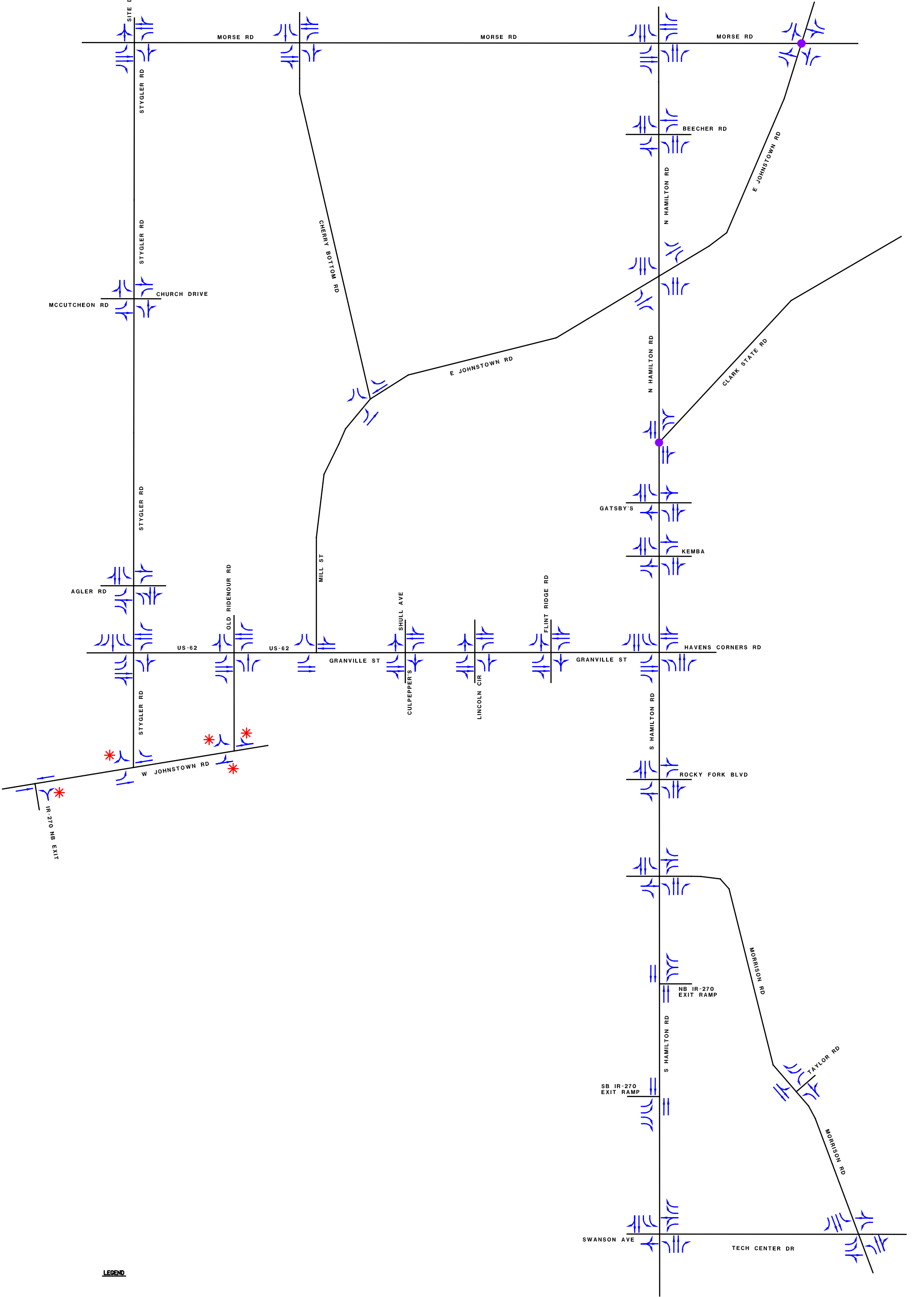


Appendix A Existing Roadway System Lane Configuration Summary



Existing Roadway System Lane Configuration Summary



LEGEND

- = ROUNDABOUT
- = STOP CONTROLLED APPROACH

ALL OTHER INTERSECTIONS SHOWN ARE SIGNALIZED
SCHEMATIC NOT TO SCALE

Appendix B Traffic Data, MORPC Growth Rates, and Traffic Volume Calculations





6612 Singletree Drive
Columbus, OH 43229

File Name : 160920 Stygler & Agler AM Peak
Site Code : _____
Start Date : 9/20/2016
Page No : 1

Groups Printed- Cars - Trucks

	Stygler Rd. From North				Agler Rd. From East				Stygler Rd. From South				Agler Rd. From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	10	115	4	129	2	2	16	20	16	45	88	149	106	3	5	114	412
07:15 AM	12	141	4	157	3	6	10	19	16	49	93	158	105	6	3	114	448
07:30 AM	15	149	4	168	7	7	9	23	13	49	78	140	120	4	2	126	457
07:45 AM	21	133	3	157	2	7	8	17	16	50	111	177	108	6	8	122	473
Total	58	538	15	611	14	22	43	79	61	193	370	624	439	19	18	476	1790
08:00 AM	21	146	6	173	3	4	14	21	14	71	96	181	97	5	9	111	486
08:15 AM	15	109	8	132	4	9	14	27	15	52	104	171	84	5	15	104	434
08:30 AM	10	93	7	110	9	11	10	30	17	66	103	186	109	4	9	122	448
08:45 AM	15	79	4	98	4	4	16	24	16	70	104	190	93	8	9	110	422
Total	61	427	25	513	20	28	54	102	62	259	407	728	383	22	42	447	1790
Grand Total	119	965	40	1124	34	50	97	181	123	452	777	1352	822	41	60	923	3580
Apprch %	10.6	85.9	3.6		18.8	27.6	53.6		9.1	33.4	57.5		89.1	4.4	6.5		
Total %	3.3	27	1.1	31.4	0.9	1.4	2.7	5.1	3.4	12.6	21.7	37.8	23	1.1	1.7	25.8	
Cars	119	965	39	1123	34	50	96	180	123	451	772	1346	817	41	60	918	3567
% Cars	100	100	97.5	99.9	100	100	99	99.4	100	99.8	99.4	99.6	99.4	100	100	99.5	99.6
Trucks	0	0	1	1	0	0	1	1	0	1	5	6	5	0	0	5	13
% Trucks	0	0	2.5	0.1	0	0	1	0.6	0	0.2	0.6	0.4	0.6	0	0	0.5	0.4



6612 Singletree Drive
Columbus, OH 43229

File Name : 160920 Stygler & Agler AM Peak
Site Code : _____
Start Date : 9/20/2016
Page No : 2

	Stygler Rd. From North				Agler Rd. From East				Stygler Rd. From South				Agler Rd. From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	12	141	4	157	3	6	10	19	16	49	93	158	105	6	3	114	448
07:30 AM	15	149	4	168	7	7	9	23	13	49	78	140	120	4	2	126	457
07:45 AM	21	133	3	157	2	7	8	17	16	50	111	177	108	6	8	122	473
08:00 AM	21	146	6	173	3	4	14	21	14	71	96	181	97	5	9	111	486
Total Volume	69	569	17	655	15	24	41	80	59	219	378	656	430	21	22	473	1864
% App. Total	10.5	86.9	2.6		18.8	30	51.2		9	33.4	57.6		90.9	4.4	4.7		
PHF	.821	.955	.708	.947	.536	.857	.732	.870	.922	.771	.851	.906	.896	.875	.611	.938	.959



6612 Singletree Drive
Columbus, OH 43229

File Name : 160920 Stygler & Agler PM Peak
Site Code :
Start Date : 9/20/2016
Page No : 1

Groups Printed- Cars - Trucks

	Stygler Rd. From North				Agler Rd. From East				Stygler Rd. From South				Agler Rd. From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	11	83	3	97	4	8	22	34	36	100	116	252	119	9	12	140	523
04:15 PM	15	86	7	108	6	7	16	29	37	99	96	232	117	9	12	138	507
04:30 PM	13	94	7	114	9	14	20	43	23	142	99	264	137	8	19	164	585
04:45 PM	9	101	7	117	7	9	14	30	27	155	102	284	167	3	13	183	614
Total	48	364	24	436	26	38	72	136	123	496	413	1032	540	29	56	625	2229
05:00 PM	9	122	5	136	7	10	14	31	17	118	84	219	154	16	25	195	581
05:15 PM	4	130	9	143	9	14	16	39	44	148	126	318	150	17	18	185	685
05:30 PM	6	116	9	131	11	10	21	42	22	149	83	254	138	14	21	173	600
05:45 PM	7	109	7	123	4	11	16	31	23	128	111	262	121	7	20	148	564
Total	26	477	30	533	31	45	67	143	106	543	404	1053	563	54	84	701	2430
Grand Total	74	841	54	969	57	83	139	279	229	1039	817	2085	1103	83	140	1326	4659
Apprch %	7.6	86.8	5.6		20.4	29.7	49.8		11	49.8	39.2		83.2	6.3	10.6		
Total %	1.6	18.1	1.2	20.8	1.2	1.8	3	6	4.9	22.3	17.5	44.8	23.7	1.8	3	28.5	
Cars	74	841	54	969	57	83	139	279	229	1039	817	2085	1097	83	140	1320	4653
% Cars	100	100	100	100	100	100	100	100	100	100	100	100	99.5	100	100	99.5	99.9
Trucks	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6	6
% Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0	0	0.5	0.1



6612 Singletree Drive
Columbus, OH 43229

File Name : 160920 Stygler & Agler PM Peak
Site Code :
Start Date : 9/20/2016
Page No : 2

	Stygler Rd. From North				Agler Rd. From East				Stygler Rd. From South				Agler Rd. From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	9	101	7	117	7	9	14	30	27	155	102	284	167	3	13	183	614
05:00 PM	9	122	5	136	7	10	14	31	17	118	84	219	154	16	25	195	581
05:15 PM	4	130	9	143	9	14	16	39	44	148	126	318	150	17	18	185	685
05:30 PM	6	116	9	131	11	10	21	42	22	149	83	254	138	14	21	173	600
Total Volume	28	469	30	527	34	43	65	142	110	570	395	1075	609	50	77	736	2480
% App. Total	5.3	89	5.7		23.9	30.3	45.8		10.2	53	36.7		82.7	6.8	10.5		
PHF	.778	.902	.833	.921	.773	.768	.774	.845	.625	.919	.784	.845	.912	.735	.770	.944	.905



6612 Singletree Drive
Columbus, OH 43229

File Name : 160920 Stygler & US62 AM Peak
Site Code :
Start Date : 9/20/2016
Page No : 1

Groups Printed- Cars - Trucks

	Stygler Rd. From North				US 62 From East				Stygler Rd. From South				US 62 From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	166	15	51	232	67	322	0	389	1	25	48	74	33	98	46	177	872
07:15 AM	161	18	56	235	72	335	2	409	1	13	31	45	49	104	72	225	914
07:30 AM	156	42	66	264	72	307	1	380	4	16	32	52	47	154	60	261	957
07:45 AM	144	52	67	263	90	311	7	408	4	33	42	79	79	128	39	246	996
Total	627	127	240	994	301	1275	10	1586	10	87	153	250	208	484	217	909	3739
08:00 AM	157	28	51	236	102	257	6	365	6	24	34	64	89	133	62	284	949
08:15 AM	126	33	63	222	90	279	2	371	6	19	36	61	74	144	62	280	934
08:30 AM	123	27	61	211	104	309	1	414	6	15	32	53	66	119	56	241	919
08:45 AM	102	27	62	191	88	218	6	312	3	23	26	52	74	137	77	288	843
Total	508	115	237	860	384	1063	15	1462	21	81	128	230	303	533	257	1093	3645
Grand Total	1135	242	477	1854	685	2338	25	3048	31	168	281	480	511	1017	474	2002	7384
Apprch %	61.2	13.1	25.7		22.5	76.7	0.8		6.5	35	58.5		25.5	50.8	23.7		
Total %	15.4	3.3	6.5	25.1	9.3	31.7	0.3	41.3	0.4	2.3	3.8	6.5	6.9	13.8	6.4	27.1	
Cars	1131	242	475	1848	685	2337	25	3047	30	168	281	479	509	1015	468	1992	7366
% Cars	99.6	100	99.6	99.7	100	100	100	100	96.8	100	100	99.8	99.6	99.8	98.7	99.5	99.8
Trucks	4	0	2	6	0	1	0	1	1	0	0	1	2	2	6	10	18
% Trucks	0.4	0	0.4	0.3	0	0	0	0	3.2	0	0	0.2	0.4	0.2	1.3	0.5	0.2



6612 Singletree Drive
Columbus, OH 43229

File Name : 160920 Stygler & US62 AM Peak
Site Code :
Start Date : 9/20/2016
Page No : 2

	Stygler Rd. From North				US 62 From East				Stygler Rd. From South				US 62 From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	156	42	66	264	72	307	1	380	4	16	32	52	47	154	60	261	957
07:45 AM	144	52	67	263	90	311	7	408	4	33	42	79	79	128	39	246	996
08:00 AM	157	28	51	236	102	257	6	365	6	24	34	64	89	133	62	284	949
08:15 AM	126	33	63	222	90	279	2	371	6	19	36	61	74	144	62	280	934
Total Volume	583	155	247	985	354	1154	16	1524	20	92	144	256	289	559	223	1071	3836
% App. Total	59.2	15.7	25.1		23.2	75.7	1		7.8	35.9	56.2		27	52.2	20.8		
PHF	.928	.745	.922	.933	.868	.928	.571	.934	.833	.697	.857	.810	.812	.907	.899	.943	.963



6612 Singletree Drive
Columbus, OH 43229

File Name : 160920 Stygler & US62 PM Peak
Site Code :
Start Date : 9/20/2016
Page No : 1

Groups Printed- Cars - Trucks

	Stygler Rd. From North				US 62 From East				Stygler Rd. From South				US 62 From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	104	23	108	235	94	164	5	263	16	28	79	123	30	242	105	377	998
04:15 PM	74	24	108	206	98	128	3	229	23	33	43	99	26	348	121	495	1029
04:30 PM	110	23	128	261	80	152	3	235	22	40	68	130	34	291	123	448	1074
04:45 PM	113	25	125	263	98	168	9	275	30	32	73	135	24	272	153	449	1122
Total	401	95	469	965	370	612	20	1002	91	133	263	487	114	1153	502	1769	4223
05:00 PM	142	23	134	299	92	125	6	223	26	38	73	137	19	315	138	472	1131
05:15 PM	144	34	136	314	127	151	5	283	17	38	75	130	23	244	116	383	1110
05:30 PM	110	18	120	248	93	154	2	249	29	44	62	135	32	300	142	474	1106
05:45 PM	109	34	130	273	124	114	8	246	30	38	50	118	31	258	104	393	1030
Total	505	109	520	1134	436	544	21	1001	102	158	260	520	105	1117	500	1722	4377
Grand Total	906	204	989	2099	806	1156	41	2003	193	291	523	1007	219	2270	1002	3491	8600
Apprch %	43.2	9.7	47.1		40.2	57.7	2		19.2	28.9	51.9		6.3	65	28.7		
Total %	10.5	2.4	11.5	24.4	9.4	13.4	0.5	23.3	2.2	3.4	6.1	11.7	2.5	26.4	11.7	40.6	
Cars	899	204	989	2092	806	1154	41	2001	193	291	522	1006	219	2268	1002	3489	8588
% Cars	99.2	100	100	99.7	100	99.8	100	99.9	100	100	99.8	99.9	100	99.9	100	99.9	99.9
Trucks	7	0	0	7	0	2	0	2	0	0	1	1	0	2	0	2	12
% Trucks	0.8	0	0	0.3	0	0.2	0	0.1	0	0	0.2	0.1	0	0.1	0	0.1	0.1



6612 Singletree Drive
Columbus, OH 43229

File Name : 160920 Stygler & US62 PM Peak
Site Code :
Start Date : 9/20/2016
Page No : 2

	Stygler Rd. From North				US 62 From East				Stygler Rd. From South				US 62 From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	113	25	125	263	98	168	9	275	30	32	73	135	24	272	153	449	1122
05:00 PM	142	23	134	299	92	125	6	223	26	38	73	137	19	315	138	472	1131
05:15 PM	144	34	136	314	127	151	5	283	17	38	75	130	23	244	116	383	1110
05:30 PM	110	18	120	248	93	154	2	249	29	44	62	135	32	300	142	474	1106
Total Volume	509	100	515	1124	410	598	22	1030	102	152	283	537	98	1131	549	1778	4469
% App. Total	45.3	8.9	45.8		39.8	58.1	2.1		19	28.3	52.7		5.5	63.6	30.9		
PHF	.884	.735	.947	.895	.807	.890	.611	.910	.850	.864	.943	.980	.766	.898	.897	.938	.988



**Transportation Solutions for
Today and Tomorrow**

941 Chatham Lane, Suite 319, Columbus, OH 43221
Phone: (614) 459-7930

Counter: 4264
Counted By: SA
Weather: Clear
Other:

File Name : Beecher Road
Site Code : 00000000
Start Date : 5/17/2016
Page No : 1

Groups Printed- Passenger Vehicles - Trucks

	BEECHER ROAD Eastbound					BEECHER ROAD Westbound					N HAMILTON RD Northbound					N HAMILTON ROAD Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
06:45 AM	0	0	5	0	5	1	5	22	0	28	5	53	2	0	60	17	129	8	0	154	247
Total	0	0	5	0	5	1	5	22	0	28	5	53	2	0	60	17	129	8	0	154	247
07:00 AM	8	6	11	0	25	3	21	36	0	60	8	58	4	0	70	20	150	12	0	182	337
07:15 AM	8	9	9	0	26	4	20	42	0	66	16	72	9	0	97	30	185	17	0	232	421
07:30 AM	10	14	16	0	40	5	97	42	0	144	27	78	11	0	116	31	210	35	0	276	576
07:45 AM	35	46	18	0	99	2	72	50	0	124	27	103	9	0	139	30	169	29	0	228	590
Total	61	75	54	0	190	14	210	170	0	394	78	311	33	0	422	111	714	93	0	918	1924
08:00 AM	17	30	17	0	64	3	7	51	0	61	2	124	5	0	131	46	179	7	0	232	488
*** BREAK ***																					
Total	17	30	17	0	64	3	7	51	0	61	2	124	5	0	131	46	179	7	0	232	488
*** BREAK ***																					
02:30 PM	1	5	3	0	9	10	4	50	2	66	3	142	10	0	155	54	146	9	0	209	439
02:45 PM	12	2	9	0	23	10	25	30	0	65	16	148	10	0	174	43	166	16	0	225	487
Total	13	7	12	0	32	20	29	80	2	131	19	290	20	0	329	97	312	25	0	434	926
03:00 PM	5	6	4	2	17	16	15	36	0	67	9	137	13	0	159	49	130	4	0	183	426
03:15 PM	20	48	6	0	74	12	11	33	1	57	9	118	7	2	136	44	152	9	0	205	472
03:30 PM	10	23	12	0	45	12	11	55	0	78	6	185	14	0	205	64	163	7	0	234	562
03:45 PM	5	7	6	0	18	12	12	48	0	72	9	198	16	0	223	53	144	8	0	205	518
Total	40	84	28	2	154	52	49	172	1	274	33	638	50	2	723	210	589	28	0	827	1978
04:00 PM	10	10	5	0	25	15	8	36	0	59	8	214	19	0	241	59	159	5	0	223	548
04:15 PM	10	5	5	0	20	13	5	45	0	63	6	169	9	0	184	58	130	3	0	191	458
04:30 PM	7	11	4	0	22	15	3	46	0	64	5	201	8	0	214	55	130	2	2	189	489
04:45 PM	8	9	7	0	24	22	3	64	4	93	6	213	12	0	231	70	150	4	0	224	572
Total	35	35	21	0	91	65	19	191	4	279	25	797	48	0	870	242	569	14	2	827	2067
05:00 PM	8	11	5	0	24	21	5	86	0	112	7	239	4	0	250	47	157	5	0	209	595
05:15 PM	6	7	3	0	16	15	6	44	0	65	9	208	10	0	227	64	153	5	0	222	530
05:30 PM	18	26	9	0	53	13	5	45	2	65	14	228	7	0	249	55	149	7	0	211	578
05:45 PM	4	7	2	0	13	4	12	38	0	54	10	207	6	0	223	73	164	6	0	243	533
Total	36	51	19	0	106	53	28	213	2	296	40	882	27	0	949	239	623	23	0	885	2236
06:00 PM	8	10	13	0	31	5	13	52	1	71	10	216	5	0	231	70	175	6	0	251	584



**Transportation Solutions for
Today and Tomorrow**

941 Chatham Lane, Suite 319, Columbus, OH 43221
Phone: (614) 459-7930

File Name : Beecher Road
Site Code : 00000000
Start Date : 5/17/2016
Page No : 2

Groups Printed- Passenger Vehicles - Trucks

	BEECHER ROAD Eastbound					BEECHER ROAD Westbound					N HAMILTON RD Northbound					N HAMILTON ROAD Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
06:15 PM	3	8	2	0	13	13	2	28	0	43	4	188	6	0	198	59	145	14	0	218	472
06:30 PM	4	7	3	0	14	13	3	27	0	43	3	179	4	0	186	65	131	5	0	201	444
Grand Total	217	307	174	2	700	239	365	1006	10	1620	219	3678	200	2	4099	1156	3566	223	2	4947	11366
Apprch %	31	43.9	24.9	0.3		14.8	22.5	62.1	0.6		5.3	89.7	4.9	0		23.4	72.1	4.5	0		
Total %	1.9	2.7	1.5	0	6.2	2.1	3.2	8.9	0.1	14.3	1.9	32.4	1.8	0	36.1	10.2	31.4	2	0	43.5	
Passenger Vehicles	217	306	174	2	699	238	365	1006	10	1619	219	3668	200	2	4089	1155	3557	223	1	4936	11343
% Passenger Vehicles	100	99.7	100	100	99.9	99.6	100	100	100	99.9	100	99.7	100	100	99.8	99.9	99.7	100	50	99.8	99.8
Trucks	0	1	0	0	1	1	0	0	0	1	0	10	0	0	10	1	9	0	1	11	23
% Trucks	0	0.3	0	0	0.1	0.4	0	0	0	0.1	0	0.3	0	0	0.2	0.1	0.3	0	50	0.2	0.2

	BEECHER ROAD Eastbound					BEECHER ROAD Westbound					N HAMILTON RD Northbound					N HAMILTON ROAD Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	8	9	9	0	26	4	20	42	0	66	16	72	9	0	97	30	185	17	0	232	421
07:30 AM	10	14	16	0	40	5	97	42	0	144	27	78	11	0	116	31	210	35	0	276	576
07:45 AM	35	46	18	0	99	2	72	50	0	124	27	103	9	0	139	30	169	29	0	228	590
08:00 AM	17	30	17	0	64	3	7	51	0	61	2	124	5	0	131	46	179	7	0	232	488
Total Volume	70	99	60	0	229	14	196	185	0	395	72	377	34	0	483	137	743	88	0	968	2075
% App. Total	30.6	43.2	26.2	0		3.5	49.6	46.8	0		14.9	78.1	7	0		14.2	76.8	9.1	0		
PHF	.500	.538	.833	.000	.578	.700	.505	.907	.000	.686	.667	.760	.773	.000	.869	.745	.885	.629	.000	.877	.879



**Transportation Solutions for
Today and Tomorrow**

941 Chatham Lane, Suite 319, Columbus, OH 43221
Phone: (614) 459-7930

File Name : Beecher Road
Site Code : 00000000
Start Date : 5/17/2016
Page No : 3

	BEECHER ROAD Eastbound					BEECHER ROAD Westbound					N HAMILTON RD Northbound					N HAMILTON ROAD Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 06:30 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	8	9	7	0	24	22	3	64	4	93	6	213	12	0	231	70	150	4	0	224	572
05:00 PM	8	11	5	0	24	21	5	86	0	112	7	239	4	0	250	47	157	5	0	209	595
05:15 PM	6	7	3	0	16	15	6	44	0	65	9	208	10	0	227	64	153	5	0	222	530
05:30 PM	18	26	9	0	53	13	5	45	2	65	14	228	7	0	249	55	149	7	0	211	578
Total Volume	40	53	24	0	117	71	19	239	6	335	36	888	33	0	957	236	609	21	0	866	2275
% App. Total	34.2	45.3	20.5	0		21.2	5.7	71.3	1.8		3.8	92.8	3.4	0		27.3	70.3	2.4	0		
PHF	.556	.510	.667	.000	.552	.807	.792	.695	.375	.748	.643	.929	.688	.000	.957	.843	.970	.750	.000	.967	.956

Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive

Columbus, Ohio, United States 43229
614 656 2419 dlaurent@cmtran.com

Count Name: Clark State Rd & N Hamilton Rd
Roundabout
Site Code:
Start Date: 04/06/2017
Page No: 1

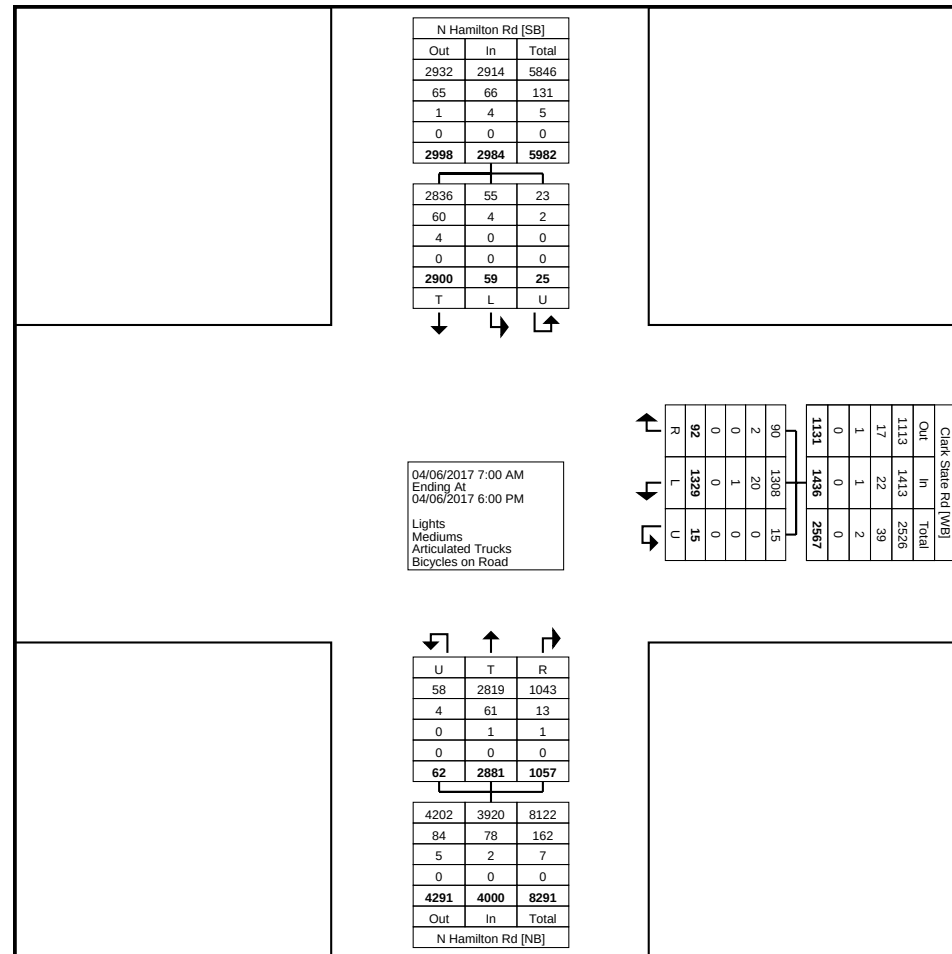
Turning Movement Data

Start Time	N Hamilton Rd Southbound				Clark State Rd Westbound				N Hamilton Rd Northbound				Int. Total
	Thru	Left	U-Turn	App. Total	Right	Left	U-Turn	App. Total	Right	Thru	U-Turn	App. Total	
7:00 AM	187	3	0	190	7	149	0	156	21	98	6	125	471
7:15 AM	192	2	0	194	5	168	3	176	28	111	4	143	513
7:30 AM	228	1	0	229	7	136	4	147	29	118	4	151	527
7:45 AM	185	1	0	186	9	130	2	141	33	166	10	209	536
Hourly Total	792	7	0	799	28	583	9	620	111	493	24	628	2047
8:00 AM	174	1	6	181	2	104	0	106	38	163	0	201	488
8:15 AM	205	4	1	210	8	108	2	118	38	140	8	186	514
8:30 AM	170	4	1	175	3	97	0	100	22	126	1	149	424
8:45 AM	145	1	2	148	4	74	0	78	28	124	2	154	380
Hourly Total	694	10	10	714	17	383	2	402	126	553	11	690	1806
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	180	7	2	189	7	37	0	44	84	205	3	292	525
4:15 PM	177	6	0	183	7	36	2	45	95	225	6	326	554
4:30 PM	186	6	1	193	6	38	0	44	97	225	4	326	563
4:45 PM	170	2	3	175	5	50	1	56	111	226	0	337	568
Hourly Total	713	21	6	740	25	161	3	189	387	881	13	1281	2210
5:00 PM	200	7	0	207	4	38	0	42	114	225	8	347	596
5:15 PM	175	7	5	187	3	56	0	59	103	234	0	337	583
5:30 PM	168	4	0	172	8	52	0	60	111	256	6	373	605
5:45 PM	158	3	4	165	7	56	1	64	105	239	0	344	573
Hourly Total	701	21	9	731	22	202	1	225	433	954	14	1401	2357
Grand Total	2900	59	25	2984	92	1329	15	1436	1057	2881	62	4000	8420
Approach %	97.2	2.0	0.8	-	6.4	92.5	1.0	-	26.4	72.0	1.6	-	-
Total %	34.4	0.7	0.3	35.4	1.1	15.8	0.2	17.1	12.6	34.2	0.7	47.5	-
Lights	2836	55	23	2914	90	1308	15	1413	1043	2819	58	3920	8247
% Lights	97.8	93.2	92.0	97.7	97.8	98.4	100.0	98.4	98.7	97.8	93.5	98.0	97.9
Mediums	60	4	2	66	2	20	0	22	13	61	4	78	166
% Mediums	2.1	6.8	8.0	2.2	2.2	1.5	0.0	1.5	1.2	2.1	6.5	2.0	2.0
Articulated Trucks	4	0	0	4	0	1	0	1	1	1	0	2	7
% Articulated Trucks	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.1	0.1
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive

Columbus, Ohio, United States 43229
614 656 2419 dlaurent@cmtran.com

Count Name: Clark State Rd & N Hamilton Rd
Roundabout
Site Code:
Start Date: 04/06/2017
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Turning Movement Data Plot

Carpenter Marty (CM) Transportation Inc.
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Count Name: Clark State Rd & N Hamilton Rd
Roundabout
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Start Date: 04/06/2017
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Approach Data

Start Time	Southbound Street Southbound				Westbound Street Westbound				Northbound Street Northbound			
	Circulating	Out	In	Next	Circulating	Out	In	Next	Circulating	Out	In	Next
7:00 AM	149	104	190	3	105	24	156	149	3	342	126	98
7:15 AM	174	112	196	2	119	31	179	168	4	362	147	111
7:30 AM	145	120	231	1	126	32	152	136	3	365	155	118
7:45 AM	134	171	188	1	181	35	143	130	3	323	214	166
Hourly Total	602	507	805	7	531	122	630	583	13	1392	642	493
8:00 AM	102	178	176	1	157	40	104	104	2	280	195	163
8:15 AM	111	146	209	4	149	43	119	108	4	320	187	140
8:30 AM	98	130	175	4	127	26	101	97	5	269	149	126
8:45 AM	72	131	147	1	125	30	76	74	2	224	153	124
Hourly Total	383	585	707	10	558	139	400	383	13	1093	684	553
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	36	215	188	7	207	91	43	37	8	221	291	205
4:15 PM	40	229	184	6	234	101	47	36	7	217	329	225
4:30 PM	36	234	192	6	228	104	42	38	6	231	325	225
4:45 PM	51	235	174	2	226	114	56	50	4	220	337	226
Hourly Total	163	913	738	21	895	410	188	161	25	889	1282	881
5:00 PM	39	228	207	7	236	121	43	38	7	246	350	225
5:15 PM	54	244	185	7	231	111	57	56	10	234	334	234
5:30 PM	51	264	173	4	263	114	59	52	5	227	374	256
5:45 PM	57	251	164	3	238	109	64	56	6	214	343	239
Hourly Total	201	987	729	21	968	455	223	202	28	921	1401	954
Grand Total	1349	2992	2979	59	2952	1126	1441	1329	79	4295	4009	2881
Approach %	18.3	40.5	40.4	0.8	43.1	16.4	21.0	19.4	0.7	38.1	35.6	25.6
Total %	5.3	11.7	11.7	0.2	11.6	4.4	5.7	5.2	0.3	16.8	15.7	11.3
Lights	1326	2924	2911	55	2887	1108	1416	1308	75	4204	3930	2819
% Lights	98.3	97.7	97.7	93.2	97.8	98.4	98.3	98.4	94.9	97.9	98.0	97.8
Mediums	22	67	64	4	64	17	24	20	4	84	77	61
% Mediums	1.6	2.2	2.1	6.8	2.2	1.5	1.7	1.5	5.1	2.0	1.9	2.1
Articulated Trucks	1	1	4	0	1	1	1	1	0	6	2	1
% Articulated Trucks	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.0	0.0
Bicycles on Road	0	0	0	0	0	0	0	0	0	1	0	0
% Bicycles on Road	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

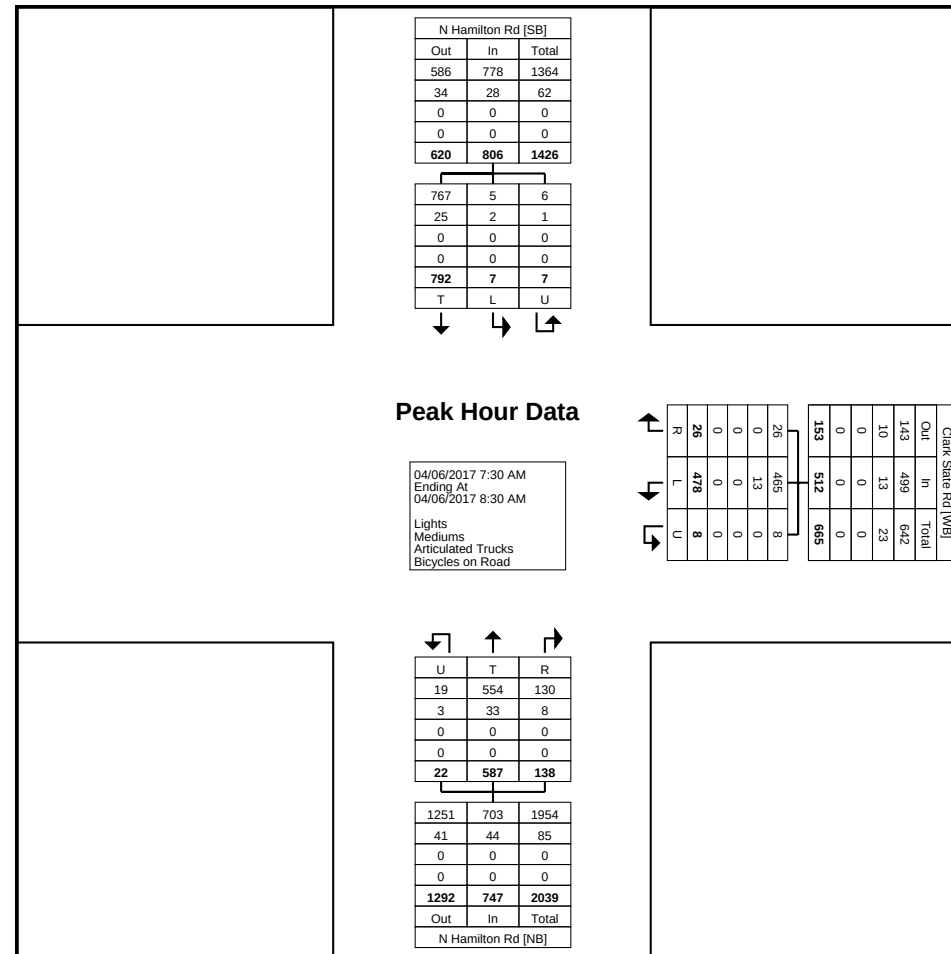
Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive

Columbus, Ohio, United States 43229
614 656 2419 dlaurent@cmtran.com

Count Name: Clark State Rd & N Hamilton Rd
Roundabout
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Turning Movement Peak Hour Data (7:30 AM)

Start Time	N Hamilton Rd Southbound				Clark State Rd Westbound				N Hamilton Rd Northbound				Int. Total
	Thru	Left	U-Turn	App. Total	Right	Left	U-Turn	App. Total	Right	Thru	U-Turn	App. Total	
7:30 AM	228	1	0	229	7	136	4	147	29	118	4	151	527
7:45 AM	185	1	0	186	9	130	2	141	33	166	10	209	536
8:00 AM	174	1	6	181	2	104	0	106	38	163	0	201	488
8:15 AM	205	4	1	210	8	108	2	118	38	140	8	186	514
Total	792	7	7	806	26	478	8	512	138	587	22	747	2065
Approach %	98.3	0.9	0.9	-	5.1	93.4	1.6	-	18.5	78.6	2.9	-	-
Total %	38.4	0.3	0.3	39.0	1.3	23.1	0.4	24.8	6.7	28.4	1.1	36.2	-
PHF	0.868	0.438	0.292	0.880	0.722	0.879	0.500	0.871	0.908	0.884	0.550	0.894	0.963
Lights	767	5	6	778	26	465	8	499	130	554	19	703	1980
% Lights	96.8	71.4	85.7	96.5	100.0	97.3	100.0	97.5	94.2	94.4	86.4	94.1	95.9
Mediums	25	2	1	28	0	13	0	13	8	33	3	44	85
% Mediums	3.2	28.6	14.3	3.5	0.0	2.7	0.0	2.5	5.8	5.6	13.6	5.9	4.1
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0
% Articulated Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Turning Movement Peak Hour Data Plot (7:30 AM)

Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive

Columbus, Ohio, United States 43229
614 656 2419 dlaurent@cmtran.com

Count Name: Clark State Rd & N Hamilton Rd
Roundabout
Site Code:
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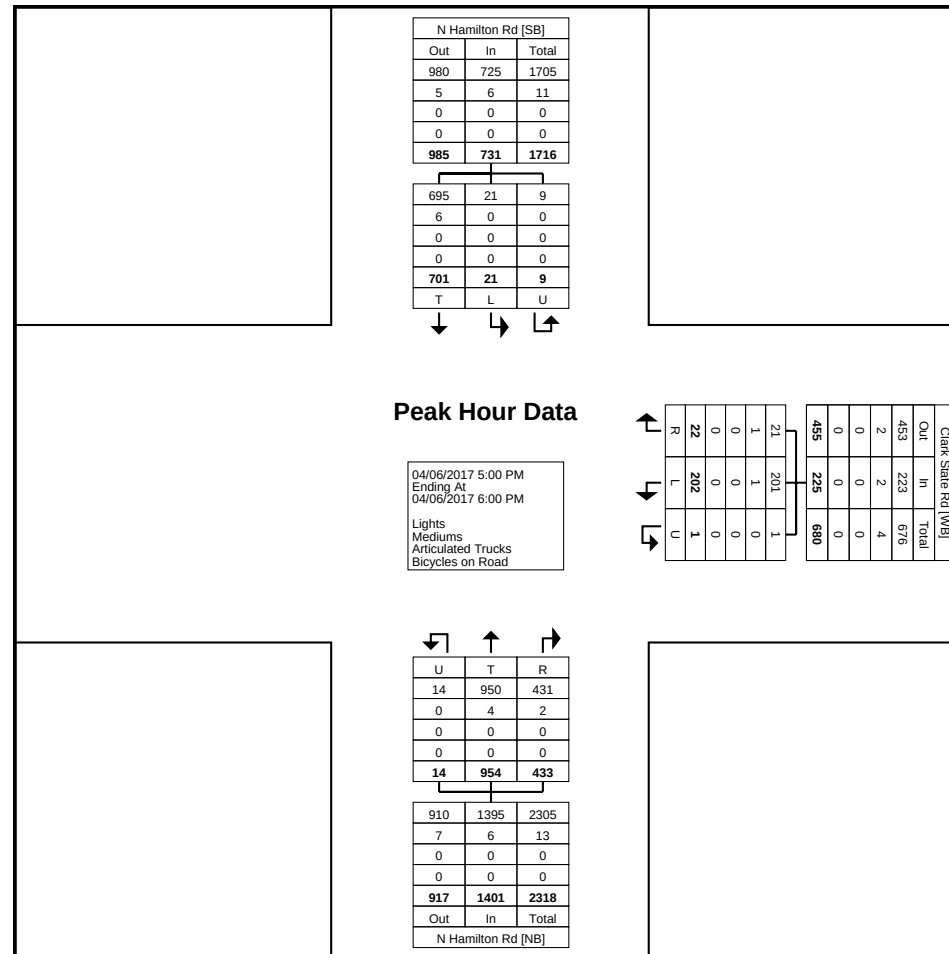
Turning Movement Peak Hour Data (5:00 PM)

Start Time	N Hamilton Rd Southbound				Clark State Rd Westbound				N Hamilton Rd Northbound				Int. Total
	Thru	Left	U-Turn	App. Total	Right	Left	U-Turn	App. Total	Right	Thru	U-Turn	App. Total	
5:00 PM	200	7	0	207	4	38	0	42	114	225	8	347	596
5:15 PM	175	7	5	187	3	56	0	59	103	234	0	337	583
5:30 PM	168	4	0	172	8	52	0	60	111	256	6	373	605
5:45 PM	158	3	4	165	7	56	1	64	105	239	0	344	573
Total	701	21	9	731	22	202	1	225	433	954	14	1401	2357
Approach %	95.9	2.9	1.2	-	9.8	89.8	0.4	-	30.9	68.1	1.0	-	-
Total %	29.7	0.9	0.4	31.0	0.9	8.6	0.0	9.5	18.4	40.5	0.6	59.4	-
PHF	0.876	0.750	0.450	0.883	0.688	0.902	0.250	0.879	0.950	0.932	0.438	0.939	0.974
Lights	695	21	9	725	21	201	1	223	431	950	14	1395	2343
% Lights	99.1	100.0	100.0	99.2	95.5	99.5	100.0	99.1	99.5	99.6	100.0	99.6	99.4
Mediums	6	0	0	6	1	1	0	2	2	4	0	6	14
% Mediums	0.9	0.0	0.0	0.8	4.5	0.5	0.0	0.9	0.5	0.4	0.0	0.4	0.6
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0
% Articulated Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Carpenter Marty (CM) Transportation Inc.
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Count Name: Clark State Rd & N Hamilton Rd
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Turning Movement Peak Hour Data Plot (5:00 PM)

Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive

Columbus, Ohio, United States 43229
614 656 2419 dlaurent@cmtran.com

Count Name: Clark State Rd & N Hamilton Rd
Roundabout
Site Code:
Start Date: 03/28/2017
Page No: 1

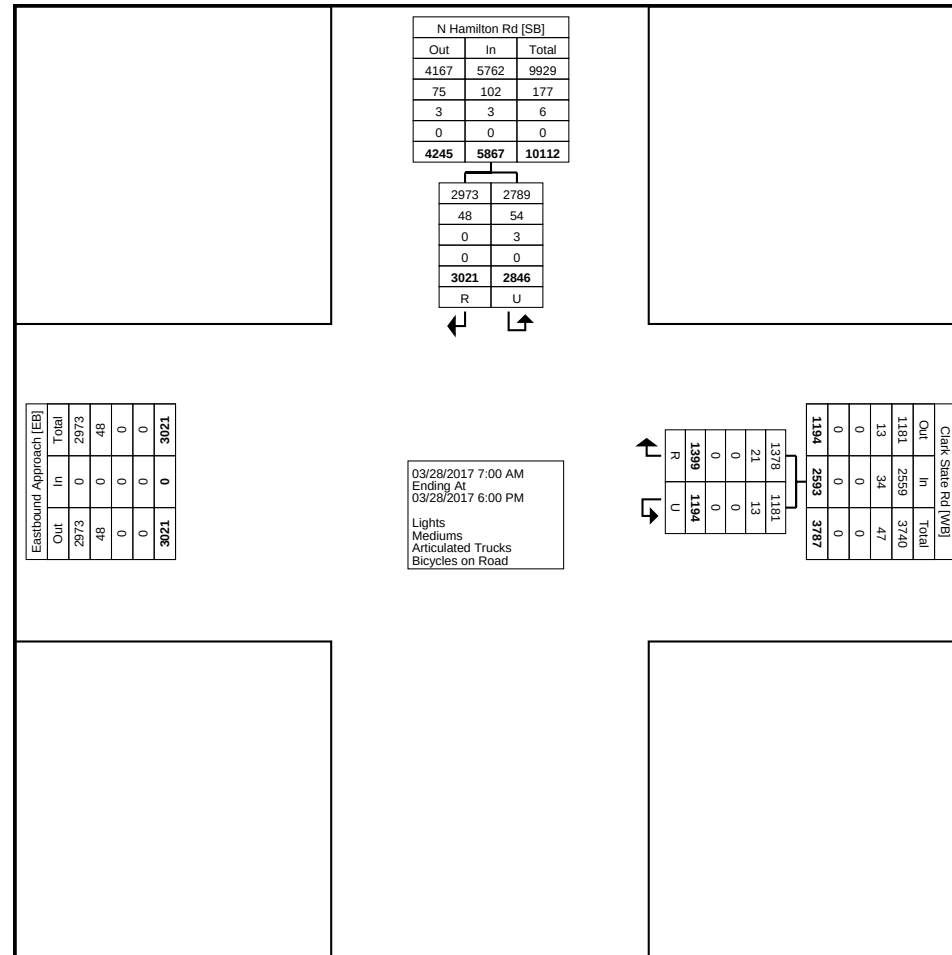
Turning Movement Data

Start Time	N Hamilton Rd Southbound			Clark State Rd Westbound			Int. Total
	Right	U-Turn	App. Total	Right	U-Turn	App. Total	
7:00 AM	190	76	266	144	14	158	424
7:15 AM	247	127	374	205	36	241	615
7:30 AM	174	136	310	136	39	175	485
7:45 AM	193	139	332	144	27	171	503
Hourly Total	804	478	1282	629	116	745	2027
8:00 AM	188	148	336	99	27	126	462
8:15 AM	181	138	319	108	31	139	458
8:30 AM	145	125	270	94	38	132	402
8:45 AM	139	135	274	61	23	84	358
Hourly Total	653	546	1199	362	119	481	1680
*** BREAK ***	-	-	-	-	-	-	-
4:00 PM	182	195	377	42	107	149	526
4:15 PM	165	199	364	46	99	145	509
4:30 PM	207	203	410	43	110	153	563
4:45 PM	242	229	471	52	115	167	638
Hourly Total	796	826	1622	183	431	614	2236
5:00 PM	215	245	460	54	106	160	620
5:15 PM	205	238	443	58	145	203	646
5:30 PM	167	281	448	57	140	197	645
5:45 PM	181	232	413	56	137	193	606
Hourly Total	768	996	1764	225	528	753	2517
Grand Total	3021	2846	5867	1399	1194	2593	8460
Approach %	51.5	48.5	-	54.0	46.0	-	-
Total %	35.7	33.6	69.3	16.5	14.1	30.7	-
Lights	2973	2789	5762	1378	1181	2559	8321
% Lights	98.4	98.0	98.2	98.5	98.9	98.7	98.4
Mediums	48	54	102	21	13	34	136
% Mediums	1.6	1.9	1.7	1.5	1.1	1.3	1.6
Articulated Trucks	0	3	3	0	0	0	3
% Articulated Trucks	0.0	0.1	0.1	0.0	0.0	0.0	0.0
Bicycles on Road	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Carpenter Marty (CM) Transportation Inc.
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Count Name: Clark State Rd & N Hamilton Rd
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Turning Movement Data Plot

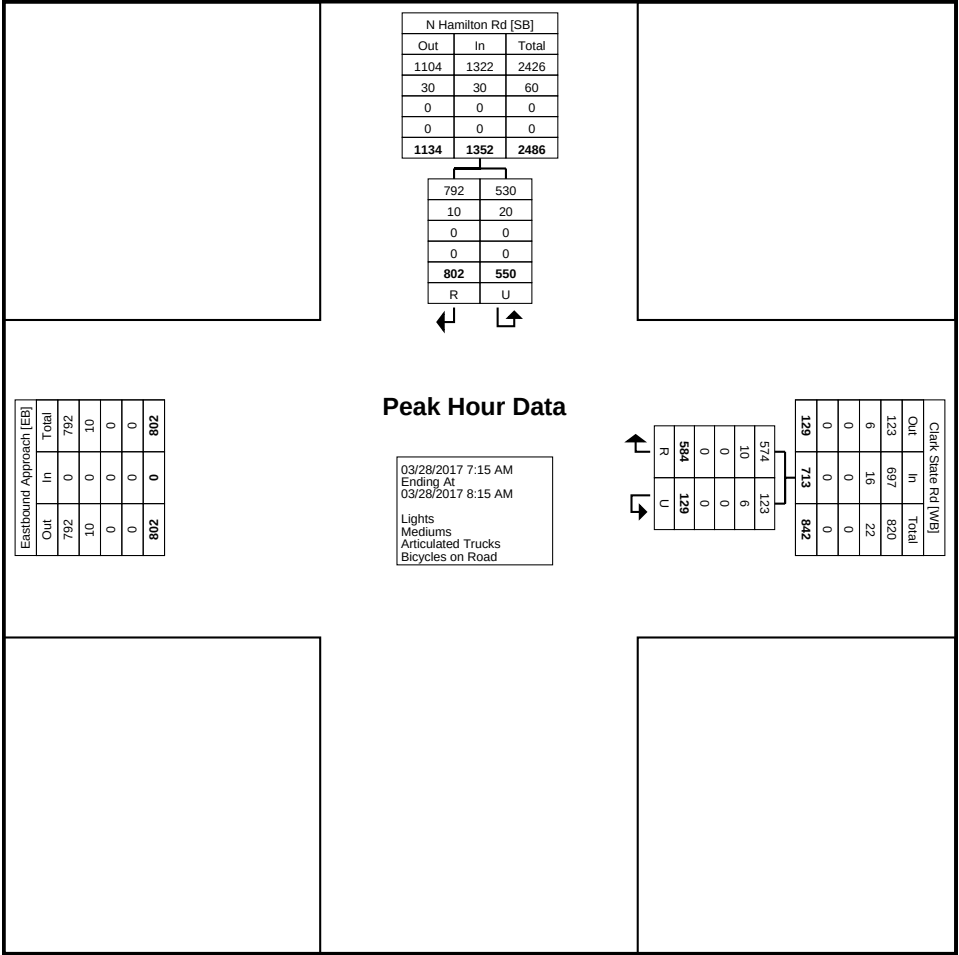
Carpenter Marty (CM) Transportation Inc.
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614 656 2419 dlaurent@cmtran.com

Count Name: Clark State Rd & N Hamilton Rd
Roundabout
Site Code:
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Turning Movement Peak Hour Data (7:15 AM)

Start Time	N Hamilton Rd Southbound			Clark State Rd Westbound			Int. Total
	Right	U-Turn	App. Total	Right	U-Turn	App. Total	
7:15 AM	247	127	374	205	36	241	615
7:30 AM	174	136	310	136	39	175	485
7:45 AM	193	139	332	144	27	171	503
8:00 AM	188	148	336	99	27	126	462
Total	802	550	1352	584	129	713	2065
Approach %	59.3	40.7	-	81.9	18.1	-	-
Total %	38.8	26.6	65.5	28.3	6.2	34.5	-
PHF	0.812	0.929	0.904	0.712	0.827	0.740	0.839
Lights	792	530	1322	574	123	697	2019
% Lights	98.8	96.4	97.8	98.3	95.3	97.8	97.8
Mediums	10	20	30	10	6	16	46
% Mediums	1.2	3.6	2.2	1.7	4.7	2.2	2.2
Articulated Trucks	0	0	0	0	0	0	0
% Articulated Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bicycles on Road	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Turning Movement Peak Hour Data Plot (7:15 AM)

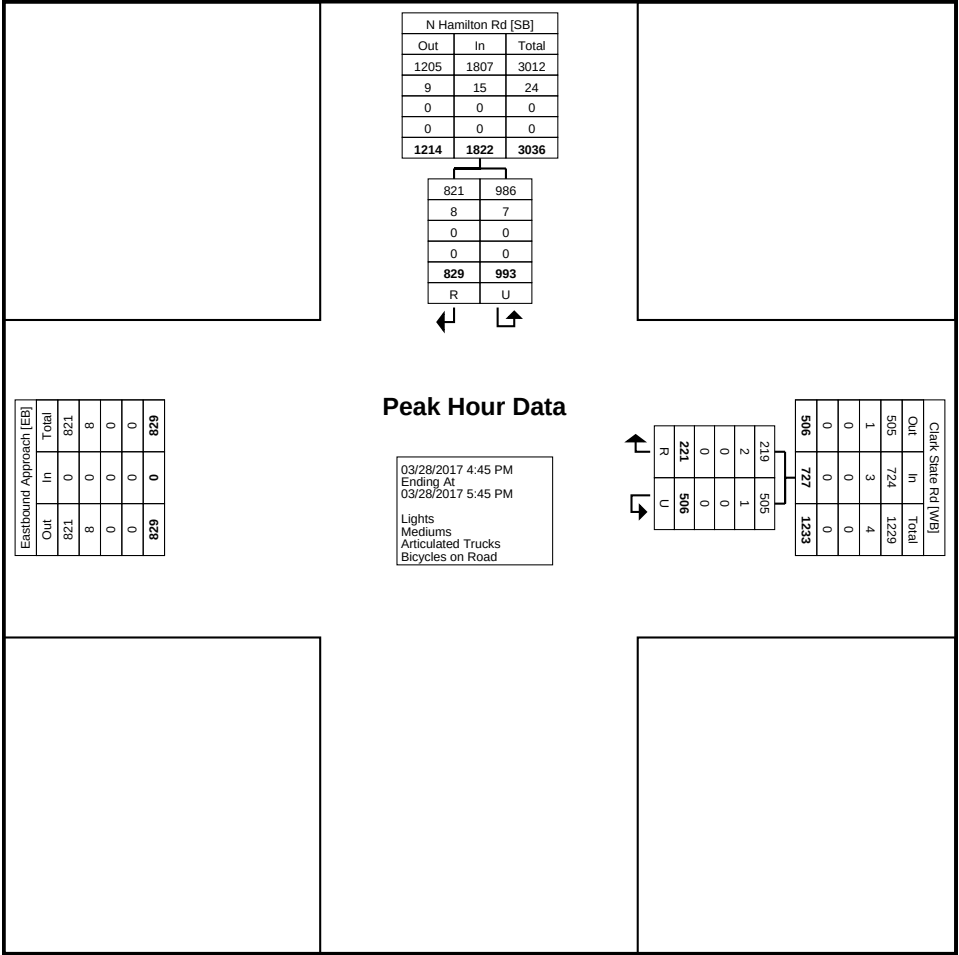
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Count Name: Clark State Rd & N Hamilton Rd
Roundabout
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Start Date: 03/28/2017
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Turning Movement Peak Hour Data (4:45 PM)

Start Time	N Hamilton Rd Southbound			Clark State Rd Westbound			Int. Total
	Right	U-Turn	App. Total	Right	U-Turn	App. Total	
4:45 PM	242	229	471	52	115	167	638
5:00 PM	215	245	460	54	106	160	620
5:15 PM	205	238	443	58	145	203	646
5:30 PM	167	281	448	57	140	197	645
Total	829	993	1822	221	506	727	2549
Approach %	45.5	54.5	-	30.4	69.6	-	-
Total %	32.5	39.0	71.5	8.7	19.9	28.5	-
PHF	0.856	0.883	0.967	0.953	0.872	0.895	0.986
Lights	821	986	1807	219	505	724	2531
% Lights	99.0	99.3	99.2	99.1	99.8	99.6	99.3
Mediums	8	7	15	2	1	3	18
% Mediums	1.0	0.7	0.8	0.9	0.2	0.4	0.7
Articulated Trucks	0	0	0	0	0	0	0
% Articulated Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bicycles on Road	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Turning Movement Peak Hour Data Plot (4:45 PM)

Study Name E Johnstown Rd & Cherry Bottom Rd TMC

Start Date 3/28/2017

Start Time 7:00 AM

Lights

Start Time	Southbound		Westbound		Northeastbound		Total
	Cherry Bottom Rd		E Johnstown Rd		E Johnstown Rd		
	Bear Right	Left	Right	Bear Left	Bear Right	Bear Left	
7:00 AM	44	2	0	165	33	12	256
7:15 AM	55	5	2	137	64	19	282
7:30 AM	52	6	3	169	69	53	352
7:45 AM	60	5	6	169	89	52	381
8:00 AM	59	7	6	117	73	20	282
8:15 AM	20	6	2	129	74	15	246
8:30 AM	32	4	14	119	65	16	250
8:45 AM	19	1	17	117	89	49	292
4:00 PM	31	8	3	95	155	32	324
4:15 PM	25	7	2	83	157	49	323
4:30 PM	30	11	13	53	134	35	276
4:45 PM	28	6	4	8	153	44	243
5:00 PM	26	6	9	66	162	43	312
5:15 PM	45	8	8	101	166	54	382
5:30 PM	41	8	9	87	156	60	361
5:45 PM	31	9	7	103	178	49	377

Mediums

Start Time	Southbound		Westbound		Northeastbound		Total
	Cherry Bottom Rd		E Johnstown Rd		E Johnstown Rd		
	Bear Right	Left	Right	Bear Left	Bear Right	Bear Left	
7:00 AM	0	0	0	0	5	1	6
7:15 AM	1	0	1	2	0	1	5
7:30 AM	3	0	0	1	1	3	8
7:45 AM	2	0	0	2	3	1	8
8:00 AM	0	0	0	3	7	2	12
8:15 AM	2	1	1	7	5	0	16
8:30 AM	0	0	0	2	1	2	5
8:45 AM	1	0	0	4	2	0	7
4:00 PM	0	0	0	4	4	2	10
4:15 PM	0	0	0	1	1	0	2
4:30 PM	1	0	0	1	1	1	4
4:45 PM	0	0	0	0	0	1	1
5:00 PM	0	0	0	2	1	0	3
5:15 PM	0	0	0	1	0	0	1
5:30 PM	0	0	0	2	0	0	2
5:45 PM	1	0	0	0	0	0	1

Study Name E Johnstown Rd & Cherry Bottom Rd TMC

Start Date 3/28/2017

Start Time 7:00 AM

Articulated Trucks

Start Time	Southbound		Westbound		Northeastbound		Total
	Cherry Bottom Rd		E Johnstown Rd		E Johnstown Rd		
	Bear Right	Left	Right	Bear Left	Bear Right	Bear Left	
7:00 AM	0	0	0	0	1	0	1
7:15 AM	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	1	0	1
8:30 AM	0	0	0	1	0	0	1
8:45 AM	0	0	0	1	0	0	1
4:00 PM	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	1	0	1
4:30 PM	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0

Total Vehicles

AM Peak

Start Time	Southbound		Westbound		Northeastbound	
	Cherry Bottom Rd		E Johnstown Rd		E Johnstown Rd	
	Bear Right	Left	Right	Bear Left	Bear Right	Bear Left
7:15 AM	232	23	18	600	306	151

PM Peak

Start Time	Southbound		Westbound		Northeastbound	
	Cherry Bottom Rd		E Johnstown Rd		E Johnstown Rd	
	Bear Right	Left	Right	Bear Left	Bear Right	Bear Left
5:00 PM	144	31	33	362	663	206

Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive

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Count Name: Granville St & Flint Ridge Dr TMC
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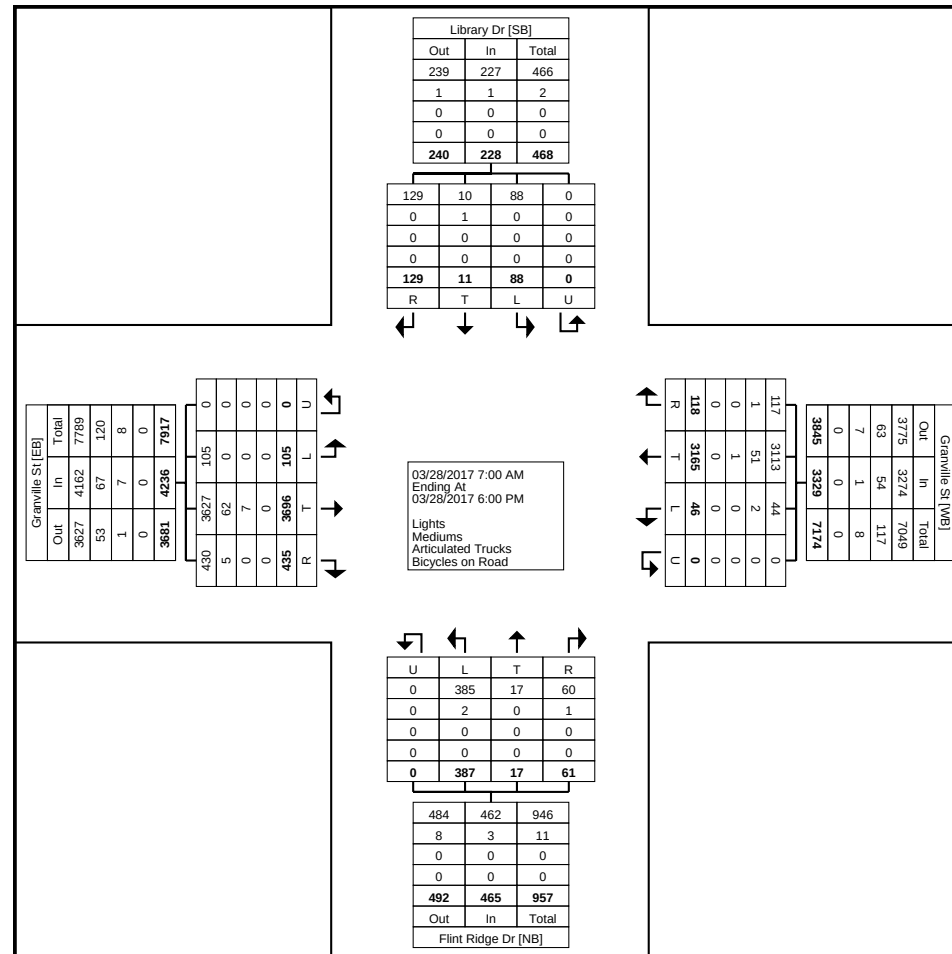
Turning Movement Data

Start Time	Library Dr Southbound					Granville St Westbound					Flint Ridge Dr Northbound					Granville St Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
7:00 AM	1	2	0	0	3	3	220	1	0	224	3	0	12	0	15	24	139	2	0	165	407
7:15 AM	1	0	1	0	2	1	225	4	0	230	8	0	21	0	29	40	208	0	0	248	509
7:30 AM	0	0	0	0	0	1	259	3	0	263	1	2	30	0	33	35	134	0	0	169	465
7:45 AM	0	0	1	0	1	0	200	4	0	204	4	1	26	0	31	35	133	3	0	171	407
Hourly Total	2	2	2	0	6	5	904	12	0	921	16	3	89	0	108	134	614	5	0	753	1788
8:00 AM	4	0	0	0	4	3	203	1	0	207	2	0	10	0	12	33	126	0	0	159	382
8:15 AM	2	0	1	0	3	3	201	1	0	205	2	0	18	0	20	19	117	1	0	137	365
8:30 AM	1	0	0	0	1	1	191	2	0	194	3	0	15	0	18	16	108	3	0	127	340
8:45 AM	1	0	0	0	1	11	163	1	0	175	1	0	18	0	19	12	98	2	0	112	307
Hourly Total	8	0	1	0	9	18	758	5	0	781	8	0	61	0	69	80	449	6	0	535	1394
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	15	2	12	0	29	10	175	3	0	188	1	0	30	0	31	30	283	17	0	330	578
4:15 PM	9	0	7	0	16	7	175	7	0	189	8	1	29	0	38	29	350	13	0	392	635
4:30 PM	19	0	12	0	31	6	189	3	0	198	1	3	29	0	33	19	307	10	0	336	598
4:45 PM	19	0	10	0	29	19	207	5	0	231	4	1	17	0	22	22	348	12	0	382	664
Hourly Total	62	2	41	0	105	42	746	18	0	806	14	5	105	0	124	100	1288	52	0	1440	2475
5:00 PM	19	4	20	0	43	20	187	4	0	211	8	4	32	0	44	34	329	13	0	376	674
5:15 PM	9	1	7	0	17	10	191	2	0	203	3	2	42	0	47	34	365	8	0	407	674
5:30 PM	14	1	10	0	25	4	185	4	0	193	6	3	39	0	48	28	329	11	0	368	634
5:45 PM	15	1	7	0	23	19	194	1	0	214	6	0	19	0	25	25	322	10	0	357	619
Hourly Total	57	7	44	0	108	53	757	11	0	821	23	9	132	0	164	121	1345	42	0	1508	2601
Grand Total	129	11	88	0	228	118	3165	46	0	3329	61	17	387	0	465	435	3696	105	0	4236	8258
Approach %	56.6	4.8	38.6	0.0	-	3.5	95.1	1.4	0.0	-	13.1	3.7	83.2	0.0	-	10.3	87.3	2.5	0.0	-	-
Total %	1.6	0.1	1.1	0.0	2.8	1.4	38.3	0.6	0.0	40.3	0.7	0.2	4.7	0.0	5.6	5.3	44.8	1.3	0.0	51.3	-
Lights	129	10	88	0	227	117	3113	44	0	3274	60	17	385	0	462	430	3627	105	0	4162	8125
% Lights	100.0	90.9	100.0	-	99.6	99.2	98.4	95.7	-	98.3	98.4	100.0	99.5	-	99.4	98.9	98.1	100.0	-	98.3	98.4
Mediums	0	1	0	0	1	1	51	2	0	54	1	0	2	0	3	5	62	0	0	67	125
% Mediums	0.0	9.1	0.0	-	0.4	0.8	1.6	4.3	-	1.6	1.6	0.0	0.5	-	0.6	1.1	1.7	0.0	-	1.6	1.5
Articulated Trucks	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	7	0	0	7	8
% Articulated Trucks	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.2	0.0	-	0.2	0.1
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0

Carpenter Marty (CM) Transportation Inc.
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Turning Movement Data Plot

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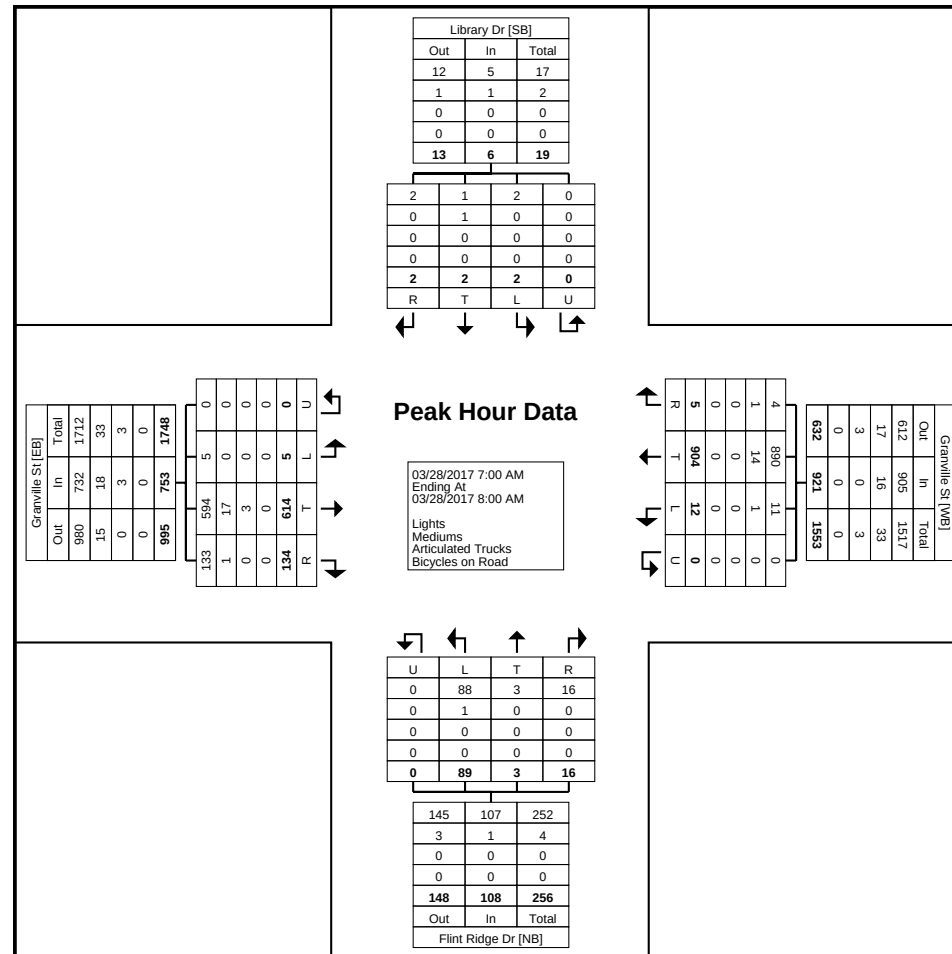
Turning Movement Peak Hour Data (7:00 AM)

Start Time	Library Dr Southbound					Granville St Westbound					Flint Ridge Dr Northbound					Granville St Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
7:00 AM	1	2	0	0	3	3	220	1	0	224	3	0	12	0	15	24	139	2	0	165	407
7:15 AM	1	0	1	0	2	1	225	4	0	230	8	0	21	0	29	40	208	0	0	248	509
7:30 AM	0	0	0	0	0	1	259	3	0	263	1	2	30	0	33	35	134	0	0	169	465
7:45 AM	0	0	1	0	1	0	200	4	0	204	4	1	26	0	31	35	133	3	0	171	407
Total	2	2	2	0	6	5	904	12	0	921	16	3	89	0	108	134	614	5	0	753	1788
Approach %	33.3	33.3	33.3	0.0	-	0.5	98.2	1.3	0.0	-	14.8	2.8	82.4	0.0	-	17.8	81.5	0.7	0.0	-	-
Total %	0.1	0.1	0.1	0.0	0.3	0.3	50.6	0.7	0.0	51.5	0.9	0.2	5.0	0.0	6.0	7.5	34.3	0.3	0.0	42.1	-
PHF	0.500	0.250	0.500	0.000	0.500	0.417	0.873	0.750	0.000	0.875	0.500	0.375	0.742	0.000	0.818	0.838	0.738	0.417	0.000	0.759	0.878
Lights	2	1	2	0	5	4	890	11	0	905	16	3	88	0	107	133	594	5	0	732	1749
% Lights	100.0	50.0	100.0	-	83.3	80.0	98.5	91.7	-	98.3	100.0	100.0	98.9	-	99.1	99.3	96.7	100.0	-	97.2	97.8
Mediums	0	1	0	0	1	1	14	1	0	16	0	0	1	0	1	1	17	0	0	18	36
% Mediums	0.0	50.0	0.0	-	16.7	20.0	1.5	8.3	-	1.7	0.0	0.0	1.1	-	0.9	0.7	2.8	0.0	-	2.4	2.0
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	3
% Articulated Trucks	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.5	0.0	-	0.4	0.2
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0

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Turning Movement Peak Hour Data Plot (7:00 AM)

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Count Name: Granville St & Flint Ridge Dr TMC
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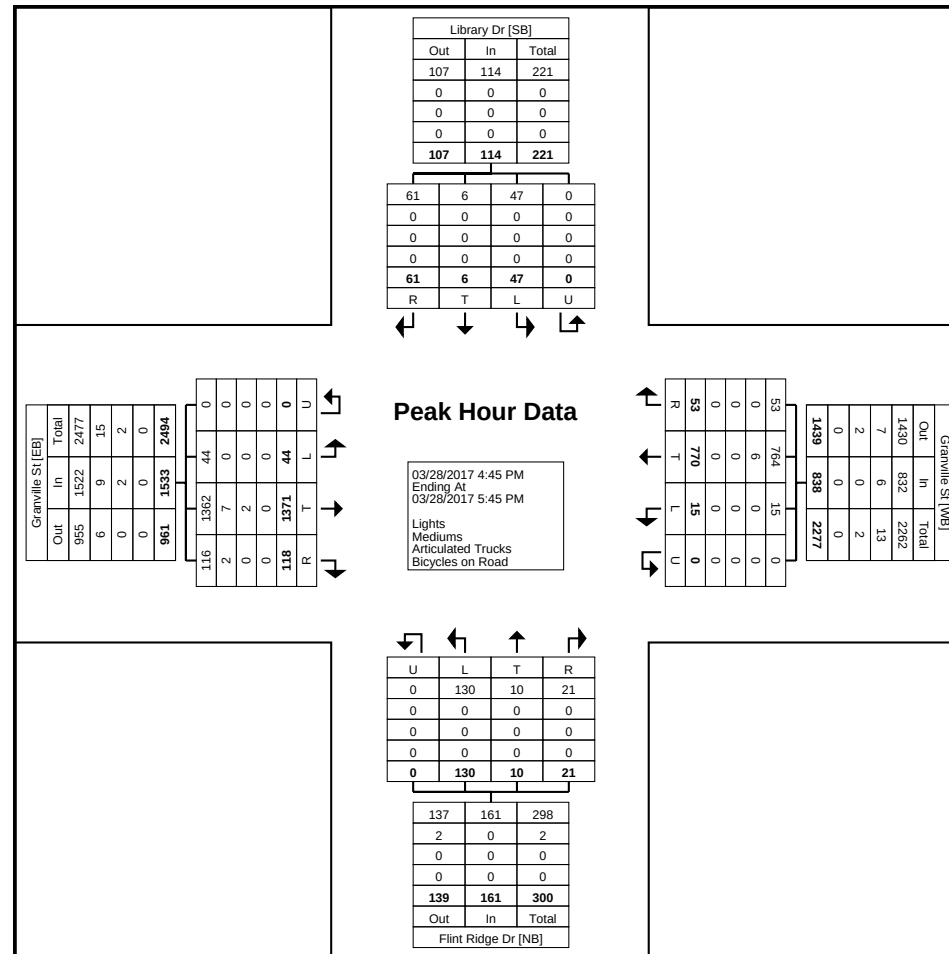
Turning Movement Peak Hour Data (4:45 PM)

Start Time	Library Dr Southbound					Granville St Westbound					Flint Ridge Dr Northbound					Granville St Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
4:45 PM	19	0	10	0	29	19	207	5	0	231	4	1	17	0	22	22	348	12	0	382	664
5:00 PM	19	4	20	0	43	20	187	4	0	211	8	4	32	0	44	34	329	13	0	376	674
5:15 PM	9	1	7	0	17	10	191	2	0	203	3	2	42	0	47	34	365	8	0	407	674
5:30 PM	14	1	10	0	25	4	185	4	0	193	6	3	39	0	48	28	329	11	0	368	634
Total	61	6	47	0	114	53	770	15	0	838	21	10	130	0	161	118	1371	44	0	1533	2646
Approach %	53.5	5.3	41.2	0.0	-	6.3	91.9	1.8	0.0	-	13.0	6.2	80.7	0.0	-	7.7	89.4	2.9	0.0	-	-
Total %	2.3	0.2	1.8	0.0	4.3	2.0	29.1	0.6	0.0	31.7	0.8	0.4	4.9	0.0	6.1	4.5	51.8	1.7	0.0	57.9	-
PHF	0.803	0.375	0.588	0.000	0.663	0.663	0.930	0.750	0.000	0.907	0.656	0.625	0.774	0.000	0.839	0.868	0.939	0.846	0.000	0.942	0.981
Lights	61	6	47	0	114	53	764	15	0	832	21	10	130	0	161	116	1362	44	0	1522	2629
% Lights	100.0	100.0	100.0	-	100.0	100.0	99.2	100.0	-	99.3	100.0	100.0	100.0	-	100.0	98.3	99.3	100.0	-	99.3	99.4
Mediums	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	2	7	0	0	9	15
% Mediums	0.0	0.0	0.0	-	0.0	0.0	0.8	0.0	-	0.7	0.0	0.0	0.0	-	0.0	1.7	0.5	0.0	-	0.6	0.6
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
% Articulated Trucks	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.1	0.0	-	0.1	0.1
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0

Carpenter Marty (CM) Transportation Inc.
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Turning Movement Peak Hour Data Plot (4:45 PM)

Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive

Columbus, Ohio, United States 43229
614 656 2419 dlaurent@cmtran.com

Count Name: Granville St & Lincoln Cir TMC
Site Code:
Start Date: 03/28/2017
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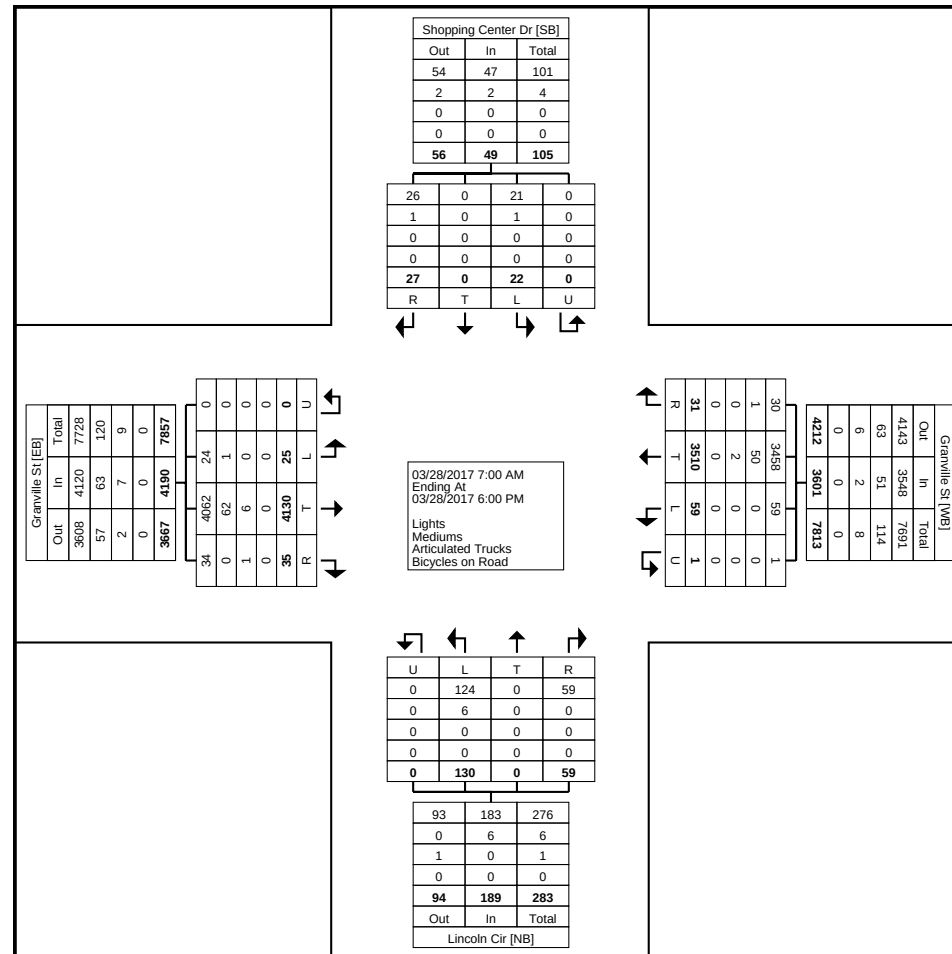
Turning Movement Data

Start Time	Shopping Center Dr Southbound					Granville St Westbound					Lincoln Cir Northbound					Granville St Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
7:00 AM	0	0	0	0	0	0	219	6	0	225	0	0	2	0	2	0	164	0	0	164	391
7:15 AM	0	0	0	0	0	0	230	6	0	236	0	0	2	0	2	1	235	1	0	237	475
7:30 AM	0	0	0	0	0	0	265	1	0	266	0	0	4	0	4	0	181	0	0	181	451
7:45 AM	0	0	0	0	0	0	210	2	0	212	0	0	8	0	8	1	179	0	0	180	400
Hourly Total	0	0	0	0	0	0	924	15	0	939	0	0	16	0	16	2	759	1	0	762	1717
8:00 AM	0	0	0	0	0	0	217	3	0	220	0	0	11	0	11	0	152	0	0	152	383
8:15 AM	0	0	0	0	0	0	206	3	0	209	0	0	5	0	5	1	133	0	0	134	348
8:30 AM	0	0	0	0	0	0	209	3	0	212	0	0	5	0	5	2	120	1	0	123	340
8:45 AM	0	0	0	0	0	1	180	4	0	185	0	0	13	0	13	1	108	1	0	110	308
Hourly Total	0	0	0	0	0	1	812	13	0	826	0	0	34	0	34	4	513	2	0	519	1379
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	3	0	2	0	5	4	188	7	0	199	13	0	14	0	27	5	301	2	0	308	539
4:15 PM	4	0	4	0	8	3	211	3	1	218	9	0	8	0	17	4	382	3	0	389	632
4:30 PM	0	0	2	0	2	2	221	4	0	227	6	0	12	0	18	4	338	1	0	343	590
4:45 PM	8	0	0	0	8	4	248	3	0	255	5	0	7	0	12	6	382	5	0	393	668
Hourly Total	15	0	8	0	23	13	868	17	1	899	33	0	41	0	74	19	1403	11	0	1433	2429
5:00 PM	3	0	4	0	7	3	232	6	0	241	3	0	14	0	17	3	362	2	0	367	632
5:15 PM	2	0	0	0	2	5	231	4	0	240	9	0	8	0	17	5	392	2	0	399	658
5:30 PM	5	0	8	0	13	6	217	0	0	223	5	0	13	0	18	1	351	1	0	353	607
5:45 PM	2	0	2	0	4	3	226	4	0	233	9	0	4	0	13	1	350	6	0	357	607
Hourly Total	12	0	14	0	26	17	906	14	0	937	26	0	39	0	65	10	1455	11	0	1476	2504
Grand Total	27	0	22	0	49	31	3510	59	1	3601	59	0	130	0	189	35	4130	25	0	4190	8029
Approach %	55.1	0.0	44.9	0.0	-	0.9	97.5	1.6	0.0	-	31.2	0.0	68.8	0.0	-	0.8	98.6	0.6	0.0	-	-
Total %	0.3	0.0	0.3	0.0	0.6	0.4	43.7	0.7	0.0	44.8	0.7	0.0	1.6	0.0	2.4	0.4	51.4	0.3	0.0	52.2	-
Lights	26	0	21	0	47	30	3458	59	1	3548	59	0	124	0	183	34	4062	24	0	4120	7898
% Lights	96.3	-	95.5	-	95.9	96.8	98.5	100.0	100.0	98.5	100.0	-	95.4	-	96.8	97.1	98.4	96.0	-	98.3	98.4
Mediums	1	0	1	0	2	1	50	0	0	51	0	0	6	0	6	0	62	1	0	63	122
% Mediums	3.7	-	4.5	-	4.1	3.2	1.4	0.0	0.0	1.4	0.0	-	4.6	-	3.2	0.0	1.5	4.0	-	1.5	1.5
Articulated Trucks	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	1	6	0	0	7	9
% Articulated Trucks	0.0	-	0.0	-	0.0	0.0	0.1	0.0	0.0	0.1	0.0	-	0.0	-	0.0	2.9	0.1	0.0	-	0.2	0.1
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	-	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0

Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive

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Count Name: Granville St & Lincoln Cir TMC
Site Code:
Start Date: 03/28/2017
Page No: 2



Turning Movement Data Plot

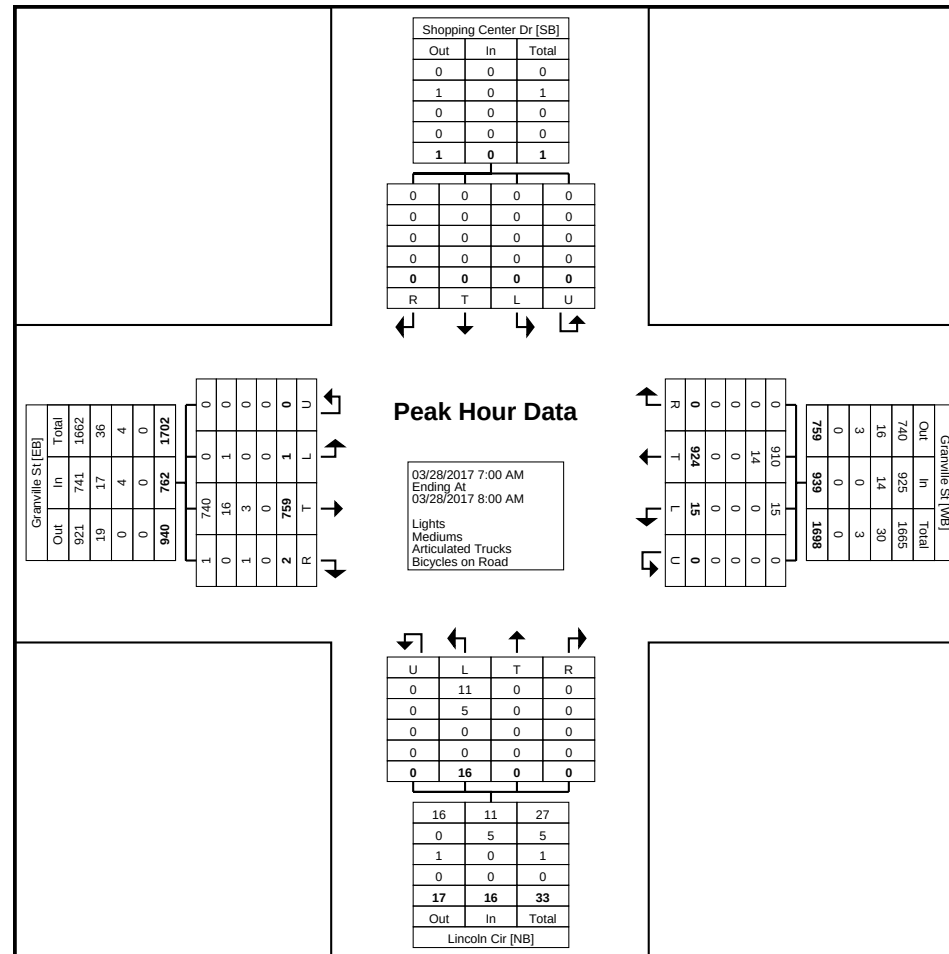
Carpenter Marty (CM) Transportation Inc.
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Count Name: Granville St & Lincoln Cir TMC
Site Code:
Start Date: 03/28/2017
Page No: 3

Turning Movement Peak Hour Data (7:00 AM)

Start Time	Shopping Center Dr Southbound					Granville St Westbound					Lincoln Cir Northbound					Granville St Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
7:00 AM	0	0	0	0	0	0	219	6	0	225	0	0	2	0	2	0	164	0	0	164	391
7:15 AM	0	0	0	0	0	0	230	6	0	236	0	0	2	0	2	1	235	1	0	237	475
7:30 AM	0	0	0	0	0	0	265	1	0	266	0	0	4	0	4	0	181	0	0	181	451
7:45 AM	0	0	0	0	0	0	210	2	0	212	0	0	8	0	8	1	179	0	0	180	400
Total	0	0	0	0	0	0	924	15	0	939	0	0	16	0	16	2	759	1	0	762	1717
Approach %	NaN	NaN	NaN	NaN	-	0.0	98.4	1.6	0.0	-	0.0	0.0	100.0	0.0	-	0.3	99.6	0.1	0.0	-	-
Total %	0.0	0.0	0.0	0.0	0.0	0.0	53.8	0.9	0.0	54.7	0.0	0.0	0.9	0.0	0.9	0.1	44.2	0.1	0.0	44.4	-
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.872	0.625	0.000	0.883	0.000	0.000	0.500	0.000	0.500	0.500	0.807	0.250	0.000	0.804	0.904
Lights	0	0	0	0	0	0	910	15	0	925	0	0	11	0	11	1	740	0	0	741	1677
% Lights	-	-	-	-	-	-	98.5	100.0	-	98.5	-	-	68.8	-	68.8	50.0	97.5	0.0	-	97.2	97.7
Mediums	0	0	0	0	0	0	14	0	0	14	0	0	5	0	5	0	16	1	0	17	36
% Mediums	-	-	-	-	-	-	1.5	0.0	-	1.5	-	-	31.3	-	31.3	0.0	2.1	100.0	-	2.2	2.1
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	4	4
% Articulated Trucks	-	-	-	-	-	-	0.0	0.0	-	0.0	-	-	0.0	-	0.0	50.0	0.4	0.0	-	0.5	0.2
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	-	-	-	-	-	-	0.0	0.0	-	0.0	-	-	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0



Turning Movement Peak Hour Data Plot (7:00 AM)

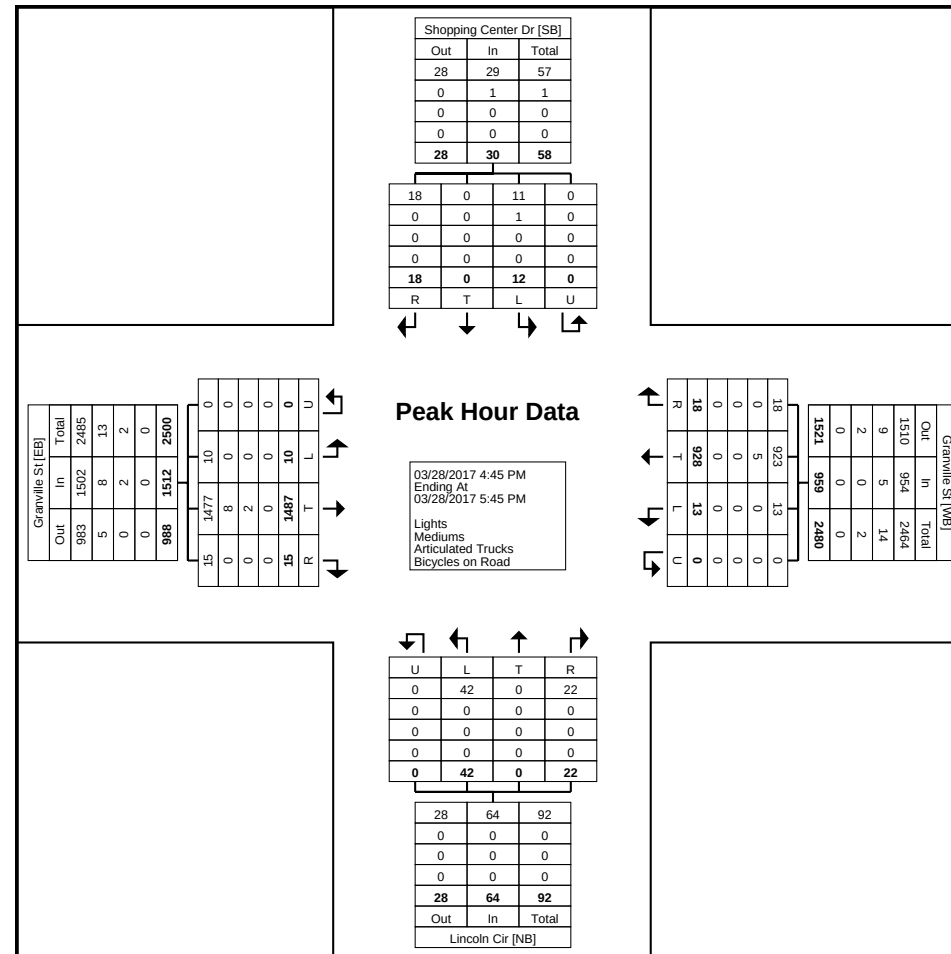
Carpenter Marty (CM) Transportation Inc.
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Count Name: Granville St & Lincoln Cir TMC
Site Code:
Start Date: 03/28/2017
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Turning Movement Peak Hour Data (4:45 PM)

Start Time	Shopping Center Dr Southbound					Granville St Westbound					Lincoln Cir Northbound					Granville St Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
4:45 PM	8	0	0	0	8	4	248	3	0	255	5	0	7	0	12	6	382	5	0	393	668
5:00 PM	3	0	4	0	7	3	232	6	0	241	3	0	14	0	17	3	362	2	0	367	632
5:15 PM	2	0	0	0	2	5	231	4	0	240	9	0	8	0	17	5	392	2	0	399	658
5:30 PM	5	0	8	0	13	6	217	0	0	223	5	0	13	0	18	1	351	1	0	353	607
Total	18	0	12	0	30	18	928	13	0	959	22	0	42	0	64	15	1487	10	0	1512	2565
Approach %	60.0	0.0	40.0	0.0	-	1.9	96.8	1.4	0.0	-	34.4	0.0	65.6	0.0	-	1.0	98.3	0.7	0.0	-	-
Total %	0.7	0.0	0.5	0.0	1.2	0.7	36.2	0.5	0.0	37.4	0.9	0.0	1.6	0.0	2.5	0.6	58.0	0.4	0.0	58.9	-
PHF	0.563	0.000	0.375	0.000	0.577	0.750	0.935	0.542	0.000	0.940	0.611	0.000	0.750	0.000	0.889	0.625	0.948	0.500	0.000	0.947	0.960
Lights	18	0	11	0	29	18	923	13	0	954	22	0	42	0	64	15	1477	10	0	1502	2549
% Lights	100.0	-	91.7	-	96.7	100.0	99.5	100.0	-	99.5	100.0	-	100.0	-	100.0	100.0	99.3	100.0	-	99.3	99.4
Mediums	0	0	1	0	1	0	5	0	0	5	0	0	0	0	0	0	8	0	0	8	14
% Mediums	0.0	-	8.3	-	3.3	0.0	0.5	0.0	-	0.5	0.0	-	0.0	-	0.0	0.0	0.5	0.0	-	0.5	0.5
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
% Articulated Trucks	0.0	-	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	0.1	0.0	-	0.1	0.1
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	-	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0



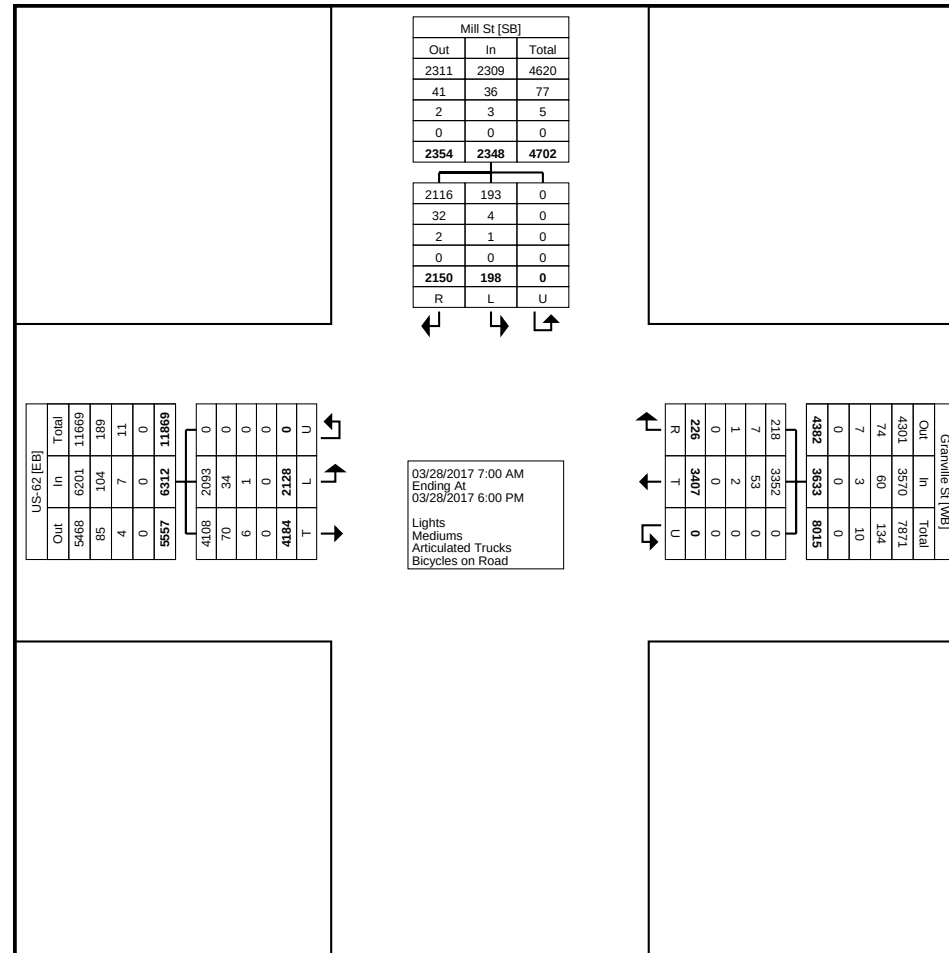
Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive

Columbus, Ohio, United States 43229
614 656 2419 dlaurent@cmtran.com

Count Name: Granville St & Mill St TMC
Site Code:
Start Date: 03/28/2017
Page No: 1

Turning Movement Data

Start Time	Mill St Southbound				Granville St Westbound				US-62 Eastbound				Int. Total
	Right	Left	U-Turn	App. Total	Right	Thru	U-Turn	App. Total	Thru	Left	U-Turn	App. Total	
7:00 AM	164	6	0	170	1	255	0	256	149	50	0	199	625
7:15 AM	192	6	0	198	7	246	0	253	217	93	0	310	761
7:30 AM	203	6	0	209	9	270	0	279	142	125	0	267	755
7:45 AM	197	5	0	202	7	238	0	245	153	120	0	273	720
Hourly Total	756	23	0	779	24	1009	0	1033	661	388	0	1049	2861
8:00 AM	178	8	0	186	8	246	0	254	125	86	0	211	651
8:15 AM	159	7	0	166	7	196	0	203	129	95	0	224	593
8:30 AM	152	6	0	158	11	205	0	216	129	95	0	224	598
8:45 AM	134	11	0	145	20	171	0	191	113	121	0	234	570
Hourly Total	623	32	0	655	46	818	0	864	496	397	0	893	2412
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	98	19	0	117	10	148	0	158	322	160	0	482	757
4:15 PM	95	16	0	111	20	215	0	235	383	163	0	546	892
4:30 PM	82	20	0	102	13	184	0	197	329	165	0	494	793
4:45 PM	53	14	0	67	23	248	0	271	403	165	0	568	906
Hourly Total	328	69	0	397	66	795	0	861	1437	653	0	2090	3348
5:00 PM	74	12	0	86	28	202	0	230	384	176	0	560	876
5:15 PM	137	20	0	157	23	184	0	207	426	184	0	610	974
5:30 PM	112	24	0	136	14	186	0	200	384	168	0	552	888
5:45 PM	120	18	0	138	25	213	0	238	396	162	0	558	934
Hourly Total	443	74	0	517	90	785	0	875	1590	690	0	2280	3672
Grand Total	2150	198	0	2348	226	3407	0	3633	4184	2128	0	6312	12293
Approach %	91.6	8.4	0.0	-	6.2	93.8	0.0	-	66.3	33.7	0.0	-	-
Total %	17.5	1.6	0.0	19.1	1.8	27.7	0.0	29.6	34.0	17.3	0.0	51.3	-
Lights	2116	193	0	2309	218	3352	0	3570	4108	2093	0	6201	12080
% Lights	98.4	97.5	-	98.3	96.5	98.4	-	98.3	98.2	98.4	-	98.2	98.3
Mediums	32	4	0	36	7	53	0	60	70	34	0	104	200
% Mediums	1.5	2.0	-	1.5	3.1	1.6	-	1.7	1.7	1.6	-	1.6	1.6
Articulated Trucks	2	1	0	3	1	2	0	3	6	1	0	7	13
% Articulated Trucks	0.1	0.5	-	0.1	0.4	0.1	-	0.1	0.1	0.0	-	0.1	0.1
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0



Turning Movement Data Plot

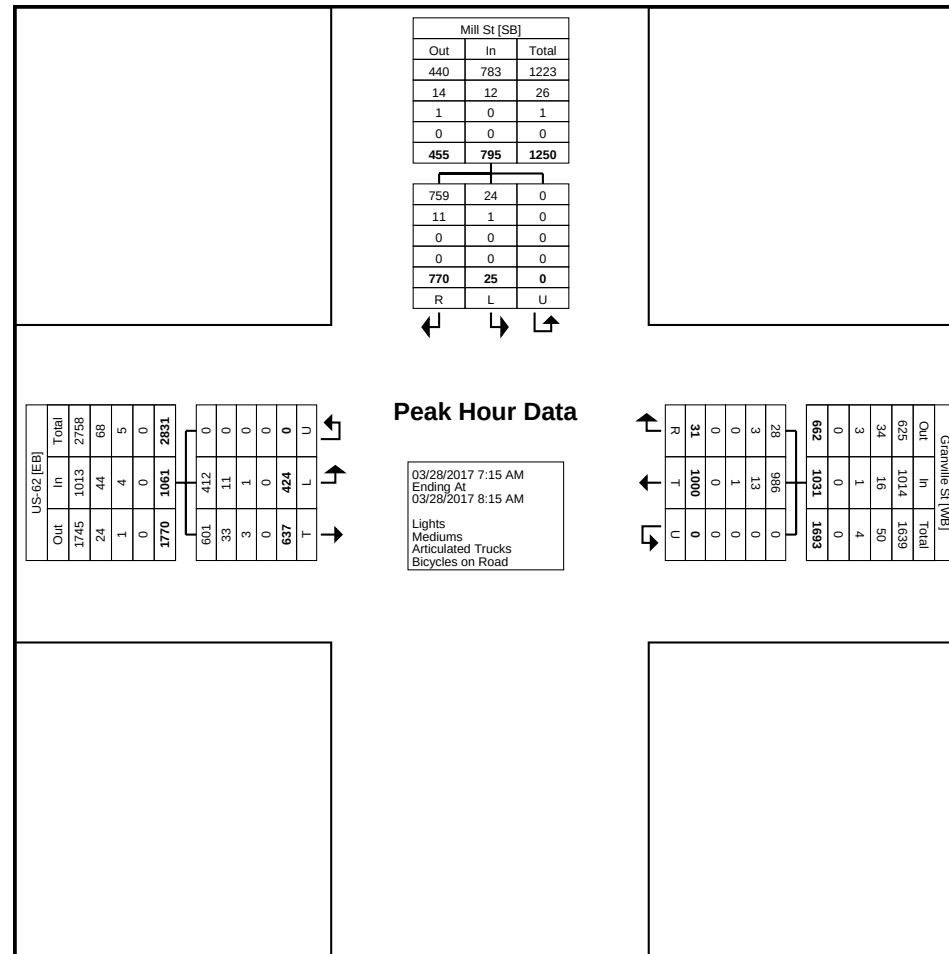
Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive

Columbus, Ohio, United States 43229
614 656 2419 dlaurent@cmtran.com

Count Name: Granville St & Mill St TMC
Site Code:
Start Date: 03/28/2017
Page No: 3

Turning Movement Peak Hour Data (7:15 AM)

Start Time	Mill St Southbound				Granville St Westbound				US-62 Eastbound				Int. Total
	Right	Left	U-Turn	App. Total	Right	Thru	U-Turn	App. Total	Thru	Left	U-Turn	App. Total	
7:15 AM	192	6	0	198	7	246	0	253	217	93	0	310	761
7:30 AM	203	6	0	209	9	270	0	279	142	125	0	267	755
7:45 AM	197	5	0	202	7	238	0	245	153	120	0	273	720
8:00 AM	178	8	0	186	8	246	0	254	125	86	0	211	651
Total	770	25	0	795	31	1000	0	1031	637	424	0	1061	2887
Approach %	96.9	3.1	0.0	-	3.0	97.0	0.0	-	60.0	40.0	0.0	-	-
Total %	26.7	0.9	0.0	27.5	1.1	34.6	0.0	35.7	22.1	14.7	0.0	36.8	-
PHF	0.948	0.781	0.000	0.951	0.861	0.926	0.000	0.924	0.734	0.848	0.000	0.856	0.948
Lights	759	24	0	783	28	986	0	1014	601	412	0	1013	2810
% Lights	98.6	96.0	-	98.5	90.3	98.6	-	98.4	94.3	97.2	-	95.5	97.3
Mediums	11	1	0	12	3	13	0	16	33	11	0	44	72
% Mediums	1.4	4.0	-	1.5	9.7	1.3	-	1.6	5.2	2.6	-	4.1	2.5
Articulated Trucks	0	0	0	0	0	1	0	1	3	1	0	4	5
% Articulated Trucks	0.0	0.0	-	0.0	0.0	0.1	-	0.1	0.5	0.2	-	0.4	0.2
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0



Turning Movement Peak Hour Data Plot (7:15 AM)

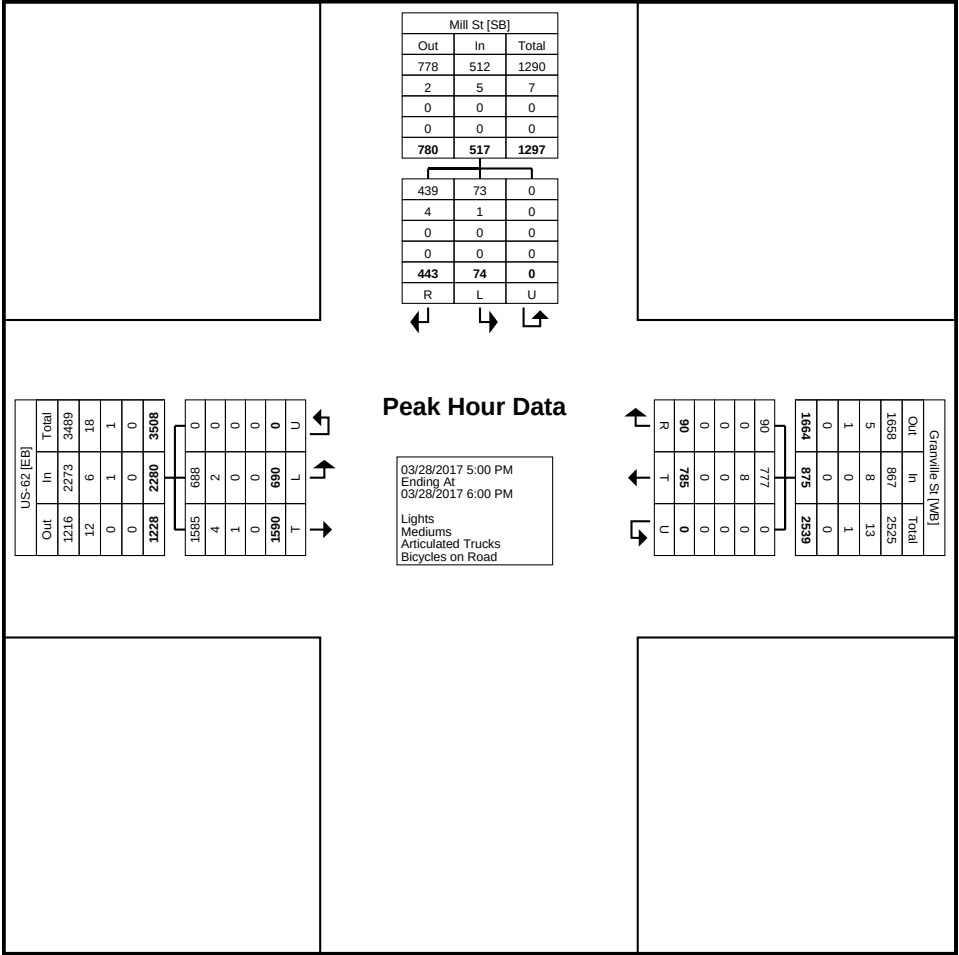
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Count Name: Granville St & Mill St TMC
Site Code:
Start Date: 03/28/2017
Page No: 5

Turning Movement Peak Hour Data (5:00 PM)

Start Time	Mill St Southbound				Granville St Westbound				US-62 Eastbound				Int. Total
	Right	Left	U-Turn	App. Total	Right	Thru	U-Turn	App. Total	Thru	Left	U-Turn	App. Total	
5:00 PM	74	12	0	86	28	202	0	230	384	176	0	560	876
5:15 PM	137	20	0	157	23	184	0	207	426	184	0	610	974
5:30 PM	112	24	0	136	14	186	0	200	384	168	0	552	888
5:45 PM	120	18	0	138	25	213	0	238	396	162	0	558	934
Total	443	74	0	517	90	785	0	875	1590	690	0	2280	3672
Approach %	85.7	14.3	0.0	-	10.3	89.7	0.0	-	69.7	30.3	0.0	-	-
Total %	12.1	2.0	0.0	14.1	2.5	21.4	0.0	23.8	43.3	18.8	0.0	62.1	-
PHF	0.808	0.771	0.000	0.823	0.804	0.921	0.000	0.919	0.933	0.938	0.000	0.934	0.943
Lights	439	73	0	512	90	777	0	867	1585	688	0	2273	3652
% Lights	99.1	98.6	-	99.0	100.0	99.0	-	99.1	99.7	99.7	-	99.7	99.5
Mediums	4	1	0	5	0	8	0	8	4	2	0	6	19
% Mediums	0.9	1.4	-	1.0	0.0	1.0	-	0.9	0.3	0.3	-	0.3	0.5
Articulated Trucks	0	0	0	0	0	0	0	0	1	0	0	1	1
% Articulated Trucks	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.1	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0



Turning Movement Peak Hour Data Plot (5:00 PM)

Carpenter Marty (CM) Transportation Inc.
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Count Name: Granville St & Shull Ave TMC
Site Code:
Start Date: 03/28/2017
Page No: 1

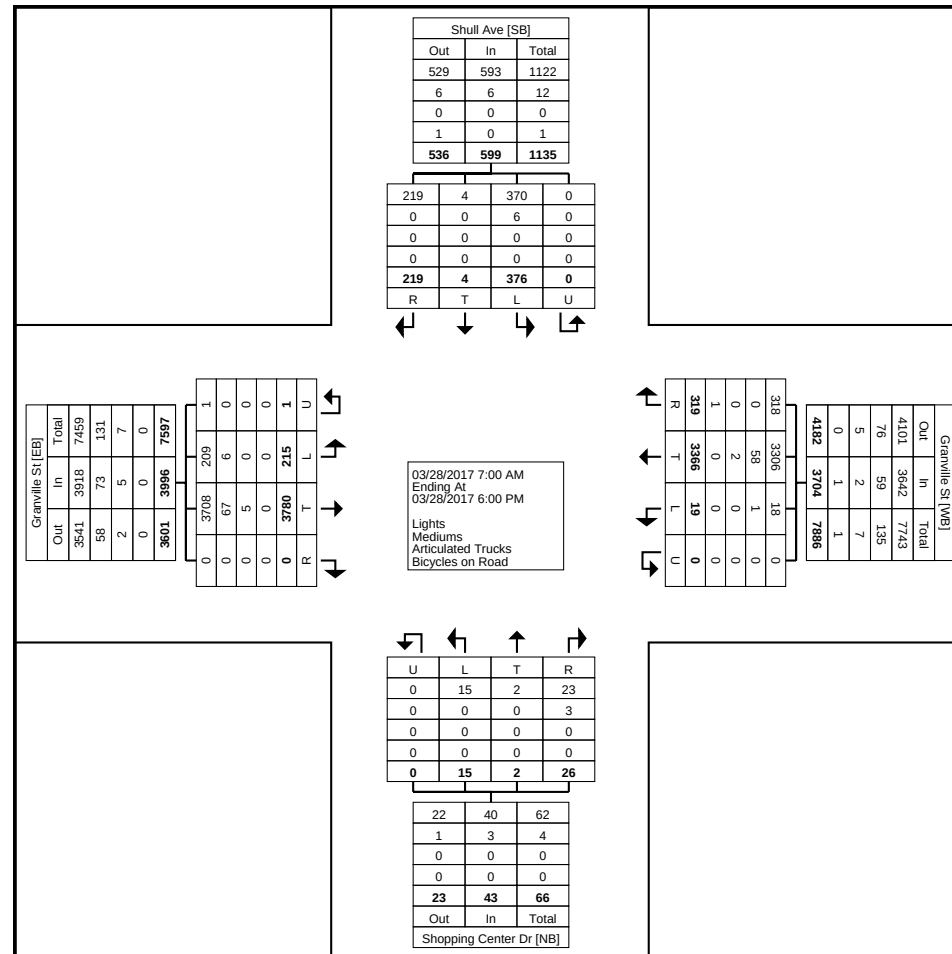
Turning Movement Data

Start Time	Shull Ave Southbound					Granville St Westbound					Shopping Center Dr Northbound					Granville St Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
7:00 AM	21	0	29	0	50	8	216	1	0	225	0	0	0	0	0	0	126	1	0	127	402
7:15 AM	26	1	46	0	73	13	224	3	0	240	0	0	0	0	0	0	176	7	0	183	496
7:30 AM	22	0	26	0	48	24	276	0	0	300	1	0	1	0	2	0	141	5	0	146	496
7:45 AM	27	0	30	0	57	20	210	0	0	230	1	0	0	0	1	0	137	7	0	144	432
Hourly Total	96	1	131	0	228	65	926	4	0	995	2	0	1	0	3	0	580	20	0	600	1826
8:00 AM	15	0	25	0	40	6	232	1	0	239	0	0	1	0	1	0	126	5	0	131	411
8:15 AM	18	0	11	0	29	8	179	1	0	188	0	0	0	0	0	0	121	6	0	127	344
8:30 AM	17	1	11	0	29	10	203	1	0	214	2	1	0	0	3	0	117	7	1	125	371
8:45 AM	15	0	10	0	25	28	177	2	0	207	1	0	2	0	3	0	103	2	0	105	340
Hourly Total	65	1	57	0	123	52	791	5	0	848	3	1	3	0	7	0	467	20	1	488	1466
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	8	0	27	0	35	29	176	0	0	205	2	0	1	0	3	0	293	16	0	309	552
4:15 PM	9	0	21	0	30	25	185	2	0	212	3	0	2	0	5	0	362	20	0	382	629
4:30 PM	7	0	23	0	30	21	214	0	0	235	2	0	1	0	3	0	326	13	0	339	607
4:45 PM	10	0	17	0	27	24	227	2	0	253	5	0	4	0	9	0	364	21	0	385	674
Hourly Total	34	0	88	0	122	99	802	4	0	905	12	0	8	0	20	0	1345	70	0	1415	2462
5:00 PM	7	1	17	0	25	27	221	0	0	248	0	1	3	0	4	0	358	22	0	380	657
5:15 PM	3	0	26	0	29	21	208	3	0	232	1	0	0	0	1	0	369	26	0	395	657
5:30 PM	6	0	33	0	39	28	227	2	0	257	4	0	0	0	4	0	330	24	0	354	654
5:45 PM	8	1	24	0	33	27	191	1	0	219	4	0	0	0	4	0	331	33	0	364	620
Hourly Total	24	2	100	0	126	103	847	6	0	956	9	1	3	0	13	0	1388	105	0	1493	2588
Grand Total	219	4	376	0	599	319	3366	19	0	3704	26	2	15	0	43	0	3780	215	1	3996	8342
Approach %	36.6	0.7	62.8	0.0	-	8.6	90.9	0.5	0.0	-	60.5	4.7	34.9	0.0	-	0.0	94.6	5.4	0.0	-	-
Total %	2.6	0.0	4.5	0.0	7.2	3.8	40.4	0.2	0.0	44.4	0.3	0.0	0.2	0.0	0.5	0.0	45.3	2.6	0.0	47.9	-
Lights	219	4	370	0	593	318	3306	18	0	3642	23	2	15	0	40	0	3708	209	1	3918	8193
% Lights	100.0	100.0	98.4	-	99.0	99.7	98.2	94.7	-	98.3	88.5	100.0	100.0	-	93.0	-	98.1	97.2	100.0	98.0	98.2
Mediums	0	0	6	0	6	0	58	1	0	59	3	0	0	0	3	0	67	6	0	73	141
% Mediums	0.0	0.0	1.6	-	1.0	0.0	1.7	5.3	-	1.6	11.5	0.0	0.0	-	7.0	-	1.8	2.8	0.0	1.8	1.7
Articulated Trucks	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	5	0	0	5	7
% Articulated Trucks	0.0	0.0	0.0	-	0.0	0.0	0.1	0.0	-	0.1	0.0	0.0	0.0	-	0.0	-	0.1	0.0	0.0	0.1	0.1
Bicycles on Road	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.3	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	0.0	0.0

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Count Name: Granville St & Shull Ave TMC
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Turning Movement Data Plot

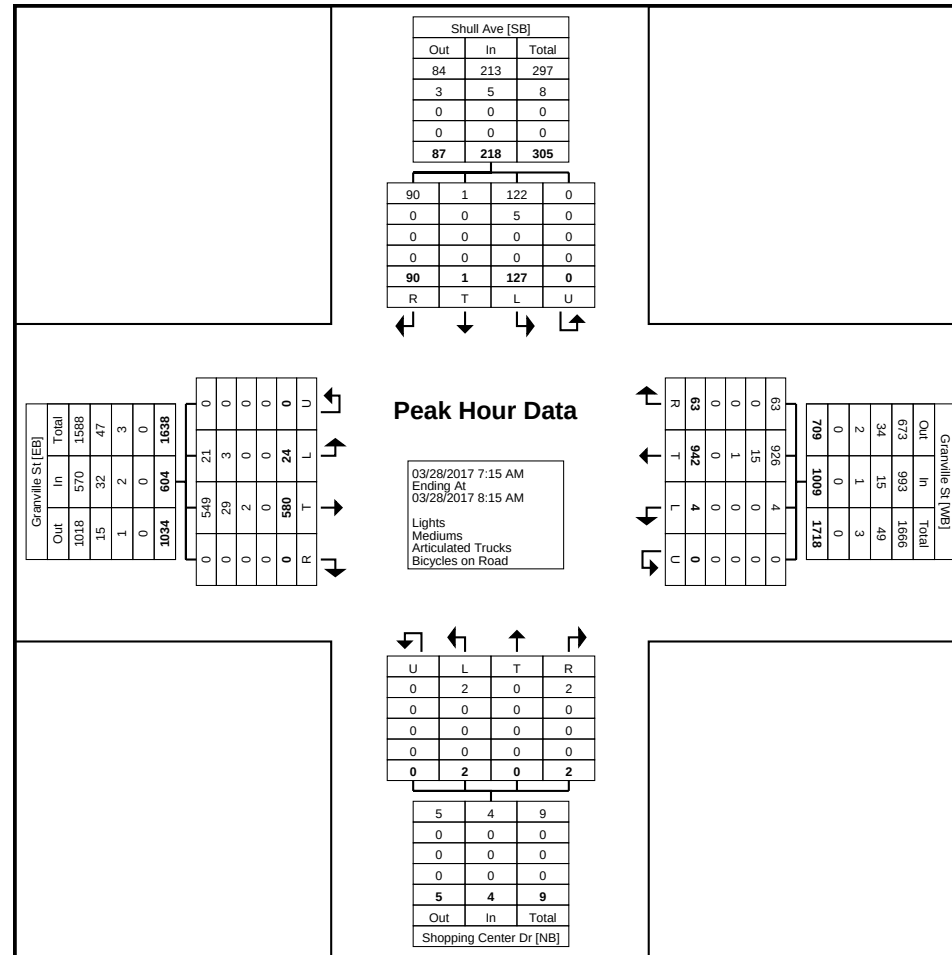
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Count Name: Granville St & Shull Ave TMC
Site Code:
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Turning Movement Peak Hour Data (7:15 AM)

Start Time	Shull Ave Southbound					Granville St Westbound					Shopping Center Dr Northbound					Granville St Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
7:15 AM	26	1	46	0	73	13	224	3	0	240	0	0	0	0	0	0	176	7	0	183	496
7:30 AM	22	0	26	0	48	24	276	0	0	300	1	0	1	0	2	0	141	5	0	146	496
7:45 AM	27	0	30	0	57	20	210	0	0	230	1	0	0	0	1	0	137	7	0	144	432
8:00 AM	15	0	25	0	40	6	232	1	0	239	0	0	1	0	1	0	126	5	0	131	411
Total	90	1	127	0	218	63	942	4	0	1009	2	0	2	0	4	0	580	24	0	604	1835
Approach %	41.3	0.5	58.3	0.0	-	6.2	93.4	0.4	0.0	-	50.0	0.0	50.0	0.0	-	0.0	96.0	4.0	0.0	-	-
Total %	4.9	0.1	6.9	0.0	11.9	3.4	51.3	0.2	0.0	55.0	0.1	0.0	0.1	0.0	0.2	0.0	31.6	1.3	0.0	32.9	-
PHF	0.833	0.250	0.690	0.000	0.747	0.656	0.853	0.333	0.000	0.841	0.500	0.000	0.500	0.000	0.500	0.000	0.824	0.857	0.000	0.825	0.925
Lights	90	1	122	0	213	63	926	4	0	993	2	0	2	0	4	0	549	21	0	570	1780
% Lights	100.0	100.0	96.1	-	97.7	100.0	98.3	100.0	-	98.4	100.0	-	100.0	-	100.0	-	94.7	87.5	-	94.4	97.0
Mediums	0	0	5	0	5	0	15	0	0	15	0	0	0	0	0	0	29	3	0	32	52
% Mediums	0.0	0.0	3.9	-	2.3	0.0	1.6	0.0	-	1.5	0.0	-	0.0	-	0.0	-	5.0	12.5	-	5.3	2.8
Articulated Trucks	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	3
% Articulated Trucks	0.0	0.0	0.0	-	0.0	0.0	0.1	0.0	-	0.1	0.0	-	0.0	-	0.0	-	0.3	0.0	-	0.3	0.2
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	-	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0



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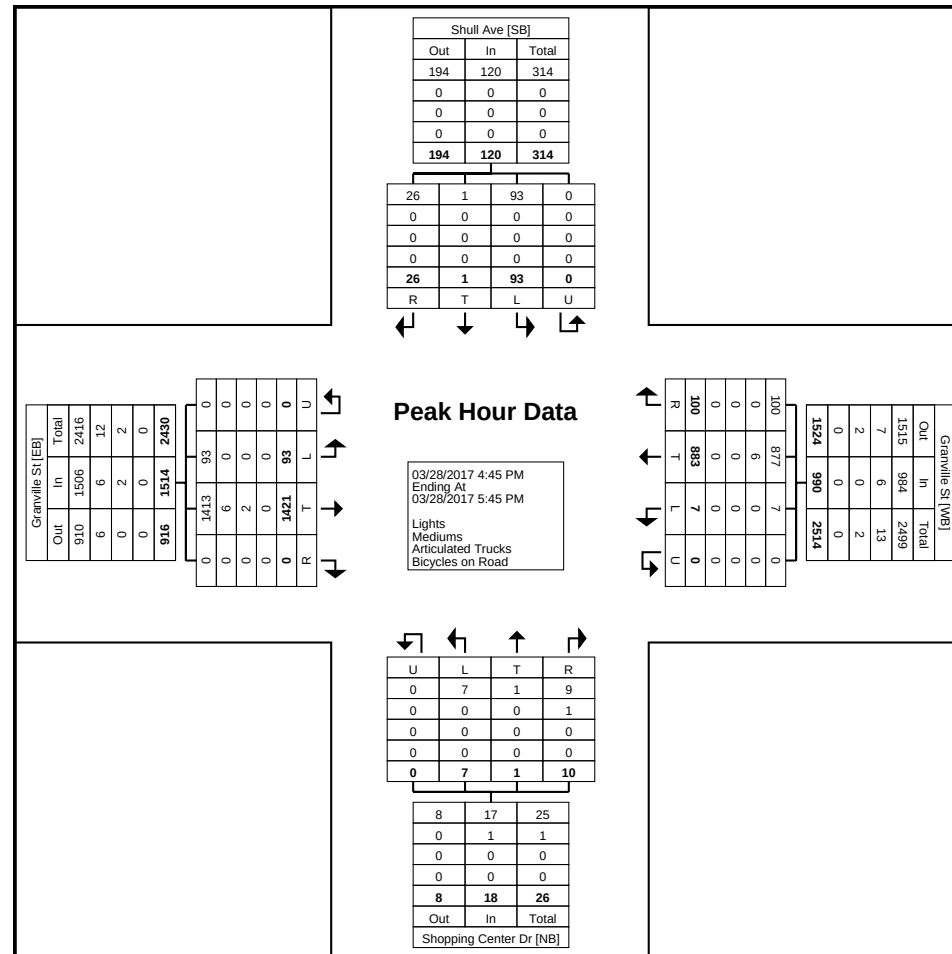
Turning Movement Peak Hour Data (4:45 PM)

Start Time	Shull Ave Southbound					Granville St Westbound					Shopping Center Dr Northbound					Granville St Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
4:45 PM	10	0	17	0	27	24	227	2	0	253	5	0	4	0	9	0	364	21	0	385	674
5:00 PM	7	1	17	0	25	27	221	0	0	248	0	1	3	0	4	0	358	22	0	380	657
5:15 PM	3	0	26	0	29	21	208	3	0	232	1	0	0	0	1	0	369	26	0	395	657
5:30 PM	6	0	33	0	39	28	227	2	0	257	4	0	0	0	4	0	330	24	0	354	654
Total	26	1	93	0	120	100	883	7	0	990	10	1	7	0	18	0	1421	93	0	1514	2642
Approach %	21.7	0.8	77.5	0.0	-	10.1	89.2	0.7	0.0	-	55.6	5.6	38.9	0.0	-	0.0	93.9	6.1	0.0	-	-
Total %	1.0	0.0	3.5	0.0	4.5	3.8	33.4	0.3	0.0	37.5	0.4	0.0	0.3	0.0	0.7	0.0	53.8	3.5	0.0	57.3	-
PHF	0.650	0.250	0.705	0.000	0.769	0.893	0.972	0.583	0.000	0.963	0.500	0.250	0.438	0.000	0.500	0.000	0.963	0.894	0.000	0.958	0.980
Lights	26	1	93	0	120	100	877	7	0	984	9	1	7	0	17	0	1413	93	0	1506	2627
% Lights	100.0	100.0	100.0	-	100.0	100.0	99.3	100.0	-	99.4	90.0	100.0	100.0	-	94.4	-	99.4	100.0	-	99.5	99.4
Mediums	0	0	0	0	0	0	6	0	0	6	1	0	0	0	1	0	6	0	0	6	13
% Mediums	0.0	0.0	0.0	-	0.0	0.0	0.7	0.0	-	0.6	10.0	0.0	0.0	-	5.6	-	0.4	0.0	-	0.4	0.5
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
% Articulated Trucks	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	-	0.1	0.0	-	0.1	0.1
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0

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Count Name: Granville St & Shull Ave TMC
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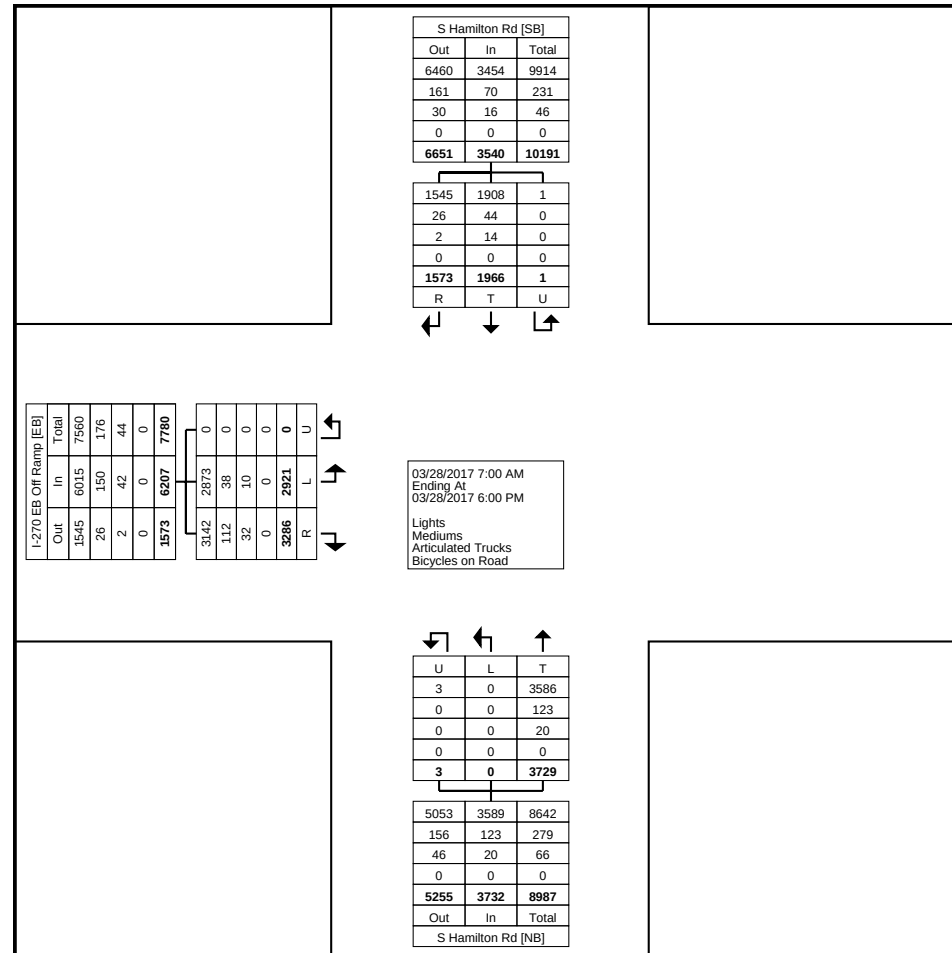
Count Name: I-270 EB Off Ramp & S Hamilton
Rd TMC
Site Code:
Start Date: 03/28/2017
Page No: 1

Turning Movement Data

Start Time	S Hamilton Rd Southbound				S Hamilton Rd Northbound				I-270 EB Off Ramp Eastbound				Int. Total
	Right	Thru	U-Turn	App. Total	Thru	Left	U-Turn	App. Total	Right	Left	U-Turn	App. Total	
7:00 AM	76	122	0	198	126	0	0	126	267	104	0	371	695
7:15 AM	84	147	0	231	143	0	0	143	270	136	0	406	780
7:30 AM	89	187	0	276	150	0	1	151	275	139	0	414	841
7:45 AM	102	198	0	300	147	0	2	149	306	152	0	458	907
Hourly Total	351	654	0	1005	566	0	3	569	1118	531	0	1649	3223
8:00 AM	83	142	0	225	147	0	0	147	238	115	0	353	725
8:15 AM	94	170	0	264	155	0	0	155	230	123	0	353	772
8:30 AM	79	144	0	223	147	0	0	147	243	113	0	356	726
8:45 AM	72	115	1	188	126	0	0	126	218	89	0	307	621
Hourly Total	328	571	1	900	575	0	0	575	929	440	0	1369	2844
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	122	105	0	227	310	0	0	310	130	191	0	321	858
4:15 PM	116	95	0	211	319	0	0	319	168	263	0	431	961
4:30 PM	107	88	0	195	359	0	0	359	137	214	0	351	905
4:45 PM	114	76	0	190	297	0	0	297	167	287	0	454	941
Hourly Total	459	364	0	823	1285	0	0	1285	602	955	0	1557	3665
5:00 PM	128	82	0	210	360	0	0	360	158	233	0	391	961
5:15 PM	117	101	0	218	331	0	0	331	180	283	0	463	1012
5:30 PM	96	91	0	187	333	0	0	333	166	236	0	402	922
5:45 PM	94	103	0	197	279	0	0	279	133	243	0	376	852
Hourly Total	435	377	0	812	1303	0	0	1303	637	995	0	1632	3747
Grand Total	1573	1966	1	3540	3729	0	3	3732	3286	2921	0	6207	13479
Approach %	44.4	55.5	0.0	-	99.9	0.0	0.1	-	52.9	47.1	0.0	-	-
Total %	11.7	14.6	0.0	26.3	27.7	0.0	0.0	27.7	24.4	21.7	0.0	46.0	-
Lights	1545	1908	1	3454	3586	0	3	3589	3142	2873	0	6015	13058
% Lights	98.2	97.0	100.0	97.6	96.2	-	100.0	96.2	95.6	98.4	-	96.9	96.9
Mediums	26	44	0	70	123	0	0	123	112	38	0	150	343
% Mediums	1.7	2.2	0.0	2.0	3.3	-	0.0	3.3	3.4	1.3	-	2.4	2.5
Articulated Trucks	2	14	0	16	20	0	0	20	32	10	0	42	78
% Articulated Trucks	0.1	0.7	0.0	0.5	0.5	-	0.0	0.5	1.0	0.3	-	0.7	0.6
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0

Carpenter Marty (CM) Transportation Inc.
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Count Name: I-270 EB Off Ramp & S Hamilton
Rd TMC
Site Code:
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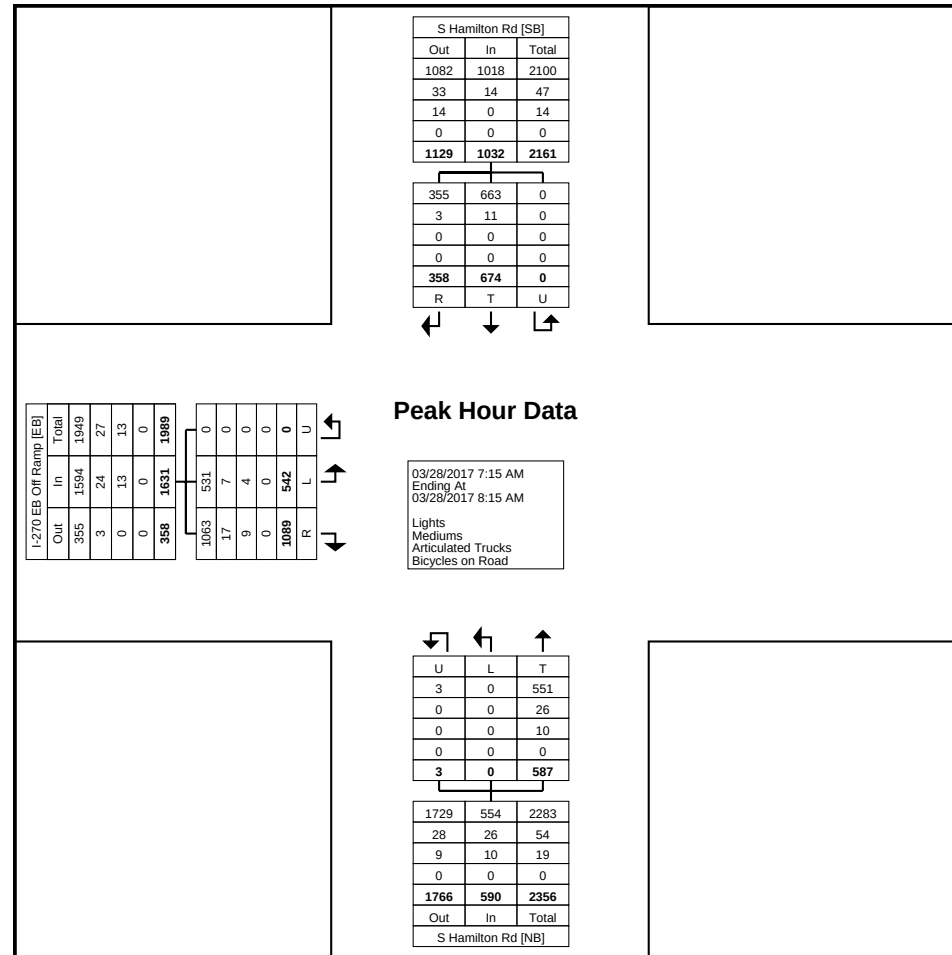
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Count Name: I-270 EB Off Ramp & S Hamilton
Rd TMC
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Start Date: 03/28/2017
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Turning Movement Peak Hour Data (7:15 AM)

Start Time	S Hamilton Rd Southbound				S Hamilton Rd Northbound				I-270 EB Off Ramp Eastbound				Int. Total
	Right	Thru	U-Turn	App. Total	Thru	Left	U-Turn	App. Total	Right	Left	U-Turn	App. Total	
7:15 AM	84	147	0	231	143	0	0	143	270	136	0	406	780
7:30 AM	89	187	0	276	150	0	1	151	275	139	0	414	841
7:45 AM	102	198	0	300	147	0	2	149	306	152	0	458	907
8:00 AM	83	142	0	225	147	0	0	147	238	115	0	353	725
Total	358	674	0	1032	587	0	3	590	1089	542	0	1631	3253
Approach %	34.7	65.3	0.0	-	99.5	0.0	0.5	-	66.8	33.2	0.0	-	-
Total %	11.0	20.7	0.0	31.7	18.0	0.0	0.1	18.1	33.5	16.7	0.0	50.1	-
PHF	0.877	0.851	0.000	0.860	0.978	0.000	0.375	0.977	0.890	0.891	0.000	0.890	0.897
Lights	355	663	0	1018	551	0	3	554	1063	531	0	1594	3166
% Lights	99.2	98.4	-	98.6	93.9	-	100.0	93.9	97.6	98.0	-	97.7	97.3
Mediums	3	11	0	14	26	0	0	26	17	7	0	24	64
% Mediums	0.8	1.6	-	1.4	4.4	-	0.0	4.4	1.6	1.3	-	1.5	2.0
Articulated Trucks	0	0	0	0	10	0	0	10	9	4	0	13	23
% Articulated Trucks	0.0	0.0	-	0.0	1.7	-	0.0	1.7	0.8	0.7	-	0.8	0.7
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0



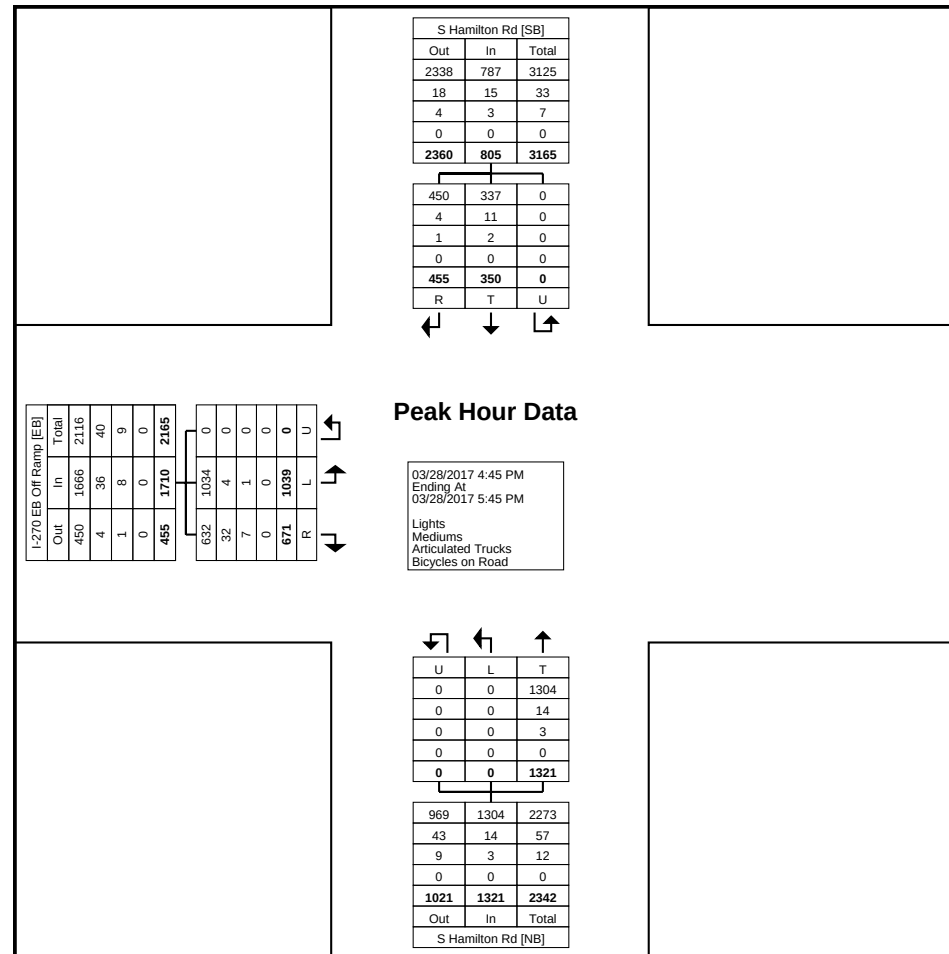
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Count Name: I-270 EB Off Ramp & S Hamilton
Rd TMC
Site Code:
Start Date: 03/28/2017
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Turning Movement Peak Hour Data (4:45 PM)

Start Time	S Hamilton Rd Southbound				S Hamilton Rd Northbound				I-270 EB Off Ramp Eastbound				Int. Total
	Right	Thru	U-Turn	App. Total	Thru	Left	U-Turn	App. Total	Right	Left	U-Turn	App. Total	
4:45 PM	114	76	0	190	297	0	0	297	167	287	0	454	941
5:00 PM	128	82	0	210	360	0	0	360	158	233	0	391	961
5:15 PM	117	101	0	218	331	0	0	331	180	283	0	463	1012
5:30 PM	96	91	0	187	333	0	0	333	166	236	0	402	922
Total	455	350	0	805	1321	0	0	1321	671	1039	0	1710	3836
Approach %	56.5	43.5	0.0	-	100.0	0.0	0.0	-	39.2	60.8	0.0	-	-
Total %	11.9	9.1	0.0	21.0	34.4	0.0	0.0	34.4	17.5	27.1	0.0	44.6	-
PHF	0.889	0.866	0.000	0.923	0.917	0.000	0.000	0.917	0.932	0.905	0.000	0.923	0.948
Lights	450	337	0	787	1304	0	0	1304	632	1034	0	1666	3757
% Lights	98.9	96.3	-	97.8	98.7	-	-	98.7	94.2	99.5	-	97.4	97.9
Mediums	4	11	0	15	14	0	0	14	32	4	0	36	65
% Mediums	0.9	3.1	-	1.9	1.1	-	-	1.1	4.8	0.4	-	2.1	1.7
Articulated Trucks	1	2	0	3	3	0	0	3	7	1	0	8	14
% Articulated Trucks	0.2	0.6	-	0.4	0.2	-	-	0.2	1.0	0.1	-	0.5	0.4
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	-	0.0	0.0	-	-	0.0	0.0	0.0	-	0.0	0.0



Turning Movement Peak Hour Data Plot (4:45 PM)

Study Name I-270 WB Off Ramp & Johnstown Rd TMC
 Start Date 3/28/2017
 Start Time 7:00 AM

Lights

Start Time	Southwestbound	Northwestbound		Northeastbound	Total
	Johnstown Rd	I-270 WB Off Ramp		Johnstown Rd	
	Thru	Right	Left	Thru	
7:00 AM	48	14	76	15	153
7:15 AM	89	17	107	18	231
7:30 AM	99	26	90	36	251
7:45 AM	95	35	118	24	272
8:00 AM	80	15	102	20	217
8:15 AM	68	20	97	28	213
8:30 AM	54	20	72	34	180
8:45 AM	38	14	66	29	147
4:00 PM	29	17	42	103	191
4:15 PM	32	11	37	99	179
4:30 PM	37	13	31	118	199
4:45 PM	28	22	37	123	210
5:00 PM	30	18	32	115	195
5:15 PM	40	20	35	93	188
5:30 PM	29	14	33	88	164
5:45 PM	30	15	40	65	150

Mediums

Start Time	Southwestbound	Northwestbound		Northeastbound	Total
	Johnstown Rd	I-270 WB Off Ramp		Johnstown Rd	
	Thru	Right	Left	Thru	
7:00 AM	1	1	2	4	8
7:15 AM	0	2	3	2	7
7:30 AM	1	1	1	0	3
7:45 AM	2	0	4	1	7
8:00 AM	3	0	3	3	9
8:15 AM	2	0	2	0	4
8:30 AM	1	0	2	0	3
8:45 AM	2	2	1	3	8
4:00 PM	4	2	2	0	8
4:15 PM	2	0	9	3	14
4:30 PM	4	0	6	1	11
4:45 PM	3	2	2	0	7
5:00 PM	1	2	3	0	6
5:15 PM	0	0	6	0	6
5:30 PM	0	0	1	1	2
5:45 PM	1	0	2	0	3

Study Name I-270 WB Off Ramp & Johnstown Rd TMC
 Start Date 3/28/2017
 Start Time 7:00 AM

Articulated Trucks

Start Time	Southwestbound	Northwestbound		Northeastbound	Total
	Johnstown Rd	I-270 WB Off Ramp		Johnstown Rd	
	Thru	Right	Left	Thru	
7:00 AM	0	0	2	0	2
7:15 AM	0	0	2	0	2
7:30 AM	0	0	1	0	1
7:45 AM	0	0	1	0	1
8:00 AM	1	0	1	1	3
8:15 AM	0	0	0	0	0
8:30 AM	0	0	1	0	1
8:45 AM	0	0	3	0	3
4:00 PM	0	0	3	0	3
4:15 PM	0	0	2	0	2
4:30 PM	0	0	4	0	4
4:45 PM	0	0	6	0	6
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	1	0	1
5:45 PM	0	0	2	0	2

Total Vehicles

AM Peak

Start Time	Southwestbound	Northwestbound		Northeastbound
	Johnstown Rd	I-270 WB Off Ramp		Johnstown Rd
	Thru	Right	Left	Thru
7:15 AM	370	96	433	105

PM Peak

Start Time	Southwestbound	Northwestbound		Northeastbound
	Johnstown Rd	I-270 WB Off Ramp		Johnstown Rd
	Thru	Right	Left	Thru
4:00 PM	139	67	181	447

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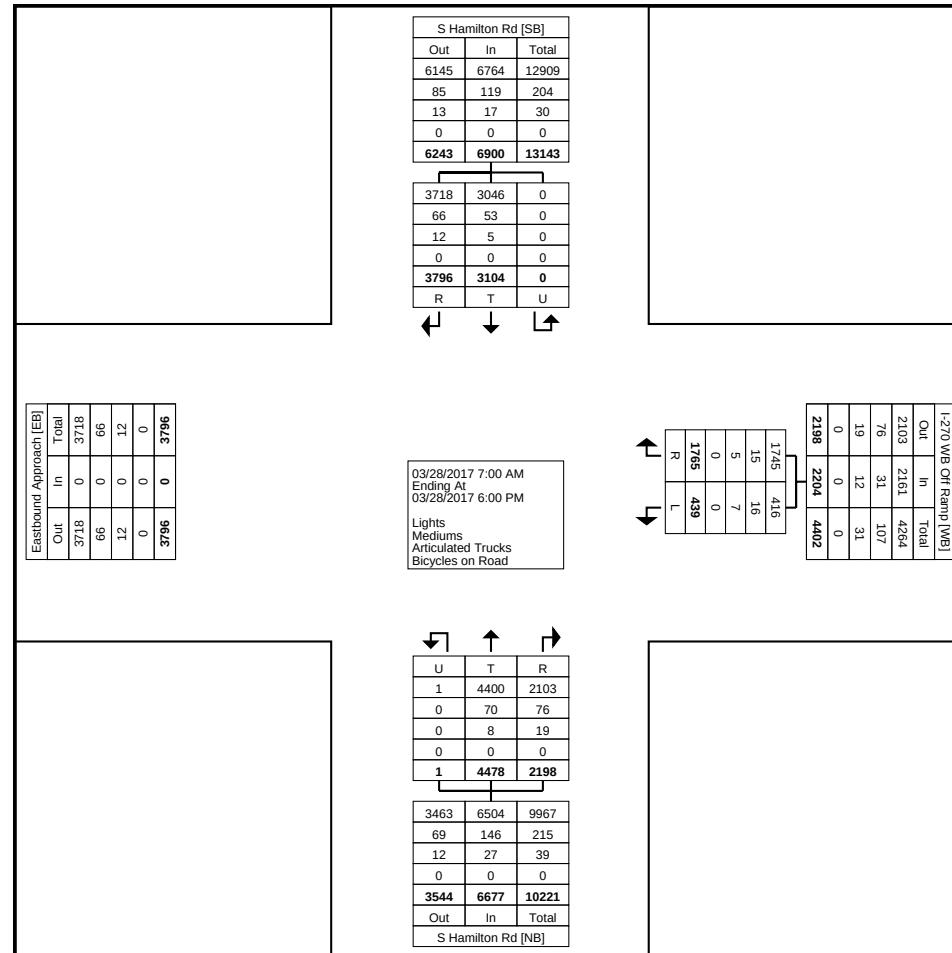
Count Name: I-270 WB Off Ramp & S Hamilton
Rd TMC
Site Code:
Start Date: 03/28/2017
Page No: 1

