

Network Level MOE

MOE	AM Peak Hour						
	Existing_AM	NoBuild_2021_AM	NoBuild_2026_AM	PartialBuild_2021_AM	PartialBuild_2026_AM	FullBuild_2021_AM	FullBuild_2026_AM
Total travel time (veh-hr)	809	2376	2932	1973	2372	1968	2259
Total Delay time (veh-hr)	64	1502	2052	1031	1397	1029	1275
Calculated Total Delay time (veh-hr)	61	1294	1723	1823	1236	930	1142
Average Delay time per vehicle (sec/veh)	13	244	321	321	211	164	192
Average speed (mph)	49	15	12	19	17	19	18
Number of vehicles served	16456	19095	19353	20480	21127	20439	21367
Travel Time (min/veh)	2.95	7.46	9.09	5.78	6.74	5.78	6.34
Annual Delay Hours	48,000	1,126,000	1,539,000	773,000	1,048,000	772,000	956,000
Annual Delay (\$)	\$ 870,000	\$ 20,450,000	\$ 27,950,000	\$ 14,040,000	\$ 19,030,000	\$ 14,020,000	\$ 17,360,000

MOE	PM Peak Hour						
	Existing_PM	NoBuild_2021_PM	NoBuild_2026_PM	PartialBuild_2021_PM	PartialBuild_2026_PM	FullBuild_2021_PM	FullBuild_2026_PM
Total travel time (veh-hr)	1612	3636	4192	3299	3915	3287	3790
Total Delay time (veh-hr)	882	2687	3229	2271	2847	2257	2711
Calculated Total Delay time (veh-hr)	794	2272	2677	1971	2412	1955	2316
Average Delay time per vehicle (sec/veh)	172	382	440	317	374	314	356
Average speed (mph)	19	11	10	13	11	13	12
Number of vehicles served	16595	21416	21899	22388	23200	22424	23440
Travel Time (min/veh)	5.83	10.19	11.49	8.84	10.12	8.80	9.70
Annual Delay Hours	662,000	2,015,000	2,421,000	1,703,000	2,135,000	1,693,000	2,034,000
Annual Delay (\$)	\$ 12,020,000	\$ 36,590,000	\$ 43,970,000	\$ 30,930,000	\$ 38,770,000	\$ 30,740,000	\$ 36,940,000

Notes

Annual delay dollars based on 250 Working days/ 3 hours of peak traffic in each AM and PM peak / \$18.19 per hour based on TTI's 2015 Urban Mobility Scorecard

Intersection LOS Summary

AM Peak

Node #	Intersection	Control Type	2017-AM		2021-AM						2026-AM					
			Existing		No Build		Partial Build		Full Build		No Build		Partial Build		Full Build	
			Delay(s/veh)	LOS	Delay(s/veh)	LOS	Delay(s/veh)	LOS	Delay(s/veh)	LOS	Delay(s/veh)	LOS	Delay(s/veh)	LOS	Delay(s/veh)	LOS
1	Stonebrook Parkway	Signalized	67.9	E	88.6	F	64.5	E	67.3	E	109.6	F	101.1	F	104.8	F
2	Academy Dr	Signalized	21.4	C	15.6	B	18.6	B	10.9	B	35.0	D	19.9	B	11.4	B
3	Allen School Drive	Signalized	13.4	B	13.7	B	13.3	B	11.2	B	31.9	C	14.4	B	11.8	B
4	Lebanon Road	Signalized	65.0	E	125.6	F	98.5	F	103.3	F	165.4	F	107.4	F	109.7	F
5	Lakehill Boulevard	Signalized	29.8	C	58.2	E	24.0	C	29.6	C	108.3	F	50.3	D	32.0	C
6	Warren Parkway	Signalized	23.7	C	42.7	D	27.8	C	31.8	C	61.6	E	52.2	D	43.1	D
7	Legacy Car Wash Driveway	Unsignalized	1.6	A	14.6	B	7.8	A	1.7	A	24.3	C	8.8	A	3.0	A
8	Boyd Office Driveway	Unsignalized	2.3	A	15.9	C	8.6	A	0.7	A	29.6	D	11.2	B	1.3	A
9	Baylor Rehabilitation Driveway	Unsignalized	5.0	A	16.0	C	6.9	A	1.5	A	30.6	D	9.5	A	1.8	A
10	Stonebriar Drive	Signalized	15.1	B	25.9	C	17.8	B	11.6	B	49.9	D	27.3	C	15.2	B
11	Wendover Drive	Unsignalized	13.2	B	34.7	D	4.3	A	0.8	A	48.6	E	9.6	A	0.8	A
12	Travis Drive	Unsignalized	7.3	A	17.9	C	2.2	A	0.4	A	22.7	C	8.3	A	0.4	A
13	Donley Drive	Unsignalized	11.2	B	23.9	C	1.1	A	0.5	A	29.0	D	6.3	A	0.6	A
14	Foard/Driveway	Unsignalized	13.8	B	25.8	D	0.8	A	0.5	A	29.5	D	3.9	A	0.6	A
15	Country Club Drive	Unsignalized	13.2	B	22.3	C	2.1	A	0.9	A	25.0	D	4.1	A	2.0	A
16	Stonebriar Way	Unsignalized	17.4	C	27.9	D	3.7	A	3.3	A	37.6	E	4.8	A	6.3	A
17	Town and Country Boulevard	Signalized	34.6	C	42.7	D	16.2	B	12.8	B	43.3	D	16.1	B	18.1	B
18	Median Opening -12	Unsignalized	20.9	C	32.0	D	24.9	C	16.9	C	31.2	D	23.5	C	23.9	C
19	WB FR SRT	Signalized	36.8	D	51.8	D	47.7	D	47.9	D	53.0	D	49.7	D	49.3	D
20	EB FR SRT	Signalized	32.0	C	48.2	D	45.4	D	43.7	D	53.6	D	63.0	E	53.7	D
21	Driveway 13	Unsignalized	0.7	A	32.0	D	17.7	C	21.5	C	36.1	E	24.9	C	24.6	C
22	Driveway 14	Unsignalized	0.9	A	28.6	D	14.1	B	17.2	C	38.7	E	23.4	C	22.1	C
23	Headquarters Drive	Signalized	12.2	B	65.3	E	41.6	D	44.6	D	95.8	F	48.7	D	48.0	D
24	Driveway 15	Unsignalized	1.9	A	18.0	C	2.7	A	3.7	A	29.0	D	7.0	A	6.0	A
25	Driveway 16	Unsignalized	1.4	A	15.6	C	1.5	A	1.5	A	28.2	D	3.4	A	2.7	A
26	Corporate Drive	Signalized	13.9	B	28.5	C	13.0	B	12.8	B	66.9	E	14.2	B	14.1	B
27	Leadership Drive and WB FR SRT	Unsignalized	2.1	A	135.9	F	107.5	F	114.6	F	142.0	F	132.0	F	135.6	F
28	Leadership Drive and Town and Country Boulevard	Unsignalized	0.31	A	0.31	A	0.32	A	0.31	A	0.29	A	0.30	A	0.31	A
29	Spring Creek and Town and Country Boulevard	Signalized	8.8	A	12.6	B	9.7	A	9.5	A	19.6	B	12.0	B	10.6	B
30	Spring Creek and WB FR SRT	Signalized	49.9	D	59.9	E	45.3	D	44.3	D	72.2	E	53.5	D	51.1	D
31	Spring Creek and EB FR SRT	Signalized	52.7	D	23.6	C	29.0	C	29.0	C	24.2	C	29.8	C	30.0	C

