	0.56	0.47
Adj. Flow (vph)	63	376	55	64	258	138	350	470	420	124	168	270
Shared Lane Traffic (%)												
Lane Group Flow (vph)	63	431	0	64	258	138	350	470	420	124	168	270
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6		6	8		8	4		4
Detector Phase	2	2		6	6	6	8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	21.0	21.0		21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0

Lanes, Volumes, Timings
50: Executive Center Drive & Wood Hollow Drive

2023 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	26.0	26.0		26.0	26.0	26.0	34.0	34.0	34.0	34.0	34.0	34.0
Total Split (%)	43.3%	43.3%		43.3%	43.3%	43.3%	56.7%	56.7%	56.7%	56.7%	56.7%	56.7%
Maximum Green (s)	21.0	21.0		21.0	21.0	21.0	29.0	29.0	29.0	29.0	29.0	29.0
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
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
Recall Mode	C-Max	C-Max		C-Max	C-Max	C-Max	None	None	None	None	None	None
Walk Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0	0	0	0	0
Act Effect Green (s)	25.5	25.5		25.5	25.5	25.5	24.5	24.5	24.5	24.5	24.5	24.5
Actuated g/C Ratio	0.42	0.42		0.42	0.42	0.42	0.41	0.41	0.41	0.41	0.41	0.41
v/c Ratio	0.14	0.55		0.21	0.33	0.18	0.71	0.62	0.52	0.48	0.22	0.33
Control Delay	14.0	17.6		15.7	14.8	3.8	22.3	17.0	6.5	18.3	10.9	2.6
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.0	17.6		15.7	14.8	3.8	22.3	17.0	6.5	18.3	10.9	2.6
LOS	B	B		B	B	A	C	B	A	B	B	A
Approach Delay		17.1			11.6			15.0			8.6	
Approach LOS		B			B			B			A	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 60

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 45

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 13.5

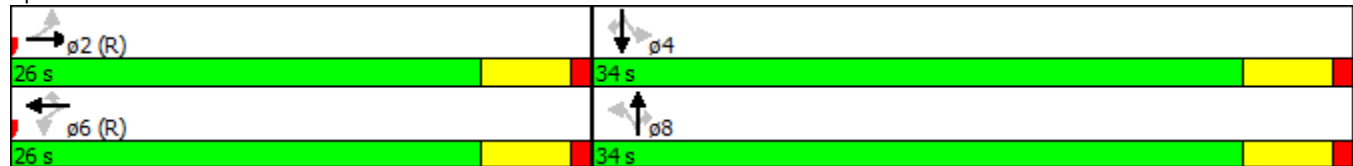
Intersection LOS: B

Intersection Capacity Utilization 56.0%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 50: Executive Center Drive & Wood Hollow Drive



Lanes, Volumes, Timings
70: Spicewood Springs Road & Hart Lane

2023 Site+Forecasted PM W/Improvements

6/2/2014

							ø5	ø6	ø8
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR			
Lane Configurations									
Volume (vph)	308	301	131	1392	941	212			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900			
Storage Length (ft)	0	0	225			0			
Storage Lanes	1	1	1			0			
Taper Length (ft)	25		150						
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95			
Frt		0.850			0.965				
Flt Protected	0.950		0.950						
Satd. Flow (prot)	1770	1583	1770	3539	3415	0			
Flt Permitted	0.950		0.950						
Satd. Flow (perm)	1770	1583	1770	3539	3415	0			
Right Turn on Red		Yes				Yes			
Satd. Flow (RTOR)		34			53				
Link Speed (mph)	30			35	35				
Link Distance (ft)	358			1093	145				
Travel Time (s)	8.1			21.3	2.8				
Peak Hour Factor	0.85	0.87	0.86	0.88	0.89	0.67			
Adj. Flow (vph)	362	346	152	1582	1057	316			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	362	346	152	1582	1373	0			
Enter Blocked Intersection	No	No	No	No	No	No			
Lane Alignment	L NA	Right	Left	R NA	Left	Right			
Median Width(ft)	18			18	6				
Link Offset(ft)	0			0	0				
Crosswalk Width(ft)	16			16	16				
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00			
Turning Speed (mph)	15	9	15			9			
Number of Detectors	1	1	1	2	2				
Detector Template	Left	Right	Left	Thru	Thru				
Leading Detector (ft)	20	20	20	100	100				
Trailing Detector (ft)	0	0	0	0	0				
Detector 1 Position(ft)	0	0	0	0	0				
Detector 1 Size(ft)	20	20	20	6	6				
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel									
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0				
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0				
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0				
Detector 2 Position(ft)				94	94				
Detector 2 Size(ft)				6	6				
Detector 2 Type				Cl+Ex	Cl+Ex				
Detector 2 Channel									
Detector 2 Extend (s)				0.0	0.0				
Turn Type	Prot	pm+ov	Prot	NA	NA				
Protected Phases	2!	3	3	6 8!	4		5	6	8
Permitted Phases		2							
Detector Phase	2	3	3	6 8	4				

Lanes, Volumes, Timings
70: Spicewood Springs Road & Hart Lane

2023 Site+Forecasted PM W/Improvements

6/2/2014



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø5	ø6	ø8
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Minimum Split (s)	9.0	9.0	9.0		23.0		23.0	9.0	9.0
Total Split (s)	34.0	14.0	14.0		42.0		23.0	11.0	56.0
Total Split (%)	37.8%	15.6%	15.6%		46.7%		26%	12%	62%
Maximum Green (s)	29.0	9.0	9.0		37.0		18.0	6.0	51.0
Yellow Time (s)	4.0	4.0	4.0		4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0				
Total Lost Time (s)	5.0	5.0	5.0		5.0				
Lead/Lag		Lead	Lead		Lag		Lead	Lag	
Lead-Lag Optimize?		Yes	Yes		Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0	3.0
Recall Mode	Min	None	None		None		None	None	None
Walk Time (s)					7.0		7.0		
Flash Dont Walk (s)					11.0		11.0		
Pedestrian Calls (#/hr)					0		0		
Act Effect Green (s)	21.4	35.5	9.1	81.6	36.0				
Actuated g/C Ratio	0.26	0.44	0.11	1.00	0.44				
v/c Ratio	0.78	0.49	0.78	0.45	0.89				
Control Delay	40.4	17.4	64.8	0.4	30.3				
Queue Delay	0.0	0.0	0.0	0.0	0.0				
Total Delay	40.4	17.4	64.8	0.4	30.3				
LOS	D	B	E	A	C				
Approach Delay	29.2			6.1	30.3				
Approach LOS	C			A	C				

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 81.6

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 19.1

Intersection LOS: B

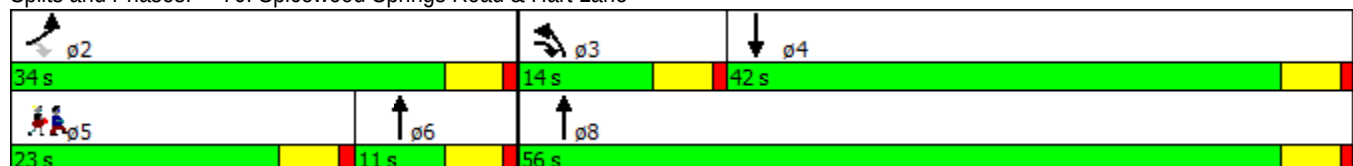
Intersection Capacity Utilization 69.6%

ICU Level of Service C

Analysis Period (min) 15

! Phase conflict between lane groups.

Splits and Phases: 70: Spicewood Springs Road & Hart Lane



HCM Unsignalized Intersection Capacity Analysis 2023 Site+Forecasted PM W/Improvements

10: Hart Lane & Greystone Drive

6/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	45	102	54	88	192	58	96	274	58	12	240	71
Peak Hour Factor	0.80	0.65	0.65	0.78	0.88	0.58	0.75	0.81	0.60	0.58	0.69	0.57
Hourly flow rate (vph)	56	157	83	113	218	100	128	338	97	21	348	125
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2				
Volume Total (vph)	135	162	222	209	297	266	195	298				
Volume Left (vph)	56	0	113	0	128	0	21	0				
Volume Right (vph)	0	83	0	100	0	97	0	125				
Hadj (s)	0.24	-0.33	0.29	-0.30	0.25	-0.22	0.09	-0.26				
Departure Headway (s)	8.6	8.1	8.4	7.8	8.1	7.6	8.0	7.7				
Degree Utilization, x	0.32	0.36	0.52	0.45	0.67	0.56	0.43	0.64				
Capacity (veh/h)	397	425	414	435	433	454	435	451				
Control Delay (s)	14.5	14.4	18.9	16.0	24.6	18.7	15.8	22.0				
Approach Delay (s)	14.4		17.5		21.8		19.6					
Approach LOS	B		C		C		C					
Intersection Summary												
Delay			18.9									
Level of Service			C									
Intersection Capacity Utilization			50.4%	ICU Level of Service					A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 2023 Site+Forecasted PM W/Improvements

20: Wood Hollow Drive & Greystone Drive

6/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	65	78	56	99	256	66	88	335	79	29	291	83
Peak Hour Factor	0.81	0.89	0.64	0.80	0.82	0.72	0.53	0.88	0.79	0.68	0.85	0.68
Hourly flow rate (vph)	80	88	88	124	312	92	166	381	100	43	342	122
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2				
Volume Total (vph)	124	131	280	248	356	290	214	293				
Volume Left (vph)	80	0	124	0	166	0	43	0				
Volume Right (vph)	0	88	0	92	0	100	0	122				
Hadj (s)	0.36	-0.43	0.26	-0.22	0.27	-0.21	0.13	-0.26				
Departure Headway (s)	9.2	8.5	8.6	8.1	8.3	7.9	8.4	8.0				
Degree Utilization, x	0.32	0.31	0.67	0.56	0.83	0.63	0.50	0.65				
Capacity (veh/h)	361	393	411	427	425	443	406	432				
Control Delay (s)	15.3	14.0	25.9	19.6	39.0	22.3	18.4	23.8				
Approach Delay (s)	14.6		22.9		31.5		21.5					
Approach LOS	B		C		D		C					
Intersection Summary												
Delay			24.3									
Level of Service			C									
Intersection Capacity Utilization			57.1%	ICU Level of Service					B			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 2023 Site+Forecasted PM W/Improvements

30: Greystone Drive & Mopac SB FR

6/2/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	195	0	0	2014	386
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.79	0.92	0.92	0.96	0.86
Hourly flow rate (vph)	0	247	0	0	2098	449
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2322	924	2547			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2322	924	2547			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	9	100			
cM capacity (veh/h)	31	271	172			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	247	839	839	868		
Volume Left	0	0	0	0		
Volume Right	247	0	0	449		
cSH	271	1700	1700	1700		
Volume to Capacity	0.91	0.49	0.49	0.51		
Queue Length 95th (ft)	205	0	0	0		
Control Delay (s)	74.3	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	74.3	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay			6.6			
Intersection Capacity Utilization			66.3%		ICU Level of Service	C
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2023 Site+Forecasted PM W/Improvements

40: Mopac SB FR & Executive Center Drive

6/2/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations					  	
Volume (veh/h)	0	367	0	0	2177	196
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.50	0.92	0.92	0.95	0.75
Hourly flow rate (vph)	0	734	0	0	2292	261
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2422	895	2553			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2422	895	2553			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	0	100			
cM capacity (veh/h)	27	284	171			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	734	917	917	720		
Volume Left	0	0	0	0		
Volume Right	734	0	0	261		
cSH	284	1700	1700	1700		
Volume to Capacity	2.59	0.54	0.54	0.42		
Queue Length 95th (ft)	1520	0	0	0		
Control Delay (s)	751.3	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	751.3	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay			167.8			
Intersection Capacity Utilization			75.8%	ICU Level of Service		D
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2023 Site+Forecasted PM W/Improvements

60: Executive Center Drive & Hart Lane

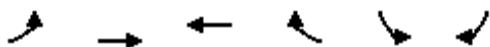
6/2/2014

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	296	70	105	216	125	255
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.79	0.67	0.83	0.72	0.75	0.46
Hourly flow rate (vph)	375	104	127	300	167	554
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)				358		
pX, platoon unblocked						
vC, conflicting volume			479		980	427
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			479		980	427
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			88		32	12
cM capacity (veh/h)			1083		245	628
Direction, Lane #	EB 1	WB 1	NB 1	NB 2		
Volume Total	479	427	167	554		
Volume Left	0	127	167	0		
Volume Right	104	0	0	554		
cSH	1700	1083	245	628		
Volume to Capacity	0.28	0.12	0.68	0.88		
Queue Length 95th (ft)	0	10	110	264		
Control Delay (s)	0.0	3.5	46.2	39.0		
Lane LOS		A	E	E		
Approach Delay (s)	0.0	3.5	40.6			
Approach LOS			E			
Intersection Summary						
Average Delay		18.9				
Intersection Capacity Utilization		53.9%		ICU Level of Service	A	
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis 2023 Site+Forecasted PM W/Improvements

100: Executive Center Drive & Driveway 1

6/2/2014



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	42	137	166	30	72	276
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	46	149	180	33	78	300
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)		893				
pX, platoon unblocked						
vC, conflicting volume	213				437	197
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	213				437	197
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	97				86	64
cM capacity (veh/h)	1357				557	844
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	195	213	378			
Volume Left	46	0	78			
Volume Right	0	33	300			
cSH	1357	1700	763			
Volume to Capacity	0.03	0.13	0.50			
Queue Length 95th (ft)	3	0	70			
Control Delay (s)	2.0	0.0	14.3			
Lane LOS	A		B			
Approach Delay (s)	2.0	0.0	14.3			
Approach LOS			B			
Intersection Summary						
Average Delay		7.4				
Intersection Capacity Utilization		51.1%		ICU Level of Service	A	
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis 2023 Site+Forecasted PM W/Improvements

200: Executive Center Drive & Driveway 2

6/2/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	0	0	442	179	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	480	195	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)					735	
pX, platoon unblocked						
vC, conflicting volume	675	195	195			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	675	195	195			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	419	847	1379			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	0	480	195			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1379	1700			
Volume to Capacity	0.00	0.00	0.11			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			26.6%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2023 Site+Forecasted PM W/Improvements

300: Executive Center Drive & Driveway 3

6/2/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	0	0	442	179	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	480	195	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)					569	
pX, platoon unblocked						
vC, conflicting volume	675	195	195			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	675	195	195			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	419	847	1379			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	0	480	195			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1379	1700			
Volume to Capacity	0.00	0.00	0.11			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			26.6%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2023 Site+Forecasted PM W/Improvements

400: Executive Center Drive & Driveway 4

6/2/2014



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	50	112	363	79	75	129
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	54	122	395	86	82	140
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						301
pX, platoon unblocked	0.98					
vC, conflicting volume	741	438			480	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	729	438			480	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	85	80			92	
cM capacity (veh/h)	355	619			1082	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	176	480	222			
Volume Left	54	0	82			
Volume Right	122	86	0			
cSH	504	1700	1082			
Volume to Capacity	0.35	0.28	0.08			
Queue Length 95th (ft)	39	0	6			
Control Delay (s)	15.9	0.0	3.6			
Lane LOS	C		A			
Approach Delay (s)	15.9	0.0	3.6			
Approach LOS	C					
Intersection Summary						
Average Delay			4.1			
Intersection Capacity Utilization			54.5%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2023 Site+Forecasted PM W/Improvements

500: Executive Center Drive & Driveway 5

6/2/2014



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↩			↩
Volume (veh/h)	0	0	262	122	41	127
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	285	133	45	138
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			140			
pX, platoon unblocked	0.84	0.84			0.84	
vC, conflicting volume	578	351			417	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	403	133			212	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			96	
cM capacity (veh/h)	487	770			1142	
Direction, Lane #	NB 1	SB 1				
Volume Total	417	183				
Volume Left	0	45				
Volume Right	133	0				
cSH	1700	1142				
Volume to Capacity	0.25	0.04				
Queue Length 95th (ft)	0	3				
Control Delay (s)	0.0	2.3				
Lane LOS		A				
Approach Delay (s)	0.0	2.3				
Approach LOS						
Intersection Summary						
Average Delay			0.7			
Intersection Capacity Utilization			36.8%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2023 Site+Forecasted PM W/Improvements

600: Executive Center Drive & Driveway 6

6/2/2014



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	34	113	214	48	36	134
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	37	123	233	52	39	146
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			352			
pX, platoon unblocked						
vC, conflicting volume	483	259			285	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	483	259			285	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	93	84			97	
cM capacity (veh/h)	526	780			1277	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	160	285	185			
Volume Left	37	0	39			
Volume Right	123	52	0			
cSH	702	1700	1277			
Volume to Capacity	0.23	0.17	0.03			
Queue Length 95th (ft)	22	0	2			
Control Delay (s)	11.6	0.0	1.9			
Lane LOS	B		A			
Approach Delay (s)	11.6	0.0	1.9			
Approach LOS	B					
Intersection Summary						
Average Delay			3.5			
Intersection Capacity Utilization			42.1%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2023 Site+Forecasted PM W/Improvements

700: Executive Center Drive & Driveway 7

6/2/2014

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	3	26	322	5	8	167
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	28	350	5	9	182
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			536			
pX, platoon unblocked						
vC, conflicting volume	552	353			355	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	552	353			355	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	96			99	
cM capacity (veh/h)	491	691			1203	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	32	355	190			
Volume Left	3	0	9			
Volume Right	28	5	0			
cSH	663	1700	1203			
Volume to Capacity	0.05	0.21	0.01			
Queue Length 95th (ft)	4	0	1			
Control Delay (s)	10.7	0.0	0.4			
Lane LOS	B		A			
Approach Delay (s)	10.7	0.0	0.4			
Approach LOS	B					
Intersection Summary						
Average Delay			0.7			
Intersection Capacity Utilization			27.3%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2023 Site+Forecasted PM W/Improvements

800: Executive Center Drive & Driveway 8

6/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	0	0	0	348	0	0	175	0
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	0	0	0	0	0	0	0	378	0	0	190	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)								676				
pX, platoon unblocked												
vC, conflicting volume	568	568	190	568	568	378	190			378		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	568	568	190	568	568	378	190			378		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	100	100	100	100			100		
cM capacity (veh/h)	433	432	852	433	432	668	1384			1180		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	0	0	378	190								
Volume Left	0	0	0	0								
Volume Right	0	0	0	0								
cSH	1700	1700	1384	1180								
Volume to Capacity	0.00	0.00	0.00	0.00								
Queue Length 95th (ft)	0	0	0	0								
Control Delay (s)	0.0	0.0	0.0	0.0								
Lane LOS	A	A										
Approach Delay (s)	0.0	0.0	0.0	0.0								
Approach LOS	A	A										
Intersection Summary												
Average Delay			0.0									
Intersection Capacity Utilization			21.6%	ICU Level of Service						A		
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 2023 Site+Forecasted PM W/Improvements

900: Executive Center Drive & Driveway 9

6/2/2014

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	348	0	0	175
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	378	0	0	190
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			872			
pX, platoon unblocked						
vC, conflicting volume	568	378			378	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	568	378			378	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	484	668			1180	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	0	378	190			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1180			
Volume to Capacity	0.00	0.22	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			21.6%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2023 Site+Forecasted PM W/Improvements 1000: Executive Center Drive & Driveway 10

6/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	0	0	0	348	0	0	175	0
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	0	0	0	0	0	0	0	378	0	0	190	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (ft)								1039				
pX, platoon unblocked												
vC, conflicting volume	568	568	190	568	568	378	190			378		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	568	568	190	568	568	378	190			378		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	100	100	100	100			100		
cM capacity (veh/h)	433	432	852	433	432	668	1384			1180		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	0	0	378	190								
Volume Left	0	0	0	0								
Volume Right	0	0	0	0								
cSH	1700	1700	1384	1180								
Volume to Capacity	0.00	0.00	0.00	0.00								
Queue Length 95th (ft)	0	0	0	0								
Control Delay (s)	0.0	0.0	0.0	0.0								
Lane LOS	A	A										
Approach Delay (s)	0.0	0.0	0.0	0.0								
Approach LOS	A	A										
Intersection Summary												
Average Delay			0.0									
Intersection Capacity Utilization			21.6%	ICU Level of Service					A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 2023 Site+Forecasted PM W/Improvements

1100: Driveway 11 & Wood Hollow Drive

6/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	537	46	161	257	0	80	0	403	107	0	54
Sign Control		Free			Free			Stop			Stop	
Grade		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
Hourly flow rate (vph)	0	584	50	175	279	0	87	0	438	116	0	59
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)		271			251							
pX, platoon unblocked	0.80			0.91			0.85	0.85	0.91	0.85	0.85	0.80
vC, conflicting volume	279			634			1297	1238	609	1676	1263	279
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			546			1018	949	518	1464	978	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			81			41	100	13	0	100	93
cM capacity (veh/h)	1306			929			146	180	506	10	173	873
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1							
Volume Total	634	454	87	438	175							
Volume Left	0	175	87	0	116							
Volume Right	50	0	0	438	59							
cSH	1700	929	146	506	16							
Volume to Capacity	0.37	0.19	0.59	0.87	11.26							
Queue Length 95th (ft)	0	17	77	231	Err							
Control Delay (s)	0.0	5.1	60.4	42.6	Err							
Lane LOS		A	F	E	F							
Approach Delay (s)	0.0	5.1	45.5		Err							
Approach LOS			E		F							
Intersection Summary												
Average Delay			993.3									
Intersection Capacity Utilization			79.4%		ICU Level of Service				D			
Analysis Period (min)			15									

Lanes, Volumes, Timings
1: Hart Lane & Far West Boulevard

2028 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	100	892	105	241	345	85	59	179	201	249	328	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	170		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	1		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.95	0.95	0.95	1.00	1.00	1.00
Frt		0.979				0.850		0.932			0.970	
Flt Protected	0.950			0.950				0.993		0.950		
Satd. Flow (prot)	1770	3465	0	1770	3539	1583	0	3275	0	1770	1807	0
Flt Permitted	0.359			0.113				0.514		0.248		
Satd. Flow (perm)	669	3465	0	210	3539	1583	0	1695	0	462	1807	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15				101		157			11	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		362			1265			236			237	
Travel Time (s)		7.1			24.6			5.4			5.4	
Peak Hour Factor	0.73	0.83	0.61	0.69	0.83	0.85	0.80	0.80	0.82	0.90	0.56	0.47
Adj. Flow (vph)	137	1075	172	349	416	100	74	224	245	277	586	147
Shared Lane Traffic (%)												
Lane Group Flow (vph)	137	1247	0	349	416	100	0	543	0	277	733	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2		1	6			4		3	8	
Permitted Phases	2			6		6	4			8		
Detector Phase	5	2		1	6	6	4	4		3	8	

Lanes, Volumes, Timings
1: Hart Lane & Far West Boulevard

2028 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	8.0	18.0		8.0	18.0	18.0	12.0	12.0		8.0	12.0	
Minimum Split (s)	13.0	23.0		13.0	23.0	23.0	17.0	17.0		13.0	17.0	
Total Split (s)	15.0	50.0		25.0	60.0	60.0	40.0	40.0		15.0	55.0	
Total Split (%)	11.5%	38.5%		19.2%	46.2%	46.2%	30.8%	30.8%		11.5%	42.3%	
Maximum Green (s)	10.0	45.0		20.0	55.0	55.0	35.0	35.0		10.0	50.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0		5.0		5.0	5.0	
Lead/Lag	Lead	Lead		Lag	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	
Walk Time (s)		7.0			7.0	7.0	7.0	7.0			7.0	
Flash Dont Walk (s)		12.0			12.0	12.0	21.0	21.0			21.0	
Pedestrian Calls (#/hr)		0			0	0	0	0			0	
Act Effect Green (s)	45.0	45.0		55.3	55.3	55.3		35.0		50.0	50.0	
Actuated g/C Ratio	0.35	0.35		0.43	0.43	0.43		0.27		0.38	0.38	
v/c Ratio	0.44	1.03		1.06	0.28	0.14		0.95		1.00	1.05	
Control Delay	35.0	75.5		89.1	5.9	0.6		60.7		87.5	85.1	
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	
Total Delay	35.0	75.5		89.1	5.9	0.6		60.7		87.5	85.1	
LOS	C	E		F	A	A		E		F	F	
Approach Delay		71.5			38.9			60.7			85.8	
Approach LOS		E			D			E			F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.06

Intersection Signal Delay: 66.3

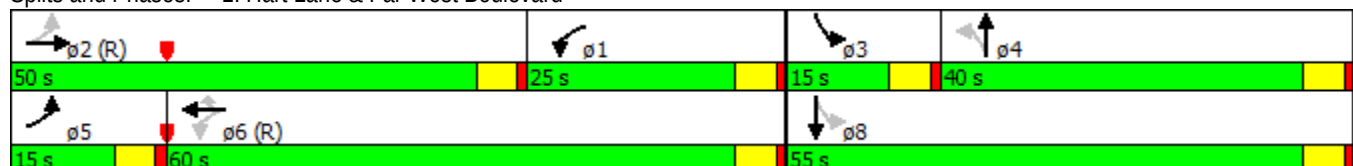
Intersection LOS: E

Intersection Capacity Utilization 92.6%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 1: Hart Lane & Far West Boulevard



Lanes, Volumes, Timings
2: Wood Hollow Drive & Far West Boulevard

2028 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	194	1225	55	136	667	113	29	160	340	310	157	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	335		0	165		0	120		120	0		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	75			35			50			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.944	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1758	0
Flt Permitted	0.255			0.151			0.454			0.523		
Satd. Flow (perm)	475	3539	1583	281	3539	1583	846	1863	1583	974	1758	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			70			140			180		27	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1265			1235			599			222	
Travel Time (s)		24.6			24.1			13.6			5.0	
Peak Hour Factor	0.74	0.91	0.58	0.90	0.88	0.81	0.69	0.65	0.87	0.90	0.81	0.77
Adj. Flow (vph)	262	1346	95	151	758	140	42	246	391	344	194	114
Shared Lane Traffic (%)												
Lane Group Flow (vph)	262	1346	95	151	758	140	42	246	391	344	308	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	L NA	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	1	6		5	2			3			7	
Permitted Phases	6		6	2		2	3		3	7		
Detector Phase	1	6	6	5	2	2	3	3	3	7	7	

Lanes, Volumes, Timings
2: Wood Hollow Drive & Far West Boulevard

2028 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	8.0	8.0	8.0	5.0	5.0	
Minimum Split (s)	11.0	40.0	40.0	12.0	40.0	40.0	15.0	15.0	15.0	15.0	15.0	
Total Split (s)	24.0	59.0	59.0	14.0	49.0	49.0	57.0	57.0	57.0	57.0	57.0	
Total Split (%)	18.5%	45.4%	45.4%	10.8%	37.7%	37.7%	43.8%	43.8%	43.8%	43.8%	43.8%	
Maximum Green (s)	19.0	54.0	54.0	9.0	44.0	44.0	52.0	52.0	52.0	52.0	52.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
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	
Recall Mode	None	C-Min	C-Min	Max	C-Min	C-Min	Min	Min	Min	Max	Max	
Walk Time (s)		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		12.0	12.0		12.0	12.0	21.0	21.0	21.0	21.0	21.0	
Pedestrian Calls (#/hr)		0	0		0	0	0	0	0	0	0	
Act Effect Green (s)	53.3	53.3	53.3	35.5	35.5	35.5	52.7	52.7	52.7	52.7	52.7	
Actuated g/C Ratio	0.41	0.41	0.41	0.27	0.27	0.27	0.41	0.41	0.41	0.41	0.41	
v/c Ratio	0.57	0.93	0.14	0.84	0.78	0.26	0.12	0.33	0.52	0.87	0.42	
Control Delay	19.7	19.7	2.1	57.6	48.5	7.4	26.0	28.2	17.9	59.5	27.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	19.7	19.7	2.1	57.6	48.5	7.4	26.0	28.2	17.9	59.5	27.5	
LOS	B	B	A	E	D	A	C	C	B	E	C	
Approach Delay		18.7			44.3			22.2			44.4	
Approach LOS		B			D			C			D	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 30.0

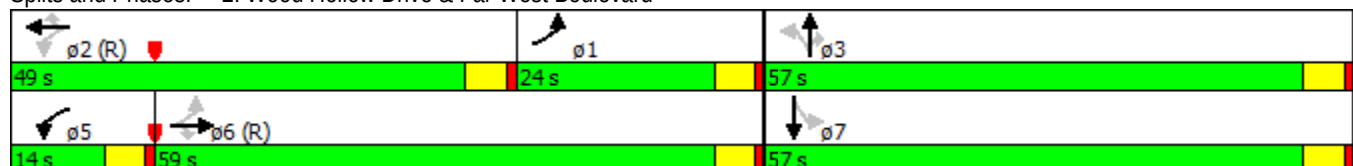
Intersection LOS: C

Intersection Capacity Utilization 84.6%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 2: Wood Hollow Drive & Far West Boulevard



Lanes, Volumes, Timings
3: Far West Boulevard & Mopac SB FR

2028 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑						↑↑	↑
Volume (vph)	0	933	529	21	615	0	0	0	0	156	726	1038
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									0.850
Flt Protected				0.950							0.990	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	3504	1583
Flt Permitted				0.950							0.990	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	3504	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			409									101
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		1235			406			400			362	
Travel Time (s)		24.1			7.9			5.5			4.9	
Peak Hour Factor	0.92	0.91	0.93	0.67	0.93	0.92	0.92	0.92	0.92	0.78	0.92	0.95
Adj. Flow (vph)	0	1025	569	31	661	0	0	0	0	200	789	1093
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1025	569	31	661	0	0	0	0	0	989	1093
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	L NA	Right	Left	Left	Right	Left	Left	R NA
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	custom	Prot	NA					custom	NA	custom
Protected Phases		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Permitted Phases										4		
Detector Phase		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Switch Phase												
Minimum Initial (s)				10.0								
Minimum Split (s)				15.0								