Turning Movement Data

Start Time	S Hamilton Rd Southbound				I-270 WB Off Ramp Westbound			S Hamilton Rd Northbound				Int. Total
	Right	Thru	U-Turn	App. Total	Right	Left	App. Total	Right	Thru	U-Turn	App. Total	
7:00 AM	293	159	0	452	86	37	123	85	136	0	221	796
7:15 AM	325	193	0	518	102	46	148	90	189	0	279	945
7:30 AM	334	251	0	585	109	40	149	114	194	0	308	1042
7:45 AM	317	252	0	569	121	46	167	88	233	0	321	1057
Hourly Total	1269	855	0	2124	418	169	587	377	752	0	1129	3840
8:00 AM	259	194	0	453	79	32	111	80	179	0	259	823
8:15 AM	284	205	0	489	104	59	163	94	183	0	277	929
8:30 AM	261	184	0	445	102	36	138	92	165	0	257	840
8:45 AM	206	160	0	366	94	28	122	91	145	0	236	724
Hourly Total	1010	743	0	1753	379	155	534	357	672	0	1029	3316
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	176	214	0	390	98	22	120	193	329	0	522	1032
4:15 PM	165	193	0	358	144	10	154	168	391	0	559	1071
4:30 PM	193	182	0	375	120	18	138	205	376	1	582	1095
4:45 PM	186	169	0	355	136	16	152	173	428	0	601	1108
Hourly Total	720	758	0	1478	498	66	564	739	1524	1	2264	4306
5:00 PM	185	195	0	380	111	9	120	206	402	0	608	1108
5:15 PM	232	207	0	439	141	14	155	175	417	0	592	1186
5:30 PM	191	164	0	355	109	16	125	193	371	0	564	1044
5:45 PM	189	182	0	371	109	10	119	151	340	0	491	981
Hourly Total	797	748	0	1545	470	49	519	725	1530	0	2255	4319
Grand Total	3796	3104	0	6900	1765	439	2204	2198	4478	1	6677	15781
Approach %	55.0	45.0	0.0	-	80.1	19.9	-	32.9	67.1	0.0	-	-
Total %	24.1	19.7	0.0	43.7	11.2	2.8	14.0	13.9	28.4	0.0	42.3	-
Lights	3718	3046	0	6764	1745	416	2161	2103	4400	1	6504	15429
% Lights	97.9	98.1	-	98.0	98.9	94.8	98.0	95.7	98.3	100.0	97.4	97.8
Mediums	66	53	0	119	15	16	31	76	70	0	146	296
% Mediums	1.7	1.7	-	1.7	0.8	3.6	1.4	3.5	1.6	0.0	2.2	1.9
Articulated Trucks	12	5	0	17	5	7	12	19	8	0	27	56
% Articulated Trucks	0.3	0.2	-	0.2	0.3	1.6	0.5	0.9	0.2	0.0	0.4	0.4
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive
Columbus, Ohio, United States 43229
614 656 2419 dlaurent@cmtran.com

Count Name: I-270 WB Off Ramp & S Hamilton
Rd TMC
Site Code:
Start Date: 03/28/2017
Page No: 2



Turning Movement Data Plot

Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive

Columbus, Ohio, United States 43229
614 656 2419 dlaurent@cmtran.com

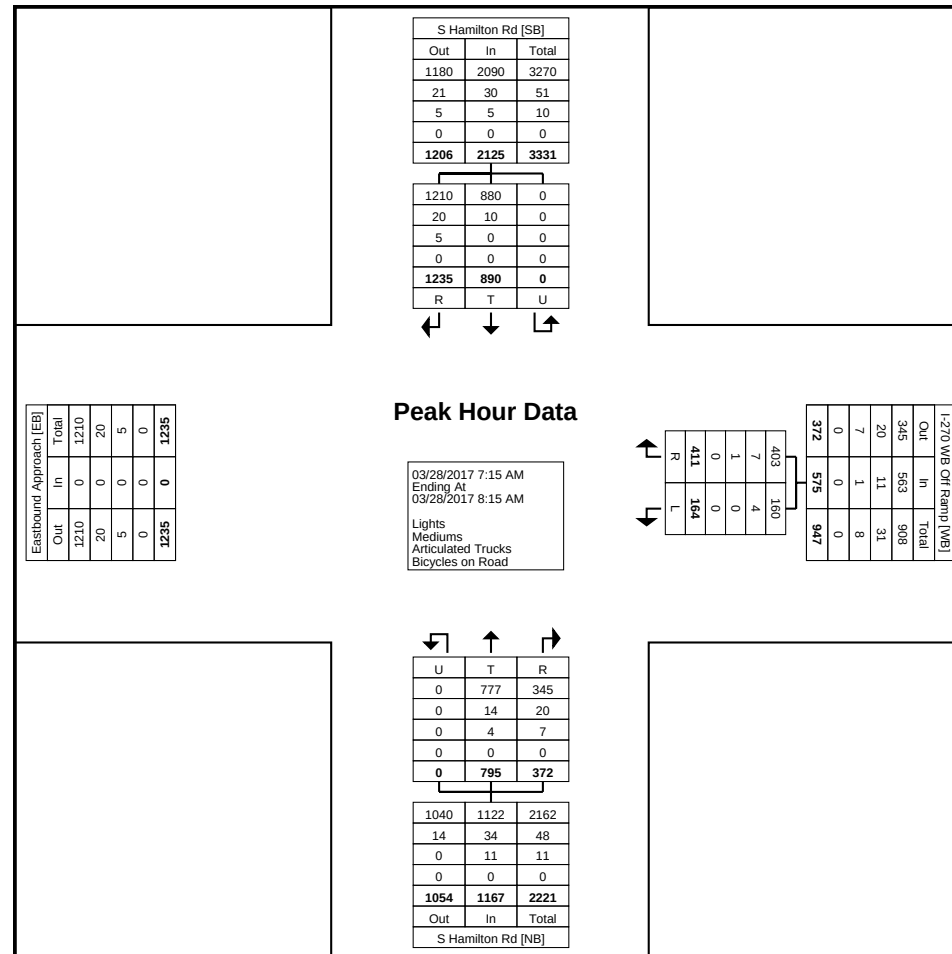
Count Name: I-270 WB Off Ramp & S Hamilton
Rd TMC
Site Code:
Start Date: 03/28/2017
Page No: 3

Turning Movement Peak Hour Data (7:15 AM)

Start Time	S Hamilton Rd Southbound				I-270 WB Off Ramp Westbound			S Hamilton Rd Northbound				Int. Total
	Right	Thru	U-Turn	App. Total	Right	Left	App. Total	Right	Thru	U-Turn	App. Total	
7:15 AM	325	193	0	518	102	46	148	90	189	0	279	945
7:30 AM	334	251	0	585	109	40	149	114	194	0	308	1042
7:45 AM	317	252	0	569	121	46	167	88	233	0	321	1057
8:00 AM	259	194	0	453	79	32	111	80	179	0	259	823
Total	1235	890	0	2125	411	164	575	372	795	0	1167	3867
Approach %	58.1	41.9	0.0	-	71.5	28.5	-	31.9	68.1	0.0	-	-
Total %	31.9	23.0	0.0	55.0	10.6	4.2	14.9	9.6	20.6	0.0	30.2	-
PHF	0.924	0.883	0.000	0.908	0.849	0.891	0.861	0.816	0.853	0.000	0.909	0.915
Lights	1210	880	0	2090	403	160	563	345	777	0	1122	3775
% Lights	98.0	98.9	-	98.4	98.1	97.6	97.9	92.7	97.7	-	96.1	97.6
Mediums	20	10	0	30	7	4	11	20	14	0	34	75
% Mediums	1.6	1.1	-	1.4	1.7	2.4	1.9	5.4	1.8	-	2.9	1.9
Articulated Trucks	5	0	0	5	1	0	1	7	4	0	11	17
% Articulated Trucks	0.4	0.0	-	0.2	0.2	0.0	0.2	1.9	0.5	-	0.9	0.4
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0

Columbus, Ohio, United States 43229
614 656 2419 dlaurent@cmtran.com

Count Name: I-270 WB Off Ramp & S Hamilton
Rd TMC
Site Code:
Start Date: 03/28/2017
Page No: 4



Turning Movement Peak Hour Data Plot (7:15 AM)

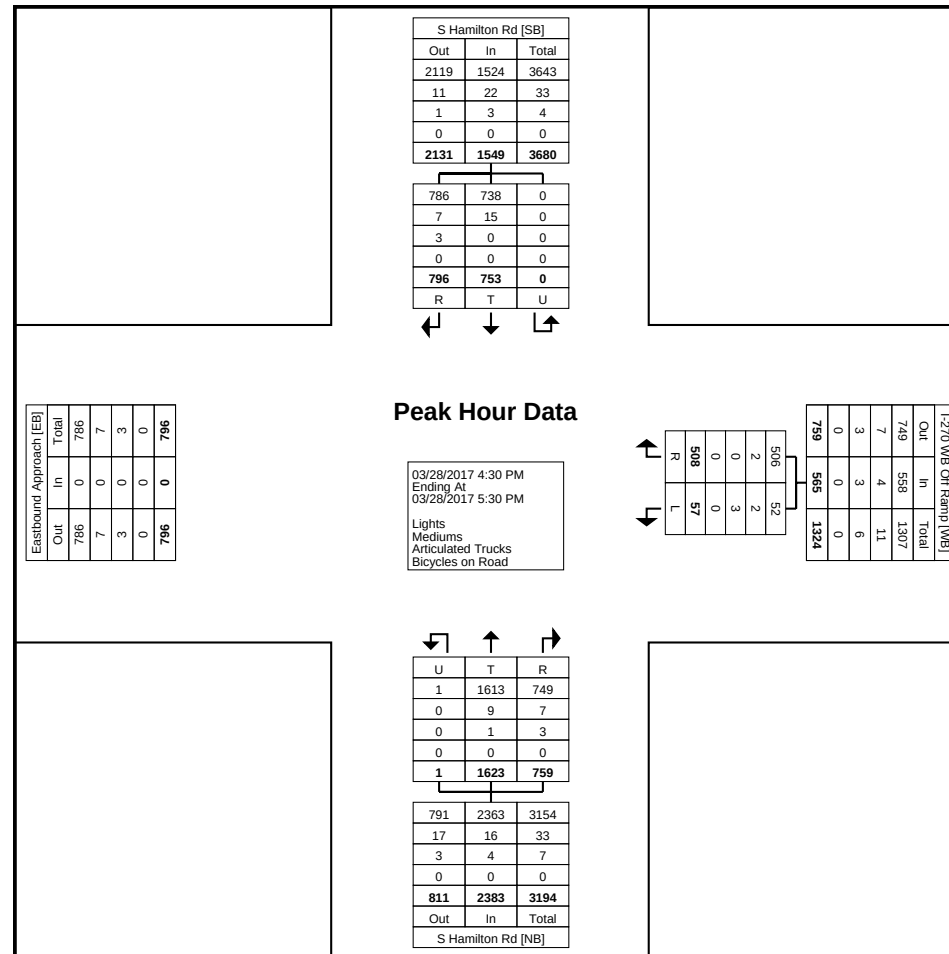
Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive

Columbus, Ohio, United States 43229
614 656 2419 dlaurent@cmtran.com

Count Name: I-270 WB Off Ramp & S Hamilton
Rd TMC
Site Code:
Start Date: 03/28/2017
Page No: 5

Turning Movement Peak Hour Data (4:30 PM)

Start Time	S Hamilton Rd Southbound				I-270 WB Off Ramp Westbound			S Hamilton Rd Northbound				Int. Total
	Right	Thru	U-Turn	App. Total	Right	Left	App. Total	Right	Thru	U-Turn	App. Total	
4:30 PM	193	182	0	375	120	18	138	205	376	1	582	1095
4:45 PM	186	169	0	355	136	16	152	173	428	0	601	1108
5:00 PM	185	195	0	380	111	9	120	206	402	0	608	1108
5:15 PM	232	207	0	439	141	14	155	175	417	0	592	1186
Total	796	753	0	1549	508	57	565	759	1623	1	2383	4497
Approach %	51.4	48.6	0.0	-	89.9	10.1	-	31.9	68.1	0.0	-	-
Total %	17.7	16.7	0.0	34.4	11.3	1.3	12.6	16.9	36.1	0.0	53.0	-
PHF	0.858	0.909	0.000	0.882	0.901	0.792	0.911	0.921	0.948	0.250	0.980	0.948
Lights	786	738	0	1524	506	52	558	749	1613	1	2363	4445
% Lights	98.7	98.0	-	98.4	99.6	91.2	98.8	98.7	99.4	100.0	99.2	98.8
Mediums	7	15	0	22	2	2	4	7	9	0	16	42
% Mediums	0.9	2.0	-	1.4	0.4	3.5	0.7	0.9	0.6	0.0	0.7	0.9
Articulated Trucks	3	0	0	3	0	3	3	3	1	0	4	10
% Articulated Trucks	0.4	0.0	-	0.2	0.0	5.3	0.5	0.4	0.1	0.0	0.2	0.2
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Turning Movement Peak Hour Data Plot (4:30 PM)

Study Name Morrison Rd & Tech Center Dr TMC
 Start Date 3/28/2017
 Start Time 7:00 AM

Lights

Start Time	Southwestbound			Northwestbound			Northeastbound			Southeastbound			Total
	Tech Center Dr			Morrison Rd			Tech Center Dr			Morrison Rd			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
7:00 AM	1	3	0	14	32	34	45	51	33	71	10	13	307
7:15 AM	2	6	0	8	45	45	42	32	27	119	22	14	362
7:30 AM	3	7	0	13	48	48	46	52	25	121	21	15	399
7:45 AM	8	7	1	25	66	48	56	73	38	115	38	35	510
8:00 AM	11	13	1	28	40	30	66	46	24	75	29	24	387
8:15 AM	3	6	3	17	45	33	35	43	15	70	32	32	334
8:30 AM	6	8	0	13	33	13	34	42	23	47	25	23	267
8:45 AM	7	10	2	11	36	31	43	47	19	44	28	20	298
4:00 PM	25	52	8	3	46	45	36	11	88	47	32	5	398
4:15 PM	23	22	3	2	46	42	51	13	107	31	21	7	368
4:30 PM	34	57	5	3	60	44	47	11	129	40	36	5	471
4:45 PM	13	55	0	1	45	38	54	15	110	30	35	4	400
5:00 PM	42	63	6	0	60	66	54	11	109	46	32	3	492
5:15 PM	19	46	1	3	64	34	69	8	153	42	39	3	481
5:30 PM	16	54	1	5	50	30	51	14	140	27	40	2	430
5:45 PM	21	24	3	5	29	31	69	10	123	13	34	4	366

Mediums

Start Time	Southwestbound			Northwestbound			Northeastbound			Southeastbound			Total
	Tech Center Dr			Morrison Rd			Tech Center Dr			Morrison Rd			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
7:00 AM	5	1	0	0	1	0	1	0	0	0	2	1	11
7:15 AM	1	0	0	0	3	2	0	0	0	0	0	3	9
7:30 AM	1	0	0	0	1	1	2	0	0	2	2	0	9
7:45 AM	0	0	0	0	2	3	1	2	0	0	0	2	10
8:00 AM	1	0	0	0	0	4	6	2	2	1	0	5	21
8:15 AM	0	1	0	0	0	4	2	3	0	1	3	8	22
8:30 AM	1	0	1	0	2	3	5	5	1	1	1	5	25
8:45 AM	1	2	0	0	4	2	4	4	1	2	0	3	23
4:00 PM	1	1	0	0	0	0	5	5	1	0	1	3	17
4:15 PM	0	1	0	0	1	3	3	2	2	1	0	1	14
4:30 PM	1	0	0	0	1	0	4	0	0	0	0	1	7
4:45 PM	0	0	0	0	0	0	8	0	1	0	2	0	11
5:00 PM	1	0	0	0	0	0	1	0	0	0	0	1	3
5:15 PM	0	1	0	0	1	0	1	0	1	1	0	0	5
5:30 PM	0	1	0	0	0	0	5	0	0	0	0	1	7
5:45 PM	2	0	0	1	0	0	2	0	0	0	0	0	5

Study Name Morrison Rd & Tech Center Dr TMC
 Start Date 3/28/2017
 Start Time 7:00 AM
 Articulated Trucks

Start Time	Southwestbound			Northwestbound			Northeastbound			Southeastbound			Total
	Tech Center Dr			Morrison Rd			Tech Center Dr			Morrison Rd			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
7:00 AM	0	0	0	0	0	1	1	0	0	0	0	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	1	1	0	0	1	0	1	0	4
8:00 AM	0	0	0	0	3	1	2	0	1	0	0	0	7
8:15 AM	0	0	0	0	1	5	0	0	0	1	0	0	7
8:30 AM	0	0	0	0	3	2	1	0	0	0	0	0	6
8:45 AM	0	0	0	0	1	2	3	0	0	0	1	0	7
4:00 PM	0	0	0	0	0	2	2	0	0	0	0	0	4
4:15 PM	0	0	0	0	1	3	2	0	0	1	1	0	8
4:30 PM	0	0	0	0	0	1	3	0	0	0	0	0	4
4:45 PM	0	0	0	0	0	1	1	0	1	0	0	0	3
5:00 PM	0	0	0	0	0	1	1	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	1	0	0	0	1	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	1
5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1

Total Vehicles

AM Peak

Start Time	Southwestbound			Northwestbound			Northeastbound			Southeastbound		
	Tech Center Dr			Morrison Rd			Tech Center Dr			Morrison Rd		
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left
7:15 AM	27	33	2	74	209	184	221	207	118	433	113	98

PM Peak

Start Time	Southwestbound			Northwestbound			Northeastbound			Southeastbound		
	Tech Center Dr			Morrison Rd			Tech Center Dr			Morrison Rd		
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left
4:30 PM	110	222	12	7	231	185	244	45	504	159	145	17

Study Name N Hamilton Rd & E Johnstown Rd TMC
 Start Date 3/28/2017
 Start Time 7:00 AM

Lights

Start Time	Southbound			Southwestbound			Northbound			Northeastbound			Total
	N Hamilton Rd			E Johnstown Rd			N Hamilton Rd			E Johnstown Rd			
	Bear Right	Thru	Hard Left	Hard Right	Thru	Bear Left	Bear Right	Thru	Hard Left	Hard Right	Thru	Bear Left	
7:00 AM	54	76	1	3	98	53	15	48	1	13	21	18	401
7:15 AM	54	119	2	2	106	64	21	84	5	15	43	25	540
7:30 AM	81	101	3	4	86	35	26	70	2	7	37	32	484
7:45 AM	65	116	3	7	92	55	41	93	1	6	50	42	571
8:00 AM	54	113	3	7	67	31	37	80	2	5	33	50	482
8:15 AM	58	102	12	10	67	41	25	105	1	6	35	54	516
8:30 AM	50	100	6	3	79	39	35	80	5	3	37	36	473
8:45 AM	55	51	6	1	79	32	41	85	10	5	50	40	455
4:00 PM	52	113	4	7	37	45	47	130	4	9	80	78	606
4:15 PM	44	111	3	1	49	44	45	128	6	6	72	78	587
4:30 PM	42	130	6	10	27	44	51	130	7	38	72	46	603
4:45 PM	15	156	0	12	8	80	40	166	4	24	96	71	672
5:00 PM	52	118	6	10	34	62	49	146	7	3	102	86	675
5:15 PM	69	138	4	5	67	64	57	182	5	4	97	89	781
5:30 PM	59	105	6	4	51	48	67	186	2	9	78	80	695
5:45 PM	61	124	2	3	67	39	46	160	6	4	102	81	695

Mediums

Start Time	Southbound			Southwestbound			Northbound			Northeastbound			Total
	N Hamilton Rd			E Johnstown Rd			N Hamilton Rd			E Johnstown Rd			
	Bear Right	Thru	Hard Left	Hard Right	Thru	Bear Left	Bear Right	Thru	Hard Left	Hard Right	Thru	Bear Left	
7:00 AM	0	1	1	0	0	1	1	0	0	0	4	0	8
7:15 AM	1	5	0	0	0	0	0	1	0	0	0	0	7
7:30 AM	0	1	0	0	1	1	2	4	0	0	1	0	10
7:45 AM	0	4	1	0	2	1	0	4	0	0	1	1	14
8:00 AM	2	1	0	0	2	0	0	1	0	0	5	2	13
8:15 AM	6	6	0	0	1	2	2	4	0	0	3	2	26
8:30 AM	0	3	0	0	2	0	2	2	0	0	0	0	9
8:45 AM	1	3	0	0	2	0	2	4	1	0	3	0	16
4:00 PM	0	0	0	0	1	1	0	2	0	0	2	1	7
4:15 PM	0	1	0	0	1	0	1	0	0	0	0	1	4
4:30 PM	1	3	0	0	1	1	2	2	0	0	1	0	11
4:45 PM	0	2	0	0	0	0	0	0	0	0	1	0	3
5:00 PM	1	1	0	0	1	0	1	1	0	0	0	0	5
5:15 PM	0	1	0	1	0	1	1	0	0	0	0	0	4
5:30 PM	0	0	0	0	0	0	1	1	0	0	0	0	2
5:45 PM	0	2	0	0	0	0	1	0	0	0	1	0	4

Study Name N Hamilton Rd & E Johnstown Rd TMC
 Start Date 3/28/2017
 Start Time 7:00 AM
 Articulated Trucks

Start Time	Southbound			Southwestbound			Northbound			Northeastbound			Total
	N Hamilton Rd			E Johnstown Rd			N Hamilton Rd			E Johnstown Rd			
	Bear Right	Thru	Hard Left	Hard Right	Thru	Bear Left	Bear Right	Thru	Hard Left	Hard Right	Thru	Bear Left	
7:00 AM	0	0	0	0	0	0	1	0	0	0	1	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:30 AM	2	0	0	0	0	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	1
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0

Total Vehicles

AM Peak

Start Time	Southbound			Southwestbound			Northbound			Northeastbound		
	N Hamilton Rd			E Johnstown Rd			N Hamilton Rd			E Johnstown Rd		
	Bear Right	Thru	Hard Left	Hard Right	Thru	Bear Left	Bear Right	Thru	Hard Left	Hard Right	Thru	Bear Left
7:15 AM	257	460	12	20	356	187	127	337	10	33	170	152

PM Peak

Start Time	Southbound			Southwestbound			Northbound			Northeastbound		
	N Hamilton Rd			E Johnstown Rd			N Hamilton Rd			E Johnstown Rd		
	Bear Right	Thru	Hard Left	Hard Right	Thru	Bear Left	Bear Right	Thru	Hard Left	Hard Right	Thru	Bear Left
5:00 PM	242	489	18	23	220	214	223	676	20	20	380	336

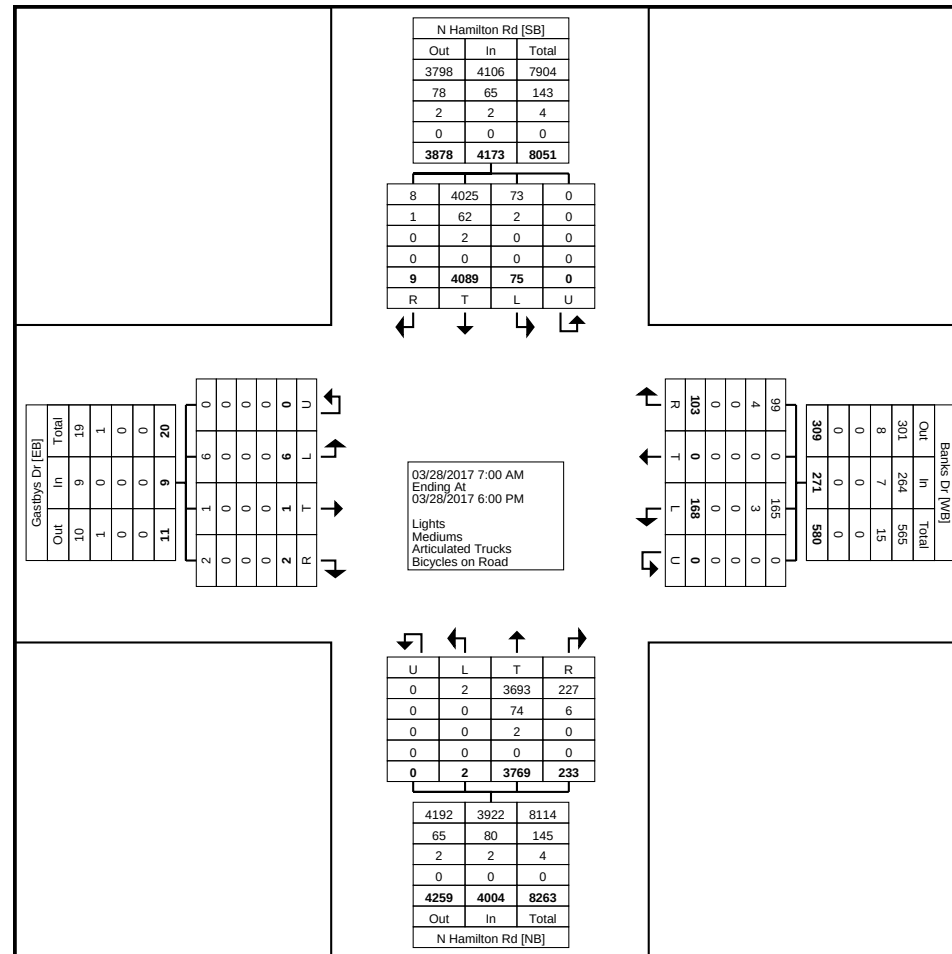
Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive

Columbus, Ohio, United States 43229
614 656 2419 dlaurent@cmtran.com

Count Name: N Hamilton Rd & Banks Dr TMC
Site Code:
Start Date: 03/28/2017
Page No: 1

Turning Movement Data

Start Time	N Hamilton Rd Southbound					Banks Dr Westbound					N Hamilton Rd Northbound					Gastbys Dr Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
7:00 AM	0	307	2	0	309	2	0	5	0	7	5	82	0	0	87	0	0	0	0	0	403
7:15 AM	0	428	1	0	429	2	0	2	0	4	8	156	0	0	164	0	0	0	0	0	597
7:30 AM	0	308	0	0	308	1	0	2	0	3	3	175	0	0	178	0	0	0	0	0	489
7:45 AM	0	293	4	0	297	1	0	3	0	4	7	144	0	0	151	0	0	0	0	0	452
Hourly Total	0	1336	7	0	1343	6	0	12	0	18	23	557	0	0	580	0	0	0	0	0	1941
8:00 AM	2	288	5	0	295	2	0	6	0	8	7	181	0	0	188	0	0	0	0	0	491
8:15 AM	0	257	6	0	263	6	0	4	0	10	6	150	0	0	156	0	0	0	0	0	429
8:30 AM	1	225	6	0	232	2	0	1	0	3	11	152	0	0	163	0	1	0	0	1	399
8:45 AM	0	178	6	0	184	2	0	6	0	8	16	151	0	0	167	0	0	0	0	0	359
Hourly Total	3	948	23	0	974	12	0	17	0	29	40	634	0	0	674	0	1	0	0	1	1678
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	220	3	0	223	5	0	16	0	21	16	291	0	0	307	1	0	0	0	1	552
4:15 PM	0	191	8	0	199	5	0	19	0	24	19	284	0	0	303	0	0	1	0	1	527
4:30 PM	1	233	5	0	239	10	0	12	0	22	28	305	0	0	333	0	0	0	0	0	594
4:45 PM	1	271	5	0	277	16	0	20	0	36	16	303	1	0	320	0	0	1	0	1	634
Hourly Total	2	915	21	0	938	36	0	67	0	103	79	1183	1	0	1263	1	0	2	0	3	2307
5:00 PM	0	223	6	0	229	9	0	13	0	22	20	333	1	0	354	0	0	0	0	0	605
5:15 PM	2	251	5	0	258	14	0	22	0	36	21	344	0	0	365	0	0	0	0	0	659
5:30 PM	1	200	5	0	206	9	0	12	0	21	29	380	0	0	409	0	0	3	0	3	639
5:45 PM	1	216	8	0	225	17	0	25	0	42	21	338	0	0	359	1	0	1	0	2	628
Hourly Total	4	890	24	0	918	49	0	72	0	121	91	1395	1	0	1487	1	0	4	0	5	2531
Grand Total	9	4089	75	0	4173	103	0	168	0	271	233	3769	2	0	4004	2	1	6	0	9	8457
Approach %	0.2	98.0	1.8	0.0	-	38.0	0.0	62.0	0.0	-	5.8	94.1	0.0	0.0	-	22.2	11.1	66.7	0.0	-	-
Total %	0.1	48.4	0.9	0.0	49.3	1.2	0.0	2.0	0.0	3.2	2.8	44.6	0.0	0.0	47.3	0.0	0.0	0.1	0.0	0.1	-
Lights	8	4025	73	0	4106	99	0	165	0	264	227	3693	2	0	3922	2	1	6	0	9	8301
% Lights	88.9	98.4	97.3	-	98.4	96.1	-	98.2	-	97.4	97.4	98.0	100.0	-	98.0	100.0	100.0	100.0	-	100.0	98.2
Mediums	1	62	2	0	65	4	0	3	0	7	6	74	0	0	80	0	0	0	0	0	152
% Mediums	11.1	1.5	2.7	-	1.6	3.9	-	1.8	-	2.6	2.6	2.0	0.0	-	2.0	0.0	0.0	0.0	-	0.0	1.8
Articulated Trucks	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	4
% Articulated Trucks	0.0	0.0	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	0.1	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0



Turning Movement Data Plot

Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive

Columbus, Ohio, United States 43229
614 656 2419 dlaurent@cmtran.com

Count Name: N Hamilton Rd & Banks Dr TMC
Site Code:
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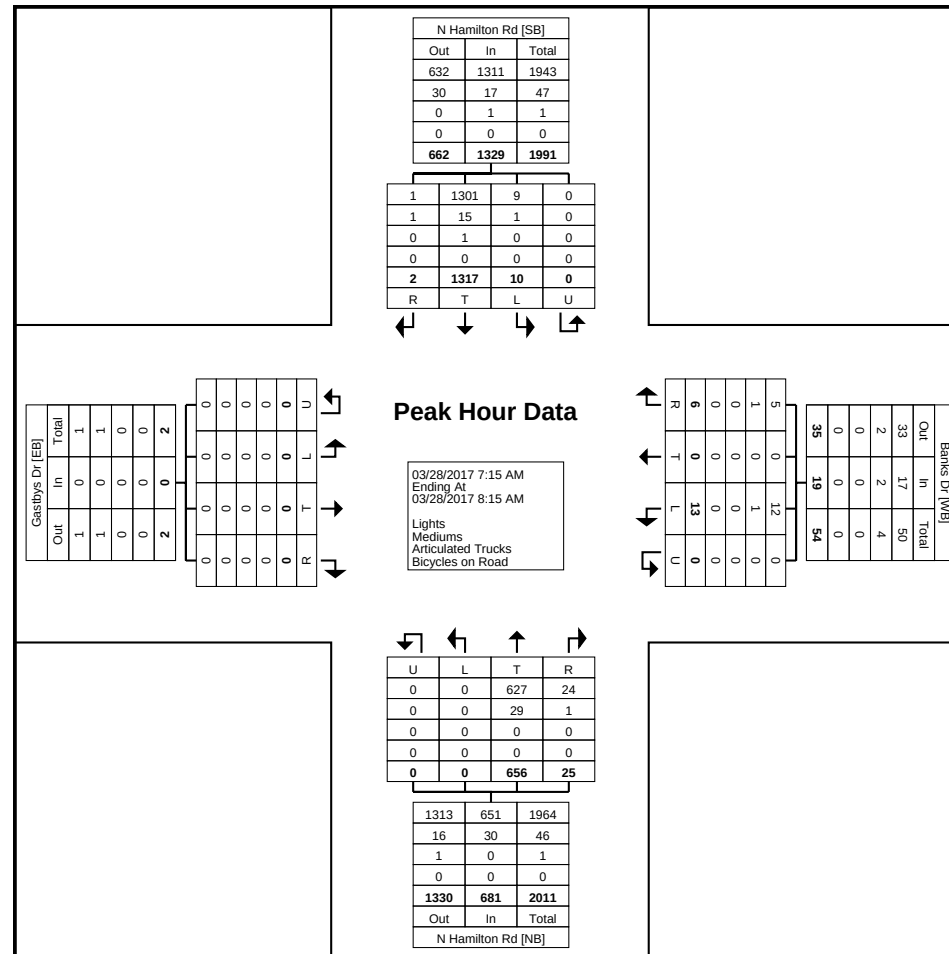
Turning Movement Peak Hour Data (7:15 AM)

Start Time	N Hamilton Rd Southbound					Banks Dr Westbound					N Hamilton Rd Northbound					Gastbys Dr Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
7:15 AM	0	428	1	0	429	2	0	2	0	4	8	156	0	0	164	0	0	0	0	0	597
7:30 AM	0	308	0	0	308	1	0	2	0	3	3	175	0	0	178	0	0	0	0	0	489
7:45 AM	0	293	4	0	297	1	0	3	0	4	7	144	0	0	151	0	0	0	0	0	452
8:00 AM	2	288	5	0	295	2	0	6	0	8	7	181	0	0	188	0	0	0	0	0	491
Total	2	1317	10	0	1329	6	0	13	0	19	25	656	0	0	681	0	0	0	0	0	2029
Approach %	0.2	99.1	0.8	0.0	-	31.6	0.0	68.4	0.0	-	3.7	96.3	0.0	0.0	-	NaN	NaN	NaN	NaN	-	-
Total %	0.1	64.9	0.5	0.0	65.5	0.3	0.0	0.6	0.0	0.9	1.2	32.3	0.0	0.0	33.6	0.0	0.0	0.0	0.0	0.0	-
PHF	0.250	0.769	0.500	0.000	0.774	0.750	0.000	0.542	0.000	0.594	0.781	0.906	0.000	0.000	0.906	0.000	0.000	0.000	0.000	0.000	0.850
Lights	1	1301	9	0	1311	5	0	12	0	17	24	627	0	0	651	0	0	0	0	0	1979
% Lights	50.0	98.8	90.0	-	98.6	83.3	-	92.3	-	89.5	96.0	95.6	-	-	95.6	-	-	-	-	-	97.5
Mediums	1	15	1	0	17	1	0	1	0	2	1	29	0	0	30	0	0	0	0	0	49
% Mediums	50.0	1.1	10.0	-	1.3	16.7	-	7.7	-	10.5	4.0	4.4	-	-	4.4	-	-	-	-	-	2.4
Articulated Trucks	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Articulated Trucks	0.0	0.1	0.0	-	0.1	0.0	-	0.0	-	0.0	0.0	0.0	-	-	0.0	-	-	-	-	-	0.0
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	-	0.0	-	-	-	-	-	0.0

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Carpenter Marty (CM) Transportation Inc.
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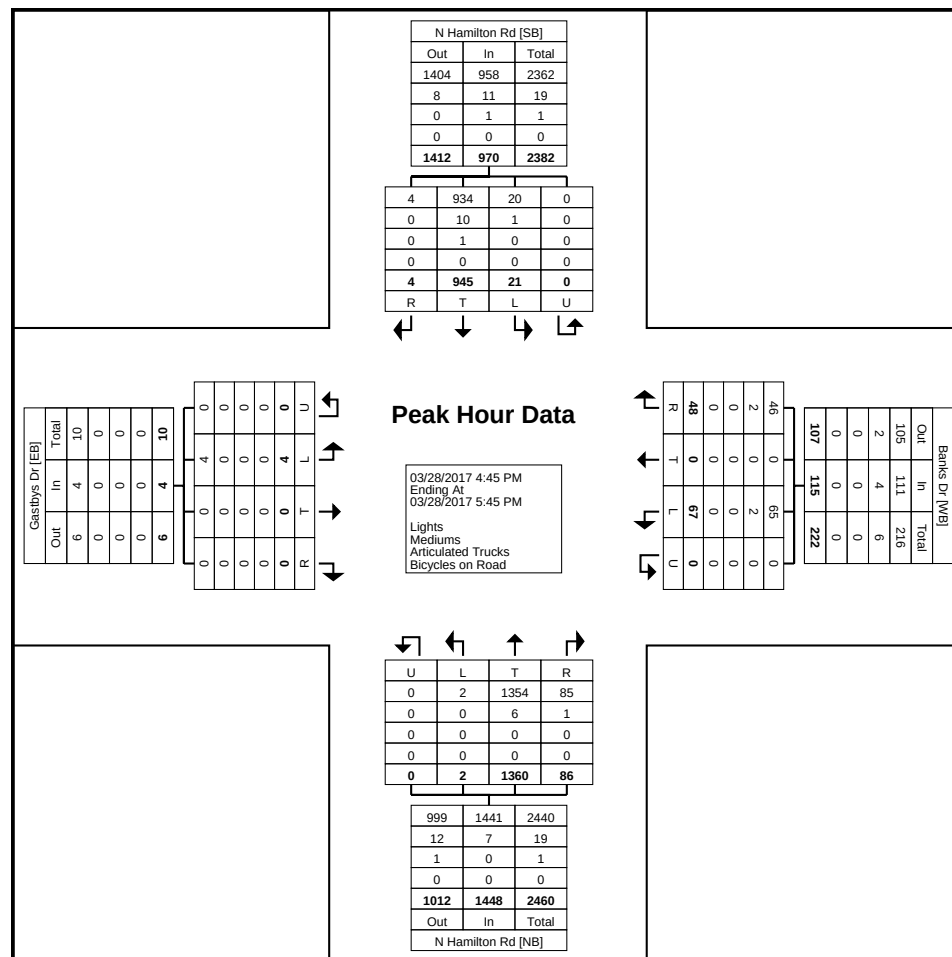
Count Name: N Hamilton Rd & Banks Dr TMC
Site Code:
Start Date: 03/28/2017
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Turning Movement Peak Hour Data (4:45 PM)

Start Time	N Hamilton Rd Southbound					Banks Dr Westbound					N Hamilton Rd Northbound					Gastbys Dr Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
4:45 PM	1	271	5	0	277	16	0	20	0	36	16	303	1	0	320	0	0	1	0	1	634
5:00 PM	0	223	6	0	229	9	0	13	0	22	20	333	1	0	354	0	0	0	0	0	605
5:15 PM	2	251	5	0	258	14	0	22	0	36	21	344	0	0	365	0	0	0	0	0	659
5:30 PM	1	200	5	0	206	9	0	12	0	21	29	380	0	0	409	0	0	3	0	3	639
Total	4	945	21	0	970	48	0	67	0	115	86	1360	2	0	1448	0	0	4	0	4	2537
Approach %	0.4	97.4	2.2	0.0	-	41.7	0.0	58.3	0.0	-	5.9	93.9	0.1	0.0	-	0.0	0.0	100.0	0.0	-	-
Total %	0.2	37.2	0.8	0.0	38.2	1.9	0.0	2.6	0.0	4.5	3.4	53.6	0.1	0.0	57.1	0.0	0.0	0.2	0.0	0.2	-
PHF	0.500	0.872	0.875	0.000	0.875	0.750	0.000	0.761	0.000	0.799	0.741	0.895	0.500	0.000	0.885	0.000	0.000	0.333	0.000	0.333	0.962
Lights	4	934	20	0	958	46	0	65	0	111	85	1354	2	0	1441	0	0	4	0	4	2514
% Lights	100.0	98.8	95.2	-	98.8	95.8	-	97.0	-	96.5	98.8	99.6	100.0	-	99.5	-	-	100.0	-	100.0	99.1
Mediums	0	10	1	0	11	2	0	2	0	4	1	6	0	0	7	0	0	0	0	0	22
% Mediums	0.0	1.1	4.8	-	1.1	4.2	-	3.0	-	3.5	1.2	0.4	0.0	-	0.5	-	-	0.0	-	0.0	0.9
Articulated Trucks	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Articulated Trucks	0.0	0.1	0.0	-	0.1	0.0	-	0.0	-	0.0	0.0	0.0	0.0	-	0.0	-	-	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	0.0	0.0	-	0.0	-	-	0.0	-	0.0	0.0

Columbus, Ohio, United States 43229
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Count Name: N Hamilton Rd & Banks Dr TMC
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Turning Movement Peak Hour Data Plot (4:45 PM)

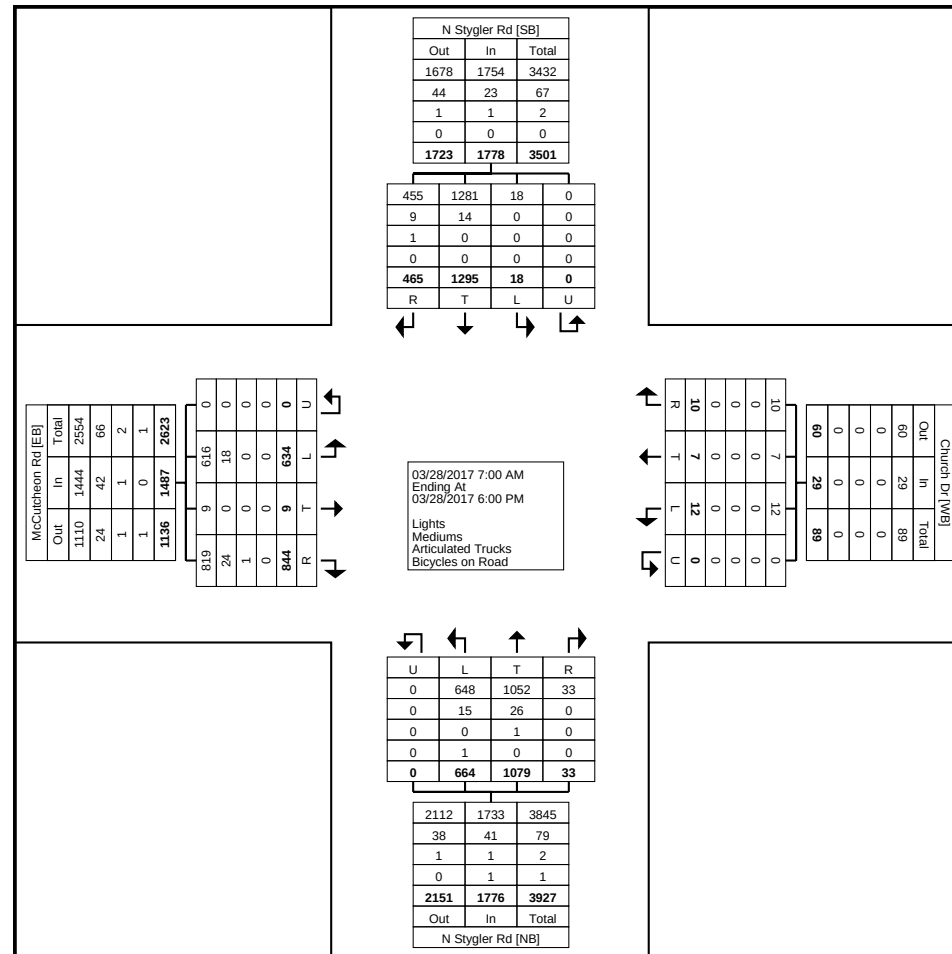
Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive

Columbus, Ohio, United States 43229
614 656 2419 dlaurent@cmtran.com

Count Name: N Stygler Rd & McCutcheon Rd
TMC
Site Code:
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Turning Movement Data

Start Time	N Stygler Rd Southbound					Church Dr Westbound					N Stygler Rd Northbound					McCutcheon Rd Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
7:00 AM	22	109	0	0	131	0	0	0	0	0	1	14	22	0	37	44	0	7	0	51	219
7:15 AM	30	108	0	0	138	0	0	0	0	0	1	31	33	0	65	45	0	10	0	55	258
7:30 AM	53	103	2	0	158	0	1	0	0	1	2	49	32	0	83	51	0	16	0	67	309
7:45 AM	47	91	2	0	140	0	0	0	0	0	1	65	43	0	109	31	0	10	0	41	290
Hourly Total	152	411	4	0	567	0	1	0	0	1	5	159	130	0	294	171	0	43	0	214	1076
8:00 AM	45	105	1	0	151	1	1	1	0	3	3	63	53	0	119	39	0	18	0	57	330
8:15 AM	39	84	1	0	124	1	0	1	0	2	3	50	43	0	96	58	0	18	0	76	298
8:30 AM	33	58	0	0	91	1	0	1	0	2	3	45	44	0	92	39	1	18	0	58	243
8:45 AM	33	69	1	0	103	0	0	1	0	1	3	40	33	0	76	19	0	17	0	36	216
Hourly Total	150	316	3	0	469	3	1	4	0	8	12	198	173	0	383	155	1	71	0	227	1087
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	17	52	0	0	69	1	0	1	0	2	1	77	42	0	120	44	0	44	0	88	279
4:15 PM	20	56	0	0	76	0	0	0	0	0	1	93	45	0	139	52	0	50	0	102	317
4:30 PM	25	64	1	0	90	1	0	0	0	1	0	87	46	0	133	55	0	66	0	121	345
4:45 PM	16	61	3	0	80	0	0	0	0	0	5	85	48	0	138	84	2	70	0	156	374
Hourly Total	78	233	4	0	315	2	0	1	0	3	7	342	181	0	530	235	2	230	0	467	1315
5:00 PM	17	94	1	0	112	1	2	1	0	4	0	95	36	0	131	78	0	73	0	151	398
5:15 PM	29	86	2	0	117	2	1	2	0	5	1	105	52	0	158	75	1	72	0	148	428
5:30 PM	16	90	4	0	110	2	1	2	0	5	3	95	50	0	148	60	3	86	0	149	412
5:45 PM	23	65	0	0	88	0	1	2	0	3	5	85	42	0	132	70	2	59	0	131	354
Hourly Total	85	335	7	0	427	5	5	7	0	17	9	380	180	0	569	283	6	290	0	579	1592
Grand Total	465	1295	18	0	1778	10	7	12	0	29	33	1079	664	0	1776	844	9	634	0	1487	5070
Approach %	26.2	72.8	1.0	0.0	-	34.5	24.1	41.4	0.0	-	1.9	60.8	37.4	0.0	-	56.8	0.6	42.6	0.0	-	-
Total %	9.2	25.5	0.4	0.0	35.1	0.2	0.1	0.2	0.0	0.6	0.7	21.3	13.1	0.0	35.0	16.6	0.2	12.5	0.0	29.3	-
Lights	455	1281	18	0	1754	10	7	12	0	29	33	1052	648	0	1733	819	9	616	0	1444	4960
% Lights	97.8	98.9	100.0	-	98.7	100.0	100.0	100.0	-	100.0	100.0	97.5	97.6	-	97.6	97.0	100.0	97.2	-	97.1	97.8
Mediums	9	14	0	0	23	0	0	0	0	0	0	26	15	0	41	24	0	18	0	42	106
% Mediums	1.9	1.1	0.0	-	1.3	0.0	0.0	0.0	-	0.0	0.0	2.4	2.3	-	2.3	2.8	0.0	2.8	-	2.8	2.1
Articulated Trucks	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	3
% Articulated Trucks	0.2	0.0	0.0	-	0.1	0.0	0.0	0.0	-	0.0	0.0	0.1	0.0	-	0.1	0.1	0.0	0.0	-	0.1	0.1
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.2	-	0.1	0.0	0.0	0.0	-	0.0	0.0



Turning Movement Data Plot

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Count Name: N Stygler Rd & McCutcheon Rd
TMC
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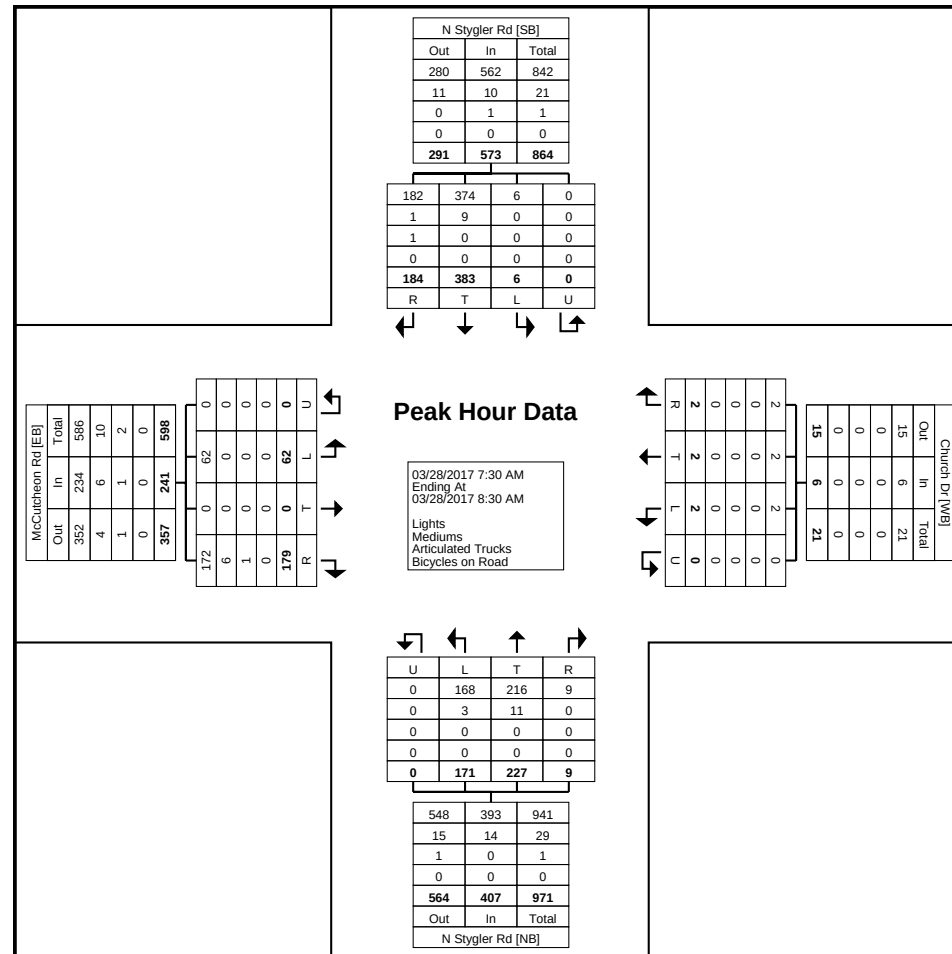
Turning Movement Peak Hour Data (7:30 AM)

Start Time	N Stygler Rd Southbound					Church Dr Westbound					N Stygler Rd Northbound					McCutcheon Rd Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
7:30 AM	53	103	2	0	158	0	1	0	0	1	2	49	32	0	83	51	0	16	0	67	309
7:45 AM	47	91	2	0	140	0	0	0	0	0	1	65	43	0	109	31	0	10	0	41	290
8:00 AM	45	105	1	0	151	1	1	1	0	3	3	63	53	0	119	39	0	18	0	57	330
8:15 AM	39	84	1	0	124	1	0	1	0	2	3	50	43	0	96	58	0	18	0	76	298
Total	184	383	6	0	573	2	2	2	0	6	9	227	171	0	407	179	0	62	0	241	1227
Approach %	32.1	66.8	1.0	0.0	-	33.3	33.3	33.3	0.0	-	2.2	55.8	42.0	0.0	-	74.3	0.0	25.7	0.0	-	-
Total %	15.0	31.2	0.5	0.0	46.7	0.2	0.2	0.2	0.0	0.5	0.7	18.5	13.9	0.0	33.2	14.6	0.0	5.1	0.0	19.6	-
PHF	0.868	0.912	0.750	0.000	0.907	0.500	0.500	0.500	0.000	0.500	0.750	0.873	0.807	0.000	0.855	0.772	0.000	0.861	0.000	0.793	0.930
Lights	182	374	6	0	562	2	2	2	0	6	9	216	168	0	393	172	0	62	0	234	1195
% Lights	98.9	97.7	100.0	-	98.1	100.0	100.0	100.0	-	100.0	100.0	95.2	98.2	-	96.6	96.1	-	100.0	-	97.1	97.4
Mediums	1	9	0	0	10	0	0	0	0	0	0	11	3	0	14	6	0	0	0	6	30
% Mediums	0.5	2.3	0.0	-	1.7	0.0	0.0	0.0	-	0.0	0.0	4.8	1.8	-	3.4	3.4	-	0.0	-	2.5	2.4
Articulated Trucks	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
% Articulated Trucks	0.5	0.0	0.0	-	0.2	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.6	-	0.0	-	0.4	0.2
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0

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Turning Movement Peak Hour Data Plot (7:30 AM)

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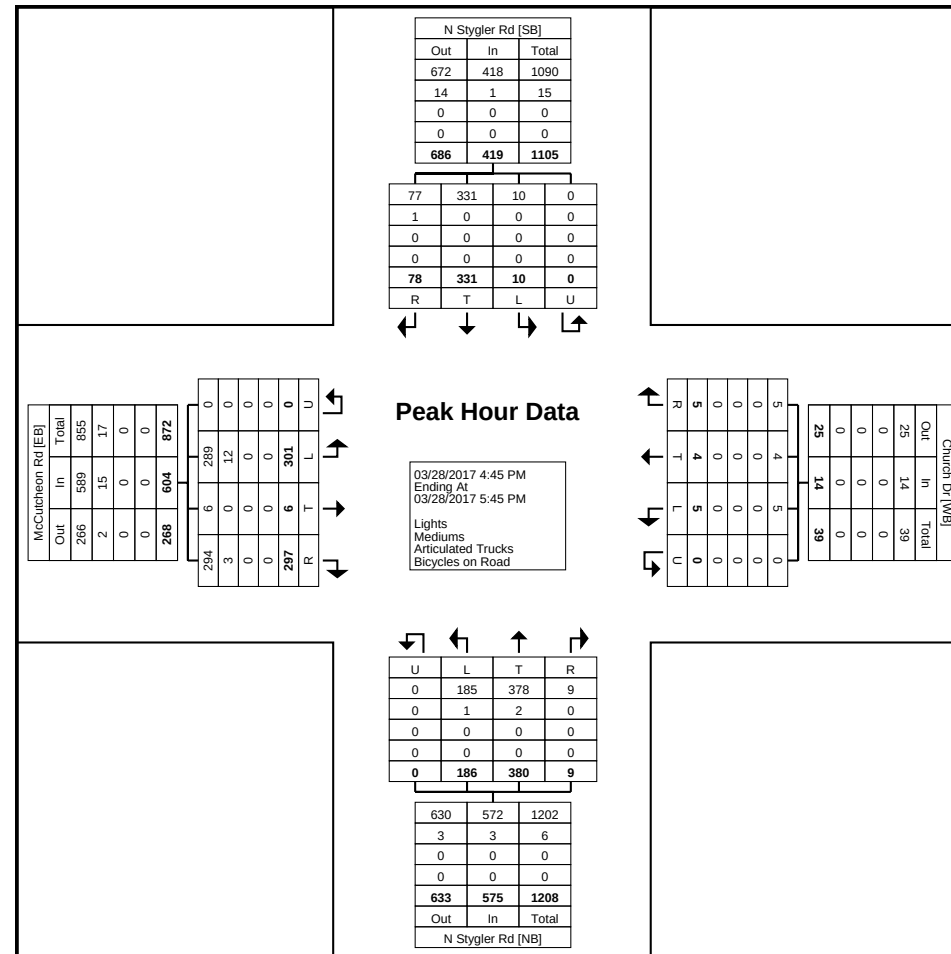
Count Name: N Stygler Rd & McCutcheon Rd
TMC
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Turning Movement Peak Hour Data (4:45 PM)

Start Time	N Stygler Rd Southbound					Church Dr Westbound					N Stygler Rd Northbound					McCutcheon Rd Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
4:45 PM	16	61	3	0	80	0	0	0	0	0	5	85	48	0	138	84	2	70	0	156	374
5:00 PM	17	94	1	0	112	1	2	1	0	4	0	95	36	0	131	78	0	73	0	151	398
5:15 PM	29	86	2	0	117	2	1	2	0	5	1	105	52	0	158	75	1	72	0	148	428
5:30 PM	16	90	4	0	110	2	1	2	0	5	3	95	50	0	148	60	3	86	0	149	412
Total	78	331	10	0	419	5	4	5	0	14	9	380	186	0	575	297	6	301	0	604	1612
Approach %	18.6	79.0	2.4	0.0	-	35.7	28.6	35.7	0.0	-	1.6	66.1	32.3	0.0	-	49.2	1.0	49.8	0.0	-	-
Total %	4.8	20.5	0.6	0.0	26.0	0.3	0.2	0.3	0.0	0.9	0.6	23.6	11.5	0.0	35.7	18.4	0.4	18.7	0.0	37.5	-
PHF	0.672	0.880	0.625	0.000	0.895	0.625	0.500	0.625	0.000	0.700	0.450	0.905	0.894	0.000	0.910	0.884	0.500	0.875	0.000	0.968	0.942
Lights	77	331	10	0	418	5	4	5	0	14	9	378	185	0	572	294	6	289	0	589	1593
% Lights	98.7	100.0	100.0	-	99.8	100.0	100.0	100.0	-	100.0	100.0	99.5	99.5	-	99.5	99.0	100.0	96.0	-	97.5	98.8
Mediums	1	0	0	0	1	0	0	0	0	0	0	2	1	0	3	3	0	12	0	15	19
% Mediums	1.3	0.0	0.0	-	0.2	0.0	0.0	0.0	-	0.0	0.0	0.5	0.5	-	0.5	1.0	0.0	4.0	-	2.5	1.2
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Articulated Trucks	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0

Columbus, Ohio, United States 43229
614 656 2419 dlaurent@cmtran.com

Count Name: N Stygler Rd & McCutcheon Rd
TMC
Site Code:
Start Date: 03/28/2017
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Turning Movement Peak Hour Data Plot (4:45 PM)

Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive

Columbus, Ohio, United States 43229
614 656 2419 dlaurent@cmtran.com

Count Name: S Hamilton Rd & Granville St TMC
Site Code:
Start Date: 03/28/2017
Page No: 1

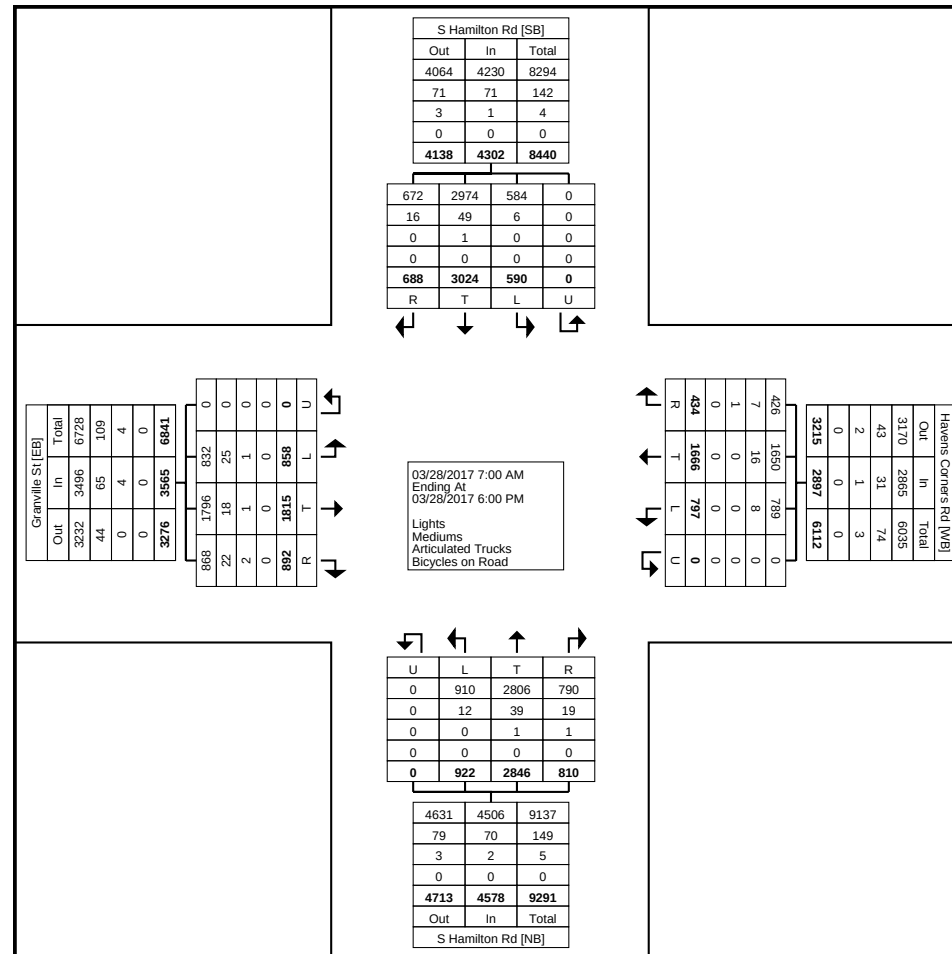
Turning Movement Data

Start Time	S Hamilton Rd Southbound					Havens Corners Rd Westbound					S Hamilton Rd Northbound					Granville St Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
7:00 AM	44	214	52	0	310	9	164	64	0	237	36	77	46	0	159	39	49	15	0	103	809
7:15 AM	51	244	75	0	370	24	139	71	0	234	71	135	53	0	259	35	103	20	0	158	1021
7:30 AM	37	225	33	0	295	22	145	81	0	248	47	140	66	0	253	35	71	23	0	129	925
7:45 AM	47	244	19	0	310	20	126	55	0	201	59	112	45	0	216	41	60	28	0	129	856
Hourly Total	179	927	179	0	1285	75	574	271	0	920	213	464	210	0	887	150	283	86	0	519	3611
8:00 AM	44	216	25	0	285	19	120	56	0	195	19	139	25	0	183	50	41	32	0	123	786
8:15 AM	47	177	29	0	253	16	113	65	0	194	18	117	37	0	172	44	42	28	0	114	733
8:30 AM	44	170	18	0	232	27	129	56	0	212	11	114	34	0	159	44	33	33	0	110	713
8:45 AM	29	145	13	0	187	17	83	58	0	158	13	132	41	0	186	30	41	22	0	93	624
Hourly Total	164	708	85	0	957	79	445	235	0	759	61	502	137	0	700	168	157	115	0	440	2856
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	32	180	42	0	254	36	64	29	0	129	57	207	79	0	343	58	147	63	0	268	994
4:15 PM	33	149	38	0	220	34	83	35	0	152	57	214	62	0	333	78	185	76	0	339	1044
4:30 PM	59	182	21	0	262	22	69	33	0	124	67	248	64	0	379	60	179	80	0	319	1084
4:45 PM	70	187	41	0	298	41	84	37	0	162	82	208	75	0	365	71	214	72	0	357	1182
Hourly Total	194	698	142	0	1034	133	300	134	0	567	263	877	280	0	1420	267	725	291	0	1283	4304
5:00 PM	45	173	44	0	262	39	85	36	0	160	71	252	61	0	384	65	157	83	0	305	1111
5:15 PM	39	187	46	0	272	32	86	37	0	155	56	232	78	0	366	83	186	104	0	373	1166
5:30 PM	30	171	36	0	237	41	77	47	0	165	83	281	72	0	436	85	148	91	0	324	1162
5:45 PM	37	160	58	0	255	35	99	37	0	171	63	238	84	0	385	74	159	88	0	321	1132
Hourly Total	151	691	184	0	1026	147	347	157	0	651	273	1003	295	0	1571	307	650	366	0	1323	4571
Grand Total	688	3024	590	0	4302	434	1666	797	0	2897	810	2846	922	0	4578	892	1815	858	0	3565	15342
Approach %	16.0	70.3	13.7	0.0	-	15.0	57.5	27.5	0.0	-	17.7	62.2	20.1	0.0	-	25.0	50.9	24.1	0.0	-	-
Total %	4.5	19.7	3.8	0.0	28.0	2.8	10.9	5.2	0.0	18.9	5.3	18.6	6.0	0.0	29.8	5.8	11.8	5.6	0.0	23.2	-
Lights	672	2974	584	0	4230	426	1650	789	0	2865	790	2806	910	0	4506	868	1796	832	0	3496	15097
% Lights	97.7	98.3	99.0	-	98.3	98.2	99.0	99.0	-	98.9	97.5	98.6	98.7	-	98.4	97.3	99.0	97.0	-	98.1	98.4
Mediums	16	49	6	0	71	7	16	8	0	31	19	39	12	0	70	22	18	25	0	65	237
% Mediums	2.3	1.6	1.0	-	1.7	1.6	1.0	1.0	-	1.1	2.3	1.4	1.3	-	1.5	2.5	1.0	2.9	-	1.8	1.5
Articulated Trucks	0	1	0	0	1	1	0	0	0	1	1	1	0	0	2	2	1	1	0	4	8
% Articulated Trucks	0.0	0.0	0.0	-	0.0	0.2	0.0	0.0	-	0.0	0.1	0.0	0.0	-	0.0	0.2	0.1	0.1	-	0.1	0.1
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0

Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive

Columbus, Ohio, United States 43229
614 656 2419 dlaurent@cmtran.com

Count Name: S Hamilton Rd & Granville St TMC
Site Code:
Start Date: 03/28/2017
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Turning Movement Data Plot

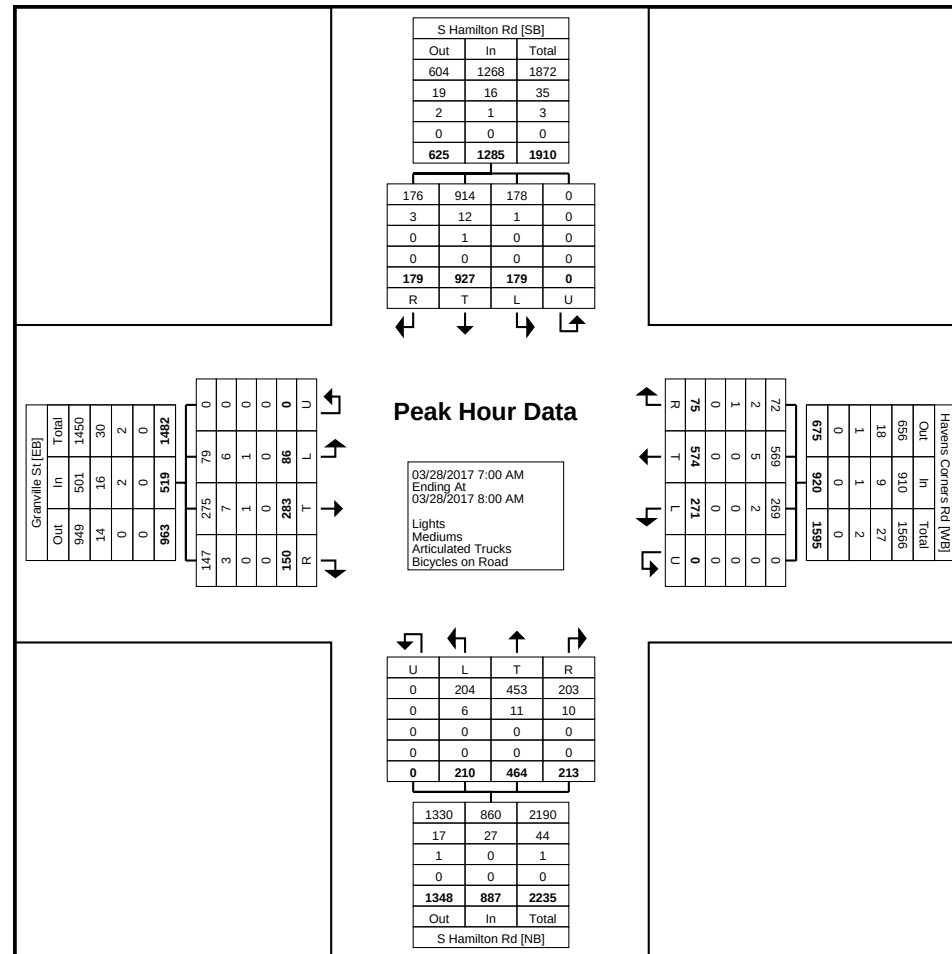
Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive

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Count Name: S Hamilton Rd & Granville St TMC
Site Code:
Start Date: 03/28/2017
Page No: 3

Turning Movement Peak Hour Data (7:00 AM)

Start Time	S Hamilton Rd Southbound					Havens Corners Rd Westbound					S Hamilton Rd Northbound					Granville St Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
7:00 AM	44	214	52	0	310	9	164	64	0	237	36	77	46	0	159	39	49	15	0	103	809
7:15 AM	51	244	75	0	370	24	139	71	0	234	71	135	53	0	259	35	103	20	0	158	1021
7:30 AM	37	225	33	0	295	22	145	81	0	248	47	140	66	0	253	35	71	23	0	129	925
7:45 AM	47	244	19	0	310	20	126	55	0	201	59	112	45	0	216	41	60	28	0	129	856
Total	179	927	179	0	1285	75	574	271	0	920	213	464	210	0	887	150	283	86	0	519	3611
Approach %	13.9	72.1	13.9	0.0	-	8.2	62.4	29.5	0.0	-	24.0	52.3	23.7	0.0	-	28.9	54.5	16.6	0.0	-	-
Total %	5.0	25.7	5.0	0.0	35.6	2.1	15.9	7.5	0.0	25.5	5.9	12.8	5.8	0.0	24.6	4.2	7.8	2.4	0.0	14.4	-
PHF	0.877	0.950	0.597	0.000	0.868	0.781	0.875	0.836	0.000	0.927	0.750	0.829	0.795	0.000	0.856	0.915	0.687	0.768	0.000	0.821	0.884
Lights	176	914	178	0	1268	72	569	269	0	910	203	453	204	0	860	147	275	79	0	501	3539
% Lights	98.3	98.6	99.4	-	98.7	96.0	99.1	99.3	-	98.9	95.3	97.6	97.1	-	97.0	98.0	97.2	91.9	-	96.5	98.0
Mediums	3	12	1	0	16	2	5	2	0	9	10	11	6	0	27	3	7	6	0	16	68
% Mediums	1.7	1.3	0.6	-	1.2	2.7	0.9	0.7	-	1.0	4.7	2.4	2.9	-	3.0	2.0	2.5	7.0	-	3.1	1.9
Articulated Trucks	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0	0	1	1	0	2	4
% Articulated Trucks	0.0	0.1	0.0	-	0.1	1.3	0.0	0.0	-	0.1	0.0	0.0	0.0	-	0.0	0.0	0.4	1.2	-	0.4	0.1
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0



Turning Movement Peak Hour Data Plot (7:00 AM)

Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive

Columbus, Ohio, United States 43229
614 656 2419 dlaurent@cmtran.com

Count Name: S Hamilton Rd & Granville St TMC
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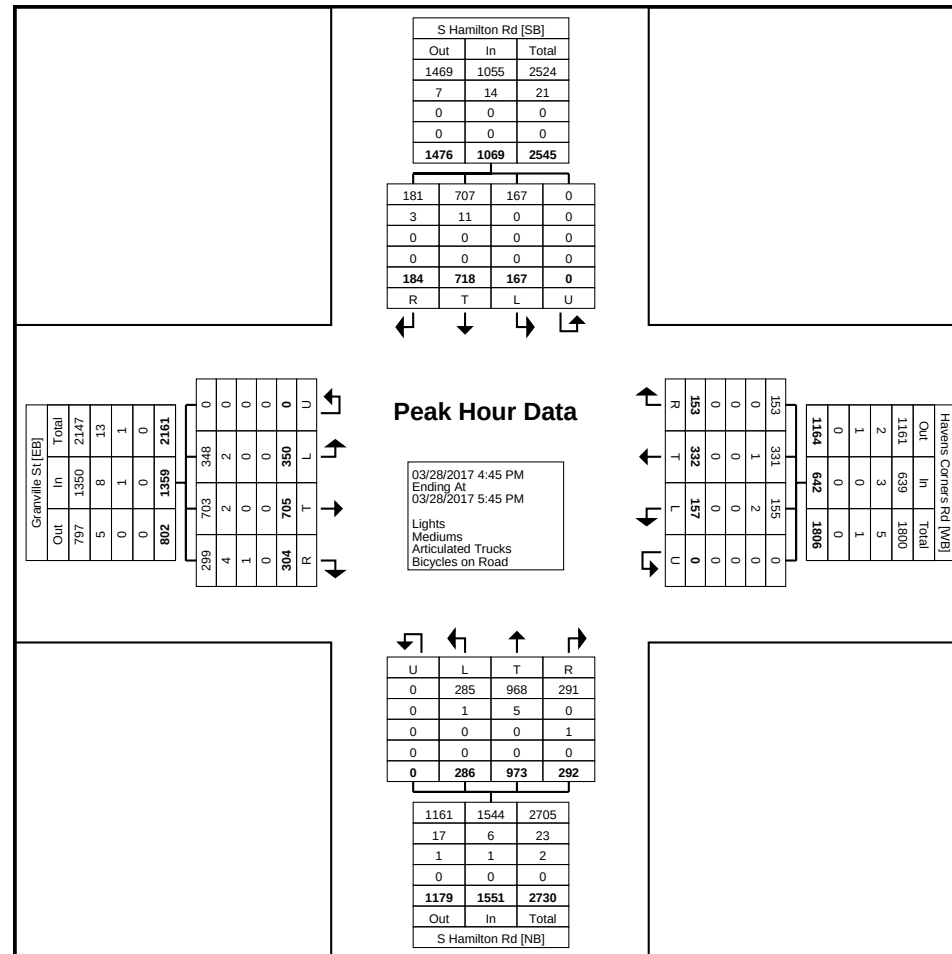
Turning Movement Peak Hour Data (4:45 PM)

Start Time	S Hamilton Rd Southbound					Havens Corners Rd Westbound					S Hamilton Rd Northbound					Granville St Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
4:45 PM	70	187	41	0	298	41	84	37	0	162	82	208	75	0	365	71	214	72	0	357	1182
5:00 PM	45	173	44	0	262	39	85	36	0	160	71	252	61	0	384	65	157	83	0	305	1111
5:15 PM	39	187	46	0	272	32	86	37	0	155	56	232	78	0	366	83	186	104	0	373	1166
5:30 PM	30	171	36	0	237	41	77	47	0	165	83	281	72	0	436	85	148	91	0	324	1162
Total	184	718	167	0	1069	153	332	157	0	642	292	973	286	0	1551	304	705	350	0	1359	4621
Approach %	17.2	67.2	15.6	0.0	-	23.8	51.7	24.5	0.0	-	18.8	62.7	18.4	0.0	-	22.4	51.9	25.8	0.0	-	-
Total %	4.0	15.5	3.6	0.0	23.1	3.3	7.2	3.4	0.0	13.9	6.3	21.1	6.2	0.0	33.6	6.6	15.3	7.6	0.0	29.4	-
PHF	0.657	0.960	0.908	0.000	0.897	0.933	0.965	0.835	0.000	0.973	0.880	0.866	0.917	0.000	0.889	0.894	0.824	0.841	0.000	0.911	0.977
Lights	181	707	167	0	1055	153	331	155	0	639	291	968	285	0	1544	299	703	348	0	1350	4588
% Lights	98.4	98.5	100.0	-	98.7	100.0	99.7	98.7	-	99.5	99.7	99.5	99.7	-	99.5	98.4	99.7	99.4	-	99.3	99.3
Mediums	3	11	0	0	14	0	1	2	0	3	0	5	1	0	6	4	2	2	0	8	31
% Mediums	1.6	1.5	0.0	-	1.3	0.0	0.3	1.3	-	0.5	0.0	0.5	0.3	-	0.4	1.3	0.3	0.6	-	0.6	0.7
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	1	2
% Articulated Trucks	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.3	0.0	0.0	-	0.1	0.3	0.0	0.0	-	0.1	0.0
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0

Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive

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Count Name: S Hamilton Rd & Granville St TMC
Site Code:
Start Date: 03/28/2017
Page No: 6



Turning Movement Peak Hour Data Plot (4:45 PM)

Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive

Columbus, Ohio, United States 43229
614 656 2419 dlaurent@cmtran.com

Count Name: S Hamilton Rd & Morrison Rd
TMC
Site Code:
Start Date: 03/28/2017
Page No: 1

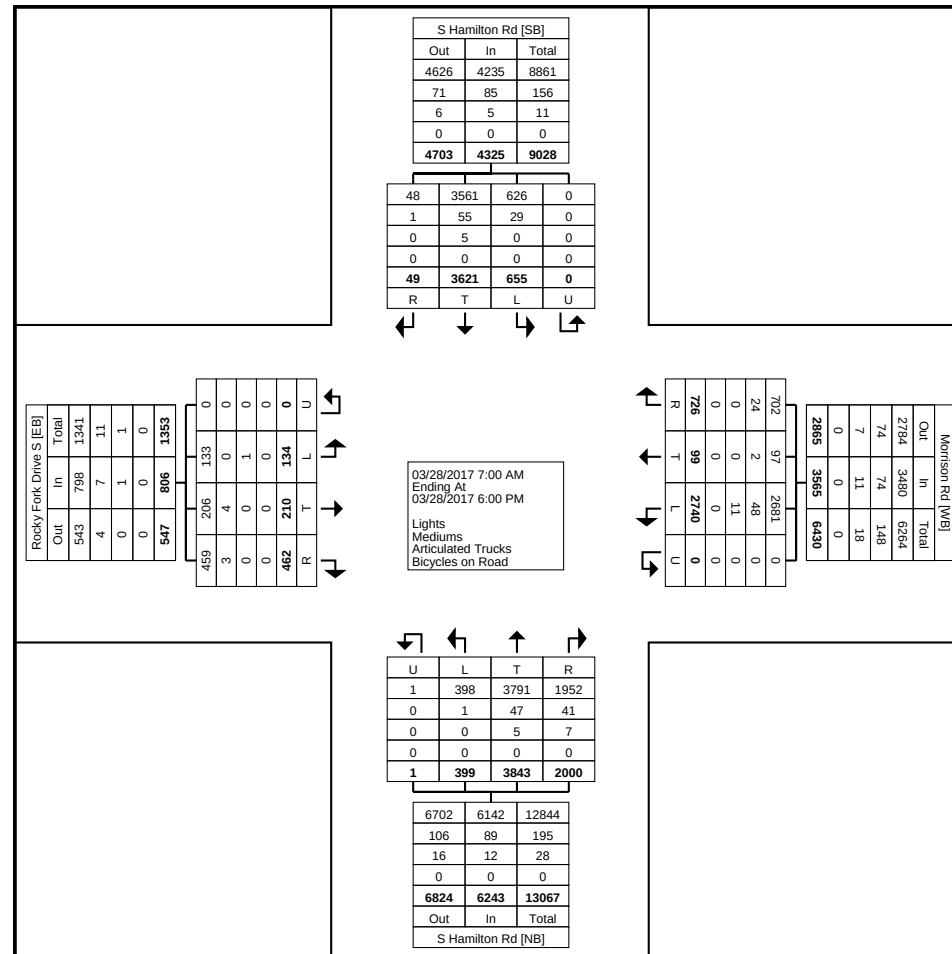
Turning Movement Data

Start Time	S Hamilton Rd Southbound					Morrison Rd Westbound					S Hamilton Rd Northbound					Rocky Fork Drive S Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
7:00 AM	3	260	23	0	286	37	4	165	0	206	66	133	10	0	209	34	8	5	0	47	748
7:15 AM	1	298	29	0	328	57	12	183	0	252	90	184	21	0	295	33	12	9	0	54	929
7:30 AM	4	316	42	0	362	47	10	214	0	271	106	163	23	0	292	50	8	4	0	62	987
7:45 AM	3	291	67	0	361	35	7	186	0	228	138	169	33	0	340	63	25	11	0	99	1028
Hourly Total	11	1165	161	0	1337	176	33	748	0	957	400	649	87	0	1136	180	53	29	0	262	3692
8:00 AM	7	256	53	0	316	31	5	150	0	186	108	141	15	0	264	36	13	7	0	56	822
8:15 AM	1	274	39	0	314	21	4	185	0	210	114	171	7	0	292	35	19	3	0	57	873
8:30 AM	4	242	42	0	288	36	9	161	0	206	88	171	8	0	267	26	12	7	0	45	806
8:45 AM	5	184	31	0	220	34	10	156	0	200	89	139	15	1	244	20	9	3	0	32	696
Hourly Total	17	956	165	0	1138	122	28	652	0	802	399	622	45	1	1067	117	53	20	0	190	3197
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	2	194	40	0	236	46	6	168	0	220	102	255	17	0	374	24	19	7	0	50	880
4:15 PM	1	193	41	0	235	45	4	143	0	192	156	367	33	0	556	18	14	8	0	40	1023
4:30 PM	4	166	37	0	207	66	4	200	0	270	142	284	29	0	455	19	7	15	0	41	973
4:45 PM	5	195	48	0	248	48	7	136	0	191	168	346	39	0	553	13	8	9	0	30	1022
Hourly Total	12	748	166	0	926	205	21	647	0	873	568	1252	118	0	1938	74	48	39	0	161	3898
5:00 PM	4	176	36	0	216	59	0	190	0	249	145	301	37	0	483	28	12	11	0	51	999
5:15 PM	2	232	51	0	285	58	3	178	0	239	189	366	52	0	607	18	12	10	0	40	1171
5:30 PM	1	146	45	0	192	59	7	184	0	250	128	299	34	0	461	22	21	12	0	55	958
5:45 PM	2	198	31	0	231	47	7	141	0	195	171	354	26	0	551	23	11	13	0	47	1024
Hourly Total	9	752	163	0	924	223	17	693	0	933	633	1320	149	0	2102	91	56	46	0	193	4152
Grand Total	49	3621	655	0	4325	726	99	2740	0	3565	2000	3843	399	1	6243	462	210	134	0	806	14939
Approach %	1.1	83.7	15.1	0.0	-	20.4	2.8	76.9	0.0	-	32.0	61.6	6.4	0.0	-	57.3	26.1	16.6	0.0	-	-
Total %	0.3	24.2	4.4	0.0	29.0	4.9	0.7	18.3	0.0	23.9	13.4	25.7	2.7	0.0	41.8	3.1	1.4	0.9	0.0	5.4	-
Lights	48	3561	626	0	4235	702	97	2681	0	3480	1952	3791	398	1	6142	459	206	133	0	798	14655
% Lights	98.0	98.3	95.6	-	97.9	96.7	98.0	97.8	-	97.6	97.6	98.6	99.7	100.0	98.4	99.4	98.1	99.3	-	99.0	98.1
Mediums	1	55	29	0	85	24	2	48	0	74	41	47	1	0	89	3	4	0	0	7	255
% Mediums	2.0	1.5	4.4	-	2.0	3.3	2.0	1.8	-	2.1	2.1	1.2	0.3	0.0	1.4	0.6	1.9	0.0	-	0.9	1.7
Articulated Trucks	0	5	0	0	5	0	0	11	0	11	7	5	0	0	12	0	0	1	0	1	29
% Articulated Trucks	0.0	0.1	0.0	-	0.1	0.0	0.0	0.4	-	0.3	0.4	0.1	0.0	0.0	0.2	0.0	0.0	0.7	-	0.1	0.2
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0

Carpenter Marty (CM) Transportation Inc.
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Count Name: S Hamilton Rd & Morrison Rd
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Turning Movement Data Plot

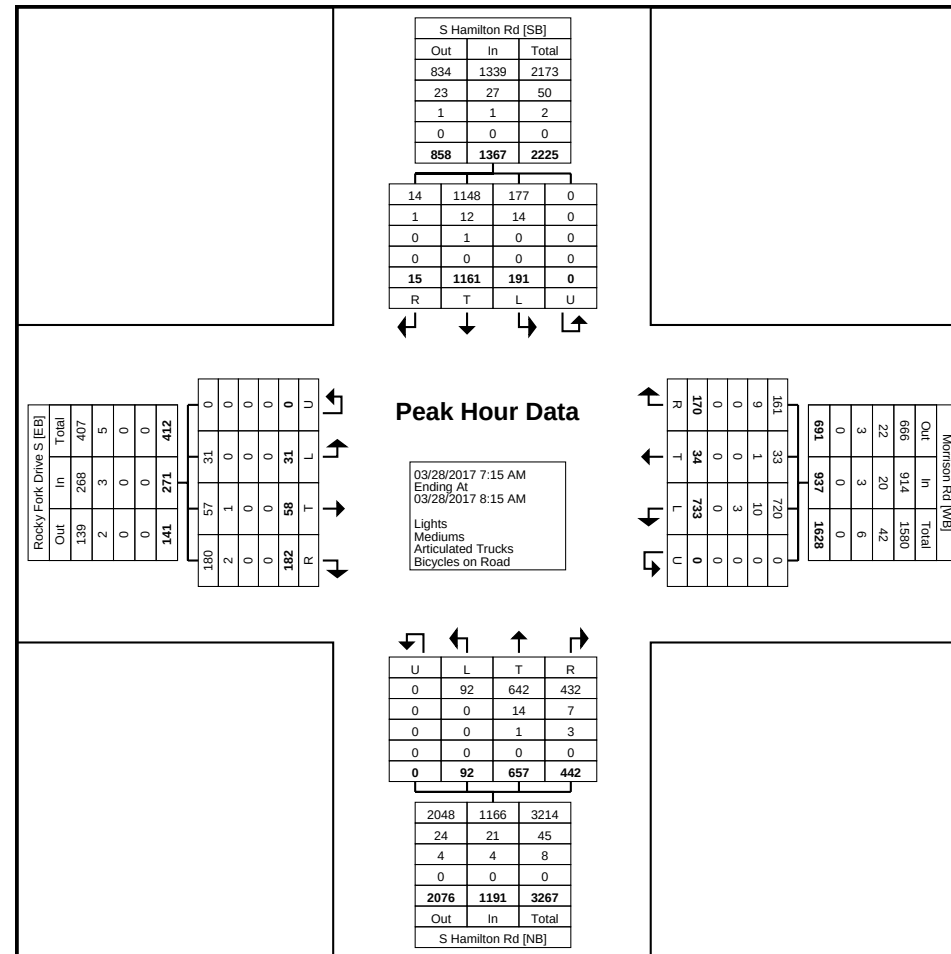
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Count Name: S Hamilton Rd & Morrison Rd
TMC
Site Code:
Start Date: 03/28/2017
Page No: 3

Turning Movement Peak Hour Data (7:15 AM)

Start Time	S Hamilton Rd Southbound					Morrison Rd Westbound					S Hamilton Rd Northbound					Rocky Fork Drive S Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
7:15 AM	1	298	29	0	328	57	12	183	0	252	90	184	21	0	295	33	12	9	0	54	929
7:30 AM	4	316	42	0	362	47	10	214	0	271	106	163	23	0	292	50	8	4	0	62	987
7:45 AM	3	291	67	0	361	35	7	186	0	228	138	169	33	0	340	63	25	11	0	99	1028
8:00 AM	7	256	53	0	316	31	5	150	0	186	108	141	15	0	264	36	13	7	0	56	822
Total	15	1161	191	0	1367	170	34	733	0	937	442	657	92	0	1191	182	58	31	0	271	3766
Approach %	1.1	84.9	14.0	0.0	-	18.1	3.6	78.2	0.0	-	37.1	55.2	7.7	0.0	-	67.2	21.4	11.4	0.0	-	-
Total %	0.4	30.8	5.1	0.0	36.3	4.5	0.9	19.5	0.0	24.9	11.7	17.4	2.4	0.0	31.6	4.8	1.5	0.8	0.0	7.2	-
PHF	0.536	0.919	0.713	0.000	0.944	0.746	0.708	0.856	0.000	0.864	0.801	0.893	0.697	0.000	0.876	0.722	0.580	0.705	0.000	0.684	0.916
Lights	14	1148	177	0	1339	161	33	720	0	914	432	642	92	0	1166	180	57	31	0	268	3687
% Lights	93.3	98.9	92.7	-	98.0	94.7	97.1	98.2	-	97.5	97.7	97.7	100.0	-	97.9	98.9	98.3	100.0	-	98.9	97.9
Mediums	1	12	14	0	27	9	1	10	0	20	7	14	0	0	21	2	1	0	0	3	71
% Mediums	6.7	1.0	7.3	-	2.0	5.3	2.9	1.4	-	2.1	1.6	2.1	0.0	-	1.8	1.1	1.7	0.0	-	1.1	1.9
Articulated Trucks	0	1	0	0	1	0	0	3	0	3	3	1	0	0	4	0	0	0	0	0	8
% Articulated Trucks	0.0	0.1	0.0	-	0.1	0.0	0.0	0.4	-	0.3	0.7	0.2	0.0	-	0.3	0.0	0.0	0.0	-	0.0	0.2
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0



Turning Movement Peak Hour Data Plot (7:15 AM)

Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive

Columbus, Ohio, United States 43229
614 656 2419 dlaurent@cmtran.com

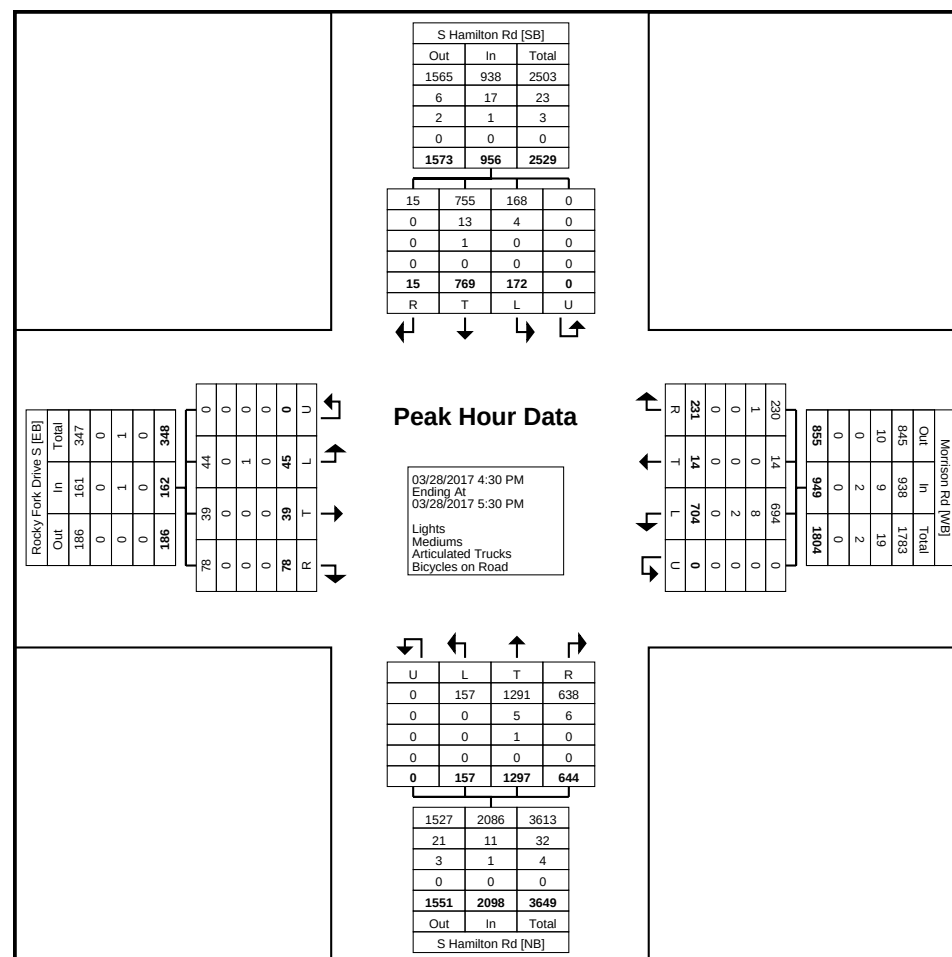
Count Name: S Hamilton Rd & Morrison Rd
TMC
Site Code:
Start Date: 03/28/2017
Page No: 5

Turning Movement Peak Hour Data (4:30 PM)

Start Time	S Hamilton Rd Southbound					Morrison Rd Westbound					S Hamilton Rd Northbound					Rocky Fork Drive S Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
4:30 PM	4	166	37	0	207	66	4	200	0	270	142	284	29	0	455	19	7	15	0	41	973
4:45 PM	5	195	48	0	248	48	7	136	0	191	168	346	39	0	553	13	8	9	0	30	1022
5:00 PM	4	176	36	0	216	59	0	190	0	249	145	301	37	0	483	28	12	11	0	51	999
5:15 PM	2	232	51	0	285	58	3	178	0	239	189	366	52	0	607	18	12	10	0	40	1171
Total	15	769	172	0	956	231	14	704	0	949	644	1297	157	0	2098	78	39	45	0	162	4165
Approach %	1.6	80.4	18.0	0.0	-	24.3	1.5	74.2	0.0	-	30.7	61.8	7.5	0.0	-	48.1	24.1	27.8	0.0	-	-
Total %	0.4	18.5	4.1	0.0	23.0	5.5	0.3	16.9	0.0	22.8	15.5	31.1	3.8	0.0	50.4	1.9	0.9	1.1	0.0	3.9	-
PHF	0.750	0.829	0.843	0.000	0.839	0.875	0.500	0.880	0.000	0.879	0.852	0.886	0.755	0.000	0.864	0.696	0.813	0.750	0.000	0.794	0.889
Lights	15	755	168	0	938	230	14	694	0	938	638	1291	157	0	2086	78	39	44	0	161	4123
% Lights	100.0	98.2	97.7	-	98.1	99.6	100.0	98.6	-	98.8	99.1	99.5	100.0	-	99.4	100.0	100.0	97.8	-	99.4	99.0
Mediums	0	13	4	0	17	1	0	8	0	9	6	5	0	0	11	0	0	0	0	0	37
% Mediums	0.0	1.7	2.3	-	1.8	0.4	0.0	1.1	-	0.9	0.9	0.4	0.0	-	0.5	0.0	0.0	0.0	-	0.0	0.9
Articulated Trucks	0	1	0	0	1	0	0	2	0	2	0	1	0	0	1	0	0	1	0	1	5
% Articulated Trucks	0.0	0.1	0.0	-	0.1	0.0	0.0	0.3	-	0.2	0.0	0.1	0.0	-	0.0	0.0	0.0	2.2	-	0.6	0.1
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0

Columbus, Ohio, United States 43229
614 656 2419 dlaurent@cmtran.com

Count Name: S Hamilton Rd & Morrison Rd
TMC
Site Code:
Start Date: 03/28/2017
Page No: 6



Turning Movement Peak Hour Data Plot (4:30 PM)

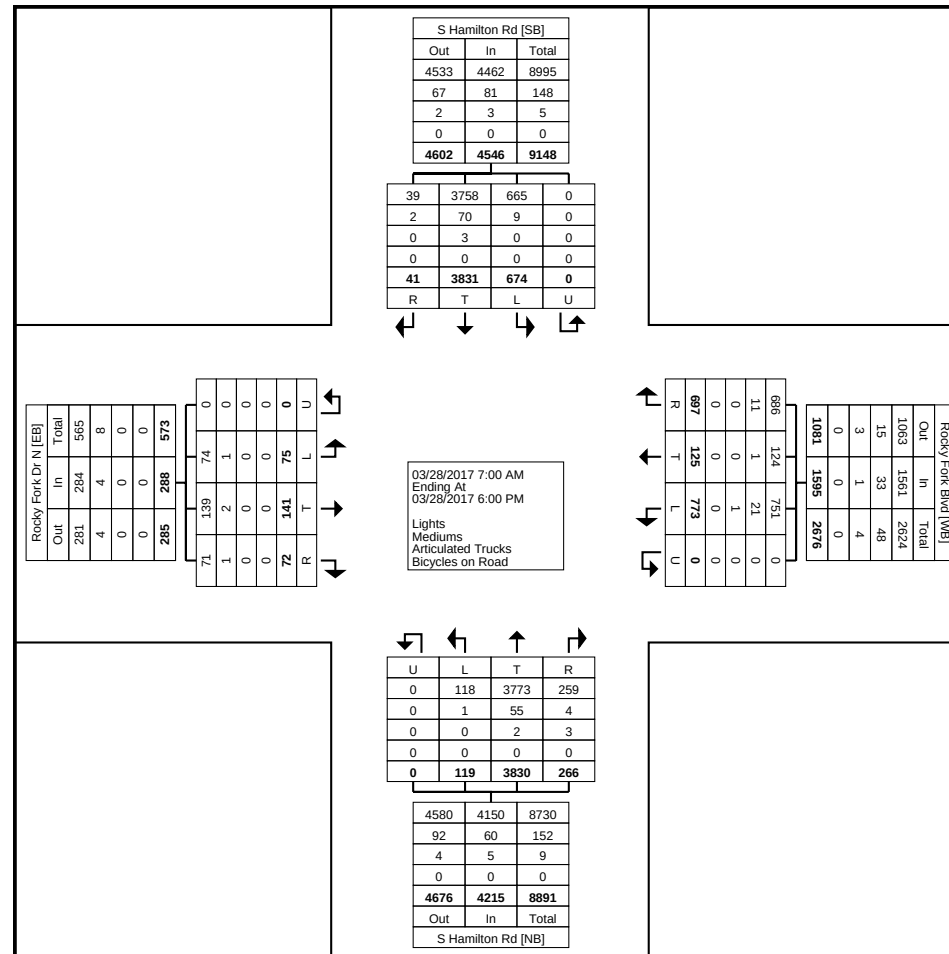
Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive

Columbus, Ohio, United States 43229
614 656 2419 dlaurent@cmtran.com

Count Name: S Hamilton Rd & Rocky Fork Dr N
TMC
Site Code:
Start Date: 03/28/2017
Page No: 1

Turning Movement Data

Start Time	S Hamilton Rd Southbound					Rocky Fork Blvd Westbound					S Hamilton Rd Northbound					Rocky Fork Dr N Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
7:00 AM	1	231	25	0	257	31	5	48	0	84	11	140	2	0	153	10	4	7	0	21	515
7:15 AM	4	294	20	0	318	80	10	70	0	160	13	212	3	0	228	5	3	15	0	23	729
7:30 AM	4	300	35	0	339	54	12	97	0	163	5	181	4	0	190	7	5	17	0	29	721
7:45 AM	2	309	39	0	350	48	9	55	0	112	9	184	11	0	204	8	11	3	0	22	688
Hourly Total	11	1134	119	0	1264	213	36	270	0	519	38	717	20	0	775	30	23	42	0	95	2653
8:00 AM	0	278	27	0	305	22	1	61	0	84	7	152	2	0	161	8	9	3	0	20	570
8:15 AM	2	269	22	0	293	20	5	46	0	71	7	136	6	0	149	2	6	0	0	8	521
8:30 AM	0	251	20	0	271	18	4	44	0	66	8	163	4	0	175	2	10	1	0	13	525
8:45 AM	2	198	26	0	226	31	6	39	0	76	12	147	0	0	159	4	3	1	0	8	469
Hourly Total	4	996	95	0	1095	91	16	190	0	297	34	598	12	0	644	16	28	5	0	49	2085
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	4	219	39	0	262	47	10	45	0	102	15	248	7	0	270	2	10	1	0	13	647
4:15 PM	4	200	52	0	256	40	9	24	0	73	31	309	12	0	352	5	7	3	0	15	696
4:30 PM	1	192	50	0	243	49	7	42	0	98	18	294	9	0	321	3	11	2	0	16	678
4:45 PM	2	230	65	0	297	47	3	32	0	82	20	342	13	0	375	1	18	2	0	21	775
Hourly Total	11	841	206	0	1058	183	29	143	0	355	84	1193	41	0	1318	11	46	8	0	65	2796
5:00 PM	3	212	56	0	271	55	6	50	0	111	27	325	12	0	364	2	9	3	0	14	760
5:15 PM	5	240	60	0	305	47	9	53	0	109	29	342	14	0	385	1	10	4	0	15	814
5:30 PM	1	202	70	0	273	55	15	30	0	100	31	315	14	0	360	5	13	7	0	25	758
5:45 PM	6	206	68	0	280	53	14	37	0	104	23	340	6	0	369	7	12	6	0	25	778
Hourly Total	15	860	254	0	1129	210	44	170	0	424	110	1322	46	0	1478	15	44	20	0	79	3110
Grand Total	41	3831	674	0	4546	697	125	773	0	1595	266	3830	119	0	4215	72	141	75	0	288	10644
Approach %	0.9	84.3	14.8	0.0	-	43.7	7.8	48.5	0.0	-	6.3	90.9	2.8	0.0	-	25.0	49.0	26.0	0.0	-	-
Total %	0.4	36.0	6.3	0.0	42.7	6.5	1.2	7.3	0.0	15.0	2.5	36.0	1.1	0.0	39.6	0.7	1.3	0.7	0.0	2.7	-
Lights	39	3758	665	0	4462	686	124	751	0	1561	259	3773	118	0	4150	71	139	74	0	284	10457
% Lights	95.1	98.1	98.7	-	98.2	98.4	99.2	97.2	-	97.9	97.4	98.5	99.2	-	98.5	98.6	98.6	98.7	-	98.6	98.2
Mediums	2	70	9	0	81	11	1	21	0	33	4	55	1	0	60	1	2	1	0	4	178
% Mediums	4.9	1.8	1.3	-	1.8	1.6	0.8	2.7	-	2.1	1.5	1.4	0.8	-	1.4	1.4	1.4	1.3	-	1.4	1.7
Articulated Trucks	0	3	0	0	3	0	0	1	0	1	3	2	0	0	5	0	0	0	0	0	9
% Articulated Trucks	0.0	0.1	0.0	-	0.1	0.0	0.0	0.1	-	0.1	1.1	0.1	0.0	-	0.1	0.0	0.0	0.0	-	0.0	0.1
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0



Turning Movement Data Plot

Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive

Columbus, Ohio, United States 43229
614 656 2419 dlaurent@cmtran.com

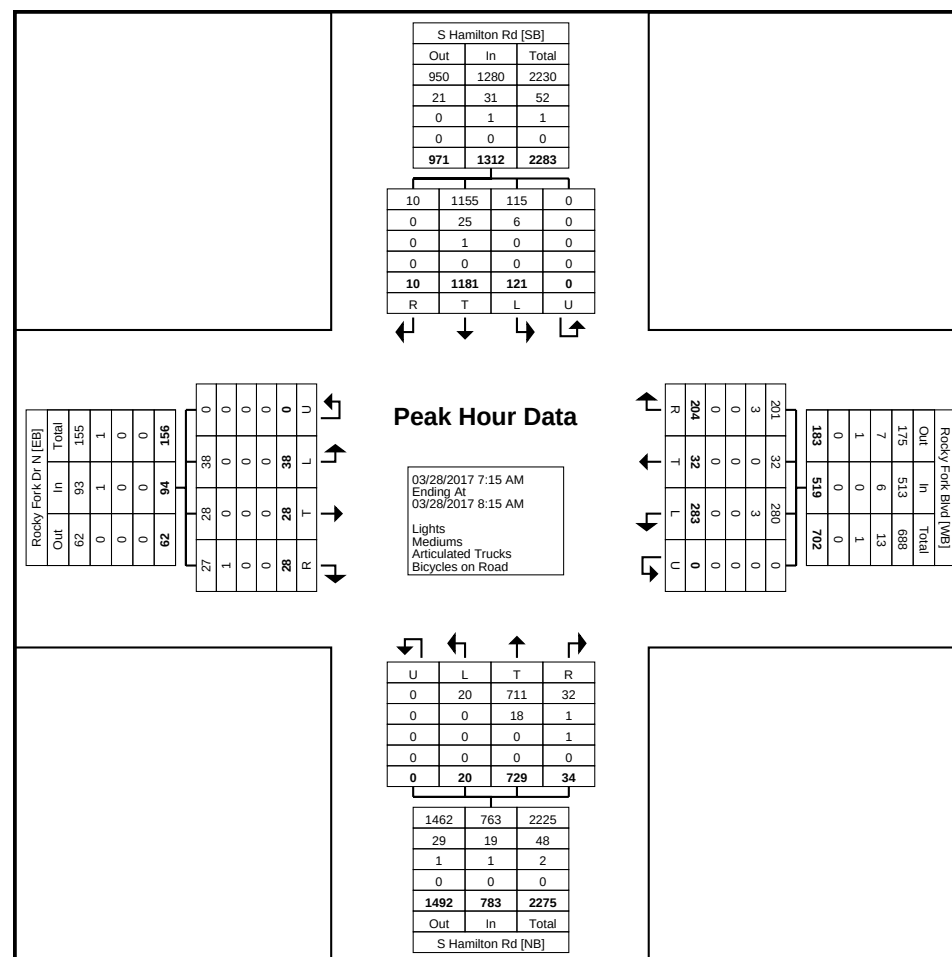
Count Name: S Hamilton Rd & Rocky Fork Dr N
TMC
Site Code:
Start Date: 03/28/2017
Page No: 3

Turning Movement Peak Hour Data (7:15 AM)

Start Time	S Hamilton Rd Southbound					Rocky Fork Blvd Westbound					S Hamilton Rd Northbound					Rocky Fork Dr N Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
7:15 AM	4	294	20	0	318	80	10	70	0	160	13	212	3	0	228	5	3	15	0	23	729
7:30 AM	4	300	35	0	339	54	12	97	0	163	5	181	4	0	190	7	5	17	0	29	721
7:45 AM	2	309	39	0	350	48	9	55	0	112	9	184	11	0	204	8	11	3	0	22	688
8:00 AM	0	278	27	0	305	22	1	61	0	84	7	152	2	0	161	8	9	3	0	20	570
Total	10	1181	121	0	1312	204	32	283	0	519	34	729	20	0	783	28	28	38	0	94	2708
Approach %	0.8	90.0	9.2	0.0	-	39.3	6.2	54.5	0.0	-	4.3	93.1	2.6	0.0	-	29.8	29.8	40.4	0.0	-	-
Total %	0.4	43.6	4.5	0.0	48.4	7.5	1.2	10.5	0.0	19.2	1.3	26.9	0.7	0.0	28.9	1.0	1.0	1.4	0.0	3.5	-
PHF	0.625	0.956	0.776	0.000	0.937	0.638	0.667	0.729	0.000	0.796	0.654	0.860	0.455	0.000	0.859	0.875	0.636	0.559	0.000	0.810	0.929
Lights	10	1155	115	0	1280	201	32	280	0	513	32	711	20	0	763	27	28	38	0	93	2649
% Lights	100.0	97.8	95.0	-	97.6	98.5	100.0	98.9	-	98.8	94.1	97.5	100.0	-	97.4	96.4	100.0	100.0	-	98.9	97.8
Mediums	0	25	6	0	31	3	0	3	0	6	1	18	0	0	19	1	0	0	0	1	57
% Mediums	0.0	2.1	5.0	-	2.4	1.5	0.0	1.1	-	1.2	2.9	2.5	0.0	-	2.4	3.6	0.0	0.0	-	1.1	2.1
Articulated Trucks	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	2
% Articulated Trucks	0.0	0.1	0.0	-	0.1	0.0	0.0	0.0	-	0.0	2.9	0.0	0.0	-	0.1	0.0	0.0	0.0	-	0.0	0.1
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0

Columbus, Ohio, United States 43229
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Count Name: S Hamilton Rd & Rocky Fork Dr N
TMC
Site Code:
Start Date: 03/28/2017
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Turning Movement Peak Hour Data Plot (7:15 AM)

Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive

Columbus, Ohio, United States 43229
614 656 2419 dlaurent@cmtran.com

Count Name: S Hamilton Rd & Rocky Fork Dr N
TMC
Site Code:
Start Date: 03/28/2017
Page No: 5

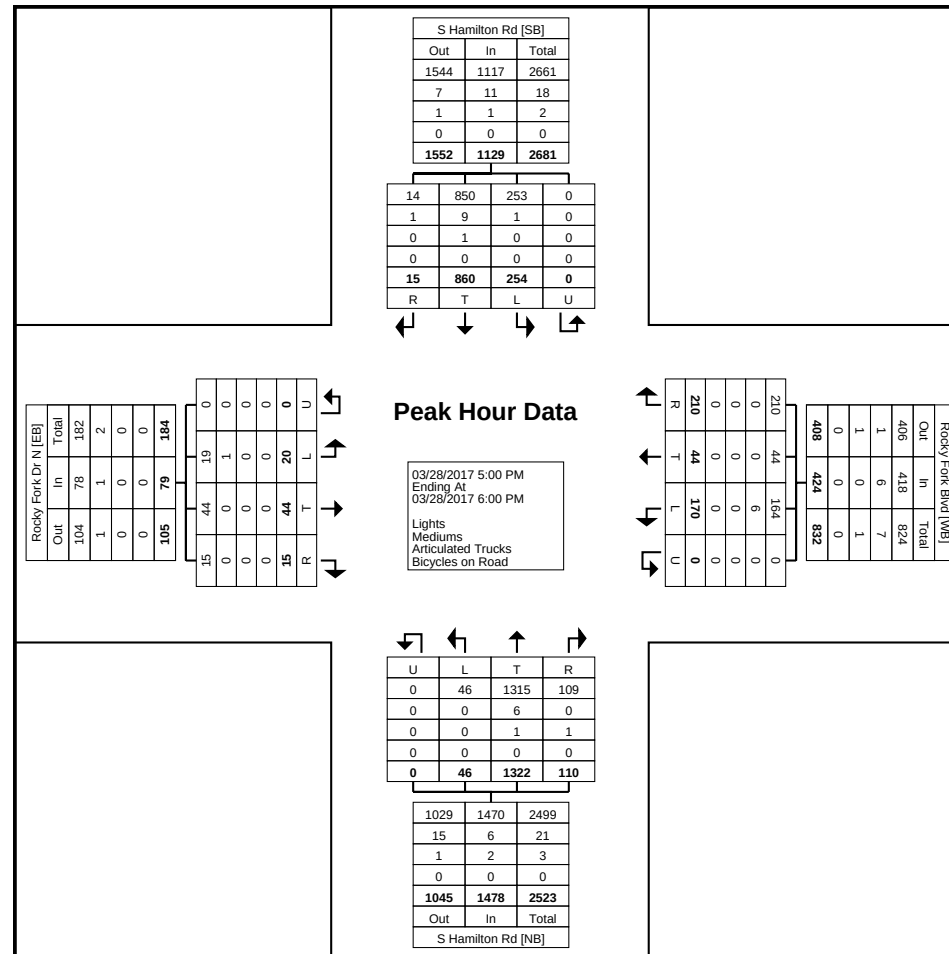
Turning Movement Peak Hour Data (5:00 PM)

Start Time	S Hamilton Rd Southbound					Rocky Fork Blvd Westbound					S Hamilton Rd Northbound					Rocky Fork Dr N Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
5:00 PM	3	212	56	0	271	55	6	50	0	111	27	325	12	0	364	2	9	3	0	14	760
5:15 PM	5	240	60	0	305	47	9	53	0	109	29	342	14	0	385	1	10	4	0	15	814
5:30 PM	1	202	70	0	273	55	15	30	0	100	31	315	14	0	360	5	13	7	0	25	758
5:45 PM	6	206	68	0	280	53	14	37	0	104	23	340	6	0	369	7	12	6	0	25	778
Total	15	860	254	0	1129	210	44	170	0	424	110	1322	46	0	1478	15	44	20	0	79	3110
Approach %	1.3	76.2	22.5	0.0	-	49.5	10.4	40.1	0.0	-	7.4	89.4	3.1	0.0	-	19.0	55.7	25.3	0.0	-	-
Total %	0.5	27.7	8.2	0.0	36.3	6.8	1.4	5.5	0.0	13.6	3.5	42.5	1.5	0.0	47.5	0.5	1.4	0.6	0.0	2.5	-
PHF	0.625	0.896	0.907	0.000	0.925	0.955	0.733	0.802	0.000	0.955	0.887	0.966	0.821	0.000	0.960	0.536	0.846	0.714	0.000	0.790	0.955
Lights	14	850	253	0	1117	210	44	164	0	418	109	1315	46	0	1470	15	44	19	0	78	3083
% Lights	93.3	98.8	99.6	-	98.9	100.0	100.0	96.5	-	98.6	99.1	99.5	100.0	-	99.5	100.0	100.0	95.0	-	98.7	99.1
Mediums	1	9	1	0	11	0	0	6	0	6	0	6	0	0	6	0	0	1	0	1	24
% Mediums	6.7	1.0	0.4	-	1.0	0.0	0.0	3.5	-	1.4	0.0	0.5	0.0	-	0.4	0.0	0.0	5.0	-	1.3	0.8
Articulated Trucks	0	1	0	0	1	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	3
% Articulated Trucks	0.0	0.1	0.0	-	0.1	0.0	0.0	0.0	-	0.0	0.9	0.1	0.0	-	0.1	0.0	0.0	0.0	-	0.0	0.1
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0

Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive

Columbus, Ohio, United States 43229
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Count Name: S Hamilton Rd & Rocky Fork Dr N
TMC
Site Code:
Start Date: 03/28/2017
Page No: 6



Turning Movement Peak Hour Data Plot (5:00 PM)

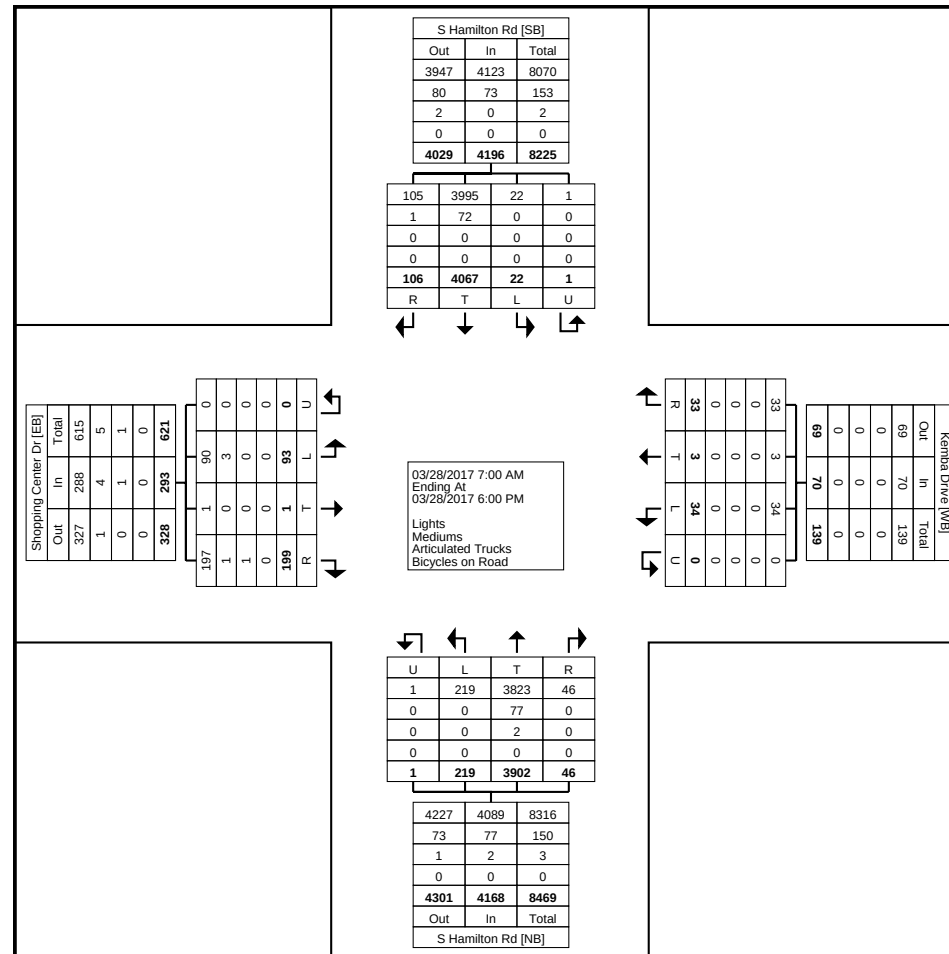
Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive

Columbus, Ohio, United States 43229
614 656 2419 dlaurent@cmtran.com

Count Name: S Hamilton Rd & Shopping Center
Dr TMC
Site Code:
Start Date: 03/28/2017
Page No: 1

Turning Movement Data

Start Time	S Hamilton Rd Southbound					Kemba Drive Westbound					S Hamilton Rd Northbound					Shopping Center Dr Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
7:00 AM	8	291	0	0	299	1	0	0	0	1	0	92	13	0	105	6	0	1	0	7	412
7:15 AM	30	381	1	0	412	1	0	0	0	1	1	161	33	0	195	15	0	8	0	23	631
7:30 AM	5	272	1	0	278	1	0	1	0	2	2	167	15	0	184	11	0	7	0	18	482
7:45 AM	2	305	1	0	308	2	0	0	0	2	2	172	7	0	181	6	0	3	0	9	500
Hourly Total	45	1249	3	0	1297	5	0	1	0	6	5	592	68	0	665	38	0	19	0	57	2025
8:00 AM	6	264	0	0	270	0	0	3	0	3	3	172	1	0	176	7	0	1	0	8	457
8:15 AM	5	255	1	0	261	1	0	0	0	1	3	150	1	0	154	3	0	4	0	7	423
8:30 AM	4	208	0	0	212	1	0	1	0	2	2	175	11	0	188	2	0	2	0	4	406
8:45 AM	5	172	6	0	183	4	0	1	0	5	4	150	7	0	161	10	0	3	0	13	362
Hourly Total	20	899	7	0	926	6	0	5	0	11	12	647	20	0	679	22	0	10	0	32	1648
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	4	240	3	0	247	5	2	4	0	11	4	283	9	1	297	11	0	8	0	19	574
4:15 PM	5	213	3	0	221	3	0	2	0	5	6	311	19	0	336	11	0	3	0	14	576
4:30 PM	2	239	1	0	242	5	0	4	0	9	5	317	17	0	339	18	0	4	0	22	612
4:45 PM	2	288	0	0	290	1	0	5	0	6	6	301	13	0	320	13	1	18	0	32	648
Hourly Total	13	980	7	0	1000	14	2	15	0	31	21	1212	58	1	1292	53	1	33	0	87	2410
5:00 PM	6	234	1	0	241	2	0	2	0	4	2	347	20	0	369	19	0	4	0	23	637
5:15 PM	10	252	2	0	264	2	0	5	0	7	4	375	19	0	398	26	0	11	0	37	706
5:30 PM	7	214	1	1	223	0	0	3	0	3	1	392	12	0	405	19	0	7	0	26	657
5:45 PM	5	239	1	0	245	4	1	3	0	8	1	337	22	0	360	22	0	9	0	31	644
Hourly Total	28	939	5	1	973	8	1	13	0	22	8	1451	73	0	1532	86	0	31	0	117	2644
Grand Total	106	4067	22	1	4196	33	3	34	0	70	46	3902	219	1	4168	199	1	93	0	293	8727
Approach %	2.5	96.9	0.5	0.0	-	47.1	4.3	48.6	0.0	-	1.1	93.6	5.3	0.0	-	67.9	0.3	31.7	0.0	-	-
Total %	1.2	46.6	0.3	0.0	48.1	0.4	0.0	0.4	0.0	0.8	0.5	44.7	2.5	0.0	47.8	2.3	0.0	1.1	0.0	3.4	-
Lights	105	3995	22	1	4123	33	3	34	0	70	46	3823	219	1	4089	197	1	90	0	288	8570
% Lights	99.1	98.2	100.0	100.0	98.3	100.0	100.0	100.0	-	100.0	100.0	98.0	100.0	100.0	98.1	99.0	100.0	96.8	-	98.3	98.2
Mediums	1	72	0	0	73	0	0	0	0	0	0	77	0	0	77	1	0	3	0	4	154
% Mediums	0.9	1.8	0.0	0.0	1.7	0.0	0.0	0.0	-	0.0	0.0	2.0	0.0	0.0	1.8	0.5	0.0	3.2	-	1.4	1.8
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	1	0	0	0	1	3
% Articulated Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.1	0.0	0.0	0.0	0.5	0.0	0.0	-	0.3	0.0
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0



Turning Movement Data Plot

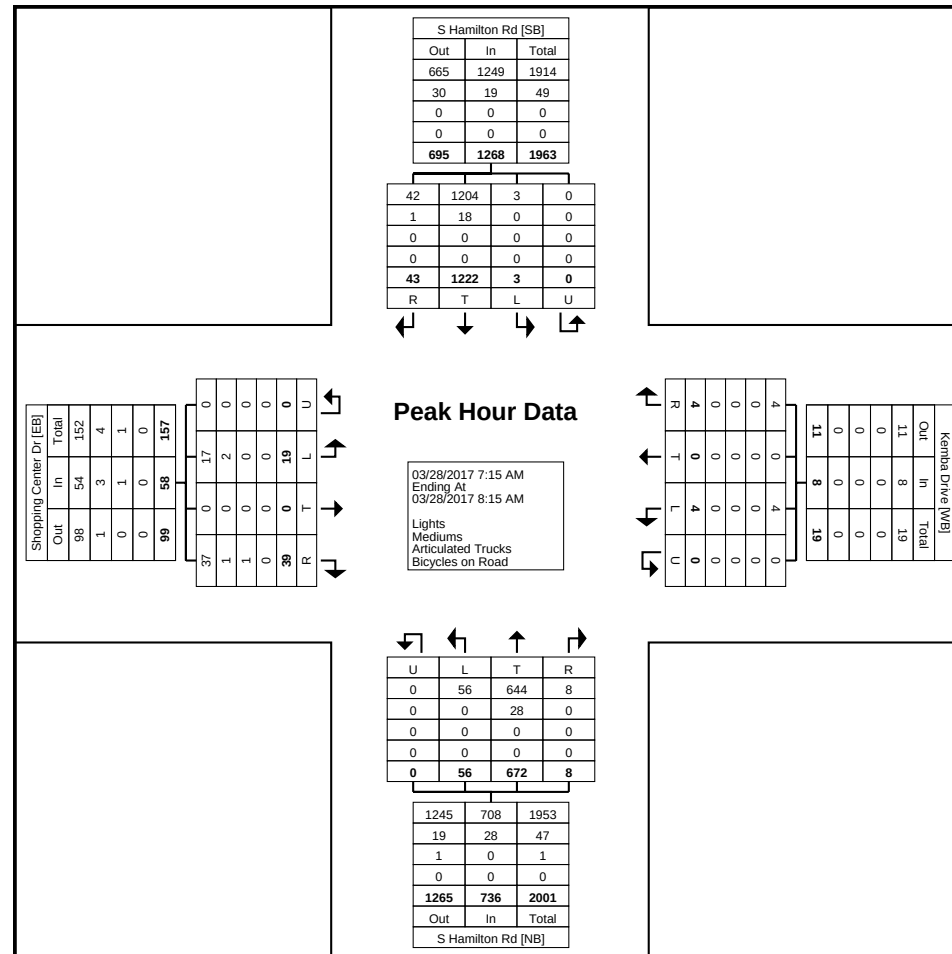
Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive

Columbus, Ohio, United States 43229
614 656 2419 dlaurent@cmtran.com

Count Name: S Hamilton Rd & Shopping Center
Dr TMC
Site Code:
Start Date: 03/28/2017
Page No: 3

Turning Movement Peak Hour Data (7:15 AM)

Start Time	S Hamilton Rd Southbound					Kemba Drive Westbound					S Hamilton Rd Northbound					Shopping Center Dr Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
7:15 AM	30	381	1	0	412	1	0	0	0	1	1	161	33	0	195	15	0	8	0	23	631
7:30 AM	5	272	1	0	278	1	0	1	0	2	2	167	15	0	184	11	0	7	0	18	482
7:45 AM	2	305	1	0	308	2	0	0	0	2	2	172	7	0	181	6	0	3	0	9	500
8:00 AM	6	264	0	0	270	0	0	3	0	3	3	172	1	0	176	7	0	1	0	8	457
Total	43	1222	3	0	1268	4	0	4	0	8	8	672	56	0	736	39	0	19	0	58	2070
Approach %	3.4	96.4	0.2	0.0	-	50.0	0.0	50.0	0.0	-	1.1	91.3	7.6	0.0	-	67.2	0.0	32.8	0.0	-	-
Total %	2.1	59.0	0.1	0.0	61.3	0.2	0.0	0.2	0.0	0.4	0.4	32.5	2.7	0.0	35.6	1.9	0.0	0.9	0.0	2.8	-
PHF	0.358	0.802	0.750	0.000	0.769	0.500	0.000	0.333	0.000	0.667	0.667	0.977	0.424	0.000	0.944	0.650	0.000	0.594	0.000	0.630	0.820
Lights	42	1204	3	0	1249	4	0	4	0	8	8	644	56	0	708	37	0	17	0	54	2019
% Lights	97.7	98.5	100.0	-	98.5	100.0	-	100.0	-	100.0	100.0	95.8	100.0	-	96.2	94.9	-	89.5	-	93.1	97.5
Mediums	1	18	0	0	19	0	0	0	0	0	0	28	0	0	28	1	0	2	0	3	50
% Mediums	2.3	1.5	0.0	-	1.5	0.0	-	0.0	-	0.0	0.0	4.2	0.0	-	3.8	2.6	-	10.5	-	5.2	2.4
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
% Articulated Trucks	0.0	0.0	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	0.0	0.0	-	0.0	2.6	-	0.0	-	1.7	0.0
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0



Turning Movement Peak Hour Data Plot (7:15 AM)

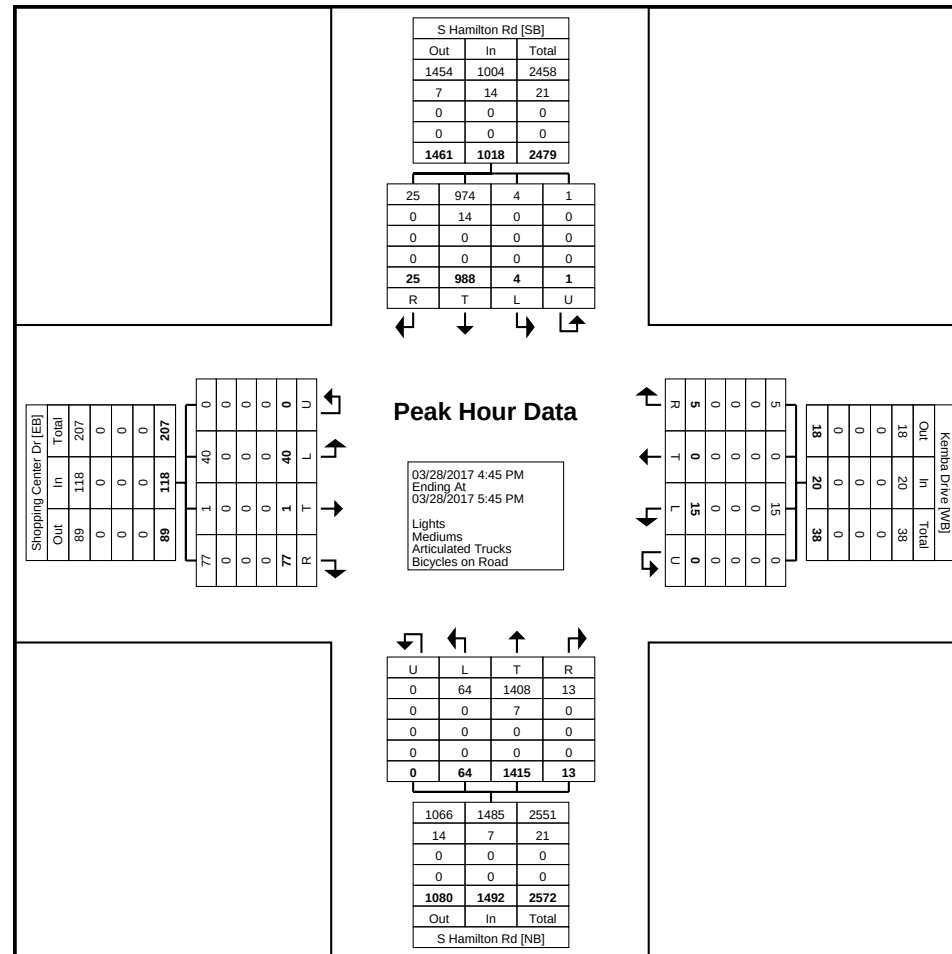
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Count Name: S Hamilton Rd & Shopping Center
Dr TMC
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Start Date: 03/28/2017
Page No: 5

Turning Movement Peak Hour Data (4:45 PM)

Start Time	S Hamilton Rd Southbound					Kemba Drive Westbound					S Hamilton Rd Northbound					Shopping Center Dr Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
4:45 PM	2	288	0	0	290	1	0	5	0	6	6	301	13	0	320	13	1	18	0	32	648
5:00 PM	6	234	1	0	241	2	0	2	0	4	2	347	20	0	369	19	0	4	0	23	637
5:15 PM	10	252	2	0	264	2	0	5	0	7	4	375	19	0	398	26	0	11	0	37	706
5:30 PM	7	214	1	1	223	0	0	3	0	3	1	392	12	0	405	19	0	7	0	26	657
Total	25	988	4	1	1018	5	0	15	0	20	13	1415	64	0	1492	77	1	40	0	118	2648
Approach %	2.5	97.1	0.4	0.1	-	25.0	0.0	75.0	0.0	-	0.9	94.8	4.3	0.0	-	65.3	0.8	33.9	0.0	-	-
Total %	0.9	37.3	0.2	0.0	38.4	0.2	0.0	0.6	0.0	0.8	0.5	53.4	2.4	0.0	56.3	2.9	0.0	1.5	0.0	4.5	-
PHF	0.625	0.858	0.500	0.250	0.878	0.625	0.000	0.750	0.000	0.714	0.542	0.902	0.800	0.000	0.921	0.740	0.250	0.556	0.000	0.797	0.938
Lights	25	974	4	1	1004	5	0	15	0	20	13	1408	64	0	1485	77	1	40	0	118	2627
% Lights	100.0	98.6	100.0	100.0	98.6	100.0	-	100.0	-	100.0	100.0	99.5	100.0	-	99.5	100.0	100.0	100.0	-	100.0	99.2
Mediums	0	14	0	0	14	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	21
% Mediums	0.0	1.4	0.0	0.0	1.4	0.0	-	0.0	-	0.0	0.0	0.5	0.0	-	0.5	0.0	0.0	0.0	-	0.0	0.8
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Articulated Trucks	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0



Turning Movement Peak Hour Data Plot (4:45 PM)

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6612 Singletree Drive

Columbus, Ohio, United States 43229
614 656 2419 dlaurent@cmtran.com

Count Name: Hamilton Rd & Tech Center Dr
TMC
Site Code:
Start Date: 03/28/2017
Page No: 1

Turning Movement Data

Start Time	S Hamilton Rd Southbound					Tech Center Dr Westbound					S Hamilton Rd Northbound					Swanson Ave Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
7:00 AM	1	262	104	0	367	38	0	68	0	106	19	97	0	0	116	1	0	0	0	1	590
7:15 AM	0	319	91	0	410	38	0	112	0	150	24	129	0	0	153	0	0	3	0	3	716
7:30 AM	0	369	79	0	448	46	0	134	0	180	39	98	0	0	137	0	0	0	0	0	765
7:45 AM	0	352	137	0	489	24	0	136	0	160	43	138	0	0	181	0	0	0	0	0	830
Hourly Total	1	1302	411	0	1714	146	0	450	0	596	125	462	0	0	587	1	0	3	0	4	2901
8:00 AM	0	304	113	0	417	37	0	92	0	129	31	131	0	0	162	0	0	0	0	0	708
8:15 AM	1	306	87	0	394	39	0	80	0	119	33	138	1	0	172	1	0	0	0	1	686
8:30 AM	0	301	90	0	391	25	0	47	0	72	27	150	0	0	177	0	0	2	0	2	642
8:45 AM	0	241	95	0	336	43	0	51	0	94	36	105	1	1	143	0	0	0	0	0	573
Hourly Total	1	1152	385	0	1538	144	0	270	0	414	127	524	2	1	654	1	0	2	0	3	2609
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	155	83	0	238	109	0	55	0	164	72	307	0	1	380	0	0	0	0	0	782
4:15 PM	0	179	67	0	246	85	0	33	0	118	112	361	1	0	474	1	0	0	0	1	839
4:30 PM	0	167	69	0	236	120	0	43	0	163	109	294	1	0	404	0	0	0	0	0	803
4:45 PM	0	181	59	0	240	83	0	38	0	121	125	354	0	0	479	0	0	0	0	0	840
Hourly Total	0	682	278	0	960	397	0	169	0	566	418	1316	2	1	1737	1	0	0	0	1	3264
5:00 PM	0	163	75	0	238	107	0	51	0	158	102	314	0	0	416	1	0	0	0	1	813
5:15 PM	0	193	72	0	265	92	0	50	0	142	156	291	0	0	447	0	0	0	0	0	854
5:30 PM	0	187	85	0	272	76	0	40	0	116	136	287	0	0	423	0	0	0	0	0	811
5:45 PM	0	160	69	0	229	58	0	19	0	77	99	266	0	0	365	0	0	0	0	0	671
Hourly Total	0	703	301	0	1004	333	0	160	0	493	493	1158	0	0	1651	1	0	0	0	1	3149
Grand Total	2	3839	1375	0	5216	1020	0	1049	0	2069	1163	3460	4	2	4629	4	0	5	0	9	11923
Approach %	0.0	73.6	26.4	0.0	-	49.3	0.0	50.7	0.0	-	25.1	74.7	0.1	0.0	-	44.4	0.0	55.6	0.0	-	-
Total %	0.0	32.2	11.5	0.0	43.7	8.6	0.0	8.8	0.0	17.4	9.8	29.0	0.0	0.0	38.8	0.0	0.0	0.0	0.0	0.1	-
Lights	2	3705	1309	0	5016	987	0	1016	0	2003	1134	3312	4	2	4452	4	0	5	0	9	11480
% Lights	100.0	96.5	95.2	-	96.2	96.8	-	96.9	-	96.8	97.5	95.7	100.0	100.0	96.2	100.0	-	100.0	-	100.0	96.3
Mediums	0	104	54	0	158	24	0	19	0	43	22	120	0	0	142	0	0	0	0	0	343
% Mediums	0.0	2.7	3.9	-	3.0	2.4	-	1.8	-	2.1	1.9	3.5	0.0	0.0	3.1	0.0	-	0.0	-	0.0	2.9
Articulated Trucks	0	30	12	0	42	9	0	14	0	23	7	28	0	0	35	0	0	0	0	0	100
% Articulated Trucks	0.0	0.8	0.9	-	0.8	0.9	-	1.3	-	1.1	0.6	0.8	0.0	0.0	0.8	0.0	-	0.0	-	0.0	0.8
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0

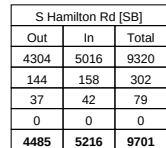
Columbus, Ohio, United States 43229
614 656 2419 dlaurent@cmtran.com

TMC

Site Code:

Start Date: 03/28/2017

Page No: 2



2	3705	1309	0
0	104	54	0
0	30	12	0
0	0	0	0
2	3839	1375	0
R	T	L	U

Swanson Ave [EB]		Swanson Ave [WB]	
Out	In	Out	In
6	9	15	0
0	0	0	0
0	0	0	0
0	0	0	0
6	9	15	0

03/28/2017 7:00 AM
Ending At
03/28/2017 6:00 PM

Lights
Mediums
Articulated Trucks
Bicycles on Road

		Team Selected (2017)		
	Out	In	Total	
	2443	2003	4446	
	76	43	119	
	19	23	42	
	0	0	0	
	2538	2069	4607	

U	L	T	R
2	4	3312	1134
0	0	120	22
0	0	28	7
0	0	0	0
2	4	3460	1163

4727	4452	9179
123	142	265
44	35	79
0	0	0
4894	4629	9523
Out	In	Total

S Hamilton Rd [NB]

Turning Movement Data Plot

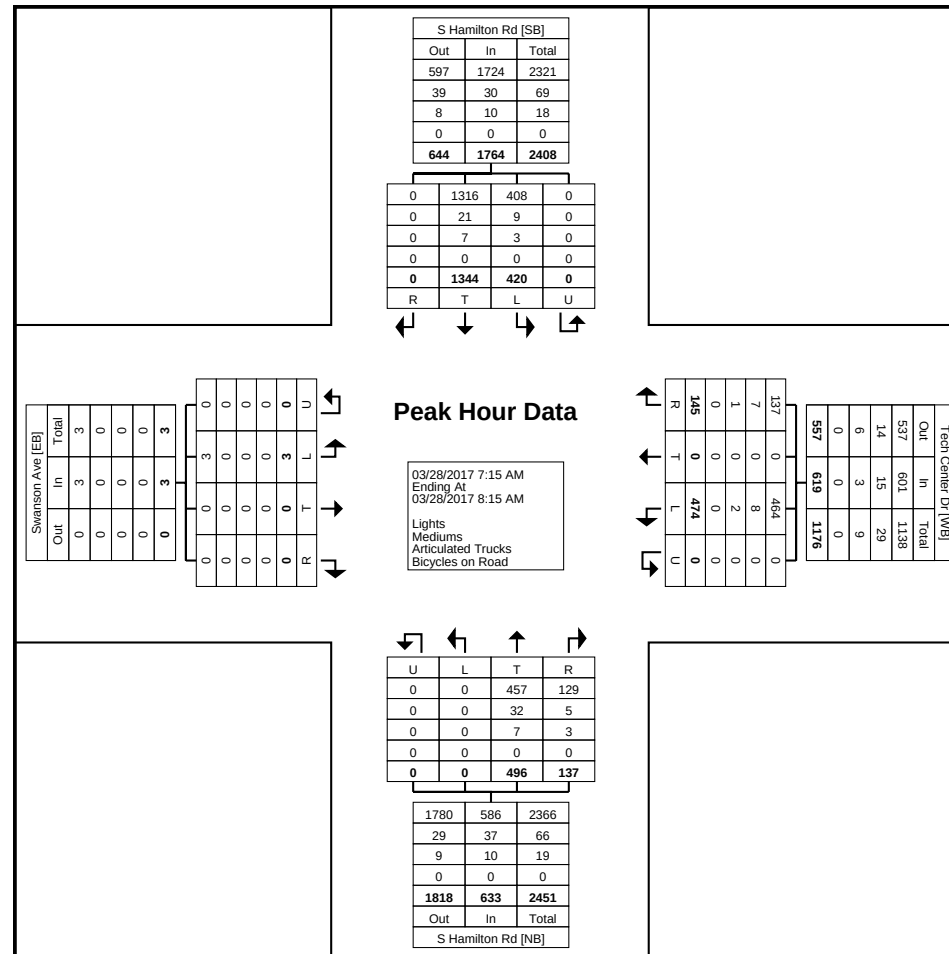
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Turning Movement Peak Hour Data (7:15 AM)

Start Time	S Hamilton Rd Southbound					Tech Center Dr Westbound					S Hamilton Rd Northbound					Swanson Ave Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
7:15 AM	0	319	91	0	410	38	0	112	0	150	24	129	0	0	153	0	0	3	0	3	716
7:30 AM	0	369	79	0	448	46	0	134	0	180	39	98	0	0	137	0	0	0	0	0	765
7:45 AM	0	352	137	0	489	24	0	136	0	160	43	138	0	0	181	0	0	0	0	0	830
8:00 AM	0	304	113	0	417	37	0	92	0	129	31	131	0	0	162	0	0	0	0	0	708
Total	0	1344	420	0	1764	145	0	474	0	619	137	496	0	0	633	0	0	3	0	3	3019
Approach %	0.0	76.2	23.8	0.0	-	23.4	0.0	76.6	0.0	-	21.6	78.4	0.0	0.0	-	0.0	0.0	100.0	0.0	-	-
Total %	0.0	44.5	13.9	0.0	58.4	4.8	0.0	15.7	0.0	20.5	4.5	16.4	0.0	0.0	21.0	0.0	0.0	0.1	0.0	0.1	-
PHF	0.000	0.911	0.766	0.000	0.902	0.788	0.000	0.871	0.000	0.860	0.797	0.899	0.000	0.000	0.874	0.000	0.000	0.250	0.000	0.250	0.909
Lights	0	1316	408	0	1724	137	0	464	0	601	129	457	0	0	586	0	0	3	0	3	2914
% Lights	-	97.9	97.1	-	97.7	94.5	-	97.9	-	97.1	94.2	92.1	-	-	92.6	-	-	100.0	-	100.0	96.5
Mediums	0	21	9	0	30	7	0	8	0	15	5	32	0	0	37	0	0	0	0	0	82
% Mediums	-	1.6	2.1	-	1.7	4.8	-	1.7	-	2.4	3.6	6.5	-	-	5.8	-	-	0.0	-	0.0	2.7
Articulated Trucks	0	7	3	0	10	1	0	2	0	3	3	7	0	0	10	0	0	0	0	0	23
% Articulated Trucks	-	0.5	0.7	-	0.6	0.7	-	0.4	-	0.5	2.2	1.4	-	-	1.6	-	-	0.0	-	0.0	0.8
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	-	0.0	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	-	0.0	-	-	0.0	-	0.0	0.0



Turning Movement Peak Hour Data Plot (7:15 AM)

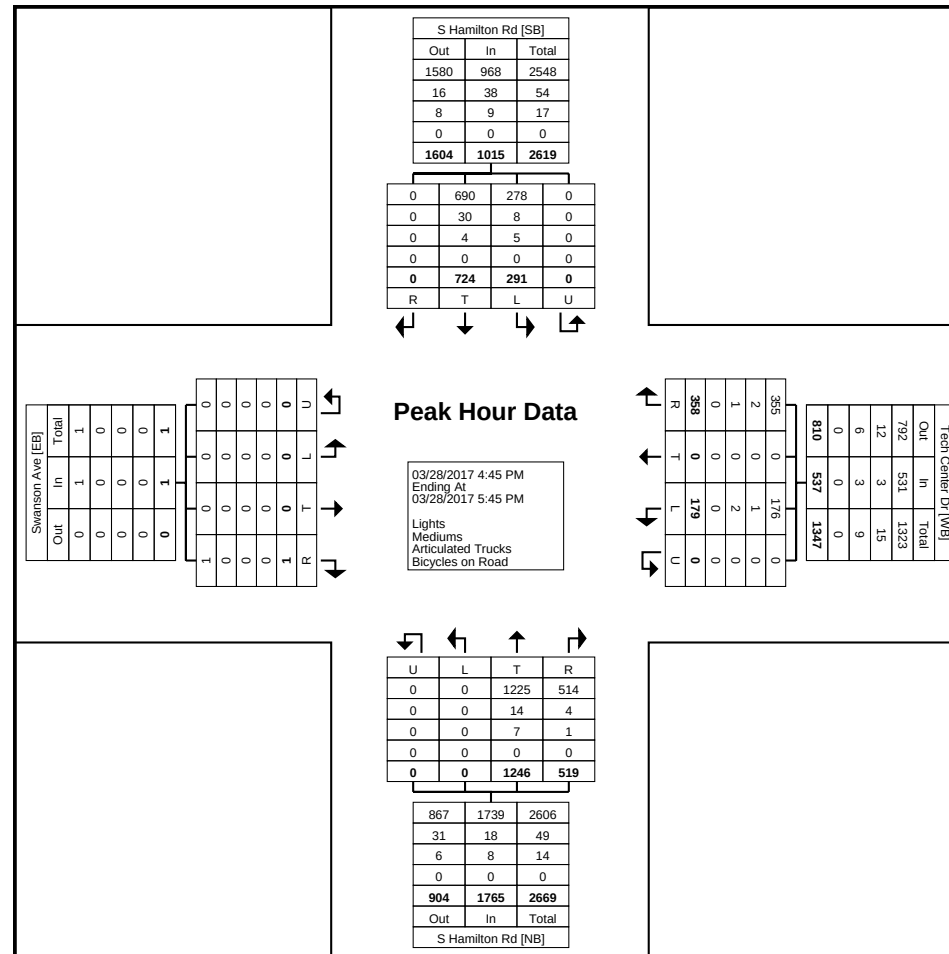
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Turning Movement Peak Hour Data (4:45 PM)

Start Time	S Hamilton Rd Southbound					Tech Center Dr Westbound					S Hamilton Rd Northbound					Swanson Ave Eastbound					Int. Total	
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total		
4:45 PM	0	181	59	0	240	83	0	38	0	121	125	354	0	0	479	0	0	0	0	0	840	
5:00 PM	0	163	75	0	238	107	0	51	0	158	102	314	0	0	416	1	0	0	0	1	813	
5:15 PM	0	193	72	0	265	92	0	50	0	142	156	291	0	0	447	0	0	0	0	0	854	
5:30 PM	0	187	85	0	272	76	0	40	0	116	136	287	0	0	423	0	0	0	0	0	811	
Total	0	724	291	0	1015	358	0	179	0	537	519	1246	0	0	1765	1	0	0	0	1	3318	
Approach %	0.0	71.3	28.7	0.0	-	66.7	0.0	33.3	0.0	-	29.4	70.6	0.0	0.0	-	100.0	0.0	0.0	0.0	0.0	-	-
Total %	0.0	21.8	8.8	0.0	30.6	10.8	0.0	5.4	0.0	16.2	15.6	37.6	0.0	0.0	53.2	0.0	0.0	0.0	0.0	0.0	-	-
PHF	0.000	0.938	0.856	0.000	0.933	0.836	0.000	0.877	0.000	0.850	0.832	0.880	0.000	0.000	0.921	0.250	0.000	0.000	0.000	0.250	0.971	0.971
Lights	0	690	278	0	968	355	0	176	0	531	514	1225	0	0	1739	1	0	0	0	1	3239	3239
% Lights	-	95.3	95.5	-	95.4	99.2	-	98.3	-	98.9	99.0	98.3	-	-	98.5	100.0	-	-	-	100.0	97.6	97.6
Mediums	0	30	8	0	38	2	0	1	0	3	4	14	0	0	18	0	0	0	0	0	59	59
% Mediums	-	4.1	2.7	-	3.7	0.6	-	0.6	-	0.6	0.8	1.1	-	-	1.0	0.0	-	-	-	0.0	1.8	1.8
Articulated Trucks	0	4	5	0	9	1	0	2	0	3	1	7	0	0	8	0	0	0	0	0	20	20
% Articulated Trucks	-	0.6	1.7	-	0.9	0.3	-	1.1	-	0.6	0.2	0.6	-	-	0.5	0.0	-	-	-	0.0	0.6	0.6
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	-	0.0	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	-	0.0	0.0	-	-	-	0.0	0.0	0.0