Notes:

1. VISSIM does not directly compute the HCM level of service.
2. The Delay for the link segments is the average of 10 simulation runs in VISSIM.
3. The Delay obtained from VISSIM is compared to the following tables to obtain LOS
 Signalized Intersections - Exhibit 18-4 LOS Criteria (Page 18-6, HCM 2010)
 Unsignalized Intersections - Exhibit 19-1 LOS Criteria (Page 19-2, HCM 2010); Exhibit 20-2 LOS Criteria (Page 20-3, HCM 2010)
4. Microscopic simulation models with significant number of underserved intersections can result in unexpected and unrealistic MOEs. Eg, 2026 intersections might show better LOS due to the underserved vehicles at multiple locations.

Intersection LOS Summary

PM Peak

Node #	Intersection	Control Type	2017-PM		2021-PM						2026-PM					
			Existing		No Build		Partial Build		Full Build		No Build		Partial Build		Full Build	
			Delay(s/veh)	LOS	Delay(s/veh)	LOS	Delay(s/veh)	LOS	Delay(s/veh)	LOS	Delay(s/veh)	LOS	Delay(s/veh)	LOS	Delay(s/veh)	LOS
1	Stonebrook Parkway	Signalized	41.3	D	45.2	D	58.3	E	63.5	E	55.3	E	87.5	F	84.6	F
2	Academy Dr	Signalized	2.0	A	7.1	A	6.3	A	6.6	A	13.3	B	8.2	A	10.4	B
3	Allen School Drive	Signalized	7.9	A	11.5	B	9.3	A	9.2	A	12.3	B	10.0	B	10.3	B
4	Lebanon Road	Signalized	49.8	D	63.9	E	61.3	E	63.3	E	142.6	F	140.3	F	133.2	F
5	Lakehill Boulevard	Signalized	19.9	B	21.1	C	8.1	A	9.3	A	67.3	E	10.3	B	15.4	B
6	Warren Parkway	Signalized	27.4	C	133.7	F	66.8	E	65.3	E	158.5	F	89.0	F	82.6	F
7	Legacy Car Wash Driveway	Unsignalized	1.8	A	14.7	B	6.3	A	3.1	A	21.0	C	8.8	A	4.0	A
8	Boyd Office Driveway	Unsignalized	0.8	A	15.8	C	4.6	A	0.6	A	21.6	C	10.5	B	0.8	A
9	Baylor Rehabilitation Driveway	Unsignalized	1.0	A	20.7	C	4.3	A	1.1	A	23.0	C	11.5	B	1.2	A
10	Stonebriar Drive	Signalized	11.7	B	34.8	C	10.6	B	8.5	A	38.7	D	24.5	C	11.7	B
11	Wendover Drive	Unsignalized	1.0	A	38.3	E	1.2	A	0.7	A	44.1	E	5.8	A	0.8	A
12	Travis Drive	Unsignalized	0.5	A	19.9	C	0.5	A	0.3	A	18.9	C	5.0	A	0.4	A
13	Donley Drive	Unsignalized	0.7	A	25.1	D	0.9	A	0.5	A	25.3	D	4.9	A	0.7	A
14	Foard/Driveway	Unsignalized	0.5	A	25.7	D	1.2	A	0.5	A	25.6	D	4.6	A	0.8	A
15	Country Club Drive	Unsignalized	1.1	A	23.0	C	3.0	A	1.4	A	27.8	D	7.3	A	2.5	A
16	Stonebriar Way	Unsignalized	1.1	A	24.6	C	4.5	A	5.6	A	25.8	D	8.5	A	7.4	A
17	Town and Country Boulevard	Signalized	16.0	B	67.1	E	21.2	C	20.4	C	68.8	E	23.5	C	21.7	C
18	Median Opening -12	Unsignalized	4.1	A	26.6	D	10.6	B	5.3	A	26.1	D	7.7	A	5.8	A
19	WB FR SRT	Signalized	39.5	D	101.1	F	103.4	F	97.6	F	102.2	F	102.1	F	95.7	F
20	EB FR SRT	Signalized	97.1	F	52.5	D	47.2	D	46.8	D	52.4	D	49.0	D	46.5	D
21	Driveway 13	Unsignalized	39.9	E	36.8	E	30.6	D	33.2	D	37.9	E	30.7	D	32.9	D
22	Driveway 14	Unsignalized	41.7	E	39.1	E	28.4	D	29.5	D	43.4	E	34.5	D	36.8	E
23	Headquarters Drive	Signalized	163.5	F	200.7	F	238.9	F	248.2	F	206.1	F	240.8	F	245.3	F
24	Driveway 15	Unsignalized	51.5	F	71.1	F	53.6	F	56.2	F	72.1	F	59.1	F	57.7	F
25	Driveway 16	Unsignalized	55.9	F	99.8	F	84.8	F	83.9	F	99.0	F	84.4	F	84.3	F
26	Corporate Drive	Signalized	64.0	E	349.3	F	174.5	F	167.7	F	357.9	F	196.7	F	187.0	F
27	Leadership Drive and WB FR SRT	Unsignalized	1.5	A	265.1	F	341.9	F	315.3	F	289.6	F	384.3	F	351.9	F
28	Leadership Drive and Town and Country Boulevard	Unsignalized	0.33	A	0.41	A	0.40	A	0.40	A	0.39	A	0.38	A	0.39	A
29	Spring Creek and Town and Country Boulevard	Signalized	9.4	A	17.3	B	18.4	B	18.2	B	19.8	B	19.0	B	18.9	B
30	Spring Creek and WB FR SRT	Signalized	24.5	C	36.6	D	40.6	D	39.6	D	36.6	D	42.0	D	41.9	D
31	Spring Creek and EB FR SRT	Signalized	37.0	D	40.6	D	38.6	D	39.3	D	47.2	D	43.4	D	42.9	D