Lane Group	ø1	ø2	ø4	ø8	ø22
Lane Configurations					
Volume (vph)					
Ideal Flow (vphpl)					
Lane Util. Factor					
Frt					
Flt Protected					
Satd. Flow (prot)					
Flt Permitted					
Satd. Flow (perm)					
Right Turn on Red					
Satd. Flow (RTOR)					
Link Speed (mph)					
Link Distance (ft)					
Travel Time (s)					
Peak Hour Factor					
Adj. Flow (vph)					
Shared Lane Traffic (%)					
Lane Group Flow (vph)					
Enter Blocked Intersection					
Lane Alignment					
Median Width(ft)					
Link Offset(ft)					
Crosswalk Width(ft)					
Two way Left Turn Lane					
Headway Factor					
Turning Speed (mph)					
Number of Detectors					
Detector Template					
Leading Detector (ft)					
Trailing Detector (ft)					
Detector 1 Position(ft)					
Detector 1 Size(ft)					
Detector 1 Type					
Detector 1 Channel					
Detector 1 Extend (s)					
Detector 1 Queue (s)					
Detector 1 Delay (s)					
Detector 2 Position(ft)					
Detector 2 Size(ft)					
Detector 2 Type					
Detector 2 Channel					
Detector 2 Extend (s)					
Turn Type					
Protected Phases	1	2	4	8	22
Permitted Phases					
Detector Phase					
Switch Phase					
Minimum Initial (s)	4.0	10.0	10.0	4.0	1.0
Minimum Split (s)	9.0	15.0	25.0	9.0	20.0

Lanes, Volumes, Timings
3: Far West Boulevard & Mopac SB FR

2028 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)				12.0								
Total Split (%)				9.2%								
Maximum Green (s)				7.0								
Yellow Time (s)				4.0								
All-Red Time (s)				1.0								
Lost Time Adjust (s)				0.0								
Total Lost Time (s)				5.0								
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0								
Recall Mode				Min								
Act Effect Green (s)		59.0	33.0	7.0	45.0						49.0	75.0
Actuated g/C Ratio		0.45	0.25	0.05	0.35						0.38	0.58
v/c Ratio		0.64	0.80	0.33	0.54						0.75	1.14
Control Delay		27.8	18.9	78.2	1.8						38.8	96.4
Queue Delay		10.3	0.0	0.0	1.1						0.0	0.0
Total Delay		38.1	18.9	78.2	2.9						38.8	96.4
LOS		D	B	E	A						D	F
Approach Delay		31.3			6.3						69.1	
Approach LOS		C			A						E	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 106 (82%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.33

Intersection Signal Delay: 45.3

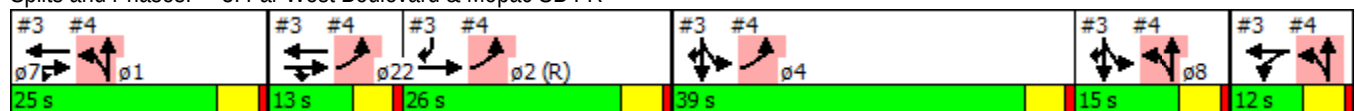
Intersection LOS: D

Intersection Capacity Utilization 119.1%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 3: Far West Boulevard & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø8	ø22
Total Split (s)	25.0	26.0	39.0	15.0	13.0
Total Split (%)	19%	20%	30%	12%	10%
Maximum Green (s)	20.0	21.0	34.0	10.0	8.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)					
Total Lost Time (s)					
Lead/Lag		Lag	Lead	Lag	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	C-Min	Min	Min	None
Act Effect Green (s)					
Actuated g/C Ratio					
v/c Ratio					
Control Delay					
Queue Delay					
Total Delay					
LOS					
Approach Delay					
Approach LOS					
Intersection Summary					

Lanes, Volumes, Timings
4: Mopac NB FR & Far West Boulevard

2028 Site+Forecasted AM W/Improvements

6/2/2014

							ø1	ø2	ø4	ø7	ø8	ø22
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR						
Lane Configurations	LT	RT	LT	TH	TH	RT						
Volume (vph)	1109	0	637	195	0	0						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Lane Util. Factor	0.97	1.00	0.95	0.95	1.00	1.00						
Fr t												
Flt Protected	0.950		0.950	0.996								
Satd. Flow (prot)	3433	0	1681	1763	0	0						
Flt Permitted	0.950		0.950	0.996								
Satd. Flow (perm)	3433	0	1681	1763	0	0						
Right Turn on Red		Yes				Yes						
Satd. Flow (RTOR)												
Link Speed (mph)	35			50	50							
Link Distance (ft)	406			308	472							
Travel Time (s)	7.9			4.2	6.4							
Peak Hour Factor	0.90	0.92	0.93	0.25	0.92	0.92						
Adj. Flow (vph)	1232	0	685	780	0	0						
Shared Lane Traffic (%)			10%									
Lane Group Flow (vph)	1232	0	616	849	0	0						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Right	Left	Left	Left	Right						
Median Width(ft)	24			12	12							
Link Offset(ft)	0			0	0							
Crosswalk Width(ft)	16			16	16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00						
Turning Speed (mph)	15	9	15			9						
Number of Detectors	1		1	2								
Detector Template	Left		Left	Thru								
Leading Detector (ft)	20		20	100								
Trailing Detector (ft)	0		0	0								
Detector 1 Position(ft)	0		0	0								
Detector 1 Size(ft)	20		20	6								
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0								
Detector 1 Queue (s)	0.0		0.0	0.0								
Detector 1 Delay (s)	0.0		0.0	0.0								
Detector 2 Position(ft)				94								
Detector 2 Size(ft)				6								
Detector 2 Type				Cl+Ex								
Detector 2 Channel												
Detector 2 Extend (s)				0.0								
Turn Type	Prot		Split	NA								
Protected Phases	2 4 22		1 7 8	1 7 8			1	2	4	7	8	22
Permitted Phases												
Detector Phase	2 4 22		1 7 8	1 7 8								
Switch Phase												
Minimum Initial (s)							4.0	10.0	10.0	10.0	4.0	1.0
Minimum Split (s)							9.0	15.0	25.0	15.0	9.0	20.0

Lanes, Volumes, Timings
4: Mopac NB FR & Far West Boulevard

2028 Site+Forecasted AM W/Improvements

6/2/2014



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Total Split (s)							25.0	26.0	39.0	12.0	15.0	13.0
Total Split (%)							19%	20%	30%	9%	12%	10%
Maximum Green (s)							20.0	21.0	34.0	7.0	10.0	8.0
Yellow Time (s)							4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)							1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag								Lag	Lead		Lag	Lead
Lead-Lag Optimize?								Yes	Yes		Yes	Yes
Vehicle Extension (s)							3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode							Min	C-Min	Min	Min	Min	None
Act Effect Green (s)	73.0		47.0	47.0								
Actuated g/C Ratio	0.56		0.36	0.36								
v/c Ratio	0.64		1.01	1.33								
Control Delay	19.6		81.6	194.9								
Queue Delay	10.5		0.0	0.0								
Total Delay	30.1		81.6	194.9								
LOS	C		F	F								
Approach Delay	30.1			147.3								
Approach LOS	C			F								

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 106 (82%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.33

Intersection Signal Delay: 93.7

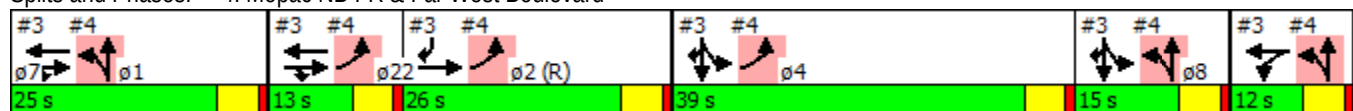
Intersection LOS: F

Intersection Capacity Utilization 132.3%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 4: Mopac NB FR & Far West Boulevard



Lanes, Volumes, Timings
5: Spicewood Springs Road & Mopac SB FR

2028 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑					↑	↑↑	↑
Volume (vph)	0	1331	830	859	1378	0	0	0	0	424	1551	824
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	60		0	0		0	150		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			75			25			75		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.999	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1610	3387	1583
Flt Permitted				0.950						0.950	0.999	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1610	3387	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			185									185
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		294			386			782			882	
Travel Time (s)		5.7			7.5			10.7			12.0	
Peak Hour Factor	0.92	0.81	0.90	0.87	0.86	0.92	0.92	0.92	0.92	0.93	0.87	0.94
Adj. Flow (vph)	0	1643	922	987	1602	0	0	0	0	456	1783	877
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	0	1643	922	987	1602	0	0	0	0	410	1829	877
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Prot	Prot	NA					Split	NA	Prot
Protected Phases		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5
Permitted Phases												
Detector Phase		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

Lanes, Volumes, Timings
5: Spicewood Springs Road & Mopac SB FR

2028 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)		32.0	32.0	38.0	63.0					45.0	45.0	45.0
Actuated g/C Ratio		0.25	0.25	0.29	0.48					0.35	0.35	0.35
v/c Ratio		1.89	1.74	1.91	0.93					0.74	1.56	1.31
Control Delay		424.8	359.4	434.9	19.8					46.6	287.7	180.0
Queue Delay		2.6	0.1	0.9	46.2					1.0	0.1	1.1
Total Delay		427.3	359.5	435.8	66.0					47.6	287.9	181.1
LOS		F	F	F	E					D	F	F
Approach Delay		402.9			206.9						226.2	
Approach LOS		F			F						F	

Intersection Summary

Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 8 (6%), Referenced to phase 2:EBWB, Start of Green	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.91	
Intersection Signal Delay: 275.0	Intersection LOS: F
Intersection Capacity Utilization 169.6%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 5: Spicewood Springs Road & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0	5.0	6.0
Minimum Split (s)	8.0	10.0	10.0	8.0	10.0	10.0	11.0
Total Split (s)	23.0	14.0	32.0	18.0	21.0	10.0	12.0
Total Split (%)	18%	11%	25%	14%	16%	8%	9%
Maximum Green (s)	18.0	9.0	27.0	13.0	16.0	5.0	7.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Lanes, Volumes, Timings
6: Mopac NB FR & Spicewood Springs Road

2028 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	476	1155	0	0	1372	289	632	15	608	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		325	0		0	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	75			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.91	0.95	1.00	1.00	1.00
Frt						0.850		0.927	0.850			
Flt Protected	0.950						0.950	0.977				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	1681	1535	1504	0	0	0
Flt Permitted	0.950						0.950	0.977				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	1681	1535	1504	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						283		33	309			
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		386			594			563			407	
Travel Time (s)		7.5			11.6			7.7			5.6	
Peak Hour Factor	0.90	0.96	0.92	0.92	0.93	0.79	0.86	0.60	0.87	0.92	0.92	0.92
Adj. Flow (vph)	529	1203	0	0	1475	366	735	25	699	0	0	0
Shared Lane Traffic (%)							31%		34%			
Lane Group Flow (vph)	529	1203	0	0	1475	366	507	491	461	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Prot	Split	NA	custom			
Protected Phases	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			
Permitted Phases												
Detector Phase	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

Lanes, Volumes, Timings
6: Mopac NB FR & Spicewood Springs Road

2028 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)	41.0	71.0			46.0	46.0	28.0	28.0	26.0			
Actuated g/C Ratio	0.32	0.55			0.35	0.35	0.22	0.22	0.20			
v/c Ratio	0.95	0.62			1.18	0.49	1.40	1.38	0.84			
Control Delay	28.6	14.4			126.7	10.1	234.4	223.6	31.1			
Queue Delay	45.4	50.0			3.1	0.0	0.2	0.5	0.0			
Total Delay	74.0	64.4			129.8	10.1	234.6	224.1	31.1			
LOS	E	E			F	B	F	F	C			
Approach Delay		67.3			106.0			166.8				
Approach LOS		E			F			F				

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 8 (6%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.91
Intersection Signal Delay: 110.3
Intersection Capacity Utilization 169.6%
Analysis Period (min) 15

Intersection LOS: F

ICU Level of Service H

Splits and Phases: 6: Mopac NB FR & Spicewood Springs Road



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0	5.0	6.0
Minimum Split (s)	8.0	10.0	10.0	8.0	10.0	10.0	11.0
Total Split (s)	23.0	14.0	32.0	18.0	21.0	10.0	12.0
Total Split (%)	18%	11%	25%	14%	16%	8%	9%
Maximum Green (s)	18.0	9.0	27.0	13.0	16.0	5.0	7.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	1396	222	787	907	13	100	4	362	8	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	0		100	0		0
Storage Lanes	1		0	1		0	1		1	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.986			0.996			0.853	0.850		0.983	
Flt Protected	0.950			0.950			0.950				0.958	
Satd. Flow (prot)	1770	5014	0	1770	3525	0	1770	1509	1504	0	1754	0
Flt Permitted	0.283			0.079			0.747				0.341	
Satd. Flow (perm)	527	5014	0	147	3525	0	1391	1509	1504	0	624	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		17			6			292	292		101	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1093			275			251			161	
Travel Time (s)		21.3			5.4			5.7			3.7	
Peak Hour Factor	0.72	0.50	0.76	0.50	0.92	0.50	0.91	0.85	0.62	0.58	0.90	0.84
Adj. Flow (vph)	14	2792	292	1574	986	26	110	5	584	14	0	2
Shared Lane Traffic (%)									50%			
Lane Group Flow (vph)	14	3084	0	1574	1012	0	110	297	292	0	16	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2			6			4		4	8		
Detector Phase	5	2		1	6		4	4	4	8	8	

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	20.0		21.0	20.0		15.0	15.0	15.0	11.0	11.0	
Minimum Split (s)	10.0	25.0		26.0	25.0		20.0	20.0	20.0	16.0	16.0	
Total Split (s)	12.0	63.0		51.0	102.0		16.0	16.0	16.0	16.0	16.0	
Total Split (%)	9.2%	48.5%		39.2%	78.5%		12.3%	12.3%	12.3%	12.3%	12.3%	
Maximum Green (s)	7.0	58.0		46.0	97.0		11.0	11.0	11.0	11.0	11.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0		5.0	
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min		Min	C-Min		Min	Min	Min	Min	Min	
Walk Time (s)							6.0	6.0	6.0	6.0	6.0	
Flash Dont Walk (s)							24.0	24.0	24.0	24.0	24.0	
Pedestrian Calls (#/hr)							0	0	0	0	0	
Act Effect Green (s)	61.4	58.0		100.4	100.4		11.0	11.0	11.0		11.0	
Actuated g/C Ratio	0.47	0.45		0.77	0.77		0.08	0.08	0.08		0.08	
v/c Ratio	0.04	1.37		2.29	0.37		0.94	0.75	0.74		0.11	
Control Delay	18.9	201.6		602.0	8.8		127.3	19.6	18.4		1.5	
Queue Delay	0.0	0.3		0.4	0.4		0.0	10.5	8.8		0.0	
Total Delay	18.9	201.9		602.4	9.2		127.3	30.1	27.1		1.5	
LOS	B	F		F	A		F	C	C		A	
Approach Delay		201.1			370.3			44.2			1.5	
Approach LOS		F			F			D			A	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 55 (42%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 2.29

Intersection Signal Delay: 251.8

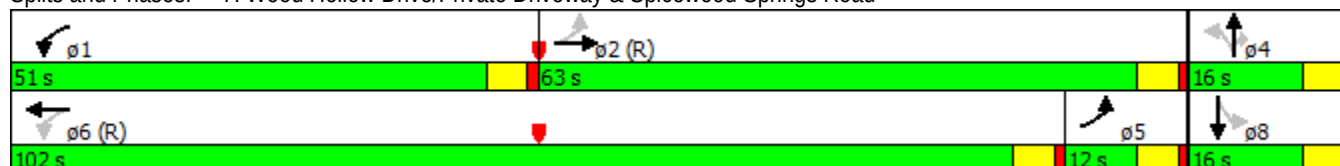
Intersection LOS: F

Intersection Capacity Utilization 100.5%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road



												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	53	292	171	232	256	232	41	74	36	81	193	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. 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
Frt		0.948				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1766	0	1770	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.576			0.382			0.430			0.655		
Satd. Flow (perm)	1073	1766	0	712	1863	1583	801	1863	1583	1220	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		64				255			72			55
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		255			271			301			140	
Travel Time (s)		5.8			6.2			6.8			3.2	
Peak Hour Factor	0.67	0.91	1.00	0.86	0.91	0.91	0.50	0.46	0.50	0.25	0.56	0.47
Adj. Flow (vph)	79	321	171	270	281	255	82	161	72	324	345	55
Shared Lane Traffic (%)												
Lane Group Flow (vph)	79	492	0	270	281	255	82	161	72	324	345	55
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6		6	8		8	4		4
Detector Phase	2	2		6	6	6	8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	21.0	21.0		21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0

Lanes, Volumes, Timings
50: Executive Center Drive & Wood Hollow Drive

2028 Site+Forecasted AM W/Improvements

6/2/2014

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	35.0	35.0		35.0	35.0	35.0	25.0	25.0	25.0	25.0	25.0	25.0
Total Split (%)	58.3%	58.3%		58.3%	58.3%	58.3%	41.7%	41.7%	41.7%	41.7%	41.7%	41.7%
Maximum Green (s)	30.0	30.0		30.0	30.0	30.0	20.0	20.0	20.0	20.0	20.0	20.0
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
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
Recall Mode	C-Max	C-Max		C-Max	C-Max	C-Max	Max	Max	Max	Max	Max	Max
Walk Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0	0	0	0	0
Act Effect Green (s)	30.0	30.0		30.0	30.0	30.0	20.0	20.0	20.0	20.0	20.0	20.0
Actuated g/C Ratio	0.50	0.50		0.50	0.50	0.50	0.33	0.33	0.33	0.33	0.33	0.33
v/c Ratio	0.15	0.54		0.76	0.30	0.28	0.31	0.26	0.13	0.80	0.56	0.10
Control Delay	9.1	11.5		29.7	10.0	2.2	18.8	16.0	4.9	36.0	20.5	5.3
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.1	11.5		29.7	10.0	2.2	18.8	16.0	4.9	36.0	20.5	5.3
LOS	A	B		C	A	A	B	B	A	D	C	A
Approach Delay	11.1			14.1			14.2			26.3		
Approach LOS	B			B			B			C		

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 60

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 50

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.80

Intersection Signal Delay: 17.1

Intersection LOS: B

Intersection Capacity Utilization 68.8%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 50: Executive Center Drive & Wood Hollow Drive



Lanes, Volumes, Timings
70: Spicewood Springs Road & Hart Lane

2028 Site+Forecasted AM W/Improvements

6/2/2014

							ø5	ø6	ø8
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR			
Lane Configurations									
Volume (vph)	147	282	198	1071	1482	390			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900			
Storage Length (ft)	0	0	225			0			
Storage Lanes	1	1	1			0			
Taper Length (ft)	25		150						
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95			
Frt		0.850			0.961				
Flt Protected	0.950		0.950						
Satd. Flow (prot)	1770	1583	1770	3539	3401	0			
Flt Permitted	0.950		0.950						
Satd. Flow (perm)	1770	1583	1770	3539	3401	0			
Right Turn on Red		Yes				Yes			
Satd. Flow (RTOR)		28			60				
Link Speed (mph)	30			35	35				
Link Distance (ft)	358			1093	145				
Travel Time (s)	8.1			21.3	2.8				
Peak Hour Factor	0.85	0.87	0.86	0.88	0.89	0.67			
Adj. Flow (vph)	173	324	230	1217	1665	582			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	173	324	230	1217	2247	0			
Enter Blocked Intersection	No	No	No	No	No	No			
Lane Alignment	L NA	Right	Left	R NA	Left	Right			
Median Width(ft)	18			18	6				
Link Offset(ft)	0			0	0				
Crosswalk Width(ft)	16			16	16				
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00			
Turning Speed (mph)	15	9	15			9			
Number of Detectors	1	1	1	2	2				
Detector Template	Left	Right	Left	Thru	Thru				
Leading Detector (ft)	20	20	20	100	100				
Trailing Detector (ft)	0	0	0	0	0				
Detector 1 Position(ft)	0	0	0	0	0				
Detector 1 Size(ft)	20	20	20	6	6				
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel									
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0				
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0				
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0				
Detector 2 Position(ft)				94	94				
Detector 2 Size(ft)				6	6				
Detector 2 Type				Cl+Ex	Cl+Ex				
Detector 2 Channel									
Detector 2 Extend (s)				0.0	0.0				
Turn Type	Prot	pm+ov	Prot	NA	NA				
Protected Phases	2!	3	3	6 8!	4		5	6	8
Permitted Phases		2							
Detector Phase	2	3	3	6 8	4				

Lanes, Volumes, Timings
70: Spicewood Springs Road & Hart Lane

2028 Site+Forecasted AM W/Improvements

6/2/2014



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø5	ø6	ø8
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Minimum Split (s)	9.0	9.0	9.0		23.0		23.0	9.0	9.0
Total Split (s)	32.0	21.0	21.0		97.0		23.0	9.0	118.0
Total Split (%)	21.3%	14.0%	14.0%		64.7%		15%	6%	79%
Maximum Green (s)	27.0	16.0	16.0		92.0		18.0	4.0	113.0
Yellow Time (s)	4.0	4.0	4.0		4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0				
Total Lost Time (s)	5.0	5.0	5.0		5.0				
Lead/Lag		Lead	Lead		Lag		Lead	Lag	
Lead-Lag Optimize?		Yes	Yes		Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0	3.0
Recall Mode	Min	None	None		None		None	None	None
Walk Time (s)					7.0		7.0		
Flash Dont Walk (s)					11.0		11.0		
Pedestrian Calls (#/hr)					0		0		
Act Effect Green (s)	19.1	40.1	16.0	142.2	92.1				
Actuated g/C Ratio	0.13	0.28	0.11	1.00	0.65				
v/c Ratio	0.73	0.70	1.16	0.34	1.01				
Control Delay	77.0	50.0	165.9	0.3	46.5				
Queue Delay	0.0	0.0	0.0	0.0	0.0				
Total Delay	77.0	50.0	165.9	0.3	46.5				
LOS	E	D	F	A	D				
Approach Delay	59.4			26.6	46.5				
Approach LOS	E			C	D				

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 142.2

Natural Cycle: 150

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.16

Intersection Signal Delay: 41.1

Intersection LOS: D

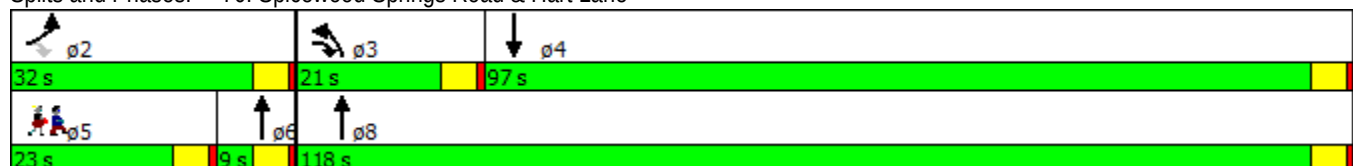
Intersection Capacity Utilization 85.0%

ICU Level of Service E

Analysis Period (min) 15

! Phase conflict between lane groups.

Splits and Phases: 70: Spicewood Springs Road & Hart Lane



HCM Unsignalized Intersection Capacity Analysis 2028 Site+Forecasted AM W/Improvements

10: Hart Lane & Greystone Drive

6/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	61	232	160	96	87	10	59	232	40	19	377	36
Peak Hour Factor	0.80	0.65	0.65	0.78	0.88	0.58	0.75	0.81	0.60	0.58	0.69	0.57
Hourly flow rate (vph)	76	357	246	123	99	17	79	286	67	33	546	63
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2				
Volume Total (vph)	255	425	173	67	222	210	306	336				
Volume Left (vph)	76	0	123	0	79	0	33	0				
Volume Right (vph)	0	246	0	17	0	67	0	63				
Hadj (s)	0.18	-0.37	0.39	-0.15	0.21	-0.19	0.09	-0.10				
Departure Headway (s)	8.4	7.8	9.4	8.9	8.8	8.4	8.3	8.2				
Degree Utilization, x	0.59	0.92	0.45	0.16	0.54	0.49	0.71	0.76				
Capacity (veh/h)	414	447	362	388	392	407	416	432				
Control Delay (s)	21.7	52.1	18.7	12.4	20.6	18.0	28.0	31.7				
Approach Delay (s)	40.7		16.9		19.3		30.0					
Approach LOS	E		C		C		D					
Intersection Summary												
Delay			29.8									
Level of Service			D									
Intersection Capacity Utilization			53.7%	ICU Level of Service					A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 2028 Site+Forecasted AM W/Improvements

20: Wood Hollow Drive & Greystone Drive

6/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	84	154	200	67	147	37	28	320	53	29	223	65
Peak Hour Factor	0.81	0.89	0.64	0.80	0.82	0.72	0.53	0.88	0.79	0.68	0.85	0.68
Hourly flow rate (vph)	104	173	312	84	179	51	53	364	67	43	262	96
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2				
Volume Total (vph)	190	399	173	141	235	249	174	227				
Volume Left (vph)	104	0	84	0	53	0	43	0				
Volume Right (vph)	0	313	0	51	0	67	0	96				
Hadj (s)	0.31	-0.51	0.28	-0.22	0.15	-0.15	0.16	-0.26				
Departure Headway (s)	8.2	7.4	8.6	8.1	8.2	7.9	8.4	7.9				
Degree Utilization, x	0.43	0.82	0.41	0.32	0.53	0.55	0.40	0.50				
Capacity (veh/h)	428	479	392	423	421	435	415	429				
Control Delay (s)	16.1	34.1	16.4	13.7	19.0	18.8	15.7	17.4				
Approach Delay (s)	28.3		15.2		18.9		16.7					
Approach LOS	D		C		C		C					
Intersection Summary												
Delay			20.8									
Level of Service			C									
Intersection Capacity Utilization			54.1%	ICU Level of Service					A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 2028 Site+Forecasted AM W/Improvements

30: Greystone Drive & Mopac SB FR

6/2/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	267	0	0	4095	185
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.79	0.92	0.92	0.96	0.86
Hourly flow rate (vph)	0	338	0	0	4266	215
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	4373	1529	4481			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	4373	1529	4481			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	0	100			
cM capacity (veh/h)	1	106	28			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	338	1706	1706	1068		
Volume Left	0	0	0	0		
Volume Right	338	0	0	215		
cSH	106	1700	1700	1700		
Volume to Capacity	3.19	1.00	1.00	0.63		
Queue Length 95th (ft)	Err	0	0	0		
Control Delay (s)	Err	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	Err	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay			701.3			
Intersection Capacity Utilization			106.4%		ICU Level of Service	G
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2028 Site+Forecasted AM W/Improvements

40: Mopac SB FR & Executive Center Drive

6/2/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	90	0	0	3393	473
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.50	0.92	0.92	0.95	0.75
Hourly flow rate (vph)	0	180	0	0	3572	631
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	3887	1506	4202			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	3887	1506	4202			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	0	100			
cM capacity (veh/h)	2	110	36			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	180	1429	1429	1345		
Volume Left	0	0	0	0		
Volume Right	180	0	0	631		
cSH	110	1700	1700	1700		
Volume to Capacity	1.64	0.84	0.84	0.79		
Queue Length 95th (ft)	342	0	0	0		
Control Delay (s)	391.7	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	391.7	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay			16.1			
Intersection Capacity Utilization			88.3%		ICU Level of Service	E
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2028 Site+Forecasted AM W/Improvements

60: Executive Center Drive & Hart Lane

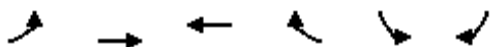
6/2/2014

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	261	119	220	341	68	157
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.79	0.67	0.83	0.72	0.75	0.46
Hourly flow rate (vph)	330	178	265	474	91	341
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)				358		
pX, platoon unblocked						
vC, conflicting volume			508		1423	419
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			508		1423	419
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			75		19	46
cM capacity (veh/h)			1057		112	634
Direction, Lane #	EB 1	WB 1	NB 1	NB 2		
Volume Total	508	739	91	341		
Volume Left	0	265	91	0		
Volume Right	178	0	0	341		
cSH	1700	1057	112	634		
Volume to Capacity	0.30	0.25	0.81	0.54		
Queue Length 95th (ft)	0	25	116	80		
Control Delay (s)	0.0	5.6	110.2	17.1		
Lane LOS		A	F	C		
Approach Delay (s)	0.0	5.6	36.6			
Approach LOS			E			
Intersection Summary						
Average Delay			11.9			
Intersection Capacity Utilization			64.9%	ICU Level of Service		C
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2028 Site+Forecasted AM W/Improvements

100: Executive Center Drive & Driveway 1

6/2/2014



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	255	229	288	185	12	50
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	277	249	313	201	13	54
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh						
Upstream signal (ft)		893				
pX, platoon unblocked						
vC, conflicting volume	514				1217	414
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	514				1217	414
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	74				91	91
cM capacity (veh/h)	1051				147	639
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	526	514	67			
Volume Left	277	0	13			
Volume Right	0	201	54			
cSH	1051	1700	388			
Volume to Capacity	0.26	0.30	0.17			
Queue Length 95th (ft)	27	0	16			
Control Delay (s)	6.5	0.0	16.2			
Lane LOS	A		C			
Approach Delay (s)	6.5	0.0	16.2			
Approach LOS			C			
Intersection Summary						
Average Delay			4.1			
Intersection Capacity Utilization			66.4%	ICU Level of Service		C
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2028 Site+Forecasted AM W/Improvements