Turning Movement Peak Hour Data Plot (4:45 PM)

Study Name Taylor Rd & Morrison Rd TMC
 Start Date 3/28/2017
 Start Time 7:00 AM

Lights

Start Time	Southwestbound		Northwestbound		Southeastbound		Total
	Taylor Rd		Morrison Rd		Morrison Rd		
	Right	Left	Right	Thru	Thru	Left	
7:00 AM	136	72	18	24	25	43	318
7:15 AM	147	130	32	37	38	60	444
7:30 AM	133	123	24	41	62	71	454
7:45 AM	125	109	46	39	77	104	500
8:00 AM	97	69	32	31	64	82	375
8:15 AM	121	73	32	34	63	67	390
8:30 AM	93	52	19	35	49	63	311
8:45 AM	62	51	29	30	42	54	268
4:00 PM	101	31	92	69	30	93	416
4:15 PM	67	28	119	76	24	101	415
4:30 PM	118	26	130	98	48	99	519
4:45 PM	72	25	124	74	40	82	417
5:00 PM	145	25	119	111	45	109	554
5:15 PM	100	25	171	80	47	120	543
5:30 PM	82	19	129	75	43	114	462
5:45 PM	81	8	112	56	37	119	413

Mediums

Start Time	Southwestbound		Northwestbound		Southeastbound		Total
	Taylor Rd		Morrison Rd		Morrison Rd		
	Right	Left	Right	Thru	Thru	Left	
7:00 AM	7	0	0	5	3	2	17
7:15 AM	3	0	1	3	3	0	10
7:30 AM	3	2	0	2	1	1	9
7:45 AM	2	0	1	1	4	0	8
8:00 AM	5	1	2	1	7	3	19
8:15 AM	3	1	0	2	10	0	16
8:30 AM	3	2	2	3	3	1	14
8:45 AM	1	2	2	4	2	2	13
4:00 PM	2	3	1	1	2	1	10
4:15 PM	0	2	2	0	1	4	9
4:30 PM	0	0	0	4	2	1	7
4:45 PM	1	0	1	0	2	1	5
5:00 PM	1	0	0	1	1	0	3
5:15 PM	0	1	2	0	0	1	4
5:30 PM	0	0	0	0	1	1	2
5:45 PM	1	0	0	1	1	1	4

Study Name Taylor Rd & Morrison Rd TMC
 Start Date 3/28/2017
 Start Time 7:00 AM

Articulated Trucks

Start Time	Southwestbound		Northwestbound		Southeastbound		Total
	Taylor Rd		Morrison Rd		Morrison Rd		
	Right	Left	Right	Thru	Thru	Left	
7:00 AM	1	0	0	0	0	1	2
7:15 AM	1	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	1	1
7:45 AM	1	0	2	1	1	0	5
8:00 AM	2	0	3	0	0	0	5
8:15 AM	1	1	1	0	0	0	3
8:30 AM	1	0	2	0	0	1	4
8:45 AM	1	0	0	1	1	0	3
4:00 PM	1	0	0	0	0	0	1
4:15 PM	0	0	0	1	0	0	1
4:30 PM	0	0	0	0	0	0	0
4:45 PM	2	0	1	0	0	0	3
5:00 PM	2	1	0	0	0	0	3
5:15 PM	0	1	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0
5:45 PM	0	0	1	0	0	0	1

Total Vehicles

AM Peak

Start Time	Southwestbound		Northwestbound		Southeastbound	
	Taylor Rd		Morrison Rd		Morrison Rd	
	Right	Left	Right	Thru	Thru	Left
7:15 AM	519	434	143	156	257	322

PM Peak

Start Time	Southwestbound		Northwestbound		Southeastbound	
	Taylor Rd		Morrison Rd		Morrison Rd	
	Right	Left	Right	Thru	Thru	Left
4:30 PM	441	104	548	368	185	413

Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive

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Count Name: Taylor Station Rd & Claycraft Rd
TMC
Site Code:
Start Date: 03/28/2017
Page No: 1

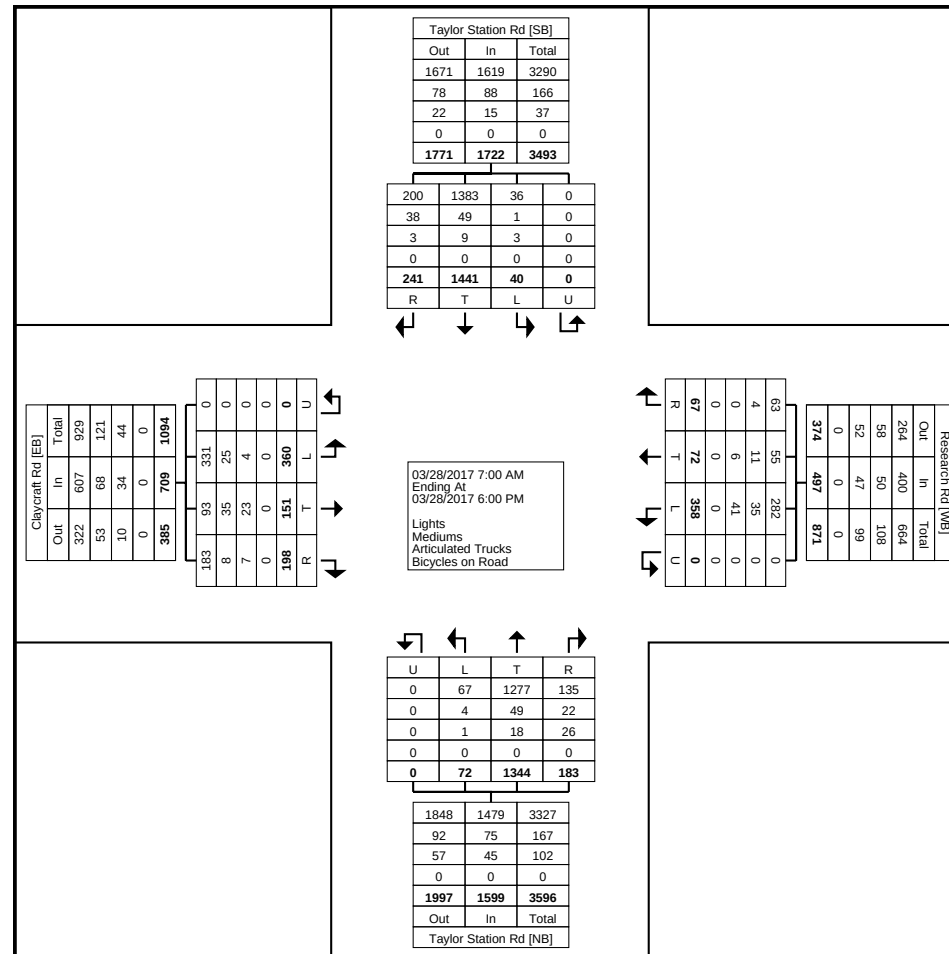
Turning Movement Data

Start Time	Taylor Station Rd Southbound					Research Rd Westbound					Taylor Station Rd Northbound					Claycraft Rd Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
7:00 AM	23	86	3	0	112	2	5	25	0	32	14	49	1	0	64	2	9	5	0	16	224
7:15 AM	25	103	3	0	131	0	6	20	0	26	17	64	5	0	86	7	5	9	0	21	264
7:30 AM	26	110	9	0	145	1	7	10	0	18	20	72	3	0	95	7	11	9	0	27	285
7:45 AM	30	98	2	0	130	1	8	17	0	26	22	84	1	0	107	11	12	20	0	43	306
Hourly Total	104	397	17	0	518	4	26	72	0	102	73	269	10	0	352	27	37	43	0	107	1079
8:00 AM	26	121	6	0	153	2	5	12	0	19	15	74	2	0	91	8	9	14	0	31	294
8:15 AM	10	91	1	0	102	0	2	17	0	19	18	75	1	0	94	11	9	8	0	28	243
8:30 AM	6	92	5	0	103	4	3	14	0	21	12	66	5	0	83	7	9	8	0	24	231
8:45 AM	13	75	4	0	92	3	1	19	0	23	16	68	2	0	86	11	6	10	0	27	228
Hourly Total	55	379	16	0	450	9	11	62	0	82	61	283	10	0	354	37	33	40	0	110	996
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	17	80	1	0	98	6	3	22	0	31	7	84	5	0	96	29	11	34	0	74	299
4:15 PM	11	73	2	0	86	0	2	23	0	25	9	79	3	0	91	16	8	31	0	55	257
4:30 PM	8	115	1	0	124	5	10	25	0	40	9	109	6	0	124	10	11	40	0	61	349
4:45 PM	9	88	2	0	99	6	6	15	0	27	6	92	7	0	105	13	17	33	0	63	294
Hourly Total	45	356	6	0	407	17	21	85	0	123	31	364	21	0	416	68	47	138	0	253	1199
5:00 PM	10	94	0	0	104	18	3	56	0	77	6	111	2	0	119	19	11	56	0	86	386
5:15 PM	5	62	1	0	68	12	5	26	0	43	2	103	9	0	114	19	9	37	0	65	290
5:30 PM	8	81	0	0	89	3	2	41	0	46	4	93	10	0	107	14	7	23	0	44	286
5:45 PM	14	72	0	0	86	4	4	16	0	24	6	121	10	0	137	14	7	23	0	44	291
Hourly Total	37	309	1	0	347	37	14	139	0	190	18	428	31	0	477	66	34	139	0	239	1253
Grand Total	241	1441	40	0	1722	67	72	358	0	497	183	1344	72	0	1599	198	151	360	0	709	4527
Approach %	14.0	83.7	2.3	0.0	-	13.5	14.5	72.0	0.0	-	11.4	84.1	4.5	0.0	-	27.9	21.3	50.8	0.0	-	-
Total %	5.3	31.8	0.9	0.0	38.0	1.5	1.6	7.9	0.0	11.0	4.0	29.7	1.6	0.0	35.3	4.4	3.3	8.0	0.0	15.7	-
Lights	200	1383	36	0	1619	63	55	282	0	400	135	1277	67	0	1479	183	93	331	0	607	4105
% Lights	83.0	96.0	90.0	-	94.0	94.0	76.4	78.8	-	80.5	73.8	95.0	93.1	-	92.5	92.4	61.6	91.9	-	85.6	90.7
Mediums	38	49	1	0	88	4	11	35	0	50	22	49	4	0	75	8	35	25	0	68	281
% Mediums	15.8	3.4	2.5	-	5.1	6.0	15.3	9.8	-	10.1	12.0	3.6	5.6	-	4.7	4.0	23.2	6.9	-	9.6	6.2
Articulated Trucks	3	9	3	0	15	0	6	41	0	47	26	18	1	0	45	7	23	4	0	34	141
% Articulated Trucks	1.2	0.6	7.5	-	0.9	0.0	8.3	11.5	-	9.5	14.2	1.3	1.4	-	2.8	3.5	15.2	1.1	-	4.8	3.1
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0

Carpenter Marty (CM) Transportation Inc.
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Count Name: Taylor Station Rd & Claycraft Rd
TMC
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Start Date: 03/28/2017
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Turning Movement Data Plot

Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive

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Count Name: Taylor Station Rd & Claycraft Rd
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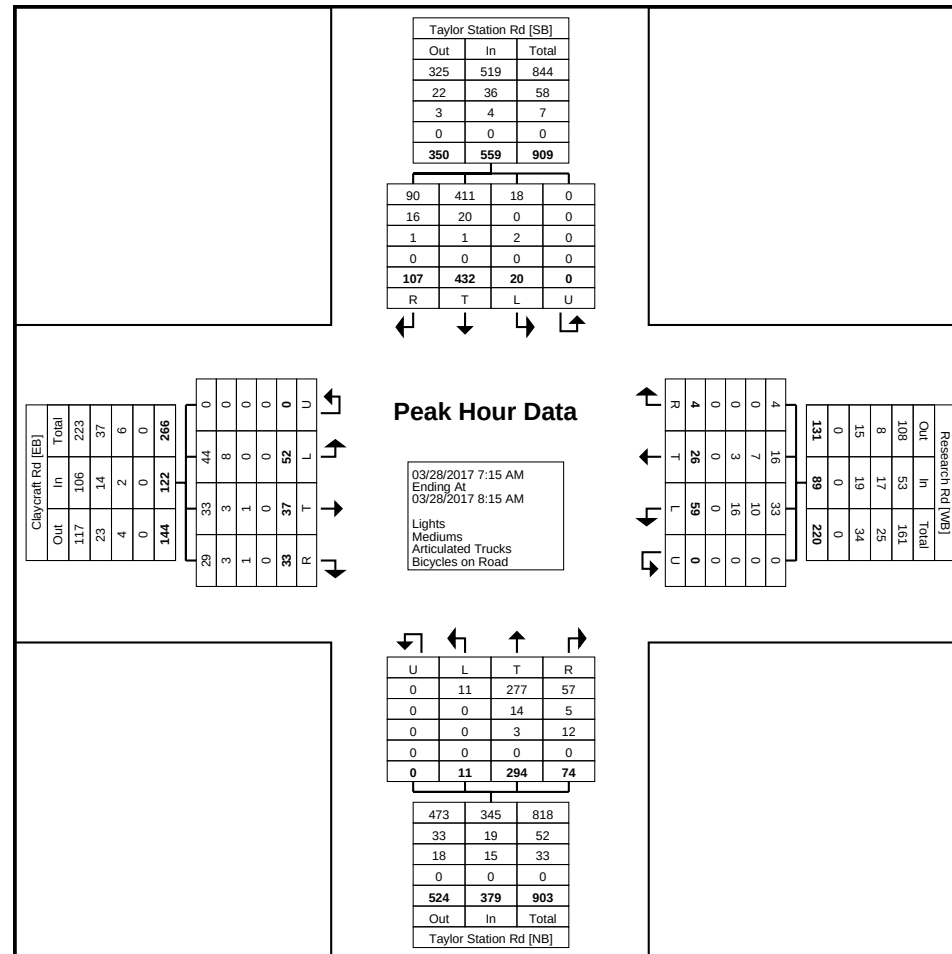
Turning Movement Peak Hour Data (7:15 AM)

Start Time	Taylor Station Rd Southbound					Research Rd Westbound					Taylor Station Rd Northbound					Claycraft Rd Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
7:15 AM	25	103	3	0	131	0	6	20	0	26	17	64	5	0	86	7	5	9	0	21	264
7:30 AM	26	110	9	0	145	1	7	10	0	18	20	72	3	0	95	7	11	9	0	27	285
7:45 AM	30	98	2	0	130	1	8	17	0	26	22	84	1	0	107	11	12	20	0	43	306
8:00 AM	26	121	6	0	153	2	5	12	0	19	15	74	2	0	91	8	9	14	0	31	294
Total	107	432	20	0	559	4	26	59	0	89	74	294	11	0	379	33	37	52	0	122	1149
Approach %	19.1	77.3	3.6	0.0	-	4.5	29.2	66.3	0.0	-	19.5	77.6	2.9	0.0	-	27.0	30.3	42.6	0.0	-	-
Total %	9.3	37.6	1.7	0.0	48.7	0.3	2.3	5.1	0.0	7.7	6.4	25.6	1.0	0.0	33.0	2.9	3.2	4.5	0.0	10.6	-
PHF	0.892	0.893	0.556	0.000	0.913	0.500	0.813	0.738	0.000	0.856	0.841	0.875	0.550	0.000	0.886	0.750	0.771	0.650	0.000	0.709	0.939
Lights	90	411	18	0	519	4	16	33	0	53	57	277	11	0	345	29	33	44	0	106	1023
% Lights	84.1	95.1	90.0	-	92.8	100.0	61.5	55.9	-	59.6	77.0	94.2	100.0	-	91.0	87.9	89.2	84.6	-	86.9	89.0
Mediums	16	20	0	0	36	0	7	10	0	17	5	14	0	0	19	3	3	8	0	14	86
% Mediums	15.0	4.6	0.0	-	6.4	0.0	26.9	16.9	-	19.1	6.8	4.8	0.0	-	5.0	9.1	8.1	15.4	-	11.5	7.5
Articulated Trucks	1	1	2	0	4	0	3	16	0	19	12	3	0	0	15	1	1	0	0	2	40
% Articulated Trucks	0.9	0.2	10.0	-	0.7	0.0	11.5	27.1	-	21.3	16.2	1.0	0.0	-	4.0	3.0	2.7	0.0	-	1.6	3.5
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0

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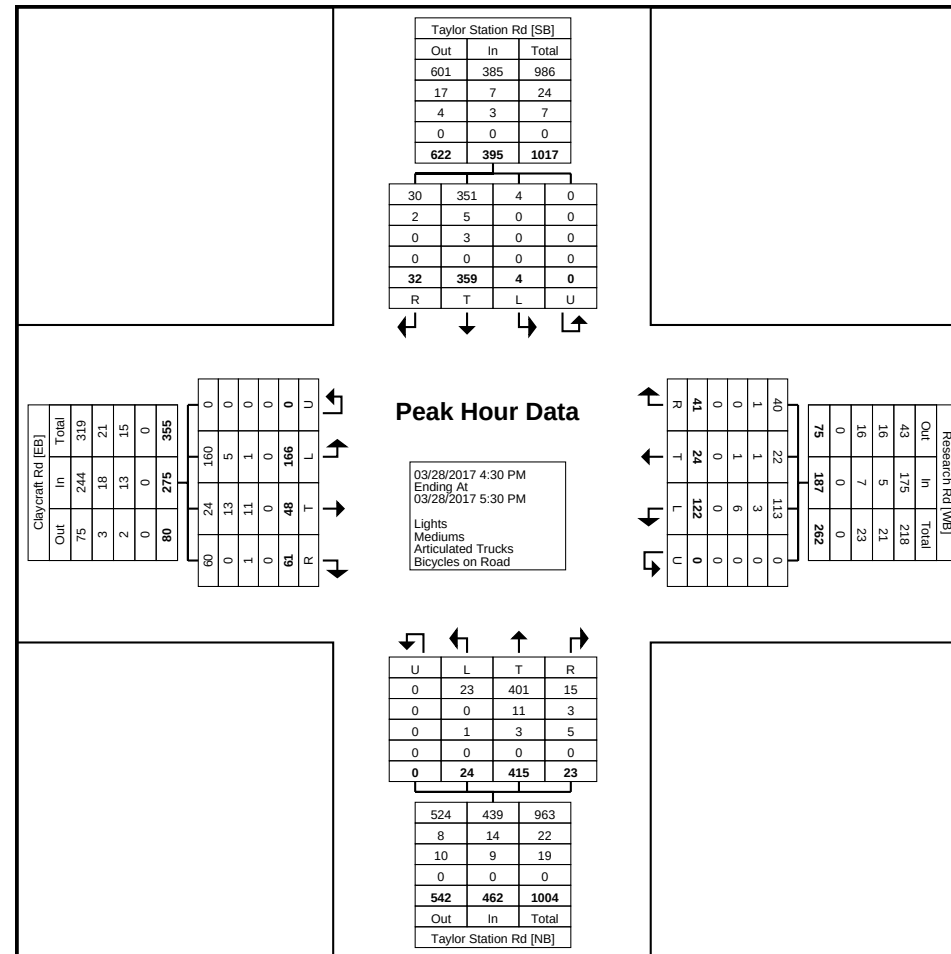
Carpenter Marty (CM) Transportation Inc.
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Count Name: Taylor Station Rd & Claycraft Rd
TMC
Site Code:
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Turning Movement Peak Hour Data (4:30 PM)

Start Time	Taylor Station Rd Southbound					Research Rd Westbound					Taylor Station Rd Northbound					Claycraft Rd Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
4:30 PM	8	115	1	0	124	5	10	25	0	40	9	109	6	0	124	10	11	40	0	61	349
4:45 PM	9	88	2	0	99	6	6	15	0	27	6	92	7	0	105	13	17	33	0	63	294
5:00 PM	10	94	0	0	104	18	3	56	0	77	6	111	2	0	119	19	11	56	0	86	386
5:15 PM	5	62	1	0	68	12	5	26	0	43	2	103	9	0	114	19	9	37	0	65	290
Total	32	359	4	0	395	41	24	122	0	187	23	415	24	0	462	61	48	166	0	275	1319
Approach %	8.1	90.9	1.0	0.0	-	21.9	12.8	65.2	0.0	-	5.0	89.8	5.2	0.0	-	22.2	17.5	60.4	0.0	-	-
Total %	2.4	27.2	0.3	0.0	29.9	3.1	1.8	9.2	0.0	14.2	1.7	31.5	1.8	0.0	35.0	4.6	3.6	12.6	0.0	20.8	-
PHF	0.800	0.780	0.500	0.000	0.796	0.569	0.600	0.545	0.000	0.607	0.639	0.935	0.667	0.000	0.931	0.803	0.706	0.741	0.000	0.799	0.854
Lights	30	351	4	0	385	40	22	113	0	175	15	401	23	0	439	60	24	160	0	244	1243
% Lights	93.8	97.8	100.0	-	97.5	97.6	91.7	92.6	-	93.6	65.2	96.6	95.8	-	95.0	98.4	50.0	96.4	-	88.7	94.2
Mediums	2	5	0	0	7	1	1	3	0	5	3	11	0	0	14	0	13	5	0	18	44
% Mediums	6.3	1.4	0.0	-	1.8	2.4	4.2	2.5	-	2.7	13.0	2.7	0.0	-	3.0	0.0	27.1	3.0	-	6.5	3.3
Articulated Trucks	0	3	0	0	3	0	1	6	0	7	5	3	1	0	9	1	11	1	0	13	32
% Articulated Trucks	0.0	0.8	0.0	-	0.8	0.0	4.2	4.9	-	3.7	21.7	0.7	4.2	-	1.9	1.6	22.9	0.6	-	4.7	2.4
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0



Turning Movement Peak Hour Data Plot (4:30 PM)

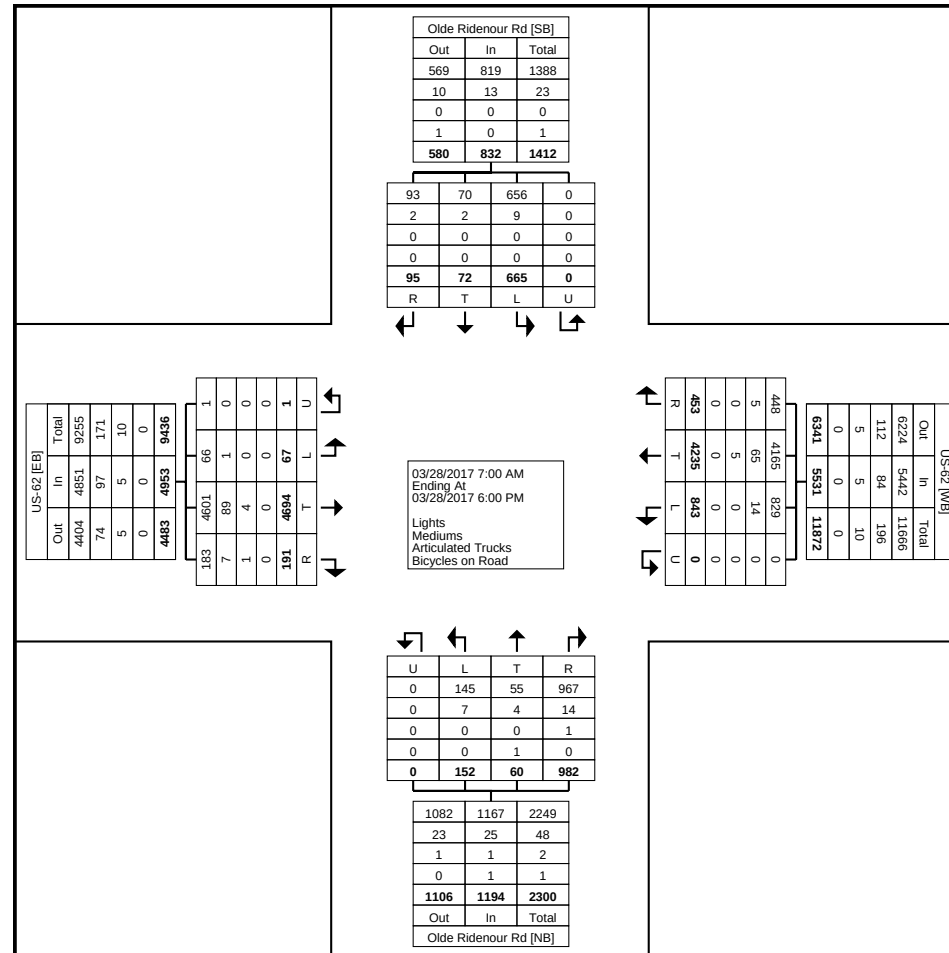
Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive

Columbus, Ohio, United States 43229
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Count Name: US 62 & Olde Ridenour Rd TMC
Site Code:
Start Date: 03/28/2017
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Turning Movement Data

Start Time	Olde Ridenour Rd Southbound					US-62 Westbound					Olde Ridenour Rd Northbound					US-62 Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
7:00 AM	4	1	37	0	42	23	353	49	0	425	25	3	11	0	39	4	128	1	0	133	639
7:15 AM	10	5	73	0	88	25	337	64	0	426	37	2	9	0	48	9	217	2	0	228	790
7:30 AM	12	7	42	0	61	30	356	76	0	462	38	2	7	0	47	10	174	1	0	185	755
7:45 AM	11	8	30	0	49	22	322	91	0	435	53	4	6	0	63	17	173	8	0	198	745
Hourly Total	37	21	182	0	240	100	1368	280	0	1748	153	11	33	0	197	40	692	12	0	744	2929
8:00 AM	9	4	38	0	51	28	318	71	0	417	39	3	14	0	56	12	146	4	0	162	686
8:15 AM	5	7	31	0	43	21	282	60	0	363	37	3	5	0	45	8	151	2	0	161	612
8:30 AM	4	4	23	0	31	13	293	50	0	356	33	1	10	0	44	6	173	5	0	184	615
8:45 AM	4	2	28	0	34	11	244	46	0	301	42	4	9	0	55	11	159	9	0	179	569
Hourly Total	22	17	120	0	159	73	1137	227	0	1437	151	11	38	0	200	37	629	20	0	686	2482
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	7	1	34	0	42	23	207	31	0	261	93	6	8	0	107	16	395	3	0	414	824
4:15 PM	2	2	45	0	49	48	206	54	0	308	91	3	10	0	104	16	385	3	0	404	865
4:30 PM	2	5	23	0	30	28	199	36	0	263	83	4	11	0	98	16	420	3	0	439	830
4:45 PM	3	3	41	0	47	34	218	48	0	300	93	7	16	0	116	12	417	2	0	431	894
Hourly Total	14	11	143	0	168	133	830	169	0	1132	360	20	45	0	425	60	1617	11	0	1688	3413
5:00 PM	6	8	51	0	65	39	197	29	0	265	75	5	7	0	87	20	453	6	0	479	896
5:15 PM	4	9	60	0	73	40	235	46	0	321	85	3	7	0	95	14	464	5	0	483	972
5:30 PM	8	0	60	0	68	34	222	42	0	298	88	5	13	0	106	10	369	7	1	387	859
5:45 PM	4	6	49	0	59	34	246	50	0	330	70	5	9	0	84	10	470	6	0	486	959
Hourly Total	22	23	220	0	265	147	900	167	0	1214	318	18	36	0	372	54	1756	24	1	1835	3686
Grand Total	95	72	665	0	832	453	4235	843	0	5531	982	60	152	0	1194	191	4694	67	1	4953	12510
Approach %	11.4	8.7	79.9	0.0	-	8.2	76.6	15.2	0.0	-	82.2	5.0	12.7	0.0	-	3.9	94.8	1.4	0.0	-	-
Total %	0.8	0.6	5.3	0.0	6.7	3.6	33.9	6.7	0.0	44.2	7.8	0.5	1.2	0.0	9.5	1.5	37.5	0.5	0.0	39.6	-
Lights	93	70	656	0	819	448	4165	829	0	5442	967	55	145	0	1167	183	4601	66	1	4851	12279
% Lights	97.9	97.2	98.6	-	98.4	98.9	98.3	98.3	-	98.4	98.5	91.7	95.4	-	97.7	95.8	98.0	98.5	100.0	97.9	98.2
Mediums	2	2	9	0	13	5	65	14	0	84	14	4	7	0	25	7	89	1	0	97	219
% Mediums	2.1	2.8	1.4	-	1.6	1.1	1.5	1.7	-	1.5	1.4	6.7	4.6	-	2.1	3.7	1.9	1.5	0.0	2.0	1.8
Articulated Trucks	0	0	0	0	0	0	5	0	0	5	1	0	0	0	1	1	4	0	0	5	11
% Articulated Trucks	0.0	0.0	0.0	-	0.0	0.0	0.1	0.0	-	0.1	0.1	0.0	0.0	-	0.1	0.5	0.1	0.0	0.0	0.1	0.1
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	1.7	0.0	-	0.1	0.0	0.0	0.0	0.0	0.0	0.0



Turning Movement Data Plot

Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive

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Count Name: US 62 & Olde Ridenour Rd TMC
Site Code:
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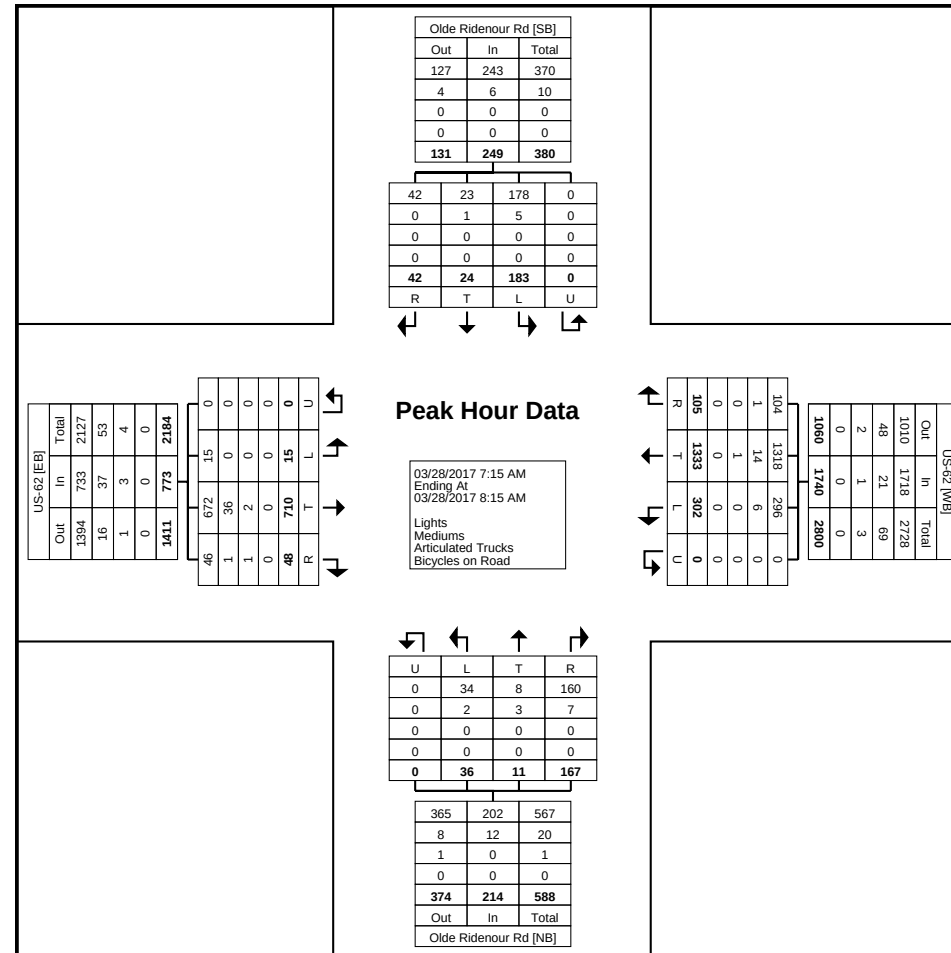
Turning Movement Peak Hour Data (7:15 AM)

Start Time	Olde Ridenour Rd Southbound					US-62 Westbound					Olde Ridenour Rd Northbound					US-62 Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
7:15 AM	10	5	73	0	88	25	337	64	0	426	37	2	9	0	48	9	217	2	0	228	790
7:30 AM	12	7	42	0	61	30	356	76	0	462	38	2	7	0	47	10	174	1	0	185	755
7:45 AM	11	8	30	0	49	22	322	91	0	435	53	4	6	0	63	17	173	8	0	198	745
8:00 AM	9	4	38	0	51	28	318	71	0	417	39	3	14	0	56	12	146	4	0	162	686
Total	42	24	183	0	249	105	1333	302	0	1740	167	11	36	0	214	48	710	15	0	773	2976
Approach %	16.9	9.6	73.5	0.0	-	6.0	76.6	17.4	0.0	-	78.0	5.1	16.8	0.0	-	6.2	91.8	1.9	0.0	-	-
Total %	1.4	0.8	6.1	0.0	8.4	3.5	44.8	10.1	0.0	58.5	5.6	0.4	1.2	0.0	7.2	1.6	23.9	0.5	0.0	26.0	-
PHF	0.875	0.750	0.627	0.000	0.707	0.875	0.936	0.830	0.000	0.942	0.788	0.688	0.643	0.000	0.849	0.706	0.818	0.469	0.000	0.848	0.942
Lights	42	23	178	0	243	104	1318	296	0	1718	160	8	34	0	202	46	672	15	0	733	2896
% Lights	100.0	95.8	97.3	-	97.6	99.0	98.9	98.0	-	98.7	95.8	72.7	94.4	-	94.4	95.8	94.6	100.0	-	94.8	97.3
Mediums	0	1	5	0	6	1	14	6	0	21	7	3	2	0	12	1	36	0	0	37	76
% Mediums	0.0	4.2	2.7	-	2.4	1.0	1.1	2.0	-	1.2	4.2	27.3	5.6	-	5.6	2.1	5.1	0.0	-	4.8	2.6
Articulated Trucks	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	2	0	0	3	4
% Articulated Trucks	0.0	0.0	0.0	-	0.0	0.0	0.1	0.0	-	0.1	0.0	0.0	0.0	-	0.0	2.1	0.3	0.0	-	0.4	0.1
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0

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Count Name: US 62 & Olde Ridenour Rd TMC
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Turning Movement Peak Hour Data Plot (7:15 AM)

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Count Name: US 62 & Olde Ridenour Rd TMC
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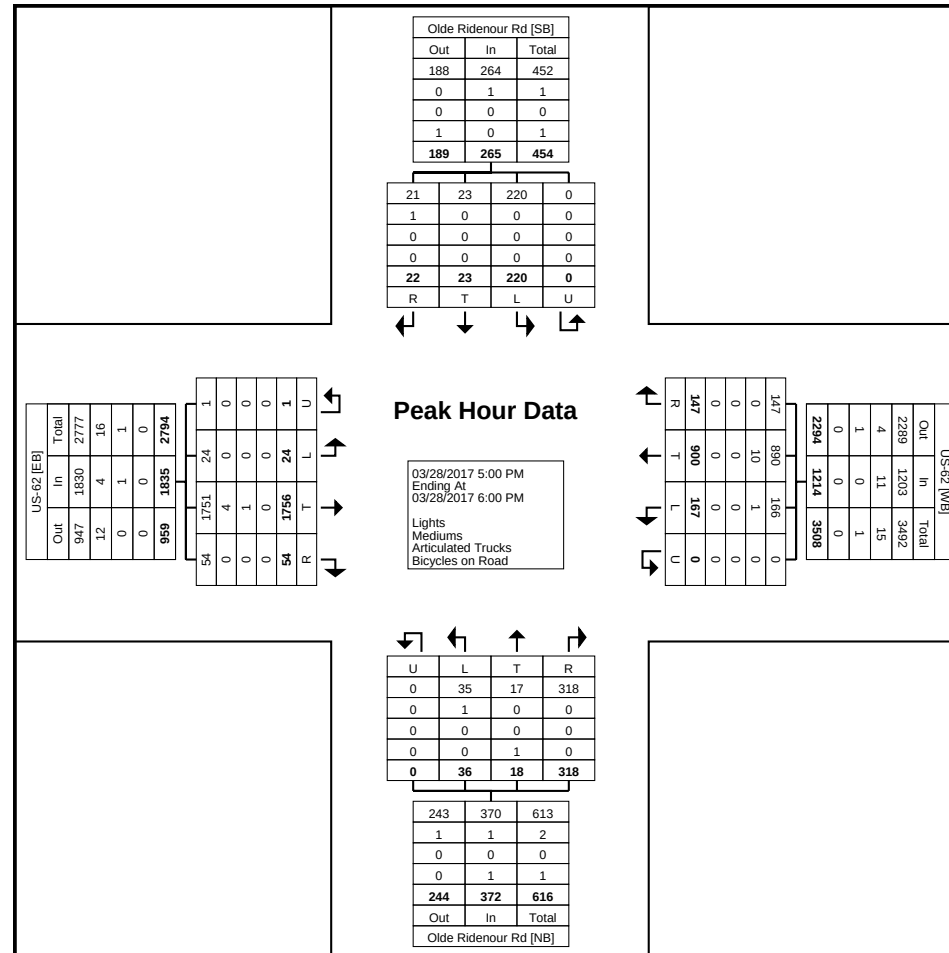
Turning Movement Peak Hour Data (5:00 PM)

Start Time	Olde Ridenour Rd Southbound					US-62 Westbound					Olde Ridenour Rd Northbound					US-62 Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
5:00 PM	6	8	51	0	65	39	197	29	0	265	75	5	7	0	87	20	453	6	0	479	896
5:15 PM	4	9	60	0	73	40	235	46	0	321	85	3	7	0	95	14	464	5	0	483	972
5:30 PM	8	0	60	0	68	34	222	42	0	298	88	5	13	0	106	10	369	7	1	387	859
5:45 PM	4	6	49	0	59	34	246	50	0	330	70	5	9	0	84	10	470	6	0	486	959
Total	22	23	220	0	265	147	900	167	0	1214	318	18	36	0	372	54	1756	24	1	1835	3686
Approach %	8.3	8.7	83.0	0.0	-	12.1	74.1	13.8	0.0	-	85.5	4.8	9.7	0.0	-	2.9	95.7	1.3	0.1	-	-
Total %	0.6	0.6	6.0	0.0	7.2	4.0	24.4	4.5	0.0	32.9	8.6	0.5	1.0	0.0	10.1	1.5	47.6	0.7	0.0	49.8	-
PHF	0.688	0.639	0.917	0.000	0.908	0.919	0.915	0.835	0.000	0.920	0.903	0.900	0.692	0.000	0.877	0.675	0.934	0.857	0.250	0.944	0.948
Lights	21	23	220	0	264	147	890	166	0	1203	318	17	35	0	370	54	1751	24	1	1830	3667
% Lights	95.5	100.0	100.0	-	99.6	100.0	98.9	99.4	-	99.1	100.0	94.4	97.2	-	99.5	100.0	99.7	100.0	100.0	99.7	99.5
Mediums	1	0	0	0	1	0	10	1	0	11	0	0	1	0	1	0	4	0	0	4	17
% Mediums	4.5	0.0	0.0	-	0.4	0.0	1.1	0.6	-	0.9	0.0	0.0	2.8	-	0.3	0.0	0.2	0.0	0.0	0.2	0.5
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
% Articulated Trucks	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.1	0.0	0.0	0.1	0.0
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	5.6	0.0	-	0.3	0.0	0.0	0.0	0.0	0.0	0.0

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Count Name: US 62 & Olde Ridenour Rd TMC
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Turning Movement Peak Hour Data Plot (5:00 PM)

Study Name W Johnstown Rd & S Stygler Rd TMC
 Start Date 3/28/2017
 Start Time 7:00 AM

Lights

Start Time	Southwestbound		Northeastbound		Southeastbound		Total
	W Johnstown Rd		W Johnstown Rd		S Stygler Rd		
	Right	Thru	Thru	Left	Right	Left	
7:00 AM	18	40	24	38	37	6	163
7:15 AM	15	68	20	28	60	3	194
7:30 AM	14	76	29	55	72	4	250
7:45 AM	11	79	39	55	100	8	292
8:00 AM	12	54	29	26	66	7	194
8:15 AM	13	58	30	28	50	8	187
8:30 AM	15	42	31	45	50	6	189
8:45 AM	12	38	35	18	54	11	168
4:00 PM	16	22	78	105	28	12	261
4:15 PM	25	34	70	77	32	13	251
4:30 PM	22	23	90	97	23	16	271
4:45 PM	20	23	69	97	28	10	247
5:00 PM	28	23	83	108	29	8	279
5:15 PM	29	30	71	105	35	12	282
5:30 PM	15	18	57	94	33	9	226
5:45 PM	20	25	55	49	29	13	191

Mediums

Start Time	Southwestbound		Northeastbound		Southeastbound		Total
	W Johnstown Rd		W Johnstown Rd		S Stygler Rd		
	Right	Thru	Thru	Left	Right	Left	
7:00 AM	2	0	0	6	0	0	8
7:15 AM	1	0	1	2	1	1	6
7:30 AM	0	2	2	1	3	0	8
7:45 AM	0	3	2	2	0	0	7
8:00 AM	0	1	0	2	5	0	8
8:15 AM	1	2	0	1	1	0	5
8:30 AM	0	0	1	1	4	0	6
8:45 AM	0	1	3	1	1	3	9
4:00 PM	0	1	1	0	4	0	6
4:15 PM	0	0	2	2	1	0	5
4:30 PM	0	2	2	0	2	0	6
4:45 PM	0	0	3	0	2	0	5
5:00 PM	0	1	2	0	1	0	4
5:15 PM	0	0	0	0	0	0	0
5:30 PM	0	0	1	0	0	0	1
5:45 PM	0	0	0	0	1	0	1

Study Name W Johnstown Rd & S Stygler Rd TMC
 Start Date 3/28/2017
 Start Time 7:00 AM

Articulated Trucks

Start Time	Southwestbound		Northeastbound		Southeastbound		Total
	W Johnstown Rd		W Johnstown Rd		S Stygler Rd		
	Right	Thru	Thru	Left	Right	Left	
7:00 AM	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0
8:00 AM	0	0	0	1	1	0	2
8:15 AM	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0

Total Vehicles

AM PEAK

Start Time	Southwestbound		Northeastbound		Southeastbound	
	W Johnstown Rd		W Johnstown Rd		S Stygler Rd	
	Right	Thru	Thru	Left	Right	Left
7:15 AM	53	283	122	172	308	23

PM Peak

Start Time	Southwestbound		Northeastbound		Southeastbound	
	W Johnstown Rd		W Johnstown Rd		S Stygler Rd	
	Right	Thru	Thru	Left	Right	Left
4:30 PM	99	102	320	407	120	46

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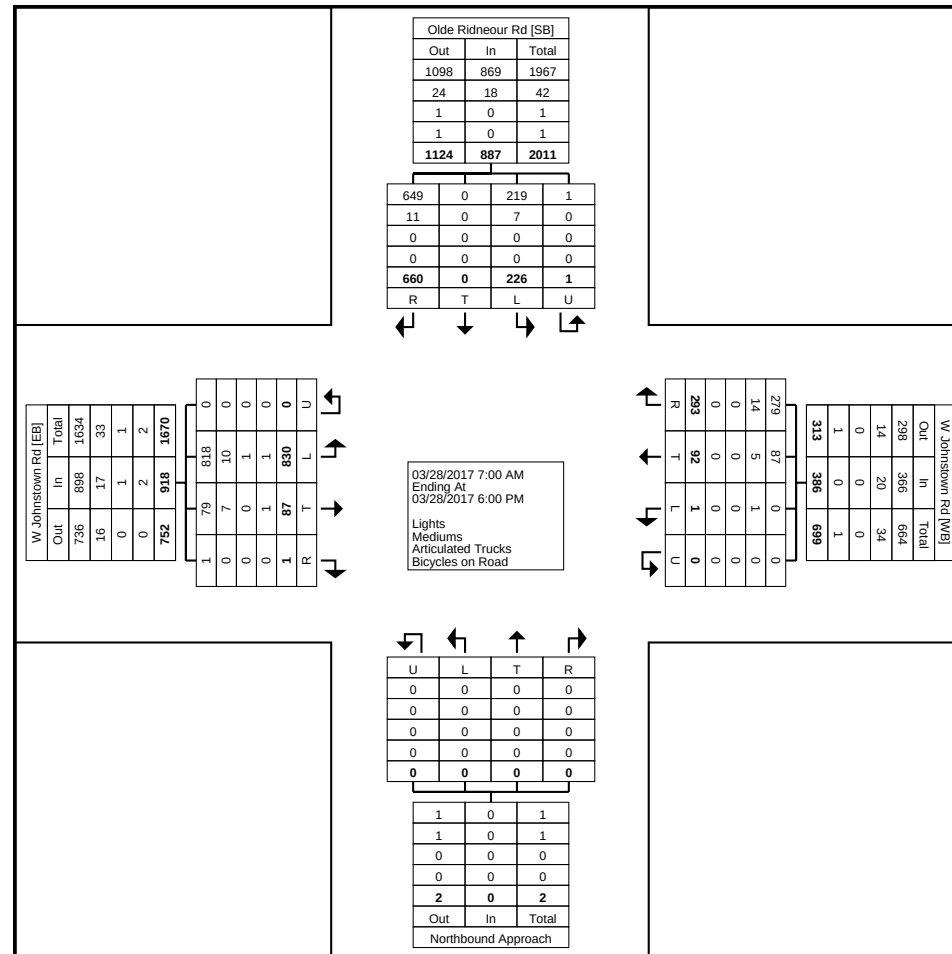
Count Name: W Johnstown Rd & Olde Ridenour
Rd TMC
Site Code:
Start Date: 03/28/2017
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Turning Movement Data

Start Time	Olde Ridenour Rd Southbound					W Johnstown Rd Westbound					Northbound Approach Northbound					W Johnstown Rd Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
7:00 AM	41	0	4	0	45	10	5	0	0	15	0	0	0	0	0	0	2	19	0	21	81
7:15 AM	58	0	4	0	62	10	5	0	0	15	0	0	0	0	0	0	3	31	0	34	111
7:30 AM	67	0	7	0	74	15	7	0	0	22	0	0	0	0	0	0	4	32	0	36	132
7:45 AM	80	0	18	0	98	12	2	0	0	14	0	0	0	0	0	0	5	45	0	50	162
Hourly Total	246	0	33	0	279	47	19	0	0	66	0	0	0	0	0	0	14	127	0	141	486
8:00 AM	54	0	17	0	71	20	6	0	0	26	0	0	0	0	0	0	6	32	0	38	135
8:15 AM	53	0	6	0	59	13	7	0	0	20	0	0	0	0	0	0	4	25	0	29	108
8:30 AM	38	0	12	0	50	13	9	0	0	22	0	0	0	0	0	0	5	25	0	30	102
8:45 AM	37	0	11	0	48	14	5	0	0	19	0	0	0	0	0	0	3	38	0	41	108
Hourly Total	182	0	46	0	228	60	27	0	0	87	0	0	0	0	0	0	18	120	0	138	453
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	22	0	10	0	32	23	8	0	0	31	0	0	0	0	0	0	9	80	0	89	152
4:15 PM	37	0	19	0	56	23	7	0	0	30	0	0	0	0	0	0	9	75	0	84	170
4:30 PM	29	0	17	0	46	25	7	1	0	33	0	0	0	0	0	0	7	76	0	83	162
4:45 PM	29	0	18	1	48	24	2	0	0	26	0	0	0	0	0	0	8	85	0	93	167
Hourly Total	117	0	64	1	182	95	24	1	0	120	0	0	0	0	0	0	33	316	0	349	651
5:00 PM	25	0	16	0	41	22	2	0	0	24	0	0	0	0	0	1	5	59	0	65	130
5:15 PM	32	0	25	0	57	22	6	0	0	28	0	0	0	0	0	0	6	73	0	79	164
5:30 PM	19	0	21	0	40	26	5	0	0	31	0	0	0	0	0	0	3	67	0	70	141
5:45 PM	39	0	21	0	60	21	9	0	0	30	0	0	0	0	0	0	8	68	0	76	166
Hourly Total	115	0	83	0	198	91	22	0	0	113	0	0	0	0	0	1	22	267	0	290	601
Grand Total	660	0	226	1	887	293	92	1	0	386	0	0	0	0	0	1	87	830	0	918	2191
Approach %	74.4	0.0	25.5	0.1	-	75.9	23.8	0.3	0.0	-	NaN	NaN	NaN	NaN	-	0.1	9.5	90.4	0.0	-	-
Total %	30.1	0.0	10.3	0.0	40.5	13.4	4.2	0.0	0.0	17.6	0.0	0.0	0.0	0.0	0.0	0.0	4.0	37.9	0.0	41.9	-
Lights	649	0	219	1	869	279	87	0	0	366	0	0	0	0	0	1	79	818	0	898	2133
% Lights	98.3	-	96.9	100.0	98.0	95.2	94.6	0.0	-	94.8	-	-	-	-	-	100.0	90.8	98.6	-	97.8	97.4
Mediums	11	0	7	0	18	14	5	1	0	20	0	0	0	0	0	0	7	10	0	17	55
% Mediums	1.7	-	3.1	0.0	2.0	4.8	5.4	100.0	-	5.2	-	-	-	-	-	0.0	8.0	1.2	-	1.9	2.5
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
% Articulated Trucks	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	-	-	-	-	-	0.0	0.0	0.1	-	0.1	0.0
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	2
% Bicycles on Road	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	-	-	-	-	-	0.0	1.1	0.1	-	0.2	0.1

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Count Name: W Johnstown Rd & Olde Ridenour
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Turning Movement Data Plot

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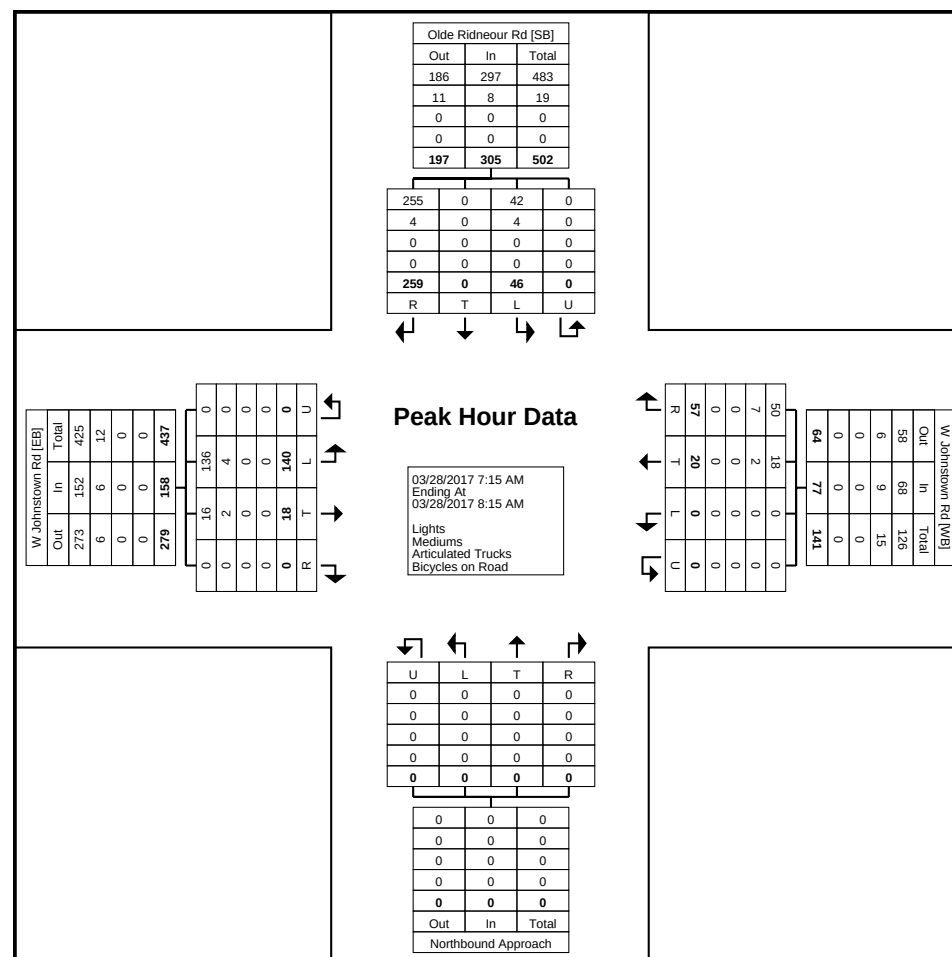
Count Name: W Johnstown Rd & Olde Ridenour
Rd TMC
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Turning Movement Peak Hour Data (7:15 AM)

Start Time	Olde Ridneour Rd Southbound					W Johnstown Rd Westbound					Northbound Approach Northbound					W Johnstown Rd Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
7:15 AM	58	0	4	0	62	10	5	0	0	15	0	0	0	0	0	0	3	31	0	34	111
7:30 AM	67	0	7	0	74	15	7	0	0	22	0	0	0	0	0	0	4	32	0	36	132
7:45 AM	80	0	18	0	98	12	2	0	0	14	0	0	0	0	0	0	5	45	0	50	162
8:00 AM	54	0	17	0	71	20	6	0	0	26	0	0	0	0	0	0	6	32	0	38	135
Total	259	0	46	0	305	57	20	0	0	77	0	0	0	0	0	0	18	140	0	158	540
Approach %	84.9	0.0	15.1	0.0	-	74.0	26.0	0.0	0.0	-	NaN	NaN	NaN	NaN	-	0.0	11.4	88.6	0.0	-	-
Total %	48.0	0.0	8.5	0.0	56.5	10.6	3.7	0.0	0.0	14.3	0.0	0.0	0.0	0.0	0.0	0.0	3.3	25.9	0.0	29.3	-
PHF	0.809	0.000	0.639	0.000	0.778	0.713	0.714	0.000	0.000	0.740	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.778	0.000	0.790	0.833
Lights	255	0	42	0	297	50	18	0	0	68	0	0	0	0	0	0	16	136	0	152	517
% Lights	98.5	-	91.3	-	97.4	87.7	90.0	-	-	88.3	-	-	-	-	-	-	88.9	97.1	-	96.2	95.7
Mediums	4	0	4	0	8	7	2	0	0	9	0	0	0	0	0	0	2	4	0	6	23
% Mediums	1.5	-	8.7	-	2.6	12.3	10.0	-	-	11.7	-	-	-	-	-	-	11.1	2.9	-	3.8	4.3
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Articulated Trucks	0.0	-	0.0	-	0.0	0.0	0.0	-	-	0.0	-	-	-	-	-	-	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	-	0.0	-	0.0	0.0	0.0	-	-	0.0	-	-	-	-	-	-	0.0	0.0	-	0.0	0.0

Columbus, Ohio, United States 43229
614 656 2419 dlaurent@cmtran.com

Count Name: W Johnstown Rd & Olde Ridenour
Rd TMC
Site Code:
Start Date: 03/28/2017
Page No: 4



Turning Movement Peak Hour Data Plot (7:15 AM)

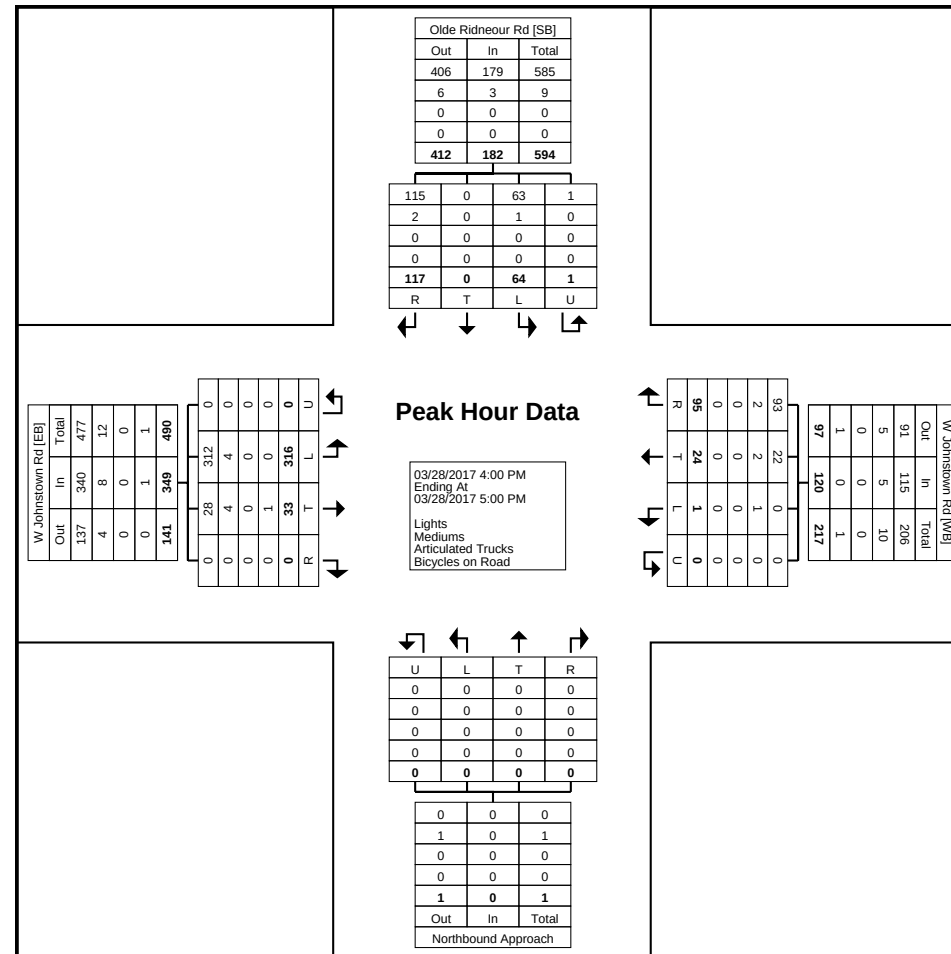
Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive

Columbus, Ohio, United States 43229
614 656 2419 dlaurent@cmtran.com

Count Name: W Johnstown Rd & Olde Ridenour
Rd TMC
Site Code:
Start Date: 03/28/2017
Page No: 5

Turning Movement Peak Hour Data (4:00 PM)

Start Time	Olde Ridneour Rd Southbound					W Johnstown Rd Westbound					Northbound Approach Northbound					W Johnstown Rd Eastbound					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
4:00 PM	22	0	10	0	32	23	8	0	0	31	0	0	0	0	0	0	9	80	0	89	152
4:15 PM	37	0	19	0	56	23	7	0	0	30	0	0	0	0	0	0	9	75	0	84	170
4:30 PM	29	0	17	0	46	25	7	1	0	33	0	0	0	0	0	0	7	76	0	83	162
4:45 PM	29	0	18	1	48	24	2	0	0	26	0	0	0	0	0	0	8	85	0	93	167
Total	117	0	64	1	182	95	24	1	0	120	0	0	0	0	0	0	33	316	0	349	651
Approach %	64.3	0.0	35.2	0.5	-	79.2	20.0	0.8	0.0	-	NaN	NaN	NaN	NaN	-	0.0	9.5	90.5	0.0	-	-
Total %	18.0	0.0	9.8	0.2	28.0	14.6	3.7	0.2	0.0	18.4	0.0	0.0	0.0	0.0	0.0	0.0	5.1	48.5	0.0	53.6	-
PHF	0.791	0.000	0.842	0.250	0.813	0.950	0.750	0.250	0.000	0.909	0.000	0.000	0.000	0.000	0.000	0.000	0.917	0.929	0.000	0.938	0.957
Lights	115	0	63	1	179	93	22	0	0	115	0	0	0	0	0	0	28	312	0	340	634
% Lights	98.3	-	98.4	100.0	98.4	97.9	91.7	0.0	-	95.8	-	-	-	-	-	-	84.8	98.7	-	97.4	97.4
Mediums	2	0	1	0	3	2	2	1	0	5	0	0	0	0	0	0	4	4	0	8	16
% Mediums	1.7	-	1.6	0.0	1.6	2.1	8.3	100.0	-	4.2	-	-	-	-	-	-	12.1	1.3	-	2.3	2.5
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Articulated Trucks	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	-	-	-	-	-	-	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
% Bicycles on Road	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	-	-	-	-	-	-	3.0	0.0	-	0.3	0.2



Smart Services, Inc.

88 W. Church Street

Newark, OH 43055

(740) 345-4700

Location : 1 - Morse Rd East of US 62

Site: 24 023E

Counter # : 31

3/16/2017

Thursday

Daily Volume (Volume factor 0.500)

Interval Start	EB	WB	Combined	Interval Start	EB	WB	Combined
12:00 AM	11	42	9	24	20	66	
12:15 AM	13		8		21		
12:30 AM	6	3		9			
12:45 AM	12	4		16			
1:00 AM	10	26	1	12	11	38	
1:15 AM	7		5		12		
1:30 AM	2	3		5			
1:45 AM	7	3		10			
2:00 AM	7	21	3	13	10	34	
2:15 AM	6		4		10		
2:30 AM	4	4		8			
2:45 AM	4	2		6			
3:00 AM	1	6	2	9	3	15	
3:15 AM	1		2		3		
3:30 AM	0	2		2			
3:45 AM	4	3		7			
4:00 AM	0	16	3	35	3	51	
4:15 AM	5		6		11		
4:30 AM	6	8		14			
4:45 AM	5	18		23			
5:00 AM	4	27	18	112	22	139	
5:15 AM	4		23		27		
5:30 AM	5		39		44		
5:45 AM	14		32		46		
6:00 AM	17	125	43	338	60	463	
6:15 AM	27		66		93		
6:30 AM	40		107		147		
6:45 AM	41		122		163		
7:00 AM	40	248	164	744	204	992	
7:15 AM	60		186		246		
7:30 AM	58		212		270		
7:45 AM	90		182		272		
8:00 AM	79	322	183	663	262	985	
8:15 AM	80		168		248		
8:30 AM	85		159		244		
8:45 AM	78		153		231		
9:00 AM	68	256	112	411	180	667	
9:15 AM	69		106		175		
9:30 AM	55		90		145		
9:45 AM	64		103		167		
10:00 AM	64	255	75	305	139	560	
10:15 AM	62		86		148		
10:30 AM	57		70		127		
10:45 AM	72		74		146		
11:00 AM	58	298	108	433	166	731	
11:15 AM	58		127		185		
11:30 AM	79		96		175		
11:45 AM	103		102		205		
12:00 PM	80	351	110	370	190	721	
12:15 PM	91		86		177		
12:30 PM	90		90		180		
12:45 PM	90		84		174		
1:00 PM	90	383	82	316	172	699	
1:15 PM	101		79		180		
1:30 PM	108		82		190		
1:45 PM	84		73		157		
2:00 PM	116	468	68	318	184	786	
2:15 PM	102		76		178		
2:30 PM	99		82		181		
2:45 PM	151		92		243		
3:00 PM	132	530	82	359	214	889	
3:15 PM	132		89		221		
3:30 PM	136		101		237		
3:45 PM	130		87		217		
4:00 PM	146	600	104	475	250	1075	
4:15 PM	157		100		257		
4:30 PM	166		127		293		
4:45 PM	131		144		275		
5:00 PM	199	721	117	558	316	1279	
5:15 PM	184		128		312		
5:30 PM	156		137		293		
5:45 PM	182		176		358		
6:00 PM	165	620	116	436	281	1056	
6:15 PM	176		130		306		
6:30 PM	146		96		242		
6:45 PM	133		94		227		
7:00 PM	110	471	112	302	222	773	
7:15 PM	146		80		226		
7:30 PM	114		58		172		
7:45 PM	101		52		153		
8:00 PM	105	403	43	156	148	559	
8:15 PM	106		52		158		
8:30 PM	94		39		133		
8:45 PM	98		22		120		
9:00 PM	90	305	32	118	122	423	
9:15 PM	79		28		107		
9:30 PM	76		28		104		
9:45 PM	60		30		90		
10:00 PM	81	201	17	86	98	287	
10:15 PM	54		23		77		
10:30 PM	41		22		63		
10:45 PM	25		24		49		
11:00 PM	21	79	9	34	30	113	
11:15 PM	22		9		31		
11:30 PM	20		10		30		
11:45 PM	16		6		22		

Volume Totals

	EB	WB	Combined
12:00 AM - 12:00 PM	1642 (34.6%)	3099 (65.4%)	4741
12:00 PM - 12:00 AM	5132 (59.3%)	3528 (40.7%)	8660
24 Hours	6774 (50.5%)	6627 (49.5%)	13401

Peak Hours

	EB	WB	Combined
12:00 AM - 12:00 PM	7:45 AM	7:15 AM	7:30 AM
Volume	334	763	1052
Factor	0.93	0.90	0.97
12:00 PM - 12:00 AM	5:00 PM	5:30 PM	5:00 PM
Volume	721	559	1279
Factor	0.91	0.79	0.89

Smart Services, Inc.
88 W. Church Street
Newark, OH 43055
(740) 345-4700

Location : 2 - Morse Rd East of Hamilton Rd

Site: 24 027E

Counter # : 35

3/15/2017

Wednesday

24 Hour Volume (Volume factor 0.500)

Interval Start								Interval Start											
EB		WB		Combined				EB		WB		Combined							
10:00 AM	84	364	114	516	198	880		10:00 PM	79	235	45	136	124	371	Volume Totals				
10:15 AM	90		124		214			10:15 PM	59		32		91		EB	WB	Combined		
10:30 AM	88		122		210			10:30 PM	56		32		88						
10:45 AM	102		156		258			10:45 PM	41		27		68						
11:00 AM	108	469	126	618	234	1087		11:00 PM	39	122	17	74	56	196	12:00 AM - 12:00 PM				
11:15 AM	117		180		297			11:15 PM	32		34		66		2237	4745	6982		
11:30 AM	120		160		280			11:30 PM	28		10		38		(32.0%)	(68.0%)			
11:45 AM	124		152		276			11:45 PM	23		13		36		12:00 PM - 12:00 AM				
12:00 PM	132	626	190	677	322	1303		3/16/2017 12:00 AM	21	79	20	48	41	127	7915	5499	13414		
12:15 PM	158		166		324			12:15 AM	24		10		34		(59.0%)	(41.0%)			
12:30 PM	178		162		340			12:30 AM	14		7		21		24 Hours				
12:45 PM	158		159		317			12:45 AM	20		11		31		10152	10244	20396		
1:00 PM	164	616	130	531	294	1147		1:00 AM	11	42	8	18	19	60	(49.8%)	(50.2%)			
1:15 PM	138		128		266			1:15 AM	11		4		15						
1:30 PM	150		136		286			1:30 AM	12		3		15						
1:45 PM	164		137		301			1:45 AM	8		3		11						
2:00 PM	172	688	129	561	301	1249		2:00 AM	9	28	5	22	14	50	Peak Hours				
2:15 PM	153		145		298			2:15 AM	6		4		10		12:00 AM - 12:00 PM				
2:30 PM	184		154		338			2:30 AM	3		8		11		EB	WB	Combined		
2:45 PM	179		133		312			2:45 AM	10		5		15						
3:00 PM	172	738	147	562	319	1300		3:00 AM	3	14	5	17	8	31					
3:15 PM	168		112		280			3:15 AM	3		4		7		Started				
3:30 PM	198		150		348			3:30 AM	1		2		3		11:00 AM	7:15 AM	7:30 AM		
3:45 PM	200		153		353			3:45 AM	7		6		13		Volume	469	1116	1463	
4:00 PM	225	921	119	568	344	1489		4:00 AM	2	17	8	47	10	64	Factor	0.95	0.93	0.93	
4:15 PM	219		146		365			4:15 AM	5		10		15						
4:30 PM	224		142		366			4:30 AM	7		11		18						
4:45 PM	253		161		414			4:45 AM	3		18		21		12:00 PM - 12:00 AM				
5:00 PM	281	1082	141	722	422	1804		5:00 AM	8	49	20	174	28	223	EB	WB	Combined		
5:15 PM	256		174		430			5:15 AM	5		35		40						
5:30 PM	274		215		489			5:30 AM	22		71		93						
5:45 PM	271		192		463			5:45 AM	14		48		62		EB				
6:00 PM	280	1008	191	685	471	1693		6:00 AM	23	128	74	538	97	666	Started				
6:15 PM	263		156		419			6:15 AM	25		106		131						
6:30 PM	236		166		402			6:30 AM	34		143		177		5:30 PM	5:15 PM	5:15 PM		
6:45 PM	229		172		401			6:45 AM	46		215		261						
7:00 PM	176	725	117	467	293	1192		7:00 AM	50	301	240	1089	290	1390	Volume	1088	772	1853	
7:15 PM	182		116		298			7:15 AM	62		272		334		Factor	0.97	0.90	0.95	
7:30 PM	171		110		281			7:30 AM	70		301		371						
7:45 PM	196		124		320			7:45 AM	119		276		395						
8:00 PM	180	658	82	301	262	959		8:00 AM	90	378	267	975	357	1353					
8:15 PM	153		87		240			8:15 AM	76		264		340						
8:30 PM	158		66		224			8:30 AM	110		228		338						
8:45 PM	167		66		233			8:45 AM	102		216		318						
9:00 PM	176	496	68	215	244	711		9:00 AM	82	368	186	683	268	1051					
9:15 PM	112		60		172			9:15 AM	110		180		290						
9:30 PM	110		45		155			9:30 AM	86		162		248						
9:45 PM	98		42		140			9:45 AM	90		155		245						

Smart Services, Inc.

88 W. Church Street
Newark, OH 43055
(740) 345-4700

Location : 3 - US 62 South of Morse Rd

Site: 24 023S

Counter # : 15

3/16/2017
Thursday

Daily Volume (Volume factor 0.500)

Interval Start	SB	NB	Combined	Interval Start	SB	NB	Combined
12:00 AM	4	12	5	21	9	33	
12:15 AM	5	10	15				
12:30 AM	1	4	5				
12:45 AM	2	2	4				
1:00 AM	2	14	4	9	6	23	
1:15 AM	4	3	7				
1:30 AM	5	1	6				
1:45 AM	3	1	4				
2:00 AM	1	4	2	6	3	10	
2:15 AM	1	3	4				
2:30 AM	0	1	1				
2:45 AM	2	0	2				
3:00 AM	0	5	0	6	0	11	
3:15 AM	0	4	4				
3:30 AM	2	1	3				
3:45 AM	3	1	4				
4:00 AM	4	27	4	16	8	43	
4:15 AM	4	1	5				
4:30 AM	2	3	5				
4:45 AM	17	8	25				
5:00 AM	17	90	6	42	23	132	
5:15 AM	17	8	25				
5:30 AM	27	18	45				
5:45 AM	29	10	39				
6:00 AM	23	237	14	120	37	357	
6:15 AM	58	24	82				
6:30 AM	62	40	102				
6:45 AM	94	42	136				
7:00 AM	97	511	46	234	143	745	
7:15 AM	132	50	182				
7:30 AM	150	62	212				
7:45 AM	132	76	208				
8:00 AM	132	493	67	275	199	768	
8:15 AM	133	74	207				
8:30 AM	106	70	176				
8:45 AM	122	64	186				
9:00 AM	95	333	70	278	165	611	
9:15 AM	80	78	158				
9:30 AM	81	68	149				
9:45 AM	77	62	139				
10:00 AM	58	270	50	245	108	515	
10:15 AM	72	66	138				
10:30 AM	74	72	146				
10:45 AM	66	57	123				
11:00 AM	77	289	64	258	141	547	
11:15 AM	61	62	123				
11:30 AM	63	62	125				
11:45 AM	88	70	158				

Volume Totals

	SB	NB	Combined
12:00 AM - 12:00 PM	2285 (60.2%)	1510 (39.8%)	3795
12:00 PM - 12:00 AM	2990 (45.4%)	3603 (54.6%)	6593
24 Hours	5275 (50.8%)	5113 (49.2%)	10388

Peak Hours

	SB	NB	Combined
12:00 AM - 12:00 PM	7:30 AM	7:45 AM	7:30 AM
Volume	547	287	826
Factor	0.91	0.94	0.97
12:00 PM - 12:00 AM	4:45 PM	5:00 PM	5:00 PM
Volume	455	595	1050
Factor	0.87	0.88	0.98



Smart Services, Inc.
88 W. Church Street

Newark, Ohio, United States 43055
(740) 345 4700 tstanhope@smartservices-inc.com
www.smartservices-inc.com

Count Name: 4 - Hamilton Rd South of Morse Rd
Site Code: 654108 Task Order 9
Start Date: 03/07/2017
Page No: 1

Direction (Southbound)

Start Time	Total
03/07/2017 12:00 AM	15
12:15 AM	14
12:30 AM	4
12:45 AM	2
1:00 AM	10
1:15 AM	5
1:30 AM	5
1:45 AM	3
2:00 AM	3
2:15 AM	3
2:30 AM	9
2:45 AM	9
3:00 AM	0
3:15 AM	2
3:30 AM	5
3:45 AM	1
4:00 AM	4
4:15 AM	2
4:30 AM	17
4:45 AM	16
5:00 AM	11
5:15 AM	25
5:30 AM	44
5:45 AM	48
6:00 AM	60
6:15 AM	70
6:30 AM	94
6:45 AM	127
7:00 AM	160
7:15 AM	226
7:30 AM	259
7:45 AM	288
8:00 AM	221
8:15 AM	206
8:30 AM	193
8:45 AM	183
9:00 AM	176
9:15 AM	148

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159
154
144
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126
101
109
89
67
70
58
63

10:30 PM	40
10:45 PM	36
11:00 PM	21
11:15 PM	26
11:30 PM	21
11:45 PM	15
Total	13030
Total %	100.0
AM Times	7:30 AM
AM Peaks	974
PM Times	5:15 PM
PM Peaks	1075



Smart Services, Inc.
88 W. Church Street

Newark, Ohio, United States 43055
(740) 345 4700 tstanhope@smartservices-inc.com
www.smartservices-inc.com

Count Name: 4 - Hamilton Rd South of Morse Rd
Site Code: 654108 Task Order 9
Start Date: 03/07/2017
Page No: 4

Direction (Northbound)

Start Time	Total
03/07/2017 12:00 AM	21
12:15 AM	17
12:30 AM	15
12:45 AM	6
1:00 AM	12
1:15 AM	10
1:30 AM	5
1:45 AM	8
2:00 AM	7
2:15 AM	3
2:30 AM	6
2:45 AM	3
3:00 AM	1
3:15 AM	3
3:30 AM	4
3:45 AM	6
4:00 AM	6
4:15 AM	4
4:30 AM	3
4:45 AM	15
5:00 AM	9
5:15 AM	18
5:30 AM	28
5:45 AM	30
6:00 AM	33
6:15 AM	46
6:30 AM	71
6:45 AM	89
7:00 AM	101
7:15 AM	147
7:30 AM	153
7:45 AM	182
8:00 AM	227
8:15 AM	194
8:30 AM	196
8:45 AM	178
9:00 AM	196
9:15 AM	174

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	229
	257
	249
	246
	238
	267
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	193
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	105
	97
	50
	46

10:30 PM	51
10:45 PM	29
11:00 PM	32
11:15 PM	20
11:30 PM	25
11:45 PM	22
Total	12586
Total %	100.0
AM Times	7:30 AM
AM Peaks	756
PM Times	5:15 PM
PM Peaks	1022

Smart Services, Inc.

88 W. Church Street

Newark, OH 43055

(740) 345-4700

Location : 5 - US 62 south of Beecher Rd

Site: 24 110S_NB

Counter # : 18

4/4/2017

Tuesday

Daily Volume, per Channel (Volume factor 0.500)

NB					
Interval Start			Interval Start		
12:00 AM	9	33	12:00 PM	84	309
12:15 AM	8		12:15 PM	72	
12:30 AM	10		12:30 PM	72	
12:45 AM	6		12:45 PM	81	
1:00 AM	9	18	1:00 PM	86	293
1:15 AM	5		1:15 PM	71	
1:30 AM	2		1:30 PM	66	
1:45 AM	2		1:45 PM	70	
2:00 AM	0	9	2:00 PM	78	364
2:15 AM	3		2:15 PM	96	
2:30 AM	1		2:30 PM	102	
2:45 AM	5		2:45 PM	88	
3:00 AM	1	5	3:00 PM	113	507
3:15 AM	0		3:15 PM	112	
3:30 AM	2		3:30 PM	154	
3:45 AM	2		3:45 PM	128	
4:00 AM	3	17	4:00 PM	157	608
4:15 AM	2		4:15 PM	119	
4:30 AM	4		4:30 PM	162	
4:45 AM	8		4:45 PM	170	
5:00 AM	15	62	5:00 PM	172	705
5:15 AM	18		5:15 PM	191	
5:30 AM	14		5:30 PM	174	
5:45 AM	15		5:45 PM	168	
6:00 AM	10	84	6:00 PM	172	522
6:15 AM	14		6:15 PM	144	
6:30 AM	26		6:30 PM	106	
6:45 AM	34		6:45 PM	100	
7:00 AM	46	256	7:00 PM	107	351
7:15 AM	56		7:15 PM	82	
7:30 AM	56		7:30 PM	85	
7:45 AM	98		7:45 PM	77	
8:00 AM	94	354	8:00 PM	84	238
8:15 AM	90		8:15 PM	60	
8:30 AM	86		8:30 PM	40	
8:45 AM	84		8:45 PM	54	
9:00 AM	84	293	9:00 PM	57	146
9:15 AM	76		9:15 PM	36	
9:30 AM	59		9:30 PM	28	
9:45 AM	74		9:45 PM	25	
10:00 AM	73	281	10:00 PM	22	76
10:15 AM	76		10:15 PM	21	
10:30 AM	70		10:30 PM	16	
10:45 AM	62		10:45 PM	17	
11:00 AM	60	265	11:00 PM	6	42
11:15 AM	56		11:15 PM	15	
11:30 AM	73		11:30 PM	13	
11:45 AM	76		11:45 PM	8	

24 Hour Total 5838**12:00 AM - 12:00 PM**

12 Hour Count 1677
Peak Hour 7:45 AM
Peak Volume 368
Factor 0.94

12:00 PM - 12:00 AM

12 Hour Count 4161
Peak Hour 4:45 PM
Peak Volume 707
Factor 0.93

Smart Services, Inc.

88 W. Church Street

Newark, OH 43055

(740) 345-4700

Location : 5 - US 62 south of Beecher Rd SB

Site: 24 110S_SB

Counter # : 33

4/4/2017

Tuesday

Daily Volume, per Channel (Volume factor 0.500)

SB					
Interval Start			Interval Start		
12:00 AM	6	22	12:00 PM	72	329
12:15 AM	7		12:15 PM	80	
12:30 AM	4		12:30 PM	81	
12:45 AM	5		12:45 PM	96	
1:00 AM	0	6	1:00 PM	82	315
1:15 AM	3		1:15 PM	84	
1:30 AM	1		1:30 PM	69	
1:45 AM	2		1:45 PM	80	
2:00 AM	1	5	2:00 PM	88	319
2:15 AM	1		2:15 PM	73	
2:30 AM	0		2:30 PM	74	
2:45 AM	3		2:45 PM	84	
3:00 AM	0	5	3:00 PM	74	350
3:15 AM	1		3:15 PM	101	
3:30 AM	0		3:30 PM	79	
3:45 AM	4		3:45 PM	96	
4:00 AM	5	29	4:00 PM	84	360
4:15 AM	3		4:15 PM	94	
4:30 AM	10		4:30 PM	84	
4:45 AM	11		4:45 PM	98	
5:00 AM	11	76	5:00 PM	108	417
5:15 AM	13		5:15 PM	103	
5:30 AM	28		5:30 PM	100	
5:45 AM	24		5:45 PM	106	
6:00 AM	48	333	6:00 PM	96	329
6:15 AM	77		6:15 PM	88	
6:30 AM	102		6:30 PM	78	
6:45 AM	106		6:45 PM	67	
7:00 AM	171	651	7:00 PM	81	253
7:15 AM	173		7:15 PM	52	
7:30 AM	148		7:30 PM	64	
7:45 AM	159		7:45 PM	56	
8:00 AM	159	665	8:00 PM	59	194
8:15 AM	210		8:15 PM	41	
8:30 AM	152		8:30 PM	63	
8:45 AM	144		8:45 PM	31	
9:00 AM	96	419	9:00 PM	38	116
9:15 AM	100		9:15 PM	30	
9:30 AM	120		9:30 PM	24	
9:45 AM	103		9:45 PM	24	
10:00 AM	84	344	10:00 PM	29	78
10:15 AM	91		10:15 PM	20	
10:30 AM	85		10:30 PM	14	
10:45 AM	84		10:45 PM	15	
11:00 AM	82	309	11:00 PM	7	19
11:15 AM	66		11:15 PM	4	
11:30 AM	76		11:30 PM	4	
11:45 AM	85		11:45 PM	4	

24 Hour Total 5943**12:00 AM - 12:00 PM**

12 Hour Count 2864
Peak Hour 7:45 AM
Peak Volume 680
Factor 0.81

12:00 PM - 12:00 AM

12 Hour Count 3079
Peak Hour 5:00 PM
Peak Volume 417
Factor 0.97

Smart Services, Inc.
88 W. Church Street
Newark, OH 43055
(740) 345-4700

Location : 6 - Johnstown Rd West of Hamilton Rd

Site: 24 010W

Counter # : 30

3/15/2017

Wednesday

24 Hour Volume (Volume factor 0.500)

Interval Start	WB	EB	Combined
12:00 PM	88	378	466
12:15 PM	112	77	189
12:30 PM	91	110	201
12:45 PM	87	108	195
1:00 PM	94	362	456
1:15 PM	96	80	176
1:30 PM	85	104	189
1:45 PM	87	86	173
2:00 PM	80	381	461
2:15 PM	106	96	202
2:30 PM	93	114	207
2:45 PM	102	116	218
3:00 PM	89	406	495
3:15 PM	100	132	232
3:30 PM	104	128	232
3:45 PM	113	122	235
4:00 PM	97	396	493
4:15 PM	89	158	247
4:30 PM	104	146	250
4:45 PM	106	160	266
5:00 PM	101	427	528
5:15 PM	122	181	303
5:30 PM	90	185	275
5:45 PM	114	193	307
6:00 PM	133	426	559
6:15 PM	111	137	248
6:30 PM	105	131	236
6:45 PM	77	142	219
7:00 PM	73	295	368
7:15 PM	80	89	169
7:30 PM	68	118	186
7:45 PM	74	86	160
8:00 PM	42	190	232
8:15 PM	58	64	122
8:30 PM	48	78	126
8:45 PM	42	66	108
9:00 PM	52	145	197
9:15 PM	36	50	86
9:30 PM	32	40	72
9:45 PM	25	30	55
10:00 PM	22	52	74
10:15 PM	14	21	35
10:30 PM	9	18	27
10:45 PM	7	16	23
11:00 PM	18	36	54
11:15 PM	7	9	16
11:30 PM	7	9	16
11:45 PM	4	12	16

Interval Start	WB	EB	Combined
3/16/2017 12:00 AM	4	17	21
12:15 AM	8	8	16
12:30 AM	4	6	10
12:45 AM	1	6	7
1:00 AM	2	9	11
1:15 AM	3	8	11
1:30 AM	1	3	4
1:45 AM	3	2	5
2:00 AM	6	11	17
2:15 AM	3	1	4
2:30 AM	1	1	2
2:45 AM	1	2	3
3:00 AM	0	10	10
3:15 AM	0	4	4
3:30 AM	3	2	5
3:45 AM	7	2	9
4:00 AM	5	25	30
4:15 AM	5	1	6
4:30 AM	3	3	6
4:45 AM	12	10	22
5:00 AM	16	91	107
5:15 AM	13	12	25
5:30 AM	32	9	41
5:45 AM	30	15	45
6:00 AM	36	328	364
6:15 AM	76	14	90
6:30 AM	89	22	111
6:45 AM	127	50	177
7:00 AM	151	649	800
7:15 AM	158	62	220
7:30 AM	163	70	233
7:45 AM	177	105	282
8:00 AM	148	580	728
8:15 AM	152	94	246
8:30 AM	150	65	215
8:45 AM	130	89	219
9:00 AM	137	403	540
9:15 AM	98	76	174
9:30 AM	86	60	146
9:45 AM	82	76	158
10:00 AM	80	309	389
10:15 AM	79	69	148
10:30 AM	86	62	148
10:45 AM	64	80	144
11:00 AM	76	360	436
11:15 AM	95	76	171
11:30 AM	88	96	184
11:45 AM	101	87	188

Volume Totals		
WB	EB	Combined
12:00 AM - 12:00 PM		
2792	1744	4536
(61.6%)	(38.4%)	
12:00 PM - 12:00 AM		
3494	4597	8091
(43.2%)	(56.8%)	
24 Hours		
6286	6341	12627
(49.8%)	(50.2%)	

Peak Hours		
12:00 AM - 12:00 PM		
WB	EB	Combined
Started		
7:00 AM	7:30 AM	7:30 AM
Volume		
649	356	996
Factor		
0.92	0.85	0.88

12:00 PM - 12:00 AM		
WB	EB	Combined
Started		
5:45 PM	5:00 PM	5:00 PM
Volume		
463	769	1196
Factor		
0.87	0.92	0.96

Smart Services, Inc.

88 W. Church Street

Newark, OH 43055

(740) 345-4700

Location : 7 - Clark State Rd East of Hamilton Rd

Site: 23 024E

Counter # : 33

3/16/2017

Thursday

Daily Volume (Volume factor 0.500)

Interval Start	WB	EB	Combined	Interval Start	WB	EB	Combined
12:00 AM	0	7	9	12:00 PM	50	180	32
12:15 AM	1		6	12:15 PM	36		44
12:30 AM	5	5	10	12:30 PM	46		45
12:45 AM	1	4	5	12:45 PM	48		36
1:00 AM	4	9	4	1:00 PM	32	144	51
1:15 AM	3		3	1:15 PM	29		34
1:30 AM	1	0	1	1:30 PM	38		39
1:45 AM	1	2	3	1:45 PM	45		38
2:00 AM	1	4	0	2:00 PM	31	163	68
2:15 AM	1		0	2:15 PM	36		43
2:30 AM	2	2	4	2:30 PM	51		44
2:45 AM	0	0	0	2:45 PM	45		65
3:00 AM	2	9	2	3:00 PM	52	172	88
3:15 AM	4		0	3:15 PM	30		84
3:30 AM	2	1	3	3:30 PM	44		84
3:45 AM	1	2	3	3:45 PM	46		72
4:00 AM	2	21	0	4:00 PM	41	185	86
4:15 AM	4		0	4:15 PM	40		96
4:30 AM	5	2	7	4:30 PM	47		104
4:45 AM	10	1	11	4:45 PM	57		120
5:00 AM	5	59	7	5:00 PM	48	215	109
5:15 AM	11		5	5:15 PM	63		122
5:30 AM	19		4	5:30 PM	57		115
5:45 AM	24		3	5:45 PM	47		106
6:00 AM	35	267	8	6:00 PM	56	230	104
6:15 AM	53		5	6:15 PM	62		82
6:30 AM	91		14	6:30 PM	66		66
6:45 AM	88		22	6:45 PM	46		71
7:00 AM	145	676	18	7:00 PM	41	156	48
7:15 AM	230		29	7:15 PM	35		58
7:30 AM	154		39	7:30 PM	41		50
7:45 AM	147		34	7:45 PM	39		50
8:00 AM	113	408	24	8:00 PM	25	101	46
8:15 AM	126		36	8:15 PM	28		60
8:30 AM	91		34	8:30 PM	36		35
8:45 AM	78		40	8:45 PM	12		52
9:00 AM	56	220	32	9:00 PM	15	62	44
9:15 AM	66		26	9:15 PM	16		45
9:30 AM	48		30	9:30 PM	17		34
9:45 AM	50		30	9:45 PM	14		16
10:00 AM	36	142	26	10:00 PM	9	39	25
10:15 AM	39		29	10:15 PM	12		20
10:30 AM	32		33	10:30 PM	9		13
10:45 AM	35		32	10:45 PM	9		18
11:00 AM	41	154	35	11:00 PM	6	20	13
11:15 AM	37		41	11:15 PM	5		6
11:30 AM	30		18	11:30 PM	2		9
11:45 AM	46		38	11:45 PM	7		4

Volume Totals

	WB	EB	Combined
12:00 AM - 12:00 PM	1976 (72.9%)	735 (27.1%)	2711
12:00 PM - 12:00 AM	1667 (38.2%)	2694 (61.8%)	4361
24 Hours	3643 (51.5%)	3429 (48.5%)	7072

Peak Hours

	WB	EB	Combined
12:00 AM - 12:00 PM	7:00 AM	8:15 AM	7:00 AM
Volume	676	142	796
Factor	0.73	0.89	0.77
12:00 PM - 12:00 AM	5:45 PM	4:45 PM	4:45 PM
Volume	231	466	691
Factor	0.88	0.95	0.93



Smart Services, Inc.
88 W. Church Street

Newark, Ohio, United States 43055
(740) 345 4700 tstanhope@smartservices-inc.com
www.smartservices-inc.com

Count Name: 8 - Hamilton Rd South of
Carpenter Rd
Site Code: 654108 - Task Order 9
Start Date: 03/07/2017
Page No: 1

Direction (Southbound)

Start Time	Total
03/07/2017 12:00 AM	14
12:15 AM	12
12:30 AM	12
12:45 AM	7
1:00 AM	6
1:15 AM	5
1:30 AM	5
1:45 AM	3
2:00 AM	1
2:15 AM	3
2:30 AM	3
2:45 AM	5
3:00 AM	2
3:15 AM	7
3:30 AM	7
3:45 AM	5
4:00 AM	11
4:15 AM	13
4:30 AM	19
4:45 AM	19
5:00 AM	20
5:15 AM	43
5:30 AM	66
5:45 AM	76
6:00 AM	89
6:15 AM	125
6:30 AM	174
6:45 AM	204
7:00 AM	335
7:15 AM	482
7:30 AM	352
7:45 AM	342
8:00 AM	319
8:15 AM	300
8:30 AM	263
8:45 AM	213
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9:15 AM	175

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	192
	223
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	229
	211
	212
	204
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	168
	161
	168
	119
	108
	104
	88
	78
	83
	96
	64
	71
	64
	44
	48

10:30 PM	54
10:45 PM	19
11:00 PM	23
11:15 PM	29
11:30 PM	22
11:45 PM	22
Total	12263
Total %	100.0
AM Times	7:15 AM
AM Peaks	1495
PM Times	5:15 PM
PM Peaks	882



Smart Services, Inc.
88 W. Church Street

Newark, Ohio, United States 43055
(740) 345 4700 tstanhope@smartservices-inc.com
www.smartservices-inc.com

Count Name: 8 - Hamilton Rd South of
Carpenter Rd
Site Code: 654108 - Task Order 9
Start Date: 03/07/2017
Page No: 4

Direction (Northbound)

Start Time	Total
03/07/2017 12:00 AM	16
12:15 AM	10
12:30 AM	12
12:45 AM	13
1:00 AM	8
1:15 AM	8
1:30 AM	6
1:45 AM	9
2:00 AM	8
2:15 AM	3
2:30 AM	6
2:45 AM	1
3:00 AM	1
3:15 AM	6
3:30 AM	4
3:45 AM	8
4:00 AM	5
4:15 AM	6
4:30 AM	10
4:45 AM	11
5:00 AM	9
5:15 AM	20
5:30 AM	35
5:45 AM	27
6:00 AM	42
6:15 AM	40
6:30 AM	51
6:45 AM	87
7:00 AM	95
7:15 AM	150
7:30 AM	183
7:45 AM	216
8:00 AM	167
8:15 AM	178
8:30 AM	168
8:45 AM	178
9:00 AM	184
9:15 AM	140

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	201
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	164
	186
	184
	177
	179
	211
	197
	205
	212
	329
	218
	243
	255
	267
	283
	276
	307
	312
	355
	357
	355
	329
	308
	241
	218
	201
	166
	160
	140
	151
	128
	130
	119
	104
	107
	60
	78
	71
	43

10:30 PM	51
10:45 PM	37
11:00 PM	31
11:15 PM	27
11:30 PM	17
11:45 PM	18
Total	12314
Total %	100.0
AM Times	7:15 AM
AM Peaks	716
PM Times	5:15 PM
PM Peaks	1396

Smart Services, Inc.

88 W. Church Street

Newark, OH 43055

(740) 345-4700

Location : 9 - Havens Corners Rd East of Hamilton Rd

Site: 23 035E

Counter # : 12

3/16/2017

Thursday

Daily Volume (Volume factor 0.500)

Interval Start	EB	WB	Combined	Interval Start	EB	WB	Combined
12:00 AM	10	47	4	12:00 PM	106	367	92
12:15 AM	17		5	12:15 PM	73		88
12:30 AM	13		0	12:30 PM	92		97
12:45 AM	7		4	12:45 PM	96		83
1:00 AM	6	22	3	1:00 PM	122	418	90
1:15 AM	6		3	1:15 PM	94		82
1:30 AM	5		2	1:30 PM	90		68
1:45 AM	5		4	1:45 PM	112		91
2:00 AM	4	19	1	2:00 PM	150	589	86
2:15 AM	3		2	2:15 PM	120		131
2:30 AM	5		1	2:30 PM	141		128
2:45 AM	7		3	2:45 PM	178		102
3:00 AM	5	19	6	3:00 PM	249	868	108
3:15 AM	3		5	3:15 PM	205		104
3:30 AM	6		4	3:30 PM	186		138
3:45 AM	5		1	3:45 PM	228		128
4:00 AM	2	33	4	4:00 PM	275	1032	124
4:15 AM	6		6	4:15 PM	250		112
4:30 AM	11		19	4:30 PM	246		105
4:45 AM	14		30	4:45 PM	261		119
5:00 AM	8	47	26	5:00 PM	292	1082	105
5:15 AM	10		44	5:15 PM	272		150
5:30 AM	13		45	5:30 PM	256		163
5:45 AM	16		73	5:45 PM	262		162
6:00 AM	17	164	104	6:00 PM	253	829	154
6:15 AM	55		144	6:15 PM	187		196
6:30 AM	40		190	6:30 PM	208		190
6:45 AM	52		230	6:45 PM	181		138
7:00 AM	63	489	260	7:00 PM	154	586	124
7:15 AM	131		277	7:15 PM	152		85
7:30 AM	156		204	7:30 PM	126		91
7:45 AM	139		238	7:45 PM	154		76
8:00 AM	81	310	188	8:00 PM	268	693	45
8:15 AM	96		174	8:15 PM	182		50
8:30 AM	70		192	8:30 PM	138		64
8:45 AM	63		174	8:45 PM	105		35
9:00 AM	66	230	162	9:00 PM	103	371	34
9:15 AM	67		134	9:15 PM	105		41
9:30 AM	54		110	9:30 PM	89		38
9:45 AM	43		113	9:45 PM	74		30
10:00 AM	59	254	91	10:00 PM	89	244	25
10:15 AM	66		96	10:15 PM	63		32
10:30 AM	61		86	10:30 PM	55		23
10:45 AM	68		104	10:45 PM	37		7
11:00 AM	74	343	108	11:00 PM	40	132	8
11:15 AM	124		98	11:15 PM	34		13
11:30 AM	69		92	11:30 PM	29		6
11:45 AM	76		96	11:45 PM	29		5

Volume Totals

	EB	WB	Combined
12:00 AM - 12:00 PM	1977 (33.3%)	3960 (66.7%)	5937
12:00 PM - 12:00 AM	7211 (63.4%)	4166 (36.6%)	11377
24 Hours	9188 (53.1%)	8126 (46.9%)	17314

Peak Hours

	EB	WB	Combined
12:00 AM - 12:00 PM	7:15 AM	7:00 AM	7:00 AM
Volume	507	979	1468
Factor	0.81	0.88	0.90
12:00 PM - 12:00 AM	5:00 PM	5:45 PM	5:15 PM
Volume	1082	702	1672
Factor	0.93	0.90	0.99

Smart Services, Inc.
88 W. Church Street
Newark, OH 43055
(740) 345-4700

Location : 10 - Morrison Rd East of Hamilton

Site: 23 029E

Counter # : 41

3/16/2017

Thursday

Daily Volume (Volume factor 0.500)

Interval Start	EB		WB		Combined		Interval Start	EB		WB		Combined	
12:00 AM	12	45	8	33	20	78	12:00 PM	142	619	88	359	230	978
12:15 AM	9		2		11		12:15 PM	137		82		219	
12:30 AM	15		13		28		12:30 PM	168		98		266	
12:45 AM	9		10		19		12:45 PM	172		91		263	
1:00 AM	12	36	3	14	15	50	1:00 PM	157	598	125	383	282	981
1:15 AM	6		4		10		1:15 PM	149		74		223	
1:30 AM	8		3		11		1:30 PM	146		84		230	
1:45 AM	10		4		14		1:45 PM	146		100		246	
2:00 AM	5	24	2	13	7	37	2:00 PM	136	585	98	508	234	1093
2:15 AM	9		4		13		2:15 PM	144		108		252	
2:30 AM	6		5		11		2:30 PM	152		144		296	
2:45 AM	4		2		6		2:45 PM	153		158		311	
3:00 AM	9	27	2	12	11	39	3:00 PM	160	716	114	447	274	1163
3:15 AM	6		6		12		3:15 PM	175		89		264	
3:30 AM	4		4		8		3:30 PM	169		126		295	
3:45 AM	8		0		8		3:45 PM	212		118		330	
4:00 AM	5	36	2	26	7	62	4:00 PM	200	760	134	688	334	1448
4:15 AM	8		8		16		4:15 PM	188		164		352	
4:30 AM	10		6		16		4:30 PM	192		182		374	
4:45 AM	13		10		23		4:45 PM	180		208		388	
5:00 AM	15	152	18	84	33	236	5:00 PM	175	817	270	773	445	1590
5:15 AM	34		14		48		5:15 PM	222		185		407	
5:30 AM	36		30		66		5:30 PM	210		170		380	
5:45 AM	67		22		89		5:45 PM	210		148		358	
6:00 AM	31	246	94	498	125	744	6:00 PM	159	617	190	522	349	1139
6:15 AM	58		120		178		6:15 PM	144		122		266	
6:30 AM	61		128		189		6:30 PM	166		120		286	
6:45 AM	96		156		252		6:45 PM	148		90		238	
7:00 AM	109	664	89	518	198	1182	7:00 PM	110	436	130	354	240	790
7:15 AM	125		68		193		7:15 PM	108		82		190	
7:30 AM	182		261		443		7:30 PM	108		76		184	
7:45 AM	248		100		348		7:45 PM	110		66		176	
8:00 AM	170	634	104	355	274	989	8:00 PM	123	410	68	205	191	615
8:15 AM	172		121		293		8:15 PM	90		47		137	
8:30 AM	140		87		227		8:30 PM	109		42		151	
8:45 AM	152		43		195		8:45 PM	88		48		136	
9:00 AM	133	479	118	321	251	800	9:00 PM	86	300	36	140	122	440
9:15 AM	114		63		177		9:15 PM	88		38		126	
9:30 AM	108		96		204		9:30 PM	68		44		112	
9:45 AM	124		44		168		9:45 PM	58		22		80	
10:00 AM	92	373	42	146	134	519	10:00 PM	66	213	45	104	111	317
10:15 AM	88		33		121		10:15 PM	60		22		82	
10:30 AM	94		38		132		10:30 PM	50		21		71	
10:45 AM	99		33		132		10:45 PM	37		16		53	
11:00 AM	114	508	62	220	176	728	11:00 PM	27	114	25	58	52	172
11:15 AM	110		50		160		11:15 PM	32		11		43	
11:30 AM	125		39		164		11:30 PM	22		18		40	
11:45 AM	159		69		228		11:45 PM	33		4		37	

Volume Totals

	EB	WB	Combined
12:00 AM - 12:00 PM	3224 (59.0%)	2240 (41.0%)	5464
12:00 PM - 12:00 AM	6185 (57.7%)	4541 (42.3%)	10726
24 Hours	9409 (58.1%)	6781 (41.9%)	16190

Peak Hours

	EB	WB	Combined
12:00 AM - 12:00 PM	7:30 AM	7:30 AM	7:30 AM
Volume	772	586	1358
Factor	0.78	0.56	0.77
12:00 PM - 12:00 AM	5:00 PM	4:30 PM	4:45 PM
Volume	817	845	1620
Factor	0.92	0.78	0.91

Smart Services, Inc.

88 W. Church Street

Newark, OH 43055

(740) 345-4700

Location : 11 - Tech Center Dr West of Morrison Rd EB

Site: 23 172W_EB

Counter # : 18

3/16/2017

Thursday

Daily Volume, per Channel (Volume factor 0.500)

EB					
Interval Start			Interval Start		
12:00 AM	10	27	12:00 PM	74	310
12:15 AM	5		12:15 PM	78	
12:30 AM	4		12:30 PM	80	
12:45 AM	8		12:45 PM	78	
1:00 AM	6	12	1:00 PM	74	292
1:15 AM	2		1:15 PM	76	
1:30 AM	0		1:30 PM	72	
1:45 AM	4		1:45 PM	70	
2:00 AM	1	10	2:00 PM	88	342
2:15 AM	4		2:15 PM	68	
2:30 AM	2		2:30 PM	76	
2:45 AM	3		2:45 PM	110	
3:00 AM	5	13	3:00 PM	117	498
3:15 AM	1		3:15 PM	114	
3:30 AM	1		3:30 PM	135	
3:45 AM	6		3:45 PM	132	
4:00 AM	9	45	4:00 PM	151	683
4:15 AM	10		4:15 PM	172	
4:30 AM	6		4:30 PM	182	
4:45 AM	20		4:45 PM	178	
5:00 AM	16	168	5:00 PM	190	782
5:15 AM	30		5:15 PM	214	
5:30 AM	44		5:30 PM	204	
5:45 AM	78		5:45 PM	174	
6:00 AM	44	248	6:00 PM	125	365
6:15 AM	54		6:15 PM	76	
6:30 AM	50		6:30 PM	94	
6:45 AM	100		6:45 PM	70	
7:00 AM	96	537	7:00 PM	50	162
7:15 AM	113		7:15 PM	52	
7:30 AM	136		7:30 PM	40	
7:45 AM	192		7:45 PM	20	
8:00 AM	134	526	8:00 PM	34	132
8:15 AM	116		8:15 PM	50	
8:30 AM	138		8:30 PM	18	
8:45 AM	138		8:45 PM	30	
9:00 AM	110	331	9:00 PM	28	75
9:15 AM	83		9:15 PM	16	
9:30 AM	64		9:30 PM	22	
9:45 AM	74		9:45 PM	9	
10:00 AM	52	238	10:00 PM	22	78
10:15 AM	67		10:15 PM	22	
10:30 AM	55		10:30 PM	18	
10:45 AM	64		10:45 PM	16	
11:00 AM	51	246	11:00 PM	5	34
11:15 AM	61		11:15 PM	12	
11:30 AM	52		11:30 PM	12	
11:45 AM	82		11:45 PM	5	

24 Hour Total 6154**12:00 AM - 12:00 PM**

12 Hour Count 2401
Peak Hour 7:45 AM
Peak Volume 580
Factor 0.76

12:00 PM - 12:00 AM

12 Hour Count 3753
Peak Hour 4:45 PM
Peak Volume 786
Factor 0.92

Smart Services, Inc.

88 W. Church Street

Newark, OH 43055

(740) 345-4700

Location : 11 - Tech Center Dr West of Morrison rd WB

Site: 23 172W_WB

Counter # : 22

3/16/2017

Thursday

Daily Volume, per Channel (Volume factor 0.500)

WB					
Interval Start			Interval Start		
12:00 AM	6	20	12:00 PM	58	260
12:15 AM	5		12:15 PM	64	
12:30 AM	3		12:30 PM	54	
12:45 AM	6		12:45 PM	84	
1:00 AM	4	8	1:00 PM	72	243
1:15 AM	1		1:15 PM	55	
1:30 AM	3		1:30 PM	59	
1:45 AM	0		1:45 PM	57	
2:00 AM	1	3	2:00 PM	76	308
2:15 AM	1		2:15 PM	66	
2:30 AM	0		2:30 PM	110	
2:45 AM	1		2:45 PM	56	
3:00 AM	4	14	3:00 PM	96	426
3:15 AM	3		3:15 PM	91	
3:30 AM	0		3:30 PM	138	
3:45 AM	7		3:45 PM	101	
4:00 AM	6	21	4:00 PM	129	474
4:15 AM	8		4:15 PM	94	
4:30 AM	5		4:30 PM	137	
4:45 AM	2		4:45 PM	114	
5:00 AM	8	48	5:00 PM	149	462
5:15 AM	3		5:15 PM	118	
5:30 AM	19		5:30 PM	114	
5:45 AM	18		5:45 PM	81	
6:00 AM	34	186	6:00 PM	67	209
6:15 AM	26		6:15 PM	56	
6:30 AM	50		6:30 PM	52	
6:45 AM	76		6:45 PM	34	
7:00 AM	104	604	7:00 PM	50	139
7:15 AM	138		7:15 PM	33	
7:30 AM	170		7:30 PM	37	
7:45 AM	192		7:45 PM	19	
8:00 AM	118	432	8:00 PM	37	108
8:15 AM	104		8:15 PM	26	
8:30 AM	118		8:30 PM	22	
8:45 AM	92		8:45 PM	23	
9:00 AM	69	232	9:00 PM	14	61
9:15 AM	56		9:15 PM	7	
9:30 AM	51		9:30 PM	25	
9:45 AM	56		9:45 PM	15	
10:00 AM	48	198	10:00 PM	12	34
10:15 AM	55		10:15 PM	6	
10:30 AM	46		10:30 PM	6	
10:45 AM	49		10:45 PM	10	
11:00 AM	54	252	11:00 PM	20	67
11:15 AM	62		11:15 PM	14	
11:30 AM	60		11:30 PM	22	
11:45 AM	76		11:45 PM	11	

24 Hour Total 4809**12:00 AM - 12:00 PM**

12 Hour Count 2018
Peak Hour 7:15 AM
Peak Volume 618
Factor 0.80

12:00 PM - 12:00 AM

12 Hour Count 2791
Peak Hour 4:30 PM
Peak Volume 518
Factor 0.87

Smart Services, Inc.

88 W. Church Street

Newark, OH 43055

(740) 345-4700

Location : 12 - Taylor Station Rd South of Havens Corner Rd

Site: 23 037S

Counter # : 42

3/16/2017

Thursday

Daily Volume (Volume factor 0.500)

Interval Start	SB	NB	Combined	Interval Start	SB	NB	Combined
12:00 AM	4	14	5	12:00 PM	50	166	47
12:15 AM	5		4	12:15 PM	42		52
12:30 AM	2	3	5	12:30 PM	34		36
12:45 AM	3	4	7	12:45 PM	40		45
1:00 AM	0	3	1	1:00 PM	51	185	44
1:15 AM	0		6	1:15 PM	58		32
1:30 AM	2	3	5	1:30 PM	44		43
1:45 AM	1	1	2	1:45 PM	32		39
2:00 AM	0	2	1	2:00 PM	42	199	54
2:15 AM	0		0	2:15 PM	56		56
2:30 AM	0	2	2	2:30 PM	58		45
2:45 AM	2	1	3	2:45 PM	43		52
3:00 AM	0	3	0	3:00 PM	77	249	80
3:15 AM	1		2	3:15 PM	58		74
3:30 AM	1	2	3	3:30 PM	56		92
3:45 AM	1	0	1	3:45 PM	58		104
4:00 AM	3	32	2	4:00 PM	63	237	112
4:15 AM	8		1	4:15 PM	58		121
4:30 AM	5		1	4:30 PM	62		120
4:45 AM	16		2	4:45 PM	54		124
5:00 AM	6	91	3	5:00 PM	51	253	142
5:15 AM	15		1	5:15 PM	79		156
5:30 AM	28		5	5:30 PM	58		126
5:45 AM	42		7	5:45 PM	65		100
6:00 AM	38	316	14	6:00 PM	62	203	102
6:15 AM	63		12	6:15 PM	53		66
6:30 AM	94		22	6:30 PM	52		56
6:45 AM	121		24	6:45 PM	36		34
7:00 AM	106	581	28	7:00 PM	38	131	46
7:15 AM	172		30	7:15 PM	40		46
7:30 AM	142		46	7:30 PM	25		32
7:45 AM	161		42	7:45 PM	28		28
8:00 AM	146	453	35	8:00 PM	35	117	32
8:15 AM	116		36	8:15 PM	32		26
8:30 AM	109		26	8:30 PM	27		44
8:45 AM	82		42	8:45 PM	23		19
9:00 AM	98	258	44	9:00 PM	20	69	30
9:15 AM	64		32	9:15 PM	21		15
9:30 AM	58		28	9:30 PM	14		9
9:45 AM	38		34	9:45 PM	14		6
10:00 AM	38	155	28	10:00 PM	12	38	16
10:15 AM	40		23	10:15 PM	8		8
10:30 AM	38		39	10:30 PM	7		8
10:45 AM	39		34	10:45 PM	11		8
11:00 AM	52	175	41	11:00 PM	13	32	8
11:15 AM	44		40	11:15 PM	10		8
11:30 AM	39		40	11:30 PM	5		6
11:45 AM	40		46	11:45 PM	4		3

Volume Totals

	SB	NB	Combined
12:00 AM - 12:00 PM	2083 (71.2%)	843 (28.8%)	2926
12:00 PM - 12:00 AM	1879 (42.4%)	2552 (57.6%)	4431
24 Hours	3962 (53.9%)	3395 (46.1%)	7357

Peak Hours

	SB	NB	Combined
12:00 AM - 12:00 PM	7:15 AM	11:00 AM	7:15 AM
Volume	621	167	774
Factor	0.90	0.91	0.95
12:00 PM - 12:00 AM	5:15 PM	4:45 PM	4:45 PM
Volume	264	548	790
Factor	0.84	0.88	0.84

Smart Services, Inc.
88 W. Church Street
Newark, OH 43055
(740) 345-4700

Location : 13 - Taylor Station Rd South of Taylor Rd

Site: 23 031S

Counter # : 46

3/16/2017
Thursday

Daily Volume (Volume factor 0.500)

Interval Start	SB		NB		Combined		Interval Start	SB		NB		Combined	
12:00 AM	6	16	1	18	7	34	12:00 PM	58	256	74	258	132	514
12:15 AM	4		6		10		12:15 PM	79		59		138	
12:30 AM	3		5		8		12:30 PM	57		61		118	
12:45 AM	3		6		9		12:45 PM	62		64		126	
1:00 AM	1	3	4	11	5	14	1:00 PM	65	245	62	226	127	471
1:15 AM	0		3		3		1:15 PM	62		60		122	
1:30 AM	1		3		4		1:30 PM	58		52		110	
1:45 AM	1		1		2		1:45 PM	60		52		112	
2:00 AM	1	6	2	12	3	18	2:00 PM	64	260	64	289	128	549
2:15 AM	2		4		6		2:15 PM	68		74		142	
2:30 AM	2		4		6		2:30 PM	70		77		147	
2:45 AM	1		2		3		2:45 PM	58		74		132	
3:00 AM	4	9	1	5	5	14	3:00 PM	74	291	97	436	171	727
3:15 AM	2		2		4		3:15 PM	68		84		152	
3:30 AM	2		2		4		3:30 PM	79		130		209	
3:45 AM	1		0		1		3:45 PM	70		125		195	
4:00 AM	3	44	4	19	7	63	4:00 PM	71	278	150	615	221	893
4:15 AM	14		4		18		4:15 PM	75		144		219	
4:30 AM	8		2		10		4:30 PM	67		174		241	
4:45 AM	19		9		28		4:45 PM	65		147		212	
5:00 AM	14	114	13	61	27	175	5:00 PM	69	291	147	569	216	860
5:15 AM	14		16		30		5:15 PM	67		168		235	
5:30 AM	33		14		47		5:30 PM	75		136		211	
5:45 AM	53		18		71		5:45 PM	80		118		198	
6:00 AM	40	319	20	116	60	435	6:00 PM	48	207	122	304	170	511
6:15 AM	67		22		89		6:15 PM	61		64		125	
6:30 AM	100		26		126		6:30 PM	54		64		118	
6:45 AM	112		48		160		6:45 PM	44		54		98	
7:00 AM	128	587	31	206	159	793	7:00 PM	42	147	57	183	99	330
7:15 AM	148		50		198		7:15 PM	40		50		90	
7:30 AM	150		58		208		7:30 PM	30		40		70	
7:45 AM	161		67		228		7:45 PM	35		36		71	
8:00 AM	175	547	56	214	231	761	8:00 PM	30	117	38	135	68	252
8:15 AM	128		56		184		8:15 PM	28		37		65	
8:30 AM	120		39		159		8:30 PM	37		36		73	
8:45 AM	124		63		187		8:45 PM	22		24		46	
9:00 AM	106	324	54	217	160	541	9:00 PM	19	77	23	71	42	148
9:15 AM	83		59		142		9:15 PM	18		22		40	
9:30 AM	90		44		134		9:30 PM	17		16		33	
9:45 AM	45		60		105		9:45 PM	23		10		33	
10:00 AM	66	227	49	181	115	408	10:00 PM	16	47	15	43	31	90
10:15 AM	50		32		82		10:15 PM	12		8		20	
10:30 AM	58		49		107		10:30 PM	10		9		19	
10:45 AM	53		51		104		10:45 PM	9		11		20	
11:00 AM	52	217	56	246	108	463	11:00 PM	16	35	10	32	26	67
11:15 AM	53		53		106		11:15 PM	14		6		20	
11:30 AM	52		73		125		11:30 PM	0		9		9	
11:45 AM	60		64		124		11:45 PM	5		7		12	

Volume Totals

	SB	NB	Combined
12:00 AM - 12:00 PM	2413 (64.9%)	1306 (35.1%)	3719
12:00 PM - 12:00 AM	2251 (41.6%)	3161 (58.4%)	5412
24 Hours	4664 (51.1%)	4467 (48.9%)	9131

Peak Hours

	SB	NB	Combined
12:00 AM - 12:00 PM	7:15 AM	11:00 AM	7:15 AM
Volume	634	246	865
Factor	0.91	0.84	0.94
12:00 PM - 12:00 AM	3:30 PM	4:30 PM	4:30 PM
Volume	295	636	904
Factor	0.93	0.91	0.94

QC JOB #: 14261901
DIRECTION: NB
DATE: Mar 29 2017

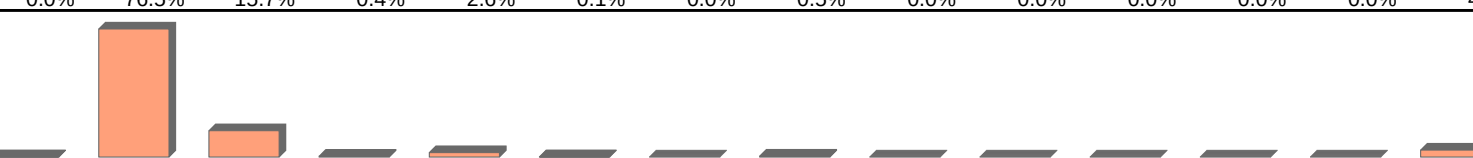
Report generated on 4/6/2017 8:12 AM SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

QC JOB #: 14261901
DIRECTION: NB
DATE: Mar 29 2017

Report generated on 4/6/2017 8:12 AM SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd														QC JOB #: 14261901	
SPECIFIC LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd														DIRECTION: NB	
CITY/STATE: Columbus, OH														DATE: Mar 29 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 PM	0	44	19	1	6	0	0	2	0	0	0	0	0	3	75
12:15 PM	0	51	10	0	4	0	0	0	0	0	0	0	0	5	70
12:30 PM	0	57	15	1	0	0	0	1	0	0	0	0	0	2	76
12:45 PM	0	41	21	0	1	0	0	1	0	0	0	0	0	2	66
1:00 PM	0	56	9	1	2	0	0	1	0	0	0	0	0	0	69
1:15 PM	0	58	11	0	1	0	0	0	0	0	0	0	0	0	70
1:30 PM	0	46	7	0	1	0	0	0	0	0	0	0	0	1	55
1:45 PM	0	54	14	0	4	0	0	0	0	0	0	0	0	5	77
2:00 PM	0	45	9	0	2	0	0	0	0	0	0	0	0	0	56
2:15 PM	0	45	15	0	3	0	0	0	0	0	0	0	0	3	66
2:30 PM	0	47	16	2	3	0	0	0	0	0	0	0	0	1	69
2:45 PM	0	71	13	0	4	0	0	0	0	0	0	0	0	3	91
3:00 PM	0	93	9	1	3	0	0	0	0	0	0	0	0	7	113
3:15 PM	0	97	25	3	7	0	0	0	0	0	0	0	0	5	137
3:30 PM	0	93	19	0	4	0	0	0	0	0	0	0	0	5	121
3:45 PM	0	86	20	0	3	0	0	1	0	0	0	0	0	5	115
4:00 PM	1	115	23	0	2	0	0	0	0	0	0	0	0	5	146
4:15 PM	0	94	15	0	2	0	0	0	0	0	0	0	0	10	121
4:30 PM	0	120	22	0	3	0	0	0	0	0	0	0	0	5	150
4:45 PM	0	125	20	0	5	0	0	1	0	0	0	0	0	4	155
5:00 PM	0	114	17	0	3	0	0	0	0	0	0	0	0	8	142
5:15 PM	0	146	17	0	1	0	0	1	0	0	0	0	0	6	171
5:30 PM	0	135	20	0	2	0	0	1	0	0	0	0	0	12	170
5:45 PM	0	116	10	0	2	0	0	0	0	0	0	0	0	8	136
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd SPECIFIC LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd CITY/STATE: Columbus, OH														QC JOB #: 14261901 DIRECTION: NB DATE: Mar 29 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
6:00 PM	0	117	17	1	3	1	0	0	0	0	0	0	0	9	148
6:15 PM	0	106	21	0	0	0	0	1	0	0	0	0	0	3	131
6:30 PM	0	86	21	0	2	0	0	0	0	0	0	0	0	6	115
6:45 PM	0	95	17	0	1	0	0	0	0	0	0	0	0	4	117
7:00 PM	0	63	13	0	2	0	0	1	0	0	0	0	0	2	81
7:15 PM	0	78	15	0	0	0	0	1	0	0	0	0	0	1	95
7:30 PM	0	82	11	0	0	0	0	0	0	0	0	0	0	2	95
7:45 PM	0	61	11	0	0	0	0	0	0	0	0	0	0	1	73
8:00 PM	0	55	9	0	1	0	0	0	0	0	0	0	0	1	66
8:15 PM	0	49	12	0	1	0	0	1	0	0	0	0	0	2	65
8:30 PM	0	45	14	0	0	0	0	0	0	0	0	0	0	2	61
8:45 PM	0	48	9	0	0	0	0	0	0	0	0	0	0	0	57
9:00 PM	0	39	5	0	1	0	0	0	0	0	0	0	0	2	47
9:15 PM	0	41	7	0	1	0	0	0	0	0	0	0	0	0	49
9:30 PM	0	29	6	0	0	0	0	0	0	0	0	0	0	0	35
9:45 PM	0	31	2	0	1	0	0	0	0	0	0	0	0	1	35
10:00 PM	0	28	6	0	0	0	0	0	0	0	0	0	0	1	35
10:15 PM	0	11	1	0	0	0	0	0	0	0	0	0	0	0	12
10:30 PM	0	13	2	0	0	0	0	0	0	0	0	0	0	0	15
10:45 PM	0	9	2	0	0	0	0	0	0	0	0	0	0	0	11
11:00 PM	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6
11:15 PM	0	12	1	0	0	0	0	0	0	0	0	0	0	0	13
11:30 PM	0	5	1	0	0	0	0	0	0	0	0	0	0	0	6
11:45 PM	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
Day Total	2	4006	822	22	136	3	0	27	0	0	0	0	0	216	5234
Percent	0.0%	76.5%	15.7%	0.4%	2.6%	0.1%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	4.1%	
ADT 5234															
AM Peak	7:30 AM	7:45 AM	9:15 AM	10:00 AM	9:45 AM	8:45 AM	9:15 AM							7:45 AM	7:45 AM
Volume	1	55	24	2	6	1	2							10	80
PM Peak	4:00 PM	5:15 PM	3:15 PM	3:15 PM	3:15 PM	6:00 PM	12:00 PM							5:30 PM	5:15 PM
Volume	1	146	25	3	7	1	2							12	171
Comments:															

LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd SPECIFIC LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd CITY/STATE: Columbus, OH												QC JOB #: 14261901 DIRECTION: NB DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
Grand Total	2	4006	822	22	136	3	0	27	0	0	0	0	0	216	5234
Percent	0.0%	76.5%	15.7%	0.4%	2.6%	0.1%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	4.1%	
ADT 5234															
Comments:															

Report generated on 4/6/2017 8:12 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd							QC JOB #: 14261901			
SPECIFIC LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd							DIRECTION: NB			
CITY/STATE: Columbus, OH							DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM			10			10			10	
12:15 AM			7			7			7	
12:30 AM			4			4			4	
12:45 AM			0			0			0	
1:00 AM			4			4			4	
1:15 AM			4			4			4	
1:30 AM			2			2			2	
1:45 AM			0			0			0	
2:00 AM			2			2			2	
2:15 AM			1			1			1	
2:30 AM			3			3			3	
2:45 AM			1			1			1	
3:00 AM			3			3			3	
3:15 AM			0			0			0	
3:30 AM			2			2			2	
3:45 AM			3			3			3	
4:00 AM			1			1			1	
4:15 AM			3			3			3	
4:30 AM			3			3			3	
4:45 AM			5			5			5	
5:00 AM			1			1			1	
5:15 AM			5			5			5	
5:30 AM			8			8			8	
5:45 AM			9			9			9	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd							QC JOB #: 14261901			
SPECIFIC LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd							DIRECTION: NB			
CITY/STATE: Columbus, OH							DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 AM			11			11			11	
6:15 AM			21			21			21	
6:30 AM			30			30			30	
6:45 AM			35			35			35	
7:00 AM			32			32			32	
7:15 AM			44			44			44	
7:30 AM			63			63			63	
7:45 AM			80			80			80	
8:00 AM			71			71			71	
8:15 AM			61			61			61	
8:30 AM			72			72			72	
8:45 AM			65			65			65	
9:00 AM			64			64			64	
9:15 AM			48			48			48	
9:30 AM			70			70			70	
9:45 AM			53			53			53	
10:00 AM			42			42			42	
10:15 AM			54			54			54	
10:30 AM			32			32			32	
10:45 AM			51			51			51	
11:00 AM			59			59			59	
11:15 AM			68			68			68	
11:30 AM			63			63			63	
11:45 AM			74			74			74	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd						QC JOB #: 14261901				
SPECIFIC LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd						DIRECTION: NB				
CITY/STATE: Columbus, OH						DATE: Mar 29 2017 - Mar 29 2017				
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 PM			75			75			75	
12:15 PM			70			70			70	
12:30 PM			76			76			76	
12:45 PM			66			66			66	
1:00 PM			69			69			69	
1:15 PM			70			70			70	
1:30 PM			55			55			55	
1:45 PM			77			77			77	
2:00 PM			56			56			56	
2:15 PM			66			66			66	
2:30 PM			69			69			69	
2:45 PM			91			91			91	
3:00 PM			113			113			113	
3:15 PM			137			137			137	
3:30 PM			121			121			121	
3:45 PM			115			115			115	
4:00 PM			146			146			146	
4:15 PM			121			121			121	
4:30 PM			150			150			150	
4:45 PM			155			155			155	
5:00 PM			142			142			142	
5:15 PM			171			171			171	
5:30 PM			170			170			170	
5:45 PM			136			136			136	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd							QC JOB #: 14261901			
SPECIFIC LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd							DIRECTION: NB			
CITY/STATE: Columbus, OH							DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 PM			148			148			148	
6:15 PM			131			131			131	
6:30 PM			115			115			115	
6:45 PM			117			117			117	
7:00 PM			81			81			81	
7:15 PM			95			95			95	
7:30 PM			95			95			95	
7:45 PM			73			73			73	
8:00 PM			66			66			66	
8:15 PM			65			65			65	
8:30 PM			61			61			61	
8:45 PM			57			57			57	
9:00 PM			47			47			47	
9:15 PM			49			49			49	
9:30 PM			35			35			35	
9:45 PM			35			35			35	
10:00 PM			35			35			35	
10:15 PM			12			12			12	
10:30 PM			15			15			15	
10:45 PM			11			11			11	
11:00 PM			6			6			6	
11:15 PM			13			13			13	
11:30 PM			6			6			6	
11:45 PM			5			5			5	
Day Total			5234			5234			5234	
% Weekday Average			100.0%							
% Week Average			100.0%			100.0%				
AM Peak Volume			7:45 AM 80			7:45 AM 80			7:45 AM 80	
PM Peak Volume			5:15 PM 171			5:15 PM 171			5:15 PM 171	
Comments:										

QC JOB #: 14261901
DIRECTION: NB/SB
DATE: Mar 29 2017

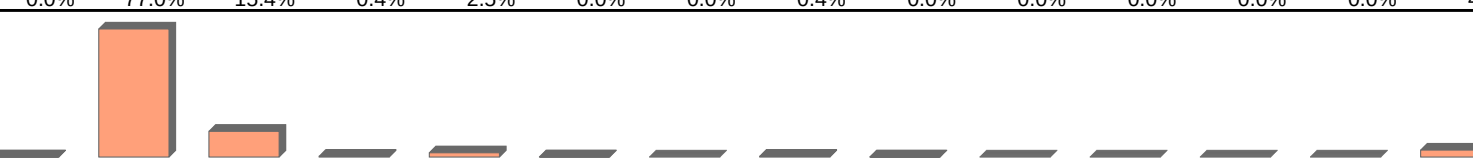
Report generated on 4/6/2017 8:12 AM SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

QC JOB #: 14261901
DIRECTION: NB/SB
DATE: Mar 29 2017

Report generated on 4/6/2017 8:12 AM SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd SPECIFIC LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd CITY/STATE: Columbus, OH													QC JOB #: 14261901 DIRECTION: NB/SB DATE: Mar 29 2017		
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 PM	0	98	32	1	9	0	0	3	0	0	0	0	0	5	148
12:15 PM	0	86	28	1	11	0	0	0	0	0	0	0	0	7	133
12:30 PM	0	95	26	1	5	0	0	2	0	0	0	0	0	4	133
12:45 PM	0	98	34	1	4	0	0	1	0	0	0	0	0	3	141
1:00 PM	0	106	19	1	5	0	0	1	0	0	0	0	0	2	134
1:15 PM	0	105	16	0	6	0	0	1	0	0	0	0	0	4	132
1:30 PM	0	84	17	0	5	0	0	0	0	0	0	0	0	4	110
1:45 PM	0	102	23	1	7	0	0	0	0	0	0	0	0	9	142
2:00 PM	0	88	16	0	4	0	0	1	0	0	0	0	0	1	110
2:15 PM	0	97	28	0	10	0	0	0	0	0	0	0	0	7	142
2:30 PM	0	97	26	4	5	0	0	0	0	0	0	0	0	1	133
2:45 PM	0	137	31	1	7	0	0	0	0	0	0	0	0	7	183
3:00 PM	0	147	22	2	4	0	0	0	0	0	0	0	0	11	186
3:15 PM	0	158	44	3	13	0	0	1	0	0	0	0	0	9	228
3:30 PM	0	144	35	0	7	0	0	2	0	0	0	0	0	5	193
3:45 PM	0	146	26	0	3	0	0	1	0	0	0	0	0	10	186
4:00 PM	1	180	38	1	2	0	0	0	0	0	0	0	0	8	230
4:15 PM	0	156	27	0	4	0	0	0	0	0	0	0	0	22	209
4:30 PM	0	190	33	0	4	0	0	1	0	0	0	0	0	8	236
4:45 PM	0	186	37	0	7	0	0	1	0	0	0	0	0	10	241
5:00 PM	0	194	36	0	4	0	0	0	0	0	0	0	0	19	253
5:15 PM	0	226	30	0	2	0	0	1	0	0	0	0	0	12	271
5:30 PM	0	207	34	0	3	0	0	2	0	0	0	0	0	21	267
5:45 PM	0	175	24	0	4	0	0	0	0	0	0	0	0	18	221
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd SPECIFIC LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd CITY/STATE: Columbus, OH														QC JOB #: 14261901 DIRECTION: NB/SB DATE: Mar 29 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
6:00 PM	0	169	25	1	4	1	0	0	0	0	0	0	0	17	217
6:15 PM	0	181	36	0	1	0	0	1	0	0	0	0	0	5	224
6:30 PM	0	138	28	1	2	0	0	0	0	0	0	0	0	15	184
6:45 PM	0	144	35	0	3	0	0	0	0	0	0	0	0	6	188
7:00 PM	0	121	28	0	3	0	0	2	0	0	0	0	0	4	158
7:15 PM	0	146	24	0	0	0	0	1	0	0	0	0	0	5	176
7:30 PM	0	120	18	1	0	0	0	0	0	0	0	0	0	2	141
7:45 PM	0	99	16	0	0	0	0	0	0	0	0	0	0	3	118
8:00 PM	0	86	13	0	1	0	0	0	0	0	0	0	0	1	101
8:15 PM	0	92	17	0	1	0	0	1	0	0	0	0	0	3	114
8:30 PM	0	81	17	0	0	0	0	0	0	0	0	0	0	5	103
8:45 PM	0	75	13	0	0	0	0	0	0	0	0	0	0	0	88
9:00 PM	0	75	8	0	1	0	0	0	0	0	0	0	0	3	87
9:15 PM	0	56	12	0	3	0	0	0	0	0	0	0	0	2	73
9:30 PM	0	36	8	0	1	0	0	0	0	0	0	0	0	0	45
9:45 PM	0	48	3	0	1	0	0	0	0	0	0	0	0	1	53
10:00 PM	0	39	7	0	0	0	0	0	0	0	0	0	0	2	48
10:15 PM	0	24	1	0	0	0	0	0	0	0	0	0	0	0	25
10:30 PM	0	21	5	0	0	0	0	1	0	0	0	0	0	0	27
10:45 PM	0	12	2	0	0	0	0	0	0	0	0	0	0	0	14
11:00 PM	0	14	0	0	1	0	0	0	0	0	0	0	0	0	15
11:15 PM	0	21	1	0	0	0	0	0	0	0	0	0	0	0	22
11:30 PM	0	12	2	0	0	0	0	0	0	0	0	0	0	0	14
11:45 PM	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6
Day Total	2	7994	1601	41	260	5	0	43	1	0	0	0	0	430	10377
Percent	0.0%	77.0%	15.4%	0.4%	2.5%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	4.1%	
ADT 10377															
AM Peak	7:30 AM	7:30 AM	9:15 AM	10:00 AM	9:15 AM	7:30 AM		8:30 AM	7:30 AM					7:45 AM	7:30 AM
Volume	1	216	50	3	8	1		2	1					18	269
PM Peak	4:00 PM	5:15 PM	3:15 PM	2:30 PM	3:15 PM	6:00 PM		12:00 PM						4:15 PM	5:15 PM
Volume	1	226	44	4	13	1		3						22	271
Comments:															

LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd SPECIFIC LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd CITY/STATE: Columbus, OH												QC JOB #: 14261901 DIRECTION: NB/SB DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
Grand Total	2	7994	1601	41	260	5	0	43	1	0	0	0	0	430	10377
Percent	0.0%	77.0%	15.4%	0.4%	2.5%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	4.1%	
ADT 10377															
Comments:															

Report generated on 4/6/2017 8:12 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd							QC JOB #: 14261901			
SPECIFIC LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd							DIRECTION: NB/SB			
CITY/STATE: Columbus, OH							DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM			15			15			15	
12:15 AM			10			10			10	
12:30 AM			9			9			9	
12:45 AM			3			3			3	
1:00 AM			6			6			6	
1:15 AM			5			5			5	
1:30 AM			4			4			4	
1:45 AM			1			1			1	
2:00 AM			3			3			3	
2:15 AM			1			1			1	
2:30 AM			5			5			5	
2:45 AM			4			4			4	
3:00 AM			3			3			3	
3:15 AM			1			1			1	
3:30 AM			3			3			3	
3:45 AM			5			5			5	
4:00 AM			2			2			2	
4:15 AM			7			7			7	
4:30 AM			11			11			11	
4:45 AM			20			20			20	
5:00 AM			25			25			25	
5:15 AM			26			26			26	
5:30 AM			32			32			32	
5:45 AM			36			36			36	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd							QC JOB #: 14261901			
SPECIFIC LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd							DIRECTION: NB/SB			
CITY/STATE: Columbus, OH							DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 AM			62			62			62	
6:15 AM			86			86			86	
6:30 AM			95			95			95	
6:45 AM			124			124			124	
7:00 AM			172			172			172	
7:15 AM			211			211			211	
7:30 AM			269			269			269	
7:45 AM			257			257			257	
8:00 AM			198			198			198	
8:15 AM			174			174			174	
8:30 AM			178			178			178	
8:45 AM			191			191			191	
9:00 AM			148			148			148	
9:15 AM			134			134			134	
9:30 AM			146			146			146	
9:45 AM			126			126			126	
10:00 AM			108			108			108	
10:15 AM			114			114			114	
10:30 AM			99			99			99	
10:45 AM			122			122			122	
11:00 AM			124			124			124	
11:15 AM			156			156			156	
11:30 AM			123			123			123	
11:45 AM			120			120			120	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd						QC JOB #: 14261901				
SPECIFIC LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd						DIRECTION: NB/SB				
CITY/STATE: Columbus, OH						DATE: Mar 29 2017 - Mar 29 2017				
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 PM			148			148			148	
12:15 PM			133			133			133	
12:30 PM			133			133			133	
12:45 PM			141			141			141	
1:00 PM			134			134			134	
1:15 PM			132			132			132	
1:30 PM			110			110			110	
1:45 PM			142			142			142	
2:00 PM			110			110			110	
2:15 PM			142			142			142	
2:30 PM			133			133			133	
2:45 PM			183			183			183	
3:00 PM			186			186			186	
3:15 PM			228			228			228	
3:30 PM			193			193			193	
3:45 PM			186			186			186	
4:00 PM			230			230			230	
4:15 PM			209			209			209	
4:30 PM			236			236			236	
4:45 PM			241			241			241	
5:00 PM			253			253			253	
5:15 PM			271			271			271	
5:30 PM			267			267			267	
5:45 PM			221			221			221	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd							QC JOB #: 14261901			
SPECIFIC LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd							DIRECTION: NB/SB			
CITY/STATE: Columbus, OH							DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 PM			217			217			217	
6:15 PM			224			224			224	
6:30 PM			184			184			184	
6:45 PM			188			188			188	
7:00 PM			158			158			158	
7:15 PM			176			176			176	
7:30 PM			141			141			141	
7:45 PM			118			118			118	
8:00 PM			101			101			101	
8:15 PM			114			114			114	
8:30 PM			103			103			103	
8:45 PM			88			88			88	
9:00 PM			87			87			87	
9:15 PM			73			73			73	
9:30 PM			45			45			45	
9:45 PM			53			53			53	
10:00 PM			48			48			48	
10:15 PM			25			25			25	
10:30 PM			27			27			27	
10:45 PM			14			14			14	
11:00 PM			15			15			15	
11:15 PM			22			22			22	
11:30 PM			14			14			14	
11:45 PM			6			6			6	
Day Total			10377			10377			10377	
% Weekday Average			100.0%							
% Week Average			100.0%			100.0%				
AM Peak			7:30 AM			7:30 AM			7:30 AM	
Volume			269			269			269	
PM Peak			5:15 PM			5:15 PM			5:15 PM	
Volume			271			271			271	
Comments:										

LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd														QC JOB #: 14261901	
SPECIFIC LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd														DIRECTION: SB	
CITY/STATE: Columbus, OH														DATE: Mar 29 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 AM	0	4	1	0	0	0	0	0	0	0	0	0	0	0	5
12:15 AM	0	2	0	0	1	0	0	0	0	0	0	0	0	0	3
12:30 AM	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
12:45 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
1:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
1:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1	2
1:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
2:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
2:45 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
3:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
3:45 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
4:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
4:15 AM	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4
4:30 AM	0	6	2	0	0	0	0	0	0	0	0	0	0	0	8
4:45 AM	0	11	3	0	1	0	0	0	0	0	0	0	0	0	15
5:00 AM	0	18	5	1	0	0	0	0	0	0	0	0	0	0	24
5:15 AM	0	15	6	0	0	0	0	0	0	0	0	0	0	0	21
5:30 AM	0	20	4	0	0	0	0	0	0	0	0	0	0	0	24
5:45 AM	0	20	5	0	0	0	0	0	0	0	0	0	0	2	27
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

QC JOB #: 14261901
DIRECTION: SB
DATE: Mar 29 2017

Report generated on 4/6/2017 8:12 AM SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd														QC JOB #: 14261901	
SPECIFIC LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd														DIRECTION: SB	
CITY/STATE: Columbus, OH														DATE: Mar 29 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 PM	0	54	13	0	3	0	0	1	0	0	0	0	0	2	73
12:15 PM	0	35	18	1	7	0	0	0	0	0	0	0	0	2	63
12:30 PM	0	38	11	0	5	0	0	1	0	0	0	0	0	2	57
12:45 PM	0	57	13	1	3	0	0	0	0	0	0	0	0	1	75
1:00 PM	0	50	10	0	3	0	0	0	0	0	0	0	0	2	65
1:15 PM	0	47	5	0	5	0	0	1	0	0	0	0	0	4	62
1:30 PM	0	38	10	0	4	0	0	0	0	0	0	0	0	3	55
1:45 PM	0	48	9	1	3	0	0	0	0	0	0	0	0	4	65
2:00 PM	0	43	7	0	2	0	0	1	0	0	0	0	0	1	54
2:15 PM	0	52	13	0	7	0	0	0	0	0	0	0	0	4	76
2:30 PM	0	50	10	2	2	0	0	0	0	0	0	0	0	0	64
2:45 PM	0	66	18	1	3	0	0	0	0	0	0	0	0	4	92
3:00 PM	0	54	13	1	1	0	0	0	0	0	0	0	0	4	73
3:15 PM	0	61	19	0	6	0	0	1	0	0	0	0	0	4	91
3:30 PM	0	51	16	0	3	0	0	2	0	0	0	0	0	0	72
3:45 PM	0	60	6	0	0	0	0	0	0	0	0	0	0	5	71
4:00 PM	0	65	15	1	0	0	0	0	0	0	0	0	0	3	84
4:15 PM	0	62	12	0	2	0	0	0	0	0	0	0	0	12	88
4:30 PM	0	70	11	0	1	0	0	1	0	0	0	0	0	3	86
4:45 PM	0	61	17	0	2	0	0	0	0	0	0	0	0	6	86
5:00 PM	0	80	19	0	1	0	0	0	0	0	0	0	0	11	111
5:15 PM	0	80	13	0	1	0	0	0	0	0	0	0	0	6	100
5:30 PM	0	72	14	0	1	0	0	1	0	0	0	0	0	9	97
5:45 PM	0	59	14	0	2	0	0	0	0	0	0	0	0	10	85
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd SPECIFIC LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd CITY/STATE: Columbus, OH														QC JOB #: 14261901 DIRECTION: SB DATE: Mar 29 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
6:00 PM	0	52	8	0	1	0	0	0	0	0	0	0	0	8	69
6:15 PM	0	75	15	0	1	0	0	0	0	0	0	0	0	2	93
6:30 PM	0	52	7	1	0	0	0	0	0	0	0	0	0	9	69
6:45 PM	0	49	18	0	2	0	0	0	0	0	0	0	0	2	71
7:00 PM	0	58	15	0	1	0	0	1	0	0	0	0	0	2	77
7:15 PM	0	68	9	0	0	0	0	0	0	0	0	0	0	4	81
7:30 PM	0	38	7	1	0	0	0	0	0	0	0	0	0	0	46
7:45 PM	0	38	5	0	0	0	0	0	0	0	0	0	0	2	45
8:00 PM	0	31	4	0	0	0	0	0	0	0	0	0	0	0	35
8:15 PM	0	43	5	0	0	0	0	0	0	0	0	0	0	1	49
8:30 PM	0	36	3	0	0	0	0	0	0	0	0	0	0	3	42
8:45 PM	0	27	4	0	0	0	0	0	0	0	0	0	0	0	31
9:00 PM	0	36	3	0	0	0	0	0	0	0	0	0	0	1	40
9:15 PM	0	15	5	0	2	0	0	0	0	0	0	0	0	2	24
9:30 PM	0	7	2	0	1	0	0	0	0	0	0	0	0	0	10
9:45 PM	0	17	1	0	0	0	0	0	0	0	0	0	0	0	18
10:00 PM	0	11	1	0	0	0	0	0	0	0	0	0	0	1	13
10:15 PM	0	13	0	0	0	0	0	0	0	0	0	0	0	0	13
10:30 PM	0	8	3	0	0	0	0	1	0	0	0	0	0	0	12
10:45 PM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
11:00 PM	0	8	0	0	1	0	0	0	0	0	0	0	0	0	9
11:15 PM	0	9	0	0	0	0	0	0	0	0	0	0	0	0	9
11:30 PM	0	7	1	0	0	0	0	0	0	0	0	0	0	0	8
11:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Day Total	0	3988	779	19	124	2	0	16	1	0	0	0	0	214	5143
Percent	0.0%	77.5%	15.1%	0.4%	2.4%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	4.2%	
ADT 5143															
AM Peak	7:30 AM 9:15 AM 5:00 AM 10:45 AM 7:30 AM 6:15 AM 7:30 AM 7:45 AM 7:30 AM														
Volume	172 26 1 6 1 1 1 8 206														
PM Peak	5:00 PM 3:15 PM 2:30 PM 12:15 PM 3:30 PM 4:15 PM 5:00 PM														
Volume	80 19 2 7 2 12 111														
Comments:															

LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd SPECIFIC LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd CITY/STATE: Columbus, OH												QC JOB #: 14261901 DIRECTION: SB DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
Grand Total	0	3988	779	19	124	2	0	16	1	0	0	0	0	214	5143
Percent	0.0%	77.5%	15.1%	0.4%	2.4%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	4.2%	
ADT 5143															
Comments:															

Report generated on 4/6/2017 8:12 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd							QC JOB #: 14261901			
SPECIFIC LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd							DIRECTION: SB			
CITY/STATE: Columbus, OH							DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM			5			5			5	
12:15 AM			3			3			3	
12:30 AM			5			5			5	
12:45 AM			3			3			3	
1:00 AM			2			2			2	
1:15 AM			1			1			1	
1:30 AM			2			2			2	
1:45 AM			1			1			1	
2:00 AM			1			1			1	
2:15 AM			0			0			0	
2:30 AM			2			2			2	
2:45 AM			3			3			3	
3:00 AM			0			0			0	
3:15 AM			1			1			1	
3:30 AM			1			1			1	
3:45 AM			2			2			2	
4:00 AM			1			1			1	
4:15 AM			4			4			4	
4:30 AM			8			8			8	
4:45 AM			15			15			15	
5:00 AM			24			24			24	
5:15 AM			21			21			21	
5:30 AM			24			24			24	
5:45 AM			27			27			27	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd							QC JOB #: 14261901			
SPECIFIC LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd							DIRECTION: SB			
CITY/STATE: Columbus, OH							DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 AM			51			51			51	
6:15 AM			65			65			65	
6:30 AM			65			65			65	
6:45 AM			89			89			89	
7:00 AM			140			140			140	
7:15 AM			167			167			167	
7:30 AM			206			206			206	
7:45 AM			177			177			177	
8:00 AM			127			127			127	
8:15 AM			113			113			113	
8:30 AM			106			106			106	
8:45 AM			126			126			126	
9:00 AM			84			84			84	
9:15 AM			86			86			86	
9:30 AM			76			76			76	
9:45 AM			73			73			73	
10:00 AM			66			66			66	
10:15 AM			60			60			60	
10:30 AM			67			67			67	
10:45 AM			71			71			71	
11:00 AM			65			65			65	
11:15 AM			88			88			88	
11:30 AM			60			60			60	
11:45 AM			46			46			46	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd							QC JOB #: 14261901			
SPECIFIC LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd							DIRECTION: SB			
CITY/STATE: Columbus, OH							DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 PM			73			73			73	
12:15 PM			63			63			63	
12:30 PM			57			57			57	
12:45 PM			75			75			75	
1:00 PM			65			65			65	
1:15 PM			62			62			62	
1:30 PM			55			55			55	
1:45 PM			65			65			65	
2:00 PM			54			54			54	
2:15 PM			76			76			76	
2:30 PM			64			64			64	
2:45 PM			92			92			92	
3:00 PM			73			73			73	
3:15 PM			91			91			91	
3:30 PM			72			72			72	
3:45 PM			71			71			71	
4:00 PM			84			84			84	
4:15 PM			88			88			88	
4:30 PM			86			86			86	
4:45 PM			86			86			86	
5:00 PM			111			111			111	
5:15 PM			100			100			100	
5:30 PM			97			97			97	
5:45 PM			85			85			85	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd							QC JOB #: 14261901			
SPECIFIC LOCATION: Johnstown Rd btwn Morse Rd and Hamilton Rd							DIRECTION: SB			
CITY/STATE: Columbus, OH							DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 PM			69			69			69	
6:15 PM			93			93			93	
6:30 PM			69			69			69	
6:45 PM			71			71			71	
7:00 PM			77			77			77	
7:15 PM			81			81			81	
7:30 PM			46			46			46	
7:45 PM			45			45			45	
8:00 PM			35			35			35	
8:15 PM			49			49			49	
8:30 PM			42			42			42	
8:45 PM			31			31			31	
9:00 PM			40			40			40	
9:15 PM			24			24			24	
9:30 PM			10			10			10	
9:45 PM			18			18			18	
10:00 PM			13			13			13	
10:15 PM			13			13			13	
10:30 PM			12			12			12	
10:45 PM			3			3			3	
11:00 PM			9			9			9	
11:15 PM			9			9			9	
11:30 PM			8			8			8	
11:45 PM			1			1			1	
Day Total			5143			5143			5143	
% Weekday Average			100.0%							
% Week Average			100.0%			100.0%				
AM Peak Volume			7:30 AM 206			7:30 AM 206			7:30 AM 206	
PM Peak Volume			5:00 PM 111			5:00 PM 111			5:00 PM 111	
Comments:										

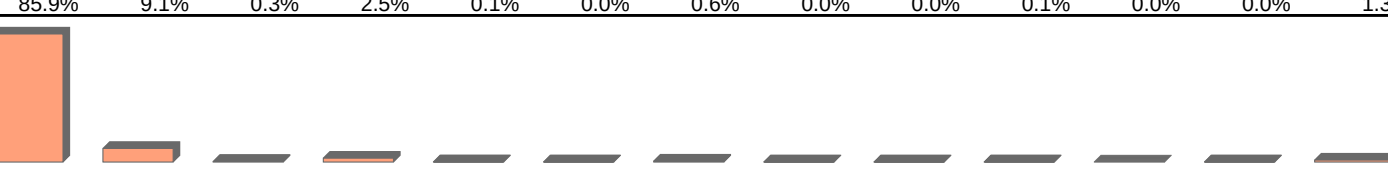
QC JOB #: 14261902
DIRECTION: NB
DATE: Mar 29 2017

