

Attachments

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ATTACHMENT A

Volumes Peak

Calculations

Background Traffic Volumes
AM Peak data

Assumed growth rate:	0.01
March 2023 Seasonal Adjust:	1.56 NHDOT Group 5 Averages
June 2023 Seasonal Adjust:	1.05 NHDOT Group 5 Averages (Int #21 ony)

Site Trips are not Seasonally Adjusted or Grown.

AM Peak data	Existing 2025 (Raw data) [03/06/2025]	Balance	2025	Existing 2025 w/ Seasonal Adjustment	2025 BASE	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
2. Parade Road (NH106) at Meredith Center Road / Elm Street																	
	7:15 AM		0		0.00												
<u>Movement</u>			0		0.00												
EBL	3		3	4.68	4.68	4.73	4.78	4.83	4.88	4.93	4.98	5.03	5.08	5.13	5.18	5.23	5.28
EBT	80	+4	84	124.80	124.80	126.05	127.31	128.58	129.87	131.17	132.48	133.80	135.14	136.49	137.85	139.23	140.62
EBR	150	+8	158	234.00	234.00	236.34	238.70	241.09	243.50	245.94	248.40	250.88	253.39	255.92	258.48	261.06	263.67
WBL	37		37	57.72	57.72	58.30	58.88	59.47	60.06	60.66	61.27	61.88	62.50	63.13	63.76	64.40	65.04
WBT	67		67	104.52	104.52	105.57	106.63	107.70	108.78	109.87	110.97	112.08	113.20	114.33	115.47	116.62	117.79
WBR	68		68	106.08	106.08	107.14	108.21	109.29	110.38	111.48	112.59	113.72	114.86	116.01	117.17	118.34	119.52
NBL	85		85	132.60	132.60	133.93	135.27	136.62	137.99	139.37	140.76	142.17	143.59	145.03	146.48	147.94	149.42
NBT	195		195	304.20	304.20	307.24	310.31	313.41	316.54	319.71	322.91	326.14	329.40	332.69	336.02	339.38	342.77
NBR	52		52	81.12	81.12	81.93	82.75	83.58	84.42	85.26	86.11	86.97	87.84	88.72	89.61	90.51	91.42
SBL	93		93	145.08	145.08	146.53	148.00	149.48	150.97	152.48	154.00	155.54	157.10	158.67	160.26	161.86	163.48
SBT	250		250	390.00	390.00	393.90	397.84	401.82	405.84	409.90	414.00	418.14	422.32	426.54	430.81	435.12	439.47
SBR	3		3	4.68	4.68	4.73	4.78	4.83	4.88	4.93	4.98	5.03	5.08	5.13	5.18	5.23	5.28
			0		0.00												
3. Parade Road (NH106) at Right Way Path / Old Main Street																	
	7:30 AM		0		0.00												
<u>Movement</u>			0		0.00												
EBL	1		1	1.00	1.00	1	1	1	1	1	1	1	1	1	1	1	1
EBT	1		1	1.00	1.00	1	1	1	1	1	1	1	1	1	1	1	1
EBR	6		6	6.00	6.00	6	6	6	6	6	6	6	6	6	6	6	6
WBL	2		2	3.12	3.12	3.15	3.18	3.21	3.24	3.27	3.30	3.33	3.36	3.39	3.42	3.45	3.48
WBT	0		0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
WBR	16		16	24.96	24.96	25.21	25.46	25.71	25.97	26.23	26.49	26.75	27.02	27.29	27.56	27.84	28.12
NBL	9		9	9.00	9.00	9	9	9	9	9	9	9	9	9	9	9	9
NBT	337		337	525.72	525.72	530.98	536.29	541.65	547.07	552.54	558.07	563.65	569.29	574.98	580.73	586.54	592.41
NBR	1		1	1.56	1.56	1.58	1.60	1.62	1.64	1.66	1.68	1.70	1.72	1.74	1.76	1.78	1.80
SBL	2		2	3.12	3.12	3.15	3.18	3.21	3.24	3.27	3.30	3.33	3.36	3.39	3.42	3.45	3.48
SBT	431		431	672.36	672.36	679.08	685.87	692.73	699.66	706.66	713.73	720.87	728.08	735.36	742.71	750.14	757.64
SBR	0		0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
			0		0.00												
4. Meredith Center Road at Eastman Road / Lane Road																	
	7:30 AM		0		0.00												
<u>Movement</u>			0		0.00												
EBL	0		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EBT	240		240	374.40	374.40	378.14	381.92	385.74	389.60	393.50	397.44	401.41	405.42	409.47	413.56	417.70	421.88
EBR	0		0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
WBL	5		5	5.00	5.00	5	5	5	5	5	5	5	5	5	5	5	5
WBT	140	+10	150	218.40	218.40	220.58	222.79	225.02	227.27	229.54	231.84	234.16	236.50	238.87	241.26	243.67	246.11
WBR	0		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NBL	0		0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
NBT	0		0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
NBR	5		5	5.00	5.00	5	5	5	5	5	5	5	5	5	5	5	5
SBL	0		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SBT	2		2	2.00	2.00	2	2	2	2	2	2	2	2	2	2	2	2
SBR	5		5	7.80	7.80	7.88	7.96	8.04	8.12	8.20	8.28	8.36	8.44	8.52	8.61	8.70	8.79

PHF	% Heavy	Counted Heavy	Calculated Heavy	AM Peak data	2037 No-Build	Site Trip Distribution (Full Build)	Site Trips Added to Intersection	2037 Build (Full Build)	FUTURE BUILD PM PHF	
2. Parade Road (NH106) at Meredith Center Road / Elm Street										
Movement										
0.77	67%	2		EBL	5	65	624	70		
	4%	3	3%	EBT	141	76		217	0.90	
	2%	3		EBR	264	0		264		
0.88	5%	2		WBL	65	75		140		
	12%	8	5%	WBT	118	55		173	0.90	
	4%	3		WBR	120	0		120		
0.81	7%	6		NBL	149	0		149		
	6%	11	6%	NBT	343	85		428	0.90	
	8%	4		NBR	91	91		182		
0.85	4%	4		SBL	163	0		163		
	1%	2	2%	SBT	439	106		545	0.90	
	67%	2		SBR	5	71		76		
3. Parade Road (NH106) at Right Way Path / Old Main Street										
Movement										
0.50	0%	0		EBL	1	180	1047	181		
	0%	0	2%	EBT	1	7		8	0.90	
	0%	0		EBR	6	395		401		
0.56	50%	1		WBL	3	0		3		
	0%	0	2%	WBT	0	17		17	0.90	
	0%	0		WBR	28	0		28		
0.82	0%	0		NBL	9	272		281		
	7%	22	6%	NBT	592	-7		585	0.90	
	0%	0		NBR	2	0		2		
0.82	0%	0		SBL	3	0		3		
	1%	6	1%	SBT	758	-7		751	0.90	
	0%	0		SBR	0	190		190		
4. Meredith Center Road at Eastman Road / Lane Road										
Movement										
0.91	0%	0		EBL	0	0	256	0		
	3%	6	3%	EBT	422	65		487	0.91	
	0%	0		EBR	0	69		69		
0.82	20%	1		WBL	5	0		5		
	9%	13	2%	WBT	246	44		290	0.90	
	0%	0		WBR	0	0		0		
0.63	0%	0		NBL	0	38		38		
	0%	0	2%	NBT	0	11		11	0.90	
	0%	0		NBR	5	2		7		
0.58	0%	0		SBL	0	0		0		
	50%	1	2%	SBT	2	27		29	0.90	
	0%	0		SBR	9	0		9		

Background Traffic Volumes
AM Peak data

Assumed growth rate: 0.01
March 2023 Seasonal Adjust: 1.56 NHDOT Group 5 Averages
June 2023 Seasonal Adjust: 1.05 NHDOT Group 5 Averages (Int #21 ony)

Site Trips are not Seasonally Adjusted or Grown.

AM Peak data	Existing 2025 (Raw data) [03/06/2025]	Balance	2025	Existing 2025 w/ Seasonal Adjustment	2025 BASE	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
31. Eastman Road at Prop Road1																	
	Calculated				0.00												
Movement			0		0.00												
WBL			0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
WBR			0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
NBT	5		5	7.80	7.80	7.88	7.96	8.04	8.12	8.20	8.28	8.36	8.44	8.52	8.61	8.70	8.79
NBR			0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
SBL			0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
SBT	7		7	10.92	10.92	11.03	11.14	11.25	11.36	11.47	11.58	11.70	11.82	11.94	12.06	12.18	12.30
			0		0.00												
32. Meredith Center Road at Prop Road2																	
	Calculated				0.00												
Movement			0		0.00												
EBT	245	0	245	382.20	382.20	386.02	389.88	393.78	397.72	401.70	405.72	409.78	413.88	418.02	422.20	426.42	430.68
EBR			0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
WBL			0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
WBT	145	10	155	226.20	226.20	228.46	230.74	233.05	235.38	237.73	240.11	242.51	244.94	247.39	249.86	252.36	254.88
NBL			0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
NBR			0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
			0		0.00												

PHF	% Heavy	Counted Heavy	Calculated Heavy	AM Peak data		2037 No-Build	Site Trip Distribution (Full Build)	Site Trips Added to Intersection	2037 Build (Full Build)	FUTURE BUILD PM PHF				
31. Eastman Road at Prop Road1														
Movement														
0.90	0%	0	2%	EBT	0	0	148	0	0.90					
	0%			EBR	0	51		51						
0.90	0%		2%	WBL	9	0		9	0.90					
	0%			WBT	0	0		0						
0.90	0%	2	2%	NBL	0	97		97	0.90					
	29%			NBR	12	0		12						
32. Meredith Center Road at Prop Road2														
Movement														
0.90	2%	6	2%	EBT	431	-3	383	428	0.90					
	0%			EBR	0	71		71						
0.90	0%	14	2%	WBL	0	129		129	0.90					
	10%			WBT	255	-4		251						
0.90	0%		2%	NBL	0	48		48	0.90					
	0%			NBR	0	142		142						

Background Traffic Volumes

PM Peak data

Assumed growth rate:0.01

March 2023 Seasonal Adjust:1.56NHDOT Group 5 Averages

June 2023 Seasonal Adjust:1.05NHDOT Group 5 Averages (Int #21 ony)

Site Trips are not Seasonally Adjusted or Grown.

PM Peak data	Existing 2025 (Raw data) [03/06/2025]	Balance	2025	Existing 2025 w/ Seasonal Adjustment	2025 BASE	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
2. Parade Road (NH106) at Meredith Center Road / Elm Street																	
	3:30 PM		1		0.00												
<u>Movement</u>			0		0.00												
EBL	1		1	1.56	1.56	1.58	1.60	1.62	1.64	1.66	1.68	1.70	1.72	1.74	1.76	1.78	1.80
EBT	95	+4	99	148.20	148.20	149.68	151.18	152.69	154.22	155.76	157.32	158.89	160.48	162.08	163.70	165.34	166.99
EBR	102	+4	106	159.12	159.12	160.71	162.32	163.94	165.58	167.24	168.91	170.60	172.31	174.03	175.77	177.53	179.31
WBL	65		65	101.40	101.40	102.41	103.43	104.46	105.50	106.56	107.63	108.71	109.80	110.90	112.01	113.13	114.26
WBT	82	+1	83	127.92	127.92	129.20	130.49	131.79	133.11	134.44	135.78	137.14	138.51	139.90	141.30	142.71	144.14
WBR	94		94	146.64	146.64	148.11	149.59	151.09	152.60	154.13	155.67	157.23	158.80	160.39	161.99	163.61	165.25
NBL	137	+3	140	213.72	213.72	215.86	218.02	220.20	222.40	224.62	226.87	229.14	231.43	233.74	236.08	238.44	240.82
NBT	284		284	443.04	443.04	447.47	451.94	456.46	461.02	465.63	470.29	474.99	479.74	484.54	489.39	494.28	499.22
NBR	116		116	180.96	180.96	182.77	184.60	186.45	188.31	190.19	192.09	194.01	195.95	197.91	199.89	201.89	203.91
SBL	93		93	145.08	145.08	146.53	148.00	149.48	150.97	152.48	154.00	155.54	157.10	158.67	160.26	161.86	163.48
SBT	239		239	372.84	372.84	376.57	380.34	384.14	387.98	391.86	395.78	399.74	403.74	407.78	411.86	415.98	420.14
SBR	2		2	3.12	3.12	3.15	3.18	3.21	3.24	3.27	3.30	3.33	3.36	3.39	3.42	3.45	3.48
			0		0.00												
3. Parade Road (NH106) at Right Way Path / Old Main Street																	
	3:30 PM		1		0.00												
<u>Movement</u>			0		0.00												
EBL	4		4	4.00	4.00	4	4	4	4	4	4	4	4	4	4	4	4
EBT	3		3	3.00	3.00	3	3	3	3	3	3	3	3	3	3	3	3
EBR	10		10	10.00	10.00	10	10	10	10	10	10	10	10	10	10	10	10
WBL	5		5	7.80	7.80	7.88	7.96	8.04	8.12	8.20	8.28	8.36	8.44	8.52	8.61	8.70	8.79
WBT	0		0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
WBR	8		8	12.48	12.48	12.60	12.73	12.86	12.99	13.12	13.25	13.38	13.51	13.65	13.79	13.93	14.07
NBL	7		7	7.00	7.00	7	7	7	7	7	7	7	7	7	7	7	7
NBT	528		528	823.68	823.68	831.92	840.24	848.64	857.13	865.70	874.36	883.10	891.93	900.85	909.86	918.96	928.15
NBR	3		3	4.68	4.68	4.73	4.78	4.83	4.88	4.93	4.98	5.03	5.08	5.13	5.18	5.23	5.28
SBL	15		15	23.40	23.40	23.63	23.87	24.11	24.35	24.59	24.84	25.09	25.34	25.59	25.85	26.11	26.37
SBT	391		391	609.96	609.96	616.06	622.22	628.44	634.72	641.07	647.48	653.95	660.49	667.09	673.76	680.50	687.31
SBR	0		0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
			0		0.00												
4. Meredith Center Road at Eastman Road / Lane Road																	
	3:30 PM		1		0.00												
<u>Movement</u>			0		0.00												
EBL	2		2	3.12	3.12	3.15	3.18	3.21	3.24	3.27	3.30	3.33	3.36	3.39	3.42	3.45	3.48
EBT	196		196	305.76	305.76	308.82	311.91	315.03	318.18	321.36	324.57	327.82	331.10	334.41	337.75	341.13	344.54
EBR	1		1	1.00	1.00	1	1	1	1	1	1	1	1	1	1	1	1
WBL	11		11	11.00	11.00	11	11	11	11	11	11	11	11	11	11	11	11
WBT	214		214	333.84	333.84	337.18	340.55	343.96	347.40	350.87	354.38	357.92	361.50	365.12	368.77	372.46	376.18
WBR	0		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NBL	0		0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
NBT	1		1	1.00	1.00	1	1	1	1	1	1	1	1	1	1	1	1
NBR	10		10	10.00	10.00	10	10	10	10	10	10	10	10	10	10	10	10
SBL	0		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SBT	0		0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
SBR	0		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			0		0.00												

PHF	% Heavy	Counted Heavy	Calculated Heavy	PM Peak data	2037 No-Build	Site Trip Distribution (Full Build)	Site Trips Added to Intersection	2037 Build (Full Build)	FUTURE BUILD PM PHF	
2. Parade Road (NH106) at Meredith Center Road / Elm Street										
Movement										
0.74	0%	0		EBL	2	92	698	94		
	1%	1	2%	EBT	167	83		250	0.90	
	2%	2		EBR	179	0		179		
0.87	5%	3		WBL	114	88		202		
	0%	0	2%	WBT	144	84		228	0.90	
	1%	1		WBR	165	0		165		
0.89	1%	1		NBL	241	0		241		
	1%	2	1%	NBT	499	95		594	0.90	
	3%	3		NBR	204	87		291		
0.96	3%	3		SBL	163	0		163		
	3%	6	3%	SBT	420	88		508	0.96	
	0%	0		SBR	3	81		84		
3. Parade Road (NH106) at Right Way Path / Old Main Street										
Movement										
0.53	0%	0		EBL	4	236	1317	240		
	0%	0	2%	EBT	3	16		19	0.90	
	0%	0		EBR	10	451		461		
0.65	40%	2		WBL	9	0		9		
	0%	0	2%	WBT	0	11		11	0.90	
	0%	0		WBR	14	0		14		
0.90	0%	0		NBL	7	479		486		
	1%	6	1%	NBT	928	-51		877	0.90	
	0%	0		NBR	5	0		5		
0.92	0%	0		SBL	26	0		26		
	3%	12	3%	SBT	687	-28		659	0.92	
	0%	0		SBR	0	203		203		
4. Meredith Center Road at Eastman Road / Lane Road										
Movement										
0.77	0%	0		EBL	3	0	254	3		
	2%	4	2%	EBT	345	41		386	0.90	
	0%	0		EBR	1	51		52		
0.79	0%	0		WBL	11	0		11		
	1%	2	1%	WBT	376	62		438	0.90	
	0%	0		WBR	0	0		0		
0.69	0%	0		NBL	0	54		54		
	0%	0	2%	NBT	1	22		23	0.90	
	0%	0		NBR	10	9		19		
0.25	0%	0		SBL	0	0		0		
	0%	0	2%	SBT	0	15		15	0.90	
	0%	0		SBR	0	0		0		

Background Traffic Volumes
PM Peak data

Assumed growth rate: 0.01
March 2023 Seasonal Adjust: 1.56 NHDOT Group 5 Averages
June 2023 Seasonal Adjust: 1.05 NHDOT Group 5 Averages (Int #21 ony)

Site Trips are not Seasonally Adjusted or Grown.

PM Peak data	Existing 2025 (Raw data) [03/06/2025]	Balance	2025	Existing 2025 w/ Seasonal Adjustment	2025 BASE	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
31. Eastman Road at																	
Prop Road1	Calculated				0.00												
Movement			0		0.00												
WBL			0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
WBR			0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
NBT	11		11	17.16	17.16	17.33	17.50	17.68	17.86	18.04	18.22	18.40	18.58	18.77	18.96	19.15	19.34
NBR			0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
SBL			0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
SBT	12		12	18.72	18.72	18.91	19.10	19.29	19.48	19.67	19.87	20.07	20.27	20.47	20.67	20.88	21.09
			0		0.00												
32. Meredith Center Road at																	
Prop Road2	Calculated				0.00												
Movement			0		0.00												
EBT	206	0	206	321.36	321.36	324.57	327.82	331.10	334.41	337.75	341.13	344.54	347.99	351.47	354.98	358.53	362.12
EBR			0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
WBL			0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
WBT	225	0	225	351.00	351.00	354.51	358.06	361.64	365.26	368.91	372.60	376.33	380.09	383.89	387.73	391.61	395.53
NBL			0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
NBR			0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
			0		0.00												

PHF	% Heavy	Counted Heavy	Calculated Heavy	PM Peak data	2037 No-Build	Site Trip Distribution (Full Build)	Site Trips Added to Intersection	2037 Build (Full Build)	FUTURE BUILD PM PHF	
31. Eastman Road at Prop Road1										
Movement										
0.90	0%	0	2%	EBT	0	0	151	0	0.90	
	0%			EBR	0	85		85		
0.90	0%		2%	WBL	19	0		19	0.90	
	0%			WBT	0	0		0		
0.90	0%	0	2%	NBL	0	66	66	0.90		
	0%			NBR	21	0	21			
32. Meredith Center Road at Prop Road2										
Movement										
0.90	2%	4	2%	EBT	362	-10	486	352	0.90	
	0%			EBR	0	60		60		
0.90	0%		2	1%	WBL	0		193	193	0.90
	1%				WBT	396		-28	368	
0.90	0%		2%	NBL	0	86	86	0.90		
	0%			NBR	0	185	185			

Background Traffic Volumes
SAT Peak data

Assumed growth rate: 0.01
March 2023 Seasonal Adjust: 1.56 NHDOT Group 5 Averages
June 2023 Seasonal Adjust: 1.05 NHDOT Group 5 Averages (Int #21 ony)

Site Trips are not Seasonally Adjusted or Grown.

SAT Peak data	Existing 2025 (Raw data) [03/08/2025]	Balance	2025	Existing 2025 w/ Seasonal Adjustment	2025 BASE	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
2. Parade Road (NH106) at Meredith Center Road / Elm Street 11:45 AM																	
Movement																	
EBL	1		1	1.56	1.56	1.58	1.60	1.62	1.64	1.66	1.68	1.70	1.72	1.74	1.76	1.78	1.80
EBT	62	+12	74	96.72	96.72	97.69	98.67	99.66	100.66	101.67	102.69	103.72	104.76	105.81	106.87	107.94	109.02
EBR	66	+12	78	102.96	102.96	103.99	105.03	106.08	107.14	108.21	109.29	110.38	111.48	112.59	113.72	114.86	116.01
WBL	26		26	40.56	40.56	40.97	41.38	41.79	42.21	42.63	43.06	43.49	43.92	44.36	44.80	45.25	45.70
WBT	66		66	102.96	102.96	103.99	105.03	106.08	107.14	108.21	109.29	110.38	111.48	112.59	113.72	114.86	116.01
WBR	77		77	120.12	120.12	121.32	122.53	123.76	125.00	126.25	127.51	128.79	130.08	131.38	132.69	134.02	135.36
NBL	63		63	98.28	98.28	99.26	100.25	101.25	102.26	103.28	104.31	105.35	106.40	107.46	108.53	109.62	110.72
NBT	170		170	265.20	265.20	267.85	270.53	273.24	275.97	278.73	281.52	284.34	287.18	290.05	292.95	295.88	298.84
NBR	36		36	56.16	56.16	56.72	57.29	57.86	58.44	59.02	59.61	60.21	60.81	61.42	62.03	62.65	63.28
SBL	68		68	106.08	106.08	107.14	108.21	109.29	110.38	111.48	112.59	113.72	114.86	116.01	117.17	118.34	119.52
SBT	154		154	240.24	240.24	242.64	245.07	247.52	250.00	252.50	255.03	257.58	260.16	262.76	265.39	268.04	270.72
SBR	1		1	1.56	1.56	1.58	1.60	1.62	1.64	1.66	1.68	1.70	1.72	1.74	1.76	1.78	1.80
3. Parade Road (NH106) at Right Way Path / Old Main Street 11:30 AM																	
Movement																	
EBL	0		0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
EBT	1		1	1.00	1.00	1	1	1	1	1	1	1	1	1	1	1	1
EBR	3		3	3.00	3.00	3	3	3	3	3	3	3	3	3	3	3	3
WBL	1		1	1.56	1.56	1.58	1.60	1.62	1.64	1.66	1.68	1.70	1.72	1.74	1.76	1.78	1.80
WBT	1		1	1.00	1.00	1	1	1	1	1	1	1	1	1	1	1	1
WBR	8		8	12.48	12.48	12.60	12.73	12.86	12.99	13.12	13.25	13.38	13.51	13.65	13.79	13.93	14.07
NBL	3		3	3.00	3.00	3	3	3	3	3	3	3	3	3	3	3	3
NBT	261		261	407.16	407.16	411.23	415.34	419.49	423.68	427.92	432.20	436.52	440.89	445.30	449.75	454.25	458.79
NBR	5		5	7.80	7.80	7.88	7.96	8.04	8.12	8.20	8.28	8.36	8.44	8.52	8.61	8.70	8.79
SBL	8		8	12.48	12.48	12.60	12.73	12.86	12.99	13.12	13.25	13.38	13.51	13.65	13.79	13.93	14.07
SBT	248		248	386.88	386.88	390.75	394.66	398.61	402.60	406.63	410.70	414.81	418.96	423.15	427.38	431.65	435.97
SBR	0		0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
4. Meredith Center Road at Eastman Road / Lane Road 11:15 AM																	
Movement																	
EBL	5		5	7.80	7.80	7.88	7.96	8.04	8.12	8.20	8.28	8.36	8.44	8.52	8.61	8.70	8.79
EBT	145		145	226.20	226.20	228.46	230.74	233.05	235.38	237.73	240.11	242.51	244.94	247.39	249.86	252.36	254.88
EBR	2		2	2.00	2.00	2	2	2	2	2	2	2	2	2	2	2	2
WBL	10		10	10.00	10.00	10	10	10	10	10	10	10	10	10	10	10	10
WBT	106	+14	120	165.36	165.36	167.01	168.68	170.37	172.07	173.79	175.53	177.29	179.06	180.85	182.66	184.49	186.33
WBR	0		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NBL	1		1	1.00	1.00	1	1	1	1	1	1	1	1	1	1	1	1
NBT	0		0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
NBR	8		8	8.00	8.00	8	8	8	8	8	8	8	8	8	8	8	8
SBL	0		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SBT	1		1	1.00	1.00	1	1	1	1	1	1	1	1	1	1	1	1
SBR	4		4	6.24	6.24	6.30	6.36	6.42	6.48	6.54	6.61	6.68	6.75	6.82	6.89	6.96	7.03

PHF	% Heavy	Counted Heavy	Calculated Heavy	SAT Peak data	2037 No-Build	Site Trip Distribution (Full Build)	Site Trips Added to Intersection	2037 Build (Full Build)	FUTURE BUILD PM PHF	
2. Parade Road (NH106) at Meredith Center Road / Elm Street										
Movement										
0.87	0%	0		EBL	2	93	729	95		
	0%	0	4%	EBT	109	79		188	0.90	
	8%	5		EBR	116	0		116		
0.74	0%	0		WBL	46	93		139		
	0%	0	1%	WBT	116	84		200	0.90	
	1%	1		WBR	135	0		135		
0.89	0%	0		NBL	111	0		111		
	0%	0	2%	NBT	299	95		394	0.90	
	0%	0		NBR	63	88		151		
0.83	0%	0		SBL	120	0		120		
	3%	4	2%	SBT	271	99		370	0.90	
	0%	0		SBR	2	98		100		
3. Parade Road (NH106) at Right Way Path / Old Main Street										
Movement										
0.50	0%	0		EBL	0	220	1018	220		
	0%	0	2%	EBT	1	13		14	0.90	
	0%	0		EBR	3	299		302		
0.50	0%	0		WBL	2	0		2		
	0%	0	2%	WBT	1	14		15	0.90	
	13%	1		WBR	14	0		14		
0.89	0%	0		NBL	3	317		320		
	0%	1	2%	NBT	459	-37		422	0.90	
	20%	1		NBR	9	0		9		
0.93	0%	0		SBL	14	0		14		
	2%	4	2%	SBT	436	-30		406	0.93	
	0%	0		SBR	0	222		222		
4. Meredith Center Road at Eastman Road / Lane Road										
Movement										
0.86	0%	0		EBL	9	0	410	9		
	1%	2	1%	EBT	255	76		331	0.90	
	0%	0		EBR	2	89		91		
0.83	0%	0		WBL	10	0		10		
	2%	2	2%	WBT	186	81		267	0.90	
	0%	0		WBR	0	0		0		
0.75	0%	0		NBL	1	85		86		
	0%	0	2%	NBT	0	38		38	0.90	
	0%	0		NBR	8	0		8		
0.42	0%	0		SBL	0	0		0		
	0%	0	2%	SBT	1	41		42	0.90	
	0%	0		SBR	7	0		7		

Background Traffic Volumes
SAT Peak data

Assumed growth rate: 0.01
March 2023 Seasonal Adjust: 1.56 NHDOT Group 5 Averages
June 2023 Seasonal Adjust: 1.05 NHDOT Group 5 Averages (Int #21 ony)

Site Trips are not Seasonally Adjusted or Grown.