200: Executive Center Drive & Driveway 2

6/2/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	0	0	338	484	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	367	526	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)					735	
pX, platoon unblocked						
vC, conflicting volume	893	526	526			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	893	526	526			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	312	552	1041			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	0	367	526			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1041	1700			
Volume to Capacity	0.00	0.00	0.31			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			28.8%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2028 Site+Forecasted AM W/Improvements

300: Executive Center Drive & Driveway 3

6/2/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	0	0	338	484	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	367	526	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)					569	
pX, platoon unblocked	0.96	0.96	0.96			
vC, conflicting volume	893	526	526			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	870	488	488			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	310	558	1035			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	0	367	526			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1035	1700			
Volume to Capacity	0.00	0.00	0.31			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			28.8%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2028 Site+Forecasted AM W/Improvements

400: Executive Center Drive & Driveway 4

6/2/2014

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	13	29	202	136	125	471
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	14	32	220	148	136	512
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						301
pX, platoon unblocked	0.81					
vC, conflicting volume	1077	293			367	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	980	293			367	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	93	96			89	
cM capacity (veh/h)	200	746			1191	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	46	367	648			
Volume Left	14	0	136			
Volume Right	32	148	0			
cSH	404	1700	1191			
Volume to Capacity	0.11	0.22	0.11			
Queue Length 95th (ft)	9	0	10			
Control Delay (s)	15.1	0.0	2.8			
Lane LOS	C		A			
Approach Delay (s)	15.1	0.0	2.8			
Approach LOS	C					
Intersection Summary						
Average Delay		2.4				
Intersection Capacity Utilization		64.0%		ICU Level of Service		B
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis 2028 Site+Forecasted AM W/Improvements

500: Executive Center Drive & Driveway 5

6/2/2014



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↩			↩
Volume (veh/h)	0	0	298	61	17	375
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	324	66	18	408
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			140			
pX, platoon unblocked	0.95	0.95			0.95	
vC, conflicting volume	802	357			390	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	768	303			337	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			98	
cM capacity (veh/h)	347	704			1166	
Direction, Lane #	NB 1	SB 1				
Volume Total	390	426				
Volume Left	0	18				
Volume Right	66	0				
cSH	1700	1166				
Volume to Capacity	0.23	0.02				
Queue Length 95th (ft)	0	1				
Control Delay (s)	0.0	0.5				
Lane LOS		A				
Approach Delay (s)	0.0	0.5				
Approach LOS						
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			36.9%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2028 Site+Forecasted AM W/Improvements

600: Executive Center Drive & Driveway 6

6/2/2014

									
Movement	WBL	WBR	NBT	NBR	SBL	SBT			
Lane Configurations									
Volume (veh/h)	7	22	275	23	20	385			
Sign Control	Stop		Free			Free			
Grade	0%		0%			0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92			
Hourly flow rate (vph)	8	24	299	25	22	418			
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type			None			None			
Median storage (veh)									
Upstream signal (ft)			352						
pX, platoon unblocked									
vC, conflicting volume	773	311			324				
vC1, stage 1 conf vol									
vC2, stage 2 conf vol									
vCu, unblocked vol	773	311			324				
tC, single (s)	6.4	6.2			4.1				
tC, 2 stage (s)									
tF (s)	3.5	3.3			2.2				
p0 queue free %	98	97			98				
cM capacity (veh/h)	361	729			1236				
Direction, Lane #	WB 1	NB 1	SB 1						
Volume Total	32	324	440						
Volume Left	8	0	22						
Volume Right	24	25	0						
cSH	585	1700	1236						
Volume to Capacity	0.05	0.19	0.02						
Queue Length 95th (ft)	4	0	1						
Control Delay (s)	11.5	0.0	0.6						
Lane LOS	B		A						
Approach Delay (s)	11.5	0.0	0.6						
Approach LOS	B								
Intersection Summary									
Average Delay		0.8							
Intersection Capacity Utilization		46.6%	ICU Level of Service	A					
Analysis Period (min)		15							

HCM Unsignalized Intersection Capacity Analysis 2028 Site+Forecasted AM W/Improvements

700: Executive Center Drive & Driveway 7

6/2/2014



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	4	294	3	7	405
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	4	320	3	8	440
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			536			
pX, platoon unblocked						
vC, conflicting volume	777	321			323	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	777	321			323	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	99			99	
cM capacity (veh/h)	363	720			1237	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	4	323	448			
Volume Left	0	0	8			
Volume Right	4	3	0			
cSH	720	1700	1237			
Volume to Capacity	0.01	0.19	0.01			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	10.0	0.0	0.2			
Lane LOS	B		A			
Approach Delay (s)	10.0	0.0	0.2			
Approach LOS	B					
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			36.9%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2028 Site+Forecasted AM W/Improvements

800: Executive Center Drive & Driveway 8

6/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	3	0	44	44	0	0	17	264	17	0	324	1
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	3	0	48	48	0	0	18	287	18	0	352	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)								676				
pX, platoon unblocked												
vC, conflicting volume	686	695	353	734	686	296	353			305		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	686	695	353	734	686	296	353			305		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	100	93	85	100	100	98			100		
cM capacity (veh/h)	357	360	691	309	364	743	1205			1255		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	51	48	324	353								
Volume Left	3	48	18	0								
Volume Right	48	0	18	1								
cSH	652	309	1205	1255								
Volume to Capacity	0.08	0.15	0.02	0.00								
Queue Length 95th (ft)	6	14	1	0								
Control Delay (s)	11.0	18.8	0.6	0.0								
Lane LOS	B	C	A									
Approach Delay (s)	11.0	18.8	0.6	0.0								
Approach LOS	B	C										
Intersection Summary												
Average Delay			2.1									
Intersection Capacity Utilization			44.7%		ICU Level of Service				A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 2028 Site+Forecasted AM W/Improvements

900: Executive Center Drive & Driveway 9

6/2/2014



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	20	267	0	1	325
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	22	290	0	1	353
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			872			
pX, platoon unblocked						
vC, conflicting volume	646	290			290	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	646	290			290	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	97			100	
cM capacity (veh/h)	436	749			1272	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	22	290	354			
Volume Left	0	0	1			
Volume Right	22	0	0			
cSH	749	1700	1272			
Volume to Capacity	0.03	0.17	0.00			
Queue Length 95th (ft)	2	0	0			
Control Delay (s)	10.0	0.0	0.0			
Lane LOS	A		A			
Approach Delay (s)	10.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			27.9%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2028 Site+Forecasted AM W/Improvements

1000: Executive Center Drive & Driveway 10

6/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	72	0	5	3	0	50	2	283	2	10	318	11
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	78	0	5	3	0	54	2	308	2	11	346	12
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)								1039				
pX, platoon unblocked												
vC, conflicting volume	741	688	352	692	692	309	358			310		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	741	688	352	692	692	309	358			310		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	74	100	99	99	100	93	100			99		
cM capacity (veh/h)	305	366	692	353	363	731	1201			1251		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	84	58	312	368								
Volume Left	78	3	2	11								
Volume Right	5	54	2	12								
cSH	317	689	1201	1251								
Volume to Capacity	0.26	0.08	0.00	0.01								
Queue Length 95th (ft)	26	7	0	1								
Control Delay (s)	20.4	10.7	0.1	0.3								
Lane LOS	C	B	A	A								
Approach Delay (s)	20.4	10.7	0.1	0.3								
Approach LOS	C	B										
Intersection Summary												
Average Delay			3.0									
Intersection Capacity Utilization			41.8%	ICU Level of Service					A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 2028 Site+Forecasted AM W/Improvements

1100: Driveway 11 & Wood Hollow Drive

6/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	333	76	276	733	0	21	0	107	21	0	11
Sign Control		Free			Free			Stop			Stop	
Grade		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
Hourly flow rate (vph)	0	362	83	300	797	0	23	0	116	23	0	12
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)		271			251							
pX, platoon unblocked	0.28			0.94			0.31	0.31	0.94	0.31	0.31	0.28
vC, conflicting volume	797			445			1812	1800	403	1916	1841	797
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			373			2044	2006	329	2378	2138	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			73			0	100	83	0	100	96
cM capacity (veh/h)	456			1110			10	14	667	5	11	305
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1							
Volume Total	445	1097	23	116	35							
Volume Left	0	300	23	0	23							
Volume Right	83	0	0	116	12							
cSH	1700	1110	10	667	7							
Volume to Capacity	0.26	0.27	2.32	0.17	4.72							
Queue Length 95th (ft)	0	27	96	16	Err							
Control Delay (s)	0.0	6.1	1350.5	11.5	Err							
Lane LOS		A	F	B	F							
Approach Delay (s)	0.0	6.1	231.2		Err							
Approach LOS			F		F							
Intersection Summary												
Average Delay			225.4									
Intersection Capacity Utilization			94.5%		ICU Level of Service				F			
Analysis Period (min)			15									

Lanes, Volumes, Timings
1: Hart Lane & Far West Boulevard

2028 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	95	703	46	212	716	180	72	202	163	201	175	108
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	170		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	1		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.95	0.95	0.95	1.00	1.00	1.00
Frt		0.988				0.850		0.945			0.936	
Flt Protected	0.950			0.950				0.992		0.950		
Satd. Flow (prot)	1770	3497	0	1770	3539	1583	0	3318	0	1770	1744	0
Flt Permitted	0.110			0.221				0.601		0.255		
Satd. Flow (perm)	205	3497	0	412	3539	1583	0	2010	0	475	1744	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7				212		93			34	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		362			1265			236			237	
Travel Time (s)		7.1			24.6			5.4			5.4	
Peak Hour Factor	0.73	0.83	0.61	0.69	0.83	0.85	0.80	0.80	0.82	0.90	0.56	0.47
Adj. Flow (vph)	130	847	75	307	863	212	90	252	199	223	312	230
Shared Lane Traffic (%)												
Lane Group Flow (vph)	130	922	0	307	863	212	0	541	0	223	542	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2		1	6			4		3	8	
Permitted Phases	2			6		6	4			8		
Detector Phase	5	2		1	6	6	4	4		3	8	

Lanes, Volumes, Timings
1: Hart Lane & Far West Boulevard

2028 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	8.0	18.0		8.0	18.0	18.0	12.0	12.0		4.0	12.0	
Minimum Split (s)	13.0	24.0		13.0	24.0	24.0	33.0	33.0		8.0	33.0	
Total Split (s)	15.0	45.0		29.0	59.0	59.0	45.0	45.0		11.0	56.0	
Total Split (%)	11.5%	34.6%		22.3%	45.4%	45.4%	34.6%	34.6%		8.5%	43.1%	
Maximum Green (s)	10.0	40.0		24.0	54.0	54.0	40.0	40.0		7.0	51.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		3.5	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		0.5	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0		5.0		4.0	5.0	
Lead/Lag	Lead	Lead		Lag	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	
Walk Time (s)		7.0			7.0	7.0	7.0	7.0			7.0	
Flash Dont Walk (s)		12.0			12.0	12.0	21.0	21.0			21.0	
Pedestrian Calls (#/hr)		0			0	0	0	0			0	
Act Effect Green (s)	46.8	46.8		55.6	55.6	55.6		34.9		50.1	49.1	
Actuated g/C Ratio	0.36	0.36		0.43	0.43	0.43		0.27		0.39	0.38	
v/c Ratio	0.66	0.73		0.82	0.57	0.27		0.89		0.79	0.80	
Control Delay	48.7	41.6		40.8	14.4	1.3		55.0		51.7	43.4	
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	
Total Delay	48.7	41.6		40.8	14.4	1.3		55.0		51.7	43.4	
LOS	D	D		D	B	A		D		D	D	
Approach Delay		42.5			18.2			55.0			45.8	
Approach LOS		D			B			D			D	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 36.0

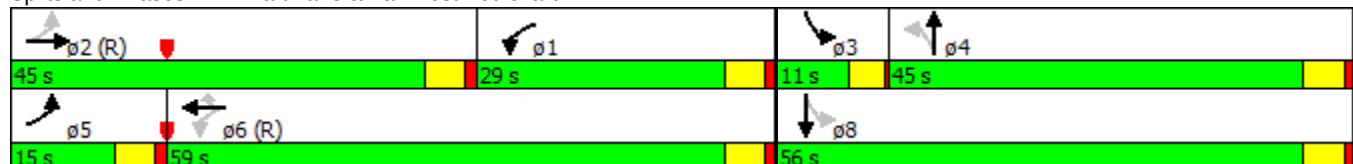
Intersection LOS: D

Intersection Capacity Utilization 78.0%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 1: Hart Lane & Far West Boulevard



Lanes, Volumes, Timings
2: Wood Hollow Drive & Far West Boulevard

2028 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	182	888	73	266	798	154	117	268	371	182	186	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	335		0	165		0	120		120	0		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	75			35			50			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.931	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1734	0
Flt Permitted	0.265			0.167			0.335			0.348		
Satd. Flow (perm)	494	3539	1583	311	3539	1583	624	1863	1583	648	1734	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			118			190			267		38	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1265			1235			599			222	
Travel Time (s)		24.6			24.1			13.6			5.0	
Peak Hour Factor	0.74	0.91	0.58	0.90	0.88	0.81	0.69	0.65	0.87	0.90	0.81	0.77
Adj. Flow (vph)	246	976	126	296	907	190	170	412	426	202	230	195
Shared Lane Traffic (%)												
Lane Group Flow (vph)	246	976	126	296	907	190	170	412	426	202	425	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	L NA	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	1	6		5	2			3			7	
Permitted Phases	6		6	2		2	3		3	7		
Detector Phase	1	6	6	5	2	2	3	3	3	7	7	

Lanes, Volumes, Timings
2: Wood Hollow Drive & Far West Boulevard

2028 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	8.0	8.0	8.0	5.0	5.0	
Minimum Split (s)	10.0	22.0	22.0	10.0	22.0	22.0	31.0	31.0	31.0	31.0	31.0	
Total Split (s)	22.0	53.0	53.0	23.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	
Total Split (%)	16.9%	40.8%	40.8%	17.7%	41.5%	41.5%	41.5%	41.5%	41.5%	41.5%	41.5%	
Maximum Green (s)	17.0	48.0	48.0	18.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
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	
Recall Mode	None	C-Min	C-Min	Max	C-Min	C-Min	Min	Min	Min	Max	Max	
Walk Time (s)		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		12.0	12.0		12.0	12.0	21.0	21.0	21.0	21.0	21.0	
Pedestrian Calls (#/hr)		0	0		0	0	0	0	0	0	0	
Act Effect Green (s)	43.5	43.5	43.5	42.0	42.0	42.0	53.5	53.5	53.5	53.5	53.5	
Actuated g/C Ratio	0.33	0.33	0.33	0.32	0.32	0.32	0.41	0.41	0.41	0.41	0.41	
v/c Ratio	0.69	0.83	0.21	0.98	0.79	0.30	0.66	0.54	0.53	0.76	0.58	
Control Delay	32.1	24.7	1.9	64.4	46.2	7.7	47.2	33.2	13.3	54.3	31.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	32.1	24.7	1.9	64.4	46.2	7.7	47.2	33.2	13.3	54.3	31.5	
LOS	C	C	A	E	D	A	D	C	B	D	C	
Approach Delay		23.9			44.8			27.1			38.8	
Approach LOS		C			D			C			D	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.98

Intersection Signal Delay: 33.4

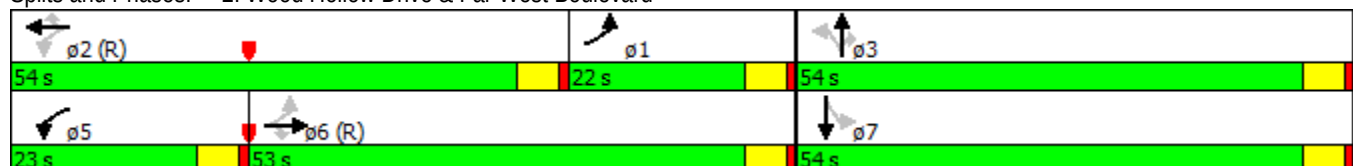
Intersection LOS: C

Intersection Capacity Utilization 81.6%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 2: Wood Hollow Drive & Far West Boulevard



Lanes, Volumes, Timings
3: Far West Boulevard & Mopac SB FR

2028 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑						↑↑	↑
Volume (vph)	0	1340	448	12	492	0	0	0	0	437	737	1095
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									0.850
Flt Protected				0.950							0.980	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	3468	1583
Flt Permitted				0.950							0.980	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	3468	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			254									186
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		1235			406			400			362	
Travel Time (s)		24.1			7.9			5.5			4.9	
Peak Hour Factor	0.92	0.91	0.93	0.67	0.93	0.92	0.92	0.92	0.92	0.78	0.92	0.95
Adj. Flow (vph)	0	1473	482	18	529	0	0	0	0	560	801	1153
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1473	482	18	529	0	0	0	0	0	1361	1153
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	L NA	Right	Left	Left	Right	Left	Left	R NA
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	custom	Prot	NA					custom	NA	custom
Protected Phases		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Permitted Phases										4		
Detector Phase		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Switch Phase												
Minimum Initial (s)				10.0								
Minimum Split (s)				15.0								

Lane Group	ø1	ø2	ø4	ø8	ø22
Lane Configurations					
Volume (vph)					
Ideal Flow (vphpl)					
Lane Util. Factor					
Frt					
Flt Protected					
Satd. Flow (prot)					
Flt Permitted					
Satd. Flow (perm)					
Right Turn on Red					
Satd. Flow (RTOR)					
Link Speed (mph)					
Link Distance (ft)					
Travel Time (s)					
Peak Hour Factor					
Adj. Flow (vph)					
Shared Lane Traffic (%)					
Lane Group Flow (vph)					
Enter Blocked Intersection					
Lane Alignment					
Median Width(ft)					
Link Offset(ft)					
Crosswalk Width(ft)					
Two way Left Turn Lane					
Headway Factor					
Turning Speed (mph)					
Number of Detectors					
Detector Template					
Leading Detector (ft)					
Trailing Detector (ft)					
Detector 1 Position(ft)					
Detector 1 Size(ft)					
Detector 1 Type					
Detector 1 Channel					
Detector 1 Extend (s)					
Detector 1 Queue (s)					
Detector 1 Delay (s)					
Detector 2 Position(ft)					
Detector 2 Size(ft)					
Detector 2 Type					
Detector 2 Channel					
Detector 2 Extend (s)					
Turn Type					
Protected Phases	1	2	4	8	22
Permitted Phases					
Detector Phase					
Switch Phase					
Minimum Initial (s)	4.0	13.0	10.0	4.0	1.0
Minimum Split (s)	9.0	18.0	15.0	9.0	6.0

Lanes, Volumes, Timings
3: Far West Boulevard & Mopac SB FR

2028 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)				18.0								
Total Split (%)				13.8%								
Maximum Green (s)				13.0								
Yellow Time (s)				4.0								
All-Red Time (s)				1.0								
Lost Time Adjust (s)				0.0								
Total Lost Time (s)				5.0								
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0								
Recall Mode				Min								
Act Effect Green (s)		55.0	33.0	13.0	51.0						47.0	69.0
Actuated g/C Ratio		0.42	0.25	0.10	0.39						0.36	0.53
v/c Ratio		0.98	0.82	0.10	0.38						1.09	1.24
Control Delay		71.8	38.7	61.7	5.1						91.7	144.1
Queue Delay		42.9	0.0	0.0	0.3						0.0	0.0
Total Delay		114.7	38.7	61.7	5.4						91.7	144.1
LOS		F	D	E	A						F	F
Approach Delay		95.9			7.2						115.7	
Approach LOS		F			A						F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.24

Intersection Signal Delay: 96.2

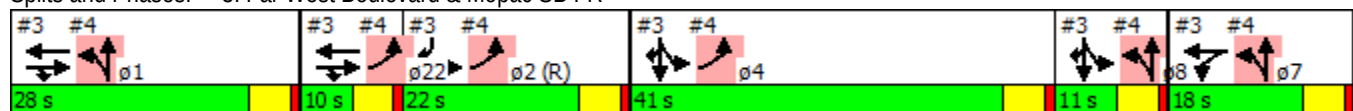
Intersection LOS: F

Intersection Capacity Utilization 121.5%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 3: Far West Boulevard & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø8	ø22
Total Split (s)	28.0	22.0	41.0	11.0	10.0
Total Split (%)	22%	17%	32%	8%	8%
Maximum Green (s)	23.0	17.0	36.0	6.0	5.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)					
Total Lost Time (s)					
Lead/Lag		Lag	Lead	Lag	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	C-Min	Min	Min	None
Act Effect Green (s)					
Actuated g/C Ratio					
v/c Ratio					
Control Delay					
Queue Delay					
Total Delay					
LOS					
Approach Delay					
Approach LOS					
Intersection Summary					

Lanes, Volumes, Timings
4: Mopac NB FR & Far West Boulevard

2028 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Lane Configurations												
Volume (vph)	1788	0	431	206	0	0						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Lane Util. Factor	0.97	1.00	0.95	0.95	1.00	1.00						
Frt												
Flt Protected	0.950		0.950	0.997								
Satd. Flow (prot)	3433	0	1681	1764	0	0						
Flt Permitted	0.950		0.950	0.997								
Satd. Flow (perm)	3433	0	1681	1764	0	0						
Right Turn on Red		Yes				Yes						
Satd. Flow (RTOR)												
Link Speed (mph)	35			50	50							
Link Distance (ft)	406			308	472							
Travel Time (s)	7.9			4.2	6.4							
Peak Hour Factor	0.90	0.92	0.93	0.25	0.92	0.92						
Adj. Flow (vph)	1987	0	463	824	0	0						
Shared Lane Traffic (%)			10%									
Lane Group Flow (vph)	1987	0	417	870	0	0						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Right	Left	Left	Left	Right						
Median Width(ft)	24			12	12							
Link Offset(ft)	0			0	0							
Crosswalk Width(ft)	16			16	16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00						
Turning Speed (mph)	15	9	15			9						
Number of Detectors	1		1	2								
Detector Template	Left		Left	Thru								
Leading Detector (ft)	20		20	100								
Trailing Detector (ft)	0		0	0								
Detector 1 Position(ft)	0		0	0								
Detector 1 Size(ft)	20		20	6								
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0								
Detector 1 Queue (s)	0.0		0.0	0.0								
Detector 1 Delay (s)	0.0		0.0	0.0								
Detector 2 Position(ft)				94								
Detector 2 Size(ft)				6								
Detector 2 Type				Cl+Ex								
Detector 2 Channel												
Detector 2 Extend (s)				0.0								
Turn Type	Prot		Split	NA								
Protected Phases	2 4 22		1 7 8	1 7 8			1	2	4	7	8	22
Permitted Phases												
Detector Phase	2 4 22		1 7 8	1 7 8								
Switch Phase												
Minimum Initial (s)							4.0	13.0	10.0	10.0	4.0	1.0
Minimum Split (s)							9.0	18.0	15.0	15.0	9.0	6.0

Lanes, Volumes, Timings
4: Mopac NB FR & Far West Boulevard

2028 Site+Forecasted PM W/Improvements

6/2/2014



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Total Split (s)							28.0	22.0	41.0	18.0	11.0	10.0
Total Split (%)							22%	17%	32%	14%	8%	8%
Maximum Green (s)							23.0	17.0	36.0	13.0	6.0	5.0
Yellow Time (s)							4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)							1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag								Lag	Lead		Lag	Lead
Lead-Lag Optimize?								Yes	Yes		Yes	Yes
Vehicle Extension (s)							3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode							Min	C-Min	Min	Min	Min	None
Act Effect Green (s)	68.0		52.0	52.0								
Actuated g/C Ratio	0.52		0.40	0.40								
v/c Ratio	1.11		0.62	1.23								
Control Delay	75.8		36.1	152.2								
Queue Delay	1.3		0.0	0.0								
Total Delay	77.1		36.1	152.2								
LOS	E		D	F								
Approach Delay	77.1			114.6								
Approach LOS	E			F								

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.24

Intersection Signal Delay: 91.8

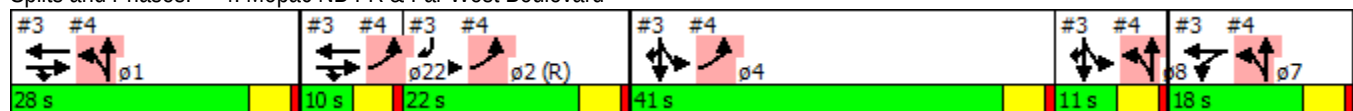
Intersection LOS: F

Intersection Capacity Utilization 134.7%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 4: Mopac NB FR & Far West Boulevard



Lanes, Volumes, Timings
5: Spicewood Springs Road & Mopac SB FR

2028 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑					↑	↑↑	↑
Volume (vph)	0	2091	430	805	1820	0	0	0	0	721	371	532
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	60		0	0		0	150		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			75			25			75		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.977	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1610	3312	1583
Flt Permitted				0.950						0.950	0.977	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1610	3312	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			160									160
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		294			386			782			882	
Travel Time (s)		5.7			7.5			10.7			12.0	
Peak Hour Factor	0.92	0.81	0.90	0.87	0.86	0.92	0.92	0.92	0.92	0.93	0.87	0.94
Adj. Flow (vph)	0	2581	478	925	2116	0	0	0	0	775	426	566
Shared Lane Traffic (%)										49%		
Lane Group Flow (vph)	0	2581	478	925	2116	0	0	0	0	395	806	566
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Prot	Prot	NA					Split	NA	Prot
Protected Phases		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5
Permitted Phases												
Detector Phase		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

Lanes, Volumes, Timings
5: Spicewood Springs Road & Mopac SB FR

2028 Site+Forecasted PM W/Improvements

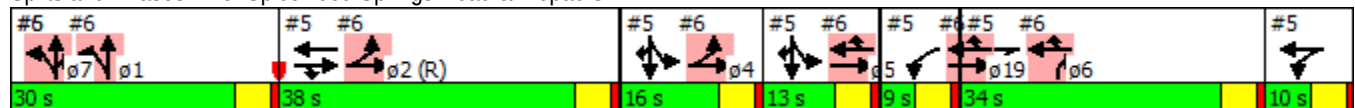
6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)		63.0	63.0	48.0	107.0					24.0	24.0	24.0
Actuated g/C Ratio		0.42	0.42	0.32	0.71					0.16	0.16	0.16
v/c Ratio		1.74	0.63	1.63	0.84					1.54	1.52	1.46
Control Delay		355.3	11.0	315.3	21.2					300.5	285.8	252.2
Queue Delay		1.6	1.5	1.3	47.8					0.0	0.0	6.5
Total Delay		356.9	12.5	316.6	69.0					300.5	285.8	258.7
LOS		F	B	F	E					F	F	F
Approach Delay		303.1			144.3						280.4	
Approach LOS		F			F						F	

Intersection Summary

Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 89 (59%), Referenced to phase 2:EBWB, Start of Green	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.74	
Intersection Signal Delay: 236.6	Intersection LOS: F
Intersection Capacity Utilization 164.1%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 5: Spicewood Springs Road & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0	5.0	6.0
Minimum Split (s)	8.0	15.0	10.0	8.0	15.0	10.0	11.0
Total Split (s)	30.0	38.0	16.0	13.0	34.0	10.0	9.0
Total Split (%)	20%	25%	11%	9%	23%	7%	6%
Maximum Green (s)	25.0	33.0	11.0	8.0	29.0	5.0	4.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Lanes, Volumes, Timings
6: Mopac NB FR & Spicewood Springs Road

2028 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	905	1586	0	0	1534	505	487	50	648	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		325	0		0	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	75			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.91	0.95	1.00	1.00	1.00
Frt						0.850		0.904	0.850			
Flt Protected	0.950						0.950	0.991				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	1681	1519	1504	0	0	0
Flt Permitted	0.950						0.950	0.991				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	1681	1519	1504	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						290		56	343			
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		386			594			563			407	
Travel Time (s)		7.5			11.6			7.7			5.6	
Peak Hour Factor	0.90	0.96	0.92	0.92	0.93	0.79	0.86	0.60	0.87	0.92	0.92	0.92
Adj. Flow (vph)	1006	1652	0	0	1649	639	566	83	745	0	0	0
Shared Lane Traffic (%)							15%		40%			
Lane Group Flow (vph)	1006	1652	0	0	1649	639	481	466	447	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Prot	Split	NA	custom			
Protected Phases	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			
Permitted Phases												
Detector Phase	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

Lanes, Volumes, Timings
6: Mopac NB FR & Spicewood Springs Road

2028 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)	49.0	71.0			51.0	51.0	35.0	35.0	39.0			
Actuated g/C Ratio	0.33	0.47			0.34	0.34	0.23	0.23	0.26			
v/c Ratio	1.74	0.99			1.37	0.88	1.23	1.17	0.69			
Control Delay	359.7	19.8			210.4	39.2	169.8	144.9	18.0			
Queue Delay	2.5	41.0			3.0	0.0	0.0	0.3	0.0			
Total Delay	362.3	60.8			213.3	39.2	169.8	145.2	18.0			
LOS	F	E			F	D	F	F	B			
Approach Delay		174.9			164.7			112.9				
Approach LOS		F			F			F				

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 89 (59%), Referenced to phase 2:EBWB, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.74

Intersection Signal Delay: 157.6

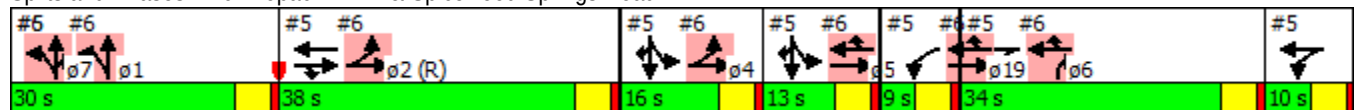
Intersection LOS: F

Intersection Capacity Utilization 164.1%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 6: Mopac NB FR & Spicewood Springs Road