Report generated on 4/6/2017 8:12 AM SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd														QC JOB #: 14261902	
SPECIFIC LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd														DIRECTION: NB	
CITY/STATE: Gahanna, OH														DATE: Mar 29 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
6:00 AM	0	21	3	1	0	0	0	0	0	0	0	0	0	0	25
6:15 AM	0	23	6	1	3	0	0	0	0	0	0	0	0	0	33
6:30 AM	0	36	4	2	2	0	0	0	0	0	0	0	0	1	45
6:45 AM	0	45	9	0	7	0	0	0	0	0	0	0	1	0	62
7:00 AM	0	55	2	1	3	0	0	3	0	0	0	0	0	0	64
7:15 AM	0	103	11	1	5	0	0	0	0	0	0	0	0	1	121
7:30 AM	0	129	11	0	2	0	0	2	0	0	0	0	0	0	144
7:45 AM	0	125	21	0	10	0	0	2	0	0	0	0	0	0	158
8:00 AM	0	109	15	2	6	0	0	0	0	0	0	0	0	0	132
8:15 AM	0	99	18	1	5	0	0	1	0	0	0	0	0	0	124
8:30 AM	0	97	21	1	6	0	0	2	0	0	0	0	0	0	127
8:45 AM	0	103	16	0	7	0	0	1	0	1	0	0	0	0	128
9:00 AM	0	101	17	0	3	0	0	2	0	0	0	0	0	0	123
9:15 AM	0	85	18	0	8	1	0	1	1	0	0	0	0	0	114
9:30 AM	0	97	15	1	9	0	0	0	0	0	0	0	0	0	122
9:45 AM	0	109	13	1	5	0	0	0	0	0	0	0	0	0	128
10:00 AM	0	98	15	0	3	1	0	1	0	0	0	0	0	0	118
10:15 AM	0	88	16	1	6	0	1	2	0	0	0	0	0	0	114
10:30 AM	0	104	14	0	2	0	0	0	0	0	0	0	0	0	120
10:45 AM	0	133	18	1	4	1	0	1	0	0	0	0	0	0	158
11:00 AM	0	105	15	1	3	0	0	1	0	0	0	0	0	0	125
11:15 AM	0	142	12	0	7	0	0	0	0	0	0	0	0	1	162
11:30 AM	0	141	18	0	3	0	0	0	0	0	0	0	0	0	162
11:45 AM	0	113	13	0	5	0	0	0	0	0	0	0	0	0	131
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd														QC JOB #: 14261902	
SPECIFIC LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd														DIRECTION: NB	
CITY/STATE: Gahanna, OH														DATE: Mar 29 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 PM	0	118	21	0	2	1	0	0	0	0	0	0	0	0	142
12:15 PM	0	145	12	0	8	0	0	0	0	0	0	0	0	0	165
12:30 PM	0	139	24	0	0	0	0	3	0	0	0	0	0	1	167
12:45 PM	0	127	12	0	3	0	0	0	0	0	0	0	0	1	143
1:00 PM	0	127	8	0	3	0	0	0	0	0	0	0	0	5	143
1:15 PM	0	114	7	1	9	0	1	1	0	0	0	0	0	2	135
1:30 PM	0	142	14	0	3	0	0	1	0	0	0	0	0	7	167
1:45 PM	0	112	17	0	6	0	0	1	0	0	0	0	0	2	138
2:00 PM	0	101	13	0	1	0	0	1	0	0	0	0	0	0	116
2:15 PM	0	117	12	1	3	0	0	1	0	0	0	0	0	1	135
2:30 PM	0	142	13	0	6	0	1	1	0	0	1	0	0	5	169
2:45 PM	0	145	12	1	4	0	0	2	0	0	0	0	0	3	167
3:00 PM	0	171	17	1	3	0	0	3	0	0	1	0	0	3	199
3:15 PM	1	140	19	0	2	0	0	1	0	0	0	0	1	4	168
3:30 PM	0	148	9	4	6	0	1	1	0	0	0	0	0	0	169
3:45 PM	0	167	11	0	5	1	0	0	0	0	0	0	1	6	191
4:00 PM	0	166	11	1	2	0	0	0	0	0	0	0	0	3	183
4:15 PM	0	167	13	0	5	0	0	0	0	0	0	0	1	3	189
4:30 PM	0	172	19	1	3	0	0	4	1	0	1	0	0	5	206
4:45 PM	0	180	14	0	4	0	0	1	0	0	0	0	0	5	204
5:00 PM	0	204	18	1	2	0	0	0	0	1	0	0	0	4	230
5:15 PM	1	202	14	0	5	0	0	4	0	0	0	0	0	5	231
5:30 PM	0	199	17	1	3	0	0	2	0	0	0	0	0	7	229
5:45 PM	0	199	17	0	3	0	0	0	0	0	0	0	0	4	223
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd SPECIFIC LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd CITY/STATE: Gahanna, OH														QC JOB #: 14261902 DIRECTION: NB DATE: Mar 29 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
6:00 PM	0	182	11	1	3	0	0	3	0	0	0	0	0	4	204
6:15 PM	0	169	23	0	2	1	0	0	0	1	1	0	0	5	202
6:30 PM	1	158	15	0	2	0	0	0	0	0	0	0	0	6	182
6:45 PM	0	141	16	0	2	0	0	0	0	0	0	0	0	7	166
7:00 PM	0	117	4	0	2	0	0	1	0	0	0	0	0	2	126
7:15 PM	0	121	9	0	1	0	0	1	0	0	0	0	0	1	133
7:30 PM	1	130	10	0	1	0	0	0	0	0	0	0	0	4	146
7:45 PM	0	111	6	0	0	0	0	1	0	0	0	0	0	3	121
8:00 PM	0	111	12	1	2	0	0	2	0	0	0	0	0	0	128
8:15 PM	0	89	14	0	1	0	0	0	0	0	0	0	0	1	105
8:30 PM	0	93	5	0	0	0	0	1	0	0	0	0	0	1	100
8:45 PM	0	76	8	0	1	0	0	0	0	0	1	0	0	0	86
9:00 PM	0	69	7	0	2	0	0	0	0	0	0	0	0	1	79
9:15 PM	0	77	2	0	2	0	0	0	0	0	0	0	0	0	81
9:30 PM	0	48	4	0	1	0	0	0	0	0	0	0	0	1	54
9:45 PM	0	37	2	0	1	0	0	0	0	0	0	0	0	0	40
10:00 PM	0	31	4	0	0	0	0	0	0	0	0	0	0	0	35
10:15 PM	0	34	2	0	2	0	0	0	0	0	0	0	0	0	38
10:30 PM	0	30	0	0	0	0	0	0	0	0	0	0	0	0	30
10:45 PM	0	28	2	1	0	0	0	0	0	0	0	0	0	1	32
11:00 PM	0	17	1	0	0	0	0	0	0	0	0	0	0	2	20
11:15 PM	0	14	0	0	0	0	0	0	0	0	0	0	0	0	14
11:30 PM	0	20	3	0	0	0	0	0	0	0	0	0	0	0	23
11:45 PM	0	16	0	0	0	0	0	0	0	0	0	0	0	1	17
Day Total	4	8002	845	31	237	6	4	56	2	3	5	0	4	119	9318
Percent	0.0%	85.9%	9.1%	0.3%	2.5%	0.1%	0.0%	0.6%	0.0%	0.0%	0.1%	0.0%	0.0%	1.3%	
ADT 9318															
AM Peak Volume	11:15 AM	7:45 AM	6:30 AM	7:45 AM	9:15 AM	10:15 AM	7:00 AM	9:15 AM	8:45 AM			6:45 AM	6:30 AM	11:15 AM	
	142	21	2	10	1	1	3	1	1			1	1	162	
PM Peak Volume	3:15 PM	5:00 PM	12:30 PM	3:30 PM	1:15 PM	12:00 PM	1:15 PM	4:30 PM	4:30 PM	5:00 PM	2:30 PM		3:15 PM	1:30 PM	5:15 PM
	1	204	24	4	9	1	1	4	1	1	1		1	7	231
Comments:															

LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd												QC JOB #: 14261902			
SPECIFIC LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd												DIRECTION: NB			
CITY/STATE: Gahanna, OH												DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
Grand Total	4	8002	845	31	237	6	4	56	2	3	5	0	4	119	9318
Percent	0.0%	85.9%	9.1%	0.3%	2.5%	0.1%	0.0%	0.6%	0.0%	0.0%	0.1%	0.0%	0.0%	1.3%	
ADT 9318															
Comments:															

Report generated on 4/6/2017 8:12 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd							QC JOB #: 14261902			
SPECIFIC LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd							DIRECTION: NB			
CITY/STATE: Gahanna, OH							DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM			13			13			13	
12:15 AM			14			14			14	
12:30 AM			13			13			13	
12:45 AM			5			5			5	
1:00 AM			11			11			11	
1:15 AM			6			6			6	
1:30 AM			4			4			4	
1:45 AM			7			7			7	
2:00 AM			5			5			5	
2:15 AM			4			4			4	
2:30 AM			4			4			4	
2:45 AM			2			2			2	
3:00 AM			0			0			0	
3:15 AM			3			3			3	
3:30 AM			6			6			6	
3:45 AM			5			5			5	
4:00 AM			2			2			2	
4:15 AM			2			2			2	
4:30 AM			7			7			7	
4:45 AM			18			18			18	
5:00 AM			6			6			6	
5:15 AM			13			13			13	
5:30 AM			25			25			25	
5:45 AM			32			32			32	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd							QC JOB #: 14261902			
SPECIFIC LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd							DIRECTION: NB			
CITY/STATE: Gahanna, OH							DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 AM			25			25			25	
6:15 AM			33			33			33	
6:30 AM			45			45			45	
6:45 AM			62			62			62	
7:00 AM			64			64			64	
7:15 AM			121			121			121	
7:30 AM			144			144			144	
7:45 AM			158			158			158	
8:00 AM			132			132			132	
8:15 AM			124			124			124	
8:30 AM			127			127			127	
8:45 AM			128			128			128	
9:00 AM			123			123			123	
9:15 AM			114			114			114	
9:30 AM			122			122			122	
9:45 AM			128			128			128	
10:00 AM			118			118			118	
10:15 AM			114			114			114	
10:30 AM			120			120			120	
10:45 AM			158			158			158	
11:00 AM			125			125			125	
11:15 AM			162			162			162	
11:30 AM			162			162			162	
11:45 AM			131			131			131	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd							QC JOB #: 14261902			
SPECIFIC LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd							DIRECTION: NB			
CITY/STATE: Gahanna, OH							DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 PM			142			142			142	
12:15 PM			165			165			165	
12:30 PM			167			167			167	
12:45 PM			143			143			143	
1:00 PM			143			143			143	
1:15 PM			135			135			135	
1:30 PM			167			167			167	
1:45 PM			138			138			138	
2:00 PM			116			116			116	
2:15 PM			135			135			135	
2:30 PM			169			169			169	
2:45 PM			167			167			167	
3:00 PM			199			199			199	
3:15 PM			168			168			168	
3:30 PM			169			169			169	
3:45 PM			191			191			191	
4:00 PM			183			183			183	
4:15 PM			189			189			189	
4:30 PM			206			206			206	
4:45 PM			204			204			204	
5:00 PM			230			230			230	
5:15 PM			231			231			231	
5:30 PM			229			229			229	
5:45 PM			223			223			223	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd							QC JOB #: 14261902			
SPECIFIC LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd							DIRECTION: NB			
CITY/STATE: Gahanna, OH							DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 PM			204			204			204	
6:15 PM			202			202			202	
6:30 PM			182			182			182	
6:45 PM			166			166			166	
7:00 PM			126			126			126	
7:15 PM			133			133			133	
7:30 PM			146			146			146	
7:45 PM			121			121			121	
8:00 PM			128			128			128	
8:15 PM			105			105			105	
8:30 PM			100			100			100	
8:45 PM			86			86			86	
9:00 PM			79			79			79	
9:15 PM			81			81			81	
9:30 PM			54			54			54	
9:45 PM			40			40			40	
10:00 PM			35			35			35	
10:15 PM			38			38			38	
10:30 PM			30			30			30	
10:45 PM			32			32			32	
11:00 PM			20			20			20	
11:15 PM			14			14			14	
11:30 PM			23			23			23	
11:45 PM			17			17			17	
Day Total			9318			9318			9318	
% Weekday Average			100.0%							
% Week Average			100.0%			100.0%				
AM Peak			11:15 AM			11:15 AM			11:15 AM	
Volume			162			162			162	
PM Peak			5:15 PM			5:15 PM			5:15 PM	
Volume			231			231			231	
Comments:										

LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd														QC JOB #: 14261902	
SPECIFIC LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd														DIRECTION: NB/SB	
CITY/STATE: Gahanna, OH														DATE: Mar 29 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 AM	0	26	6	0	0	0	0	0	0	0	0	0	0	0	32
12:15 AM	0	26	3	0	0	0	0	0	0	0	0	0	0	0	29
12:30 AM	0	23	0	0	0	0	0	0	0	0	0	0	0	0	23
12:45 AM	0	11	0	0	0	0	0	0	0	0	0	0	0	0	11
1:00 AM	0	13	2	0	0	0	0	0	0	0	0	0	0	0	15
1:15 AM	0	11	1	0	0	0	0	0	0	0	0	0	0	0	12
1:30 AM	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6
1:45 AM	0	9	1	0	0	0	0	0	0	0	0	0	0	0	10
2:00 AM	0	6	0	0	1	0	0	0	0	0	0	0	0	0	7
2:15 AM	0	6	1	0	0	0	0	0	0	0	0	0	0	0	7
2:30 AM	0	7	2	0	0	0	0	0	0	0	0	0	0	0	9
2:45 AM	0	8	1	0	0	0	0	0	0	0	0	0	0	0	9
3:00 AM	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
3:15 AM	0	5	0	0	0	0	0	1	0	0	0	0	0	0	6
3:30 AM	0	9	0	0	0	0	0	0	0	0	0	0	0	0	9
3:45 AM	0	9	1	0	0	0	0	0	0	0	0	0	0	0	10
4:00 AM	0	7	2	0	0	0	0	0	0	0	0	0	0	0	9
4:15 AM	0	6	3	0	0	0	0	0	0	0	0	0	0	0	9
4:30 AM	0	11	5	0	0	0	0	0	0	0	0	0	0	0	16
4:45 AM	0	26	3	0	1	0	0	0	0	0	0	0	0	0	30
5:00 AM	0	20	5	0	1	0	0	0	0	0	0	0	0	0	26
5:15 AM	0	27	4	0	1	0	0	1	0	0	0	0	0	0	33
5:30 AM	0	58	12	0	4	0	0	0	0	0	0	0	0	0	74
5:45 AM	0	59	8	1	6	0	0	0	0	0	0	0	0	0	74
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

QC JOB #: 14261902
DIRECTION: NB/SB
DATE: Mar 29 2017

Report generated on 4/6/2017 8:12 AM SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd														QC JOB #: 14261902	
SPECIFIC LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd														DIRECTION: NB/SB	
CITY/STATE: Gahanna, OH														DATE: Mar 29 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 PM	0	225	41	1	5	2	0	2	0	0	0	0	0	1	277
12:15 PM	0	240	34	0	13	0	0	3	0	1	1	0	0	3	295
12:30 PM	0	245	46	0	4	0	0	4	0	0	0	0	0	5	304
12:45 PM	0	252	32	2	6	0	0	0	0	1	0	0	0	2	295
1:00 PM	0	234	23	0	8	0	0	1	0	0	0	0	0	5	271
1:15 PM	0	220	32	2	13	1	1	2	0	0	0	0	0	3	274
1:30 PM	0	240	38	2	10	0	0	1	0	0	0	0	0	7	298
1:45 PM	0	232	47	2	14	0	0	2	0	0	0	0	0	5	302
2:00 PM	0	214	30	2	8	0	0	1	0	0	0	0	0	1	256
2:15 PM	0	222	27	1	10	0	0	4	0	1	0	0	0	1	266
2:30 PM	0	238	33	4	8	0	1	3	0	0	1	0	0	11	299
2:45 PM	0	270	38	4	9	0	0	2	0	0	0	0	0	4	327
3:00 PM	0	323	44	5	7	0	0	6	0	0	1	0	0	6	392
3:15 PM	2	268	49	2	9	0	0	1	0	0	1	0	2	6	340
3:30 PM	0	291	28	6	16	1	1	3	0	1	1	0	0	5	353
3:45 PM	0	267	41	3	12	1	0	3	0	0	0	0	1	11	339
4:00 PM	0	297	36	2	5	0	0	4	0	0	0	0	0	5	349
4:15 PM	0	287	39	1	12	0	0	1	0	0	0	0	1	7	348
4:30 PM	0	306	40	1	6	0	0	7	1	0	1	0	0	6	368
4:45 PM	0	325	46	1	9	1	0	6	0	0	0	0	0	5	393
5:00 PM	0	327	46	2	8	0	0	2	0	1	0	0	0	4	390
5:15 PM	1	342	42	0	11	0	0	4	0	0	1	0	0	9	410
5:30 PM	0	336	43	1	8	1	0	5	0	0	0	0	0	11	405
5:45 PM	0	309	41	1	6	0	0	1	0	0	0	0	0	10	368
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd														QC JOB #: 14261902	
SPECIFIC LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd														DIRECTION: NB/SB	
CITY/STATE: Gahanna, OH														DATE: Mar 29 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
6:00 PM	0	294	33	1	5	0	0	4	0	1	0	0	0	6	344
6:15 PM	0	303	39	1	6	1	0	2	0	1	1	0	0	8	362
6:30 PM	1	262	43	0	3	0	0	2	0	0	0	0	0	9	320
6:45 PM	0	250	38	0	8	0	0	1	0	0	0	0	1	8	306
7:00 PM	0	226	24	0	4	0	0	1	0	0	0	0	0	5	260
7:15 PM	0	242	25	1	6	0	0	1	0	0	0	0	0	4	279
7:30 PM	1	228	29	0	4	0	0	1	0	0	0	0	0	7	270
7:45 PM	0	211	25	0	1	0	0	2	0	0	0	0	0	6	245
8:00 PM	0	207	22	1	6	0	0	3	0	0	0	0	0	2	241
8:15 PM	0	189	34	0	5	0	0	1	0	1	0	0	0	3	233
8:30 PM	0	175	21	0	1	0	0	2	0	0	0	0	0	1	200
8:45 PM	0	155	18	0	1	0	0	1	0	0	1	0	0	1	177
9:00 PM	0	142	9	0	4	0	0	0	0	0	0	0	0	1	156
9:15 PM	0	138	12	0	4	0	0	0	0	0	0	0	0	0	154
9:30 PM	0	99	15	0	2	0	0	1	0	0	0	0	0	1	118
9:45 PM	0	78	9	1	1	0	0	0	0	0	0	0	0	0	89
10:00 PM	0	64	8	0	1	0	0	0	0	0	0	0	0	0	73
10:15 PM	0	66	8	1	2	0	0	0	0	0	0	0	0	0	77
10:30 PM	0	60	3	0	0	0	0	0	0	0	0	0	0	1	64
10:45 PM	0	52	7	1	1	0	0	0	0	0	0	0	0	1	62
11:00 PM	0	40	4	0	0	0	0	0	0	0	0	0	0	2	46
11:15 PM	0	36	1	0	0	0	0	0	0	0	0	0	0	1	38
11:30 PM	0	30	3	0	0	0	0	0	0	0	0	0	0	0	33
11:45 PM	0	22	1	0	1	0	0	0	0	0	0	0	0	2	26
Day Total	6	15203	2140	85	519	12	4	130	2	12	13	0	8	242	18376
Percent	0.0%	82.7%	11.6%	0.5%	2.8%	0.1%	0.0%	0.7%	0.0%	0.1%	0.1%	0.0%	0.0%	1.3%	
ADT 18376															
AM Peak	9:45 AM	7:30 AM	11:30 AM	8:00 AM	7:45 AM	9:15 AM	10:15 AM	8:30 AM	9:15 AM	8:45 AM	6:30 AM		7:00 AM	7:00 AM	7:45 AM
Volume	1	279	57	5	17	1	1	5	1	2	1		2	5	326
PM Peak	3:15 PM	5:15 PM	3:15 PM	3:30 PM	3:30 PM	12:00 PM	1:15 PM	4:30 PM	4:30 PM	12:15 PM	12:15 PM		3:15 PM	2:30 PM	5:15 PM
Volume	2	342	49	6	16	2	1	7	1	1	1		2	11	410
Comments:															

LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd SPECIFIC LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd CITY/STATE: Gahanna, OH												QC JOB #: 14261902 DIRECTION: NB/SB DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
Grand Total	6	15203	2140	85	519	12	4	130	2	12	13	0	8	242	18376
Percent	0.0%	82.7%	11.6%	0.5%	2.8%	0.1%	0.0%	0.7%	0.0%	0.1%	0.1%	0.0%	0.0%	1.3%	
ADT 18376															
Comments:															

Report generated on 4/6/2017 8:12 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd							QC JOB #: 14261902			
SPECIFIC LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd							DIRECTION: NB/SB			
CITY/STATE: Gahanna, OH							DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM			32			32			32	
12:15 AM			29			29			29	
12:30 AM			23			23			23	
12:45 AM			11			11			11	
1:00 AM			15			15			15	
1:15 AM			12			12			12	
1:30 AM			6			6			6	
1:45 AM			10			10			10	
2:00 AM			7			7			7	
2:15 AM			7			7			7	
2:30 AM			9			9			9	
2:45 AM			9			9			9	
3:00 AM			4			4			4	
3:15 AM			6			6			6	
3:30 AM			9			9			9	
3:45 AM			10			10			10	
4:00 AM			9			9			9	
4:15 AM			9			9			9	
4:30 AM			16			16			16	
4:45 AM			30			30			30	
5:00 AM			26			26			26	
5:15 AM			33			33			33	
5:30 AM			74			74			74	
5:45 AM			74			74			74	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd						QC JOB #: 14261902				
SPECIFIC LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd						DIRECTION: NB/SB				
CITY/STATE: Gahanna, OH						DATE: Mar 29 2017 - Mar 29 2017				
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 AM			72			72			72	
6:15 AM			121			121			121	
6:30 AM			141			141			141	
6:45 AM			179			179			179	
7:00 AM			234			234			234	
7:15 AM			318			318			318	
7:30 AM			310			310			310	
7:45 AM			326			326			326	
8:00 AM			303			303			303	
8:15 AM			298			298			298	
8:30 AM			271			271			271	
8:45 AM			271			271			271	
9:00 AM			233			233			233	
9:15 AM			234			234			234	
9:30 AM			223			223			223	
9:45 AM			234			234			234	
10:00 AM			231			231			231	
10:15 AM			218			218			218	
10:30 AM			219			219			219	
10:45 AM			260			260			260	
11:00 AM			241			241			241	
11:15 AM			287			287			287	
11:30 AM			319			319			319	
11:45 AM			271			271			271	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd							QC JOB #: 14261902			
SPECIFIC LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd							DIRECTION: NB/SB			
CITY/STATE: Gahanna, OH							DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 PM			277			277			277	
12:15 PM			295			295			295	
12:30 PM			304			304			304	
12:45 PM			295			295			295	
1:00 PM			271			271			271	
1:15 PM			274			274			274	
1:30 PM			298			298			298	
1:45 PM			302			302			302	
2:00 PM			256			256			256	
2:15 PM			266			266			266	
2:30 PM			299			299			299	
2:45 PM			327			327			327	
3:00 PM			392			392			392	
3:15 PM			340			340			340	
3:30 PM			353			353			353	
3:45 PM			339			339			339	
4:00 PM			349			349			349	
4:15 PM			348			348			348	
4:30 PM			368			368			368	
4:45 PM			393			393			393	
5:00 PM			390			390			390	
5:15 PM			410			410			410	
5:30 PM			405			405			405	
5:45 PM			368			368			368	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd							QC JOB #: 14261902			
SPECIFIC LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd							DIRECTION: NB/SB			
CITY/STATE: Gahanna, OH							DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 PM			344			344			344	
6:15 PM			362			362			362	
6:30 PM			320			320			320	
6:45 PM			306			306			306	
7:00 PM			260			260			260	
7:15 PM			279			279			279	
7:30 PM			270			270			270	
7:45 PM			245			245			245	
8:00 PM			241			241			241	
8:15 PM			233			233			233	
8:30 PM			200			200			200	
8:45 PM			177			177			177	
9:00 PM			156			156			156	
9:15 PM			154			154			154	
9:30 PM			118			118			118	
9:45 PM			89			89			89	
10:00 PM			73			73			73	
10:15 PM			77			77			77	
10:30 PM			64			64			64	
10:45 PM			62			62			62	
11:00 PM			46			46			46	
11:15 PM			38			38			38	
11:30 PM			33			33			33	
11:45 PM			26			26			26	
Day Total			18376			18376			18376	
% Weekday Average			100.0%							
% Week Average			100.0%			100.0%				
AM Peak Volume			7:45 AM 326			7:45 AM 326			7:45 AM 326	
PM Peak Volume			5:15 PM 410			5:15 PM 410			5:15 PM 410	
Comments:										

QC JOB #: 14261902
DIRECTION: SB
DATE: Mar 29 2017

Report generated on 4/6/2017 8:12 AM SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd														QC JOB #: 14261902	
SPECIFIC LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd														DIRECTION: SB	
CITY/STATE: Gahanna, OH														DATE: Mar 29 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
6:00 AM	0	43	4	0	0	0	0	0	0	0	0	0	0	0	47
6:15 AM	0	77	8	0	2	0	0	0	0	0	0	0	0	1	88
6:30 AM	0	82	8	0	3	0	0	0	0	1	1	0	0	1	96
6:45 AM	0	91	20	0	6	0	0	0	0	0	0	0	0	0	117
7:00 AM	0	142	14	1	5	0	0	0	0	0	1	0	2	5	170
7:15 AM	0	165	22	0	4	0	0	3	0	0	0	0	0	3	197
7:30 AM	0	150	10	0	3	0	0	1	0	0	0	0	0	2	166
7:45 AM	0	135	24	1	7	0	0	0	0	0	1	0	0	0	168
8:00 AM	0	138	25	3	3	0	0	0	0	0	0	0	0	2	171
8:15 AM	0	139	20	1	9	0	0	0	0	0	0	0	0	5	174
8:30 AM	0	115	17	1	7	0	0	3	0	0	0	0	0	1	144
8:45 AM	0	109	25	0	6	0	0	2	0	1	0	0	0	0	143
9:00 AM	0	90	17	0	1	0	0	1	0	0	0	0	0	1	110
9:15 AM	0	94	17	2	6	0	0	0	0	0	0	0	0	1	120
9:30 AM	0	79	15	0	5	0	0	1	0	0	0	0	0	1	101
9:45 AM	1	81	14	2	6	0	0	2	0	0	0	0	0	0	106
10:00 AM	0	95	11	1	3	0	0	0	0	0	0	0	0	3	113
10:15 AM	0	79	20	0	2	1	0	1	0	0	0	0	0	1	104
10:30 AM	0	84	12	1	1	0	0	1	0	0	0	0	0	0	99
10:45 AM	0	80	12	0	6	0	0	0	0	1	1	0	0	2	102
11:00 AM	0	95	15	1	2	0	0	1	0	0	0	0	0	2	116
11:15 AM	0	99	15	0	9	0	0	0	0	0	0	0	0	2	125
11:30 AM	0	107	39	1	8	0	0	1	0	0	0	0	0	1	157
11:45 AM	0	101	28	2	4	0	0	2	0	0	0	0	0	3	140
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd														QC JOB #: 14261902	
SPECIFIC LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd														DIRECTION: SB	
CITY/STATE: Gahanna, OH														DATE: Mar 29 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 PM	0	107	20	1	3	1	0	2	0	0	0	0	0	1	135
12:15 PM	0	95	22	0	5	0	0	3	0	1	1	0	0	3	130
12:30 PM	0	106	22	0	4	0	0	1	0	0	0	0	0	4	137
12:45 PM	0	125	20	2	3	0	0	0	0	1	0	0	0	1	152
1:00 PM	0	107	15	0	5	0	0	1	0	0	0	0	0	0	128
1:15 PM	0	106	25	1	4	1	0	1	0	0	0	0	0	1	139
1:30 PM	0	98	24	2	7	0	0	0	0	0	0	0	0	0	131
1:45 PM	0	120	30	2	8	0	0	1	0	0	0	0	0	3	164
2:00 PM	0	113	17	2	7	0	0	0	0	0	0	0	0	1	140
2:15 PM	0	105	15	0	7	0	0	3	0	1	0	0	0	0	131
2:30 PM	0	96	20	4	2	0	0	2	0	0	0	0	0	6	130
2:45 PM	0	125	26	3	5	0	0	0	0	0	0	0	0	1	160
3:00 PM	0	152	27	4	4	0	0	3	0	0	0	0	0	3	193
3:15 PM	1	128	30	2	7	0	0	0	0	0	1	0	1	2	172
3:30 PM	0	143	19	2	10	1	0	2	0	1	1	0	0	5	184
3:45 PM	0	100	30	3	7	0	0	3	0	0	0	0	0	5	148
4:00 PM	0	131	25	1	3	0	0	4	0	0	0	0	0	2	166
4:15 PM	0	120	26	1	7	0	0	1	0	0	0	0	0	4	159
4:30 PM	0	134	21	0	3	0	0	3	0	0	0	0	0	1	162
4:45 PM	0	145	32	1	5	1	0	5	0	0	0	0	0	0	189
5:00 PM	0	123	28	1	6	0	0	2	0	0	0	0	0	0	160
5:15 PM	0	140	28	0	6	0	0	0	0	0	1	0	0	4	179
5:30 PM	0	137	26	0	5	1	0	3	0	0	0	0	0	4	176
5:45 PM	0	110	24	1	3	0	0	1	0	0	0	0	0	6	145
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd SPECIFIC LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd CITY/STATE: Gahanna, OH														QC JOB #: 14261902 DIRECTION: SB DATE: Mar 29 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
6:00 PM	0	112	22	0	2	0	0	1	0	1	0	0	0	2	140
6:15 PM	0	134	16	1	4	0	0	2	0	0	0	0	0	3	160
6:30 PM	0	104	28	0	1	0	0	2	0	0	0	0	0	3	138
6:45 PM	0	109	22	0	6	0	0	1	0	0	0	0	1	1	140
7:00 PM	0	109	20	0	2	0	0	0	0	0	0	0	0	3	134
7:15 PM	0	121	16	1	5	0	0	0	0	0	0	0	0	3	146
7:30 PM	0	98	19	0	3	0	0	1	0	0	0	0	0	3	124
7:45 PM	0	100	19	0	1	0	0	1	0	0	0	0	0	3	124
8:00 PM	0	96	10	0	4	0	0	1	0	0	0	0	0	2	113
8:15 PM	0	100	20	0	4	0	0	1	0	1	0	0	0	2	128
8:30 PM	0	82	16	0	1	0	0	1	0	0	0	0	0	0	100
8:45 PM	0	79	10	0	0	0	0	1	0	0	0	0	0	1	91
9:00 PM	0	73	2	0	2	0	0	0	0	0	0	0	0	0	77
9:15 PM	0	61	10	0	2	0	0	0	0	0	0	0	0	0	73
9:30 PM	0	51	11	0	1	0	0	1	0	0	0	0	0	0	64
9:45 PM	0	41	7	1	0	0	0	0	0	0	0	0	0	0	49
10:00 PM	0	33	4	0	1	0	0	0	0	0	0	0	0	0	38
10:15 PM	0	32	6	1	0	0	0	0	0	0	0	0	0	0	39
10:30 PM	0	30	3	0	0	0	0	0	0	0	0	0	0	1	34
10:45 PM	0	24	5	0	1	0	0	0	0	0	0	0	0	0	30
11:00 PM	0	23	3	0	0	0	0	0	0	0	0	0	0	0	26
11:15 PM	0	22	1	0	0	0	0	0	0	0	0	0	0	1	24
11:30 PM	0	10	0	0	0	0	0	0	0	0	0	0	0	0	10
11:45 PM	0	6	1	0	1	0	0	0	0	0	0	0	0	1	9
Day Total	2	7201	1295	54	282	6	0	74	0	9	8	0	4	123	9058
Percent	0.0%	79.5%	14.3%	0.6%	3.1%	0.1%	0.0%	0.8%	0.0%	0.1%	0.1%	0.0%	0.0%	1.4%	
ADT 9058															
AM Peak	9:45 AM	7:15 AM	11:30 AM	8:00 AM	8:15 AM	10:15 AM		7:15 AM		6:30 AM	6:30 AM		7:00 AM	7:00 AM	7:15 AM
Volume	1	165	39	3	9	1		3		1	1		2	5	197
PM Peak	3:15 PM	3:00 PM	4:45 PM	2:30 PM	3:30 PM	12:00 PM		4:45 PM		12:15 PM	12:15 PM		3:15 PM	2:30 PM	3:00 PM
Volume	1	152	32	4	10	1		5		1	1		1	6	193
Comments:															

LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd SPECIFIC LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd CITY/STATE: Gahanna, OH												QC JOB #: 14261902 DIRECTION: SB DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
Grand Total	2	7201	1295	54	282	6	0	74	0	9	8	0	4	123	9058
Percent	0.0%	79.5%	14.3%	0.6%	3.1%	0.1%	0.0%	0.8%	0.0%	0.1%	0.1%	0.0%	0.0%	1.4%	
ADT 9058															
Comments:															

Report generated on 4/6/2017 8:12 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd							QC JOB #: 14261902			
SPECIFIC LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd							DIRECTION: SB			
CITY/STATE: Gahanna, OH							DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM			19			19			19	
12:15 AM			15			15			15	
12:30 AM			10			10			10	
12:45 AM			6			6			6	
1:00 AM			4			4			4	
1:15 AM			6			6			6	
1:30 AM			2			2			2	
1:45 AM			3			3			3	
2:00 AM			2			2			2	
2:15 AM			3			3			3	
2:30 AM			5			5			5	
2:45 AM			7			7			7	
3:00 AM			4			4			4	
3:15 AM			3			3			3	
3:30 AM			3			3			3	
3:45 AM			5			5			5	
4:00 AM			7			7			7	
4:15 AM			7			7			7	
4:30 AM			9			9			9	
4:45 AM			12			12			12	
5:00 AM			20			20			20	
5:15 AM			20			20			20	
5:30 AM			49			49			49	
5:45 AM			42			42			42	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd							QC JOB #: 14261902			
SPECIFIC LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd							DIRECTION: SB			
CITY/STATE: Gahanna, OH							DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 AM			47			47			47	
6:15 AM			88			88			88	
6:30 AM			96			96			96	
6:45 AM			117			117			117	
7:00 AM			170			170			170	
7:15 AM			197			197			197	
7:30 AM			166			166			166	
7:45 AM			168			168			168	
8:00 AM			171			171			171	
8:15 AM			174			174			174	
8:30 AM			144			144			144	
8:45 AM			143			143			143	
9:00 AM			110			110			110	
9:15 AM			120			120			120	
9:30 AM			101			101			101	
9:45 AM			106			106			106	
10:00 AM			113			113			113	
10:15 AM			104			104			104	
10:30 AM			99			99			99	
10:45 AM			102			102			102	
11:00 AM			116			116			116	
11:15 AM			125			125			125	
11:30 AM			157			157			157	
11:45 AM			140			140			140	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd							QC JOB #: 14261902			
SPECIFIC LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd							DIRECTION: SB			
CITY/STATE: Gahanna, OH							DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 PM			135			135			135	
12:15 PM			130			130			130	
12:30 PM			137			137			137	
12:45 PM			152			152			152	
1:00 PM			128			128			128	
1:15 PM			139			139			139	
1:30 PM			131			131			131	
1:45 PM			164			164			164	
2:00 PM			140			140			140	
2:15 PM			131			131			131	
2:30 PM			130			130			130	
2:45 PM			160			160			160	
3:00 PM			193			193			193	
3:15 PM			172			172			172	
3:30 PM			184			184			184	
3:45 PM			148			148			148	
4:00 PM			166			166			166	
4:15 PM			159			159			159	
4:30 PM			162			162			162	
4:45 PM			189			189			189	
5:00 PM			160			160			160	
5:15 PM			179			179			179	
5:30 PM			176			176			176	
5:45 PM			145			145			145	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

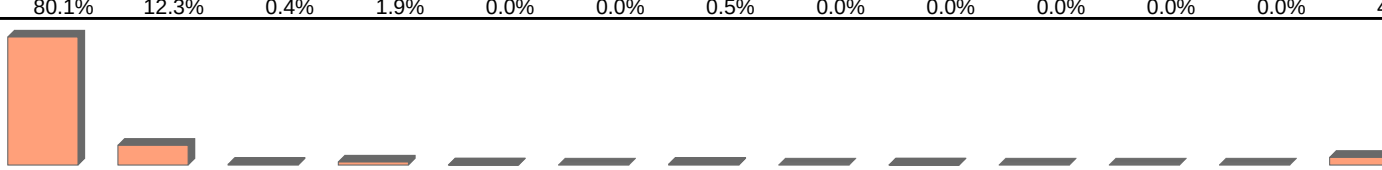
LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd							QC JOB #: 14261902			
SPECIFIC LOCATION: Hamilton Rd btwn Johnstown Rd and Clark State Rd							DIRECTION: SB			
CITY/STATE: Gahanna, OH							DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 PM			140			140			140	
6:15 PM			160			160			160	
6:30 PM			138			138			138	
6:45 PM			140			140			140	
7:00 PM			134			134			134	
7:15 PM			146			146			146	
7:30 PM			124			124			124	
7:45 PM			124			124			124	
8:00 PM			113			113			113	
8:15 PM			128			128			128	
8:30 PM			100			100			100	
8:45 PM			91			91			91	
9:00 PM			77			77			77	
9:15 PM			73			73			73	
9:30 PM			64			64			64	
9:45 PM			49			49			49	
10:00 PM			38			38			38	
10:15 PM			39			39			39	
10:30 PM			34			34			34	
10:45 PM			30			30			30	
11:00 PM			26			26			26	
11:15 PM			24			24			24	
11:30 PM			10			10			10	
11:45 PM			9			9			9	
Day Total			9058			9058			9058	
% Weekday Average			100.0%							
% Week Average			100.0%			100.0%				
AM Peak Volume			7:15 AM 197			7:15 AM 197			7:15 AM 197	
PM Peak Volume			3:00 PM 193			3:00 PM 193			3:00 PM 193	
Comments:										

LOCATION: Mill St btwn Cherry Bottom Rd and Granville St														QC JOB #: 14261903	
SPECIFIC LOCATION: Mill St btwn Cherry Bottom Rd and Granville St														DIRECTION: NB	
CITY/STATE: Columbus, OH														DATE: Mar 29 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 AM	0	9	2	0	1	0	0	0	0	0	0	0	0	0	12
12:15 AM	0	11	0	0	0	0	0	0	0	0	0	0	0	1	12
12:30 AM	0	7	0	0	1	0	0	0	0	0	0	0	0	0	8
12:45 AM	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
1:00 AM	0	7	0	0	0	0	0	0	0	0	0	0	0	0	7
1:15 AM	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4
1:30 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
1:45 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
2:00 AM	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4
2:15 AM	0	1	0	0	0	0	0	1	0	0	0	0	0	0	2
2:30 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
2:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
3:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
3:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
3:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
4:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
4:15 AM	0	3	0	0	0	0	0	1	0	0	0	0	0	0	4
4:30 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	1	4
4:45 AM	0	5	1	0	0	0	0	0	0	0	0	0	0	0	6
5:00 AM	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4
5:15 AM	0	6	4	0	0	0	0	0	0	0	0	0	0	0	10
5:30 AM	0	7	3	0	1	0	0	0	0	0	0	0	0	0	11
5:45 AM	0	12	3	0	0	0	0	0	0	0	0	0	0	1	16
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

LOCATION: Mill St btwn Cherry Bottom Rd and Granville St														QC JOB #: 14261903	
SPECIFIC LOCATION: Mill St btwn Cherry Bottom Rd and Granville St														DIRECTION: NB	
CITY/STATE: Columbus, OH														DATE: Mar 29 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
6:00 AM	0	13	1	0	1	0	0	0	0	0	0	0	0	0	15
6:15 AM	0	15	2	0	2	0	0	0	0	0	0	0	0	1	20
6:30 AM	0	19	8	2	1	0	0	1	0	0	0	0	0	2	33
6:45 AM	0	22	3	0	2	0	0	3	0	0	0	0	0	2	32
7:00 AM	0	31	2	1	3	0	0	2	0	0	0	0	0	5	44
7:15 AM	0	60	8	1	1	0	0	0	0	0	0	0	0	4	74
7:30 AM	0	81	12	0	2	0	0	0	0	0	0	0	0	13	108
7:45 AM	1	105	18	2	2	0	0	1	0	0	0	0	0	16	145
8:00 AM	0	72	13	4	4	0	0	2	0	0	0	0	0	9	104
8:15 AM	0	63	17	1	4	0	0	0	0	0	0	0	0	12	97
8:30 AM	0	51	9	2	5	0	0	0	0	0	0	0	0	3	70
8:45 AM	0	100	17	1	2	2	0	2	0	1	0	0	0	0	125
9:00 AM	0	55	14	0	5	0	0	1	0	0	0	0	0	0	75
9:15 AM	0	64	15	0	1	0	0	1	0	0	0	0	0	7	88
9:30 AM	0	52	14	1	4	0	0	2	0	0	0	0	0	6	79
9:45 AM	0	67	18	1	5	0	0	1	0	0	0	0	0	2	94
10:00 AM	0	39	10	1	1	0	0	1	0	0	0	0	0	4	56
10:15 AM	0	52	14	1	2	0	0	1	0	0	0	0	0	4	74
10:30 AM	0	63	8	0	4	0	0	2	0	0	0	0	0	4	81
10:45 AM	0	70	16	0	1	0	0	0	0	0	0	0	0	4	91
11:00 AM	0	76	1	1	0	0	0	2	0	0	0	0	0	5	85
11:15 AM	0	90	18	0	2	0	0	1	0	0	0	0	0	7	118
11:30 AM	0	76	12	0	2	0	0	0	0	0	0	0	0	5	95
11:45 AM	0	82	18	0	4	0	0	1	0	0	0	0	0	6	111
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

LOCATION: Mill St btwn Cherry Bottom Rd and Granville St SPECIFIC LOCATION: Mill St btwn Cherry Bottom Rd and Granville St CITY/STATE: Columbus, OH														QC JOB #: 14261903 DIRECTION: NB DATE: Mar 29 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 PM	0	99	18	1	4	0	0	0	0	0	0	0	0	0	122
12:15 PM	0	93	13	0	1	0	0	0	0	0	0	0	0	6	113
12:30 PM	0	78	11	0	4	0	0	1	0	0	0	0	0	3	97
12:45 PM	0	70	13	2	2	0	0	0	0	0	0	0	0	3	90
1:00 PM	0	78	20	0	3	0	0	0	0	0	0	0	0	5	106
1:15 PM	0	78	12	0	1	0	0	3	0	0	0	0	0	3	97
1:30 PM	0	88	15	0	1	0	0	0	0	0	0	0	0	2	106
1:45 PM	0	95	13	1	2	0	0	3	0	0	0	0	0	4	118
2:00 PM	0	72	12	0	3	0	0	0	0	0	0	0	0	6	93
2:15 PM	0	94	20	0	5	0	0	1	0	0	0	0	0	9	129
2:30 PM	1	123	19	0	5	0	0	1	0	0	0	0	0	5	154
2:45 PM	0	114	24	0	2	0	0	0	0	0	0	0	0	4	144
3:00 PM	0	121	15	3	3	0	0	0	0	0	0	0	0	15	157
3:15 PM	0	104	14	2	0	0	0	0	0	0	0	0	0	12	132
3:30 PM	0	124	20	0	2	0	0	0	0	0	0	0	0	8	154
3:45 PM	0	132	25	0	4	0	0	0	0	0	0	0	0	6	167
4:00 PM	1	158	19	0	1	0	0	0	0	0	0	0	0	7	186
4:15 PM	0	156	26	0	2	0	0	0	0	0	0	0	0	8	192
4:30 PM	0	174	20	0	3	0	0	0	0	0	0	0	0	9	206
4:45 PM	0	156	17	0	1	0	0	0	0	0	0	0	0	17	191
5:00 PM	0	170	19	0	2	0	0	0	0	0	0	0	0	15	206
5:15 PM	0	181	20	0	2	0	0	0	0	0	0	0	0	8	211
5:30 PM	0	180	26	0	3	0	0	0	0	0	0	0	0	12	221
5:45 PM	0	173	25	0	0	0	0	0	0	0	0	0	0	9	207
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

LOCATION: Mill St btwn Cherry Bottom Rd and Granville St SPECIFIC LOCATION: Mill St btwn Cherry Bottom Rd and Granville St CITY/STATE: Columbus, OH														QC JOB #: 14261903 DIRECTION: NB DATE: Mar 29 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
6:00 PM	1	192	13	1	1	0	0	0	0	0	0	0	0	12	220
6:15 PM	0	149	15	0	1	0	0	1	0	0	0	0	0	6	172
6:30 PM	0	122	17	0	0	0	0	0	0	0	0	0	0	4	143
6:45 PM	0	121	15	0	1	0	0	1	0	0	0	0	0	6	144
7:00 PM	0	103	16	0	2	0	0	0	0	0	0	0	0	2	123
7:15 PM	0	103	12	0	2	0	0	1	0	0	0	0	0	5	123
7:30 PM	0	125	14	0	1	0	0	0	0	0	0	0	0	7	147
7:45 PM	0	69	16	0	2	0	0	0	0	0	0	0	0	0	87
8:00 PM	0	87	12	0	2	0	0	0	0	0	0	0	0	3	104
8:15 PM	1	73	11	0	2	0	0	1	0	0	0	0	0	4	92
8:30 PM	0	89	17	0	1	0	0	0	0	0	0	0	0	1	108
8:45 PM	0	81	7	1	1	0	0	0	0	0	0	0	0	2	92
9:00 PM	0	47	5	0	3	0	0	0	0	0	0	0	0	4	59
9:15 PM	0	53	5	0	1	0	0	0	0	0	0	0	0	0	59
9:30 PM	0	43	9	0	1	0	0	0	0	0	0	0	0	0	53
9:45 PM	0	48	3	0	0	0	0	0	0	0	0	0	0	0	51
10:00 PM	0	28	5	0	0	0	0	0	0	0	0	0	0	1	34
10:15 PM	0	23	3	0	1	0	0	0	0	0	0	0	0	0	27
10:30 PM	0	26	3	0	0	0	0	0	0	0	0	0	0	0	29
10:45 PM	0	14	1	0	0	0	0	0	0	0	0	0	0	1	16
11:00 PM	0	11	4	0	0	0	0	0	0	0	0	0	0	0	15
11:15 PM	0	19	1	0	0	0	0	0	0	0	0	0	0	1	21
11:30 PM	0	14	3	0	0	0	0	0	0	0	0	0	0	1	18
11:45 PM	1	5	1	0	0	0	0	0	0	0	0	0	0	0	7
Day Total	6	6070	933	30	141	2	0	39	0	1	0	0	0	360	7582
Percent	0.1%	80.1%	12.3%	0.4%	1.9%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	4.7%	
ADT 7582															
AM Peak	7:45 AM	7:45 AM	7:45 AM	8:00 AM	8:30 AM	8:45 AM		6:45 AM		8:45 AM				7:45 AM	7:45 AM
Volume	1	105	18	4	5	2		3		1				16	145
PM Peak	2:30 PM	6:00 PM	4:15 PM	3:00 PM	2:15 PM			1:15 PM						4:45 PM	5:30 PM
Volume	1	192	26	3	5			3						17	221
Comments:															

LOCATION: Mill St btwn Cherry Bottom Rd and Granville St SPECIFIC LOCATION: Mill St btwn Cherry Bottom Rd and Granville St CITY/STATE: Columbus, OH														QC JOB #: 14261903 DIRECTION: NB DATE: Mar 29 2017 - Mar 29 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
Grand Total	6	6070	933	30	141	2	0	39	0	1	0	0	0	360	7582
Percent	0.1%	80.1%	12.3%	0.4%	1.9%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	4.7%	
ADT 7582															
Comments:															

Report generated on 4/6/2017 8:12 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

LOCATION: Mill St btwn Cherry Bottom Rd and Granville St							QC JOB #: 14261903			
SPECIFIC LOCATION: Mill St btwn Cherry Bottom Rd and Granville St							DIRECTION: NB			
CITY/STATE: Columbus, OH							DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM			12			12			12	
12:15 AM			12			12			12	
12:30 AM			8			8			8	
12:45 AM			5			5			5	
1:00 AM			7			7			7	
1:15 AM			4			4			4	
1:30 AM			3			3			3	
1:45 AM			2			2			2	
2:00 AM			4			4			4	
2:15 AM			2			2			2	
2:30 AM			2			2			2	
2:45 AM			1			1			1	
3:00 AM			2			2			2	
3:15 AM			1			1			1	
3:30 AM			0			0			0	
3:45 AM			2			2			2	
4:00 AM			3			3			3	
4:15 AM			4			4			4	
4:30 AM			4			4			4	
4:45 AM			6			6			6	
5:00 AM			4			4			4	
5:15 AM			10			10			10	
5:30 AM			11			11			11	
5:45 AM			16			16			16	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Mill St btwn Cherry Bottom Rd and Granville St							QC JOB #: 14261903			
SPECIFIC LOCATION: Mill St btwn Cherry Bottom Rd and Granville St							DIRECTION: NB			
CITY/STATE: Columbus, OH							DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 AM			15			15			15	
6:15 AM			20			20			20	
6:30 AM			33			33			33	
6:45 AM			32			32			32	
7:00 AM			44			44			44	
7:15 AM			74			74			74	
7:30 AM			108			108			108	
7:45 AM			145			145			145	
8:00 AM			104			104			104	
8:15 AM			97			97			97	
8:30 AM			70			70			70	
8:45 AM			125			125			125	
9:00 AM			75			75			75	
9:15 AM			88			88			88	
9:30 AM			79			79			79	
9:45 AM			94			94			94	
10:00 AM			56			56			56	
10:15 AM			74			74			74	
10:30 AM			81			81			81	
10:45 AM			91			91			91	
11:00 AM			85			85			85	
11:15 AM			118			118			118	
11:30 AM			95			95			95	
11:45 AM			111			111			111	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Mill St btwn Cherry Bottom Rd and Granville St							QC JOB #: 14261903			
SPECIFIC LOCATION: Mill St btwn Cherry Bottom Rd and Granville St							DIRECTION: NB			
CITY/STATE: Columbus, OH							DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 PM			122			122			122	
12:15 PM			113			113			113	
12:30 PM			97			97			97	
12:45 PM			90			90			90	
1:00 PM			106			106			106	
1:15 PM			97			97			97	
1:30 PM			106			106			106	
1:45 PM			118			118			118	
2:00 PM			93			93			93	
2:15 PM			129			129			129	
2:30 PM			154			154			154	
2:45 PM			144			144			144	
3:00 PM			157			157			157	
3:15 PM			132			132			132	
3:30 PM			154			154			154	
3:45 PM			167			167			167	
4:00 PM			186			186			186	
4:15 PM			192			192			192	
4:30 PM			206			206			206	
4:45 PM			191			191			191	
5:00 PM			206			206			206	
5:15 PM			211			211			211	
5:30 PM			221			221			221	
5:45 PM			207			207			207	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Mill St btwn Cherry Bottom Rd and Granville St							QC JOB #: 14261903			
SPECIFIC LOCATION: Mill St btwn Cherry Bottom Rd and Granville St							DIRECTION: NB			
CITY/STATE: Columbus, OH							DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 PM			220			220			220	
6:15 PM			172			172			172	
6:30 PM			143			143			143	
6:45 PM			144			144			144	
7:00 PM			123			123			123	
7:15 PM			123			123			123	
7:30 PM			147			147			147	
7:45 PM			87			87			87	
8:00 PM			104			104			104	
8:15 PM			92			92			92	
8:30 PM			108			108			108	
8:45 PM			92			92			92	
9:00 PM			59			59			59	
9:15 PM			59			59			59	
9:30 PM			53			53			53	
9:45 PM			51			51			51	
10:00 PM			34			34			34	
10:15 PM			27			27			27	
10:30 PM			29			29			29	
10:45 PM			16			16			16	
11:00 PM			15			15			15	
11:15 PM			21			21			21	
11:30 PM			18			18			18	
11:45 PM			7			7			7	
Day Total			7582			7582			7582	
% Weekday Average			100.0%							
% Week Average			100.0%			100.0%				
AM Peak Volume			7:45 AM 145			7:45 AM 145			7:45 AM 145	
PM Peak Volume			5:30 PM 221			5:30 PM 221			5:30 PM 221	
Comments:										

QC JOB #: 14261903
DIRECTION: NB/SB
DATE: Mar 29 2017

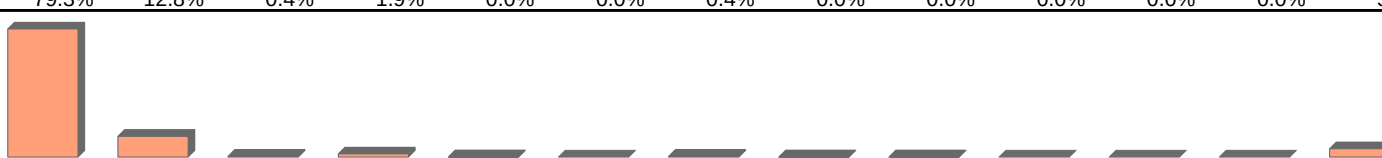
Report generated on 4/6/2017 8:12 AM SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

QC JOB #: 14261903
DIRECTION: NB/SB
DATE: Mar 29 2017

Report generated on 4/6/2017 8:12 AM SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

LOCATION: Mill St btwn Cherry Bottom Rd and Granville St												QC JOB #: 14261903			
SPECIFIC LOCATION: Mill St btwn Cherry Bottom Rd and Granville St												DIRECTION: NB/SB			
CITY/STATE: Columbus, OH												DATE: Mar 29 2017			
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 PM	0	194	27	2	5	0	0	1	0	0	0	0	0	7	236
12:15 PM	0	172	28	1	3	0	0	1	0	0	0	0	0	9	214
12:30 PM	0	160	26	0	7	0	0	4	0	0	0	0	0	9	206
12:45 PM	0	142	31	2	8	0	0	0	0	0	0	0	0	7	190
1:00 PM	0	152	33	0	6	0	0	0	0	0	0	0	0	8	199
1:15 PM	0	148	27	0	5	0	0	3	0	0	0	0	0	19	202
1:30 PM	0	162	32	0	3	0	0	0	0	0	0	0	0	9	206
1:45 PM	0	165	24	2	3	0	0	3	0	0	0	0	0	5	202
2:00 PM	0	151	34	0	6	0	0	1	0	0	0	0	0	12	204
2:15 PM	0	180	37	1	10	0	0	2	0	0	0	0	0	20	250
2:30 PM	2	212	39	0	10	0	0	1	0	0	0	0	0	9	273
2:45 PM	0	198	40	1	2	0	0	1	0	0	0	0	0	11	253
3:00 PM	0	189	36	4	3	0	0	0	0	0	0	0	0	30	262
3:15 PM	0	210	42	4	4	0	0	0	0	0	0	0	0	26	286
3:30 PM	0	228	30	0	8	0	0	3	0	0	0	0	0	22	291
3:45 PM	0	214	41	1	7	0	0	0	0	0	0	0	0	18	281
4:00 PM	1	226	37	0	4	0	0	1	0	0	0	0	0	13	282
4:15 PM	0	235	42	2	4	0	0	0	0	0	0	0	0	15	298
4:30 PM	0	265	39	0	6	0	0	1	0	0	0	0	0	17	328
4:45 PM	0	243	38	0	2	0	0	0	0	0	0	0	0	28	311
5:00 PM	0	274	41	1	4	0	0	0	0	0	0	0	0	28	348
5:15 PM	0	277	31	0	6	0	0	0	0	0	0	0	0	23	337
5:30 PM	0	280	45	0	5	0	0	1	0	0	0	0	0	24	355
5:45 PM	0	271	52	0	3	0	0	0	0	0	0	0	0	25	351
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

LOCATION: Mill St btwn Cherry Bottom Rd and Granville St SPECIFIC LOCATION: Mill St btwn Cherry Bottom Rd and Granville St CITY/STATE: Columbus, OH														QC JOB #: 14261903 DIRECTION: NB/SB DATE: Mar 29 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
6:00 PM	1	302	27	1	1	0	0	0	0	0	0	0	0	21	353
6:15 PM	0	242	27	0	5	0	0	1	0	0	0	0	0	17	292
6:30 PM	0	210	35	1	1	0	0	0	0	0	0	0	0	14	261
6:45 PM	0	197	31	0	2	0	0	1	0	0	0	0	0	10	241
7:00 PM	0	166	25	0	5	0	0	1	0	0	0	0	0	4	201
7:15 PM	0	181	27	0	3	0	0	1	0	0	0	0	0	8	220
7:30 PM	0	204	25	1	4	0	0	0	0	1	0	0	0	10	245
7:45 PM	0	130	27	0	5	0	0	0	0	0	0	0	0	1	163
8:00 PM	0	137	21	0	2	0	0	0	0	0	0	0	0	7	167
8:15 PM	1	126	20	0	2	0	0	1	0	0	0	0	0	8	158
8:30 PM	0	142	20	0	1	0	0	0	0	0	0	0	0	5	168
8:45 PM	0	131	11	1	1	0	0	0	0	0	0	0	0	5	149
9:00 PM	0	88	12	1	4	0	0	0	0	0	0	0	0	5	110
9:15 PM	0	96	10	0	2	0	0	0	0	0	0	0	0	3	111
9:30 PM	0	72	16	0	1	0	0	0	0	0	0	0	0	2	91
9:45 PM	0	68	6	0	0	0	0	0	0	0	0	0	0	1	75
10:00 PM	0	51	7	0	0	0	0	0	0	0	0	0	0	2	60
10:15 PM	0	39	4	0	1	0	0	0	0	0	0	0	0	0	44
10:30 PM	0	42	4	0	0	0	0	0	0	0	0	0	0	0	46
10:45 PM	0	21	3	0	0	0	0	1	0	0	0	0	0	2	27
11:00 PM	0	19	6	0	0	0	0	0	0	0	0	0	0	0	25
11:15 PM	0	29	3	0	0	0	0	0	0	0	0	0	0	1	33
11:30 PM	0	24	3	0	0	0	0	0	0	0	0	0	0	1	28
11:45 PM	1	9	3	0	0	0	0	0	0	0	0	0	0	1	14
Day Total	9	11883	1918	64	282	3	0	64	1	2	0	0	0	763	14989
Percent	0.1%	79.3%	12.8%	0.4%	1.9%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	5.1%	
ADT 14989															
AM Peak	7:45 AM	7:45 AM	7:45 AM	8:00 AM	8:15 AM	8:45 AM		6:45 AM	9:00 AM	8:45 AM				7:45 AM	7:45 AM
Volume	2	274	45	5	10	2		3	1	1				33	363
PM Peak	2:30 PM	6:00 PM	5:45 PM	3:00 PM	2:15 PM			12:30 PM		7:30 PM				3:00 PM	5:30 PM
Volume	2	302	52	4	10			4		1				30	355
Comments:															

LOCATION: Mill St btwn Cherry Bottom Rd and Granville St SPECIFIC LOCATION: Mill St btwn Cherry Bottom Rd and Granville St CITY/STATE: Columbus, OH												QC JOB #: 14261903 DIRECTION: NB/SB DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
Grand Total	9	11883	1918	64	282	3	0	64	1	2	0	0	0	763	14989
Percent	0.1%	79.3%	12.8%	0.4%	1.9%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	5.1%	
ADT 14989															
Comments:															

Report generated on 4/6/2017 8:12 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

LOCATION: Mill St btwn Cherry Bottom Rd and Granville St						QC JOB #: 14261903				
SPECIFIC LOCATION: Mill St btwn Cherry Bottom Rd and Granville St						DIRECTION: NB/SB				
CITY/STATE: Columbus, OH						DATE: Mar 29 2017 - Mar 29 2017				
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 AM			74			74			74	
6:15 AM			112			112			112	
6:30 AM			139			139			139	
6:45 AM			165			165			165	
7:00 AM			247			247			247	
7:15 AM			269			269			269	
7:30 AM			333			333			333	
7:45 AM			363			363			363	
8:00 AM			274			274			274	
8:15 AM			258			258			258	
8:30 AM			250			250			250	
8:45 AM			262			262			262	
9:00 AM			246			246			246	
9:15 AM			192			192			192	
9:30 AM			191			191			191	
9:45 AM			178			178			178	
10:00 AM			155			155			155	
10:15 AM			167			167			167	
10:30 AM			163			163			163	
10:45 AM			184			184			184	
11:00 AM			178			178			178	
11:15 AM			222			222			222	
11:30 AM			224			224			224	
11:45 AM			200			200			200	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Mill St btwn Cherry Bottom Rd and Granville St							QC JOB #: 14261903			
SPECIFIC LOCATION: Mill St btwn Cherry Bottom Rd and Granville St							DIRECTION: NB/SB			
CITY/STATE: Columbus, OH							DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 PM			236			236			236	
12:15 PM			214			214			214	
12:30 PM			206			206			206	
12:45 PM			190			190			190	
1:00 PM			199			199			199	
1:15 PM			202			202			202	
1:30 PM			206			206			206	
1:45 PM			202			202			202	
2:00 PM			204			204			204	
2:15 PM			250			250			250	
2:30 PM			273			273			273	
2:45 PM			253			253			253	
3:00 PM			262			262			262	
3:15 PM			286			286			286	
3:30 PM			291			291			291	
3:45 PM			281			281			281	
4:00 PM			282			282			282	
4:15 PM			298			298			298	
4:30 PM			328			328			328	
4:45 PM			311			311			311	
5:00 PM			348			348			348	
5:15 PM			337			337			337	
5:30 PM			355			355			355	
5:45 PM			351			351			351	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Mill St btwn Cherry Bottom Rd and Granville St							QC JOB #: 14261903			
SPECIFIC LOCATION: Mill St btwn Cherry Bottom Rd and Granville St							DIRECTION: NB/SB			
CITY/STATE: Columbus, OH							DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 PM			353			353			353	
6:15 PM			292			292			292	
6:30 PM			261			261			261	
6:45 PM			241			241			241	
7:00 PM			201			201			201	
7:15 PM			220			220			220	
7:30 PM			245			245			245	
7:45 PM			163			163			163	
8:00 PM			167			167			167	
8:15 PM			158			158			158	
8:30 PM			168			168			168	
8:45 PM			149			149			149	
9:00 PM			110			110			110	
9:15 PM			111			111			111	
9:30 PM			91			91			91	
9:45 PM			75			75			75	
10:00 PM			60			60			60	
10:15 PM			44			44			44	
10:30 PM			46			46			46	
10:45 PM			27			27			27	
11:00 PM			25			25			25	
11:15 PM			33			33			33	
11:30 PM			28			28			28	
11:45 PM			14			14			14	
Day Total			14989			14989			14989	
% Weekday Average			100.0%							
% Week Average			100.0%			100.0%				
AM Peak Volume			7:45 AM 363			7:45 AM 363			7:45 AM 363	
PM Peak Volume			5:30 PM 355			5:30 PM 355			5:30 PM 355	
Comments:										

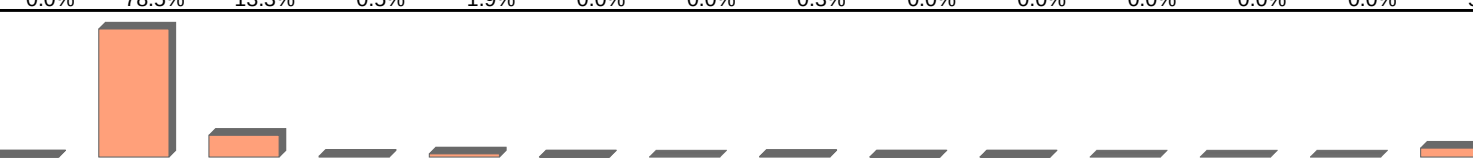
QC JOB #: 14261903
DIRECTION: SB
DATE: Mar 29 2017

Report generated on 4/6/2017 8:12 AM SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

LOCATION: Mill St btwn Cherry Bottom Rd and Granville St SPECIFIC LOCATION: Mill St btwn Cherry Bottom Rd and Granville St CITY/STATE: Columbus, OH														QC JOB #: 14261903 DIRECTION: SB DATE: Mar 29 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
6:00 AM	0	54	2	0	0	0	0	0	0	0	0	0	0	3	59
6:15 AM	0	78	10	0	1	0	0	1	0	0	0	0	0	2	92
6:30 AM	0	89	15	0	1	0	0	0	0	0	0	0	0	1	106
6:45 AM	0	109	21	1	1	0	0	0	0	0	0	0	0	1	133
7:00 AM	1	174	21	0	0	0	0	0	0	0	0	0	0	7	203
7:15 AM	0	165	15	1	1	0	0	0	0	0	0	0	0	13	195
7:30 AM	0	183	22	2	4	0	0	0	0	0	0	0	0	14	225
7:45 AM	1	169	27	2	1	1	0	0	0	0	0	0	0	17	218
8:00 AM	0	150	9	1	4	0	0	0	0	0	0	0	0	6	170
8:15 AM	0	120	21	3	6	0	0	1	0	0	0	0	0	10	161
8:30 AM	0	163	11	1	2	0	0	1	0	0	0	0	0	2	180
8:45 AM	0	123	13	0	1	0	0	0	0	0	0	0	0	0	137
9:00 AM	0	147	17	0	5	0	0	0	1	0	0	0	0	1	171
9:15 AM	0	74	21	1	4	0	0	0	0	0	0	0	0	4	104
9:30 AM	0	90	15	2	1	0	0	0	0	0	0	0	0	4	112
9:45 AM	0	65	11	2	4	0	0	0	0	0	0	0	0	2	84
10:00 AM	0	76	16	0	3	0	0	2	0	0	0	0	0	2	99
10:15 AM	0	72	16	0	0	0	0	1	0	0	0	0	0	4	93
10:30 AM	0	67	10	0	1	0	0	0	0	0	0	0	0	4	82
10:45 AM	0	73	11	0	4	0	0	2	0	0	0	0	0	3	93
11:00 AM	0	68	17	1	4	0	0	0	0	0	0	0	0	3	93
11:15 AM	0	77	20	0	2	0	0	0	0	0	0	0	0	5	104
11:30 AM	0	101	23	0	0	0	0	0	0	0	0	0	0	5	129
11:45 AM	0	73	10	1	0	0	0	1	0	0	0	0	0	4	89
Day Total															
Percent															
AM Peak Volume															
PM Peak Volume															
Comments:															

LOCATION: Mill St btwn Cherry Bottom Rd and Granville St SPECIFIC LOCATION: Mill St btwn Cherry Bottom Rd and Granville St CITY/STATE: Columbus, OH													QC JOB #: 14261903 DIRECTION: SB DATE: Mar 29 2017		
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 PM	0	95	9	1	1	0	0	1	0	0	0	0	0	7	114
12:15 PM	0	79	15	1	2	0	0	1	0	0	0	0	0	3	101
12:30 PM	0	82	15	0	3	0	0	3	0	0	0	0	0	6	109
12:45 PM	0	72	18	0	6	0	0	0	0	0	0	0	0	4	100
1:00 PM	0	74	13	0	3	0	0	0	0	0	0	0	0	3	93
1:15 PM	0	70	15	0	4	0	0	0	0	0	0	0	0	16	105
1:30 PM	0	74	17	0	2	0	0	0	0	0	0	0	0	7	100
1:45 PM	0	70	11	1	1	0	0	0	0	0	0	0	0	1	84
2:00 PM	0	79	22	0	3	0	0	1	0	0	0	0	0	6	111
2:15 PM	0	86	17	1	5	0	0	1	0	0	0	0	0	11	121
2:30 PM	1	89	20	0	5	0	0	0	0	0	0	0	0	4	119
2:45 PM	0	84	16	1	0	0	0	1	0	0	0	0	0	7	109
3:00 PM	0	68	21	1	0	0	0	0	0	0	0	0	0	15	105
3:15 PM	0	106	28	2	4	0	0	0	0	0	0	0	0	14	154
3:30 PM	0	104	10	0	6	0	0	3	0	0	0	0	0	14	137
3:45 PM	0	82	16	1	3	0	0	0	0	0	0	0	0	12	114
4:00 PM	0	68	18	0	3	0	0	1	0	0	0	0	0	6	96
4:15 PM	0	79	16	2	2	0	0	0	0	0	0	0	0	7	106
4:30 PM	0	91	19	0	3	0	0	1	0	0	0	0	0	8	122
4:45 PM	0	87	21	0	1	0	0	0	0	0	0	0	0	11	120
5:00 PM	0	104	22	1	2	0	0	0	0	0	0	0	0	13	142
5:15 PM	0	96	11	0	4	0	0	0	0	0	0	0	0	15	126
5:30 PM	0	100	19	0	2	0	0	1	0	0	0	0	0	12	134
5:45 PM	0	98	27	0	3	0	0	0	0	0	0	0	0	16	144
Day Total															
Percent															
AM Peak Volume															
PM Peak Volume															
Comments:															

LOCATION: Mill St btwn Cherry Bottom Rd and Granville St SPECIFIC LOCATION: Mill St btwn Cherry Bottom Rd and Granville St CITY/STATE: Columbus, OH														QC JOB #: 14261903 DIRECTION: SB DATE: Mar 29 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
6:00 PM	0	110	14	0	0	0	0	0	0	0	0	0	0	9	133
6:15 PM	0	93	12	0	4	0	0	0	0	0	0	0	0	11	120
6:30 PM	0	88	18	1	1	0	0	0	0	0	0	0	0	10	118
6:45 PM	0	76	16	0	1	0	0	0	0	0	0	0	0	4	97
7:00 PM	0	63	9	0	3	0	0	1	0	0	0	0	0	2	78
7:15 PM	0	78	15	0	1	0	0	0	0	0	0	0	0	3	97
7:30 PM	0	79	11	1	3	0	0	0	0	1	0	0	0	3	98
7:45 PM	0	61	11	0	3	0	0	0	0	0	0	0	0	1	76
8:00 PM	0	50	9	0	0	0	0	0	0	0	0	0	0	4	63
8:15 PM	0	53	9	0	0	0	0	0	0	0	0	0	0	4	66
8:30 PM	0	53	3	0	0	0	0	0	0	0	0	0	0	4	60
8:45 PM	0	50	4	0	0	0	0	0	0	0	0	0	0	3	57
9:00 PM	0	41	7	1	1	0	0	0	0	0	0	0	0	1	51
9:15 PM	0	43	5	0	1	0	0	0	0	0	0	0	0	3	52
9:30 PM	0	29	7	0	0	0	0	0	0	0	0	0	0	2	38
9:45 PM	0	20	3	0	0	0	0	0	0	0	0	0	0	1	24
10:00 PM	0	23	2	0	0	0	0	0	0	0	0	0	0	1	26
10:15 PM	0	16	1	0	0	0	0	0	0	0	0	0	0	0	17
10:30 PM	0	16	1	0	0	0	0	0	0	0	0	0	0	0	17
10:45 PM	0	7	2	0	0	0	0	1	0	0	0	0	0	1	11
11:00 PM	0	8	2	0	0	0	0	0	0	0	0	0	0	0	10
11:15 PM	0	10	2	0	0	0	0	0	0	0	0	0	0	0	12
11:30 PM	0	10	0	0	0	0	0	0	0	0	0	0	0	0	10
11:45 PM	0	4	2	0	0	0	0	0	0	0	0	0	0	1	7
Day Total	3	5813	985	34	141	1	0	25	1	1	0	0	0	403	7407
Percent	0.0%	78.5%	13.3%	0.5%	1.9%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	5.4%	
ADT 7407															
AM Peak	7:00 AM	7:30 AM	7:45 AM	8:15 AM	8:15 AM	7:45 AM		10:00 AM	9:00 AM					7:45 AM	7:30 AM
Volume	1	183	27	3	6	1		2	1					17	225
PM Peak	2:30 PM	6:00 PM	3:15 PM	3:15 PM	12:45 PM			12:30 PM	7:30 PM					1:15 PM	3:15 PM
Volume	1	110	28	2	6			3	1					16	154
Comments:															

LOCATION: Mill St btwn Cherry Bottom Rd and Granville St SPECIFIC LOCATION: Mill St btwn Cherry Bottom Rd and Granville St CITY/STATE: Columbus, OH												QC JOB #: 14261903 DIRECTION: SB DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
Grand Total	3	5813	985	34	141	1	0	25	1	1	0	0	0	403	7407
Percent	0.0%	78.5%	13.3%	0.5%	1.9%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	5.4%	
ADT 7407															
Comments:															

Report generated on 4/6/2017 8:12 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

LOCATION: Mill St btwn Cherry Bottom Rd and Granville St							QC JOB #: 14261903			
SPECIFIC LOCATION: Mill St btwn Cherry Bottom Rd and Granville St							DIRECTION: SB			
CITY/STATE: Columbus, OH							DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM			6			6			6	
12:15 AM			5			5			5	
12:30 AM			5			5			5	
12:45 AM			3			3			3	
1:00 AM			2			2			2	
1:15 AM			1			1			1	
1:30 AM			3			3			3	
1:45 AM			3			3			3	
2:00 AM			2			2			2	
2:15 AM			1			1			1	
2:30 AM			2			2			2	
2:45 AM			0			0			0	
3:00 AM			0			0			0	
3:15 AM			0			0			0	
3:30 AM			3			3			3	
3:45 AM			6			6			6	
4:00 AM			3			3			3	
4:15 AM			3			3			3	
4:30 AM			11			11			11	
4:45 AM			11			11			11	
5:00 AM			16			16			16	
5:15 AM			20			20			20	
5:30 AM			29			29			29	
5:45 AM			36			36			36	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Mill St btwn Cherry Bottom Rd and Granville St							QC JOB #: 14261903			
SPECIFIC LOCATION: Mill St btwn Cherry Bottom Rd and Granville St							DIRECTION: SB			
CITY/STATE: Columbus, OH							DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 AM			59			59			59	
6:15 AM			92			92			92	
6:30 AM			106			106			106	
6:45 AM			133			133			133	
7:00 AM			203			203			203	
7:15 AM			195			195			195	
7:30 AM			225			225			225	
7:45 AM			218			218			218	
8:00 AM			170			170			170	
8:15 AM			161			161			161	
8:30 AM			180			180			180	
8:45 AM			137			137			137	
9:00 AM			171			171			171	
9:15 AM			104			104			104	
9:30 AM			112			112			112	
9:45 AM			84			84			84	
10:00 AM			99			99			99	
10:15 AM			93			93			93	
10:30 AM			82			82			82	
10:45 AM			93			93			93	
11:00 AM			93			93			93	
11:15 AM			104			104			104	
11:30 AM			129			129			129	
11:45 AM			89			89			89	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Mill St btwn Cherry Bottom Rd and Granville St							QC JOB #: 14261903			
SPECIFIC LOCATION: Mill St btwn Cherry Bottom Rd and Granville St							DIRECTION: SB			
CITY/STATE: Columbus, OH							DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 PM			114			114			114	
12:15 PM			101			101			101	
12:30 PM			109			109			109	
12:45 PM			100			100			100	
1:00 PM			93			93			93	
1:15 PM			105			105			105	
1:30 PM			100			100			100	
1:45 PM			84			84			84	
2:00 PM			111			111			111	
2:15 PM			121			121			121	
2:30 PM			119			119			119	
2:45 PM			109			109			109	
3:00 PM			105			105			105	
3:15 PM			154			154			154	
3:30 PM			137			137			137	
3:45 PM			114			114			114	
4:00 PM			96			96			96	
4:15 PM			106			106			106	
4:30 PM			122			122			122	
4:45 PM			120			120			120	
5:00 PM			142			142			142	
5:15 PM			126			126			126	
5:30 PM			134			134			134	
5:45 PM			144			144			144	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

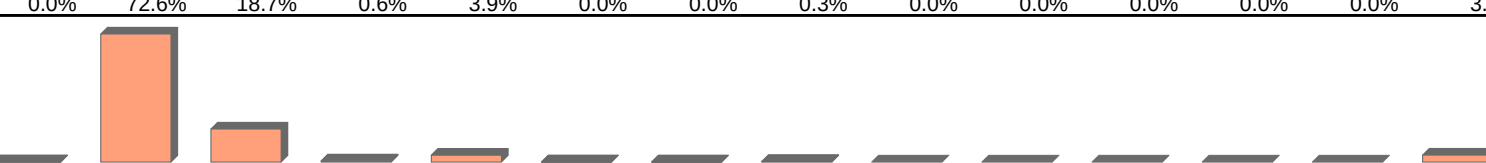
LOCATION: Mill St btwn Cherry Bottom Rd and Granville St							QC JOB #: 14261903			
SPECIFIC LOCATION: Mill St btwn Cherry Bottom Rd and Granville St							DIRECTION: SB			
CITY/STATE: Columbus, OH							DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 PM			133			133			133	
6:15 PM			120			120			120	
6:30 PM			118			118			118	
6:45 PM			97			97			97	
7:00 PM			78			78			78	
7:15 PM			97			97			97	
7:30 PM			98			98			98	
7:45 PM			76			76			76	
8:00 PM			63			63			63	
8:15 PM			66			66			66	
8:30 PM			60			60			60	
8:45 PM			57			57			57	
9:00 PM			51			51			51	
9:15 PM			52			52			52	
9:30 PM			38			38			38	
9:45 PM			24			24			24	
10:00 PM			26			26			26	
10:15 PM			17			17			17	
10:30 PM			17			17			17	
10:45 PM			11			11			11	
11:00 PM			10			10			10	
11:15 PM			12			12			12	
11:30 PM			10			10			10	
11:45 PM			7			7			7	
Day Total			7407			7407			7407	
% Weekday Average			100.0%							
% Week Average			100.0%			100.0%				
AM Peak Volume			7:30 AM 225			7:30 AM 225			7:30 AM 225	
PM Peak Volume			3:15 PM 154			3:15 PM 154			3:15 PM 154	
Comments:										

LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd														QC JOB #: 14261904	
SPECIFIC LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd														DIRECTION: EB	
CITY/STATE: Gahanna, OH														DATE: Apr 04 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 AM	0	11	2	0	0	0	0	0	0	0	0	0	0	0	13
12:15 AM	0	10	2	0	0	0	0	0	0	0	0	0	0	0	12
12:30 AM	0	10	1	0	0	0	0	0	0	0	0	0	0	0	11
12:45 AM	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4
1:00 AM	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4
1:15 AM	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
1:30 AM	0	2	3	0	0	0	0	0	0	0	0	0	0	0	5
1:45 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
2:00 AM	0	4	2	0	0	0	0	0	0	0	0	0	0	1	7
2:15 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
2:30 AM	0	4	3	0	0	0	0	0	0	0	0	0	0	0	7
2:45 AM	0	7	0	0	0	0	0	0	0	0	0	0	0	0	7
3:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
3:15 AM	0	3	2	0	0	0	0	0	0	0	0	0	0	0	5
3:30 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
3:45 AM	0	1	1	1	1	0	0	0	0	0	0	0	0	0	4
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 AM	0	3	2	0	0	0	0	0	0	0	0	0	0	0	5
4:30 AM	0	5	0	0	1	0	0	0	0	0	0	0	0	0	6
4:45 AM	0	7	2	0	1	0	0	0	0	0	0	0	0	0	10
5:00 AM	0	3	2	0	1	0	0	0	0	0	0	0	0	0	6
5:15 AM	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4
5:30 AM	0	9	2	1	1	0	0	0	0	0	0	0	0	0	13
5:45 AM	0	13	3	0	1	0	0	0	0	0	0	0	0	0	17
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd														QC JOB #: 14261904	
SPECIFIC LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd														DIRECTION: EB	
CITY/STATE: Gahanna, OH														DATE: Apr 04 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
6:00 AM	0	7	2	0	2	0	0	0	0	0	0	0	0	1	12
6:15 AM	0	17	6	0	0	0	0	1	0	0	0	0	0	0	24
6:30 AM	0	24	2	0	7	0	0	0	0	0	0	0	0	0	33
6:45 AM	0	31	4	1	5	0	0	0	0	0	0	0	0	3	44
7:00 AM	0	56	12	2	1	0	0	1	0	0	0	0	0	3	75
7:15 AM	0	53	18	4	2	0	0	0	0	0	0	0	0	9	86
7:30 AM	0	53	22	2	6	0	0	0	0	0	0	0	0	8	91
7:45 AM	1	86	31	3	2	0	1	0	0	0	0	0	0	21	145
8:00 AM	0	50	15	1	7	0	0	0	0	0	0	0	0	3	76
8:15 AM	0	34	13	0	3	0	0	0	0	0	0	0	0	3	53
8:30 AM	0	44	12	2	2	0	0	0	0	0	0	0	0	4	64
8:45 AM	0	40	10	0	4	0	0	0	0	0	0	0	0	7	61
9:00 AM	0	47	10	0	7	0	0	0	0	0	0	0	0	3	67
9:15 AM	0	46	12	1	6	0	0	0	0	0	0	0	0	3	68
9:30 AM	0	41	10	0	4	0	0	0	0	0	0	0	0	1	56
9:45 AM	0	43	17	0	3	0	0	0	0	0	0	0	0	3	66
10:00 AM	0	34	16	0	3	0	0	1	0	0	0	0	0	2	56
10:15 AM	0	43	10	0	2	0	0	0	0	0	0	0	0	1	56
10:30 AM	0	43	18	0	4	0	0	1	0	0	0	0	0	3	69
10:45 AM	0	45	12	0	4	0	0	0	0	0	0	0	0	1	62
11:00 AM	0	45	14	0	2	0	0	0	0	0	0	0	0	1	62
11:15 AM	0	49	20	0	5	0	0	0	0	0	0	0	0	0	74
11:30 AM	0	40	10	0	3	0	0	1	0	0	0	0	0	2	56
11:45 AM	0	52	19	0	5	0	0	0	0	0	0	0	0	3	79
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd														QC JOB #: 14261904	
SPECIFIC LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd														DIRECTION: EB	
CITY/STATE: Gahanna, OH														DATE: Apr 04 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 PM	0	67	15	1	9	0	0	0	0	0	0	0	0	2	94
12:15 PM	0	66	13	2	7	0	0	1	0	0	0	0	0	4	93
12:30 PM	0	54	18	1	7	0	0	0	0	0	0	0	0	4	84
12:45 PM	0	57	18	0	5	0	0	0	0	0	0	0	0	3	83
1:00 PM	0	64	20	0	4	0	0	0	0	0	0	0	0	2	90
1:15 PM	0	60	21	0	2	0	0	0	0	0	0	0	0	2	85
1:30 PM	0	60	18	0	3	0	0	0	0	0	0	0	0	5	86
1:45 PM	0	69	20	1	9	0	0	0	0	0	0	0	0	2	101
2:00 PM	0	79	21	0	6	0	0	1	0	0	0	0	0	8	115
2:15 PM	0	89	20	7	3	0	0	1	0	0	0	0	0	6	126
2:30 PM	0	80	32	4	8	0	0	0	0	0	0	0	0	5	129
2:45 PM	0	102	34	1	6	0	0	0	0	0	0	0	0	2	145
3:00 PM	0	152	36	1	3	0	0	1	0	0	0	0	0	2	195
3:15 PM	0	143	33	2	7	0	0	0	0	0	0	0	0	4	189
3:30 PM	0	138	37	4	7	0	0	1	0	0	0	0	0	4	191
3:45 PM	0	147	40	4	5	0	0	0	0	0	0	0	0	7	203
4:00 PM	0	185	49	1	7	0	0	2	0	0	0	0	0	4	248
4:15 PM	0	156	55	0	13	0	0	1	0	0	0	0	0	9	234
4:30 PM	0	193	40	1	7	1	0	0	0	0	0	0	0	11	253
4:45 PM	0	194	38	0	8	0	0	0	0	0	0	0	0	14	254
5:00 PM	0	193	49	0	9	0	0	0	0	0	0	0	0	7	258
5:15 PM	1	212	44	1	3	1	0	1	0	0	0	0	0	16	279
5:30 PM	1	172	33	0	1	0	0	2	0	0	0	0	0	22	231
5:45 PM	0	171	39	0	9	0	0	0	0	0	0	0	0	15	234
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd														QC JOB #: 14261904	
SPECIFIC LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd														DIRECTION: EB	
CITY/STATE: Gahanna, OH														DATE: Apr 04 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
6:00 PM	0	196	30	0	9	0	0	0	0	0	0	0	0	7	242
6:15 PM	0	178	35	0	4	0	0	0	0	0	0	0	0	5	222
6:30 PM	0	122	35	0	3	0	0	1	0	0	0	0	0	8	169
6:45 PM	0	137	27	0	3	0	0	0	0	0	0	0	0	6	173
7:00 PM	0	103	38	0	4	0	0	0	0	0	0	0	0	4	149
7:15 PM	0	107	25	0	5	0	0	0	0	0	0	0	0	6	143
7:30 PM	0	121	31	0	5	0	0	0	0	0	0	0	0	6	163
7:45 PM	1	104	26	0	2	0	0	0	0	0	0	0	0	3	136
8:00 PM	0	125	41	0	4	0	0	0	0	0	0	0	0	3	173
8:15 PM	0	110	33	0	9	0	0	0	0	0	0	0	0	2	154
8:30 PM	0	80	22	0	3	0	0	0	0	0	0	0	0	2	107
8:45 PM	0	65	12	0	0	0	0	0	0	0	0	0	0	6	83
9:00 PM	0	94	17	0	3	0	0	1	0	0	0	0	0	2	117
9:15 PM	0	58	12	0	3	0	0	1	0	0	0	0	0	3	77
9:30 PM	0	65	8	0	2	0	0	0	0	0	0	0	0	0	75
9:45 PM	0	54	9	1	1	0	0	0	0	0	0	0	0	0	65
10:00 PM	0	32	9	0	4	0	0	0	0	0	0	0	0	7	52
10:15 PM	0	25	9	0	2	0	0	0	0	0	0	0	0	3	39
10:30 PM	0	32	5	0	1	0	0	0	0	0	0	0	0	0	38
10:45 PM	0	25	3	0	1	0	0	0	0	0	0	0	0	1	30
11:00 PM	0	28	3	0	0	0	0	1	0	0	0	0	0	1	33
11:15 PM	0	12	4	0	3	0	0	1	0	0	0	0	0	0	20
11:30 PM	0	27	4	0	1	0	0	0	0	0	0	0	0	0	32
11:45 PM	0	18	4	0	1	0	0	0	0	0	0	0	0	0	23
Day Total	4	5953	1533	50	316	2	1	21	0	0	0	0	0	321	8201
Percent	0.0%	72.6%	18.7%	0.6%	3.9%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	3.9%	
ADT 8201															
AM Peak	7:45 AM	7:45 AM	7:45 AM	7:15 AM	6:30 AM		7:45 AM	6:15 AM						7:45 AM	7:45 AM
Volume	1	86	31	4	7		1	1						21	145
PM Peak	5:15 PM	5:15 PM	4:15 PM	2:15 PM	4:15 PM	4:30 PM		4:00 PM						5:30 PM	5:15 PM
Volume	1	212	55	7	13	1		2						22	279
Comments:															

LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd SPECIFIC LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd CITY/STATE: Gahanna, OH														QC JOB #: 14261904 DIRECTION: EB DATE: Apr 04 2017 - Apr 04 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
Grand Total	4	5953	1533	50	316	2	1	21	0	0	0	0	0	321	8201
Percent	0.0%	72.6%	18.7%	0.6%	3.9%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	3.9%	
ADT 8201															
Comments:															

Report generated on 4/6/2017 8:12 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd									QC JOB #: 14261904	
SPECIFIC LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd									DIRECTION: EB	
CITY/STATE: Gahanna, OH									DATE: Apr 04 2017 - Apr 04 2017	
Start Time	Mon 04-Apr-17	Tue	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM		13				13			13	
12:15 AM		12				12			12	
12:30 AM		11				11			11	
12:45 AM		4				4			4	
1:00 AM		4				4			4	
1:15 AM		4				4			4	
1:30 AM		5				5			5	
1:45 AM		2				2			2	
2:00 AM		7				7			7	
2:15 AM		2				2			2	
2:30 AM		7				7			7	
2:45 AM		7				7			7	
3:00 AM		1				1			1	
3:15 AM		5				5			5	
3:30 AM		2				2			2	
3:45 AM		4				4			4	
4:00 AM		0				0			0	
4:15 AM		5				5			5	
4:30 AM		6				6			6	
4:45 AM		10				10			10	
5:00 AM		6				6			6	
5:15 AM		4				4			4	
5:30 AM		13				13			13	
5:45 AM		17				17			17	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd						QC JOB #: 14261904				
SPECIFIC LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd						DIRECTION: EB				
CITY/STATE: Gahanna, OH						DATE: Apr 04 2017 - Apr 04 2017				
Start Time	Mon 04-Apr-17	Tue	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 AM		12				12			12	
6:15 AM		24				24			24	
6:30 AM		33				33			33	
6:45 AM		44				44			44	
7:00 AM		75				75			75	
7:15 AM		86				86			86	
7:30 AM		91				91			91	
7:45 AM		145				145			145	
8:00 AM		76				76			76	
8:15 AM		53				53			53	
8:30 AM		64				64			64	
8:45 AM		61				61			61	
9:00 AM		67				67			67	
9:15 AM		68				68			68	
9:30 AM		56				56			56	
9:45 AM		66				66			66	
10:00 AM		56				56			56	
10:15 AM		56				56			56	
10:30 AM		69				69			69	
10:45 AM		62				62			62	
11:00 AM		62				62			62	
11:15 AM		74				74			74	
11:30 AM		56				56			56	
11:45 AM		79				79			79	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd							QC JOB #: 14261904			
SPECIFIC LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd							DIRECTION: EB			
CITY/STATE: Gahanna, OH							DATE: Apr 04 2017 - Apr 04 2017			
Start Time	Mon	Tue 04-Apr-17	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 PM		94				94			94	
12:15 PM		93				93			93	
12:30 PM		84				84			84	
12:45 PM		83				83			83	
1:00 PM		90				90			90	
1:15 PM		85				85			85	
1:30 PM		86				86			86	
1:45 PM		101				101			101	
2:00 PM		115				115			115	
2:15 PM		126				126			126	
2:30 PM		129				129			129	
2:45 PM		145				145			145	
3:00 PM		195				195			195	
3:15 PM		189				189			189	
3:30 PM		191				191			191	
3:45 PM		203				203			203	
4:00 PM		248				248			248	
4:15 PM		234				234			234	
4:30 PM		253				253			253	
4:45 PM		254				254			254	
5:00 PM		258				258			258	
5:15 PM		279				279			279	
5:30 PM		231				231			231	
5:45 PM		234				234			234	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd						QC JOB #: 14261904				
SPECIFIC LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd						DIRECTION: EB				
CITY/STATE: Gahanna, OH						DATE: Apr 04 2017 - Apr 04 2017				
Start Time	Mon 04-Apr-17	Tue	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 PM		242				242			242	
6:15 PM		222				222			222	
6:30 PM		169				169			169	
6:45 PM		173				173			173	
7:00 PM		149				149			149	
7:15 PM		143				143			143	
7:30 PM		163				163			163	
7:45 PM		136				136			136	
8:00 PM		173				173			173	
8:15 PM		154				154			154	
8:30 PM		107				107			107	
8:45 PM		83				83			83	
9:00 PM		117				117			117	
9:15 PM		77				77			77	
9:30 PM		75				75			75	
9:45 PM		65				65			65	
10:00 PM		52				52			52	
10:15 PM		39				39			39	
10:30 PM		38				38			38	
10:45 PM		30				30			30	
11:00 PM		33				33			33	
11:15 PM		20				20			20	
11:30 PM		32				32			32	
11:45 PM		23				23			23	
Day Total		8201				8201			8201	
% Weekday Average		100.0%								
% Week Average		100.0%				100.0%				
AM Peak Volume		7:45 AM 145				7:45 AM 145			7:45 AM 145	
PM Peak Volume		5:15 PM 279				5:15 PM 279			5:15 PM 279	
Comments:										

QC JOB #: 14261904
DIRECTION: EB/WB
DATE: Apr 04 2017

Report generated on 4/6/2017 8:12 AM SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd														QC JOB #: 14261904	
SPECIFIC LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd														DIRECTION: EB/WB	
CITY/STATE: Gahanna, OH														DATE: Apr 04 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
6:00 AM	0	101	23	0	4	0	0	0	0	0	0	0	0	2	130
6:15 AM	0	149	27	0	1	0	0	2	0	0	0	0	0	2	181
6:30 AM	0	196	38	1	11	0	0	0	0	0	0	0	0	1	247
6:45 AM	0	233	20	1	8	0	0	0	0	0	0	0	0	4	266
7:00 AM	0	245	37	2	3	0	0	1	0	0	0	0	0	9	297
7:15 AM	0	279	45	5	6	0	0	1	0	0	0	0	0	16	352
7:30 AM	0	224	46	5	15	0	0	0	0	0	0	0	0	13	303
7:45 AM	1	257	50	4	5	0	1	1	0	0	0	0	0	37	356
8:00 AM	0	207	27	1	11	0	0	0	0	0	0	0	0	9	255
8:15 AM	0	222	33	2	7	0	0	0	0	0	0	0	0	8	272
8:30 AM	0	203	26	2	7	0	0	0	0	0	0	0	0	8	246
8:45 AM	0	199	24	0	8	0	0	0	0	0	0	0	0	15	246
9:00 AM	0	132	21	0	11	0	0	0	0	0	0	0	0	7	171
9:15 AM	0	164	29	1	11	1	0	0	0	0	0	0	0	6	212
9:30 AM	0	179	23	1	6	0	0	0	0	0	0	0	0	6	215
9:45 AM	1	130	31	0	5	0	0	1	0	0	0	0	0	8	176
10:00 AM	0	104	27	1	6	0	0	1	0	0	0	0	0	4	143
10:15 AM	0	121	21	0	3	0	0	2	0	0	0	0	0	2	149
10:30 AM	0	121	31	0	7	0	0	1	0	0	0	0	0	5	165
10:45 AM	0	137	22	0	9	0	0	0	0	0	0	0	0	3	171
11:00 AM	0	99	21	2	3	0	0	1	0	0	0	0	0	5	131
11:15 AM	0	123	27	0	6	0	0	1	0	0	0	0	0	3	160
11:30 AM	1	122	21	0	10	0	0	1	0	0	0	0	0	5	160
11:45 AM	0	125	37	0	8	0	0	0	0	0	0	0	0	6	176
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd														QC JOB #: 14261904	
SPECIFIC LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd														DIRECTION: EB/WB	
CITY/STATE: Gahanna, OH														DATE: Apr 04 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 PM	0	116	22	1	11	0	0	0	0	0	0	0	0	5	155
12:15 PM	0	119	20	2	8	0	0	1	0	0	0	0	0	9	159
12:30 PM	0	127	32	2	10	0	0	0	0	0	0	0	0	8	179
12:45 PM	0	111	25	1	7	0	0	1	0	0	0	0	0	6	151
1:00 PM	0	122	30	1	7	1	0	0	0	0	0	0	0	4	165
1:15 PM	0	115	30	0	3	0	0	0	0	0	0	0	0	2	150
1:30 PM	0	135	27	0	6	0	0	0	0	0	0	0	0	10	178
1:45 PM	0	120	26	3	10	0	0	0	0	0	0	0	0	3	162
2:00 PM	0	142	38	1	8	0	0	1	0	0	0	0	0	15	205
2:15 PM	0	161	42	9	3	0	0	2	0	0	0	0	0	12	229
2:30 PM	0	168	49	5	11	0	0	0	0	0	0	0	0	10	243
2:45 PM	0	179	45	2	9	1	0	0	0	0	0	0	0	6	242
3:00 PM	0	228	51	1	7	0	0	2	0	0	0	0	0	10	299
3:15 PM	0	204	51	3	9	0	0	1	0	0	0	0	0	10	278
3:30 PM	0	224	52	6	9	0	0	1	0	0	0	0	0	9	301
3:45 PM	0	243	52	4	6	0	0	0	0	0	0	0	0	19	324
4:00 PM	0	271	63	1	7	0	0	2	0	0	0	0	0	8	352
4:15 PM	0	245	76	0	17	0	0	1	0	0	0	0	0	18	357
4:30 PM	0	286	52	2	10	1	0	0	0	0	0	0	0	22	373
4:45 PM	0	274	49	0	11	0	0	0	0	0	0	0	0	23	357
5:00 PM	0	290	62	0	13	0	0	1	0	0	0	0	0	21	387
5:15 PM	1	305	57	1	6	1	0	2	0	0	0	0	0	31	404
5:30 PM	2	245	39	0	2	0	0	2	0	0	0	0	0	38	328
5:45 PM	0	280	51	0	12	0	0	0	0	0	0	0	0	24	367
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd SPECIFIC LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd CITY/STATE: Gahanna, OH														QC JOB #: 14261904 DIRECTION: EB/WB DATE: Apr 04 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
6:00 PM	0	274	44	0	12	0	0	0	0	0	0	0	0	18	348
6:15 PM	0	281	46	0	8	0	0	0	0	0	0	0	0	14	349
6:30 PM	0	207	42	1	8	0	0	1	0	0	0	0	0	13	272
6:45 PM	0	201	40	0	5	0	0	0	0	0	0	0	0	13	259
7:00 PM	0	172	47	0	4	0	0	0	0	0	0	0	0	8	231
7:15 PM	0	174	30	0	6	0	0	0	0	0	0	0	0	10	220
7:30 PM	0	192	36	0	5	0	0	0	0	0	0	0	0	9	242
7:45 PM	1	161	34	0	2	0	0	0	0	0	0	0	0	10	208
8:00 PM	0	175	47	0	4	0	0	0	0	0	0	0	0	4	230
8:15 PM	0	159	44	0	9	0	0	0	0	0	0	0	0	3	215
8:30 PM	0	116	28	0	4	0	0	0	0	0	0	0	0	2	150
8:45 PM	0	99	13	0	0	0	0	0	0	0	0	0	0	7	119
9:00 PM	0	131	20	0	3	0	0	1	0	0	0	0	0	5	160
9:15 PM	0	77	13	0	3	0	0	1	0	0	0	0	0	5	99
9:30 PM	0	90	9	0	2	0	0	0	0	0	0	0	0	1	102
9:45 PM	0	76	13	1	1	0	0	0	0	0	0	0	0	1	92
10:00 PM	0	51	12	0	4	0	0	0	0	0	0	0	0	8	75
10:15 PM	0	42	12	0	3	0	0	0	0	0	0	0	0	3	60
10:30 PM	0	42	7	0	2	0	0	0	0	0	0	0	0	1	52
10:45 PM	0	35	4	0	1	0	0	0	0	0	0	0	0	1	41
11:00 PM	0	41	6	0	1	0	0	1	0	0	0	0	0	1	50
11:15 PM	0	15	5	0	3	0	0	1	0	0	0	0	0	1	25
11:30 PM	0	33	4	0	1	0	0	0	0	0	0	0	0	0	38
11:45 PM	0	26	4	0	1	0	0	0	0	0	0	0	0	0	31
Day Total	7	11992	2383	78	477	5	1	36	0	0	0	0	0	653	15632
Percent	0.0%	76.7%	15.2%	0.5%	3.1%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	4.2%	
ADT 15632															
AM Peak	7:45 AM	7:15 AM	7:45 AM	7:15 AM	7:30 AM	9:15 AM	7:45 AM	6:15 AM						7:45 AM	7:45 AM
Volume	1	279	50	5	15	1	1	2						37	356
PM Peak	5:30 PM	5:15 PM	4:15 PM	2:15 PM	4:15 PM	1:00 PM		2:15 PM						5:30 PM	5:15 PM
Volume	2	305	76	9	17	1		2						38	404
Comments:															

LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd														QC JOB #: 14261904	
SPECIFIC LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd														DIRECTION: EB/WB	
CITY/STATE: Gahanna, OH														DATE: Apr 04 2017 - Apr 04 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
Grand Total	7	11992	2383	78	477	5	1	36	0	0	0	0	0	653	15632
Percent	0.0%	76.7%	15.2%	0.5%	3.1%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	4.2%	
ADT 15632															
Comments:															

Report generated on 4/6/2017 8:12 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd						QC JOB #: 14261904				
SPECIFIC LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd						DIRECTION: EB/WB				
CITY/STATE: Gahanna, OH						DATE: Apr 04 2017 - Apr 04 2017				
Start Time	Mon 04-Apr-17	Tue	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM		18				18			18	
12:15 AM		19				19			19	
12:30 AM		13				13			13	
12:45 AM		5				5			5	
1:00 AM		8				8			8	
1:15 AM		6				6			6	
1:30 AM		7				7			7	
1:45 AM		3				3			3	
2:00 AM		8				8			8	
2:15 AM		6				6			6	
2:30 AM		9				9			9	
2:45 AM		9				9			9	
3:00 AM		7				7			7	
3:15 AM		10				10			10	
3:30 AM		7				7			7	
3:45 AM		9				9			9	
4:00 AM		6				6			6	
4:15 AM		13				13			13	
4:30 AM		25				25			25	
4:45 AM		28				28			28	
5:00 AM		23				23			23	
5:15 AM		44				44			44	
5:30 AM		71				71			71	
5:45 AM		85				85			85	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd						QC JOB #: 14261904				
SPECIFIC LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd						DIRECTION: EB/WB				
CITY/STATE: Gahanna, OH						DATE: Apr 04 2017 - Apr 04 2017				
Start Time	Mon	Tue 04-Apr-17	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 AM		130				130			130	
6:15 AM		181				181			181	
6:30 AM		247				247			247	
6:45 AM		266				266			266	
7:00 AM		297				297			297	
7:15 AM		352				352			352	
7:30 AM		303				303			303	
7:45 AM		356				356			356	
8:00 AM		255				255			255	
8:15 AM		272				272			272	
8:30 AM		246				246			246	
8:45 AM		246				246			246	
9:00 AM		171				171			171	
9:15 AM		212				212			212	
9:30 AM		215				215			215	
9:45 AM		176				176			176	
10:00 AM		143				143			143	
10:15 AM		149				149			149	
10:30 AM		165				165			165	
10:45 AM		171				171			171	
11:00 AM		131				131			131	
11:15 AM		160				160			160	
11:30 AM		160				160			160	
11:45 AM		176				176			176	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd						QC JOB #: 14261904				
SPECIFIC LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd						DIRECTION: EB/WB				
CITY/STATE: Gahanna, OH						DATE: Apr 04 2017 - Apr 04 2017				
Start Time	Mon	Tue 04-Apr-17	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 PM		155				155			155	
12:15 PM		159				159			159	
12:30 PM		179				179			179	
12:45 PM		151				151			151	
1:00 PM		165				165			165	
1:15 PM		150				150			150	
1:30 PM		178				178			178	
1:45 PM		162				162			162	
2:00 PM		205				205			205	
2:15 PM		229				229			229	
2:30 PM		243				243			243	
2:45 PM		242				242			242	
3:00 PM		299				299			299	
3:15 PM		278				278			278	
3:30 PM		301				301			301	
3:45 PM		324				324			324	
4:00 PM		352				352			352	
4:15 PM		357				357			357	
4:30 PM		373				373			373	
4:45 PM		357				357			357	
5:00 PM		387				387			387	
5:15 PM		404				404			404	
5:30 PM		328				328			328	
5:45 PM		367				367			367	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd						QC JOB #: 14261904				
SPECIFIC LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd						DIRECTION: EB/WB				
CITY/STATE: Gahanna, OH						DATE: Apr 04 2017 - Apr 04 2017				
Start Time	Mon 04-Apr-17	Tue	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 PM		348				348			348	
6:15 PM		349				349			349	
6:30 PM		272				272			272	
6:45 PM		259				259			259	
7:00 PM		231				231			231	
7:15 PM		220				220			220	
7:30 PM		242				242			242	
7:45 PM		208				208			208	
8:00 PM		230				230			230	
8:15 PM		215				215			215	
8:30 PM		150				150			150	
8:45 PM		119				119			119	
9:00 PM		160				160			160	
9:15 PM		99				99			99	
9:30 PM		102				102			102	
9:45 PM		92				92			92	
10:00 PM		75				75			75	
10:15 PM		60				60			60	
10:30 PM		52				52			52	
10:45 PM		41				41			41	
11:00 PM		50				50			50	
11:15 PM		25				25			25	
11:30 PM		38				38			38	
11:45 PM		31				31			31	
Day Total		15632				15632			15632	
% Weekday Average		100.0%								
% Week Average		100.0%				100.0%				
AM Peak Volume		7:45 AM 356				7:45 AM 356			7:45 AM 356	
PM Peak Volume		5:15 PM 404				5:15 PM 404			5:15 PM 404	
Comments:										

QC JOB #: 14261904
DIRECTION: WB
DATE: Apr 04 2017

Report generated on 4/6/2017 8:12 AM SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd														QC JOB #: 14261904	
SPECIFIC LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd														DIRECTION: WB	
CITY/STATE: Gahanna, OH														DATE: Apr 04 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
6:00 AM	0	94	21	0	2	0	0	0	0	0	0	0	0	1	118
6:15 AM	0	132	21	0	1	0	0	1	0	0	0	0	0	2	157
6:30 AM	0	172	36	1	4	0	0	0	0	0	0	0	0	1	214
6:45 AM	0	202	16	0	3	0	0	0	0	0	0	0	0	1	222
7:00 AM	0	189	25	0	2	0	0	0	0	0	0	0	0	6	222
7:15 AM	0	226	27	1	4	0	0	1	0	0	0	0	0	7	266
7:30 AM	0	171	24	3	9	0	0	0	0	0	0	0	0	5	212
7:45 AM	0	171	19	1	3	0	0	1	0	0	0	0	0	16	211
8:00 AM	0	157	12	0	4	0	0	0	0	0	0	0	0	6	179
8:15 AM	0	188	20	2	4	0	0	0	0	0	0	0	0	5	219
8:30 AM	0	159	14	0	5	0	0	0	0	0	0	0	0	4	182
8:45 AM	0	159	14	0	4	0	0	0	0	0	0	0	0	8	185
9:00 AM	0	85	11	0	4	0	0	0	0	0	0	0	0	4	104
9:15 AM	0	118	17	0	5	1	0	0	0	0	0	0	0	3	144
9:30 AM	0	138	13	1	2	0	0	0	0	0	0	0	0	5	159
9:45 AM	1	87	14	0	2	0	0	1	0	0	0	0	0	5	110
10:00 AM	0	70	11	1	3	0	0	0	0	0	0	0	0	2	87
10:15 AM	0	78	11	0	1	0	0	2	0	0	0	0	0	1	93
10:30 AM	0	78	13	0	3	0	0	0	0	0	0	0	0	2	96
10:45 AM	0	92	10	0	5	0	0	0	0	0	0	0	0	2	109
11:00 AM	0	54	7	2	1	0	0	1	0	0	0	0	0	4	69
11:15 AM	0	74	7	0	1	0	0	1	0	0	0	0	0	3	86
11:30 AM	1	82	11	0	7	0	0	0	0	0	0	0	0	3	104
11:45 AM	0	73	18	0	3	0	0	0	0	0	0	0	0	3	97
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd														QC JOB #: 14261904	
SPECIFIC LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd														DIRECTION: WB	
CITY/STATE: Gahanna, OH														DATE: Apr 04 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 PM	0	49	7	0	2	0	0	0	0	0	0	0	0	3	61
12:15 PM	0	53	7	0	1	0	0	0	0	0	0	0	0	5	66
12:30 PM	0	73	14	1	3	0	0	0	0	0	0	0	0	4	95
12:45 PM	0	54	7	1	2	0	0	1	0	0	0	0	0	3	68
1:00 PM	0	58	10	1	3	1	0	0	0	0	0	0	0	2	75
1:15 PM	0	55	9	0	1	0	0	0	0	0	0	0	0	0	65
1:30 PM	0	75	9	0	3	0	0	0	0	0	0	0	0	5	92
1:45 PM	0	51	6	2	1	0	0	0	0	0	0	0	0	1	61
2:00 PM	0	63	17	1	2	0	0	0	0	0	0	0	0	7	90
2:15 PM	0	72	22	2	0	0	0	1	0	0	0	0	0	6	103
2:30 PM	0	88	17	1	3	0	0	0	0	0	0	0	0	5	114
2:45 PM	0	77	11	1	3	1	0	0	0	0	0	0	0	4	97
3:00 PM	0	76	15	0	4	0	0	1	0	0	0	0	0	8	104
3:15 PM	0	61	18	1	2	0	0	1	0	0	0	0	0	6	89
3:30 PM	0	86	15	2	2	0	0	0	0	0	0	0	0	5	110
3:45 PM	0	96	12	0	1	0	0	0	0	0	0	0	0	12	121
4:00 PM	0	86	14	0	0	0	0	0	0	0	0	0	0	4	104
4:15 PM	0	89	21	0	4	0	0	0	0	0	0	0	0	9	123
4:30 PM	0	93	12	1	3	0	0	0	0	0	0	0	0	11	120
4:45 PM	0	80	11	0	3	0	0	0	0	0	0	0	0	9	103
5:00 PM	0	97	13	0	4	0	0	1	0	0	0	0	0	14	129
5:15 PM	0	93	13	0	3	0	0	1	0	0	0	0	0	15	125
5:30 PM	1	73	6	0	1	0	0	0	0	0	0	0	0	16	97
5:45 PM	0	109	12	0	3	0	0	0	0	0	0	0	0	9	133
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd														QC JOB #: 14261904	
SPECIFIC LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd														DIRECTION: WB	
CITY/STATE: Gahanna, OH														DATE: Apr 04 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
6:00 PM	0	78	14	0	3	0	0	0	0	0	0	0	0	11	106
6:15 PM	0	103	11	0	4	0	0	0	0	0	0	0	0	9	127
6:30 PM	0	85	7	1	5	0	0	0	0	0	0	0	0	5	103
6:45 PM	0	64	13	0	2	0	0	0	0	0	0	0	0	7	86
7:00 PM	0	69	9	0	0	0	0	0	0	0	0	0	0	4	82
7:15 PM	0	67	5	0	1	0	0	0	0	0	0	0	0	4	77
7:30 PM	0	71	5	0	0	0	0	0	0	0	0	0	0	3	79
7:45 PM	0	57	8	0	0	0	0	0	0	0	0	0	0	7	72
8:00 PM	0	50	6	0	0	0	0	0	0	0	0	0	0	1	57
8:15 PM	0	49	11	0	0	0	0	0	0	0	0	0	0	1	61
8:30 PM	0	36	6	0	1	0	0	0	0	0	0	0	0	0	43
8:45 PM	0	34	1	0	0	0	0	0	0	0	0	0	0	1	36
9:00 PM	0	37	3	0	0	0	0	0	0	0	0	0	0	3	43
9:15 PM	0	19	1	0	0	0	0	0	0	0	0	0	0	2	22
9:30 PM	0	25	1	0	0	0	0	0	0	0	0	0	0	1	27
9:45 PM	0	22	4	0	0	0	0	0	0	0	0	0	0	1	27
10:00 PM	0	19	3	0	0	0	0	0	0	0	0	0	0	1	23
10:15 PM	0	17	3	0	1	0	0	0	0	0	0	0	0	0	21
10:30 PM	0	10	2	0	1	0	0	0	0	0	0	0	0	1	14
10:45 PM	0	10	1	0	0	0	0	0	0	0	0	0	0	0	11
11:00 PM	0	13	3	0	1	0	0	0	0	0	0	0	0	0	17
11:15 PM	0	3	1	0	0	0	0	0	0	0	0	0	0	1	5
11:30 PM	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6
11:45 PM	0	8	0	0	0	0	0	0	0	0	0	0	0	0	8
Day Total	3	6039	850	28	161	3	0	15	0	0	0	0	0	332	7431
Percent	0.0%	81.3%	11.4%	0.4%	2.2%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	4.5%	
ADT 7431															
AM Peak	9:45 AM	7:15 AM	6:30 AM	7:30 AM	7:30 AM	9:15 AM	10:15 AM				7:45 AM				7:15 AM
Volume	1	226	36	3	9	1	2				16				266
PM Peak	5:30 PM	5:45 PM	2:15 PM	1:45 PM	6:30 PM	1:00 PM	12:45 PM				5:30 PM				5:45 PM
Volume	1	109	22	2	5	1	1				16				133
Comments:															

LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd SPECIFIC LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd CITY/STATE: Gahanna, OH														QC JOB #: 14261904 DIRECTION: WB DATE: Apr 04 2017 - Apr 04 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
Grand Total	3	6039	850	28	161	3	0	15	0	0	0	0	0	332	7431
Percent	0.0%	81.3%	11.4%	0.4%	2.2%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	4.5%	
ADT 7431															
Comments:															

Report generated on 4/6/2017 8:12 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd						QC JOB #: 14261904				
SPECIFIC LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd						DIRECTION: WB				
CITY/STATE: Gahanna, OH						DATE: Apr 04 2017 - Apr 04 2017				
Start Time	Mon	Tue 04-Apr-17	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM		5				5			5	
12:15 AM		7				7			7	
12:30 AM		2				2			2	
12:45 AM		1				1			1	
1:00 AM		4				4			4	
1:15 AM		2				2			2	
1:30 AM		2				2			2	
1:45 AM		1				1			1	
2:00 AM		1				1			1	
2:15 AM		4				4			4	
2:30 AM		2				2			2	
2:45 AM		2				2			2	
3:00 AM		6				6			6	
3:15 AM		5				5			5	
3:30 AM		5				5			5	
3:45 AM		5				5			5	
4:00 AM		6				6			6	
4:15 AM		8				8			8	
4:30 AM		19				19			19	
4:45 AM		18				18			18	
5:00 AM		17				17			17	
5:15 AM		40				40			40	
5:30 AM		58				58			58	
5:45 AM		68				68			68	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd						QC JOB #: 14261904				
SPECIFIC LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd						DIRECTION: WB				
CITY/STATE: Gahanna, OH						DATE: Apr 04 2017 - Apr 04 2017				
Start Time	Mon 04-Apr-17	Tue	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 AM		118				118			118	
6:15 AM		157				157			157	
6:30 AM		214				214			214	
6:45 AM		222				222			222	
7:00 AM		222				222			222	
7:15 AM		266				266			266	
7:30 AM		212				212			212	
7:45 AM		211				211			211	
8:00 AM		179				179			179	
8:15 AM		219				219			219	
8:30 AM		182				182			182	
8:45 AM		185				185			185	
9:00 AM		104				104			104	
9:15 AM		144				144			144	
9:30 AM		159				159			159	
9:45 AM		110				110			110	
10:00 AM		87				87			87	
10:15 AM		93				93			93	
10:30 AM		96				96			96	
10:45 AM		109				109			109	
11:00 AM		69				69			69	
11:15 AM		86				86			86	
11:30 AM		104				104			104	
11:45 AM		97				97			97	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd						QC JOB #: 14261904				
SPECIFIC LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd						DIRECTION: WB				
CITY/STATE: Gahanna, OH						DATE: Apr 04 2017 - Apr 04 2017				
Start Time	Mon	Tue 04-Apr-17	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 PM		61				61			61	
12:15 PM		66				66			66	
12:30 PM		95				95			95	
12:45 PM		68				68			68	
1:00 PM		75				75			75	
1:15 PM		65				65			65	
1:30 PM		92				92			92	
1:45 PM		61				61			61	
2:00 PM		90				90			90	
2:15 PM		103				103			103	
2:30 PM		114				114			114	
2:45 PM		97				97			97	
3:00 PM		104				104			104	
3:15 PM		89				89			89	
3:30 PM		110				110			110	
3:45 PM		121				121			121	
4:00 PM		104				104			104	
4:15 PM		123				123			123	
4:30 PM		120				120			120	
4:45 PM		103				103			103	
5:00 PM		129				129			129	
5:15 PM		125				125			125	
5:30 PM		97				97			97	
5:45 PM		133				133			133	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd						QC JOB #: 14261904				
SPECIFIC LOCATION: Havens Corner Rd btwn Helmbright Rd and Taylor Station Rd						DIRECTION: WB				
CITY/STATE: Gahanna, OH						DATE: Apr 04 2017 - Apr 04 2017				
Start Time	Mon 04-Apr-17	Tue	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 PM		106				106			106	
6:15 PM		127				127			127	
6:30 PM		103				103			103	
6:45 PM		86				86			86	
7:00 PM		82				82			82	
7:15 PM		77				77			77	
7:30 PM		79				79			79	
7:45 PM		72				72			72	
8:00 PM		57				57			57	
8:15 PM		61				61			61	
8:30 PM		43				43			43	
8:45 PM		36				36			36	
9:00 PM		43				43			43	
9:15 PM		22				22			22	
9:30 PM		27				27			27	
9:45 PM		27				27			27	
10:00 PM		23				23			23	
10:15 PM		21				21			21	
10:30 PM		14				14			14	
10:45 PM		11				11			11	
11:00 PM		17				17			17	
11:15 PM		5				5			5	
11:30 PM		6				6			6	
11:45 PM		8				8			8	
Day Total		7431				7431			7431	
% Weekday Average		100.0%								
% Week Average		100.0%				100.0%				
AM Peak Volume		7:15 AM 266				7:15 AM 266			7:15 AM 266	
PM Peak Volume		5:45 PM 133				5:45 PM 133			5:45 PM 133	
Comments:										

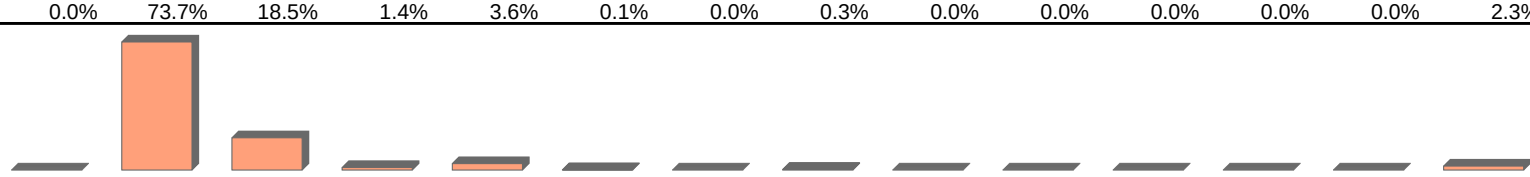
QC JOB #: 14261905
DIRECTION: NB
DATE: Apr 04 2017

Report generated on 4/6/2017 8:12 AM SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd														QC JOB #: 14261905	
SPECIFIC LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd														DIRECTION: NB	
CITY/STATE: Gahanna, OH														DATE: Apr 04 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
6:00 AM	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4
6:15 AM	0	4	0	1	0	0	0	0	0	0	0	0	0	0	5
6:30 AM	0	5	4	0	0	0	0	0	0	0	0	0	0	0	9
6:45 AM	0	4	1	0	0	0	0	0	0	0	0	0	0	0	5
7:00 AM	0	10	2	0	0	0	0	0	0	0	0	0	0	0	12
7:15 AM	0	22	5	0	3	0	0	0	0	0	0	0	0	0	30
7:30 AM	0	24	6	0	2	1	0	0	0	0	0	0	0	0	33
7:45 AM	0	20	6	0	0	0	0	0	0	0	0	0	0	0	26
8:00 AM	0	15	3	0	2	0	0	0	0	0	0	0	0	0	20
8:15 AM	0	20	3	2	1	0	0	0	0	0	0	0	0	3	29
8:30 AM	0	14	3	2	1	0	0	0	0	0	0	0	0	0	20
8:45 AM	0	5	2	0	1	0	0	0	0	0	0	0	0	0	8
9:00 AM	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
9:15 AM	0	5	1	0	0	0	0	0	0	0	0	0	0	0	6
9:30 AM	0	11	2	0	1	0	0	0	0	0	0	0	0	0	14
9:45 AM	0	5	1	0	0	0	0	0	0	0	0	0	0	0	6
10:00 AM	0	4	1	0	0	0	0	1	0	0	0	0	0	0	6
10:15 AM	0	8	1	0	2	0	0	0	0	0	0	0	0	1	12
10:30 AM	0	7	4	0	1	0	0	0	0	0	0	0	0	0	12
10:45 AM	0	5	1	0	0	0	0	0	0	0	0	0	0	0	6
11:00 AM	0	3	0	0	1	0	0	0	0	0	0	0	0	0	4
11:15 AM	0	7	0	0	0	0	0	0	0	0	0	0	0	0	7
11:30 AM	0	8	1	0	0	0	0	0	0	0	0	0	0	0	9
11:45 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd														QC JOB #: 14261905	
SPECIFIC LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd														DIRECTION: NB	
CITY/STATE: Gahanna, OH														DATE: Apr 04 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 PM	0	5	2	0	0	0	0	0	0	0	0	0	0	1	8
12:15 PM	0	2	0	0	1	0	0	0	0	0	0	0	0	0	3
12:30 PM	0	8	0	0	0	0	0	0	0	0	0	0	0	0	8
12:45 PM	0	4	4	0	0	0	0	0	0	0	0	0	0	1	9
1:00 PM	0	14	3	0	0	0	0	0	0	0	0	0	0	0	17
1:15 PM	0	5	1	0	0	0	0	1	0	0	0	0	0	0	7
1:30 PM	0	3	1	0	1	0	0	0	0	0	0	0	0	2	7
1:45 PM	0	6	0	0	0	0	0	1	0	0	0	0	0	0	7
2:00 PM	0	6	3	4	0	0	0	0	0	0	0	0	0	0	13
2:15 PM	0	13	2	1	0	0	0	0	0	0	0	0	0	1	17
2:30 PM	0	5	1	0	2	0	0	0	0	0	0	0	0	1	9
2:45 PM	0	8	4	0	1	0	0	0	0	0	0	0	0	1	14
3:00 PM	0	9	1	3	2	0	0	0	0	0	0	0	0	0	15
3:15 PM	0	20	8	0	0	0	0	0	0	0	0	0	0	0	28
3:30 PM	0	16	2	0	1	0	0	0	0	0	0	0	0	0	19
3:45 PM	0	8	1	0	1	0	0	0	0	0	0	0	0	0	10
4:00 PM	0	13	2	0	0	0	0	0	0	0	0	0	0	1	16
4:15 PM	0	18	5	0	0	0	0	0	0	0	0	0	0	1	24
4:30 PM	0	21	4	0	1	0	0	0	0	0	0	0	0	0	26
4:45 PM	0	25	8	0	1	0	0	0	0	0	0	0	0	0	34
5:00 PM	0	31	7	0	0	0	0	0	0	0	0	0	0	4	42
5:15 PM	0	18	8	0	0	0	0	0	0	0	0	0	0	0	26
5:30 PM	0	33	10	0	1	0	0	0	0	0	0	0	0	0	44
5:45 PM	0	22	4	0	0	0	0	0	0	0	0	0	0	1	27
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd														QC JOB #: 14261905	
SPECIFIC LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd														DIRECTION: NB	
CITY/STATE: Gahanna, OH														DATE: Apr 04 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
6:00 PM	0	13	8	0	1	0	0	0	0	0	0	0	0	1	23
6:15 PM	0	12	7	0	0	0	0	0	0	0	0	0	0	0	19
6:30 PM	0	13	4	0	0	0	0	0	0	0	0	0	0	0	17
6:45 PM	0	15	1	0	2	0	0	0	0	0	0	0	0	1	19
7:00 PM	0	10	5	0	1	0	0	0	0	0	0	0	0	0	16
7:15 PM	0	11	3	0	0	0	0	0	0	0	0	0	0	0	14
7:30 PM	0	9	6	0	0	0	0	0	0	0	0	0	0	0	15
7:45 PM	0	8	0	0	0	0	0	0	0	0	0	0	0	0	8
8:00 PM	0	4	1	0	0	0	0	0	0	0	0	0	0	1	6
8:15 PM	0	13	2	0	0	0	0	0	0	0	0	0	0	0	15
8:30 PM	0	4	1	0	1	0	0	0	0	0	0	0	0	0	6
8:45 PM	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
9:00 PM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
9:15 PM	0	7	2	0	0	0	0	0	0	0	0	0	0	0	9
9:30 PM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
9:45 PM	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
10:00 PM	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
10:15 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
10:30 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
10:45 PM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
11:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
11:15 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
11:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
11:45 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
Day Total	0	688	173	13	34	1	0	3	0	0	0	0	0	21	933
Percent	0.0%	73.7%	18.5%	1.4%	3.6%	0.1%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	2.3%	
ADT 933															
AM Peak Volume	7:30 AM 24		7:30 AM 6	8:15 AM 2	7:15 AM 3	7:30 AM 1	10:00 AM 1							8:15 AM 3	7:30 AM 33
PM Peak Volume	5:30 PM 33		5:30 PM 10	2:00 PM 4	2:30 PM 2	1:15 PM 1							5:00 PM 4	5:30 PM 44	
Comments:															

LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd SPECIFIC LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd CITY/STATE: Gahanna, OH													QC JOB #: 14261905 DIRECTION: NB DATE: Apr 04 2017 - Apr 04 2017		
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
Grand Total	0	688	173	13	34	1	0	3	0	0	0	0	0	21	933
Percent	0.0%	73.7%	18.5%	1.4%	3.6%	0.1%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	2.3%	
ADT 933															
Comments:															

Report generated on 4/6/2017 8:12 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd										QC JOB #: 14261905	
SPECIFIC LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd										DIRECTION: NB	
CITY/STATE: Gahanna, OH										DATE: Apr 04 2017 - Apr 04 2017	
	Mon	Tue	Wed	Thu	Fri	Average Weekday	Sat	Sun	Average Week	Average Week Profile	
Start Time	04-Apr-17					Hourly Traffic			Hourly Traffic		
12:00 AM		1				1			1		
12:15 AM		1				1			1		
12:30 AM		1				1			1		
12:45 AM		0				0			0		
1:00 AM		0				0			0		
1:15 AM		2				2			2		
1:30 AM		0				0			0		
1:45 AM		0				0			0		
2:00 AM		0				0			0		
2:15 AM		0				0			0		
2:30 AM		0				0			0		
2:45 AM		0				0			0		
3:00 AM		0				0			0		
3:15 AM		1				1			1		
3:30 AM		0				0			0		
3:45 AM		3				3			3		
4:00 AM		0				0			0		
4:15 AM		0				0			0		
4:30 AM		0				0			0		
4:45 AM		0				0			0		
5:00 AM		0				0			0		
5:15 AM		1				1			1		
5:30 AM		1				1			1		
5:45 AM		1				1			1		
Day Total											
% Weekday Average											
% Week Average											
AM Peak Volume											
PM Peak Volume											
Comments:											

LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd						QC JOB #: 14261905				
SPECIFIC LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd						DIRECTION: NB				
CITY/STATE: Gahanna, OH						DATE: Apr 04 2017 - Apr 04 2017				
Start Time	Mon	Tue 04-Apr-17	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 AM		4				4			4	
6:15 AM		5				5			5	
6:30 AM		9				9			9	
6:45 AM		5				5			5	
7:00 AM		12				12			12	
7:15 AM		30				30			30	
7:30 AM		33				33			33	
7:45 AM		26				26			26	
8:00 AM		20				20			20	
8:15 AM		29				29			29	
8:30 AM		20				20			20	
8:45 AM		8				8			8	
9:00 AM		5				5			5	
9:15 AM		6				6			6	
9:30 AM		14				14			14	
9:45 AM		6				6			6	
10:00 AM		6				6			6	
10:15 AM		12				12			12	
10:30 AM		12				12			12	
10:45 AM		6				6			6	
11:00 AM		4				4			4	
11:15 AM		7				7			7	
11:30 AM		9				9			9	
11:45 AM		2				2			2	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd						QC JOB #: 14261905				
SPECIFIC LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd						DIRECTION: NB				
CITY/STATE: Gahanna, OH						DATE: Apr 04 2017 - Apr 04 2017				
Start Time	Mon 04-Apr-17	Tue	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 PM		8				8			8	
12:15 PM		3				3			3	
12:30 PM		8				8			8	
12:45 PM		9				9			9	
1:00 PM		17				17			17	
1:15 PM		7				7			7	
1:30 PM		7				7			7	
1:45 PM		7				7			7	
2:00 PM		13				13			13	
2:15 PM		17				17			17	
2:30 PM		9				9			9	
2:45 PM		14				14			14	
3:00 PM		15				15			15	
3:15 PM		28				28			28	
3:30 PM		19				19			19	
3:45 PM		10				10			10	
4:00 PM		16				16			16	
4:15 PM		24				24			24	
4:30 PM		26				26			26	
4:45 PM		34				34			34	
5:00 PM		42				42			42	
5:15 PM		26				26			26	
5:30 PM		44				44			44	
5:45 PM		27				27			27	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd						QC JOB #: 14261905				
SPECIFIC LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd						DIRECTION: NB				
CITY/STATE: Gahanna, OH						DATE: Apr 04 2017 - Apr 04 2017				
Start Time	Mon 04-Apr-17	Tue	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 PM		23				23			23	
6:15 PM		19				19			19	
6:30 PM		17				17			17	
6:45 PM		19				19			19	
7:00 PM		16				16			16	
7:15 PM		14				14			14	
7:30 PM		15				15			15	
7:45 PM		8				8			8	
8:00 PM		6				6			6	
8:15 PM		15				15			15	
8:30 PM		6				6			6	
8:45 PM		5				5			5	
9:00 PM		3				3			3	
9:15 PM		9				9			9	
9:30 PM		3				3			3	
9:45 PM		5				5			5	
10:00 PM		5				5			5	
10:15 PM		2				2			2	
10:30 PM		2				2			2	
10:45 PM		3				3			3	
11:00 PM		1				1			1	
11:15 PM		2				2			2	
11:30 PM		1				1			1	
11:45 PM		2				2			2	
Day Total		933				933			933	
% Weekday Average		100.0%								
% Week Average		100.0%				100.0%				
AM Peak		7:30 AM				7:30 AM			7:30 AM	
Volume		33				33			33	
PM Peak		5:30 PM				5:30 PM			5:30 PM	
Volume		44				44			44	
Comments:										

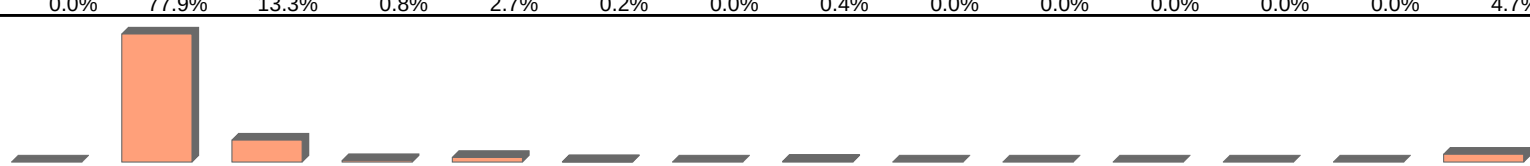
QC JOB #: 14261905
DIRECTION: NB/SB
DATE: Apr 04 2017

Report generated on 4/6/2017 8:12 AM

LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd														QC JOB #: 14261905	
SPECIFIC LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd														DIRECTION: NB/SB	
CITY/STATE: Gahanna, OH														DATE: Apr 04 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
6:00 AM	0	5	1	0	0	0	0	0	0	0	0	0	0	1	7
6:15 AM	0	10	0	1	0	0	0	0	0	0	0	0	0	0	11
6:30 AM	0	17	4	0	0	0	0	0	0	0	0	0	0	0	21
6:45 AM	0	8	3	0	0	0	0	0	0	0	0	0	0	1	12
7:00 AM	0	33	2	0	0	0	0	0	0	0	0	0	0	2	37
7:15 AM	0	43	8	0	3	0	0	0	0	0	0	0	0	4	58
7:30 AM	0	37	7	1	4	1	0	0	0	0	0	0	0	1	51
7:45 AM	0	47	7	1	0	0	0	0	0	0	0	0	0	2	57
8:00 AM	0	39	3	0	3	0	0	0	0	0	0	0	0	1	46
8:15 AM	0	42	6	2	1	0	0	0	0	0	0	0	0	7	58
8:30 AM	0	40	3	2	2	0	0	0	0	0	0	0	0	5	52
8:45 AM	0	15	8	0	1	0	0	0	0	0	0	0	0	0	24
9:00 AM	0	17	1	0	0	0	0	0	0	0	0	0	0	0	18
9:15 AM	0	9	2	0	0	0	0	0	0	0	0	0	0	0	11
9:30 AM	0	15	3	0	3	0	0	0	0	0	0	0	0	1	22
9:45 AM	0	12	2	0	0	0	0	1	0	0	0	0	0	1	16
10:00 AM	0	8	2	0	0	0	0	1	0	0	0	0	0	0	11
10:15 AM	0	13	1	0	3	0	0	0	0	0	0	0	0	2	19
10:30 AM	0	17	5	0	1	0	0	0	0	0	0	0	0	0	23
10:45 AM	0	19	2	0	0	1	0	0	0	0	0	0	0	2	24
11:00 AM	0	15	2	0	2	0	0	0	0	0	0	0	0	0	19
11:15 AM	0	14	0	0	0	0	0	0	0	0	0	0	0	2	16
11:30 AM	0	17	1	0	0	0	0	1	0	0	0	0	0	0	19
11:45 AM	0	11	1	0	2	0	0	0	0	0	0	0	0	1	15
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd														QC JOB #: 14261905	
SPECIFIC LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd														DIRECTION: NB/SB	
CITY/STATE: Gahanna, OH														DATE: Apr 04 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 PM	0	14	4	0	0	0	0	0	0	0	0	0	0	4	22
12:15 PM	0	15	2	0	1	0	0	0	0	0	0	0	0	0	18
12:30 PM	0	15	0	0	2	0	0	0	0	0	0	0	0	2	19
12:45 PM	0	8	6	0	0	0	0	0	0	0	0	0	0	1	15
1:00 PM	0	22	4	0	0	1	0	0	0	0	0	0	0	1	28
1:15 PM	0	16	3	0	0	0	0	1	0	0	0	0	0	0	20
1:30 PM	0	15	5	0	1	0	0	0	0	0	0	0	0	3	24
1:45 PM	0	14	2	0	0	0	0	1	0	0	0	0	0	0	17
2:00 PM	0	18	3	4	0	0	0	0	0	0	0	0	0	0	25
2:15 PM	0	22	4	1	0	0	0	0	0	0	0	0	0	1	28
2:30 PM	0	16	2	0	2	0	0	0	0	0	0	0	0	3	23
2:45 PM	0	22	6	0	1	0	0	0	0	0	0	0	0	1	30
3:00 PM	0	21	3	3	2	0	0	0	0	0	0	0	0	2	31
3:15 PM	0	35	9	0	2	0	0	0	0	0	0	0	0	1	47
3:30 PM	0	35	9	0	2	0	0	0	0	0	0	0	0	1	47
3:45 PM	0	21	2	0	2	0	0	0	0	0	0	0	0	0	25
4:00 PM	0	27	3	1	0	0	0	0	0	0	0	0	0	2	33
4:15 PM	0	33	6	0	0	0	0	1	0	0	0	0	0	3	43
4:30 PM	0	32	5	0	1	0	0	0	0	0	0	0	0	4	42
4:45 PM	0	44	9	0	2	0	0	0	0	0	0	0	0	4	59
5:00 PM	0	63	8	0	1	0	0	0	0	0	0	0	0	8	80
5:15 PM	0	36	9	0	0	0	0	0	0	0	0	0	0	0	45
5:30 PM	0	55	11	0	1	0	0	0	0	0	0	0	0	2	69
5:45 PM	0	38	7	0	1	0	0	1	0	0	0	0	0	1	48
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd														QC JOB #: 14261905	
SPECIFIC LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd														DIRECTION: NB/SB	
CITY/STATE: Gahanna, OH														DATE: Apr 04 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
6:00 PM	0	22	8	0	1	0	0	0	0	0	0	0	0	2	33
6:15 PM	0	21	8	0	1	0	0	0	0	0	0	0	0	1	31
6:30 PM	0	26	6	0	0	0	0	0	0	0	0	0	0	0	32
6:45 PM	0	34	2	0	2	0	0	0	0	0	0	0	0	2	40
7:00 PM	0	22	7	0	1	0	0	0	0	0	0	0	0	1	31
7:15 PM	0	23	4	0	0	0	0	0	0	0	0	0	0	1	28
7:30 PM	0	22	8	0	0	0	0	0	0	0	0	0	0	0	30
7:45 PM	0	20	0	0	0	0	0	0	0	0	0	0	0	0	20
8:00 PM	0	16	2	0	0	0	0	0	0	0	0	0	0	2	20
8:15 PM	0	20	4	0	0	0	0	0	0	0	0	0	0	2	26
8:30 PM	0	11	1	0	1	0	0	0	0	0	0	0	0	0	13
8:45 PM	0	17	1	0	0	0	0	0	0	0	0	0	0	0	18
9:00 PM	0	11	1	0	0	0	0	0	0	0	0	0	0	0	12
9:15 PM	0	12	2	0	0	0	0	0	0	0	0	0	0	0	14
9:30 PM	0	6	1	0	0	0	0	0	0	0	0	0	0	1	8
9:45 PM	0	9	1	0	0	0	0	0	0	0	0	0	0	0	10
10:00 PM	0	9	0	0	0	0	0	0	0	0	0	0	0	0	9
10:15 PM	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6
10:30 PM	0	8	1	0	0	0	0	0	0	0	0	0	0	0	9
10:45 PM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
11:00 PM	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
11:15 PM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
11:30 PM	0	4	1	0	0	0	0	0	0	0	0	0	0	0	5
11:45 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	1	3
Day Total	0	1502	257	16	53	3	0	7	0	0	0	0	0	91	1929
Percent	0.0%	77.9%	13.3%	0.8%	2.7%	0.2%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	4.7%	
ADT 1929															
AM Peak	7:45 AM 7:15 AM 8:15 AM 7:30 AM 7:30 AM 9:45 AM 8:15 AM 7:15 AM														
Volume	47 8 2 4 1 1 7 58														
PM Peak	5:00 PM 5:30 PM 2:00 PM 12:30 PM 1:00 PM 1:15 PM 5:00 PM 5:00 PM														
Volume	63 11 4 2 1 1 8 80														
Comments:															

LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd SPECIFIC LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd CITY/STATE: Gahanna, OH													QC JOB #: 14261905 DIRECTION: NB/SB DATE: Apr 04 2017 - Apr 04 2017		
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
Grand Total	0	1502	257	16	53	3	0	7	0	0	0	0	0	91	1929
Percent	0.0%	77.9%	13.3%	0.8%	2.7%	0.2%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	4.7%	
ADT 1929															
Comments:															

Report generated on 4/6/2017 8:12 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd						QC JOB #: 14261905				
SPECIFIC LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd						DIRECTION: NB/SB				
CITY/STATE: Gahanna, OH						DATE: Apr 04 2017 - Apr 04 2017				
Start Time	Mon	Tue 04-Apr-17	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM		2				2			2	
12:15 AM		1				1			1	
12:30 AM		2				2			2	
12:45 AM		0				0			0	
1:00 AM		1				1			1	
1:15 AM		2				2			2	
1:30 AM		0				0			0	
1:45 AM		0				0			0	
2:00 AM		0				0			0	
2:15 AM		0				0			0	
2:30 AM		1				1			1	
2:45 AM		0				0			0	
3:00 AM		0				0			0	
3:15 AM		1				1			1	
3:30 AM		1				1			1	
3:45 AM		3				3			3	
4:00 AM		0				0			0	
4:15 AM		0				0			0	
4:30 AM		0				0			0	
4:45 AM		3				3			3	
5:00 AM		2				2			2	
5:15 AM		5				5			5	
5:30 AM		5				5			5	
5:45 AM		6				6			6	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd						QC JOB #: 14261905				
SPECIFIC LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd						DIRECTION: NB/SB				
CITY/STATE: Gahanna, OH						DATE: Apr 04 2017 - Apr 04 2017				
Start Time	Mon 04-Apr-17	Tue	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 AM		7				7			7	
6:15 AM		11				11			11	
6:30 AM		21				21			21	
6:45 AM		12				12			12	
7:00 AM		37				37			37	
7:15 AM		58				58			58	
7:30 AM		51				51			51	
7:45 AM		57				57			57	
8:00 AM		46				46			46	
8:15 AM		58				58			58	
8:30 AM		52				52			52	
8:45 AM		24				24			24	
9:00 AM		18				18			18	
9:15 AM		11				11			11	
9:30 AM		22				22			22	
9:45 AM		16				16			16	
10:00 AM		11				11			11	
10:15 AM		19				19			19	
10:30 AM		23				23			23	
10:45 AM		24				24			24	
11:00 AM		19				19			19	
11:15 AM		16				16			16	
11:30 AM		19				19			19	
11:45 AM		15				15			15	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd						QC JOB #: 14261905				
SPECIFIC LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd						DIRECTION: NB/SB				
CITY/STATE: Gahanna, OH						DATE: Apr 04 2017 - Apr 04 2017				
Start Time	Mon 04-Apr-17	Tue	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 PM		22				22			22	
12:15 PM		18				18			18	
12:30 PM		19				19			19	
12:45 PM		15				15			15	
1:00 PM		28				28			28	
1:15 PM		20				20			20	
1:30 PM		24				24			24	
1:45 PM		17				17			17	
2:00 PM		25				25			25	
2:15 PM		28				28			28	
2:30 PM		23				23			23	
2:45 PM		30				30			30	
3:00 PM		31				31			31	
3:15 PM		47				47			47	
3:30 PM		47				47			47	
3:45 PM		25				25			25	
4:00 PM		33				33			33	
4:15 PM		43				43			43	
4:30 PM		42				42			42	
4:45 PM		59				59			59	
5:00 PM		80				80			80	
5:15 PM		45				45			45	
5:30 PM		69				69			69	
5:45 PM		48				48			48	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd						QC JOB #: 14261905				
SPECIFIC LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd						DIRECTION: NB/SB				
CITY/STATE: Gahanna, OH						DATE: Apr 04 2017 - Apr 04 2017				
Start Time	Mon 04-Apr-17	Tue	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 PM		33				33			33	
6:15 PM		31				31			31	
6:30 PM		32				32			32	
6:45 PM		40				40			40	
7:00 PM		31				31			31	
7:15 PM		28				28			28	
7:30 PM		30				30			30	
7:45 PM		20				20			20	
8:00 PM		20				20			20	
8:15 PM		26				26			26	
8:30 PM		13				13			13	
8:45 PM		18				18			18	
9:00 PM		12				12			12	
9:15 PM		14				14			14	
9:30 PM		8				8			8	
9:45 PM		10				10			10	
10:00 PM		9				9			9	
10:15 PM		6				6			6	
10:30 PM		9				9			9	
10:45 PM		3				3			3	
11:00 PM		5				5			5	
11:15 PM		3				3			3	
11:30 PM		5				5			5	
11:45 PM		3				3			3	
Day Total		1929				1929			1929	
% Weekday Average		100.0%								
% Week Average		100.0%				100.0%				
AM Peak Volume		7:15 AM 58				7:15 AM 58			7:15 AM 58	
PM Peak Volume		5:00 PM 80				5:00 PM 80			5:00 PM 80	
Comments:										

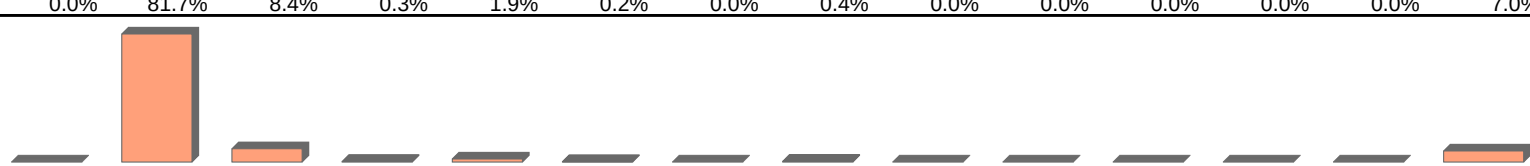
QC JOB #: 14261905
DIRECTION: SB
DATE: Apr 04 2017