Notes:

- VISSIM does not directly compute the HCM level of service.
- The Delay for the link segments is the average of 10 simulation runs in VISSIM.
- The Delay obtained from VISSIM is compared to the following tables to obtain LOS
 Signalized Intersections - Exhibit 18-4 LOS Criteria (Page 18-6, HCM 2010)
 Unsignalized Intersections - Exhibit 19-1 LOS Criteria (Page 19-2, HCM 2010); Exhibit 20-2 LOS Criteria (Page 20-3, HCM 2010)
- Microscopic simulation models with significant number of underserved intersections can result in unexpected and unrealistic MOEs. Eg, 2026 intersections might show better LOS due to the underserved vehicles at multiple locations.



Travel Times Summary

AM Peak

NB														
	Stonebrook		Lebanon		Warren		Stonebriar Drive		T&C		SRT		Corporate	Corporate to Stonebrook (Overall)
Distance (miles)	1.35		0.7		0.4		0.8		0.25		0.65			4.15
Existing	184	03:54	473	01:33	696	01:13	784	01:14	797	00:56	328	02:02	22	10:34
NoBuild 2021	308	04:02	549	01:30	731	01:18	1381	01:19	1262	01:13	920	06:32	71	14:23
Partial Build 2021	339	03:42	576	01:23	794	01:19	1530	01:47	1409	00:53	1062	03:54	88	12:07
Full Build 2021	348	03:50	582	01:34	805	00:56	1545	01:15	1384	00:51	1039	04:21	87	12:02
NoBuild 2026	331	04:03	595	01:34	803	01:32	1446	01:52	1307	01:15	911	08:35	73	16:44
Partial Build 2026	356	03:50	613	01:24	847	01:16	1559	02:43	1492	00:52	1148	04:19	89	13:09
Full Build 2026	378	03:54	640	01:38	908	00:58	1661	01:16	1516	00:52	1155	04:18	96	12:09
SB														
	Stonebrook		Lebanon		Warren		Stonebriar Drive		T&C		SRT		Corporate	Stonebrook to Corporate (Overall)
Distance (miles)	1.35		0.7		0.4		0.8		0.25		0.65			4.15
Existing	702	04:28	920	01:55	1744	01:03	1600	03:24	1248	01:39	920	01:22	168	13:19
NoBuild 2021	683	05:05	702	02:54	1265	02:10	1354	06:25	826	02:33	606	01:50	52	18:20
Partial Build 2021	721	04:20	845	01:42	1534	00:42	1597	01:24	1051	02:31	724	01:54	63	12:28
Full Build 2021	721	04:17	824	01:47	1523	00:44	1562	01:23	1049	02:12	721	01:56	71	12:21
NoBuild 2026	665	07:14	634	05:08	1142	03:14	1297	07:39	826	02:31	608	01:55	52	22:23
Partial Build 2026	796	04:26	895	02:17	1604	00:41	1632	01:25	1113	02:23	717	02:16	71	13:26
Full Build 2026	798	04:17	876	01:50	1611	00:45	1627	01:34	1122	02:22	721	02:14	76	13:07
xxx	-Vehicles for the travel time segment													



Travel Times Summary

PM Peak

NB														
	Stonebrook		Lebanon		Warren		Stonebriar Drive		T&C		SRT		Corporate	
														Corporate to Stonebrook (Overall)
Distance (miles)		1.35		0.7		0.4		0.8		0.25		0.65		4.15
Existing	771	02:40	1017	01:24	1863	00:59	1621	01:21	1614	00:51	715	06:53	97	14:01
NoBuild 2021	959	02:45	1249	01:36	1764	01:16	2003	01:51	1444	01:27	836	11:10	129	20:15
Partial Build 2021	1103	03:19	1445	01:42	1943	01:29	2197	01:19	1562	00:57	1065	10:02	171	18:01
Full Build 2021	1103	03:19	1451	01:45	1952	01:10	2196	01:13	1559	00:58	1057	10:07	170	17:47
NoBuild 2026	978	02:50	1259	02:02	1850	01:10	2020	01:21	1457	01:20	811	11:17	128	20:24
Partial Build 2026	1136	03:22	1463	02:06	2004	01:54	2209	01:58	1588	00:57	1029	10:13	154	19:40
Full Build 2026	1151	03:30	1493	02:22	2071	01:12	2264	01:14	1603	00:56	1067	10:02	167	18:48
SB														
	Stonebrook		Lebanon		Warren		Stonebriar Drive		T&C		SRT		Corporate	
														Stonebrook to Corporate (Overall)
Distance (miles)		1.35		0.7		0.4		0.8		0.25		0.65		4.15
Existing	279	04:44	425	01:06	799	00:41	813	01:17	579	01:35	448	01:51	52	11:13
NoBuild 2021	302	03:50	386	02:34	935	03:13	1301	07:14	681	02:59	598	02:00	43	20:39
Partial Build 2021	292	04:19	417	02:05	1023	00:51	1353	01:37	978	02:01	765	03:29	57	14:34
Full Build 2021	291	04:19	417	02:01	1026	00:43	1348	01:36	970	01:33	768	03:29	58	13:49
NoBuild 2026	335	04:07	377	05:32	898	04:22	1241	08:17	675	03:01	596	02:11	51	24:47
Partial Build 2026	321	04:45	438	02:10	1108	00:54	1419	01:53	1061	01:43	808	03:39	62	15:07
Full Build 2026	328	04:16	453	02:02	1116	00:43	1418	01:41	1079	01:32	828	03:45	65	14:07
xxx	-Vehicles for the travel time segment													