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0	5.0	6.0
Minimum Split (s)	8.0	15.0	10.0	8.0	15.0	10.0	11.0
Total Split (s)	30.0	38.0	16.0	13.0	34.0	10.0	9.0
Total Split (%)	20%	25%	11%	9%	23%	7%	6%
Maximum Green (s)	25.0	33.0	11.0	8.0	29.0	5.0	4.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	7	1253	85	480	958	1	409	10	924	1	4	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	0		100	0		0
Storage Lanes	1		0	1		0	1		1	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.994						0.852	0.850		0.896	
Flt Protected	0.950			0.950			0.950				0.996	
Satd. Flow (prot)	1770	5055	0	1770	3539	0	1770	1508	1504	0	1662	0
Flt Permitted	0.275			0.072			0.740				0.668	
Satd. Flow (perm)	512	5055	0	134	3539	0	1378	1508	1504	0	1115	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5						469	469		20	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1093			275			251			161	
Travel Time (s)		21.3			5.4			5.7			3.7	
Peak Hour Factor	0.72	0.50	0.76	0.50	0.92	0.50	0.91	0.85	0.62	0.58	0.90	0.84
Adj. Flow (vph)	10	2506	112	960	1041	2	449	12	1490	2	4	20
Shared Lane Traffic (%)									50%			
Lane Group Flow (vph)	10	2618	0	960	1043	0	449	757	745	0	26	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2			6			4		4	8		
Detector Phase	5	2		1	6		4	4	4	8	8	

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	20.0		21.0	20.0		15.0	15.0	15.0	11.0	11.0	
Minimum Split (s)	10.0	25.0		26.0	25.0		35.0	35.0	35.0	35.0	35.0	
Total Split (s)	12.0	67.0		48.0	103.0		35.0	35.0	35.0	35.0	35.0	
Total Split (%)	8.0%	44.7%		32.0%	68.7%		23.3%	23.3%	23.3%	23.3%	23.3%	
Maximum Green (s)	7.0	62.0		43.0	98.0		30.0	30.0	30.0	30.0	30.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0		5.0	
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min		Min	C-Min		Min	Min	Min	Min	Min	
Walk Time (s)							6.0	6.0	6.0	6.0	6.0	
Flash Dont Walk (s)							24.0	24.0	24.0	24.0	24.0	
Pedestrian Calls (#/hr)							0	0	0	0	0	
Act Effect Green (s)	65.4	62.0		102.4	102.4		30.0	30.0	30.0		30.0	
Actuated g/C Ratio	0.44	0.41		0.68	0.68		0.20	0.20	0.20		0.20	
v/c Ratio	0.03	1.25		1.71	0.43		1.63	1.12	1.10		0.11	
Control Delay	25.4	154.9		355.6	9.9		337.5	92.6	86.0		23.8	
Queue Delay	0.0	1.2		0.2	0.3		0.0	0.8	0.8		0.0	
Total Delay	25.4	156.1		355.7	10.3		337.5	93.4	86.7		23.8	
LOS	C	F		F	B		F	F	F		C	
Approach Delay		155.6			175.8			147.0			23.8	
Approach LOS		F			F			F			C	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 55 (37%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.71

Intersection Signal Delay: 158.7

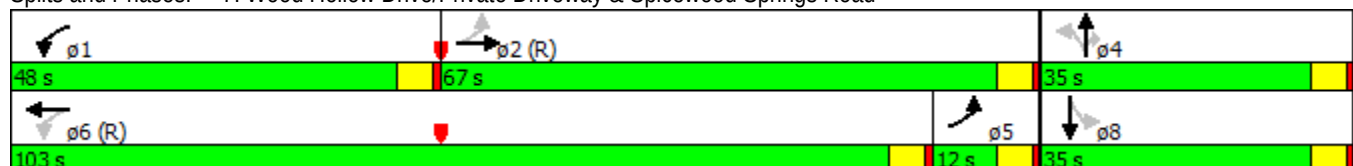
Intersection LOS: F

Intersection Capacity Utilization 94.5%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road



Lanes, Volumes, Timings
50: Executive Center Drive & Wood Hollow Drive

2028 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	376	61	61	259	248	193	269	231	69	120	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. 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
Frt		0.981				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1827	0	1770	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.491			0.222			0.624			0.326		
Satd. Flow (perm)	915	1827	0	414	1863	1583	1162	1863	1583	607	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13				261			179			298
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		255			271			301			140	
Travel Time (s)		5.8			6.2			6.8			3.2	
Peak Hour Factor	0.67	0.91	1.00	0.86	0.91	0.91	0.50	0.46	0.50	0.25	0.56	0.47
Adj. Flow (vph)	88	413	61	71	285	273	386	585	462	276	214	298
Shared Lane Traffic (%)												
Lane Group Flow (vph)	88	474	0	71	285	273	386	585	462	276	214	298
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6		6	8		8	4		4
Detector Phase	2	2		6	6	6	8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	21.0	21.0		21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0

Lanes, Volumes, Timings
50: Executive Center Drive & Wood Hollow Drive

2028 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	23.0	23.0		23.0	23.0	23.0	37.0	37.0	37.0	37.0	37.0	37.0
Total Split (%)	38.3%	38.3%		38.3%	38.3%	38.3%	61.7%	61.7%	61.7%	61.7%	61.7%	61.7%
Maximum Green (s)	18.0	18.0		18.0	18.0	18.0	32.0	32.0	32.0	32.0	32.0	32.0
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
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
Recall Mode	C-Max	C-Max		C-Max	C-Max	C-Max	Max	Max	Max	Max	Max	Max
Walk Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0	0	0	0	0
Act Effect Green (s)	18.0	18.0		18.0	18.0	18.0	32.0	32.0	32.0	32.0	32.0	32.0
Actuated g/C Ratio	0.30	0.30		0.30	0.30	0.30	0.53	0.53	0.53	0.53	0.53	0.53
v/c Ratio	0.32	0.85		0.57	0.51	0.42	0.62	0.59	0.50	0.85	0.22	0.30
Control Delay	20.3	36.7		40.6	21.3	5.1	15.4	12.6	7.4	41.1	8.1	2.0
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.3	36.7		40.6	21.3	5.1	15.4	12.6	7.4	41.1	8.1	2.0
LOS	C	D		D	C	A	B	B	A	D	A	A
Approach Delay		34.1			16.4			11.7			17.3	
Approach LOS		C			B			B			B	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 60

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 50

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 17.6

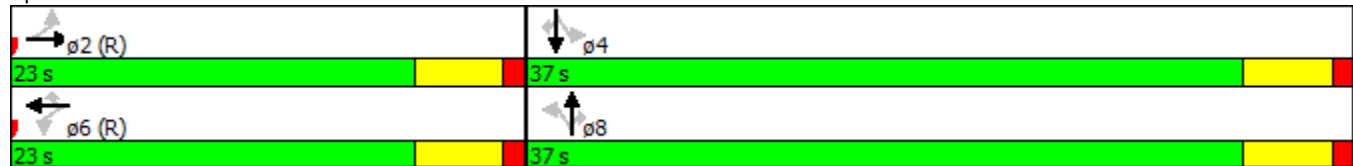
Intersection LOS: B

Intersection Capacity Utilization 61.5%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 50: Executive Center Drive & Wood Hollow Drive



Lanes, Volumes, Timings
70: Spicewood Springs Road & Hart Lane

2028 Site+Forecasted PM W/Improvements

6/2/2014

							ø5	ø6	ø8
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø5	ø6	ø8
Lane Configurations									
Volume (vph)	344	382	190	1532	1035	246			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900			
Storage Length (ft)	0	0	225			0			
Storage Lanes	1	1	1			0			
Taper Length (ft)	25		150						
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95			
Fr _t		0.850			0.964				
Fl _t Protected	0.950		0.950						
Satd. Flow (prot)	1770	1583	1770	3539	3412	0			
Fl _t Permitted	0.950		0.950						
Satd. Flow (perm)	1770	1583	1770	3539	3412	0			
Right Turn on Red		Yes				Yes			
Satd. Flow (RTOR)		26			52				
Link Speed (mph)	30			35	35				
Link Distance (ft)	358			1093	145				
Travel Time (s)	8.1			21.3	2.8				
Peak Hour Factor	0.85	0.87	0.86	0.88	0.89	0.67			
Adj. Flow (vph)	405	439	221	1741	1163	367			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	405	439	221	1741	1530	0			
Enter Blocked Intersection	No	No	No	No	No	No			
Lane Alignment	L NA	Right	Left	R NA	Left	Right			
Median Width(ft)	18			18	6				
Link Offset(ft)	0			0	0				
Crosswalk Width(ft)	16			16	16				
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00			
Turning Speed (mph)	15	9	15			9			
Number of Detectors	1	1	1	2	2				
Detector Template	Left	Right	Left	Thru	Thru				
Leading Detector (ft)	20	20	20	100	100				
Trailing Detector (ft)	0	0	0	0	0				
Detector 1 Position(ft)	0	0	0	0	0				
Detector 1 Size(ft)	20	20	20	6	6				
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel									
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0				
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0				
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0				
Detector 2 Position(ft)				94	94				
Detector 2 Size(ft)				6	6				
Detector 2 Type				Cl+Ex	Cl+Ex				
Detector 2 Channel									
Detector 2 Extend (s)				0.0	0.0				
Turn Type	Prot	pm+ov	Prot	NA	NA				
Protected Phases	2!	3	3	6 8!	4		5	6	8
Permitted Phases		2							
Detector Phase	2	3	3	6 8	4				

Lanes, Volumes, Timings
70: Spicewood Springs Road & Hart Lane

2028 Site+Forecasted PM W/Improvements

6/2/2014



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø5	ø6	ø8
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Minimum Split (s)	9.0	9.0	9.0		23.0		23.0	9.0	9.0
Total Split (s)	34.0	19.0	19.0		47.0		23.0	11.0	66.0
Total Split (%)	34.0%	19.0%	19.0%		47.0%		23%	11%	66%
Maximum Green (s)	29.0	14.0	14.0		42.0		18.0	6.0	61.0
Yellow Time (s)	4.0	4.0	4.0		4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0				
Total Lost Time (s)	5.0	5.0	5.0		5.0				
Lead/Lag		Lead	Lead		Lag		Lead	Lag	
Lead-Lag Optimize?		Yes	Yes		Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0	3.0
Recall Mode	Min	None	None		None		None	None	None
Walk Time (s)					7.0		7.0		
Flash Dont Walk (s)					11.0		11.0		
Pedestrian Calls (#/hr)					0		0		
Act Effect Green (s)	25.5	44.3	13.8	96.4	42.1				
Actuated g/C Ratio	0.26	0.46	0.14	1.00	0.44				
v/c Ratio	0.87	0.59	0.87	0.49	1.01				
Control Delay	53.4	21.8	74.4	0.5	52.8				
Queue Delay	0.0	0.0	0.0	0.0	0.0				
Total Delay	53.4	21.8	74.4	0.5	52.8				
LOS	D	C	E	A	D				
Approach Delay	37.0			8.8	52.8				
Approach LOS	D			A	D				

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 96.4

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.01

Intersection Signal Delay: 29.8

Intersection LOS: C

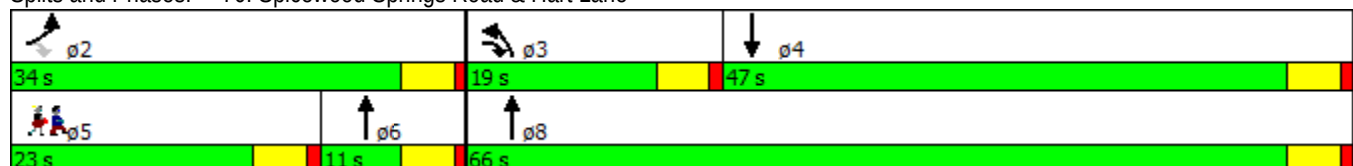
Intersection Capacity Utilization 78.5%

ICU Level of Service D

Analysis Period (min) 15

! Phase conflict between lane groups.

Splits and Phases: 70: Spicewood Springs Road & Hart Lane



HCM Unsignalized Intersection Capacity Analysis 2028 Site+Forecasted PM W/Improvements

10: Hart Lane & Greystone Drive

6/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	50	112	59	97	211	64	106	339	64	13	283	78
Peak Hour Factor	0.80	0.65	0.65	0.78	0.88	0.58	0.75	0.81	0.60	0.58	0.69	0.57
Hourly flow rate (vph)	62	172	91	124	240	110	141	419	107	22	410	137
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2				
Volume Total (vph)	149	177	244	230	351	316	227	342				
Volume Left (vph)	63	0	124	0	141	0	22	0				
Volume Right (vph)	0	91	0	110	0	107	0	137				
Hadj (s)	0.24	-0.33	0.29	-0.30	0.24	-0.20	0.08	-0.25				
Departure Headway (s)	9.3	8.7	9.0	8.4	8.6	8.1	8.6	8.2				
Degree Utilization, x	0.38	0.43	0.61	0.54	0.84	0.71	0.54	0.78				
Capacity (veh/h)	363	387	381	408	414	432	402	427				
Control Delay (s)	16.7	16.8	23.9	19.5	41.1	27.8	20.0	33.9				
Approach Delay (s)	16.8		21.8		34.8		28.3					
Approach LOS	C		C		D		D					
Intersection Summary												
Delay			27.1									
Level of Service			D									
Intersection Capacity Utilization			55.6%	ICU Level of Service					B			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 2028 Site+Forecasted PM W/Improvements

20: Wood Hollow Drive & Greystone Drive

6/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	72	86	62	109	282	73	97	382	87	32	320	91
Peak Hour Factor	0.81	0.89	0.64	0.80	0.82	0.72	0.53	0.88	0.79	0.68	0.85	0.68
Hourly flow rate (vph)	89	97	97	136	344	101	183	434	110	47	376	134
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2				
Volume Total (vph)	137	145	308	273	400	327	235	322				
Volume Left (vph)	89	0	136	0	183	0	47	0				
Volume Right (vph)	0	97	0	101	0	110	0	134				
Hadj (s)	0.36	-0.43	0.26	-0.23	0.26	-0.20	0.13	-0.26				
Departure Headway (s)	9.8	9.0	9.0	8.5	8.8	8.3	8.9	8.5				
Degree Utilization, x	0.37	0.36	0.77	0.65	0.98	0.76	0.58	0.76				
Capacity (veh/h)	351	390	396	411	400	425	389	411				
Control Delay (s)	17.3	15.8	35.4	24.7	67.4	31.6	22.4	32.9				
Approach Delay (s)	16.5		30.4		51.3		28.5					
Approach LOS	C		D		F		D					
Intersection Summary												
Delay			35.1									
Level of Service			E									
Intersection Capacity Utilization			61.9%	ICU Level of Service					B			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 2028 Site+Forecasted PM W/Improvements

30: Greystone Drive & Mopac SB FR

6/2/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	215	0	0	2249	425
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.79	0.92	0.92	0.96	0.86
Hourly flow rate (vph)	0	272	0	0	2343	494
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2590	1028	2837			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2590	1028	2837			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	0	100			
cM capacity (veh/h)	21	231	132			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	272	937	937	963		
Volume Left	0	0	0	0		
Volume Right	272	0	0	494		
cSH	231	1700	1700	1700		
Volume to Capacity	1.18	0.55	0.55	0.57		
Queue Length 95th (ft)	324	0	0	0		
Control Delay (s)	159.3	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	159.3	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay			13.9			
Intersection Capacity Utilization			72.9%		ICU Level of Service	C
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2028 Site+Forecasted PM W/Improvements

40: Mopac SB FR & Executive Center Drive

6/2/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	421	0	0	2412	247
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.50	0.92	0.92	0.95	0.75
Hourly flow rate (vph)	0	842	0	0	2539	329
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2704	1011	2868			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2704	1011	2868			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	0	100			
cM capacity (veh/h)	17	237	128			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	842	1016	1016	837		
Volume Left	0	0	0	0		
Volume Right	842	0	0	329		
cSH	237	1700	1700	1700		
Volume to Capacity	3.55	0.60	0.60	0.49		
Queue Length 95th (ft)	Err	0	0	0		
Control Delay (s)	Err	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	Err	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay		2269.1				
Intersection Capacity Utilization		84.8%		ICU Level of Service		E
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis 2028 Site+Forecasted PM W/Improvements

60: Executive Center Drive & Hart Lane

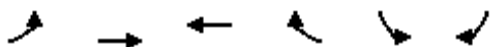
6/2/2014

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	326	115	175	238	157	337
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.79	0.67	0.83	0.72	0.75	0.46
Hourly flow rate (vph)	413	172	211	331	209	733
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)				358		
pX, platoon unblocked						
vC, conflicting volume			584		1251	498
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			584		1251	498
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			79		0	0
cM capacity (veh/h)			990		150	572
Direction, Lane #	EB 1	WB 1	NB 1	NB 2		
Volume Total	584	541	209	733		
Volume Left	0	211	209	0		
Volume Right	172	0	0	733		
cSH	1700	990	150	572		
Volume to Capacity	0.34	0.21	1.40	1.28		
Queue Length 95th (ft)	0	20	333	736		
Control Delay (s)	0.0	5.3	269.7	161.8		
Lane LOS		A	F	F		
Approach Delay (s)	0.0	5.3	185.8			
Approach LOS			F			
Intersection Summary						
Average Delay			86.0			
Intersection Capacity Utilization			65.1%	ICU Level of Service		C
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2028 Site+Forecasted PM W/Improvements

100: Executive Center Drive & Driveway 1

6/2/2014



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	46	168	214	33	79	304
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	50	183	233	36	86	330
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)		893				
pX, platoon unblocked						
vC, conflicting volume	268				533	251
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	268				533	251
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	96				82	58
cM capacity (veh/h)	1295				488	788
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	233	268	416			
Volume Left	50	0	86			
Volume Right	0	36	330			
cSH	1295	1700	699			
Volume to Capacity	0.04	0.16	0.60			
Queue Length 95th (ft)	3	0	99			
Control Delay (s)	2.0	0.0	17.4			
Lane LOS	A		C			
Approach Delay (s)	2.0	0.0	17.4			
Approach LOS			C			
Intersection Summary						
Average Delay		8.4				
Intersection Capacity Utilization		57.8%		ICU Level of Service		B
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis 2028 Site+Forecasted PM W/Improvements

200: Executive Center Drive & Driveway 2

6/2/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	0	0	518	214	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	563	233	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)					735	
pX, platoon unblocked						
vC, conflicting volume	796	233	233			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	796	233	233			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	356	807	1335			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	0	563	233			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1335	1700			
Volume to Capacity	0.00	0.00	0.14			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			30.6%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2028 Site+Forecasted PM W/Improvements

300: Executive Center Drive & Driveway 3

6/2/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	0	0	518	214	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	563	233	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)					569	
pX, platoon unblocked						
vC, conflicting volume	796	233	233			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	796	233	233			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	356	807	1335			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	0	563	233			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1335	1700			
Volume to Capacity	0.00	0.00	0.14			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			30.6%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2028 Site+Forecasted PM W/Improvements

400: Executive Center Drive & Driveway 4

6/2/2014

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	55	123	431	87	83	159
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	60	134	468	95	90	173
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						301
pX, platoon unblocked	0.98					
vC, conflicting volume	869	516			563	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	859	516			563	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	80	76			91	
cM capacity (veh/h)	293	559			1008	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	193	563	263			
Volume Left	60	0	90			
Volume Right	134	95	0			
cSH	437	1700	1008			
Volume to Capacity	0.44	0.33	0.09			
Queue Length 95th (ft)	56	0	7			
Control Delay (s)	19.6	0.0	3.6			
Lane LOS	C		A			
Approach Delay (s)	19.6	0.0	3.6			
Approach LOS	C					
Intersection Summary						
Average Delay		4.7				
Intersection Capacity Utilization		61.5%		ICU Level of Service		B
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis 2028 Site+Forecasted PM W/Improvements

500: Executive Center Drive & Driveway 5

6/2/2014



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↩↪			↩↪
Volume (veh/h)	0	0	442	134	45	190
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	480	146	49	207
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			140			
pX, platoon unblocked	0.82	0.82			0.82	
vC, conflicting volume	858	553			626	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	713	341			430	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			95	
cM capacity (veh/h)	308	573			922	
Direction, Lane #	NB 1	SB 1				
Volume Total	626	255				
Volume Left	0	49				
Volume Right	146	0				
cSH	1700	922				
Volume to Capacity	0.37	0.05				
Queue Length 95th (ft)	0	4				
Control Delay (s)	0.0	2.2				
Lane LOS		A				
Approach Delay (s)	0.0	2.2				
Approach LOS						
Intersection Summary						
Average Delay			0.6			
Intersection Capacity Utilization			50.6%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2028 Site+Forecasted PM W/Improvements

600: Executive Center Drive & Driveway 6

6/2/2014

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	37	124	389	53	40	198
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	40	135	423	58	43	215
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)			352			
pX, platoon unblocked						
vC, conflicting volume	754	452			480	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	754	452			480	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	89	78			96	
cM capacity (veh/h)	362	608			1082	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	175	480	259			
Volume Left	40	0	43			
Volume Right	135	58	0			
cSH	526	1700	1082			
Volume to Capacity	0.33	0.28	0.04			
Queue Length 95th (ft)	36	0	3			
Control Delay (s)	15.2	0.0	1.7			
Lane LOS	C		A			
Approach Delay (s)	15.2	0.0	1.7			
Approach LOS	C					
Intersection Summary						
Average Delay		3.4				
Intersection Capacity Utilization		56.0%		ICU Level of Service		B
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis 2028 Site+Forecasted PM W/Improvements

700: Executive Center Drive & Driveway 7

6/2/2014

									
Movement	WBL	WBR	NBT	NBR	SBL	SBT			
Lane Configurations									
Volume (veh/h)	3	29	507	6	9	235			
Sign Control	Stop		Free			Free			
Grade	0%		0%			0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92			
Hourly flow rate (vph)	3	32	551	7	10	255			
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type			None			None			
Median storage veh									
Upstream signal (ft)			536						
pX, platoon unblocked									
vC, conflicting volume	829	554			558				
vC1, stage 1 conf vol									
vC2, stage 2 conf vol									
vCu, unblocked vol	829	554			558				
tC, single (s)	6.4	6.2			4.1				
tC, 2 stage (s)									
tF (s)	3.5	3.3			2.2				
p0 queue free %	99	94			99				
cM capacity (veh/h)	337	532			1013				
Direction, Lane #	WB 1	NB 1	SB 1						
Volume Total	35	558	265						
Volume Left	3	0	10						
Volume Right	32	7	0						
cSH	504	1700	1013						
Volume to Capacity	0.07	0.33	0.01						
Queue Length 95th (ft)	6	0	1						
Control Delay (s)	12.7	0.0	0.4						
Lane LOS	B		A						
Approach Delay (s)	12.7	0.0	0.4						
Approach LOS	B								
Intersection Summary									
Average Delay		0.6							
Intersection Capacity Utilization		37.0%	ICU Level of Service	A					
Analysis Period (min)		15							

HCM Unsignalized Intersection Capacity Analysis 2028 Site+Forecasted PM W/Improvements

800: Executive Center Drive & Driveway 8

6/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	1	0	24	23	0	0	71	396	69	2	197	3
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	1	0	26	25	0	0	77	430	75	2	214	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)								676				
pX, platoon unblocked												
vC, conflicting volume	842	880	216	868	844	468	217			505		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	842	880	216	868	844	468	217			505		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	97	90	100	100	94			100		
cM capacity (veh/h)	271	269	824	252	282	595	1352			1059		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	27	25	583	220								
Volume Left	1	25	77	2								
Volume Right	26	0	75	3								
cSH	762	252	1352	1059								
Volume to Capacity	0.04	0.10	0.06	0.00								
Queue Length 95th (ft)	3	8	5	0								
Control Delay (s)	9.9	20.9	1.6	0.1								
Lane LOS	A	C	A	A								
Approach Delay (s)	9.9	20.9	1.6	0.1								
Approach LOS	A	C										
Intersection Summary												
Average Delay			2.0									
Intersection Capacity Utilization			57.6%	ICU Level of Service						B		
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 2028 Site+Forecasted PM W/Improvements

900: Executive Center Drive & Driveway 9

6/2/2014

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	10	397	0	3	202
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	11	432	0	3	220
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			872			
pX, platoon unblocked						
vC, conflicting volume	658	432			432	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	658	432			432	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	98			100	
cM capacity (veh/h)	428	624			1128	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	11	432	223			
Volume Left	0	0	3			
Volume Right	11	0	0			
cSH	624	1700	1128			
Volume to Capacity	0.02	0.25	0.00			
Queue Length 95th (ft)	1	0	0			
Control Delay (s)	10.9	0.0	0.1			
Lane LOS	B		A			
Approach Delay (s)	10.9	0.0	0.1			
Approach LOS	B					
Intersection Summary						
Average Delay		0.2				
Intersection Capacity Utilization		30.9%		ICU Level of Service		A
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis 2028 Site+Forecasted PM W/Improvements

1000: Executive Center Drive & Driveway 10

6/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	38	0	3	2	0	25	8	394	5	42	200	48
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	41	0	3	2	0	27	9	428	5	46	217	52
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)								1039				
pX, platoon unblocked												
vC, conflicting volume	810	786	243	786	809	431	270			434		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	810	786	243	786	809	431	270			434		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	85	100	100	99	100	96	99			96		
cM capacity (veh/h)	275	309	795	297	299	624	1294			1126		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	45	29	442	315								
Volume Left	41	2	9	46								
Volume Right	3	27	5	52								
cSH	289	577	1294	1126								
Volume to Capacity	0.15	0.05	0.01	0.04								
Queue Length 95th (ft)	13	4	1	3								
Control Delay (s)	19.7	11.6	0.2	1.6								
Lane LOS	C	B	A	A								
Approach Delay (s)	19.7	11.6	0.2	1.6								
Approach LOS	C	B										
Intersection Summary												
Average Delay			2.2									
Intersection Capacity Utilization			53.2%	ICU Level of Service					A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 2028 Site+Forecasted PM W/Improvements

1100: Driveway 11 & Wood Hollow Drive

6/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	625	51	177	392	0	88	0	443	118	0	59
Sign Control		Free			Free			Stop			Stop	
Grade		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
Hourly flow rate (vph)	0	679	55	192	426	0	96	0	482	128	0	64
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)		271			251							
pX, platoon unblocked	0.65			0.90			0.70	0.70	0.90	0.70	0.70	0.65
vC, conflicting volume	426			735			1582	1518	707	1999	1546	426
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			654			1310	1218	623	1909	1258	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			77			0	100	0	0	100	91
cM capacity (veh/h)	1054			844			71	97	439	0	92	704
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1							
Volume Total	735	618	96	482	192							
Volume Left	0	192	96	0	128							
Volume Right	55	0	0	482	64							
cSH	1700	844	71	439	0							
Volume to Capacity	0.43	0.23	1.35	1.10	Err							
Queue Length 95th (ft)	0	22	193	408	Err							
Control Delay (s)	0.0	5.5	325.6	101.9	Err							
Lane LOS		A	F	F	F							
Approach Delay (s)	0.0	5.5	138.9		Err							
Approach LOS			F		F							
Intersection Summary												
Average Delay			Err									
Intersection Capacity Utilization			93.2%		ICU Level of Service				F			
Analysis Period (min)			15									

Lanes, Volumes, Timings
1: Hart Lane & Far West Boulevard

2031 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	127	967	111	257	370	90	63	205	219	264	349	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	170		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	1		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.95	0.95	0.95	1.00	1.00	1.00
Frt		0.980				0.850		0.933			0.969	
Flt Protected	0.950			0.950				0.993		0.950		
Satd. Flow (prot)	1770	3468	0	1770	3539	1583	0	3279	0	1770	1805	0
Flt Permitted	0.314			0.119				0.516		0.209		
Satd. Flow (perm)	585	3468	0	222	3539	1583	0	1704	0	389	1805	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15				106		151			12	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		362			1265			236			237	
Travel Time (s)		7.1			24.6			5.4			5.4	
Peak Hour Factor	0.73	0.83	0.61	0.69	0.83	0.85	0.80	0.80	0.82	0.90	0.56	0.47
Adj. Flow (vph)	174	1165	182	372	446	106	79	256	267	293	623	162
Shared Lane Traffic (%)												
Lane Group Flow (vph)	174	1347	0	372	446	106	0	602	0	293	785	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2		1	6			4		3	8	
Permitted Phases	2			6		6	4			8		
Detector Phase	5	2		1	6	6	4	4		3	8	

Lanes, Volumes, Timings
1: Hart Lane & Far West Boulevard

2031 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	8.0	18.0		8.0	18.0	18.0	12.0	12.0		8.0	12.0	
Minimum Split (s)	13.0	23.0		13.0	23.0	23.0	17.0	17.0		13.0	17.0	
Total Split (s)	24.0	53.0		20.0	49.0	49.0	40.0	40.0		17.0	57.0	
Total Split (%)	18.5%	40.8%		15.4%	37.7%	37.7%	30.8%	30.8%		13.1%	43.8%	
Maximum Green (s)	19.0	48.0		15.0	44.0	44.0	35.0	35.0		12.0	52.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0		5.0		5.0	5.0	
Lead/Lag	Lead	Lead		Lag	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	
Walk Time (s)		7.0			7.0	7.0	7.0	7.0			7.0	
Flash Dont Walk (s)		12.0			12.0	12.0	21.0	21.0			21.0	
Pedestrian Calls (#/hr)		0			0	0	0	0			0	
Act Effect Green (s)	48.0	48.0		48.6	48.6	48.6		35.0		52.0	52.0	
Actuated g/C Ratio	0.37	0.37		0.37	0.37	0.37		0.27		0.40	0.40	
v/c Ratio	0.50	1.04		1.43	0.34	0.16		1.06		1.04	1.08	
Control Delay	34.2	77.2		246.4	41.5	17.1		88.3		94.8	93.0	
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	
Total Delay	34.2	77.2		246.4	41.5	17.1		88.3		94.8	93.0	
LOS	C	E		F	D	B		F		F	F	
Approach Delay		72.3			121.2			88.3			93.5	
Approach LOS		E			F			F			F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 110 (85%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.43