Report generated on 4/6/2017 8:12 AM

LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd														QC JOB #: 14261905	
SPECIFIC LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd														DIRECTION: SB	
CITY/STATE: Gahanna, OH														DATE: Apr 04 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
6:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	1	3
6:15 AM	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6
6:30 AM	0	12	0	0	0	0	0	0	0	0	0	0	0	0	12
6:45 AM	0	4	2	0	0	0	0	0	0	0	0	0	0	1	7
7:00 AM	0	23	0	0	0	0	0	0	0	0	0	0	0	2	25
7:15 AM	0	21	3	0	0	0	0	0	0	0	0	0	0	4	28
7:30 AM	0	13	1	1	2	0	0	0	0	0	0	0	0	1	18
7:45 AM	0	27	1	1	0	0	0	0	0	0	0	0	0	2	31
8:00 AM	0	24	0	0	1	0	0	0	0	0	0	0	0	1	26
8:15 AM	0	22	3	0	0	0	0	0	0	0	0	0	0	4	29
8:30 AM	0	26	0	0	1	0	0	0	0	0	0	0	0	5	32
8:45 AM	0	10	6	0	0	0	0	0	0	0	0	0	0	0	16
9:00 AM	0	12	1	0	0	0	0	0	0	0	0	0	0	0	13
9:15 AM	0	4	1	0	0	0	0	0	0	0	0	0	0	0	5
9:30 AM	0	4	1	0	2	0	0	0	0	0	0	0	0	1	8
9:45 AM	0	7	1	0	0	0	0	1	0	0	0	0	0	1	10
10:00 AM	0	4	1	0	0	0	0	0	0	0	0	0	0	0	5
10:15 AM	0	5	0	0	1	0	0	0	0	0	0	0	0	1	7
10:30 AM	0	10	1	0	0	0	0	0	0	0	0	0	0	0	11
10:45 AM	0	14	1	0	0	1	0	0	0	0	0	0	0	2	18
11:00 AM	0	12	2	0	1	0	0	0	0	0	0	0	0	0	15
11:15 AM	0	7	0	0	0	0	0	0	0	0	0	0	0	2	9
11:30 AM	0	9	0	0	0	0	0	1	0	0	0	0	0	0	10
11:45 AM	0	10	1	0	1	0	0	0	0	0	0	0	0	1	13
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd														QC JOB #: 14261905	
SPECIFIC LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd														DIRECTION: SB	
CITY/STATE: Gahanna, OH														DATE: Apr 04 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 PM	0	9	2	0	0	0	0	0	0	0	0	0	0	3	14
12:15 PM	0	13	2	0	0	0	0	0	0	0	0	0	0	0	15
12:30 PM	0	7	0	0	2	0	0	0	0	0	0	0	0	2	11
12:45 PM	0	4	2	0	0	0	0	0	0	0	0	0	0	0	6
1:00 PM	0	8	1	0	0	1	0	0	0	0	0	0	0	1	11
1:15 PM	0	11	2	0	0	0	0	0	0	0	0	0	0	0	13
1:30 PM	0	12	4	0	0	0	0	0	0	0	0	0	0	1	17
1:45 PM	0	8	2	0	0	0	0	0	0	0	0	0	0	0	10
2:00 PM	0	12	0	0	0	0	0	0	0	0	0	0	0	0	12
2:15 PM	0	9	2	0	0	0	0	0	0	0	0	0	0	0	11
2:30 PM	0	11	1	0	0	0	0	0	0	0	0	0	0	2	14
2:45 PM	0	14	2	0	0	0	0	0	0	0	0	0	0	0	16
3:00 PM	0	12	2	0	0	0	0	0	0	0	0	0	0	2	16
3:15 PM	0	15	1	0	2	0	0	0	0	0	0	0	0	1	19
3:30 PM	0	19	7	0	1	0	0	0	0	0	0	0	0	1	28
3:45 PM	0	13	1	0	1	0	0	0	0	0	0	0	0	0	15
4:00 PM	0	14	1	1	0	0	0	0	0	0	0	0	0	1	17
4:15 PM	0	15	1	0	0	0	0	1	0	0	0	0	0	2	19
4:30 PM	0	11	1	0	0	0	0	0	0	0	0	0	0	4	16
4:45 PM	0	19	1	0	1	0	0	0	0	0	0	0	0	4	25
5:00 PM	0	32	1	0	1	0	0	0	0	0	0	0	0	4	38
5:15 PM	0	18	1	0	0	0	0	0	0	0	0	0	0	0	19
5:30 PM	0	22	1	0	0	0	0	0	0	0	0	0	0	2	25
5:45 PM	0	16	3	0	1	0	0	1	0	0	0	0	0	0	21
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd														QC JOB #: 14261905	
SPECIFIC LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd														DIRECTION: SB	
CITY/STATE: Gahanna, OH														DATE: Apr 04 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
6:00 PM	0	9	0	0	0	0	0	0	0	0	0	0	0	1	10
6:15 PM	0	9	1	0	1	0	0	0	0	0	0	0	0	1	12
6:30 PM	0	13	2	0	0	0	0	0	0	0	0	0	0	0	15
6:45 PM	0	19	1	0	0	0	0	0	0	0	0	0	0	1	21
7:00 PM	0	12	2	0	0	0	0	0	0	0	0	0	0	1	15
7:15 PM	0	12	1	0	0	0	0	0	0	0	0	0	0	1	14
7:30 PM	0	13	2	0	0	0	0	0	0	0	0	0	0	0	15
7:45 PM	0	12	0	0	0	0	0	0	0	0	0	0	0	0	12
8:00 PM	0	12	1	0	0	0	0	0	0	0	0	0	0	1	14
8:15 PM	0	7	2	0	0	0	0	0	0	0	0	0	0	2	11
8:30 PM	0	7	0	0	0	0	0	0	0	0	0	0	0	0	7
8:45 PM	0	12	1	0	0	0	0	0	0	0	0	0	0	0	13
9:00 PM	0	9	0	0	0	0	0	0	0	0	0	0	0	0	9
9:15 PM	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
9:30 PM	0	4	0	0	0	0	0	0	0	0	0	0	0	1	5
9:45 PM	0	4	1	0	0	0	0	0	0	0	0	0	0	0	5
10:00 PM	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
10:15 PM	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
10:30 PM	0	6	1	0	0	0	0	0	0	0	0	0	0	0	7
10:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
11:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
11:30 PM	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4
11:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Day Total	0	814	84	3	19	2	0	4	0	0	0	0	0	70	996
Percent	0.0%	81.7%	8.4%	0.3%	1.9%	0.2%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	7.0%	
ADT 996															
AM Peak Volume	7:45 AM 27		8:45 AM 6	7:30 AM 1	7:30 AM 2	10:45 AM 1	9:45 AM 1						8:30 AM 5	8:30 AM 32	
PM Peak Volume	5:00 PM 32		3:30 PM 7	4:00 PM 1	12:30 PM 2	1:00 PM 1	4:15 PM 1						4:30 PM 4	5:00 PM 38	
Comments:															

LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd SPECIFIC LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd CITY/STATE: Gahanna, OH														QC JOB #: 14261905 DIRECTION: SB DATE: Apr 04 2017 - Apr 04 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
Grand Total	0	814	84	3	19	2	0	4	0	0	0	0	0	70	996
Percent	0.0%	81.7%	8.4%	0.3%	1.9%	0.2%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	7.0%	
ADT 996															
Comments:															

Report generated on 4/6/2017 8:12 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd							QC JOB #: 14261905			
SPECIFIC LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd							DIRECTION: SB			
CITY/STATE: Gahanna, OH							DATE: Apr 04 2017 - Apr 04 2017			
Start Time	Mon	Tue 04-Apr-17	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM		1				1			1	
12:15 AM		0				0			0	
12:30 AM		1				1			1	
12:45 AM		0				0			0	
1:00 AM		1				1			1	
1:15 AM		0				0			0	
1:30 AM		0				0			0	
1:45 AM		0				0			0	
2:00 AM		0				0			0	
2:15 AM		0				0			0	
2:30 AM		1				1			1	
2:45 AM		0				0			0	
3:00 AM		0				0			0	
3:15 AM		0				0			0	
3:30 AM		1				1			1	
3:45 AM		0				0			0	
4:00 AM		0				0			0	
4:15 AM		0				0			0	
4:30 AM		0				0			0	
4:45 AM		3				3			3	
5:00 AM		2				2			2	
5:15 AM		4				4			4	
5:30 AM		4				4			4	
5:45 AM		5				5			5	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd						QC JOB #: 14261905				
SPECIFIC LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd						DIRECTION: SB				
CITY/STATE: Gahanna, OH						DATE: Apr 04 2017 - Apr 04 2017				
Start Time	Mon 04-Apr-17	Tue	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 AM		3				3			3	
6:15 AM		6				6			6	
6:30 AM		12				12			12	
6:45 AM		7				7			7	
7:00 AM		25				25			25	
7:15 AM		28				28			28	
7:30 AM		18				18			18	
7:45 AM		31				31			31	
8:00 AM		26				26			26	
8:15 AM		29				29			29	
8:30 AM		32				32			32	
8:45 AM		16				16			16	
9:00 AM		13				13			13	
9:15 AM		5				5			5	
9:30 AM		8				8			8	
9:45 AM		10				10			10	
10:00 AM		5				5			5	
10:15 AM		7				7			7	
10:30 AM		11				11			11	
10:45 AM		18				18			18	
11:00 AM		15				15			15	
11:15 AM		9				9			9	
11:30 AM		10				10			10	
11:45 AM		13				13			13	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd						QC JOB #: 14261905				
SPECIFIC LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd						DIRECTION: SB				
CITY/STATE: Gahanna, OH						DATE: Apr 04 2017 - Apr 04 2017				
Start Time	Mon 04-Apr-17	Tue	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 PM		14				14			14	
12:15 PM		15				15			15	
12:30 PM		11				11			11	
12:45 PM		6				6			6	
1:00 PM		11				11			11	
1:15 PM		13				13			13	
1:30 PM		17				17			17	
1:45 PM		10				10			10	
2:00 PM		12				12			12	
2:15 PM		11				11			11	
2:30 PM		14				14			14	
2:45 PM		16				16			16	
3:00 PM		16				16			16	
3:15 PM		19				19			19	
3:30 PM		28				28			28	
3:45 PM		15				15			15	
4:00 PM		17				17			17	
4:15 PM		19				19			19	
4:30 PM		16				16			16	
4:45 PM		25				25			25	
5:00 PM		38				38			38	
5:15 PM		19				19			19	
5:30 PM		25				25			25	
5:45 PM		21				21			21	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd						QC JOB #: 14261905				
SPECIFIC LOCATION: Helmbright Rd btwn Havens Corner Rd and Taylor Rd						DIRECTION: SB				
CITY/STATE: Gahanna, OH						DATE: Apr 04 2017 - Apr 04 2017				
Start Time	Mon 04-Apr-17	Tue	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 PM		10				10			10	
6:15 PM		12				12			12	
6:30 PM		15				15			15	
6:45 PM		21				21			21	
7:00 PM		15				15			15	
7:15 PM		14				14			14	
7:30 PM		15				15			15	
7:45 PM		12				12			12	
8:00 PM		14				14			14	
8:15 PM		11				11			11	
8:30 PM		7				7			7	
8:45 PM		13				13			13	
9:00 PM		9				9			9	
9:15 PM		5				5			5	
9:30 PM		5				5			5	
9:45 PM		5				5			5	
10:00 PM		4				4			4	
10:15 PM		4				4			4	
10:30 PM		7				7			7	
10:45 PM		0				0			0	
11:00 PM		4				4			4	
11:15 PM		1				1			1	
11:30 PM		4				4			4	
11:45 PM		1				1			1	
Day Total		996				996			996	
% Weekday Average		100.0%								
% Week Average		100.0%				100.0%				
AM Peak Volume		8:30 AM 32				8:30 AM 32			8:30 AM 32	
PM Peak Volume		5:00 PM 38				5:00 PM 38			5:00 PM 38	
Comments:										

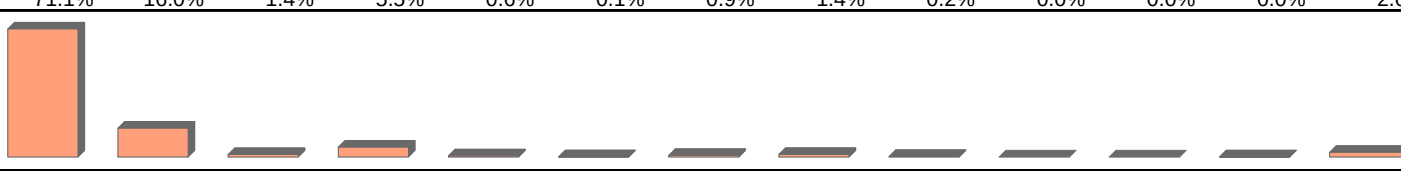
QC JOB #: 14261906
DIRECTION: NB
DATE: Mar 29 2017

Report generated on 4/6/2017 8:12 AM SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd SPECIFIC LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd CITY/STATE: Gahanna, OH														QC JOB #: 14261906 DIRECTION: NB DATE: Mar 29 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
6:00 AM	0	18	5	1	3	0	0	0	0	0	0	0	0	0	27
6:15 AM	0	33	4	2	1	0	0	0	1	0	0	0	0	0	41
6:30 AM	0	39	9	0	4	0	0	0	0	0	0	0	0	3	55
6:45 AM	0	50	11	0	2	0	0	1	0	0	0	0	0	0	64
7:00 AM	0	57	16	1	3	0	0	0	0	0	0	0	0	3	80
7:15 AM	0	68	17	1	4	0	0	2	0	0	0	0	0	3	95
7:30 AM	0	83	21	3	1	0	0	0	2	0	0	0	0	5	115
7:45 AM	0	107	21	0	5	0	1	1	1	0	0	0	1	6	143
8:00 AM	1	68	15	3	5	1	0	2	2	0	0	0	0	4	101
8:15 AM	0	96	21	3	8	1	0	1	1	2	0	0	0	3	136
8:30 AM	0	90	23	1	6	2	0	1	1	0	0	0	0	4	128
8:45 AM	0	67	20	2	3	0	0	0	0	0	0	0	0	3	95
9:00 AM	1	53	19	2	8	0	0	1	1	0	0	0	0	0	85
9:15 AM	0	39	20	2	8	2	0	0	3	0	0	0	0	1	75
9:30 AM	0	36	15	1	7	1	0	0	0	1	0	0	0	2	63
9:45 AM	0	25	7	1	8	0	0	0	1	0	0	0	0	1	43
10:00 AM	0	24	10	0	3	0	0	0	4	0	0	0	0	2	43
10:15 AM	0	27	10	0	2	0	0	0	2	0	0	0	0	1	42
10:30 AM	1	45	16	1	7	1	0	5	1	0	0	0	0	2	79
10:45 AM	0	40	13	0	8	0	0	3	4	1	0	0	0	2	71
11:00 AM	0	51	11	1	6	2	0	0	1	1	0	0	0	1	74
11:15 AM	0	36	14	0	5	0	0	1	0	1	0	0	0	0	57
11:30 AM	0	43	11	1	5	1	0	1	3	0	0	0	0	0	65
11:45 AM	0	50	12	1	3	0	0	1	0	0	0	0	0	3	70
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd														QC JOB #: 14261906	
SPECIFIC LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd														DIRECTION: NB	
CITY/STATE: Gahanna, OH														DATE: Mar 29 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 PM	0	51	17	1	6	1	0	0	1	0	0	0	0	1	78
12:15 PM	1	48	14	2	6	0	0	4	1	1	0	0	0	2	79
12:30 PM	0	51	11	2	7	0	0	1	2	0	0	0	0	2	76
12:45 PM	0	44	14	1	3	2	0	0	0	0	0	0	0	2	66
1:00 PM	0	47	10	2	7	3	0	1	3	0	0	0	0	3	76
1:15 PM	0	50	9	0	4	0	0	1	4	0	0	0	0	1	69
1:30 PM	0	41	6	0	2	2	0	0	1	1	0	0	0	0	53
1:45 PM	0	46	13	1	2	0	0	2	3	1	0	0	0	4	72
2:00 PM	0	54	9	3	6	1	0	1	0	0	0	0	0	2	76
2:15 PM	0	53	13	0	3	0	0	0	0	0	0	0	0	3	72
2:30 PM	0	87	19	2	5	1	2	1	2	1	0	0	0	2	122
2:45 PM	0	52	8	3	4	0	0	1	2	0	0	0	0	0	70
3:00 PM	0	62	7	3	6	2	0	1	1	0	0	0	0	2	84
3:15 PM	0	39	15	1	6	2	0	1	0	1	0	0	0	3	68
3:30 PM	1	73	12	2	5	1	0	0	0	0	0	0	0	5	99
3:45 PM	0	69	22	1	4	1	0	1	0	0	0	0	0	2	100
4:00 PM	0	45	7	4	7	0	0	1	3	0	0	0	0	4	71
4:15 PM	0	51	21	2	3	0	0	0	0	0	0	0	0	2	79
4:30 PM	0	62	11	2	3	0	0	0	1	0	0	0	0	1	80
4:45 PM	0	47	12	0	3	0	0	1	2	0	0	0	0	5	70
5:00 PM	0	78	12	0	3	0	0	0	0	0	0	0	0	3	96
5:15 PM	1	54	6	0	4	0	0	0	0	0	0	0	0	1	66
5:30 PM	0	46	9	0	7	0	0	0	1	0	0	0	0	1	64
5:45 PM	0	46	10	0	4	0	0	0	0	0	0	0	0	3	63
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd SPECIFIC LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd CITY/STATE: Gahanna, OH														QC JOB #: 14261906 DIRECTION: NB DATE: Mar 29 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
6:00 PM	0	43	9	0	0	0	0	1	0	0	0	0	0	1	54
6:15 PM	1	38	4	0	1	0	0	0	0	0	0	0	0	2	46
6:30 PM	0	51	3	0	2	0	0	0	0	0	0	0	0	2	58
6:45 PM	0	35	10	0	0	0	0	1	0	0	0	0	0	1	47
7:00 PM	0	39	4	0	1	0	0	0	0	0	0	0	0	2	46
7:15 PM	0	60	9	0	2	0	0	0	0	0	0	0	0	3	74
7:30 PM	0	38	6	1	1	0	0	0	0	0	0	0	0	1	47
7:45 PM	0	27	3	0	2	0	0	0	1	0	0	0	0	0	33
8:00 PM	0	24	2	0	1	0	0	0	0	0	0	0	0	0	27
8:15 PM	0	29	3	0	1	0	0	0	0	0	0	0	0	0	33
8:30 PM	0	30	5	0	0	0	0	0	0	0	0	0	0	1	36
8:45 PM	0	11	0	0	0	0	0	0	0	0	0	0	0	0	11
9:00 PM	0	12	3	0	1	0	0	0	1	0	0	0	0	0	17
9:15 PM	0	13	0	0	0	1	0	0	0	0	0	0	0	1	15
9:30 PM	0	15	2	0	0	0	0	0	0	0	0	0	0	0	17
9:45 PM	0	9	3	0	0	0	0	0	1	0	0	0	0	0	13
10:00 PM	0	19	2	0	0	0	0	0	1	0	0	0	0	0	22
10:15 PM	0	9	0	0	0	0	0	0	0	0	0	0	0	0	9
10:30 PM	0	17	2	0	0	0	0	0	0	0	0	0	0	0	19
10:45 PM	0	7	1	0	0	0	0	0	0	0	0	0	0	0	8
11:00 PM	1	22	1	0	0	1	0	0	0	0	0	0	0	0	25
11:15 PM	0	13	1	0	0	0	0	0	0	0	0	0	0	0	14
11:30 PM	0	15	1	0	0	0	0	0	0	0	0	0	0	0	16
11:45 PM	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
Day Total	8	3210	722	62	246	29	3	39	64	11	0	0	1	117	4512
Percent	0.2%	71.1%	16.0%	1.4%	5.5%	0.6%	0.1%	0.9%	1.4%	0.2%	0.0%	0.0%	0.0%	2.6%	
ADT 4512															
AM Peak	8:00 AM	7:45 AM	8:30 AM	7:30 AM	8:15 AM	8:30 AM	7:45 AM	10:30 AM	10:00 AM	8:15 AM			7:45 AM	7:45 AM	7:45 AM
Volume	1	107	23	3	8	2	1	5	4	2			1	6	143
PM Peak	12:15 PM	2:30 PM	3:45 PM	4:00 PM	12:30 PM	1:00 PM	2:30 PM	12:15 PM	1:15 PM	12:15 PM				3:30 PM	2:30 PM
Volume	1	87	22	4	7	3	2	4	4	1				5	122
Comments:															

LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd SPECIFIC LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd CITY/STATE: Gahanna, OH												QC JOB #: 14261906 DIRECTION: NB DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
Grand Total	8	3210	722	62	246	29	3	39	64	11	0	0	1	117	4512
Percent	0.2%	71.1%	16.0%	1.4%	5.5%	0.6%	0.1%	0.9%	1.4%	0.2%	0.0%	0.0%	0.0%	2.6%	
ADT 4512															
Comments:															

Report generated on 4/6/2017 8:12 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd										QC JOB #: 14261906
SPECIFIC LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd										DIRECTION: NB
CITY/STATE: Gahanna, OH										DATE: Mar 29 2017 - Mar 29 2017
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM			5			5			5	
12:15 AM			3			3			3	
12:30 AM			4			4			4	
12:45 AM			3			3			3	
1:00 AM			1			1			1	
1:15 AM			3			3			3	
1:30 AM			6			6			6	
1:45 AM			2			2			2	
2:00 AM			1			1			1	
2:15 AM			0			0			0	
2:30 AM			2			2			2	
2:45 AM			4			4			4	
3:00 AM			0			0			0	
3:15 AM			1			1			1	
3:30 AM			2			2			2	
3:45 AM			4			4			4	
4:00 AM			3			3			3	
4:15 AM			4			4			4	
4:30 AM			3			3			3	
4:45 AM			5			5			5	
5:00 AM			9			9			9	
5:15 AM			20			20			20	
5:30 AM			17			17			17	
5:45 AM			23			23			23	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd							QC JOB #: 14261906			
SPECIFIC LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd							DIRECTION: NB			
CITY/STATE: Gahanna, OH							DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 AM			27			27			27	
6:15 AM			41			41			41	
6:30 AM			55			55			55	
6:45 AM			64			64			64	
7:00 AM			80			80			80	
7:15 AM			95			95			95	
7:30 AM			115			115			115	
7:45 AM			143			143			143	
8:00 AM			101			101			101	
8:15 AM			136			136			136	
8:30 AM			128			128			128	
8:45 AM			95			95			95	
9:00 AM			85			85			85	
9:15 AM			75			75			75	
9:30 AM			63			63			63	
9:45 AM			43			43			43	
10:00 AM			43			43			43	
10:15 AM			42			42			42	
10:30 AM			79			79			79	
10:45 AM			71			71			71	
11:00 AM			74			74			74	
11:15 AM			57			57			57	
11:30 AM			65			65			65	
11:45 AM			70			70			70	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd										QC JOB #: 14261906	
SPECIFIC LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd										DIRECTION: NB	
CITY/STATE: Gahanna, OH										DATE: Mar 29 2017 - Mar 29 2017	
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile	
12:00 PM			78			78			78		
12:15 PM			79			79			79		
12:30 PM			76			76			76		
12:45 PM			66			66			66		
1:00 PM			76			76			76		
1:15 PM			69			69			69		
1:30 PM			53			53			53		
1:45 PM			72			72			72		
2:00 PM			76			76			76		
2:15 PM			72			72			72		
2:30 PM			122			122			122		
2:45 PM			70			70			70		
3:00 PM			84			84			84		
3:15 PM			68			68			68		
3:30 PM			99			99			99		
3:45 PM			100			100			100		
4:00 PM			71			71			71		
4:15 PM			79			79			79		
4:30 PM			80			80			80		
4:45 PM			70			70			70		
5:00 PM			96			96			96		
5:15 PM			66			66			66		
5:30 PM			64			64			64		
5:45 PM			63			63			63		
Day Total											
% Weekday Average											
% Week Average											
AM Peak Volume											
PM Peak Volume											
Comments:											

LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd							QC JOB #: 14261906			
SPECIFIC LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd							DIRECTION: NB			
CITY/STATE: Gahanna, OH							DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 PM			54			54			54	
6:15 PM			46			46			46	
6:30 PM			58			58			58	
6:45 PM			47			47			47	
7:00 PM			46			46			46	
7:15 PM			74			74			74	
7:30 PM			47			47			47	
7:45 PM			33			33			33	
8:00 PM			27			27			27	
8:15 PM			33			33			33	
8:30 PM			36			36			36	
8:45 PM			11			11			11	
9:00 PM			17			17			17	
9:15 PM			15			15			15	
9:30 PM			17			17			17	
9:45 PM			13			13			13	
10:00 PM			22			22			22	
10:15 PM			9			9			9	
10:30 PM			19			19			19	
10:45 PM			8			8			8	
11:00 PM			25			25			25	
11:15 PM			14			14			14	
11:30 PM			16			16			16	
11:45 PM			4			4			4	
Day Total			4512			4512			4512	
% Weekday Average			100.0%							
% Week Average			100.0%			100.0%				
AM Peak			7:45 AM			7:45 AM			7:45 AM	
Volume			143			143			143	
PM Peak			2:30 PM			2:30 PM			2:30 PM	
Volume			122			122			122	
Comments:										

LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd														QC JOB #: 14261906	
SPECIFIC LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd														DIRECTION: NB/SB	
CITY/STATE: Gahanna, OH														DATE: Mar 29 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 AM	0	5	1	0	0	0	0	0	1	0	0	0	0	0	7
12:15 AM	0	4	1	0	0	0	0	0	1	0	0	0	0	0	6
12:30 AM	0	6	4	0	0	0	0	0	0	0	0	0	0	0	10
12:45 AM	0	4	1	0	0	0	0	0	2	0	0	0	0	1	8
1:00 AM	0	3	0	0	0	0	0	0	1	0	0	0	0	0	4
1:15 AM	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
1:30 AM	0	5	2	0	0	0	0	0	1	0	0	0	0	0	8
1:45 AM	0	4	0	0	0	0	0	0	1	0	0	0	0	0	5
2:00 AM	0	1	0	0	0	0	0	0	1	0	0	0	0	0	2
2:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
2:30 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
2:45 AM	0	4	1	0	0	0	0	0	0	0	0	0	0	0	5
3:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
3:15 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
3:30 AM	0	4	1	0	1	0	0	0	0	0	0	0	0	0	6
3:45 AM	0	3	1	0	0	0	0	0	1	0	0	0	0	0	5
4:00 AM	0	3	2	0	3	0	0	1	0	0	0	0	0	0	9
4:15 AM	0	13	0	0	0	0	0	0	2	0	0	0	0	0	15
4:30 AM	0	9	2	0	1	0	0	0	2	0	0	0	0	0	14
4:45 AM	0	12	3	0	0	0	0	0	0	0	0	0	0	0	15
5:00 AM	0	20	4	0	1	0	0	0	1	0	0	0	0	0	26
5:15 AM	0	33	6	1	1	0	0	0	1	0	0	0	0	0	42
5:30 AM	0	44	6	1	0	0	0	0	2	0	0	0	0	0	53
5:45 AM	0	73	11	0	5	0	0	0	0	0	0	0	0	0	89
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd														QC JOB #: 14261906	
SPECIFIC LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd														DIRECTION: NB/SB	
CITY/STATE: Gahanna, OH														DATE: Mar 29 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
6:00 AM	0	30	12	1	4	0	0	0	1	0	0	0	0	0	48
6:15 AM	0	59	13	2	2	0	0	0	2	0	0	0	0	0	78
6:30 AM	0	61	24	0	7	0	0	0	0	0	0	0	0	5	97
6:45 AM	0	94	29	2	4	0	0	1	2	0	0	0	0	1	133
7:00 AM	0	85	35	1	6	0	0	0	0	0	0	0	0	3	130
7:15 AM	0	118	37	2	10	0	0	2	0	0	0	0	0	8	177
7:30 AM	0	128	27	4	2	0	0	0	2	0	0	0	0	10	173
7:45 AM	1	171	38	3	8	0	1	2	2	0	0	0	1	10	237
8:00 AM	1	133	28	7	7	1	0	3	3	0	0	0	0	11	194
8:15 AM	1	142	29	4	11	2	1	2	1	2	0	0	0	6	201
8:30 AM	0	142	33	3	11	2	0	2	1	0	0	0	0	5	199
8:45 AM	0	121	29	3	5	0	0	3	2	0	0	0	0	7	170
9:00 AM	1	96	29	4	13	1	0	3	3	0	0	0	0	1	151
9:15 AM	0	73	29	3	10	4	1	1	3	1	0	0	0	2	127
9:30 AM	0	69	21	3	11	1	0	2	0	1	0	0	0	6	114
9:45 AM	0	54	19	1	13	0	0	1	3	0	0	0	0	2	93
10:00 AM	0	51	15	2	6	2	0	4	7	0	0	0	0	4	91
10:15 AM	0	49	17	0	6	0	0	3	3	0	0	0	0	5	83
10:30 AM	2	66	31	2	9	3	0	7	2	0	0	0	0	4	126
10:45 AM	0	76	24	6	11	2	0	4	5	1	0	0	0	3	132
11:00 AM	1	79	26	4	10	3	0	2	2	1	0	0	0	5	133
11:15 AM	0	67	25	0	6	2	0	4	1	1	0	0	0	0	106
11:30 AM	1	85	21	3	11	3	0	4	5	1	0	0	0	1	135
11:45 AM	1	91	17	2	9	1	0	5	1	0	0	0	0	4	131
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd														QC JOB #: 14261906	
SPECIFIC LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd														DIRECTION: NB/SB	
CITY/STATE: Gahanna, OH														DATE: Mar 29 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 PM	0	83	28	2	12	2	0	1	2	0	0	0	0	6	136
12:15 PM	1	98	24	3	7	1	0	6	4	1	0	0	0	4	149
12:30 PM	0	97	26	4	11	1	0	4	5	0	0	0	0	4	152
12:45 PM	0	106	26	1	8	3	0	3	0	0	0	0	0	6	153
1:00 PM	0	94	19	3	11	4	0	2	6	0	0	0	0	8	147
1:15 PM	0	101	21	2	7	0	0	4	5	1	0	0	0	4	145
1:30 PM	0	85	19	2	7	2	0	3	1	1	0	0	0	1	121
1:45 PM	1	93	29	1	7	1	0	3	5	2	0	0	0	7	149
2:00 PM	1	90	25	4	15	4	1	2	0	0	0	0	0	5	147
2:15 PM	0	102	27	2	5	0	0	1	4	0	0	0	0	6	147
2:30 PM	0	127	31	5	8	3	2	3	3	1	0	0	0	6	189
2:45 PM	0	107	17	6	10	0	0	2	3	1	0	0	0	2	148
3:00 PM	1	117	13	4	13	4	0	5	1	0	0	0	0	5	163
3:15 PM	1	82	28	1	14	3	0	2	2	1	0	0	0	4	138
3:30 PM	1	125	27	4	10	1	0	1	0	0	0	0	0	10	179
3:45 PM	0	116	35	3	11	2	0	3	2	2	0	0	1	5	180
4:00 PM	0	113	15	5	11	0	1	4	4	2	0	0	0	9	164
4:15 PM	1	108	38	6	4	0	0	2	0	0	0	0	0	2	161
4:30 PM	2	142	19	4	5	0	0	2	2	0	0	0	0	3	179
4:45 PM	1	120	20	0	6	0	0	4	5	0	0	0	0	7	163
5:00 PM	0	164	25	0	6	0	0	2	0	0	0	0	0	8	205
5:15 PM	1	154	19	0	6	0	0	0	1	0	0	0	0	4	185
5:30 PM	0	138	22	0	7	0	0	1	1	0	0	0	0	2	171
5:45 PM	0	133	16	0	6	0	0	1	1	0	0	0	0	5	162
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd SPECIFIC LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd CITY/STATE: Gahanna, OH														QC JOB #: 14261906 DIRECTION: NB/SB DATE: Mar 29 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
6:00 PM	0	109	13	1	2	0	0	2	0	0	0	0	0	2	129
6:15 PM	1	92	10	0	2	0	0	3	1	0	0	0	0	3	112
6:30 PM	2	94	5	0	4	0	0	2	0	0	0	0	0	4	111
6:45 PM	1	77	19	0	0	2	0	2	1	0	0	0	0	1	103
7:00 PM	0	75	9	0	1	0	0	0	0	0	0	0	0	2	87
7:15 PM	0	89	15	0	2	0	0	0	0	0	0	0	0	5	111
7:30 PM	0	72	12	1	1	0	0	0	0	0	0	0	0	2	88
7:45 PM	0	56	7	0	2	0	0	0	1	0	0	0	0	0	66
8:00 PM	0	52	6	0	3	0	0	1	0	0	0	0	0	2	64
8:15 PM	0	51	6	0	1	0	0	0	1	0	0	0	0	0	59
8:30 PM	0	59	6	0	0	0	0	0	1	0	0	0	0	2	68
8:45 PM	1	34	3	0	0	0	0	0	0	0	0	0	0	1	39
9:00 PM	0	31	7	0	1	0	0	0	1	0	0	0	0	0	40
9:15 PM	0	30	5	0	0	1	0	0	1	0	0	0	0	5	42
9:30 PM	0	41	4	0	0	0	0	0	0	0	0	0	0	0	45
9:45 PM	0	23	5	0	0	0	0	0	1	0	0	0	0	0	29
10:00 PM	0	31	3	0	0	0	0	0	1	0	0	0	0	0	35
10:15 PM	0	21	1	0	0	0	0	0	1	0	0	0	0	0	23
10:30 PM	0	27	3	0	0	0	0	0	0	0	0	0	0	0	30
10:45 PM	0	17	3	0	0	0	0	0	1	0	0	0	0	0	21
11:00 PM	1	29	1	0	0	1	0	0	0	0	0	0	0	1	33
11:15 PM	0	21	3	0	0	0	0	0	0	0	0	0	0	0	24
11:30 PM	0	22	1	0	0	1	0	0	0	0	0	0	0	0	24
11:45 PM	0	7	1	0	0	0	0	0	0	0	0	0	0	0	8
Day Total	26	6254	1372	128	431	63	7	127	137	20	0	0	2	257	8824
Percent	0.3%	70.9%	15.5%	1.5%	4.9%	0.7%	0.1%	1.4%	1.6%	0.2%	0.0%	0.0%	0.0%	2.9%	
ADT 8824															
AM Peak	10:30 AM	7:45 AM	7:45 AM	8:00 AM	9:00 AM	9:15 AM	7:45 AM	10:30 AM	10:00 AM	8:15 AM			7:45 AM	8:00 AM	7:45 AM
Volume	2	171	38	7	13	4	1	7	7	2			1	11	237
PM Peak	4:30 PM	5:00 PM	4:15 PM	2:45 PM	2:00 PM	1:00 PM	2:30 PM	12:15 PM	1:00 PM	1:45 PM			3:45 PM	3:30 PM	5:00 PM
Volume	2	164	38	6	15	4	2	6	6	2			1	10	205
Comments:															

LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd SPECIFIC LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd CITY/STATE: Gahanna, OH												QC JOB #: 14261906 DIRECTION: NB/SB DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
Grand Total	26	6254	1372	128	431	63	7	127	137	20	0	0	2	257	8824
Percent	0.3%	70.9%	15.5%	1.5%	4.9%	0.7%	0.1%	1.4%	1.6%	0.2%	0.0%	0.0%	0.0%	2.9%	
ADT 8824															
Comments:															

Report generated on 4/6/2017 8:12 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd							QC JOB #: 14261906			
SPECIFIC LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd							DIRECTION: NB/SB			
CITY/STATE: Gahanna, OH							DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM			7			7			7	
12:15 AM			6			6			6	
12:30 AM			10			10			10	
12:45 AM			8			8			8	
1:00 AM			4			4			4	
1:15 AM			5			5			5	
1:30 AM			8			8			8	
1:45 AM			5			5			5	
2:00 AM			2			2			2	
2:15 AM			1			1			1	
2:30 AM			3			3			3	
2:45 AM			5			5			5	
3:00 AM			1			1			1	
3:15 AM			2			2			2	
3:30 AM			6			6			6	
3:45 AM			5			5			5	
4:00 AM			9			9			9	
4:15 AM			15			15			15	
4:30 AM			14			14			14	
4:45 AM			15			15			15	
5:00 AM			26			26			26	
5:15 AM			42			42			42	
5:30 AM			53			53			53	
5:45 AM			89			89			89	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd							QC JOB #: 14261906			
SPECIFIC LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd							DIRECTION: NB/SB			
CITY/STATE: Gahanna, OH							DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 AM			48			48			48	
6:15 AM			78			78			78	
6:30 AM			97			97			97	
6:45 AM			133			133			133	
7:00 AM			130			130			130	
7:15 AM			177			177			177	
7:30 AM			173			173			173	
7:45 AM			237			237			237	
8:00 AM			194			194			194	
8:15 AM			201			201			201	
8:30 AM			199			199			199	
8:45 AM			170			170			170	
9:00 AM			151			151			151	
9:15 AM			127			127			127	
9:30 AM			114			114			114	
9:45 AM			93			93			93	
10:00 AM			91			91			91	
10:15 AM			83			83			83	
10:30 AM			126			126			126	
10:45 AM			132			132			132	
11:00 AM			133			133			133	
11:15 AM			106			106			106	
11:30 AM			135			135			135	
11:45 AM			131			131			131	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd							QC JOB #: 14261906			
SPECIFIC LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd							DIRECTION: NB/SB			
CITY/STATE: Gahanna, OH							DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 PM			136			136			136	
12:15 PM			149			149			149	
12:30 PM			152			152			152	
12:45 PM			153			153			153	
1:00 PM			147			147			147	
1:15 PM			145			145			145	
1:30 PM			121			121			121	
1:45 PM			149			149			149	
2:00 PM			147			147			147	
2:15 PM			147			147			147	
2:30 PM			189			189			189	
2:45 PM			148			148			148	
3:00 PM			163			163			163	
3:15 PM			138			138			138	
3:30 PM			179			179			179	
3:45 PM			180			180			180	
4:00 PM			164			164			164	
4:15 PM			161			161			161	
4:30 PM			179			179			179	
4:45 PM			163			163			163	
5:00 PM			205			205			205	
5:15 PM			185			185			185	
5:30 PM			171			171			171	
5:45 PM			162			162			162	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

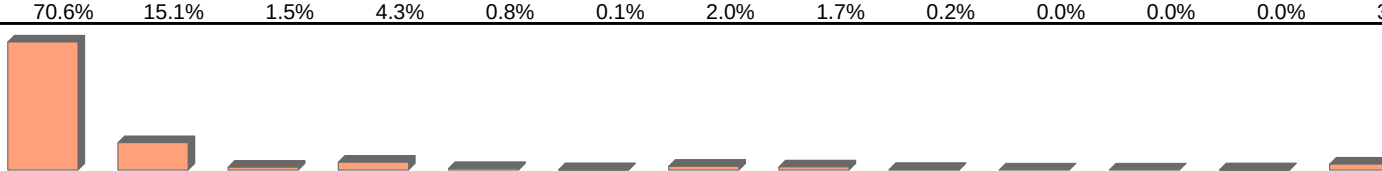
LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd							QC JOB #: 14261906			
SPECIFIC LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd							DIRECTION: NB/SB			
CITY/STATE: Gahanna, OH							DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 PM			129			129			129	
6:15 PM			112			112			112	
6:30 PM			111			111			111	
6:45 PM			103			103			103	
7:00 PM			87			87			87	
7:15 PM			111			111			111	
7:30 PM			88			88			88	
7:45 PM			66			66			66	
8:00 PM			64			64			64	
8:15 PM			59			59			59	
8:30 PM			68			68			68	
8:45 PM			39			39			39	
9:00 PM			40			40			40	
9:15 PM			42			42			42	
9:30 PM			45			45			45	
9:45 PM			29			29			29	
10:00 PM			35			35			35	
10:15 PM			23			23			23	
10:30 PM			30			30			30	
10:45 PM			21			21			21	
11:00 PM			33			33			33	
11:15 PM			24			24			24	
11:30 PM			24			24			24	
11:45 PM			8			8			8	
Day Total			8824			8824			8824	
% Weekday Average			100.0%							
% Week Average			100.0%			100.0%				
AM Peak Volume			7:45 AM 237			7:45 AM 237			7:45 AM 237	
PM Peak Volume			5:00 PM 205			5:00 PM 205			5:00 PM 205	
Comments:										

LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd													QC JOB #: 14261906		
SPECIFIC LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd													DIRECTION: SB		
CITY/STATE: Gahanna, OH													DATE: Mar 29 2017		
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 AM	0	0	1	0	0	0	0	0	1	0	0	0	0	0	2
12:15 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
12:30 AM	0	4	2	0	0	0	0	0	0	0	0	0	0	0	6
12:45 AM	0	3	0	0	0	0	0	0	1	0	0	0	0	1	5
1:00 AM	0	2	0	0	0	0	0	0	1	0	0	0	0	0	3
1:15 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
1:30 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
1:45 AM	0	2	0	0	0	0	0	0	1	0	0	0	0	0	3
2:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
2:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
2:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
2:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
3:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
3:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
3:30 AM	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4
3:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4:00 AM	0	2	1	0	2	0	0	1	0	0	0	0	0	0	6
4:15 AM	0	9	0	0	0	0	0	0	2	0	0	0	0	0	11
4:30 AM	0	8	1	0	0	0	0	0	2	0	0	0	0	0	11
4:45 AM	0	9	1	0	0	0	0	0	0	0	0	0	0	0	10
5:00 AM	0	13	4	0	0	0	0	0	0	0	0	0	0	0	17
5:15 AM	0	17	4	0	0	0	0	0	1	0	0	0	0	0	22
5:30 AM	0	32	2	0	0	0	0	0	2	0	0	0	0	0	36
5:45 AM	0	57	7	0	2	0	0	0	0	0	0	0	0	0	66
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd														QC JOB #: 14261906	
SPECIFIC LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd														DIRECTION: SB	
CITY/STATE: Gahanna, OH														DATE: Mar 29 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
6:00 AM	0	12	7	0	1	0	0	0	1	0	0	0	0	0	21
6:15 AM	0	26	9	0	1	0	0	0	1	0	0	0	0	0	37
6:30 AM	0	22	15	0	3	0	0	0	0	0	0	0	0	2	42
6:45 AM	0	44	18	2	2	0	0	0	2	0	0	0	0	1	69
7:00 AM	0	28	19	0	3	0	0	0	0	0	0	0	0	0	50
7:15 AM	0	50	20	1	6	0	0	0	0	0	0	0	0	5	82
7:30 AM	0	45	6	1	1	0	0	0	0	0	0	0	0	5	58
7:45 AM	1	64	17	3	3	0	0	1	1	0	0	0	0	4	94
8:00 AM	0	65	13	4	2	0	0	1	1	0	0	0	0	7	93
8:15 AM	1	46	8	1	3	1	1	1	0	0	0	0	0	3	65
8:30 AM	0	52	10	2	5	0	0	1	0	0	0	0	0	1	71
8:45 AM	0	54	9	1	2	0	0	3	2	0	0	0	0	4	75
9:00 AM	0	43	10	2	5	1	0	2	2	0	0	0	0	1	66
9:15 AM	0	34	9	1	2	2	1	1	0	1	0	0	0	1	52
9:30 AM	0	33	6	2	4	0	0	2	0	0	0	0	0	4	51
9:45 AM	0	29	12	0	5	0	0	1	2	0	0	0	0	1	50
10:00 AM	0	27	5	2	3	2	0	4	3	0	0	0	0	2	48
10:15 AM	0	22	7	0	4	0	0	3	1	0	0	0	0	4	41
10:30 AM	1	21	15	1	2	2	0	2	1	0	0	0	0	2	47
10:45 AM	0	36	11	6	3	2	0	1	1	0	0	0	0	1	61
11:00 AM	1	28	15	3	4	1	0	2	1	0	0	0	0	4	59
11:15 AM	0	31	11	0	1	2	0	3	1	0	0	0	0	0	49
11:30 AM	1	42	10	2	6	2	0	3	2	1	0	0	0	1	70
11:45 AM	1	41	5	1	6	1	0	4	1	0	0	0	0	1	61
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd														QC JOB #: 14261906	
SPECIFIC LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd														DIRECTION: SB	
CITY/STATE: Gahanna, OH														DATE: Mar 29 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 PM	0	32	11	1	6	1	0	1	1	0	0	0	0	5	58
12:15 PM	0	50	10	1	1	1	0	2	3	0	0	0	0	2	70
12:30 PM	0	46	15	2	4	1	0	3	3	0	0	0	0	2	76
12:45 PM	0	62	12	0	5	1	0	3	0	0	0	0	0	4	87
1:00 PM	0	47	9	1	4	1	0	1	3	0	0	0	0	5	71
1:15 PM	0	51	12	2	3	0	0	3	1	1	0	0	0	3	76
1:30 PM	0	44	13	2	5	0	0	3	0	0	0	0	0	1	68
1:45 PM	1	47	16	0	5	1	0	1	2	1	0	0	0	3	77
2:00 PM	1	36	16	1	9	3	1	1	0	0	0	0	0	3	71
2:15 PM	0	49	14	2	2	0	0	1	4	0	0	0	0	3	75
2:30 PM	0	40	12	3	3	2	0	2	1	0	0	0	0	4	67
2:45 PM	0	55	9	3	6	0	0	1	1	1	0	0	0	2	78
3:00 PM	1	55	6	1	7	2	0	4	0	0	0	0	0	3	79
3:15 PM	1	43	13	0	8	1	0	1	2	0	0	0	0	1	70
3:30 PM	0	52	15	2	5	0	0	1	0	0	0	0	0	5	80
3:45 PM	0	47	13	2	7	1	0	2	2	2	0	0	1	3	80
4:00 PM	0	68	8	1	4	0	1	3	1	2	0	0	0	5	93
4:15 PM	1	57	17	4	1	0	0	2	0	0	0	0	0	0	82
4:30 PM	2	80	8	2	2	0	0	2	1	0	0	0	0	2	99
4:45 PM	1	73	8	0	3	0	0	3	3	0	0	0	0	2	93
5:00 PM	0	86	13	0	3	0	0	2	0	0	0	0	0	5	109
5:15 PM	0	100	13	0	2	0	0	0	1	0	0	0	0	3	119
5:30 PM	0	92	13	0	0	0	0	1	0	0	0	0	0	1	107
5:45 PM	0	87	6	0	2	0	0	1	1	0	0	0	0	2	99
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd SPECIFIC LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd CITY/STATE: Gahanna, OH														QC JOB #: 14261906 DIRECTION: SB DATE: Mar 29 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
6:00 PM	0	66	4	1	2	0	0	1	0	0	0	0	0	1	75
6:15 PM	0	54	6	0	1	0	0	3	1	0	0	0	0	1	66
6:30 PM	2	43	2	0	2	0	0	2	0	0	0	0	0	2	53
6:45 PM	1	42	9	0	0	2	0	1	1	0	0	0	0	0	56
7:00 PM	0	36	5	0	0	0	0	0	0	0	0	0	0	0	41
7:15 PM	0	29	6	0	0	0	0	0	0	0	0	0	0	2	37
7:30 PM	0	34	6	0	0	0	0	0	0	0	0	0	0	1	41
7:45 PM	0	29	4	0	0	0	0	0	0	0	0	0	0	0	33
8:00 PM	0	28	4	0	2	0	0	1	0	0	0	0	0	2	37
8:15 PM	0	22	3	0	0	0	0	0	1	0	0	0	0	0	26
8:30 PM	0	29	1	0	0	0	0	0	1	0	0	0	0	1	32
8:45 PM	1	23	3	0	0	0	0	0	0	0	0	0	0	1	28
9:00 PM	0	19	4	0	0	0	0	0	0	0	0	0	0	0	23
9:15 PM	0	17	5	0	0	0	0	0	1	0	0	0	0	4	27
9:30 PM	0	26	2	0	0	0	0	0	0	0	0	0	0	0	28
9:45 PM	0	14	2	0	0	0	0	0	0	0	0	0	0	0	16
10:00 PM	0	12	1	0	0	0	0	0	0	0	0	0	0	0	13
10:15 PM	0	12	1	0	0	0	0	0	1	0	0	0	0	0	14
10:30 PM	0	10	1	0	0	0	0	0	0	0	0	0	0	0	11
10:45 PM	0	10	2	0	0	0	0	0	1	0	0	0	0	0	13
11:00 PM	0	7	0	0	0	0	0	0	0	0	0	0	0	1	8
11:15 PM	0	8	2	0	0	0	0	0	0	0	0	0	0	0	10
11:30 PM	0	7	0	0	0	1	0	0	0	0	0	0	0	0	8
11:45 PM	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4
Day Total	18	3044	650	66	185	34	4	88	73	9	0	0	1	140	4312
Percent	0.4%	70.6%	15.1%	1.5%	4.3%	0.8%	0.1%	2.0%	1.7%	0.2%	0.0%	0.0%	0.0%	3.2%	
ADT 4312															
AM Peak	7:45 AM	8:00 AM	7:15 AM	10:45 AM	7:15 AM	9:15 AM	8:15 AM	10:00 AM	10:00 AM	9:15 AM				8:00 AM	7:45 AM
Volume	1	65	20	6	6	2	1	4	3	1				7	94
PM Peak	4:30 PM	5:15 PM	4:15 PM	4:15 PM	2:00 PM	2:00 PM	2:00 PM	3:00 PM	2:15 PM	3:45 PM			3:45 PM	12:00 PM	5:15 PM
Volume	2	100	17	4	9	3	1	4	4	2			1	5	119
Comments:															

LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd SPECIFIC LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd CITY/STATE: Gahanna, OH													QC JOB #: 14261906 DIRECTION: SB DATE: Mar 29 2017 - Mar 29 2017		
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
Grand Total	18	3044	650	66	185	34	4	88	73	9	0	0	1	140	4312
Percent	0.4%	70.6%	15.1%	1.5%	4.3%	0.8%	0.1%	2.0%	1.7%	0.2%	0.0%	0.0%	0.0%	3.2%	
ADT 4312															
Comments:															

Report generated on 4/6/2017 8:12 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd							QC JOB #: 14261906			
SPECIFIC LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd							DIRECTION: SB			
CITY/STATE: Gahanna, OH							DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM			2			2			2	
12:15 AM			3			3			3	
12:30 AM			6			6			6	
12:45 AM			5			5			5	
1:00 AM			3			3			3	
1:15 AM			2			2			2	
1:30 AM			2			2			2	
1:45 AM			3			3			3	
2:00 AM			1			1			1	
2:15 AM			1			1			1	
2:30 AM			1			1			1	
2:45 AM			1			1			1	
3:00 AM			1			1			1	
3:15 AM			1			1			1	
3:30 AM			4			4			4	
3:45 AM			1			1			1	
4:00 AM			6			6			6	
4:15 AM			11			11			11	
4:30 AM			11			11			11	
4:45 AM			10			10			10	
5:00 AM			17			17			17	
5:15 AM			22			22			22	
5:30 AM			36			36			36	
5:45 AM			66			66			66	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd							QC JOB #: 14261906			
SPECIFIC LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd							DIRECTION: SB			
CITY/STATE: Gahanna, OH							DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 AM			21			21			21	
6:15 AM			37			37			37	
6:30 AM			42			42			42	
6:45 AM			69			69			69	
7:00 AM			50			50			50	
7:15 AM			82			82			82	
7:30 AM			58			58			58	
7:45 AM			94			94			94	
8:00 AM			93			93			93	
8:15 AM			65			65			65	
8:30 AM			71			71			71	
8:45 AM			75			75			75	
9:00 AM			66			66			66	
9:15 AM			52			52			52	
9:30 AM			51			51			51	
9:45 AM			50			50			50	
10:00 AM			48			48			48	
10:15 AM			41			41			41	
10:30 AM			47			47			47	
10:45 AM			61			61			61	
11:00 AM			59			59			59	
11:15 AM			49			49			49	
11:30 AM			70			70			70	
11:45 AM			61			61			61	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd							QC JOB #: 14261906			
SPECIFIC LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd							DIRECTION: SB			
CITY/STATE: Gahanna, OH							DATE: Mar 29 2017 - Mar 29 2017			
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 PM			58			58			58	
12:15 PM			70			70			70	
12:30 PM			76			76			76	
12:45 PM			87			87			87	
1:00 PM			71			71			71	
1:15 PM			76			76			76	
1:30 PM			68			68			68	
1:45 PM			77			77			77	
2:00 PM			71			71			71	
2:15 PM			75			75			75	
2:30 PM			67			67			67	
2:45 PM			78			78			78	
3:00 PM			79			79			79	
3:15 PM			70			70			70	
3:30 PM			80			80			80	
3:45 PM			80			80			80	
4:00 PM			93			93			93	
4:15 PM			82			82			82	
4:30 PM			99			99			99	
4:45 PM			93			93			93	
5:00 PM			109			109			109	
5:15 PM			119			119			119	
5:30 PM			107			107			107	
5:45 PM			99			99			99	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

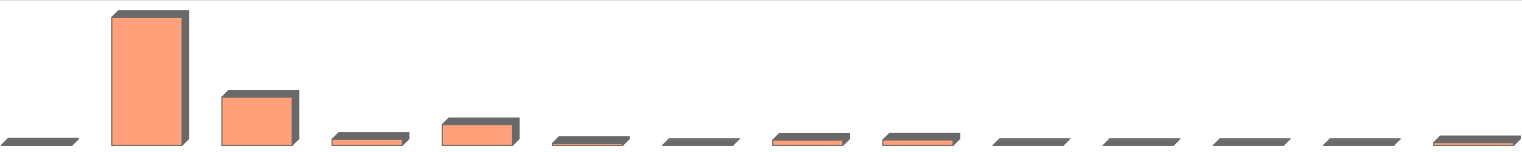
LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd						QC JOB #: 14261906				
SPECIFIC LOCATION: Morrison Rd btwn Tech Center Dr and Claycraft Rd						DIRECTION: SB				
CITY/STATE: Gahanna, OH						DATE: Mar 29 2017 - Mar 29 2017				
Start Time	Mon	Tue	Wed 29-Mar-17	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 PM			75			75			75	
6:15 PM			66			66			66	
6:30 PM			53			53			53	
6:45 PM			56			56			56	
7:00 PM			41			41			41	
7:15 PM			37			37			37	
7:30 PM			41			41			41	
7:45 PM			33			33			33	
8:00 PM			37			37			37	
8:15 PM			26			26			26	
8:30 PM			32			32			32	
8:45 PM			28			28			28	
9:00 PM			23			23			23	
9:15 PM			27			27			27	
9:30 PM			28			28			28	
9:45 PM			16			16			16	
10:00 PM			13			13			13	
10:15 PM			14			14			14	
10:30 PM			11			11			11	
10:45 PM			13			13			13	
11:00 PM			8			8			8	
11:15 PM			10			10			10	
11:30 PM			8			8			8	
11:45 PM			4			4			4	
Day Total			4312			4312			4312	
% Weekday Average			100.0%							
% Week Average			100.0%			100.0%				
AM Peak Volume			7:45 AM 94			7:45 AM 94			7:45 AM 94	
PM Peak Volume			5:15 PM 119			5:15 PM 119			5:15 PM 119	
Comments:										

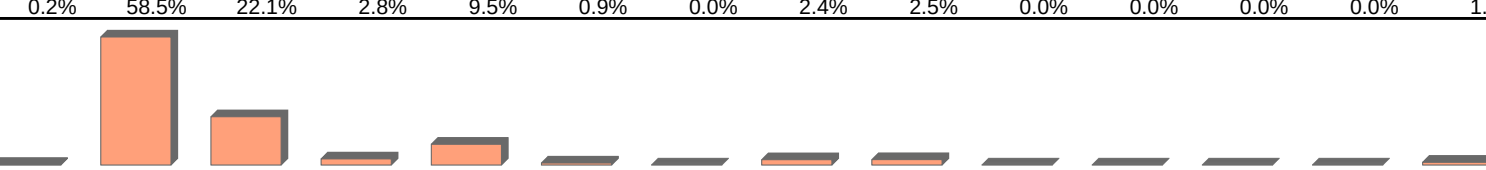
QC JOB #: 14261907
DIRECTION: EB
DATE: Apr 04 2017

Report generated on 4/6/2017 8:12 AM SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

LOCATION: Claycraft Rd bwtm Morrison Rd and Taylor Station Rd SPECIFIC LOCATION: Claycraft Rd bwtm Morrison Rd and Taylor Station Rd CITY/STATE: Columbus, OH														QC JOB #: 14261907 DIRECTION: EB DATE: Apr 04 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
6:00 AM	0	10	3	1	3	0	0	0	1	0	0	0	0	0	18
6:15 AM	0	26	8	1	2	0	0	0	2	0	0	0	0	0	39
6:30 AM	0	20	17	2	3	0	0	0	0	0	0	0	0	0	42
6:45 AM	1	47	21	1	4	0	0	0	0	0	0	0	0	0	74
7:00 AM	0	23	25	0	6	0	0	1	1	0	0	0	0	1	57
7:15 AM	0	36	23	1	1	0	0	0	1	0	0	0	0	1	63
7:30 AM	0	31	9	1	3	0	0	0	2	0	0	0	0	1	47
7:45 AM	0	39	20	2	2	1	0	0	0	0	0	0	0	1	65
8:00 AM	0	39	12	3	5	0	0	0	0	0	0	0	0	3	62
8:15 AM	0	31	9	1	3	0	0	0	0	0	0	0	0	0	44
8:30 AM	0	25	7	0	3	0	0	0	1	0	0	0	0	0	36
8:45 AM	0	21	5	1	1	1	0	1	1	0	0	0	0	0	31
9:00 AM	0	26	7	2	0	0	0	1	1	0	0	0	0	0	37
9:15 AM	0	15	4	0	3	1	0	0	1	0	0	0	0	0	24
9:30 AM	0	12	7	2	5	0	0	2	1	0	0	0	0	0	29
9:45 AM	0	9	9	0	3	0	0	1	1	0	0	0	0	0	23
10:00 AM	0	9	9	2	4	0	0	0	0	0	0	0	0	0	24
10:15 AM	0	7	7	0	1	0	0	0	0	0	0	0	0	1	16
10:30 AM	0	5	10	0	5	0	0	2	1	0	0	0	0	0	23
10:45 AM	0	11	5	0	6	1	0	0	2	0	0	0	0	1	26
11:00 AM	0	8	1	0	6	0	0	2	0	0	0	0	0	0	17
11:15 AM	0	15	7	0	4	0	0	1	0	0	0	0	0	0	27
11:30 AM	0	15	9	1	4	0	0	5	0	0	0	0	0	0	34
11:45 AM	0	16	7	1	3	0	0	0	2	0	0	0	0	0	29
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

LOCATION: Claycraft Rd bwtm Morrison Rd and Taylor Station Rd														QC JOB #: 14261907	
SPECIFIC LOCATION: Claycraft Rd bwtm Morrison Rd and Taylor Station Rd														DIRECTION: EB	
CITY/STATE: Columbus, OH														DATE: Apr 04 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 PM	0	22	6	1	4	1	0	1	1	0	0	0	0	1	37
12:15 PM	0	17	11	1	5	0	0	1	1	0	0	0	0	0	36
12:30 PM	0	17	9	3	5	0	0	2	0	0	0	0	0	1	37
12:45 PM	0	20	5	1	8	0	0	0	1	0	0	0	0	3	38
1:00 PM	0	26	7	3	6	2	0	1	0	0	0	0	0	0	45
1:15 PM	0	14	11	1	2	0	0	1	0	0	0	0	0	0	29
1:30 PM	0	21	9	0	5	0	0	1	1	0	0	0	0	1	38
1:45 PM	0	27	7	1	7	2	0	2	2	0	0	0	0	1	49
2:00 PM	0	13	4	0	5	2	0	1	1	0	0	0	0	0	26
2:15 PM	0	10	10	1	2	3	0	2	1	0	0	0	0	0	29
2:30 PM	0	14	7	2	2	0	0	1	0	0	0	0	0	0	26
2:45 PM	0	13	5	2	4	0	0	0	0	0	0	0	0	0	24
3:00 PM	0	21	8	4	11	1	0	4	0	0	0	0	0	0	49
3:15 PM	0	15	8	0	5	0	0	0	0	0	0	0	0	3	31
3:30 PM	1	9	15	1	7	2	0	0	1	0	0	0	0	5	41
3:45 PM	0	24	5	0	3	0	0	0	2	0	0	0	0	0	34
4:00 PM	0	19	6	2	7	1	0	2	1	0	0	0	0	0	38
4:15 PM	0	26	2	4	7	0	0	2	1	0	0	0	0	0	42
4:30 PM	0	24	4	1	2	0	0	0	0	0	0	0	0	0	31
4:45 PM	0	20	4	2	1	0	0	2	1	0	0	0	0	1	31
5:00 PM	0	41	5	2	3	0	0	1	1	0	0	0	0	0	53
5:15 PM	0	40	7	0	0	0	0	0	2	0	0	0	0	0	49
5:30 PM	1	27	8	1	2	0	0	3	1	0	0	0	0	0	43
5:45 PM	0	32	7	1	2	0	0	3	3	0	0	0	0	0	48
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

LOCATION: Claycraft Rd bwtm Morrison Rd and Taylor Station Rd														QC JOB #: 14261907	
SPECIFIC LOCATION: Claycraft Rd bwtm Morrison Rd and Taylor Station Rd														DIRECTION: EB	
CITY/STATE: Columbus, OH														DATE: Apr 04 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
6:00 PM	0	15	4	0	1	0	0	0	1	0	0	0	0	0	21
6:15 PM	0	14	5	0	1	0	0	2	2	0	0	0	0	0	24
6:30 PM	1	18	1	0	0	0	0	2	0	0	0	0	0	1	23
6:45 PM	0	15	4	0	1	0	0	1	0	0	0	0	0	0	21
7:00 PM	0	9	2	0	0	0	0	0	0	0	0	0	0	0	11
7:15 PM	0	15	1	0	0	0	0	0	2	0	0	0	0	0	18
7:30 PM	0	12	1	0	2	0	0	0	0	0	0	0	0	0	15
7:45 PM	0	6	2	0	1	0	0	0	0	0	0	0	0	0	9
8:00 PM	0	4	2	0	0	0	0	0	0	0	0	0	0	0	6
8:15 PM	0	11	2	0	0	0	0	0	0	0	0	0	0	0	13
8:30 PM	0	5	2	0	0	0	0	0	1	0	0	0	0	0	8
8:45 PM	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4
9:00 PM	0	2	1	1	0	0	0	0	0	0	0	0	0	0	4
9:15 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
9:30 PM	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
9:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
10:00 PM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
10:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 PM	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
10:45 PM	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4
11:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
11:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 PM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
11:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Day Total	4	1242	468	59	201	19	0	51	52	0	0	0	0	26	2122
Percent	0.2%	58.5%	22.1%	2.8%	9.5%	0.9%	0.0%	2.4%	2.5%	0.0%	0.0%	0.0%	0.0%	1.2%	
ADT 2122															
AM Peak	6:45 AM	6:45 AM	7:00 AM	8:00 AM	7:00 AM	4:15 AM		11:30 AM	6:15 AM					8:00 AM	6:45 AM
Volume	1	47	25	3	6	1		5	2					3	74
PM Peak	3:30 PM	5:00 PM	3:30 PM	3:00 PM	3:00 PM	2:15 PM		3:00 PM	5:45 PM					3:30 PM	5:00 PM
Volume	1	41	15	4	11	3		4	3					5	53
Comments:															

LOCATION: Claycraft Rd bwtm Morrison Rd and Taylor Station Rd SPECIFIC LOCATION: Claycraft Rd bwtm Morrison Rd and Taylor Station Rd CITY/STATE: Columbus, OH													QC JOB #: 14261907 DIRECTION: EB DATE: Apr 04 2017 - Apr 04 2017		
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
Grand Total	4	1242	468	59	201	19	0	51	52	0	0	0	0	26	2122
Percent	0.2%	58.5%	22.1%	2.8%	9.5%	0.9%	0.0%	2.4%	2.5%	0.0%	0.0%	0.0%	0.0%	1.2%	
ADT 2122															
Comments:															

Report generated on 4/6/2017 8:12 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

LOCATION: Claycraft Rd bwtm Morrison Rd and Taylor Station Rd						QC JOB #: 14261907				
SPECIFIC LOCATION: Claycraft Rd bwtm Morrison Rd and Taylor Station Rd						DIRECTION: EB				
CITY/STATE: Columbus, OH						DATE: Apr 04 2017 - Apr 04 2017				
Start Time	Mon 04-Apr-17	Tue	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM		1				1			1	
12:15 AM		2				2			2	
12:30 AM		1				1			1	
12:45 AM		1				1			1	
1:00 AM		3				3			3	
1:15 AM		1				1			1	
1:30 AM		3				3			3	
1:45 AM		1				1			1	
2:00 AM		0				0			0	
2:15 AM		1				1			1	
2:30 AM		0				0			0	
2:45 AM		1				1			1	
3:00 AM		0				0			0	
3:15 AM		7				7			7	
3:30 AM		2				2			2	
3:45 AM		2				2			2	
4:00 AM		7				7			7	
4:15 AM		3				3			3	
4:30 AM		6				6			6	
4:45 AM		14				14			14	
5:00 AM		5				5			5	
5:15 AM		14				14			14	
5:30 AM		17				17			17	
5:45 AM		39				39			39	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Claycraft Rd bwt Morrison Rd and Taylor Station Rd									QC JOB #: 14261907	
SPECIFIC LOCATION: Claycraft Rd bwt Morrison Rd and Taylor Station Rd									DIRECTION: EB	
CITY/STATE: Columbus, OH									DATE: Apr 04 2017 - Apr 04 2017	
Start Time	Mon 04-Apr-17	Tue	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 AM		18				18			18	
6:15 AM		39				39			39	
6:30 AM		42				42			42	
6:45 AM		74				74			74	
7:00 AM		57				57			57	
7:15 AM		63				63			63	
7:30 AM		47				47			47	
7:45 AM		65				65			65	
8:00 AM		62				62			62	
8:15 AM		44				44			44	
8:30 AM		36				36			36	
8:45 AM		31				31			31	
9:00 AM		37				37			37	
9:15 AM		24				24			24	
9:30 AM		29				29			29	
9:45 AM		23				23			23	
10:00 AM		24				24			24	
10:15 AM		16				16			16	
10:30 AM		23				23			23	
10:45 AM		26				26			26	
11:00 AM		17				17			17	
11:15 AM		27				27			27	
11:30 AM		34				34			34	
11:45 AM		29				29			29	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Claycraft Rd bwt Morrison Rd and Taylor Station Rd						QC JOB #: 14261907				
SPECIFIC LOCATION: Claycraft Rd bwt Morrison Rd and Taylor Station Rd						DIRECTION: EB				
CITY/STATE: Columbus, OH						DATE: Apr 04 2017 - Apr 04 2017				
Start Time	Mon	Tue	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
		04-Apr-17								
12:00 PM		37				37			37	
12:15 PM		36				36			36	
12:30 PM		37				37			37	
12:45 PM		38				38			38	
1:00 PM		45				45			45	
1:15 PM		29				29			29	
1:30 PM		38				38			38	
1:45 PM		49				49			49	
2:00 PM		26				26			26	
2:15 PM		29				29			29	
2:30 PM		26				26			26	
2:45 PM		24				24			24	
3:00 PM		49				49			49	
3:15 PM		31				31			31	
3:30 PM		41				41			41	
3:45 PM		34				34			34	
4:00 PM		38				38			38	
4:15 PM		42				42			42	
4:30 PM		31				31			31	
4:45 PM		31				31			31	
5:00 PM		53				53			53	
5:15 PM		49				49			49	
5:30 PM		43				43			43	
5:45 PM		48				48			48	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Claycraft Rd bwt Morrison Rd and Taylor Station Rd						QC JOB #: 14261907				
SPECIFIC LOCATION: Claycraft Rd bwt Morrison Rd and Taylor Station Rd						DIRECTION: EB				
CITY/STATE: Columbus, OH						DATE: Apr 04 2017 - Apr 04 2017				
Start Time	Mon	Tue	Wed	Thu	Fri	Average Weekday	Sat	Sun	Average Week	Average Week Profile
		04-Apr-17				Hourly Traffic			Hourly Traffic	
6:00 PM		21				21			21	
6:15 PM		24				24			24	
6:30 PM		23				23			23	
6:45 PM		21				21			21	
7:00 PM		11				11			11	
7:15 PM		18				18			18	
7:30 PM		15				15			15	
7:45 PM		9				9			9	
8:00 PM		6				6			6	
8:15 PM		13				13			13	
8:30 PM		8				8			8	
8:45 PM		4				4			4	
9:00 PM		4				4			4	
9:15 PM		2				2			2	
9:30 PM		4				4			4	
9:45 PM		1				1			1	
10:00 PM		3				3			3	
10:15 PM		0				0			0	
10:30 PM		4				4			4	
10:45 PM		4				4			4	
11:00 PM		1				1			1	
11:15 PM		0				0			0	
11:30 PM		3				3			3	
11:45 PM		1				1			1	
Day Total		2122				2122			2122	
% Weekday Average		100.0%								
% Week Average		100.0%				100.0%				
AM Peak		6:45 AM				6:45 AM			6:45 AM	
Volume		74				74			74	
PM Peak		5:00 PM				5:00 PM			5:00 PM	
Volume		53				53			53	
Comments:										

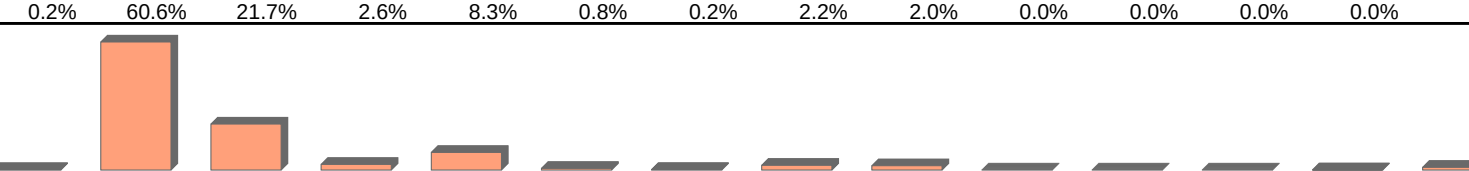
QC JOB #: 14261907
DIRECTION: EB/WB
DATE: Apr 04 2017

Report generated on 4/6/2017 8:12 AM SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

LOCATION: Claycraft Rd bwtm Morrison Rd and Taylor Station Rd														QC JOB #: 14261907	
SPECIFIC LOCATION: Claycraft Rd bwtm Morrison Rd and Taylor Station Rd														DIRECTION: EB/WB	
CITY/STATE: Columbus, OH														DATE: Apr 04 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
6:00 AM	0	17	4	2	4	1	0	0	1	0	0	0	0	0	29
6:15 AM	0	28	9	4	3	0	0	0	2	0	0	0	0	2	48
6:30 AM	0	25	19	2	4	0	0	0	0	0	0	0	0	0	50
6:45 AM	1	54	26	1	4	1	0	0	1	0	0	0	0	0	88
7:00 AM	0	40	31	0	7	0	0	1	1	0	0	0	0	1	81
7:15 AM	0	49	27	4	5	0	0	1	1	0	0	0	0	1	88
7:30 AM	0	40	16	2	6	1	0	2	2	0	0	0	0	1	70
7:45 AM	0	63	26	2	4	1	0	2	0	0	0	0	0	1	99
8:00 AM	0	52	19	3	5	0	0	0	2	0	0	0	0	3	84
8:15 AM	0	43	16	1	6	0	0	0	2	0	0	0	0	1	69
8:30 AM	0	37	15	0	3	0	0	0	1	0	0	0	0	0	56
8:45 AM	0	25	8	2	3	1	0	1	1	0	0	0	0	0	41
9:00 AM	0	37	10	2	2	0	0	1	1	0	0	0	0	0	53
9:15 AM	0	21	9	1	3	1	0	0	1	0	0	0	0	0	36
9:30 AM	0	27	13	4	6	0	0	2	1	0	0	0	0	0	53
9:45 AM	1	16	18	0	5	1	0	2	2	0	0	0	0	3	48
10:00 AM	0	17	14	2	7	0	0	1	0	0	0	0	0	0	41
10:15 AM	0	18	13	1	1	0	0	0	0	0	0	0	0	1	34
10:30 AM	0	14	16	0	6	0	0	4	2	0	0	0	0	0	42
10:45 AM	0	21	9	0	6	1	0	0	3	0	0	0	0	1	41
11:00 AM	0	16	4	0	8	0	0	2	1	0	0	0	0	0	31
11:15 AM	0	24	11	1	5	0	0	2	1	0	0	0	0	0	44
11:30 AM	0	36	21	2	4	0	0	6	0	0	0	0	0	0	69
11:45 AM	0	36	13	1	4	0	0	1	2	0	0	0	0	0	57
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

LOCATION: Claycraft Rd bwtm Morrison Rd and Taylor Station Rd													QC JOB #: 14261907		
SPECIFIC LOCATION: Claycraft Rd bwtm Morrison Rd and Taylor Station Rd													DIRECTION: EB/WB		
CITY/STATE: Columbus, OH													DATE: Apr 04 2017		
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 PM	0	46	12	1	6	1	0	2	1	0	0	0	0	2	71
12:15 PM	0	30	14	1	5	0	0	1	1	0	0	0	0	0	52
12:30 PM	0	35	16	3	8	0	0	3	1	0	0	0	0	1	67
12:45 PM	0	37	10	1	9	1	0	1	1	0	0	0	1	3	64
1:00 PM	0	39	11	3	11	2	0	2	0	0	0	0	0	0	68
1:15 PM	0	30	16	3	3	0	0	2	0	0	0	0	0	0	54
1:30 PM	0	32	12	2	5	0	0	1	1	0	0	0	0	1	54
1:45 PM	0	43	11	1	8	2	1	2	2	0	0	0	0	4	74
2:00 PM	0	26	8	0	8	2	1	1	1	0	0	0	0	0	47
2:15 PM	0	16	15	1	5	3	0	2	1	0	0	0	0	0	43
2:30 PM	0	26	11	2	2	0	0	2	0	0	0	0	0	0	43
2:45 PM	0	26	12	3	5	0	0	0	1	0	0	0	0	0	47
3:00 PM	0	33	13	5	13	1	1	4	0	0	0	0	0	0	70
3:15 PM	0	29	11	0	6	0	1	1	0	0	0	0	0	4	52
3:30 PM	2	34	22	1	10	2	0	0	1	0	0	0	0	6	78
3:45 PM	0	42	11	0	5	0	0	0	2	0	0	0	0	0	60
4:00 PM	0	38	11	3	10	1	1	2	1	0	0	0	0	0	67
4:15 PM	0	43	4	6	7	0	1	2	2	0	0	0	0	0	65
4:30 PM	0	44	9	1	2	0	0	0	1	0	0	0	0	0	57
4:45 PM	0	33	7	2	4	0	0	3	1	0	0	0	0	1	51
5:00 PM	0	60	10	2	3	0	1	1	1	0	0	0	0	1	79
5:15 PM	0	57	11	0	1	0	0	0	2	0	0	0	0	1	72
5:30 PM	1	41	9	1	2	0	0	5	1	0	0	0	0	1	61
5:45 PM	0	49	11	1	2	0	0	3	3	0	0	0	0	0	69
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

LOCATION: Claycraft Rd bwn Morrison Rd and Taylor Station Rd														QC JOB #: 14261907	
SPECIFIC LOCATION: Claycraft Rd bwn Morrison Rd and Taylor Station Rd														DIRECTION: EB/WB	
CITY/STATE: Columbus, OH														DATE: Apr 04 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
6:00 PM	0	26	5	0	1	0	0	0	1	0	0	0	0	0	33
6:15 PM	0	24	9	0	1	0	0	2	2	0	0	0	0	0	38
6:30 PM	1	31	1	0	0	0	0	2	0	0	0	0	0	1	36
6:45 PM	0	23	6	0	1	0	0	1	0	0	0	0	0	0	31
7:00 PM	0	17	4	0	1	0	0	0	0	0	0	0	0	0	22
7:15 PM	0	24	2	0	0	0	0	0	3	0	0	0	0	0	29
7:30 PM	0	22	3	0	2	0	0	0	0	0	0	0	0	0	27
7:45 PM	0	12	4	0	1	0	0	0	0	0	0	0	0	1	18
8:00 PM	0	9	2	0	0	0	0	0	0	0	0	0	0	0	11
8:15 PM	0	15	2	0	1	0	0	0	0	0	0	0	0	0	18
8:30 PM	0	11	2	0	0	0	0	1	1	0	0	0	0	0	15
8:45 PM	0	10	1	0	0	0	0	0	0	0	0	0	0	0	11
9:00 PM	0	5	2	1	0	0	0	0	0	0	0	0	0	0	8
9:15 PM	0	4	1	1	0	0	0	0	0	0	0	0	0	0	6
9:30 PM	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
9:45 PM	0	2	2	0	0	0	0	0	0	0	0	0	0	0	4
10:00 PM	0	8	1	0	0	0	0	0	0	0	0	0	0	0	9
10:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
10:30 PM	0	5	1	0	0	0	0	0	0	0	0	0	0	0	6
10:45 PM	0	5	1	0	0	0	0	0	0	0	0	0	0	0	6
11:00 PM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
11:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 PM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
11:45 PM	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
Day Total	6	2018	724	88	277	25	7	74	67	0	0	0	1	42	3329
Percent	0.2%	60.6%	21.7%	2.6%	8.3%	0.8%	0.2%	2.2%	2.0%	0.0%	0.0%	0.0%	0.0%	1.3%	
ADT 3329															
AM Peak	6:45 AM	7:45 AM	7:00 AM	6:15 AM	11:00 AM	4:15 AM		11:30 AM	10:45 AM					8:00 AM	7:45 AM
Volume	1	63	31	4	8	1		6	3					3	99
PM Peak	3:30 PM	5:00 PM	3:30 PM	4:15 PM	3:00 PM	2:15 PM	1:45 PM	5:30 PM	5:45 PM				12:45 PM	3:30 PM	5:00 PM
Volume	2	60	22	6	13	3	1	5	3				1	6	79
Comments:															

LOCATION: Claycraft Rd bwtm Morrison Rd and Taylor Station Rd SPECIFIC LOCATION: Claycraft Rd bwtm Morrison Rd and Taylor Station Rd CITY/STATE: Columbus, OH													QC JOB #: 14261907 DIRECTION: EB/WB DATE: Apr 04 2017 - Apr 04 2017		
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
Grand Total	6	2018	724	88	277	25	7	74	67	0	0	0	1	42	3329
Percent	0.2%	60.6%	21.7%	2.6%	8.3%	0.8%	0.2%	2.2%	2.0%	0.0%	0.0%	0.0%	0.0%	1.3%	
ADT 3329															
Comments:															

Report generated on 4/6/2017 8:12 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

LOCATION: Claycraft Rd bwtm Morrison Rd and Taylor Station Rd						QC JOB #: 14261907				
SPECIFIC LOCATION: Claycraft Rd bwtm Morrison Rd and Taylor Station Rd						DIRECTION: EB/WB				
CITY/STATE: Columbus, OH						DATE: Apr 04 2017 - Apr 04 2017				
Start Time	Mon	Tue 04-Apr-17	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM		1				1			1	
12:15 AM		3				3			3	
12:30 AM		2				2			2	
12:45 AM		1				1			1	
1:00 AM		3				3			3	
1:15 AM		2				2			2	
1:30 AM		7				7			7	
1:45 AM		1				1			1	
2:00 AM		0				0			0	
2:15 AM		2				2			2	
2:30 AM		1				1			1	
2:45 AM		2				2			2	
3:00 AM		1				1			1	
3:15 AM		7				7			7	
3:30 AM		4				4			4	
3:45 AM		2				2			2	
4:00 AM		8				8			8	
4:15 AM		4				4			4	
4:30 AM		8				8			8	
4:45 AM		17				17			17	
5:00 AM		6				6			6	
5:15 AM		19				19			19	
5:30 AM		23				23			23	
5:45 AM		44				44			44	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Claycraft Rd bwt Morrison Rd and Taylor Station Rd						QC JOB #: 14261907				
SPECIFIC LOCATION: Claycraft Rd bwt Morrison Rd and Taylor Station Rd						DIRECTION: EB/WB				
CITY/STATE: Columbus, OH						DATE: Apr 04 2017 - Apr 04 2017				
Start Time	Mon	Tue 04-Apr-17	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 AM		29				29			29	
6:15 AM		48				48			48	
6:30 AM		50				50			50	
6:45 AM		88				88			88	
7:00 AM		81				81			81	
7:15 AM		88				88			88	
7:30 AM		70				70			70	
7:45 AM		99				99			99	
8:00 AM		84				84			84	
8:15 AM		69				69			69	
8:30 AM		56				56			56	
8:45 AM		41				41			41	
9:00 AM		53				53			53	
9:15 AM		36				36			36	
9:30 AM		53				53			53	
9:45 AM		48				48			48	
10:00 AM		41				41			41	
10:15 AM		34				34			34	
10:30 AM		42				42			42	
10:45 AM		41				41			41	
11:00 AM		31				31			31	
11:15 AM		44				44			44	
11:30 AM		69				69			69	
11:45 AM		57				57			57	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Claycraft Rd bwt Morrison Rd and Taylor Station Rd						QC JOB #: 14261907				
SPECIFIC LOCATION: Claycraft Rd bwt Morrison Rd and Taylor Station Rd						DIRECTION: EB/WB				
CITY/STATE: Columbus, OH						DATE: Apr 04 2017 - Apr 04 2017				
Start Time	Mon	Tue	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
		04-Apr-17								
12:00 PM		71				71			71	
12:15 PM		52				52			52	
12:30 PM		67				67			67	
12:45 PM		64				64			64	
1:00 PM		68				68			68	
1:15 PM		54				54			54	
1:30 PM		54				54			54	
1:45 PM		74				74			74	
2:00 PM		47				47			47	
2:15 PM		43				43			43	
2:30 PM		43				43			43	
2:45 PM		47				47			47	
3:00 PM		70				70			70	
3:15 PM		52				52			52	
3:30 PM		78				78			78	
3:45 PM		60				60			60	
4:00 PM		67				67			67	
4:15 PM		65				65			65	
4:30 PM		57				57			57	
4:45 PM		51				51			51	
5:00 PM		79				79			79	
5:15 PM		72				72			72	
5:30 PM		61				61			61	
5:45 PM		69				69			69	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Claycraft Rd bwn Morrison Rd and Taylor Station Rd						QC JOB #: 14261907				
SPECIFIC LOCATION: Claycraft Rd bwn Morrison Rd and Taylor Station Rd						DIRECTION: EB/WB				
CITY/STATE: Columbus, OH						DATE: Apr 04 2017 - Apr 04 2017				
Start Time	Mon 04-Apr-17	Tue	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 PM		33				33			33	
6:15 PM		38				38			38	
6:30 PM		36				36			36	
6:45 PM		31				31			31	
7:00 PM		22				22			22	
7:15 PM		29				29			29	
7:30 PM		27				27			27	
7:45 PM		18				18			18	
8:00 PM		11				11			11	
8:15 PM		18				18			18	
8:30 PM		15				15			15	
8:45 PM		11				11			11	
9:00 PM		8				8			8	
9:15 PM		6				6			6	
9:30 PM		5				5			5	
9:45 PM		4				4			4	
10:00 PM		9				9			9	
10:15 PM		1				1			1	
10:30 PM		6				6			6	
10:45 PM		6				6			6	
11:00 PM		3				3			3	
11:15 PM		0				0			0	
11:30 PM		3				3			3	
11:45 PM		4				4			4	
Day Total		3329				3329			3329	
% Weekday Average		100.0%								
% Week Average		100.0%				100.0%				
AM Peak		7:45 AM				7:45 AM			7:45 AM	
Volume		99				99			99	
PM Peak		5:00 PM				5:00 PM			5:00 PM	
Volume		79				79			79	
Comments:										

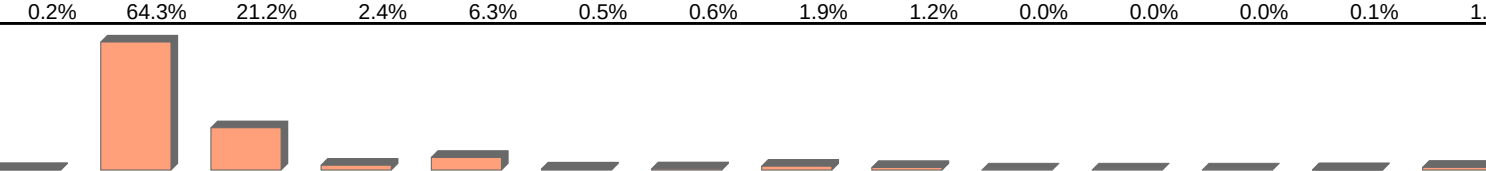
QC JOB #: 14261907
DIRECTION: WB
DATE: Apr 04 2017

Report generated on 4/6/2017 8:12 AM SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

LOCATION: Claycraft Rd bwtm Morrison Rd and Taylor Station Rd														QC JOB #: 14261907	
SPECIFIC LOCATION: Claycraft Rd bwtm Morrison Rd and Taylor Station Rd														DIRECTION: WB	
CITY/STATE: Columbus, OH														DATE: Apr 04 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
6:00 AM	0	7	1	1	1	1	0	0	0	0	0	0	0	0	11
6:15 AM	0	2	1	3	1	0	0	0	0	0	0	0	0	2	9
6:30 AM	0	5	2	0	1	0	0	0	0	0	0	0	0	0	8
6:45 AM	0	7	5	0	0	1	0	0	1	0	0	0	0	0	14
7:00 AM	0	17	6	0	1	0	0	0	0	0	0	0	0	0	24
7:15 AM	0	13	4	3	4	0	0	1	0	0	0	0	0	0	25
7:30 AM	0	9	7	1	3	1	0	2	0	0	0	0	0	0	23
7:45 AM	0	24	6	0	2	0	0	2	0	0	0	0	0	0	34
8:00 AM	0	13	7	0	0	0	0	0	2	0	0	0	0	0	22
8:15 AM	0	12	7	0	3	0	0	0	2	0	0	0	0	1	25
8:30 AM	0	12	8	0	0	0	0	0	0	0	0	0	0	0	20
8:45 AM	0	4	3	1	2	0	0	0	0	0	0	0	0	0	10
9:00 AM	0	11	3	0	2	0	0	0	0	0	0	0	0	0	16
9:15 AM	0	6	5	1	0	0	0	0	0	0	0	0	0	0	12
9:30 AM	0	15	6	2	1	0	0	0	0	0	0	0	0	0	24
9:45 AM	1	7	9	0	2	1	0	1	1	0	0	0	0	3	25
10:00 AM	0	8	5	0	3	0	0	1	0	0	0	0	0	0	17
10:15 AM	0	11	6	1	0	0	0	0	0	0	0	0	0	0	18
10:30 AM	0	9	6	0	1	0	0	2	1	0	0	0	0	0	19
10:45 AM	0	10	4	0	0	0	0	0	1	0	0	0	0	0	15
11:00 AM	0	8	3	0	2	0	0	0	1	0	0	0	0	0	14
11:15 AM	0	9	4	1	1	0	0	1	1	0	0	0	0	0	17
11:30 AM	0	21	12	1	0	0	0	1	0	0	0	0	0	0	35
11:45 AM	0	20	6	0	1	0	0	1	0	0	0	0	0	0	28
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

LOCATION: Claycraft Rd bwtm Morrison Rd and Taylor Station Rd														QC JOB #: 14261907	
SPECIFIC LOCATION: Claycraft Rd bwtm Morrison Rd and Taylor Station Rd														DIRECTION: WB	
CITY/STATE: Columbus, OH														DATE: Apr 04 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
12:00 PM	0	24	6	0	2	0	0	1	0	0	0	0	0	1	34
12:15 PM	0	13	3	0	0	0	0	0	0	0	0	0	0	0	16
12:30 PM	0	18	7	0	3	0	0	1	1	0	0	0	0	0	30
12:45 PM	0	17	5	0	1	1	0	1	0	0	0	0	1	0	26
1:00 PM	0	13	4	0	5	0	0	1	0	0	0	0	0	0	23
1:15 PM	0	16	5	2	1	0	0	1	0	0	0	0	0	0	25
1:30 PM	0	11	3	2	0	0	0	0	0	0	0	0	0	0	16
1:45 PM	0	16	4	0	1	0	1	0	0	0	0	0	0	3	25
2:00 PM	0	13	4	0	3	0	1	0	0	0	0	0	0	0	21
2:15 PM	0	6	5	0	3	0	0	0	0	0	0	0	0	0	14
2:30 PM	0	12	4	0	0	0	0	1	0	0	0	0	0	0	17
2:45 PM	0	13	7	1	1	0	0	0	1	0	0	0	0	0	23
3:00 PM	0	12	5	1	2	0	1	0	0	0	0	0	0	0	21
3:15 PM	0	14	3	0	1	0	1	1	0	0	0	0	0	1	21
3:30 PM	1	25	7	0	3	0	0	0	0	0	0	0	0	1	37
3:45 PM	0	18	6	0	2	0	0	0	0	0	0	0	0	0	26
4:00 PM	0	19	5	1	3	0	1	0	0	0	0	0	0	0	29
4:15 PM	0	17	2	2	0	0	1	0	1	0	0	0	0	0	23
4:30 PM	0	20	5	0	0	0	0	0	1	0	0	0	0	0	26
4:45 PM	0	13	3	0	3	0	0	1	0	0	0	0	0	0	20
5:00 PM	0	19	5	0	0	0	1	0	0	0	0	0	0	1	26
5:15 PM	0	17	4	0	1	0	0	0	0	0	0	0	0	1	23
5:30 PM	0	14	1	0	0	0	0	2	0	0	0	0	0	1	18
5:45 PM	0	17	4	0	0	0	0	0	0	0	0	0	0	0	21
Day Total															
Percent															
AM Peak															
Volume															
PM Peak															
Volume															
Comments:															

LOCATION: Claycraft Rd bwt Morrison Rd and Taylor Station Rd														QC JOB #: 14261907	
SPECIFIC LOCATION: Claycraft Rd bwt Morrison Rd and Taylor Station Rd														DIRECTION: WB	
CITY/STATE: Columbus, OH														DATE: Apr 04 2017	
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
6:00 PM	0	11	1	0	0	0	0	0	0	0	0	0	0	0	12
6:15 PM	0	10	4	0	0	0	0	0	0	0	0	0	0	0	14
6:30 PM	0	13	0	0	0	0	0	0	0	0	0	0	0	0	13
6:45 PM	0	8	2	0	0	0	0	0	0	0	0	0	0	0	10
7:00 PM	0	8	2	0	1	0	0	0	0	0	0	0	0	0	11
7:15 PM	0	9	1	0	0	0	0	0	1	0	0	0	0	0	11
7:30 PM	0	10	2	0	0	0	0	0	0	0	0	0	0	0	12
7:45 PM	0	6	2	0	0	0	0	0	0	0	0	0	0	1	9
8:00 PM	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
8:15 PM	0	4	0	0	1	0	0	0	0	0	0	0	0	0	5
8:30 PM	0	6	0	0	0	0	0	1	0	0	0	0	0	0	7
8:45 PM	0	7	0	0	0	0	0	0	0	0	0	0	0	0	7
9:00 PM	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4
9:15 PM	0	2	1	1	0	0	0	0	0	0	0	0	0	0	4
9:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
9:45 PM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
10:00 PM	0	5	1	0	0	0	0	0	0	0	0	0	0	0	6
10:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
10:30 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
10:45 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
11:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
11:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 PM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
Day Total	2	776	256	29	76	6	7	23	15	0	0	0	1	16	1207
Percent	0.2%	64.3%	21.2%	2.4%	6.3%	0.5%	0.6%	1.9%	1.2%	0.0%	0.0%	0.0%	0.1%	1.3%	
ADT 1207															
AM Peak	9:45 AM	7:45 AM	11:30 AM	6:15 AM	7:15 AM	4:30 AM		7:30 AM	8:00 AM					9:45 AM	11:30 AM
Volume	1	24	12	3	4	1		2	2					3	35
PM Peak	3:30 PM	3:30 PM	12:30 PM	1:15 PM	1:00 PM	12:45 PM	1:45 PM	5:30 PM	12:30 PM				12:45 PM	1:45 PM	3:30 PM
Volume	1	25	7	2	5	1	1	2	1				1	3	37
Comments:															

LOCATION: Claycraft Rd bwtm Morrison Rd and Taylor Station Rd SPECIFIC LOCATION: Claycraft Rd bwtm Morrison Rd and Taylor Station Rd CITY/STATE: Columbus, OH													QC JOB #: 14261907 DIRECTION: WB DATE: Apr 04 2017 - Apr 04 2017		
Start Time	Motor-cycles	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified	Total
Grand Total	2	776	256	29	76	6	7	23	15	0	0	0	1	16	1207
Percent	0.2%	64.3%	21.2%	2.4%	6.3%	0.5%	0.6%	1.9%	1.2%	0.0%	0.0%	0.0%	0.1%	1.3%	
ADT 1207															
Comments:															

Report generated on 4/6/2017 8:12 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

LOCATION: Claycraft Rd bwtm Morrison Rd and Taylor Station Rd							QC JOB #: 14261907			
SPECIFIC LOCATION: Claycraft Rd bwtm Morrison Rd and Taylor Station Rd							DIRECTION: WB			
CITY/STATE: Columbus, OH							DATE: Apr 04 2017 - Apr 04 2017			
Start Time	Mon	Tue 04-Apr-17	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM		0				0			0	
12:15 AM		1				1			1	
12:30 AM		1				1			1	
12:45 AM		0				0			0	
1:00 AM		0				0			0	
1:15 AM		1				1			1	
1:30 AM		4				4			4	
1:45 AM		0				0			0	
2:00 AM		0				0			0	
2:15 AM		1				1			1	
2:30 AM		1				1			1	
2:45 AM		1				1			1	
3:00 AM		1				1			1	
3:15 AM		0				0			0	
3:30 AM		2				2			2	
3:45 AM		0				0			0	
4:00 AM		1				1			1	
4:15 AM		1				1			1	
4:30 AM		2				2			2	
4:45 AM		3				3			3	
5:00 AM		1				1			1	
5:15 AM		5				5			5	
5:30 AM		6				6			6	
5:45 AM		5				5			5	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Claycraft Rd bwt Morrison Rd and Taylor Station Rd						QC JOB #: 14261907				
SPECIFIC LOCATION: Claycraft Rd bwt Morrison Rd and Taylor Station Rd						DIRECTION: WB				
CITY/STATE: Columbus, OH						DATE: Apr 04 2017 - Apr 04 2017				
Start Time	Mon	Tue 04-Apr-17	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 AM		11				11			11	
6:15 AM		9				9			9	
6:30 AM		8				8			8	
6:45 AM		14				14			14	
7:00 AM		24				24			24	
7:15 AM		25				25			25	
7:30 AM		23				23			23	
7:45 AM		34				34			34	
8:00 AM		22				22			22	
8:15 AM		25				25			25	
8:30 AM		20				20			20	
8:45 AM		10				10			10	
9:00 AM		16				16			16	
9:15 AM		12				12			12	
9:30 AM		24				24			24	
9:45 AM		25				25			25	
10:00 AM		17				17			17	
10:15 AM		18				18			18	
10:30 AM		19				19			19	
10:45 AM		15				15			15	
11:00 AM		14				14			14	
11:15 AM		17				17			17	
11:30 AM		35				35			35	
11:45 AM		28				28			28	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Claycraft Rd bwtm Morrison Rd and Taylor Station Rd						QC JOB #: 14261907				
SPECIFIC LOCATION: Claycraft Rd bwtm Morrison Rd and Taylor Station Rd						DIRECTION: WB				
CITY/STATE: Columbus, OH						DATE: Apr 04 2017 - Apr 04 2017				
Start Time	Mon	Tue 04-Apr-17	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 PM		34				34			34	
12:15 PM		16				16			16	
12:30 PM		30				30			30	
12:45 PM		26				26			26	
1:00 PM		23				23			23	
1:15 PM		25				25			25	
1:30 PM		16				16			16	
1:45 PM		25				25			25	
2:00 PM		21				21			21	
2:15 PM		14				14			14	
2:30 PM		17				17			17	
2:45 PM		23				23			23	
3:00 PM		21				21			21	
3:15 PM		21				21			21	
3:30 PM		37				37			37	
3:45 PM		26				26			26	
4:00 PM		29				29			29	
4:15 PM		23				23			23	
4:30 PM		26				26			26	
4:45 PM		20				20			20	
5:00 PM		26				26			26	
5:15 PM		23				23			23	
5:30 PM		18				18			18	
5:45 PM		21				21			21	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										
Comments:										

LOCATION: Claycraft Rd bwt Morrison Rd and Taylor Station Rd						QC JOB #: 14261907				
SPECIFIC LOCATION: Claycraft Rd bwt Morrison Rd and Taylor Station Rd						DIRECTION: WB				
CITY/STATE: Columbus, OH						DATE: Apr 04 2017 - Apr 04 2017				
Start Time	Mon	Tue 04-Apr-17	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 PM		12				12			12	
6:15 PM		14				14			14	
6:30 PM		13				13			13	
6:45 PM		10				10			10	
7:00 PM		11				11			11	
7:15 PM		11				11			11	
7:30 PM		12				12			12	
7:45 PM		9				9			9	
8:00 PM		5				5			5	
8:15 PM		5				5			5	
8:30 PM		7				7			7	
8:45 PM		7				7			7	
9:00 PM		4				4			4	
9:15 PM		4				4			4	
9:30 PM		1				1			1	
9:45 PM		3				3			3	
10:00 PM		6				6			6	
10:15 PM		1				1			1	
10:30 PM		2				2			2	
10:45 PM		2				2			2	
11:00 PM		2				2			2	
11:15 PM		0				0			0	
11:30 PM		0				0			0	
11:45 PM		3				3			3	
Day Total		1207				1207			1207	
% Weekday Average		100.0%								
% Week Average		100.0%				100.0%				
AM Peak		11:30 AM				11:30 AM			11:30 AM	
Volume		35				35			35	
PM Peak		3:30 PM				3:30 PM			3:30 PM	
Volume		37				37			37	
Comments:										

MORPC Provided Growth Rates

Study Corridor	Intersection Location	Linear Annual Growth Rate
Morse	Morse Rd w/o Johnstown Rd	1.00%
	Morse Rd e/o Johnstown Rd	1.10%
	Morse Rd e/o Hamilton Rd	0.50%
	Morse Rd w/o Hamilton Rd	0.70%
	Hamilton Rd s/o Morse Rd	1.20%
	Morse Rd e/o Cherry Bottom Rd	0.50%
	Cherry Bottom Rd n/o Morse Rd	1.70%
	Morse Rd w/o Cherry Bottom Rd	0.70%
	Cherry Bottom Rd s/o Morse Rd	0.50%
	Morse Rd e/o Stygler Rd	0.70%
	Morse Rd w/o Stygler Rd	0.50%
	Stygler Rd s/o Morse Rd	1.60%
Hamilton	Beecher Rd e/o Hamilton Rd	0.50%
	Hamilton Rd n/o Beecher Rd	1.30%
	Beecher Rd w/o Hamilton Rd	0.50%
	Hamilton Rd s/o Beecher Rd	1.30%
	E Johnstown Rd e/o Hamilton Rd	0.90%
	Hamilton Rd n/o E Johnstown Rd	1.30%
	E Johnstown Rd w/o Hamilton Rd	0.90%
	Hamilton Rd s/o E Johnstown Rd	1.30%
	Clark State Rd e/o Hamilton Rd	0.90%
	Hamilton Rd n/o Clark State Rd	1.40%
	Hamilton Rd s/o Clark State Rd	1.20%
	Banks e/o Hamilton Rd	0.50%
	Hamilton Rd n/o Banks/Gatsby	1.10%
	Gatsby w/o Hamilton Rd	0.50%
	Hamilton Rd s/o Banks/Gatsby	1.10%
	KEMA e/o Hamilton Rd	0.50%
	Hamilton Rd n/o KEMA/Shopping	1.10%
	Shopping Center w/o Hamilton Rd	0.50%
	Hamilton Rd s/o KEMA/Shopping	1.10%
	Havens Corners Rd e/o Hamilton Rd	0.70%
	Hamilton Rd n/o Havens Corners/Granville	1.10%
	Granville St w/o Hamilton Rd	0.70%
	Hamilton Rd s/o Havens Corners/Granville	0.80%
	Rocky Fork Blvd e/o Hamilton Rd	0.50%
	Hamilton Rd n/o Rocky Fork Blvd	0.80%
	Rocky Fork Blvd w/o Hamilton Rd	0.50%

MORPC Provided Growth Rates

Study Corridor	Intersection Location	Linear Annual Growth Rate
Hamilton	Hamilton Rd s/o Rocky Fork Blvd	0.80%
	Morrison Rd e/o Hamilton Rd	0.70%
	Hamilton Rd n/o Morrison Rd	0.80%
	Morrison Rd w/o Hamilton Rd	0.50%
	Hamilton Rd s/o Morrison Rd	0.50%
	I270WB Off Ramp e/o Hamilton Rd	0.90%
	Hamilton Rd n/o I270WB Off Ramp	0.50%
	Hamilton Rd s/o I270WB Off Ramp	0.50%
	Hamilton Rd n/o I270EB Off Ramp	0.50%
	I270EB Off Ramp w/o Hamilton Rd	0.60%
	Hamilton Rd s/o I270EB Off Ramp	0.60%
	Tech Center Dr e/o Hamilton Rd	2.10%
	Hamilton Rd n/o Tech Center Dr	0.60%
	Swanson Ave w/o Hamilton Rd	0.50%
	Hamilton Rd s/o Tech Center Dr	0.60%
E Johnstown/Mill	E Johnstown Rd s/o Morse Rd	1.30%
	E Johnstown Rd Bet Riva Ridge and Beecher/Dark Star	1.10%
	E Johnstown Rd s/o Beecher/Dark Star	1.10%
	E Johnstown Rd e/o Cherry Bottom Rd	1.10%
	Cherry Bottom Rd n/o E Johnstown Rd	0.50%
	E Johnstown Rd w/o Cherry Bottom Rd	0.80%
	Mill St n/o Carpenter Rd	0.90%
	Granville St e/o Mill St	0.70%
	Mill St n/o Granville St	0.70%
	Granville St w/o Mill St	0.80%
Granville/Havens Corners	Granville St e/o Olde Ridenour Rd	0.80%
	Olde Ridenour Rd n/o Granville St	0.50%
	Granville St w/o Olde Ridenour Rd	0.80%
	Olde Ridenour Rd s/o Granville St	0.80%
	Granville St e/o Shull Ave	0.60%
	Shull Ave n/o Granville St	0.50%
	Granville St w/o Shull Ave	0.80%
	Granville St e/o Lincoln Cir	0.60%
	Granville St w/o Lincoln Cir	0.70%
	Lincoln Cir s/o Granville St	0.50%
	Granville St e/o Flint Ridge Dr	0.70%

MORPC Provided Growth Rates

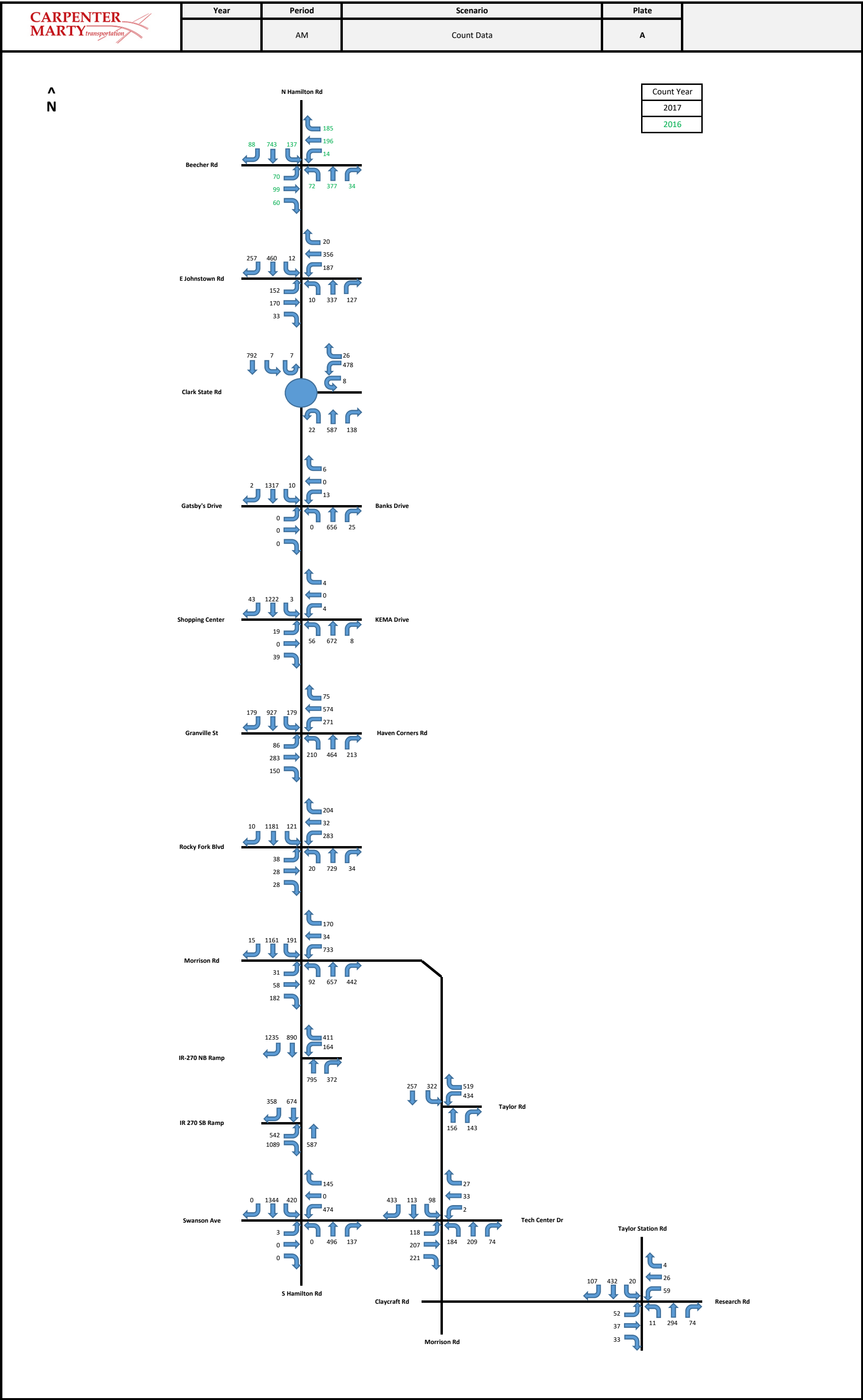
Study Corridor	Intersection Location	Linear Annual Growth Rate
Granville/Havens Corners	Flint Ridge Dr n/o Granville St	0.50%
	Granville St w/o Flint Ridge Dr	0.70%
	Flint Ridge Dr s/o Granville St	0.50%
	Havens Corners Rd e/o Helmbright Rd	0.70%
	Helmbright Rd s/o Havens Corners Rd	0.50%
Taylor Station	Havens Corners Rd e/o Taylor Station Rd	1.20%
	Havens Corners Rd w/o Taylor Station Rd	0.70%
	Taylor Station Rd s/o Havens Corners Rd	1.60%
	Taylor Station Rd s/o Taylor Rd	0.60%
	Research Rd e/o Taylor Station Rd	0.50%
	Taylor Station Rd n/o Claycraft/Research	0.50%
	Claycraft Rd w/o Taylor Station Rd	0.80%
	Taylor Station Rd s/o Claycraft/Research	0.50%
Morrison	Taylor Rd e/o Morrison Rd	0.50%
	Morrison Rd n/o Taylor Rd	0.70%
	Morrison Rd s/o Taylor Rd	1.40%
	Tech Center Dr e/o Morrison Rd	0.90%
	Morrison Rd n/o Tech Center Dr	1.40%
	Tech Center Dr w/o Morrison Rd	2.00%
	Morrison Rd s/o Tech Center Dr	1.00%
W Johnstown	W Johnstown Rd e/o Olde Ridenour Rd	0.50%
	Olde Ridenour Rd n/o W Johnstown Rd	0.80%
	W Johnstown Rd w/o Olde Ridenour Rd	0.60%
	W Johnstown Rd e/o Stygler Rd	0.60%
	Stygler Rd n/o W Johnstown Rd	0.60%
	W Johnstown Rd w/o Stygler Rd	0.80%
	W Johnstown Rd e/o I270 WB Off Ramp	0.80%
	W Johnstown Rd w/o I270 WB Off Ramp	0.50%
	I270 WB Off Ramp s/o W Johnstown Rd	0.50%
Stygler	Stygler Rd n/o Wendler Blvd	1.60%
	New Life Church ENT e/o Stygler Rd	0.50%
	Stygler Rd n/o McCutcheon Rd	1.40%
	McCutcheon Rd w/o Stygler Rd	1.50%
	Stygler Rd s/o McCutcheon Rd	1.10%
	Stygler Rd n/o Agler Rd	1.60%
	Agler Rd w/o Stygler Rd	1.30%
	Stygler Rd s/o Agler Rd	1.50%

MORPC Provided Growth Rates

Study Corridor	Intersection Location	Linear Annual Growth Rate
Stygler		
	US 62 e/o Stygler Rd	0.90%
	Stygler Rd n/o US 62	1.50%
	US 62 w/o Stygler Rd	0.90%
	Stygler Rd s/o US 62	0.60%
Others	Clotts Rd n/o Clark State Rd	0.50%
	Clark State Rd w/o Havens Rd	1.50%
	Cherry Bottom Rd s/o Campus Dr	0.50%
	Mann Rd n/o Havens Corners Rd	2.00%
	Mann Rd s/o Clark State Rd	2.00%
	Taylor Rd e/o Taylor Station Rd	0.50%
	Havens Rd e/o Clark State Rd	0.50%
	Carpenter Rd from Mill St to Hamilton Rd	0.50%

Note: This is planning level analysis based on MORPC regional travel demand model.

Gahanna Thoroughfare Plan - Hamilton Rd
Traffic Volume Calculations

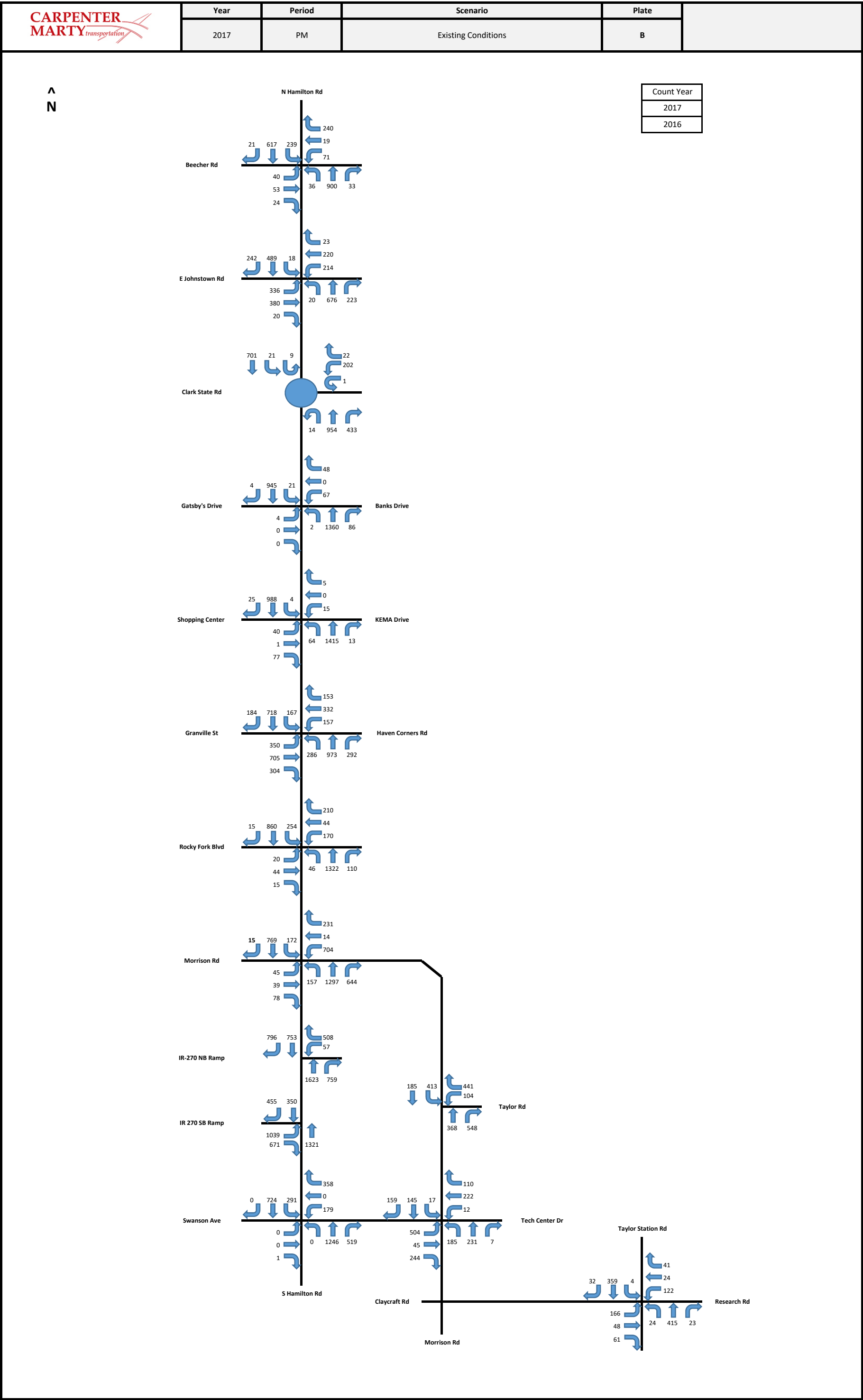


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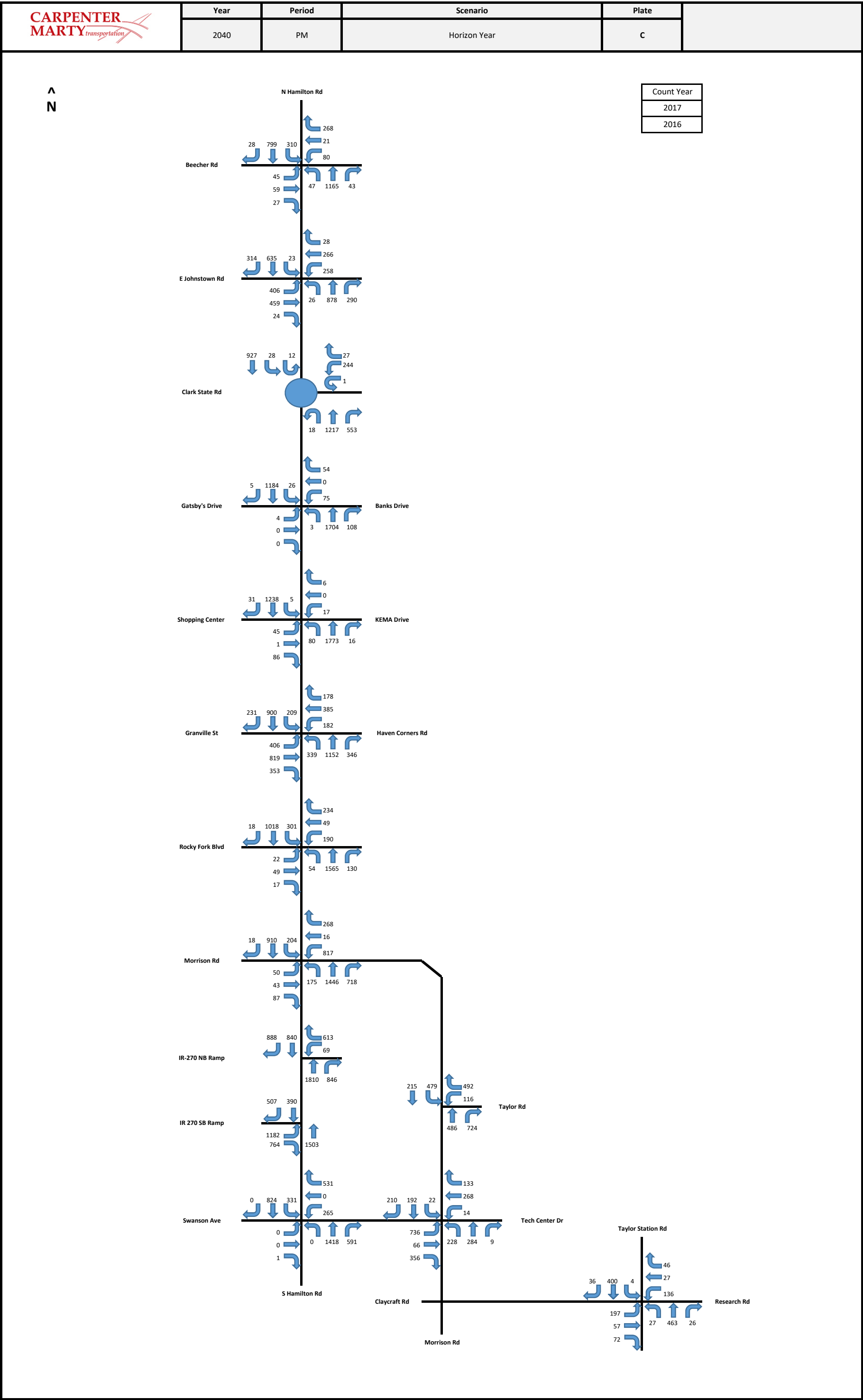
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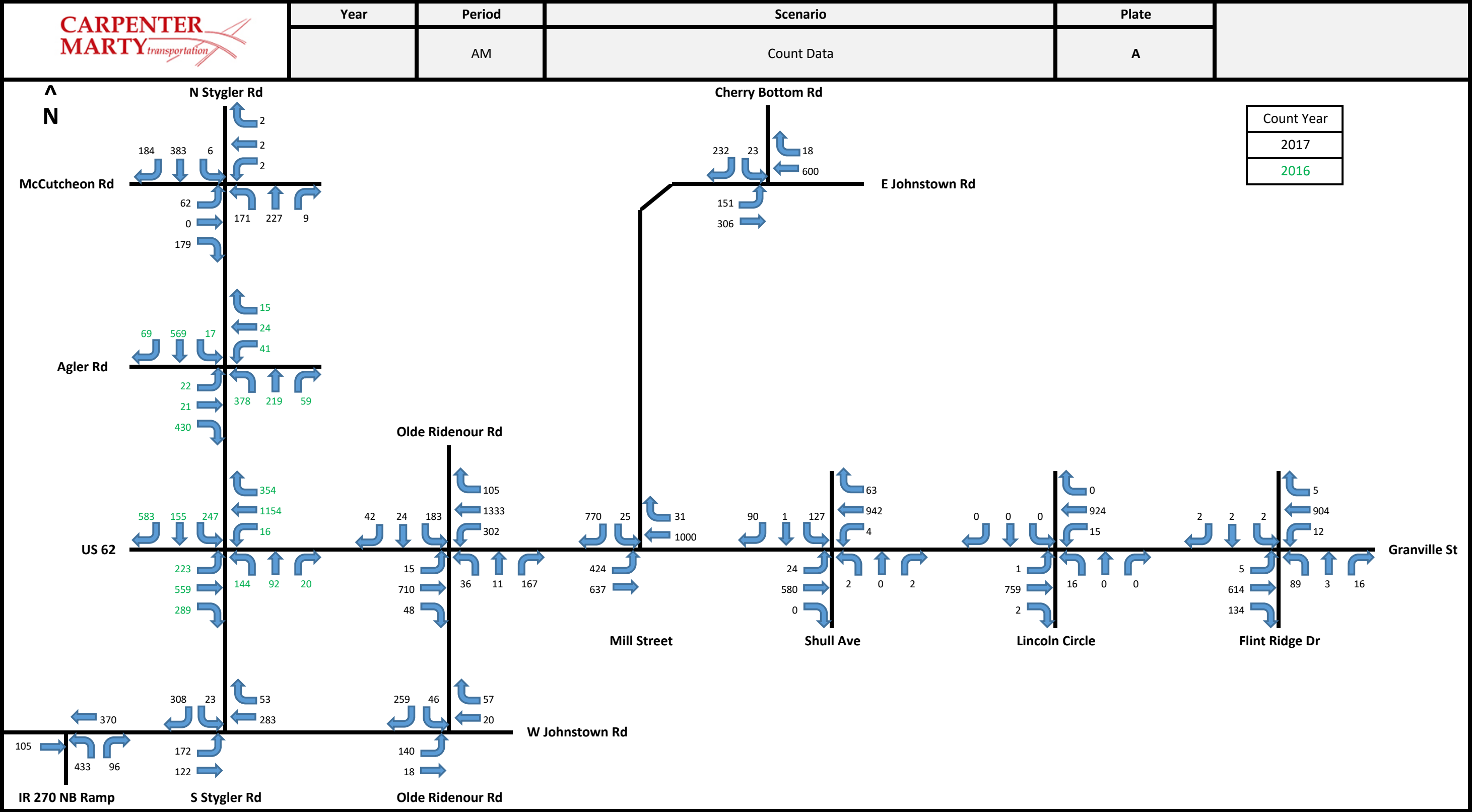
Gahanna Thoroughfare Plan - Hamilton Rd
Traffic Volume Calculations



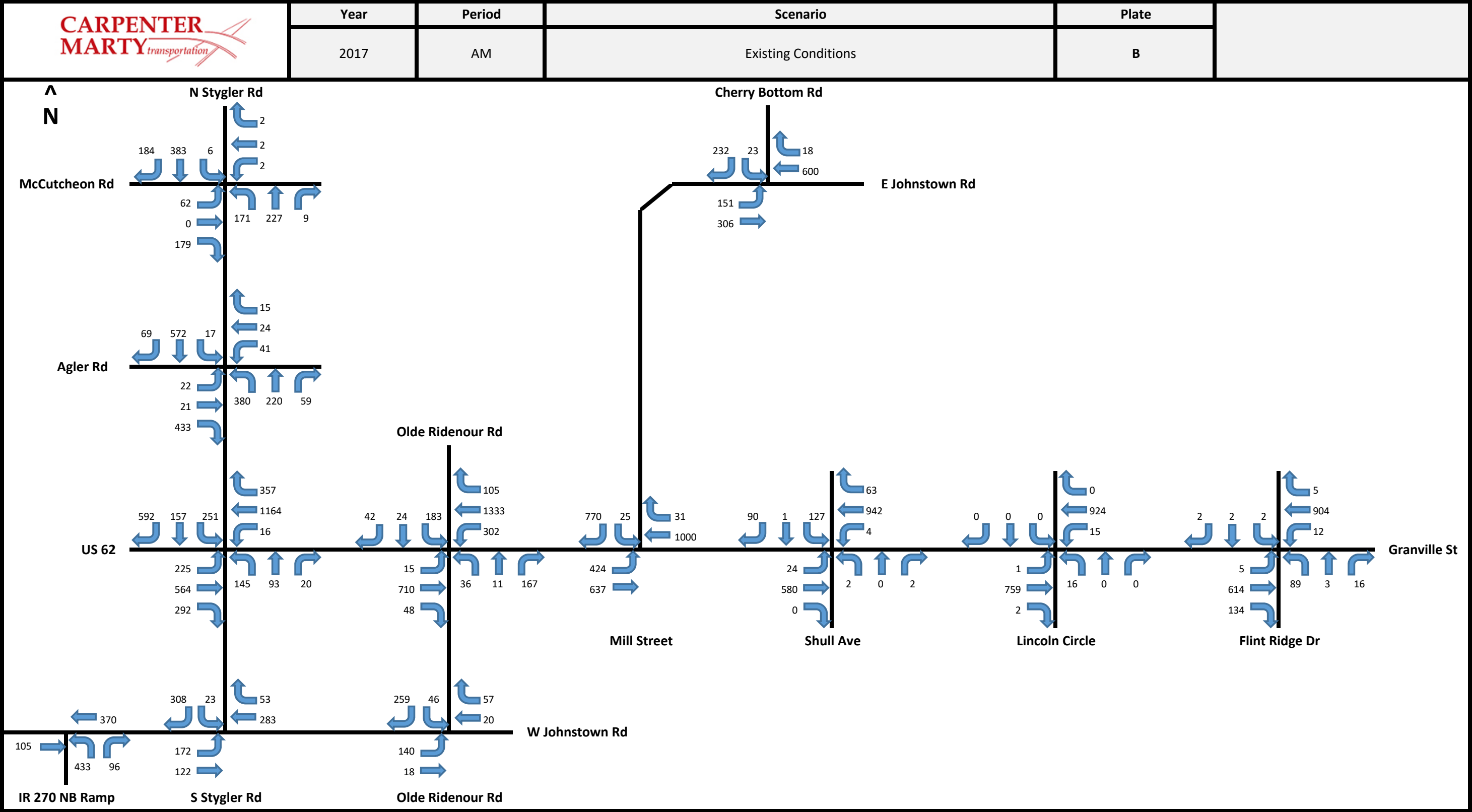
Gahanna Thoroughfare Plan - Hamilton Rd
Traffic Volume Calculations



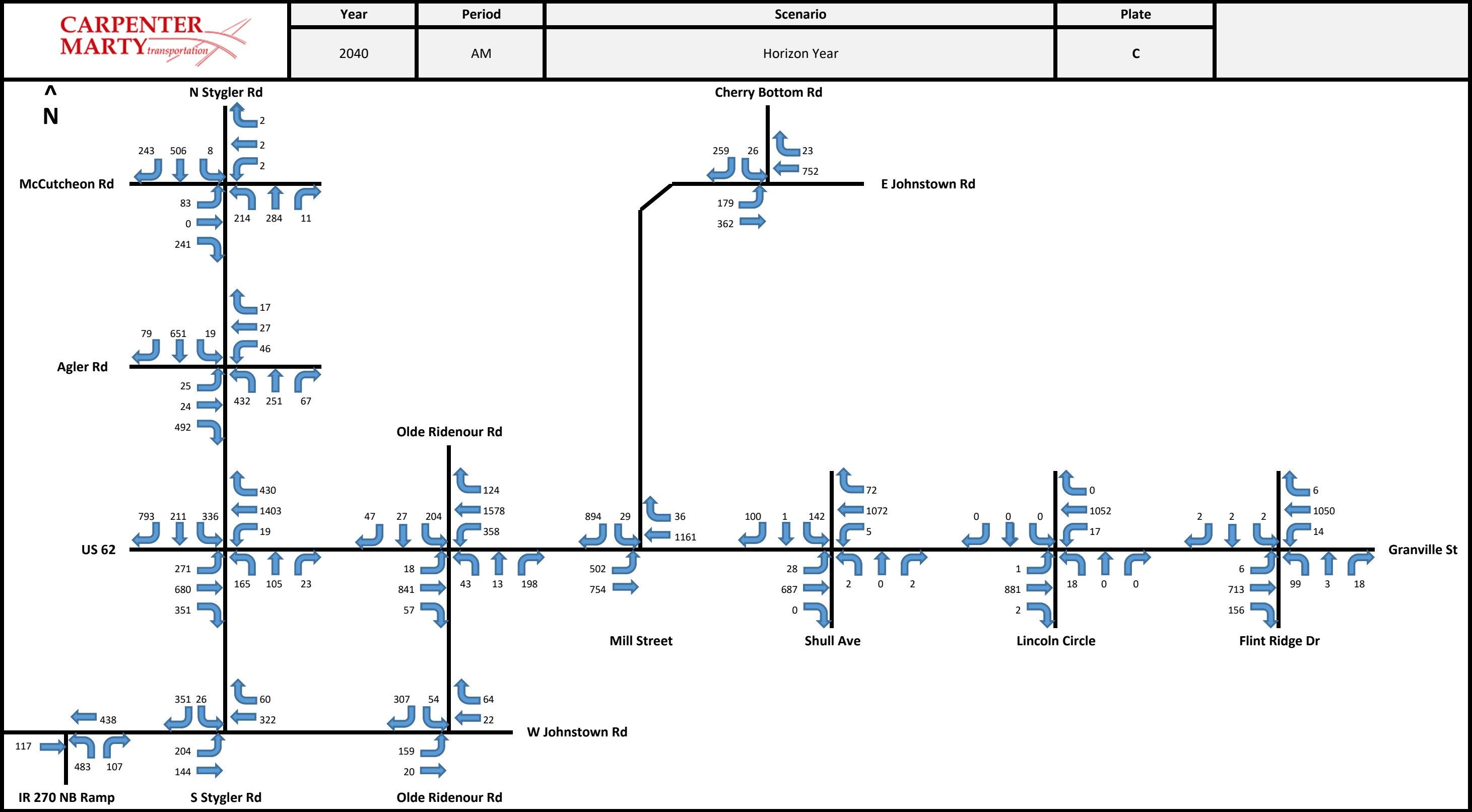
Gahanna Thoroughfare Plan - US 62
Traffic Volume Calculations



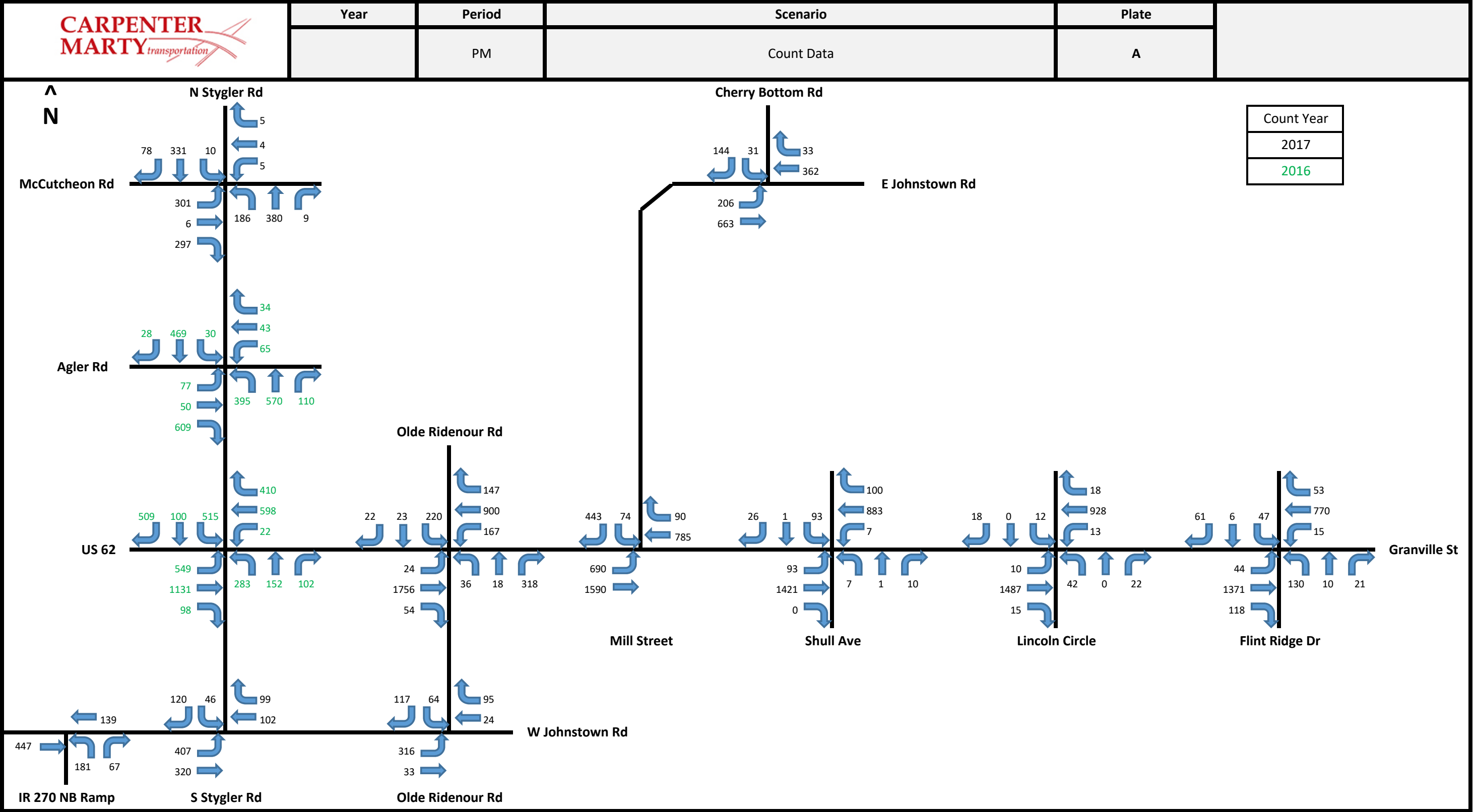
Gahanna Thoroughfare Plan - US 62
Traffic Volume Calculations



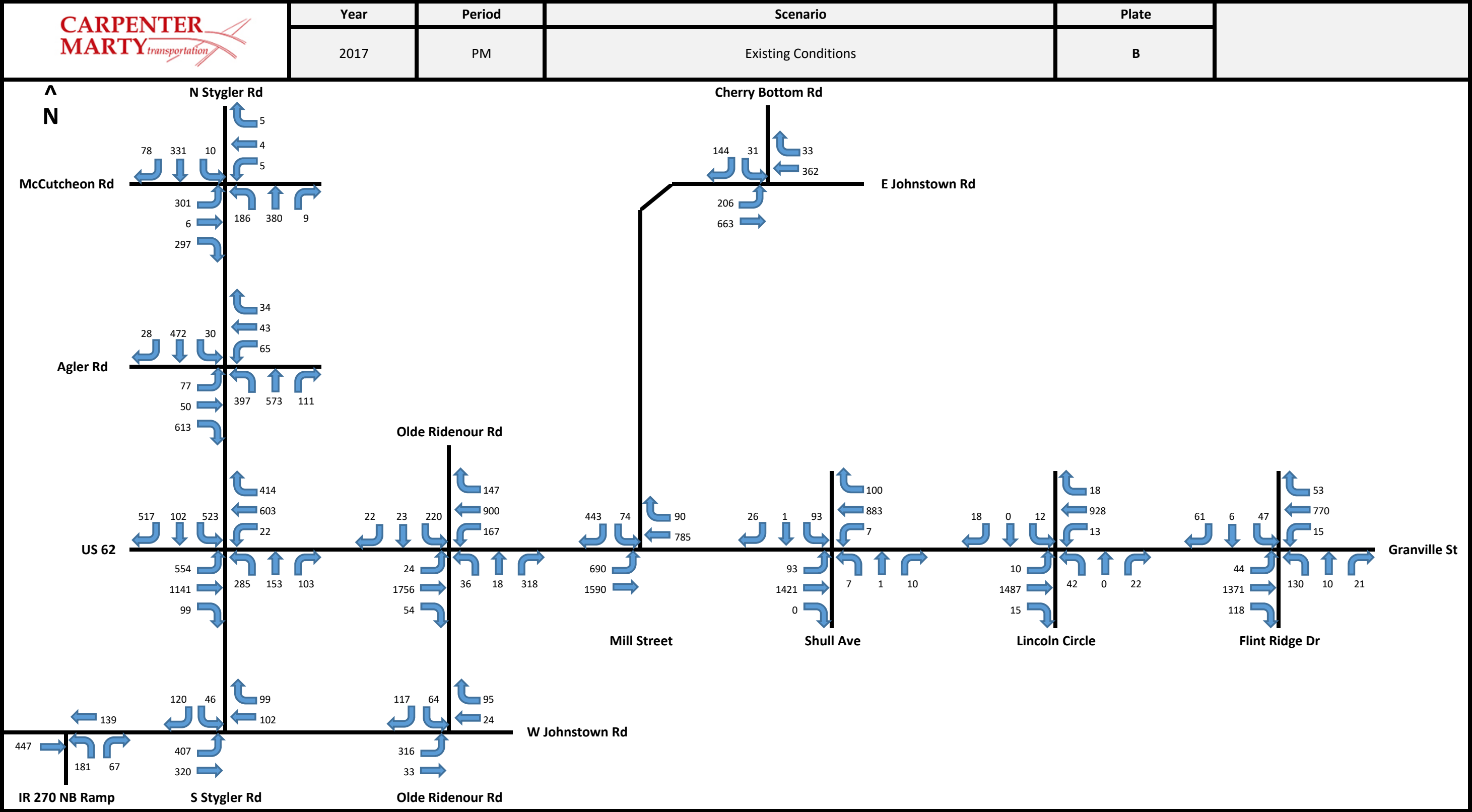
Gahanna Thoroughfare Plan - US 62
Traffic Volume Calculations



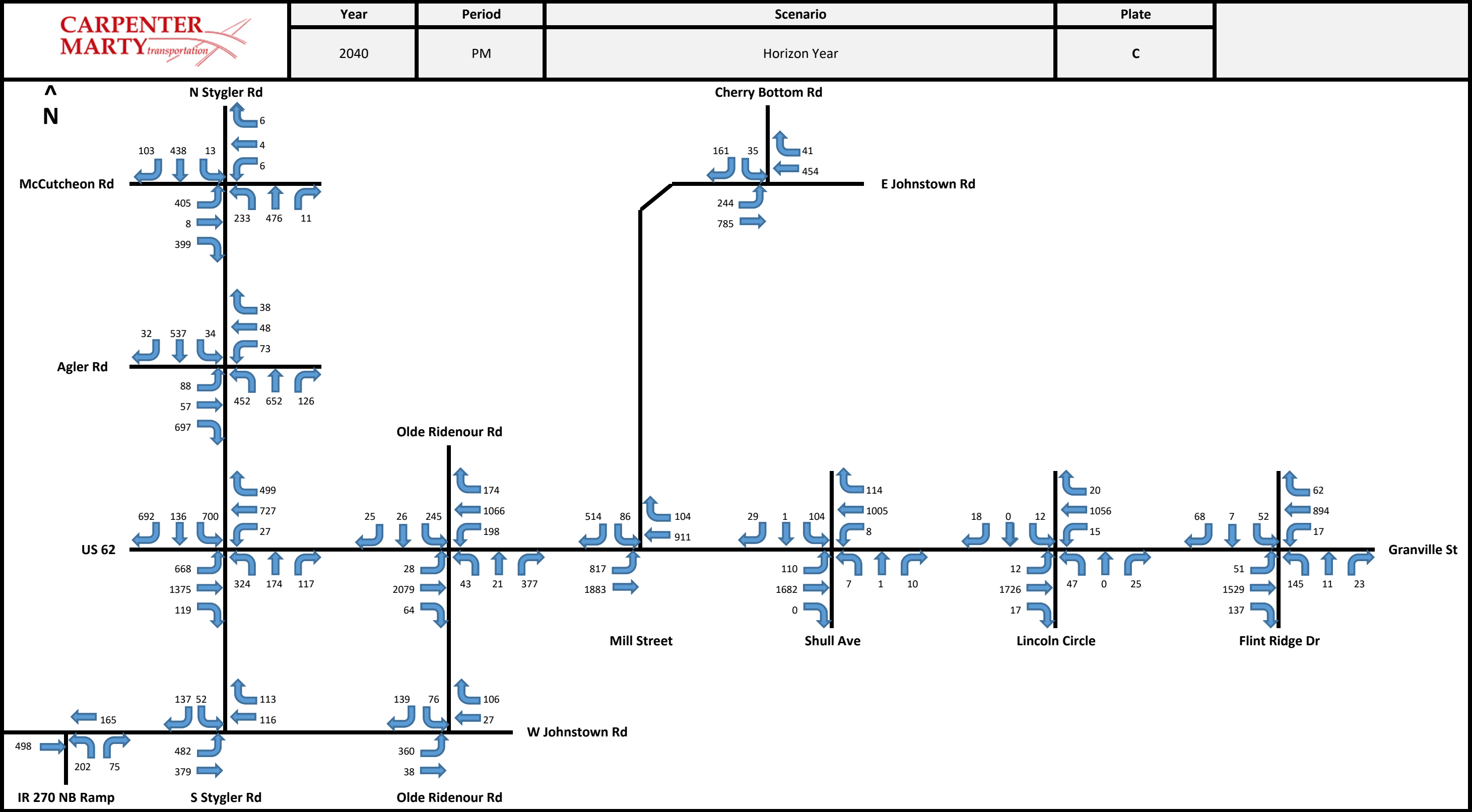
Gahanna Thoroughfare Plan - US 62
Traffic Volume Calculations



Gahanna Thoroughfare Plan - US 62
Traffic Volume Calculations



Gahanna Thoroughfare Plan - US 62
Traffic Volume Calculations



Appendix C

Capacity Analysis Results



HCM 2010 Signalized Intersection Summary

2: N Stygler Rd & McCutcheon Rd/Church

12/01/2017

																
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR				
Lane Configurations																
Traffic Volume (veh/h)	62	0	179	2	2	2	171	227	9	6	383	184				
Future Volume (veh/h)	62	0	179	2	2	2	171	227	9	6	383	184				
Number	7	4	14	3	8	18	5	2	12	1	6	16				
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0				
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00				
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900				
Adj Flow Rate, veh/h	67	0	195	2	2	2	186	247	10	7	416	200				
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0				
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92				
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2				
Cap, veh/h	362	0	363	223	100	100	460	1076	44	706	638	307				
Arrive On Green	0.07	0.00	0.23	0.12	0.12	0.12	0.08	0.60	0.60	0.01	0.54	0.54				
Sat Flow, veh/h	1774	0	1583	1183	856	856	1774	1778	72	1774	1190	572				
Grp Volume(v), veh/h	67	0	195	2	0	4	186	0	257	7	0	616				
Grp Sat Flow(s),veh/h/ln	1774	0	1583	1183	0	1712	1774	0	1850	1774	0	1762				
Q Serve(g_s), s	2.6	0.0	9.2	0.1	0.0	0.2	3.6	0.0	5.4	0.2	0.0	21.2				
Cycle Q Clear(g_c), s	2.6	0.0	9.2	0.1	0.0	0.2	3.6	0.0	5.4	0.2	0.0	21.2				
Prop In Lane	1.00		1.00	1.00		0.50	1.00		0.04	1.00		0.32				
Lane Grp Cap(c), veh/h	362	0	363	223	0	200	460	0	1119	706	0	944				
V/C Ratio(X)	0.18	0.00	0.54	0.01	0.00	0.02	0.40	0.00	0.23	0.01	0.00	0.65				
Avail Cap(c_a), veh/h	581	0	849	440	0	514	649	0	1119	914	0	944				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00				
Uniform Delay (d), s/veh	27.8	0.0	28.7	33.2	0.0	33.2	10.2	0.0	7.7	8.7	0.0	14.0				
Incr Delay (d2), s/veh	0.2	0.0	1.2	0.0	0.0	0.0	0.6	0.0	0.5	0.0	0.0	3.5				
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
%ile BackOfQ(50%),veh/ln	1.3	0.0	4.1	0.0	0.0	0.1	1.8	0.0	2.9	0.1	0.0	11.2				
LnGrp Delay(d),s/veh	28.1	0.0	30.0	33.2	0.0	33.2	10.8	0.0	8.2	8.7	0.0	17.5				
LnGrp LOS	C		C	C		C	B		A	A		B				
Approach Vol, veh/h	262			6			443			623						
Approach Delay, s/veh	29.5			33.2			9.3			17.4						
Approach LOS	C			C			A			B						
Timer	1	2	3	4	5	6	7	8								
Assigned Phs	1	2	4		5	6	7	8								
Phs Duration (G+Y+Rc), s	5.1	55.8	24.0		10.9	50.0	9.6	14.4								
Change Period (Y+Rc), s	4.0	4.5	4.5		4.0	4.5	4.0	4.5								
Max Green Setting (Gmax), s	11.0	50.5	45.5		16.0	45.5	16.0	25.5								
Max Q Clear Time (g_c+I1), s	2.2	7.4	11.2		5.6	23.2	4.6	2.2								
Green Ext Time (p_c), s	0.0	1.6	1.3		0.3	4.3	0.1	0.0								
Intersection Summary																
HCM 2010 Ctrl Delay	17.2															
HCM 2010 LOS	B															

Timing Report, Sorted By Phase

2: N Stygler Rd & McCutcheon Rd/Church

12/01/2017

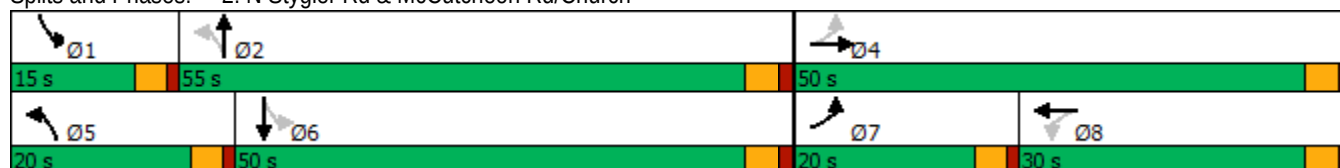


Phase Number	1	2	4	5	6	7	8
Movement	SBL	NBTL	EBTL	NBL	SBTL	EBL	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	Max	None	None	Max	None	None
Maximum Split (s)	15	55	50	20	50	20	30
Maximum Split (%)	12.5%	45.8%	41.7%	16.7%	41.7%	16.7%	25.0%
Minimum Split (s)	11	24.5	26.5	11.5	26.5	11.5	25
Yellow Time (s)	3	3	3	3	3	3	3
All-Red Time (s)	1	1.5	1.5	1	1.5	1	1.5
Minimum Initial (s)	7	20	10	7	20	7	10
Vehicle Extension (s)	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0
Walk Time (s)			7		7		7
Flash Dont Walk (s)			15		15		13
Dual Entry	No	Yes	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	15	70	0	20	70	90
End Time (s)	15	70	0	20	70	90	0
Yield/Force Off (s)	11	65.5	115.5	16	65.5	86	115.5
Yield/Force Off 170(s)	11	65.5	100.5	16	50.5	86	102.5
Local Start Time (s)	100	115	50	100	0	50	70
Local Yield (s)	111	45.5	95.5	116	45.5	66	95.5
Local Yield 170(s)	111	45.5	80.5	116	30.5	66	82.5

Intersection Summary

Cycle Length	120
Control Type	Semi Act-Uncoord
Natural Cycle	90

Splits and Phases: 2: N Stygler Rd & McCutcheon Rd/Church



HCM 2010 Signalized Intersection Summary

5: S Stygler Rd/N Stygler Rd & US 62

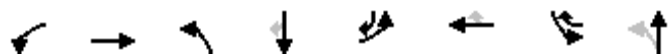
12/01/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	225	564	292	16	1164	357	145	93	20	251	157	592
Future Volume (veh/h)	225	564	292	16	1164	357	145	93	20	251	157	592
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	245	613	317	17	1265	388	158	101	22	273	171	643
Adj No. of Lanes	2	2	0	1	2	1	1	1	0	2	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	289	1189	615	29	1624	877	282	314	68	327	419	861
Arrive On Green	0.08	0.53	0.53	0.02	0.46	0.46	0.08	0.21	0.21	0.03	0.07	0.07
Sat Flow, veh/h	3442	2259	1168	1774	3539	1583	1774	1483	323	3442	1863	2787
Grp Volume(v), veh/h	245	480	450	17	1265	388	158	0	123	273	171	643
Grp Sat Flow(s),veh/h/ln	1721	1770	1657	1774	1770	1583	1774	0	1806	1721	1863	1393
Q Serve(g_s), s	11.2	28.2	28.2	1.5	48.2	23.2	11.0	0.0	9.2	12.6	14.0	33.0
Cycle Q Clear(g_c), s	11.2	28.2	28.2	1.5	48.2	23.2	11.0	0.0	9.2	12.6	14.0	33.0
Prop In Lane	1.00		0.70	1.00		1.00	1.00		0.18	1.00		1.00
Lane Grp Cap(c), veh/h	289	931	872	29	1624	877	282	0	383	327	419	861
V/C Ratio(X)	0.85	0.52	0.52	0.58	0.78	0.44	0.56	0.00	0.32	0.83	0.41	0.75
Avail Cap(c_a), veh/h	344	931	872	55	1624	877	314	0	383	495	419	861
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	0.59	0.59	0.59	1.00	0.00	1.00	0.93	0.93	0.93
Uniform Delay (d), s/veh	72.3	24.6	24.6	78.1	36.5	21.1	44.3	0.0	53.3	76.2	63.9	59.2
Incr Delay (d2), s/veh	15.4	2.0	2.2	10.2	2.3	1.0	1.8	0.0	2.2	7.0	2.7	5.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	14.3	13.4	0.8	24.1	10.3	5.5	0.0	4.8	6.3	7.6	13.4
LnGrp Delay(d),s/veh	87.6	26.7	26.8	88.3	38.7	22.0	46.1	0.0	55.5	83.2	66.6	64.7
LnGrp LOS	F	C	C	F	D	C	D		E	F	E	E
Approach Vol, veh/h	1175			1670			281			1087		
Approach Delay, s/veh	39.4			35.4			50.2			69.6		
Approach LOS	D			D			D			E		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.7	90.2	19.1	42.0	19.5	79.4	21.2	39.9				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	5.0	79.0	16.0	36.0	16.0	68.0	23.0	29.0				
Max Q Clear Time (g_c+I1), s	3.5	30.2	13.0	35.0	13.2	50.2	14.6	11.2				
Green Ext Time (p_c), s	0.0	7.8	0.1	0.5	0.2	10.4	0.6	0.5				
Intersection Summary												
HCM 2010 Ctrl Delay	46.3											
HCM 2010 LOS	D											

Timing Report, Sorted By Phase

5: S Stygler Rd/N Stygler Rd & US 62

12/01/2017



Phase Number	1	2	3	4	5	6	7	8
Movement	WBL	EBT	NBL	SBT	EBL	WBT	SBL	NBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	C-Max	None	Max
Maximum Split (s)	11	85	22	42	22	74	29	35
Maximum Split (%)	6.9%	53.1%	13.8%	26.3%	13.8%	46.3%	18.1%	21.9%
Minimum Split (s)	11	22.5	11	22.5	16	22.5	11	35
Yellow Time (s)	4	4	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2	2	2
Minimum Initial (s)	5	10	5	7	10	10	5	7
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)								5
Flash Dont Walk (s)								20
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	138	149	74	96	138	0	74	103
End Time (s)	149	74	96	138	0	74	103	138
Yield/Force Off (s)	143	68	90	132	154	68	97	132
Yield/Force Off 170(s)	143	68	90	132	154	68	97	112
Local Start Time (s)	138	149	74	96	138	0	74	103
Local Yield (s)	143	68	90	132	154	68	97	132
Local Yield 170(s)	143	68	90	132	154	68	97	112