SAT Peak data	Existing 2025 (Raw data) [03/08/2025]	Balance	2025	Existing 2025 w/ Seasonal Adjustment	2025 BASE	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
31. Eastman Road at Prop Road1																	
Calculated																	
Movement																	
WBL			0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
WBR			0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
NBT	9		9	14.04	14.04	14.18	14.32	14.46	14.60	14.75	14.90	15.05	15.20	15.35	15.50	15.66	15.82
NBR			0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
SBL			0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
SBT	13		13	20.28	20.28	20.48	20.68	20.89	21.10	21.31	21.52	21.74	21.96	22.18	22.40	22.62	22.85
32. Meredith Center Road at Prop Road2																	
Calculated																	
Movement																	
EBT	153	0	153	238.68	238.68	241.07	243.48	245.91	248.37	250.85	253.36	255.89	258.45	261.03	263.64	266.28	268.94
EBR			0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
WBL			0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
WBT	116	14	130	180.96	180.96	182.77	184.60	186.45	188.31	190.19	192.09	194.01	195.95	197.91	199.89	201.89	203.91
NBL			0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
NBR			0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0

PHF	% Heavy	Counted Heavy	Calculated Heavy	SAT Peak data	2037 No-Build	Site Trip Distribution (Full Build)	Site Trips Added to Intersection	2037 Build (Full Build)	FUTURE BUILD PM PHF
31. Eastman Road at Prop Road1									
Movement									
0.90	0%		2%	WBL	0	0	252	0	0.90
	0%		WBR	0	123	123			
0.90	0%	0	2%	NBT	16	0		16	0.90
	0%	NBR	0	0	0				
0.90	0%	0	2%	SBL	0	129	129	0.90	
	0%		SBT	23	0	23			
32. Meredith Center Road at Prop Road2									
Movement									
0.90	1%	2	1%	EBT	269	-11	556	258	0.90
	0%		EBR	0	97	97			
0.90	0%	2	2%	WBL	0	207		207	0.90
	2%		WBT	204	-24	180			
0.90	0%		2%	NBL	0	104	104	0.90	
	0%		NBR	0	183	183			

ATTACHMENT B

Adjustment

Seasonal

Growth

Heavy Vehicles

Year 2023 Monthly Data

Group 5 Averages: Recreational Highways

<u>Month</u>	<u>MADT</u>	<u>Adjustment to Average</u>	<u>Adjustment to Peak</u>
January	7,742	1.27	1.63
February	8,117	1.21	1.55
March	8,048	1.22	1.56
April	8,787	1.12	1.43
May	10,554	0.93	1.19
June	11,959	0.82	1.05
July	12,587	0.78	1.00
August	12,456	0.79	1.01
September	10,687	0.92	1.18
October	10,134	0.97	1.24
November	8,747	1.13	1.44
December	8,481	1.16	1.48
Average ADT:	9,858		
Peak ADT:	12,587		

Growth

Belknap County - Group 5 Highway Station

NH 104 west of Chase Rd (by

02295022 Meredith Wickwas Lake)

VOLUME TREND ?	
Year	Annual Growth
2023	3%
2022	-1%
2021	12%
2020	-10%
2019	1%
2018	0%
2017	4%
2016	0%
2015	3%
2014	0%

Average Growth: 0.11%

Year	AADT	Annual Change
2014	11658	
2015	12020	3.11%
2016	11976	-0.37%
2017	12499	4.37%
2018	12480	-0.15%
2019	12638	1.27%
2020	11415	-9.68%
2021	12776	11.92%
2022	12632	-1.13%
2023	12997	2.89%

CAGR	1.22%
Exp	-1.00%
Avg	0.11%

Background Traffic Volumes - HEAVY VEHICLE CALCULATIONS

NOTE: For calculated HV weighted average per NHDOT Synchro Checklist, Heavy vehicle percentages >8% are not to be averaged into the approach value

Volumes with strikethrough are not included in weighted average

AM Peak Hour	Existing 2025 (Raw data) [03/06/2025]	AM HEAVY	AM %Heavy	CALCULATE D WEIGHTED AVERAGE	If 0% calculated, use 2%
2. Parade Road (NH106) at Meredith Center Road / Elm Street					
<u>Movement</u>					
EBL	3	2	67%		
EBT	80	3	4%	3%	3%
EBR	150	3	2%		
WBL	37	2	5%		
WBT	67	8	12%	5%	5%
WBR	68	3	4%		
NBL	85	6	7%		
NBT	195	11	6%	6%	6%
NBR	52	4	8%		
SBL	93	4	4%		
SBT	250	2	1%	2%	2%
SBR	3	2	67%		
3. Parade Road (NH106) at Right Way Path / Old Main Street					
<u>Movement</u>					
EBL	1	0	0%		
EBT	1	0	0%	0%	2%
EBR	6	0	0%		
WBL	2	1	50%		
WBT	0	0	0%	0%	2%
WBR	16	0	0%		
NBL	9	0	0%		
NBT	337	22	7%	6%	6%
NBR	1	0	0%		
SBL	2	0	0%		
SBT	431	6	1%	1%	1%
SBR	0	0	0%		
4. Meredith Center Road at Eastman Road / Lane Road					
<u>Movement</u>					
EBL	0	0	0%		
EBT	240	6	3%	3%	3%
EBR	0	0	0%		
WBL	5	1	20%		
WBT	140	13	9%	0%	2%
WBR	0	0	0%		
NBL	0	0	0%		
NBT	0	0	0%	0%	2%
NBR	5	0	0%		
SBL	0	0	0%		
SBT	2	1	50%	0%	2%
SBR	5	0	0%		

Background Traffic Volumes - HEAVY VEHICLE CALCULATIONS

NOTE: For calculated HV weighted average per NHDOT Synchro Checklist, Heavy vehicle percentages >8% are not to be averaged into the approach value

Volumes with strikethrough are not included in weighted average

AM Peak Hour	Existing 2025 (Raw data) [03/06/2025]	AM HEAVY	AM %Heavy	CALCULATE D WEIGHTED AVERAGE	If 0% calculated , use 2%
31. Eastman Road at Prop Road1					
<u>Movement</u>					
WBL	0	0	0%	0%	2%
WBR	0	0	0%		
NBT	5	0	0%	0%	2%
NBR	0	0	0%		
SBL	0	0	0%	0%	2%
SBT	7	2	29%		
32. Meredith Center Road at Prop Road2					
<u>Movement</u>					
EBT	245	6	2%	2%	2%
EBR	0	0	0%		
WBL	0	0	0%	0%	2%
WBT	145	14	10%		
NBL	0	0	0%	0%	2%

Background Traffic Volumes - HEAVY VEHICLE CALCULATIONS

NOTE: For calculated HV weighted average per NHDOT Synchro Checklist, Heavy vehicle percentages >8% are not to be averaged into the approach value
Volumes with strikethrough are not included in weighted average

PM Peak Hour	Existing 2025 (Raw data) [03/06/2025]	PM HEAVY	PM %Heavy	CALCULATE D WEIGHTED AVERAGE	If 0% calculated , use 2%
2. Parade Road (NH106) at Meredith Center Road / Elm Street					
<u>Movement</u>					
EBL	1	0	0%		
EBT	95	1	1%	2%	2%
EBR	102	2	2%		
WBL	65	3	5%		
WBT	82	0	0%	2%	2%
WBR	94	1	1%		
NBL	137	1	1%		
NBT	284	2	1%	1%	1%
NBR	116	3	3%		
SBL	93	3	3%		
SBT	239	6	3%	3%	3%
SBR	2	0	0%		
3. Parade Road (NH106) at Right Way Path / Old Main Street					
<u>Movement</u>					
EBL	4	0	0%		
EBT	3	0	0%	0%	2%
EBR	10	0	0%		
WBL	5	2	40%		
WBT	0	0	0%	0%	2%
WBR	8	0	0%		
NBL	7	0	0%		
NBT	528	6	1%	1%	1%
NBR	3	0	0%		
SBL	15	0	0%		
SBT	391	12	3%	3%	3%
SBR	0	0	0%		
4. Meredith Center Road at Eastman Road / Lane Road					
<u>Movement</u>					
EBL	2	0	0%		
EBT	196	4	2%	2%	2%
EBR	1	0	0%		
WBL	11	0	0%		
WBT	214	2	1%	1%	1%
WBR	0	0	0%		
NBL	0	0	0%		
NBT	1	0	0%	0%	2%
NBR	10	0	0%		
SBL	0	0	0%		
SBT	0	0	0%	0%	2%
SBR	0	0	0%		

Background Traffic Volumes - HEAVY VEHICLE CALCULATIONS

NOTE: For calculated HV weighted average per NHDOT Synchro Checklist, Heavy vehicle percentages >8% are not to be averaged into the approach value
Volumes with strikethrough are not included in weighted average

PM Peak Hour	Existing 2025 (Raw data) [03/06/2025]	PM HEAVY	PM %Heavy	CALCULATE D WEIGHTED AVERAGE	If 0% calculated , use 2%
31. Eastman Road at Prop Road1					
<u>Movement</u>					
WBL	0	0	0%	0%	2%
WBR	0	0	0%	0%	2%
NBT	11	0	0%	0%	2%
NBR	0	0	0%	0%	2%
SBL	0	0	0%	0%	2%
SBT	12	0	0%	0%	2%
32. Meredith Center Road at Prop Road2					
<u>Movement</u>					
EBT	206	4	2%	2%	2%
EBR	0	0	0%	2%	2%
WBL	0	0	0%	1%	1%
WBT	225	2	1%	1%	1%
NBL	0	0	0%	0%	2%

Background Traffic Volumes - HEAVY VEHICLE CALCULATIONS

NOTE: For calculated HV weighted average per NHDOT Synchro Checklist, Heavy vehicle percentages >8% are not to be averaged into the approach value

Volumes with strikethrough are not included in weighted average

SAT Peak Hour	Existing 2025 (Raw data) [03/08/2025]	SAT HEAVY	SAT %Heavy	CALCULATE D WEIGHTED AVERAGE	If 0% calculated, use 2%
2. Parade Road (NH106) at Meredith Center Road / Elm Street					
<u>Movement</u>					
EBL	1	0	0%		
EBT	62	0	0%	4%	4%
EBR	66	5	8%		
WBL	26	0	0%		
WBT	66	0	0%	1%	1%
WBR	77	1	1%		
NBL	63	0	0%		
NBT	170	0	0%	0%	2%
NBR	36	0	0%		
SBL	68	0	0%		
SBT	154	4	3%	2%	2%
SBR	1	0	0%		
3. Parade Road (NH106) at Right Way Path / Old Main Street					
<u>Movement</u>					
EBL	0	0	0%		
EBT	1	0	0%	0%	2%
EBR	3	0	0%		
WBL	1	0	0%		
WBT	1	0	0%	0%	2%
WBR	8	1	13%		
NBL	3	0	0%		
NBT	261	1	0%	0%	2%
NBR	5	1	20%		
SBL	8	0	0%		
SBT	248	4	2%	2%	2%
SBR	0	0	0%		
4. Meredith Center Road at Eastman Road / Lane Road					
<u>Movement</u>					
EBL	5	0	0%		
EBT	145	2	1%	1%	1%
EBR	2	0	0%		
WBL	10	0	0%		
WBT	106	2	2%	2%	2%
WBR	0	0	0%		
NBL	1	0	0%		
NBT	0	0	0%	0%	2%
NBR	8	0	0%		
SBL	0	0	0%		
SBT	1	0	0%	0%	2%
SBR	4	0	0%		

Background Traffic Volumes - HEAVY VEHICLE CALCULATIONS

NOTE: For calculated HV weighted average per NHDOT Synchro Checklist, Heavy vehicle percentages >8% are not to be averaged into the approach value

Volumes with strikethrough are not included in weighted average

SAT Peak Hour	Existing 2025 (Raw data) [03/08/2025]	SAT HEAVY	SAT %Heavy	CALCULATE D WEIGHTED AVERAGE	If 0% calculated , use 2%
31. Eastman Road at Prop Road1					
<u>Movement</u>					
WBL	0	0	0%	0%	2%
WBR	0	0	0%		
NBT	9	0	0%	0%	2%
NBR	0	0	0%		
SBL	0	0	0%	0%	2%
SBT	13	0	0%		
32. Meredith Center Road at Prop Road2					
<u>Movement</u>					
EBT	153	2	1%	1%	1%
EBR	0	0	0%		
WBL	0	0	0%	2%	2%
WBT	116	2	2%		
NBL	0	0	0%	0%	2%

ATTACHMENT C

Timings

NH DOT - SEQUENCE AND TIMING CHART

8/13/2024 6:49:41 AM

CITY/TOWN: LACONIA			SIGNAL ID#: S-245-02		
LOCATION: NH 106 (PARADE ROAD)					
INTERSECT: ELM ST					
CABINET TYPE:		P TYPE-1		METER NUMBER 74345774 EVERSOURCE	
CONTROLLER INFO		TCT/PEEK	LMD8000	and MFR:	
INSTALL DATE:		6 /6 /1996		FIRE PREEMPT	

CONTROLLER TIMINGS						
	PH 1	PH 2	PH 4	PH 5	PH 6	PH 8
INITIAL	4	8	5	4	8	5
PASSAGE	4	5	4	4	5	4
YELLOW	4	4	4	4	4	4
ALL RED	2	2	2	2	2	2
MAXIMUM 1	20	30	30	20	30	30
MAXIMUM 2	20	30	30	20	30	30
MAXIMUM 3						
MAXIMUM EXT						
RECALL	NL	ON	NL	NL	ON	NL
WALK						
DON'T WALK						
FL YEL ARROW						
MOVEMENT	106NLT	106S	MER CTR	106SLT	106N	ELM
TIME TO REDUCE						
REDUCE BY						
MIN GAP						
DYN MAX LIM						
DYN MAX STEP						

NOTES:
CABINET TYPE: TCT

ABOVE TIMINGS VERIFIED ON 9/28/2016 G.T.

ATTACHMENT D

Crash Data

Summary

NHDOT raw data

						Year				Severity			Crash Type (**Assumed to be with another vehicle)						Weather			Weekday Commuter Peak			
	Intersection	Number	Date	Day	Time	Number of Vehicles	2020	2021	2022	2023	Property Damage Only	Injury	Fatal	Pedestrian	Unknown**	Fixed Object/ DITCH	OTHER MOTOR VEHICLE	ANIMAL	Bicycle	Sun Glare	Rain/Wet	Snow/Ice	Weekday AM (7-9AM)	Weekday PM (3-6PM)	Non-Commuter Peak
	3. Parade Rd at Right Way Path/Old North Main St																								
0	TOTALS						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2. Parade Rd at Meredith Center Rd/Elm St	71	5/14/2023	SUN	317PM	2				1	1				1										1
	2. Parade Rd at Meredith Center Rd/Elm St	292	8/23/2023	WED	221PM	2				1		1			1										1
	2. Parade Rd at Meredith Center Rd/Elm St	40	2/24/2023	FRI	1159AM	2				1	1				1					1					1
	2. Parade Rd at Meredith Center Rd/Elm St	72	3/31/2023	FRI	1029PM	2				1	1				1							1			1
	2. Parade Rd at Meredith Center Rd/Elm St	265	8/2/2021	MON	1054AM	2			1		1						1								1
	2. Parade Rd at Meredith Center Rd/Elm St	196	11/3/2021	WED	532PM	2			1		1						1							1	
	2. Parade Rd at Meredith Center Rd/Elm St	102	1/30/2022	SUN	832AM	2				1	1						1					1			1
	2. Parade Rd at Meredith Center Rd/Elm St	51	3/20/2020	FRI	1PM	2	1					1					1								1
8	TOTALS						1	2	1	4	6	2	0	0	4	0	4	0	0	0	1	2	0	1	7
	4. Meredith Center Rd at Eastman Rd/Lane Rd	83	2/6/2020	THUR	8PM	1	1				1					1						1			1
1	TOTALS						1	0	0	0	1	0	0	0	0	1	0	0	0	0	0	1	0	0	1

OBJECT ID *	CRASH DATE	DAY OF THE WEEK	CRASH TIME	ROUTENO_ STREETNAME	FATAL INDICATOR	TOTAL INJURED	VEHICLES COUNT	CRASH TYPE	FIXED OBJECT STRUCK	FIRST HARMFUL EVENT	ROAD SURFACE CONDITION	WEATHER CONDITION	SEVERITY
1	2/22/2020	Saturday	2217	VETERANS SQ	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
2	9/23/2020	Wednesday	1641	COURT ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
3	6/20/2020	Saturday	2122	855 UNION AVE	No	0	2	Parked Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
4	8/13/2020	Thursday	1729	ROLLER COASTER RD	No	2	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	Suspected Minor Injury
5	9/11/2020	Friday	1724	UNION AVE	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
6	3/19/2020	Thursday	1718	UNION AVE	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Wet	Rain	No Apparent Injury
7	1/13/2020	Monday	1338	GILFORD AVE	No	0	3	Other Motor Vehicle	Value not provided	<Null>	Ice	Rain	No Apparent Injury
8	10/6/2020	Tuesday	1656	GILFORD AVE	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
9	3/2/2020	Monday	1310	UNION AVE	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
10	1/4/2020	Saturday	1016	COURT ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Wet	Rain	No Apparent Injury
11	8/16/2020	Sunday	1708	SOUTH MAIN ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
12	3/8/2021	Monday	1601	311 UNION AVE	No	1	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	Possible Injury
13	2/4/2021	Thursday	1541	ELM ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
14	3/1/2021	Monday	1339	UNION AVE	No	2	2	Other Motor Vehicle	Value not provided	<Null>	Wet	Cloudy	Possible Injury
15	2/19/2021	Friday	1113	COURT ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Wet	Snow	No Apparent Injury
16	3/10/2021	Wednesday	1423	VETERANS SQ	No	2	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	Suspected Minor Injury
17	3/21/2021	Sunday	1158	UNION AVE	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
18	2/24/2021	Wednesday	1731	NORTH MAIN ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
19	7/14/2021	Wednesday	1525	UNION AVE	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
20	8/29/2021	Sunday	1331	UNION AVE	No	0	2	Pedal Cycle/Moped	Value not provided	<Null>	Dry	Clear	No Apparent Injury
21	8/24/2021	Tuesday	1420	MAIN ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
22	8/19/2021	Thursday	909	NORTH MAIN ST	No	1	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Cloudy	Suspected Minor Injury
23	7/20/2021	Tuesday	2248	NORTH MAIN ST	No	0	1	Fixed Object	Other	<Null>	Wet	Rain	No Apparent Injury
24	6/21/2021	Monday	1650	LAKE ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
25	5/6/2021	Thursday	1050	PARADE RD	No	1	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	Suspected Minor Injury

26	6/18/2021	Friday	2117	ROLLER COASTER RD	No	1	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	Suspected Minor Injury
27	12/28/2022	Wednesday	1714	UNION AVE	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
28	7/26/2022	Tuesday	1001	695 N MAIN ST	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
29	7/5/2022	Tuesday	1442	N MAIN ST	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Wet	Rain	No Apparent Injury
30	8/19/2022	Friday	1427	UNION AVE	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Cloudy	No Apparent Injury
31	7/18/2022	Monday	2000	17 GILFORD AVE	No	<Null>	1	<Null>	<Null>	Curb(Collision with Fixed Object)	Dry	Rain	Unknown
32	7/17/2022	Sunday	1301	WEIRS BLVD	No	1	1	<Null>	<Null>	Overturn/Rollover(N on Collision)	Dry	Clear	Suspected Serious Injury
33	7/28/2022	Thursday	1920	ENDICOTT NORTH ST	No	1	1	<Null>	<Null>	Curb(Collision with Fixed Object)	Wet	Rain	Suspected Minor Injury
34	1/30/2022	Sunday	949	ENDICOTT EAST ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Snow	Clear	No Apparent Injury
35	7/27/2022	Wednesday	1526	OAK ST	No	1	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	Suspected Minor Injury
36	7/30/2023	Sunday	330	ELM ST	No	<Null>	1	<Null>	<Null>	Utility Pole/Light Support(Collision with Fixed Object)	Dry	Clear	No Apparent Injury
37	10/26/2023	Thursday	1631	45 COURT ST	No	<Null>	2	<Null>	<Null>	Motor Vehicle in Transport	Dry	Clear	No Apparent Injury
38	7/10/2023	Monday	1438	UNION AVE	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Wet	Rain	No Apparent Injury
39	5/8/2023	Monday	1459	S MAIN ST	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	Unknown

40	2/24/2023	Friday	1159	PARADE RD	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Wet	Clear	No Apparent Injury
41	9/8/2023	Friday	1821	765 UNION AVE	No	<Null>	2	<Null>	<Null>	Parked Motor Vehicle	Dry	Clear	No Apparent Injury
42	6/11/2023	Sunday	1307	45 COURT ST	No	1	3	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	Possible Injury
43	4/28/2023	Friday	1506	855 UNION AVE	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
44	2/26/2023	Sunday	1013	ENDICOTT EAST ST	No	1	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Snow	Snow	Possible Injury
45	3/29/2023	Wednesday	1111	OAK ST	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
46	10/14/2020	Wednesday	2253	MESSER ST	No	1	2	Bicyclist	Value not provided	<Null>	Dry	Clear	Possible Injury
47	10/28/2020	Wednesday	814	NORTH MAIN ST	No	1	1	Pedestrian	Value not provided	<Null>	Wet	Rain	No Apparent Injury
48	10/28/2020	Wednesday	1422	UNION AVE	No	0	1	Fixed Object	Telephone/Electric Pole	<Null>	Wet	Cloudy	No Apparent Injury
49	7/29/2020	Wednesday	1035	BEACON EAST ST	No	1	2	Bicyclist	Value not provided	<Null>	Dry	Clear	No Apparent Injury
50	12/4/2020	Friday	1522	PARADE RD	No	0	1	Overturn/Rollover	Embankment/Ditch/Curb	<Null>	Dry	Clear	No Apparent Injury
51	3/20/2020	Friday	1300	ELM ST	No	1	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Cloudy	Suspected Minor Injury
52	4/2/2021	Friday	841	423 SOUTH MAIN ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
53	10/19/2021	Tuesday	1609	UNION AVE	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
54	8/22/2021	Sunday	1705	CHURCH ST	No	0	4	Other Motor Vehicle	Value not provided	<Null>	Wet	Rain	No Apparent Injury
55	7/31/2021	Saturday	1158	ENDICOTT NORTH ST	No	0	1	Fixed Object	Tree	<Null>	Dry	Clear	No Apparent Injury
56	7/29/2021	Thursday	2154	UNION AVE	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Wet	Rain	Unknown
57	11/9/2021	Tuesday	1611	UNION AVE	No	1	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	Possible Injury
58	7/6/2021	Tuesday	1106	297 UNION AVE	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury

59	6/17/2021	Thursday	1113	UNION AVE	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
60	7/9/2021	Friday	1229	union ave	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Wet	Rain	No Apparent Injury
61	1/8/2022	Saturday	1906	MESSER ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
62	3/3/2022	Thursday	1627	UNION AVE	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
63	5/23/2022	Monday	1707	UNION AVE	No	<Null>	2	<Null>	<Null>	Other Non-Collision(Non-Collision)	Dry	Clear	No Apparent Injury
64	10/24/2022	Monday	1640	UNION AVE	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
65	9/1/2022	Thursday	636	28 LEXINGTON DR	No	<Null>	2	<Null>	<Null>	Parked Motor Vehicle(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
66	8/13/2023	Sunday	1608	UNION AVE	No	<Null>	2	<Null>	<Null>	Motor Vehicle in Transport	Dry	Clear	No Apparent Injury
67	11/28/2023	Tuesday	1030	N MAIN ST	No	1	2	<Null>	<Null>	Motor Vehicle in Transport	Unknown	Unknown	Suspected Serious Injury
68	8/31/2023	Thursday	1023	OAK ST	No	2	3	<Null>	<Null>	Pedestrian	Dry	Clear	No Apparent Injury
69	10/11/2023	Wednesday	1012	25 UNION AVE	No	<Null>	2	<Null>	<Null>	Parked Motor Vehicle	Dry	Clear	No Apparent Injury
70	8/10/2023	Thursday	1550	173 COURT ST	No	<Null>	2	<Null>	<Null>	Motor Vehicle in Transport	Dry	Cloudy	No Apparent Injury
71	5/14/2023	Sunday	1517	PARADE RD	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
72	3/31/2023	Friday	2229	ELM ST	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Snow	Snow	No Apparent Injury
73	3/25/2020	Wednesday	851	VETERANS SQ	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
74	5/13/2020	Wednesday	532	MEREDITH CENTER RD	No	0	1	Animal(Other)	Value not provided	<Null>	Dry	Clear	No Apparent Injury
75	8/5/2020	Wednesday	1525	NORTH MAIN ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
76	10/1/2020	Thursday	1823	NORTH MAIN ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
77	7/7/2020	Tuesday	1540	LEXINGTON DR	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury

78	10/5/2020	Monday	1445	MAIN ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
79	2/8/2020	Saturday	1032	NORTH MAIN ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
80	4/2/2020	Thursday	1722	COURT ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Wet	Rain	No Apparent Injury
81	6/5/2020	Friday	1126	UNION AVE	No	2	3	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	Suspected Minor Injury
82	8/26/2020	Wednesday	1608	UNION AVE	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
83	2/6/2020	Thursday	2000	LANE RD	No	0	1	Fixed Object	Embankment/Ditch/Curb	<Null>	Ice	-tail, Freeze Rail,	No Apparent Injury
84	1/17/2021	Sunday	1027	N MAIN ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
85	3/19/2021	Friday	1228	VETERANS SQ	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
86	6/12/2021	Saturday	1708	WATSON RD	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
87	7/18/2021	Sunday	735	N MAIN ST	No	1	1	Fixed Object	Telephone/Electric Pole	<Null>	Wet	Rain	Suspected Minor Injury
88	12/2/2021	Thursday	936	MEREDITH CENTER RD	No	0	1	Fixed Object	Embankment/Ditch/Curb	<Null>	Snow	Sleet and Fog	No Apparent Injury
89	11/15/2021	Monday	1505	ELM ST	No	0	2	Pedestrian	Value not provided	<Null>	Dry	Clear	No Apparent Injury
90	10/31/2021	Sunday	854	UNION AVE	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Wet	Rain	No Apparent Injury
91	11/6/2021	Saturday	1742	GILFORD AVE	No	0	1	Fixed Object	Traffic Signal	<Null>	Dry	Clear	No Apparent Injury
92	6/13/2021	Sunday	1351	PARADE RD	No	1	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	Suspected Minor Injury
93	9/28/2021	Tuesday	1230	480 MAIN ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
94	8/26/2021	Thursday	2244	UNION AVE	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
95	6/23/2021	Wednesday	1556	S MAIN ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
96	7/29/2021	Thursday	2158	UNION AVE	No	0	1	Fixed Object	Median	<Null>	Wet	Rain	No Apparent Injury
97	12/14/2021	Tuesday	1652	NORTH MAIN ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
98	8/3/2021	Tuesday	1315	MAIN ST	No	0	2	Parked Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
99	7/7/2021	Wednesday	1307	COURT ST	No	1	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	Suspected Minor Injury
100	7/12/2022	Tuesday	1211	UNION AVE	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury

101	6/1/2022	Wednesday	1622	N MAIN ST	No	<Null>	2	<Null>	<Null>	Other Non-Collision(Non-Collision)	Dry	Clear	No Apparent Injury
102	1/30/2022	Sunday	832	PARADE RD	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Snow	Clear	No Apparent Injury
103	10/9/2022	Sunday	1959	799 UNION AVE	No	<Null>	2	<Null>	<Null>	Other Non-motorist(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
104	6/29/2022	Wednesday	1509	UNION AVE	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
105	8/16/2022	Tuesday	1831	765 UNION AVE	No	<Null>	2	<Null>	<Null>	Parked Motor Vehicle(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
106	3/24/2022	Thursday	1714	COURT ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Wet	Rain	No Apparent Injury
107	9/10/2022	Saturday	1233	FAIR ST	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
108	3/16/2022	Wednesday	725	GILFORD AVE	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Wet	Cloudy	No Apparent Injury
109	8/30/2022	Tuesday	1835	N MAIN ST	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
110	10/26/2023	Thursday	1453	GILFORD AVE	No	2	2	<Null>	<Null>	Motor Vehicle in Transport	Dry	Clear	Suspected Minor Injury
111	3/10/2023	Friday	1544	LEXINGTON DR	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
112	5/17/2023	Wednesday	1203	UNION AVE	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
113	4/10/2023	Monday	1611	UNION AVE	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury

114	2/13/2023	Monday	1740	653 MAIN ST	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
115	12/21/2023	Thursday	1536	PARADE RD	No	1	2	<Null>	<Null>	Motor Vehicle in Transport	Dry	Clear	Suspected Minor Injury
116	6/23/2023	Friday	1645	288 UNION AVE	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
117	4/11/2023	Tuesday	1954	N MAIN ST	No	1	2	<Null>	<Null>	Unknown	Dry	Clear	Suspected Minor Injury
118	10/26/2023	Thursday	730	UNION AVE	No	<Null>	2	<Null>	<Null>	Motor Vehicle in Transport	Dry	Clear	No Apparent Injury
119	10/5/2023	Thursday	934	174 COURT ST	No	<Null>	2	<Null>	<Null>	Motor Vehicle in Transport	Dry	Clear	No Apparent Injury
120	3/24/2023	Friday	907	UNION AVE	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Cloudy	No Apparent Injury
121	12/29/2020	Tuesday	1333	COURT ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
122	8/28/2020	Friday	414	PARADE RD	No	0	1	Fixed Object	Embankment/Ditch/Curb	<Null>	Dry	Clear	No Apparent Injury
123	2/18/2020	Tuesday	1000	BEACON WEST ST	No	0	3	Other Motor Vehicle	Value not provided	<Null>	Wet	Snow	No Apparent Injury
124	12/25/2020	Friday	24	ENDICOTT EAST ST	No	1	1	Fixed Object	Median	<Null>	Wet	Rain	Possible Injury
125	5/26/2020	Tuesday	1113	VETERANS SQ	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
126	10/28/2020	Wednesday	1156	CHURCH ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Wet	Rain	No Apparent Injury
127	5/26/2020	Tuesday	953	CHURCH ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
128	11/15/2020	Sunday	1642	SOUTH MAIN ST	No	1	2	Other Motor Vehicle	Value not provided	<Null>	Wet	Rain	Suspected Minor Injury
129	11/25/2020	Wednesday	1047	PARADE RD	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
130	1/4/2021	Monday	1653	COURT ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
131	3/23/2021	Tuesday	1046	ELM ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
132	10/28/2021	Thursday	1652	VETERAN'S SQ	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
133	8/5/2021	Thursday	1504	COURT ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
134	7/7/2021	Wednesday	1157	BEACON WEST ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury

135	4/13/2021	Tuesday	1409	S MAIN ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
136	6/23/2022	Thursday	1624	COURT ST	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
137	5/16/2022	Monday	731	ELM ST	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
138	6/16/2022	Thursday	640	PARADE RD	No	<Null>	2	<Null>	<Null>	Unknown	Dry	Cloudy	No Apparent Injury
139	5/2/2022	Monday	1410	UNION AVE	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
140	9/8/2022	Thursday	1129	1367 UNION AVE	No	<Null>	2	<Null>	<Null>	Parked Motor Vehicle(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
141	2/8/2022	Tuesday	1809	UNION AVE	No	1	2	Pedestrian	Value not provided	<Null>	Wet	Cloudy	Suspected Minor Injury
142	1/7/2022	Friday	1829	FAIR ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Ice	Adverse Condi	No Apparent Injury
143	9/17/2022	Saturday	1756	ENDICOTT NORTH ST	No	1	3	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	Suspected Minor Injury
144	9/5/2022	Monday	847	UNION AVE	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Wet	Rain	No Apparent Injury
145	12/2/2023	Saturday	1157	9 VETERAN'S SQ	No	<Null>	2	<Null>	<Null>	Parked Motor Vehicle	Dry	Clear	Unknown
146	2/23/2023	Thursday	1217	UNION AVE	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Snow	Snow	No Apparent Injury
147	12/20/2023	Wednesday	1526	ROLLER COASTER RD	No	<Null>	2	<Null>	<Null>	Motor Vehicle in Transport	Dry	Clear	No Apparent Injury
148	11/22/2023	Wednesday	1917	UNION AVE	No	<Null>	2	<Null>	<Null>	Motor Vehicle in Transport	Wet	Clear	No Apparent Injury
149	8/29/2023	Tuesday	1305	S MAIN ST	No	<Null>	2	<Null>	<Null>	Motor Vehicle in Transport	Dry	Clear	No Apparent Injury

150	12/6/2020	Sunday	1205	435 UNION AVE	No	1	3	Other Motor Vehicle	Value not provided	<Null>	Wet	Cloudy	Suspected Minor Injury
151	2/9/2020	Sunday	1258	UNION AVE	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
152	7/24/2020	Friday	1218	GILFORD AVE	No	1	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
153	7/6/2020	Monday	1243	UNION AVE	No	0	3	Parked Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
154	11/27/2020	Friday	926	ELM ST	No	0	1	Animal(Other)	Value not provided	<Null>	Dry	Clear	<Null>
155	11/1/2020	Sunday	2004	UNION AVE	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Wet	Rain	No Apparent Injury
156	10/15/2020	Thursday	1839	ELM ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
157	12/9/2020	Wednesday	1142	UNION AVE	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Cloudy	No Apparent Injury
158	8/23/2020	Sunday	1216	UNION AVE	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
159	1/30/2021	Saturday	1340	UNION AVE	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
160	9/17/2021	Friday	1515	UNION AVE	No	0	3	Other Motor Vehicle	Value not provided	<Null>	Dry	Cloudy	No Apparent Injury
161	7/28/2021	Wednesday	1353	UNION AVE	No	1	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	Suspected Minor Injury
162	6/13/2021	Sunday	1908	PARADE RD	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
163	10/26/2021	Tuesday	1107	PLEASANT ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Wet	Cloudy	No Apparent Injury
164	10/1/2021	Friday	2302	MAIN ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
165	8/7/2021	Saturday	2313	UNION AVE	No	1	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	Possible Injury
166	5/22/2021	Saturday	2054	NORTH MAIN ST	No	0	1	Fixed Object	RR Crossing Device	<Null>	Dry	Clear	No Apparent Injury
167	10/31/2022	Monday	1144	MAIN ST	No	1	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
168	8/17/2022	Wednesday	1022	MAIN ST	No	1	2	<Null>	<Null>	Pedalcycle(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
169	12/1/2022	Thursday	820	UNION AVE	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Cloudy	No Apparent Injury
170	8/5/2022	Friday	1622	855 UNION AVE	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury

171	1/23/2022	Sunday	1241	PARADE RD	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Adverse Condi	No Apparent Injury
172	4/1/2022	Friday	1436	UNION AVE	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Cloudy	No Apparent Injury
173	3/4/2022	Friday	2148	MESSER ST	No	1	1	Fixed Object	Other	<Null>	Dry	Clear	Suspected Minor Injury
174	8/21/2022	Sunday	1050	45 COURT ST	No	<Null>	2	<Null>	<Null>	Other Non-motorist(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
175	4/18/2022	Monday	659	BEACON WEST ST	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
176	9/22/2022	Thursday	1654	UNION AVE	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Wet	Rain	No Apparent Injury
177	1/7/2022	Friday	829	UNION AVE	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Snow	Snow	No Apparent Injury
178	7/25/2022	Monday	934	ROLLER COASTER RD	No	1	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Wet	Rain	Suspected Minor Injury
179	4/18/2022	Monday	634	UNION AVE	No	2	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	Suspected Minor Injury
180	5/16/2022	Monday	1537	161 COURT ST	No	1	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Cloudy	Suspected Minor Injury
181	6/17/2022	Friday	106	WATSON RD	No	1	1	<Null>	<Null>	Overturn/Rollover(N on Collision)	Dry	Clear	Suspected Minor Injury
182	8/1/2023	Tuesday	1625	COURT ST	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
183	7/10/2023	Monday	1015	UNION AVE	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Wet	Rain	No Apparent Injury

184	7/19/2023	Wednesday	1510	CHURCH ST	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
185	3/17/2023	Friday	1412	288 UNION AVE	No	<Null>	2	<Null>	<Null>	Other Non-Collision(Non-Collision)	Dry	Cloudy	No Apparent Injury
186	3/31/2023	Friday	1008	N MAIN ST	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
187	12/3/2023	Sunday	941	UNION AVE	No	<Null>	1	<Null>	<Null>	Other Post, Pole, or Support	Dry	Clear	No Apparent Injury
188	10/19/2023	Thursday	1507	COURT ST	No	1	2	<Null>	<Null>	Motor Vehicle in Transport	Dry	Clear	Suspected Serious Injury
189	12/20/2023	Wednesday	531	N MAIN ST	No	<Null>	2	<Null>	<Null>	Motor Vehicle in Transport	Dry	Clear	No Apparent Injury
190	1/22/2020	Wednesday	703	NORTH MAIN ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
191	2/7/2020	Friday	1934	UNION AVE	No	0	1	Fixed Object	Telephone/Electric Pole	<Null>	Snow	Snow	No Apparent Injury
192	8/1/2020	Saturday	509	GILFORD AVE	No	0	1	Fixed Object	Telephone/Electric Pole	<Null>	Dry	Clear	No Apparent Injury
193	4/20/2020	Monday	1301	GILFORD AVE	No	2	3	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	Suspected Minor Injury
194	5/23/2020	Saturday	1138	COURT ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
195	4/26/2020	Sunday	1605	BALDWIN ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Adverse Condi	No Apparent Injury
196	11/3/2021	Wednesday	1732	ELM ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
197	6/12/2021	Saturday	2244	ENDICOTT NORTH ST	No	2	3	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	Suspected Minor Injury
198	9/10/2021	Friday	1613	UNION AVE	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
199	12/6/2021	Monday	1715	BEACON WEST ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Wet	Cloudy	No Apparent Injury
200	7/18/2021	Sunday	1453	WATSON RD	No	0	3	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
201	7/30/2021	Friday	104	LAKE ST	No	0	1	Other	Value not provided	<Null>	Wet	Cloudy	No Apparent Injury
202	6/19/2021	Saturday	20	endicott north st	No	2	1	Overturn/Rollover	Embankment/Ditch/Curb	<Null>	Dry	Clear	Suspected Minor Injury
203	11/22/2022	Tuesday	1711	UNION AVE	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury

204	1/8/2022	Saturday	1649	COURT ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Wet	Cloudy	No Apparent Injury
205	2/2/2022	Wednesday	657	UNION AVE	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Wet	Cloudy	No Apparent Injury
206	12/22/2022	Thursday	1332	UNION AVE	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
207	12/16/2022	Friday	1144	N MAIN ST	No	<Null>	1	<Null>	<Null>	Traffic Sign Support(Collision with Fixed Object)	Snow	Snow	No Apparent Injury
208	2/9/2022	Wednesday	1210	45 COURT ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
209	1/18/2022	Tuesday	1637	GILFORD AVE	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Wet	Adverse Condi	No Apparent Injury
210	11/26/2023	Sunday	1045	PARADE RD	No	1	1	<Null>	<Null>	Overturn/Rollover	Dry	Clear	Suspected Minor Injury
211	12/4/2023	Monday	1337	17 LEXINGTON DR	No	<Null>	2	<Null>	<Null>	Parked Motor Vehicle	Dry	Clear	Unknown
212	6/10/2023	Saturday	1414	WATSON RD	No	<Null>	1	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	Unknown
213	3/28/2023	Tuesday	1446	COURT ST	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
214	1/13/2023	Friday	1332	UNION AVE	No	1	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Wet	Rain	Possible Injury
215	6/11/2023	Sunday	1228	UNION AVE	No	2	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	Possible Injury
216	6/22/2023	Thursday	631	OAK ST	No	1	2	<Null>	<Null>	Pedalcycle(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
217	7/21/2023	Friday	1239	653 MAIN ST	No	<Null>	2	<Null>	<Null>	Parked Motor Vehicle(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury

218	7/27/2023	Thursday	1647	UNION AVE	No	<Null>	3	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
219	8/29/2020	Saturday	1153	UNION AVE	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Wet	Rain	No Apparent Injury
220	5/27/2020	Wednesday	1216	UNION AVE	No	1	4	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	Suspected Minor Injury
221	3/17/2020	Tuesday	913	PARADE RD	No	0	1	Fixed Object	Tree	<Null>	Ice	Snow	No Apparent Injury
222	9/27/2020	Sunday	1509	COURT ST	No	2	1	Fixed Object	Telephone/Electric Pole	<Null>	Dry	Cloudy	Possible Injury
223	5/10/2020	Sunday	1055	PARADE RD	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
224	10/5/2020	Monday	1515	UNION AVE	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
225	12/4/2020	Friday	1456	NORTH MAIN ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Cloudy	No Apparent Injury
226	11/21/2020	Saturday	1545	MAIN ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
227	2/11/2021	Thursday	1009	FAIR ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Wet	Adverse Condi	No Apparent Injury
228	6/17/2021	Thursday	1136	UNION AVE	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
229	6/12/2021	Saturday	1758	ENDICOTT NORTH ST	No	2	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	Suspected Minor Injury
230	9/8/2021	Wednesday	1708	UNION AVE	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
231	10/31/2021	Sunday	23	ENDICOTT NORTH ST	No	0	1	Fixed Object	Sign Post	<Null>	Wet	Rain	No Apparent Injury
232	4/27/2021	Tuesday	1354	UNION AVE	No	0	2	Other Motor Vehicle	Traffic Signal	<Null>	Dry	Clear	No Apparent Injury
233	11/12/2021	Friday	37	MEREDITH CENTER RD	No	1	1	Fixed Object	Embankment/Ditch/Curb	<Null>	Dry	Clear	Possible Injury
234	12/31/2021	Friday	1837	UNION AVE	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Wet	Rain	No Apparent Injury
235	9/12/2021	Sunday	1227	SOUTH MAIN ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
236	10/21/2021	Thursday	1215	UNION AVE	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
237	8/9/2021	Monday	1649	UNION AVE	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
238	9/26/2022	Monday	858	UNION AVE	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury

239	10/25/2022	Tuesday	1715	COURT ST	No	1	2	<Null>	<Null>	Pedalcycle(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Cloudy	No Apparent Injury
240	1/26/2022	Wednesday	1053	ELM ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
241	7/23/2022	Saturday	1052	UNION AVE	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
242	8/16/2022	Tuesday	2021	736 UNION AVE	No	<Null>	2	<Null>	<Null>	Parked Motor Vehicle(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
243	11/5/2022	Saturday	1121	UNION AVE	No	1	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	Suspected Minor Injury
244	9/15/2022	Thursday	1807	UNION AVE	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
245	5/8/2022	Sunday	1631	COURT ST	No	<Null>	1	<Null>	<Null>	Traffic Sign Support(Collision with Fixed Object)	Dry	Clear	No Apparent Injury
246	10/8/2023	Sunday	1703	736 UNION AVE	No	<Null>	1	<Null>	<Null>	Other Post, Pole, or Support	Dry	Clear	No Apparent Injury
247	3/2/2023	Thursday	655	UNION AVE	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Snow	Snow	No Apparent Injury
248	7/26/2023	Wednesday	1132	PARADE RD	No	<Null>	2	<Null>	<Null>	Pedalcycle(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
249	3/1/2023	Wednesday	1530	COURT ST	No	<Null>	1	<Null>	<Null>	Traffic Sign Support(Collision with Fixed Object)	Dry	Clear	No Apparent Injury
250	12/11/2023	Monday	1724	UNION AVE	No	<Null>	2	<Null>	<Null>	Motor Vehicle in Transport	Dry	Clear	No Apparent Injury
251	11/2/2023	Thursday	1215	GILFORD AVE	No	<Null>	2	<Null>	<Null>	Motor Vehicle in Transport	Dry	Clear	No Apparent Injury
252	9/7/2023	Thursday	1619	UNION AVE	No	<Null>	2	<Null>	<Null>	Motor Vehicle in Transport	Dry	Clear	No Apparent Injury

253	3/15/2023	Wednesday	1325	UNION AVE	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
254	6/26/2020	Friday	1542	BEACON WEST ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
255	5/13/2020	Wednesday	1427	NORTH MAIN ST	No	1	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	Possible Injury
256	4/28/2020	Tuesday	411	SOUTH MAIN ST	No	0	1	Fixed Object	Other	<Null>	Dry	Clear	No Apparent Injury
257	3/6/2020	Friday	1356	UNION AVE	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Wet	Rain	No Apparent Injury
258	1/6/2020	Monday	1605	NORTH MAIN ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Ice	Clear	No Apparent Injury
259	12/8/2020	Tuesday	1223	PARADE RD	No	0	1	Fixed Object	Culvert/Headwall	<Null>	Dry	Clear	No Apparent Injury
260	8/18/2020	Tuesday	1450	PARADE RD	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
261	3/9/2021	Tuesday	1223	ENDICOTT EAST ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
262	2/22/2021	Monday	1715	CLINTON ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Snow	Snow	No Apparent Injury
263	8/21/2021	Saturday	2218	LAKE ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Cloudy	No Apparent Injury
264	5/9/2021	Sunday	1332	ENDICOTT NORTH ST	No	1	1	Fixed Object	Telephone/Electric Pole	<Null>	Dry	Clear	Suspected Minor Injury
265	8/2/2021	Monday	1054	PARADE RD	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
266	8/17/2021	Tuesday	1321	OAK ST	No	1	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	Suspected Minor Injury
267	11/21/2021	Sunday	2033	MAIN ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
268	12/15/2021	Wednesday	1856	GILFORD AVE	No	1	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Cloudy	Possible Injury
269	3/31/2021	Wednesday	1556	UNION AVE	No	1	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	Suspected Minor Injury
270	7/9/2021	Friday	2237	FAIR ST	No	1	2	Bicyclist	Value not provided	<Null>	Dry	Clear	Possible Injury
271	11/3/2021	Wednesday	1549	UNION AVE	No	0	2	Parked Motor Vehicle	Value not provided	<Null>	Dry	Cloudy	No Apparent Injury
272	4/30/2021	Friday	1639	CLINTON ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Cloudy	No Apparent Injury
273	6/23/2022	Thursday	1618	UNION AVE	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
274	6/12/2022	Sunday	1904	PARADE RD	No	<Null>	1	<Null>	<Null>	Embankment(Collision with Fixed Object)	Dry	Clear	No Apparent Injury
275	1/21/2022	Friday	757	UNION AVE	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury

276	6/10/2022	Friday	742	PARADE RD	No	<Null>	1	<Null>	<Null>	Animal (live)(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
277	12/19/2022	Monday	1352	COURT ST	No	<Null>	1	<Null>	<Null>	Curb(Collision with Fixed Object)	Dry	Cloudy	No Apparent Injury
278	9/29/2022	Thursday	1328	UNION AVE	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
279	10/26/2022	Wednesday	1517	45 COURT ST	No	<Null>	1	<Null>	<Null>	Parked Motor Vehicle(Collision with person, motor vehicle, or Non-Fixed Object)	Wet	Rain	Unknown
280	3/7/2022	Monday	715	CLINTON ST	No	1	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Rain	Suspected Minor Injury
281	7/2/2023	Sunday	1853	ENDICOTT NORTH ST	No	4	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Wet	Cloudy	Suspected Minor Injury
282	10/6/2023	Friday	1940	161 COURT ST	No	<Null>	2	<Null>	<Null>	Parked Motor Vehicle	Dry	Cloudy	No Apparent Injury
283	8/1/2023	Tuesday	1615	UNION AVE	No	1	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
284	9/30/2023	Saturday	656	OAK ST	No	<Null>	1	<Null>	<Null>	Traffic Sign Support	Dry	Clear	No Apparent Injury
285	6/15/2023	Thursday	1700	PARADE RD	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
286	3/29/2023	Wednesday	721	855 UNION AVE	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
287	9/16/2022	Friday	2301	N MAIN ST	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury

288	4/26/2023	Wednesday	2043	855 UNION AVE	No	<Null>	1	<Null>	<Null>	Other Fixed Object (wall, building, tunnel, etc)(Collision with Fixed Object)	Dry	Clear	No Apparent Injury
289	6/16/2023	Friday	1306	765 UNION AVE	No	<Null>	1	<Null>	<Null>	Curb(Collision with Fixed Object)	Dry	Clear	No Apparent Injury
290	6/6/2023	Tuesday	1156	UNION AVE	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
291	8/16/2023	Wednesday	1421	S MAIN ST	No	<Null>	2	<Null>	<Null>	Motor Vehicle in Transport	Dry	Clear	No Apparent Injury
292	8/23/2023	Wednesday	1353	PARADE RD	No	1	2	<Null>	<Null>	Motor Vehicle in Transport	Dry	Clear	Suspected Minor Injury
293	1/12/2021	Tuesday	1612	NORTH MAIN ST	No	1	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	Possible Injury
294	3/22/2021	Monday	1417	423 SOUTH MAIN ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
295	6/25/2022	Saturday	1810	MAIN ST	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
296	6/1/2022	Wednesday	851	COURT ST	No	<Null>	3	<Null>	<Null>	Other Non-motorist(Collision with person, motor vehicle, or Non-Fixed Object)	Wet	Cloudy	No Apparent Injury
297	11/1/2023	Wednesday	1551	CHURCH ST	No	1	2	<Null>	<Null>	Motor Vehicle in Transport	Dry	Clear	Suspected Minor Injury
298	3/15/2023	Wednesday	932	480 MAIN ST	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
299	3/26/2021	Friday	1307	COURT ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
300	1/16/2021	Saturday	1233	COURT ST	No	0	1	Fixed Object	Sign Post	<Null>	Wet	Cloudy	No Apparent Injury
301	1/12/2021	Tuesday	1002	UNION AVE	No	1	2	Other Motor Vehicle	Value not provided	<Null>	Wet	Clear	Possible Injury
302	9/11/2021	Saturday	1155	UNION AVE	No	1	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	Suspected Minor Injury
303	5/10/2023	Wednesday	707	N MAIN ST	No	2	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	Possible Injury
304	6/7/2020	Sunday	1502	VETERANS SQ	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury

305	9/11/2020	Friday	2343	MAIN ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
306	1/15/2022	Saturday	1037	CHURCH ST	No	0	3	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
307	2/21/2023	Tuesday	1526	COURT ST	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Cloudy	No Apparent Injury
308	2/1/2023	Wednesday	1840	1367 UNION AVE	No	<Null>	2	<Null>	<Null>	Ditch(Collision with Fixed Object)	Dry	Clear	No Apparent Injury
309	10/21/2020	Wednesday	1928	N MAIN ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
310	10/21/2020	Wednesday	540	45 COURT ST	No	0	1	Fixed Object	Light Pole	<Null>	Wet	Rain	No Apparent Injury
311	2/26/2021	Friday	1912	799 UNION AVE	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
312	2/18/2021	Thursday	1611	UNION AVE	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
313	3/17/2022	Thursday	1637	UNION AVE	No	0	2	Pedestrian	Value not provided	<Null>	Dry	Cloudy	No Apparent Injury
314	11/4/2021	Thursday	1751	GILFORD AVE	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
315	6/10/2021	Thursday	1624	725 UNION AVE	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
316	3/1/2022	Tuesday	948	MAIN ST	No	1	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	Suspected Minor Injury
317	10/21/2022	Friday	1210	UNION AVE	No	<Null>	2	<Null>	<Null>	Motor vehicle in Transport(Collision with person, motor vehicle, or Non-Fixed Object)	Dry	Clear	No Apparent Injury
318	8/28/2020	Friday	1628	NORTH MAIN ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
319	6/17/2020	Wednesday	1653	MAIN ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury
320	1/22/2020	Wednesday	836	BEACON EAST ST	No	0	2	Other Motor Vehicle	Value not provided	<Null>	Dry	Clear	No Apparent Injury