Intersection Signal Delay: 91.1

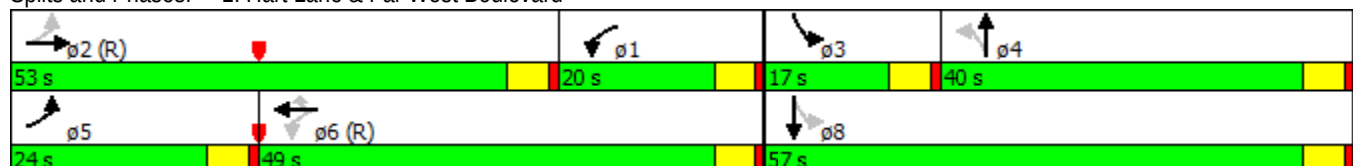
Intersection LOS: F

Intersection Capacity Utilization 98.7%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 1: Hart Lane & Far West Boulevard



Lanes, Volumes, Timings
2: Wood Hollow Drive & Far West Boulevard

2031 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	233	1299	58	145	710	120	31	191	360	329	168	96
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	335		0	165		0	120		120	0		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	75			35			50			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.944	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1758	0
Flt Permitted	0.207			0.145			0.439			0.479		
Satd. Flow (perm)	386	3539	1583	270	3539	1583	818	1863	1583	892	1758	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			68			148			165		29	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1265			1235			599			222	
Travel Time (s)		24.6			24.1			13.6			5.0	
Peak Hour Factor	0.74	0.91	0.58	0.90	0.88	0.81	0.69	0.65	0.87	0.90	0.81	0.77
Adj. Flow (vph)	315	1427	100	161	807	148	45	294	414	366	207	125
Shared Lane Traffic (%)												
Lane Group Flow (vph)	315	1427	100	161	807	148	45	294	414	366	332	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	L NA	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	1	6		5	2			3			7	
Permitted Phases	6		6	2		2	3		3	7		
Detector Phase	1	6	6	5	2	2	3	3	3	7	7	

Lanes, Volumes, Timings
2: Wood Hollow Drive & Far West Boulevard

2031 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	8.0	8.0	8.0	5.0	5.0	
Minimum Split (s)	11.0	40.0	40.0	12.0	40.0	40.0	15.0	15.0	15.0	15.0	15.0	
Total Split (s)	26.0	57.0	57.0	13.0	44.0	44.0	60.0	60.0	60.0	60.0	60.0	
Total Split (%)	20.0%	43.8%	43.8%	10.0%	33.8%	33.8%	46.2%	46.2%	46.2%	46.2%	46.2%	
Maximum Green (s)	21.0	52.0	52.0	8.0	39.0	39.0	55.0	55.0	55.0	55.0	55.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
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	
Recall Mode	None	C-Min	C-Min	Max	C-Min	C-Min	Min	Min	Min	Max	Max	
Walk Time (s)		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		12.0	12.0		12.0	12.0	21.0	21.0	21.0	21.0	21.0	
Pedestrian Calls (#/hr)		0	0		0	0	0	0	0	0	0	
Act Effect Green (s)	52.0	52.0	52.0	35.6	35.6	35.6	55.0	55.0	55.0	55.0	55.0	
Actuated g/C Ratio	0.40	0.40	0.40	0.27	0.27	0.27	0.42	0.42	0.42	0.42	0.42	
v/c Ratio	0.76	1.01	0.15	0.97	0.83	0.27	0.13	0.37	0.54	0.97	0.44	
Control Delay	48.2	53.4	6.6	73.2	50.0	8.1	24.3	27.4	19.1	77.1	26.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	48.2	53.4	6.6	73.2	50.0	8.1	24.3	27.4	19.1	77.1	26.2	
LOS	D	D	A	E	D	A	C	C	B	E	C	
Approach Delay		50.0			47.8			22.7			52.9	
Approach LOS		D			D			C			D	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.01

Intersection Signal Delay: 45.2

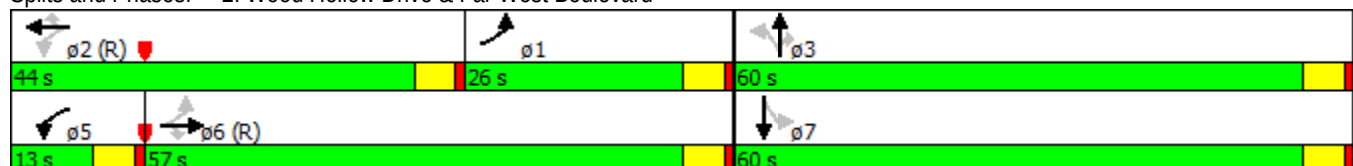
Intersection LOS: D

Intersection Capacity Utilization 88.9%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 2: Wood Hollow Drive & Far West Boulevard



Lanes, Volumes, Timings
3: Far West Boulevard & Mopac SB FR

2031 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑						↑↑	↑
Volume (vph)	0	989	561	22	652	0	0	0	0	165	780	1104
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									0.850
Flt Protected				0.950							0.990	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	3504	1583
Flt Permitted				0.950							0.990	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	3504	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			444									101
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		1235			406			400			362	
Travel Time (s)		24.1			7.9			5.5			4.9	
Peak Hour Factor	0.92	0.91	0.93	0.67	0.93	0.92	0.92	0.92	0.92	0.78	0.92	0.95
Adj. Flow (vph)	0	1087	603	33	701	0	0	0	0	212	848	1162
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1087	603	33	701	0	0	0	0	0	1060	1162
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	L NA	Right	Left	Left	Right	Left	Left	R NA
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	custom	Prot	NA					custom	NA	custom
Protected Phases		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Permitted Phases										4		
Detector Phase		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Switch Phase												
Minimum Initial (s)				10.0								
Minimum Split (s)				15.0								

Lane Group	ø1	ø2	ø4	ø8	ø22
Lane Configurations					
Volume (vph)					
Ideal Flow (vphpl)					
Lane Util. Factor					
Frt					
Flt Protected					
Satd. Flow (prot)					
Flt Permitted					
Satd. Flow (perm)					
Right Turn on Red					
Satd. Flow (RTOR)					
Link Speed (mph)					
Link Distance (ft)					
Travel Time (s)					
Peak Hour Factor					
Adj. Flow (vph)					
Shared Lane Traffic (%)					
Lane Group Flow (vph)					
Enter Blocked Intersection					
Lane Alignment					
Median Width(ft)					
Link Offset(ft)					
Crosswalk Width(ft)					
Two way Left Turn Lane					
Headway Factor					
Turning Speed (mph)					
Number of Detectors					
Detector Template					
Leading Detector (ft)					
Trailing Detector (ft)					
Detector 1 Position(ft)					
Detector 1 Size(ft)					
Detector 1 Type					
Detector 1 Channel					
Detector 1 Extend (s)					
Detector 1 Queue (s)					
Detector 1 Delay (s)					
Detector 2 Position(ft)					
Detector 2 Size(ft)					
Detector 2 Type					
Detector 2 Channel					
Detector 2 Extend (s)					
Turn Type					
Protected Phases	1	2	4	8	22
Permitted Phases					
Detector Phase					
Switch Phase					
Minimum Initial (s)	4.0	10.0	10.0	4.0	1.0
Minimum Split (s)	9.0	15.0	25.0	9.0	20.0

Lanes, Volumes, Timings
3: Far West Boulevard & Mopac SB FR

2031 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)				10.0								
Total Split (%)				7.7%								
Maximum Green (s)				5.0								
Yellow Time (s)				4.0								
All-Red Time (s)				1.0								
Lost Time Adjust (s)				0.0								
Total Lost Time (s)				5.0								
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0								
Recall Mode				Min								
Act Effect Green (s)		69.0	36.0	5.0	46.0						41.0	74.0
Actuated g/C Ratio		0.53	0.28	0.04	0.35						0.32	0.57
v/c Ratio		0.58	0.79	0.49	0.56						0.96	1.23
Control Delay		23.1	16.1	77.7	3.8						48.5	131.6
Queue Delay		5.6	0.0	0.0	1.4						0.0	0.0
Total Delay		28.7	16.1	77.7	5.2						48.5	131.6
LOS		C	B	E	A						D	F
Approach Delay		24.2			8.4						92.0	
Approach LOS		C			A						F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 106 (82%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.59

Intersection Signal Delay: 54.1

Intersection LOS: D

Intersection Capacity Utilization 128.2%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 3: Far West Boulevard & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø8	ø22
Total Split (s)	28.0	33.0	26.0	20.0	13.0
Total Split (%)	22%	25%	20%	15%	10%
Maximum Green (s)	23.0	28.0	21.0	15.0	8.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)					
Total Lost Time (s)					
Lead/Lag		Lag	Lead	Lag	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	C-Min	Min	Min	None
Act Effect Green (s)					
Actuated g/C Ratio					
v/c Ratio					
Control Delay					
Queue Delay					
Total Delay					
LOS					
Approach Delay					
Approach LOS					
Intersection Summary					

Lanes, Volumes, Timings
4: Mopac NB FR & Far West Boulevard

2031 Site+Forecasted AM W/Improvements

6/2/2014

							ø1	ø2	ø4	ø7	ø8	ø22
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR						
Lane Configurations	LT	RT	LT	TH	TH	RT						
Volume (vph)	1176	0	675	268	0	0						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Lane Util. Factor	0.97	1.00	0.95	0.95	1.00	1.00						
Fr t												
Flt Protected	0.950		0.950	0.997								
Satd. Flow (prot)	3433	0	1681	1764	0	0						
Flt Permitted	0.950		0.950	0.997								
Satd. Flow (perm)	3433	0	1681	1764	0	0						
Right Turn on Red		Yes				Yes						
Satd. Flow (RTOR)												
Link Speed (mph)	35			50	50							
Link Distance (ft)	406			308	472							
Travel Time (s)	7.9			4.2	6.4							
Peak Hour Factor	0.90	0.92	0.93	0.25	0.92	0.92						
Adj. Flow (vph)	1307	0	726	1072	0	0						
Shared Lane Traffic (%)			10%									
Lane Group Flow (vph)	1307	0	653	1145	0	0						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Right	Left	Left	Left	Right						
Median Width(ft)	24			12	12							
Link Offset(ft)	0			0	0							
Crosswalk Width(ft)	16			16	16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00						
Turning Speed (mph)	15	9	15			9						
Number of Detectors	1		1	2								
Detector Template	Left		Left	Thru								
Leading Detector (ft)	20		20	100								
Trailing Detector (ft)	0		0	0								
Detector 1 Position(ft)	0		0	0								
Detector 1 Size(ft)	20		20	6								
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0								
Detector 1 Queue (s)	0.0		0.0	0.0								
Detector 1 Delay (s)	0.0		0.0	0.0								
Detector 2 Position(ft)				94								
Detector 2 Size(ft)				6								
Detector 2 Type				Cl+Ex								
Detector 2 Channel												
Detector 2 Extend (s)				0.0								
Turn Type	Prot		Split	NA								
Protected Phases	2 4 22		1 7 8	1 7 8			1	2	4	7	8	22
Permitted Phases												
Detector Phase	2 4 22		1 7 8	1 7 8								
Switch Phase												
Minimum Initial (s)							4.0	10.0	10.0	10.0	4.0	1.0
Minimum Split (s)							9.0	15.0	25.0	15.0	9.0	20.0

Lanes, Volumes, Timings
4: Mopac NB FR & Far West Boulevard

2031 Site+Forecasted AM W/Improvements

6/2/2014



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Total Split (s)							28.0	33.0	26.0	10.0	20.0	13.0
Total Split (%)							22%	25%	20%	8%	15%	10%
Maximum Green (s)							23.0	28.0	21.0	5.0	15.0	8.0
Yellow Time (s)							4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)							1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag								Lag	Lead		Lag	Lead
Lead-Lag Optimize?								Yes	Yes		Yes	Yes
Vehicle Extension (s)							3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode							Min	C-Min	Min	Min	Min	None
Act Effect Green (s)	67.0		53.0	53.0								
Actuated g/C Ratio	0.52		0.41	0.41								
v/c Ratio	0.74		0.95	1.59								
Control Delay	28.1		62.5	302.4								
Queue Delay	5.9		0.0	0.0								
Total Delay	34.0		62.5	302.4								
LOS	C		E	F								
Approach Delay	34.0			215.2								
Approach LOS	C			F								

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 106 (82%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.59

Intersection Signal Delay: 139.0

Intersection LOS: F

Intersection Capacity Utilization 141.3%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 4: Mopac NB FR & Far West Boulevard



Lanes, Volumes, Timings
5: Spicewood Springs Road & Mopac SB FR

2031 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑					↑	↑↑	↑
Volume (vph)	0	1439	880	974	1541	0	0	0	0	449	1706	894
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	60		0	0		0	150		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			75			25			75		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.999	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1610	3387	1583
Flt Permitted				0.950						0.950	0.999	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1610	3387	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			185									185
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		294			386			782			882	
Travel Time (s)		5.7			7.5			10.7			12.0	
Peak Hour Factor	0.92	0.81	0.90	0.87	0.86	0.92	0.92	0.92	0.92	0.93	0.87	0.94
Adj. Flow (vph)	0	1777	978	1120	1792	0	0	0	0	483	1961	951
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	0	1777	978	1120	1792	0	0	0	0	435	2009	951
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Prot	Prot	NA					Split	NA	Prot
Protected Phases		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5
Permitted Phases												
Detector Phase		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

Lanes, Volumes, Timings
5: Spicewood Springs Road & Mopac SB FR

2031 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)		33.0	33.0	39.0	63.0					43.0	43.0	43.0
Actuated g/C Ratio		0.25	0.25	0.30	0.48					0.33	0.33	0.33
v/c Ratio		1.98	1.81	2.11	1.04					0.82	1.79	1.47
Control Delay		466.4	391.8	523.1	45.6					53.8	389.1	247.2
Queue Delay		3.0	0.0	1.4	24.6					0.0	0.0	0.7
Total Delay		469.5	391.8	524.5	70.2					53.8	389.1	247.9
LOS		F	F	F	E					D	F	F
Approach Delay		441.9			244.9						306.6	
Approach LOS		F			F						F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 8 (6%), Referenced to phase 2:EBWB, Start of Green

Natural Cycle: 140

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 2.11

Intersection Signal Delay: 327.9

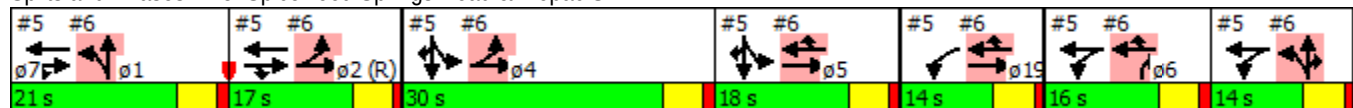
Intersection LOS: F

Intersection Capacity Utilization 183.7%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 5: Spicewood Springs Road & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0	5.0	6.0
Minimum Split (s)	8.0	10.0	10.0	8.0	10.0	10.0	11.0
Total Split (s)	21.0	17.0	30.0	18.0	16.0	14.0	14.0
Total Split (%)	16%	13%	23%	14%	12%	11%	11%
Maximum Green (s)	16.0	12.0	25.0	13.0	11.0	9.0	9.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Lanes, Volumes, Timings
6: Mopac NB FR & Spicewood Springs Road

2031 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	519	1238	0	0	1536	306	731	16	644	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		325	0		0	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	75			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.91	0.95	1.00	1.00	1.00
Frt						0.850		0.937	0.850			
Flt Protected	0.950						0.950	0.974				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	1681	1547	1504	0	0	0
Flt Permitted	0.950						0.950	0.974				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	1681	1547	1504	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						258		26	274			
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		386			594			563			407	
Travel Time (s)		7.5			11.6			7.7			5.6	
Peak Hour Factor	0.90	0.96	0.92	0.92	0.93	0.79	0.86	0.60	0.87	0.92	0.92	0.92
Adj. Flow (vph)	577	1290	0	0	1652	387	850	27	740	0	0	0
Shared Lane Traffic (%)							34%		31%			
Lane Group Flow (vph)	577	1290	0	0	1652	387	561	545	511	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Prot	Split	NA	custom			
Protected Phases	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			
Permitted Phases												
Detector Phase	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

Lanes, Volumes, Timings
6: Mopac NB FR & Spicewood Springs Road

2031 Site+Forecasted AM W/Improvements

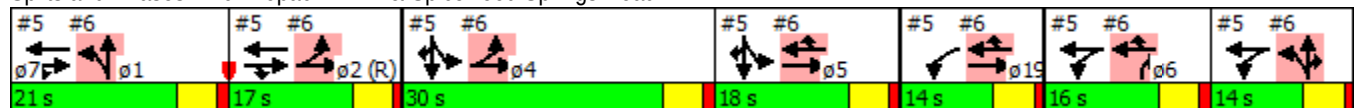
6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)	42.0	74.0			43.0	43.0	30.0	30.0	25.0			
Actuated g/C Ratio	0.32	0.57			0.33	0.33	0.23	0.23	0.19			
v/c Ratio	1.01	0.64			1.41	0.56	1.45	1.45	1.00			
Control Delay	38.9	13.5			224.7	14.6	253.0	250.0	64.8			
Queue Delay	33.8	50.0			4.0	0.0	0.3	0.6	0.0			
Total Delay	72.7	63.5			228.7	14.6	253.3	250.6	64.8			
LOS	E	E			F	B	F	F	E			
Approach Delay		66.3			188.1			192.8				
Approach LOS		E			F			F				

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 8 (6%), Referenced to phase 2:EBWB, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 2.11
Intersection Signal Delay: 148.3
Intersection LOS: F
Intersection Capacity Utilization 183.7%
ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 6: Mopac NB FR & Spicewood Springs Road



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	5.0	5.0	3.0	5.0	5.0	6.0
Minimum Split (s)	8.0	10.0	10.0	8.0	10.0	10.0	11.0
Total Split (s)	21.0	17.0	30.0	18.0	16.0	14.0	14.0
Total Split (%)	16%	13%	23%	14%	12%	11%	11%
Maximum Green (s)	16.0	12.0	25.0	13.0	11.0	9.0	9.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	11	1480	276	934	961	14	117	4	412	8	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	0		100	0		0
Storage Lanes	1		0	1		0	1		1	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.984			0.996			0.852	0.850		0.983	
Flt Protected	0.950			0.950			0.950				0.958	
Satd. Flow (prot)	1770	5004	0	1770	3525	0	1770	1508	1504	0	1754	0
Flt Permitted	0.267			0.085			0.747				0.341	
Satd. Flow (perm)	497	5004	0	158	3525	0	1391	1508	1504	0	624	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20			6			333	332		101	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1093			275			251			161	
Travel Time (s)		21.3			5.4			5.7			3.7	
Peak Hour Factor	0.72	0.50	0.76	0.50	0.92	0.50	0.91	0.85	0.62	0.58	0.90	0.84
Adj. Flow (vph)	15	2960	363	1868	1045	28	129	5	665	14	0	2
Shared Lane Traffic (%)									50%			
Lane Group Flow (vph)	15	3323	0	1868	1073	0	129	338	332	0	16	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2			6			4		4	8		
Detector Phase	5	2		1	6		4	4	4	8	8	

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	20.0		21.0	20.0		15.0	15.0	15.0	11.0	11.0	
Minimum Split (s)	10.0	25.0		26.0	25.0		20.0	20.0	20.0	16.0	16.0	
Total Split (s)	12.0	59.0		55.0	102.0		16.0	16.0	16.0	16.0	16.0	
Total Split (%)	9.2%	45.4%		42.3%	78.5%		12.3%	12.3%	12.3%	12.3%	12.3%	
Maximum Green (s)	7.0	54.0		50.0	97.0		11.0	11.0	11.0	11.0	11.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0		5.0	
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min		Min	C-Min		Min	Min	Min	Min	Min	
Walk Time (s)							6.0	6.0	6.0	6.0	6.0	
Flash Dont Walk (s)							24.0	24.0	24.0	24.0	24.0	
Pedestrian Calls (#/hr)							0	0	0	0	0	
Act Effect Green (s)	57.4	54.0		101.2	101.2		11.0	11.0	11.0		11.0	
Actuated g/C Ratio	0.44	0.42		0.78	0.78		0.08	0.08	0.08		0.08	
v/c Ratio	0.05	1.59		2.51	0.39		1.10	0.78	0.77		0.11	
Control Delay	21.2	296.7		701.2	7.8		167.1	19.8	18.6		1.5	
Queue Delay	0.0	0.3		0.5	0.5		0.0	13.1	11.3		0.0	
Total Delay	21.2	297.0		701.7	8.3		167.1	32.9	29.9		1.5	
LOS	C	F		F	A		F	C	C		A	
Approach Delay		295.7			448.8			53.3			1.5	
Approach LOS		F			F			D			A	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 55 (42%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 2.51

Intersection Signal Delay: 331.2

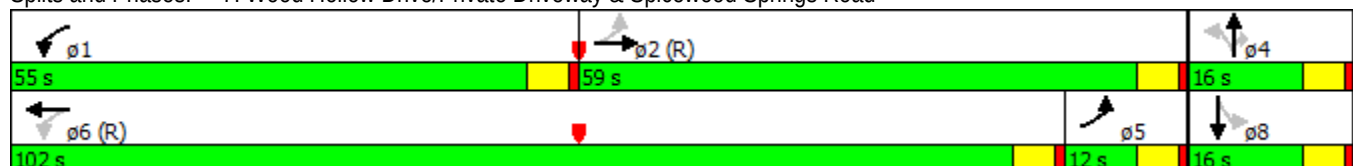
Intersection LOS: F

Intersection Capacity Utilization 111.5%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road



Lanes, Volumes, Timings
50: Executive Center Drive & Wood Hollow Drive

2031 Site+Forecasted AM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	56	310	246	387	271	246	49	86	77	86	285	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. 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
Frt		0.937				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1745	0	1770	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.572			0.335			0.235			0.640		
Satd. Flow (perm)	1065	1745	0	624	1863	1583	438	1863	1583	1192	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		96				270			154			60
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		255			271			301			140	
Travel Time (s)		5.8			6.2			6.8			3.2	
Peak Hour Factor	0.67	0.91	1.00	0.86	0.91	0.91	0.50	0.46	0.50	0.25	0.56	0.47
Adj. Flow (vph)	84	341	246	450	298	270	98	187	154	344	509	60
Shared Lane Traffic (%)												
Lane Group Flow (vph)	84	587	0	450	298	270	98	187	154	344	509	60
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6		6	8		8	4		4
Detector Phase	2	2		6	6	6	8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	21.0	21.0		21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0

Lanes, Volumes, Timings
50: Executive Center Drive & Wood Hollow Drive

2031 Site+Forecasted AM W/Improvements

6/2/2014

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	38.0	38.0		38.0	38.0	38.0	22.0	22.0	22.0	22.0	22.0	22.0
Total Split (%)	63.3%	63.3%		63.3%	63.3%	63.3%	36.7%	36.7%	36.7%	36.7%	36.7%	36.7%
Maximum Green (s)	33.0	33.0		33.0	33.0	33.0	17.0	17.0	17.0	17.0	17.0	17.0
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
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
Recall Mode	C-Max	C-Max		C-Max	C-Max	C-Max	Max	Max	Max	Max	Max	Max
Walk Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0	0	0	0	0
Act Effect Green (s)	33.0	33.0		33.0	33.0	33.0	17.0	17.0	17.0	17.0	17.0	17.0
Actuated g/C Ratio	0.55	0.55		0.55	0.55	0.55	0.28	0.28	0.28	0.28	0.28	0.28
v/c Ratio	0.14	0.59		1.31	0.29	0.27	0.79	0.35	0.28	1.02	0.97	0.12
Control Delay	7.4	10.2		179.8	8.2	1.8	66.2	19.5	4.9	81.0	56.6	6.0
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	7.4	10.2		179.8	8.2	1.8	66.2	19.5	4.9	81.0	56.6	6.0
LOS	A	B		F	A	A	E	B	A	F	E	A
Approach Delay	9.9			82.4			24.8			62.5		
Approach LOS	A			F			C			E		

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 60

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.31

Intersection Signal Delay: 52.1

Intersection LOS: D

Intersection Capacity Utilization 87.8%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 50: Executive Center Drive & Wood Hollow Drive



Lanes, Volumes, Timings
70: Spicewood Springs Road & Hart Lane

2031 Site+Forecasted AM W/Improvements

6/2/2014



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø5	ø6	ø8
Lane Configurations									
Volume (vph)	160	299	210	1146	1612	454			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900			
Storage Length (ft)	0	0	225			0			
Storage Lanes	1	1	1			0			
Taper Length (ft)	25		150						
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95			
Frt		0.850			0.959				
Flt Protected	0.950		0.950						
Satd. Flow (prot)	1770	1583	1770	3539	3394	0			
Flt Permitted	0.950		0.950						
Satd. Flow (perm)	1770	1583	1770	3539	3394	0			
Right Turn on Red		Yes				Yes			
Satd. Flow (RTOR)		20			68				
Link Speed (mph)	30			35	35				
Link Distance (ft)	358			1093	145				
Travel Time (s)	8.1			21.3	2.8				
Peak Hour Factor	0.85	0.87	0.86	0.88	0.89	0.67			
Adj. Flow (vph)	188	344	244	1302	1811	678			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	188	344	244	1302	2489	0			
Enter Blocked Intersection	No	No	No	No	No	No			
Lane Alignment	L NA	Right	Left	R NA	Left	Right			
Median Width(ft)	18			18	6				
Link Offset(ft)	0			0	0				
Crosswalk Width(ft)	16			16	16				
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00			
Turning Speed (mph)	15	9	15			9			
Number of Detectors	1	1	1	2	2				
Detector Template	Left	Right	Left	Thru	Thru				
Leading Detector (ft)	20	20	20	100	100				
Trailing Detector (ft)	0	0	0	0	0				
Detector 1 Position(ft)	0	0	0	0	0				
Detector 1 Size(ft)	20	20	20	6	6				
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel									
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0				
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0				
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0				
Detector 2 Position(ft)				94	94				
Detector 2 Size(ft)				6	6				
Detector 2 Type				Cl+Ex	Cl+Ex				
Detector 2 Channel									
Detector 2 Extend (s)				0.0	0.0				
Turn Type	Prot	pm+ov	Prot	NA	NA				
Protected Phases	2!	3	3	6 8!	4		5	6	8
Permitted Phases		2							
Detector Phase	2	3	3	6 8	4				

Lanes, Volumes, Timings
70: Spicewood Springs Road & Hart Lane

2031 Site+Forecasted AM W/Improvements

6/2/2014



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø5	ø6	ø8
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Minimum Split (s)	9.0	9.0	9.0		23.0		23.0	9.0	9.0
Total Split (s)	35.0	17.0	17.0		98.0		23.0	12.0	115.0
Total Split (%)	23.3%	11.3%	11.3%		65.3%		15%	8%	77%
Maximum Green (s)	30.0	12.0	12.0		93.0		18.0	7.0	110.0
Yellow Time (s)	4.0	4.0	4.0		4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0				
Total Lost Time (s)	5.0	5.0	5.0		5.0				
Lead/Lag		Lead	Lead		Lag		Lead	Lag	
Lead-Lag Optimize?		Yes	Yes		Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0	3.0
Recall Mode	Min	None	None		None		None	None	None
Walk Time (s)					7.0		7.0		
Flash Dont Walk (s)					11.0		11.0		
Pedestrian Calls (#/hr)					0		0		
Act Effect Green (s)	20.0	37.0	12.0	140.2	93.1				
Actuated g/C Ratio	0.14	0.26	0.09	1.00	0.66				
v/c Ratio	0.75	0.80	1.62	0.37	1.09				
Control Delay	75.6	59.4	343.2	0.3	73.5				
Queue Delay	0.0	0.0	0.0	0.0	0.0				
Total Delay	75.6	59.4	343.2	0.3	73.5				
LOS	E	E	F	A	E				
Approach Delay	65.1			54.4	73.5				
Approach LOS	E			D	E				

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 140.2

Natural Cycle: 150

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.62

Intersection Signal Delay: 66.1

Intersection LOS: E

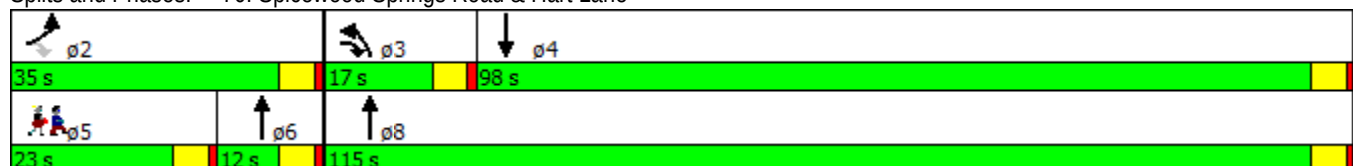
Intersection Capacity Utilization 92.1%

ICU Level of Service F

Analysis Period (min) 15

! Phase conflict between lane groups.