Intersection Summary

Cycle Length 160
Control Type Actuated-Coordinated
Natural Cycle 105
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Splits and Phases: 5: S Stygler Rd/N Stygler Rd & US 62



HCM 2010 Signalized Intersection Summary

8: S Hamilton Rd/N Hamilton Rd & Granville St/Havens Corners Rd

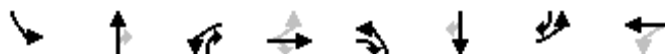
12/01/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	283	150	271	574	75	210	464	213	179	927	179
Future Volume (veh/h)	86	283	150	271	574	75	210	464	213	179	927	179
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	93	308	163	295	624	82	228	504	232	195	1008	195
Adj No. of Lanes	1	2	1	1	2	0	2	2	1	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	182	565	382	362	721	95	280	1866	1053	239	1824	913
Arrive On Green	0.06	0.16	0.16	0.14	0.23	0.23	0.08	0.53	0.53	0.07	0.52	0.52
Sat Flow, veh/h	1774	3539	1583	1774	3147	413	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	93	308	163	295	350	356	228	504	232	195	1008	195
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1790	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	6.9	12.8	13.9	22.0	30.5	30.6	10.4	12.6	9.2	8.9	30.9	9.5
Cycle Q Clear(g_c), s	6.9	12.8	13.9	22.0	30.5	30.6	10.4	12.6	9.2	8.9	30.9	9.5
Prop In Lane	1.00		1.00	1.00		0.23	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	182	565	382	362	406	410	280	1866	1053	239	1824	913
V/C Ratio(X)	0.51	0.55	0.43	0.82	0.86	0.87	0.81	0.27	0.22	0.82	0.55	0.21
Avail Cap(c_a), veh/h	184	896	530	362	570	576	559	1866	1053	301	1824	913
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.92	0.92	0.92	1.00	1.00	1.00	0.90	0.90	0.90	0.89	0.89	0.89
Uniform Delay (d), s/veh	52.6	61.9	51.4	46.8	59.3	59.3	72.3	20.8	10.5	73.4	26.3	16.3
Incr Delay (d2), s/veh	2.1	0.8	0.7	13.4	9.6	9.8	5.2	0.3	0.4	11.6	1.1	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	6.3	6.2	12.1	16.0	16.2	5.2	6.2	4.2	4.6	15.4	4.3
LnGrp Delay(d),s/veh	54.7	62.7	52.1	60.2	68.9	69.1	77.4	21.2	11.0	85.0	27.4	16.8
LnGrp LOS	D	E	D	E	E	E	E	C	B	F	C	B
Approach Vol, veh/h		564			1001			964			1398	
Approach Delay, s/veh		58.3			66.4			32.0			33.9	
Approach LOS		E			E			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.1	88.9	26.0	30.0	17.0	86.9	14.8	41.2				
Change Period (Y+Rc), s	4.0	4.5	4.0	4.5	4.0	4.5	5.0	4.5				
Max Green Setting (Gmax), s	14.0	66.5	22.0	40.5	26.0	54.5	10.0	51.5				
Max Q Clear Time (g_c+I1), s	10.9	14.6	24.0	15.9	12.4	32.9	8.9	32.6				
Green Ext Time (p_c), s	0.2	4.6	0.0	2.7	0.6	8.1	0.0	4.1				
Intersection Summary												
HCM 2010 Ctrl Delay			45.2									
HCM 2010 LOS			D									

Timing Report, Sorted By Phase

8: S Hamilton Rd/N Hamilton Rd & Granville St/Havens Corners Rd

12/01/2017



Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBT	WBL	EBTL	NBL	SBT	EBL	WBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	18	71	26	45	30	59	15	56
Maximum Split (%)	11.3%	44.4%	16.3%	28.1%	18.8%	36.9%	9.4%	35.0%
Minimum Split (s)	11.5	29.5	11.5	29.5	12.5	39.5	15	29.5
Yellow Time (s)	3	3.5	3	3.5	3	3.5	3	3.5
All-Red Time (s)	1	1	1	1	1	1	2	1
Minimum Initial (s)	7	25	7	15	8	35	10	15
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Dont Walk (s)		18		18		18		18
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	130	148	59	85	130	0	59	74
End Time (s)	148	59	85	130	0	59	74	130
Yield/Force Off (s)	144	54.5	81	125.5	156	54.5	69	125.5
Yield/Force Off 170(s)	144	36.5	81	107.5	156	36.5	69	107.5
Local Start Time (s)	130	148	59	85	130	0	59	74
Local Yield (s)	144	54.5	81	125.5	156	54.5	69	125.5
Local Yield 170(s)	144	36.5	81	107.5	156	36.5	69	107.5

Intersection Summary

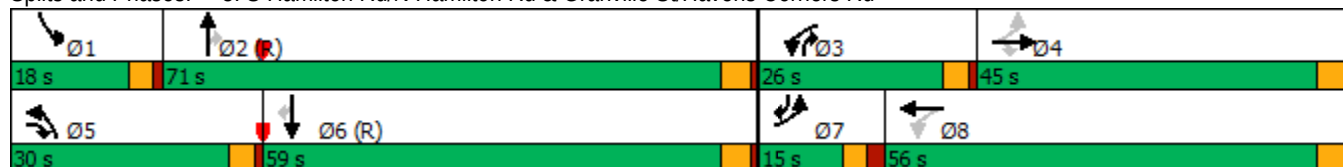
Cycle Length 160

Control Type Actuated-Coordinated

Natural Cycle 100

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Splits and Phases: 8: S Hamilton Rd/N Hamilton Rd & Granville St/Havens Corners Rd



HCM 2010 Signalized Intersection Summary

11: E Johnstown Rd & N Hamilton

12/01/2017

												
Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	10	337	127	12	460	257	152	170	33	187	356	20
Future Volume (veh/h)	10	337	127	12	460	257	152	170	33	187	356	20
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	11	366	138	13	500	279	165	185	0	203	387	0
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	377	1708	936	482	1718	913	264	405	344	417	437	371
Arrive On Green	0.02	0.48	0.48	0.02	0.49	0.49	0.09	0.22	0.00	0.11	0.23	0.00
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	1863	1583	1774	1863	1583
Grp Volume(v), veh/h	11	366	138	13	500	279	165	185	0	203	387	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1863	1583	1774	1863	1583
Q Serve(g_s), s	0.3	6.3	4.1	0.4	8.9	9.6	7.5	9.1	0.0	9.2	21.2	0.0
Cycle Q Clear(g_c), s	0.3	6.3	4.1	0.4	8.9	9.6	7.5	9.1	0.0	9.2	21.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	377	1708	936	482	1718	913	264	405	344	417	437	371
V/C Ratio(X)	0.03	0.21	0.15	0.03	0.29	0.31	0.63	0.46	0.00	0.49	0.89	0.00
Avail Cap(c_a), veh/h	681	1708	936	781	1718	913	404	582	494	527	582	494
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	13.6	15.8	9.7	13.3	16.3	11.5	30.0	35.9	0.0	27.6	39.1	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.3	0.0	0.4	0.9	2.4	0.8	0.0	0.9	12.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	3.1	1.9	0.2	4.5	4.4	3.8	4.8	0.0	4.6	12.3	0.0
LnGrp Delay(d),s/veh	13.6	16.1	10.0	13.3	16.7	12.3	32.4	36.7	0.0	28.5	51.4	0.0
LnGrp LOS	B	B	B	B	B	B	C	D		C	D	
Approach Vol, veh/h		515			792			350			590	
Approach Delay, s/veh		14.4			15.1			34.7			43.5	
Approach LOS		B			B			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.7	55.5	16.0	27.5	6.4	55.8	14.2	29.3				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	20.0	51.0	18.0	33.0	20.0	51.0	18.0	33.0				
Max Q Clear Time (g_c+I1), s	2.4	8.3	11.2	11.1	2.3	11.6	9.5	23.2				
Green Ext Time (p_c), s	0.0	3.0	0.3	0.9	0.0	4.7	0.3	1.6				
Intersection Summary												
HCM 2010 Ctrl Delay			25.4									
HCM 2010 LOS			C									

Timing Report, Sorted By Phase
11: E Johnstown Rd & N Hamilton

12/01/2017



Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	SWL	NETL	NBL	SBTL	NEL	SWTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	None	None	None	Max	None	None
Maximum Split (s)	24.5	55.5	22.5	37.5	24.5	55.5	22.5	37.5
Maximum Split (%)	17.5%	39.6%	16.1%	26.8%	17.5%	39.6%	16.1%	26.8%
Minimum Split (s)	11.5	36.5	11.5	37.5	11.5	36.5	11.5	37.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1	1	1
Minimum Initial (s)	7	25	7	15	7	25	7	15
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Dont Walk (s)		25		25		25		25
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	24.5	80	102.5	0	24.5	80	102.5
End Time (s)	24.5	80	102.5	0	24.5	80	102.5	0
Yield/Force Off (s)	20	75.5	98	135.5	20	75.5	98	135.5
Yield/Force Off 170(s)	20	50.5	98	110.5	20	50.5	98	110.5
Local Start Time (s)	115.5	0	55.5	78	115.5	0	55.5	78
Local Yield (s)	135.5	51	73.5	111	135.5	51	73.5	111
Local Yield 170(s)	135.5	26	73.5	86	135.5	26	73.5	86

Intersection Summary

Cycle Length	140
Control Type	Semi Act-Uncoord
Natural Cycle	100

Splits and Phases: 11: E Johnstown Rd & N Hamilton

Ø1	Ø2	Ø3	Ø4
24.5 s	55.5 s	22.5 s	37.5 s
Ø5	Ø6	Ø7	Ø8
24.5 s	55.5 s	22.5 s	37.5 s

HCM 2010 Signalized Intersection Summary

13: Granville St & Mill St

12/01/2017

								
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	424	637	1000	31	25	770		
Future Volume (veh/h)	424	637	1000	31	25	770		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863		
Adj Flow Rate, veh/h	461	692	1087	34	27	837		
Adj No. of Lanes	1	2	2	0	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	488	2027	1044	33	629	939		
Arrive On Green	0.48	1.00	0.30	0.30	0.35	0.35		
Sat Flow, veh/h	1774	3632	3597	110	1774	1583		
Grp Volume(v), veh/h	461	692	549	572	27	837		
Grp Sat Flow(s),veh/h/ln	1774	1770	1770	1843	1774	1583		
Q Serve(g_s), s	22.7	0.0	32.8	32.8	1.1	39.0		
Cycle Q Clear(g_c), s	22.7	0.0	32.8	32.8	1.1	39.0		
Prop In Lane	1.00			0.06	1.00	1.00		
Lane Grp Cap(c), veh/h	488	2027	528	550	629	939		
V/C Ratio(X)	0.94	0.34	1.04	1.04	0.04	0.89		
Avail Cap(c_a), veh/h	823	2027	528	550	629	939		
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.88	0.88	0.81	0.81	0.84	0.84		
Uniform Delay (d), s/veh	19.3	0.0	38.6	38.6	23.3	19.3		
Incr Delay (d2), s/veh	11.6	0.4	46.3	45.7	0.0	9.3		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	14.4	0.1	22.8	23.6	0.5	38.2		
LnGrp Delay(d),s/veh	30.9	0.4	84.9	84.3	23.3	28.6		
LnGrp LOS	C	A	F	F	C	C		
Approach Vol, veh/h		1153	1121		864			
Approach Delay, s/veh		12.6	84.6		28.4			
Approach LOS		B	F		C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		67.0		43.0	30.2	36.8		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		63.0		39.0	47.0	12.0		
Max Q Clear Time (g_c+I1), s		2.0		41.0	24.7	34.8		
Green Ext Time (p_c), s		6.1		0.0	1.5	0.0		
Intersection Summary								
HCM 2010 Ctrl Delay			42.7					
HCM 2010 LOS			D					

Timing Report, Sorted By Phase

13: Granville St & Mill St

12/01/2017

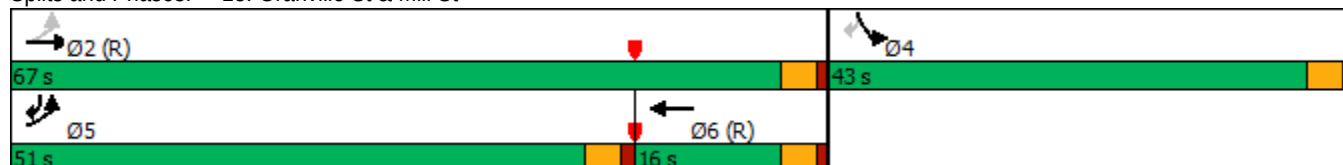


Phase Number	2	4	5	6
Movement	EBTL	SBL	EBL	WBT
Lead/Lag			Lead	Lag
Lead-Lag Optimize			Yes	Yes
Recall Mode	C-Max	None	None	C-Max
Maximum Split (s)	67	43	51	16
Maximum Split (%)	60.9%	39.1%	46.4%	14.5%
Minimum Split (s)	24.5	15	19.5	16
Yellow Time (s)	3	3	3	3
All-Red Time (s)	1	1	1	1
Minimum Initial (s)	20	10	15	12
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)				
Flash Dont Walk (s)				
Dual Entry	Yes	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	59	16	59	0
End Time (s)	16	59	0	16
Yield/Force Off (s)	12	55	106	12
Yield/Force Off 170(s)	12	55	106	12
Local Start Time (s)	59	16	59	0
Local Yield (s)	12	55	106	12
Local Yield 170(s)	12	55	106	12

Intersection Summary

Cycle Length	110
Control Type	Actuated-Coordinated
Natural Cycle	80
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green	

Splits and Phases: 13: Granville St & Mill St



HCM 2010 Signalized Intersection Summary

14: N Hamilton & Beecher Rd

12/01/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	99	60	14	197	186	73	382	34	139	753	89
Future Volume (veh/h)	70	99	60	14	197	186	73	382	34	139	753	89
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	76	108	65	15	214	202	79	415	37	151	818	97
Adj No. of Lanes	1	1	0	1	1	1	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	192	196	118	208	277	356	456	2025	933	687	1846	219
Arrive On Green	0.05	0.18	0.18	0.02	0.15	0.15	0.07	0.57	0.57	0.08	0.58	0.58
Sat Flow, veh/h	1774	1091	656	1774	1863	1583	1774	3539	1583	1774	3188	378
Grp Volume(v), veh/h	76	0	173	15	214	202	79	415	37	151	454	461
Grp Sat Flow(s),veh/h/ln	1774	0	1747	1774	1863	1583	1774	1770	1583	1774	1770	1796
Q Serve(g_s), s	3.6	0.0	9.3	0.7	11.4	11.7	1.7	5.9	1.0	3.4	15.0	15.0
Cycle Q Clear(g_c), s	3.6	0.0	9.3	0.7	11.4	11.7	1.7	5.9	1.0	3.4	15.0	15.0
Prop In Lane	1.00		0.38	1.00		1.00	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	192	0	315	208	277	356	456	2025	933	687	1025	1040
V/C Ratio(X)	0.40	0.00	0.55	0.07	0.77	0.57	0.17	0.20	0.04	0.22	0.44	0.44
Avail Cap(c_a), veh/h	226	0	455	298	486	533	505	2025	933	894	1025	1040
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.2	0.0	38.6	36.6	42.4	35.7	8.1	10.7	8.9	7.2	12.3	12.3
Incr Delay (d2), s/veh	1.3	0.0	1.5	0.1	4.6	1.4	0.2	0.2	0.1	0.2	1.4	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	4.6	0.4	6.2	5.3	0.9	2.9	0.5	1.6	7.7	7.8
LnGrp Delay(d),s/veh	35.5	0.0	40.1	36.7	47.0	37.1	8.3	11.0	9.0	7.4	13.7	13.7
LnGrp LOS	D		D	D	D	D	A	B	A	A	B	B
Approach Vol, veh/h		249			431			531			1066	
Approach Delay, s/veh		38.7			42.0			10.4			12.8	
Approach LOS		D			D			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.9	64.3	4.8	23.7	10.2	65.0	8.0	20.4				
Change Period (Y+Rc), s	3.0	5.0	3.0	5.0	3.0	5.0	3.0	5.0				
Max Green Setting (Gmax), s	20.0	50.0	7.0	27.0	10.0	60.0	7.0	27.0				
Max Q Clear Time (g_c+I1), s	5.4	7.9	2.7	11.3	3.7	17.0	5.6	13.7				
Green Ext Time (p_c), s	0.3	3.0	0.0	0.8	0.1	6.8	0.0	1.7				
Intersection Summary												
HCM 2010 Ctrl Delay			20.6									
HCM 2010 LOS			C									

Timing Report, Sorted By Phase
14: N Hamilton & Beecher Rd

12/01/2017



Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBTL	NBL	SBTL	EBL	WBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	None	None	None	Max	None	None
Maximum Split (s)	23	55	10	32	13	65	10	32
Maximum Split (%)	19.2%	45.8%	8.3%	26.7%	10.8%	54.2%	8.3%	26.7%
Minimum Split (s)	11	29	8	29	11	29	8	29
Yellow Time (s)	3	3.5	3	3.5	3	3.5	3	3.5
All-Red Time (s)	0	1.5	0	1.5	0	1.5	0	1.5
Minimum Initial (s)	8	20	5	5	8	20	5	8
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		8		8		8		8
Flash Dont Walk (s)		16		16		16		16
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	23	78	88	0	13	78	88
End Time (s)	23	78	88	0	13	78	88	0
Yield/Force Off (s)	20	73	85	115	10	73	85	115
Yield/Force Off 170(s)	20	57	85	99	10	57	85	99
Local Start Time (s)	97	0	55	65	97	110	55	65
Local Yield (s)	117	50	62	92	107	50	62	92
Local Yield 170(s)	117	34	62	76	107	34	62	76

Intersection Summary

Cycle Length	120
Control Type	Semi Act-Uncoord
Natural Cycle	80

Splits and Phases: 14: N Hamilton & Beecher Rd

Ø1	Ø2	Ø3	Ø4
23 s	55 s	10 s	32 s
Ø5	Ø6	Ø7	Ø8
13 s	65 s	10 s	32 s

HCM 2010 Signalized Intersection Summary

17: S Hamilton Rd & Rocky Fork Blvd

12/01/2017

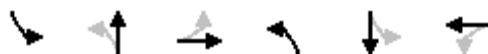
												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	28	28	283	32	204	20	729	34	121	1181	10
Future Volume (veh/h)	38	28	28	283	32	204	20	729	34	121	1181	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	41	30	30	308	35	222	22	792	37	132	1284	11
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	223	238	238	402	61	388	251	1895	89	517	2079	18
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.04	1.00	1.00	0.05	0.58	0.58
Sat Flow, veh/h	1118	856	856	1337	220	1396	1774	3443	161	1774	3596	31
Grp Volume(v), veh/h	41	0	60	308	0	257	22	407	422	132	632	663
Grp Sat Flow(s),veh/h/ln	1118	0	1712	1337	0	1616	1774	1770	1834	1774	1770	1857
Q Serve(g_s), s	3.6	0.0	2.9	24.6	0.0	15.0	0.6	0.0	0.0	3.5	25.8	25.8
Cycle Q Clear(g_c), s	18.6	0.0	2.9	27.5	0.0	15.0	0.6	0.0	0.0	3.5	25.8	25.8
Prop In Lane	1.00		0.50	1.00		0.86	1.00		0.09	1.00		0.02
Lane Grp Cap(c), veh/h	223	0	476	402	0	449	251	974	1010	517	1023	1074
V/C Ratio(X)	0.18	0.00	0.13	0.77	0.00	0.57	0.09	0.42	0.42	0.26	0.62	0.62
Avail Cap(c_a), veh/h	251	0	518	435	0	489	389	974	1010	605	1023	1074
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.89	0.89	0.89	0.77	0.77	0.77
Uniform Delay (d), s/veh	42.1	0.0	29.7	40.0	0.0	34.1	12.4	0.0	0.0	9.1	15.2	15.2
Incr Delay (d2), s/veh	0.4	0.0	0.1	7.4	0.0	1.4	0.1	1.2	1.1	0.2	2.2	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	1.4	9.9	0.0	6.9	0.3	0.3	0.3	1.7	13.1	13.7
LnGrp Delay(d),s/veh	42.5	0.0	29.8	47.5	0.0	35.5	12.5	1.2	1.1	9.3	17.4	17.3
LnGrp LOS	D		C	D		D	B	A	A	A	B	B
Approach Vol, veh/h	101			565			851			1427		
Approach Delay, s/veh	35.0			42.0			1.4			16.6		
Approach LOS	C			D			A			B		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	9.5	65.2	35.3		6.4	68.3	35.3					
Change Period (Y+Rc), s	4.0	* 4.7	* 4.7		4.0	* 4.7	* 4.7					
Max Green Setting (Gmax), s	11.0	* 52	* 33		11.0	* 52	* 33					
Max Q Clear Time (g_c+I1), s	5.5	2.0	20.6		2.6	27.8	29.5					
Green Ext Time (p_c), s	0.1	6.0	0.3		0.0	9.7	1.0					
Intersection Summary												
HCM 2010 Ctrl Delay			17.7									
HCM 2010 LOS			B									
Notes												

2017 AM Peak 10/12/2017

Synchro 10 Report
Page 13

Timing Report, Sorted By Phase
17: S Hamilton Rd & Rocky Fork Blvd

12/01/2017



Phase Number	1	2	4	5	6	8
Movement	SBL	NBTL	EBTL	NBL	SBTL	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	None	None	C-Max	None
Maximum Split (s)	15	57	38	15	57	38
Maximum Split (%)	13.6%	51.8%	34.5%	13.6%	51.8%	34.5%
Minimum Split (s)	9.5	29.7	34.7	9.5	29.7	34.7
Yellow Time (s)	3	3.7	3.7	3	3.7	3.7
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	5	20	5	5	20	5
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		18	23		18	23
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	107	12	69	107	12	69
End Time (s)	12	69	107	12	69	107
Yield/Force Off (s)	8	64.3	102.3	8	64.3	102.3
Yield/Force Off 170(s)	8	46.3	79.3	8	46.3	79.3
Local Start Time (s)	95	0	57	95	0	57
Local Yield (s)	106	52.3	90.3	106	52.3	90.3
Local Yield 170(s)	106	34.3	67.3	106	34.3	67.3

Intersection Summary

Cycle Length 110
Control Type Actuated-Coordinated
Natural Cycle 80
Offset: 12 (11%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Splits and Phases: 17: S Hamilton Rd & Rocky Fork Blvd



HCM 2010 Signalized Intersection Summary
20: S Hamilton Rd & Swanson Ave/Tech Center Dr

12/01/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	1	1	474	1	145	1	496	137	420	1344	1
Future Volume (veh/h)	3	1	1	474	1	145	1	496	137	420	1344	1
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	3	1	1	516	0	158	1	539	149	457	1461	1
Adj No. of Lanes	0	1	0	2	0	2	1	2	1	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	9	3	3	589	0	999	237	1953	1137	514	2658	2
Arrive On Green	0.01	0.01	0.01	0.17	0.00	0.17	0.55	0.55	0.55	0.15	0.73	0.73
Sat Flow, veh/h	1049	350	350	3548	0	3167	361	3539	1583	3442	3629	2
Grp Volume(v), veh/h	5	0	0	516	0	158	1	539	149	457	712	750
Grp Sat Flow(s),veh/h/ln	1749	0	0	1774	0	1583	361	1770	1583	1721	1770	1862
Q Serve(g_s), s	0.5	0.0	0.0	27.0	0.0	6.8	0.2	15.3	5.6	24.7	34.3	34.3
Cycle Q Clear(g_c), s	0.5	0.0	0.0	27.0	0.0	6.8	0.3	15.3	5.6	24.7	34.3	34.3
Prop In Lane	0.60		0.20	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	15	0	0	589	0	999	237	1953	1137	514	1296	1364
V/C Ratio(X)	0.33	0.00	0.00	0.88	0.00	0.16	0.00	0.28	0.13	0.89	0.55	0.55
Avail Cap(c_a), veh/h	84	0	0	1104	0	1458	237	1953	1137	1071	1296	1364
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	93.6	0.0	0.0	77.3	0.0	46.9	19.1	22.5	8.3	79.3	11.4	11.4
Incr Delay (d2), s/veh	12.6	0.0	0.0	4.3	0.0	0.1	0.0	0.4	0.2	5.5	1.7	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	13.6	0.0	3.0	0.0	7.6	3.9	12.2	17.2	18.1
LnGrp Delay(d),s/veh	106.2	0.0	0.0	81.6	0.0	46.9	19.2	22.9	8.6	84.8	13.1	13.0
LnGrp LOS	F			F		D	B	C	A	F	B	B
Approach Vol, veh/h	5			674			689			1919		
Approach Delay, s/veh	106.2			73.5			19.8			30.1		
Approach LOS	F			E			B			C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	34.3	110.7		7.5		145.0		37.4				
Change Period (Y+Rc), s	* 5.9	* 5.9		* 5.9		* 5.9		5.9				
Max Green Setting (Gmax), s	* 59	* 74		* 9.1		* 1.4E2		59.1				
Max Q Clear Time (g_c+I1), s	26.7	17.3		2.5		36.3		29.0				
Green Ext Time (p_c), s	1.6	4.2		0.0		13.9		2.6				
Intersection Summary												
HCM 2010 Ctrl Delay				37.0								
HCM 2010 LOS				D								
Notes												

2017 AM Peak 10/12/2017

Synchro 10 Report
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Timing Report, Sorted By Phase

20: S Hamilton Rd & Swanson Ave/Tech Center Dr

12/01/2017



Phase Number	1	2	4	6	8
Movement	SBL	NBTL	EBTL	SBT	WBTL
Lead/Lag	Lead	Lag			
Lead-Lag Optimize	Yes	Yes			
Recall Mode	None	Max	None	Max	None
Maximum Split (s)	65	80	15	145	65
Maximum Split (%)	28.9%	35.6%	6.7%	64.4%	28.9%
Minimum Split (s)	12.9	38.9	15	38.9	44.9
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	2.3	2.3	2.3	2.3	2.3
Minimum Initial (s)	7	25	7	25	10
Vehicle Extension (s)	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0
Walk Time (s)				7	7
Flash Dont Walk (s)				26	32
Dual Entry	No	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	65	145	0	160
End Time (s)	65	145	160	145	0
Yield/Force Off (s)	59.1	139.1	154.1	139.1	219.1
Yield/Force Off 170(s)	59.1	139.1	154.1	113.1	187.1
Local Start Time (s)	160	0	80	160	95
Local Yield (s)	219.1	74.1	89.1	74.1	154.1
Local Yield 170(s)	219.1	74.1	89.1	48.1	122.1

Intersection Summary

Cycle Length	225
Control Type	Semi Act-Uncoord
Natural Cycle	115

Splits and Phases: 20: S Hamilton Rd & Swanson Ave/Tech Center Dr

 Ø1	 Ø2	 Ø4	 Ø8
65 s	80 s	15 s	65 s
 Ø6			
145 s			

HCM 2010 Signalized Intersection Summary

22: S Hamilton Rd & Morrison Rd

12/01/2017

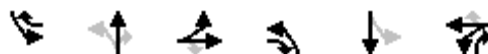
												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	58	182	733	34	170	92	657	442	191	1161	15
Future Volume (veh/h)	31	58	182	733	34	170	92	657	442	191	1161	15
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	34	63	198	823	0	185	100	714	480	208	1262	16
Adj No. of Lanes	0	1	1	2	0	1	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	70	130	282	845	0	492	263	1416	1010	350	1444	18
Arrive On Green	0.11	0.11	0.11	0.24	0.00	0.24	0.14	0.80	0.80	0.15	0.81	0.81
Sat Flow, veh/h	642	1189	1583	3548	0	1583	1774	3539	1583	1774	3579	45
Grp Volume(v), veh/h	97	0	198	823	0	185	100	714	480	208	624	654
Grp Sat Flow(s),veh/h/ln	1831	0	1583	1774	0	1583	1774	1770	1583	1774	1770	1855
Q Serve(g_s), s	5.5	0.0	12.0	25.3	0.0	10.0	3.4	7.4	10.2	8.0	25.4	25.4
Cycle Q Clear(g_c), s	5.5	0.0	12.0	25.3	0.0	10.0	3.4	7.4	10.2	8.0	25.4	25.4
Prop In Lane	0.35		1.00	1.00		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	200	0	282	845	0	492	263	1416	1010	350	714	748
V/C Ratio(X)	0.49	0.00	0.70	0.97	0.00	0.38	0.38	0.50	0.48	0.59	0.87	0.87
Avail Cap(c_a), veh/h	200	0	282	845	0	492	430	1416	1010	350	714	748
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	0.84	0.00	0.84	1.00	1.00	1.00	0.71	0.71	0.71
Uniform Delay (d), s/veh	46.1	0.0	42.4	41.6	0.0	29.6	18.5	7.3	3.0	16.6	8.8	8.8
Incr Delay (d2), s/veh	1.8	0.0	7.5	22.1	0.0	0.4	0.9	1.3	1.6	1.9	10.5	10.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	6.2	14.9	0.0	4.4	1.7	3.6	7.4	4.0	13.5	14.1
LnGrp Delay(d),s/veh	47.9	0.0	49.9	63.7	0.0	30.0	19.5	8.6	4.6	18.6	19.3	18.9
LnGrp LOS	D		D	E		C	B	A	A	B	B	B
Approach Vol, veh/h		295			1008			1294			1486	
Approach Delay, s/veh		49.3			57.5			8.0			19.0	
Approach LOS		D			E			A			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.0	50.0		17.0	11.6	50.4		31.0				
Change Period (Y+Rc), s	4.0	6.0		5.0	4.0	6.0		4.8				
Max Green Setting (Gmax), s	8.0	44.0		12.0	18.0	34.0		26.2				
Max Q Clear Time (g_c+I1), s	10.0	12.2		14.0	5.4	27.4		27.3				
Green Ext Time (p_c), s	0.0	7.1		0.0	0.2	4.1		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			27.2									
HCM 2010 LOS			C									
Notes												

2017 AM Peak 10/12/2017

Synchro 10 Report
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Timing Report, Sorted By Phase
22: S Hamilton Rd & Morrison Rd

12/01/2017

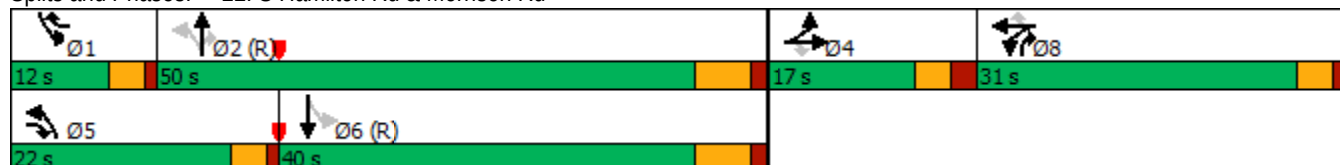


Phase Number	1	2	4	5	6	8
Movement	SBL	NBTL	EBTL	NBL	SBTL	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	None	None	C-Max	None
Maximum Split (s)	12	50	17	22	40	31
Maximum Split (%)	10.9%	45.5%	15.5%	20.0%	36.4%	28.2%
Minimum Split (s)	12	24	17	12	36	31
Yellow Time (s)	3	4.5	3	3	4.5	3
All-Red Time (s)	1	1.5	2	1	1.5	1.8
Minimum Initial (s)	8	15	8	8	15	8
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)					7	7
Flash Dont Walk (s)					23	19
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	4	16	66	4	26	83
End Time (s)	16	66	83	26	66	4
Yield/Force Off (s)	12	60	78	22	60	109.2
Yield/Force Off 170(s)	12	60	78	22	37	90.2
Local Start Time (s)	88	100	40	88	0	57
Local Yield (s)	96	34	52	106	34	83.2
Local Yield 170(s)	96	34	52	106	11	64.2

Intersection Summary

Cycle Length	110
Control Type	Actuated-Coordinated
Natural Cycle	100
Offset: 26 (24%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	

Splits and Phases: 22: S Hamilton Rd & Morrison Rd



HCM 2010 Signalized Intersection Summary

23: Morrison Rd & Tech Center Dr

12/01/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	118	207	221	2	33	27	184	209	74	98	113	433
Future Volume (veh/h)	118	207	221	2	33	27	184	209	74	98	113	433
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	128	225	240	2	36	29	200	227	80	107	123	471
Adj No. of Lanes	2	1	0	1	1	0	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	183	247	264	91	238	192	559	1308	448	619	1684	838
Arrive On Green	0.05	0.30	0.30	0.00	0.25	0.25	0.07	0.51	0.51	0.04	0.48	0.48
Sat Flow, veh/h	3442	826	881	1774	956	770	1774	2588	888	1774	3539	1583
Grp Volume(v), veh/h	128	0	465	2	0	65	200	153	154	107	123	471
Grp Sat Flow(s),veh/h/ln	1721	0	1707	1774	0	1727	1774	1770	1706	1774	1770	1583
Q Serve(g_s), s	5.1	0.0	36.3	0.1	0.0	4.1	7.8	6.5	6.8	4.3	2.6	27.6
Cycle Q Clear(g_c), s	5.1	0.0	36.3	0.1	0.0	4.1	7.8	6.5	6.8	4.3	2.6	27.6
Prop In Lane	1.00		0.52	1.00		0.45	1.00		0.52	1.00		1.00
Lane Grp Cap(c), veh/h	183	0	511	91	0	430	559	894	862	619	1684	838
V/C Ratio(X)	0.70	0.00	0.91	0.02	0.00	0.15	0.36	0.17	0.18	0.17	0.07	0.56
Avail Cap(c_a), veh/h	744	0	801	214	0	560	874	894	862	666	1684	838
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.4	0.0	46.6	41.9	0.0	40.5	15.3	18.5	18.6	16.9	19.7	21.8
Incr Delay (d2), s/veh	4.7	0.0	9.7	0.1	0.0	0.2	0.4	0.4	0.5	0.1	0.1	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	18.4	0.1	0.0	2.0	3.8	3.3	3.3	2.1	1.3	12.7
LnGrp Delay(d),s/veh	69.1	0.0	56.4	42.0	0.0	40.7	15.7	19.0	19.1	17.1	19.8	24.6
LnGrp LOS	E		E	D		D	B	B	B	B	B	C
Approach Vol, veh/h	593			67			507			701		
Approach Delay, s/veh	59.1			40.7			17.7			22.6		
Approach LOS	E			D			B			C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.3	75.0	5.5	46.5	15.4	70.9	12.5	39.5				
Change Period (Y+Rc), s	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1				
Max Green Setting (Gmax), s	9.9	69.9	9.9	64.9	34.9	44.9	29.9	44.9				
Max Q Clear Time (g_c+I1), s	6.3	8.8	2.1	38.3	9.8	29.6	7.1	6.1				
Green Ext Time (p_c), s	0.1	1.9	0.0	3.2	0.5	2.2	0.4	0.4				
Intersection Summary												
HCM 2010 Ctrl Delay	33.5											
HCM 2010 LOS	C											

Timing Report, Sorted By Phase
23: Morrison Rd & Tech Center Dr

12/01/2017

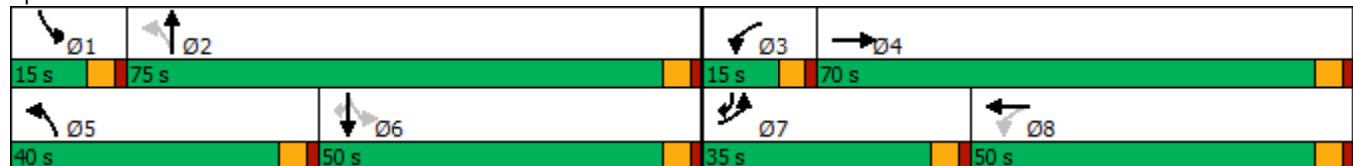


Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBT	NBL	SBTL	EBL	WBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	None	None	None	Max	None	None
Maximum Split (s)	15	75	15	70	40	50	35	50
Maximum Split (%)	8.6%	42.9%	8.6%	40.0%	22.9%	28.6%	20.0%	28.6%
Minimum Split (s)	10.1	35.1	10.1	32.1	10.1	35.1	10.1	32.1
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Minimum Initial (s)	5	10	5	10	5	10	5	10
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Dont Walk (s)		23		20		23		18
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	15	90	105	0	40	90	125
End Time (s)	15	90	105	0	40	90	125	0
Yield/Force Off (s)	9.9	84.9	99.9	169.9	34.9	84.9	119.9	169.9
Yield/Force Off 170(s)	9.9	61.9	99.9	149.9	34.9	61.9	119.9	151.9
Local Start Time (s)	135	150	50	65	135	0	50	85
Local Yield (s)	144.9	44.9	59.9	129.9	169.9	44.9	79.9	129.9
Local Yield 170(s)	144.9	21.9	59.9	109.9	169.9	21.9	79.9	111.9

Intersection Summary

Cycle Length	175
Control Type	Semi Act-Uncoord
Natural Cycle	90

Splits and Phases: 23: Morrison Rd & Tech Center Dr



HCM 2010 Signalized Intersection Summary

25: Old Ridenour Rd & US 62/Granville St

12/01/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	710	48	302	1333	105	36	11	167	183	24	42
Future Volume (veh/h)	15	710	48	302	1333	105	36	11	167	183	24	42
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	16	772	52	328	1449	114	39	12	182	199	26	46
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	216	1705	763	485	2035	1095	260	195	341	389	115	203
Arrive On Green	0.02	0.48	0.48	0.15	0.76	0.76	0.03	0.10	0.10	0.12	0.19	0.19
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	1863	1583	1774	605	1070
Grp Volume(v), veh/h	16	772	52	328	1449	114	39	12	182	199	0	72
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1863	1583	1774	0	1674
Q Serve(g_s), s	0.5	15.9	1.9	10.1	23.3	1.5	2.1	0.6	11.2	10.6	0.0	4.0
Cycle Q Clear(g_c), s	0.5	15.9	1.9	10.1	23.3	1.5	2.1	0.6	11.2	10.6	0.0	4.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.64
Lane Grp Cap(c), veh/h	216	1705	763	485	2035	1095	260	195	341	389	0	317
V/C Ratio(X)	0.07	0.45	0.07	0.68	0.71	0.10	0.15	0.06	0.53	0.51	0.00	0.23
Avail Cap(c_a), veh/h	314	1705	763	498	2035	1095	381	195	341	489	0	317
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.81	0.81	0.81	0.36	0.36	0.36	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.7	18.9	15.3	12.5	8.2	3.0	42.0	44.4	38.3	35.9	0.0	37.8
Incr Delay (d2), s/veh	0.1	0.7	0.1	1.3	0.8	0.1	0.3	0.6	5.9	1.0	0.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	7.9	0.9	4.9	11.1	0.7	1.1	0.4	5.5	5.3	0.0	2.0
LnGrp Delay(d),s/veh	14.8	19.6	15.4	13.8	9.0	3.1	42.2	45.0	44.2	36.9	0.0	39.4
LnGrp LOS	B	B	B	B	A	A	D	D	D	D		D
Approach Vol, veh/h		840			1891			233			271	
Approach Delay, s/veh		19.2			9.5			43.9			37.6	
Approach LOS		B			A			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.2	59.0	8.5	25.3	6.9	69.2	17.8	16.0				
Change Period (Y+Rc), s	5.0	6.0	5.0	4.5	5.0	6.0	5.0	4.5				
Max Green Setting (Gmax), s	13.0	46.0	11.0	19.5	8.0	51.0	19.0	11.5				
Max Q Clear Time (g_c+I1), s	12.1	17.9	4.1	6.0	2.5	25.3	12.6	13.2				
Green Ext Time (p_c), s	0.1	5.7	0.0	0.2	0.0	12.5	0.3	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				16.9								
HCM 2010 LOS				B								

Timing Report, Sorted By Phase
25: Old Ridenour Rd & US 62/Granville St

12/01/2017



Phase Number	1	2	3	4	5	6	7	8
Movement	WBL	EBTL	NBL	SBTL	EBL	WBTL	SBL	NBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	C-Max	None	Max
Maximum Split (s)	18	52	16	24	13	57	24	16
Maximum Split (%)	16.4%	47.3%	14.5%	21.8%	11.8%	51.8%	21.8%	14.5%
Minimum Split (s)	10	41	15	24	13	41	15	16
Yellow Time (s)	4	4.5	4	3	4	4.5	4	3
All-Red Time (s)	1	1.5	1	1.5	1	1.5	1	1.5
Minimum Initial (s)	5	35	5	8	5	35	10	5
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)	7							
Flash Dont Walk (s)	12							
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	86	104	46	62	86	99	46	70
End Time (s)	104	46	62	86	99	46	70	86
Yield/Force Off (s)	99	40	57	81.5	94	40	65	81.5
Yield/Force Off 170(s)	99	40	57	81.5	94	28	65	81.5
Local Start Time (s)	92	0	52	68	92	105	52	76
Local Yield (s)	105	46	63	87.5	100	46	71	87.5
Local Yield 170(s)	105	46	63	87.5	100	34	71	87.5

Intersection Summary

Cycle Length	110
Control Type	Actuated-Coordinated
Natural Cycle	95
Offset: 104 (95%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	

Splits and Phases: 25: Old Ridenour Rd & US 62/Granville St



Intersection

Intersection Delay, s/veh	9.3
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	140	18	20	57	46	259
Future Vol, veh/h	140	18	20	57	46	259
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	152	20	22	62	50	282
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	9.5	8	9.5
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	89%	0%	15%
Vol Thru, %	11%	26%	0%
Vol Right, %	0%	74%	85%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	158	77	305
LT Vol	140	0	46
Through Vol	18	20	0
RT Vol	0	57	259
Lane Flow Rate	172	84	332
Geometry Grp	1	1	1
Degree of Util (X)	0.235	0.103	0.375
Departure Headway (Hd)	4.916	4.416	4.072
Convergence, Y/N	Yes	Yes	Yes
Cap	730	809	885
Service Time	2.955	2.459	2.096
HCM Lane V/C Ratio	0.236	0.104	0.375
HCM Control Delay	9.5	8	9.5
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.9	0.3	1.8

Intersection

Int Delay, s/veh 7.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	172	122	283	53	23	308
Future Vol, veh/h	172	122	283	53	23	308
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	60	-	-	200	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	187	133	308	58	25	335

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	366	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.12	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.218	-	-
Pot Cap-1 Maneuver	1193	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1193	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	5	0	16.7
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1193	-	-	-	663
HCM Lane V/C Ratio	0.157	-	-	-	0.543
HCM Control Delay (s)	8.6	-	-	-	16.7
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.6	-	-	-	3.3

HCM 2010 TWSC
31: IR-270 NB Exit Ramp & W Johnstown Rd

12/01/2017

Intersection

Int Delay, s/veh 36.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↑	↑
Traffic Vol, veh/h	105	0	0	370	433	96
Future Vol, veh/h	105	0	0	370	433	96
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	114	0	0	402	471	104

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	-	-	516	114
Stage 1	-	-	-	114	-
Stage 2	-	-	-	402	-
Critical Hdwy	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	0	0	519	939
Stage 1	-	0	0	911	-
Stage 2	-	0	0	676	-
Platoon blocked, %	-				
Mov Cap-1 Maneuver	-	-	-	519	939
Mov Cap-2 Maneuver	-	-	-	519	-
Stage 1	-	-	-	911	-
Stage 2	-	-	-	676	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	69.5
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	WBT
Capacity (veh/h)	565	-	-
HCM Lane V/C Ratio	1.018	-	-
HCM Control Delay (s)	69.5	-	-
HCM Lane LOS	F	-	-
HCM 95th %tile Q(veh)	15.3	-	-

HCM 2010 Signalized Intersection Summary

32: Culpeper's/Shull Ave & Granville St

12/01/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	580	1	4	942	63	2	1	2	127	1	90
Future Volume (veh/h)	24	580	1	4	942	63	2	1	2	127	1	90
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	26	630	1	4	1024	68	2	1	2	138	1	98
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	415	2079	3	416	1826	121	192	102	165	275	15	168
Arrive On Green	0.01	0.19	0.19	0.02	1.00	1.00	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	1774	3626	6	1774	3369	224	537	373	607	819	55	616
Grp Volume(v), veh/h	26	307	324	4	538	554	5	0	0	237	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1862	1774	1770	1823	1517	0	0	1490	0	0
Q Serve(g_s), s	0.7	16.4	16.4	0.1	0.0	0.0	0.0	0.0	0.0	13.6	0.0	0.0
Cycle Q Clear(g_c), s	0.7	16.4	16.4	0.1	0.0	0.0	0.2	0.0	0.0	15.0	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.12	0.40		0.40	0.58		0.41
Lane Grp Cap(c), veh/h	415	1015	1068	416	959	988	459	0	0	458	0	0
V/C Ratio(X)	0.06	0.30	0.30	0.01	0.56	0.56	0.01	0.00	0.00	0.52	0.00	0.00
Avail Cap(c_a), veh/h	497	1015	1068	555	959	988	459	0	0	458	0	0
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.99	0.96	0.96	0.96	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	10.0	25.7	25.7	11.8	0.0	0.0	29.2	0.0	0.0	34.4	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.8	0.7	0.0	2.3	2.2	0.0	0.0	0.0	4.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	8.3	8.7	0.1	0.6	0.6	0.1	0.0	0.0	6.7	0.0	0.0
LnGrp Delay(d),s/veh	10.1	26.4	26.4	11.8	2.3	2.2	29.2	0.0	0.0	38.6	0.0	0.0
LnGrp LOS	B	C	C	B	A	A	C			D		
Approach Vol, veh/h		657			1096			5			237	
Approach Delay, s/veh		25.8			2.3			29.2			38.6	
Approach LOS		C			A			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.4	68.6		35.0	9.9	65.1		35.0				
Change Period (Y+Rc), s	5.5	5.5		5.0	5.5	5.5		5.0				
Max Green Setting (Gmax), s	9.5	54.5		30.0	9.5	54.5		30.0				
Max Q Clear Time (g_c+I1), s	2.1	18.4		17.0	2.7	2.0		2.2				
Green Ext Time (p_c), s	0.0	4.6		1.1	0.0	10.3		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				14.4								
HCM 2010 LOS				B								

Timing Report, Sorted By Phase

32: Culpeper's/Shull Ave & Granville St

12/01/2017

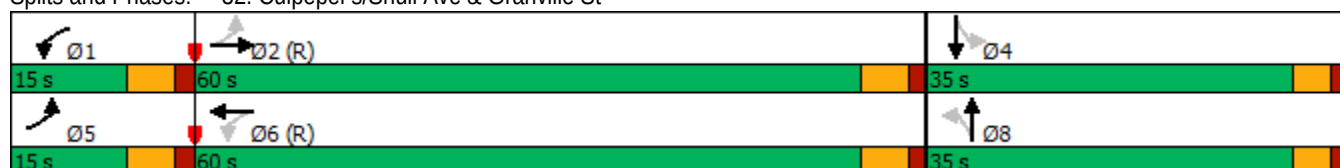


Phase Number	1	2	4	5	6	8
Movement	WBL	EBTL	SBTL	EBL	WBTL	NBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	Max	None	C-Max	Max
Maximum Split (s)	15	60	35	15	60	35
Maximum Split (%)	13.6%	54.5%	31.8%	13.6%	54.5%	31.8%
Minimum Split (s)	13.5	24.5	30	13.5	24.5	30
Yellow Time (s)	4	4	3	4	4	3
All-Red Time (s)	1.5	1.5	2	1.5	1.5	2
Minimum Initial (s)	8	15	8	8	15	8
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		12	18		12	18
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	55	70	20	55	70	20
End Time (s)	70	20	55	70	20	55
Yield/Force Off (s)	64.5	14.5	50	64.5	14.5	50
Yield/Force Off 170(s)	64.5	2.5	32	64.5	2.5	32
Local Start Time (s)	95	0	60	95	0	60
Local Yield (s)	104.5	54.5	90	104.5	54.5	90
Local Yield 170(s)	104.5	42.5	72	104.5	42.5	72

Intersection Summary

Cycle Length	110
Control Type	Actuated-Coordinated
Natural Cycle	75
Offset: 70 (64%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	

Splits and Phases: 32: Culpeper's/Shull Ave & Granville St



HCM 2010 Signalized Intersection Summary

37: Lincoln Cir & Granville St

12/01/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	759	2	15	924	1	16	1	1	1	1	1
Future Volume (veh/h)	1	759	2	15	924	1	16	1	1	1	1	1
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	1	825	2	16	1004	1	17	1	1	1	1	1
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	513	2889	7	623	2952	3	160	57	57	64	54	37
Arrive On Green	0.00	1.00	1.00	0.04	1.00	1.00	0.07	0.07	0.07	0.07	0.07	0.07
Sat Flow, veh/h	1774	3622	9	1774	3628	4	1409	856	856	308	803	555
Grp Volume(v), veh/h	1	403	424	16	490	515	17	0	2	3	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1861	1774	1770	1862	1409	0	1712	1666	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.2	0.0	0.0	1.0	0.0	0.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.2	0.0	0.0	1.2	0.0	0.1	0.2	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		0.50	0.33		0.33
Lane Grp Cap(c), veh/h	513	1411	1484	623	1440	1515	160	0	114	155	0	0
V/C Ratio(X)	0.00	0.29	0.29	0.03	0.34	0.34	0.11	0.00	0.02	0.02	0.00	0.00
Avail Cap(c_a), veh/h	748	1411	1484	918	1440	1515	466	0	486	501	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	0.88	0.88	0.88	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	2.2	0.0	0.0	1.9	0.0	0.0	48.4	0.0	48.0	48.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.5	0.0	0.6	0.5	0.3	0.0	0.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.2	0.1	0.2	0.2	0.5	0.0	0.1	0.1	0.0	0.0
LnGrp Delay(d),s/veh	2.2	0.5	0.5	1.9	0.6	0.5	48.7	0.0	48.0	48.0	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	D		D	D		
Approach Vol, veh/h		828			1021			19			3	
Approach Delay, s/veh		0.5			0.6			48.7			48.0	
Approach LOS		A			A			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.9	92.7		11.3	4.2	94.5		11.3				
Change Period (Y+Rc), s	4.0	5.0		4.0	4.0	5.0		4.0				
Max Green Setting (Gmax), s	20.2	45.6		31.2	14.7	51.1		31.2				
Max Q Clear Time (g_c+I1), s	2.2	2.0		2.2	2.0	2.0		3.2				
Green Ext Time (p_c), s	0.0	6.6		0.0	0.0	8.9		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			1.1									
HCM 2010 LOS			A									

Timing Report, Sorted By Phase

37: Lincoln Cir & Granville St

12/01/2017



Phase Number	1	2	4	5	6	8
Movement	WBL	EBTL	SBTL	EBL	WBTL	NBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	None	None	C-Max	None
Maximum Split (s)	24.2	50.6	35.2	18.7	56.1	35.2
Maximum Split (%)	22.0%	46.0%	32.0%	17.0%	51.0%	32.0%
Minimum Split (s)	9.5	35	26	9.5	35	26.5
Yellow Time (s)	3	4	3	3	4	3
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	5	30	15	5	30	15
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		15	15		15	15
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	40.8	65	5.6	40.8	59.5	5.6
End Time (s)	65	5.6	40.8	59.5	5.6	40.8
Yield/Force Off (s)	61	0.6	36.8	55.5	0.6	36.8
Yield/Force Off 170(s)	61	95.6	21.8	55.5	95.6	21.8
Local Start Time (s)	85.8	0	50.6	85.8	104.5	50.6
Local Yield (s)	106	45.6	81.8	100.5	45.6	81.8
Local Yield 170(s)	106	30.6	66.8	100.5	30.6	66.8

Intersection Summary

Cycle Length 110
Control Type Actuated-Coordinated
Natural Cycle 75
Offset: 65 (59%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Splits and Phases: 37: Lincoln Cir & Granville St



HCM 2010 Signalized Intersection Summary

40: Flint Ridge Rd/Library & Granville St

12/01/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	614	134	12	904	5	89	3	16	2	2	2
Future Volume (veh/h)	5	614	134	12	904	5	89	3	16	2	2	2
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	5	667	146	13	983	5	97	3	17	2	2	2
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	310	1586	347	475	2031	10	402	16	61	270	255	461
Arrive On Green	0.02	1.00	1.00	0.02	0.56	0.56	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1774	2889	632	1774	3611	18	1178	56	210	760	876	1583
Grp Volume(v), veh/h	5	408	405	13	482	506	117	0	0	4	0	2
Grp Sat Flow(s),veh/h/ln	1774	1770	1751	1774	1770	1860	1444	0	0	1636	0	1583
Q Serve(g_s), s	0.1	0.0	0.0	0.3	18.0	18.0	6.4	0.0	0.0	0.0	0.0	0.1
Cycle Q Clear(g_c), s	0.1	0.0	0.0	0.3	18.0	18.0	6.8	0.0	0.0	0.2	0.0	0.1
Prop In Lane	1.00		0.36	1.00		0.01	0.83		0.15	0.50		1.00
Lane Grp Cap(c), veh/h	310	971	961	475	995	1046	480	0	0	525	0	461
V/C Ratio(X)	0.02	0.42	0.42	0.03	0.48	0.48	0.24	0.00	0.00	0.01	0.00	0.00
Avail Cap(c_a), veh/h	526	971	961	666	995	1046	480	0	0	525	0	461
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	0.67	0.67	0.67	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.8	0.0	0.0	10.1	14.5	14.5	30.0	0.0	0.0	27.7	0.0	27.7
Incr Delay (d2), s/veh	0.0	1.3	1.3	0.0	1.1	1.1	1.2	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.4	0.4	0.2	9.0	9.5	2.9	0.0	0.0	0.1	0.0	0.0
LnGrp Delay(d),s/veh	11.9	1.3	1.3	10.1	15.6	15.5	31.2	0.0	0.0	27.7	0.0	27.7
LnGrp LOS	B	A	A	B	B	B	C			C		C
Approach Vol, veh/h		818			1001			117			6	
Approach Delay, s/veh		1.4			15.5			31.2			27.7	
Approach LOS		A			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	65.9		37.0	5.6	67.4		37.0				
Change Period (Y+Rc), s	4.5	5.5		5.0	4.5	5.5		5.0				
Max Green Setting (Gmax), s	14.5	48.5		32.0	14.5	48.5		32.0				
Max Q Clear Time (g_c+I1), s	2.3	2.0		2.2	2.1	20.0		8.8				
Green Ext Time (p_c), s	0.0	6.7		0.0	0.0	7.8		0.6				
Intersection Summary												
HCM 2010 Ctrl Delay				10.5								
HCM 2010 LOS				B								

Timing Report, Sorted By Phase

40: Flint Ridge Rd/Library & Granville St

12/01/2017



Phase Number	1	2	4	5	6	8
Movement	WBL	EBTL	SBTL	EBL	WBTL	NBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	Max	None	C-Max	Max
Maximum Split (s)	19	54	37	19	54	37
Maximum Split (%)	17.3%	49.1%	33.6%	17.3%	49.1%	33.6%
Minimum Split (s)	12.5	25.5	33	12.5	25.5	33
Yellow Time (s)	3	4	3	3	4	3
All-Red Time (s)	1.5	1.5	2	1.5	1.5	2
Minimum Initial (s)	8	15	8	8	15	8
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		13	21		13	21
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	36	55	109	36	55	109
End Time (s)	55	109	36	55	109	36
Yield/Force Off (s)	50.5	103.5	31	50.5	103.5	31
Yield/Force Off 170(s)	50.5	90.5	10	50.5	90.5	10
Local Start Time (s)	91	0	54	91	0	54
Local Yield (s)	105.5	48.5	86	105.5	48.5	86
Local Yield 170(s)	105.5	35.5	65	105.5	35.5	65

Intersection Summary

Cycle Length 110
Control Type Actuated-Coordinated
Natural Cycle 75
Offset: 55 (50%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Splits and Phases: 40: Flint Ridge Rd/Library & Granville St



HCM 2010 Signalized Intersection Summary

43: N Hamilton Rd & Shopping Center/KEMBA

12/01/2017

																		
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR						
Lane Configurations																		
Traffic Volume (veh/h)	19	1	39	4	1	4	56	672	8	3	1222	43						
Future Volume (veh/h)	19	1	39	4	1	4	56	672	8	3	1222	43						
Number	3	8	18	7	4	14	1	6	16	5	2	12						
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0						
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00						
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						
Adj Sat Flow, veh/h/ln	1900	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900						
Adj Flow Rate, veh/h	21	1	42	4	1	4	61	730	9	3	1328	47						
Adj No. of Lanes	0	1	1	1	1	0	1	2	0	1	2	0						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92						
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2						
Cap, veh/h	122	5	95	104	20	78	431	2983	37	627	2785	98						
Arrive On Green	0.06	0.06	0.06	0.06	0.06	0.06	0.08	1.00	1.00	0.01	1.00	1.00						
Sat Flow, veh/h	1291	80	1583	1358	326	1306	1774	3580	44	1774	3487	123						
Grp Volume(v), veh/h	22	0	42	4	0	5	61	361	378	3	673	702						
Grp Sat Flow(s),veh/h/ln	1371	0	1583	1358	0	1632	1774	1770	1855	1774	1770	1841						
Q Serve(g_s), s	2.2	0.0	4.1	0.5	0.0	0.5	0.8	0.0	0.0	0.1	0.0	0.0						
Cycle Q Clear(g_c), s	2.7	0.0	4.1	3.2	0.0	0.5	0.8	0.0	0.0	0.1	0.0	0.0						
Prop In Lane	0.95		1.00	1.00		0.80	1.00		0.02	1.00		0.07						
Lane Grp Cap(c), veh/h	126	0	95	104	0	98	431	1474	1546	627	1413	1470						
V/C Ratio(X)	0.17	0.00	0.44	0.04	0.00	0.05	0.14	0.24	0.24	0.00	0.48	0.48						
Avail Cap(c_a), veh/h	261	0	245	233	0	253	467	1474	1546	725	1413	1470						
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00						
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.95	0.95	0.95	0.89	0.89	0.89						
Uniform Delay (d), s/veh	72.1	0.0	72.6	73.5	0.0	70.9	1.8	0.0	0.0	3.1	0.0	0.0						
Incr Delay (d2), s/veh	0.6	0.0	3.2	0.2	0.0	0.2	0.1	0.4	0.4	0.0	1.0	1.0						
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
%ile BackOfQ(50%),veh/ln	1.0	0.0	1.9	0.2	0.0	0.2	0.4	0.2	0.2	0.0	0.4	0.4						
LnGrp Delay(d),s/veh	72.7	0.0	75.8	73.6	0.0	71.1	1.9	0.4	0.4	3.1	1.0	1.0						
LnGrp LOS	E		E	E		E	A	A	A	A	A	A						
Approach Vol, veh/h	64		9				800			1378								
Approach Delay, s/veh	74.7		72.2				0.5			1.0								
Approach LOS	E		E				A			A								
Timer	1	2	3	4	5	6	7	8										
Assigned Phs	1	2			4	5	6	8										
Phs Duration (G+Y+Rc), s	11.7	133.5			14.8	6.2	139.0	14.8										
Change Period (Y+Rc), s	* 5.2	* 5.7			* 5.2	* 5.3	* 5.7	* 5.2										
Max Green Setting (Gmax), s	* 9.8	* 1.1E2			* 25	* 9.7	* 1.1E2	* 25										
Max Q Clear Time (g_c+I1), s	2.8	2.0			5.2	2.1	2.0	6.1										
Green Ext Time (p_c), s	0.1	14.0			0.0	0.0	5.1	0.2										
Intersection Summary																		
HCM 2010 Ctrl Delay	3.2																	
HCM 2010 LOS	A																	
Notes																		

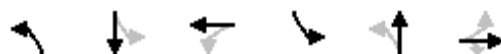
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43: N Hamilton Rd & Shopping Center/KEMBA

12/01/2017

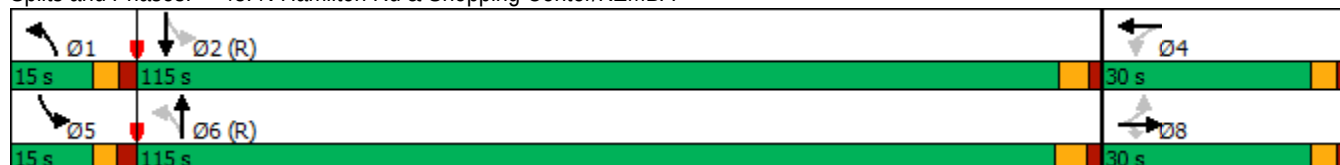


Phase Number	1	2	4	5	6	8
Movement	NBL	SBTL	WBTL	SBL	NBTL	EBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	None	None	C-Max	None
Maximum Split (s)	15	115	30	15	115	30
Maximum Split (%)	9.4%	71.9%	18.8%	9.4%	71.9%	18.8%
Minimum Split (s)	12.2	29.3	29.2	12.3	26.7	29.2
Yellow Time (s)	3	3.7	3	3	3.7	3
All-Red Time (s)	2.2	1.6	2.2	2.3	2	2.2
Minimum Initial (s)	7	15	10	7	15	10
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		17	17		14	17
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	125	140	95	125	140	95
End Time (s)	140	95	125	140	95	125
Yield/Force Off (s)	134.8	89.7	119.8	134.7	89.3	119.8
Yield/Force Off 170(s)	134.8	72.7	102.8	134.7	75.3	102.8
Local Start Time (s)	145	0	115	145	0	115
Local Yield (s)	154.8	109.7	139.8	154.7	109.3	139.8
Local Yield 170(s)	154.8	92.7	122.8	154.7	95.3	122.8

Intersection Summary

Cycle Length	160
Control Type	Actuated-Coordinated
Natural Cycle	80
Offset: 140 (88%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	

Splits and Phases: 43: N Hamilton Rd & Shopping Center/KEMBA



HCM 2010 Signalized Intersection Summary

46: N Hamilton Rd/N Hamilton & Gatsby's/Banks

12/01/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	1	1	13	1	6	1	656	25	10	1317	2
Future Volume (veh/h)	1	1	1	13	1	6	1	656	25	10	1317	2
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	1	1	1	14	1	7	1	713	27	11	1432	2
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	3	3	3	42	3	21	3	3045	115	653	3079	4
Arrive On Green	0.00	0.00	0.00	0.04	0.04	0.04	0.00	1.00	1.00	0.85	0.85	0.85
Sat Flow, veh/h	577	577	577	1090	78	545	1774	3477	132	716	3626	5
Grp Volume(v), veh/h	3	0	0	22	0	0	1	363	377	11	699	735
Grp Sat Flow(s),veh/h/ln	1732	0	0	1712	0	0	1774	1770	1840	716	1770	1862
Q Serve(g_s), s	0.3	0.0	0.0	2.0	0.0	0.0	0.1	0.0	0.0	0.4	15.8	15.8
Cycle Q Clear(g_c), s	0.3	0.0	0.0	2.0	0.0	0.0	0.1	0.0	0.0	0.4	15.8	15.8
Prop In Lane	0.33		0.33	0.64		0.32	1.00		0.07	1.00		0.00
Lane Grp Cap(c), veh/h	8	0	0	67	0	0	3	1550	1611	653	1503	1581
V/C Ratio(X)	0.37	0.00	0.00	0.33	0.00	0.00	0.35	0.23	0.23	0.02	0.47	0.47
Avail Cap(c_a), veh/h	65	0	0	223	0	0	67	1550	1611	653	1503	1581
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.98	0.98	0.98	0.96	0.96	0.96
Uniform Delay (d), s/veh	79.4	0.0	0.0	74.8	0.0	0.0	79.7	0.0	0.0	1.9	3.0	3.0
Incr Delay (d2), s/veh	25.8	0.0	0.0	2.8	0.0	0.0	58.2	0.3	0.3	0.0	1.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	1.0	0.0	0.0	0.1	0.1	0.1	0.1	8.0	8.4
LnGrp Delay(d),s/veh	105.2	0.0	0.0	77.7	0.0	0.0	137.8	0.3	0.3	1.9	4.0	4.0
LnGrp LOS	F			E			F	A	A	A	A	A
Approach Vol, veh/h		3			22			741			1445	
Approach Delay, s/veh		105.2			77.7			0.5			4.0	
Approach LOS		F			E			A			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	4.3	140.6		10.4		144.8		4.7				
Change Period (Y+Rc), s	4.0	* 4.7		* 4.2		* 4.7		4.0				
Max Green Setting (Gmax), s	6.0	* 1.1E2		* 21		* 1.1E2		6.0				
Max Q Clear Time (g_c+I1), s	2.1	17.8		4.0		2.0		2.3				
Green Ext Time (p_c), s	0.0	15.4		0.0		5.2		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			3.7									
HCM 2010 LOS			A									
Notes												

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Timing Report, Sorted By Phase

46: N Hamilton Rd/N Hamilton & Gatsby's/Banks

12/01/2017



Phase Number	1	2	4	6	8
Movement	NBL	SBTL	WBTL	NBT	EBTL
Lead/Lag	Lead	Lag			
Lead-Lag Optimize	Yes	Yes			
Recall Mode	None	C-Max	None	C-Max	None
Maximum Split (s)	10	115	25	115	10
Maximum Split (%)	6.3%	71.9%	15.6%	71.9%	6.3%
Minimum Split (s)	10	56	25	56	10
Yellow Time (s)	3	3.7	3.2	3.7	3
All-Red Time (s)	1	1	1	1	1
Minimum Initial (s)	6	15	10	15	6
Vehicle Extension (s)	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0
Walk Time (s)		7	7		
Flash Dont Walk (s)		17	13.8		
Dual Entry	No	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes
Start Time (s)	130	140	95	130	120
End Time (s)	140	95	120	95	130
Yield/Force Off (s)	136	90.3	115.8	90.3	126
Yield/Force Off 170(s)	136	73.3	102	90.3	126
Local Start Time (s)	150	0	115	150	140
Local Yield (s)	156	110.3	135.8	110.3	146
Local Yield 170(s)	156	93.3	122	110.3	146

Intersection Summary

Cycle Length	160
Control Type	Actuated-Coordinated
Natural Cycle	105
Offset: 140 (88%), Referenced to phase 2:SBTL and 6:NBT, Start of Green	

Splits and Phases: 46: N Hamilton Rd/N Hamilton & Gatsby's/Banks



HCM 2010 Signalized Intersection Summary

49: S Hamilton Rd & NB IR-270 Exit Ramp

12/01/2017

								
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations								
Traffic Volume (veh/h)	164	411	795	0	0	890		
Future Volume (veh/h)	164	411	795	0	0	890		
Number	3	18	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	0	0	1863		
Adj Flow Rate, veh/h	178	447	864	0	0	967		
Adj No. of Lanes	1	2	2	0	0	2		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	0	0	2		
Cap, veh/h	289	516	2621	0	0	2621		
Arrive On Green	0.16	0.16	1.00	0.00	0.00	1.00		
Sat Flow, veh/h	1774	3167	3725	0	0	3725		
Grp Volume(v), veh/h	178	447	864	0	0	967		
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	0	0	1770		
Q Serve(g_s), s	10.3	15.1	0.0	0.0	0.0	0.0		
Cycle Q Clear(g_c), s	10.3	15.1	0.0	0.0	0.0	0.0		
Prop In Lane	1.00	1.00		0.00	0.00			
Lane Grp Cap(c), veh/h	289	516	2621	0	0	2621		
V/C Ratio(X)	0.62	0.87	0.33	0.00	0.00	0.37		
Avail Cap(c_a), veh/h	329	587	2621	0	0	2621		
HCM Platoon Ratio	1.00	1.00	2.00	1.00	1.00	2.00		
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	1.00		
Uniform Delay (d), s/veh	42.8	44.9	0.0	0.0	0.0	0.0		
Incr Delay (d2), s/veh	2.7	11.7	0.3	0.0	0.0	0.4		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	5.3	7.5	0.1	0.0	0.0	0.1		
LnGrp Delay(d),s/veh	45.6	56.6	0.3	0.0	0.0	0.4		
LnGrp LOS	D	E	A			A		
Approach Vol, veh/h	625		864			967		
Approach Delay, s/veh	53.5		0.3			0.4		
Approach LOS	D		A			A		
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		87.5				87.5		22.5
Change Period (Y+Rc), s		6.0				6.0		4.6
Max Green Setting (Gmax), s		79.0				79.0		20.4
Max Q Clear Time (g_c+I1), s		2.0				2.0		17.1
Green Ext Time (p_c), s		6.6				7.8		0.8
Intersection Summary								
HCM 2010 Ctrl Delay			13.9					
HCM 2010 LOS			B					
Notes								

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Timing Report, Sorted By Phase
49: S Hamilton Rd & NB IR-270 Exit Ramp

12/01/2017

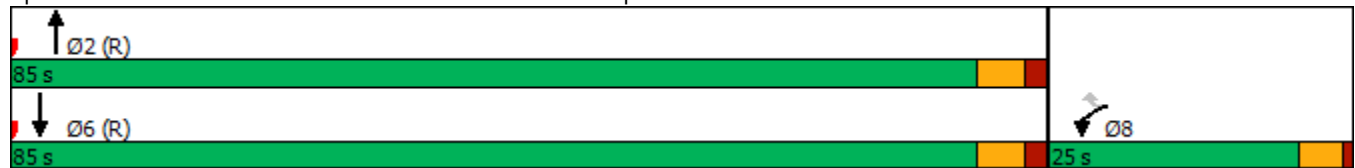


Phase Number	2	6	8
Movement	NBT	SBT	WBL
Lead/Lag			
Lead-Lag Optimize			
Recall Mode	C-Max	C-Max	None
Maximum Split (s)	85	85	25
Maximum Split (%)	77.3%	77.3%	22.7%
Minimum Split (s)	21	21	13
Yellow Time (s)	4	4	3.6
All-Red Time (s)	2	2	1
Minimum Initial (s)	15	15	8
Vehicle Extension (s)	3	3	3
Minimum Gap (s)	3	3	3
Time Before Reduce (s)	0	0	0
Time To Reduce (s)	0	0	0
Walk Time (s)			
Flash Dont Walk (s)			
Dual Entry	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes
Start Time (s)	0	0	85
End Time (s)	85	85	0
Yield/Force Off (s)	79	79	105.4
Yield/Force Off 170(s)	79	79	105.4
Local Start Time (s)	0	0	85
Local Yield (s)	79	79	105.4
Local Yield 170(s)	79	79	105.4

Intersection Summary

Cycle Length	110
Control Type	Actuated-Coordinated
Natural Cycle	40
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	

Splits and Phases: 49: S Hamilton Rd & NB IR-270 Exit Ramp



HCM 2010 Signalized Intersection Summary

57: Morrison Rd & Taylor Rd

12/01/2017

								
Movement	EBL	EBT	WBT	WBR	SWL	SWR		
Lane Configurations								
Traffic Volume (veh/h)	322	257	156	143	434	519		
Future Volume (veh/h)	322	257	156	143	434	519		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863		
Adj Flow Rate, veh/h	350	279	170	155	515	518		
Adj No. of Lanes	1	2	2	0	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	775	2492	1004	857	362	323		
Arrive On Green	0.10	0.70	0.55	0.55	0.20	0.20		
Sat Flow, veh/h	1774	3632	1905	1547	1774	1583		
Grp Volume(v), veh/h	350	279	166	159	515	518		
Grp Sat Flow(s),veh/h/ln	1774	1770	1770	1590	1774	1583		
Q Serve(g_s), s	9.6	3.0	5.5	6.0	24.5	24.5		
Cycle Q Clear(g_c), s	9.6	3.0	5.5	6.0	24.5	24.5		
Prop In Lane	1.00			0.97	1.00	1.00		
Lane Grp Cap(c), veh/h	775	2492	981	881	362	323		
V/C Ratio(X)	0.45	0.11	0.17	0.18	1.42	1.60		
Avail Cap(c_a), veh/h	952	2492	981	881	362	323		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	8.3	5.7	13.2	13.3	47.8	47.8		
Incr Delay (d2), s/veh	0.4	0.1	0.4	0.5	205.3	285.2		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	4.7	1.5	2.8	2.7	32.6	36.3		
LnGrp Delay(d),s/veh	8.7	5.8	13.5	13.7	253.1	332.9		
LnGrp LOS	A	A	B	B	F	F		
Approach Vol, veh/h		629	325		1033			
Approach Delay, s/veh		7.4	13.6		293.1			
Approach LOS		A	B		F			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		90.0		30.0	18.0	72.0		
Change Period (Y+Rc), s		5.5		5.5	5.5	5.5		
Max Green Setting (Gmax), s		84.5		24.5	24.5	54.5		
Max Q Clear Time (g_c+I1), s		5.0		26.5	11.6	8.0		
Green Ext Time (p_c), s		2.1		0.0	0.9	2.1		
Intersection Summary								
HCM 2010 Ctrl Delay			157.0					
HCM 2010 LOS			F					
Notes								

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Timing Report, Sorted By Phase

57: Morrison Rd & Taylor Rd

12/01/2017



Phase Number	2	4	5	6
Movement	EBTL	SWL	EBL	WBT
Lead/Lag			Lead	Lag
Lead-Lag Optimize			Yes	Yes
Recall Mode	Max	None	None	Max
Maximum Split (s)	90	30	30	60
Maximum Split (%)	75.0%	25.0%	25.0%	50.0%
Minimum Split (s)	23.5	30	10.5	25.5
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	2	2	2	2
Minimum Initial (s)	10	5	5	10
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)		7		5
Flash Dont Walk (s)		11		15
Dual Entry	Yes	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	90	0	30
End Time (s)	90	0	30	90
Yield/Force Off (s)	84.5	114.5	24.5	84.5
Yield/Force Off 170(s)	84.5	103.5	24.5	69.5
Local Start Time (s)	90	60	90	0
Local Yield (s)	54.5	84.5	114.5	54.5
Local Yield 170(s)	54.5	73.5	114.5	39.5

Intersection Summary

Cycle Length	120
Control Type	Semi Act-Uncoord
Natural Cycle	70

Splits and Phases: 57: Morrison Rd & Taylor Rd



HCM 2010 Signalized Intersection Summary

60: S Hamilton Rd & SB IR-270 Exit Ramp

12/01/2017

								
Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations								
Traffic Volume (veh/h)	542	1089	0	587	674	0		
Future Volume (veh/h)	542	1089	0	587	674	0		
Number	7	14	5	2	6	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	0		
Adj Flow Rate, veh/h	589	1184	0	638	733	0		
Adj No. of Lanes	2	2	0	2	2	0		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	0	2	2	0		
Cap, veh/h	1420	1150	0	1737	1737	0		
Arrive On Green	0.41	0.41	0.00	0.49	0.65	0.00		
Sat Flow, veh/h	3442	2787	0	3725	3725	0		
Grp Volume(v), veh/h	589	1184	0	638	733	0		
Grp Sat Flow(s),veh/h/ln	1721	1393	0	1770	1770	0		
Q Serve(g_s), s	13.3	45.4	0.0	12.3	10.9	0.0		
Cycle Q Clear(g_c), s	13.3	45.4	0.0	12.3	10.9	0.0		
Prop In Lane	1.00	1.00	0.00			0.00		
Lane Grp Cap(c), veh/h	1420	1150	0	1737	1737	0		
V/C Ratio(X)	0.41	1.03	0.00	0.37	0.42	0.00		
Avail Cap(c_a), veh/h	1420	1150	0	1737	1737	0		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.33	1.00		
Upstream Filter(I)	1.00	1.00	0.00	0.98	1.00	0.00		
Uniform Delay (d), s/veh	22.9	32.3	0.0	17.4	11.6	0.0		
Incr Delay (d2), s/veh	0.2	34.4	0.0	0.6	0.8	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	6.3	22.9	0.0	6.2	5.4	0.0		
LnGrp Delay(d),s/veh	23.1	66.7	0.0	18.0	12.4	0.0		
LnGrp LOS	C	F		B	B			
Approach Vol, veh/h	1773			638	733			
Approach Delay, s/veh	52.2			18.0	12.4			
Approach LOS	D			B	B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		60.0		50.0		60.0		
Change Period (Y+Rc), s		6.0		4.6		6.0		
Max Green Setting (Gmax), s		54.0		45.4		54.0		
Max Q Clear Time (g_c+I1), s		14.3		47.4		12.9		
Green Ext Time (p_c), s		4.4		0.0		5.2		
Intersection Summary								
HCM 2010 Ctrl Delay			36.0					
HCM 2010 LOS			D					

2017 AM Peak 10/12/2017

Synchro 10 Report
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Timing Report, Sorted By Phase
60: S Hamilton Rd & SB IR-270 Exit Ramp

12/01/2017

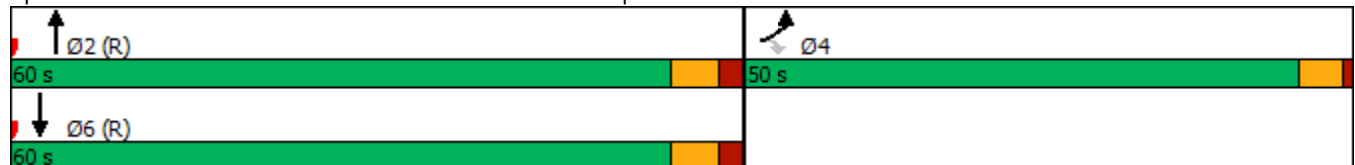


Phase Number	2	4	6
Movement	NBT	EBL	SBT
Lead/Lag			
Lead-Lag Optimize			
Recall Mode	C-Max	None	C-Max
Maximum Split (s)	60	50	60
Maximum Split (%)	54.5%	45.5%	54.5%
Minimum Split (s)	21	14.6	21
Yellow Time (s)	4	3.6	4
All-Red Time (s)	2	1	2
Minimum Initial (s)	15	10	15
Vehicle Extension (s)	3	3	3
Minimum Gap (s)	3	3	3
Time Before Reduce (s)	0	0	0
Time To Reduce (s)	0	0	0
Walk Time (s)			
Flash Dont Walk (s)			
Dual Entry	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes
Start Time (s)	33	93	33
End Time (s)	93	33	93
Yield/Force Off (s)	87	28.4	87
Yield/Force Off 170(s)	87	28.4	87
Local Start Time (s)	0	60	0
Local Yield (s)	54	105.4	54
Local Yield 170(s)	54	105.4	54

Intersection Summary

Cycle Length	110
Control Type	Actuated-Coordinated
Natural Cycle	50
Offset: 33 (30%), Referenced to phase 2:NBT and 6:SBT, Start of Green	

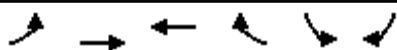
Splits and Phases: 60: S Hamilton Rd & SB IR-270 Exit Ramp



HCM 2010 Signalized Intersection Summary

63: Mill St/E Johnstown Rd & Cherry Bottom Rd

12/01/2017



Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	151	306	600	18	23	232		
Future Volume (veh/h)	151	306	600	18	23	232		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	164	333	652	20	25	252		
Adj No. of Lanes	1	1	1	1	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	526	1366	1134	1240	310	402		
Arrive On Green	0.08	0.73	0.61	0.61	0.17	0.17		
Sat Flow, veh/h	1774	1863	1863	1583	1774	1583		
Grp Volume(v), veh/h	164	333	652	20	25	252		
Grp Sat Flow(s),veh/h/ln	1774	1863	1863	1583	1774	1583		
Q Serve(g_s), s	2.6	5.1	18.4	0.2	1.0	12.3		
Cycle Q Clear(g_c), s	2.6	5.1	18.4	0.2	1.0	12.3		
Prop In Lane	1.00			1.00	1.00	1.00		
Lane Grp Cap(c), veh/h	526	1366	1134	1240	310	402		
V/C Ratio(X)	0.31	0.24	0.58	0.02	0.08	0.63		
Avail Cap(c_a), veh/h	671	1366	1134	1240	835	870		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	7.1	3.8	10.3	2.1	30.1	28.8		
Incr Delay (d2), s/veh	0.3	0.4	2.1	0.0	0.1	1.6		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	1.2	2.8	9.9	0.2	0.5	10.8		
LnGrp Delay(d),s/veh	7.4	4.2	12.4	2.1	30.2	30.5		
LnGrp LOS	A	A	B	A	C	C		
Approach Vol, veh/h		497	672		277			
Approach Delay, s/veh		5.3	12.1		30.4			
Approach LOS		A	B		C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		67.9		19.2	10.9	57.0		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		53.0		41.0	14.0	53.0		
Max Q Clear Time (g_c+I1), s		7.1		14.3	4.6	20.4		
Green Ext Time (p_c), s		2.1		0.9	0.3	4.9		
Intersection Summary								
HCM 2010 Ctrl Delay			13.3					
HCM 2010 LOS			B					

Timing Report, Sorted By Phase

63: Mill St/E Johnstown Rd & Cherry Bottom Rd

12/01/2017

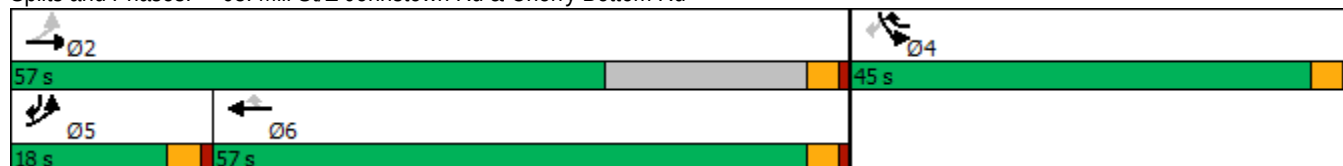


Phase Number	2	4	5	6
Movement	EBTL	SBL	EBL	WBT
Lead/Lag			Lead	Lag
Lead-Lag Optimize			Yes	Yes
Recall Mode	Max	None	None	Max
Maximum Split (s)	57	45	18	57
Maximum Split (%)	47.5%	37.5%	15.0%	47.5%
Minimum Split (s)	23	26	11	23
Yellow Time (s)	3	3	3	3
All-Red Time (s)	1	1	1	1
Minimum Initial (s)	19	5	7	19
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)		7		
Flash Dont Walk (s)		15		
Dual Entry	Yes	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	75	0	18
End Time (s)	75	0	18	75
Yield/Force Off (s)	71	116	14	71
Yield/Force Off 170(s)	71	101	14	71
Local Start Time (s)	102	57	102	0
Local Yield (s)	53	98	116	53
Local Yield 170(s)	53	83	116	53

Intersection Summary

Cycle Length	120
Control Type	Semi Act-Uncoord
Natural Cycle	65

Splits and Phases: 63: Mill St/E Johnstown Rd & Cherry Bottom Rd



HCM 2010 Signalized Intersection Summary

71: N Stygler Rd & Agler Rd

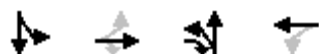
12/01/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	21	433	41	24	15	380	220	59	17	572	69
Future Volume (veh/h)	22	21	433	41	24	15	380	220	59	17	572	69
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	24	0	486	45	26	16	482	142	64	18	622	75
Adj No. of Lanes	1	0	2	1	1	0	2	1	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	220	0	997	181	162	100	587	201	91	1032	1851	223
Arrive On Green	0.15	0.00	0.15	0.15	0.15	0.15	0.05	0.05	0.05	0.58	0.58	0.58
Sat Flow, veh/h	1359	0	3167	906	1080	665	3548	1217	549	1774	3182	383
Grp Volume(v), veh/h	24	0	486	45	0	42	482	0	206	18	345	352
Grp Sat Flow(s),veh/h/ln	1359	0	1583	906	0	1745	1774	0	1766	1774	1770	1795
Q Serve(g_s), s	2.5	0.0	19.9	7.1	0.0	3.4	21.5	0.0	18.4	0.7	16.2	16.3
Cycle Q Clear(g_c), s	5.9	0.0	19.9	7.1	0.0	3.4	21.5	0.0	18.4	0.7	16.2	16.3
Prop In Lane	1.00		1.00	1.00		0.38	1.00		0.31	1.00		0.21
Lane Grp Cap(c), veh/h	220	0	997	181	0	261	587	0	292	1032	1030	1045
V/C Ratio(X)	0.11	0.00	0.49	0.25	0.00	0.16	0.82	0.00	0.71	0.02	0.34	0.34
Avail Cap(c_a), veh/h	378	0	1365	286	0	464	898	0	447	1032	1030	1045
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.86	0.00	0.86	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.8	0.0	44.3	60.9	0.0	59.3	73.3	0.0	71.8	14.1	17.4	17.4
Incr Delay (d2), s/veh	0.2	0.0	0.4	0.7	0.0	0.3	3.2	0.0	2.7	0.0	0.9	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	10.8	1.8	0.0	1.6	10.9	0.0	9.2	0.3	8.1	8.3
LnGrp Delay(d),s/veh	62.0	0.0	44.7	61.6	0.0	59.6	76.5	0.0	74.5	14.2	18.3	18.3
LnGrp LOS	E		D	E		E	E		E	B	B	B
Approach Vol, veh/h	510			87			688			715		
Approach Delay, s/veh	45.5			60.6			75.9			18.2		
Approach LOS	D			E			E			B		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+Rc), s	98.6		29.4		32.0		29.4					
Change Period (Y+Rc), s	5.5		5.5		5.5		5.5					
Max Green Setting (Gmax), s	60.5		42.5		40.5		42.5					
Max Q Clear Time (g_c+I1), s	18.3		21.9		23.5		9.1					
Green Ext Time (p_c), s	5.4		2.1		2.9		0.5					
Intersection Summary												
HCM 2010 Ctrl Delay	46.8											
HCM 2010 LOS	D											
Notes												

Timing Report, Sorted By Phase

71: N Stygler Rd & Agler Rd

12/01/2017

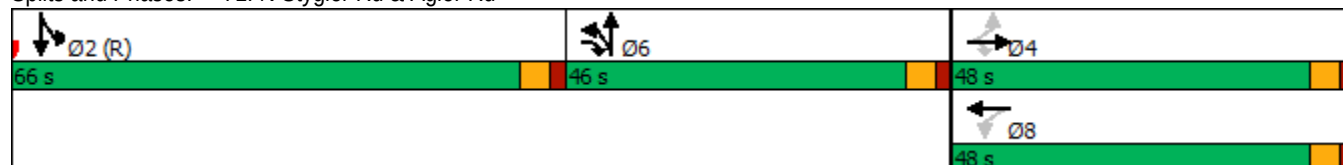


Phase Number	2	4	6	8
Movement	SBTL	EBTL	NBTL	WBTL
Lead/Lag				
Lead-Lag Optimize				
Recall Mode	C-Max	None	None	None
Maximum Split (s)	66	48	46	48
Maximum Split (%)	41.3%	30.0%	28.8%	30.0%
Minimum Split (s)	31.5	38.5	34.5	38.5
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	2	2	2	2
Minimum Initial (s)	8	5	5	5
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)	7	7	7	7
Flash Dont Walk (s)	19	26	22	26
Dual Entry	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	133	85	39	85
End Time (s)	39	133	85	133
Yield/Force Off (s)	33.5	127.5	79.5	127.5
Yield/Force Off 170(s)	14.5	101.5	57.5	101.5
Local Start Time (s)	0	112	66	112
Local Yield (s)	60.5	154.5	106.5	154.5
Local Yield 170(s)	41.5	128.5	84.5	128.5

Intersection Summary

Cycle Length	160
Control Type	Actuated-Coordinated
Natural Cycle	105
Offset: 133 (83%), Referenced to phase 2:SBTL, Start of Green	

Splits and Phases: 71: N Stygler Rd & Agler Rd



HCM 2010 Signalized Intersection Summary
54: Taylor Station Rd & Claycraft Rd/Research Rd

05/20/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	37	33	59	26	4	11	294	74	20	432	107
Future Volume (veh/h)	52	37	33	59	26	4	11	294	74	20	432	107
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1682	1900	1900	1355	1900	1900	1740	1900	1900	1771	1900
Adj Flow Rate, veh/h	73	52	46	69	30	5	12	330	83	22	475	118
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.71	0.71	0.71	0.86	0.86	0.86	0.89	0.89	0.89	0.91	0.91	0.91
Percent Heavy Veh, %	11	11	11	38	38	38	6	6	6	5	5	5
Cap, veh/h	88	62	55	98	43	7	56	749	184	63	758	184
Arrive On Green	0.13	0.13	0.13	0.11	0.11	0.11	0.57	0.57	0.57	0.57	0.57	0.57
Sat Flow, veh/h	672	478	423	863	375	63	16	1321	325	28	1337	324
Grp Volume(v), veh/h	171	0	0	104	0	0	425	0	0	615	0	0
Grp Sat Flow(s),veh/h/ln	1573	0	0	1301	0	0	1662	0	0	1688	0	0
Q Serve(g_s), s	8.4	0.0	0.0	6.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	8.4	0.0	0.0	6.1	0.0	0.0	11.6	0.0	0.0	19.2	0.0	0.0
Prop In Lane	0.43		0.27	0.66		0.05	0.03		0.20	0.04		0.19
Lane Grp Cap(c), veh/h	205	0	0	147	0	0	989	0	0	1004	0	0
V/C Ratio(X)	0.83	0.00	0.00	0.71	0.00	0.00	0.43	0.00	0.00	0.61	0.00	0.00
Avail Cap(c_a), veh/h	258	0	0	328	0	0	989	0	0	1004	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	33.6	0.0	0.0	33.9	0.0	0.0	9.9	0.0	0.0	11.6	0.0	0.0
Incr Delay (d2), s/veh	16.8	0.0	0.0	6.1	0.0	0.0	1.4	0.0	0.0	2.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	0.0	0.0	2.4	0.0	0.0	5.7	0.0	0.0	9.8	0.0	0.0
LnGrp Delay(d),s/veh	50.4	0.0	0.0	40.0	0.0	0.0	11.3	0.0	0.0	14.4	0.0	0.0
LnGrp LOS	D			D			B			B		
Approach Vol, veh/h		171			104			425			615	
Approach Delay, s/veh		50.4			40.0			11.3			14.4	
Approach LOS		D			D			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		50.0		15.4		50.0		14.0				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		45.0		13.0		45.0		20.0				
Max Q Clear Time (g_c+I1), s		13.6		10.4		21.2		8.1				
Green Ext Time (p_c), s		2.9		0.2		4.4		0.4				
Intersection Summary												
HCM 2010 Ctrl Delay				20.1								
HCM 2010 LOS				C								

Timing Report, Sorted By Phase

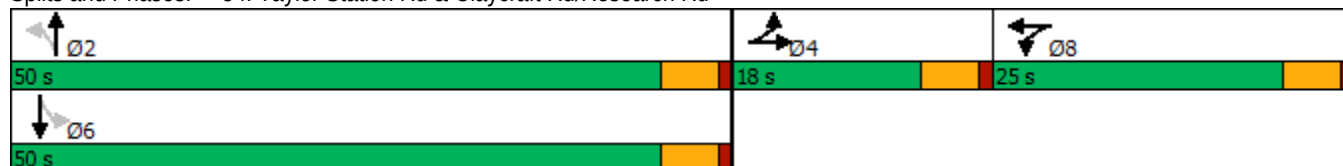
54: Taylor Station Rd & Claycraft Rd/Research Rd

05/20/2019



Phase Number	2	4	6	8
Movement	NBTL	EBTL	SBTL	WBTL
Lead/Lag				
Lead-Lag Optimize				
Recall Mode	Max	None	Max	None
Maximum Split (s)	50	18	50	25
Maximum Split (%)	53.8%	19.4%	53.8%	26.9%
Minimum Split (s)	15	15	15	15
Yellow Time (s)	4	4	4	4
All-Red Time (s)	1	1	1	1
Minimum Initial (s)	10	10	10	10
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)				
Flash Dont Walk (s)				
Dual Entry	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	50	0	68
End Time (s)	50	68	50	0
Yield/Force Off (s)	45	63	45	88
Yield/Force Off 170(s)	45	63	45	88
Local Start Time (s)	0	50	0	68
Local Yield (s)	45	63	45	88
Local Yield 170(s)	45	63	45	88
Intersection Summary				
Cycle Length	93			
Control Type	Semi Act-Uncoord			
Natural Cycle	60			

Splits and Phases: 54: Taylor Station Rd & Claycraft Rd/Research Rd



LANE SUMMARY

 **Site: 1 [2017 AM Count]**

Clark State Road & Hamilton Road
Roundabout

Lane Use and Performance													
	Demand Total veh/h	Flows HV %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue Veh	Queue Dist ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
South: Hamilton Road													
Lane 1	398	3.0	1335	0.298	100	5.1	LOS A	1.8	45.1	Full	1600	0.0	0.0
Lane 2 ^d	414	3.0	1389	0.298	100	4.8	LOS A	1.8	45.2	Full	1600	0.0	0.0
Approach	812	3.0		0.298		5.0	LOS A	1.8	45.2				
East: Clark State Road													
Lane 1	277	2.9	875	0.316	100	11.4	LOS B	1.2	30.6	Full	1600	0.0	0.0
Lane 2 ^d	280	3.0	884	0.316	100	10.9	LOS B	1.2	30.7	Full	1600	0.0	0.0
Approach	557	3.0		0.316		11.2	LOS B	1.2	30.7				
North: Hamilton Road													
Lane 1	438	3.0	883	0.496	100	7.5	LOS A	2.6	66.3	Full	1600	0.0	0.0
Lane 2 ^d	438	3.0	883	0.496	100	7.3	LOS A	2.6	66.3	Full	1600	0.0	0.0
Approach	876	3.0		0.496		7.4	LOS A	2.6	66.3				
Intersection	2245	3.0		0.496		7.4	LOS A	2.6	66.3				

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Signalised Intersections.

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

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

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 2010).

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

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

^d Dominant lane on roundabout approach

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Organisation: CARPENTER MARTY TRANSPORTATION INC. | Processed: Tuesday, December 5, 2017 2:59:33 PM

Project: P:\TRA\Gahanna\Thoroughfare plan\Analysis\Sidra\171205 Clark State & Hamilton.sip7

LANE LEVEL OF SERVICE

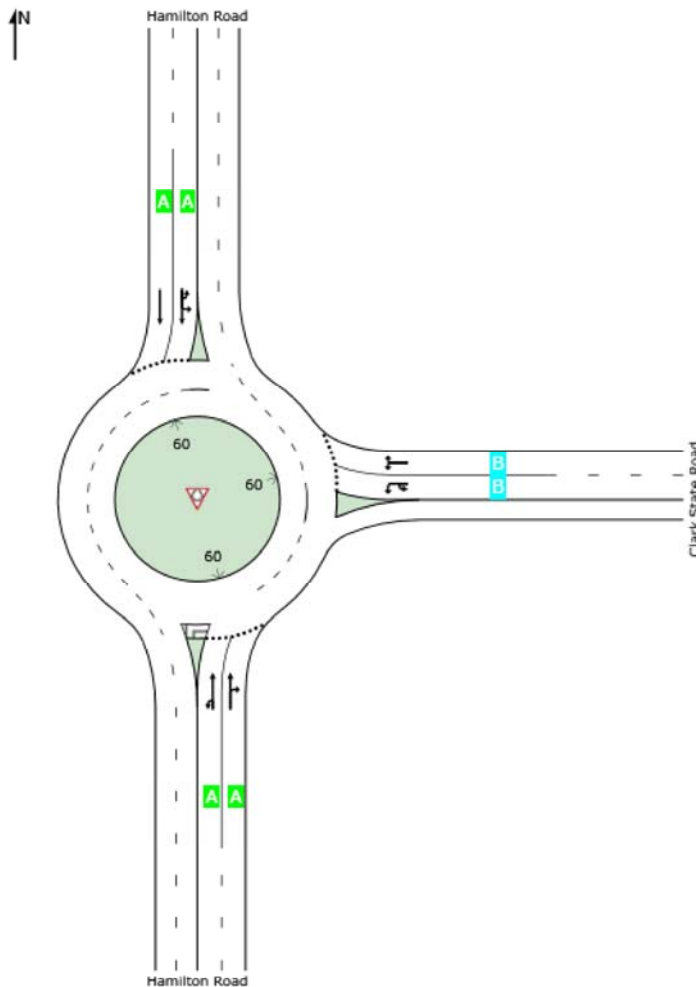
Lane Level of Service

Site: 1 [2017 AM Count]

Clark State Road & Hamilton Road
Roundabout

All Movement Classes

	South	East	North	Intersection
LOS	A	B	A	A



Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.

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

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

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 2010).

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

HCM 2010 Signalized Intersection Summary

2: N Stygler Rd & McCutcheon Rd/Church

12/01/2017

																
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR				
Lane Configurations																
Traffic Volume (veh/h)	301	6	297	5	4	5	186	380	9	10	331	78				
Future Volume (veh/h)	301	6	297	5	4	5	186	380	9	10	331	78				
Number	7	4	14	3	8	18	5	2	12	1	6	16				
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0				
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00				
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900				
Adj Flow Rate, veh/h	327	7	323	5	4	5	202	413	10	11	360	85				
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0				
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92				
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2				
Cap, veh/h	509	11	485	184	78	98	498	967	23	488	690	163				
Arrive On Green	0.17	0.31	0.31	0.10	0.10	0.10	0.08	0.53	0.53	0.02	0.47	0.47				
Sat Flow, veh/h	1774	34	1555	1046	754	942	1774	1811	44	1774	1458	344				
Grp Volume(v), veh/h	327	0	330	5	0	9	202	0	423	11	0	445				
Grp Sat Flow(s),veh/h/ln	1774	0	1588	1046	0	1696	1774	0	1855	1774	0	1802				
Q Serve(g_s), s	15.4	0.0	17.3	0.4	0.0	0.5	5.3	0.0	13.2	0.3	0.0	16.6				
Cycle Q Clear(g_c), s	15.4	0.0	17.3	0.4	0.0	0.5	5.3	0.0	13.2	0.3	0.0	16.6				
Prop In Lane	1.00		0.98	1.00		0.56	1.00		0.02	1.00		0.19				
Lane Grp Cap(c), veh/h	509	0	496	184	0	177	498	0	990	488	0	853				
V/C Ratio(X)	0.64	0.00	0.67	0.03	0.00	0.05	0.41	0.00	0.43	0.02	0.00	0.52				
Avail Cap(c_a), veh/h	509	0	752	352	0	450	654	0	990	659	0	853				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00				
Uniform Delay (d), s/veh	29.6	0.0	28.7	38.7	0.0	38.8	12.2	0.0	13.5	12.8	0.0	17.7				
Incr Delay (d2), s/veh	2.7	0.0	1.5	0.1	0.0	0.1	0.5	0.0	1.3	0.0	0.0	2.3				
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
%ile BackOfQ(50%),veh/ln	7.8	0.0	7.8	0.1	0.0	0.2	2.6	0.0	7.1	0.1	0.0	8.7				
LnGrp Delay(d),s/veh	32.3	0.0	30.2	38.8	0.0	38.9	12.7	0.0	14.9	12.8	0.0	20.0				
LnGrp LOS	C		C	D		D	B		B	B		B				
Approach Vol, veh/h	657			14			625			456						
Approach Delay, s/veh	31.3			38.9			14.2			19.8						
Approach LOS	C			D			B			B						
Timer	1	2	3	4	5	6	7	8								
Assigned Phs	1	2	4		5	6	7	8								
Phs Duration (G+Y+Rc), s	5.8	55.8	34.5		11.6	50.0	20.0	14.5								
Change Period (Y+Rc), s	4.0	4.5	4.5		4.0	4.5	4.0	4.5								
Max Green Setting (Gmax), s	11.0	50.5	45.5		16.0	45.5	16.0	25.5								
Max Q Clear Time (g_c+I1), s	2.3	15.2	19.3		7.3	18.6	17.4	2.5								
Green Ext Time (p_c), s	0.0	2.8	2.2		0.3	2.9	0.0	0.0								
Intersection Summary																
HCM 2010 Ctrl Delay	22.2															
HCM 2010 LOS	C															

Timing Report, Sorted By Phase

2: N Stygler Rd & McCutcheon Rd/Church

12/01/2017

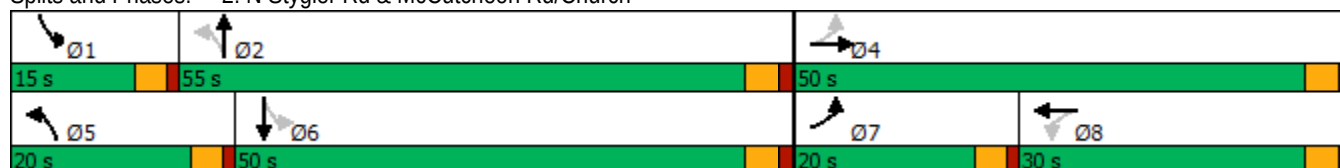


Phase Number	1	2	4	5	6	7	8
Movement	SBL	NBTL	EBTL	NBL	SBTL	EBL	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	Max	None	None	Max	None	None
Maximum Split (s)	15	55	50	20	50	20	30
Maximum Split (%)	12.5%	45.8%	41.7%	16.7%	41.7%	16.7%	25.0%
Minimum Split (s)	11	24.5	26.5	11.5	26.5	11.5	25
Yellow Time (s)	3	3	3	3	3	3	3
All-Red Time (s)	1	1.5	1.5	1	1.5	1	1.5
Minimum Initial (s)	7	20	10	7	20	7	10
Vehicle Extension (s)	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0
Walk Time (s)			7		7		7
Flash Dont Walk (s)			15		15		13
Dual Entry	No	Yes	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	15	70	0	20	70	90
End Time (s)	15	70	0	20	70	90	0
Yield/Force Off (s)	11	65.5	115.5	16	65.5	86	115.5
Yield/Force Off 170(s)	11	65.5	100.5	16	50.5	86	102.5
Local Start Time (s)	100	115	50	100	0	50	70
Local Yield (s)	111	45.5	95.5	116	45.5	66	95.5
Local Yield 170(s)	111	45.5	80.5	116	30.5	66	82.5

Intersection Summary

Cycle Length	120
Control Type	Semi Act-Uncoord
Natural Cycle	75

Splits and Phases: 2: N Stygler Rd & McCutcheon Rd/Church



HCM 2010 Signalized Intersection Summary 5: S Stygler Rd/N Stygler Rd & US 62

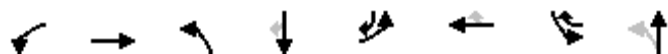
12/01/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	554	1141	99	22	603	414	285	153	103	523	102	517
Future Volume (veh/h)	554	1141	99	22	603	414	285	153	103	523	102	517
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	602	1240	108	24	655	450	310	166	112	568	111	562
Adj No. of Lanes	2	2	0	1	2	1	1	1	0	2	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	656	1586	138	36	1101	787	429	169	114	639	350	1055
Arrive On Green	0.19	0.48	0.48	0.01	0.10	0.10	0.16	0.16	0.16	0.06	0.06	0.06
Sat Flow, veh/h	3442	3295	286	1774	3539	1583	1774	1038	701	3442	1863	2787
Grp Volume(v), veh/h	602	665	683	24	655	450	310	0	278	568	111	562
Grp Sat Flow(s),veh/h/ln	1721	1770	1812	1774	1770	1583	1774	0	1739	1721	1863	1393
Q Serve(g_s), s	27.5	49.9	50.2	2.2	28.3	32.9	22.9	0.0	25.5	26.2	9.1	24.8
Cycle Q Clear(g_c), s	27.5	49.9	50.2	2.2	28.3	32.9	22.9	0.0	25.5	26.2	9.1	24.8
Prop In Lane	1.00		0.16	1.00		1.00	1.00		0.40	1.00		1.00
Lane Grp Cap(c), veh/h	656	852	872	36	1101	787	429	0	283	639	350	1055
V/C Ratio(X)	0.92	0.78	0.78	0.66	0.59	0.57	0.72	0.00	0.98	0.89	0.32	0.53
Avail Cap(c_a), veh/h	731	852	872	55	1101	787	555	0	283	796	350	1055
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	0.93	0.93	0.93	1.00	0.00	1.00	0.86	0.86	0.86
Uniform Delay (d), s/veh	63.5	34.5	34.6	78.9	62.2	37.2	44.6	0.0	66.8	73.5	65.2	44.6
Incr Delay (d2), s/veh	15.5	7.0	7.0	17.3	2.2	2.8	3.3	0.0	49.6	9.0	2.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.5	26.0	26.7	1.2	14.2	15.0	11.6	0.0	16.2	13.3	4.9	9.8
LnGrp Delay(d),s/veh	79.0	41.5	41.5	96.2	64.4	40.0	47.8	0.0	116.3	82.4	67.3	46.3
LnGrp LOS	E	D	D	F	E	D	D		F	F	E	D
Approach Vol, veh/h	1950			1129			588			1241		
Approach Delay, s/veh	53.1			55.3			80.2			64.7		
Approach LOS	D			E			F			E		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.3	83.0	31.7	36.0	36.5	55.8	35.7	32.0				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	5.0	68.0	37.0	26.0	34.0	39.0	37.0	26.0				
Max Q Clear Time (g_c+I1), s	4.2	52.2	24.9	26.8	29.5	34.9	28.2	27.5				
Green Ext Time (p_c), s	0.0	8.5	0.7	0.0	1.1	2.3	1.5	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay	59.8											
HCM 2010 LOS	E											

Timing Report, Sorted By Phase

5: S Stygler Rd/N Stygler Rd & US 62

12/01/2017

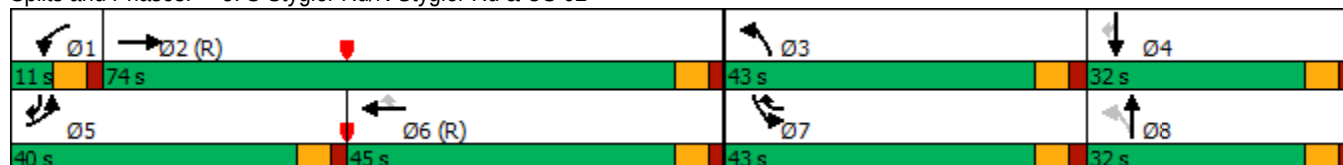


Phase Number	1	2	3	4	5	6	7	8
Movement	WBL	EBT	NBL	SBT	EBL	WBT	SBL	NBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	C-Max	None	Max
Maximum Split (s)	11	74	43	32	40	45	43	32
Maximum Split (%)	6.9%	46.3%	26.9%	20.0%	25.0%	28.1%	26.9%	20.0%
Minimum Split (s)	11	22.5	11	22.5	16	22.5	11	32
Yellow Time (s)	4	4	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2	2	2
Minimum Initial (s)	5	10	5	7	10	10	5	7
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)								5
Flash Dont Walk (s)								20
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	120	131	45	88	120	0	45	88
End Time (s)	131	45	88	120	0	45	88	120
Yield/Force Off (s)	125	39	82	114	154	39	82	114
Yield/Force Off 170(s)	125	39	82	114	154	39	82	94
Local Start Time (s)	120	131	45	88	120	0	45	88
Local Yield (s)	125	39	82	114	154	39	82	114
Local Yield 170(s)	125	39	82	114	154	39	82	94

Intersection Summary

Cycle Length 160
Control Type Actuated-Coordinated
Natural Cycle 115
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Splits and Phases: 5: S Stygler Rd/N Stygler Rd & US 62



HCM 2010 Signalized Intersection Summary

8: S Hamilton Rd/N Hamilton Rd & Granville St/Havens Corners Rd

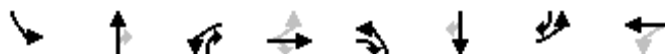
12/01/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	350	705	304	157	332	153	286	973	292	167	718	184
Future Volume (veh/h)	350	705	304	157	332	153	286	973	292	167	718	184
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	380	766	330	171	361	166	311	1058	317	182	780	200
Adj No. of Lanes	1	2	1	1	2	0	2	2	1	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	410	1050	628	231	385	174	344	1504	778	241	1398	930
Arrive On Green	0.19	0.30	0.30	0.07	0.16	0.16	0.20	0.85	0.85	0.14	0.79	0.79
Sat Flow, veh/h	1774	3539	1583	1774	2370	1073	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	380	766	330	171	268	259	311	1058	317	182	780	200
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1673	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	20.6	23.3	19.1	8.0	17.9	18.4	10.6	13.4	5.3	6.1	9.9	2.9
Cycle Q Clear(g_c), s	20.6	23.3	19.1	8.0	17.9	18.4	10.6	13.4	5.3	6.1	9.9	2.9
Prop In Lane	1.00		1.00	1.00		0.64	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	410	1050	628	231	288	272	344	1504	778	241	1398	930
V/C Ratio(X)	0.93	0.73	0.53	0.74	0.93	0.95	0.90	0.70	0.41	0.75	0.56	0.22
Avail Cap(c_a), veh/h	467	1106	653	231	288	272	344	1504	778	459	1398	930
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	0.59	0.59	0.59	1.00	1.00	1.00	0.34	0.34	0.34	0.92	0.92	0.92
Uniform Delay (d), s/veh	32.1	37.9	27.6	41.9	49.6	49.8	47.4	6.2	4.4	50.6	8.7	3.8
Incr Delay (d2), s/veh	15.8	1.4	0.4	12.0	35.5	41.6	11.1	0.9	0.5	4.4	1.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.8	11.6	8.4	2.5	11.6	11.6	5.5	6.3	2.2	3.0	4.8	1.3
LnGrp Delay(d),s/veh	47.9	39.3	28.0	53.9	85.1	91.4	58.5	7.1	4.9	55.0	10.2	4.2
LnGrp LOS	D	D	C	D	F	F	E	A	A	D	B	A
Approach Vol, veh/h	1476				698			1686			1162	
Approach Delay, s/veh	39.0				79.8			16.2			16.2	
Approach LOS	D				E			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.4	55.5	12.0	40.1	16.0	51.9	28.1	24.0				
Change Period (Y+Rc), s	4.0	4.5	4.0	4.5	4.0	4.5	5.0	4.5				
Max Green Setting (Gmax), s	16.0	39.5	8.0	37.5	12.0	43.5	27.0	19.5				
Max Q Clear Time (g_c+I1), s	8.1	15.4	10.0	25.3	12.6	11.9	22.6	20.4				
Green Ext Time (p_c), s	0.3	9.5	0.0	5.4	0.0	6.8	0.5	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay	31.7											
HCM 2010 LOS	C											

Timing Report, Sorted By Phase

8: S Hamilton Rd/N Hamilton Rd & Granville St/Havens Corners Rd

12/01/2017



Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBT	WBL	EBTL	NBL	SBT	EBL	WBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	20	44	12	42	16	48	32	24
Maximum Split (%)	16.7%	36.7%	10.0%	35.0%	13.3%	40.0%	26.7%	20.0%
Minimum Split (s)	11.5	29.5	11.5	29.5	12.5	39.5	15	24
Yellow Time (s)	3	3.5	3	3.5	3	3.5	3	3.5
All-Red Time (s)	1	1	1	1	1	1	2	1
Minimum Initial (s)	7	25	7	15	8	35	10	15
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Dont Walk (s)		18		18		18		12
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	100	0	44	56	100	116	44	76
End Time (s)	0	44	56	100	116	44	76	100
Yield/Force Off (s)	116	39.5	52	95.5	112	39.5	71	95.5
Yield/Force Off 170(s)	116	21.5	52	77.5	112	21.5	71	83.5
Local Start Time (s)	100	0	44	56	100	116	44	76
Local Yield (s)	116	39.5	52	95.5	112	39.5	71	95.5
Local Yield 170(s)	116	21.5	52	77.5	112	21.5	71	83.5

Intersection Summary

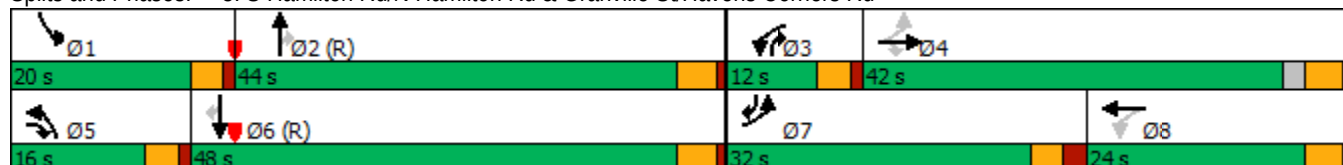
Cycle Length 120

Control Type Actuated-Coordinated

Natural Cycle 95

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Splits and Phases: 8: S Hamilton Rd/N Hamilton Rd & Granville St/Havens Corners Rd



HCM 2010 Signalized Intersection Summary

11: E Johnstown Rd & N Hamilton

12/01/2017

												
Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	20	676	223	18	489	242	336	380	20	214	220	23
Future Volume (veh/h)	20	676	223	18	489	242	336	380	20	214	220	23
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	22	735	242	20	532	263	365	413	0	233	239	0
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	355	1587	902	288	1580	956	446	455	386	306	387	329
Arrive On Green	0.03	0.45	0.45	0.03	0.45	0.45	0.16	0.24	0.00	0.12	0.21	0.00
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	1863	1583	1774	1863	1583
Grp Volume(v), veh/h	22	735	242	20	532	263	365	413	0	233	239	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1863	1583	1774	1863	1583
Q Serve(g_s), s	0.8	16.5	8.9	0.7	11.2	9.0	18.0	24.6	0.0	11.6	13.3	0.0
Cycle Q Clear(g_c), s	0.8	16.5	8.9	0.7	11.2	9.0	18.0	24.6	0.0	11.6	13.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	355	1587	902	288	1580	956	446	455	386	306	387	329
V/C Ratio(X)	0.06	0.46	0.27	0.07	0.34	0.28	0.82	0.91	0.00	0.76	0.62	0.00
Avail Cap(c_a), veh/h	611	1587	902	548	1580	956	446	538	457	370	538	457
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	16.4	21.9	12.5	17.1	20.6	10.7	29.4	41.9	0.0	31.9	41.1	0.0
Incr Delay (d2), s/veh	0.1	1.0	0.7	0.1	0.6	0.7	11.4	17.5	0.0	7.4	1.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	8.3	4.0	0.3	5.6	4.1	3.8	14.8	0.0	6.3	7.0	0.0
LnGrp Delay(d),s/veh	16.4	22.9	13.2	17.2	21.2	11.5	40.8	59.5	0.0	39.3	42.7	0.0
LnGrp LOS	B	C	B	B	C	B	D	E		D	D	
Approach Vol, veh/h		999			815			778			472	
Approach Delay, s/veh		20.4			17.9			50.7			41.0	
Approach LOS		C			B			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.8	55.7	18.3	32.4	8.0	55.5	22.5	28.2				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	20.0	51.0	18.0	33.0	20.0	51.0	18.0	33.0				
Max Q Clear Time (g_c+I1), s	2.7	18.5	13.6	26.6	2.8	13.2	20.0	15.3				
Green Ext Time (p_c), s	0.0	6.6	0.3	1.3	0.0	4.9	0.0	1.2				
Intersection Summary												
HCM 2010 Ctrl Delay			30.6									
HCM 2010 LOS			C									

Timing Report, Sorted By Phase
11: E Johnstown Rd & N Hamilton

12/01/2017



Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	SWL	NETL	NBL	SBTL	NEL	SWTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	None	None	None	Max	None	None
Maximum Split (s)	24.5	55.5	22.5	37.5	24.5	55.5	22.5	37.5
Maximum Split (%)	17.5%	39.6%	16.1%	26.8%	17.5%	39.6%	16.1%	26.8%
Minimum Split (s)	11.5	36.5	11.5	37.5	11.5	36.5	11.5	37.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1	1	1
Minimum Initial (s)	7	25	7	15	7	25	7	15
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Dont Walk (s)		25		25		25		25
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	24.5	80	102.5	0	24.5	80	102.5
End Time (s)	24.5	80	102.5	0	24.5	80	102.5	0
Yield/Force Off (s)	20	75.5	98	135.5	20	75.5	98	135.5
Yield/Force Off 170(s)	20	50.5	98	110.5	20	50.5	98	110.5
Local Start Time (s)	115.5	0	55.5	78	115.5	0	55.5	78
Local Yield (s)	135.5	51	73.5	111	135.5	51	73.5	111
Local Yield 170(s)	135.5	26	73.5	86	135.5	26	73.5	86

Intersection Summary

Cycle Length	140
Control Type	Semi Act-Uncoord
Natural Cycle	100

Splits and Phases: 11: E Johnstown Rd & N Hamilton

Ø1	Ø2	Ø3	Ø4
24.5 s	55.5 s	22.5 s	37.5 s
Ø5	Ø6	Ø7	Ø8
24.5 s	55.5 s	22.5 s	37.5 s

HCM 2010 Signalized Intersection Summary

13: Granville St & Mill St

12/01/2017

								
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	690	1590	785	90	74	443		
Future Volume (veh/h)	690	1590	785	90	74	443		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863		
Adj Flow Rate, veh/h	750	1728	853	98	80	482		
Adj No. of Lanes	1	2	2	0	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	782	2548	996	114	378	932		
Arrive On Green	0.38	0.72	0.62	0.62	0.21	0.21		
Sat Flow, veh/h	1774	3632	3293	368	1774	1583		
Grp Volume(v), veh/h	750	1728	472	479	80	482		
Grp Sat Flow(s),veh/h/ln	1774	1770	1770	1798	1774	1583		
Q Serve(g_s), s	41.3	32.1	25.9	25.9	4.5	21.6		
Cycle Q Clear(g_c), s	41.3	32.1	25.9	25.9	4.5	21.6		
Prop In Lane	1.00			0.20	1.00	1.00		
Lane Grp Cap(c), veh/h	782	2548	551	560	378	932		
V/C Ratio(X)	0.96	0.68	0.86	0.86	0.21	0.52		
Avail Cap(c_a), veh/h	856	2548	551	560	621	1148		
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00		
Upstream Filter(I)	0.25	0.25	0.78	0.78	0.96	0.96		
Uniform Delay (d), s/veh	27.1	9.2	20.5	20.5	38.9	14.6		
Incr Delay (d2), s/veh	7.6	0.4	12.7	12.5	0.3	0.4		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	25.6	15.5	14.2	14.4	2.2	22.7		
LnGrp Delay(d),s/veh	34.8	9.6	33.2	33.0	39.1	15.0		
LnGrp LOS	C	A	C	C	D	B		
Approach Vol, veh/h		2478	951		562			
Approach Delay, s/veh		17.2	33.1		18.5			
Approach LOS		B	C		B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		90.4		29.6	49.0	41.4		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		70.0		42.0	50.0	16.0		
Max Q Clear Time (g_c+I1), s		34.1		23.6	43.3	27.9		
Green Ext Time (p_c), s		20.6		2.0	1.8	0.0		
Intersection Summary								
HCM 2010 Ctrl Delay			21.2					
HCM 2010 LOS			C					

Timing Report, Sorted By Phase

13: Granville St & Mill St

12/01/2017

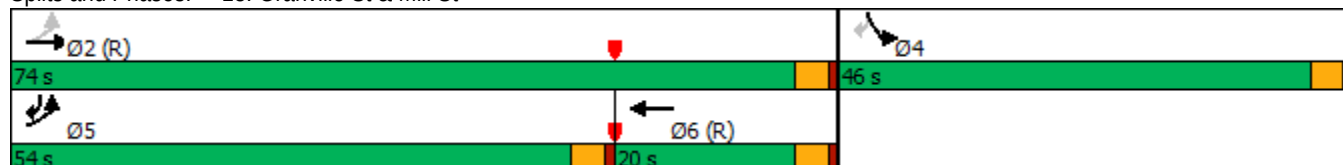


Phase Number	2	4	5	6
Movement	EBTL	SBL	EBL	WBT
Lead/Lag			Lead	Lag
Lead-Lag Optimize			Yes	Yes
Recall Mode	C-Max	None	None	C-Max
Maximum Split (s)	74	46	54	20
Maximum Split (%)	61.7%	38.3%	45.0%	16.7%
Minimum Split (s)	24.5	15	19.5	16
Yellow Time (s)	3	3	3	3
All-Red Time (s)	1	1	1	1
Minimum Initial (s)	20	10	15	12
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)				
Flash Dont Walk (s)				
Dual Entry	Yes	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	50	4	50	104
End Time (s)	4	50	104	4
Yield/Force Off (s)	0	46	100	0
Yield/Force Off 170(s)	0	46	100	0
Local Start Time (s)	66	20	66	0
Local Yield (s)	16	62	116	16
Local Yield 170(s)	16	62	116	16

Intersection Summary

Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	90
Offset: 104 (87%), Referenced to phase 2:EBTL and 6:WBT, Start of Green	

Splits and Phases: 13: Granville St & Mill St



HCM 2010 Signalized Intersection Summary

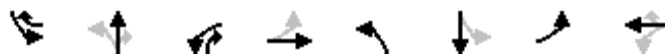
14: N Hamilton & Beecher Rd

12/01/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	53	24	71	19	240	36	900	33	239	617	21
Future Volume (veh/h)	40	53	24	71	19	240	36	900	33	239	617	21
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	43	58	26	77	21	261	39	978	36	260	671	23
Adj No. of Lanes	1	1	0	1	1	1	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	304	193	87	310	322	407	526	1956	953	431	2040	70
Arrive On Green	0.03	0.16	0.16	0.05	0.17	0.17	0.05	0.55	0.55	0.08	0.58	0.58
Sat Flow, veh/h	1774	1220	547	1774	1863	1583	1774	3539	1583	1774	3492	120
Grp Volume(v), veh/h	43	0	84	77	21	261	39	978	36	260	340	354
Grp Sat Flow(s),veh/h/ln	1774	0	1766	1774	1863	1583	1774	1770	1583	1774	1770	1842
Q Serve(g_s), s	2.1	0.0	4.3	3.7	1.0	15.1	0.9	17.5	1.0	6.1	10.1	10.2
Cycle Q Clear(g_c), s	2.1	0.0	4.3	3.7	1.0	15.1	0.9	17.5	1.0	6.1	10.1	10.2
Prop In Lane	1.00		0.31	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	304	0	280	310	322	407	526	1956	953	431	1034	1076
V/C Ratio(X)	0.14	0.00	0.30	0.25	0.07	0.64	0.07	0.50	0.04	0.60	0.33	0.33
Avail Cap(c_a), veh/h	364	0	464	343	490	550	606	1956	953	627	1034	1076
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.3	0.0	38.2	33.4	35.5	33.9	8.4	14.2	8.3	10.6	11.0	11.0
Incr Delay (d2), s/veh	0.2	0.0	0.6	0.4	0.1	1.7	0.1	0.9	0.1	1.4	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	2.1	1.8	0.5	6.7	0.5	8.8	0.4	3.1	5.2	5.4
LnGrp Delay(d),s/veh	34.5	0.0	38.8	33.8	35.6	35.6	8.5	15.1	8.4	12.0	11.8	11.8
LnGrp LOS	C		D	C	D	D	A	B	A	B	B	B
Approach Vol, veh/h		127			359			1053			954	
Approach Delay, s/veh		37.3			35.2			14.6			11.9	
Approach LOS		D			D			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.6	61.7	8.1	21.2	8.4	65.0	6.5	22.8				
Change Period (Y+Rc), s	3.0	5.0	3.0	5.0	3.0	5.0	3.0	5.0				
Max Green Setting (Gmax), s	20.0	50.0	7.0	27.0	10.0	60.0	7.0	27.0				
Max Q Clear Time (g_c+I1), s	8.1	19.5	5.7	6.3	2.9	12.2	4.1	17.1				
Green Ext Time (p_c), s	0.6	8.1	0.0	0.4	0.0	4.7	0.0	0.7				
Intersection Summary												
HCM 2010 Ctrl Delay				17.7								
HCM 2010 LOS				B								

Timing Report, Sorted By Phase
14: N Hamilton & Beecher Rd

12/01/2017



Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBTL	NBL	SBTL	EBL	WBL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	None	None	None	Max	None	None
Maximum Split (s)	23	55	10	32	13	65	10	32
Maximum Split (%)	19.2%	45.8%	8.3%	26.7%	10.8%	54.2%	8.3%	26.7%
Minimum Split (s)	11	29	8	29	11	29	8	29
Yellow Time (s)	3	3.5	3	3.5	3	3.5	3	3.5
All-Red Time (s)	0	1.5	0	1.5	0	1.5	0	1.5
Minimum Initial (s)	8	20	5	5	8	20	5	8
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		8		8		8		8
Flash Dont Walk (s)		16		16		16		16
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	23	78	88	0	13	78	88
End Time (s)	23	78	88	0	13	78	88	0
Yield/Force Off (s)	20	73	85	115	10	73	85	115
Yield/Force Off 170(s)	20	57	85	99	10	57	85	99
Local Start Time (s)	97	0	55	65	97	110	55	65
Local Yield (s)	117	50	62	92	107	50	62	92
Local Yield 170(s)	117	34	62	76	107	34	62	76

Intersection Summary

Cycle Length	120
Control Type	Semi Act-Uncoord
Natural Cycle	80

Splits and Phases: 14: N Hamilton & Beecher Rd



HCM 2010 Signalized Intersection Summary

17: S Hamilton Rd & Rocky Fork Blvd

12/01/2017

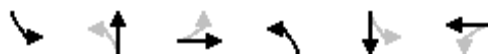
												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	44	15	170	44	210	46	1322	110	254	860	15
Future Volume (veh/h)	20	44	15	170	44	210	46	1322	110	254	860	15
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	22	48	16	185	48	228	50	1437	120	276	935	16
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	102	270	90	289	57	271	431	1968	164	284	2324	40
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.01	0.20	0.20	0.09	0.65	0.65
Sat Flow, veh/h	1099	1338	446	1332	283	1343	1774	3309	275	1774	3561	61
Grp Volume(v), veh/h	22	0	64	185	0	276	50	765	792	276	465	486
Grp Sat Flow(s),veh/h/ln	1099	0	1784	1332	0	1626	1774	1770	1814	1774	1770	1852
Q Serve(g_s), s	2.4	0.0	3.6	16.0	0.0	19.6	1.3	48.6	49.2	10.4	14.8	14.8
Cycle Q Clear(g_c), s	21.9	0.0	3.6	19.6	0.0	19.6	1.3	48.6	49.2	10.4	14.8	14.8
Prop In Lane	1.00		0.25	1.00		0.83	1.00		0.15	1.00		0.03
Lane Grp Cap(c), veh/h	102	0	360	289	0	328	431	1053	1079	284	1155	1209
V/C Ratio(X)	0.21	0.00	0.18	0.64	0.00	0.84	0.12	0.73	0.73	0.97	0.40	0.40
Avail Cap(c_a), veh/h	222	0	555	435	0	505	534	1053	1079	284	1155	1209
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.52	0.52	0.52	0.80	0.80	0.80
Uniform Delay (d), s/veh	56.6	0.0	39.7	47.8	0.0	46.0	9.0	39.1	39.3	33.9	9.8	9.8
Incr Delay (d2), s/veh	1.0	0.0	0.2	2.4	0.0	7.6	0.1	2.3	2.3	40.3	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	1.8	6.1	0.0	9.5	0.6	24.6	25.5	12.3	7.5	7.8
LnGrp Delay(d),s/veh	57.6	0.0	39.9	50.1	0.0	53.6	9.1	41.4	41.6	74.2	10.6	10.6
LnGrp LOS	E		D	D		D	A	D	D	E	B	B
Approach Vol, veh/h	86			461			1607			1227		
Approach Delay, s/veh	44.4			52.2			40.5			24.9		
Approach LOS	D			D			D			C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	15.0	76.1	28.9		8.1	83.0	28.9					
Change Period (Y+Rc), s	4.0	* 4.7	* 4.7		4.0	* 4.7	* 4.7					
Max Green Setting (Gmax), s	11.0	* 58	* 37		11.0	* 58	* 37					
Max Q Clear Time (g_c+I1), s	12.4	51.2	23.9		3.3	16.8	21.6					
Green Ext Time (p_c), s	0.0	5.2	0.3		0.0	7.1	2.2					
Intersection Summary												
HCM 2010 Ctrl Delay			36.5									
HCM 2010 LOS			D									
Notes												

2017 PM Peak 11/27/2017

Synchro 10 Report
Page 13

Timing Report, Sorted By Phase
17: S Hamilton Rd & Rocky Fork Blvd

12/01/2017



Phase Number	1	2	4	5	6	8
Movement	SBL	NBTL	EBTL	NBL	SBTL	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	None	None	C-Max	None
Maximum Split (s)	15	63	42	15	63	42
Maximum Split (%)	12.5%	52.5%	35.0%	12.5%	52.5%	35.0%
Minimum Split (s)	9.5	29.7	34.7	9.5	29.7	34.7
Yellow Time (s)	3	3.7	3.7	3	3.7	3.7
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	5	20	5	5	20	5
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		18	23		18	23
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	85	100	43	85	100	43
End Time (s)	100	43	85	100	43	85
Yield/Force Off (s)	96	38.3	80.3	96	38.3	80.3
Yield/Force Off 170(s)	96	20.3	57.3	96	20.3	57.3
Local Start Time (s)	105	0	63	105	0	63
Local Yield (s)	116	58.3	100.3	116	58.3	100.3
Local Yield 170(s)	116	40.3	77.3	116	40.3	77.3

Intersection Summary

Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	100
Offset: 100 (83%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	

Splits and Phases: 17: S Hamilton Rd & Rocky Fork Blvd



HCM 2010 Signalized Intersection Summary
20: S Hamilton Rd & Swanson Ave/Tech Center Dr

12/01/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	1	1	179	1	358	1	1246	519	291	724	1
Future Volume (veh/h)	1	1	1	179	1	358	1	1246	519	291	724	1
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	1	1	1	196	0	389	1	1354	564	316	787	1
Adj No. of Lanes	0	1	0	2	0	2	1	2	1	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	3	3	3	464	0	754	469	2218	1199	369	2780	4
Arrive On Green	0.01	0.01	0.01	0.13	0.00	0.13	0.63	0.63	0.63	0.11	0.77	0.77
Sat Flow, veh/h	577	577	577	3548	0	3167	685	3539	1583	3442	3627	5
Grp Volume(v), veh/h	3	0	0	196	0	389	1	1354	564	316	384	404
Grp Sat Flow(s),veh/h/ln	1732	0	0	1774	0	1583	685	1770	1583	1721	1770	1862
Q Serve(g_s), s	0.3	0.0	0.0	9.2	0.0	19.4	0.1	42.0	24.4	16.4	11.8	11.8
Cycle Q Clear(g_c), s	0.3	0.0	0.0	9.2	0.0	19.4	0.1	42.0	24.4	16.4	11.8	11.8
Prop In Lane	0.33		0.33	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	9	0	0	464	0	754	469	2218	1199	369	1356	1427
V/C Ratio(X)	0.32	0.00	0.00	0.42	0.00	0.52	0.00	0.61	0.47	0.86	0.28	0.28
Avail Cap(c_a), veh/h	87	0	0	1155	0	1371	469	2218	1199	1121	1356	1427
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	89.9	0.0	0.0	72.6	0.0	60.1	12.7	20.5	8.3	79.6	6.3	6.3
Incr Delay (d2), s/veh	18.4	0.0	0.0	0.6	0.0	0.5	0.0	1.3	1.3	5.7	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	4.6	0.0	8.6	0.0	20.9	16.7	8.1	6.0	6.3
LnGrp Delay(d),s/veh	108.3	0.0	0.0	73.2	0.0	60.6	12.7	21.8	9.6	85.4	6.8	6.8
LnGrp LOS	F			E		E	B	C	A	F	A	A
Approach Vol, veh/h	3			585			1919			1104		
Approach Delay, s/veh	108.3			64.8			18.2			29.3		
Approach LOS	F			E			B			C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	4		6		8					
Phs Duration (G+Y+Rc), s	25.4	119.6	6.9		145.0		29.6					
Change Period (Y+Rc), s	* 5.9	* 5.9	* 5.9		* 5.9		5.9					
Max Green Setting (Gmax), s	* 59	* 74	* 9.1		* 1.4E2		59.1					
Max Q Clear Time (g_c+I1), s	18.4	44.0	2.3		13.8		21.4					
Green Ext Time (p_c), s	1.1	14.7	0.0		5.0		2.4					
Intersection Summary												
HCM 2010 Ctrl Delay				29.2								
HCM 2010 LOS				C								
Notes												

2017 PM Peak 11/27/2017

Synchro 10 Report
Page 16

Timing Report, Sorted By Phase

20: S Hamilton Rd & Swanson Ave/Tech Center Dr

12/01/2017



Phase Number	1	2	4	6	8
Movement	SBL	NBTL	EBTL	SBT	WBTL
Lead/Lag	Lead	Lag			
Lead-Lag Optimize	Yes	Yes			
Recall Mode	None	Max	None	Max	None
Maximum Split (s)	65	80	15	145	65
Maximum Split (%)	28.9%	35.6%	6.7%	64.4%	28.9%
Minimum Split (s)	12.9	38.9	15	38.9	44.9
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	2.3	2.3	2.3	2.3	2.3
Minimum Initial (s)	7	25	7	25	10
Vehicle Extension (s)	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0
Walk Time (s)				7	7
Flash Dont Walk (s)				26	32
Dual Entry	No	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	65	145	0	160
End Time (s)	65	145	160	145	0
Yield/Force Off (s)	59.1	139.1	154.1	139.1	219.1
Yield/Force Off 170(s)	59.1	139.1	154.1	113.1	187.1
Local Start Time (s)	160	0	80	160	95
Local Yield (s)	219.1	74.1	89.1	74.1	154.1
Local Yield 170(s)	219.1	74.1	89.1	48.1	122.1

Intersection Summary

Cycle Length	225
Control Type	Semi Act-Uncoord
Natural Cycle	135

Splits and Phases: 20: S Hamilton Rd & Swanson Ave/Tech Center Dr

 Ø1	 Ø2	 Ø4	 Ø8
65 s	80 s	15 s	65 s
 Ø6			
145 s			

HCM 2010 Signalized Intersection Summary

22: S Hamilton Rd & Morrison Rd

12/01/2017

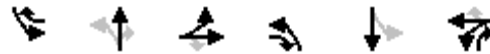
												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	39	78	704	14	231	157	1297	644	172	769	15
Future Volume (veh/h)	45	39	78	704	14	231	157	1297	644	172	769	15
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	49	42	85	776	0	251	171	1410	700	187	836	16
Adj No. of Lanes	0	1	1	2	0	1	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	65	56	211	745	0	451	357	1710	1097	212	1746	33
Arrive On Green	0.07	0.07	0.07	0.21	0.00	0.21	0.02	0.16	0.16	0.02	0.16	0.16
Sat Flow, veh/h	977	837	1583	3548	0	1583	1774	3539	1583	1774	3552	68
Grp Volume(v), veh/h	91	0	85	776	0	251	171	1410	700	187	416	436
Grp Sat Flow(s),veh/h/ln	1814	0	1583	1774	0	1583	1774	1770	1583	1774	1770	1851
Q Serve(g_s), s	5.9	0.0	5.9	25.2	0.0	16.2	5.6	46.3	31.0	7.3	25.6	25.7
Cycle Q Clear(g_c), s	5.9	0.0	5.9	25.2	0.0	16.2	5.6	46.3	31.0	7.3	25.6	25.7
Prop In Lane	0.54		1.00	1.00		1.00	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	121	0	211	745	0	451	357	1710	1097	212	870	910
V/C Ratio(X)	0.75	0.00	0.40	1.04	0.00	0.56	0.48	0.82	0.64	0.88	0.48	0.48
Avail Cap(c_a), veh/h	151	0	237	745	0	451	446	1710	1097	212	870	910
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	0.81	0.00	0.81	1.00	1.00	1.00	0.89	0.89	0.89
Uniform Delay (d), s/veh	55.0	0.0	47.6	47.4	0.0	36.5	17.8	45.5	16.9	33.2	36.3	36.3
Incr Delay (d2), s/veh	14.8	0.0	1.2	41.0	0.0	1.2	1.0	4.7	2.8	29.6	1.7	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.0	2.6	16.6	0.0	7.2	2.8	23.9	23.8	7.9	13.0	13.6
LnGrp Delay(d),s/veh	69.8	0.0	48.9	88.4	0.0	37.7	18.7	50.2	19.8	62.9	38.0	37.9
LnGrp LOS	E		D	F		D	B	D	B	E	D	D
Approach Vol, veh/h		176			1027			2281			1039	
Approach Delay, s/veh		59.7			76.0			38.5			42.4	
Approach LOS		E			E			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.0	64.0		13.0	12.0	65.0		30.0				
Change Period (Y+Rc), s	4.0	6.0		5.0	4.0	6.0		4.8				
Max Green Setting (Gmax), s	9.0	56.0		10.0	14.0	51.0		25.2				
Max Q Clear Time (g_c+I1), s	9.3	48.3		7.9	7.6	27.7		27.2				
Green Ext Time (p_c), s	0.0	6.1		0.1	0.2	5.5		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			48.7									
HCM 2010 LOS			D									
Notes												

2017 PM Peak 11/27/2017

Synchro 10 Report
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Timing Report, Sorted By Phase
22: S Hamilton Rd & Morrison Rd

12/01/2017

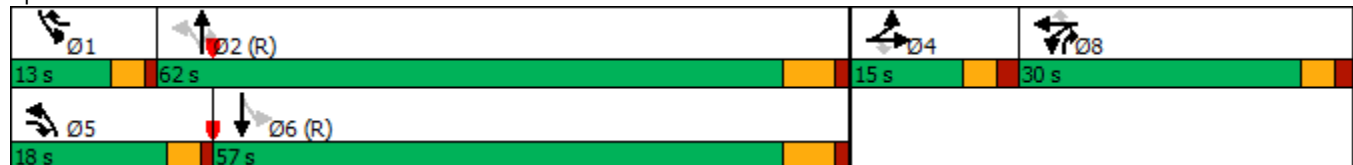


Phase Number	1	2	4	5	6	8
Movement	SBL	NBTL	EBTL	NBL	SBTL	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	None	None	C-Max	None
Maximum Split (s)	13	62	15	18	57	30
Maximum Split (%)	10.8%	51.7%	12.5%	15.0%	47.5%	25.0%
Minimum Split (s)	12	24	15	12	36	30
Yellow Time (s)	3	4.5	3	3	4.5	3
All-Red Time (s)	1	1.5	2	1	1.5	1.8
Minimum Initial (s)	8	15	8	8	15	8
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)					7	7
Flash Dont Walk (s)					23	18
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	8	21	83	8	26	98
End Time (s)	21	83	98	26	83	8
Yield/Force Off (s)	17	77	93	22	77	3.2
Yield/Force Off 170(s)	17	77	93	22	54	105.2
Local Start Time (s)	102	115	57	102	0	72
Local Yield (s)	111	51	67	116	51	97.2
Local Yield 170(s)	111	51	67	116	28	79.2

Intersection Summary

Cycle Length 120
Control Type Actuated-Coordinated
Natural Cycle 95
Offset: 26 (22%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Splits and Phases: 22: S Hamilton Rd & Morrison Rd



HCM 2010 Signalized Intersection Summary

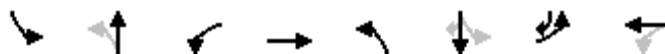
23: Morrison Rd & Tech Center Dr

12/01/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	504	45	244	12	222	110	185	231	7	17	145	159
Future Volume (veh/h)	504	45	244	12	222	110	185	231	7	17	145	159
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	548	49	265	13	241	120	201	251	8	18	158	173
Adj No. of Lanes	2	1	0	1	1	0	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	600	98	527	310	264	131	567	1581	50	509	1368	888
Arrive On Green	0.17	0.39	0.39	0.01	0.22	0.22	0.08	0.45	0.45	0.02	0.39	0.39
Sat Flow, veh/h	3442	253	1368	1774	1175	585	1774	3501	111	1774	3539	1583
Grp Volume(v), veh/h	548	0	314	13	0	361	201	126	133	18	158	173
Grp Sat Flow(s),veh/h/ln	1721	0	1621	1774	0	1760	1774	1770	1843	1774	1770	1583
Q Serve(g_s), s	24.2	0.0	22.9	0.9	0.0	31.0	10.2	6.5	6.6	0.9	4.4	8.3
Cycle Q Clear(g_c), s	24.2	0.0	22.9	0.9	0.0	31.0	10.2	6.5	6.6	0.9	4.4	8.3
Prop In Lane	1.00		0.84	1.00		0.33	1.00		0.06	1.00		1.00
Lane Grp Cap(c), veh/h	600	0	625	310	0	396	567	799	832	509	1368	888
V/C Ratio(X)	0.91	0.00	0.50	0.04	0.00	0.91	0.35	0.16	0.16	0.04	0.12	0.19
Avail Cap(c_a), veh/h	665	0	680	399	0	510	820	799	832	591	1368	888
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.7	0.0	36.3	45.2	0.0	58.5	23.6	25.1	25.1	27.8	30.5	16.8
Incr Delay (d2), s/veh	16.1	0.0	0.6	0.1	0.0	17.7	0.4	0.4	0.4	0.0	0.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.8	0.0	10.3	0.4	0.0	17.0	5.1	3.3	3.4	0.5	2.2	3.8
LnGrp Delay(d),s/veh	78.9	0.0	36.9	45.2	0.0	76.2	24.0	25.5	25.5	27.8	30.7	17.2
LnGrp LOS	E		D	D		E	C	C	C	C	C	B
Approach Vol, veh/h		862			374			460			349	
Approach Delay, s/veh		63.6			75.2			24.8			23.9	
Approach LOS		E			E			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.8	75.0	7.2	64.8	17.9	64.9	32.1	39.9				
Change Period (Y+Rc), s	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1				
Max Green Setting (Gmax), s	9.9	69.9	9.9	64.9	34.9	44.9	29.9	44.9				
Max Q Clear Time (g_c+I1), s	2.9	8.6	2.9	24.9	12.2	10.3	26.2	33.0				
Green Ext Time (p_c), s	0.0	1.5	0.0	2.2	0.5	1.6	0.8	1.8				
Intersection Summary												
HCM 2010 Ctrl Delay			50.2									
HCM 2010 LOS			D									

Timing Report, Sorted By Phase
23: Morrison Rd & Tech Center Dr

12/01/2017

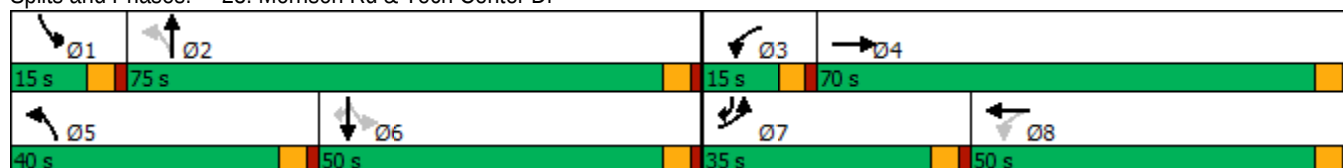


Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBT	NBL	SBTL	EBL	WBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	None	None	None	Max	None	None
Maximum Split (s)	15	75	15	70	40	50	35	50
Maximum Split (%)	8.6%	42.9%	8.6%	40.0%	22.9%	28.6%	20.0%	28.6%
Minimum Split (s)	10.1	35.1	10.1	32.1	10.1	35.1	10.1	32.1
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Minimum Initial (s)	5	10	5	10	5	10	5	10
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Dont Walk (s)		23		20		23		18
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	15	90	105	0	40	90	125
End Time (s)	15	90	105	0	40	90	125	0
Yield/Force Off (s)	9.9	84.9	99.9	169.9	34.9	84.9	119.9	169.9
Yield/Force Off 170(s)	9.9	61.9	99.9	149.9	34.9	61.9	119.9	151.9
Local Start Time (s)	135	150	50	65	135	0	50	85
Local Yield (s)	144.9	44.9	59.9	129.9	169.9	44.9	79.9	129.9
Local Yield 170(s)	144.9	21.9	59.9	109.9	169.9	21.9	79.9	111.9

Intersection Summary

Cycle Length	175
Control Type	Semi Act-Uncoord
Natural Cycle	90

Splits and Phases: 23: Morrison Rd & Tech Center Dr



HCM 2010 Signalized Intersection Summary

25: Old Ridenour Rd & US 62/Granville St

12/01/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	1756	54	167	900	147	36	18	318	220	23	22
Future Volume (veh/h)	24	1756	54	167	900	147	36	18	318	220	23	22
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	26	1909	59	182	978	160	39	20	346	239	25	24
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	347	2256	1009	273	2353	1272	157	87	152	328	138	133
Arrive On Green	0.04	1.00	1.00	0.05	0.66	0.66	0.03	0.05	0.05	0.14	0.16	0.16
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	1863	1583	1774	875	840
Grp Volume(v), veh/h	26	1909	59	182	978	160	39	20	346	239	0	49
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1863	1583	1774	0	1715
Q Serve(g_s), s	0.8	0.0	0.0	5.6	20.5	3.5	3.3	1.7	7.5	20.0	0.0	4.0
Cycle Q Clear(g_c), s	0.8	0.0	0.0	5.6	20.5	3.5	3.3	1.7	7.5	20.0	0.0	4.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.49
Lane Grp Cap(c), veh/h	347	2256	1009	273	2353	1272	157	87	152	328	0	271
V/C Ratio(X)	0.07	0.85	0.06	0.67	0.42	0.13	0.25	0.23	2.28	0.73	0.00	0.18
Avail Cap(c_a), veh/h	420	2256	1009	352	2353	1272	275	87	152	359	0	271
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.43	0.43	0.43	0.75	0.75	0.75	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.1	0.0	0.0	8.3	12.4	3.4	70.1	73.5	72.3	59.5	0.0	58.4
Incr Delay (d2), s/veh	0.0	1.8	0.0	2.3	0.4	0.2	0.8	1.3	596.2	6.7	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.6	0.0	2.9	10.0	1.6	1.7	0.9	31.9	10.4	0.0	1.9
LnGrp Delay(d),s/veh	10.1	1.8	0.0	10.7	12.8	3.6	70.9	74.8	668.5	66.2	0.0	58.7
LnGrp LOS	B	A	A	B	B	A	E	E	F	E		E
Approach Vol, veh/h	1994			1320			405			288		
Approach Delay, s/veh	1.9			11.4			581.6			64.9		
Approach LOS	A			B			F			E		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.8	108.0	9.4	29.8	8.4	112.4	27.2	12.0				
Change Period (Y+Rc), s	5.0	6.0	5.0	4.5	5.0	6.0	5.0	4.5				
Max Green Setting (Gmax), s	15.0	92.0	15.0	17.5	10.0	97.0	25.0	7.5				
Max Q Clear Time (g_c+I1), s	7.6	2.0	5.3	6.0	2.8	22.5	22.0	9.5				
Green Ext Time (p_c), s	0.3	31.4	0.0	0.1	0.0	9.1	0.2	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay	68.1											
HCM 2010 LOS	E											