Intersection Volumes Comparison

AM Peak

Node #	Intersection	Control Type	Year 2021						Year 2026							
			Demand Volumes	NoBuild Year		Partial Build Year		Full Build Year		Demand Volumes	NoBuild Year		Partial Build Year		Full Build Year	
				Served Volumes	% Difference	Served Volumes	% Difference	Served Volumes	% Difference		Served Volumes	% Difference	Served Volumes	% Difference	Served Volumes	% Difference
1	Stonebrook Parkway	Signalized	4520	4054	-10%	4286	-5%	4293	-5%	4900	4123	-16%	4471	-9%	4504	-8%
2	Academy Dr	Signalized	3130	2890	-8%	2983	-5%	3003	-4%	3430	2920	-15%	3200	-7%	3245	-5%
3	Allen School Drive	Signalized	3080	2813	-9%	2882	-6%	2922	-5%	3360	2817	-16%	3102	-8%	3158	-6%
4	Lebanon Road	Signalized	6690	5877	-12%	6137	-8%	6142	-8%	7320	5749	-21%	6486	-11%	6532	-11%
5	Lakehill Boulevard	Signalized	4460	3747	-16%	4130	-7%	4125	-8%	4830	3626	-25%	4335	-10%	4390	-9%
6	Warren Parkway	Signalized	5670	4779	-16%	5244	-8%	5241	-8%	6170	4755	-23%	5457	-12%	5608	-9%
7	Legacy Car Wash Driveway	Unsignalized	4050	3341	-18%	3736	-8%	3735	-8%	4430	3362	-24%	3899	-12%	4035	-9%
8	Boyd Office Driveway	Unsignalized	4050	3310	-18%	3743	-8%	3739	-8%	4430	3328	-25%	3906	-12%	4041	-9%
9	Baylor Rehabilitation Driveway	Unsignalized	4050	3292	-19%	3763	-7%	3750	-7%	4430	3314	-25%	3927	-11%	4059	-8%
10	Stonebriar Drive	Signalized	4180	3409	-18%	3893	-7%	3865	-8%	4600	3470	-25%	4080	-11%	4205	-9%
11	Wendover Drive	Unsignalized	3950	3142	-20%	3689	-7%	3636	-8%	4340	3175	-27%	3836	-12%	3933	-9%
12	Travis Drive	Unsignalized	3920	3104	-21%	3675	-6%	3613	-8%	4310	3146	-27%	3826	-11%	3903	-9%
13	Donley Drive	Unsignalized	3940	3106	-21%	3722	-6%	3659	-7%	4350	3137	-28%	3880	-11%	3943	-9%
14	Foard/Driveway	Unsignalized	3930	3066	-22%	3710	-6%	3646	-7%	4340	3128	-28%	3866	-11%	3926	-10%
15	Country Club Drive	Unsignalized	3990	3134	-21%	3788	-5%	3719	-7%	4410	3212	-27%	3960	-10%	4004	-9%
16	Stonebriar Way	Unsignalized	4010	3199	-20%	3829	-5%	3754	-6%	4460	3300	-26%	4033	-10%	4058	-9%
17	Town and Country Boulevard	Signalized	4250	3449	-19%	4069	-4%	4006	-6%	4710	3526	-25%	4264	-9%	4286	-9%
18	Median Opening -12	Unsignalized	3700	2958	-20%	3505	-5%	3493	-6%	4130	3005	-27%	3693	-11%	3733	-10%
19	WB FR SRT	Signalized	6510	5297	-19%	6094	-6%	6016	-8%	7030	5346	-24%	6111	-13%	6138	-13%
20	EB FR SRT	Signalized	6200	5267	-15%	5882	-5%	5817	-6%	6710	5363	-20%	5950	-11%	6036	-10%
21	Driveway 13	Unsignalized	4440	3676	-17%	4224	-5%	4173	-6%	4900	3713	-24%	4327	-12%	4367	-11%
22	Driveway 14	Unsignalized	4290	3623	-16%	4138	-4%	4098	-4%	4780	3657	-23%	4279	-10%	4313	-10%
23	Headquaters Drive	Signalized	5760	5015	-13%	5544	-4%	5506	-4%	6230	5016	-19%	5769	-7%	5811	-7%
24	Driveway 15	Unsignalized	4250	3761	-12%	4164	-2%	4155	-2%	4720	3793	-20%	4411	-7%	4446	-6%
25	Driveway 16	Unsignalized	4160	3729	-10%	4109	-1%	4107	-1%	4600	3749	-19%	4365	-5%	4394	-4%
26	Corporate Drive	Signalized	4370	3982	-9%	4320	-1%	4312	-1%	4830	3972	-18%	4632	-4%	4654	-4%
27	Leadership Drive and WB FR SRT	Unsignalized	3770	3112	-17%	3483	-8%	3388	-10%	3880	3099	-20%	3206	-17%	3170	-18%
28	Leadership Drive and Town and Country Boulevard	Unsignalized	270	230	-15%	258	-4%	253	-6%	310	237	-24%	254	-18%	251	-19%
29	Spring Creek and Town and Country Boulevard	Signalized	1510	1427	-5%	1472	-3%	1467	-3%	1610	1484	-8%	1535	-5%	1535	-5%
30	Spring Creek and WB FR SRT	Signalized	2570	2364	-8%	2497	-3%	2487	-3%	2700	2418	-10%	2541	-6%	2539	-6%
31	Spring Creek and EB FR SRT	Signalized	3740	3557	-5%	3611	-3%	3606	-4%	3890	3686	-5%	3740	-4%	3742	-4%