Splits and Phases: 70: Spicewood Springs Road & Hart Lane



HCM Unsignalized Intersection Capacity Analysis 2031 Site+Forecasted AM W/Improvements

10: Hart Lane & Greystone Drive

6/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	74	257	42	102	94	11	65	275	176	20	404	39
Peak Hour Factor	0.80	0.65	0.65	0.78	0.88	0.58	0.75	0.81	0.60	0.58	0.69	0.57
Hourly flow rate (vph)	92	395	65	131	107	19	87	340	293	34	586	68
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2				
Volume Total (vph)	290	262	184	72	256	463	327	361				
Volume Left (vph)	93	0	131	0	87	0	34	0				
Volume Right (vph)	0	65	0	19	0	293	0	68				
Hadj (s)	0.19	-0.14	0.39	-0.15	0.20	-0.41	0.09	-0.10				
Departure Headway (s)	9.0	8.7	9.8	9.3	8.8	8.2	8.7	8.5				
Degree Utilization, x	0.73	0.63	0.50	0.19	0.63	1.0	0.79	0.86				
Capacity (veh/h)	391	402	348	371	395	440	407	417				
Control Delay (s)	31.2	24.3	21.1	13.2	24.5	87.3	36.4	43.7				
Approach Delay (s)	27.9		18.9		64.9		40.2					
Approach LOS	D		C		F		E					
Intersection Summary												
Delay			42.7									
Level of Service			E									
Intersection Capacity Utilization			58.0%	ICU Level of Service					B			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 2031 Site+Forecasted AM W/Improvements

20: Wood Hollow Drive & Greystone Drive

6/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	106	163	212	71	158	39	30	387	56	31	241	70
Peak Hour Factor	0.81	0.89	0.64	0.80	0.82	0.72	0.53	0.88	0.79	0.68	0.85	0.68
Hourly flow rate (vph)	131	183	331	89	193	54	57	440	71	46	284	103
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2				
Volume Total (vph)	222	423	185	151	276	291	187	245				
Volume Left (vph)	131	0	89	0	57	0	46	0				
Volume Right (vph)	0	331	0	54	0	71	0	103				
Hadj (s)	0.33	-0.51	0.27	-0.22	0.14	-0.14	0.16	-0.26				
Departure Headway (s)	8.6	7.8	9.1	8.6	8.6	8.3	8.8	8.4				
Degree Utilization, x	0.53	0.91	0.47	0.36	0.66	0.67	0.46	0.57				
Capacity (veh/h)	409	458	373	401	408	421	386	409				
Control Delay (s)	19.8	50.0	18.7	15.2	25.3	25.3	17.9	20.8				
Approach Delay (s)	39.6		17.1		25.3		19.5					
Approach LOS	E		C		D		C					
Intersection Summary												
Delay			27.3									
Level of Service			D									
Intersection Capacity Utilization			58.6%	ICU Level of Service				B				
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 2031 Site+Forecasted AM W/Improvements

30: Greystone Drive & Mopac SB FR

6/2/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	283	0	0	4355	198
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.79	0.92	0.92	0.96	0.86
Hourly flow rate (vph)	0	358	0	0	4536	230
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	4652	1627	4767			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	4652	1627	4767			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	0	100			
cM capacity (veh/h)	1	91	21			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	358	1815	1815	1138		
Volume Left	0	0	0	0		
Volume Right	358	0	0	230		
cSH	91	1700	1700	1700		
Volume to Capacity	3.94	1.07	1.07	0.67		
Queue Length 95th (ft)	Err	0	0	0		
Control Delay (s)	Err	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	Err	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay		698.9				
Intersection Capacity Utilization		112.7%		ICU Level of Service		H
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis 2031 Site+Forecasted AM W/Improvements

40: Mopac SB FR & Executive Center Drive

6/2/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	111	0	0	3597	626
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.50	0.92	0.92	0.95	0.75
Hourly flow rate (vph)	0	222	0	0	3786	835
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	4204	1679	4621			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	4204	1679	4621			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	0	100			
cM capacity (veh/h)	1	84	24			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	222	1515	1515	1592		
Volume Left	0	0	0	0		
Volume Right	222	0	0	835		
cSH	84	1700	1700	1700		
Volume to Capacity	2.65	0.89	0.89	0.94		
Queue Length 95th (ft)	530	0	0	0		
Control Delay (s)	854.8	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	854.8	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay			39.2			
Intersection Capacity Utilization			97.0%		ICU Level of Service	F
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2031 Site+Forecasted AM W/Improvements 60: Executive Center Drive & Hart Lane

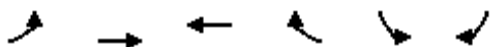
6/2/2014

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	277	165	274	361	76	170
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.79	0.67	0.83	0.72	0.75	0.46
Hourly flow rate (vph)	351	246	330	501	101	370
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)				358		
pX, platoon unblocked						
vC, conflicting volume			597		1635	474
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			597		1635	474
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			66		0	37
cM capacity (veh/h)			980		74	591
Direction, Lane #	EB 1	WB 1	NB 1	NB 2		
Volume Total	597	832	101	370		
Volume Left	0	330	101	0		
Volume Right	246	0	0	370		
cSH	1700	980	74	591		
Volume to Capacity	0.35	0.34	1.38	0.63		
Queue Length 95th (ft)	0	37	203	108		
Control Delay (s)	0.0	7.2	332.6	20.7		
Lane LOS		A	F	C		
Approach Delay (s)	0.0	7.2	87.8			
Approach LOS			F			
Intersection Summary						
Average Delay		24.9				
Intersection Capacity Utilization		73.0%		ICU Level of Service		D
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis 2031 Site+Forecasted AM W/Improvements

100: Executive Center Drive & Driveway 1

6/2/2014



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	270	259	430	196	13	53
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	293	282	467	213	14	58
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh						
Upstream signal (ft)		893				
pX, platoon unblocked						
vC, conflicting volume	680				1442	574
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	680				1442	574
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	68				86	89
cM capacity (veh/h)	912				99	518
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	575	680	72			
Volume Left	293	0	14			
Volume Right	0	213	58			
cSH	912	1700	282			
Volume to Capacity	0.32	0.40	0.25			
Queue Length 95th (ft)	35	0	25			
Control Delay (s)	7.6	0.0	22.0			
Lane LOS	A		C			
Approach Delay (s)	7.6	0.0	22.0			
Approach LOS			C			
Intersection Summary						
Average Delay			4.5			
Intersection Capacity Utilization			77.1%	ICU Level of Service		D
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2031 Site+Forecasted AM W/Improvements

200: Executive Center Drive & Driveway 2

6/2/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	19	6	55	428	523	125
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	21	7	60	465	568	136
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)					735	
pX, platoon unblocked	0.99	0.99	0.99			
vC, conflicting volume	1221	636	704			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1219	630	698			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	89	99	93			
cM capacity (veh/h)	184	478	891			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	27	525	704			
Volume Left	21	60	0			
Volume Right	7	0	136			
cSH	216	891	1700			
Volume to Capacity	0.13	0.07	0.41			
Queue Length 95th (ft)	11	5	0			
Control Delay (s)	24.0	1.8	0.0			
Lane LOS	C	A				
Approach Delay (s)	24.0	1.8	0.0			
Approach LOS	C					
Intersection Summary						
Average Delay			1.3			
Intersection Capacity Utilization			74.0%	ICU Level of Service		D
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2031 Site+Forecasted AM W/Improvements

300: Executive Center Drive & Driveway 3

6/2/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			W	W	
Volume (veh/h)	33	10	70	377	638	161
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	36	11	76	410	693	175
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)					569	
pX, platoon unblocked	0.75	0.75	0.75			
vC, conflicting volume	1343	781	868			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1292	546	662			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	70	97	89			
cM capacity (veh/h)	121	405	698			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	47	486	868			
Volume Left	36	76	0			
Volume Right	11	0	175			
cSH	145	698	1700			
Volume to Capacity	0.32	0.11	0.51			
Queue Length 95th (ft)	32	9	0			
Control Delay (s)	41.4	3.0	0.0			
Lane LOS	E	A				
Approach Delay (s)	41.4	3.0	0.0			
Approach LOS	E					
Intersection Summary						
Average Delay			2.4			
Intersection Capacity Utilization			80.4%		ICU Level of Service	D
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2031 Site+Forecasted AM W/Improvements

400: Executive Center Drive & Driveway 4

6/2/2014



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	14	31	266	144	133	785
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	15	34	289	157	145	853
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						301
pX, platoon unblocked	0.62					
vC, conflicting volume	1510	367			446	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1516	367			446	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	79	95			87	
cM capacity (veh/h)	71	678			1115	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	49	446	998			
Volume Left	15	0	145			
Volume Right	34	157	0			
cSH	186	1700	1115			
Volume to Capacity	0.26	0.26	0.13			
Queue Length 95th (ft)	25	0	11			
Control Delay (s)	31.2	0.0	3.2			
Lane LOS	D		A			
Approach Delay (s)	31.2	0.0	3.2			
Approach LOS	D					
Intersection Summary						
Average Delay		3.2				
Intersection Capacity Utilization		84.8%		ICU Level of Service	E	
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis 2031 Site+Forecasted AM W/Improvements

500: Executive Center Drive & Driveway 5

6/2/2014



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↩			↩
Volume (veh/h)	0	0	323	65	18	477
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	351	71	20	518
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			140			
pX, platoon unblocked	0.94	0.94			0.94	
vC, conflicting volume	944	386			422	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	907	312			350	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			98	
cM capacity (veh/h)	282	683			1133	
Direction, Lane #	NB 1	SB 1				
Volume Total	422	538				
Volume Left	0	20				
Volume Right	71	0				
cSH	1700	1133				
Volume to Capacity	0.25	0.02				
Queue Length 95th (ft)	0	1				
Control Delay (s)	0.0	0.5				
Lane LOS		A				
Approach Delay (s)	0.0	0.5				
Approach LOS						
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			43.0%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2031 Site+Forecasted AM W/Improvements

600: Executive Center Drive & Driveway 6

6/2/2014

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	7	23	299	24	21	488
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	8	25	325	26	23	530
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			352			
pX, platoon unblocked						
vC, conflicting volume	914	338			351	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	914	338			351	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	97	96			98	
cM capacity (veh/h)	297	704			1208	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	33	351	553			
Volume Left	8	0	23			
Volume Right	25	26	0			
cSH	534	1700	1208			
Volume to Capacity	0.06	0.21	0.02			
Queue Length 95th (ft)	5	0	1			
Control Delay (s)	12.2	0.0	0.5			
Lane LOS	B		A			
Approach Delay (s)	12.2	0.0	0.5			
Approach LOS	B					
Intersection Summary						
Average Delay			0.7			
Intersection Capacity Utilization			52.7%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2031 Site+Forecasted AM W/Improvements

700: Executive Center Drive & Driveway 7

6/2/2014



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	4	319	3	7	509
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	4	347	3	8	553
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			536			
pX, platoon unblocked						
vC, conflicting volume	917	348			350	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	917	348			350	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	99			99	
cM capacity (veh/h)	300	695			1209	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	4	350	561			
Volume Left	0	0	8			
Volume Right	4	3	0			
cSH	695	1700	1209			
Volume to Capacity	0.01	0.21	0.01			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	10.2	0.0	0.2			
Lane LOS	B		A			
Approach Delay (s)	10.2	0.0	0.2			
Approach LOS	B					
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			42.4%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2031 Site+Forecasted AM W/Improvements

800: Executive Center Drive & Driveway 8

6/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	3	0	47	47	0	0	18	287	18	0	422	1
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	3	0	51	51	0	0	20	312	20	0	459	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)								676				
pX, platoon unblocked												
vC, conflicting volume	820	830	459	871	821	322	460			332		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	820	830	459	871	821	322	460			332		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	100	92	79	100	100	98			100		
cM capacity (veh/h)	290	300	602	245	304	719	1101			1228		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	54	51	351	460								
Volume Left	3	51	20	0								
Volume Right	51	0	20	1								
cSH	565	245	1101	1228								
Volume to Capacity	0.10	0.21	0.02	0.00								
Queue Length 95th (ft)	8	19	1	0								
Control Delay (s)	12.0	23.5	0.6	0.0								
Lane LOS	B	C	A									
Approach Delay (s)	12.0	23.5	0.6	0.0								
Approach LOS	B	C										
Intersection Summary												
Average Delay			2.3									
Intersection Capacity Utilization			47.0%	ICU Level of Service						A		
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 2031 Site+Forecasted AM W/Improvements

900: Executive Center Drive & Driveway 9

6/2/2014

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	21	290	0	1	423
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	23	315	0	1	460
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)			872			
pX, platoon unblocked						
vC, conflicting volume	777	315			315	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	777	315			315	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	97			100	
cM capacity (veh/h)	365	725			1245	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	23	315	461			
Volume Left	0	0	1			
Volume Right	23	0	0			
cSH	725	1700	1245			
Volume to Capacity	0.03	0.19	0.00			
Queue Length 95th (ft)	2	0	0			
Control Delay (s)	10.1	0.0	0.0			
Lane LOS	B		A			
Approach Delay (s)	10.1	0.0	0.0			
Approach LOS	B					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			33.1%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2031 Site+Forecasted AM W/Improvements 1000: Executive Center Drive & Driveway 10

6/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	76	0	5	3	0	53	2	307	2	11	416	12
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	83	0	5	3	0	58	2	334	2	12	452	13
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)								1039				
pX, platoon unblocked												
vC, conflicting volume	879	823	459	827	828	335	465			336		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	879	823	459	827	828	335	465			336		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	66	100	99	99	100	92	100			99		
cM capacity (veh/h)	244	305	602	285	303	707	1096			1223		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	88	61	338	477								
Volume Left	83	3	2	12								
Volume Right	5	58	2	13								
cSH	253	655	1096	1223								
Volume to Capacity	0.35	0.09	0.00	0.01								
Queue Length 95th (ft)	37	8	0	1								
Control Delay (s)	26.6	11.1	0.1	0.3								
Lane LOS	D	B	A	A								
Approach Delay (s)	26.6	11.1	0.1	0.3								
Approach LOS	D	B										
Intersection Summary												
Average Delay			3.3									
Intersection Capacity Utilization			47.9%		ICU Level of Service				A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 2031 Site+Forecasted AM W/Improvements 1100: Driveway 11 & Wood Hollow Drive

6/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	392	81	293	917	0	22	0	113	22	0	12
Sign Control		Free			Free			Stop			Stop	
Grade		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
Hourly flow rate (vph)	0	426	88	318	997	0	24	0	123	24	0	13
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)		271			251							
pX, platoon unblocked	0.26			0.92			0.30	0.30	0.92	0.30	0.30	0.26
vC, conflicting volume	997			514			2117	2104	470	2227	2148	997
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			427			2925	2882	379	3285	3026	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			69			0	100	80	0	100	95
cM capacity (veh/h)	429			1040			2	3	614	1	3	287
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1							
Volume Total	514	1315	24	123	37							
Volume Left	0	318	24	0	24							
Volume Right	88	0	0	123	13							
cSH	1700	1040	2	614	1							
Volume to Capacity	0.30	0.31	11.28	0.20	24.92							
Queue Length 95th (ft)	0	33	Err	19	Err							
Control Delay (s)	0.0	8.0	Err	12.3	Err							
Lane LOS		A	F	B	F							
Approach Delay (s)	0.0	8.0	1639.8		Err							
Approach LOS			F		F							
Intersection Summary												
Average Delay			308.3									
Intersection Capacity Utilization			108.6%		ICU Level of Service				G			
Analysis Period (min)			15									

Lanes, Volumes, Timings
1: Hart Lane & Far West Boulevard

2031 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	106	750	49	239	782	191	76	218	175	213	192	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	170		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	1		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	0.95	0.95	0.95	1.00	1.00	1.00
Frt		0.988				0.850		0.945			0.933	
Flt Protected	0.950			0.950				0.992		0.950		
Satd. Flow (prot)	1770	3497	0	1770	3539	1583	0	3318	0	1770	1738	0
Flt Permitted	0.134			0.163				0.537		0.263		
Satd. Flow (perm)	250	3497	0	304	3539	1583	0	1796	0	490	1738	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7				225		95			36	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		362			1265			236			237	
Travel Time (s)		7.1			24.6			5.4			5.4	
Peak Hour Factor	0.73	0.83	0.61	0.69	0.83	0.85	0.80	0.80	0.82	0.90	0.56	0.47
Adj. Flow (vph)	145	904	80	346	942	225	95	272	213	237	343	274
Shared Lane Traffic (%)												
Lane Group Flow (vph)	145	984	0	346	942	225	0	580	0	237	617	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2		1	6			4		3	8	
Permitted Phases	2			6		6	4			8		
Detector Phase	5	2		1	6	6	4	4		3	8	

Lanes, Volumes, Timings
1: Hart Lane & Far West Boulevard

2031 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	8.0	18.0		8.0	18.0	18.0	12.0	12.0		4.0	12.0	
Minimum Split (s)	13.0	24.0		13.0	24.0	24.0	33.0	33.0		8.0	33.0	
Total Split (s)	19.0	47.0		27.0	55.0	55.0	47.0	47.0		9.0	56.0	
Total Split (%)	14.6%	36.2%		20.8%	42.3%	42.3%	36.2%	36.2%		6.9%	43.1%	
Maximum Green (s)	14.0	42.0		22.0	50.0	50.0	42.0	42.0		5.0	51.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		3.5	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		0.5	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0		5.0		4.0	5.0	
Lead/Lag	Lead	Lead		Lag	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	
Walk Time (s)		7.0			7.0	7.0	7.0	7.0			7.0	
Flash Dont Walk (s)		12.0			12.0	12.0	21.0	21.0			21.0	
Pedestrian Calls (#/hr)		0			0	0	0	0			0	
Act Effect Green (s)	42.2	42.2		51.5	51.5	51.5		40.1		52.2	51.2	
Actuated g/C Ratio	0.32	0.32		0.40	0.40	0.40		0.31		0.40	0.39	
v/c Ratio	0.65	0.86		0.95	0.67	0.30		0.94		0.89	0.87	
Control Delay	46.4	50.1		60.8	17.1	1.0		60.0		67.6	49.2	
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	
Total Delay	46.4	50.1		60.8	17.1	1.0		60.0		67.6	49.2	
LOS	D	D		E	B	A		E		E	D	
Approach Delay		49.6			24.7			60.0			54.3	
Approach LOS		D			C			E			D	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.95

Intersection Signal Delay: 42.8

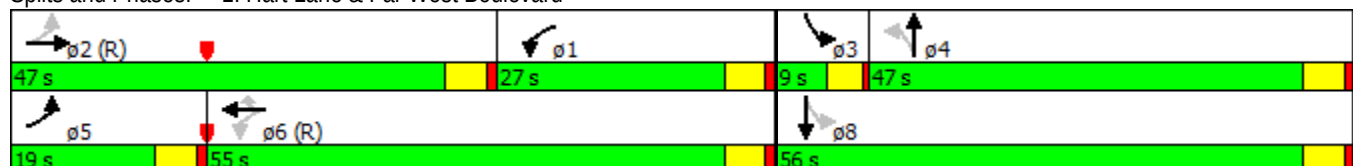
Intersection LOS: D

Intersection Capacity Utilization 84.0%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 1: Hart Lane & Far West Boulevard



Lanes, Volumes, Timings
2: Wood Hollow Drive & Far West Boulevard

2031 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	199	941	77	290	864	163	124	289	393	193	209	178
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	335		0	165		0	120		120	0		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	75			35			50			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.929	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1730	0
Flt Permitted	0.222			0.179			0.267			0.311		
Satd. Flow (perm)	414	3539	1583	333	3539	1583	497	1863	1583	579	1730	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			111			181			272		41	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1265			1235			599			222	
Travel Time (s)		24.6			24.1			13.6			5.0	
Peak Hour Factor	0.74	0.91	0.58	0.90	0.88	0.81	0.69	0.65	0.87	0.90	0.81	0.77
Adj. Flow (vph)	269	1034	133	322	982	201	180	445	452	214	258	231
Shared Lane Traffic (%)												
Lane Group Flow (vph)	269	1034	133	322	982	201	180	445	452	214	489	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Right	Left	L NA	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	1	6		5	2			3			7	
Permitted Phases	6		6	2		2	3		3	7		
Detector Phase	1	6	6	5	2	2	3	3	3	7	7	

Lanes, Volumes, Timings
2: Wood Hollow Drive & Far West Boulevard

2031 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	8.0	8.0	8.0	5.0	5.0	
Minimum Split (s)	10.0	22.0	22.0	10.0	22.0	22.0	31.0	31.0	31.0	31.0	31.0	
Total Split (s)	23.0	48.0	48.0	25.0	50.0	50.0	57.0	57.0	57.0	57.0	57.0	
Total Split (%)	17.7%	36.9%	36.9%	19.2%	38.5%	38.5%	43.8%	43.8%	43.8%	43.8%	43.8%	
Maximum Green (s)	18.0	43.0	43.0	20.0	45.0	45.0	52.0	52.0	52.0	52.0	52.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
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	
Recall Mode	None	C-Min	C-Min	Max	C-Min	C-Min	Min	Min	Min	Max	Max	
Walk Time (s)		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)		12.0	12.0		12.0	12.0	21.0	21.0	21.0	21.0	21.0	
Pedestrian Calls (#/hr)		0	0		0	0	0	0	0	0	0	
Act Effect Green (s)	42.1	42.1	42.1	42.3	42.3	42.3	52.9	52.9	52.9	52.9	52.9	
Actuated g/C Ratio	0.32	0.32	0.32	0.33	0.33	0.33	0.41	0.41	0.41	0.41	0.41	
v/c Ratio	0.79	0.90	0.23	0.98	0.85	0.32	0.89	0.59	0.56	0.91	0.67	
Control Delay	37.1	27.2	2.3	49.6	43.6	8.2	78.7	34.2	14.2	77.6	34.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	37.1	27.2	2.3	49.6	43.6	8.2	78.7	34.2	14.2	77.6	34.4	
LOS	D	C	A	D	D	A	E	C	B	E	C	
Approach Delay		26.7			40.2			33.2			47.5	
Approach LOS		C			D			C			D	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.98

Intersection Signal Delay: 35.6

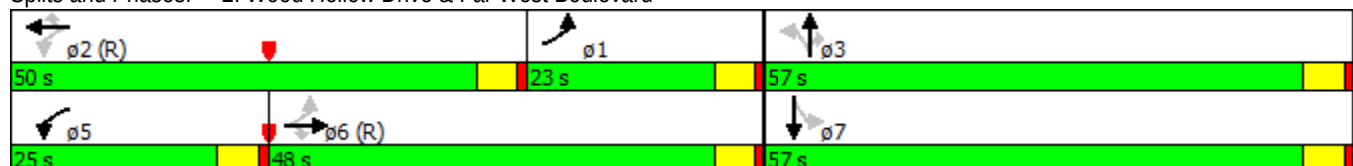
Intersection LOS: D

Intersection Capacity Utilization 87.5%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 2: Wood Hollow Drive & Far West Boulevard



Lanes, Volumes, Timings
3: Far West Boulevard & Mopac SB FR

2031 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑						↑↑	↑
Volume (vph)	0	1420	475	13	522	0	0	0	0	463	838	1187
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									0.850
Flt Protected				0.950							0.981	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	0	3472	1583
Flt Permitted				0.950							0.981	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	0	3472	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			249									135
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		1235			406			400			362	
Travel Time (s)		24.1			7.9			5.5			4.9	
Peak Hour Factor	0.92	0.91	0.93	0.67	0.93	0.92	0.92	0.92	0.92	0.78	0.92	0.95
Adj. Flow (vph)	0	1560	511	19	561	0	0	0	0	594	911	1249
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1560	511	19	561	0	0	0	0	0	1505	1249
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	L NA	Right	Left	Left	Right	Left	Left	R NA
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	custom	Prot	NA					custom	NA	custom
Protected Phases		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Permitted Phases										4		
Detector Phase		1 2 22	1 22	7	1 7 22					4 8	4 8	2 4 8
Switch Phase												
Minimum Initial (s)				10.0								
Minimum Split (s)				15.0								

Lane Group	ø1	ø2	ø4	ø8	ø22
Lane Configurations					
Volume (vph)					
Ideal Flow (vphpl)					
Lane Util. Factor					
Frt					
Flt Protected					
Satd. Flow (prot)					
Flt Permitted					
Satd. Flow (perm)					
Right Turn on Red					
Satd. Flow (RTOR)					
Link Speed (mph)					
Link Distance (ft)					
Travel Time (s)					
Peak Hour Factor					
Adj. Flow (vph)					
Shared Lane Traffic (%)					
Lane Group Flow (vph)					
Enter Blocked Intersection					
Lane Alignment					
Median Width(ft)					
Link Offset(ft)					
Crosswalk Width(ft)					
Two way Left Turn Lane					
Headway Factor					
Turning Speed (mph)					
Number of Detectors					
Detector Template					
Leading Detector (ft)					
Trailing Detector (ft)					
Detector 1 Position(ft)					
Detector 1 Size(ft)					
Detector 1 Type					
Detector 1 Channel					
Detector 1 Extend (s)					
Detector 1 Queue (s)					
Detector 1 Delay (s)					
Detector 2 Position(ft)					
Detector 2 Size(ft)					
Detector 2 Type					
Detector 2 Channel					
Detector 2 Extend (s)					
Turn Type					
Protected Phases	1	2	4	8	22
Permitted Phases					
Detector Phase					
Switch Phase					
Minimum Initial (s)	4.0	13.0	10.0	4.0	1.0
Minimum Split (s)	9.0	18.0	15.0	9.0	6.0

Lanes, Volumes, Timings
3: Far West Boulevard & Mopac SB FR

2031 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)				15.0								
Total Split (%)				11.5%								
Maximum Green (s)				10.0								
Yellow Time (s)				4.0								
All-Red Time (s)				1.0								
Lost Time Adjust (s)				0.0								
Total Lost Time (s)				5.0								
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0								
Recall Mode				Min								
Act Effect Green (s)		53.0	31.0	10.0	46.0						52.0	74.0
Actuated g/C Ratio		0.41	0.24	0.08	0.35						0.40	0.57
v/c Ratio		1.08	0.90	0.14	0.45						1.08	1.30
Control Delay		98.5	47.6	74.8	5.6						87.9	168.6
Queue Delay		11.7	0.0	0.0	0.4						0.0	0.0
Total Delay		110.2	47.6	74.8	6.0						87.9	168.6
LOS		F	D	E	A						F	F
Approach Delay		94.7			8.2						124.5	
Approach LOS		F			A						F	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.53

Intersection Signal Delay: 100.6

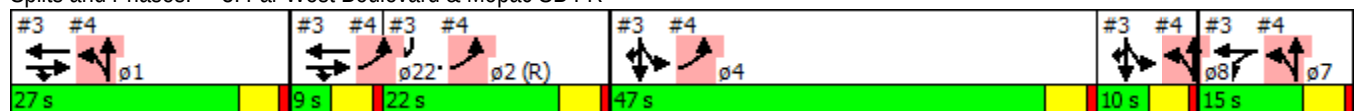
Intersection LOS: F

Intersection Capacity Utilization 130.8%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 3: Far West Boulevard & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø8	ø22
Total Split (s)	27.0	22.0	47.0	10.0	9.0
Total Split (%)	21%	17%	36%	8%	7%
Maximum Green (s)	22.0	17.0	42.0	5.0	4.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)					
Total Lost Time (s)					
Lead/Lag		Lag	Lead	Lag	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	C-Min	Min	Min	None
Act Effect Green (s)					
Actuated g/C Ratio					
v/c Ratio					
Control Delay					
Queue Delay					
Total Delay					
LOS					
Approach Delay					
Approach LOS					
Intersection Summary					

Lanes, Volumes, Timings
4: Mopac NB FR & Far West Boulevard

2031 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Lane Configurations												
Volume (vph)	1895	0	457	231	0	0						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900						
Lane Util. Factor	0.97	1.00	0.95	0.95	1.00	1.00						
Frt												
Flt Protected	0.950		0.950	0.997								
Satd. Flow (prot)	3433	0	1681	1764	0	0						
Flt Permitted	0.950		0.950	0.997								
Satd. Flow (perm)	3433	0	1681	1764	0	0						
Right Turn on Red		Yes				Yes						
Satd. Flow (RTOR)												
Link Speed (mph)	35			50	50							
Link Distance (ft)	406			308	472							
Travel Time (s)	7.9			4.2	6.4							
Peak Hour Factor	0.90	0.92	0.93	0.25	0.92	0.92						
Adj. Flow (vph)	2106	0	491	924	0	0						
Shared Lane Traffic (%)			10%									
Lane Group Flow (vph)	2106	0	442	973	0	0						
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Right	Left	Left	Left	Right						
Median Width(ft)	24			12	12							
Link Offset(ft)	0			0	0							
Crosswalk Width(ft)	16			16	16							
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00						
Turning Speed (mph)	15	9	15			9						
Number of Detectors	1		1	2								
Detector Template	Left		Left	Thru								
Leading Detector (ft)	20		20	100								
Trailing Detector (ft)	0		0	0								
Detector 1 Position(ft)	0		0	0								
Detector 1 Size(ft)	20		20	6								
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0								
Detector 1 Queue (s)	0.0		0.0	0.0								
Detector 1 Delay (s)	0.0		0.0	0.0								
Detector 2 Position(ft)				94								
Detector 2 Size(ft)				6								
Detector 2 Type				Cl+Ex								
Detector 2 Channel												
Detector 2 Extend (s)				0.0								
Turn Type	Prot		Split	NA								
Protected Phases	2 4 22		1 7 8	1 7 8			1	2	4	7	8	22
Permitted Phases												
Detector Phase	2 4 22		1 7 8	1 7 8								
Switch Phase												
Minimum Initial (s)							4.0	13.0	10.0	10.0	4.0	1.0
Minimum Split (s)							9.0	18.0	15.0	15.0	9.0	6.0