Timing Report, Sorted By Phase
25: Old Ridenour Rd & US 62/Granville St

12/01/2017

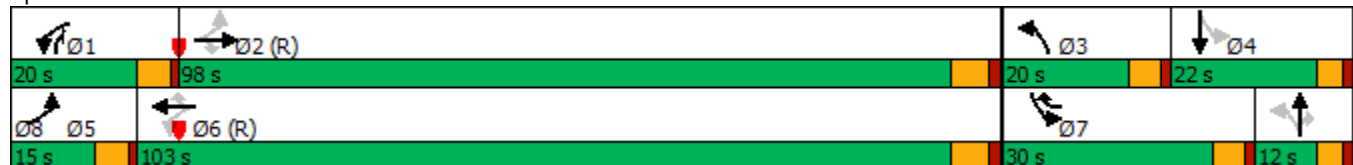


Phase Number	1	2	3	4	5	6	7	8
Movement	WBL	EBTL	NBL	SBTL	EBL	WBTL	SBL	NBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	20	98	20	22	15	103	30	12
Maximum Split (%)	12.5%	61.3%	12.5%	13.8%	9.4%	64.4%	18.8%	7.5%
Minimum Split (s)	10	41	15	22	13	41	15	12
Yellow Time (s)	4	4.5	4	3	4	4.5	4	3
All-Red Time (s)	1	1.5	1	1.5	1	1.5	1	1.5
Minimum Initial (s)	5	35	5	8	5	35	10	5
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)	7							
Flash Dont Walk (s)	12							
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	140	0	98	118	140	155	98	128
End Time (s)	0	98	118	140	155	98	128	140
Yield/Force Off (s)	155	92	113	135.5	150	92	123	135.5
Yield/Force Off 170(s)	155	92	113	135.5	150	80	123	135.5
Local Start Time (s)	140	0	98	118	140	155	98	128
Local Yield (s)	155	92	113	135.5	150	92	123	135.5
Local Yield 170(s)	155	92	113	135.5	150	80	123	135.5

Intersection Summary

Cycle Length 160
Control Type Actuated-Coordinated
Natural Cycle 115
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Splits and Phases: 25: Old Ridenour Rd & US 62/Granville St



Intersection

Intersection Delay, s/veh	10.9
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	316	33	24	95	64	117
Future Vol, veh/h	316	33	24	95	64	117
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	343	36	26	103	70	127
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	12.4	8.3	9.6
HCM LOS	B	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	91%	0%	35%
Vol Thru, %	9%	20%	0%
Vol Right, %	0%	80%	65%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	349	119	181
LT Vol	316	0	64
Through Vol	33	24	0
RT Vol	0	95	117
Lane Flow Rate	379	129	197
Geometry Grp	1	1	1
Degree of Util (X)	0.499	0.157	0.262
Departure Headway (Hd)	4.735	4.383	4.792
Convergence, Y/N	Yes	Yes	Yes
Cap	759	814	746
Service Time	2.781	2.438	2.842
HCM Lane V/C Ratio	0.499	0.158	0.264
HCM Control Delay	12.4	8.3	9.6
HCM Lane LOS	B	A	A
HCM 95th-tile Q	2.8	0.6	1

Intersection

Int Delay, s/veh 8.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	407	320	102	99	46	120
Future Vol, veh/h	407	320	102	99	46	120
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	60	-	-	200	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	442	348	111	108	50	130

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	219	0	0 1343 111
Stage 1	-	-	- 111 -
Stage 2	-	-	- 1232 -
Critical Hdwy	4.12	-	- 6.42 6.22
Critical Hdwy Stg 1	-	-	- 5.42 -
Critical Hdwy Stg 2	-	-	- 5.42 -
Follow-up Hdwy	2.218	-	- 3.518 3.318
Pot Cap-1 Maneuver	1350	-	- 168 942
Stage 1	-	-	- 914 -
Stage 2	-	-	- 275 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1350	-	- 113 942
Mov Cap-2 Maneuver	-	-	- 113 -
Stage 1	-	-	- 615 -
Stage 2	-	-	- 275 -

Approach	EB	WB	SB
HCM Control Delay, s	5	0	31.4
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1350	-	-	-	311
HCM Lane V/C Ratio	0.328	-	-	-	0.58
HCM Control Delay (s)	9	-	-	-	31.4
HCM Lane LOS	A	-	-	-	D
HCM 95th %tile Q(veh)	1.4	-	-	-	3.4

HCM 2010 TWSC
31: IR-270 NB Exit Ramp & W Johnstown Rd

12/01/2017

Intersection

Int Delay, s/veh 6.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	W	
Traffic Vol, veh/h	447	0	0	139	181	67
Future Vol, veh/h	447	0	0	139	181	67
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	486	0	0	151	197	73

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	-	-	-	637 486
Stage 1	-	-	-	-	486 -
Stage 2	-	-	-	-	151 -
Critical Hdwy	-	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	-	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	-	0	0	-	441 581
Stage 1	-	0	0	-	618 -
Stage 2	-	0	0	-	877 -
Platoon blocked, %	-			-	
Mov Cap-1 Maneuver	-	-	-	-	441 581
Mov Cap-2 Maneuver	-	-	-	-	441 -
Stage 1	-	-	-	-	618 -
Stage 2	-	-	-	-	877 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0	22.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	WBT
Capacity (veh/h)	472	-	-
HCM Lane V/C Ratio	0.571	-	-
HCM Control Delay (s)	22.3	-	-
HCM Lane LOS	C	-	-
HCM 95th %tile Q(veh)	3.5	-	-

HCM 2010 Signalized Intersection Summary

32: Culpeper's/Shull Ave & Granville St

12/01/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	1421	1	7	883	100	7	1	10	93	1	26
Future Volume (veh/h)	93	1421	1	7	883	100	7	1	10	93	1	26
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	101	1545	1	8	960	109	8	1	11	101	1	28
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	451	2091	1	263	1690	192	197	38	236	356	10	86
Arrive On Green	0.13	1.00	1.00	0.03	1.00	1.00	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	1774	3630	2	1774	3204	364	563	140	859	1100	35	312
Grp Volume(v), veh/h	101	753	793	8	530	539	20	0	0	130	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1862	1774	1770	1799	1563	0	0	1447	0	0
Q Serve(g_s), s	2.8	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	7.3	0.0	0.0
Cycle Q Clear(g_c), s	2.8	0.0	0.0	0.2	0.0	0.0	1.0	0.0	0.0	8.4	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.20	0.40		0.55	0.78		0.22
Lane Grp Cap(c), veh/h	451	1019	1073	263	933	948	472	0	0	451	0	0
V/C Ratio(X)	0.22	0.74	0.74	0.03	0.57	0.57	0.04	0.00	0.00	0.29	0.00	0.00
Avail Cap(c_a), veh/h	685	1019	1073	406	933	948	472	0	0	451	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.81	0.81	0.81	0.95	0.95	0.95	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	9.1	0.0	0.0	12.4	0.0	0.0	31.9	0.0	0.0	34.5	0.0	0.0
Incr Delay (d2), s/veh	0.2	3.9	3.7	0.0	2.4	2.3	0.2	0.0	0.0	1.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	1.1	1.1	0.1	0.6	0.6	0.5	0.0	0.0	3.6	0.0	0.0
LnGrp Delay(d),s/veh	9.3	3.9	3.7	12.4	2.4	2.3	32.1	0.0	0.0	36.1	0.0	0.0
LnGrp LOS	A	A	A	B	A	A	C			D		
Approach Vol, veh/h	1647			1077			20			130		
Approach Delay, s/veh	4.1			2.4			32.1			36.1		
Approach LOS	A			A			C			D		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.4	74.6		38.0	13.2	68.8		38.0				
Change Period (Y+Rc), s	5.5	5.5		5.0	5.5	5.5		5.0				
Max Green Setting (Gmax), s	11.5	59.5		33.0	23.5	47.5		33.0				
Max Q Clear Time (g_c+I1), s	2.2	2.0		10.4	4.8	2.0		3.0				
Green Ext Time (p_c), s	0.0	19.4		0.7	0.2	9.8		0.1				
Intersection Summary												
HCM 2010 Ctrl Delay	5.1											
HCM 2010 LOS	A											

Timing Report, Sorted By Phase

32: Culpeper's/Shull Ave & Granville St

12/01/2017



Phase Number	1	2	4	5	6	8
Movement	WBL	EBTL	SBTL	EBL	WBTL	NBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	Max	None	C-Max	Max
Maximum Split (s)	17	65	38	29	53	38
Maximum Split (%)	14.2%	54.2%	31.7%	24.2%	44.2%	31.7%
Minimum Split (s)	13.5	24.5	30	13.5	24.5	30
Yellow Time (s)	4	4	3	4	4	3
All-Red Time (s)	1.5	1.5	2	1.5	1.5	2
Minimum Initial (s)	8	15	8	8	15	8
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		12	18		12	18
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	91	108	53	91	0	53
End Time (s)	108	53	91	0	53	91
Yield/Force Off (s)	102.5	47.5	86	114.5	47.5	86
Yield/Force Off 170(s)	102.5	35.5	68	114.5	35.5	68
Local Start Time (s)	91	108	53	91	0	53
Local Yield (s)	102.5	47.5	86	114.5	47.5	86
Local Yield 170(s)	102.5	35.5	68	114.5	35.5	68

Intersection Summary

Cycle Length 120
Control Type Actuated-Coordinated
Natural Cycle 90
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Splits and Phases: 32: Culpeper's/Shull Ave & Granville St



HCM 2010 Signalized Intersection Summary

37: Lincoln Cir & Granville St

12/01/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	1487	15	13	928	18	42	1	22	12	1	18
Future Volume (veh/h)	10	1487	15	13	928	18	42	1	22	12	1	18
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	11	1616	16	14	1009	20	46	1	24	13	1	20
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	495	2711	27	319	2689	53	235	8	185	96	22	110
Arrive On Green	0.03	1.00	1.00	0.03	1.00	1.00	0.12	0.12	0.12	0.12	0.12	0.12
Sat Flow, veh/h	1774	3591	36	1774	3550	70	1385	64	1529	452	184	909
Grp Volume(v), veh/h	11	796	836	14	503	526	46	0	25	34	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1856	1774	1770	1850	1385	0	1593	1545	0	0
Q Serve(g_s), s	0.2	0.0	0.0	0.2	0.0	0.0	0.8	0.0	1.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.2	0.0	0.0	0.2	0.0	0.0	3.0	0.0	1.7	2.2	0.0	0.0
Prop In Lane	1.00		0.02	1.00		0.04	1.00		0.96	0.38		0.59
Lane Grp Cap(c), veh/h	495	1336	1401	319	1341	1402	235	0	193	229	0	0
V/C Ratio(X)	0.02	0.60	0.60	0.04	0.38	0.38	0.20	0.00	0.13	0.15	0.00	0.00
Avail Cap(c_a), veh/h	768	1336	1401	534	1341	1402	478	0	473	493	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.64	0.64	0.64	0.91	0.91	0.91	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.2	0.0	0.0	3.1	0.0	0.0	47.6	0.0	47.1	47.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.3	1.2	0.1	0.7	0.7	0.4	0.0	0.3	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.5	0.5	0.1	0.3	0.3	1.4	0.0	0.8	1.0	0.0	0.0
LnGrp Delay(d),s/veh	3.2	1.3	1.2	3.2	0.7	0.7	48.0	0.0	47.4	47.6	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	D		D	D		
Approach Vol, veh/h	1643				1043				71		34	
Approach Delay, s/veh	1.2				0.7				47.8		47.6	
Approach LOS	A				A				D		D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.9	95.6		18.5	5.5	95.9		18.5				
Change Period (Y+Rc), s	4.0	5.0		4.0	4.0	5.0		4.0				
Max Green Setting (Gmax), s	16.4	55.0		35.6	20.0	51.4		35.6				
Max Q Clear Time (g_c+I1), s	2.2	2.0		4.2	2.2	2.0		5.0				
Green Ext Time (p_c), s	0.0	21.2		0.1	0.0	9.2		0.2				
Intersection Summary												
HCM 2010 Ctrl Delay	2.8											
HCM 2010 LOS	A											

Timing Report, Sorted By Phase

37: Lincoln Cir & Granville St

12/01/2017



Phase Number	1	2	4	5	6	8
Movement	WBL	EBTL	SBTL	EBL	WBTL	NBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	None	None	C-Max	None
Maximum Split (s)	20.4	60	39.6	24	56.4	39.6
Maximum Split (%)	17.0%	50.0%	33.0%	20.0%	47.0%	33.0%
Minimum Split (s)	9.5	35	26	9.5	35	26.5
Yellow Time (s)	3	4	3	3	4	3
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	5	30	15	5	30	15
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		15	15		15	15
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	106	6.4	66.4	106	10	66.4
End Time (s)	6.4	66.4	106	10	66.4	106
Yield/Force Off (s)	2.4	61.4	102	6	61.4	102
Yield/Force Off 170(s)	2.4	46.4	87	6	46.4	87
Local Start Time (s)	96	116.4	56.4	96	0	56.4
Local Yield (s)	112.4	51.4	92	116	51.4	92
Local Yield 170(s)	112.4	36.4	77	116	36.4	77

Intersection Summary

Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	80
Offset: 10 (8%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	

Splits and Phases: 37: Lincoln Cir & Granville St

20.4 s	60 s	39.6 s
24 s	56.4 s	39.6 s

HCM 2010 Signalized Intersection Summary

40: Flint Ridge Rd/Library & Granville St

12/01/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	1371	118	15	770	53	130	10	21	47	6	61
Future Volume (veh/h)	44	1371	118	15	770	53	130	10	21	47	6	61
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	48	1490	128	16	837	58	141	11	23	51	7	66
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	394	1972	168	287	1920	133	299	25	41	379	49	396
Arrive On Green	0.11	1.00	1.00	0.02	0.38	0.38	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	1774	3301	282	1774	3359	233	981	102	164	1290	194	1583
Grp Volume(v), veh/h	48	794	824	16	441	454	175	0	0	58	0	66
Grp Sat Flow(s),veh/h/ln	1774	1770	1813	1774	1770	1822	1247	0	0	1485	0	1583
Q Serve(g_s), s	1.2	0.0	0.0	0.4	22.1	22.1	12.9	0.0	0.0	0.0	0.0	3.9
Cycle Q Clear(g_c), s	1.2	0.0	0.0	0.4	22.1	22.1	16.3	0.0	0.0	3.5	0.0	3.9
Prop In Lane	1.00		0.16	1.00		0.13	0.81		0.13	0.88		1.00
Lane Grp Cap(c), veh/h	394	1057	1083	287	1012	1042	366	0	0	428	0	396
V/C Ratio(X)	0.12	0.75	0.76	0.06	0.44	0.44	0.48	0.00	0.00	0.14	0.00	0.17
Avail Cap(c_a), veh/h	499	1057	1083	437	1012	1042	366	0	0	428	0	396
HCM Platoon Ratio	2.00	2.00	2.00	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.80	0.80	0.80	0.57	0.57	0.57	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.2	0.0	0.0	9.8	22.7	22.7	41.0	0.0	0.0	35.0	0.0	35.2
Incr Delay (d2), s/veh	0.1	4.0	4.0	0.0	0.8	0.8	4.4	0.0	0.0	0.7	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	1.2	1.2	0.2	11.1	11.4	5.6	0.0	0.0	1.6	0.0	1.8
LnGrp Delay(d),s/veh	10.3	4.0	4.0	9.9	23.5	23.4	45.4	0.0	0.0	35.7	0.0	36.1
LnGrp LOS	B	A	A	A	C	C	D			D		D
Approach Vol, veh/h	1666			911			175			124		
Approach Delay, s/veh	4.2			23.2			45.4			35.9		
Approach LOS	A			C			D			D		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.8	77.2		35.0	10.9	74.1		35.0				
Change Period (Y+Rc), s	4.5	5.5		5.0	4.5	5.5		5.0				
Max Green Setting (Gmax), s	13.5	61.5		30.0	13.5	61.5		30.0				
Max Q Clear Time (g_c+I1), s	2.4	2.0		5.9	3.2	24.1		18.3				
Green Ext Time (p_c), s	0.0	21.8		0.5	0.1	7.3		0.7				
Intersection Summary												
HCM 2010 Ctrl Delay	14.1											
HCM 2010 LOS	B											

Timing Report, Sorted By Phase
40: Flint Ridge Rd/Library & Granville St

12/01/2017

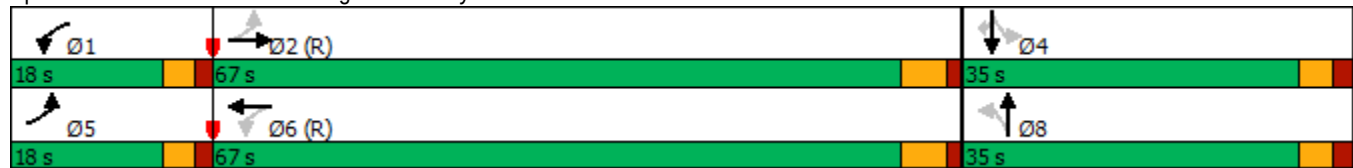


Phase Number	1	2	4	5	6	8
Movement	WBL	EBTL	SBTL	EBL	WBTL	NBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	Max	None	C-Max	Max
Maximum Split (s)	18	67	35	18	67	35
Maximum Split (%)	15.0%	55.8%	29.2%	15.0%	55.8%	29.2%
Minimum Split (s)	12.5	25.5	33	12.5	25.5	33
Yellow Time (s)	3	4	3	3	4	3
All-Red Time (s)	1.5	1.5	2	1.5	1.5	2
Minimum Initial (s)	8	15	8	8	15	8
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		13	21		13	21
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	112	10	77	112	10	77
End Time (s)	10	77	112	10	77	112
Yield/Force Off (s)	5.5	71.5	107	5.5	71.5	107
Yield/Force Off 170(s)	5.5	58.5	86	5.5	58.5	86
Local Start Time (s)	102	0	67	102	0	67
Local Yield (s)	115.5	61.5	97	115.5	61.5	97
Local Yield 170(s)	115.5	48.5	76	115.5	48.5	76

Intersection Summary

Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	90
Offset: 10 (8%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	

Splits and Phases: 40: Flint Ridge Rd/Library & Granville St



HCM 2010 Signalized Intersection Summary

43: N Hamilton Rd & Shopping Center/KEMBA

12/01/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	1	77	15	1	5	64	1415	13	4	988	25
Future Volume (veh/h)	40	1	77	15	1	5	64	1415	13	4	988	25
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	43	1	84	16	1	5	70	1538	14	4	1074	27
Adj No. of Lanes	0	1	1	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	169	3	131	126	22	112	526	2785	25	315	2577	65
Arrive On Green	0.08	0.08	0.08	0.08	0.08	0.08	0.11	1.00	1.00	0.01	1.00	1.00
Sat Flow, veh/h	1323	39	1583	1307	271	1353	1774	3594	33	1774	3528	89
Grp Volume(v), veh/h	44	0	84	16	0	6	70	757	795	4	539	562
Grp Sat Flow(s),veh/h/ln	1363	0	1583	1307	0	1624	1774	1770	1857	1774	1770	1847
Q Serve(g_s), s	3.5	0.0	6.2	1.4	0.0	0.4	1.0	0.0	0.0	0.1	0.0	0.0
Cycle Q Clear(g_c), s	3.9	0.0	6.2	5.3	0.0	0.4	1.0	0.0	0.0	0.1	0.0	0.0
Prop In Lane	0.98		1.00	1.00		0.83	1.00		0.02	1.00		0.05
Lane Grp Cap(c), veh/h	172	0	131	126	0	134	526	1371	1439	315	1292	1349
V/C Ratio(X)	0.26	0.00	0.64	0.13	0.00	0.04	0.13	0.55	0.55	0.01	0.42	0.42
Avail Cap(c_a), veh/h	253	0	222	201	0	227	548	1371	1439	416	1292	1349
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.48	0.48	0.48	0.94	0.94	0.94
Uniform Delay (d), s/veh	52.4	0.0	53.3	54.8	0.0	50.7	2.4	0.0	0.0	4.1	0.0	0.0
Incr Delay (d2), s/veh	0.8	0.0	5.1	0.5	0.0	0.1	0.1	0.8	0.7	0.0	0.9	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	2.9	0.5	0.0	0.2	0.5	0.3	0.3	0.0	0.3	0.3
LnGrp Delay(d),s/veh	53.2	0.0	58.4	55.2	0.0	50.8	2.4	0.8	0.7	4.1	0.9	0.9
LnGrp LOS	D		E	E		D	A	A	A	A	A	A
Approach Vol, veh/h		128			22			1622			1105	
Approach Delay, s/veh		56.6			54.0			0.8			0.9	
Approach LOS		E			D			A			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.5	93.3		15.1	6.2	98.7		15.1				
Change Period (Y+Rc), s	* 5.2	* 5.7		* 5.2	* 5.3	* 5.7		* 5.2				
Max Green Setting (Gmax), s	* 7.8	* 80		* 17	* 7.7	* 79		* 17				
Max Q Clear Time (g_c+I1), s	3.0	2.0		7.3	2.1	2.0		8.2				
Green Ext Time (p_c), s	0.0	9.2		0.0	0.0	17.9		0.3				
Intersection Summary												
HCM 2010 Ctrl Delay			3.8									
HCM 2010 LOS			A									
Notes												

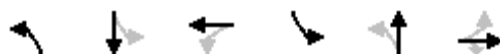
2017 PM Peak 11/27/2017

Synchro 10 Report
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Timing Report, Sorted By Phase

43: N Hamilton Rd & Shopping Center/KEMBA

12/01/2017

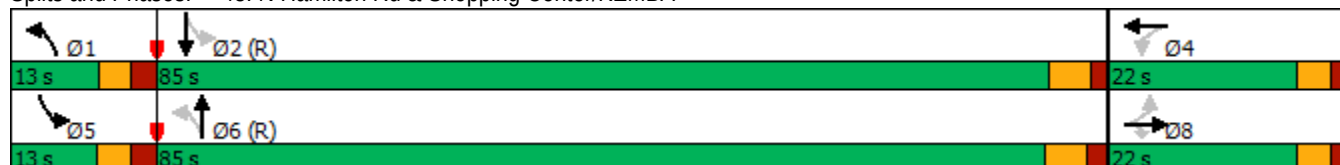


Phase Number	1	2	4	5	6	8
Movement	NBL	SBTL	WBTL	SBL	NBTL	EBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	None	None	C-Max	None
Maximum Split (s)	13	85	22	13	85	22
Maximum Split (%)	10.8%	70.8%	18.3%	10.8%	70.8%	18.3%
Minimum Split (s)	12.2	29.3	22	12.3	26.7	22
Yellow Time (s)	3	3.7	3	3	3.7	3
All-Red Time (s)	2.2	1.6	2.2	2.3	2	2.2
Minimum Initial (s)	7	15	10	7	15	10
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		17	9		14	9
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	107	0	85	107	0	85
End Time (s)	0	85	107	0	85	107
Yield/Force Off (s)	114.8	79.7	101.8	114.7	79.3	101.8
Yield/Force Off 170(s)	114.8	62.7	92.8	114.7	65.3	92.8
Local Start Time (s)	107	0	85	107	0	85
Local Yield (s)	114.8	79.7	101.8	114.7	79.3	101.8
Local Yield 170(s)	114.8	62.7	92.8	114.7	65.3	92.8

Intersection Summary

Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	75
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	

Splits and Phases: 43: N Hamilton Rd & Shopping Center/KEMBA



HCM 2010 Signalized Intersection Summary

46: N Hamilton Rd/N Hamilton & Gatsby's/Banks

12/01/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	1	1	67	1	48	2	1360	86	21	945	4
Future Volume (veh/h)	4	1	1	67	1	48	2	1360	86	21	945	4
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	4	1	1	73	1	52	2	1478	93	23	1027	4
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	11	3	3	90	1	64	6	2678	168	306	2730	11
Arrive On Green	0.01	0.01	0.01	0.09	0.09	0.09	0.01	1.00	1.00	0.75	0.75	0.75
Sat Flow, veh/h	1168	292	292	979	13	698	1774	3383	212	325	3616	14
Grp Volume(v), veh/h	6	0	0	126	0	0	2	770	801	23	503	528
Grp Sat Flow(s),veh/h/ln	1753	0	0	1691	0	0	1774	1770	1825	325	1770	1860
Q Serve(g_s), s	0.4	0.0	0.0	8.8	0.0	0.0	0.1	0.0	0.0	2.2	11.7	11.7
Cycle Q Clear(g_c), s	0.4	0.0	0.0	8.8	0.0	0.0	0.1	0.0	0.0	2.2	11.7	11.7
Prop In Lane	0.67		0.17	0.58		0.41	1.00		0.12	1.00		0.01
Lane Grp Cap(c), veh/h	16	0	0	155	0	0	6	1401	1445	306	1336	1404
V/C Ratio(X)	0.38	0.00	0.00	0.81	0.00	0.00	0.35	0.55	0.55	0.08	0.38	0.38
Avail Cap(c_a), veh/h	88	0	0	293	0	0	89	1401	1445	306	1336	1404
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.84	0.84	0.84	0.89	0.89	0.89
Uniform Delay (d), s/veh	59.1	0.0	0.0	53.5	0.0	0.0	59.5	0.0	0.0	3.9	5.0	5.0
Incr Delay (d2), s/veh	14.1	0.0	0.0	9.6	0.0	0.0	27.9	1.3	1.3	0.4	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	4.5	0.0	0.0	0.1	0.5	0.5	0.2	5.9	6.1
LnGrp Delay(d),s/veh	73.3	0.0	0.0	63.1	0.0	0.0	87.4	1.3	1.3	4.3	5.8	5.7
LnGrp LOS	E			E			F	A	A	A	A	A
Approach Vol, veh/h	6			126			1573			1054		
Approach Delay, s/veh	73.3			63.1			1.4			5.7		
Approach LOS	E			E			A			A		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	4.4	95.3		15.2		99.7		5.1				
Change Period (Y+Rc), s	4.0	* 4.7		* 4.2		* 4.7		4.0				
Max Green Setting (Gmax), s	6.0	* 70		* 21		* 70		6.0				
Max Q Clear Time (g_c+I1), s	2.1	13.7		10.8		2.0		2.4				
Green Ext Time (p_c), s	0.0	9.0		0.4		18.3		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay	6.0											
HCM 2010 LOS	A											
Notes												

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Timing Report, Sorted By Phase

46: N Hamilton Rd/N Hamilton & Gatsby's/Banks

12/01/2017



Phase Number	1	2	4	6	8
Movement	NBL	SBTL	WBTL	NBT	EBTL
Lead/Lag	Lead	Lag			
Lead-Lag Optimize	Yes	Yes			
Recall Mode	None	C-Max	None	C-Max	None
Maximum Split (s)	10	75	25	75	10
Maximum Split (%)	8.3%	62.5%	20.8%	62.5%	8.3%
Minimum Split (s)	10	56	25	56	10
Yellow Time (s)	3	3.7	3.2	3.7	3
All-Red Time (s)	1	1	1	1	1
Minimum Initial (s)	6	15	10	15	6
Vehicle Extension (s)	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0
Walk Time (s)		7	7		
Flash Dont Walk (s)		17	13.8		
Dual Entry	No	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes
Start Time (s)	5	15	90	5	115
End Time (s)	15	90	115	90	5
Yield/Force Off (s)	11	85.3	110.8	85.3	1
Yield/Force Off 170(s)	11	68.3	97	85.3	1
Local Start Time (s)	110	0	75	110	100
Local Yield (s)	116	70.3	95.8	70.3	106
Local Yield 170(s)	116	53.3	82	70.3	106

Intersection Summary

Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	105
Offset: 15 (13%), Referenced to phase 2:SBTL and 6:NBT, Start of Green	

Splits and Phases: 46: N Hamilton Rd/N Hamilton & Gatsby's/Banks



HCM 2010 Signalized Intersection Summary

49: S Hamilton Rd & NB IR-270 Exit Ramp

12/01/2017

							
Movement	WBL	WBR	NBT	NBR	SBL	SBT	
Lane Configurations							
Traffic Volume (veh/h)	57	508	1623	0	0	753	
Future Volume (veh/h)	57	508	1623	0	0	753	
Number	3	18	2	12	1	6	
Initial Q (Qb), veh	0	0	0	0	0	0	
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	
Adj Sat Flow, veh/h/ln	1863	1863	1863	0	0	1863	
Adj Flow Rate, veh/h	62	552	1764	0	0	818	
Adj No. of Lanes	1	2	2	0	0	2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Percent Heavy Veh, %	2	2	2	0	0	2	
Cap, veh/h	343	612	2542	0	0	2542	
Arrive On Green	0.19	0.19	1.00	0.00	0.00	0.24	
Sat Flow, veh/h	1774	3167	3725	0	0	3725	
Grp Volume(v), veh/h	62	552	1764	0	0	818	
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	0	0	1770	
Q Serve(g_s), s	3.5	20.4	0.0	0.0	0.0	22.9	
Cycle Q Clear(g_c), s	3.5	20.4	0.0	0.0	0.0	22.9	
Prop In Lane	1.00	1.00		0.00	0.00		
Lane Grp Cap(c), veh/h	343	612	2542	0	0	2542	
V/C Ratio(X)	0.18	0.90	0.69	0.00	0.00	0.32	
Avail Cap(c_a), veh/h	376	670	2542	0	0	2542	
HCM Platoon Ratio	1.00	1.00	2.00	1.00	1.00	0.33	
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	1.00	
Uniform Delay (d), s/veh	40.5	47.3	0.0	0.0	0.0	21.6	
Incr Delay (d2), s/veh	0.2	14.6	1.6	0.0	0.0	0.3	
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),veh/ln	1.7	10.2	0.6	0.0	0.0	11.4	
LnGrp Delay(d),s/veh	40.7	61.9	1.6	0.0	0.0	22.0	
LnGrp LOS	D	E	A			C	
Approach Vol, veh/h	614		1764			818	
Approach Delay, s/veh	59.8		1.6			22.0	
Approach LOS	E		A			C	
Timer	1	2	3	4	5	6	7 8
Assigned Phs		2				6	8
Phs Duration (G+Y+Rc), s		92.2				92.2	27.8
Change Period (Y+Rc), s		6.0				6.0	4.6
Max Green Setting (Gmax), s		84.0				84.0	25.4
Max Q Clear Time (g_c+I1), s		2.0				24.9	22.4
Green Ext Time (p_c), s		23.6				6.1	0.8
Intersection Summary							
HCM 2010 Ctrl Delay			18.0				
HCM 2010 LOS			B				
Notes							

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Timing Report, Sorted By Phase

49: S Hamilton Rd & NB IR-270 Exit Ramp

12/01/2017

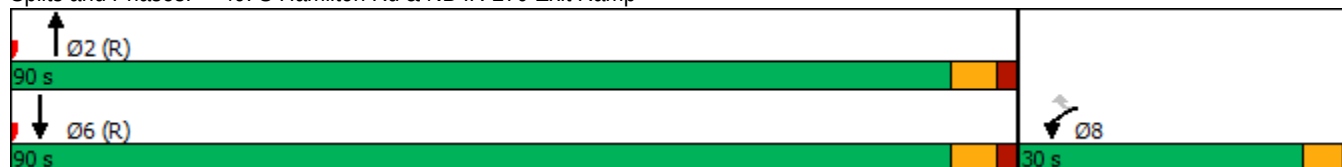


Phase Number	2	6	8
Movement	NBT	SBT	WBL
Lead/Lag			
Lead-Lag Optimize			
Recall Mode	C-Max	C-Max	None
Maximum Split (s)	90	90	30
Maximum Split (%)	75.0%	75.0%	25.0%
Minimum Split (s)	21	21	13
Yellow Time (s)	4	4	3.6
All-Red Time (s)	2	2	1
Minimum Initial (s)	15	15	8
Vehicle Extension (s)	3	3	3
Minimum Gap (s)	3	3	3
Time Before Reduce (s)	0	0	0
Time To Reduce (s)	0	0	0
Walk Time (s)			
Flash Dont Walk (s)			
Dual Entry	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes
Start Time (s)	72	72	42
End Time (s)	42	42	72
Yield/Force Off (s)	36	36	67.4
Yield/Force Off 170(s)	36	36	67.4
Local Start Time (s)	0	0	90
Local Yield (s)	84	84	115.4
Local Yield 170(s)	84	84	115.4

Intersection Summary

Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	60
Offset: 72 (60%), Referenced to phase 2:NBT and 6:SBT, Start of Green	

Splits and Phases: 49: S Hamilton Rd & NB IR-270 Exit Ramp



HCM 2010 Signalized Intersection Summary

57: Morrison Rd & Taylor Rd

12/01/2017

								
Movement	EBL	EBT	WBT	WBR	SWL	SWR		
Lane Configurations								
Traffic Volume (veh/h)	413	185	368	548	104	441		
Future Volume (veh/h)	413	185	368	548	104	441		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863		
Adj Flow Rate, veh/h	449	201	400	596	284	296		
Adj No. of Lanes	1	2	2	0	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	477	2501	844	755	357	319		
Arrive On Green	0.18	0.71	0.48	0.48	0.20	0.20		
Sat Flow, veh/h	1774	3632	1863	1583	1774	1583		
Grp Volume(v), veh/h	449	201	400	596	284	296		
Grp Sat Flow(s),veh/h/ln	1774	1770	1770	1583	1774	1583		
Q Serve(g_s), s	19.5	2.1	18.3	37.8	18.2	22.0		
Cycle Q Clear(g_c), s	19.5	2.1	18.3	37.8	18.2	22.0		
Prop In Lane	1.00			1.00	1.00	1.00		
Lane Grp Cap(c), veh/h	477	2501	844	755	357	319		
V/C Ratio(X)	0.94	0.08	0.47	0.79	0.79	0.93		
Avail Cap(c_a), veh/h	514	2501	844	755	363	324		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	29.6	5.5	21.1	26.2	45.4	46.9		
Incr Delay (d2), s/veh	25.0	0.1	1.9	8.2	11.4	31.7		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	17.8	1.1	9.3	18.1	10.0	12.4		
LnGrp Delay(d),s/veh	54.6	5.5	23.0	34.5	56.8	78.6		
LnGrp LOS	D	A	C	C	E	E		
Approach Vol, veh/h		650	996		580			
Approach Delay, s/veh		39.4	29.9		67.9			
Approach LOS		D	C		E			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		90.0		29.6	27.5	62.5		
Change Period (Y+Rc), s		5.5		5.5	5.5	5.5		
Max Green Setting (Gmax), s		84.5		24.5	24.5	54.5		
Max Q Clear Time (g_c+I1), s		4.1		24.0	21.5	39.8		
Green Ext Time (p_c), s		1.5		0.1	0.5	5.9		
Intersection Summary								
HCM 2010 Ctrl Delay			42.6					
HCM 2010 LOS			D					
Notes								

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Timing Report, Sorted By Phase

57: Morrison Rd & Taylor Rd

12/01/2017



Phase Number	2	4	5	6
Movement	EBTL	SWL	EBL	WBT
Lead/Lag			Lead	Lag
Lead-Lag Optimize			Yes	Yes
Recall Mode	Max	None	None	Max
Maximum Split (s)	90	30	30	60
Maximum Split (%)	75.0%	25.0%	25.0%	50.0%
Minimum Split (s)	23.5	30	10.5	25.5
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	2	2	2	2
Minimum Initial (s)	10	5	5	10
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)		7		5
Flash Dont Walk (s)		11		15
Dual Entry	Yes	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	90	0	30
End Time (s)	90	0	30	90
Yield/Force Off (s)	84.5	114.5	24.5	84.5
Yield/Force Off 170(s)	84.5	103.5	24.5	69.5
Local Start Time (s)	90	60	90	0
Local Yield (s)	54.5	84.5	114.5	54.5
Local Yield 170(s)	54.5	73.5	114.5	39.5

Intersection Summary

Cycle Length	120
Control Type	Semi Act-Uncoord
Natural Cycle	90

Splits and Phases: 57: Morrison Rd & Taylor Rd



HCM 2010 Signalized Intersection Summary

60: S Hamilton Rd & SB IR-270 Exit Ramp

12/01/2017

								
Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations								
Traffic Volume (veh/h)	1039	671	0	1321	350	0		
Future Volume (veh/h)	1039	671	0	1321	350	0		
Number	7	14	5	2	6	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	0		
Adj Flow Rate, veh/h	1129	729	0	1436	380	0		
Adj No. of Lanes	2	2	0	2	2	0		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	0	2	2	0		
Cap, veh/h	1239	1003	0	1952	1952	0		
Arrive On Green	0.36	0.36	0.00	0.55	1.00	0.00		
Sat Flow, veh/h	3442	2787	0	3725	3725	0		
Grp Volume(v), veh/h	1129	729	0	1436	380	0		
Grp Sat Flow(s),veh/h/ln	1721	1393	0	1770	1770	0		
Q Serve(g_s), s	37.5	27.2	0.0	36.7	0.0	0.0		
Cycle Q Clear(g_c), s	37.5	27.2	0.0	36.7	0.0	0.0		
Prop In Lane	1.00	1.00	0.00			0.00		
Lane Grp Cap(c), veh/h	1239	1003	0	1952	1952	0		
V/C Ratio(X)	0.91	0.73	0.00	0.74	0.19	0.00		
Avail Cap(c_a), veh/h	1302	1054	0	1952	1952	0		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	0.81	1.00	0.00		
Uniform Delay (d), s/veh	36.6	33.3	0.0	20.3	0.0	0.0		
Incr Delay (d2), s/veh	9.5	2.4	0.0	2.0	0.2	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	19.4	10.8	0.0	18.5	0.1	0.0		
LnGrp Delay(d),s/veh	46.1	35.7	0.0	22.3	0.2	0.0		
LnGrp LOS	D	D		C	A			
Approach Vol, veh/h	1858			1436	380			
Approach Delay, s/veh	42.0			22.3	0.2			
Approach LOS	D			C	A			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		72.2		47.8		72.2		
Change Period (Y+Rc), s		6.0		4.6		6.0		
Max Green Setting (Gmax), s		64.0		45.4		64.0		
Max Q Clear Time (g_c+I1), s		38.7		39.5		2.0		
Green Ext Time (p_c), s		11.4		3.7		2.5		
Intersection Summary								
HCM 2010 Ctrl Delay			30.0					
HCM 2010 LOS			C					

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Synchro 10 Report
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Timing Report, Sorted By Phase
60: S Hamilton Rd & SB IR-270 Exit Ramp

12/01/2017

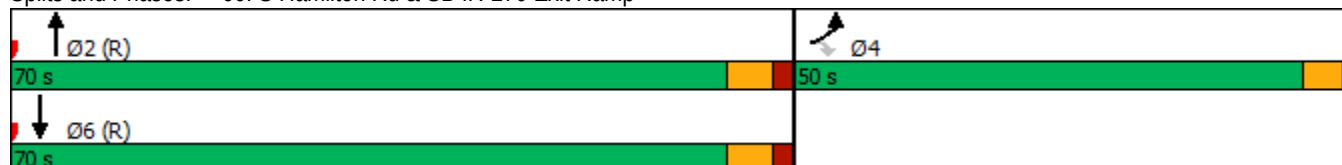


Phase Number	2	4	6
Movement	NBT	EBL	SBT
Lead/Lag			
Lead-Lag Optimize			
Recall Mode	C-Max	None	C-Max
Maximum Split (s)	70	50	70
Maximum Split (%)	58.3%	41.7%	58.3%
Minimum Split (s)	21	14.6	21
Yellow Time (s)	4	3.6	4
All-Red Time (s)	2	1	2
Minimum Initial (s)	15	10	15
Vehicle Extension (s)	3	3	3
Minimum Gap (s)	3	3	3
Time Before Reduce (s)	0	0	0
Time To Reduce (s)	0	0	0
Walk Time (s)			
Flash Dont Walk (s)			
Dual Entry	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes
Start Time (s)	67	17	67
End Time (s)	17	67	17
Yield/Force Off (s)	11	62.4	11
Yield/Force Off 170(s)	11	62.4	11
Local Start Time (s)	0	70	0
Local Yield (s)	64	115.4	64
Local Yield 170(s)	64	115.4	64

Intersection Summary

Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	65
Offset: 67 (56%), Referenced to phase 2:NBT and 6:SBT, Start of Green	

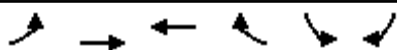
Splits and Phases: 60: S Hamilton Rd & SB IR-270 Exit Ramp



HCM 2010 Signalized Intersection Summary

63: Mill St/E Johnstown Rd & Cherry Bottom Rd

12/01/2017

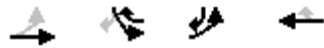


Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	206	663	362	33	31	144		
Future Volume (veh/h)	206	663	362	33	31	144		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	224	721	393	36	34	157		
Adj No. of Lanes	1	1	1	1	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	776	1478	1250	1248	207	309		
Arrive On Green	0.08	0.79	0.67	0.67	0.12	0.12		
Sat Flow, veh/h	1774	1863	1863	1583	1774	1583		
Grp Volume(v), veh/h	224	721	393	36	34	157		
Grp Sat Flow(s),veh/h/ln	1774	1863	1863	1583	1774	1583		
Q Serve(g_s), s	3.0	11.7	7.9	0.4	1.5	7.9		
Cycle Q Clear(g_c), s	3.0	11.7	7.9	0.4	1.5	7.9		
Prop In Lane	1.00			1.00	1.00	1.00		
Lane Grp Cap(c), veh/h	776	1478	1250	1248	207	309		
V/C Ratio(X)	0.29	0.49	0.31	0.03	0.16	0.51		
Avail Cap(c_a), veh/h	915	1478	1250	1248	813	849		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	3.4	3.1	6.1	2.1	35.6	32.2		
Incr Delay (d2), s/veh	0.2	1.2	0.7	0.0	0.4	1.3		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	1.4	6.3	4.3	0.3	0.8	7.1		
LnGrp Delay(d),s/veh	3.6	4.3	6.8	2.1	35.9	33.5		
LnGrp LOS	A	A	A	A	D	C		
Approach Vol, veh/h		945	429		191			
Approach Delay, s/veh		4.1	6.4		33.9			
Approach LOS		A	A		C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		75.0		14.5	11.0	64.0		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		71.0		41.0	14.0	53.0		
Max Q Clear Time (g_c+I1), s		13.7		9.9	5.0	9.9		
Green Ext Time (p_c), s		5.9		0.6	0.4	2.7		
Intersection Summary								
HCM 2010 Ctrl Delay			8.4					
HCM 2010 LOS			A					

Timing Report, Sorted By Phase

63: Mill St/E Johnstown Rd & Cherry Bottom Rd

12/01/2017

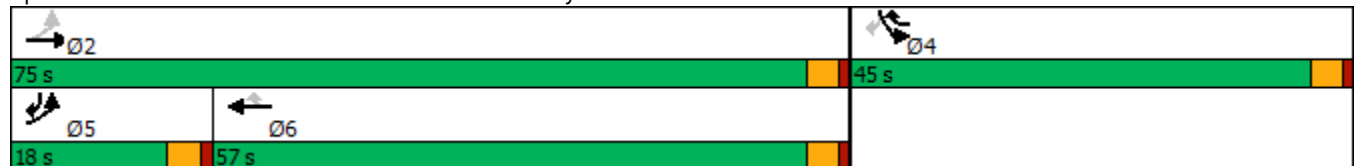


Phase Number	2	4	5	6
Movement	EBTL	SBL	EBL	WBT
Lead/Lag			Lead	Lag
Lead-Lag Optimize			Yes	Yes
Recall Mode	Max	None	None	Max
Maximum Split (s)	75	45	18	57
Maximum Split (%)	62.5%	37.5%	15.0%	47.5%
Minimum Split (s)	23	26	11	23
Yellow Time (s)	3	3	3	3
All-Red Time (s)	1	1	1	1
Minimum Initial (s)	19	5	7	19
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)		7		
Flash Dont Walk (s)		15		
Dual Entry	Yes	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	75	0	18
End Time (s)	75	0	18	75
Yield/Force Off (s)	71	116	14	71
Yield/Force Off 170(s)	71	101	14	71
Local Start Time (s)	102	57	102	0
Local Yield (s)	53	98	116	53
Local Yield 170(s)	53	83	116	53

Intersection Summary

Cycle Length	120
Control Type	Semi Act-Uncoord
Natural Cycle	60

Splits and Phases: 63: Mill St/E Johnstown Rd & Cherry Bottom Rd



HCM 2010 Signalized Intersection Summary

71: N Stygler Rd & Agler Rd

12/01/2017

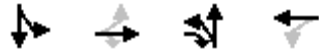
												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	50	613	65	43	34	397	573	111	30	472	28
Future Volume (veh/h)	77	50	613	65	43	34	397	573	111	30	472	28
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	84	0	702	71	47	37	392	679	121	33	513	30
Adj No. of Lanes	1	0	2	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	206	0	1409	168	160	126	496	861	153	801	1536	90
Arrive On Green	0.17	0.00	0.17	0.17	0.17	0.17	0.09	0.09	0.09	0.45	0.45	0.45
Sat Flow, veh/h	1308	0	3167	742	967	761	1774	3080	548	1774	3399	198
Grp Volume(v), veh/h	84	0	702	71	0	84	392	410	390	33	267	276
Grp Sat Flow(s),veh/h/ln	1308	0	1583	742	0	1728	1774	1863	1766	1774	1770	1828
Q Serve(g_s), s	9.6	0.0	25.3	14.1	0.0	6.8	34.6	34.5	34.6	1.7	15.6	15.6
Cycle Q Clear(g_c), s	16.4	0.0	25.3	14.1	0.0	6.8	34.6	34.5	34.6	1.7	15.6	15.6
Prop In Lane	1.00		1.00	1.00		0.44	1.00		0.31	1.00		0.11
Lane Grp Cap(c), veh/h	206	0	1409	168	0	286	496	521	494	801	799	826
V/C Ratio(X)	0.41	0.00	0.50	0.42	0.00	0.29	0.79	0.79	0.79	0.04	0.33	0.33
Avail Cap(c_a), veh/h	206	0	1409	168	0	286	826	867	822	801	799	826
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.60	0.60	0.60	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.8	0.0	31.6	61.6	0.0	58.5	68.0	68.0	68.0	24.5	28.3	28.3
Incr Delay (d2), s/veh	1.3	0.0	0.3	1.7	0.0	0.6	1.7	1.6	1.7	0.1	1.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.6	0.0	15.6	3.0	0.0	3.3	17.3	18.1	17.2	0.8	7.9	8.2
LnGrp Delay(d),s/veh	67.0	0.0	31.9	63.3	0.0	59.1	69.8	69.6	69.8	24.6	29.4	29.4
LnGrp LOS	E		C	E		E	E	E	E	C	C	C
Approach Vol, veh/h	786			155			1192			576		
Approach Delay, s/veh	35.7			61.0			69.7			29.1		
Approach LOS	D			E			E			C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+Rc), s	77.8		32.0		50.2		32.0					
Change Period (Y+Rc), s	5.5		5.5		5.5		5.5					
Max Green Setting (Gmax), s	42.5		26.5		74.5		26.5					
Max Q Clear Time (g_c+I1), s	17.6		27.3		36.6		16.1					
Green Ext Time (p_c), s	3.7		0.0		8.1		0.6					
Intersection Summary												
HCM 2010 Ctrl Delay	50.7											
HCM 2010 LOS	D											
Notes												

2017 PM Peak 11/27/2017

Synchro 10 Report
Page 53

Timing Report, Sorted By Phase
71: N Stygler Rd & Agler Rd

12/01/2017

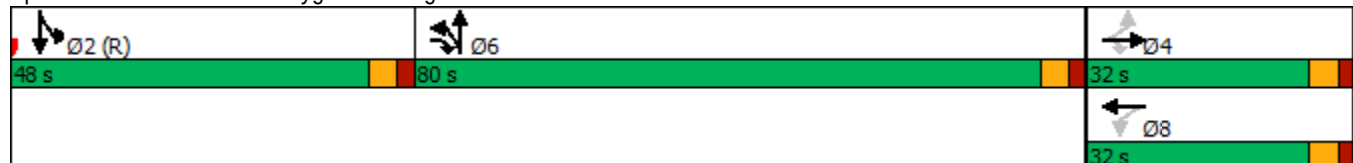


Phase Number	2	4	6	8
Movement	SBTL	EBTL	NBTL	WBTL
Lead/Lag				
Lead-Lag Optimize				
Recall Mode	C-Max	None	None	None
Maximum Split (s)	48	32	80	32
Maximum Split (%)	30.0%	20.0%	50.0%	20.0%
Minimum Split (s)	31.5	32	34.5	32
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	2	2	2	2
Minimum Initial (s)	8	5	5	5
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)	7	7	7	7
Flash Dont Walk (s)	19	19	22	19
Dual Entry	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	133	101	21	101
End Time (s)	21	133	101	133
Yield/Force Off (s)	15.5	127.5	95.5	127.5
Yield/Force Off 170(s)	156.5	108.5	73.5	108.5
Local Start Time (s)	0	128	48	128
Local Yield (s)	42.5	154.5	122.5	154.5
Local Yield 170(s)	23.5	135.5	100.5	135.5

Intersection Summary

Cycle Length	160
Control Type	Actuated-Coordinated
Natural Cycle	100
Offset: 133 (83%), Referenced to phase 2:SBTL, Start of Green	

Splits and Phases: 71: N Stygler Rd & Agler Rd



HCM 2010 Signalized Intersection Summary

54: Taylor Station Rd & Claycraft Rd/Research Rd

05/20/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	166	48	61	122	24	41	24	415	23	4	359	32
Future Volume (veh/h)	166	48	61	122	24	41	24	415	23	4	359	32
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1703	1900	1900	1781	1900	1900	1815	1900	1900	1857	1900
Adj Flow Rate, veh/h	208	60	76	200	39	67	26	446	25	5	449	40
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.80	0.80	0.80	0.61	0.61	0.61	0.93	0.93	0.93	0.80	0.80	0.80
Percent Heavy Veh, %	50	50	50	8	8	8	3	3	3	2	2	2
Cap, veh/h	234	67	85	228	44	76	56	663	36	35	686	61
Arrive On Green	0.24	0.24	0.24	0.21	0.21	0.21	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	963	278	352	1087	212	364	51	1615	88	5	1673	148
Grp Volume(v), veh/h	344	0	0	306	0	0	497	0	0	494	0	0
Grp Sat Flow(s),veh/h/ln	1593	0	0	1662	0	0	1755	0	0	1826	0	0
Q Serve(g_s), s	22.9	0.0	0.0	19.5	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	22.9	0.0	0.0	19.5	0.0	0.0	24.8	0.0	0.0	23.9	0.0	0.0
Prop In Lane	0.60		0.22	0.65		0.22	0.05		0.05	0.01		0.08
Lane Grp Cap(c), veh/h	387	0	0	349	0	0	755	0	0	782	0	0
V/C Ratio(X)	0.89	0.00	0.00	0.88	0.00	0.00	0.66	0.00	0.00	0.63	0.00	0.00
Avail Cap(c_a), veh/h	552	0	0	500	0	0	755	0	0	782	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	40.1	0.0	0.0	41.9	0.0	0.0	26.3	0.0	0.0	26.1	0.0	0.0
Incr Delay (d2), s/veh	12.3	0.0	0.0	11.8	0.0	0.0	4.5	0.0	0.0	3.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.4	0.0	0.0	10.2	0.0	0.0	13.2	0.0	0.0	12.9	0.0	0.0
LnGrp Delay(d),s/veh	52.3	0.0	0.0	53.8	0.0	0.0	30.8	0.0	0.0	30.0	0.0	0.0
LnGrp LOS	D			D			C			C		
Approach Vol, veh/h		344			306			497			494	
Approach Delay, s/veh		52.3			53.8			30.8			30.0	
Approach LOS		D			D			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		50.0		31.6		50.0		28.0				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		45.0		38.0		45.0		33.0				
Max Q Clear Time (g_c+I1), s		26.8		24.9		25.9		21.5				
Green Ext Time (p_c), s		3.0		1.8		3.0		1.5				
Intersection Summary												
HCM 2010 Ctrl Delay				39.4								
HCM 2010 LOS				D								

Timing Report, Sorted By Phase

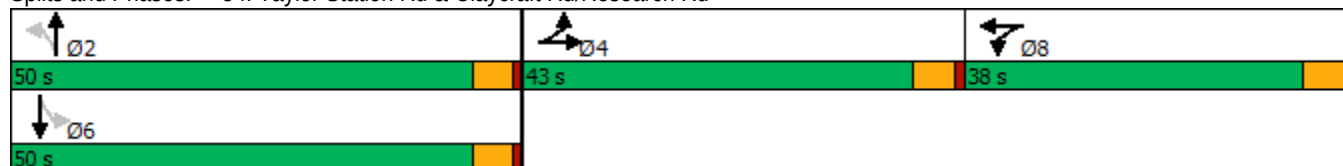
54: Taylor Station Rd & Claycraft Rd/Research Rd

05/20/2019



Phase Number	2	4	6	8
Movement	NBTL	EBTL	SBTL	WBTL
Lead/Lag				
Lead-Lag Optimize				
Recall Mode	Max	None	Max	None
Maximum Split (s)	50	43	50	38
Maximum Split (%)	38.2%	32.8%	38.2%	29.0%
Minimum Split (s)	15	15	15	15
Yellow Time (s)	4	4	4	4
All-Red Time (s)	1	1	1	1
Minimum Initial (s)	10	10	10	10
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)				
Flash Dont Walk (s)				
Dual Entry	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	50	0	93
End Time (s)	50	93	50	0
Yield/Force Off (s)	45	88	45	126
Yield/Force Off 170(s)	45	88	45	126
Local Start Time (s)	0	50	0	93
Local Yield (s)	45	88	45	126
Local Yield 170(s)	45	88	45	126
Intersection Summary				
Cycle Length	131			
Control Type	Semi Act-Uncoord			
Natural Cycle	75			

Splits and Phases: 54: Taylor Station Rd & Claycraft Rd/Research Rd



LANE SUMMARY

Site: 1 [2017 PM Count]

Clark State Road & Hamilton Road
Roundabout

Lane Use and Performance													
	Demand Total veh/h	Flows HV %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue Veh	Queue Dist ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
South: Hamilton Road													
Lane 1	746	3.0	1322	0.564	100	5.1	LOS A	5.0	126.8	Full	1600	0.0	0.0
Lane 2 ^d	777	3.0	1377	0.564	100	5.0	LOS A	5.0	126.9	Full	1600	0.0	0.0
Approach	1523	3.0		0.564		5.0	LOS A	5.0	126.9				
East: Clark State Road													
Lane 1	118	3.0	674	0.175	100	12.8	LOS B	0.7	17.4	Full	1600	0.0	0.0
Lane 2 ^d	126	3.0	720	0.175	100	11.7	LOS B	0.7	17.7	Full	1600	0.0	0.0
Approach	245	3.0		0.175		12.2	LOS B	0.7	17.7				
North: Hamilton Road													
Lane 1	397	3.0	1036	0.384	100	6.1	LOS A	1.8	47.0	Full	1600	0.0	0.0
Lane 2 ^d	397	3.0	1036	0.384	100	5.7	LOS A	1.8	47.0	Full	1600	0.0	0.0
Approach	795	3.0		0.384		5.9	LOS A	1.8	47.0				
Intersection	2562	3.0		0.564		6.0	LOS A	5.0	126.9				

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Signalised Intersections.

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

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

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 2010).

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

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

^d Dominant lane on roundabout approach

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Organisation: CARPENTER MARTY TRANSPORTATION INC. | Processed: Tuesday, December 5, 2017 3:03:19 PM

Project: P:\TRA\Gahanna\Thoroughfare plan\Analysis\Sidra\171205 Clark State & Hamilton.sip7

LANE LEVEL OF SERVICE

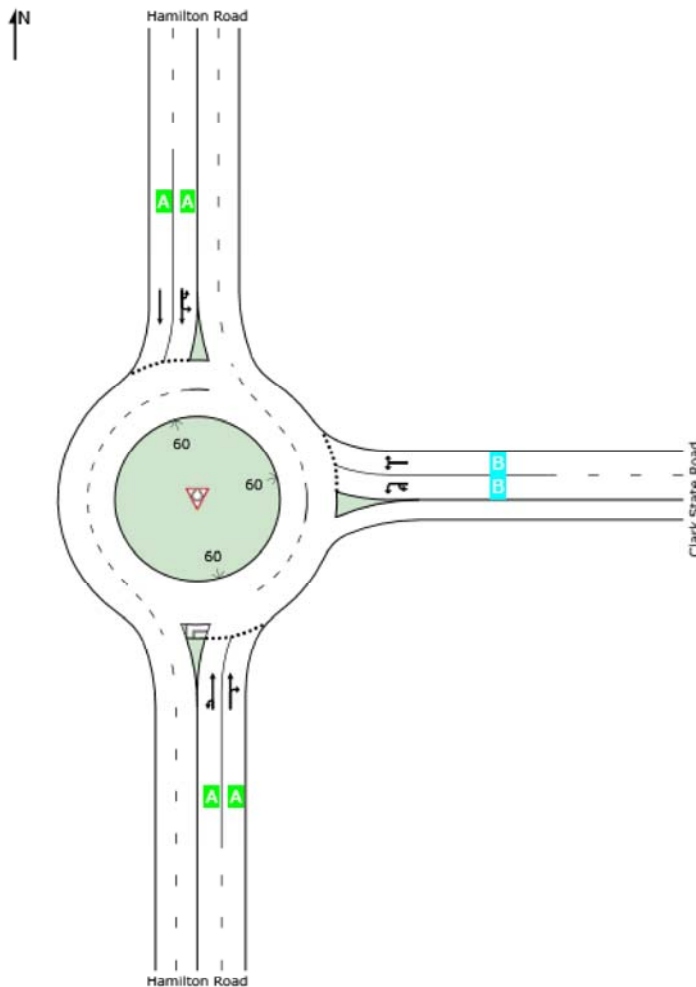
Lane Level of Service

Site: 1 [2017 PM Count]

Clark State Road & Hamilton Road
Roundabout

All Movement Classes

	South	East	North	Intersection
LOS	A	B	A	A



Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.

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

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

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 2010).

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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Project: P:\TRA\Gahanna\Thoroughfare plan\Analysis\Sidra\171205 Clark State & Hamilton.sip7

HCM 2010 Signalized Intersection Summary

2: N Stygler Rd & McCutcheon Rd/Church

01/23/2019

																	
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR					
Lane Configurations																	
Traffic Volume (veh/h)	83	1	241	2	2	2	214	284	11	8	506	243					
Future Volume (veh/h)	83	1	241	2	2	2	214	284	11	8	506	243					
Number	7	4	14	3	8	18	5	2	12	1	6	16					
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0					
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00					
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900					
Adj Flow Rate, veh/h	90	1	262	2	2	2	233	309	12	9	550	264					
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0					
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92					
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2					
Cap, veh/h	373	1	371	176	100	100	316	1065	41	653	631	303					
Arrive On Green	0.07	0.24	0.24	0.12	0.12	0.12	0.08	0.60	0.60	0.02	0.53	0.53					
Sat Flow, veh/h	1774	6	1578	1112	856	856	1774	1781	69	1774	1190	571					
Grp Volume(v), veh/h	90	0	263	2	0	4	233	0	321	9	0	814					
Grp Sat Flow(s),veh/h/ln	1774	0	1584	1112	0	1712	1774	0	1851	1774	0	1762					
Q Serve(g_s), s	3.6	0.0	13.1	0.1	0.0	0.2	4.7	0.0	7.2	0.2	0.0	34.6					
Cycle Q Clear(g_c), s	3.6	0.0	13.1	3.0	0.0	0.2	4.7	0.0	7.2	0.2	0.0	34.6					
Prop In Lane	1.00		1.00	1.00		0.50	1.00		0.04	1.00		0.32					
Lane Grp Cap(c), veh/h	373	0	372	176	0	199	316	0	1106	653	0	934					
V/C Ratio(X)	0.24	0.00	0.71	0.01	0.00	0.02	0.74	0.00	0.29	0.01	0.00	0.87					
Avail Cap(c_a), veh/h	576	0	840	377	0	509	500	0	1106	853	0	934					
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00					
Uniform Delay (d), s/veh	28.1	0.0	30.1	36.2	0.0	33.6	17.7	0.0	8.4	8.9	0.0	17.6					
Incr Delay (d2), s/veh	0.3	0.0	2.5	0.0	0.0	0.0	3.4	0.0	0.7	0.0	0.0	10.9					
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
%ile BackOfQ(50%),veh/ln	1.8	0.0	6.0	0.0	0.0	0.1	3.3	0.0	3.9	0.1	0.0	19.6					
LnGrp Delay(d),s/veh	28.4	0.0	32.6	36.2	0.0	33.6	21.0	0.0	9.1	8.9	0.0	28.5					
LnGrp LOS	C		C	D		C	C		A	A		C					
Approach Vol, veh/h	353		6				554				823						
Approach Delay, s/veh	31.5		34.5				14.1				28.3						
Approach LOS	C		C				B				C						
Timer	1	2	3	4	5	6	7	8									
Assigned Phs	1	2			4	5	6	7	8								
Phs Duration (G+Y+Rc), s	5.4	55.8			24.7	11.1	50.0	10.2	14.5								
Change Period (Y+Rc), s	4.0	4.5			4.5	4.0	4.5	4.0	4.5								
Max Green Setting (Gmax), s	11.0	50.5			45.5	16.0	45.5	16.0	25.5								
Max Q Clear Time (g_c+l1), s	2.2	9.2			15.1	6.7	36.6	5.6	5.0								
Green Ext Time (p_c), s	0.0	2.0			1.7	0.4	3.8	0.1	0.0								
Intersection Summary																	
HCM 2010 Ctrl Delay		24.4															
HCM 2010 LOS		C															

2040 AM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase
2: N Stygler Rd & McCutcheon Rd/Church

01/23/2019

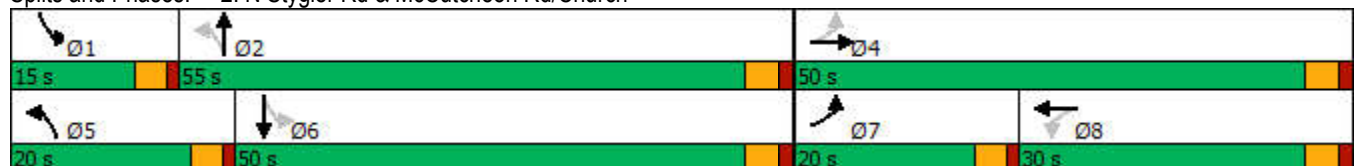


Phase Number	1	2	4	5	6	7	8
Movement	SBL	NBTL	EBTL	NBL	SBTL	EBL	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	Max	None	None	Max	None	None
Maximum Split (s)	15	55	50	20	50	20	30
Maximum Split (%)	12.5%	45.8%	41.7%	16.7%	41.7%	16.7%	25.0%
Minimum Split (s)	11	24.5	26.5	11.5	26.5	11.5	25
Yellow Time (s)	3	3	3	3	3	3	3
All-Red Time (s)	1	1.5	1.5	1	1.5	1	1.5
Minimum Initial (s)	7	20	10	7	20	7	10
Vehicle Extension (s)	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0
Walk Time (s)			7		7		7
Flash Dont Walk (s)			15		15		13
Dual Entry	No	Yes	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	15	70	0	20	70	90
End Time (s)	15	70	0	20	70	90	0
Yield/Force Off (s)	11	65.5	115.5	16	65.5	86	115.5
Yield/Force Off 170(s)	11	65.5	100.5	16	50.5	86	102.5
Local Start Time (s)	100	115	50	100	0	50	70
Local Yield (s)	111	45.5	95.5	116	45.5	66	95.5
Local Yield 170(s)	111	45.5	80.5	116	30.5	66	82.5

Intersection Summary

Cycle Length	120
Control Type	Semi Act-Uncoord
Natural Cycle	100

Splits and Phases: 2: N Stygler Rd & McCutcheon Rd/Church



HCM 2010 Signalized Intersection Summary

5: S Stygler Rd/N Stygler Rd & US 62

01/23/2019

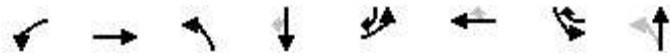
												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	271	680	351	19	1403	430	165	105	23	336	211	793
Future Volume (veh/h)	271	680	351	19	1403	430	165	105	23	336	211	793
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	295	739	382	21	1525	467	179	114	25	365	229	862
Adj No. of Lanes	2	2	0	1	2	1	1	1	0	2	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	335	1161	599	34	1539	881	264	291	64	417	419	899
Arrive On Green	0.10	0.51	0.51	0.02	0.43	0.43	0.09	0.20	0.20	0.04	0.07	0.07
Sat Flow, veh/h	3442	2260	1166	1774	3539	1583	1774	1481	325	3442	1863	2787
Grp Volume(v), veh/h	295	578	543	21	1525	467	179	0	139	365	229	862
Grp Sat Flow(s),veh/h/ln	1721	1770	1657	1774	1770	1583	1774	0	1805	1721	1863	1393
Q Serve(g_s), s	13.5	37.8	37.9	1.9	68.5	29.7	12.8	0.0	10.7	16.9	19.0	36.0
Cycle Q Clear(g_c), s	13.5	37.8	37.9	1.9	68.5	29.7	12.8	0.0	10.7	16.9	19.0	36.0
Prop In Lane	1.00		0.70	1.00		1.00	1.00		0.18	1.00		1.00
Lane Grp Cap(c), veh/h	335	909	851	34	1539	881	264	0	354	417	419	899
V/C Ratio(X)	0.88	0.64	0.64	0.62	0.99	0.53	0.68	0.00	0.39	0.87	0.55	0.96
Avail Cap(c_a), veh/h	344	909	851	55	1539	881	277	0	354	495	419	899
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	0.36	0.36	0.36	1.00	0.00	1.00	0.89	0.89	0.89
Uniform Delay (d), s/veh	71.3	28.1	28.2	77.9	44.9	22.3	46.0	0.0	56.0	75.6	66.2	62.2
Incr Delay (d2), s/veh	21.7	3.4	3.6	6.6	11.7	0.8	6.1	0.0	3.2	12.9	4.5	20.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	19.3	18.2	1.0	36.0	13.2	6.7	0.0	5.7	8.8	10.3	21.0
LnGrp Delay(d),s/veh	93.0	31.5	31.8	84.5	56.6	23.2	52.1	0.0	59.2	88.4	70.7	82.3
LnGrp LOS	F	C	C	F	E	C	D		E	F	E	F
Approach Vol, veh/h	1416				2013				318			
Approach Delay, s/veh	44.4				49.1				55.2			
Approach LOS	D				D				E			
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.0	88.1	20.8	42.0	21.6	75.6	25.4	37.4				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	5.0	79.0	16.0	36.0	16.0	68.0	23.0	29.0				
Max Q Clear Time (g_c+I1), s	3.9	39.9	14.8	38.0	15.5	70.5	18.9	12.7				
Green Ext Time (p_c), s	0.0	10.0	0.1	0.0	0.1	0.0	0.5	0.6				
Intersection Summary												
HCM 2010 Ctrl Delay	57.4											
HCM 2010 LOS	E											

2040 AM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase
5: S Stygler Rd/N Stygler Rd & US 62

01/23/2019

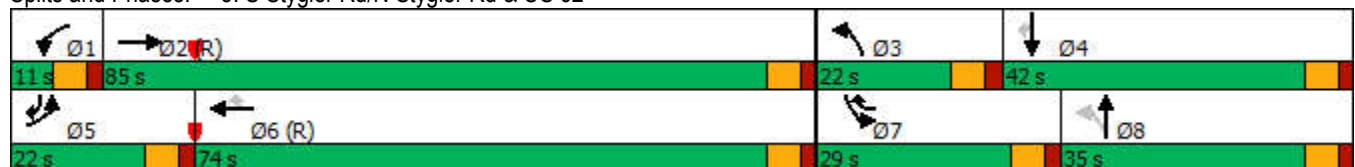


Phase Number	1	2	3	4	5	6	7	8
Movement	WBL	EBT	NBL	SBT	EBL	WBT	SBL	NBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	C-Max	None	Max
Maximum Split (s)	11	85	22	42	22	74	29	35
Maximum Split (%)	6.9%	53.1%	13.8%	26.3%	13.8%	46.3%	18.1%	21.9%
Minimum Split (s)	11	22.5	11	22.5	16	22.5	11	35
Yellow Time (s)	4	4	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2	2	2
Minimum Initial (s)	5	10	5	7	10	10	5	7
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)								5
Flash Dont Walk (s)								20
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	138	149	74	96	138	0	74	103
End Time (s)	149	74	96	138	0	74	103	138
Yield/Force Off (s)	143	68	90	132	154	68	97	132
Yield/Force Off 170(s)	143	68	90	132	154	68	97	112
Local Start Time (s)	138	149	74	96	138	0	74	103
Local Yield (s)	143	68	90	132	154	68	97	132
Local Yield 170(s)	143	68	90	132	154	68	97	112

Intersection Summary

Cycle Length 160
Control Type Actuated-Coordinated
Natural Cycle 145
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Splits and Phases: 5: S Stygler Rd/N Stygler Rd & US 62



HCM 2010 Signalized Intersection Summary

8: S Hamilton Rd/N Hamilton Rd & Granville St/Havens Corners Rd

01/23/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	329	174	315	666	87	249	549	252	224	1162	224
Future Volume (veh/h)	100	329	174	315	666	87	249	549	252	224	1162	224
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	109	358	189	342	724	95	271	597	274	243	1263	243
Adj No. of Lanes	1	2	1	1	2	0	2	2	1	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	181	678	452	375	820	108	324	1707	981	284	1665	843
Arrive On Green	0.06	0.19	0.19	0.14	0.26	0.26	0.09	0.48	0.48	0.08	0.47	0.47
Sat Flow, veh/h	1774	3539	1583	1774	3147	413	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	109	358	189	342	407	412	271	597	274	243	1263	243
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1790	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	7.8	14.6	15.5	22.0	35.3	35.4	12.4	16.8	12.7	11.2	47.0	13.6
Cycle Q Clear(g_c), s	7.8	14.6	15.5	22.0	35.3	35.4	12.4	16.8	12.7	11.2	47.0	13.6
Prop In Lane	1.00		1.00	1.00		0.23	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	181	678	452	375	461	467	324	1707	981	284	1665	843
V/C Ratio(X)	0.60	0.53	0.42	0.91	0.88	0.88	0.84	0.35	0.28	0.85	0.76	0.29
Avail Cap(c_a), veh/h	182	896	550	375	570	576	559	1707	981	301	1665	843
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.87	0.87	1.00	1.00	1.00	0.83	0.83	0.83	0.78	0.78	0.78
Uniform Delay (d), s/veh	49.7	58.2	46.4	46.9	56.8	56.8	71.2	25.8	14.0	72.4	34.9	20.6
Incr Delay (d2), s/veh	4.7	0.6	0.5	25.9	13.0	12.9	4.8	0.5	0.6	16.1	2.6	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	7.2	6.9	7.0	19.0	19.2	6.1	8.3	5.7	5.9	23.6	6.1
LnGrp Delay(d),s/veh	54.4	58.7	46.9	72.8	69.8	69.7	76.0	26.3	14.6	88.5	37.4	21.3
LnGrp LOS	D	E	D	E	E	E	E	C	B	F	D	C
Approach Vol, veh/h		656			1161			1142			1749	
Approach Delay, s/veh		54.6			70.7			35.3			42.3	
Approach LOS		D			E			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.2	81.6	26.0	35.1	19.1	79.8	14.9	46.2				
Change Period (Y+Rc), s	4.0	4.5	4.0	4.5	4.0	4.5	5.0	4.5				
Max Green Setting (Gmax), s	14.0	66.5	22.0	40.5	26.0	54.5	10.0	51.5				
Max Q Clear Time (g_c+I1), s	13.2	18.8	24.0	17.5	14.4	49.0	9.8	37.4				
Green Ext Time (p_c), s	0.1	5.6	0.0	3.1	0.7	3.9	0.0	4.3				
Intersection Summary												
HCM 2010 Ctrl Delay				49.3								
HCM 2010 LOS				D								

Timing Report, Sorted By Phase

8: S Hamilton Rd/N Hamilton Rd & Granville St/Havens Corners Rd

01/23/2019



Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBT	WBL	EBTL	NBL	SBT	EBL	WBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	18	71	26	45	30	59	15	56
Maximum Split (%)	11.3%	44.4%	16.3%	28.1%	18.8%	36.9%	9.4%	35.0%
Minimum Split (s)	11.5	29.5	11.5	29.5	12.5	39.5	15	29.5
Yellow Time (s)	3	3.5	3	3.5	3	3.5	3	3.5
All-Red Time (s)	1	1	1	1	1	1	2	1
Minimum Initial (s)	7	25	7	15	8	35	10	15
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Dont Walk (s)		18		18		18		18
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	130	148	59	85	130	0	59	74
End Time (s)	148	59	85	130	0	59	74	130
Yield/Force Off (s)	144	54.5	81	125.5	156	54.5	69	125.5
Yield/Force Off 170(s)	144	36.5	81	107.5	156	36.5	69	107.5
Local Start Time (s)	130	148	59	85	130	0	59	74
Local Yield (s)	144	54.5	81	125.5	156	54.5	69	125.5
Local Yield 170(s)	144	36.5	81	107.5	156	36.5	69	107.5

Intersection Summary

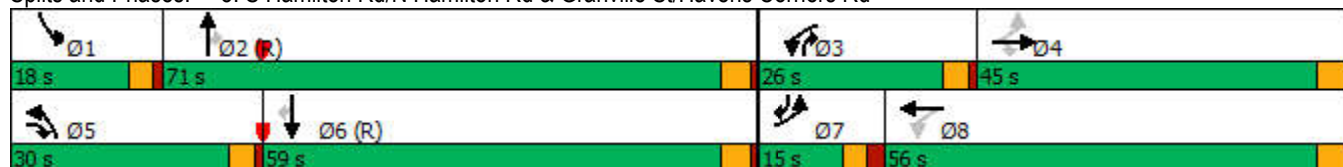
Cycle Length 160

Control Type Actuated-Coordinated

Natural Cycle 100

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Splits and Phases: 8: S Hamilton Rd/N Hamilton Rd & Granville St/Havens Corners Rd



HCM 2010 Signalized Intersection Summary

11: E Johnstown Rd & N Hamilton

01/23/2019

												
Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	13	438	165	16	598	334	183	205	40	226	430	24
Future Volume (veh/h)	13	438	165	16	598	334	183	205	40	226	430	24
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	14	476	179	17	650	363	199	223	0	246	467	0
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	283	1579	898	387	1591	873	266	465	395	448	502	426
Arrive On Green	0.02	0.45	0.45	0.03	0.45	0.45	0.10	0.25	0.00	0.12	0.27	0.00
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	1863	1583	1774	1863	1583
Grp Volume(v), veh/h	14	476	179	17	650	363	199	223	0	246	467	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1863	1583	1774	1863	1583
Q Serve(g_s), s	0.5	9.8	6.3	0.6	14.2	15.3	9.4	11.7	0.0	11.6	28.0	0.0
Cycle Q Clear(g_c), s	0.5	9.8	6.3	0.6	14.2	15.3	9.4	11.7	0.0	11.6	28.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	283	1579	898	387	1591	873	266	465	395	448	502	426
V/C Ratio(X)	0.05	0.30	0.20	0.04	0.41	0.42	0.75	0.48	0.00	0.55	0.93	0.00
Avail Cap(c_a), veh/h	554	1579	898	652	1591	873	365	538	457	513	538	457
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	17.2	20.3	12.1	16.5	21.2	14.9	30.5	36.6	0.0	27.0	40.7	0.0
Incr Delay (d2), s/veh	0.1	0.5	0.5	0.0	0.8	1.5	5.5	0.8	0.0	1.0	22.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	4.9	2.9	0.3	7.0	6.9	5.0	6.1	0.0	5.7	17.5	0.0
LnGrp Delay(d),s/veh	17.2	20.8	12.6	16.6	22.0	16.4	36.0	37.3	0.0	28.1	63.1	0.0
LnGrp LOS	B	C	B	B	C	B	D	D		C	E	
Approach Vol, veh/h		669			1030			422			713	
Approach Delay, s/veh		18.5			19.9			36.7			51.0	
Approach LOS		B			B			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.4	55.5	18.4	33.1	7.0	55.9	16.1	35.3				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	20.0	51.0	18.0	33.0	20.0	51.0	18.0	33.0				
Max Q Clear Time (g_c+I1), s	2.6	11.8	13.6	13.7	2.5	17.3	11.4	30.0				
Green Ext Time (p_c), s	0.0	4.0	0.3	1.1	0.0	6.4	0.3	0.8				
Intersection Summary												
HCM 2010 Ctrl Delay				29.9								
HCM 2010 LOS				C								

2040 AM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase
11: E Johnstown Rd & N Hamilton

01/23/2019



Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	SWL	NETL	NBL	SBTL	NEL	SWTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	None	None	None	Max	None	None
Maximum Split (s)	24.5	55.5	22.5	37.5	24.5	55.5	22.5	37.5
Maximum Split (%)	17.5%	39.6%	16.1%	26.8%	17.5%	39.6%	16.1%	26.8%
Minimum Split (s)	11.5	36.5	11.5	37.5	11.5	36.5	11.5	37.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1	1	1
Minimum Initial (s)	7	25	7	15	7	25	7	15
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Dont Walk (s)		25		25		25		25
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	24.5	80	102.5	0	24.5	80	102.5
End Time (s)	24.5	80	102.5	0	24.5	80	102.5	0
Yield/Force Off (s)	20	75.5	98	135.5	20	75.5	98	135.5
Yield/Force Off 170(s)	20	50.5	98	110.5	20	50.5	98	110.5
Local Start Time (s)	115.5	0	55.5	78	115.5	0	55.5	78
Local Yield (s)	135.5	51	73.5	111	135.5	51	73.5	111
Local Yield 170(s)	135.5	26	73.5	86	135.5	26	73.5	86

Intersection Summary

Cycle Length	140
Control Type	Semi Act-Uncoord
Natural Cycle	100

Splits and Phases: 11: E Johnstown Rd & N Hamilton

Ø1	Ø2	Ø3	Ø4
24.5 s	55.5 s	22.5 s	37.5 s
Ø5	Ø6	Ø7	Ø8
24.5 s	55.5 s	22.5 s	37.5 s

HCM 2010 Signalized Intersection Summary

13: Granville St & Mill St

01/23/2019

								
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	502	754	1161	36	29	894		
Future Volume (veh/h)	502	754	1161	36	29	894		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863		
Adj Flow Rate, veh/h	546	820	1262	39	32	972		
Adj No. of Lanes	1	2	2	0	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	569	2027	884	27	629	1011		
Arrive On Green	0.57	1.00	0.34	0.34	0.35	0.35		
Sat Flow, veh/h	1774	3632	3598	108	1774	1583		
Grp Volume(v), veh/h	546	820	637	664	32	972		
Grp Sat Flow(s),veh/h/ln	1774	1770	1770	1844	1774	1583		
Q Serve(g_s), s	27.5	0.0	27.8	27.8	1.3	39.0		
Cycle Q Clear(g_c), s	27.5	0.0	27.8	27.8	1.3	39.0		
Prop In Lane	1.00			0.06	1.00	1.00		
Lane Grp Cap(c), veh/h	569	2027	446	465	629	1011		
V/C Ratio(X)	0.96	0.40	1.43	1.43	0.05	0.96		
Avail Cap(c_a), veh/h	823	2027	446	465	629	1011		
HCM Platoon Ratio	2.00	2.00	1.33	1.33	1.00	1.00		
Upstream Filter(I)	0.80	0.80	0.73	0.73	0.71	0.71		
Uniform Delay (d), s/veh	15.4	0.0	36.5	36.5	23.3	18.6		
Incr Delay (d2), s/veh	15.3	0.5	201.2	201.6	0.0	15.5		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	17.3	0.1	38.4	40.1	0.6	44.5		
LnGrp Delay(d),s/veh	30.7	0.5	237.8	238.2	23.4	34.2		
LnGrp LOS	C	A	F	F	C	C		
Approach Vol, veh/h		1366	1301		1004			
Approach Delay, s/veh		12.6	238.0		33.8			
Approach LOS		B	F		C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		67.0		43.0	35.2	31.8		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		63.0		39.0	47.0	12.0		
Max Q Clear Time (g_c+I1), s		2.0		41.0	29.5	29.8		
Green Ext Time (p_c), s		7.6		0.0	1.8	0.0		
Intersection Summary								
HCM 2010 Ctrl Delay			98.3					
HCM 2010 LOS			F					

2040 AM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase

13: Granville St & Mill St

01/23/2019

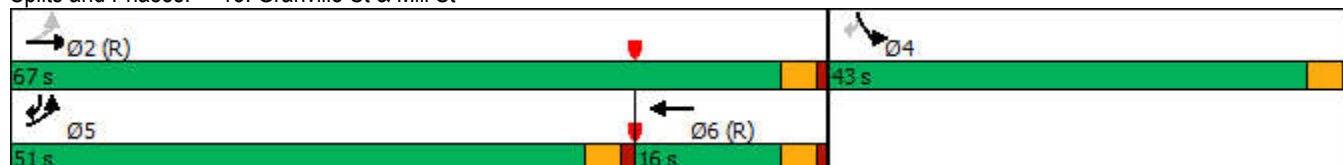


Phase Number	2	4	5	6
Movement	EBTL	SBL	EBL	WBT
Lead/Lag			Lead	Lag
Lead-Lag Optimize			Yes	Yes
Recall Mode	C-Max	None	None	C-Max
Maximum Split (s)	67	43	51	16
Maximum Split (%)	60.9%	39.1%	46.4%	14.5%
Minimum Split (s)	24.5	15	19.5	16
Yellow Time (s)	3	3	3	3
All-Red Time (s)	1	1	1	1
Minimum Initial (s)	20	10	15	12
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)				
Flash Dont Walk (s)				
Dual Entry	Yes	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	59	16	59	0
End Time (s)	16	59	0	16
Yield/Force Off (s)	12	55	106	12
Yield/Force Off 170(s)	12	55	106	12
Local Start Time (s)	59	16	59	0
Local Yield (s)	12	55	106	12
Local Yield 170(s)	12	55	106	12

Intersection Summary

Cycle Length	110
Control Type	Actuated-Coordinated
Natural Cycle	120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green	

Splits and Phases: 13: Granville St & Mill St



HCM 2010 Signalized Intersection Summary

14: N Hamilton & Beecher Rd

01/23/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	78	111	67	16	220	207	94	495	45	180	975	115
Future Volume (veh/h)	78	111	67	16	220	207	94	495	45	180	975	115
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	85	121	73	17	239	225	102	538	49	196	1060	125
Adj No. of Lanes	1	1	0	1	1	1	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	197	214	129	214	301	375	357	1983	916	598	1798	212
Arrive On Green	0.05	0.20	0.20	0.02	0.16	0.16	0.07	0.56	0.56	0.07	0.56	0.56
Sat Flow, veh/h	1774	1089	657	1774	1863	1583	1774	3539	1583	1774	3190	376
Grp Volume(v), veh/h	85	0	194	17	239	225	102	538	49	196	588	597
Grp Sat Flow(s),veh/h/ln	1774	0	1747	1774	1863	1583	1774	1770	1583	1774	1770	1796
Q Serve(g_s), s	4.1	0.0	10.7	0.8	13.1	13.5	2.4	8.4	1.4	4.8	23.1	23.1
Cycle Q Clear(g_c), s	4.1	0.0	10.7	0.8	13.1	13.5	2.4	8.4	1.4	4.8	23.1	23.1
Prop In Lane	1.00		0.38	1.00		1.00	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	197	0	342	214	301	375	357	1983	916	598	997	1013
V/C Ratio(X)	0.43	0.00	0.57	0.08	0.79	0.60	0.29	0.27	0.05	0.33	0.59	0.59
Avail Cap(c_a), veh/h	220	0	443	297	472	520	397	1983	916	798	997	1013
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.0	0.0	38.7	36.3	42.9	36.1	10.8	12.1	9.7	8.4	15.2	15.2
Incr Delay (d2), s/veh	1.5	0.0	1.5	0.2	4.9	1.5	0.4	0.3	0.1	0.3	2.6	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	5.3	0.4	7.2	6.1	1.2	4.2	0.7	2.4	12.0	12.2
LnGrp Delay(d),s/veh	35.5	0.0	40.2	36.5	47.8	37.7	11.2	12.5	9.9	8.7	17.7	17.7
LnGrp LOS	D		D	D	D	D	B	B	A	A	B	B
Approach Vol, veh/h		279			481			689			1381	
Approach Delay, s/veh		38.8			42.7			12.1			16.4	
Approach LOS		D			D			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.0	64.6	5.0	25.9	10.6	65.0	8.6	22.2				
Change Period (Y+Rc), s	3.0	5.0	3.0	5.0	3.0	5.0	3.0	5.0				
Max Green Setting (Gmax), s	20.0	50.0	7.0	27.0	10.0	60.0	7.0	27.0				
Max Q Clear Time (g_c+I1), s	6.8	10.4	2.8	12.7	4.4	25.1	6.1	15.5				
Green Ext Time (p_c), s	0.4	4.1	0.0	0.9	0.1	9.7	0.0	1.8				
Intersection Summary												
HCM 2010 Ctrl Delay			22.0									
HCM 2010 LOS			C									

2040 AM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase
14: N Hamilton & Beecher Rd

01/23/2019

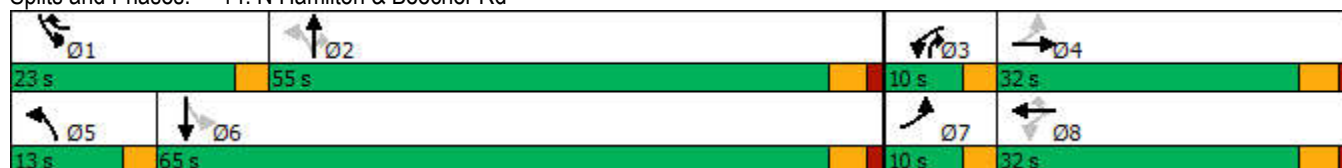


Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBTL	NBL	SBTL	EBL	WBL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	None	None	None	Max	None	None
Maximum Split (s)	23	55	10	32	13	65	10	32
Maximum Split (%)	19.2%	45.8%	8.3%	26.7%	10.8%	54.2%	8.3%	26.7%
Minimum Split (s)	11	29	8	29	11	29	8	29
Yellow Time (s)	3	3.5	3	3.5	3	3.5	3	3.5
All-Red Time (s)	0	1.5	0	1.5	0	1.5	0	1.5
Minimum Initial (s)	8	20	5	5	8	20	5	8
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		8		8		8		8
Flash Dont Walk (s)		16		16		16		16
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	23	78	88	0	13	78	88
End Time (s)	23	78	88	0	13	78	88	0
Yield/Force Off (s)	20	73	85	115	10	73	85	115
Yield/Force Off 170(s)	20	57	85	99	10	57	85	99
Local Start Time (s)	97	0	55	65	97	110	55	65
Local Yield (s)	117	50	62	92	107	50	62	92
Local Yield 170(s)	117	34	62	76	107	34	62	76

Intersection Summary

Cycle Length	120
Control Type	Semi Act-Uncoord
Natural Cycle	80

Splits and Phases: 14: N Hamilton & Beecher Rd



HCM 2010 Signalized Intersection Summary

17: S Hamilton Rd & Rocky Fork Blvd

01/23/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	31	31	316	36	227	24	863	40	143	1398	12
Future Volume (veh/h)	42	31	31	316	36	227	24	863	40	143	1398	12
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	46	34	34	343	39	247	26	938	43	155	1520	13
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	230	258	258	427	66	421	185	1788	82	465	1985	17
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.05	1.00	1.00	0.06	0.55	0.55
Sat Flow, veh/h	1089	856	856	1328	220	1396	1774	3446	158	1774	3596	31
Grp Volume(v), veh/h	46	0	68	343	0	286	26	482	499	155	748	785
Grp Sat Flow(s),veh/h/ln	1089	0	1712	1328	0	1616	1774	1770	1835	1774	1770	1857
Q Serve(g_s), s	4.1	0.0	3.2	27.9	0.0	16.5	0.7	0.0	0.0	4.3	36.1	36.1
Cycle Q Clear(g_c), s	20.6	0.0	3.2	31.1	0.0	16.5	0.7	0.0	0.0	4.3	36.1	36.1
Prop In Lane	1.00		0.50	1.00		0.86	1.00		0.09	1.00		0.02
Lane Grp Cap(c), veh/h	230	0	516	427	0	487	185	918	952	465	977	1025
V/C Ratio(X)	0.20	0.00	0.13	0.80	0.00	0.59	0.14	0.52	0.52	0.33	0.77	0.77
Avail Cap(c_a), veh/h	232	0	518	429	0	489	318	918	952	539	977	1025
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.85	0.85	0.85	0.54	0.54	0.54
Uniform Delay (d), s/veh	41.4	0.0	28.0	39.3	0.0	32.6	16.4	0.0	0.0	10.1	19.1	19.1
Incr Delay (d2), s/veh	0.4	0.0	0.1	10.5	0.0	1.8	0.3	1.8	1.8	0.2	3.1	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	1.5	11.4	0.0	7.6	0.4	0.5	0.5	2.1	18.3	19.2
LnGrp Delay(d),s/veh	41.8	0.0	28.1	49.8	0.0	34.4	16.7	1.8	1.8	10.3	22.3	22.1
LnGrp LOS	D		C	D		C	B	A	A	B	C	C
Approach Vol, veh/h	114			629			1007			1688		
Approach Delay, s/veh	33.6			42.8			2.2			21.1		
Approach LOS	C			D			A			C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.4	61.8		37.8	6.7	65.4		37.8				
Change Period (Y+Rc), s	4.0	* 4.7		* 4.7	4.0	* 4.7		* 4.7				
Max Green Setting (Gmax), s	11.0	* 52		* 33	11.0	* 52		* 33				
Max Q Clear Time (g_c+I1), s	6.3	2.0		22.6	2.7	38.1		33.1				
Green Ext Time (p_c), s	0.2	7.6		0.3	0.0	8.7		0.1				
Intersection Summary												
HCM 2010 Ctrl Delay			19.9									
HCM 2010 LOS			B									
Notes												

2040 AM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase
17: S Hamilton Rd & Rocky Fork Blvd

01/23/2019

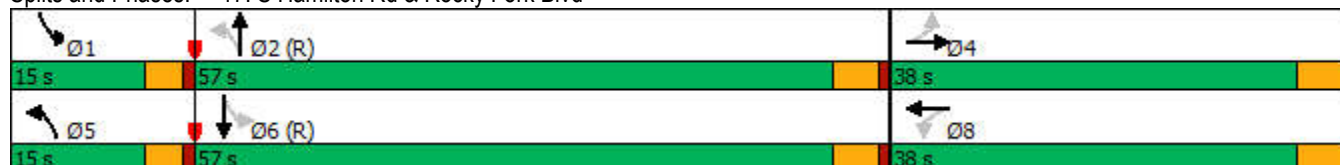


Phase Number	1	2	4	5	6	8
Movement	SBL	NBTL	EBTL	NBL	SBTL	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	None	None	C-Max	None
Maximum Split (s)	15	57	38	15	57	38
Maximum Split (%)	13.6%	51.8%	34.5%	13.6%	51.8%	34.5%
Minimum Split (s)	9.5	29.7	34.7	9.5	29.7	34.7
Yellow Time (s)	3	3.7	3.7	3	3.7	3.7
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	5	20	5	5	20	5
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		18	23		18	23
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	107	12	69	107	12	69
End Time (s)	12	69	107	12	69	107
Yield/Force Off (s)	8	64.3	102.3	8	64.3	102.3
Yield/Force Off 170(s)	8	46.3	79.3	8	46.3	79.3
Local Start Time (s)	95	0	57	95	0	57
Local Yield (s)	106	52.3	90.3	106	52.3	90.3
Local Yield 170(s)	106	34.3	67.3	106	34.3	67.3

Intersection Summary

Cycle Length	110
Control Type	Actuated-Coordinated
Natural Cycle	90
Offset: 12 (11%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	

Splits and Phases: 17: S Hamilton Rd & Rocky Fork Blvd



HCM 2010 Signalized Intersection Summary
20: S Hamilton Rd & Swanson Ave/Tech Center Dr

01/23/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	1	1	703	1	215	1	564	156	478	1529	1
Future Volume (veh/h)	3	1	1	703	1	215	1	564	156	478	1529	1
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	3	1	1	765	0	234	1	613	170	520	1662	1
Adj No. of Lanes	0	1	0	2	0	2	1	2	1	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	9	3	3	838	0	1276	151	1681	1126	574	2433	1
Arrive On Green	0.01	0.01	0.01	0.24	0.00	0.24	0.47	0.47	0.47	0.17	0.67	0.67
Sat Flow, veh/h	1049	350	350	3548	0	3167	298	3539	1583	3442	3630	2
Grp Volume(v), veh/h	5	0	0	765	0	234	1	613	170	520	810	853
Grp Sat Flow(s),veh/h/ln	1749	0	0	1774	0	1583	298	1770	1583	1721	1770	1862
Q Serve(g_s), s	0.6	0.0	0.0	43.6	0.0	9.9	0.4	22.8	7.2	30.8	57.8	57.8
Cycle Q Clear(g_c), s	0.6	0.0	0.0	43.6	0.0	9.9	17.7	22.8	7.2	30.8	57.8	57.8
Prop In Lane	0.60		0.20	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	15	0	0	838	0	1276	151	1681	1126	574	1186	1248
V/C Ratio(X)	0.34	0.00	0.00	0.91	0.00	0.18	0.01	0.36	0.15	0.91	0.68	0.68
Avail Cap(c_a), veh/h	77	0	0	1010	0	1430	151	1681	1126	980	1186	1248
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	102.3	0.0	0.0	77.2	0.0	40.0	38.5	34.6	9.7	84.9	20.8	20.8
Incr Delay (d2), s/veh	12.9	0.0	0.0	10.9	0.0	0.1	0.1	0.6	0.3	6.9	3.2	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	22.6	0.0	4.3	0.0	11.3	5.8	15.2	29.2	30.7
LnGrp Delay(d),s/veh	115.2	0.0	0.0	88.1	0.0	40.0	38.6	35.2	10.0	91.7	24.0	23.9
LnGrp LOS	F			F		D	D	D	A	F	C	C
Approach Vol, veh/h	5			999			784			2183		
Approach Delay, s/veh	115.2			76.9			29.7			40.1		
Approach LOS	F			E			C			D		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	4		6		8					
Phs Duration (G+Y+Rc), s	40.5	104.5	7.7		145.0		54.9					
Change Period (Y+Rc), s	* 5.9	* 5.9	* 5.9		* 5.9		5.9					
Max Green Setting (Gmax), s	* 59	* 74	* 9.1		* 1.4E2		59.1					
Max Q Clear Time (g_c+I1), s	32.8	24.8	2.6		59.8		45.6					
Green Ext Time (p_c), s	1.8	4.9	0.0		18.5		3.4					
Intersection Summary												
HCM 2010 Ctrl Delay			47.4									
HCM 2010 LOS			D									
Notes												

2040 AM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase
20: S Hamilton Rd & Swanson Ave/Tech Center Dr

01/23/2019



Phase Number	1	2	4	6	8
Movement	SBL	NBTL	EBTL	SBT	WBTL
Lead/Lag	Lead	Lag			
Lead-Lag Optimize	Yes	Yes			
Recall Mode	None	Max	None	Max	None
Maximum Split (s)	65	80	15	145	65
Maximum Split (%)	28.9%	35.6%	6.7%	64.4%	28.9%
Minimum Split (s)	12.9	38.9	15	38.9	44.9
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	2.3	2.3	2.3	2.3	2.3
Minimum Initial (s)	7	25	7	25	10
Vehicle Extension (s)	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0
Walk Time (s)				7	7
Flash Dont Walk (s)				26	32
Dual Entry	No	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	65	145	0	160
End Time (s)	65	145	160	145	0
Yield/Force Off (s)	59.1	139.1	154.1	139.1	219.1
Yield/Force Off 170(s)	59.1	139.1	154.1	113.1	187.1
Local Start Time (s)	160	0	80	160	95
Local Yield (s)	219.1	74.1	89.1	74.1	154.1
Local Yield 170(s)	219.1	74.1	89.1	48.1	122.1

Intersection Summary

Cycle Length	225
Control Type	Semi Act-Uncoord
Natural Cycle	125

Splits and Phases: 20: S Hamilton Rd & Swanson Ave/Tech Center Dr

 Ø1	 Ø2	 Ø4	 Ø8
65 s	80 s	15 s	65 s
 Ø6			
145 s			

HCM 2010 Signalized Intersection Summary

22: S Hamilton Rd & Morrison Rd

01/23/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	65	203	851	39	197	103	733	493	226	1375	18
Future Volume (veh/h)	35	65	203	851	39	197	103	733	493	226	1375	18
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	38	71	221	955	0	214	112	797	536	246	1495	20
Adj No. of Lanes	0	1	1	2	0	1	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	70	130	284	845	0	492	190	1416	1010	325	1439	19
Arrive On Green	0.11	0.11	0.11	0.24	0.00	0.24	0.14	0.80	0.80	0.15	0.80	0.80
Sat Flow, veh/h	638	1193	1583	3548	0	1583	1774	3539	1583	1774	3576	48
Grp Volume(v), veh/h	109	0	221	955	0	214	112	797	536	246	739	776
Grp Sat Flow(s),veh/h/ln	1831	0	1583	1774	0	1583	1774	1770	1583	1774	1770	1854
Q Serve(g_s), s	6.2	0.0	12.0	26.2	0.0	11.8	3.9	9.0	13.9	8.0	44.3	44.3
Cycle Q Clear(g_c), s	6.2	0.0	12.0	26.2	0.0	11.8	3.9	9.0	13.9	8.0	44.3	44.3
Prop In Lane	0.35		1.00	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	200	0	284	845	0	492	190	1416	1010	325	712	746
V/C Ratio(X)	0.55	0.00	0.78	1.13	0.00	0.43	0.59	0.56	0.53	0.76	1.04	1.04
Avail Cap(c_a), veh/h	200	0	284	845	0	492	356	1416	1010	325	712	746
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	0.79	0.00	0.79	1.00	1.00	1.00	0.53	0.53	0.53
Uniform Delay (d), s/veh	46.4	0.0	43.0	41.9	0.0	30.2	23.3	7.5	3.2	20.2	10.7	10.7
Incr Delay (d2), s/veh	3.1	0.0	12.8	70.7	0.0	0.5	2.9	1.6	2.0	5.4	34.9	34.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	0.0	7.4	21.1	0.0	5.2	2.0	4.5	9.8	3.5	26.7	27.9
LnGrp Delay(d),s/veh	49.5	0.0	55.9	112.6	0.0	30.7	26.2	9.1	5.2	25.6	45.7	45.6
LnGrp LOS	D		E	F		C	C	A	A	C	F	F
Approach Vol, veh/h		330			1169			1445			1761	
Approach Delay, s/veh		53.8			97.6			9.0			42.8	
Approach LOS		D			F			A			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.0	50.0		17.0	11.7	50.3		31.0				
Change Period (Y+Rc), s	4.0	6.0		5.0	4.0	6.0		4.8				
Max Green Setting (Gmax), s	8.0	44.0		12.0	18.0	34.0		26.2				
Max Q Clear Time (g_c+I1), s	10.0	15.9		14.0	5.9	46.3		28.2				
Green Ext Time (p_c), s	0.0	8.0		0.0	0.2	0.0		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			46.8									
HCM 2010 LOS			D									
Notes												

2040 AM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase
22: S Hamilton Rd & Morrison Rd

01/23/2019

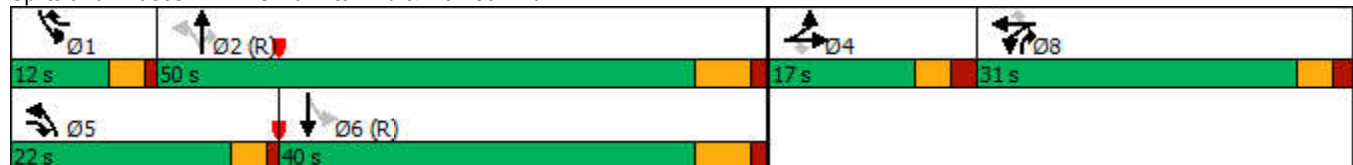


Phase Number	1	2	4	5	6	8
Movement	SBL	NBTL	EBTL	NBL	SBTL	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	None	None	C-Max	None
Maximum Split (s)	12	50	17	22	40	31
Maximum Split (%)	10.9%	45.5%	15.5%	20.0%	36.4%	28.2%
Minimum Split (s)	12	24	17	12	36	31
Yellow Time (s)	3	4.5	3	3	4.5	3
All-Red Time (s)	1	1.5	2	1	1.5	1.8
Minimum Initial (s)	8	15	8	8	15	8
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)					7	7
Flash Dont Walk (s)					23	19
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	4	16	66	4	26	83
End Time (s)	16	66	83	26	66	4
Yield/Force Off (s)	12	60	78	22	60	109.2
Yield/Force Off 170(s)	12	60	78	22	37	90.2
Local Start Time (s)	88	100	40	88	0	57
Local Yield (s)	96	34	52	106	34	83.2
Local Yield 170(s)	96	34	52	106	11	64.2

Intersection Summary

Cycle Length 110
Control Type Actuated-Coordinated
Natural Cycle 130
Offset: 26 (24%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Splits and Phases: 22: S Hamilton Rd & Morrison Rd



HCM 2010 Signalized Intersection Summary

23: Morrison Rd & Tech Center Dr

01/23/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	172	302	323	2	40	33	226	257	91	130	149	572
Future Volume (veh/h)	172	302	323	2	40	33	226	257	91	130	149	572
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	187	328	351	2	43	36	246	279	99	141	162	622
Adj No. of Lanes	2	1	0	1	1	0	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	237	323	346	48	306	256	460	1089	378	500	1361	718
Arrive On Green	0.07	0.39	0.39	0.00	0.33	0.33	0.10	0.42	0.42	0.06	0.38	0.38
Sat Flow, veh/h	3442	825	882	1774	938	786	1774	2579	895	1774	3539	1583
Grp Volume(v), veh/h	187	0	679	2	0	79	246	189	189	141	162	622
Grp Sat Flow(s),veh/h/ln	1721	0	1707	1774	0	1724	1774	1770	1705	1774	1770	1583
Q Serve(g_s), s	8.9	0.0	64.9	0.1	0.0	5.4	13.5	11.5	11.9	7.9	4.9	58.5
Cycle Q Clear(g_c), s	8.9	0.0	64.9	0.1	0.0	5.4	13.5	11.5	11.9	7.9	4.9	58.5
Prop In Lane	1.00		0.52	1.00		0.46	1.00		0.53	1.00		1.00
Lane Grp Cap(c), veh/h	237	0	669	48	0	562	460	747	720	500	1361	718
V/C Ratio(X)	0.79	0.00	1.01	0.04	0.00	0.14	0.53	0.25	0.26	0.28	0.12	0.87
Avail Cap(c_a), veh/h	622	0	669	150	0	562	662	747	720	500	1361	718
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	75.9	0.0	50.3	46.2	0.0	39.4	24.8	30.9	31.1	27.9	32.8	40.7
Incr Delay (d2), s/veh	5.8	0.0	38.5	0.3	0.0	0.1	1.0	0.8	0.9	0.3	0.2	13.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	0.0	37.6	0.1	0.0	2.6	6.7	5.8	5.8	3.9	2.4	28.1
LnGrp Delay(d),s/veh	81.7	0.0	88.8	46.5	0.0	39.5	25.8	31.8	31.9	28.2	33.0	54.0
LnGrp LOS	F		F	D		D	C	C	C	C	C	D
Approach Vol, veh/h	866			81			624			925		
Approach Delay, s/veh	87.3			39.7			29.5			46.4		
Approach LOS	F			D			C			D		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.0	75.0	5.5	70.0	21.2	68.8	16.5	59.0				
Change Period (Y+Rc), s	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1				
Max Green Setting (Gmax), s	9.9	69.9	9.9	64.9	34.9	44.9	29.9	44.9				
Max Q Clear Time (g_c+I1), s	9.9	13.9	2.1	66.9	15.5	60.5	10.9	7.4				
Green Ext Time (p_c), s	0.0	2.4	0.0	0.0	0.6	0.0	0.5	0.5				
Intersection Summary												
HCM 2010 Ctrl Delay	56.1											
HCM 2010 LOS	E											

2040 AM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase
23: Morrison Rd & Tech Center Dr

01/23/2019

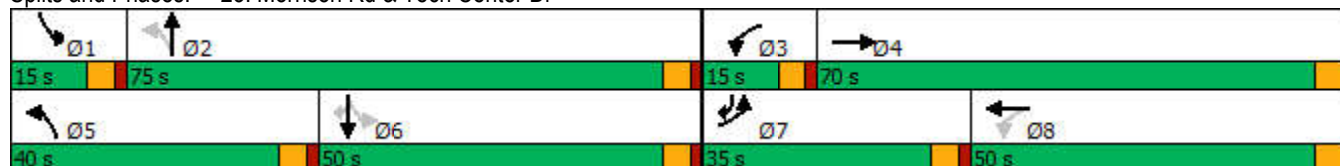


Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBT	NBL	SBTL	EBL	WBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	None	None	None	Max	None	None
Maximum Split (s)	15	75	15	70	40	50	35	50
Maximum Split (%)	8.6%	42.9%	8.6%	40.0%	22.9%	28.6%	20.0%	28.6%
Minimum Split (s)	10.1	35.1	10.1	32.1	10.1	35.1	10.1	32.1
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Minimum Initial (s)	5	10	5	10	5	10	5	10
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Dont Walk (s)		23		20		23		18
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	15	90	105	0	40	90	125
End Time (s)	15	90	105	0	40	90	125	0
Yield/Force Off (s)	9.9	84.9	99.9	169.9	34.9	84.9	119.9	169.9
Yield/Force Off 170(s)	9.9	61.9	99.9	149.9	34.9	61.9	119.9	151.9
Local Start Time (s)	135	150	50	65	135	0	50	85
Local Yield (s)	144.9	44.9	59.9	129.9	169.9	44.9	79.9	129.9
Local Yield 170(s)	144.9	21.9	59.9	109.9	169.9	21.9	79.9	111.9

Intersection Summary

Cycle Length	175
Control Type	Semi Act-Uncoord
Natural Cycle	90

Splits and Phases: 23: Morrison Rd & Tech Center Dr



HCM 2010 Signalized Intersection Summary

25: Old Ridenour Rd & US 62/Granville St

01/23/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	841	57	358	1578	124	43	13	198	204	27	47
Future Volume (veh/h)	18	841	57	358	1578	124	43	13	198	204	27	47
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	20	914	62	389	1715	135	47	14	215	222	29	51
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	217	1639	733	434	1984	1090	264	195	353	404	120	211
Arrive On Green	0.02	0.46	0.46	0.24	1.00	1.00	0.03	0.10	0.10	0.13	0.20	0.20
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	1863	1583	1774	607	1067
Grp Volume(v), veh/h	20	914	62	389	1715	135	47	14	215	222	0	80
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1863	1583	1774	0	1674
Q Serve(g_s), s	0.6	20.6	2.4	13.0	0.0	0.0	2.6	0.7	11.5	11.8	0.0	4.4
Cycle Q Clear(g_c), s	0.6	20.6	2.4	13.0	0.0	0.0	2.6	0.7	11.5	11.8	0.0	4.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.64
Lane Grp Cap(c), veh/h	217	1639	733	434	1984	1090	264	195	353	404	0	331
V/C Ratio(X)	0.09	0.56	0.08	0.90	0.86	0.12	0.18	0.07	0.61	0.55	0.00	0.24
Avail Cap(c_a), veh/h	309	1639	733	434	1984	1090	380	195	353	484	0	331
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.69	0.69	0.69	0.09	0.09	0.09	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.8	21.4	16.5	17.4	0.0	0.0	41.9	44.4	38.4	35.4	0.0	37.2
Incr Delay (d2), s/veh	0.1	1.0	0.2	2.6	0.5	0.0	0.3	0.7	7.6	1.2	0.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	10.2	1.1	5.8	0.1	0.0	1.3	0.4	6.6	5.9	0.0	2.2
LnGrp Delay(d),s/veh	14.9	22.3	16.7	20.0	0.5	0.0	42.2	45.1	46.1	36.5	0.0	38.9
LnGrp LOS	B	C	B	B	A	A	D	D	D	D		D
Approach Vol, veh/h		996			2239			276			302	
Approach Delay, s/veh		21.8			3.9			45.4			37.1	
Approach LOS		C			A			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	18.0	56.9	8.8	26.2	7.3	67.7	19.1	16.0				
Change Period (Y+Rc), s	5.0	6.0	5.0	4.5	5.0	6.0	5.0	4.5				
Max Green Setting (Gmax), s	13.0	46.0	11.0	19.5	8.0	51.0	19.0	11.5				
Max Q Clear Time (g_c+I1), s	15.0	22.6	4.6	6.4	2.6	2.0	13.8	13.5				
Green Ext Time (p_c), s	0.0	6.7	0.0	0.3	0.0	21.6	0.3	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				14.2								
HCM 2010 LOS				B								

2040 AM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase
25: Old Ridenour Rd & US 62/Granville St

01/23/2019

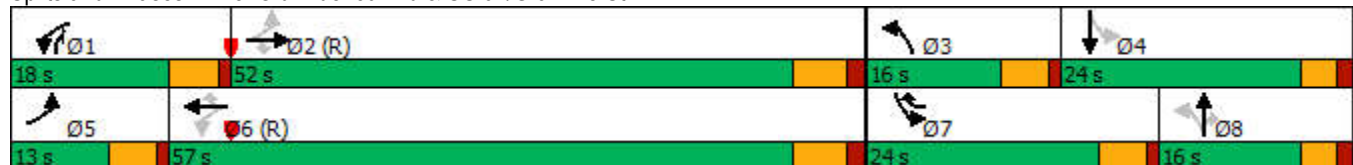


Phase Number	1	2	3	4	5	6	7	8
Movement	WBL	EBTL	NBL	SBTL	EBL	WBTL	SBL	NBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	C-Max	None	Max
Maximum Split (s)	18	52	16	24	13	57	24	16
Maximum Split (%)	16.4%	47.3%	14.5%	21.8%	11.8%	51.8%	21.8%	14.5%
Minimum Split (s)	10	41	15	24	13	41	15	16
Yellow Time (s)	4	4.5	4	3	4	4.5	4	3
All-Red Time (s)	1	1.5	1	1.5	1	1.5	1	1.5
Minimum Initial (s)	5	35	5	8	5	35	10	5
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)	7							
Flash Dont Walk (s)	12							
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	86	104	46	62	86	99	46	70
End Time (s)	104	46	62	86	99	46	70	86
Yield/Force Off (s)	99	40	57	81.5	94	40	65	81.5
Yield/Force Off 170(s)	99	40	57	81.5	94	28	65	81.5
Local Start Time (s)	92	0	52	68	92	105	52	76
Local Yield (s)	105	46	63	87.5	100	46	71	87.5
Local Yield 170(s)	105	46	63	87.5	100	34	71	87.5

Intersection Summary

Cycle Length	110
Control Type	Actuated-Coordinated
Natural Cycle	105
Offset: 104 (95%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	

Splits and Phases: 25: Old Ridenour Rd & US 62/Granville St



Intersection						
Int Delay, s/veh	9.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	204	144	322	60	26	351
Future Vol, veh/h	204	144	322	60	26	351
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	60	-	-	200	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	222	157	350	65	28	382
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	415	0	-	0	951	350
Stage 1	-	-	-	-	350	-
Stage 2	-	-	-	-	601	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1144	-	-	-	288	693
Stage 1	-	-	-	-	713	-
Stage 2	-	-	-	-	547	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1144	-	-	-	232	693
Mov Cap-2 Maneuver	-	-	-	-	232	-
Stage 1	-	-	-	-	575	-
Stage 2	-	-	-	-	547	-
Approach	EB	WB		SB		
HCM Control Delay, s	5.2	0		22.2		
HCM LOS	C					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1144	-	-	-	609	
HCM Lane V/C Ratio	0.194	-	-	-	0.673	
HCM Control Delay (s)	8.9	-	-	-	22.2	
HCM Lane LOS	A	-	-	-	C	
HCM 95th %tile Q(veh)	0.7	-	-	-	5.1	

HCM 2010 TWSC
31: IR-270 NB Exit Ramp & W Johnstown Rd

01/23/2019

Intersection						
Int Delay, s/veh	81.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↑	
Traffic Vol, veh/h	117	0	0	438	483	107
Future Vol, veh/h	117	0	0	438	483	107
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	127	0	0	476	525	116

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	-	-	603	127
Stage 1	-	-	-	127	-
Stage 2	-	-	-	476	-
Critical Hdwy	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	0	0	~ 462	923
Stage 1	-	0	0	899	-
Stage 2	-	0	0	625	-
Platoon blocked, %	-				
Mov Cap-1 Maneuver	-	-	-	~ 462	923
Mov Cap-2 Maneuver	-	-	-	~ 462	-
Stage 1	-	-	-	899	-
Stage 2	-	-	-	625	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	157.8
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	WBT
Capacity (veh/h)	508	-	-
HCM Lane V/C Ratio	1.262	-	-
HCM Control Delay (s)	157.8	-	-
HCM Lane LOS	F	-	-
HCM 95th %tile Q(veh)	25.9	-	-

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

HCM 2010 Signalized Intersection Summary

32: Culpeper's/Shull Ave & Granville St

01/23/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	687	1	5	1072	72	2	1	2	142	1	100
Future Volume (veh/h)	28	687	1	5	1072	72	2	1	2	142	1	100
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	30	747	1	5	1165	78	2	1	2	154	1	109
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	383	2073	3	362	1812	121	191	101	164	278	11	167
Arrive On Green	0.01	0.19	0.19	0.02	1.00	1.00	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	1774	3627	5	1774	3367	225	533	371	602	831	42	614
Grp Volume(v), veh/h	30	364	384	5	612	631	5	0	0	264	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1862	1774	1770	1823	1506	0	0	1486	0	0
Q Serve(g_s), s	0.8	19.7	19.7	0.1	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0
Cycle Q Clear(g_c), s	0.8	19.7	19.7	0.1	0.0	0.0	0.2	0.0	0.0	17.2	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.12	0.40		0.40	0.58		0.41
Lane Grp Cap(c), veh/h	383	1011	1064	362	952	981	456	0	0	457	0	0
V/C Ratio(X)	0.08	0.36	0.36	0.01	0.64	0.64	0.01	0.00	0.00	0.58	0.00	0.00
Avail Cap(c_a), veh/h	459	1011	1064	497	952	981	456	0	0	457	0	0
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.98	0.98	0.98	0.94	0.94	0.94	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	10.0	27.1	27.1	12.3	0.0	0.0	29.2	0.0	0.0	35.3	0.0	0.0
Incr Delay (d2), s/veh	0.1	1.0	0.9	0.0	3.1	3.1	0.0	0.0	0.0	5.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	10.0	10.5	0.1	0.8	0.8	0.1	0.0	0.0	7.7	0.0	0.0
LnGrp Delay(d),s/veh	10.1	28.1	28.1	12.3	3.1	3.1	29.2	0.0	0.0	40.5	0.0	0.0
LnGrp LOS	B	C	C	B	A	A	C			D		
Approach Vol, veh/h		778			1248			5			264	
Approach Delay, s/veh		27.4			3.1			29.2			40.5	
Approach LOS		C			A			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.6	68.4		35.0	10.3	64.7		35.0				
Change Period (Y+Rc), s	5.5	5.5		5.0	5.5	5.5		5.0				
Max Green Setting (Gmax), s	9.5	54.5		30.0	9.5	54.5		30.0				
Max Q Clear Time (g_c+I1), s	2.1	21.7		19.2	2.8	2.0		2.2				
Green Ext Time (p_c), s	0.0	5.6		1.2	0.0	12.8		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				15.7								
HCM 2010 LOS				B								

2040 AM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase

32: Culpeper's/Shull Ave & Granville St

01/23/2019

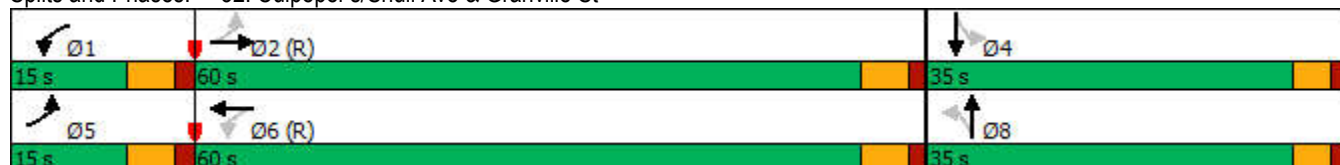


Phase Number	1	2	4	5	6	8
Movement	WBL	EBTL	SBTL	EBL	WBTL	NBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	Max	None	C-Max	Max
Maximum Split (s)	15	60	35	15	60	35
Maximum Split (%)	13.6%	54.5%	31.8%	13.6%	54.5%	31.8%
Minimum Split (s)	13.5	24.5	30	13.5	24.5	30
Yellow Time (s)	4	4	3	4	4	3
All-Red Time (s)	1.5	1.5	2	1.5	1.5	2
Minimum Initial (s)	8	15	8	8	15	8
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		12	18		12	18
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	55	70	20	55	70	20
End Time (s)	70	20	55	70	20	55
Yield/Force Off (s)	64.5	14.5	50	64.5	14.5	50
Yield/Force Off 170(s)	64.5	2.5	32	64.5	2.5	32
Local Start Time (s)	95	0	60	95	0	60
Local Yield (s)	104.5	54.5	90	104.5	54.5	90
Local Yield 170(s)	104.5	42.5	72	104.5	42.5	72

Intersection Summary

Cycle Length	110
Control Type	Actuated-Coordinated
Natural Cycle	80
Offset: 70 (64%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	

Splits and Phases: 32: Culpeper's/Shull Ave & Granville St



HCM 2010 Signalized Intersection Summary

37: Lincoln Cir & Granville St

01/23/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	881	2	17	1052	1	18	1	1	1	1	1
Future Volume (veh/h)	1	881	2	17	1052	1	18	1	1	1	1	1
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	1	958	2	18	1143	1	20	1	1	1	1	1
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	455	2862	6	560	2931	3	169	62	62	67	57	40
Arrive On Green	0.00	1.00	1.00	0.04	1.00	1.00	0.07	0.07	0.07	0.07	0.07	0.07
Sat Flow, veh/h	1774	3623	8	1774	3629	3	1409	856	856	319	789	554
Grp Volume(v), veh/h	1	468	492	18	557	587	20	0	2	3	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1861	1774	1770	1862	1409	0	1712	1662	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.2	0.0	0.0	1.2	0.0	0.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.2	0.0	0.0	1.4	0.0	0.1	0.2	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		0.50	0.33		0.33
Lane Grp Cap(c), veh/h	455	1398	1470	560	1429	1504	169	0	125	165	0	0
V/C Ratio(X)	0.00	0.33	0.33	0.03	0.39	0.39	0.12	0.00	0.02	0.02	0.00	0.00
Avail Cap(c_a), veh/h	689	1398	1470	851	1429	1504	466	0	486	501	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.95	0.82	0.82	0.82	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	2.4	0.0	0.0	2.0	0.0	0.0	47.9	0.0	47.3	47.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.6	0.0	0.7	0.6	0.3	0.0	0.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.2	0.1	0.3	0.3	0.6	0.0	0.1	0.1	0.0	0.0
LnGrp Delay(d),s/veh	2.4	0.6	0.6	2.0	0.7	0.6	48.2	0.0	47.4	47.4	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	D		D	D		
Approach Vol, veh/h		961			1162			22			3	
Approach Delay, s/veh		0.6			0.7			48.2			47.4	
Approach LOS		A			A			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.1	91.9		12.0	4.2	93.8		12.0				
Change Period (Y+Rc), s	4.0	5.0		4.0	4.0	5.0		4.0				
Max Green Setting (Gmax), s	20.2	45.6		31.2	14.7	51.1		31.2				
Max Q Clear Time (g_c+I1), s	2.2	2.0		2.2	2.0	2.0		3.4				
Green Ext Time (p_c), s	0.0	8.2		0.0	0.0	10.9		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				1.2								
HCM 2010 LOS				A								

2040 AM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase

37: Lincoln Cir & Granville St

01/23/2019

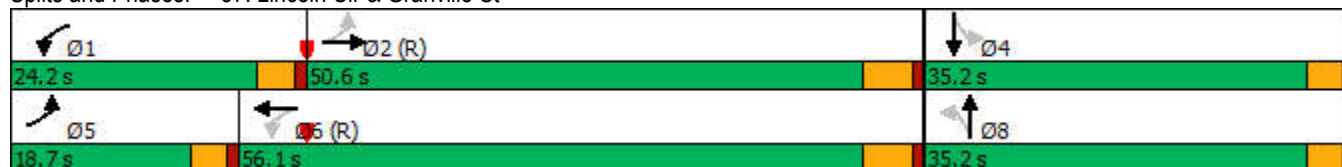


Phase Number	1	2	4	5	6	8
Movement	WBL	EBTL	SBTL	EBL	WBTL	NBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	None	None	C-Max	None
Maximum Split (s)	24.2	50.6	35.2	18.7	56.1	35.2
Maximum Split (%)	22.0%	46.0%	32.0%	17.0%	51.0%	32.0%
Minimum Split (s)	9.5	35	26	9.5	35	26.5
Yellow Time (s)	3	4	3	3	4	3
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	5	30	15	5	30	15
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		15	15		15	15
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	40.8	65	5.6	40.8	59.5	5.6
End Time (s)	65	5.6	40.8	59.5	5.6	40.8
Yield/Force Off (s)	61	0.6	36.8	55.5	0.6	36.8
Yield/Force Off 170(s)	61	95.6	21.8	55.5	95.6	21.8
Local Start Time (s)	85.8	0	50.6	85.8	104.5	50.6
Local Yield (s)	106	45.6	81.8	100.5	45.6	81.8
Local Yield 170(s)	106	30.6	66.8	100.5	30.6	66.8

Intersection Summary

Cycle Length 110
Control Type Actuated-Coordinated
Natural Cycle 75
Offset: 65 (59%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Splits and Phases: 37: Lincoln Cir & Granville St



HCM 2010 Signalized Intersection Summary

40: Flint Ridge Rd/Library & Granville St

01/23/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	713	156	14	1050	6	99	3	18	2	2	2
Future Volume (veh/h)	6	713	156	14	1050	6	99	3	18	2	2	2
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	7	775	170	15	1141	7	108	3	20	2	2	2
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	263	1576	346	435	2015	12	400	15	64	270	254	461
Arrive On Green	0.03	1.00	1.00	0.03	0.56	0.56	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1774	2887	633	1774	3606	22	1171	53	220	758	874	1583
Grp Volume(v), veh/h	7	475	470	15	560	588	131	0	0	4	0	2
Grp Sat Flow(s),veh/h/ln	1774	1770	1751	1774	1770	1859	1444	0	0	1632	0	1583
Q Serve(g_s), s	0.2	0.0	0.0	0.4	22.5	22.5	7.3	0.0	0.0	0.0	0.0	0.1
Cycle Q Clear(g_c), s	0.2	0.0	0.0	0.4	22.5	22.5	7.7	0.0	0.0	0.2	0.0	0.1
Prop In Lane	1.00		0.36	1.00		0.01	0.82		0.15	0.50		1.00
Lane Grp Cap(c), veh/h	263	966	956	435	989	1039	480	0	0	524	0	461
V/C Ratio(X)	0.03	0.49	0.49	0.03	0.57	0.57	0.27	0.00	0.00	0.01	0.00	0.00
Avail Cap(c_a), veh/h	472	966	956	622	989	1039	480	0	0	524	0	461
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.96	0.96	0.63	0.63	0.63	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.6	0.0	0.0	10.1	15.7	15.7	30.3	0.0	0.0	27.7	0.0	27.7
Incr Delay (d2), s/veh	0.0	1.7	1.7	0.0	1.5	1.4	1.4	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.5	0.5	0.2	11.3	11.8	3.3	0.0	0.0	0.1	0.0	0.0
LnGrp Delay(d),s/veh	12.6	1.7	1.7	10.1	17.2	17.1	31.7	0.0	0.0	27.7	0.0	27.7
LnGrp LOS	B	A	A	B	B	B	C			C		C
Approach Vol, veh/h		952			1163			131			6	
Approach Delay, s/veh		1.8			17.0			31.7			27.7	
Approach LOS		A			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.4	65.6		37.0	6.0	67.0		37.0				
Change Period (Y+Rc), s	4.5	5.5		5.0	4.5	5.5		5.0				
Max Green Setting (Gmax), s	14.5	48.5		32.0	14.5	48.5		32.0				
Max Q Clear Time (g_c+I1), s	2.4	2.0		2.2	2.2	24.5		9.7				
Green Ext Time (p_c), s	0.0	8.2		0.0	0.0	9.0		0.7				
Intersection Summary												
HCM 2010 Ctrl Delay				11.5								
HCM 2010 LOS				B								

2040 AM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase

40: Flint Ridge Rd/Library & Granville St

01/23/2019

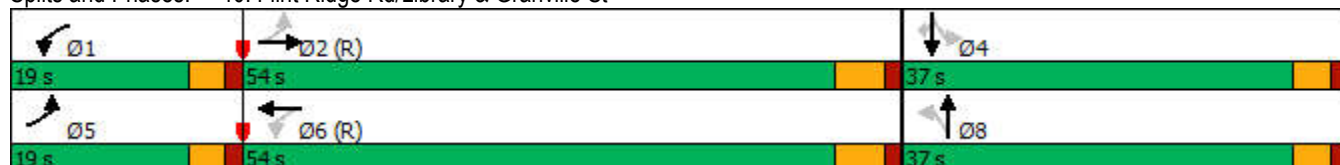


Phase Number	1	2	4	5	6	8
Movement	WBL	EBTL	SBTL	EBL	WBTL	NBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	Max	None	C-Max	Max
Maximum Split (s)	19	54	37	19	54	37
Maximum Split (%)	17.3%	49.1%	33.6%	17.3%	49.1%	33.6%
Minimum Split (s)	12.5	25.5	33	12.5	25.5	33
Yellow Time (s)	3	4	3	3	4	3
All-Red Time (s)	1.5	1.5	2	1.5	1.5	2
Minimum Initial (s)	8	15	8	8	15	8
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		13	21		13	21
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	36	55	109	36	55	109
End Time (s)	55	109	36	55	109	36
Yield/Force Off (s)	50.5	103.5	31	50.5	103.5	31
Yield/Force Off 170(s)	50.5	90.5	10	50.5	90.5	10
Local Start Time (s)	91	0	54	91	0	54
Local Yield (s)	105.5	48.5	86	105.5	48.5	86
Local Yield 170(s)	105.5	35.5	65	105.5	35.5	65

Intersection Summary

Cycle Length	110
Control Type	Actuated-Coordinated
Natural Cycle	80
Offset: 55 (50%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	

Splits and Phases: 40: Flint Ridge Rd/Library & Granville St



HCM 2010 Signalized Intersection Summary

43: N Hamilton Rd & Shopping Center/KEMBA

01/23/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	1	43	4	1	4	70	842	10	4	1531	54
Future Volume (veh/h)	21	1	43	4	1	4	70	842	10	4	1531	54
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	23	1	47	4	1	4	76	915	11	4	1664	59
Adj No. of Lanes	0	1	1	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	123	4	96	102	20	79	344	2976	36	537	2777	98
Arrive On Green	0.06	0.06	0.06	0.06	0.06	0.06	0.08	1.00	1.00	0.01	1.00	1.00
Sat Flow, veh/h	1296	73	1583	1352	326	1306	1774	3582	43	1774	3487	123
Grp Volume(v), veh/h	24	0	47	4	0	5	76	452	474	4	841	882
Grp Sat Flow(s),veh/h/ln	1369	0	1583	1352	0	1632	1774	1770	1855	1774	1770	1841
Q Serve(g_s), s	2.5	0.0	4.6	0.5	0.0	0.5	1.1	0.0	0.0	0.1	0.0	0.0
Cycle Q Clear(g_c), s	2.9	0.0	4.6	3.4	0.0	0.5	1.1	0.0	0.0	0.1	0.0	0.0
Prop In Lane	0.96		1.00	1.00		0.80	1.00		0.02	1.00		0.07
Lane Grp Cap(c), veh/h	127	0	96	102	0	99	344	1470	1541	537	1409	1466
V/C Ratio(X)	0.19	0.00	0.49	0.04	0.00	0.05	0.22	0.31	0.31	0.01	0.60	0.60
Avail Cap(c_a), veh/h	261	0	245	230	0	253	377	1470	1541	632	1409	1466
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	0.91	0.91	0.91	0.81	0.81	0.81
Uniform Delay (d), s/veh	72.1	0.0	72.7	73.6	0.0	70.8	1.8	0.0	0.0	3.1	0.0	0.0
Incr Delay (d2), s/veh	0.7	0.0	3.8	0.2	0.0	0.2	0.3	0.5	0.5	0.0	1.5	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	2.1	0.2	0.0	0.2	0.5	0.2	0.2	0.0	0.6	0.6
LnGrp Delay(d),s/veh	72.8	0.0	76.5	73.7	0.0	71.0	2.1	0.5	0.5	3.1	1.5	1.5
LnGrp LOS	E		E	E		E	A	A	A	A	A	A
Approach Vol, veh/h		71			9			1002			1727	
Approach Delay, s/veh		75.3			72.2			0.6			1.5	
Approach LOS		E			E			A			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.0	133.1		14.9	6.4	138.6		14.9				
Change Period (Y+Rc), s	* 5.2	* 5.7		* 5.2	* 5.3	* 5.7		* 5.2				
Max Green Setting (Gmax), s	* 9.8	* 1.1E2		* 25	* 9.7	* 1.1E2		* 25				
Max Q Clear Time (g_c+I1), s	3.1	2.0		5.4	2.1	2.0		6.6				
Green Ext Time (p_c), s	0.1	24.0		0.0	0.0	7.0		0.2				
Intersection Summary												
HCM 2010 Ctrl Delay			3.3									
HCM 2010 LOS			A									
Notes												

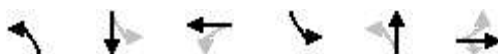
2040 AM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase

43: N Hamilton Rd & Shopping Center/KEMBA

01/23/2019

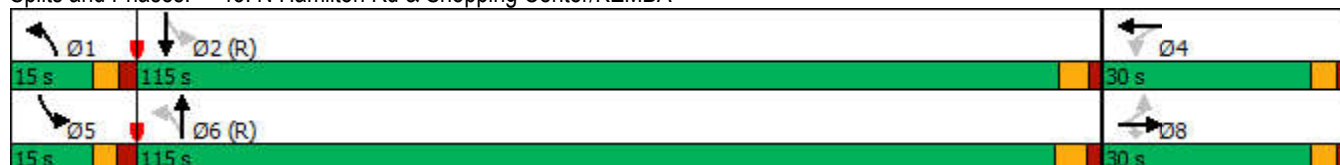


Phase Number	1	2	4	5	6	8
Movement	NBL	SBTL	WBTL	SBL	NBTL	EBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	None	None	C-Max	None
Maximum Split (s)	15	115	30	15	115	30
Maximum Split (%)	9.4%	71.9%	18.8%	9.4%	71.9%	18.8%
Minimum Split (s)	12.2	29.3	29.2	12.3	26.7	29.2
Yellow Time (s)	3	3.7	3	3	3.7	3
All-Red Time (s)	2.2	1.6	2.2	2.3	2	2.2
Minimum Initial (s)	7	15	10	7	15	10
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		17	17		14	17
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	125	140	95	125	140	95
End Time (s)	140	95	125	140	95	125
Yield/Force Off (s)	134.8	89.7	119.8	134.7	89.3	119.8
Yield/Force Off 170(s)	134.8	72.7	102.8	134.7	75.3	102.8
Local Start Time (s)	145	0	115	145	0	115
Local Yield (s)	154.8	109.7	139.8	154.7	109.3	139.8
Local Yield 170(s)	154.8	92.7	122.8	154.7	95.3	122.8

Intersection Summary

Cycle Length 160
Control Type Actuated-Coordinated
Natural Cycle 90
Offset: 140 (88%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Splits and Phases: 43: N Hamilton Rd & Shopping Center/KEMBA



HCM 2010 Signalized Intersection Summary

46: N Hamilton Rd/N Hamilton & Gatsby's/Banks

01/23/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	1	1	14	1	7	1	822	31	13	1650	3
Future Volume (veh/h)	1	1	1	14	1	7	1	822	31	13	1650	3
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	1	1	1	15	1	8	1	893	34	14	1793	3
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	3	3	3	44	3	23	3	3038	116	554	3071	5
Arrive On Green	0.00	0.00	0.00	0.04	0.04	0.04	0.00	1.00	1.00	0.85	0.85	0.85
Sat Flow, veh/h	577	577	577	1068	71	570	1774	3477	132	601	3625	6
Grp Volume(v), veh/h	3	0	0	24	0	0	1	455	472	14	875	921
Grp Sat Flow(s),veh/h/ln	1732	0	0	1709	0	0	1774	1770	1839	601	1770	1862
Q Serve(g_s), s	0.3	0.0	0.0	2.2	0.0	0.0	0.1	0.0	0.0	0.6	23.9	24.0
Cycle Q Clear(g_c), s	0.3	0.0	0.0	2.2	0.0	0.0	0.1	0.0	0.0	0.6	23.9	24.0
Prop In Lane	0.33		0.33	0.62		0.33	1.00		0.07	1.00		0.00
Lane Grp Cap(c), veh/h	8	0	0	70	0	0	3	1546	1607	554	1499	1577
V/C Ratio(X)	0.37	0.00	0.00	0.34	0.00	0.00	0.35	0.29	0.29	0.03	0.58	0.58
Avail Cap(c_a), veh/h	65	0	0	222	0	0	67	1546	1607	554	1499	1577
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.96	0.96	0.96	0.90	0.90	0.90
Uniform Delay (d), s/veh	79.4	0.0	0.0	74.6	0.0	0.0	79.7	0.0	0.0	1.9	3.7	3.7
Incr Delay (d2), s/veh	25.8	0.0	0.0	2.9	0.0	0.0	57.4	0.5	0.4	0.1	1.5	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	1.1	0.0	0.0	0.1	0.2	0.2	0.1	12.1	12.7
LnGrp Delay(d),s/veh	105.2	0.0	0.0	77.5	0.0	0.0	137.0	0.5	0.4	2.0	5.2	5.1
LnGrp LOS	F			E			F	A	A	A	A	A
Approach Vol, veh/h	3			24			928			1810		
Approach Delay, s/veh	105.2			77.5			0.6			5.2		
Approach LOS	F			E			A			A		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	4.3	140.2		10.8		144.5		4.7				
Change Period (Y+Rc), s	4.0	* 4.7		* 4.2		* 4.7		4.0				
Max Green Setting (Gmax), s	6.0	* 1.1E2		* 21		* 1.1E2		6.0				
Max Q Clear Time (g_c+I1), s	2.1	26.0		4.2		2.0		2.3				
Green Ext Time (p_c), s	0.0	26.3		0.1		7.1		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay	4.4											
HCM 2010 LOS	A											
Notes												

2040 AM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase

46: N Hamilton Rd/N Hamilton & Gatsby's/Banks

01/23/2019

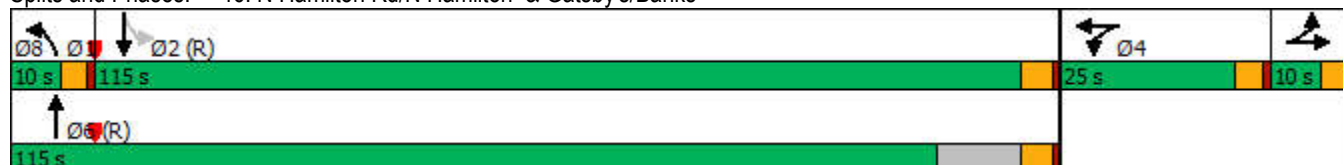


Phase Number	1	2	4	6	8
Movement	NBL	SBTL	WBTL	NBT	EBTL
Lead/Lag	Lead	Lag			
Lead-Lag Optimize	Yes	Yes			
Recall Mode	None	C-Max	None	C-Max	None
Maximum Split (s)	10	115	25	115	10
Maximum Split (%)	6.3%	71.9%	15.6%	71.9%	6.3%
Minimum Split (s)	10	56	25	56	10
Yellow Time (s)	3	3.7	3.2	3.7	3
All-Red Time (s)	1	1	1	1	1
Minimum Initial (s)	6	15	10	15	6
Vehicle Extension (s)	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0
Walk Time (s)		7	7		
Flash Dont Walk (s)		17	13.8		
Dual Entry	No	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes
Start Time (s)	130	140	95	130	120
End Time (s)	140	95	120	95	130
Yield/Force Off (s)	136	90.3	115.8	90.3	126
Yield/Force Off 170(s)	136	73.3	102	90.3	126
Local Start Time (s)	150	0	115	150	140
Local Yield (s)	156	110.3	135.8	110.3	146
Local Yield 170(s)	156	93.3	122	110.3	146

Intersection Summary

Cycle Length	160
Control Type	Actuated-Coordinated
Natural Cycle	105
Offset: 140 (88%), Referenced to phase 2:SBTL and 6:NBT, Start of Green	

Splits and Phases: 46: N Hamilton Rd/N Hamilton & Gatsby's/Banks



HCM 2010 Signalized Intersection Summary

49: S Hamilton Rd & NB IR-270 Exit Ramp

01/23/2019

								
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations								
Traffic Volume (veh/h)	198	496	886	0	0	992		
Future Volume (veh/h)	198	496	886	0	0	992		
Number	3	18	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	0	0	1863		
Adj Flow Rate, veh/h	215	539	963	0	0	1078		
Adj No. of Lanes	1	2	2	0	0	2		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	0	0	2		
Cap, veh/h	329	587	2542	0	0	2542		
Arrive On Green	0.19	0.19	1.00	0.00	0.00	1.00		
Sat Flow, veh/h	1774	3167	3725	0	0	3725		
Grp Volume(v), veh/h	215	539	963	0	0	1078		
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	0	0	1770		
Q Serve(g_s), s	12.4	18.4	0.0	0.0	0.0	0.0		
Cycle Q Clear(g_c), s	12.4	18.4	0.0	0.0	0.0	0.0		
Prop In Lane	1.00	1.00		0.00	0.00			
Lane Grp Cap(c), veh/h	329	587	2542	0	0	2542		
V/C Ratio(X)	0.65	0.92	0.38	0.00	0.00	0.42		
Avail Cap(c_a), veh/h	329	587	2542	0	0	2542		
HCM Platoon Ratio	1.00	1.00	2.00	1.00	1.00	2.00		
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	1.00		
Uniform Delay (d), s/veh	41.5	44.0	0.0	0.0	0.0	0.0		
Incr Delay (d2), s/veh	4.6	19.6	0.4	0.0	0.0	0.5		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	6.5	9.6	0.2	0.0	0.0	0.2		
LnGrp Delay(d),s/veh	46.1	63.6	0.4	0.0	0.0	0.5		
LnGrp LOS	D	E	A			A		
Approach Vol, veh/h	754		963			1078		
Approach Delay, s/veh	58.6		0.4			0.5		
Approach LOS	E		A			A		
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		85.0				85.0		25.0
Change Period (Y+Rc), s		6.0				6.0		4.6
Max Green Setting (Gmax), s		79.0				79.0		20.4
Max Q Clear Time (g_c+I1), s		2.0				2.0		20.4
Green Ext Time (p_c), s		7.7				9.2		0.0
Intersection Summary								
HCM 2010 Ctrl Delay			16.2					
HCM 2010 LOS			B					
Notes								

2040 AM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase

49: S Hamilton Rd & NB IR-270 Exit Ramp

01/23/2019

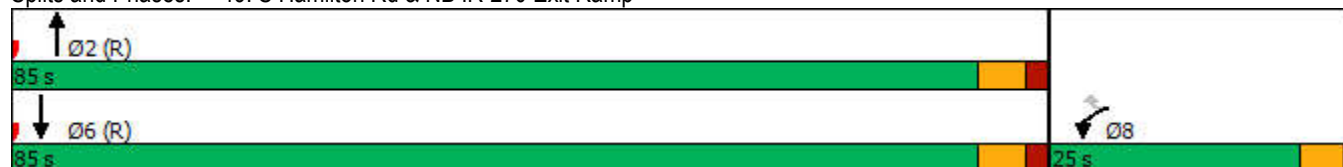


Phase Number	2	6	8
Movement	NBT	SBT	WBL
Lead/Lag			
Lead-Lag Optimize			
Recall Mode	C-Max	C-Max	None
Maximum Split (s)	85	85	25
Maximum Split (%)	77.3%	77.3%	22.7%
Minimum Split (s)	21	21	13
Yellow Time (s)	4	4	3.6
All-Red Time (s)	2	2	1
Minimum Initial (s)	15	15	8
Vehicle Extension (s)	3	3	3
Minimum Gap (s)	3	3	3
Time Before Reduce (s)	0	0	0
Time To Reduce (s)	0	0	0
Walk Time (s)			
Flash Dont Walk (s)			
Dual Entry	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes
Start Time (s)	0	0	85
End Time (s)	85	85	0
Yield/Force Off (s)	79	79	105.4
Yield/Force Off 170(s)	79	79	105.4
Local Start Time (s)	0	0	85
Local Yield (s)	79	79	105.4
Local Yield 170(s)	79	79	105.4

Intersection Summary

Cycle Length	110
Control Type	Actuated-Coordinated
Natural Cycle	40
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	

Splits and Phases: 49: S Hamilton Rd & NB IR-270 Exit Ramp



HCM 2010 Signalized Intersection Summary

57: Morrison Rd & Taylor Rd

01/23/2019

								
Movement	EBL	EBT	WBT	WBR	SWL	SWR		
Lane Configurations								
Traffic Volume (veh/h)	374	298	206	189	484	579		
Future Volume (veh/h)	374	298	206	189	484	579		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863		
Adj Flow Rate, veh/h	407	324	224	205	574	578		
Adj No. of Lanes	1	2	2	0	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	722	2492	961	839	362	323		
Arrive On Green	0.12	0.70	0.54	0.54	0.20	0.20		
Sat Flow, veh/h	1774	3632	1885	1565	1774	1583		
Grp Volume(v), veh/h	407	324	221	208	574	578		
Grp Sat Flow(s),veh/h/ln	1774	1770	1770	1587	1774	1583		
Q Serve(g_s), s	11.6	3.6	7.9	8.4	24.5	24.5		
Cycle Q Clear(g_c), s	11.6	3.6	7.9	8.4	24.5	24.5		
Prop In Lane	1.00			0.99	1.00	1.00		
Lane Grp Cap(c), veh/h	722	2492	949	851	362	323		
V/C Ratio(X)	0.56	0.13	0.23	0.24	1.58	1.79		
Avail Cap(c_a), veh/h	868	2492	949	851	362	323		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	9.0	5.8	14.7	14.8	47.8	47.8		
Incr Delay (d2), s/veh	0.7	0.1	0.6	0.7	276.0	366.8		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	5.7	1.7	4.0	3.8	39.7	43.6		
LnGrp Delay(d),s/veh	9.7	5.9	15.3	15.5	323.7	414.6		
LnGrp LOS	A	A	B	B	F	F		
Approach Vol, veh/h		731	429		1152			
Approach Delay, s/veh		8.0	15.4		369.3			
Approach LOS		A	B		F			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		90.0		30.0	20.1	69.9		
Change Period (Y+Rc), s		5.5		5.5	5.5	5.5		
Max Green Setting (Gmax), s		84.5		24.5	24.5	54.5		
Max Q Clear Time (g_c+I1), s		5.6		26.5	13.6	10.4		
Green Ext Time (p_c), s		2.5		0.0	1.0	2.8		
Intersection Summary								
HCM 2010 Ctrl Delay			189.4					
HCM 2010 LOS			F					
Notes								

2040 AM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase

57: Morrison Rd & Taylor Rd

01/23/2019

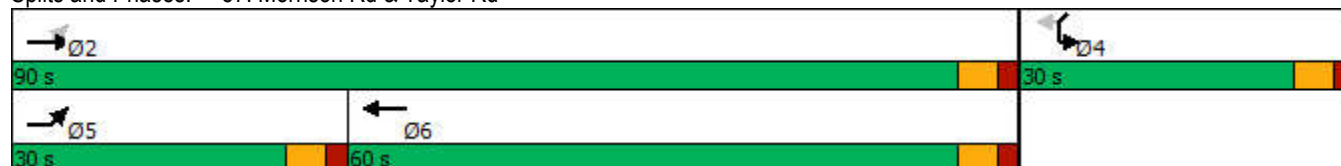


Phase Number	2	4	5	6
Movement	EBTL	SWL	EBL	WBT
Lead/Lag			Lead	Lag
Lead-Lag Optimize			Yes	Yes
Recall Mode	Max	None	None	Max
Maximum Split (s)	90	30	30	60
Maximum Split (%)	75.0%	25.0%	25.0%	50.0%
Minimum Split (s)	23.5	30	10.5	25.5
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	2	2	2	2
Minimum Initial (s)	10	5	5	10
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)		7		5
Flash Dont Walk (s)		11		15
Dual Entry	Yes	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	90	0	30
End Time (s)	90	0	30	90
Yield/Force Off (s)	84.5	114.5	24.5	84.5
Yield/Force Off 170(s)	84.5	103.5	24.5	69.5
Local Start Time (s)	90	60	90	0
Local Yield (s)	54.5	84.5	114.5	54.5
Local Yield 170(s)	54.5	73.5	114.5	39.5

Intersection Summary

Cycle Length	120
Control Type	Semi Act-Uncoord
Natural Cycle	90

Splits and Phases: 57: Morrison Rd & Taylor Rd



HCM 2010 Signalized Intersection Summary

60: S Hamilton Rd & SB IR-270 Exit Ramp

01/23/2019

								
Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations								
Traffic Volume (veh/h)	617	1239	0	668	752	0		
Future Volume (veh/h)	617	1239	0	668	752	0		
Number	7	14	5	2	6	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	0		
Adj Flow Rate, veh/h	671	1347	0	726	817	0		
Adj No. of Lanes	2	2	0	2	2	0		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	0	2	2	0		
Cap, veh/h	1420	1150	0	1737	1737	0		
Arrive On Green	0.41	0.41	0.00	0.49	0.65	0.00		
Sat Flow, veh/h	3442	2787	0	3725	3725	0		
Grp Volume(v), veh/h	671	1347	0	726	817	0		
Grp Sat Flow(s),veh/h/ln	1721	1393	0	1770	1770	0		
Q Serve(g_s), s	15.6	45.4	0.0	14.5	12.7	0.0		
Cycle Q Clear(g_c), s	15.6	45.4	0.0	14.5	12.7	0.0		
Prop In Lane	1.00	1.00	0.00			0.00		
Lane Grp Cap(c), veh/h	1420	1150	0	1737	1737	0		
V/C Ratio(X)	0.47	1.17	0.00	0.42	0.47	0.00		
Avail Cap(c_a), veh/h	1420	1150	0	1737	1737	0		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.33	1.00		
Upstream Filter(I)	1.00	1.00	0.00	0.96	1.00	0.00		
Uniform Delay (d), s/veh	23.6	32.3	0.0	17.9	11.9	0.0		
Incr Delay (d2), s/veh	0.2	86.6	0.0	0.7	0.9	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	7.5	31.2	0.0	7.2	6.4	0.0		
LnGrp Delay(d),s/veh	23.8	118.9	0.0	18.6	12.8	0.0		
LnGrp LOS	C	F		B	B			
Approach Vol, veh/h	2018			726	817			
Approach Delay, s/veh	87.3			18.6	12.8			
Approach LOS	F			B	B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		60.0		50.0		60.0		
Change Period (Y+Rc), s		6.0		4.6		6.0		
Max Green Setting (Gmax), s		54.0		45.4		54.0		
Max Q Clear Time (g_c+I1), s		16.5		47.4		14.7		
Green Ext Time (p_c), s		5.1		0.0		6.0		
Intersection Summary								
HCM 2010 Ctrl Delay			56.2					
HCM 2010 LOS			E					

2040 AM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase
60: S Hamilton Rd & SB IR-270 Exit Ramp

01/23/2019

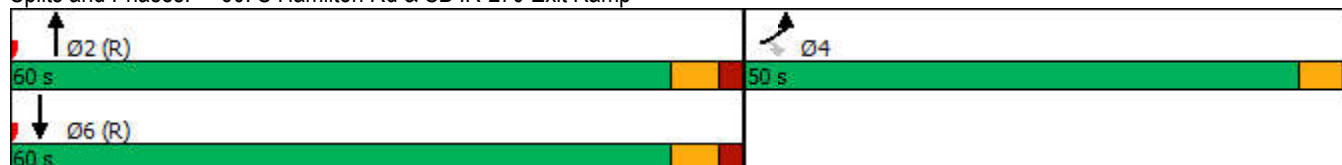


Phase Number	2	4	6
Movement	NBT	EBL	SBT
Lead/Lag			
Lead-Lag Optimize			
Recall Mode	C-Max	None	C-Max
Maximum Split (s)	60	50	60
Maximum Split (%)	54.5%	45.5%	54.5%
Minimum Split (s)	21	14.6	21
Yellow Time (s)	4	3.6	4
All-Red Time (s)	2	1	2
Minimum Initial (s)	15	10	15
Vehicle Extension (s)	3	3	3
Minimum Gap (s)	3	3	3
Time Before Reduce (s)	0	0	0
Time To Reduce (s)	0	0	0
Walk Time (s)			
Flash Dont Walk (s)			
Dual Entry	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes
Start Time (s)	33	93	33
End Time (s)	93	33	93
Yield/Force Off (s)	87	28.4	87
Yield/Force Off 170(s)	87	28.4	87
Local Start Time (s)	0	60	0
Local Yield (s)	54	105.4	54
Local Yield 170(s)	54	105.4	54

Intersection Summary

Cycle Length	110
Control Type	Actuated-Coordinated
Natural Cycle	60
Offset: 33 (30%), Referenced to phase 2:NBT and 6:SBT, Start of Green	

Splits and Phases: 60: S Hamilton Rd & SB IR-270 Exit Ramp



HCM 2010 Signalized Intersection Summary

63: Mill St/E Johnstown Rd & Cherry Bottom Rd

01/23/2019



Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	179	362	752	23	26	259		
Future Volume (veh/h)	179	362	752	23	26	259		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	195	393	817	25	28	282		
Adj No. of Lanes	1	1	1	1	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	400	1337	1108	1247	341	428		
Arrive On Green	0.08	0.72	0.59	0.59	0.19	0.19		
Sat Flow, veh/h	1774	1863	1863	1583	1774	1583		
Grp Volume(v), veh/h	195	393	817	25	28	282		
Grp Sat Flow(s),veh/h/ln	1774	1863	1863	1583	1774	1583		
Q Serve(g_s), s	3.4	6.7	28.2	0.3	1.2	14.1		
Cycle Q Clear(g_c), s	3.4	6.7	28.2	0.3	1.2	14.1		
Prop In Lane	1.00			1.00	1.00	1.00		
Lane Grp Cap(c), veh/h	400	1337	1108	1247	341	428		
V/C Ratio(X)	0.49	0.29	0.74	0.02	0.08	0.66		
Avail Cap(c_a), veh/h	541	1337	1108	1247	816	852		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	11.9	4.5	13.0	2.0	29.5	28.9		
Incr Delay (d2), s/veh	0.9	0.6	4.4	0.0	0.1	1.7		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	2.4	3.6	15.6	0.3	0.6	12.3		
LnGrp Delay(d),s/veh	12.9	5.1	17.4	2.1	29.6	30.6		
LnGrp LOS	B	A	B	A	C	C		
Approach Vol, veh/h		588	842		310			
Approach Delay, s/veh		7.6	17.0		30.5			
Approach LOS		A	B		C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		67.9		21.1	10.9	57.0		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		53.0		41.0	14.0	53.0		
Max Q Clear Time (g_c+I1), s		8.7		16.1	5.4	30.2		
Green Ext Time (p_c), s		2.6		1.1	0.3	6.3		
Intersection Summary								
HCM 2010 Ctrl Delay			16.2					
HCM 2010 LOS			B					

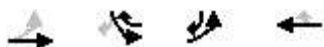
2040 AM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase

63: Mill St/E Johnstown Rd & Cherry Bottom Rd

01/23/2019

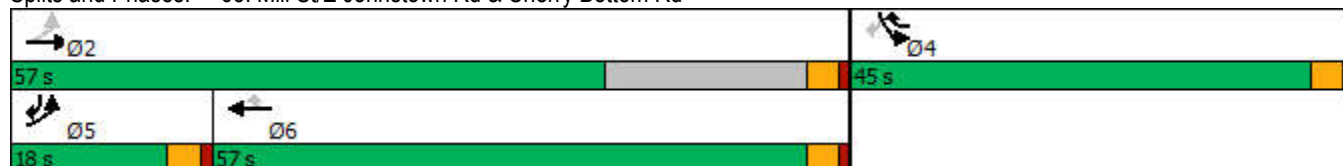


Phase Number	2	4	5	6
Movement	EBTL	SBL	EBL	WBT
Lead/Lag			Lead	Lag
Lead-Lag Optimize			Yes	Yes
Recall Mode	Max	None	None	Max
Maximum Split (s)	57	45	18	57
Maximum Split (%)	47.5%	37.5%	15.0%	47.5%
Minimum Split (s)	23	26	11	23
Yellow Time (s)	3	3	3	3
All-Red Time (s)	1	1	1	1
Minimum Initial (s)	19	5	7	19
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)		7		
Flash Dont Walk (s)		15		
Dual Entry	Yes	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	75	0	18
End Time (s)	75	0	18	75
Yield/Force Off (s)	71	116	14	71
Yield/Force Off 170(s)	71	101	14	71
Local Start Time (s)	102	57	102	0
Local Yield (s)	53	98	116	53
Local Yield 170(s)	53	83	116	53

Intersection Summary

Cycle Length	120
Control Type	Semi Act-Uncoord
Natural Cycle	80

Splits and Phases: 63: Mill St/E Johnstown Rd & Cherry Bottom Rd



HCM 2010 Signalized Intersection Summary

71: N Stygler Rd & Agler Rd

01/23/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	24	492	46	27	17	432	251	67	19	651	79
Future Volume (veh/h)	25	24	492	46	27	17	432	251	67	19	651	79
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	27	0	552	50	29	18	550	162	73	21	708	86
Adj No. of Lanes	1	0	2	1	1	0	2	1	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	236	0	1108	185	177	110	659	226	102	970	1738	211
Arrive On Green	0.16	0.00	0.16	0.16	0.16	0.16	0.06	0.06	0.06	0.55	0.55	0.55
Sat Flow, veh/h	1353	0	3167	852	1077	668	3548	1217	549	1774	3178	386
Grp Volume(v), veh/h	27	0	552	50	0	47	550	0	235	21	394	400
Grp Sat Flow(s),veh/h/ln	1353	0	1583	852	0	1745	1774	0	1766	1774	1770	1795
Q Serve(g_s), s	2.8	0.0	22.0	8.3	0.0	3.7	24.5	0.0	20.9	0.9	20.8	20.8
Cycle Q Clear(g_c), s	6.5	0.0	22.0	8.3	0.0	3.7	24.5	0.0	20.9	0.9	20.8	20.8
Prop In Lane	1.00		1.00	1.00		0.38	1.00		0.31	1.00		0.21
Lane Grp Cap(c), veh/h	236	0	1108	185	0	287	659	0	328	970	968	981
V/C Ratio(X)	0.11	0.00	0.50	0.27	0.00	0.16	0.83	0.00	0.72	0.02	0.41	0.41
Avail Cap(c_a), veh/h	373	0	1429	271	0	463	898	0	447	970	968	981
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.79	0.00	0.79	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.2	0.0	40.9	59.3	0.0	57.4	72.7	0.0	71.0	16.6	21.1	21.1
Incr Delay (d2), s/veh	0.2	0.0	0.3	0.8	0.0	0.3	4.0	0.0	2.7	0.0	1.3	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	12.2	2.0	0.0	1.8	12.4	0.0	10.5	0.4	10.5	10.7
LnGrp Delay(d),s/veh	60.4	0.0	41.3	60.1	0.0	57.7	76.7	0.0	73.7	16.7	22.4	22.4
LnGrp LOS	E		D	E		E	E		E	B	C	C
Approach Vol, veh/h	579					97		785		815		
Approach Delay, s/veh	42.2					58.9		75.8		22.3		
Approach LOS	D					E		E		C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+Rc), s	93.0		31.8		35.2		31.8					
Change Period (Y+Rc), s	5.5		5.5		5.5		5.5					
Max Green Setting (Gmax), s	60.5		42.5		40.5		42.5					
Max Q Clear Time (g_c+I1), s	22.8		24.0		26.5		10.3					
Green Ext Time (p_c), s	6.3		2.3		3.2		0.5					
Intersection Summary												
HCM 2010 Ctrl Delay	47.4											
HCM 2010 LOS	D											
Notes												

2040 AM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase

71: N Stygler Rd & Agler Rd

01/23/2019

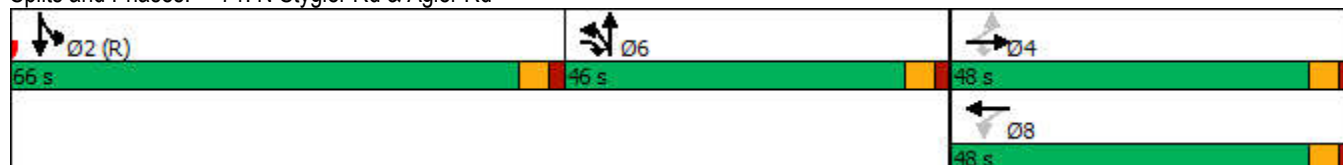


Phase Number	2	4	6	8
Movement	SBTL	EBTL	NBTL	WBTl
Lead/Lag				
Lead-Lag Optimize				
Recall Mode	C-Max	None	None	None
Maximum Split (s)	66	48	46	48
Maximum Split (%)	41.3%	30.0%	28.8%	30.0%
Minimum Split (s)	31.5	38.5	34.5	38.5
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	2	2	2	2
Minimum Initial (s)	8	5	5	5
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)	7	7	7	7
Flash Dont Walk (s)	19	26	22	26
Dual Entry	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	133	85	39	85
End Time (s)	39	133	85	133
Yield/Force Off (s)	33.5	127.5	79.5	127.5
Yield/Force Off 170(s)	14.5	101.5	57.5	101.5
Local Start Time (s)	0	112	66	112
Local Yield (s)	60.5	154.5	106.5	154.5
Local Yield 170(s)	41.5	128.5	84.5	128.5

Intersection Summary

Cycle Length	160
Control Type	Actuated-Coordinated
Natural Cycle	105
Offset: 133 (83%), Referenced to phase 2:SBTL, Start of Green	

Splits and Phases: 71: N Stygler Rd & Agler Rd



HCM 2010 Signalized Intersection Summary
 54: Taylor Station Rd & Claycraft Rd/Research Rd

05/20/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	44	39	66	29	4	12	328	83	22	482	119
Future Volume (veh/h)	62	44	39	66	29	4	12	328	83	22	482	119
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1682	1900	1900	1353	1900	1900	1740	1900	1900	1771	1900
Adj Flow Rate, veh/h	87	62	55	77	34	5	13	369	93	24	530	131
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.71	0.71	0.71	0.86	0.86	0.86	0.89	0.89	0.89	0.91	0.91	0.91
Percent Heavy Veh, %	11	11	11	38	38	38	6	6	6	5	5	5
Cap, veh/h	101	72	64	98	43	6	54	727	179	61	737	178
Arrive On Green	0.15	0.15	0.15	0.11	0.11	0.11	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	671	478	424	863	381	56	17	1318	325	28	1335	322
Grp Volume(v), veh/h	204	0	0	116	0	0	475	0	0	685	0	0
Grp Sat Flow(s),veh/h/ln	1573	0	0	1300	0	0	1659	0	0	1686	0	0
Q Serve(g_s), s	10.3	0.0	0.0	7.1	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0
Cycle Q Clear(g_c), s	10.3	0.0	0.0	7.1	0.0	0.0	14.4	0.0	0.0	24.4	0.0	0.0
Prop In Lane	0.43		0.27	0.66		0.04	0.03		0.20	0.04		0.19
Lane Grp Cap(c), veh/h	237	0	0	148	0	0	961	0	0	976	0	0
V/C Ratio(X)	0.86	0.00	0.00	0.78	0.00	0.00	0.49	0.00	0.00	0.70	0.00	0.00
Avail Cap(c_a), veh/h	251	0	0	319	0	0	961	0	0	976	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	33.8	0.0	0.0	35.2	0.0	0.0	11.4	0.0	0.0	13.6	0.0	0.0
Incr Delay (d2), s/veh	24.1	0.0	0.0	8.8	0.0	0.0	1.8	0.0	0.0	4.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	0.0	0.0	2.9	0.0	0.0	7.1	0.0	0.0	12.6	0.0	0.0
LnGrp Delay(d),s/veh	58.0	0.0	0.0	43.9	0.0	0.0	13.2	0.0	0.0	17.9	0.0	0.0
LnGrp LOS	E			D			B			B		
Approach Vol, veh/h		204			116			475			685	
Approach Delay, s/veh		58.0			43.9			13.2			17.9	
Approach LOS		E			D			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		50.0		17.3		50.0		14.3				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		45.0		13.0		45.0		20.0				
Max Q Clear Time (g_c+I1), s		16.4		12.3		26.4		9.1				
Green Ext Time (p_c), s		3.3		0.1		4.7		0.4				
Intersection Summary												
HCM 2010 Ctrl Delay				23.9								
HCM 2010 LOS				C								

2040 AM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase

54: Taylor Station Rd & Claycraft Rd/Research Rd

05/20/2019



Phase Number	2	4	6	8
Movement	NBTL	EBTL	SBTL	WBTL
Lead/Lag				
Lead-Lag Optimize				
Recall Mode	Max	None	Max	None
Maximum Split (s)	50	18	50	25
Maximum Split (%)	53.8%	19.4%	53.8%	26.9%
Minimum Split (s)	15	15	15	15
Yellow Time (s)	4	4	4	4
All-Red Time (s)	1	1	1	1
Minimum Initial (s)	10	10	10	10
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)				
Flash Dont Walk (s)				
Dual Entry	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	50	0	68
End Time (s)	50	68	50	0
Yield/Force Off (s)	45	63	45	88
Yield/Force Off 170(s)	45	63	45	88
Local Start Time (s)	0	50	0	68
Local Yield (s)	45	63	45	88
Local Yield 170(s)	45	63	45	88
Intersection Summary				
Cycle Length	93			
Control Type	Semi Act-Uncoord			
Natural Cycle	60			

Splits and Phases: 54: Taylor Station Rd & Claycraft Rd/Research Rd

 Ø2	 Ø4	 Ø8
50 s	18 s	25 s
 Ø6		
50 s		

LANE SUMMARY

Site: 1 [Design Year AM]

Clark State Road & Hamilton Road
Roundabout

Lane Use and Performance													
	Demand Total veh/h	Flows HV %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue Veh	Queue Dist ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
South: Hamilton Road													
Lane 1	493	3.0	1384	0.356	100	5.2	LOS A	2.3	59.5	Full	1600	0.0	0.0
Lane 2 ^d	543	3.0	1523	0.356	100	4.8	LOS A	2.3	60.1	Full	1600	0.0	0.0
Approach	1036	3.0		0.356		5.0	LOS A	2.3	60.1				
East: Clark State Road													
Lane 1	315	2.9	847	0.372	100	12.1	LOS B	1.5	39.6	Full	1600	0.0	0.0
Lane 2 ^d	357	3.0	957	0.372	100	11.2	LOS B	1.6	40.3	Full	1600	0.0	0.0
Approach	672	3.0		0.372		11.6	LOS B	1.6	40.3				
North: Hamilton Road													
Lane 1	551	3.0	867	0.635	100	8.7	LOS A	4.1	105.0	Full	1600	0.0	0.0
Lane 2 ^d	607	3.0	955	0.635	100	8.0	LOS A	4.2	107.4	Full	1600	0.0	0.0
Approach	1158	3.0		0.635		8.3	LOS A	4.2	107.4				
Intersection	2865	3.0		0.635		7.9	LOS A	4.2	107.4				

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Signalised Intersections.