Intersection Volumes Comparison

PM Peak

Node #	Intersection	Control Type	Year 2021						Year 2026							
			Demand Volumes	NoBuild Year		Partial Build Year		Full Build Year		Demand Volumes	NoBuild Year		Partial Build Year		Full Build Year	
				Served Volumes	% Difference	Served Volumes	% Difference	Served Volumes	% Difference		Served Volumes	% Difference	Served Volumes	% Difference	Served Volumes	% Difference
1	Stonebrook Parkway	Signalized	5230	4735	-9%	4937	-6%	4919	-6%	5580	4967	-11%	5142	-8%	5171	-7%
2	Academy Dr	Signalized	3450	2966	-14%	3194	-7%	3194	-7%	3720	3106	-17%	3368	-9%	3391	-9%
3	Allen School Drive	Signalized	3520	2989	-15%	3243	-8%	3243	-8%	3770	3122	-17%	3413	-9%	3442	-9%
4	Lebanon Road	Signalized	8360	7399	-11%	7829	-6%	7831	-6%	9130	7623	-17%	8318	-9%	8419	-8%
5	Lakehill Boulevard	Signalized	5070	4105	-19%	4582	-10%	4587	-10%	5420	4063	-25%	4813	-11%	4885	-10%
6	Warren Parkway	Signalized	6530	4940	-24%	5904	-10%	5910	-9%	7010	4798	-32%	6136	-12%	6216	-11%
7	Legacy Car Wash Driveway	Unsignalized	5120	3888	-24%	4508	-12%	4525	-12%	5440	3834	-30%	4691	-14%	4802	-12%
8	Boyd Office Driveway	Unsignalized	5110	3863	-24%	4513	-12%	4527	-11%	5430	3804	-30%	4700	-13%	4798	-12%
9	Baylor Rehabilitation Driveway	Unsignalized	5120	3837	-25%	4521	-12%	4527	-12%	5450	3760	-31%	4720	-13%	4792	-12%
10	Stonebriar Drive	Signalized	5390	4060	-25%	4749	-12%	4749	-12%	5800	4059	-30%	5007	-14%	5066	-13%
11	Wendover Drive	Unsignalized	5160	3824	-26%	4516	-12%	4518	-12%	5530	3804	-31%	4741	-14%	4783	-14%
12	Travis Drive	Unsignalized	5140	3800	-26%	4497	-13%	4494	-13%	5510	3794	-31%	4724	-14%	4757	-14%
13	Donley Drive	Unsignalized	5170	3805	-26%	4526	-12%	4521	-13%	5560	3796	-32%	4765	-14%	4791	-14%
14	Foard/Driveway	Unsignalized	5160	3780	-27%	4511	-13%	4499	-13%	5550	3785	-32%	4746	-14%	4769	-14%
15	Country Club Drive	Unsignalized	5230	3860	-26%	4587	-12%	4575	-13%	5650	3880	-31%	4848	-14%	4868	-14%
16	Stonebriar Way	Unsignalized	5200	3857	-26%	4572	-12%	4569	-12%	5600	3886	-31%	4827	-14%	4856	-13%
17	Town and Country Boulevard	Signalized	5330	3959	-26%	4695	-12%	4696	-12%	5700	3975	-30%	4933	-13%	4972	-13%
18	Median Opening -12	Unsignalized	3860	2846	-26%	3411	-12%	3400	-12%	4180	2866	-31%	3575	-14%	3609	-14%
19	WB FR SRT	Signalized	7660	5349	-30%	5697	-26%	5733	-25%	8100	5316	-34%	5784	-29%	5943	-27%
20	EB FR SRT	Signalized	6480	4864	-25%	5484	-15%	5465	-16%	6920	4934	-29%	5658	-18%	5727	-17%
21	Driveway 13	Unsignalized	4680	3307	-29%	3790	-19%	3776	-19%	5020	3301	-34%	3881	-23%	3930	-22%
22	Driveway 14	Unsignalized	4650	3297	-29%	3782	-19%	3765	-19%	5010	3304	-34%	3876	-23%	3928	-22%
23	Headquaters Drive	Signalized	7090	5335	-25%	5839	-18%	5844	-18%	7390	5279	-29%	5888	-20%	5890	-20%
24	Driveway 15	Unsignalized	4470	3063	-31%	3715	-17%	3696	-17%	4730	3082	-35%	3803	-20%	3849	-19%
25	Driveway 16	Unsignalized	4440	3054	-31%	3640	-18%	3629	-18%	4660	3065	-34%	3713	-20%	3763	-19%
26	Corporate Drive	Signalized	4690	3321	-29%	3732	-20%	3731	-20%	4980	3331	-33%	3764	-24%	3829	-23%
27	Leadership Drive and WB FR SRT	Unsignalized	3340	2363	-29%	2057	-38%	2151	-36%	3460	2277	-34%	1963	-43%	2085	-40%
28	Leadership Drive and Town and Country Boulevard	Unsignalized	390	279	-28%	266	-32%	275	-29%	440	287	-35%	277	-37%	288	-35%
29	Spring Creek and Town and Country Boulevard	Signalized	2740	2401	-12%	2592	-5%	2590	-5%	2860	2508	-12%	2720	-5%	2732	-4%
30	Spring Creek and WB FR SRT	Signalized	4790	3985	-17%	4168	-13%	4177	-13%	4980	4158	-17%	4303	-14%	4356	-13%
31	Spring Creek and EB FR SRT	Signalized	4780	4414	-8%	4613	-3%	4616	-3%	4990	4691	-6%	4857	-3%	4868	-2%