ATTACHMENT E

Intersection #3: Synchro/SIDRA (AM/PM/SAT)

2037 No-Build (Synchro)

2037 Build (Synchro)

2037 Build Mit (SIDRA)

Lanes, Volumes, Timings

3: Parade Rd (NH106) & Right Way Path/Old North Main St

AM 2037 NB

Timing Plan: NHDOT/City

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	1	6	3	0	28	9	592	2	3	758	0
Future Volume (vph)	1	1	6	3	0	28	9	592	2	3	758	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2205			500			4280			2400	
Travel Time (s)		50.1			11.4			97.3			54.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	6%	6%	6%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	9	0	0	34	0	0	670	0	0	845	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)		0			0			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
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

HCM Unsignalized Intersection Capacity Analysis

3: Parade Rd (NH106) & Right Way Path/Old North Main St

AM 2037 NB
Timing Plan: NHDOT/City

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	1	6	3	0	28	9	592	2	3	758	0
Future Volume (Veh/h)	1	1	6	3	0	28	9	592	2	3	758	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	1	1	7	3	0	31	10	658	2	3	842	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	1558	1528	842	1534	1527	659	842			660		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1558	1528	842	1534	1527	659	842			660		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.2			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.3			2.2		
p0 queue free %	99	99	98	97	100	93	99			100		
cM capacity (veh/h)	84	115	364	91	116	464	777			933		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	9	34	670	845								
Volume Left	1	3	10	3								
Volume Right	7	31	2	0								
cSH	226	341	777	933								
Volume to Capacity	0.04	0.10	0.01	0.00								
Queue Length 95th (ft)	3	8	1	0								
Control Delay (s)	21.6	16.7	0.3	0.1								
Lane LOS	C	C	A	A								
Approach Delay (s)	21.6	16.7	0.3	0.1								
Approach LOS	C	C										
Intersection Summary												
Average Delay			0.7									
Intersection Capacity Utilization			51.5%		ICU Level of Service					A		
Analysis Period (min)			15									

Lanes, Volumes, Timings

AM 2037 B

3: Parade Rd (NH106) & Right Way Path/Old North Main St

Timing Plan: NHDOT/City

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	181	8	401	3	17	28	281	585	2	3	751	190
Future Volume (vph)	181	8	401	3	17	28	281	585	2	3	751	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2205			500			4280			2400	
Travel Time (s)		50.1			11.4			97.3			54.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	6%	6%	6%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	656	0	0	53	0	0	964	0	0	1048	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)		0			0			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
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

HCM Unsignalized Intersection Capacity Analysis

3: Parade Rd (NH106) & Right Way Path/Old North Main St

AM 2037 B
Timing Plan: NHDOT/City

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	181	8	401	3	17	28	281	585	2	3	751	190
Future Volume (Veh/h)	181	8	401	3	17	28	281	585	2	3	751	190
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	201	9	446	3	19	31	312	650	2	3	834	211
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	2261	2222	940	2671	2326	651	1045			652		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2261	2222	940	2671	2326	651	1045			652		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.2			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.3			2.2		
p0 queue free %	0	60	0	0	2	93	52			100		
cM capacity (veh/h)	2	23	320	0	19	469	651			939		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	656	53	964	1048								
Volume Left	201	3	312	3								
Volume Right	446	31	2	211								
cSH	5	0	651	939								
Volume to Capacity	131.99	Err	0.48	0.00								
Queue Length 95th (ft)	Err	Err	65	0								
Control Delay (s)	Err	Err	13.2	0.1								
Lane LOS	F	F	B	A								
Approach Delay (s)	Err	Err	13.2	0.1								
Approach LOS	F	F										
Intersection Summary												
Average Delay			Err									
Intersection Capacity Utilization			149.5%		ICU Level of Service				H			
Analysis Period (min)			15									

LEVEL OF SERVICE

Lane Level of Service



Site: [3] Laconia Village (Folder1)

Output produced by SIDRA INTERSECTION Version: 10.0.3.210

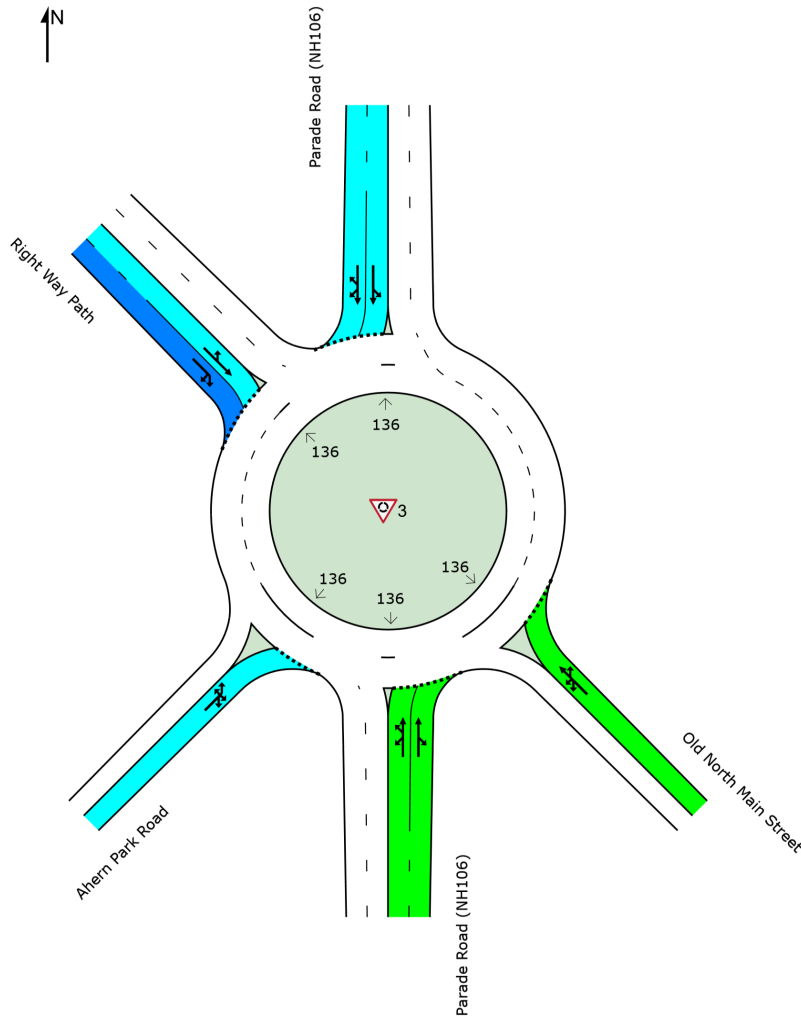
Main Entrance

Site Category: Future Conditions 1

Roundabout

Site Scenario: 4 | AM 2037 BUILD

	Approaches					Intersection
	South	Southeast	North	Northwest	Southwest	
LOS	A	A	B	C	B	B



Colour code based on Level of Service



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Roundabout Level of Service Method: Same as Sign Control

Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

MOVEMENT SUMMARY



Site: [3] Laconia Village (Folder1)

Output produced by SIDRA INTERSECTION Version: 10.0.3.210

Main Entrance

Site Category: Future Conditions 1

Roundabout

Site Scenario: 4 | AM 2037 BUILD

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] ft				mph
South: Parade Road (NH106)															
3b	L3	All MCs	22	6.0	22	6.0	0.458	8.6	LOS A	2.5	64.7	0.50	0.30	0.50	30.1
3a	L1	All MCs	305	6.0	305	6.0	0.458	8.6	LOS A	2.5	64.7	0.50	0.30	0.50	30.1
8	T1	All MCs	636	6.0	636	6.0	0.458	8.4	LOS A	2.5	64.7	0.48	0.29	0.48	32.3
18b	R3	All MCs	2	6.0	2	6.0	0.458	8.3	LOS A	2.4	63.2	0.47	0.28	0.47	31.6
Approach			965	6.0	965	6.0	0.458	8.5	LOS A	2.5	64.7	0.48	0.29	0.48	31.6
SouthEast: Old North Main Street															
3bx	L3	All MCs	3	2.0	3	2.0	0.159	10.0	LOS A	0.5	12.8	0.69	0.69	0.69	30.5
3x	L2	All MCs	22	2.0	22	2.0	0.159	10.0	LOS A	0.5	12.8	0.69	0.69	0.69	29.7
8x	T1	All MCs	18	2.0	18	2.0	0.159	10.0	LOS A	0.5	12.8	0.69	0.69	0.69	30.2
18ax	R1	All MCs	30	2.0	30	2.0	0.159	10.0	LOS A	0.5	12.8	0.69	0.69	0.69	31.0
Approach			74	2.0	74	2.0	0.159	10.0	LOS A	0.5	12.8	0.69	0.69	0.69	30.4
North: Parade Road (NH106)															
7a	L1	All MCs	3	1.0	3	1.0	0.545	11.1	LOS B	4.3	109.5	0.66	0.59	0.92	32.2
4	T1	All MCs	816	1.0	816	1.0	0.545	10.8	LOS B	4.3	109.5	0.65	0.58	0.90	33.4
14a	R1	All MCs	22	1.0	22	1.0	0.545	10.5	LOS B	4.3	108.8	0.64	0.57	0.88	32.7
14b	R3	All MCs	207	1.0	207	1.0	0.545	10.5	LOS B	4.3	108.8	0.64	0.57	0.88	32.3
Approach			1048	1.0	1048	1.0	0.545	10.7	LOS B	4.3	109.5	0.65	0.58	0.90	33.1
NorthWest: Right Way Path															
7bx	L3	All MCs	197	2.0	197	2.0	0.363	11.7	LOS B	1.5	39.2	0.69	0.72	0.84	29.1
4x	T1	All MCs	9	2.0	9	2.0	0.363	11.7	LOS B	1.5	39.2	0.69	0.72	0.84	28.7
14ax	R1	All MCs	436	2.0	436	2.0	0.728	22.8	LOS C	5.7	145.3	0.84	1.06	1.65	32.4
14x	R2	All MCs	22	2.0	22	2.0	0.728	22.8	LOS C	5.7	145.3	0.84	1.06	1.65	31.4
Approach			663	2.0	663	2.0	0.728	19.4	LOS C	5.7	145.3	0.80	0.95	1.40	31.2
SouthWest: Ahern Park Road															
5x	L2	All MCs	5	2.0	5	2.0	0.059	10.6	LOS B	0.2	4.4	0.73	0.73	0.73	28.8
5ax	L1	All MCs	5	2.0	5	2.0	0.059	10.6	LOS B	0.2	4.4	0.73	0.73	0.73	29.6
12x	R2	All MCs	5	2.0	5	2.0	0.059	10.6	LOS B	0.2	4.4	0.73	0.73	0.73	29.1
12bx	R3	All MCs	5	2.0	5	2.0	0.059	10.6	LOS B	0.2	4.4	0.73	0.73	0.73	29.8
Approach			22	2.0	22	2.0	0.059	10.6	LOS B	0.2	4.4	0.73	0.73	0.73	29.3
All Vehicles			2772	3.0	2772	3.0	0.728	12.0	LOS B	5.7	145.3	0.63	0.57	0.87	32.0

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c >1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: Siegloch M1 implied by US HCM 6 Roundabout Capacity Model.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Project: F:\TFM Projects\96126 Legacy at Laconia - Laconia, NH\96126-01 Pillsbury - NH State School Due Diligence\Traffic\SIDRA\96126-01
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Lanes, Volumes, Timings

3: Parade Rd (NH106) & Right Way Path/Old North Main St

PM 2037 NB

Timing Plan: NHDOT/City

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	3	10	9	0	14	7	928	5	26	687	0
Future Volume (vph)	4	3	10	9	0	14	7	928	5	26	687	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2205			500			4280			2400	
Travel Time (s)		50.1			11.4			97.3			54.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	1%	1%	1%	3%	3%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	18	0	0	26	0	0	1045	0	0	775	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)		0			0			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
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

HCM Unsignalized Intersection Capacity Analysis

3: Parade Rd (NH106) & Right Way Path/Old North Main St

PM 2037 NB
Timing Plan: NHDOT/City

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	3	10	9	0	14	7	928	5	26	687	0
Future Volume (Veh/h)	4	3	10	9	0	14	7	928	5	26	687	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.92	0.92	0.92
Hourly flow rate (vph)	4	3	11	10	0	16	8	1031	6	28	747	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	1869	1856	747	1866	1853	1034	747			1037		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1869	1856	747	1866	1853	1034	747			1037		
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 %	92	96	97	80	100	94	99			96		
cM capacity (veh/h)	50	70	413	50	70	282	866			666		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	18	26	1045	775								
Volume Left	4	10	8	28								
Volume Right	11	16	6	0								
cSH	120	102	866	666								
Volume to Capacity	0.15	0.26	0.01	0.04								
Queue Length 95th (ft)	13	23	1	3								
Control Delay (s)	40.1	52.1	0.3	1.2								
Lane LOS	E	F	A	A								
Approach Delay (s)	40.1	52.1	0.3	1.2								
Approach LOS	E	F										
Intersection Summary												
Average Delay			1.8									
Intersection Capacity Utilization			63.5%		ICU Level of Service					B		
Analysis Period (min)			15									

Lanes, Volumes, Timings

PM 2037 B

3: Parade Rd (NH106) & Right Way Path/Old North Main St

Timing Plan: NHDOT/City

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	240	19	461	9	11	14	486	877	5	26	659	203
Future Volume (vph)	240	19	461	9	11	14	486	877	5	26	659	203
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2205			500			4280			2400	
Travel Time (s)		50.1			11.4			97.3			54.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	1%	1%	1%	3%	3%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	800	0	0	38	0	0	1520	0	0	965	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)		0			0			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
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

HCM Unsignalized Intersection Capacity Analysis

3: Parade Rd (NH106) & Right Way Path/Old North Main St

PM 2037 B
Timing Plan: NHDOT/City

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	19	461	9	11	14	486	877	5	26	659	203
Future Volume (Veh/h)	240	19	461	9	11	14	486	877	5	26	659	203
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.92	0.92	0.92
Hourly flow rate (vph)	267	21	512	10	12	16	540	974	6	28	716	221
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	2962	2942	826	3462	3050	977	937			980		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2962	2942	826	3462	3050	977	937			980		
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 %	0	0	0	0	0	95	27			96		
cM capacity (veh/h)	0	4	372	0	3	304	735			700		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	800	38	1520	965								
Volume Left	267	10	540	28								
Volume Right	512	16	6	221								
cSH	0	0	735	700								
Volume to Capacity	Err	Err	0.73	0.04								
Queue Length 95th (ft)	Err	Err	164	3								
Control Delay (s)	Err	Err	22.2	1.2								
Lane LOS	F	F	C	A								
Approach Delay (s)	Err	Err	22.2	1.2								
Approach LOS	F	F										
Intersection Summary												
Average Delay			Err									
Intersection Capacity Utilization			181.1%		ICU Level of Service				H			
Analysis Period (min)			15									

LEVEL OF SERVICE

Lane Level of Service



Site: [3] Laconia Village (Folder1)

Output produced by SIDRA INTERSECTION Version: 10.0.3.210

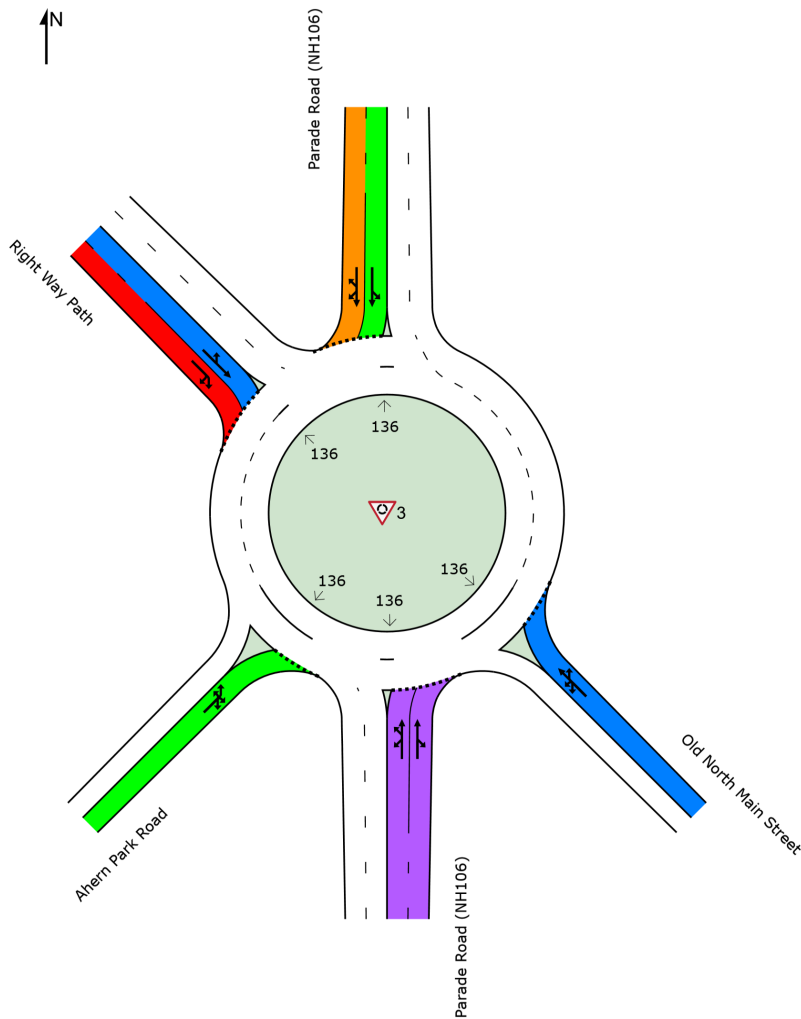
Main Entrance

Site Category: Future Conditions 1

Roundabout

Site Scenario: 2 | PM 2037 BUILD

	Approaches					Intersection
	South	Southeast	North	Northwest	Southwest	
LOS	D	C	D	E	A	D



Colour code based on Level of Service



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Roundabout Level of Service Method: Same as Sign Control

Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

MOVEMENT SUMMARY

 **Site: [3] Laconia Village** (Folder1)

Output produced by SIDRA INTERSECTION Version: 10.0.3.210

Main Entrance

Site Category: Future Conditions 1

Roundabout

Site Scenario: 2 | PM 2037 BUILD

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] ft				mph
South: Parade Road (NH106)															
3b	L3	All MCs	22	1.0	22	1.0	0.886	31.3	LOS D	17.4	439.1	1.00	1.42	2.59	31.2
3a	L1	All MCs	528	1.0	528	1.0	0.886	31.3	LOS D	17.4	439.1	1.00	1.42	2.59	31.2
8	T1	All MCs	953	1.0	953	1.0	0.886	29.9	LOS D	18.3	460.6	1.00	1.42	2.60	33.7
18b	R3	All MCs	5	1.0	5	1.0	0.886	29.6	LOS D	18.3	460.6	1.00	1.42	2.60	33.0
Approach			1509	1.0	1509	1.0	0.886	30.4	LOS D	18.3	460.6	1.00	1.42	2.59	32.8
SouthEast: Old North Main Street															
3bx	L3	All MCs	10	2.0	10	2.0	0.212	17.4	LOS C	0.6	15.4	0.82	0.83	0.84	28.5
3x	L2	All MCs	22	2.0	22	2.0	0.212	17.4	LOS C	0.6	15.4	0.82	0.83	0.84	27.6
8x	T1	All MCs	12	2.0	12	2.0	0.212	17.4	LOS C	0.6	15.4	0.82	0.83	0.84	28.1
18ax	R1	All MCs	15	2.0	15	2.0	0.212	17.4	LOS C	0.6	15.4	0.82	0.83	0.84	29.0
Approach			59	2.0	59	2.0	0.212	17.4	LOS C	0.6	15.4	0.82	0.83	0.84	28.2
North: Parade Road (NH106)															
7a	L1	All MCs	221	3.0	221	3.0	0.329	8.9	LOS A	1.4	35.0	0.61	0.53	0.63	30.2
4	T1	All MCs	22	3.0	22	3.0	0.329	8.9	LOS A	1.4	35.0	0.61	0.53	0.63	31.4
14a	R1	All MCs	716	3.0	716	3.0	0.929	38.3	LOS E	18.9	483.0	1.00	1.59	2.94	33.2
14b	R3	All MCs	28	3.0	28	3.0	0.929	38.3	LOS E	18.9	483.0	1.00	1.59	2.94	32.8
Approach			987	3.0	987	3.0	0.929	31.1	LOS D	18.9	483.0	0.91	1.33	2.37	32.4
NorthWest: Right Way Path															
7bx	L3	All MCs	261	2.0	261	2.0	0.571	19.3	LOS C	2.9	74.7	0.79	0.91	1.21	28.9
4x	T1	All MCs	21	2.0	21	2.0	0.571	19.3	LOS C	2.9	74.7	0.79	0.91	1.21	28.5
14ax	R1	All MCs	501	2.0	501	2.0	0.946	52.0	LOS F	12.3	313.3	0.96	1.59	3.09	32.2
14x	R2	All MCs	22	2.0	22	2.0	0.946	52.0	LOS F	12.3	313.3	0.96	1.59	3.09	31.2
Approach			804	2.0	804	2.0	0.946	40.5	LOS E	12.3	313.3	0.90	1.35	2.43	30.9
SouthWest: Ahern Park Road															
5x	L2	All MCs	5	2.0	5	2.0	0.040	7.1	LOS A	0.1	3.2	0.60	0.59	0.60	29.7
5ax	L1	All MCs	5	2.0	5	2.0	0.040	7.1	LOS A	0.1	3.2	0.60	0.59	0.60	30.5
12x	R2	All MCs	5	2.0	5	2.0	0.040	7.1	LOS A	0.1	3.2	0.60	0.59	0.60	30.0
12bx	R3	All MCs	5	2.0	5	2.0	0.040	7.1	LOS A	0.1	3.2	0.60	0.59	0.60	30.7
Approach			22	2.0	22	2.0	0.040	7.1	LOS A	0.1	3.2	0.60	0.59	0.60	30.2
All Vehicles			3380	1.8	3380	1.8	0.946	32.6	LOS D	18.9	483.0	0.94	1.36	2.45	32.1

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c >1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: Siegloch M1 implied by US HCM 6 Roundabout Capacity Model.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Lanes, Volumes, Timings

3: Parade Rd (NH106) & Right Way Path/Old North Main St

SAT 2037 NB

Timing Plan: NHDOT/City

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1	3	2	1	14	3	459	9	14	436	0
Future Volume (vph)	0	1	3	2	1	14	3	459	9	14	436	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2205			500			4280			2400	
Travel Time (s)		50.1			11.4			97.3			54.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.93	0.93	0.93
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	4	0	0	19	0	0	523	0	0	484	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)		0			0			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
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

HCM Unsignalized Intersection Capacity Analysis

3: Parade Rd (NH106) & Right Way Path/Old North Main St

SAT 2037 NB
Timing Plan: NHDOT/City

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1	3	2	1	14	3	459	9	14	436	0
Future Volume (Veh/h)	0	1	3	2	1	14	3	459	9	14	436	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.93	0.93	0.93
Hourly flow rate (vph)	0	1	3	2	1	16	3	510	10	15	469	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	1036	1025	469	1024	1020	515	469			520		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1036	1025	469	1024	1020	515	469			520		
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	99	99	100	97	100			99		
cM capacity (veh/h)	200	231	594	209	233	560	1093			1046		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	4	19	523	484								
Volume Left	0	2	3	15								
Volume Right	3	16	10	0								
cSH	427	448	1093	1046								
Volume to Capacity	0.01	0.04	0.00	0.01								
Queue Length 95th (ft)	1	3	0	1								
Control Delay (s)	13.5	13.4	0.1	0.4								
Lane LOS	B	B	A	A								
Approach Delay (s)	13.5	13.4	0.1	0.4								
Approach LOS	B	B										
Intersection Summary												
Average Delay			0.5									
Intersection Capacity Utilization			42.5%		ICU Level of Service					A		
Analysis Period (min)			15									

Lanes, Volumes, Timings

3: Parade Rd (NH106) & Right Way Path/Old North Main St

SAT 2037 B

Timing Plan: NHDOT/City

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	220	14	302	2	15	14	320	422	9	14	406	222
Future Volume (vph)	220	14	302	2	15	14	320	422	9	14	406	222
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2205			500			4280			2400	
Travel Time (s)		50.1			11.4			97.3			54.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.93	0.93	0.93
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	596	0	0	35	0	0	835	0	0	691	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)		0			0			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
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

HCM Unsignalized Intersection Capacity Analysis

3: Parade Rd (NH106) & Right Way Path/Old North Main St

SAT 2037 B
Timing Plan: NHDOT/City

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	14	302	2	15	14	320	422	9	14	406	222
Future Volume (Veh/h)	220	14	302	2	15	14	320	422	9	14	406	222
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.93	0.93	0.93
Hourly flow rate (vph)	244	16	336	2	17	16	356	469	10	15	437	239
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	1797	1778	556	2116	1892	474	676			479		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1797	1778	556	2116	1892	474	676			479		
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 %	0	68	37	72	60	97	61			99		
cM capacity (veh/h)	29	50	530	7	42	590	915			1083		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	596	35	835	691								
Volume Left	244	2	356	15								
Volume Right	336	16	10	239								
cSH	64	49	915	1083								
Volume to Capacity	9.25	0.71	0.39	0.01								
Queue Length 95th (ft)	Err	71	46	1								
Control Delay (s)	Err	179.0	8.4	0.4								
Lane LOS	F	F	A	A								
Approach Delay (s)	Err	179.0	8.4	0.4								
Approach LOS	F	F										
Intersection Summary												
Average Delay			2769.1									
Intersection Capacity Utilization			124.3%		ICU Level of Service					H		
Analysis Period (min)			15									