Lanes, Volumes, Timings
4: Mopac NB FR & Far West Boulevard

2031 Site+Forecasted PM W/Improvements

6/2/2014



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø1	ø2	ø4	ø7	ø8	ø22
Total Split (s)							27.0	22.0	47.0	15.0	10.0	9.0
Total Split (%)							21%	17%	36%	12%	8%	7%
Maximum Green (s)							22.0	17.0	42.0	10.0	5.0	4.0
Yellow Time (s)							4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)							1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag								Lag	Lead		Lag	Lead
Lead-Lag Optimize?								Yes	Yes		Yes	Yes
Vehicle Extension (s)							3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode							Min	C-Min	Min	Min	Min	None
Act Effect Green (s)	73.0		47.0	47.0								
Actuated g/C Ratio	0.56		0.36	0.36								
v/c Ratio	1.09		0.73	1.53								
Control Delay	68.9		44.3	276.6								
Queue Delay	4.5		0.0	0.0								
Total Delay	73.3		44.3	276.6								
LOS	E		D	F								
Approach Delay	73.3			204.0								
Approach LOS	E			F								

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.53

Intersection Signal Delay: 125.9

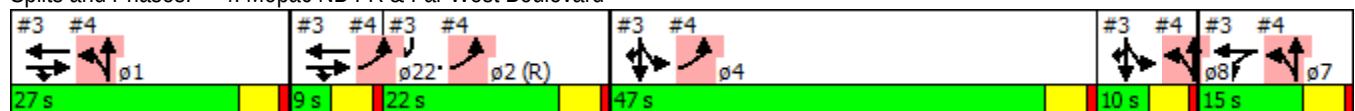
Intersection LOS: F

Intersection Capacity Utilization 144.0%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 4: Mopac NB FR & Far West Boulevard



Lanes, Volumes, Timings
5: Spicewood Springs Road & Mopac SB FR

2031 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑					↑	↑↑	↑
Volume (vph)	0	2366	456	867	1946	0	0	0	0	764	407	569
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	60		0	0		0	150		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			75			25			75		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.977	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1610	3312	1583
Flt Permitted				0.950						0.950	0.977	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1610	3312	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			160									160
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		294			386			782			882	
Travel Time (s)		5.7			7.5			10.7			12.0	
Peak Hour Factor	0.92	0.81	0.90	0.87	0.86	0.92	0.92	0.92	0.92	0.93	0.87	0.94
Adj. Flow (vph)	0	2921	507	997	2263	0	0	0	0	822	468	605
Shared Lane Traffic (%)										49%		
Lane Group Flow (vph)	0	2921	507	997	2263	0	0	0	0	419	871	605
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Prot	Prot	NA					Split	NA	Prot
Protected Phases		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5
Permitted Phases												
Detector Phase		1 2	1 2	6 7 19	1 2 6 7					4 5	4 5	4 5

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

Lanes, Volumes, Timings
5: Spicewood Springs Road & Mopac SB FR

2031 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)		61.0	61.0	47.0	104.0					27.0	27.0	27.0
Actuated g/C Ratio		0.41	0.41	0.31	0.69					0.18	0.18	0.18
v/c Ratio		2.03	0.69	1.80	0.92					1.45	1.46	1.45
Control Delay		484.4	8.5	386.7	25.7					262.9	258.5	248.2
Queue Delay		1.6	2.3	1.2	46.5					0.0	0.0	6.3
Total Delay		486.0	10.8	387.9	72.2					262.9	258.5	254.5
LOS		F	B	F	E					F	F	F
Approach Delay		415.7			168.7						258.2	
Approach LOS		F			F						F	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 89 (59%), Referenced to phase 2:EBWB, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 2.03

Intersection Signal Delay: 287.1

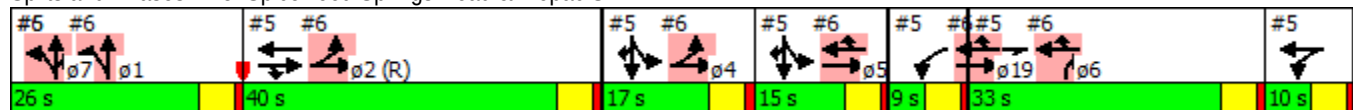
Intersection LOS: F

Intersection Capacity Utilization 178.6%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 5: Spicewood Springs Road & Mopac SB FR



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0	5.0	6.0
Minimum Split (s)	8.0	15.0	10.0	8.0	15.0	10.0	11.0
Total Split (s)	26.0	40.0	17.0	15.0	33.0	10.0	9.0
Total Split (%)	17%	27%	11%	10%	22%	7%	6%
Maximum Green (s)	21.0	35.0	12.0	10.0	28.0	5.0	4.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

Lanes, Volumes, Timings
6: Mopac NB FR & Spicewood Springs Road

2031 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1034	1756	0	0	1644	535	529	53	687	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		325	0		0	0		0
Storage Lanes	1		0	0		1	1		1	0		0
Taper Length (ft)	75			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.91	0.95	1.00	1.00	1.00
Frt						0.850		0.906	0.850			
Flt Protected	0.950						0.950	0.990				
Satd. Flow (prot)	1770	3539	0	0	3539	1583	1681	1520	1504	0	0	0
Flt Permitted	0.950						0.950	0.990				
Satd. Flow (perm)	1770	3539	0	0	3539	1583	1681	1520	1504	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						233		51	285			
Link Speed (mph)		35			35			50			50	
Link Distance (ft)		386			594			563			407	
Travel Time (s)		7.5			11.6			7.7			5.6	
Peak Hour Factor	0.90	0.96	0.92	0.92	0.93	0.79	0.86	0.60	0.87	0.92	0.92	0.92
Adj. Flow (vph)	1149	1829	0	0	1768	677	615	88	790	0	0	0
Shared Lane Traffic (%)							16%		40%			
Lane Group Flow (vph)	1149	1829	0	0	1768	677	517	502	474	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Prot	Split	NA	custom			
Protected Phases	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			
Permitted Phases												
Detector Phase	2 4	2 4 5 19			5 6 19	5 6 19	1 7	1 7	6 7			

Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Lane Configurations							
Volume (vph)							
Ideal Flow (vphpl)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Peak Hour Factor							
Adj. Flow (vph)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Enter Blocked Intersection							
Lane Alignment							
Median Width(ft)							
Link Offset(ft)							
Crosswalk Width(ft)							
Two way Left Turn Lane							
Headway Factor							
Turning Speed (mph)							
Number of Detectors							
Detector Template							
Leading Detector (ft)							
Trailing Detector (ft)							
Detector 1 Position(ft)							
Detector 1 Size(ft)							
Detector 1 Type							
Detector 1 Channel							
Detector 1 Extend (s)							
Detector 1 Queue (s)							
Detector 1 Delay (s)							
Detector 2 Position(ft)							
Detector 2 Size(ft)							
Detector 2 Type							
Detector 2 Channel							
Detector 2 Extend (s)							
Turn Type							
Protected Phases	1	2	4	5	6	7	19
Permitted Phases							
Detector Phase							

Lanes, Volumes, Timings
6: Mopac NB FR & Spicewood Springs Road

2031 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)												
Minimum Split (s)												
Total Split (s)												
Total Split (%)												
Maximum Green (s)												
Yellow Time (s)												
All-Red Time (s)												
Lost Time Adjust (s)												
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)												
Recall Mode												
Act Effect Green (s)	52.0	76.0			52.0	52.0	31.0	31.0	38.0			
Actuated g/C Ratio	0.35	0.51			0.35	0.35	0.21	0.21	0.25			
v/c Ratio	1.87	1.02			1.44	0.97	1.49	1.42	0.80			
Control Delay	417.7	28.7			239.9	57.9	275.3	241.8	31.5			
Queue Delay	2.5	33.0			3.6	0.0	0.0	0.4	0.0			
Total Delay	420.2	61.6			243.5	57.9	275.3	242.3	31.5			
LOS	F	E			F	E	F	F	C			
Approach Delay		200.0			192.1			186.8				
Approach LOS		F			F			F				

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 89 (59%), Referenced to phase 2:EBWB, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 2.03

Intersection Signal Delay: 194.4

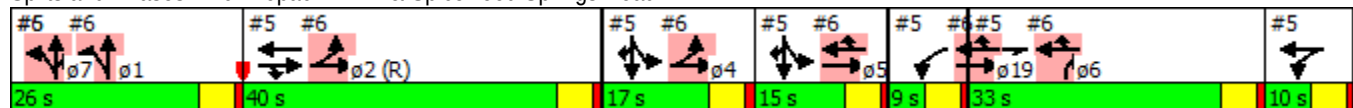
Intersection LOS: F

Intersection Capacity Utilization 178.6%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 6: Mopac NB FR & Spicewood Springs Road



Lane Group	ø1	ø2	ø4	ø5	ø6	ø7	ø19
Switch Phase							
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0	5.0	6.0
Minimum Split (s)	8.0	15.0	10.0	8.0	15.0	10.0	11.0
Total Split (s)	26.0	40.0	17.0	15.0	33.0	10.0	9.0
Total Split (%)	17%	27%	11%	10%	22%	7%	6%
Maximum Green (s)	21.0	35.0	12.0	10.0	28.0	5.0	4.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	C-Max	Max	Max	Max	Max	None
Act Effect Green (s)							
Actuated g/C Ratio							
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Intersection Summary							

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  			 			 	
Volume (vph)	7	1328	99	531	1015	1	490	11	1129	1	4	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	175		0	0		100	0		0
Storage Lanes	1		0	1		0	1		1	0		0
Taper Length (ft)	75			75			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.993						0.852	0.850		0.895	
Flt Protected	0.950			0.950			0.950				0.996	
Satd. Flow (prot)	1770	5050	0	1770	3539	0	1770	1508	1504	0	1660	0
Flt Permitted	0.258			0.076			0.740				0.668	
Satd. Flow (perm)	481	5050	0	142	3539	0	1378	1508	1504	0	1114	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6						513	513		21	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1093			275			251			161	
Travel Time (s)		21.3			5.4			5.7			3.7	
Peak Hour Factor	0.72	0.50	0.76	0.50	0.92	0.50	0.91	0.85	0.62	0.58	0.90	0.84
Adj. Flow (vph)	10	2656	130	1062	1103	2	538	13	1821	2	4	21
Shared Lane Traffic (%)									50%			
Lane Group Flow (vph)	10	2786	0	1062	1105	0	538	924	910	0	27	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		18			18			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			8	
Permitted Phases	2			6			4		4	8		
Detector Phase	5	2		1	6		4	4	4	8	8	

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	20.0		21.0	20.0		15.0	15.0	15.0	11.0	11.0	
Minimum Split (s)	10.0	25.0		26.0	25.0		35.0	35.0	35.0	35.0	35.0	
Total Split (s)	10.0	63.0		52.0	105.0		35.0	35.0	35.0	35.0	35.0	
Total Split (%)	6.7%	42.0%		34.7%	70.0%		23.3%	23.3%	23.3%	23.3%	23.3%	
Maximum Green (s)	5.0	58.0		47.0	100.0		30.0	30.0	30.0	30.0	30.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0		0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0		5.0	
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min		Min	C-Min		Min	Min	Min	Min	Min	
Walk Time (s)							6.0	6.0	6.0	6.0	6.0	
Flash Dont Walk (s)							24.0	24.0	24.0	24.0	24.0	
Pedestrian Calls (#/hr)							0	0	0	0	0	
Act Effect Green (s)	61.4	58.0		103.4	103.4		30.0	30.0	30.0		30.0	
Actuated g/C Ratio	0.41	0.39		0.69	0.69		0.20	0.20	0.20		0.20	
v/c Ratio	0.04	1.42		1.75	0.45		1.96	1.30	1.28		0.11	
Control Delay	27.9	229.1		368.9	11.2		474.0	164.8	157.1		23.4	
Queue Delay	0.0	1.7		0.3	0.4		0.0	0.8	0.8		0.0	
Total Delay	27.9	230.8		369.2	11.6		474.0	165.6	157.9		23.4	
LOS	C	F		F	B		F	F	F		C	
Approach Delay		230.1			186.8			232.6			23.4	
Approach LOS		F			F			F			C	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 55 (37%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.96

Intersection Signal Delay: 217.4

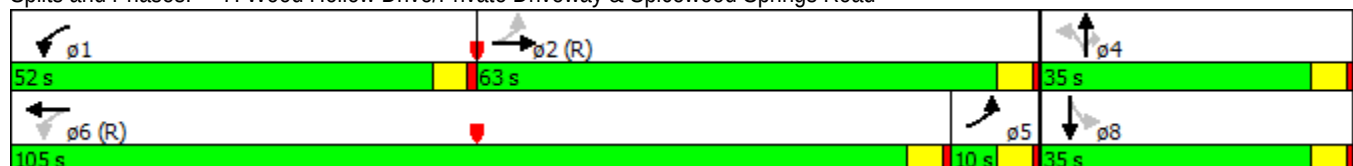
Intersection LOS: F

Intersection Capacity Utilization 103.6%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 7: Wood Hollow Drive/Private Driveway & Spicewood Springs Road



Lanes, Volumes, Timings
50: Executive Center Drive & Wood Hollow Drive

2031 Site+Forecasted PM W/Improvements

6/2/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	63	399	81	96	275	263	241	330	451	73	146	148
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. 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
Frt		0.977				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1820	0	1770	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.437			0.250			0.598			0.252		
Satd. Flow (perm)	814	1820	0	466	1863	1583	1114	1863	1583	469	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15				208			124			249
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		255			271			301			140	
Travel Time (s)		5.8			6.2			6.8			3.2	
Peak Hour Factor	0.67	0.91	1.00	0.86	0.91	0.91	0.50	0.46	0.50	0.25	0.56	0.47
Adj. Flow (vph)	94	438	81	112	302	289	482	717	902	292	261	315
Shared Lane Traffic (%)												
Lane Group Flow (vph)	94	519	0	112	302	289	482	717	902	292	261	315
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6		6	8		8	4		4
Detector Phase	2	2		6	6	6	8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	21.0	21.0		21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0

Lanes, Volumes, Timings
50: Executive Center Drive & Wood Hollow Drive

2031 Site+Forecasted PM W/Improvements

6/2/2014

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	21.0	21.0		21.0	21.0	21.0	39.0	39.0	39.0	39.0	39.0	39.0
Total Split (%)	35.0%	35.0%		35.0%	35.0%	35.0%	65.0%	65.0%	65.0%	65.0%	65.0%	65.0%
Maximum Green (s)	16.0	16.0		16.0	16.0	16.0	34.0	34.0	34.0	34.0	34.0	34.0
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
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
Recall Mode	C-Max	C-Max		C-Max	C-Max	C-Max	Max	Max	Max	Max	Max	Max
Walk Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0	0	0	0	0
Act Effect Green (s)	16.0	16.0		16.0	16.0	16.0	34.0	34.0	34.0	34.0	34.0	34.0
Actuated g/C Ratio	0.27	0.27		0.27	0.27	0.27	0.57	0.57	0.57	0.57	0.57	0.57
v/c Ratio	0.43	1.05		0.90	0.61	0.50	0.76	0.68	0.95	1.10	0.25	0.31
Control Delay	25.7	78.4		87.9	25.4	9.5	20.6	13.3	32.8	105.7	7.3	2.7
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.7	78.4		87.9	25.4	9.5	20.6	13.3	32.8	105.7	7.3	2.7
LOS	C	E		F	C	A	C	B	C	F	A	A
Approach Delay		70.3			28.8			23.3			38.7	
Approach LOS		E			C			C			D	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 60

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.10

Intersection Signal Delay: 34.1

Intersection LOS: C

Intersection Capacity Utilization 70.4%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 50: Executive Center Drive & Wood Hollow Drive



Lanes, Volumes, Timings
70: Spicewood Springs Road & Hart Lane

2031 Site+Forecasted PM W/Improvements

6/2/2014

							ø5	ø6	ø8
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø5	ø6	ø8
Lane Configurations									
Volume (vph)	384	405	201	1680	1106	270			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900			
Storage Length (ft)	0	0	225			0			
Storage Lanes	1	1	1			0			
Taper Length (ft)	25		150						
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95			
Frt		0.850			0.963				
Flt Protected	0.950		0.950						
Satd. Flow (prot)	1770	1583	1770	3539	3408	0			
Flt Permitted	0.950		0.950						
Satd. Flow (perm)	1770	1583	1770	3539	3408	0			
Right Turn on Red		Yes				Yes			
Satd. Flow (RTOR)		32			50				
Link Speed (mph)	30			35	35				
Link Distance (ft)	358			1093	145				
Travel Time (s)	8.1			21.3	2.8				
Peak Hour Factor	0.85	0.87	0.86	0.88	0.89	0.67			
Adj. Flow (vph)	452	466	234	1909	1243	403			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	452	466	234	1909	1646	0			
Enter Blocked Intersection	No	No	No	No	No	No			
Lane Alignment	L NA	Right	Left	R NA	Left	Right			
Median Width(ft)	18			18	6				
Link Offset(ft)	0			0	0				
Crosswalk Width(ft)	16			16	16				
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00			
Turning Speed (mph)	15	9	15			9			
Number of Detectors	1	1	1	2	2				
Detector Template	Left	Right	Left	Thru	Thru				
Leading Detector (ft)	20	20	20	100	100				
Trailing Detector (ft)	0	0	0	0	0				
Detector 1 Position(ft)	0	0	0	0	0				
Detector 1 Size(ft)	20	20	20	6	6				
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel									
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0				
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0				
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0				
Detector 2 Position(ft)				94	94				
Detector 2 Size(ft)				6	6				
Detector 2 Type				Cl+Ex	Cl+Ex				
Detector 2 Channel									
Detector 2 Extend (s)				0.0	0.0				
Turn Type	Prot	pm+ov	Prot	NA	NA				
Protected Phases	2!	3	3	6 8!	4		5	6	8
Permitted Phases		2							
Detector Phase	2	3	3	6 8	4				

Lanes, Volumes, Timings
70: Spicewood Springs Road & Hart Lane

2031 Site+Forecasted PM W/Improvements

6/2/2014



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	ø5	ø6	ø8
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Minimum Split (s)	9.0	9.0	9.0		23.0		23.0	9.0	9.0
Total Split (s)	37.0	21.0	21.0		62.0		23.0	14.0	83.0
Total Split (%)	30.8%	17.5%	17.5%		51.7%		19%	12%	69%
Maximum Green (s)	32.0	16.0	16.0		57.0		18.0	9.0	78.0
Yellow Time (s)	4.0	4.0	4.0		4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0		1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0				
Total Lost Time (s)	5.0	5.0	5.0		5.0				
Lead/Lag		Lead	Lead		Lag		Lead	Lag	
Lead-Lag Optimize?		Yes	Yes		Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0	3.0
Recall Mode	Min	None	None		None		None	None	None
Walk Time (s)					7.0		7.0		
Flash Dont Walk (s)					11.0		11.0		
Pedestrian Calls (#/hr)					0		0		
Act Effect Green (s)	31.7	52.7	16.0	119.7	57.0				
Actuated g/C Ratio	0.26	0.44	0.13	1.00	0.48				
v/c Ratio	0.97	0.65	0.99	0.54	1.00				
Control Delay	77.8	29.6	108.0	0.6	52.4				
Queue Delay	0.0	0.0	0.0	0.0	0.0				
Total Delay	77.8	29.6	108.0	0.6	52.4				
LOS	E	C	F	A	D				
Approach Delay	53.3			12.3	52.4				
Approach LOS	D			B	D				

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 119.7

Natural Cycle: 130

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.00

Intersection Signal Delay: 34.3

Intersection LOS: C

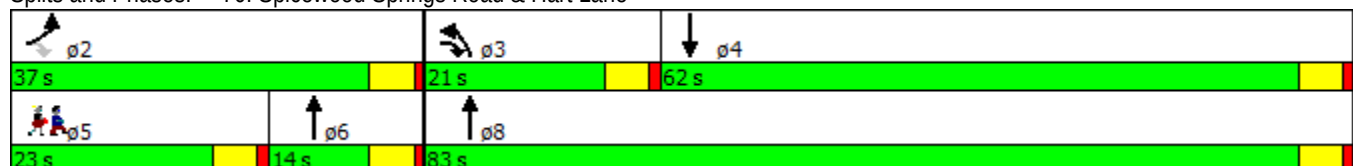
Intersection Capacity Utilization 84.1%

ICU Level of Service E

Analysis Period (min) 15

! Phase conflict between lane groups.

Splits and Phases: 70: Spicewood Springs Road & Hart Lane



HCM Unsignalized Intersection Capacity Analysis 2031 Site+Forecasted PM W/Improvements

10: Hart Lane & Greystone Drive

6/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	56	122	63	103	239	68	112	366	70	14	321	88
Peak Hour Factor	0.80	0.65	0.65	0.78	0.88	0.58	0.75	0.81	0.60	0.58	0.69	0.57
Hourly flow rate (vph)	70	188	97	132	272	117	149	452	117	24	465	154
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2				
Volume Total (vph)	164	191	268	253	375	343	257	387				
Volume Left (vph)	70	0	132	0	149	0	24	0				
Volume Right (vph)	0	97	0	117	0	117	0	154				
Hadj (s)	0.25	-0.32	0.28	-0.29	0.23	-0.20	0.08	-0.25				
Departure Headway (s)	9.8	9.3	9.5	8.9	9.1	8.6	9.0	8.7				
Degree Utilization, x	0.45	0.49	0.71	0.63	0.95	0.82	0.64	0.94				
Capacity (veh/h)	350	366	366	389	391	410	386	403				
Control Delay (s)	19.4	19.7	31.0	24.5	62.2	39.7	25.8	58.3				
Approach Delay (s)	19.5		27.8		51.5		45.3					
Approach LOS	C		D		F		E					
Intersection Summary												
Delay			39.1									
Level of Service			E									
Intersection Capacity Utilization			59.8%	ICU Level of Service					B			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 2031 Site+Forecasted PM W/Improvements

20: Wood Hollow Drive & Greystone Drive

6/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	80	91	66	116	309	77	103	417	92	34	370	101
Peak Hour Factor	0.81	0.89	0.64	0.80	0.82	0.72	0.53	0.88	0.79	0.68	0.85	0.68
Hourly flow rate (vph)	99	102	103	145	377	107	194	474	116	50	435	149
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2				
Volume Total (vph)	150	154	333	295	431	353	268	366				
Volume Left (vph)	99	0	145	0	194	0	50	0				
Volume Right (vph)	0	103	0	107	0	116	0	149				
Hadj (s)	0.36	-0.43	0.25	-0.22	0.26	-0.20	0.13	-0.25				
Departure Headway (s)	10.1	9.3	9.3	8.8	9.2	8.7	9.2	8.8				
Degree Utilization, x	0.42	0.40	0.86	0.72	1.0	0.86	0.68	0.90				
Capacity (veh/h)	336	361	380	399	402	408	382	394				
Control Delay (s)	19.0	17.2	46.8	30.4	104.5	44.6	28.6	51.4				
Approach Delay (s)	18.1		39.1		77.5		41.8					
Approach LOS	C		E		F		E					
Intersection Summary												
Delay			49.9									
Level of Service			E									
Intersection Capacity Utilization			66.6%		ICU Level of Service					C		
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 2031 Site+Forecasted PM W/Improvements

30: Greystone Drive & Mopac SB FR

6/2/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	228	0	0	2467	461
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.79	0.92	0.92	0.96	0.86
Hourly flow rate (vph)	0	289	0	0	2570	536
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2838	1125	3106			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2838	1125	3106			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	0	100			
cM capacity (veh/h)	14	199	102			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	289	1028	1028	1050		
Volume Left	0	0	0	0		
Volume Right	289	0	0	536		
cSH	199	1700	1700	1700		
Volume to Capacity	1.45	0.60	0.60	0.62		
Queue Length 95th (ft)	435	0	0	0		
Control Delay (s)	272.0	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	272.0	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay		23.1				
Intersection Capacity Utilization		78.7%		ICU Level of Service	D	
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis 2031 Site+Forecasted PM W/Improvements

40: Mopac SB FR & Executive Center Drive

6/2/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations					  	
Volume (veh/h)	0	539	0	0	2557	289
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.50	0.92	0.92	0.95	0.75
Hourly flow rate (vph)	0	1078	0	0	2692	385
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2884	1090	3077			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2884	1090	3077			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	0	100			
cM capacity (veh/h)	13	210	105			
Direction, Lane #	EB 1	SB 1	SB 2	SB 3		
Volume Total	1078	1077	1077	924		
Volume Left	0	0	0	0		
Volume Right	1078	0	0	385		
cSH	210	1700	1700	1700		
Volume to Capacity	5.13	0.63	0.63	0.54		
Queue Length 95th (ft)	Err	0	0	0		
Control Delay (s)	Err	0.0	0.0	0.0		
Lane LOS	F					
Approach Delay (s)	Err	0.0				
Approach LOS	F					
Intersection Summary						
Average Delay		2594.3				
Intersection Capacity Utilization		95.9%		ICU Level of Service		F
Analysis Period (min)		15				

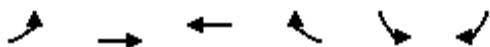
HCM Unsignalized Intersection Capacity Analysis 2031 Site+Forecasted PM W/Improvements 60: Executive Center Drive & Hart Lane

6/2/2014

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	346	132	195	252	192	376
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.79	0.67	0.83	0.72	0.75	0.46
Hourly flow rate (vph)	438	197	235	350	256	817
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (ft)				358		
pX, platoon unblocked						
vC, conflicting volume			635		1356	536
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			635		1356	536
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			75		0	0
cM capacity (veh/h)			948		124	544
Direction, Lane #	EB 1	WB 1	NB 1	NB 2		
Volume Total	635	585	256	817		
Volume Left	0	235	256	0		
Volume Right	197	0	0	817		
cSH	1700	948	124	544		
Volume to Capacity	0.37	0.25	2.07	1.50		
Queue Length 95th (ft)	0	24	527	1038		
Control Delay (s)	0.0	5.9	566.3	255.7		
Lane LOS		A	F	F		
Approach Delay (s)	0.0	5.9	329.8			
Approach LOS			F			
Intersection Summary						
Average Delay			155.9			
Intersection Capacity Utilization			70.9%	ICU Level of Service		C
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2031 Site+Forecasted PM W/Improvements 100: Executive Center Drive & Driveway 1

6/2/2014



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	49	273	254	35	84	322
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	53	297	276	38	91	350
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)		893				
pX, platoon unblocked						
vC, conflicting volume	314				698	295
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	314				698	295
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	96				77	53
cM capacity (veh/h)	1246				389	744
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	350	314	441			
Volume Left	53	0	91			
Volume Right	0	38	350			
cSH	1246	1700	626			
Volume to Capacity	0.04	0.18	0.70			
Queue Length 95th (ft)	3	0	144			
Control Delay (s)	1.6	0.0	23.3			
Lane LOS	A		C			
Approach Delay (s)	1.6	0.0	23.3			
Approach LOS			C			
Intersection Summary						
Average Delay		9.8				
Intersection Capacity Utilization		67.1%		ICU Level of Service		C
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis 2031 Site+Forecasted PM W/Improvements

200: Executive Center Drive & Driveway 2

6/2/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	130	42	11	565	280	25
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	141	46	12	614	304	27
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)					735	
pX, platoon unblocked						
vC, conflicting volume	956	318	332			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	956	318	332			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	50	94	99			
cM capacity (veh/h)	283	723	1228			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	187	626	332			
Volume Left	141	12	0			
Volume Right	46	0	27			
cSH	333	1228	1700			
Volume to Capacity	0.56	0.01	0.20			
Queue Length 95th (ft)	82	1	0			
Control Delay (s)	28.8	0.3	0.0			
Lane LOS	D	A				
Approach Delay (s)	28.8	0.3	0.0			
Approach LOS	D					
Intersection Summary						
Average Delay			4.9			
Intersection Capacity Utilization			55.0%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2031 Site+Forecasted PM W/Improvements

300: Executive Center Drive & Driveway 3

6/2/2014



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	157	51	17	678	254	39
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	171	55	18	737	276	42
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)					569	
pX, platoon unblocked						
vC, conflicting volume	1071	297	318			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1071	297	318			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	29	93	99			
cM capacity (veh/h)	241	742	1242			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	226	755	318			
Volume Left	171	18	0			
Volume Right	55	0	42			
cSH	289	1242	1700			
Volume to Capacity	0.78	0.01	0.19			
Queue Length 95th (ft)	152	1	0			
Control Delay (s)	51.1	0.4	0.0			
Lane LOS	F	A				
Approach Delay (s)	51.1	0.4	0.0			
Approach LOS	F					
Intersection Summary						
Average Delay			9.1			
Intersection Capacity Utilization			67.8%	ICU Level of Service		C
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2031 Site+Forecasted PM W/Improvements

400: Executive Center Drive & Driveway 4

6/2/2014



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	58	130	743	92	88	235
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	63	141	808	100	96	255
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						301
pX, platoon unblocked	0.97					
vC, conflicting volume	1304	858			908	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1298	858			908	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	58	60			87	
cM capacity (veh/h)	151	357			750	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	204	908	351			
Volume Left	63	0	96			
Volume Right	141	100	0			
cSH	251	1700	750			
Volume to Capacity	0.81	0.53	0.13			
Queue Length 95th (ft)	158	0	11			
Control Delay (s)	61.3	0.0	4.0			
Lane LOS	F		A			
Approach Delay (s)	61.3	0.0	4.0			
Approach LOS	F					
Intersection Summary						
Average Delay			9.5			
Intersection Capacity Utilization			83.1%		ICU Level of Service	E
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2031 Site+Forecasted PM W/Improvements

500: Executive Center Drive & Driveway 5

6/2/2014



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↩			↩
Volume (veh/h)	0	0	514	142	48	219
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	559	154	52	238
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			140			
pX, platoon unblocked	0.76	0.76			0.76	
vC, conflicting volume	978	636			713	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	815	365			466	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			94	
cM capacity (veh/h)	248	518			834	
Direction, Lane #	NB 1	SB 1				
Volume Total	713	290				
Volume Left	0	52				
Volume Right	154	0				
cSH	1700	834				
Volume to Capacity	0.42	0.06				
Queue Length 95th (ft)	0	5				
Control Delay (s)	0.0	2.3				
Lane LOS		A				
Approach Delay (s)	0.0	2.3				
Approach LOS						
Intersection Summary						
Average Delay			0.7			
Intersection Capacity Utilization			56.1%		ICU Level of Service	B
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2031 Site+Forecasted PM W/Improvements