Legacy NB Served Volumes Comparision

AM Peak

Node #	Intersection	Control Type	2021				2026					
			Demand Volumes	Partial Build Year		Full Build Year		Demand Volumes	Partial Build Year		Full Build Year	
				Served Volumes	% Difference	Served Volumes	% Difference		Served Volumes	% Difference	Served Volumes	% Difference
1	Stonebrook Parkway	Signalized	1110	992	-11%	1002	-10%	1150	1073	-7%	1103	-4%
2	Academy Dr	Signalized	1030	902	-12%	919	-11%	1060	985	-7%	1020	-4%
3	Allen School Drive	Signalized	970	818	-16%	838	-14%	980	895	-9%	934	-5%
4	Lebanon Road	Signalized	1280	1190	-7%	1190	-7%	1370	1286	-6%	1330	-3%
5	Lakehill Boulevard	Signalized	1320	1229	-7%	1242	-6%	1410	1309	-7%	1365	-3%
6	Warren Parkway	Signalized	1800	1645	-9%	1697	-6%	1980	1778	-10%	1921	-3%
7	Legacy Car Wash Driveway	Unsignalized	1800	1649	-8%	1691	-6%	1990	1780	-11%	1908	-4%
8	Boyd Office Driveway	Unsignalized	1800	1673	-7%	1709	-5%	1990	1798	-10%	1926	-3%
9	Baylor Rehabilitation Driveway	Unsignalized	1830	1722	-6%	1754	-4%	2030	1842	-9%	1969	-3%
10	Stonebriar Drive	Signalized	1750	1656	-5%	1678	-4%	1950	1741	-11%	1862	-5%
11	Wendover Drive	Unsignalized	1730	1679	-3%	1677	-3%	1940	1760	-9%	1858	-4%
12	Travis Drive	Unsignalized	1730	1710	-1%	1701	-2%	1940	1782	-8%	1867	-4%
13	Donley Drive	Unsignalized	1740	1733	0%	1722	-1%	1970	1807	-8%	1882	-4%
14	Foard/Driveway	Unsignalized	1730	1732	0%	1716	-1%	1950	1808	-7%	1869	-4%
15	Country Club Drive	Unsignalized	1780	1789	1%	1765	-1%	2010	1874	-7%	1921	-4%
16	Stonebriar Way	Unsignalized	1790	1801	1%	1772	-1%	2020	1882	-7%	1910	-5%
17	Town and Country Boulevard	Signalized	1520	1555	2%	1527	0%	1760	1635	-7%	1659	-6%
18	Median Opening -12	Unsignalized	1540	1568	2%	1539	0%	1800	1649	-8%	1674	-7%
19	WB FR SRT	Signalized	1690	1703	1%	1671	-1%	1960	1803	-8%	1829	-7%
20	EB FR SRT	Signalized	1320	1335	1%	1306	-1%	1580	1458	-8%	1467	-7%
21	Driveway 13	Unsignalized	1340	1382	3%	1350	1%	1610	1505	-7%	1513	-6%
22	Driveway 14	Unsignalized	1390	1447	4%	1420	2%	1650	1573	-5%	1581	-4%
23	Headquaters Drive	Signalized	1810	1774	-2%	1749	-3%	2060	1941	-6%	1954	-5%
24	Driveway 15	Unsignalized	1950	1922	-1%	1919	-2%	2190	2111	-4%	2124	-3%
25	Driveway 16	Unsignalized	1980	1959	-1%	1959	-1%	2220	2169	-2%	2177	-2%
26	Corporate Drive	Signalized	1990	1990	0%	1990	0%	2220	2223	0%	2225	0%



Legacy SB Served Volumes Comparison

AM Peak

Node #	Intersection	Control Type	2021				2026					
			Demand Volumes	Partial Build Year		Full Build Year		Demand Volumes	Partial Build Year		Full Build Year	
				Served Volumes	% Difference	Served Volumes	% Difference		Served Volumes	% Difference	Served Volumes	% Difference
1	Stonebrook Parkway	Signalized	1440	1426	-1%	1427	-1%	1690	1571	-7%	1573	-7%
2	Academy Dr	Signalized	1850	1816	-2%	1821	-2%	2110	1941	-8%	1951	-8%
3	Allen School Drive	Signalized	1850	1779	-4%	1807	-2%	2100	1901	-9%	1927	-8%
4	Lebanon Road	Signalized	2050	2016	-2%	2020	-1%	2300	2150	-7%	2153	-6%
5	Lakehill Boulevard	Signalized	2720	2468	-9%	2447	-10%	2950	2554	-13%	2546	-14%
6	Warren Parkway	Signalized	2990	2722	-9%	2722	-9%	3230	2840	-12%	2854	-12%
7	Legacy Car Wash Driveway	Unsignalized	2230	2066	-7%	2023	-9%	2410	2087	-13%	2094	-13%
8	Boyd Office Driveway	Unsignalized	2230	2052	-8%	2011	-10%	2410	2082	-14%	2091	-13%
9	Baylor Rehabilitation Driveway	Unsignalized	2200	2022	-8%	1976	-10%	2370	2057	-13%	2063	-13%
10	Stonebriar Drive	Signalized	2160	1975	-9%	1922	-11%	2330	2015	-14%	2020	-13%
11	Wendover Drive	Unsignalized	2180	1969	-10%	1915	-12%	2350	2029	-14%	2020	-14%
12	Travis Drive	Unsignalized	2180	1965	-10%	1912	-12%	2350	2028	-14%	2017	-14%
13	Donley Drive	Unsignalized	2180	1967	-10%	1916	-12%	2350	2033	-13%	2021	-14%
14	Foard/Driveway	Unsignalized	2190	1971	-10%	1921	-12%	2370	2043	-14%	2039	-14%
15	Country Club Drive	Unsignalized	2170	1953	-10%	1907	-12%	2340	2026	-13%	2022	-14%
16	Stonebriar Way	Unsignalized	2160	1964	-9%	1919	-11%	2340	2043	-13%	2040	-13%
17	Town and Country Boulevard	Signalized	2150	1960	-9%	1929	-10%	2330	2063	-11%	2061	-12%
18	Median Opening -12	Unsignalized	2100	1892	-10%	1892	-10%	2270	1992	-12%	2000	-12%
19	WB FR SRT	Signalized	2150	1872	-13%	1889	-12%	2320	1981	-15%	1993	-14%
20	EB FR SRT	Signalized	2980	2653	-11%	2634	-12%	3150	2634	-16%	2642	-16%
21	Driveway 13	Unsignalized	3070	2811	-8%	2792	-9%	3250	2783	-14%	2815	-13%
22	Driveway 14	Unsignalized	2690	2476	-8%	2463	-8%	2880	2458	-15%	2484	-14%
23	Headquaters Drive	Signalized	2590	2417	-7%	2412	-7%	2770	2425	-12%	2454	-11%
24	Driveway 15	Unsignalized	2230	2161	-3%	2157	-3%	2420	2182	-10%	2202	-9%
25	Driveway 16	Unsignalized	2160	2132	-1%	2130	-1%	2350	2172	-8%	2193	-7%
26	Corporate Drive	Signalized	1940	1914	-1%	1906	-2%	2120	1942	-8%	1962	-7%