LEVEL OF SERVICE

Lane Level of Service

 **Site: [3] Laconia Village** (Folder1)

Output produced by SIDRA INTERSECTION Version: 10.0.3.210

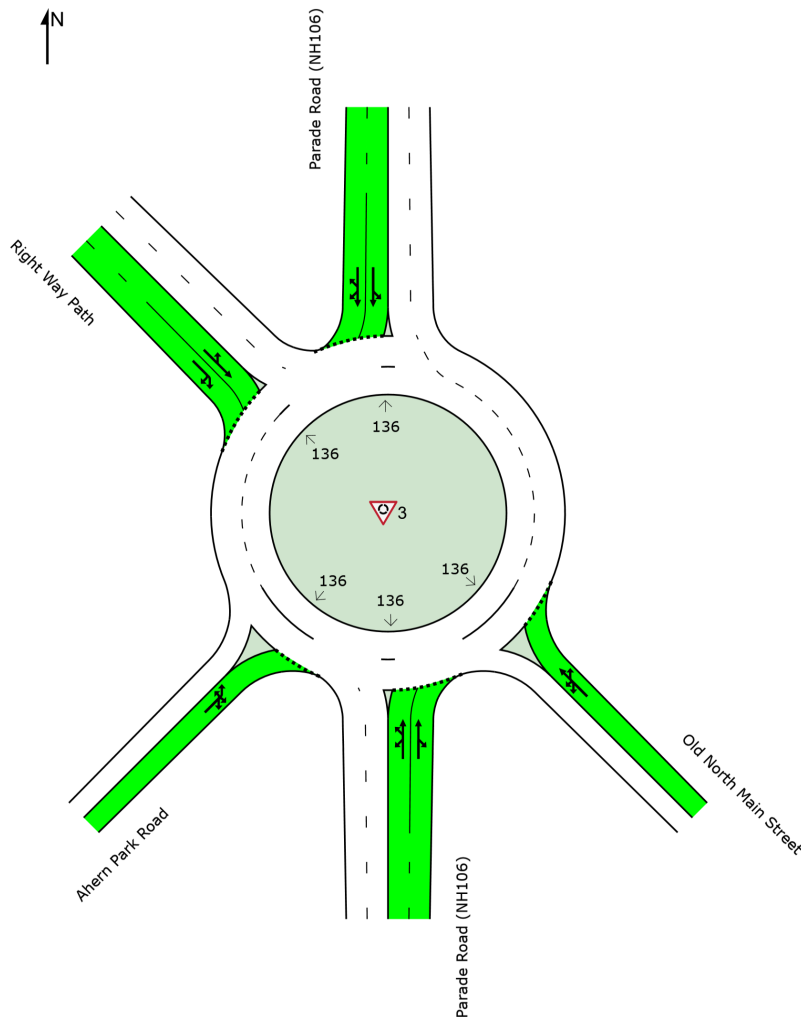
Main Entrance

Site Category: Future Conditions 1

Roundabout

Site Scenario: 3 | SAT 2037 BUILD

	Approaches					Intersection
	South	Southeast	North	Northwest	Southwest	
LOS	A	A	A	A	A	A



Colour code based on Level of Service



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Roundabout Level of Service Method: Same as Sign Control

Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

MOVEMENT SUMMARY



Site: [3] Laconia Village (Folder1)

Output produced by SIDRA INTERSECTION Version: 10.0.3.210

Main Entrance

Site Category: Future Conditions 1

Roundabout

Site Scenario: 3 | SAT 2037 BUILD

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] ft				mph
South: Parade Road (NH106)															
3b	L3	All MCs	22	2.0	22	2.0	0.404	7.9	LOS A	2.0	52.0	0.51	0.34	0.51	30.1
3a	L1	All MCs	348	2.0	348	2.0	0.404	7.9	LOS A	2.0	52.0	0.51	0.34	0.51	30.1
8	T1	All MCs	459	2.0	459	2.0	0.404	7.6	LOS A	2.0	52.0	0.49	0.33	0.49	32.9
18b	R3	All MCs	10	2.0	10	2.0	0.404	7.6	LOS A	2.0	51.1	0.49	0.32	0.49	32.0
Approach			838	2.0	838	2.0	0.404	7.7	LOS A	2.0	52.0	0.50	0.33	0.50	31.6
SouthEast: Old North Main Street															
3bx	L3	All MCs	2	1.0	2	1.0	0.103	8.0	LOS A	0.3	8.5	0.63	0.63	0.63	30.7
3x	L2	All MCs	22	1.0	22	1.0	0.103	8.0	LOS A	0.3	8.5	0.63	0.63	0.63	29.9
8x	T1	All MCs	16	1.0	16	1.0	0.103	8.0	LOS A	0.3	8.5	0.63	0.63	0.63	30.4
18ax	R1	All MCs	15	1.0	15	1.0	0.103	8.0	LOS A	0.3	8.5	0.63	0.63	0.63	31.2
Approach			55	1.0	55	1.0	0.103	8.0	LOS A	0.3	8.5	0.63	0.63	0.63	30.5
North: Parade Road (NH106)															
7a	L1	All MCs	15	2.0	15	2.0	0.389	8.5	LOS A	1.8	46.5	0.58	0.44	0.58	32.0
4	T1	All MCs	441	2.0	441	2.0	0.389	8.4	LOS A	1.8	46.5	0.57	0.43	0.57	33.1
14a	R1	All MCs	22	2.0	22	2.0	0.389	8.0	LOS A	1.8	45.7	0.55	0.41	0.55	32.5
14b	R3	All MCs	241	2.0	241	2.0	0.389	8.0	LOS A	1.8	45.7	0.55	0.41	0.55	32.1
Approach			720	2.0	720	2.0	0.389	8.2	LOS A	1.8	46.5	0.57	0.43	0.57	32.7
NorthWest: Right Way Path															
7bx	L3	All MCs	239	4.0	239	4.0	0.328	8.5	LOS A	1.4	34.8	0.59	0.49	0.59	29.5
4x	T1	All MCs	15	4.0	15	4.0	0.328	8.5	LOS A	1.4	34.8	0.59	0.49	0.59	29.2
14ax	R1	All MCs	328	4.0	328	4.0	0.417	9.3	LOS A	2.1	54.6	0.61	0.54	0.74	32.7
14x	R2	All MCs	22	4.0	22	4.0	0.417	9.3	LOS A	2.1	54.6	0.61	0.54	0.74	31.7
Approach			604	4.0	604	4.0	0.417	9.0	LOS A	2.1	54.6	0.60	0.52	0.68	31.2
SouthWest: Ahern Park Road															
5x	L2	All MCs	5	2.0	5	2.0	0.040	7.2	LOS A	0.1	3.2	0.61	0.60	0.61	29.7
5ax	L1	All MCs	5	2.0	5	2.0	0.040	7.2	LOS A	0.1	3.2	0.61	0.60	0.61	30.5
12x	R2	All MCs	5	2.0	5	2.0	0.040	7.2	LOS A	0.1	3.2	0.61	0.60	0.61	30.0
12bx	R3	All MCs	5	2.0	5	2.0	0.040	7.2	LOS A	0.1	3.2	0.61	0.60	0.61	30.7
Approach			22	2.0	22	2.0	0.040	7.2	LOS A	0.1	3.2	0.61	0.60	0.61	30.2
All Vehicles			2239	2.5	2239	2.5	0.417	8.2	LOS A	2.1	54.6	0.55	0.42	0.57	31.8

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c >1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: Siegloch M1 implied by US HCM 6 Roundabout Capacity Model.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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ROUNABOUT.sipx

ATTACHMENT F

Intersection #2: Synchro (AM/PM/SAT)

2037 No-Build

2037 Build

2037 Build Mit

Lanes, Volumes, Timings
2: Parade Rd (NH106) & Meredith Center Rd/Elm Street

AM 2037 NB
Timing Plan: NHDOT/City

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	141	264	65	118	120	149	343	91	163	439	5
Future Volume (vph)	5	141	264	65	118	120	149	343	91	163	439	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		125	0		75	150		150	150		0
Storage Lanes	0		1	0		1	1		1	1		0
Taper Length (ft)	25			25			150			150		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1680			1042			2400			2280	
Travel Time (s)		38.2			23.7			54.5			51.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	3%	3%	3%	5%	5%	5%	6%	6%	6%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	163	293	0	203	133	166	381	101	181	494	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)		0			0			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
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4		4	8		8			6			
Detector Phase	4	4	4	8	8	8	1	6	6	5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	4.0	8.0	8.0	4.0	8.0	
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	14.0	14.0	11.0	14.0	
Total Split (s)	36.0	36.0	36.0	36.0	36.0	36.0	26.0	36.0	36.0	26.0	36.0	
Total Split (%)	36.7%	36.7%	36.7%	36.7%	36.7%	36.7%	26.5%	36.7%	36.7%	26.5%	36.7%	
Maximum Green (s)	30.0	30.0	30.0	30.0	30.0	30.0	20.0	30.0	30.0	20.0	30.0	
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)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		-2.0	-2.0		-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	
Total Lost Time (s)		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag							Lead	Lag	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	3.0	3.0	3.0	3.0	
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	
v/c Ratio		0.36	0.48		0.55	0.28	0.47	0.59	0.16	0.48	0.72	
Control Delay		26.6	6.3		31.4	6.6	32.3	24.4	5.3	31.8	28.2	
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay		26.6	6.3		31.4	6.6	32.3	24.4	5.3	31.8	28.2	
Queue Length 50th (ft)		60	0		79	0	66	129	0	71	178	
Queue Length 95th (ft)		129	58		165	41	145	281	33	154	376	
Internal Link Dist (ft)		1600			962			2320			2200	
Turn Bay Length (ft)			125			75	150		150	150		

Lanes, Volumes, Timings

2: Parade Rd (NH106) & Meredith Center Rd/Elm Street

AM 2037 NB

Timing Plan: NHDOT/City

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)		861	895		709	797	553	847	773	575	881	
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0	
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0	
Storage Cap Reductn		0	0		0	0	0	0	0	0	0	
Reduced v/c Ratio		0.19	0.33		0.29	0.17	0.30	0.45	0.13	0.31	0.56	

Intersection Summary

Area Type: Other

Cycle Length: 98

Actuated Cycle Length: 71.2

Natural Cycle: 50

Control Type: Actuated-Uncoordinated

Splits and Phases: 2: Parade Rd (NH106) & Meredith Center Rd/Elm Street

 Ø1	 Ø2	 Ø4
26 s	36 s	36 s
 Ø5	 Ø6	 Ø8
26 s	36 s	36 s

HCM Signalized Intersection Capacity Analysis

2: Parade Rd (NH106) & Meredith Center Rd/Elm Street

AM 2037 NB
Timing Plan: NHDOT/City

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	141	264	65	118	120	149	343	91	163	439	5
Future Volume (vph)	5	141	264	65	118	120	149	343	91	163	439	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		1.00	1.00		0.98	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1841	1568		1778	1538	1703	1792	1524	1770	1859	
Flt Permitted		0.99	1.00		0.83	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1820	1568		1503	1538	1703	1792	1524	1770	1859	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	6	157	293	72	131	133	166	381	101	181	488	6
RTOR Reduction (vph)	0	0	220	0	0	100	0	0	64	0	1	0
Lane Group Flow (vph)	0	163	73	0	203	33	166	381	37	181	493	0
Heavy Vehicles (%)	3%	3%	3%	5%	5%	5%	6%	6%	6%	2%	2%	2%
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4		4	8		8			6			
Actuated Green, G (s)		15.5	15.5		15.5	15.5	12.7	23.6	23.6	13.1	24.0	
Effective Green, g (s)		17.5	17.5		17.5	17.5	14.7	25.6	25.6	15.1	26.0	
Actuated g/C Ratio		0.25	0.25		0.25	0.25	0.21	0.36	0.36	0.22	0.37	
Clearance Time (s)		6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		453	390		374	383	356	653	555	380	688	
v/s Ratio Prot							0.10	0.21		c0.10	c0.27	
v/s Ratio Perm		0.09	0.05		c0.14	0.02			0.02			
v/c Ratio		0.36	0.19		0.54	0.09	0.47	0.58	0.07	0.48	0.72	
Uniform Delay, d1		21.7	20.8		22.9	20.2	24.3	18.0	14.5	24.1	18.9	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.5	0.2		1.6	0.1	1.0	1.3	0.1	0.9	3.6	
Delay (s)		22.2	21.0		24.5	20.3	25.3	19.3	14.6	25.0	22.5	
Level of Service		C	C		C	C	C	B	B	C	C	
Approach Delay (s)		21.4			22.8			20.1			23.2	
Approach LOS		C			C			C			C	
Intersection Summary												
HCM 2000 Control Delay			21.8				HCM 2000 Level of Service			C		
HCM 2000 Volume to Capacity ratio			0.61									
Actuated Cycle Length (s)			70.2				Sum of lost time (s)			12.0		
Intersection Capacity Utilization			62.5%				ICU Level of Service			B		
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings

AM 2037 B

2: Parade Rd (NH106) & Meredith Center Rd/Elm Street

Timing Plan: NHDOT/City

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	217	264	140	173	120	149	428	182	163	545	76
Future Volume (vph)	70	217	264	140	173	120	149	428	182	163	545	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		125	0		75	150		150	150		0
Storage Lanes	0		1	0		1	1		1	1		0
Taper Length (ft)	25			25			150			150		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1680			1042			2400			2280	
Travel Time (s)		38.2			23.7			54.5			51.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	3%	3%	3%	5%	5%	5%	6%	6%	6%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	319	293	0	348	133	166	476	202	181	690	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)		0			0			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
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4		4	8		8			6			
Detector Phase	4	4	4	8	8	8	1	6	6	5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	4.0	8.0	8.0	4.0	8.0	
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	14.0	14.0	11.0	14.0	
Total Split (s)	36.0	36.0	36.0	36.0	36.0	36.0	26.0	36.0	36.0	26.0	36.0	
Total Split (%)	36.7%	36.7%	36.7%	36.7%	36.7%	36.7%	26.5%	36.7%	36.7%	26.5%	36.7%	
Maximum Green (s)	30.0	30.0	30.0	30.0	30.0	30.0	20.0	30.0	30.0	20.0	30.0	
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)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		-2.0	-2.0		-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	
Total Lost Time (s)		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag							Lead	Lag	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	3.0	3.0	3.0	3.0	
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	
v/c Ratio		0.75	0.40		1.09	0.22	0.56	0.77	0.32	0.58	1.07	
Control Delay		40.4	4.7		108.5	8.7	42.3	37.8	7.8	42.3	88.2	
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay		40.4	4.7		108.5	8.7	42.3	37.8	7.8	42.3	88.2	
Queue Length 50th (ft)		163	0		~232	13	90	246	16	98	~450	
Queue Length 95th (ft)		#321	57		#432	56	153	#434	69	165	#729	
Internal Link Dist (ft)		1600			962			2320			2200	
Turn Bay Length (ft)			125			75	150		150	150		

Lanes, Volumes, Timings

AM 2037 B

2: Parade Rd (NH106) & Meredith Center Rd/Elm Street

Timing Plan: NHDOT/City

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)		427	735		319	598	406	621	634	422	642	
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0	
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0	
Storage Cap Reductn		0	0		0	0	0	0	0	0	0	
Reduced v/c Ratio		0.75	0.40		1.09	0.22	0.41	0.77	0.32	0.43	1.07	

Intersection Summary

Area Type: Other

Cycle Length: 98

Actuated Cycle Length: 92.4

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 2: Parade Rd (NH106) & Meredith Center Rd/Elm Street

 Ø1	 Ø2	 Ø4
26 s	36 s	36 s
 Ø5	 Ø6	 Ø8
26 s	36 s	36 s

HCM Signalized Intersection Capacity Analysis

2: Parade Rd (NH106) & Meredith Center Rd/Elm Street

AM 2037 B
Timing Plan: NHDOT/City

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	217	264	140	173	120	149	428	182	163	545	76
Future Volume (vph)	70	217	264	140	173	120	149	428	182	163	545	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected		0.99	1.00		0.98	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1822	1568		1770	1538	1703	1792	1524	1770	1829	
Flt Permitted		0.67	1.00		0.51	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1232	1568		923	1538	1703	1792	1524	1770	1829	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	78	241	293	156	192	133	166	476	202	181	606	84
RTOR Reduction (vph)	0	0	191	0	0	65	0	0	106	0	5	0
Lane Group Flow (vph)	0	319	102	0	348	68	166	476	96	181	685	0
Heavy Vehicles (%)	3%	3%	3%	5%	5%	5%	6%	6%	6%	2%	2%	2%
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4		4	8		8			6			
Actuated Green, G (s)		30.1	30.1		30.1	30.1	14.1	29.9	29.9	14.4	30.2	
Effective Green, g (s)		32.1	32.1		32.1	32.1	16.1	31.9	31.9	16.4	32.2	
Actuated g/C Ratio		0.35	0.35		0.35	0.35	0.17	0.35	0.35	0.18	0.35	
Clearance Time (s)		6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		428	544		320	534	296	618	526	314	637	
v/s Ratio Prot							0.10	0.27		c0.10	c0.37	
v/s Ratio Perm		0.26	0.06		c0.38	0.04			0.06			
v/c Ratio		0.75	0.19		1.09	0.13	0.56	0.77	0.18	0.58	1.08	
Uniform Delay, d1		26.6	21.0		30.2	20.6	34.9	27.0	21.1	34.8	30.1	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		6.9	0.2		75.7	0.1	2.4	5.9	0.2	2.6	57.5	
Delay (s)		33.5	21.2		105.9	20.7	37.3	32.9	21.3	37.4	87.6	
Level of Service		C	C		F	C	D	C	C	D	F	
Approach Delay (s)		27.6			82.3			31.0			77.2	
Approach LOS		C			F			C			E	
Intersection Summary												
HCM 2000 Control Delay			53.4				HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio			0.98									
Actuated Cycle Length (s)			92.4				Sum of lost time (s)			12.0		
Intersection Capacity Utilization			87.0%				ICU Level of Service			E		
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings
2: Parade Rd (NH106) & Meredith Center Rd/Elm Street

AM 2037 B-MIT

Timing Plan: MIT

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	217	264	140	173	120	149	428	182	163	545	76
Future Volume (vph)	70	217	264	140	173	120	149	428	182	163	545	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		75	90		0	150		150	150		150
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	75			100			150			150		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1680			1042			878			825	
Travel Time (s)		38.2			23.7			20.0			18.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	3%	3%	3%	5%	5%	5%	6%	6%	6%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	78	241	293	156	325	0	166	678	0	181	690	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
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases			4									
Detector Phase	7	4	4	3	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		4.0	8.0		4.0	8.0	
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0		11.0	14.0		11.0	14.0	
Total Split (s)	16.0	46.0	46.0	18.0	48.0		19.0	36.0		20.0	37.0	
Total Split (%)	13.3%	38.3%	38.3%	15.0%	40.0%		15.8%	30.0%		16.7%	30.8%	
Maximum Green (s)	10.0	40.0	40.0	12.0	42.0		13.0	30.0		14.0	31.0	
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)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	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	None	None	None	None		None	Min		None	Min	
v/c Ratio	0.38	0.56	0.55	0.62	0.62		0.63	0.71		0.63	0.69	
Control Delay	48.0	37.5	12.6	52.5	33.2		51.6	33.2		50.1	33.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	48.0	37.5	12.6	52.5	33.2		51.6	33.2		50.1	33.5	
Queue Length 50th (ft)	44	129	34	90	161		95	178		103	188	
Queue Length 95th (ft)	102	215	113	#203	270		#211	274		#219	286	
Internal Link Dist (ft)		1600			962			798			745	
Turn Bay Length (ft)	75		75	90			150			150		

2: Parade Rd (NH106) & Meredith Center Rd/Elm Street

Timing Plan: MIT

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	232	856	847	265	842		282	1184		312	1274	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.34	0.28	0.35	0.59	0.39		0.59	0.57		0.58	0.54	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 92.9

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 2: Parade Rd (NH106) & Meredith Center Rd/Elm Street

 Ø1	 Ø2	 Ø3	 Ø4
19 s	37 s	18 s	46 s
 Ø5	 Ø6	 Ø7	 Ø8
20 s	36 s	16 s	48 s

HCM Signalized Intersection Capacity Analysis

2: Parade Rd (NH106) & Meredith Center Rd/Elm Street

AM 2037 B-MIT
Timing Plan: MIT

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	217	264	140	173	120	149	428	182	163	545	76
Future Volume (vph)	70	217	264	140	173	120	149	428	182	163	545	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85	1.00	0.94		1.00	0.96		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1752	1845	1568	1719	1698		1703	3253		1770	3475	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1752	1845	1568	1719	1698		1703	3253		1770	3475	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	78	241	293	156	192	133	166	476	202	181	606	84
RTOR Reduction (vph)	0	0	169	0	23	0	0	38	0	0	9	0
Lane Group Flow (vph)	78	241	124	156	302	0	166	640	0	181	681	0
Heavy Vehicles (%)	3%	3%	3%	5%	5%	5%	6%	6%	6%	2%	2%	2%
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases			4									
Actuated Green, G (s)	7.2	21.2	21.2	11.6	25.6		12.4	24.0		13.1	24.7	
Effective Green, g (s)	9.2	23.2	23.2	13.6	27.6		14.4	26.0		15.1	26.7	
Actuated g/C Ratio	0.10	0.25	0.25	0.14	0.29		0.15	0.28		0.16	0.28	
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0		6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	171	455	387	248	499		261	900		284	988	
v/s Ratio Prot	0.04	0.13		c0.09	c0.18		0.10	c0.20		c0.10	0.20	
v/s Ratio Perm			0.08									
v/c Ratio	0.46	0.53	0.32	0.63	0.60		0.64	0.71		0.64	0.69	
Uniform Delay, d1	40.0	30.6	28.9	37.8	28.5		37.3	30.6		36.8	29.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.9	1.1	0.5	4.9	2.1		5.0	2.7		4.6	2.0	
Delay (s)	41.9	31.7	29.4	42.7	30.5		42.3	33.2		41.5	31.9	
Level of Service	D	C	C	D	C		D	C		D	C	
Approach Delay (s)		31.9			34.5			35.0			33.9	
Approach LOS		C			C			D			C	
Intersection Summary												
HCM 2000 Control Delay			33.9			HCM 2000 Level of Service				C		
HCM 2000 Volume to Capacity ratio			0.67									
Actuated Cycle Length (s)			93.9			Sum of lost time (s)			16.0			
Intersection Capacity Utilization			60.6%			ICU Level of Service			B			
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings
2: Parade Rd (NH106) & Meredith Center Rd/Elm Street

PM 2037 NB
Timing Plan: NHDOT/City

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	167	179	114	144	165	241	499	204	163	420	3
Future Volume (vph)	2	167	179	114	144	165	241	499	204	163	420	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		125	0		75	150		150	150		0
Storage Lanes	0		1	0		1	1		1	1		0
Taper Length (ft)	25			25			150			150		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1680			1042			2400			2280	
Travel Time (s)		38.2			23.7			54.5			51.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	1%	1%	1%	3%	3%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	188	199	0	287	183	268	554	227	170	441	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)		0			0			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
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4		4	8		8			6			
Detector Phase	4	4	4	8	8	8	1	6	6	5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	4.0	8.0	8.0	4.0	8.0	
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	14.0	14.0	11.0	14.0	
Total Split (s)	36.0	36.0	36.0	36.0	36.0	36.0	26.0	36.0	36.0	26.0	36.0	
Total Split (%)	36.7%	36.7%	36.7%	36.7%	36.7%	36.7%	26.5%	36.7%	36.7%	26.5%	36.7%	
Maximum Green (s)	30.0	30.0	30.0	30.0	30.0	30.0	20.0	30.0	30.0	20.0	30.0	
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)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		-2.0	-2.0		-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	
Total Lost Time (s)		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag							Lead	Lag	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	3.0	3.0	3.0	3.0	
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	
v/c Ratio		0.34	0.33		0.75	0.32	0.68	0.80	0.33	0.52	0.72	
Control Delay		26.0	5.3		41.1	9.1	41.6	36.8	9.5	38.9	34.2	
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay		26.0	5.3		41.1	9.1	41.6	36.8	9.5	38.9	34.2	
Queue Length 50th (ft)		80	0		141	17	136	271	26	87	218	
Queue Length 95th (ft)		145	48		251	68	241	#526	89	155	357	
Internal Link Dist (ft)		1600			962			2320			2200	
Turn Bay Length (ft)			125			75	150		150	150		

Lanes, Volumes, Timings
2: Parade Rd (NH106) & Meredith Center Rd/Elm Street

PM 2037 NB
Timing Plan: NHDOT/City

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)		731	743		507	707	484	756	736	474	725	
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0	
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0	
Storage Cap Reductn		0	0		0	0	0	0	0	0	0	
Reduced v/c Ratio		0.26	0.27		0.57	0.26	0.55	0.73	0.31	0.36	0.61	

Intersection Summary

Area Type: Other

Cycle Length: 98

Actuated Cycle Length: 84.2

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

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

Splits and Phases: 2: Parade Rd (NH106) & Meredith Center Rd/Elm Street

 Ø1	 Ø2	 Ø4
26 s	36 s	36 s
 Ø5	 Ø6	 Ø8
26 s	36 s	36 s

HCM Signalized Intersection Capacity Analysis

2: Parade Rd (NH106) & Meredith Center Rd/Elm Street

PM 2037 NB
Timing Plan: NHDOT/City

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	167	179	114	144	165	241	499	204	163	420	3
Future Volume (vph)	2	167	179	114	144	165	241	499	204	163	420	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		1.00	1.00		0.98	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1862	1583		1822	1583	1787	1881	1599	1752	1843	
Flt Permitted		1.00	1.00		0.69	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1857	1583		1287	1583	1787	1881	1599	1752	1843	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.96	0.96	0.96
Adj. Flow (vph)	2	186	199	127	160	183	268	554	227	170	438	3
RTOR Reduction (vph)	0	0	139	0	0	97	0	0	98	0	0	0
Lane Group Flow (vph)	0	188	60	0	287	86	268	554	129	170	441	0
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	1%	1%	1%	3%	3%	3%
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4		4	8		8			6			
Actuated Green, G (s)		23.0	23.0		23.0	23.0	16.6	28.8	28.8	13.7	25.9	
Effective Green, g (s)		25.0	25.0		25.0	25.0	18.6	30.8	30.8	15.7	27.9	
Actuated g/C Ratio		0.30	0.30		0.30	0.30	0.22	0.37	0.37	0.19	0.33	
Clearance Time (s)		6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		555	473		385	473	398	693	589	329	615	
v/s Ratio Prot							c0.15	c0.29		0.10	0.24	
v/s Ratio Perm		0.10	0.04		c0.22	0.05			0.08			
v/c Ratio		0.34	0.13		0.75	0.18	0.67	0.80	0.22	0.52	0.72	
Uniform Delay, d1		22.8	21.3		26.4	21.7	29.7	23.6	18.1	30.5	24.3	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.4	0.1		7.6	0.2	4.5	6.4	0.2	1.4	4.0	
Delay (s)		23.2	21.4		34.0	21.9	34.1	30.0	18.3	31.9	28.3	
Level of Service		C	C		C	C	C	C	B	C	C	
Approach Delay (s)		22.3			29.3			28.5			29.3	
Approach LOS		C			C			C			C	
Intersection Summary												
HCM 2000 Control Delay			27.9									
HCM 2000 Volume to Capacity ratio			0.77									
Actuated Cycle Length (s)			83.5									
Intersection Capacity Utilization			71.8%									
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings

PM 2037 B

2: Parade Rd (NH106) & Meredith Center Rd/Elm Street

Timing Plan: NHDOT/City

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	94	250	179	202	228	165	241	594	291	163	508	84
Future Volume (vph)	94	250	179	202	228	165	241	594	291	163	508	84
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		125	0		75	150		150	150		0
Storage Lanes	0		1	0		1	1		1	1		0
Taper Length (ft)	25			25			150			150		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1680			1042			2400			2280	
Travel Time (s)		38.2			23.7			54.5			51.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	1%	1%	1%	3%	3%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	382	199	0	477	183	268	660	323	170	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)		0			0			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
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4		4	8		8			6			
Detector Phase	4	4	4	8	8	8	1	6	6	5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	4.0	8.0	8.0	4.0	8.0	
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	14.0	14.0	11.0	14.0	
Total Split (s)	36.0	36.0	36.0	36.0	36.0	36.0	26.0	36.0	36.0	26.0	36.0	
Total Split (%)	36.7%	36.7%	36.7%	36.7%	36.7%	36.7%	26.5%	36.7%	36.7%	26.5%	36.7%	
Maximum Green (s)	30.0	30.0	30.0	30.0	30.0	30.0	20.0	30.0	30.0	20.0	30.0	
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)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		-2.0	-2.0		-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	
Total Lost Time (s)		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag							Lead	Lag	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	3.0	3.0	3.0	3.0	
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	
v/c Ratio		1.69	0.31		1.94	0.31	0.73	0.96	0.46	0.56	1.01	
Control Delay		356.0	7.1		460.6	13.0	48.1	56.5	12.4	43.5	72.6	
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay		356.0	7.1		460.6	13.0	48.1	56.5	12.4	43.5	72.6	
Queue Length 50th (ft)		~353	12		~464	36	153	387	56	98	~411	
Queue Length 95th (ft)		#534	62		#661	90	241	#675	143	155	#629	
Internal Link Dist (ft)		1600			962			2320			2200	
Turn Bay Length (ft)			125			75	150		150	150		

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)		226	642		246	596	411	691	706	403	610	
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0	
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0	
Storage Cap Reductn		0	0		0	0	0	0	0	0	0	
Reduced v/c Ratio		1.69	0.31		1.94	0.31	0.65	0.96	0.46	0.42	1.01	

Intersection Summary

Area Type: Other

Cycle Length: 98

Actuated Cycle Length: 95.7

Natural Cycle: 110

Control Type: Actuated-Uncoordinated

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 2: Parade Rd (NH106) & Meredith Center Rd/Elm Street

 Ø1	 Ø2	 Ø4
26 s	36 s	36 s
 Ø5	 Ø6	 Ø8
26 s	36 s	36 s

HCM Signalized Intersection Capacity Analysis

2: Parade Rd (NH106) & Meredith Center Rd/Elm Street

PM 2037 B
Timing Plan: NHDOT/City

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	94	250	179	202	228	165	241	594	291	163	508	84
Future Volume (vph)	94	250	179	202	228	165	241	594	291	163	508	84
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected		0.99	1.00		0.98	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1838	1583		1820	1583	1787	1881	1599	1752	1805	
Flt Permitted		0.36	1.00		0.40	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		676	1583		736	1583	1787	1881	1599	1752	1805	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.96	0.96	0.96
Adj. Flow (vph)	104	278	199	224	253	183	268	660	323	170	529	88
RTOR Reduction (vph)	0	0	113	0	0	67	0	0	118	0	6	0
Lane Group Flow (vph)	0	382	86	0	477	116	268	660	205	170	611	0
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	1%	1%	1%	3%	3%	3%
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4		4	8		8			6			
Actuated Green, G (s)		30.0	30.0		30.0	30.0	17.6	33.2	33.2	14.5	30.1	
Effective Green, g (s)		32.0	32.0		32.0	32.0	19.6	35.2	35.2	16.5	32.1	
Actuated g/C Ratio		0.33	0.33		0.33	0.33	0.20	0.37	0.37	0.17	0.34	
Clearance Time (s)		6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		226	529		246	529	365	691	588	302	605	
v/s Ratio Prot							c0.15	c0.35		0.10	0.34	
v/s Ratio Perm		0.57	0.05		c0.65	0.07			0.13			
v/c Ratio		1.69	0.16		1.94	0.22	0.73	0.96	0.35	0.56	1.01	
Uniform Delay, d1		31.9	22.4		31.9	22.9	35.6	29.5	21.9	36.3	31.8	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		329.0	0.1		437.2	0.2	7.5	23.6	0.4	2.4	39.1	
Delay (s)		360.9	22.6		469.0	23.1	43.1	53.0	22.3	38.7	70.9	
Level of Service		F	C		F	C	D	D	C	D	E	
Approach Delay (s)		245.0			345.4			43.0			63.9	
Approach LOS		F			F			D			E	
Intersection Summary												
HCM 2000 Control Delay		144.7										
HCM 2000 Volume to Capacity ratio		1.30										
Actuated Cycle Length (s)		95.7										
Intersection Capacity Utilization		100.1%										
Analysis Period (min)		15										
c Critical Lane Group												

Lanes, Volumes, Timings
2: Parade Rd (NH106) & Meredith Center Rd/Elm Street

PM 2037 B-MIT

Timing Plan: MIT

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	94	250	179	202	228	165	241	594	291	163	508	84
Future Volume (vph)	94	250	179	202	228	165	241	594	291	163	508	84
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		75	90		0	150		150	150		150
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	75			100			150			150		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1680			1042			878			825	
Travel Time (s)		38.2			23.7			20.0			18.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	1%	1%	1%	3%	3%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	104	278	199	224	436	0	268	983	0	170	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)		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
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases			4									
Detector Phase	7	4	4	3	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		4.0	8.0		4.0	8.0	
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0		11.0	14.0		11.0	14.0	
Total Split (s)	14.0	28.0	28.0	17.0	31.0		20.0	30.0		15.0	25.0	
Total Split (%)	15.6%	31.1%	31.1%	18.9%	34.4%		22.2%	33.3%		16.7%	27.8%	
Maximum Green (s)	8.0	22.0	22.0	11.0	25.0		14.0	24.0		9.0	19.0	
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)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	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	None	None	None	None		None	Min		None	Min	
v/c Ratio	0.53	0.62	0.38	0.85	0.76		0.83	0.91		0.77	0.72	
Control Delay	48.2	35.7	7.7	66.6	35.8		58.6	41.1		61.9	35.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	48.2	35.7	7.7	66.6	35.8		58.6	41.1		61.9	35.7	
Queue Length 50th (ft)	57	136	7	126	206		149	262		95	167	
Queue Length 95th (ft)	109	216	59	#256	#356		#281	#391		#201	229	
Internal Link Dist (ft)		1600			962			798			745	
Turn Bay Length (ft)	75		75	90			150			150		

Lanes, Volumes, Timings
 2: Parade Rd (NH106) & Meredith Center Rd/Elm Street

PM 2037 B-MIT
 Timing Plan: MIT

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	203	513	568	264	583		328	1080		221	853	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.51	0.54	0.35	0.85	0.75		0.82	0.91		0.77	0.72	

Intersection Summary

Area Type: Other

Cycle Length: 90

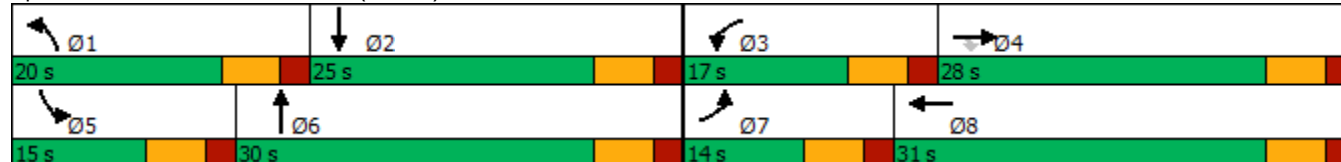
Actuated Cycle Length: 87.3

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

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

Splits and Phases: 2: Parade Rd (NH106) & Meredith Center Rd/Elm Street



HCM Signalized Intersection Capacity Analysis

2: Parade Rd (NH106) & Meredith Center Rd/Elm Street

PM 2037 B-MIT
Timing Plan: MIT

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	94	250	179	202	228	165	241	594	291	163	508	84
Future Volume (vph)	94	250	179	202	228	165	241	594	291	163	508	84
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85	1.00	0.94		1.00	0.95		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1583	1770	1745		1787	3398		1752	3430	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1863	1583	1770	1745		1787	3398		1752	3430	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.96	0.96	0.96
Adj. Flow (vph)	104	278	199	224	253	183	268	660	323	170	529	88
RTOR Reduction (vph)	0	0	136	0	28	0	0	66	0	0	14	0
Lane Group Flow (vph)	104	278	63	224	408	0	268	917	0	170	603	0
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	1%	1%	1%	3%	3%	3%
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases			4									
Actuated Green, G (s)	6.3	20.5	20.5	11.0	25.2		13.7	24.0		9.0	19.3	
Effective Green, g (s)	8.3	22.5	22.5	13.0	27.2		15.7	26.0		11.0	21.3	
Actuated g/C Ratio	0.09	0.25	0.25	0.15	0.31		0.18	0.29		0.12	0.24	
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0		6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	166	473	402	260	536		317	998		217	825	
v/s Ratio Prot	0.06	0.15		c0.13	c0.23		c0.15	c0.27		0.10	0.18	
v/s Ratio Perm			0.04									
v/c Ratio	0.63	0.59	0.16	0.86	0.76		0.85	0.92		0.78	0.73	
Uniform Delay, d1	38.6	28.9	25.6	36.9	27.7		35.2	30.2		37.6	31.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	7.2	1.9	0.2	24.1	6.3		18.3	12.9		16.7	3.3	
Delay (s)	45.8	30.8	25.8	61.0	34.0		53.5	43.1		54.3	34.3	
Level of Service	D	C	C	E	C		D	D		D	C	
Approach Delay (s)		31.8			43.1			45.3			38.6	
Approach LOS		C			D			D			D	
Intersection Summary												
HCM 2000 Control Delay			40.9			HCM 2000 Level of Service				D		
HCM 2000 Volume to Capacity ratio			0.90									
Actuated Cycle Length (s)			88.5			Sum of lost time (s)				16.0		
Intersection Capacity Utilization			75.4%			ICU Level of Service				D		
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings
2: Parade Rd (NH106) & Meredith Center Rd/Elm Street

SAT 2037 NB
Timing Plan: NHDOT/City

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	109	116	46	116	135	111	299	63	120	271	2
Future Volume (vph)	2	109	116	46	116	135	111	299	63	120	271	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		125	0		75	150		150	150		0
Storage Lanes	0		1	0		1	1		1	1		0
Taper Length (ft)	25			25			150			150		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1680			1042			2400			2280	
Travel Time (s)		38.2			23.7			54.5			51.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	4%	4%	4%	1%	1%	1%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	123	129	0	180	150	123	332	70	133	303	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)		0			0			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
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4		4	8		8			6			
Detector Phase	4	4	4	8	8	8	1	6	6	5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	4.0	8.0	8.0	4.0	8.0	
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	14.0	14.0	11.0	14.0	
Total Split (s)	36.0	36.0	36.0	36.0	36.0	36.0	26.0	36.0	36.0	26.0	36.0	
Total Split (%)	36.7%	36.7%	36.7%	36.7%	36.7%	36.7%	26.5%	36.7%	36.7%	26.5%	36.7%	
Maximum Green (s)	30.0	30.0	30.0	30.0	30.0	30.0	20.0	30.0	30.0	20.0	30.0	
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)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		-2.0	-2.0		-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	
Total Lost Time (s)		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag							Lead	Lag	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	3.0	3.0	3.0	3.0	
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	
v/c Ratio		0.25	0.25		0.40	0.28	0.31	0.52	0.12	0.33	0.47	
Control Delay		21.1	6.1		23.3	5.9	24.9	20.5	2.6	24.8	19.3	
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay		21.1	6.1		23.3	5.9	24.9	20.5	2.6	24.8	19.3	
Queue Length 50th (ft)		33	0		50	0	35	89	0	37	79	
Queue Length 95th (ft)		91	39		130	42	101	207	15	106	185	
Internal Link Dist (ft)		1600			962			2320			2200	
Turn Bay Length (ft)			125			75	150		150	150		

Lanes, Volumes, Timings
 2: Parade Rd (NH106) & Meredith Center Rd/Elm Street

SAT 2037 NB
 Timing Plan: NHDOT/City

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)		1137	1020		1036	1056	786	1165	1028	786	1164	
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0	
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0	
Storage Cap Reductn		0	0		0	0	0	0	0	0	0	
Reduced v/c Ratio		0.11	0.13		0.17	0.14	0.16	0.28	0.07	0.17	0.26	

Intersection Summary

Area Type: Other
 Cycle Length: 98
 Actuated Cycle Length: 55.6
 Natural Cycle: 40
 Control Type: Actuated-Uncoordinated

Splits and Phases: 2: Parade Rd (NH106) & Meredith Center Rd/Elm Street



HCM Signalized Intersection Capacity Analysis

2: Parade Rd (NH106) & Meredith Center Rd/Elm Street

SAT 2037 NB
Timing Plan: NHDOT/City

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	109	116	46	116	135	111	299	63	120	271	2
Future Volume (vph)	2	109	116	46	116	135	111	299	63	120	271	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1825	1553		1855	1599	1770	1863	1583	1770	1861	
Flt Permitted		0.99	1.00		0.88	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1817	1553		1658	1599	1770	1863	1583	1770	1861	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	2	121	129	51	129	150	123	332	70	133	301	2
RTOR Reduction (vph)	0	0	95	0	0	110	0	0	46	0	0	0
Lane Group Flow (vph)	0	123	34	0	180	40	123	332	24	133	303	0
Heavy Vehicles (%)	4%	4%	4%	1%	1%	1%	2%	2%	2%	2%	2%	2%
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4		4	8		8			6			
Actuated Green, G (s)		12.8	12.8		12.8	12.8	7.9	16.8	16.8	8.1	17.0	
Effective Green, g (s)		14.8	14.8		14.8	14.8	9.9	18.8	18.8	10.1	19.0	
Actuated g/C Ratio		0.27	0.27		0.27	0.27	0.18	0.34	0.34	0.18	0.34	
Clearance Time (s)		6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		482	412		440	424	314	628	534	320	634	
v/s Ratio Prot							0.07	c0.18		c0.08	0.16	
v/s Ratio Perm		0.07	0.02		c0.11	0.02			0.01			
v/c Ratio		0.26	0.08		0.41	0.09	0.39	0.53	0.04	0.42	0.48	
Uniform Delay, d1		16.1	15.4		16.8	15.4	20.2	14.9	12.4	20.2	14.4	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.3	0.1		0.6	0.1	0.8	0.8	0.0	0.9	0.6	
Delay (s)		16.4	15.4		17.5	15.5	21.0	15.7	12.4	21.1	15.0	
Level of Service		B	B		B	B	C	B	B	C	B	
Approach Delay (s)		15.9			16.6			16.5			16.9	
Approach LOS		B			B			B			B	
Intersection Summary												
HCM 2000 Control Delay			16.5				HCM 2000 Level of Service			B		
HCM 2000 Volume to Capacity ratio			0.46									
Actuated Cycle Length (s)			55.7				Sum of lost time (s)			12.0		
Intersection Capacity Utilization			47.7%				ICU Level of Service			A		
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings

2: Parade Rd (NH106) & Meredith Center Rd/Elm Street

SAT 2037 B

Timing Plan: NHDOT/City

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	95	188	116	139	200	135	111	394	151	120	370	100
Future Volume (vph)	95	188	116	139	200	135	111	394	151	120	370	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		125	0		75	150		150	150		0
Storage Lanes	0		1	0		1	1		1	1		0
Taper Length (ft)	25			25			150			150		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1680			1042			2400			2280	
Travel Time (s)		38.2			23.7			54.5			51.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	4%	4%	4%	1%	1%	1%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	315	129	0	376	150	123	438	168	133	522	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)		0			0			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
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4		4	8		8			6			
Detector Phase	4	4	4	8	8	8	1	6	6	5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	4.0	8.0	8.0	4.0	8.0	
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	14.0	14.0	11.0	14.0	
Total Split (s)	36.0	36.0	36.0	36.0	36.0	36.0	26.0	36.0	36.0	26.0	36.0	
Total Split (%)	36.7%	36.7%	36.7%	36.7%	36.7%	36.7%	26.5%	36.7%	36.7%	26.5%	36.7%	
Maximum Green (s)	30.0	30.0	30.0	30.0	30.0	30.0	20.0	30.0	30.0	20.0	30.0	
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)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		-2.0	-2.0		-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	
Total Lost Time (s)		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag							Lead	Lag	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	3.0	3.0	3.0	3.0	
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	
v/c Ratio		0.82	0.20		0.97	0.23	0.45	0.70	0.27	0.47	0.84	
Control Delay		46.4	5.0		69.9	9.5	39.9	32.8	6.6	39.9	39.9	
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay		46.4	5.0		69.9	9.5	39.9	32.8	6.6	39.9	39.9	
Queue Length 50th (ft)		161	0		209	18	64	206	8	70	255	
Queue Length 95th (ft)		#342	38		#427	64	118	338	53	125	#453	
Internal Link Dist (ft)		1600			962			2320			2200	
Turn Bay Length (ft)			125			75	150		150	150		

Lanes, Volumes, Timings
 2: Parade Rd (NH106) & Meredith Center Rd/Elm Street

SAT 2037 B
 Timing Plan: NHDOT/City

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)		384	653		388	652	448	686	675	448	678	
Starvation Cap Reductn		0	0		0	0	0	0	0	0	0	
Spillback Cap Reductn		0	0		0	0	0	0	0	0	0	
Storage Cap Reductn		0	0		0	0	0	0	0	0	0	
Reduced v/c Ratio		0.82	0.20		0.97	0.23	0.27	0.64	0.25	0.30	0.77	

Intersection Summary

Area Type: Other

Cycle Length: 98

Actuated Cycle Length: 87.4

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

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

Splits and Phases: 2: Parade Rd (NH106) & Meredith Center Rd/Elm Street

 Ø1	 Ø2	 Ø4
26 s	36 s	36 s
 Ø5	 Ø6	 Ø8
26 s	36 s	36 s

HCM Signalized Intersection Capacity Analysis

2: Parade Rd (NH106) & Meredith Center Rd/Elm Street

SAT 2037 B
Timing Plan: NHDOT/City

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	95	188	116	139	200	135	111	394	151	120	370	100
Future Volume (vph)	95	188	116	139	200	135	111	394	151	120	370	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.97	
Flt Protected		0.98	1.00		0.98	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1797	1553		1843	1599	1770	1863	1583	1770	1803	
Flt Permitted		0.57	1.00		0.56	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1046	1553		1055	1599	1770	1863	1583	1770	1803	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	106	209	129	154	222	150	123	438	168	133	411	111
RTOR Reduction (vph)	0	0	81	0	0	63	0	0	97	0	10	0
Lane Group Flow (vph)	0	315	48	0	376	87	123	438	71	133	512	0
Heavy Vehicles (%)	4%	4%	4%	1%	1%	1%	2%	2%	2%	2%	2%	2%
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4		4	8		8			6			
Actuated Green, G (s)		30.2	30.2		30.2	30.2	11.4	27.2	27.2	11.9	27.7	
Effective Green, g (s)		32.2	32.2		32.2	32.2	13.4	29.2	29.2	13.9	29.7	
Actuated g/C Ratio		0.37	0.37		0.37	0.37	0.15	0.33	0.33	0.16	0.34	
Clearance Time (s)		6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		385	572		389	589	271	623	529	281	613	
v/s Ratio Prot							0.07	0.24		c0.08	c0.28	
v/s Ratio Perm		0.30	0.03		c0.36	0.05			0.04			
v/c Ratio		0.82	0.08		0.97	0.15	0.45	0.70	0.13	0.47	0.84	
Uniform Delay, d1		24.9	17.9		27.0	18.4	33.6	25.3	20.2	33.4	26.5	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		12.7	0.1		36.5	0.1	1.2	3.6	0.1	1.3	9.6	
Delay (s)		37.6	18.0		63.6	18.5	34.8	28.9	20.4	34.6	36.2	
Level of Service		D	B		E	B	C	C	C	C	D	
Approach Delay (s)		31.9			50.7			27.9			35.8	
Approach LOS		C			D			C			D	
Intersection Summary												
HCM 2000 Control Delay			36.0									
HCM 2000 Volume to Capacity ratio			0.83									
Actuated Cycle Length (s)			87.3									
Intersection Capacity Utilization			78.4%									
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings
2: Parade Rd (NH106) & Meredith Center Rd/Elm Street

SAT 2037 B-MIT

Timing Plan: MIT

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	95	188	116	139	200	135	111	394	151	120	370	100
Future Volume (vph)	95	188	116	139	200	135	111	394	151	120	370	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	75		75	90		0	150		150	150		150
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	75			100			150			150		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1680			1042			878			825	
Travel Time (s)		38.2			23.7			20.0			18.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	4%	4%	4%	1%	1%	1%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	106	209	129	154	372	0	123	606	0	133	522	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
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases			4									
Detector Phase	7	4	4	3	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		4.0	8.0		4.0	8.0	
Minimum Split (s)	11.0	11.0	11.0	11.0	11.0		11.0	14.0		11.0	14.0	
Total Split (s)	19.0	39.0	39.0	22.0	42.0		19.0	39.0		20.0	40.0	
Total Split (%)	15.8%	32.5%	32.5%	18.3%	35.0%		15.8%	32.5%		16.7%	33.3%	
Maximum Green (s)	13.0	33.0	33.0	16.0	36.0		13.0	33.0		14.0	34.0	
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)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	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	None	None	None	None		None	Min		None	Min	
v/c Ratio	0.45	0.47	0.27	0.53	0.65		0.49	0.65		0.51	0.55	
Control Delay	48.9	35.1	6.5	47.7	34.6		49.5	33.0		48.9	31.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	48.9	35.1	6.5	47.7	34.6		49.5	33.0		48.9	31.1	
Queue Length 50th (ft)	59	106	0	86	187		69	159		74	135	
Queue Length 95th (ft)	137	201	41	184	335		156	256		165	220	
Internal Link Dist (ft)		1600			962			798			745	
Turn Bay Length (ft)	75		75	90			150			150		

2: Parade Rd (NH106) & Meredith Center Rd/Elm Street

Timing Plan: MIT

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	294	722	696	363	776		299	1369		320	1410	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.36	0.29	0.19	0.42	0.48		0.41	0.44		0.42	0.37	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 93.3

Natural Cycle: 55

Control Type: Actuated-Uncoordinated

Splits and Phases: 2: Parade Rd (NH106) & Meredith Center Rd/Elm Street

 Ø1	 Ø2	 Ø3	 Ø4
19 s	40 s	22 s	39 s
 Ø5	 Ø6	 Ø7	 Ø8
20 s	39 s	19 s	42 s

HCM Signalized Intersection Capacity Analysis

2: Parade Rd (NH106) & Meredith Center Rd/Elm Street

SAT 2037 B-MIT

Timing Plan: MIT

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	95	188	116	139	200	135	111	394	151	120	370	100
Future Volume (vph)	95	188	116	139	200	135	111	394	151	120	370	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85	1.00	0.94		1.00	0.96		1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1736	1827	1553	1787	1767		1770	3392		1770	3426	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1736	1827	1553	1787	1767		1770	3392		1770	3426	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	106	209	129	154	222	150	123	438	168	133	411	111
RTOR Reduction (vph)	0	0	95	0	21	0	0	35	0	0	21	0
Lane Group Flow (vph)	106	209	34	154	351	0	123	571	0	133	501	0
Heavy Vehicles (%)	4%	4%	4%	1%	1%	1%	2%	2%	2%	2%	2%	2%
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases			4									
Actuated Green, G (s)	8.6	22.7	22.7	12.9	27.0		11.1	22.5		11.7	23.1	
Effective Green, g (s)	10.6	24.7	24.7	14.9	29.0		13.1	24.5		13.7	25.1	
Actuated g/C Ratio	0.11	0.26	0.26	0.16	0.31		0.14	0.26		0.15	0.27	
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0		6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	196	481	408	283	546		247	885		258	916	
v/s Ratio Prot	0.06	0.11		c0.09	c0.20		0.07	c0.17		c0.08	0.15	
v/s Ratio Perm			0.02									
v/c Ratio	0.54	0.43	0.08	0.54	0.64		0.50	0.65		0.52	0.55	
Uniform Delay, d1	39.3	28.7	26.0	36.3	27.9		37.3	30.8		37.0	29.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	3.0	0.6	0.1	2.1	2.6		1.6	1.6		1.7	0.7	
Delay (s)	42.3	29.4	26.1	38.5	30.5		38.9	32.4		38.7	30.1	
Level of Service	D	C	C	D	C		D	C		D	C	
Approach Delay (s)		31.5			32.9			33.5			31.9	
Approach LOS		C			C			C			C	
Intersection Summary												
HCM 2000 Control Delay			32.5			HCM 2000 Level of Service				C		
HCM 2000 Volume to Capacity ratio			0.62									
Actuated Cycle Length (s)			93.8			Sum of lost time (s)				16.0		
Intersection Capacity Utilization			59.7%			ICU Level of Service				B		
Analysis Period (min)			15									
c Critical Lane Group												

ATTACHMENT G

Intersection #32: Synchro (AM/PM/SAT)

2037 Build

2037 Build Mit

Lanes, Volumes, Timings
32: Prop. Road2 & Meredith Center Rd

AM 2037 B
Timing Plan: NHDOT/City

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	428	71	129	251	48	142
Future Volume (vph)	428	71	129	251	48	142
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30			30	30	
Link Distance (ft)	1400			1680	921	
Travel Time (s)	31.8			38.2	20.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)						
Lane Group Flow (vph)	555	0	0	422	211	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	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)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized

HCM Unsignalized Intersection Capacity Analysis

32: Prop. Road2 & Meredith Center Rd

AM 2037 B
Timing Plan: NHDOT/City

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	428	71	129	251	48	142
Future Volume (Veh/h)	428	71	129	251	48	142
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	476	79	143	279	53	158
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			555		1080	516
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			555		1080	516
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			86		74	72
cM capacity (veh/h)			1015		207	559
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	555	422	211			
Volume Left	0	143	53			
Volume Right	79	0	158			
cSH	1700	1015	392			
Volume to Capacity	0.33	0.14	0.54			
Queue Length 95th (ft)	0	12	77			
Control Delay (s)	0.0	4.1	24.4			
Lane LOS		A	C			
Approach Delay (s)	0.0	4.1	24.4			
Approach LOS			C			
Intersection Summary						
Average Delay			5.8			
Intersection Capacity Utilization			68.6%	ICU Level of Service		C
Analysis Period (min)			15			

Lanes, Volumes, Timings
32: Prop. Road2 & Meredith Center Rd

AM 2037 B-MIT
Timing Plan: MIT

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	428	71	129	251	48	142
Future Volume (vph)	428	71	129	251	48	142
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	50		0	100
Storage Lanes		0	1		1	1
Taper Length (ft)			265		25	
Link Speed (mph)	30			30	30	
Link Distance (ft)	1400			1680	921	
Travel Time (s)	31.8			38.2	20.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)						
Lane Group Flow (vph)	555	0	143	279	53	158
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			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)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized

HCM Unsignalized Intersection Capacity Analysis

32: Prop. Road2 & Meredith Center Rd

AM 2037 B-MIT
Timing Plan: MIT

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	428	71	129	251	48	142
Future Volume (Veh/h)	428	71	129	251	48	142
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	476	79	143	279	53	158
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						4
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			555	1080		516
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			555	1080		516
tC, single (s)			4.1	6.4		6.2
tC, 2 stage (s)						
tF (s)			2.2	3.5		3.3
p0 queue free %			86	74		72
cM capacity (veh/h)			1015	207		559
Direction, Lane #	EB 1	WB 1	WB 2	NB 1		
Volume Total	555	143	279	211		
Volume Left	0	143	0	53		
Volume Right	79	0	0	158		
cSH	1700	1015	1700	747		
Volume to Capacity	0.33	0.14	0.16	0.28		
Queue Length 95th (ft)	0	12	0	29		
Control Delay (s)	0.0	9.1	0.0	17.5		
Lane LOS		A		C		
Approach Delay (s)	0.0	3.1		17.5		
Approach LOS				C		
Intersection Summary						
Average Delay			4.2			
Intersection Capacity Utilization			47.3%	ICU Level of Service		A
Analysis Period (min)			15			

Lanes, Volumes, Timings
32: Prop. Road2 & Meredith Center Rd

PM 2037 B
Timing Plan: NHDOT/City

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	352	60	193	368	86	185
Future Volume (vph)	352	60	193	368	86	185
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30			30	30	
Link Distance (ft)	1400			1680	921	
Travel Time (s)	31.8			38.2	20.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	1%	1%	2%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	458	0	0	623	302	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	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)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized

HCM Unsignalized Intersection Capacity Analysis

32: Prop. Road2 & Meredith Center Rd

PM 2037 B
Timing Plan: NHDOT/City

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	352	60	193	368	86	185
Future Volume (Veh/h)	352	60	193	368	86	185
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	391	67	214	409	96	206
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			458		1262	424
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			458		1262	424
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			81		37	67
cM capacity (veh/h)			1108		151	630
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	458	623	302			
Volume Left	0	214	96			
Volume Right	67	0	206			
cSH	1700	1108	314			
Volume to Capacity	0.27	0.19	0.96			
Queue Length 95th (ft)	0	18	248			
Control Delay (s)	0.0	4.6	78.6			
Lane LOS		A	F			
Approach Delay (s)	0.0	4.6	78.6			
Approach LOS			F			
Intersection Summary						
Average Delay			19.2			
Intersection Capacity Utilization			78.4%	ICU Level of Service		D
Analysis Period (min)			15			

Lanes, Volumes, Timings
32: Prop. Road2 & Meredith Center Rd

PM 2037 B-MIT
Timing Plan: MIT

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	352	60	193	368	86	185
Future Volume (vph)	352	60	193	368	86	185
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	50		0	100
Storage Lanes		0	1		1	1
Taper Length (ft)			265		25	
Link Speed (mph)	30			30	30	
Link Distance (ft)	1400			1680	921	
Travel Time (s)	31.8			38.2	20.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	1%	1%	2%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	458	0	214	409	96	206
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			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)		9	15		15	9
Sign Control	Free			Free	Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					

HCM Unsignalized Intersection Capacity Analysis

32: Prop. Road2 & Meredith Center Rd

PM 2037 B-MIT
Timing Plan: MIT

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	352	60	193	368	86	185
Future Volume (Veh/h)	352	60	193	368	86	185
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	391	67	214	409	96	206
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						4
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			458			1262
vC1, stage 1 conf vol						424
vC2, stage 2 conf vol						
vCu, unblocked vol			458			1262
tC, single (s)			4.1			6.4
tC, 2 stage (s)						6.2
tF (s)			2.2			3.5
p0 queue free %			81			37
cM capacity (veh/h)			1108			151
						630
Direction, Lane #	EB 1	WB 1	WB 2	NB 1		
Volume Total	458	214	409	302		
Volume Left	0	214	0	96		
Volume Right	67	0	0	206		
cSH	1700	1108	1700	477		
Volume to Capacity	0.27	0.19	0.24	0.63		
Queue Length 95th (ft)	0	18	0	108		
Control Delay (s)	0.0	9.0	0.0	29.2		
Lane LOS		A		D		
Approach Delay (s)	0.0	3.1		29.2		
Approach LOS				D		
Intersection Summary						
Average Delay			7.8			
Intersection Capacity Utilization			47.6%	ICU Level of Service		A
Analysis Period (min)			15			

Lanes, Volumes, Timings
32: Prop. Road2 & Meredith Center Rd

SAT 2037 B
Timing Plan: NHDOT/City

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	258	97	207	180	104	183
Future Volume (vph)	258	97	207	180	104	183
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30			30	30	
Link Distance (ft)	1400			1680	921	
Travel Time (s)	31.8			38.2	20.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	1%	2%	2%	2%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	395	0	0	430	319	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	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)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized

HCM Unsignalized Intersection Capacity Analysis

32: Prop. Road2 & Meredith Center Rd

SAT 2037 B
Timing Plan: NHDOT/City

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	258	97	207	180	104	183
Future Volume (Veh/h)	258	97	207	180	104	183
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	287	108	230	200	116	203
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			395		1001	341
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			395		1001	341
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		46	71
cM capacity (veh/h)			1164		216	701
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	395	430	319			
Volume Left	0	230	116			
Volume Right	108	0	203			
cSH	1700	1164	386			
Volume to Capacity	0.23	0.20	0.83			
Queue Length 95th (ft)	0	18	188			
Control Delay (s)	0.0	5.7	46.0			
Lane LOS		A	E			
Approach Delay (s)	0.0	5.7	46.0			
Approach LOS			E			
Intersection Summary						
Average Delay			14.9			
Intersection Capacity Utilization			67.4%	ICU Level of Service		C
Analysis Period (min)			15			

Lanes, Volumes, Timings
32: Prop. Road2 & Meredith Center Rd

SAT 2037 B-MIT
Timing Plan: MIT

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	258	97	207	180	104	183
Future Volume (vph)	258	97	207	180	104	183
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	50		0	100
Storage Lanes		0	1		1	1
Taper Length (ft)			265		25	
Link Speed (mph)	30			30	30	
Link Distance (ft)	1400			1680	921	
Travel Time (s)	31.8			38.2	20.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	1%	2%	2%	2%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	395	0	230	200	116	203
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			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)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized

HCM Unsignalized Intersection Capacity Analysis

32: Prop. Road2 & Meredith Center Rd

SAT 2037 B-MIT

Timing Plan: MIT

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	258	97	207	180	104	183
Future Volume (Veh/h)	258	97	207	180	104	183
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	287	108	230	200	116	203
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						4
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			395			1001
vC1, stage 1 conf vol						341
vC2, stage 2 conf vol						
vCu, unblocked vol			395			1001
tC, single (s)			4.1			6.4
tC, 2 stage (s)						6.2
tF (s)			2.2			3.5
p0 queue free %			80			46
cM capacity (veh/h)			1164			216
						701
Direction, Lane #	EB 1	WB 1	WB 2	NB 1		
Volume Total	395	230	200	319		
Volume Left	0	230	0	116		
Volume Right	108	0	0	203		
cSH	1700	1164	1700	594		
Volume to Capacity	0.23	0.20	0.12	0.54		
Queue Length 95th (ft)	0	18	0	80		
Control Delay (s)	0.0	8.9	0.0	22.1		
Lane LOS		A		C		
Approach Delay (s)	0.0	4.7		22.1		
Approach LOS				C		
Intersection Summary						
Average Delay			8.0			
Intersection Capacity Utilization			46.7%	ICU Level of Service		A
Analysis Period (min)			15			

ATTACHMENT H

Intersection #4: Synchro (AM/PM/SAT)

2037 No-Build

2037 Build

Lanes, Volumes, Timings
4: Eastman Rd/Lane Rd & Meredith Center Rd

AM 2037 NB
Timing Plan: NHDOT/City

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	422	0	5	246	0	0	0	5	0	2	9
Future Volume (vph)	0	422	0	5	246	0	0	0	5	0	2	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		208			1400			880			2301	
Travel Time (s)		4.7			31.8			20.0			52.3	
Peak Hour Factor	0.91	0.91	0.91	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	464	0	0	279	0	0	6	0	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)		0			0			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
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized

HCM Unsignalized Intersection Capacity Analysis

4: Eastman Rd/Lane Rd & Meredith Center Rd

AM 2037 NB

Timing Plan: NHDOT/City

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	422	0	5	246	0	0	0	5	0	2	9
Future Volume (Veh/h)	0	422	0	5	246	0	0	0	5	0	2	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.91	0.91	0.91	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	464	0	6	273	0	0	0	6	0	2	10
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	273			464			760	749	464	755	749	273
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	273			464			760	749	464	755	749	273
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			99			100	100	99	100	99	99
cM capacity (veh/h)	1284			1097			316	339	598	320	339	766
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	464	279	6	12								
Volume Left	0	6	0	0								
Volume Right	0	0	6	10								
cSH	1284	1097	598	633								
Volume to Capacity	0.00	0.01	0.01	0.02								
Queue Length 95th (ft)	0	0	1	1								
Control Delay (s)	0.0	0.2	11.1	10.8								
Lane LOS		A	B	B								
Approach Delay (s)	0.0	0.2	11.1	10.8								
Approach LOS			B	B								
Intersection Summary												
Average Delay			0.3									
Intersection Capacity Utilization			32.2%		ICU Level of Service				A			
Analysis Period (min)			15									

Lanes, Volumes, Timings

AM 2037 B

4: Eastman Rd/Lane Rd & Meredith Center Rd

Timing Plan: NHDOT/City

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	487	69	5	290	0	38	11	7	0	29	9
Future Volume (vph)	0	487	69	5	290	0	38	11	7	0	29	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		208			1400			880			2301	
Travel Time (s)		4.7			31.8			20.0			52.3	
Peak Hour Factor	0.91	0.91	0.91	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	611	0	0	328	0	0	62	0	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)		0			0			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
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

HCM Unsignalized Intersection Capacity Analysis

AM 2037 B

4: Eastman Rd/Lane Rd & Meredith Center Rd

Timing Plan: NHDOT/City

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	487	69	5	290	0	38	11	7	0	29	9
Future Volume (Veh/h)	0	487	69	5	290	0	38	11	7	0	29	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.91	0.91	0.91	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	535	76	6	322	0	42	12	8	0	32	10
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	322			611			933	907	573	921	945	322
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	322			611			933	907	573	921	945	322
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			99			81	96	98	100	88	99
cM capacity (veh/h)	1232			968			219	274	519	238	260	719
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	611	328	62	42								
Volume Left	0	6	42	0								
Volume Right	76	0	8	10								
cSH	1232	968	247	307								
Volume to Capacity	0.00	0.01	0.25	0.14								
Queue Length 95th (ft)	0	0	24	12								
Control Delay (s)	0.0	0.2	24.4	18.6								
Lane LOS		A	C	C								
Approach Delay (s)	0.0	0.2	24.4	18.6								
Approach LOS			C	C								
Intersection Summary												
Average Delay			2.3									
Intersection Capacity Utilization			46.3%		ICU Level of Service					A		
Analysis Period (min)			15									

Lanes, Volumes, Timings
4: Eastman Rd/Lane Rd & Meredith Center Rd

PM 2037 NB
Timing Plan: NHDOT/City

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	345	1	11	376	0	0	1	10	0	0	0
Future Volume (vph)	3	345	1	11	376	0	0	1	10	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		208			1400			880			2301	
Travel Time (s)		4.7			31.8			20.0			52.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	387	0	0	430	0	0	12	0	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)		0			0			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
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized

HCM Unsignalized Intersection Capacity Analysis

4: Eastman Rd/Lane Rd & Meredith Center Rd

PM 2037 NB

Timing Plan: NHDOT/City

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	345	1	11	376	0	0	1	10	0	0	0
Future Volume (Veh/h)	3	345	1	11	376	0	0	1	10	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	3	383	1	12	418	0	0	1	11	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	418			384			832	832	384	843	832	418
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	418			384			832	832	384	843	832	418
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			99			100	100	98	100	100	100
cM capacity (veh/h)	1141			1180			286	301	664	275	301	635
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	387	430	12	0								
Volume Left	3	12	0	0								
Volume Right	1	0	11	0								
cSH	1141	1180	603	1700								
Volume to Capacity	0.00	0.01	0.02	0.14								
Queue Length 95th (ft)	0	1	2	0								
Control Delay (s)	0.1	0.3	11.1	0.0								
Lane LOS	A	A	B	A								
Approach Delay (s)	0.1	0.3	11.1	0.0								
Approach LOS			B	A								
Intersection Summary												
Average Delay			0.4									
Intersection Capacity Utilization			36.9%		ICU Level of Service				A			
Analysis Period (min)			15									

Lanes, Volumes, Timings

PM 2037 B

4: Eastman Rd/Lane Rd & Meredith Center Rd

Timing Plan: NHDOT/City

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	386	52	11	438	0	54	23	19	0	15	0
Future Volume (vph)	3	386	52	11	438	0	54	23	19	0	15	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		208			1400			880			2301	
Travel Time (s)		4.7			31.8			20.0			52.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	490	0	0	499	0	0	107	0	0	17	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)		0			0			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
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

HCM Unsignalized Intersection Capacity Analysis

PM 2037 B

4: Eastman Rd/Lane Rd & Meredith Center Rd

Timing Plan: NHDOT/City

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	386	52	11	438	0	54	23	19	0	15	0
Future Volume (Veh/h)	3	386	52	11	438	0	54	23	19	0	15	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	3	429	58	12	487	0	60	26	21	0	17	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	487			487			984	975	458	1009	1004	487
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	487			487			984	975	458	1009	1004	487
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			99			72	90	97	100	93	100
cM capacity (veh/h)	1076			1081			213	248	603	192	238	581
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	490	499	107	17								
Volume Left	3	12	60	0								
Volume Right	58	0	21	0								
cSH	1076	1081	254	238								
Volume to Capacity	0.00	0.01	0.42	0.07								
Queue Length 95th (ft)	0	1	49	6								
Control Delay (s)	0.1	0.3	29.1	21.3								
Lane LOS	A	A	D	C								
Approach Delay (s)	0.1	0.3	29.1	21.3								
Approach LOS			D	C								
Intersection Summary												
Average Delay			3.3									
Intersection Capacity Utilization			49.1%		ICU Level of Service				A			
Analysis Period (min)			15									

Lanes, Volumes, Timings
4: Eastman Rd/Lane Rd & Meredith Center Rd

SAT 2037 NB
Timing Plan: NHDOT/City

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1	7	9	255	2	10	186	0	1	0	8
Future Volume (vph)	0	1	7	9	255	2	10	186	0	1	0	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		208			1400			880			2301	
Travel Time (s)		4.7			31.8			20.0			52.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	9	0	0	295	0	0	218	0	0	10	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)		0			0			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
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized

HCM Unsignalized Intersection Capacity Analysis

4: Eastman Rd/Lane Rd & Meredith Center Rd

SAT 2037 NB

Timing Plan: NHDOT/City

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1	7	9	255	2	10	186	0	1	0	8
Future Volume (Veh/h)	0	1	7	9	255	2	10	186	0	1	0	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	1	8	10	283	2	11	207	0	1	0	9
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			9			318	310	5	412	313	284
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	285			9			318	310	5	412	313	284
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			99			98	66	100	100	100	99
cM capacity (veh/h)	1277			1617			624	601	1078	401	598	755
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	9	295	218	10								
Volume Left	0	10	11	1								
Volume Right	8	2	0	9								
cSH	1277	1617	602	694								
Volume to Capacity	0.00	0.01	0.36	0.01								
Queue Length 95th (ft)	0	0	41	1								
Control Delay (s)	0.0	0.3	14.3	10.3								
Lane LOS		A	B	B								
Approach Delay (s)	0.0	0.3	14.3	10.3								
Approach LOS			B	B								
Intersection Summary												
Average Delay			6.2									
Intersection Capacity Utilization			39.1%		ICU Level of Service				A			
Analysis Period (min)			15									

Lanes, Volumes, Timings
4: Eastman Rd/Lane Rd & Meredith Center Rd

SAT 2037 B
Timing Plan: NHDOT/City

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	42	7	9	331	91	10	267	0	86	38	8
Future Volume (vph)	0	42	7	9	331	91	10	267	0	86	38	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		208			1400			880			2301	
Travel Time (s)		4.7			31.8			20.0			52.3	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	55	0	0	479	0	0	308	0	0	147	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)		0			0			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
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized

HCM Unsignalized Intersection Capacity Analysis

4: Eastman Rd/Lane Rd & Meredith Center Rd

SAT 2037 B

Timing Plan: NHDOT/City

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	42	7	9	331	91	10	267	0	86	38	8
Future Volume (Veh/h)	0	42	7	9	331	91	10	267	0	86	38	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	47	8	10	368	101	11	297	0	96	42	9
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	469			55			520	540	51	638	494	418
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	469			55			520	540	51	638	494	418
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			99			97	33	100	47	91	99
cM capacity (veh/h)	1093			1556			427	446	1017	180	474	635
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	55	479	308	147								
Volume Left	0	10	11	96								
Volume Right	8	101	0	9								
cSH	1093	1556	445	231								
Volume to Capacity	0.00	0.01	0.69	0.64								
Queue Length 95th (ft)	0	0	129	96								
Control Delay (s)	0.0	0.2	29.4	44.5								
Lane LOS		A	D	E								
Approach Delay (s)	0.0	0.2	29.4	44.5								
Approach LOS			D	E								
Intersection Summary												
Average Delay			15.9									
Intersection Capacity Utilization			62.0%		ICU Level of Service				B			
Analysis Period (min)			15									

ATTACHMENT I

Intersection #31: Synchro (AM/PM/SAT)

2037 Build

Lanes, Volumes, Timings
31: Eastman Rd & Right Way Path

AM 2037 B
Timing Plan: NHDOT/City

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	51	9	0	97	12
Future Volume (vph)	0	51	9	0	97	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30		30			30
Link Distance (ft)	446		1050			880
Travel Time (s)	10.1		23.9			20.0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)						
Lane Group Flow (vph)	57	0	10	0	0	121
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
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		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type: Other
Control Type: Unsignalized

HCM Unsignalized Intersection Capacity Analysis

31: Eastman Rd & Right Way Path

AM 2037 B
Timing Plan: NHDOT/City

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	51	9	0	97	12
Future Volume (Veh/h)	0	51	9	0	97	12
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	57	10	0	108	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	239	10			10	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	239	10			10	
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	95			93	
cM capacity (veh/h)	699	1071			1610	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	57	10	121			
Volume Left	0	0	108			
Volume Right	57	0	0			
cSH	1071	1700	1610			
Volume to Capacity	0.05	0.01	0.07			
Queue Length 95th (ft)	4	0	5			
Control Delay (s)	8.5	0.0	6.7			
Lane LOS	A		A			
Approach Delay (s)	8.5	0.0	6.7			
Approach LOS	A					
Intersection Summary						
Average Delay			6.9			
Intersection Capacity Utilization			22.7%	ICU Level of Service		A
Analysis Period (min)			15			

Lanes, Volumes, Timings
31: Eastman Rd & Right Way Path

PM 2037 B
Timing Plan: NHDOT/City

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	85	19	0	66	21
Future Volume (vph)	0	85	19	0	66	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30		30			30
Link Distance (ft)	446		1050			880
Travel Time (s)	10.1		23.9			20.0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)						
Lane Group Flow (vph)	94	0	21	0	0	96
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
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		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type: Other
Control Type: Unsignalized

HCM Unsignalized Intersection Capacity Analysis

PM 2037 B

31: Eastman Rd & Right Way Path

Timing Plan: NHDOT/City

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	85	19	0	66	21
Future Volume (Veh/h)	0	85	19	0	66	21
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	94	21	0	73	23
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	190	21			21	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	190	21			21	
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	91			95	
cM capacity (veh/h)	762	1056			1595	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	94	21	96			
Volume Left	0	0	73			
Volume Right	94	0	0			
cSH	1056	1700	1595			
Volume to Capacity	0.09	0.01	0.05			
Queue Length 95th (ft)	7	0	4			
Control Delay (s)	8.7	0.0	5.7			
Lane LOS	A		A			
Approach Delay (s)	8.7	0.0	5.7			
Approach LOS	A					
Intersection Summary						
Average Delay			6.5			
Intersection Capacity Utilization			23.4%	ICU Level of Service		A
Analysis Period (min)			15			

Lanes, Volumes, Timings
31: Eastman Rd & Right Way Path

SAT 2037 B
Timing Plan: NHDOT/City

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	123	16	0	129	23
Future Volume (vph)	0	123	16	0	129	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30		30			30
Link Distance (ft)	446		1050			880
Travel Time (s)	10.1		23.9			20.0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)						
Lane Group Flow (vph)	137	0	18	0	0	169
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
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		9	15	
Sign Control	Stop		Free			Free

Intersection Summary

Area Type: Other
Control Type: Unsignalized

HCM Unsignalized Intersection Capacity Analysis

31: Eastman Rd & Right Way Path

SAT 2037 B
Timing Plan: NHDOT/City

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	123	16	0	129	23
Future Volume (Veh/h)	0	123	16	0	129	23
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	137	18	0	143	26
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	330	18			18	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	330	18			18	
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	87			91	
cM capacity (veh/h)	605	1061			1599	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	137	18	169			
Volume Left	0	0	143			
Volume Right	137	0	0			
cSH	1061	1700	1599			
Volume to Capacity	0.13	0.01	0.09			
Queue Length 95th (ft)	11	0	7			
Control Delay (s)	8.9	0.0	6.4			
Lane LOS	A		A			
Approach Delay (s)	8.9	0.0	6.4			
Approach LOS	A					
Intersection Summary						
Average Delay			7.1			
Intersection Capacity Utilization			29.3%	ICU Level of Service		A
Analysis Period (min)			15			

ATTACHMENT J

Turn Lane Warrants (#32)

Volumes (Ave)