600: Executive Center Drive & Driveway 6

6/2/2014

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	39	131	458	56	42	228
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	42	142	498	61	46	248
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)			352			
pX, platoon unblocked						
vC, conflicting volume	867	528			559	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	867	528			559	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	86	74			95	
cM capacity (veh/h)	309	550			1012	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	185	559	293			
Volume Left	42	0	46			
Volume Right	142	61	0			
cSH	466	1700	1012			
Volume to Capacity	0.40	0.33	0.05			
Queue Length 95th (ft)	47	0	4			
Control Delay (s)	17.7	0.0	1.7			
Lane LOS	C		A			
Approach Delay (s)	17.7	0.0	1.7			
Approach LOS	C					
Intersection Summary						
Average Delay		3.6				
Intersection Capacity Utilization		62.1%		ICU Level of Service		B
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis 2031 Site+Forecasted PM W/Improvements

700: Executive Center Drive & Driveway 7

6/2/2014

									
Movement	WBL	WBR	NBT	NBR	SBL	SBT			
Lane Configurations									
Volume (veh/h)	3	31	583	6	10	267			
Sign Control	Stop		Free			Free			
Grade	0%		0%			0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92			
Hourly flow rate (vph)	3	34	634	7	11	290			
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type			None			None			
Median storage veh									
Upstream signal (ft)			536						
pX, platoon unblocked									
vC, conflicting volume	949	637			640				
vC1, stage 1 conf vol									
vC2, stage 2 conf vol									
vCu, unblocked vol	949	637			640				
tC, single (s)	6.4	6.2			4.1				
tC, 2 stage (s)									
tF (s)	3.5	3.3			2.2				
p0 queue free %	99	93			99				
cM capacity (veh/h)	286	477			944				
Direction, Lane #	WB 1	NB 1	SB 1						
Volume Total	37	640	301						
Volume Left	3	0	11						
Volume Right	34	7	0						
cSH	451	1700	944						
Volume to Capacity	0.08	0.38	0.01						
Queue Length 95th (ft)	7	0	1						
Control Delay (s)	13.7	0.0	0.4						
Lane LOS	B		A						
Approach Delay (s)	13.7	0.0	0.4						
Approach LOS	B								
Intersection Summary									
Average Delay		0.7							
Intersection Capacity Utilization		41.0%	ICU Level of Service	A					
Analysis Period (min)		15							

HCM Unsignalized Intersection Capacity Analysis 2031 Site+Forecasted PM W/Improvements

800: Executive Center Drive & Driveway 8

6/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	1	0	25	24	0	0	75	466	73	2	228	3
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	1	0	27	26	0	0	82	507	79	2	248	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)								676				
pX, platoon unblocked												
vC, conflicting volume	963	1003	249	990	965	546	251			586		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	963	1003	249	990	965	546	251			586		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	97	87	100	100	94			100		
cM capacity (veh/h)	224	227	789	207	239	537	1314			989		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	28	26	667	253								
Volume Left	1	26	82	2								
Volume Right	27	0	79	3								
cSH	719	207	1314	989								
Volume to Capacity	0.04	0.13	0.06	0.00								
Queue Length 95th (ft)	3	11	5	0								
Control Delay (s)	10.2	24.9	1.6	0.1								
Lane LOS	B	C	A	A								
Approach Delay (s)	10.2	24.9	1.6	0.1								
Approach LOS	B	C										
Intersection Summary												
Average Delay			2.1									
Intersection Capacity Utilization			63.4%		ICU Level of Service				B			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 2031 Site+Forecasted PM W/Improvements

900: Executive Center Drive & Driveway 9

6/2/2014

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	11	467	0	3	233
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	12	508	0	3	253
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)			872			
pX, platoon unblocked						
vC, conflicting volume	767	508			508	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	767	508			508	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	98			100	
cM capacity (veh/h)	369	565			1057	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	12	508	257			
Volume Left	0	0	3			
Volume Right	12	0	0			
cSH	565	1700	1057			
Volume to Capacity	0.02	0.30	0.00			
Queue Length 95th (ft)	2	0	0			
Control Delay (s)	11.5	0.0	0.1			
Lane LOS	B		A			
Approach Delay (s)	11.5	0.0	0.1			
Approach LOS	B					
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			34.6%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2031 Site+Forecasted PM W/Improvements

1000: Executive Center Drive & Driveway 10

6/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	0	3	2	0	27	8	465	5	45	231	51
Sign Control		Stop			Stop			Free			Free	
Grade		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
Hourly flow rate (vph)	43	0	3	2	0	29	9	505	5	49	251	55
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)								1039				
pX, platoon unblocked												
vC, conflicting volume	932	905	279	905	930	508	307			511		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	932	905	279	905	930	508	307			511		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	81	100	100	99	100	95	99			95		
cM capacity (veh/h)	225	262	760	246	253	565	1254			1054		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	47	32	520	355								
Volume Left	43	2	9	49								
Volume Right	3	29	5	55								
cSH	236	518	1254	1054								
Volume to Capacity	0.20	0.06	0.01	0.05								
Queue Length 95th (ft)	18	5	1	4								
Control Delay (s)	24.0	12.4	0.2	1.6								
Lane LOS	C	B	A	A								
Approach Delay (s)	24.0	12.4	0.2	1.6								
Approach LOS	C	B										
Intersection Summary												
Average Delay			2.3									
Intersection Capacity Utilization			58.0%	ICU Level of Service					B			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 2031 Site+Forecasted PM W/Improvements

1100: Driveway 12 & Wood Hollow Drive

6/2/2014

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	869	54	188	446	0	93	0	470	125	0	63
Sign Control		Free			Free			Stop			Stop	
Grade		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
Hourly flow rate (vph)	0	945	59	204	485	0	101	0	511	136	0	68
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)		271			251							
pX, platoon unblocked	0.55			0.90			0.60	0.60	0.90	0.60	0.60	0.55
vC, conflicting volume	485			1003			1936	1867	974	2378	1897	485
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			950			1864	1750	917	2606	1799	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			69			0	100	0	0	100	88
cM capacity (veh/h)	890			653			22	35	297	0	33	595
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1							
Volume Total	1003	689	101	511	204							
Volume Left	0	204	101	0	136							
Volume Right	59	0	0	511	68							
cSH	1700	653	22	297	0							
Volume to Capacity	0.59	0.31	4.54	1.72	Err							
Queue Length 95th (ft)	0	33	Err	814	Err							
Control Delay (s)	0.0	7.9	Err	366.6	Err							
Lane LOS		A	F	F	F							
Approach Delay (s)	0.0	7.9	1957.8		Err							
Approach LOS			F		F							
Intersection Summary												
Average Delay			Err									
Intersection Capacity Utilization			110.3%		ICU Level of Service				H			
Analysis Period (min)			15									

EXHIBIT 11

**APPROACH LEVEL OF SERVICE
AND DELAY TABLES**

AUSTIN OAKS
TRAFFIC IMPACT ANALYSIS
LEVEL OF SERVICE BY APPROACH (AM PEAK PERIOD)

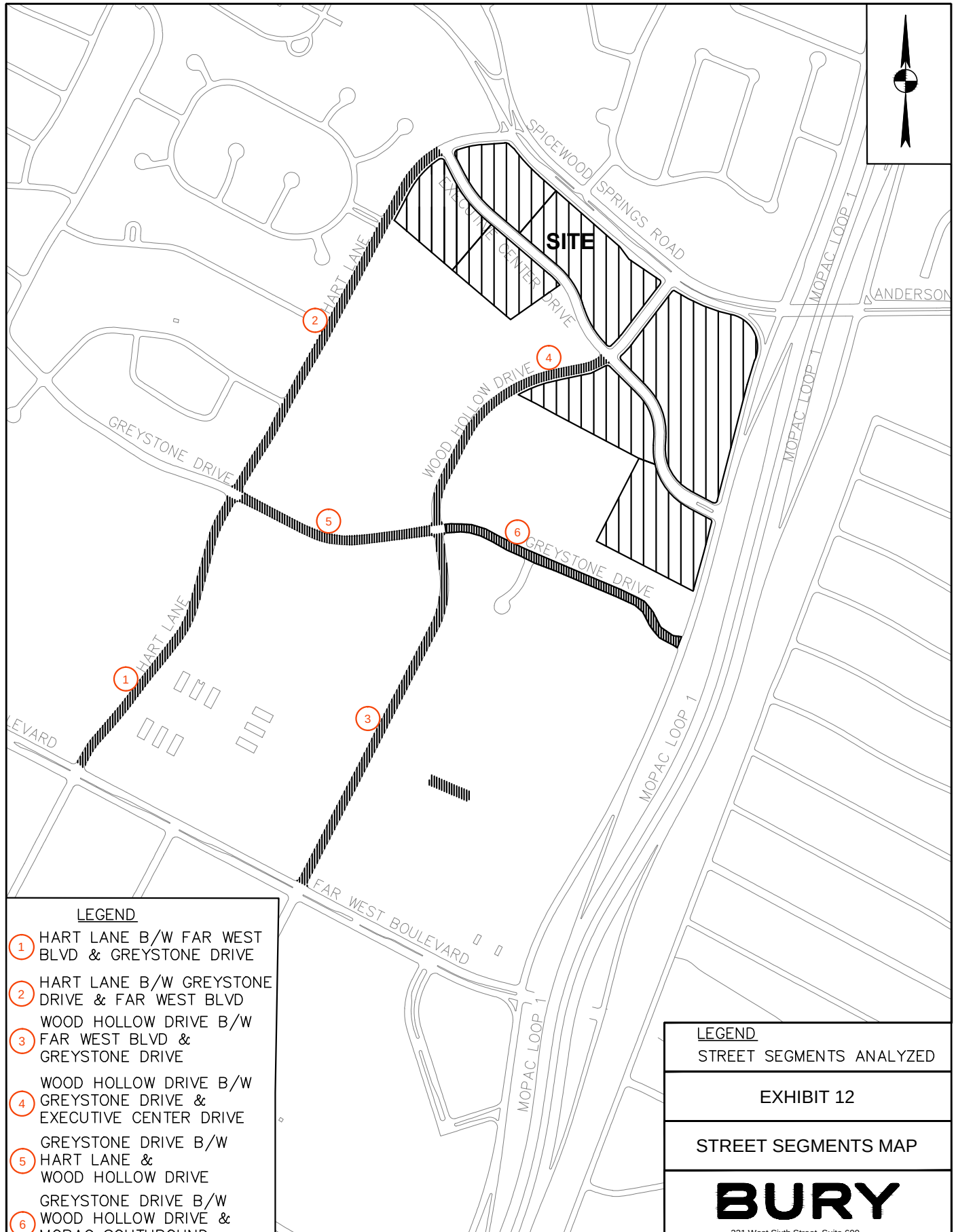
Intersection	Approach	AM																	
		2014		2018		2018		2023		2023		2028		2028		2031		2031	
		Existing		Forecasted		Site + Forecasted		Forecasted		Site + Forecasted		Forecasted		Site + Forecasted		Forecasted		Site + Forecasted	
		LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)
Far West Boulevard & Hart Lane	EB	D	35.6	D	42.7	D	45.4	D	49.0	D	50.1	E	60.6	E	60.5	E	74.3	E	79.3
	WB	E	58.0	E	65.8	E	65.4	E	67.5	E	71.2	F	91.8	F	91.8	F	102.5	F	103.3
	NB	D	37.7	D	39.9	D	45.4	D	48.7	D	51.4	E	55.8	E	56.1	E	61.6	E	66.8
	SB	D	53.7	D	53.9	E	59.7	F	109.1	F	133.8	F	203.8	F	251.2	F	297.9	F	313.6
Far West Boulevard & Wood Hollow Drive	EB	D	41.8	D	37.4	D	36.5	D	35.6	D	35.8	C	34.7	C	34.5	C	34.2	C	34.7
	WB	D	48.2	D	46.9	D	46.0	D	44.0	D	43.8	D	41.4	D	41.4	D	39.9	D	39.8
	NB	D	43.8	D	47.3	D	49.9	D	54.5	E	57.7	F	101.9	F	102.9	F	147.9	F	166.5
	SB	D	45.2	D	53.6	D	54.2	F	87.6	F	89.4	F	109.0	F	109.0	F	126.8	F	128.5
Far West Boulevard & Mopac SB FR	EB	C	28.8	C	30.4	C	30.4	C	33.1	C	33.1	C	34.7	C	34.7	D	36.9	D	36.9
	WB	A	4.2	A	3.9	A	3.8	A	4.1	A	4.3	A	5.2	A	5.2	A	6.5	A	6.5
	SB	C	29.8	D	35.7	D	35.2	D	46.7	D	45.1	E	67.8	E	68.8	F	83.6	F	84.3
Far West Boulevard & Mopac NB FR	EB	A	3.7	A	3.8	A	3.4	A	4.0	A	4.1	A	5.3	A	5.8	A	7.4	A	7.5
	NB	D	46.9	D	50.8	F	86.2	F	111.5	F	242.8	F	301.5	F	338.4	F	381.4	F	540.1
Spicewood Springs Road & Mopac SB FR	EB	F	210.9	F	259.7	F	288.0	F	353.8	F	383.5	F	461.3	F	533.6	F	590.6	F	604.8
	WB	D	40.6	D	49.6	E	67.7	E	73.6	F	98.6	F	121.2	F	120.6	F	135.8	F	154.7
	SB	F	126.1	F	162.8	F	192.4	F	242.8	F	273.9	F	335.2	F	339.5	F	380.6	F	406.0
Spicewood Springs Road & Mopac NB FR	EB	A	4.1	A	6.5	A	9.1	C	25.5	D	36.5	E	56.2	E	57.4	E	58.3	E	58.6
	WB	D	37.7	D	52.4	E	79.9	F	83.9	F	83.6	F	118.3	F	123.2	F	148.0	F	175.1
	NB	F	131.8	F	159.4	F	218.8	F	264.1	F	317.9	F	375.0	F	385.1	F	424.6	F	462.1
Spicewood Springs Road & Wood Hollow Drive / Private Driveway	EB	C	29.6	C	31.5	C	33.1	D	43.2	D	52.7	F	88.7	F	119.0	F	149.5	F	159.0
	WB	E	73.9	F	109.1	F	312.3	F	378.4	F	590.3	F	726.5	F	855.2	F	920.0	F	1106.4
	NB	C	22.4	C	22.6	C	26.7	C	31.8	D	39.9	D	47.6	F	81.2	F	101.1	F	129.4
	SB	A	0.3	A	0.3	A	0.3	A	0.3	A	0.3	A	0.3	A	0.2	A	0.2	A	0.3
Greystone Drive & Hart Lane	EB	B	14.8	C	17.8	C	23.2	D	29.7	E	43.1	F	68.5	F	69.0	F	106.8	F	133.5
	WB	B	13.7	C	15.7	C	17.4	C	19.3	C	21.2	D	25.1	D	25.2	D	27.1	D	27.5
	NB	C	15.6	C	18.6	C	23.2	D	29.6	E	45.5	F	71.1	F	77.4	F	289.5	F	337.6
	SB	D	25.2	E	37.6	F	50.5	F	93.0	F	133.8	F	208.4	F	264.9	F	311.6	F	320.6
Greystone Drive & Wood Hollow Drive	EB	B	10.7	B	11.7	B	13.5	C	15.6	C	17.4	C	21.5	C	21.6	D	25.4	D	29.1
	WB	B	11.5	B	12.6	B	14.0	C	16.1	C	17.4	C	21.2	C	21.2	C	24.7	D	26.7
	NB	B	10.0	B	10.7	B	12.4	B	13.8	C	16.0	C	18.9	C	19.0	C	21.5	D	25.6
	SB	B	10.2	B	11.0	B	12.2	B	13.5	B	14.5	C	16.7	C	16.8	C	18.5	C	19.7
Greystone Drive & Mopac SB FR	EB	F	220.2	F	368.4	F	377.1	F	630.2	F	642.5	F	>9999.9	F	>9999.9	F	>9999.9	F	>9999.9
	SB	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0
Executive Center Drive & Mopac SB FR	EB	C	21.2	C	23.9	D	30.1	E	39.0	F	85.0	F	164.4	F	391.7	F	554.0	F	854.8
	SB	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0
Executive Center Drive & Wood Hollow Drive	EB	A	1.4	A	1.5	A	1.2	A	1.3	A	1.8	A	1.9	A	2.5	A	3.1	A	3.5
	SB	A	2.5	A	2.6	A	2.7	A	2.9	A	5.0	A	5.5	A	5.6	A	5.9	A	9.6
	EB	C	19.0	C	23.3	F	74.0	F	193.4	F	>9999.9	F	>9999.9	F	>9999.9	F	>9999.9	F	>9999.9
	SB	B	13.2	B	14.1	F	74.5	F	156.1	F	>9999.9	F	>9999.9	F	>9999.9	F	>9999.9	F	>9999.9
Executive Center Drive & Hart Lane	EB	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0
	WB	A	2.1	A	2.2	A	3.2	A	3.4	A	4.7	A	5.2	A	5.6	A	5.9	A	7.2
	NB	B	11.4	B	11.6	B	13.6	B	14.8	C	21.6	D	28.5	F	207.6	F	309.2	F	500.5
Spicewood Springs Road & Hart Lane	EB	F	4068.6	F	4096.3	F	4267.9	F	4273.7	F	4293.2	F	4326.2	F	3703.6	F	3789.2	F	3893.7
	NB	A	2.1	A	2.3	A	2.4	A	2.8	A	3.0	A	3.9	A	4.4	A	5.7	A	6.3
	SB	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0
Executive Center Drive & Driveway 1	EB	-	-	-	-	A	0.0	A	0.0	A	6.3	A	6.7	A	6.5	A	6.8	A	7.6
	WB	-	-	-	-	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0
	SB	-	-	-	-	A	0.0	A	0.0	B	14.2	C	15.7	C	16.2	C	17.7	C	22.0
Executive Center Drive & Driveway 2	EB	-	-	-	-	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	C	23.9
	NB	-	-	-	-	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	1.8
	SB	-	-	-	-	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0
Executive Center Drive & Driveway 3	EB	-	-	-	-	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	D	32.6
	NB	-	-	-	-	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	2.7
	SB	-	-	-	-	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0
Executive Center Drive & Driveway 4	WB	-	-	-	-	B	10.6	B	11.0	B	13.2	B	14.1	B	14.6	C	15.5	C	21.3
	NB	-	-	-	-	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0
	SB	-	-	-	-	A	3.8	A	3.9	A	2.7	A	2.9	A	2.8	A	3.0	A	3.2
Executive Center Drive & Driveway 5	WB	-	-	-	-	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0
	NB	-	-	-	-	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0
	SB	-	-	-	-	A	0.0	A	0.0	A	0.6	A	0.6	A	0.5	A	0.5	A	0.5
Executive Center Drive & Driveway 6	WB	-	-	-	-	A	0.0	A	0.0	B	10.5	B	10.8	B	11.5	B	11.7	B	12.2
	NB	-	-	-	-	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0
	SB	-	-	-	-	A	0.0	A	0.0	A	0.6	A	0.7	A	0.6	A	0.6	A	0.5
Executive Center Drive & Driveway 7	WB	-	-	-	-	A	0.0	A	0.0	A	9.6	A	9.8	B	10.0	B	10.2	B	10.2
	NB	-	-	-	-	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0
	SB	-	-	-	-	A	0.0	A	0.0	A	0.2	A	0.2	A	0.5	A	0.2	A	0.2
Executive Center Drive & Driveway 8	EB	-	-	-	-	A	0.0	A	0.0	A	0.0	A							

AUSTIN OAKS
TRAFFIC IMPACT ANALYSIS
LEVEL OF SERVICE BY APPROACH (PM PEAK PERIOD)

Intersection	Approach	PM																	
		2014		2018		2018		2023		2023		2028		2028		2031		2031	
		Existing		Forecasted		Site + Forecasted		Forecasted		Site + Forecasted		Forecasted		Site + Forecasted		Forecasted		Site + Forecasted	
		LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)
Far West Boulevard & Hart Lane	EB	B	19.9	C	22.0	C	28.4	C	33.8	D	43.4	D	44.3	D	46.6	D	46.0	D	47.1
	WB	C	22.8	C	20.9	B	16.5	B	16.5	B	19.1	B	17.5	B	17.6	B	17.5	B	19.4
	NB	D	47.3	D	48.3	D	49.5	D	52.0	D	53.9	E	57.3	E	58.4	E	64.4	E	65.3
	SB	E	59.6	E	59.3	E	57.3	E	55.7	D	50.5	F	92.9	F	118.2	F	242.5	F	269.9
Far West Boulevard & Wood Hollow Drive	EB	D	43.6	D	41.0	C	31.7	C	25.8	C	21.5	B	19.0	B	18.9	B	17.5	B	17.9
	WB	E	62.2	E	63.7	E	65.7	E	70.8	E	72.2	E	79.1	E	79.1	F	85.2	F	89.0
	NB	D	36.6	C	33.8	C	33.4	D	38.3	D	41.0	D	55.0	E	59.4	F	85.9	F	96.0
	SB	D	43.0	E	57.5	E	67.1	F	90.5	F	146.9	F	182.2	F	182.2	F	204.8	F	244.9
Far West Boulevard & Mopac SB FR	EB	E	67.7	E	71.0	E	77.1	F	83.9	F	87.0	F	129.7	F	129.6	F	155.7	F	155.5
	WB	A	3.5	A	3.4	A	3.5	A	3.5	A	3.4	A	3.9	A	3.9	A	4.0	A	4.0
	SB	F	104.8	F	141.3	F	85.1	F	131.4	F	160.2	F	221.1	F	229.9	F	271.6	F	293.4
Far West Boulevard & Mopac NB FR	EB	E	78.3	F	80.1	E	72.3	E	67.3	E	64.5	F	84.7	F	84.7	F	115.8	F	115.8
	NB	C	27.1	C	27.7	C	30.5	C	31.7	D	37.7	D	41.8	F	101.0	F	120.1	F	141.8
Spicewood Springs Road & Mopac SB FR	EB	F	173.9	F	211.4	F	382.3	F	453.9	F	607.0	F	704.2	F	739.2	F	806.5	F	892.6
	WB	C	29.7	D	51.7	E	58.9	E	68.4	E	68.4	E	68.7	E	67.8	E	77.4	F	80.3
	SB	F	97.3	F	119.4	F	113.1	F	146.3	F	166.2	F	214.1	F	235.1	F	269.8	F	276.7
Spicewood Springs Road & Mopac NB FR	EB	C	31.2	D	50.4	E	58.2	E	69.5	F	112.3	F	136.4	F	147.5	F	164.8	F	191.6
	WB	C	33.0	D	39.7	D	45.5	E	76.3	F	80.1	F	83.9	F	82.4	F	94.0	F	97.8
	NB	F	160.6	F	191.4	F	232.3	F	279.4	F	327.9	F	386.4	F	451.3	F	494.0	F	508.9
Spicewood Springs Road & Wood Hollow Drive / Private Driveway	EB	C	22.2	C	26.1	F	81.8	F	82.5	F	84.8	F	90.9	F	92.7	F	89.7	F	89.4
	WB	B	11.8	B	12.4	D	43.1	D	54.4	F	159.9	F	198.9	F	335.3	F	365.7	F	397.5
	NB	D	48.2	D	44.3	F	220.2	F	309.1	F	554.2	F	654.0	F	690.3	F	756.0	F	930.9
	SB	C	22.1	C	20.3	C	24.7	C	24.8	C	25.4	C	24.2	C	24.2	C	23.8	C	23.8
Greystone Drive & Hart Lane	EB	B	10.7	B	11.5	C	15.2	C	16.6	C	20.0	C	22.8	C	22.8	D	25.1	D	26.7
	WB	B	13.2	B	15.0	C	21.3	D	25.7	E	36.0	E	49.0	E	48.9	F	61.1	F	71.8
	NB	C	17.7	C	22.0	F	53.1	F	99.7	F	166.7	F	244.4	F	292.0	F	351.5	F	372.7
	SB	B	13.3	C	15.1	D	27.1	E	37.4	F	103.5	F	163.5	F	189.7	F	239.7	F	287.5
Greystone Drive & Wood Hollow Drive	EB	B	10.6	B	11.5	B	13.3	B	14.8	C	15.9	C	17.6	C	17.7	C	19.1	C	19.9
	WB	C	21.6	D	29.3	D	35.0	F	56.2	F	69.8	F	112.4	F	113.5	F	141.9	F	158.8
	NB	B	12.6	B	14.3	C	20.7	D	27.3	D	33.4	E	46.8	E	49.7	F	63.7	F	70.0
	SB	B	10.6	B	11.6	B	14.9	C	17.3	C	22.3	D	27.3	D	27.5	D	33.2	E	39.9
Greystone Drive & Mopac SB FR	EB	D	33.9	F	50.1	E	36.7	F	60.4	F	74.3	F	151.0	F	159.3	F	238.7	F	272.0
	SB	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0
Executive Center Drive & Mopac SB FR	EB	C	24.2	D	30.5	F	179.2	F	308.3	F	751.3	F	>9999.9	F	>9999.9	F	>9999.9	F	>9999.9
	SB	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0
Executive Center Drive & Wood Hollow Drive	EB	A	0.6	A	0.7	A	0.4	A	0.4	A	1.6	A	1.7	A	2.3	A	2.5	A	2.4
	SB	A	1.1	A	1.0	A	0.6	A	0.7	A	1.7	A	1.8	A	1.7	A	1.8	A	2.6
	EB	C	23.7	D	34.7	F	644.8	F	>9999.9	F	>9999.9	F	>9999.9	F	>9999.9	F	>9999.9	F	>9999.9
	SB	B	14.5	C	16.7	F	177.9	F	414.0	F	>9999.9	F	>9999.9	F	>9999.9	F	>9999.9	F	>9999.9
Executive Center Drive & Hart Lane	EB	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0
	WB	A	0.8	A	0.9	A	1.7	A	1.7	A	3.5	A	3.7	A	5.3	A	5.6	A	5.9
	NB	B	12.5	B	13.3	C	18.6	C	23.2	F	286.8	F	440.7	F	785.7	F	>9999.9	F	>9999.9
Spicewood Springs Road & Hart Lane	EB	F	466.5	F	4562.0	F	5259.6	F	5265.8	F	5141.9	F	5169.7	F	4886.5	F	4926.4	F	5055.9
	NB	A	1.1	A	1.2	A	1.0	A	1.1	A	1.1	A	1.2	A	1.6	A	1.8	A	1.8
	SB	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0
Executive Center Drive & Driveway 1	EB	-	-	-	-	A	0.0	A	0.0	A	2.0	A	2.1	A	2.0	A	2.0	A	1.6
	WB	-	-	-	-	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0
	SB	-	-	-	-	A	0.0	A	0.0	B	14.3	C	16.1	C	17.4	C	19.5	C	23.3
Executive Center Drive & Driveway 2	EB	-	-	-	-	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	D	28.8
	NB	-	-	-	-	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.3
	SB	-	-	-	-	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0
Executive Center Drive & Driveway 3	EB	-	-	-	-	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	F	51.1
	NB	-	-	-	-	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.4
	SB	-	-	-	-	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0
Executive Center Drive & Driveway 4	WB	-	-	-	-	B	10.0	B	10.3	C	15.9	C	18.2	C	19.6	C	22.0	F	59.3
	NB	-	-	-	-	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0
	SB	-	-	-	-	A	5.2	A	5.3	A	3.6	A	3.8	A	3.6	A	3.8	A	4.0
Executive Center Drive & Driveway 5	WB	-	-	-	-	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0
	NB	-	-	-	-	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0
	SB	-	-	-	-	A	0.0	A	0.0	A	2.3	A	2.4	A	2.1	A	2.2	A	2.2
Executive Center Drive & Driveway 6	WB	-	-	-	-	A	0.0	A	0.0	B	11.6	B	12.2	B	15.2	C	16.3	C	17.7
	NB	-	-	-	-	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0
	SB	-	-	-	-	A	0.0	A	0.0	A	1.9	A	2.0	A	1.7	A	1.8	A	1.7
Executive Center Drive & Driveway 7	WB	-	-	-	-	A	0.0	A	0.0	B	10.7	B	11.0	B	12.7	B	13.1	B	13.7
	NB	-	-	-	-	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0
	SB	-	-	-	-	A	0.0	A	0.0	A	0.4	A	0.5	A	0.4	A	0.4	A	0.4
Executive Center Drive & Driveway 8	EB	-	-																

EXHIBIT 12

ROADWAY SEGMENTS



LEGEND

- ① HART LANE B/W FAR WEST BLVD & GREYSTONE DRIVE
- ② HART LANE B/W GREYSTONE DRIVE & FAR WEST BLVD
- ③ WOOD HOLLOW DRIVE B/W FAR WEST BLVD & GREYSTONE DRIVE
- ④ WOOD HOLLOW DRIVE B/W GREYSTONE DRIVE & EXECUTIVE CENTER DRIVE
- ⑤ GREYSTONE DRIVE B/W HART LANE & WOOD HOLLOW DRIVE
- ⑥ GREYSTONE DRIVE B/W WOOD HOLLOW DRIVE & MOPAC SOUTHBOUND FRONTAGE ROAD

LEGEND

STREET SEGMENTS ANALYZED

EXHIBIT 12

STREET SEGMENTS MAP

BURY

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TBPE Registration Number F-1048
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FILE:

PROJECT No.: 103363-10002

SCALE: N.T.S.