Legacy NB Served Volumes Comparison

PM Peak

Node #	Intersection	Control Type	2021				2026					
			Demand Volumes	Partial Build Year		Full Build Year		Demand Volumes	Partial Build Year		Full Build Year	
				Served Volumes	% Difference	Served Volumes	% Difference		Served Volumes	% Difference	Served Volumes	% Difference
1	Stonebrook Parkway	Signalized	2560	2248	-12%	2253	-12%	2720	2351	-14%	2377	-13%
2	Academy Dr	Signalized	2540	2245	-12%	2244	-12%	2700	2335	-14%	2359	-13%
3	Allen School Drive	Signalized	2480	2190	-12%	2189	-12%	2770	2276	-18%	2305	-17%
4	Lebanon Road	Signalized	3350	2764	-17%	2764	-17%	3470	2816	-19%	2851	-18%
5	Lakehill Boulevard	Signalized	3470	2902	-16%	2906	-16%	3590	2980	-17%	3031	-16%
6	Warren Parkway	Signalized	3070	2426	-21%	2437	-21%	3130	2504	-20%	2592	-17%
7	Legacy Car Wash Driveway	Unsignalized	3060	2434	-20%	2448	-20%	3120	2500	-20%	2608	-16%
8	Boyd Office Driveway	Unsignalized	3040	2435	-20%	2440	-20%	3110	2507	-19%	2598	-16%
9	Baylor Rehabilitation Driveway	Unsignalized	3030	2439	-20%	2439	-20%	3120	2530	-19%	2600	-17%
10	Stonebriar Drive	Signalized	3030	2426	-20%	2425	-20%	3130	2499	-20%	2562	-18%
11	Wendover Drive	Unsignalized	3030	2446	-19%	2450	-19%	3140	2525	-20%	2578	-18%
12	Travis Drive	Unsignalized	3030	2449	-19%	2450	-19%	3140	2524	-20%	2570	-18%
13	Donley Drive	Unsignalized	3050	2466	-19%	2466	-19%	3180	2541	-20%	2586	-19%
14	Foard/Driveway	Unsignalized	3040	2460	-19%	2459	-19%	3160	2533	-20%	2570	-19%
15	Country Club Drive	Unsignalized	3050	2472	-19%	2474	-19%	3180	2533	-20%	2570	-19%
16	Stonebriar Way	Unsignalized	3030	2460	-19%	2465	-19%	3150	2506	-20%	2540	-19%
17	Town and Country Boulevard	Signalized	2180	1734	-20%	1732	-21%	2270	1754	-23%	1777	-22%
18	Median Opening -12	Unsignalized	2240	1774	-21%	1773	-21%	2330	1797	-23%	1819	-22%
19	WB FR SRT	Signalized	3290	2408	-27%	2386	-27%	3400	2416	-29%	2440	-28%
20	EB FR SRT	Signalized	3110	2205	-29%	2192	-30%	3210	2189	-32%	2217	-31%
21	Driveway 13	Unsignalized	3080	2148	-30%	2141	-30%	3170	2127	-33%	2150	-32%
22	Driveway 14	Unsignalized	3080	2168	-30%	2157	-30%	3170	2137	-33%	2160	-32%
23	Headquarters Drive	Signalized	2370	1617	-32%	1612	-32%	2450	1589	-35%	1639	-33%
24	Driveway 15	Unsignalized	2360	1604	-32%	1600	-32%	2430	1563	-36%	1615	-34%
25	Driveway 16	Unsignalized	2250	1529	-32%	1536	-32%	2320	1494	-36%	1545	-33%
26	Corporate Drive	Signalized	1510	1272	-16%	1279	-15%	1560	1263	-19%	1306	-16%