Diagrams

Left Turn Lane Warrants

Right Turn Lane Warrants

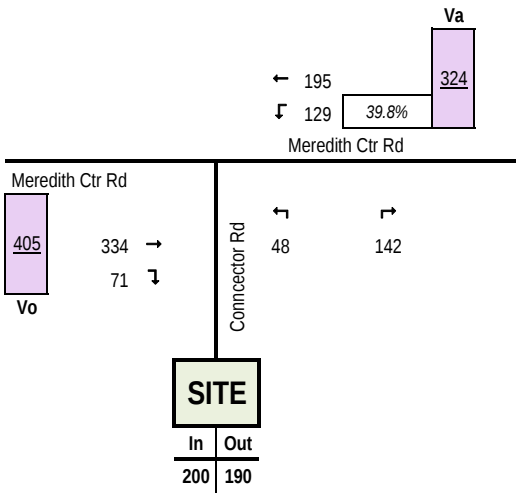
Second Lane on a Minor Road Warrant

2037 BUILD: FULL BUILD

LT WARRANT - AVE VOLS

AM Peak Hour

XX Volumes

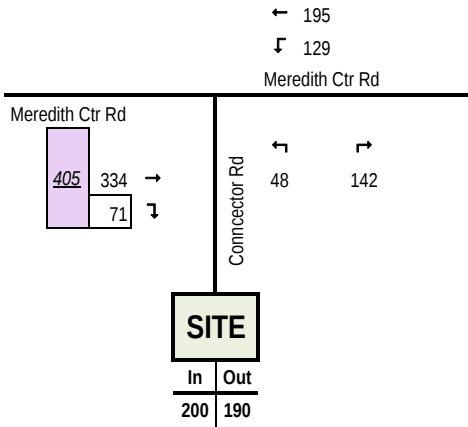


2037 BUILD: FULL BUILD

RT WARRANT - AVE VOLS

AM Peak Hour

XX Volumes

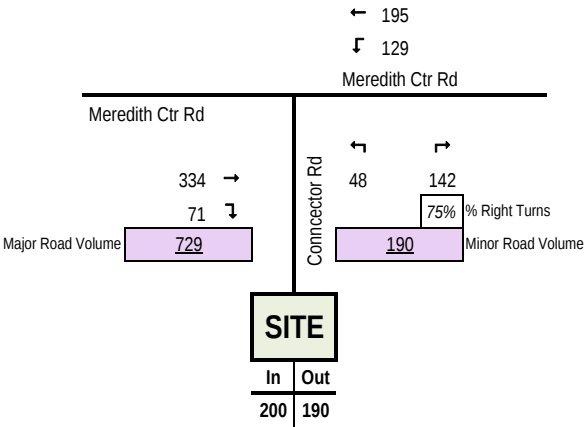


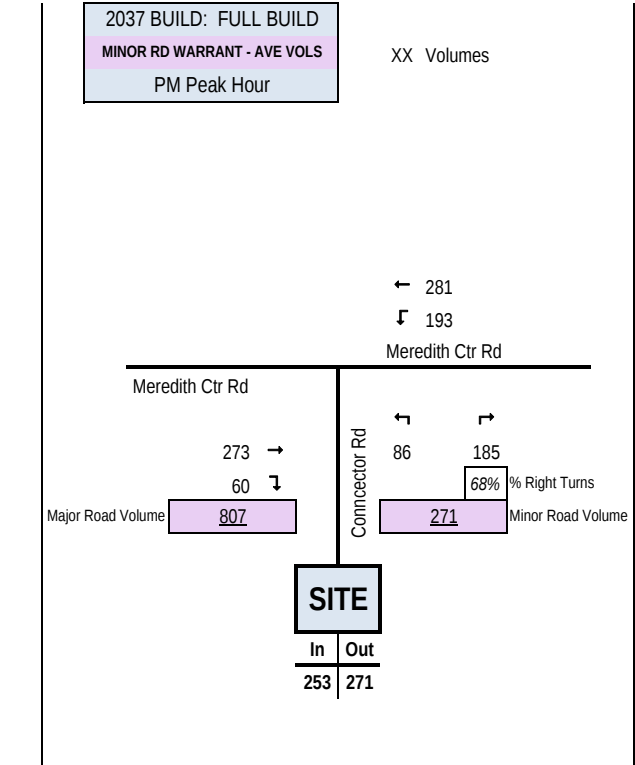
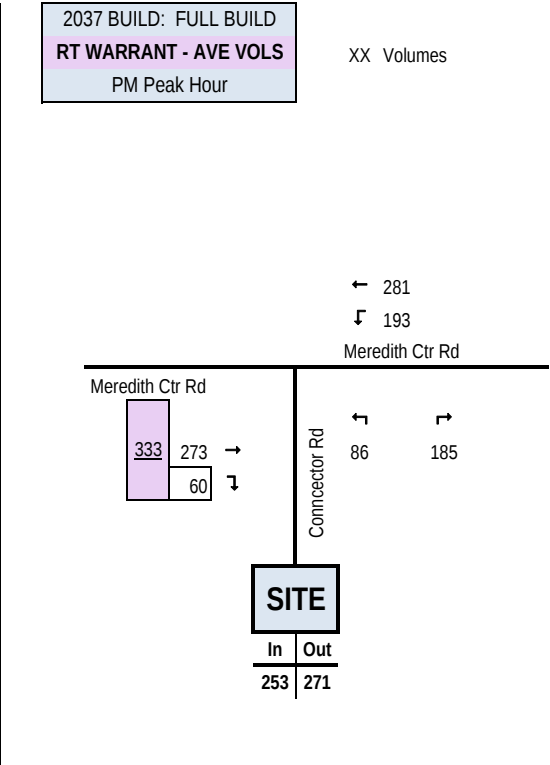
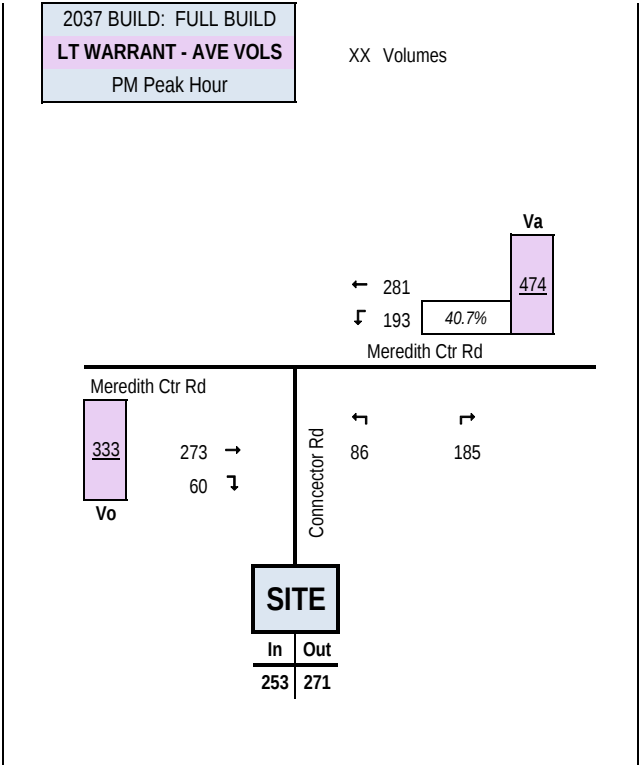
2037 BUILD: FULL BUILD

MINOR RD WARRANT - AVE VOLS

AM Peak Hour

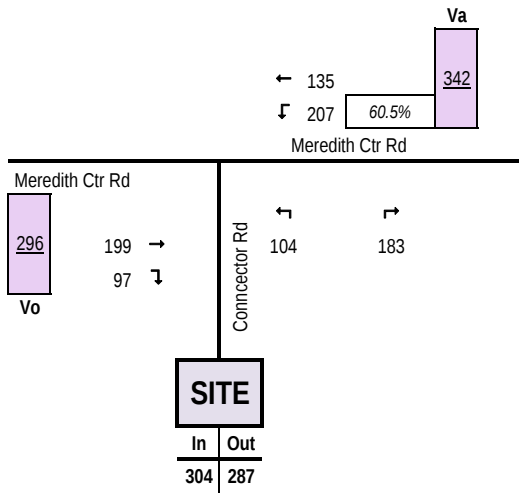
XX Volumes





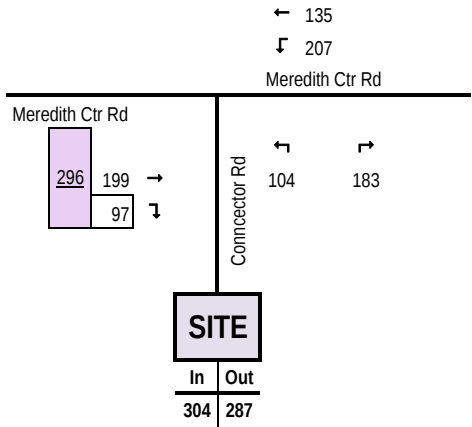
2037 BUILD: FULL BUILD
LT WARRANT - AVE VOLS
SAT Peak Hour

XX Volumes



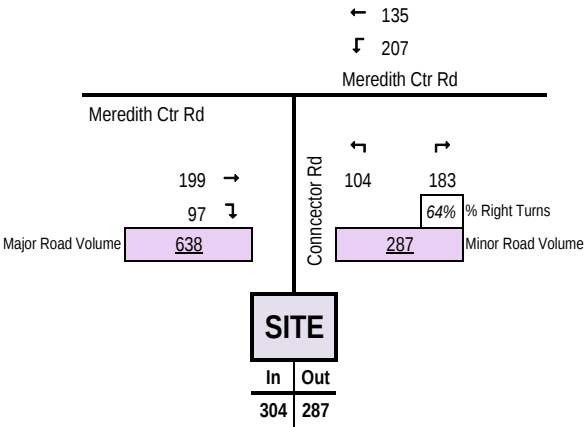
2037 BUILD: FULL BUILD
RT WARRANT - AVE VOLS
SAT Peak Hour

XX Volumes



2037 BUILD: FULL BUILD
MINOR RD WARRANT - AVE VOLS
SAT Peak Hour

XX Volumes



Background Traffic Volumes - AVERAGE SEASONAL ADJUSTMENT

AM Peak data																		
Assumed growth rate:			0.01															
March 2023 Seasonal Adjust:			1.22	NHDOT Group 5 Averages														
June 2023 Seasonal Adjust:			0.82	NHDOT Group 5 Averages (Int #21 ony)														

AM Peak data	Existing 2025 (Raw data) [03/06/2025]	Balance	2025	Existing 2025 w/ Seasonal (AVE) Adjustment	2025 BASE	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
32. Meredith Center Road at Connector Road																	
	Calculated				0.00												
	<u>Movement</u>		0		0.00												
	EBT	245	0	245	298.90	298.90	301.89	304.91	307.96	311.04	314.15	317.29	320.46	323.66	326.90	330.17	333.47
	EBR			0	0.00	0	0	0	0	0	0	0	0	0	0	0	0
	WBL			0	0.00	0	0	0	0	0	0	0	0	0	0	0	0
	WBT	145	10	155	176.90	176.90	178.67	180.46	182.26	184.08	185.92	187.78	189.66	191.56	193.48	195.41	197.36
	NBL			0	0.00	0	0	0	0	0	0	0	0	0	0	0	0
	NBR			0	0.00	0	0	0	0	0	0	0	0	0	0	0	0

AM Peak data	2037 No-Build	Site Trip Distribution (Full Build)	2037 Build (Full Build)	FUTURE BUILD PM PHF
32. Meredith Center Road at Connector Road				
	<u>Movement</u>			
	EBT	337	-3	334
	EBR	0	71	71
	WBL	0	129	129
	WBT	199	-4	195
	NBL	0	48	48
	NBR	0	142	142

Background Traffic Volumes - AVERAGE SEASONAL ADJUSTMENT
PM Peak data

Assumed growth rate:	0.01	
March 2023 Seasonal Adjust:	1.22	NHDOT Group 5
June 2023 Seasonal Adjust:	0.82	NHDOT Group 5 (Int #21 ony)

Site Trips are not Seasonally Adjusted or Grown.

PM Peak data	Existing 2025 (Raw data) [03/06/2025]	Balance	2025	Existing 2025 w/ Seasonal (AVE) Adjustment	2025 BASE	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
32. Meredith Center Road at Connector Road	Calculated				0.00												
Movement			0		0.00												
EBT	206	0	206	251.32	251.32	253.83	256.37	258.93	261.52	264.14	266.78	269.45	272.14	274.86	277.61	280.39	283.19
EBR			0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
WBL			0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
WBT	225	0	225	274.50	274.50	277.25	280.02	282.82	285.65	288.51	291.40	294.31	297.25	300.22	303.22	306.25	309.31
NBL			0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
NBR			0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0

PM Peak data	2037 No-Build	Site Trip Distribution (Full Build)	2037 Build (Full Build)	FUTURE BUILD PM PHF
32. Meredith Center Road at Connector Road				
Movement				
EBT	283	-10	273	0.90
EBR	0	60	60	
WBL	0	193	193	0.90
WBT	309	-28	281	
NBL	0	86	86	0.90
NBR	0	185	185	

Background Traffic Volumes - AVERAGE SEASONAL ADJUSTMENT
SAT Peak data

Assumed growth rate:	0.01	
March 2023 Seasonal Adjust:	1.22	NHDOT Group 5
June 2023 Seasonal Adjust:	0.82	NHDOT Group 5 (Int #21 ony)

Site Trips are not Seasonally Adjusted or Grown.

SAT Peak data	Existing 2025 (Raw data) [03/08/2025]	Balance	2025	Existing 2025 w/ Seasonal (AVE) Adjustment	2025 BASE	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
32. Meredith Center Road at Connector Road	Calculated																
Movement																	
EBT	153	0	153	186.66	186.66	188.53	190.42	192.32	194.24	196.18	198.14	200.12	202.12	204.14	206.18	208.24	210.32
EBR			0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
WBL			0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
WBT	116	14	130	141.52	141.52	142.94	144.37	145.81	147.27	148.74	150.23	151.73	153.25	154.78	156.33	157.89	159.47
NBL			0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
NBR			0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0

SAT Peak data	2037 No-Build	Site Trip Distribution (Full Build)	2037 Build (Full Build)	FUTURE BUILD PM PHF
32. Meredith Center Road at Connector Road				
Movement				
EBT	210	-11	199	0.90
EBR	0	97	97	
WBL	0	207	207	0.90
WBT	159	-24	135	
NBL	0	104	104	0.90
NBR	0	183	183	

Figure 2 - 5. Guideline for determining the need for a major-road left-turn bay at a two-way stop-controlled intersection.

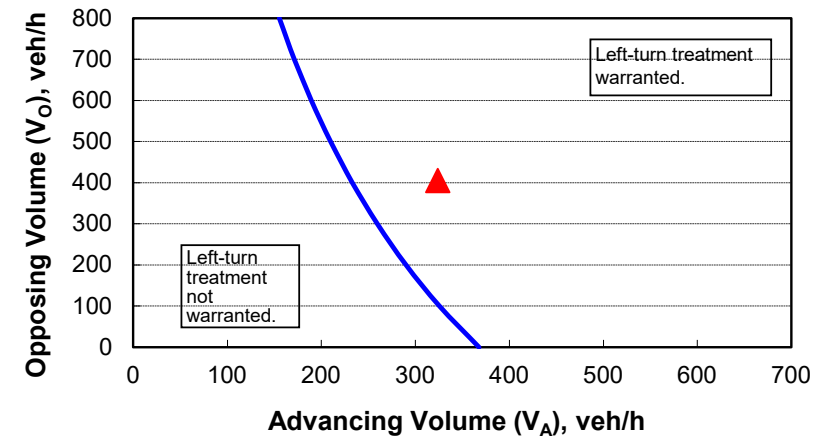
2-lane roadway (English)

INPUT

Variable	Value
85 th percentile speed, mph:	40
Percent of left-turns in advancing volume (V_A), %:	34%
Advancing volume (V_A), veh/h:	324
Opposing volume (V_O), veh/h:	405

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	232
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Figure 2 - 5. Guideline for determining the need for a major-road left-turn bay at a two-way stop-controlled intersection.

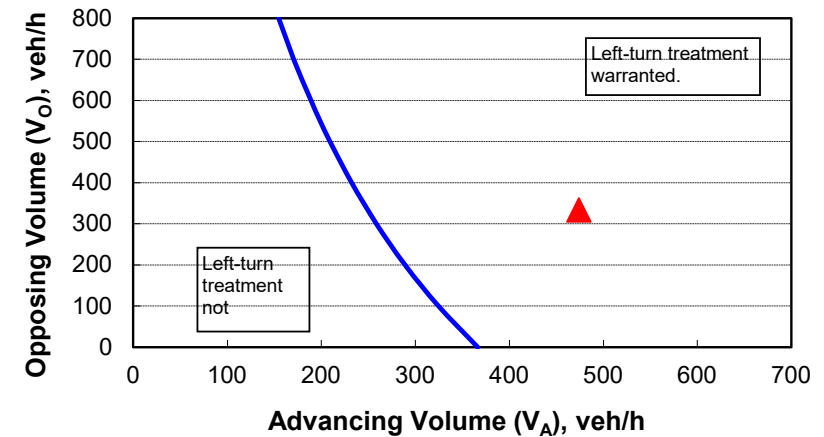
2-lane roadway (English)

INPUT

Variable	Value
85 th percentile speed, mph:	40
Percent of left-turns in advancing volume (V_A), %:	34%
Advancing volume (V_A), veh/h:	474
Opposing volume (V_O), veh/h:	333

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	250
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Figure 2 - 5. Guideline for determining the need for a major-road left-turn bay at a two-way stop-controlled intersection.

2-lane roadway (English)

INPUT

Variable	Value
85 th percentile speed, mph:	40
Percent of left-turns in advancing volume (V_A), %:	54%
Advancing volume (V_A), veh/h:	342
Opposing volume (V_O), veh/h:	296

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	247
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment warranted.	

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

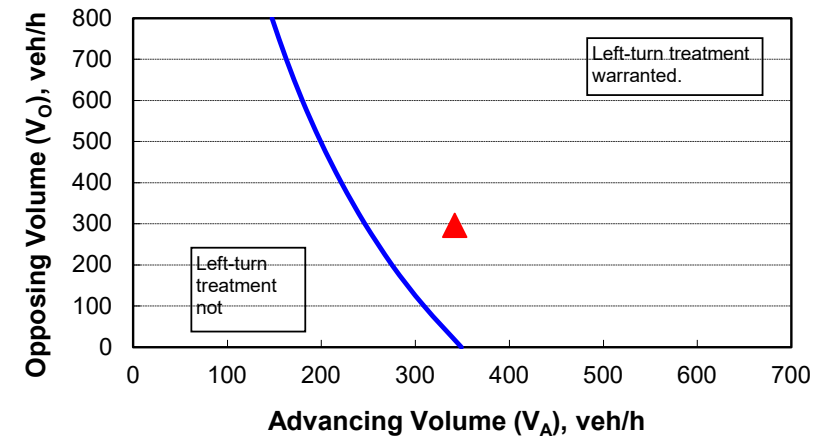


Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	2-lane roadway
Variable	Value
Major-road speed, mph:	40
Major-road volume (one direction), veh/h:	405
Right-turn volume, veh/h:	71

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	153
Guidance for determining the need for a major-road right-turn bay for a 2-lane roadway:	
Do NOT add right-turn bay.	

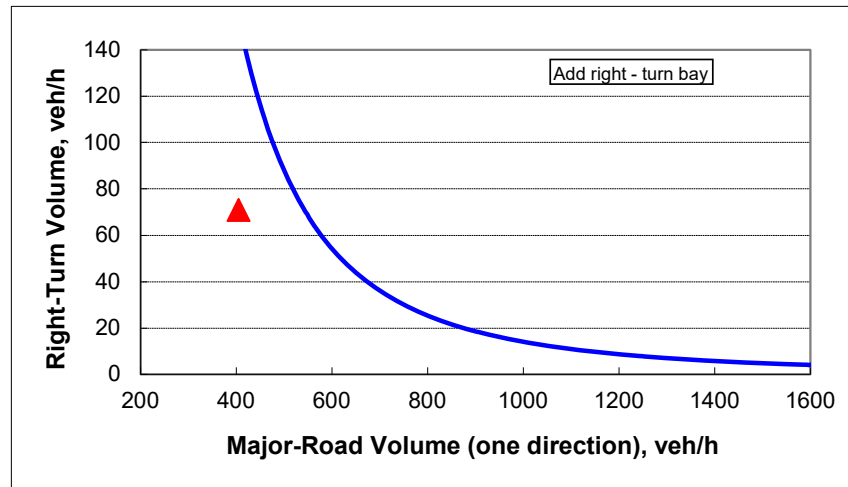


Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	2-lane roadway
Variable	Value
Major-road speed, mph:	40
Major-road volume (one direction), veh/h:	333
Right-turn volume, veh/h:	60

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	257
Guidance for determining the need for a major-road right-turn bay for a 2-lane roadway:	
Do NOT add right-turn bay.	

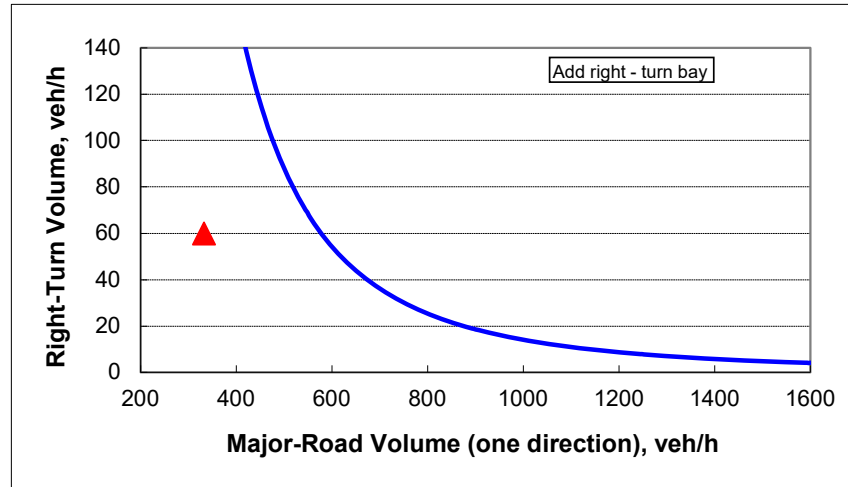


Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	2-lane roadway
Variable	Value
Major-road speed, mph:	40
Major-road volume (one direction), veh/h:	296
Right-turn volume, veh/h:	97

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	351
Guidance for determining the need for a major-road right-turn bay for a 2-lane roadway:	
Do NOT add right-turn bay.	

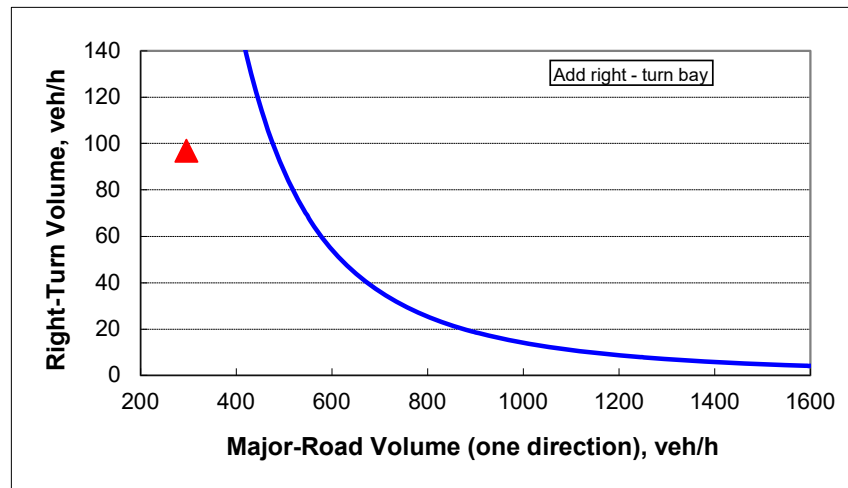


Figure 2 - 4. Guideline for determining minor-road approach geometry at two-way stop-controlled intersections.

INPUT

Variable	Value
Major-road volume (total of both directions), veh/h:	729
Percentage of right-turns on minor road, %:	75%
Minor-road volume (one direction), veh/h:	190

OUTPUT

Variable	Value
Limiting minor-road volume (one direction), veh/h:	323
Guidance for determining minor-road approach geometry:	
ONE approach lane is o.k.	

CALIBRATION CONSTANTS

Minor Road	Critical gap, s:	Follow-up gap, s:
Right-turn capacity, veh/h:	6.9	3.3
Left-turn and through capacity veh/h:	7.5	3.5

* according to Table 17 - 5 of the HCM

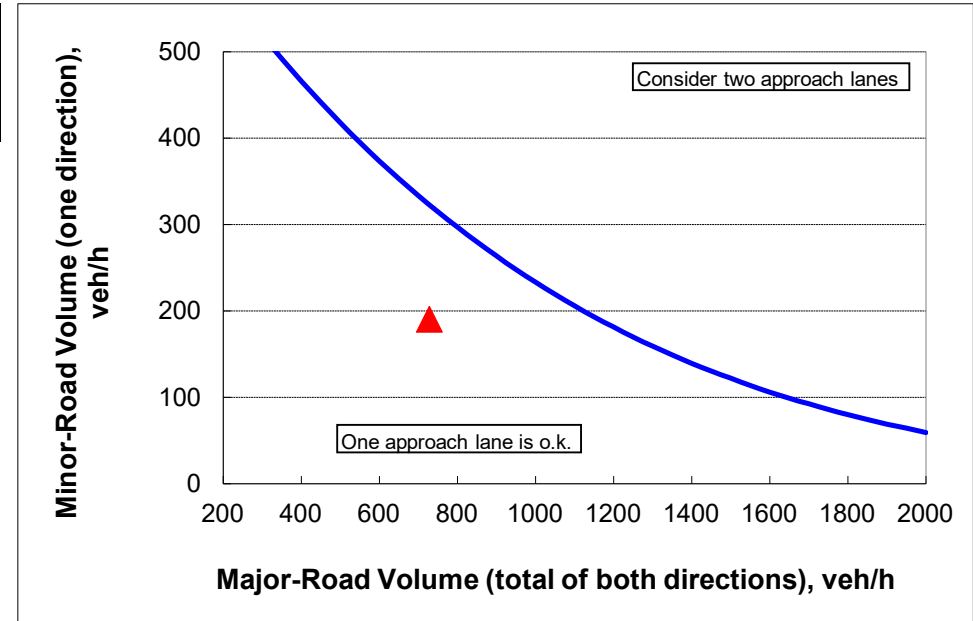


Figure 2 - 4. Guideline for determining minor-road approach geometry at two-way stop-controlled intersections.

INPUT

Variable	Value
Major-road volume (total of both directions), veh/h:	807
Percentage of right-turns on minor road, %:	68%
Minor-road volume (one direction), veh/h:	271

OUTPUT

Variable	Value
Limiting minor-road volume (one direction), veh/h:	272
Guidance for determining minor-road approach geometry:	
ONE approach lane is o.k.	

CALIBRATION CONSTANTS

Minor Road	Critical gap, s:	Follow-up gap, s:
Right-turn capacity, veh/h:	6.9	3.3
Left-turn and through capacity veh/h:	7.5	3.5

* according to Table 17 - 5 of the HCM

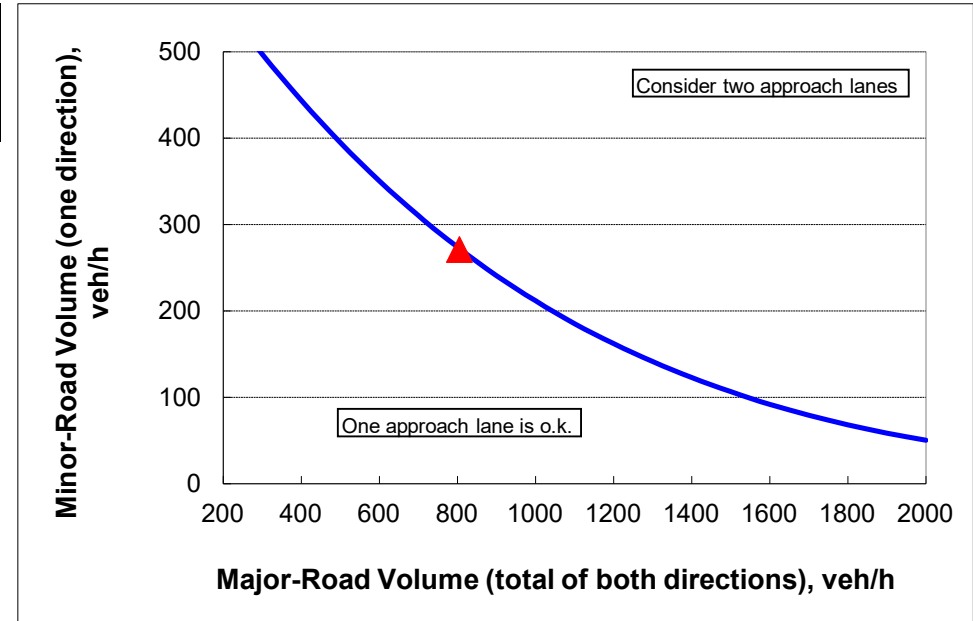


Figure 2 - 4. Guideline for determining minor-road approach geometry at two-way stop-controlled intersections.

INPUT

Variable	Value
Major-road volume (total of both directions), veh/h:	638
Percentage of right-turns on minor road, %:	64%
Minor-road volume (one direction), veh/h:	287

OUTPUT

Variable	Value
Limiting minor-road volume (one direction), veh/h:	323
Guidance for determining minor-road approach geometry:	
ONE approach lane is o.k.	

CALIBRATION CONSTANTS

Minor Road	Critical gap, s:	Follow-up gap, s:
Right-turn capacity, veh/h:	6.9	3.3
Left-turn and through capacity veh/h:	7.5	3.5

* according to Table 17 - 5 of the HCM