Legacy SB Served Volumes Comparison

PM Peak

Node #	Intersection	Control Type	2021				2026					
			Demand Volumes	Partial Build Year		Full Build Year		Demand Volumes	Partial Build Year		Full Build Year	
				Served Volumes	% Difference	Served Volumes	% Difference		Served Volumes	% Difference	Served Volumes	% Difference
1	Stonebrook Parkway	Signalized	750	784	5%	784	5%	850	883	4%	883	4%
2	Academy Dr	Signalized	860	881	2%	881	2%	960	956	0%	956	0%
3	Allen School Drive	Signalized	850	852	0%	853	0%	940	923	-2%	923	-2%
4	Lebanon Road	Signalized	980	975	-1%	976	0%	1070	1019	-5%	1062	-1%
5	Lakehill Boulevard	Signalized	1420	1461	3%	1462	3%	1620	1581	-2%	1602	-1%
6	Warren Parkway	Signalized	1460	1524	4%	1527	5%	1650	1647	0%	1672	1%
7	Legacy Car Wash Driveway	Unsignalized	2040	2056	1%	2058	1%	2290	2158	-6%	2162	-6%
8	Boyd Office Driveway	Unsignalized	2030	2042	1%	2051	1%	2270	2154	-5%	2154	-5%
9	Baylor Rehabilitation Driveway	Unsignalized	2030	2025	0%	2031	0%	2270	2135	-6%	2132	-6%
10	Stonebriar Drive	Signalized	2060	2029	-2%	2030	-1%	2300	2136	-7%	2131	-7%
11	Wendover Drive	Unsignalized	2100	2039	-3%	2038	-3%	2350	2177	-7%	2164	-8%
12	Travis Drive	Unsignalized	2100	2038	-3%	2035	-3%	2350	2182	-7%	2166	-8%
13	Donley Drive	Unsignalized	2100	2038	-3%	2034	-3%	2350	2188	-7%	2167	-8%
14	Foard/Driveway	Unsignalized	2110	2041	-3%	2030	-4%	2370	2195	-7%	2181	-8%
15	Country Club Drive	Unsignalized	2100	2031	-3%	2017	-4%	2350	2184	-7%	2169	-8%
16	Stonebriar Way	Unsignalized	2100	2037	-3%	2029	-3%	2350	2215	-6%	2209	-6%
17	Town and Country Boulevard	Signalized	2060	2041	-1%	2033	-1%	2300	2224	-3%	2224	-3%
18	Median Opening -12	Unsignalized	1570	1585	1%	1575	0%	1790	1712	-4%	1723	-4%
19	WB FR SRT	Signalized	1560	1607	3%	1595	2%	1790	1752	-2%	1759	-2%
20	EB FR SRT	Signalized	1420	1389	-2%	1384	-3%	1630	1491	-9%	1522	-7%
21	Driveway 13	Unsignalized	1440	1481	3%	1473	2%	1680	1582	-6%	1608	-4%
22	Driveway 14	Unsignalized	1490	1532	3%	1526	2%	1730	1625	-6%	1655	-4%
23	Headquaters Drive	Signalized	1480	1540	4%	1538	4%	1730	1644	-5%	1673	-3%
24	Driveway 15	Unsignalized	1900	1898	0%	1884	-1%	2050	1998	-3%	1999	-2%
25	Driveway 16	Unsignalized	2020	2013	0%	1999	-1%	2160	2125	-2%	2124	-2%
26	Corporate Drive	Signalized	2050	1984	-3%	1978	-4%	2180	2097	-4%	2087	-4%



Movement LOS Summary

AM and PM Peak

Node #	Intersection	Control Type	Existing - AM		2021 - AM						2026 - AM					
					No Build		Partial Build		Full Build		No Build		Partial Build		Full Build	
			Delay(s/veh)	LOS	Delay(s/veh)	LOS	Delay(s/veh)	LOS	Delay(s/veh)	LOS	Delay(s/veh)	LOS	Delay(s/veh)	LOS	Delay(s/veh)	LOS
7	Legacy Car Wash Driveway	Unsignalized	20.4	C	225.4	F	32.8	D	12.7	B	464.5	F	47.3	E	18.5	C
8	Boyd Office Driveway	Unsignalized	17.2	C	334.4	F	56.3	F	12.4	B	700.8	F	86.9	F	17.4	C
9	Baylor Rehabilitation Driveway	Unsignalized	47.9	E	171.6	F	32.2	D	18.6	C	466.8	F	45.6	E	24.0	C
11	Wendover Drive	Unsignalized	32.0	D	278.0	F	49.1	E	11.1	B	659.3	F	100.4	F	16.4	C
13	Donley Drive	Unsignalized	277.1	F	328.7	F	27.4	D	10.3	B	1843.8	F	46.3	E	12.9	B
15	Country Club Drive	Unsignalized	100.7	F	135.9	F	26.7	D	14.3	B	208.9	F	40.6	E	19.1	C
16	Stonebriar Way	Unsignalized	99.9	F	173.1	F	29.2	D	19.4	C	484.8	F	48.5	E	28.9	D

Node #	Intersection	Control Type	Existing - PM		2021 - PM						2026 - PM					
					No Build		Partial Build		Full Build		No Build		Partial Build		Full Build	
			Delay(s/veh)	LOS	Delay(s/veh)	LOS	Delay(s/veh)	LOS	Delay(s/veh)	LOS	Delay(s/veh)	LOS	Delay(s/veh)	LOS	Delay(s/veh)	LOS
7	Legacy Car Wash Driveway	Unsignalized	19.2	C	273.1	F	49.8	E	17.5	C	726.2	F	76.2	F	17.4	C
8	Boyd Office Driveway	Unsignalized	19.4	C	120.4	F	45.2	E	14.3	B	308.7	F	179.2	F	16.7	C
9	Baylor Rehabilitation Driveway	Unsignalized	20.6	C	152.9	F	52.9	F	21.7	C	597.7	F	193.0	F	25.0	D
11	Wendover Drive	Unsignalized	24.1	C	773.3	F	36.9	E	23.4	C	1176.2	F	65.2	F	29.7	D
13	Donley Drive	Unsignalized	27.5	D	975.2	F	43.2	E	18.7	C	1765.2	F	119.4	F	20.3	C
15	Country Club Drive	Unsignalized	23.6	C	140.9	F	36.7	E	20.6	C	377.2	F	87.7	F	26.6	D
16	Stonebriar Way	Unsignalized	24.9	C	203.3	F	47.9	E	31.1	D	324.0	F	146.4	F	56.5	F

Notes:

1. The above are the delays and LOS for the worst movement of the respective intersections.
2. VISSIM does not directly compute the HCM level of service.
3. The Delay for the link segments is the average of 10 simulation runs in VISSIM.
4. The Delay obtained from VISSIM is compared to the following tables to obtain LOS
 Signalized Intersections - Exhibit 18-4 LOS Criteria (Page 18-6, HCM 2010)
 Unsignalized Intersections - Exhibit 19-1 LOS Criteria (Page 19-2, HCM 2010); Exhibit 20-2 LOS Criteria (Page 20-3, HCM 2010)
5. Microscopic simulation models with significant number of underserved intersections can result in unexpected and unrealistic MOEs. Eg, 2026 intersections might show better LOS due to the underserved vehicles at multiple locations.