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

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

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 2010).

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

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

^d Dominant lane on roundabout approach

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Project: P:\TRA\Gahanna\Thoroughfare plan\Analysis\Sidra\171205 Clark State & Hamilton.sip7

LANE LEVEL OF SERVICE

Lane Level of Service

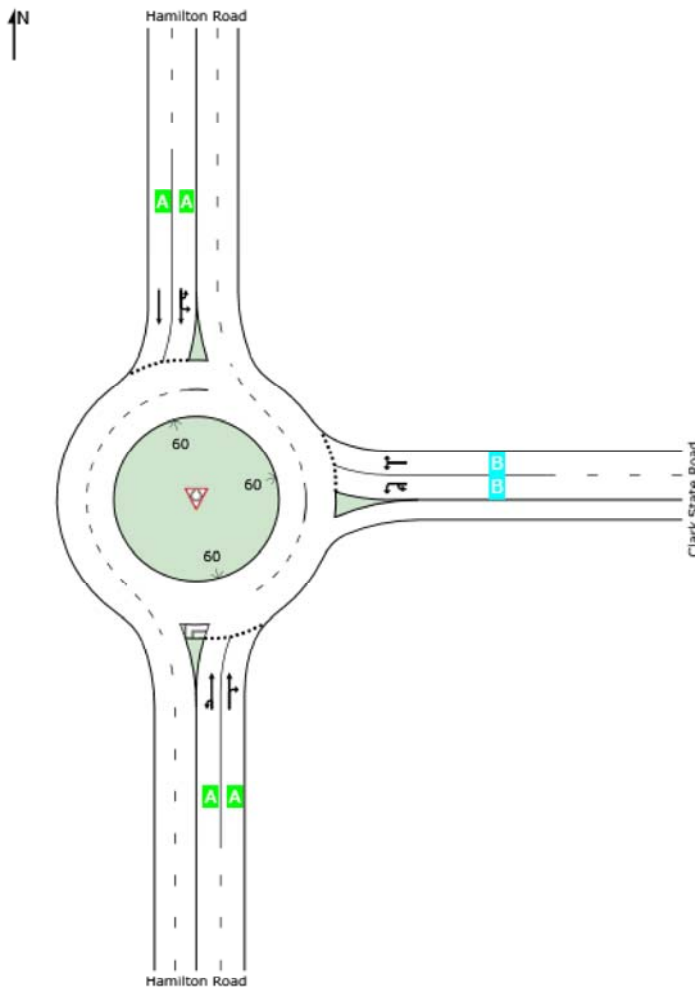


Site: 1 [Design Year AM]

Clark State Road & Hamilton Road
Roundabout

All Movement Classes

	South	East	North	Intersection
LOS	A	B	A	A



Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.

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

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

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 2010).

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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Project: P:\TRA\Gahanna\Thoroughfare plan\Analysis\Sidra\171205 Clark State & Hamilton.sip7

HCM 2010 Signalized Intersection Summary

2: N Stygler Rd & McCutcheon Rd/Church

01/23/2019

															
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR			
Lane Configurations															
Traffic Volume (veh/h)	405	8	399	6	4	6	233	476	11	13	438	103			
Future Volume (veh/h)	405	8	399	6	4	6	233	476	11	13	438	103			
Number	7	4	14	3	8	18	5	2	12	1	6	16			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900			
Adj Flow Rate, veh/h	440	9	434	7	4	7	253	517	12	14	476	112			
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2			
Cap, veh/h	507	10	488	118	68	119	405	965	22	414	671	158			
Arrive On Green	0.16	0.31	0.31	0.11	0.11	0.11	0.09	0.53	0.53	0.02	0.46	0.46			
Sat Flow, veh/h	1774	32	1556	943	609	1066	1774	1813	42	1774	1459	343			
Grp Volume(v), veh/h	440	0	443	7	0	11	253	0	529	14	0	588			
Grp Sat Flow(s),veh/h/ln	1774	0	1588	943	0	1675	1774	0	1855	1774	0	1802			
Q Serve(g_s), s	16.0	0.0	26.3	0.7	0.0	0.6	7.0	0.0	18.5	0.4	0.0	25.9			
Cycle Q Clear(g_c), s	16.0	0.0	26.3	7.0	0.0	0.6	7.0	0.0	18.5	0.4	0.0	25.9			
Prop In Lane	1.00		0.98	1.00		0.64	1.00		0.02	1.00		0.19			
Lane Grp Cap(c), veh/h	507	0	498	118	0	187	405	0	988	414	0	829			
V/C Ratio(X)	0.87	0.00	0.89	0.06	0.00	0.06	0.62	0.00	0.54	0.03	0.00	0.71			
Avail Cap(c_a), veh/h	507	0	730	256	0	432	523	0	988	571	0	829			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	34.0	0.0	32.3	45.1	0.0	39.3	16.1	0.0	15.1	14.0	0.0	21.4			
Incr Delay (d2), s/veh	14.7	0.0	9.4	0.2	0.0	0.1	1.6	0.0	2.1	0.0	0.0	5.1			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	6.3	0.0	12.7	0.2	0.0	0.3	3.6	0.0	10.0	0.2	0.0	13.9			
LnGrp Delay(d),s/veh	48.7	0.0	41.7	45.4	0.0	39.4	17.7	0.0	17.2	14.0	0.0	26.5			
LnGrp LOS	D		D	D		D	B		B	B		C			
Approach Vol, veh/h	883			18			782			602					
Approach Delay, s/veh	45.2			41.7			17.4			26.2					
Approach LOS	D			D			B			C					
Timer	1	2	3	4	5	6	7	8							
Assigned Phs	1	2			4	5	6	7	8						
Phs Duration (G+Y+Rc), s	6.2	57.2			35.5	13.4	50.0	20.0	15.5						
Change Period (Y+Rc), s	4.0	4.5			4.5	4.0	4.5	4.0	4.5						
Max Green Setting (Gmax), s	11.0	50.5			45.5	16.0	45.5	16.0	25.5						
Max Q Clear Time (g_c+l1), s	2.4	20.5			28.3	9.0	27.9	18.0	9.0						
Green Ext Time (p_c), s	0.0	3.6			2.8	0.4	3.6	0.0	0.0						
Intersection Summary															
HCM 2010 Ctrl Delay				30.6											
HCM 2010 LOS				C											

2040 PM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase

2: N Stygler Rd & McCutcheon Rd/Church

01/23/2019

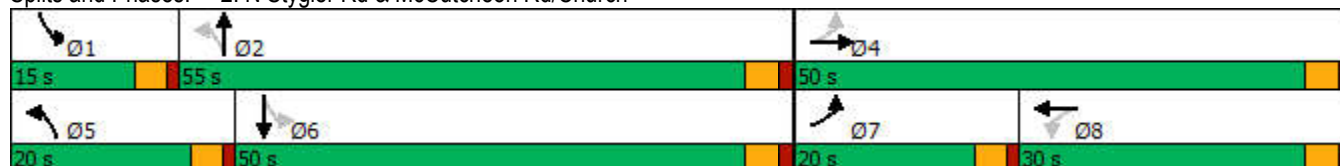


Phase Number	1	2	4	5	6	7	8
Movement	SBL	NBTL	EBTL	NBL	SBTL	EBL	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	Max	None	None	Max	None	None
Maximum Split (s)	15	55	50	20	50	20	30
Maximum Split (%)	12.5%	45.8%	41.7%	16.7%	41.7%	16.7%	25.0%
Minimum Split (s)	11	24.5	26.5	11.5	26.5	11.5	25
Yellow Time (s)	3	3	3	3	3	3	3
All-Red Time (s)	1	1.5	1.5	1	1.5	1	1.5
Minimum Initial (s)	7	20	10	7	20	7	10
Vehicle Extension (s)	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0
Walk Time (s)			7		7		7
Flash Dont Walk (s)			15		15		13
Dual Entry	No	Yes	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	15	70	0	20	70	90
End Time (s)	15	70	0	20	70	90	0
Yield/Force Off (s)	11	65.5	115.5	16	65.5	86	115.5
Yield/Force Off 170(s)	11	65.5	100.5	16	50.5	86	102.5
Local Start Time (s)	100	115	50	100	0	50	70
Local Yield (s)	111	45.5	95.5	116	45.5	66	95.5
Local Yield 170(s)	111	45.5	80.5	116	30.5	66	82.5

Intersection Summary

Cycle Length 120
Control Type Semi Act-Uncoord
Natural Cycle 90

Splits and Phases: 2: N Stygler Rd & McCutcheon Rd/Church



HCM 2010 Signalized Intersection Summary

5: S Stygler Rd/N Stygler Rd & US 62

01/23/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	668	1375	119	27	727	499	324	174	117	700	136	692
Future Volume (veh/h)	668	1375	119	27	727	499	324	174	117	700	136	692
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	726	1495	129	29	790	542	352	189	127	761	148	752
Adj No. of Lanes	2	2	0	1	2	1	1	1	0	2	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	731	1431	123	40	863	752	449	169	114	796	398	1188
Arrive On Green	0.21	0.43	0.43	0.01	0.08	0.08	0.18	0.16	0.16	0.08	0.07	0.07
Sat Flow, veh/h	3442	3300	283	1774	3539	1583	1774	1040	699	3442	1863	2787
Grp Volume(v), veh/h	726	797	827	29	790	542	352	0	316	761	148	752
Grp Sat Flow(s),veh/h/ln	1721	1770	1813	1774	1770	1583	1774	0	1739	1721	1863	1393
Q Serve(g_s), s	33.7	69.4	69.4	2.6	35.5	39.0	26.0	0.0	26.0	35.3	12.1	32.1
Cycle Q Clear(g_c), s	33.7	69.4	69.4	2.6	35.5	39.0	26.0	0.0	26.0	35.3	12.1	32.1
Prop In Lane	1.00		0.16	1.00		1.00	1.00		0.40	1.00		1.00
Lane Grp Cap(c), veh/h	731	767	786	40	863	752	449	0	283	796	398	1188
V/C Ratio(X)	0.99	1.04	1.05	0.72	0.92	0.72	0.78	0.00	1.12	0.96	0.37	0.63
Avail Cap(c_a), veh/h	731	767	786	55	863	752	540	0	283	796	398	1188
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	0.88	0.88	0.88	1.00	0.00	1.00	0.72	0.72	0.72
Uniform Delay (d), s/veh	62.9	45.3	45.3	78.9	71.9	39.4	43.3	0.0	67.0	73.1	64.1	42.0
Incr Delay (d2), s/veh	31.4	43.1	46.5	22.0	14.5	5.2	6.2	0.0	89.1	17.6	1.9	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.2	43.1	44.9	1.5	19.1	18.4	13.5	0.0	19.5	18.8	6.5	12.7
LnGrp Delay(d),s/veh	94.2	88.4	91.9	100.9	86.4	44.6	49.4	0.0	156.1	90.7	66.0	43.9
LnGrp LOS	F	F	F	F	F	D	D		F	F	E	D
Approach Vol, veh/h	2350			1361				668			1661	
Approach Delay, s/veh	91.4			70.1				99.9			67.3	
Approach LOS	F			E				F			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.6	75.4	34.8	40.2	40.0	45.0	43.0	32.0				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	5.0	68.0	37.0	26.0	34.0	39.0	37.0	26.0				
Max Q Clear Time (g_c+I1), s	4.6	71.4	28.0	34.1	35.7	41.0	37.3	28.0				
Green Ext Time (p_c), s	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay	80.9											
HCM 2010 LOS	F											

2040 PM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase
5: S Stygler Rd/N Stygler Rd & US 62

01/23/2019

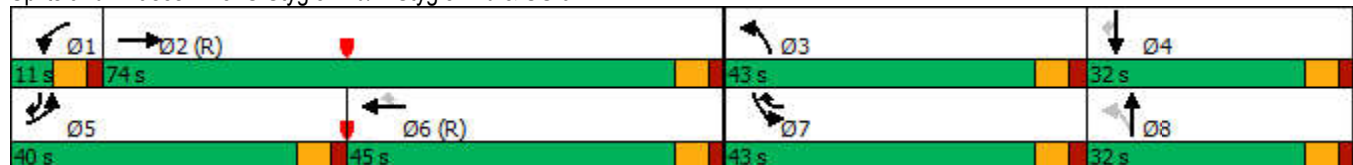


Phase Number	1	2	3	4	5	6	7	8
Movement	WBL	EBT	NBL	SBT	EBL	WBT	SBL	NBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	C-Max	None	Max
Maximum Split (s)	11	74	43	32	40	45	43	32
Maximum Split (%)	6.9%	46.3%	26.9%	20.0%	25.0%	28.1%	26.9%	20.0%
Minimum Split (s)	11	22.5	11	22.5	16	22.5	11	32
Yellow Time (s)	4	4	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2	2	2
Minimum Initial (s)	5	10	5	7	10	10	5	7
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)								5
Flash Dont Walk (s)								20
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	120	131	45	88	120	0	45	88
End Time (s)	131	45	88	120	0	45	88	120
Yield/Force Off (s)	125	39	82	114	154	39	82	114
Yield/Force Off 170(s)	125	39	82	114	154	39	82	94
Local Start Time (s)	120	131	45	88	120	0	45	88
Local Yield (s)	125	39	82	114	154	39	82	114
Local Yield 170(s)	125	39	82	114	154	39	82	94

Intersection Summary

Cycle Length 160
Control Type Actuated-Coordinated
Natural Cycle 145
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Splits and Phases: 5: S Stygler Rd/N Stygler Rd & US 62



HCM 2010 Signalized Intersection Summary

8: S Hamilton Rd/N Hamilton Rd & Granville St/Havens Corners Rd

01/23/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	406	819	353	182	385	178	339	1152	346	209	900	231
Future Volume (veh/h)	406	819	353	182	385	178	339	1152	346	209	900	231
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	441	890	384	198	418	193	368	1252	376	227	978	251
Adj No. of Lanes	1	2	1	1	2	0	2	2	1	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	459	1165	680	223	384	175	344	1343	706	286	1283	930
Arrive On Green	0.22	0.33	0.33	0.07	0.16	0.16	0.20	0.76	0.76	0.17	0.73	0.73
Sat Flow, veh/h	1774	3539	1583	1774	2363	1079	3442	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	441	890	384	198	312	299	368	1252	376	227	978	251
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1672	1721	1770	1583	1721	1770	1583
Q Serve(g_s), s	25.4	27.0	21.9	8.0	19.5	19.5	12.0	35.0	11.7	7.6	20.4	5.0
Cycle Q Clear(g_c), s	25.4	27.0	21.9	8.0	19.5	19.5	12.0	35.0	11.7	7.6	20.4	5.0
Prop In Lane	1.00		1.00	1.00		0.65	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	459	1165	680	223	288	272	344	1343	706	286	1283	930
V/C Ratio(X)	0.96	0.76	0.57	0.89	1.08	1.10	1.07	0.93	0.53	0.79	0.76	0.27
Avail Cap(c_a), veh/h	459	1165	680	223	288	272	344	1343	706	459	1283	930
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	0.44	0.44	0.44	1.00	1.00	1.00	0.09	0.09	0.09	0.83	0.83	0.83
Uniform Delay (d), s/veh	34.4	36.1	25.8	44.6	50.3	50.3	48.0	13.2	8.4	49.0	13.3	4.8
Incr Delay (d2), s/veh	19.1	1.4	0.5	32.0	77.6	84.2	37.2	1.6	0.3	4.1	3.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.9	13.4	9.6	4.6	15.7	15.3	7.4	16.6	4.8	3.8	10.2	2.2
LnGrp Delay(d),s/veh	53.5	37.4	26.3	76.6	127.8	134.4	85.2	14.8	8.7	53.2	16.9	5.4
LnGrp LOS	D	D	C	E	F	F	F	B	A	D	B	A
Approach Vol, veh/h	1715				809				1996			
Approach Delay, s/veh	39.1				117.7				26.6			
Approach LOS	D				F				C			
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.0	50.0	12.0	44.0	16.0	48.0	32.0	24.0				
Change Period (Y+Rc), s	4.0	4.5	4.0	4.5	4.0	4.5	5.0	4.5				
Max Green Setting (Gmax), s	16.0	39.5	8.0	37.5	12.0	43.5	27.0	19.5				
Max Q Clear Time (g_c+I1), s	9.6	37.0	10.0	29.0	14.0	22.4	27.4	21.5				
Green Ext Time (p_c), s	0.4	2.0	0.0	4.8	0.0	8.0	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay	41.1											
HCM 2010 LOS	D											

Timing Report, Sorted By Phase

8: S Hamilton Rd/N Hamilton Rd & Granville St/Havens Corners Rd

01/23/2019



Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBT	WBL	EBTL	NBL	SBT	EBL	WBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	20	44	12	42	16	48	32	24
Maximum Split (%)	16.7%	36.7%	10.0%	35.0%	13.3%	40.0%	26.7%	20.0%
Minimum Split (s)	11.5	29.5	11.5	29.5	12.5	39.5	15	24
Yellow Time (s)	3	3.5	3	3.5	3	3.5	3	3.5
All-Red Time (s)	1	1	1	1	1	1	2	1
Minimum Initial (s)	7	25	7	15	8	35	10	15
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Dont Walk (s)		18		18		18		12
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	100	0	44	56	100	116	44	76
End Time (s)	0	44	56	100	116	44	76	100
Yield/Force Off (s)	116	39.5	52	95.5	112	39.5	71	95.5
Yield/Force Off 170(s)	116	21.5	52	77.5	112	21.5	71	83.5
Local Start Time (s)	100	0	44	56	100	116	44	76
Local Yield (s)	116	39.5	52	95.5	112	39.5	71	95.5
Local Yield 170(s)	116	21.5	52	77.5	112	21.5	71	83.5

Intersection Summary

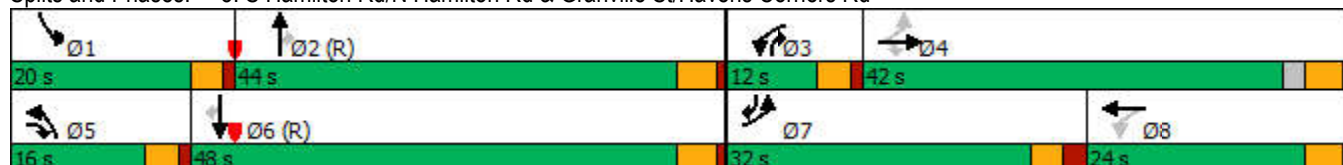
Cycle Length 120

Control Type Actuated-Coordinated

Natural Cycle 105

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Splits and Phases: 8: S Hamilton Rd/N Hamilton Rd & Granville St/Havens Corners Rd



HCM 2010 Signalized Intersection Summary

11: E Johnstown Rd & N Hamilton

01/23/2019

												
Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	26	878	290	23	635	314	406	459	24	258	266	28
Future Volume (veh/h)	26	878	290	23	635	314	406	459	24	258	266	28
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	28	954	315	25	690	341	441	499	0	280	289	0
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	268	1470	878	203	1461	885	452	498	423	305	485	413
Arrive On Green	0.03	0.42	0.42	0.03	0.41	0.41	0.15	0.27	0.00	0.14	0.26	0.00
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	1863	1583	1774	1863	1583
Grp Volume(v), veh/h	28	954	315	25	690	341	441	499	0	280	289	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1863	1583	1774	1863	1583
Q Serve(g_s), s	1.1	26.7	13.7	1.0	17.6	15.0	18.0	33.0	0.0	15.1	16.8	0.0
Cycle Q Clear(g_c), s	1.1	26.7	13.7	1.0	17.6	15.0	18.0	33.0	0.0	15.1	16.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	268	1470	878	203	1461	885	452	498	423	305	485	413
V/C Ratio(X)	0.10	0.65	0.36	0.12	0.47	0.39	0.97	1.00	0.00	0.92	0.60	0.00
Avail Cap(c_a), veh/h	493	1470	878	432	1461	885	452	498	423	317	498	423
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	20.4	28.9	15.3	22.2	26.4	15.3	35.2	45.3	0.0	35.3	40.0	0.0
Incr Delay (d2), s/veh	0.2	2.2	1.1	0.3	1.1	1.3	35.7	41.0	0.0	29.8	1.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	13.4	6.2	0.5	8.8	6.8	10.7	22.5	0.0	11.9	8.9	0.0
LnGrp Delay(d),s/veh	20.6	31.1	16.4	22.5	27.5	16.6	70.9	86.2	0.0	65.0	41.8	0.0
LnGrp LOS	C	C	B	C	C	B	E	F		E	D	
Approach Vol, veh/h		1297			1056			940			569	
Approach Delay, s/veh		27.3			23.9			79.1			53.2	
Approach LOS		C			C			E			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.5	55.8	21.7	37.5	8.8	55.5	22.5	36.7				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	20.0	51.0	18.0	33.0	20.0	51.0	18.0	33.0				
Max Q Clear Time (g_c+I1), s	3.0	28.7	17.1	35.0	3.1	19.6	20.0	18.8				
Green Ext Time (p_c), s	0.0	8.2	0.1	0.0	0.0	6.6	0.0	1.3				
Intersection Summary												
HCM 2010 Ctrl Delay				42.8								
HCM 2010 LOS				D								

2040 PM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase
11: E Johnstown Rd & N Hamilton

01/23/2019



Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	SWL	NETL	NBL	SBTL	NEL	SWTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	None	None	None	Max	None	None
Maximum Split (s)	24.5	55.5	22.5	37.5	24.5	55.5	22.5	37.5
Maximum Split (%)	17.5%	39.6%	16.1%	26.8%	17.5%	39.6%	16.1%	26.8%
Minimum Split (s)	11.5	36.5	11.5	37.5	11.5	36.5	11.5	37.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1	1	1
Minimum Initial (s)	7	25	7	15	7	25	7	15
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Dont Walk (s)		25		25		25		25
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	24.5	80	102.5	0	24.5	80	102.5
End Time (s)	24.5	80	102.5	0	24.5	80	102.5	0
Yield/Force Off (s)	20	75.5	98	135.5	20	75.5	98	135.5
Yield/Force Off 170(s)	20	50.5	98	110.5	20	50.5	98	110.5
Local Start Time (s)	115.5	0	55.5	78	115.5	0	55.5	78
Local Yield (s)	135.5	51	73.5	111	135.5	51	73.5	111
Local Yield 170(s)	135.5	26	73.5	86	135.5	26	73.5	86

Intersection Summary

Cycle Length	140
Control Type	Semi Act-Uncoord
Natural Cycle	100

Splits and Phases: 11: E Johnstown Rd & N Hamilton

Ø1	Ø2	Ø3	Ø4
24.5 s	55.5 s	22.5 s	37.5 s
Ø5	Ø6	Ø7	Ø8
24.5 s	55.5 s	22.5 s	37.5 s

HCM 2010 Signalized Intersection Summary

13: Granville St & Mill St

01/23/2019

								
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	817	1883	911	104	86	514		
Future Volume (veh/h)	817	1883	911	104	86	514		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863		
Adj Flow Rate, veh/h	888	2047	990	113	93	559		
Adj No. of Lanes	1	2	2	0	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	799	2491	813	93	407	1023		
Arrive On Green	0.42	0.70	0.08	0.08	0.23	0.23		
Sat Flow, veh/h	1774	3632	3296	365	1774	1583		
Grp Volume(v), veh/h	888	2047	547	556	93	559		
Grp Sat Flow(s),veh/h/ln	1774	1770	1770	1798	1774	1583		
Q Serve(g_s), s	50.0	48.7	30.5	30.5	5.1	23.2		
Cycle Q Clear(g_c), s	50.0	48.7	30.5	30.5	5.1	23.2		
Prop In Lane	1.00			0.20	1.00	1.00		
Lane Grp Cap(c), veh/h	799	2491	449	457	407	1023		
V/C Ratio(X)	1.11	0.82	1.22	1.22	0.23	0.55		
Avail Cap(c_a), veh/h	799	2491	449	457	621	1214		
HCM Platoon Ratio	1.00	1.00	0.33	0.33	1.00	1.00		
Upstream Filter(I)	0.09	0.09	0.68	0.68	0.93	0.93		
Uniform Delay (d), s/veh	30.3	12.5	55.0	55.0	37.6	11.6		
Incr Delay (d2), s/veh	52.0	0.3	111.1	111.2	0.3	0.4		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	38.0	23.7	28.8	29.3	2.5	25.2		
LnGrp Delay(d),s/veh	82.3	12.8	166.0	166.2	37.9	12.0		
LnGrp LOS	F	B	F	F	D	B		
Approach Vol, veh/h		2935	1103		652			
Approach Delay, s/veh		33.8	166.1		15.7			
Approach LOS		C	F		B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		88.5		31.5	54.0	34.5		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		70.0		42.0	50.0	16.0		
Max Q Clear Time (g_c+I1), s		50.7		25.2	52.0	32.5		
Green Ext Time (p_c), s		15.6		2.4	0.0	0.0		
Intersection Summary								
HCM 2010 Ctrl Delay			62.4					
HCM 2010 LOS			E					

2040 PM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase

13: Granville St & Mill St

01/23/2019

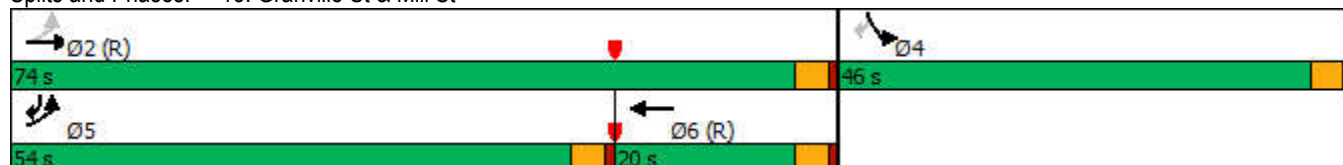


Phase Number	2	4	5	6
Movement	EBTL	SBL	EBL	WBT
Lead/Lag			Lead	Lag
Lead-Lag Optimize			Yes	Yes
Recall Mode	C-Max	None	None	C-Max
Maximum Split (s)	74	46	54	20
Maximum Split (%)	61.7%	38.3%	45.0%	16.7%
Minimum Split (s)	24.5	15	19.5	16
Yellow Time (s)	3	3	3	3
All-Red Time (s)	1	1	1	1
Minimum Initial (s)	20	10	15	12
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)				
Flash Dont Walk (s)				
Dual Entry	Yes	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	50	4	50	104
End Time (s)	4	50	104	4
Yield/Force Off (s)	0	46	100	0
Yield/Force Off 170(s)	0	46	100	0
Local Start Time (s)	66	20	66	0
Local Yield (s)	16	62	116	16
Local Yield 170(s)	16	62	116	16

Intersection Summary

Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	100
Offset: 104 (87%), Referenced to phase 2:EBTL and 6:WBT, Start of Green	

Splits and Phases: 13: Granville St & Mill St



HCM 2010 Signalized Intersection Summary

14: N Hamilton & Beecher Rd

01/23/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	59	27	80	21	268	47	1165	43	310	799	28
Future Volume (veh/h)	45	59	27	80	21	268	47	1165	43	310	799	28
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	49	64	29	87	23	291	51	1266	47	337	868	30
Adj No. of Lanes	1	1	0	1	1	1	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	308	201	91	319	342	474	436	1815	898	374	1987	69
Arrive On Green	0.04	0.17	0.17	0.05	0.18	0.18	0.06	0.51	0.51	0.12	0.57	0.57
Sat Flow, veh/h	1774	1215	551	1774	1863	1583	1774	3539	1583	1774	3490	121
Grp Volume(v), veh/h	49	0	93	87	23	291	51	1266	47	337	440	458
Grp Sat Flow(s),veh/h/ln	1774	0	1766	1774	1863	1583	1774	1770	1583	1774	1770	1841
Q Serve(g_s), s	2.4	0.0	4.9	4.2	1.1	16.6	1.3	28.6	1.4	9.5	15.0	15.0
Cycle Q Clear(g_c), s	2.4	0.0	4.9	4.2	1.1	16.6	1.3	28.6	1.4	9.5	15.0	15.0
Prop In Lane	1.00		0.31	1.00		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	308	0	293	319	342	474	436	1815	898	374	1007	1048
V/C Ratio(X)	0.16	0.00	0.32	0.27	0.07	0.61	0.12	0.70	0.05	0.90	0.44	0.44
Avail Cap(c_a), veh/h	362	0	452	341	477	588	500	1815	898	506	1007	1048
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.5	0.0	38.7	33.1	35.5	31.7	10.4	19.5	10.2	20.6	13.0	13.0
Incr Delay (d2), s/veh	0.2	0.0	0.6	0.5	0.1	1.3	0.1	2.2	0.1	15.6	1.4	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	2.4	2.1	0.6	7.4	0.7	14.5	0.6	11.2	7.7	8.0
LnGrp Delay(d),s/veh	34.8	0.0	39.3	33.6	35.6	33.0	10.5	21.7	10.3	36.2	14.4	14.3
LnGrp LOS	C		D	C	D	C	B	C	B	D	B	B
Approach Vol, veh/h		142			401			1364			1235	
Approach Delay, s/veh		37.8			33.3			20.9			20.3	
Approach LOS		D			C			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.1	59.1	8.7	22.5	9.2	65.0	6.8	24.4				
Change Period (Y+Rc), s	3.0	5.0	3.0	5.0	3.0	5.0	3.0	5.0				
Max Green Setting (Gmax), s	20.0	50.0	7.0	27.0	10.0	60.0	7.0	27.0				
Max Q Clear Time (g_c+I1), s	11.5	30.6	6.2	6.9	3.3	17.0	4.4	18.6				
Green Ext Time (p_c), s	0.7	9.3	0.0	0.4	0.0	6.6	0.0	0.7				
Intersection Summary												
HCM 2010 Ctrl Delay			23.0									
HCM 2010 LOS			C									

2040 PM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase
14: N Hamilton & Beecher Rd

01/23/2019

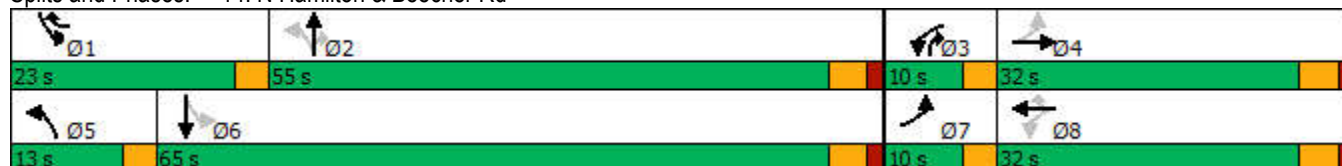


Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBTL	NBL	SBTL	EBL	WBL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	None	None	None	Max	None	None
Maximum Split (s)	23	55	10	32	13	65	10	32
Maximum Split (%)	19.2%	45.8%	8.3%	26.7%	10.8%	54.2%	8.3%	26.7%
Minimum Split (s)	11	29	8	29	11	29	8	29
Yellow Time (s)	3	3.5	3	3.5	3	3.5	3	3.5
All-Red Time (s)	0	1.5	0	1.5	0	1.5	0	1.5
Minimum Initial (s)	8	20	5	5	8	20	5	8
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		8		8		8		8
Flash Dont Walk (s)		16		16		16		16
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	23	78	88	0	13	78	88
End Time (s)	23	78	88	0	13	78	88	0
Yield/Force Off (s)	20	73	85	115	10	73	85	115
Yield/Force Off 170(s)	20	57	85	99	10	57	85	99
Local Start Time (s)	97	0	55	65	97	110	55	65
Local Yield (s)	117	50	62	92	107	50	62	92
Local Yield 170(s)	117	34	62	76	107	34	62	76

Intersection Summary

Cycle Length	120
Control Type	Semi Act-Uncoord
Natural Cycle	90

Splits and Phases: 14: N Hamilton & Beecher Rd



HCM 2010 Signalized Intersection Summary

17: S Hamilton Rd & Rocky Fork Blvd

01/23/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	49	17	190	49	234	54	1565	130	301	1018	18
Future Volume (veh/h)	22	49	17	190	49	234	54	1565	130	301	1018	18
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	24	53	18	207	53	254	59	1701	141	327	1107	20
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	104	296	100	311	62	299	324	1903	156	244	2242	41
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.02	0.38	0.38	0.06	0.42	0.42
Sat Flow, veh/h	1068	1331	452	1324	281	1345	1774	3313	272	1774	3557	64
Grp Volume(v), veh/h	24	0	71	207	0	307	59	900	942	327	551	576
Grp Sat Flow(s),veh/h/ln	1068	0	1783	1324	0	1625	1774	1770	1815	1774	1770	1851
Q Serve(g_s), s	2.6	0.0	3.9	18.0	0.0	21.7	1.6	56.9	58.8	11.0	27.3	27.3
Cycle Q Clear(g_c), s	24.4	0.0	3.9	21.9	0.0	21.7	1.6	56.9	58.8	11.0	27.3	27.3
Prop In Lane	1.00		0.25	1.00		0.83	1.00		0.15	1.00		0.03
Lane Grp Cap(c), veh/h	104	0	396	311	0	361	324	1017	1043	244	1116	1167
V/C Ratio(X)	0.23	0.00	0.18	0.66	0.00	0.85	0.18	0.88	0.90	1.34	0.49	0.49
Avail Cap(c_a), veh/h	199	0	554	429	0	505	423	1017	1043	244	1116	1167
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	0.67	0.67	0.67
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	0.35	0.35	0.35	0.61	0.61	0.61
Uniform Delay (d), s/veh	56.5	0.0	37.8	46.7	0.0	44.8	11.6	33.2	33.8	41.4	20.7	20.7
Incr Delay (d2), s/veh	1.1	0.0	0.2	2.4	0.0	9.6	0.1	4.4	5.1	169.4	1.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	1.9	6.8	0.0	10.7	0.8	29.1	31.0	19.6	13.6	14.3
LnGrp Delay(d),s/veh	57.6	0.0	38.0	49.1	0.0	54.3	11.7	37.6	38.9	210.7	21.6	21.6
LnGrp LOS	E		D	D		D	B	D	D	F	C	C
Approach Vol, veh/h	95			514			1901			1454		
Approach Delay, s/veh	43.0			52.2			37.5			64.1		
Approach LOS	D			D			D			E		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	15.0	73.6	31.4		8.3	80.3	31.4					
Change Period (Y+Rc), s	4.0	* 4.7	* 4.7		4.0	* 4.7	* 4.7					
Max Green Setting (Gmax), s	11.0	* 58	* 37		11.0	* 58	* 37					
Max Q Clear Time (g_c+I1), s	13.0	60.8	26.4		3.6	29.3	23.9					
Green Ext Time (p_c), s	0.0	0.0	0.3		0.1	8.5	2.3					
Intersection Summary												
HCM 2010 Ctrl Delay			49.3									
HCM 2010 LOS			D									
Notes												

2040 PM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase
17: S Hamilton Rd & Rocky Fork Blvd

01/23/2019

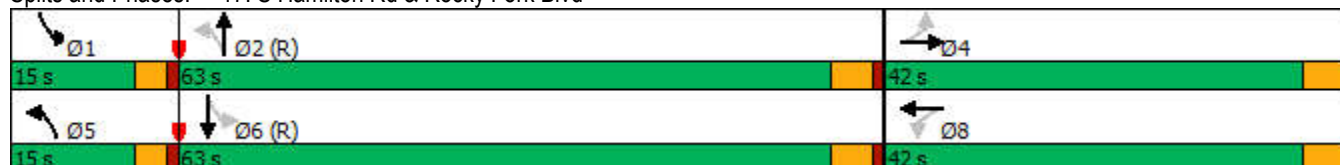


Phase Number	1	2	4	5	6	8
Movement	SBL	NBTL	EBTL	NBL	SBTL	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	None	None	C-Max	None
Maximum Split (s)	15	63	42	15	63	42
Maximum Split (%)	12.5%	52.5%	35.0%	12.5%	52.5%	35.0%
Minimum Split (s)	9.5	29.7	34.7	9.5	29.7	34.7
Yellow Time (s)	3	3.7	3.7	3	3.7	3.7
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	5	20	5	5	20	5
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		18	23		18	23
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	85	100	43	85	100	43
End Time (s)	100	43	85	100	43	85
Yield/Force Off (s)	96	38.3	80.3	96	38.3	80.3
Yield/Force Off 170(s)	96	20.3	57.3	96	20.3	57.3
Local Start Time (s)	105	0	63	105	0	63
Local Yield (s)	116	58.3	100.3	116	58.3	100.3
Local Yield 170(s)	116	40.3	77.3	116	40.3	77.3

Intersection Summary

Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	140
Offset: 100 (83%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	

Splits and Phases: 17: S Hamilton Rd & Rocky Fork Blvd



HCM 2010 Signalized Intersection Summary
20: S Hamilton Rd & Swanson Ave/Tech Center Dr

01/23/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	1	1	265	1	531	1	1418	591	331	824	1
Future Volume (veh/h)	1	1	1	265	1	531	1	1418	591	331	824	1
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	1	1	1	289	0	577	1	1541	642	360	896	1
Adj No. of Lanes	0	1	0	2	0	2	1	2	1	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	3	3	3	653	0	962	389	2013	1192	412	2608	3
Arrive On Green	0.01	0.01	0.01	0.18	0.00	0.18	0.57	0.57	0.57	0.12	0.72	0.72
Sat Flow, veh/h	577	577	577	3548	0	3167	618	3539	1583	3442	3628	4
Grp Volume(v), veh/h	3	0	0	289	0	577	1	1541	642	360	437	460
Grp Sat Flow(s),veh/h/ln	1732	0	0	1774	0	1583	618	1770	1583	1721	1770	1862
Q Serve(g_s), s	0.3	0.0	0.0	14.0	0.0	30.0	0.1	64.3	32.6	19.9	17.8	17.8
Cycle Q Clear(g_c), s	0.3	0.0	0.0	14.0	0.0	30.0	0.1	64.3	32.6	19.9	17.8	17.8
Prop In Lane	0.33		0.33	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	9	0	0	653	0	962	389	2013	1192	412	1272	1339
V/C Ratio(X)	0.32	0.00	0.00	0.44	0.00	0.60	0.00	0.77	0.54	0.87	0.34	0.34
Avail Cap(c_a), veh/h	81	0	0	1084	0	1346	389	2013	1192	1051	1272	1339
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	95.9	0.0	0.0	70.1	0.0	57.3	18.0	31.8	9.9	83.7	10.1	10.1
Incr Delay (d2), s/veh	18.6	0.0	0.0	0.5	0.0	0.6	0.0	2.8	1.7	5.9	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	6.9	0.0	13.2	0.0	32.0	25.4	9.8	8.9	9.3
LnGrp Delay(d),s/veh	114.5	0.0	0.0	70.6	0.0	57.9	18.0	34.7	11.7	89.7	10.9	10.8
LnGrp LOS	F			E		E	B	C	B	F	B	B
Approach Vol, veh/h	3			866			2184			1257		
Approach Delay, s/veh	114.5			62.2			27.9			33.4		
Approach LOS	F			E			C			C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	4		6		8					
Phs Duration (G+Y+Rc), s	29.0	116.0	6.9		145.0		41.5					
Change Period (Y+Rc), s	* 5.9	* 5.9	* 5.9		* 5.9		5.9					
Max Green Setting (Gmax), s	* 59	* 74	* 9.1		* 1.4E2		59.1					
Max Q Clear Time (g_c+I1), s	21.9	66.3	2.3		19.8		32.0					
Green Ext Time (p_c), s	1.2	6.3	0.0		6.0		3.6					
Intersection Summary												
HCM 2010 Ctrl Delay			36.5									
HCM 2010 LOS			D									
Notes												

2040 PM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase

20: S Hamilton Rd & Swanson Ave/Tech Center Dr

01/23/2019



Phase Number	1	2	4	6	8
Movement	SBL	NBTL	EBTL	SBT	WBTL
Lead/Lag	Lead	Lag			
Lead-Lag Optimize	Yes	Yes			
Recall Mode	None	Max	None	Max	None
Maximum Split (s)	65	80	15	145	65
Maximum Split (%)	28.9%	35.6%	6.7%	64.4%	28.9%
Minimum Split (s)	12.9	38.9	15	38.9	44.9
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	2.3	2.3	2.3	2.3	2.3
Minimum Initial (s)	7	25	7	25	10
Vehicle Extension (s)	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0
Walk Time (s)				7	7
Flash Dont Walk (s)				26	32
Dual Entry	No	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	65	145	0	160
End Time (s)	65	145	160	145	0
Yield/Force Off (s)	59.1	139.1	154.1	139.1	219.1
Yield/Force Off 170(s)	59.1	139.1	154.1	113.1	187.1
Local Start Time (s)	160	0	80	160	95
Local Yield (s)	219.1	74.1	89.1	74.1	154.1
Local Yield 170(s)	219.1	74.1	89.1	48.1	122.1

Intersection Summary

Cycle Length 225

Control Type Semi Act-Uncoord

Natural Cycle 145

Splits and Phases: 20: S Hamilton Rd & Swanson Ave/Tech Center Dr

 01	 02	 04	 08
65 s	80 s	15 s	65 s
 06			
145 s			

HCM 2010 Signalized Intersection Summary

22: S Hamilton Rd & Morrison Rd

01/23/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	43	87	817	16	268	175	1446	718	204	910	18
Future Volume (veh/h)	50	43	87	817	16	268	175	1446	718	204	910	18
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	54	47	95	900	0	291	190	1572	780	222	989	20
Adj No. of Lanes	0	1	1	2	0	1	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	70	61	227	745	0	451	310	1691	1089	199	1709	35
Arrive On Green	0.07	0.07	0.07	0.21	0.00	0.21	0.02	0.16	0.16	0.02	0.16	0.16
Sat Flow, veh/h	970	844	1583	3548	0	1583	1774	3539	1583	1774	3548	72
Grp Volume(v), veh/h	101	0	95	900	0	291	190	1572	780	222	493	516
Grp Sat Flow(s),veh/h/ln	1814	0	1583	1774	0	1583	1774	1770	1583	1774	1770	1850
Q Serve(g_s), s	6.6	0.0	6.6	25.2	0.0	19.3	6.3	52.6	35.5	9.0	31.0	31.0
Cycle Q Clear(g_c), s	6.6	0.0	6.6	25.2	0.0	19.3	6.3	52.6	35.5	9.0	31.0	31.0
Prop In Lane	0.53		1.00	1.00		1.00	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	131	0	227	745	0	451	310	1691	1089	199	852	891
V/C Ratio(X)	0.77	0.00	0.42	1.21	0.00	0.64	0.61	0.93	0.72	1.12	0.58	0.58
Avail Cap(c_a), veh/h	151	0	245	745	0	451	391	1691	1089	199	852	891
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	0.60	0.00	0.60	1.00	1.00	1.00	0.83	0.83	0.83
Uniform Delay (d), s/veh	54.7	0.0	46.8	47.4	0.0	37.6	20.7	48.5	18.4	39.2	39.2	39.2
Incr Delay (d2), s/veh	18.8	0.0	1.2	101.3	0.0	1.9	2.0	10.5	4.0	92.5	2.4	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	0.0	2.9	22.8	0.0	8.7	3.2	28.3	27.2	11.7	15.8	16.5
LnGrp Delay(d),s/veh	73.5	0.0	48.1	148.7	0.0	39.5	22.7	59.1	22.4	131.7	41.6	41.5
LnGrp LOS	E		D	F		D	C	E	C	F	D	D
Approach Vol, veh/h		196			1191			2542			1231	
Approach Delay, s/veh		61.2			122.0			45.1			57.8	
Approach LOS		E			F			D			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.0	63.3		13.7	12.5	63.8		30.0				
Change Period (Y+Rc), s	4.0	6.0		5.0	4.0	6.0		4.8				
Max Green Setting (Gmax), s	9.0	56.0		10.0	14.0	51.0		25.2				
Max Q Clear Time (g_c+I1), s	11.0	54.6		8.6	8.3	33.0		27.2				
Green Ext Time (p_c), s	0.0	1.3		0.1	0.2	6.1		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			66.5									
HCM 2010 LOS			E									
Notes												

2040 PM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase
22: S Hamilton Rd & Morrison Rd

01/23/2019

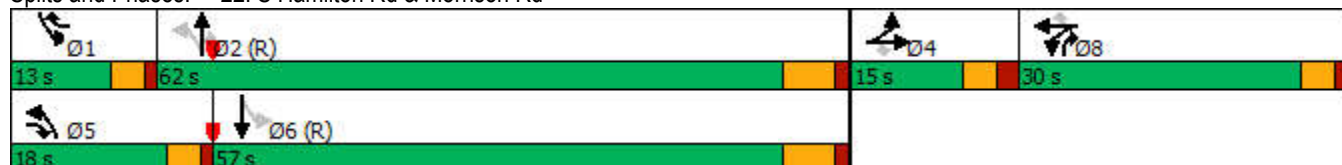


Phase Number	1	2	4	5	6	8
Movement	SBL	NBTL	EBTL	NBL	SBTL	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	None	None	C-Max	None
Maximum Split (s)	13	62	15	18	57	30
Maximum Split (%)	10.8%	51.7%	12.5%	15.0%	47.5%	25.0%
Minimum Split (s)	12	24	15	12	36	30
Yellow Time (s)	3	4.5	3	3	4.5	3
All-Red Time (s)	1	1.5	2	1	1.5	1.8
Minimum Initial (s)	8	15	8	8	15	8
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)					7	7
Flash Dont Walk (s)					23	18
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	8	21	83	8	26	98
End Time (s)	21	83	98	26	83	8
Yield/Force Off (s)	17	77	93	22	77	3.2
Yield/Force Off 170(s)	17	77	93	22	54	105.2
Local Start Time (s)	102	115	57	102	0	72
Local Yield (s)	111	51	67	116	51	97.2
Local Yield 170(s)	111	51	67	116	28	79.2

Intersection Summary

Cycle Length 120
Control Type Actuated-Coordinated
Natural Cycle 145
Offset: 26 (22%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Splits and Phases: 22: S Hamilton Rd & Morrison Rd



HCM 2010 Signalized Intersection Summary

23: Morrison Rd & Tech Center Dr

01/23/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	736	66	356	14	268	133	228	284	9	22	192	210
Future Volume (veh/h)	736	66	356	14	268	133	228	284	9	22	192	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	800	72	387	15	291	145	248	309	10	24	209	228
Adj No. of Lanes	2	1	0	1	1	0	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	617	108	579	252	305	152	506	1466	47	432	1182	812
Arrive On Green	0.18	0.42	0.42	0.02	0.26	0.26	0.11	0.42	0.42	0.02	0.33	0.33
Sat Flow, veh/h	3442	254	1367	1774	1174	585	1774	3499	113	1774	3539	1583
Grp Volume(v), veh/h	800	0	459	15	0	436	248	156	163	24	209	228
Grp Sat Flow(s),veh/h/ln	1721	0	1621	1774	0	1759	1774	1770	1843	1774	1770	1583
Q Serve(g_s), s	29.9	0.0	38.0	1.0	0.0	40.7	14.9	9.4	9.4	1.5	7.0	13.7
Cycle Q Clear(g_c), s	29.9	0.0	38.0	1.0	0.0	40.7	14.9	9.4	9.4	1.5	7.0	13.7
Prop In Lane	1.00		0.84	1.00		0.33	1.00		0.06	1.00		1.00
Lane Grp Cap(c), veh/h	617	0	687	252	0	457	506	741	772	432	1182	812
V/C Ratio(X)	1.30	0.00	0.67	0.06	0.00	0.95	0.49	0.21	0.21	0.06	0.18	0.28
Avail Cap(c_a), veh/h	617	0	687	331	0	473	691	741	772	501	1182	812
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	68.5	0.0	38.6	44.6	0.0	60.8	29.6	30.9	30.9	35.3	39.3	23.1
Incr Delay (d2), s/veh	145.6	0.0	2.5	0.1	0.0	29.6	0.7	0.6	0.6	0.1	0.3	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	26.6	0.0	17.4	0.5	0.0	23.5	7.4	4.7	4.9	0.7	3.5	6.2
LnGrp Delay(d),s/veh	214.1	0.0	41.1	44.7	0.0	90.4	30.3	31.6	31.5	35.4	39.7	24.0
LnGrp LOS	F		D	D		F	C	C	C	D	D	C
Approach Vol, veh/h	1259				451				567			
Approach Delay, s/veh	151.0				88.9				31.0			
Approach LOS	F				F				C			
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.5	75.0	7.6	75.8	22.6	60.8	35.0	48.4				
Change Period (Y+Rc), s	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1				
Max Green Setting (Gmax), s	9.9	69.9	9.9	64.9	34.9	44.9	29.9	44.9				
Max Q Clear Time (g_c+I1), s	3.5	11.4	3.0	40.0	16.9	15.7	31.9	42.7				
Green Ext Time (p_c), s	0.0	1.9	0.0	3.2	0.6	2.1	0.0	0.6				
Intersection Summary												
HCM 2010 Ctrl Delay	95.8											
HCM 2010 LOS	F											

2040 PM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase
23: Morrison Rd & Tech Center Dr

01/23/2019

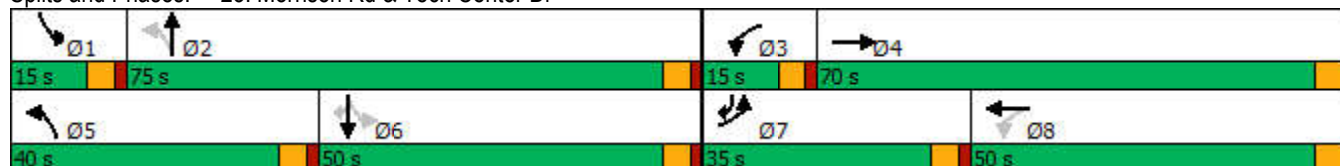


Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBT	NBL	SBTL	EBL	WBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	None	None	None	Max	None	None
Maximum Split (s)	15	75	15	70	40	50	35	50
Maximum Split (%)	8.6%	42.9%	8.6%	40.0%	22.9%	28.6%	20.0%	28.6%
Minimum Split (s)	10.1	35.1	10.1	32.1	10.1	35.1	10.1	32.1
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Minimum Initial (s)	5	10	5	10	5	10	5	10
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)		7		7		7		7
Flash Dont Walk (s)		23		20		23		18
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	15	90	105	0	40	90	125
End Time (s)	15	90	105	0	40	90	125	0
Yield/Force Off (s)	9.9	84.9	99.9	169.9	34.9	84.9	119.9	169.9
Yield/Force Off 170(s)	9.9	61.9	99.9	149.9	34.9	61.9	119.9	151.9
Local Start Time (s)	135	150	50	65	135	0	50	85
Local Yield (s)	144.9	44.9	59.9	129.9	169.9	44.9	79.9	129.9
Local Yield 170(s)	144.9	21.9	59.9	109.9	169.9	21.9	79.9	111.9

Intersection Summary

Cycle Length	175
Control Type	Semi Act-Uncoord
Natural Cycle	100

Splits and Phases: 23: Morrison Rd & Tech Center Dr



HCM 2010 Signalized Intersection Summary
25: Old Ridenour Rd & US 62/Granville St

01/23/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	2079	64	198	1066	174	43	21	377	245	26	25
Future Volume (veh/h)	28	2079	64	198	1066	174	43	21	377	245	26	25
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	30	2260	70	215	1159	189	47	23	410	266	28	27
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	279	2123	950	242	2300	1270	167	87	190	348	145	139
Arrive On Green	0.05	1.00	1.00	0.07	0.65	0.65	0.03	0.05	0.05	0.15	0.17	0.17
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	1863	1583	1774	873	842
Grp Volume(v), veh/h	30	2260	70	215	1159	189	47	23	410	266	0	55
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1863	1583	1774	0	1714
Q Serve(g_s), s	1.0	96.0	0.0	8.9	27.3	4.3	4.0	1.9	7.5	22.3	0.0	4.4
Cycle Q Clear(g_c), s	1.0	96.0	0.0	8.9	27.3	4.3	4.0	1.9	7.5	22.3	0.0	4.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.49
Lane Grp Cap(c), veh/h	279	2123	950	242	2300	1270	167	87	190	348	0	284
V/C Ratio(X)	0.11	1.06	0.07	0.89	0.50	0.15	0.28	0.26	2.16	0.76	0.00	0.19
Avail Cap(c_a), veh/h	349	2123	950	279	2300	1270	274	87	190	355	0	284
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	0.09	0.09	0.09	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.5	0.0	0.0	33.4	14.6	3.6	69.6	73.6	70.4	58.6	0.0	57.5
Incr Delay (d2), s/veh	0.0	30.3	0.0	3.2	0.1	0.0	0.9	1.6	537.1	9.3	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	8.9	0.0	9.6	13.2	1.9	2.0	1.0	36.8	11.8	0.0	2.1
LnGrp Delay(d),s/veh	12.5	30.3	0.0	36.6	14.6	3.6	70.5	75.2	607.5	67.9	0.0	57.8
LnGrp LOS	B	F	A	D	B	A	E	E	F	E		E
Approach Vol, veh/h	2360		1563				480				321	
Approach Delay, s/veh	29.2		16.3				529.4				66.2	
Approach LOS	C		B				F				E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.4	102.2	10.3	31.0	8.7	110.0	29.3	12.0				
Change Period (Y+Rc), s	5.0	6.0	5.0	4.5	5.0	6.0	5.0	4.5				
Max Green Setting (Gmax), s	15.0	92.0	15.0	17.5	10.0	97.0	25.0	7.5				
Max Q Clear Time (g_c+I1), s	10.9	98.0	6.0	6.4	3.0	29.3	24.3	9.5				
Green Ext Time (p_c), s	0.2	0.0	0.0	0.1	0.0	12.0	0.1	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay	78.3											
HCM 2010 LOS	E											

2040 PM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase
25: Old Ridenour Rd & US 62/Granville St

01/23/2019

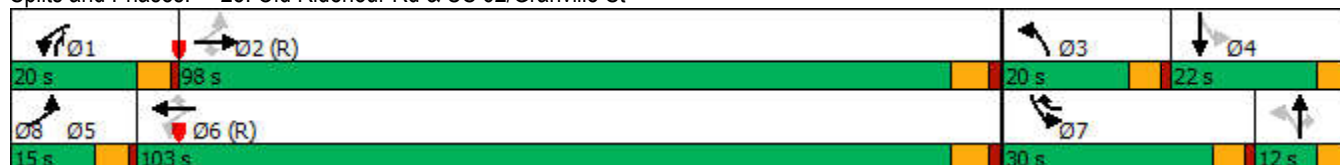


Phase Number	1	2	3	4	5	6	7	8
Movement	WBL	EBTL	NBL	SBTL	EBL	WBTL	SBL	NBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	20	98	20	22	15	103	30	12
Maximum Split (%)	12.5%	61.3%	12.5%	13.8%	9.4%	64.4%	18.8%	7.5%
Minimum Split (s)	10	41	15	22	13	41	15	12
Yellow Time (s)	4	4.5	4	3	4	4.5	4	3
All-Red Time (s)	1	1.5	1	1.5	1	1.5	1	1.5
Minimum Initial (s)	5	35	5	8	5	35	10	5
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0	0
Walk Time (s)	7							
Flash Dont Walk (s)	12							
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	140	0	98	118	140	155	98	128
End Time (s)	0	98	118	140	155	98	128	140
Yield/Force Off (s)	155	92	113	135.5	150	92	123	135.5
Yield/Force Off 170(s)	155	92	113	135.5	150	80	123	135.5
Local Start Time (s)	140	0	98	118	140	155	98	128
Local Yield (s)	155	92	113	135.5	150	92	123	135.5
Local Yield 170(s)	155	92	113	135.5	150	80	123	135.5

Intersection Summary

Cycle Length 160
Control Type Actuated-Coordinated
Natural Cycle 145
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Splits and Phases: 25: Old Ridenour Rd & US 62/Granville St



HCM 2010 TWSC
28: W Johnstown Rd & S Stygler Rd

01/23/2019

Intersection

Int Delay, s/veh 17.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	482	379	116	113	52	137
Future Vol, veh/h	482	379	116	113	52	137
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	60	-	-	200	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	524	412	126	123	57	149

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	249	0	0 1586 126
Stage 1	-	-	- 126 -
Stage 2	-	-	- 1460 -
Critical Hdwy	4.12	-	- 6.42 6.22
Critical Hdwy Stg 1	-	-	- 5.42 -
Critical Hdwy Stg 2	-	-	- 5.42 -
Follow-up Hdwy	2.218	-	- 3.518 3.318
Pot Cap-1 Maneuver	1317	-	- 119 924
Stage 1	-	-	- 900 -
Stage 2	-	-	- 213 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1317	-	- 72 924
Mov Cap-2 Maneuver	-	-	- 72 -
Stage 1	-	-	- 542 -
Stage 2	-	-	- 213 -

Approach	EB	WB	SB
HCM Control Delay, s	5.3	0	94.5
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1317	-	-	-	217
HCM Lane V/C Ratio	0.398	-	-	-	0.947
HCM Control Delay (s)	9.5	-	-	-	94.5
HCM Lane LOS	A	-	-	-	F
HCM 95th %tile Q(veh)	1.9	-	-	-	8.1

HCM 2010 TWSC
31: IR-270 NB Exit Ramp & W Johnstown Rd

01/23/2019

Intersection

Int Delay, s/veh 9.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↑	↑
Traffic Vol, veh/h	498	0	0	165	202	75
Future Vol, veh/h	498	0	0	165	202	75
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	541	0	0	179	220	82

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	-	-	720	541
Stage 1	-	-	-	541	-
Stage 2	-	-	-	179	-
Critical Hdwy	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	0	0	395	541
Stage 1	-	0	0	583	-
Stage 2	-	0	0	852	-
Platoon blocked, %	-				
Mov Cap-1 Maneuver	-	-	-	395	541
Mov Cap-2 Maneuver	-	-	-	395	-
Stage 1	-	-	-	583	-
Stage 2	-	-	-	852	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	31.4
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	WBT
Capacity (veh/h)	426	-	-
HCM Lane V/C Ratio	0.707	-	-
HCM Control Delay (s)	31.4	-	-
HCM Lane LOS	D	-	-
HCM 95th %tile Q(veh)	5.4	-	-

HCM 2010 Signalized Intersection Summary

32: Culpeper's/Shull Ave & Granville St

01/23/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	1682	1	8	1005	114	7	1	10	104	1	29
Future Volume (veh/h)	110	1682	1	8	1005	114	7	1	10	104	1	29
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	120	1828	1	9	1092	124	8	1	11	113	1	32
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	417	2085	1	224	1686	191	197	38	236	355	9	87
Arrive On Green	0.13	1.00	1.00	0.03	1.00	1.00	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	1774	3630	2	1774	3205	363	563	140	860	1096	34	317
Grp Volume(v), veh/h	120	891	938	9	602	614	20	0	0	146	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1862	1774	1770	1799	1563	0	0	1447	0	0
Q Serve(g_s), s	3.4	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	8.5	0.0	0.0
Cycle Q Clear(g_c), s	3.4	0.0	0.0	0.3	0.0	0.0	1.0	0.0	0.0	9.6	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.20	0.40		0.55	0.77		0.22
Lane Grp Cap(c), veh/h	417	1016	1070	224	931	946	472	0	0	451	0	0
V/C Ratio(X)	0.29	0.88	0.88	0.04	0.65	0.65	0.04	0.00	0.00	0.32	0.00	0.00
Avail Cap(c_a), veh/h	648	1016	1070	363	931	946	472	0	0	451	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.67	0.67	0.67	0.92	0.92	0.92	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	9.2	0.0	0.0	12.3	0.0	0.0	31.9	0.0	0.0	34.9	0.0	0.0
Incr Delay (d2), s/veh	0.3	7.4	7.1	0.1	3.2	3.2	0.2	0.0	0.0	1.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	2.1	2.1	0.1	0.8	0.8	0.5	0.0	0.0	4.1	0.0	0.0
LnGrp Delay(d),s/veh	9.5	7.4	7.1	12.4	3.2	3.2	32.1	0.0	0.0	36.8	0.0	0.0
LnGrp LOS	A	A	A	B	A	A	C			D		
Approach Vol, veh/h	1949			1225			20			146		
Approach Delay, s/veh	7.4			3.2			32.1			36.8		
Approach LOS	A			A			C			D		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.6	74.4		38.0	13.4	68.6		38.0				
Change Period (Y+Rc), s	5.5	5.5		5.0	5.5	5.5		5.0				
Max Green Setting (Gmax), s	11.5	59.5		33.0	23.5	47.5		33.0				
Max Q Clear Time (g_c+I1), s	2.3	2.0		11.6	5.4	2.0		3.0				
Green Ext Time (p_c), s	0.0	27.5		0.8	0.3	12.1		0.1				
Intersection Summary												
HCM 2010 Ctrl Delay				7.3								
HCM 2010 LOS				A								

2040 PM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase
32: Culpeper's/Shull Ave & Granville St

01/23/2019

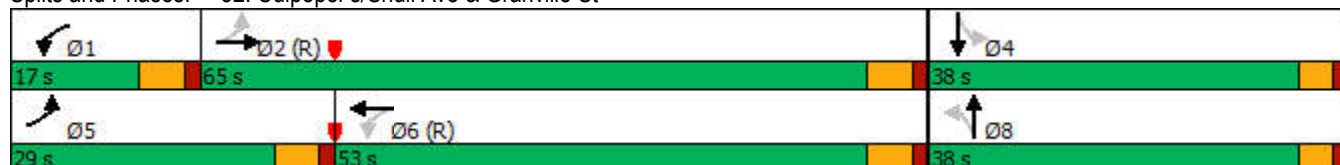


Phase Number	1	2	4	5	6	8
Movement	WBL	EBTL	SBTL	EBL	WBTL	NBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	Max	None	C-Max	Max
Maximum Split (s)	17	65	38	29	53	38
Maximum Split (%)	14.2%	54.2%	31.7%	24.2%	44.2%	31.7%
Minimum Split (s)	13.5	24.5	30	13.5	24.5	30
Yellow Time (s)	4	4	3	4	4	3
All-Red Time (s)	1.5	1.5	2	1.5	1.5	2
Minimum Initial (s)	8	15	8	8	15	8
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		12	18		12	18
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	91	108	53	91	0	53
End Time (s)	108	53	91	0	53	91
Yield/Force Off (s)	102.5	47.5	86	114.5	47.5	86
Yield/Force Off 170(s)	102.5	35.5	68	114.5	35.5	68
Local Start Time (s)	91	108	53	91	0	53
Local Yield (s)	102.5	47.5	86	114.5	47.5	86
Local Yield 170(s)	102.5	35.5	68	114.5	35.5	68

Intersection Summary

Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	100
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	

Splits and Phases: 32: Culpeper's/Shull Ave & Granville St



HCM 2010 Signalized Intersection Summary
37: Lincoln Cir & Granville St

01/23/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	1726	17	15	1056	20	47	1	25	12	1	18
Future Volume (veh/h)	12	1726	17	15	1056	20	47	1	25	12	1	18
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	13	1876	18	16	1148	22	51	1	27	13	1	20
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	445	2702	26	270	2682	51	236	7	187	97	22	111
Arrive On Green	0.03	1.00	1.00	0.03	1.00	1.00	0.12	0.12	0.12	0.12	0.12	0.12
Sat Flow, veh/h	1774	3592	34	1774	3552	68	1385	57	1535	452	183	908
Grp Volume(v), veh/h	13	923	971	16	572	598	51	0	28	34	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1857	1774	1770	1851	1385	0	1592	1543	0	0
Q Serve(g_s), s	0.2	0.0	0.0	0.2	0.0	0.0	1.2	0.0	1.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.2	0.0	0.0	0.2	0.0	0.0	3.4	0.0	1.9	2.2	0.0	0.0
Prop In Lane	1.00		0.02	1.00		0.04	1.00		0.96	0.38		0.59
Lane Grp Cap(c), veh/h	445	1331	1397	270	1336	1397	236	0	194	230	0	0
V/C Ratio(X)	0.03	0.69	0.70	0.06	0.43	0.43	0.22	0.00	0.14	0.15	0.00	0.00
Avail Cap(c_a), veh/h	715	1331	1397	481	1336	1397	478	0	472	492	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.43	0.43	0.43	0.87	0.87	0.87	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.2	0.0	0.0	3.2	0.0	0.0	47.6	0.0	47.1	47.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.3	1.2	0.1	0.9	0.8	0.5	0.0	0.3	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.5	0.5	0.1	0.3	0.3	1.6	0.0	0.9	1.0	0.0	0.0
LnGrp Delay(d),s/veh	3.2	1.3	1.2	3.2	0.9	0.8	48.1	0.0	47.4	47.5	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	D		D	D		
Approach Vol, veh/h	1907			1186			79			34		
Approach Delay, s/veh	1.3			0.9			47.9			47.5		
Approach LOS	A			A			D			D		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.1	95.3		18.7	5.8	95.6		18.7				
Change Period (Y+Rc), s	4.0	5.0		4.0	4.0	5.0		4.0				
Max Green Setting (Gmax), s	16.4	55.0		35.6	20.0	51.4		35.6				
Max Q Clear Time (g_c+I1), s	2.2	2.0		4.2	2.2	2.0		5.4				
Green Ext Time (p_c), s	0.0	28.5		0.1	0.0	11.3		0.3				
Intersection Summary												
HCM 2010 Ctrl Delay	2.8											
HCM 2010 LOS	A											

2040 PM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase

37: Lincoln Cir & Granville St

01/23/2019

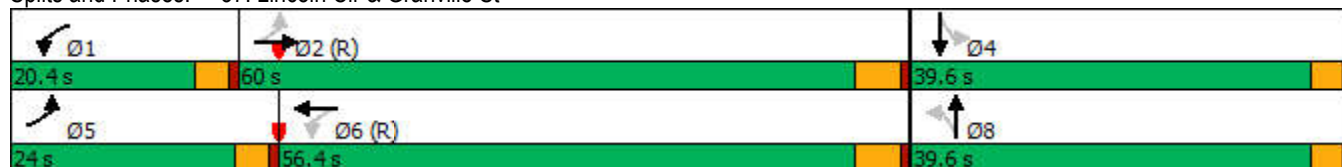


Phase Number	1	2	4	5	6	8
Movement	WBL	EBTL	SBTL	EBL	WBTL	NBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	None	None	C-Max	None
Maximum Split (s)	20.4	60	39.6	24	56.4	39.6
Maximum Split (%)	17.0%	50.0%	33.0%	20.0%	47.0%	33.0%
Minimum Split (s)	9.5	35	26	9.5	35	26.5
Yellow Time (s)	3	4	3	3	4	3
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	5	30	15	5	30	15
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		15	15		15	15
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	106	6.4	66.4	106	10	66.4
End Time (s)	6.4	66.4	106	10	66.4	106
Yield/Force Off (s)	2.4	61.4	102	6	61.4	102
Yield/Force Off 170(s)	2.4	46.4	87	6	46.4	87
Local Start Time (s)	96	116.4	56.4	96	0	56.4
Local Yield (s)	112.4	51.4	92	116	51.4	92
Local Yield 170(s)	112.4	36.4	77	116	36.4	77

Intersection Summary

Cycle Length 120
Control Type Actuated-Coordinated
Natural Cycle 90
Offset: 10 (8%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Splits and Phases: 37: Lincoln Cir & Granville St



HCM 2010 Signalized Intersection Summary

40: Flint Ridge Rd/Library & Granville St

01/23/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	1529	137	17	894	62	145	11	23	52	7	68
Future Volume (veh/h)	51	1529	137	17	894	62	145	11	23	52	7	68
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	55	1662	149	18	972	67	158	12	25	57	8	74
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	347	1957	173	260	1912	132	295	24	39	381	50	396
Arrive On Green	0.11	1.00	1.00	0.02	0.38	0.38	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	1774	3289	292	1774	3360	232	963	98	156	1299	200	1583
Grp Volume(v), veh/h	55	886	925	18	512	527	195	0	0	65	0	74
Grp Sat Flow(s),veh/h/ln	1774	1770	1811	1774	1770	1822	1217	0	0	1499	0	1583
Q Serve(g_s), s	1.4	0.0	0.0	0.5	26.6	26.6	14.9	0.0	0.0	0.0	0.0	4.4
Cycle Q Clear(g_c), s	1.4	0.0	0.0	0.5	26.6	26.6	18.8	0.0	0.0	3.9	0.0	4.4
Prop In Lane	1.00		0.16	1.00		0.13	0.81		0.13	0.88		1.00
Lane Grp Cap(c), veh/h	347	1053	1078	260	1007	1037	359	0	0	431	0	396
V/C Ratio(X)	0.16	0.84	0.86	0.07	0.51	0.51	0.54	0.00	0.00	0.15	0.00	0.19
Avail Cap(c_a), veh/h	447	1053	1078	406	1007	1037	359	0	0	431	0	396
HCM Platoon Ratio	2.00	2.00	2.00	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.70	0.70	0.70	0.35	0.35	0.35	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.2	0.0	0.0	9.8	24.2	24.2	42.2	0.0	0.0	35.2	0.0	35.4
Incr Delay (d2), s/veh	0.1	5.8	6.4	0.0	0.6	0.6	5.8	0.0	0.0	0.7	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	1.7	1.9	0.2	13.2	13.6	6.4	0.0	0.0	1.8	0.0	2.0
LnGrp Delay(d),s/veh	11.3	5.8	6.4	9.9	24.9	24.9	48.0	0.0	0.0	35.9	0.0	36.4
LnGrp LOS	B	A	A	A	C	C	D			D		D
Approach Vol, veh/h	1866			1057			195			139		
Approach Delay, s/veh	6.3			24.6			48.0			36.2		
Approach LOS	A			C			D			D		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.1	76.9		35.0	11.2	73.8		35.0				
Change Period (Y+Rc), s	4.5	5.5		5.0	4.5	5.5		5.0				
Max Green Setting (Gmax), s	13.5	61.5		30.0	13.5	61.5		30.0				
Max Q Clear Time (g_c+I1), s	2.5	2.0		6.4	3.4	28.6		20.8				
Green Ext Time (p_c), s	0.0	27.7		0.6	0.1	8.8		0.7				
Intersection Summary												
HCM 2010 Ctrl Delay				16.0								
HCM 2010 LOS				B								

2040 PM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase

40: Flint Ridge Rd/Library & Granville St

01/23/2019

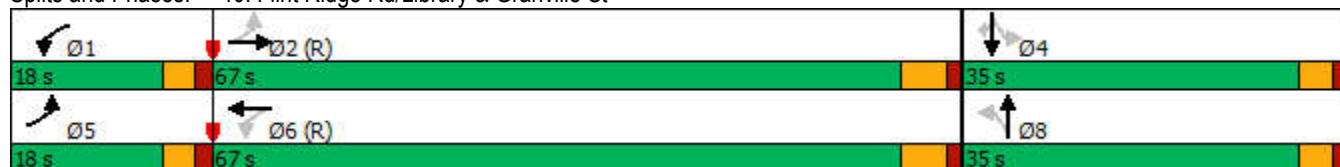


Phase Number	1	2	4	5	6	8
Movement	WBL	EBTL	SBTL	EBL	WBTL	NBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	Max	None	C-Max	Max
Maximum Split (s)	18	67	35	18	67	35
Maximum Split (%)	15.0%	55.8%	29.2%	15.0%	55.8%	29.2%
Minimum Split (s)	12.5	25.5	33	12.5	25.5	33
Yellow Time (s)	3	4	3	3	4	3
All-Red Time (s)	1.5	1.5	2	1.5	1.5	2
Minimum Initial (s)	8	15	8	8	15	8
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		13	21		13	21
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	112	10	77	112	10	77
End Time (s)	10	77	112	10	77	112
Yield/Force Off (s)	5.5	71.5	107	5.5	71.5	107
Yield/Force Off 170(s)	5.5	58.5	86	5.5	58.5	86
Local Start Time (s)	102	0	67	102	0	67
Local Yield (s)	115.5	61.5	97	115.5	61.5	97
Local Yield 170(s)	115.5	48.5	76	115.5	48.5	76

Intersection Summary

Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	100
Offset: 10 (8%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	

Splits and Phases: 40: Flint Ridge Rd/Library & Granville St



HCM 2010 Signalized Intersection Summary

43: N Hamilton Rd & Shopping Center/KEMBA

01/23/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	1	86	17	1	6	80	1773	16	5	1238	31
Future Volume (veh/h)	45	1	86	17	1	6	80	1773	16	5	1238	31
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	49	1	93	18	1	7	87	1927	17	5	1346	34
Adj No. of Lanes	0	1	1	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	168	3	131	118	17	117	442	2779	24	241	2567	65
Arrive On Green	0.08	0.08	0.08	0.08	0.08	0.08	0.11	1.00	1.00	0.02	1.00	1.00
Sat Flow, veh/h	1304	34	1583	1297	202	1412	1774	3595	32	1774	3528	89
Grp Volume(v), veh/h	50	0	93	18	0	8	87	947	997	5	675	705
Grp Sat Flow(s),veh/h/ln	1339	0	1583	1297	0	1614	1774	1770	1857	1774	1770	1847
Q Serve(g_s), s	4.0	0.0	6.9	1.6	0.0	0.5	1.2	0.0	0.0	0.1	0.0	0.0
Cycle Q Clear(g_c), s	4.6	0.0	6.9	6.2	0.0	0.5	1.2	0.0	0.0	0.1	0.0	0.0
Prop In Lane	0.98		1.00	1.00		0.88	1.00		0.02	1.00		0.05
Lane Grp Cap(c), veh/h	171	0	131	118	0	134	442	1368	1436	241	1288	1344
V/C Ratio(X)	0.29	0.00	0.71	0.15	0.00	0.06	0.20	0.69	0.69	0.02	0.52	0.52
Avail Cap(c_a), veh/h	251	0	222	192	0	226	460	1368	1436	339	1288	1344
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.11	0.11	0.11	0.88	0.88	0.88
Uniform Delay (d), s/veh	52.8	0.0	53.6	55.5	0.0	50.7	2.4	0.0	0.0	4.1	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	6.8	0.6	0.0	0.2	0.0	0.3	0.3	0.0	1.3	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	3.2	0.6	0.0	0.3	0.6	0.1	0.1	0.0	0.5	0.5
LnGrp Delay(d),s/veh	53.7	0.0	60.4	56.1	0.0	50.9	2.4	0.3	0.3	4.2	1.3	1.3
LnGrp LOS	D		E	E		D	A	A	A	A	A	A
Approach Vol, veh/h	143		26			2031			1385			
Approach Delay, s/veh	58.1		54.5			0.4			1.3			
Approach LOS	E		D			A			A			
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	11.8	93.0	15.2		6.4	98.5	15.2					
Change Period (Y+Rc), s	* 5.2	* 5.7	* 5.2		* 5.3	* 5.7	* 5.2					
Max Green Setting (Gmax), s	* 7.8	* 80	* 17		* 7.7	* 79	* 17					
Max Q Clear Time (g_c+I1), s	3.2	2.0	8.2		2.1	2.0	8.9					
Green Ext Time (p_c), s	0.1	14.0	0.0		0.0	31.1	0.3					
Intersection Summary												
HCM 2010 Ctrl Delay			3.5									
HCM 2010 LOS			A									
Notes												

2040 PM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase
43: N Hamilton Rd & Shopping Center/KEMBA

01/23/2019

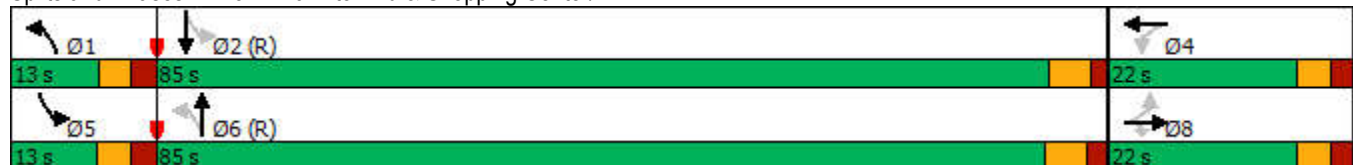


Phase Number	1	2	4	5	6	8
Movement	NBL	SBTL	WBTL	SBL	NBTL	EBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max	None	None	C-Max	None
Maximum Split (s)	13	85	22	13	85	22
Maximum Split (%)	10.8%	70.8%	18.3%	10.8%	70.8%	18.3%
Minimum Split (s)	12.2	29.3	22	12.3	26.7	22
Yellow Time (s)	3	3.7	3	3	3.7	3
All-Red Time (s)	2.2	1.6	2.2	2.3	2	2.2
Minimum Initial (s)	7	15	10	7	15	10
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		17	9		14	9
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	107	0	85	107	0	85
End Time (s)	0	85	107	0	85	107
Yield/Force Off (s)	114.8	79.7	101.8	114.7	79.3	101.8
Yield/Force Off 170(s)	114.8	62.7	92.8	114.7	65.3	92.8
Local Start Time (s)	107	0	85	107	0	85
Local Yield (s)	114.8	79.7	101.8	114.7	79.3	101.8
Local Yield 170(s)	114.8	62.7	92.8	114.7	65.3	92.8

Intersection Summary

Cycle Length 120
Control Type Actuated-Coordinated
Natural Cycle 90
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Splits and Phases: 43: N Hamilton Rd & Shopping Center/KEMBA



HCM 2010 Signalized Intersection Summary

46: N Hamilton Rd/N Hamilton & Gatsby's/Banks

01/23/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	1	1	75	1	54	3	1704	108	26	1184	5
Future Volume (veh/h)	4	1	1	75	1	54	3	1704	108	26	1184	5
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	4	1	1	82	1	59	3	1852	117	28	1287	5
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	11	3	3	100	1	72	8	2644	165	224	2688	10
Arrive On Green	0.01	0.01	0.01	0.10	0.10	0.10	0.01	1.00	1.00	0.74	0.74	0.74
Sat Flow, veh/h	1168	292	292	976	12	702	1774	3384	212	221	3616	14
Grp Volume(v), veh/h	6	0	0	142	0	0	3	959	1010	28	630	662
Grp Sat Flow(s),veh/h/ln	1753	0	0	1690	0	0	1774	1770	1825	221	1770	1860
Q Serve(g_s), s	0.4	0.0	0.0	9.9	0.0	0.0	0.2	0.0	0.0	4.5	17.0	17.0
Cycle Q Clear(g_c), s	0.4	0.0	0.0	9.9	0.0	0.0	0.2	0.0	0.0	4.5	17.0	17.0
Prop In Lane	0.67		0.17	0.58		0.42	1.00		0.12	1.00		0.01
Lane Grp Cap(c), veh/h	16	0	0	172	0	0	8	1383	1426	224	1315	1383
V/C Ratio(X)	0.38	0.00	0.00	0.82	0.00	0.00	0.36	0.69	0.71	0.12	0.48	0.48
Avail Cap(c_a), veh/h	88	0	0	293	0	0	89	1383	1426	224	1315	1383
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.66	0.66	0.66	0.80	0.80	0.80
Uniform Delay (d), s/veh	59.1	0.0	0.0	52.8	0.0	0.0	59.2	0.0	0.0	4.5	6.1	6.1
Incr Delay (d2), s/veh	14.1	0.0	0.0	9.4	0.0	0.0	16.0	1.9	2.0	0.9	1.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	5.1	0.0	0.0	0.1	0.7	0.8	0.3	8.6	9.0
LnGrp Delay(d),s/veh	73.3	0.0	0.0	62.3	0.0	0.0	75.2	1.9	2.0	5.4	7.1	7.1
LnGrp LOS	E			E			E	A	A	A	A	A
Approach Vol, veh/h		6			142			1972			1320	
Approach Delay, s/veh		73.3			62.3			2.1			7.1	
Approach LOS		E			E			A			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	4.6	93.9		16.4		98.5		5.1				
Change Period (Y+Rc), s	4.0	* 4.7		* 4.2		* 4.7		4.0				
Max Green Setting (Gmax), s	6.0	* 70		* 21		* 70		6.0				
Max Q Clear Time (g_c+I1), s	2.2	19.0		11.9		2.0		2.4				
Green Ext Time (p_c), s	0.0	13.6		0.5		31.0		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			6.6									
HCM 2010 LOS			A									
Notes												

2040 PM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase

46: N Hamilton Rd/N Hamilton & Gatsby's/Banks

01/23/2019

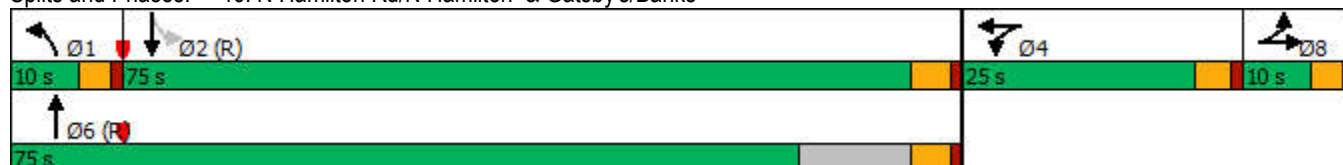


Phase Number	1	2	4	6	8
Movement	NBL	SBTL	WBTL	NBT	EBTL
Lead/Lag	Lead	Lag			
Lead-Lag Optimize	Yes	Yes			
Recall Mode	None	C-Max	None	C-Max	None
Maximum Split (s)	10	75	25	75	10
Maximum Split (%)	8.3%	62.5%	20.8%	62.5%	8.3%
Minimum Split (s)	10	56	25	56	10
Yellow Time (s)	3	3.7	3.2	3.7	3
All-Red Time (s)	1	1	1	1	1
Minimum Initial (s)	6	15	10	15	6
Vehicle Extension (s)	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0
Walk Time (s)		7	7		
Flash Dont Walk (s)		17	13.8		
Dual Entry	No	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes
Start Time (s)	5	15	90	5	115
End Time (s)	15	90	115	90	5
Yield/Force Off (s)	11	85.3	110.8	85.3	1
Yield/Force Off 170(s)	11	68.3	97	85.3	1
Local Start Time (s)	110	0	75	110	100
Local Yield (s)	116	70.3	95.8	70.3	106
Local Yield 170(s)	116	53.3	82	70.3	106

Intersection Summary

Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	105
Offset: 15 (13%), Referenced to phase 2:SBTL and 6:NBT, Start of Green	

Splits and Phases: 46: N Hamilton Rd/N Hamilton & Gatsby's/Banks



HCM 2010 Signalized Intersection Summary

49: S Hamilton Rd & NB IR-270 Exit Ramp

01/23/2019

								
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations								
Traffic Volume (veh/h)	69	613	1810	0	0	840		
Future Volume (veh/h)	69	613	1810	0	0	840		
Number	3	18	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	0	0	1863		
Adj Flow Rate, veh/h	75	666	1967	0	0	913		
Adj No. of Lanes	1	2	2	0	0	2		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	0	0	2		
Cap, veh/h	376	670	2477	0	0	2477		
Arrive On Green	0.21	0.21	1.00	0.00	0.00	0.47		
Sat Flow, veh/h	1774	3167	3725	0	0	3725		
Grp Volume(v), veh/h	75	666	1967	0	0	913		
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	0	0	1770		
Q Serve(g_s), s	4.2	25.2	0.0	0.0	0.0	19.9		
Cycle Q Clear(g_c), s	4.2	25.2	0.0	0.0	0.0	19.9		
Prop In Lane	1.00	1.00		0.00	0.00			
Lane Grp Cap(c), veh/h	376	670	2477	0	0	2477		
V/C Ratio(X)	0.20	0.99	0.79	0.00	0.00	0.37		
Avail Cap(c_a), veh/h	376	670	2477	0	0	2477		
HCM Platoon Ratio	1.00	1.00	2.00	1.00	1.00	0.67		
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	1.00		
Uniform Delay (d), s/veh	38.9	47.2	0.0	0.0	0.0	14.8		
Incr Delay (d2), s/veh	0.3	33.1	2.7	0.0	0.0	0.4		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	2.1	14.1	0.9	0.0	0.0	9.8		
LnGrp Delay(d),s/veh	39.2	80.3	2.7	0.0	0.0	15.3		
LnGrp LOS	D	F	A			B		
Approach Vol, veh/h	741		1967			913		
Approach Delay, s/veh	76.1		2.7			15.3		
Approach LOS	E		A			B		
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		90.0				90.0		30.0
Change Period (Y+Rc), s		6.0				6.0		4.6
Max Green Setting (Gmax), s		84.0				84.0		25.4
Max Q Clear Time (g_c+I1), s		2.0				21.9		27.2
Green Ext Time (p_c), s		30.4				7.1		0.0
Intersection Summary								
HCM 2010 Ctrl Delay			20.9					
HCM 2010 LOS			C					
Notes								

2040 PM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase

49: S Hamilton Rd & NB IR-270 Exit Ramp

01/23/2019

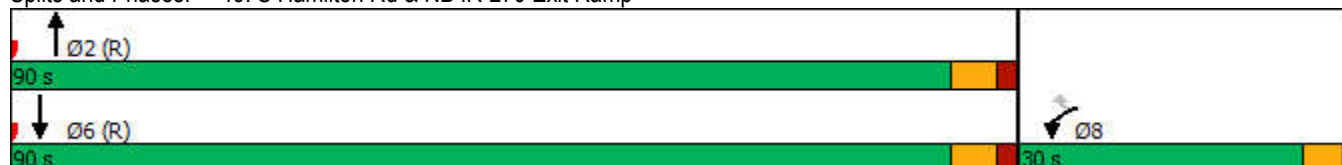


Phase Number	2	6	8
Movement	NBT	SBT	WBL
Lead/Lag			
Lead-Lag Optimize			
Recall Mode	C-Max	C-Max	None
Maximum Split (s)	90	90	30
Maximum Split (%)	75.0%	75.0%	25.0%
Minimum Split (s)	21	21	13
Yellow Time (s)	4	4	3.6
All-Red Time (s)	2	2	1
Minimum Initial (s)	15	15	8
Vehicle Extension (s)	3	3	3
Minimum Gap (s)	3	3	3
Time Before Reduce (s)	0	0	0
Time To Reduce (s)	0	0	0
Walk Time (s)			
Flash Dont Walk (s)			
Dual Entry	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes
Start Time (s)	72	72	42
End Time (s)	42	42	72
Yield/Force Off (s)	36	36	67.4
Yield/Force Off 170(s)	36	36	67.4
Local Start Time (s)	0	0	90
Local Yield (s)	84	84	115.4
Local Yield 170(s)	84	84	115.4

Intersection Summary

Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	75
Offset: 72 (60%), Referenced to phase 2:NBT and 6:SBT, Start of Green	

Splits and Phases: 49: S Hamilton Rd & NB IR-270 Exit Ramp



HCM 2010 Signalized Intersection Summary

57: Morrison Rd & Taylor Rd

01/23/2019

								
Movement	EBL	EBT	WBT	WBR	SWL	SWR		
Lane Configurations								
Traffic Volume (veh/h)	479	215	486	724	116	492		
Future Volume (veh/h)	479	215	486	724	116	492		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863		
Adj Flow Rate, veh/h	521	234	528	787	317	330		
Adj No. of Lanes	1	2	2	0	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	422	2492	804	719	362	323		
Arrive On Green	0.20	0.70	0.45	0.45	0.20	0.20		
Sat Flow, veh/h	1774	3632	1863	1583	1774	1583		
Grp Volume(v), veh/h	521	234	528	787	317	330		
Grp Sat Flow(s),veh/h/ln	1774	1770	1770	1583	1774	1583		
Q Serve(g_s), s	24.5	2.5	27.9	54.5	20.8	24.5		
Cycle Q Clear(g_c), s	24.5	2.5	27.9	54.5	20.8	24.5		
Prop In Lane	1.00			1.00	1.00	1.00		
Lane Grp Cap(c), veh/h	422	2492	804	719	362	323		
V/C Ratio(X)	1.23	0.09	0.66	1.09	0.88	1.02		
Avail Cap(c_a), veh/h	422	2492	804	719	362	323		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	40.5	5.6	25.5	32.8	46.3	47.8		
Incr Delay (d2), s/veh	124.3	0.1	4.2	62.3	20.5	55.5		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	28.5	1.2	14.4	36.2	12.3	15.7		
LnGrp Delay(d),s/veh	164.8	5.7	29.7	95.0	66.8	103.3		
LnGrp LOS	F	A	C	F	E	F		
Approach Vol, veh/h		755	1315		647			
Approach Delay, s/veh		115.5	68.8		85.4			
Approach LOS		F	E		F			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		90.0		30.0	30.0	60.0		
Change Period (Y+Rc), s		5.5		5.5	5.5	5.5		
Max Green Setting (Gmax), s		84.5		24.5	24.5	54.5		
Max Q Clear Time (g_c+I1), s		4.5		26.5	26.5	56.5		
Green Ext Time (p_c), s		1.8		0.0	0.0	0.0		
Intersection Summary								
HCM 2010 Ctrl Delay			85.7					
HCM 2010 LOS			F					
Notes								

2040 PM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase

57: Morrison Rd & Taylor Rd

01/23/2019

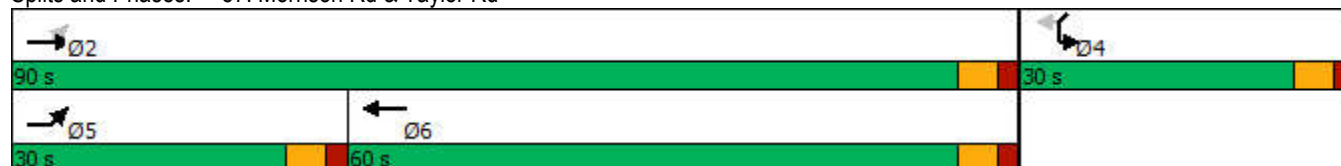


Phase Number	2	4	5	6
Movement	EBTL	SWL	EBL	WBT
Lead/Lag			Lead	Lag
Lead-Lag Optimize			Yes	Yes
Recall Mode	Max	None	None	Max
Maximum Split (s)	90	30	30	60
Maximum Split (%)	75.0%	25.0%	25.0%	50.0%
Minimum Split (s)	23.5	30	10.5	25.5
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	2	2	2	2
Minimum Initial (s)	10	5	5	10
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)		7		5
Flash Dont Walk (s)		11		15
Dual Entry	Yes	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	90	0	30
End Time (s)	90	0	30	90
Yield/Force Off (s)	84.5	114.5	24.5	84.5
Yield/Force Off 170(s)	84.5	103.5	24.5	69.5
Local Start Time (s)	90	60	90	0
Local Yield (s)	54.5	84.5	114.5	54.5
Local Yield 170(s)	54.5	73.5	114.5	39.5

Intersection Summary

Cycle Length	120
Control Type	Semi Act-Uncoord
Natural Cycle	100

Splits and Phases: 57: Morrison Rd & Taylor Rd



HCM 2010 Signalized Intersection Summary 60: S Hamilton Rd & SB IR-270 Exit Ramp

01/23/2019

								
Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations								
Traffic Volume (veh/h)	1182	764	0	1503	390	0		
Future Volume (veh/h)	1182	764	0	1503	390	0		
Number	7	14	5	2	6	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	0		
Adj Flow Rate, veh/h	1285	830	0	1634	424	0		
Adj No. of Lanes	2	2	0	2	2	0		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	0	2	2	0		
Cap, veh/h	1302	1054	0	1888	1888	0		
Arrive On Green	0.38	0.38	0.00	0.53	1.00	0.00		
Sat Flow, veh/h	3442	2787	0	3725	3725	0		
Grp Volume(v), veh/h	1285	830	0	1634	424	0		
Grp Sat Flow(s),veh/h/ln	1721	1393	0	1770	1770	0		
Q Serve(g_s), s	44.4	31.6	0.0	48.0	0.0	0.0		
Cycle Q Clear(g_c), s	44.4	31.6	0.0	48.0	0.0	0.0		
Prop In Lane	1.00	1.00	0.00			0.00		
Lane Grp Cap(c), veh/h	1302	1054	0	1888	1888	0		
V/C Ratio(X)	0.99	0.79	0.00	0.87	0.22	0.00		
Avail Cap(c_a), veh/h	1302	1054	0	1888	1888	0		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	0.66	1.00	0.00		
Uniform Delay (d), s/veh	37.0	33.0	0.0	24.3	0.0	0.0		
Incr Delay (d2), s/veh	21.7	4.0	0.0	3.8	0.3	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	25.0	12.7	0.0	24.4	0.1	0.0		
LnGrp Delay(d),s/veh	58.7	37.1	0.0	28.1	0.3	0.0		
LnGrp LOS	E	D		C	A			
Approach Vol, veh/h	2115			1634	424			
Approach Delay, s/veh	50.2			28.1	0.3			
Approach LOS	D			C	A			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		70.0		50.0		70.0		
Change Period (Y+Rc), s		6.0		4.6		6.0		
Max Green Setting (Gmax), s		64.0		45.4		64.0		
Max Q Clear Time (g_c+I1), s		50.0		46.4		2.0		
Green Ext Time (p_c), s		9.2		0.0		2.8		
Intersection Summary								
HCM 2010 Ctrl Delay			36.5					
HCM 2010 LOS			D					

2040 PM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase

60: S Hamilton Rd & SB IR-270 Exit Ramp

01/23/2019

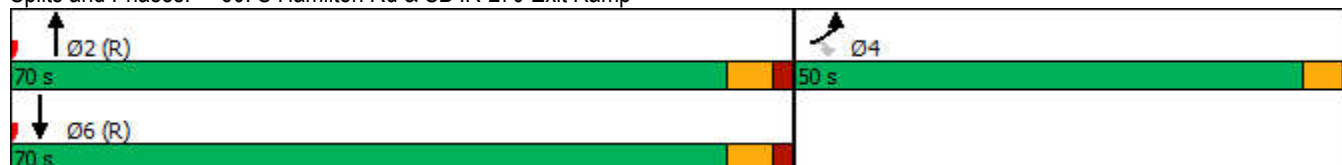


Phase Number	2	4	6
Movement	NBT	EBL	SBT
Lead/Lag			
Lead-Lag Optimize			
Recall Mode	C-Max	None	C-Max
Maximum Split (s)	70	50	70
Maximum Split (%)	58.3%	41.7%	58.3%
Minimum Split (s)	21	14.6	21
Yellow Time (s)	4	3.6	4
All-Red Time (s)	2	1	2
Minimum Initial (s)	15	10	15
Vehicle Extension (s)	3	3	3
Minimum Gap (s)	3	3	3
Time Before Reduce (s)	0	0	0
Time To Reduce (s)	0	0	0
Walk Time (s)			
Flash Dont Walk (s)			
Dual Entry	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes
Start Time (s)	67	17	67
End Time (s)	17	67	17
Yield/Force Off (s)	11	62.4	11
Yield/Force Off 170(s)	11	62.4	11
Local Start Time (s)	0	70	0
Local Yield (s)	64	115.4	64
Local Yield 170(s)	64	115.4	64

Intersection Summary

Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	90
Offset: 67 (56%), Referenced to phase 2:NBT and 6:SBT, Start of Green	

Splits and Phases: 60: S Hamilton Rd & SB IR-270 Exit Ramp



HCM 2010 Signalized Intersection Summary

63: Mill St/E Johnstown Rd & Cherry Bottom Rd

01/23/2019



Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	244	785	454	41	35	161		
Future Volume (veh/h)	244	785	454	41	35	161		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	265	853	493	45	38	175		
Adj No. of Lanes	1	1	1	1	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	683	1460	1234	1251	227	325		
Arrive On Green	0.08	0.78	0.66	0.66	0.13	0.13		
Sat Flow, veh/h	1774	1863	1863	1583	1774	1583		
Grp Volume(v), veh/h	265	853	493	45	38	175		
Grp Sat Flow(s),veh/h/ln	1774	1863	1863	1583	1774	1583		
Q Serve(g_s), s	3.8	16.6	11.0	0.6	1.7	8.9		
Cycle Q Clear(g_c), s	3.8	16.6	11.0	0.6	1.7	8.9		
Prop In Lane	1.00			1.00	1.00	1.00		
Lane Grp Cap(c), veh/h	683	1460	1234	1251	227	325		
V/C Ratio(X)	0.39	0.58	0.40	0.04	0.17	0.54		
Avail Cap(c_a), veh/h	821	1460	1234	1251	803	839		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	4.4	3.9	7.0	2.0	35.2	32.2		
Incr Delay (d2), s/veh	0.4	1.7	1.0	0.1	0.3	1.4		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	1.8	9.0	5.9	0.4	0.9	8.0		
LnGrp Delay(d),s/veh	4.7	5.6	8.0	2.1	35.5	33.6		
LnGrp LOS	A	A	A	A	D	C		
Approach Vol, veh/h		1118	538		213			
Approach Delay, s/veh		5.4	7.5		33.9			
Approach LOS		A	A		C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		75.0		15.6	11.0	64.0		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		71.0		41.0	14.0	53.0		
Max Q Clear Time (g_c+I1), s		18.6		10.9	5.8	13.0		
Green Ext Time (p_c), s		7.9		0.7	0.5	3.5		
Intersection Summary								
HCM 2010 Ctrl Delay			9.3					
HCM 2010 LOS			A					

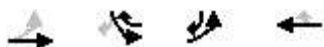
2040 PM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase

63: Mill St/E Johnstown Rd & Cherry Bottom Rd

01/23/2019

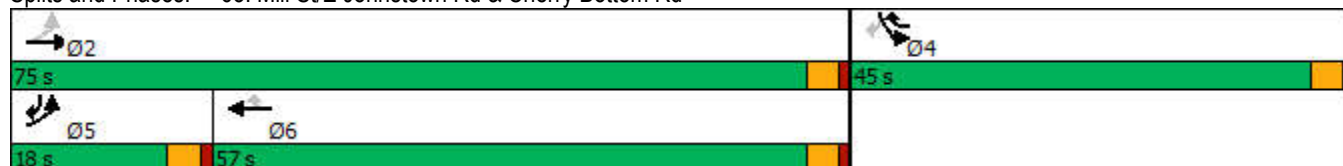


Phase Number	2	4	5	6
Movement	EBTL	SBL	EBL	WBT
Lead/Lag			Lead	Lag
Lead-Lag Optimize			Yes	Yes
Recall Mode	Max	None	None	Max
Maximum Split (s)	75	45	18	57
Maximum Split (%)	62.5%	37.5%	15.0%	47.5%
Minimum Split (s)	23	26	11	23
Yellow Time (s)	3	3	3	3
All-Red Time (s)	1	1	1	1
Minimum Initial (s)	19	5	7	19
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)		7		
Flash Dont Walk (s)		15		
Dual Entry	Yes	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	75	0	18
End Time (s)	75	0	18	75
Yield/Force Off (s)	71	116	14	71
Yield/Force Off 170(s)	71	101	14	71
Local Start Time (s)	102	57	102	0
Local Yield (s)	53	98	116	53
Local Yield 170(s)	53	83	116	53

Intersection Summary

Cycle Length	120
Control Type	Semi Act-Uncoord
Natural Cycle	60

Splits and Phases: 63: Mill St/E Johnstown Rd & Cherry Bottom Rd



HCM 2010 Signalized Intersection Summary

71: N Stygler Rd & Agler Rd

01/23/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	57	697	73	48	38	452	652	126	34	537	32
Future Volume (veh/h)	88	57	697	73	48	38	452	652	126	34	537	32
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	96	0	799	79	52	41	446	772	137	37	584	35
Adj No. of Lanes	1	0	2	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	198	0	1529	157	160	126	563	978	174	734	1405	84
Arrive On Green	0.17	0.00	0.17	0.17	0.17	0.17	0.10	0.10	0.10	0.41	0.41	0.41
Sat Flow, veh/h	1298	0	3167	678	966	762	1774	3082	547	1774	3393	203
Grp Volume(v), veh/h	96	0	799	79	0	93	446	467	442	37	304	315
Grp Sat Flow(s),veh/h/ln	1298	0	1583	678	0	1728	1774	1863	1766	1774	1770	1827
Q Serve(g_s), s	11.3	0.0	26.5	17.6	0.0	7.6	39.3	39.1	39.1	2.0	19.5	19.5
Cycle Q Clear(g_c), s	18.9	0.0	26.5	17.6	0.0	7.6	39.3	39.1	39.1	2.0	19.5	19.5
Prop In Lane	1.00		1.00	1.00		0.44	1.00		0.31	1.00		0.11
Lane Grp Cap(c), veh/h	198	0	1529	157	0	286	563	591	560	734	732	756
V/C Ratio(X)	0.48	0.00	0.52	0.50	0.00	0.32	0.79	0.79	0.79	0.05	0.42	0.42
Avail Cap(c_a), veh/h	198	0	1529	157	0	286	826	867	822	734	732	756
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.35	0.35	0.35	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.2	0.0	28.2	63.0	0.0	58.9	66.5	66.4	66.4	28.1	33.2	33.2
Incr Delay (d2), s/veh	1.8	0.0	0.3	2.5	0.0	0.7	1.2	1.1	1.2	0.1	1.7	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	0.0	17.7	3.4	0.0	3.7	19.5	20.4	19.4	1.0	9.9	10.2
LnGrp Delay(d),s/veh	69.0	0.0	28.6	65.6	0.0	59.5	67.7	67.5	67.6	28.2	34.9	34.9
LnGrp LOS	E		C	E		E	E	E	E	C	C	C
Approach Vol, veh/h	895				172		1355				656	
Approach Delay, s/veh	32.9				62.3		67.6				34.5	
Approach LOS	C				E		E				C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+Rc), s	71.7		32.0		56.3		32.0					
Change Period (Y+Rc), s	5.5		5.5		5.5		5.5					
Max Green Setting (Gmax), s	42.5		26.5		74.5		26.5					
Max Q Clear Time (g_c+I1), s	21.5		28.5		41.3		19.6					
Green Ext Time (p_c), s	4.1		0.0		9.5		0.6					
Intersection Summary												
HCM 2010 Ctrl Delay			50.2									
HCM 2010 LOS			D									
Notes												

2040 PM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase

71: N Stygler Rd & Agler Rd

01/23/2019

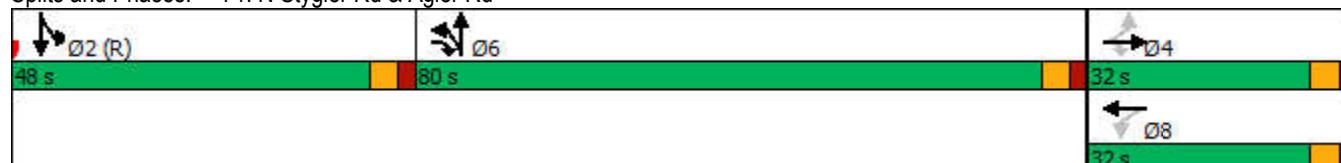


Phase Number	2	4	6	8
Movement	SBTL	EBTL	NBTL	WBTL
Lead/Lag				
Lead-Lag Optimize				
Recall Mode	C-Max	None	None	None
Maximum Split (s)	48	32	80	32
Maximum Split (%)	30.0%	20.0%	50.0%	20.0%
Minimum Split (s)	31.5	32	34.5	32
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	2	2	2	2
Minimum Initial (s)	8	5	5	5
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)	7	7	7	7
Flash Dont Walk (s)	19	19	22	19
Dual Entry	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	133	101	21	101
End Time (s)	21	133	101	133
Yield/Force Off (s)	15.5	127.5	95.5	127.5
Yield/Force Off 170(s)	156.5	108.5	73.5	108.5
Local Start Time (s)	0	128	48	128
Local Yield (s)	42.5	154.5	122.5	154.5
Local Yield 170(s)	23.5	135.5	100.5	135.5

Intersection Summary

Cycle Length	160
Control Type	Actuated-Coordinated
Natural Cycle	100
Offset: 133 (83%), Referenced to phase 2:SBTL, Start of Green	

Splits and Phases: 71: N Stygler Rd & Agler Rd



HCM 2010 Signalized Intersection Summary
 54: Taylor Station Rd & Claycraft Rd/Research Rd

05/20/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	197	57	72	136	27	46	27	463	26	4	400	36
Future Volume (veh/h)	197	57	72	136	27	46	27	463	26	4	400	36
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1703	1900	1900	1781	1900	1900	1815	1900	1900	1857	1900
Adj Flow Rate, veh/h	246	71	90	223	44	75	29	498	28	5	500	45
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.80	0.80	0.80	0.61	0.61	0.61	0.93	0.93	0.93	0.80	0.80	0.80
Percent Heavy Veh, %	50	50	50	8	8	8	3	3	3	2	2	2
Cap, veh/h	266	77	97	246	49	83	51	579	32	32	624	56
Arrive On Green	0.28	0.28	0.28	0.23	0.23	0.23	0.37	0.37	0.37	0.37	0.37	0.37
Sat Flow, veh/h	963	278	352	1084	214	365	52	1552	85	5	1675	150
Grp Volume(v), veh/h	407	0	0	342	0	0	555	0	0	550	0	0
Grp Sat Flow(s),veh/h/ln	1593	0	0	1662	0	0	1689	0	0	1829	0	0
Q Serve(g_s), s	30.0	0.0	0.0	24.2	0.0	0.0	4.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	30.0	0.0	0.0	24.2	0.0	0.0	37.1	0.0	0.0	32.5	0.0	0.0
Prop In Lane	0.60		0.22	0.65		0.22	0.05		0.05	0.01		0.08
Lane Grp Cap(c), veh/h	440	0	0	377	0	0	661	0	0	712	0	0
V/C Ratio(X)	0.93	0.00	0.00	0.91	0.00	0.00	0.84	0.00	0.00	0.77	0.00	0.00
Avail Cap(c_a), veh/h	501	0	0	455	0	0	661	0	0	712	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	42.5	0.0	0.0	45.4	0.0	0.0	34.9	0.0	0.0	33.9	0.0	0.0
Incr Delay (d2), s/veh	21.8	0.0	0.0	19.4	0.0	0.0	12.2	0.0	0.0	8.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.9	0.0	0.0	13.2	0.0	0.0	19.5	0.0	0.0	17.9	0.0	0.0
LnGrp Delay(d),s/veh	64.3	0.0	0.0	64.9	0.0	0.0	47.1	0.0	0.0	41.9	0.0	0.0
LnGrp LOS	E			E			D			D		
Approach Vol, veh/h		407			342			555			550	
Approach Delay, s/veh		64.3			64.9			47.1			41.9	
Approach LOS		E			E			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		50.0		38.3		50.0		32.4				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		45.0		38.0		45.0		33.0				
Max Q Clear Time (g_c+I1), s		39.1		32.0		34.5		26.2				
Green Ext Time (p_c), s		1.8		1.3		2.6		1.2				
Intersection Summary												
HCM 2010 Ctrl Delay				52.6								
HCM 2010 LOS				D								

2040 PM Peak With Existing Timings

Synchro 10 Report

Timing Report, Sorted By Phase

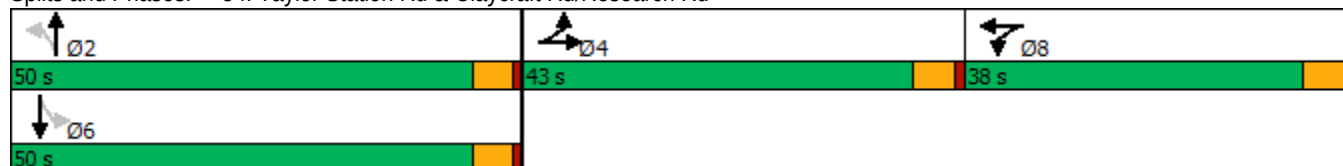
54: Taylor Station Rd & Claycraft Rd/Research Rd

05/20/2019



Phase Number	2	4	6	8
Movement	NBTL	EBTL	SBTL	WBTL
Lead/Lag				
Lead-Lag Optimize				
Recall Mode	Max	None	Max	None
Maximum Split (s)	50	43	50	38
Maximum Split (%)	38.2%	32.8%	38.2%	29.0%
Minimum Split (s)	15	15	15	15
Yellow Time (s)	4	4	4	4
All-Red Time (s)	1	1	1	1
Minimum Initial (s)	10	10	10	10
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)				
Flash Dont Walk (s)				
Dual Entry	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	50	0	93
End Time (s)	50	93	50	0
Yield/Force Off (s)	45	88	45	126
Yield/Force Off 170(s)	45	88	45	126
Local Start Time (s)	0	50	0	93
Local Yield (s)	45	88	45	126
Local Yield 170(s)	45	88	45	126
Intersection Summary				
Cycle Length	131			
Control Type	Semi Act-Uncoord			
Natural Cycle	90			

Splits and Phases: 54: Taylor Station Rd & Claycraft Rd/Research Rd



LANE SUMMARY

Site: 1 [Design Year PM]

Clark State Road & Hamilton Road
Roundabout

Lane Use and Performance													
	Demand Total veh/h	Flows HV %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Average Delay sec	Level of Service	95% Back of Queue Veh	Queue Dist ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
South: Hamilton Road													
Lane 1	924	3.0	1364	0.677	100	5.2	LOS A	7.6	194.8	Full	1600	0.0	0.0
Lane 2 ^d	1020	3.0	1505	0.677	100	5.1	LOS A	7.6	194.7	Full	1600	0.0	0.0
Approach	1943	3.0		0.677		5.2	LOS A	7.6	194.8				
East: Clark State Road													
Lane 1	133	3.0	576	0.231	100	14.1	LOS B	1.0	25.5	Full	1600	0.0	0.0
Lane 2 ^d	163	3.0	704	0.231	100	12.5	LOS B	1.1	27.4	Full	1600	0.0	0.0
Approach	296	3.0		0.231		13.2	LOS B	1.1	27.4				
North: Hamilton Road													
Lane 1	515	3.0	1078	0.478	100	6.3	LOS A	2.6	65.5	Full	1600	0.0	0.0
Lane 2 ^d	536	3.0	1123	0.478	100	5.8	LOS A	2.6	66.1	Full	1600	0.0	0.0
Approach	1051	3.0		0.478		6.0	LOS A	2.6	66.1				
Intersection	3290	3.0		0.677		6.1	LOS A	7.6	194.8				

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Signalised Intersections.

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

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

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 2010).

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

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

^d Dominant lane on roundabout approach

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Organisation: CARPENTER MARTY TRANSPORTATION INC. | Processed: Tuesday, December 5, 2017 3:41:27 PM

Project: P:\TRA\Gahanna\Thoroughfare plan\Analysis\Sidra\171205 Clark State & Hamilton.sip7

LANE LEVEL OF SERVICE

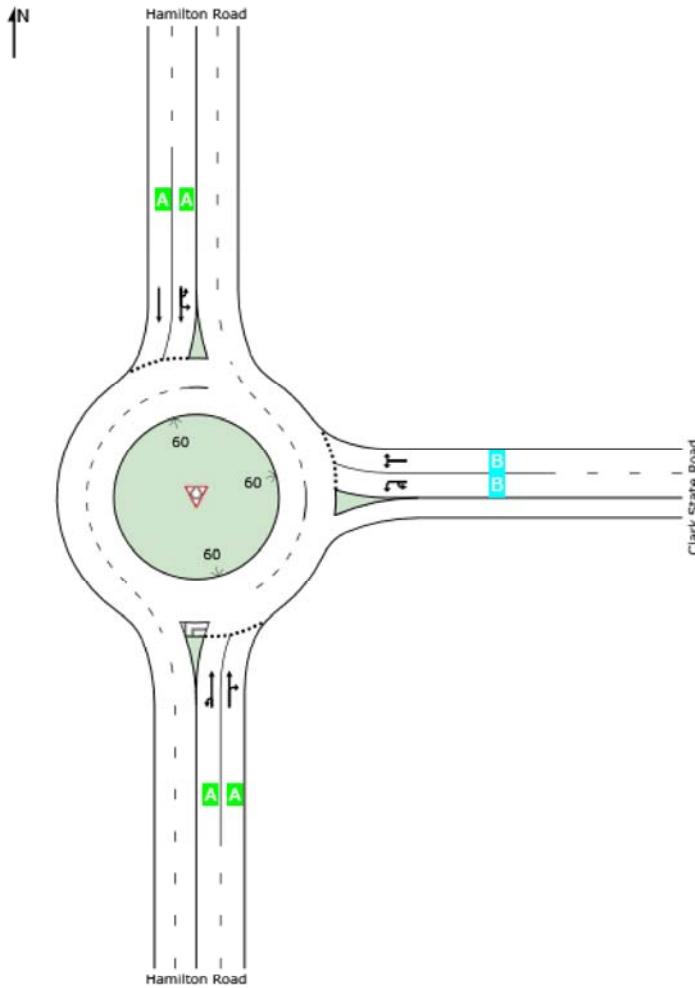
Lane Level of Service

Site: 1 [Design Year PM]

Clark State Road & Hamilton Road
Roundabout

All Movement Classes

	South	East	North	Intersection
LOS	A	B	A	A



Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.

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

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

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 2010).

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

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Organisation: CARPENTER MARTY TRANSPORTATION INC. | Processed: Tuesday, December 5, 2017 3:41:27 PM

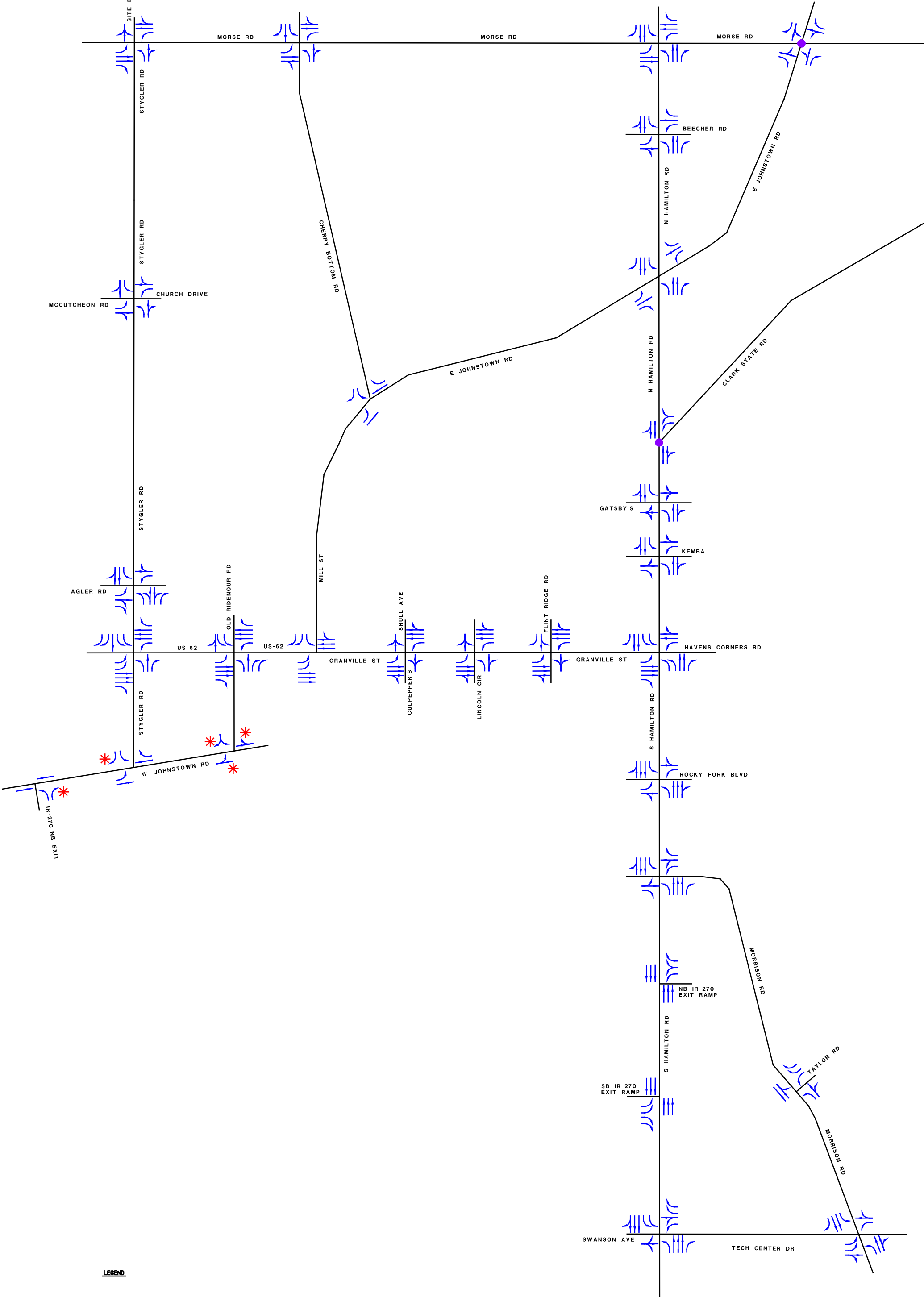
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Appendix D

Proposed Roadway System Lane Configuration Summary



Proposed Roadway System Lane Configuration Summary



LEGEND

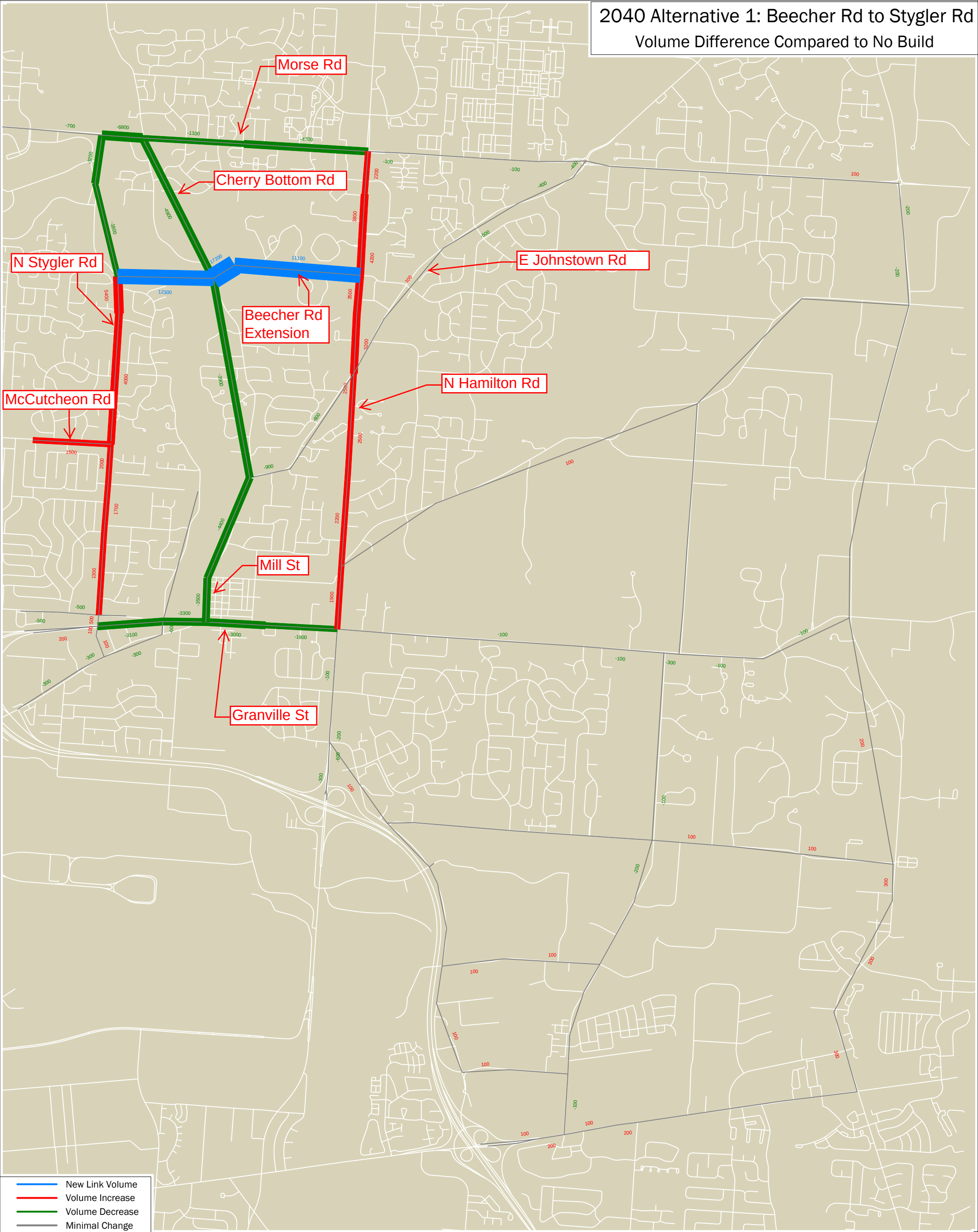
- = ROUNDABOUT
- = STOP CONTROLLED APPROACH
- ALL OTHER INTERSECTIONS SHOWN ARE SIGNALIZED
- SCHEMATIC NOT TO SCALE

Appendix E

New East-West Connector Road Analysis

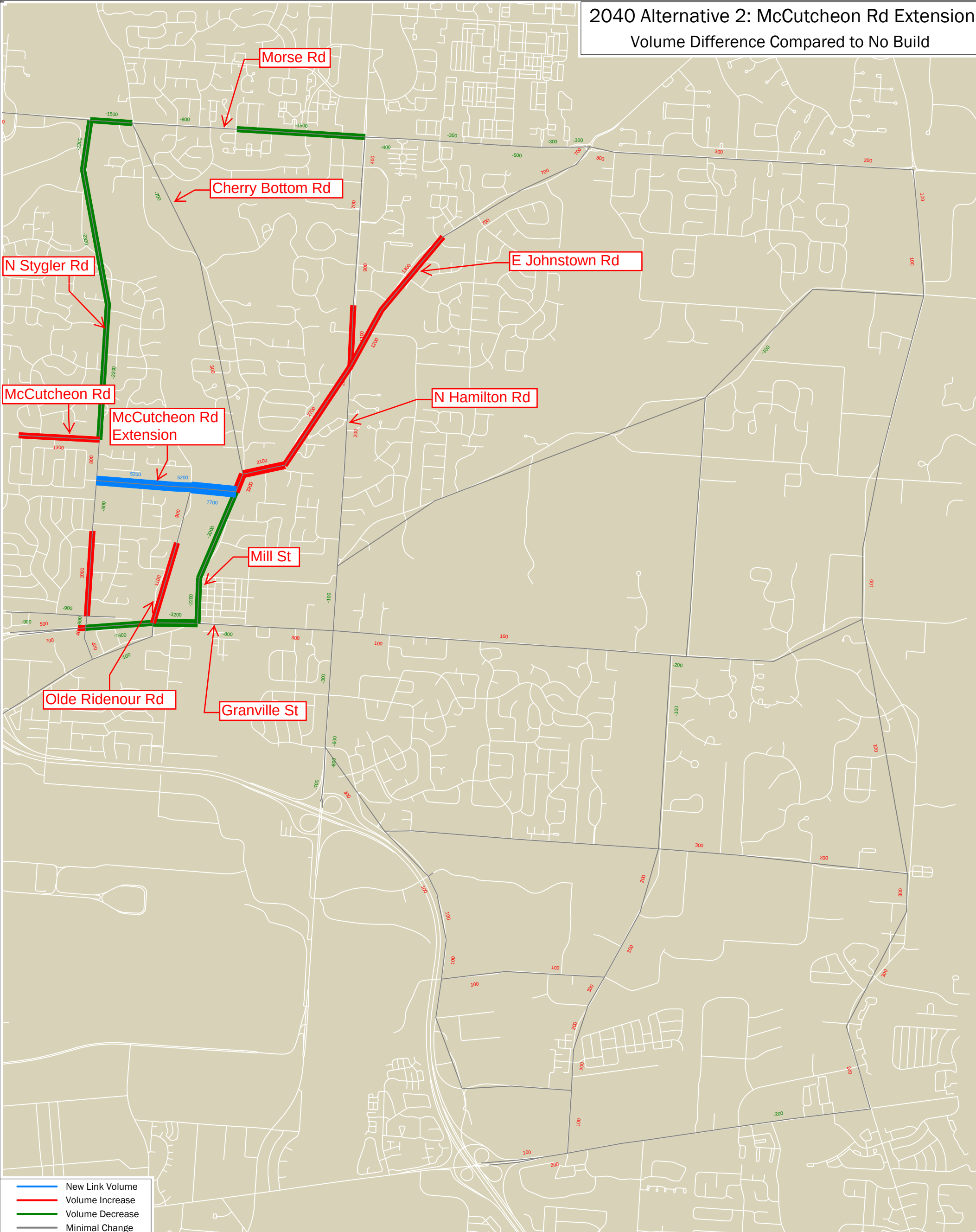


2040 Alternative 1: Beecher Rd to Stygler Rd
Volume Difference Compared to No Build



2040 Alternative 2: McCutcheon Rd Extension

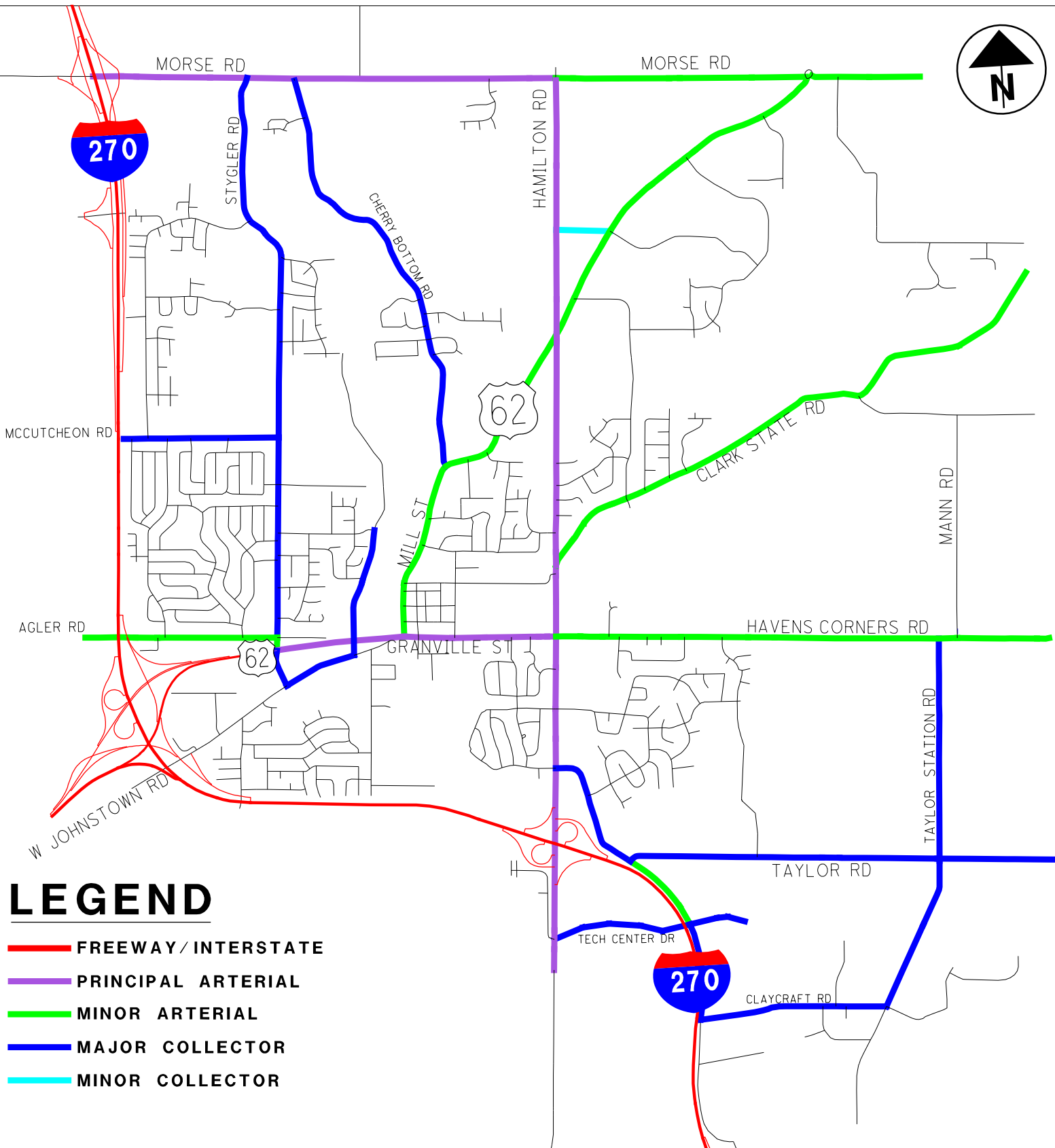
Volume Difference Compared to No Build



Appendix F

Thoroughfare Plan Roadway System Summary Requirements

Thoroughfare Plan



Existing 2017 Thoroughfare Plan Roadways

Segment	From	To	Classification	Jurisdiction	Thru Lanes	Speed Limit	2017 AADT	Ex. ROW
North-South Corridors								
Hines Rd	McCutcheon Road	Wendler Boulevard	Local	Gahanna	1/1	25		40'-50'
Lincolnshire Road	Agler Road	Wendler Boulevard	Local	Gahanna	1/1	25		50'-60'
Olde Ridenour Road	W Johnstown Road	Granville Street	Local	Gahanna	1/1	25	8460	60'
	Granville Street	Chappelfield Road	Local	Gahanna	1/1	25	5190	60'
Stygler Road	Johnstown Road	Granville Street	Major Collector	Gahanna	1/1	25	7940	50'-80'
	Granville Street	Agler Road	Minor Arterial	Gahanna	2/2T	25	24710	80'
	Agler Road	McCutcheon Road	Major Collector	Gahanna	1/1T	25/35	13950	80'
	McCutcheon Road	Ridenour Road	Major Collector	Gahanna	1/1T	35	12440	80'
	Ridenour Road	Morse Road	Major Collector	Gahanna/Columbus	1/1	35	9100	80'
Mill Street	Granville Street	Carpenter Road	Minor Arterial	Gahanna	1/1T	25	18310	60'
	Carpenter Road	Johnstown Road	Minor Arterial	Gahanna	1/1	35	15760	60'
Cherry Bottom Road	E. Johnstown Road	Academy Woods Drive	Major Collector	Gahanna	1/1	25	5090	80'
	Academy Woods Drive	Morse Road	Major Collector	Gahanna	1/1	25	7550	80'
E. Johnstown Road	Mill Street	Hamilton Road	Minor Arterial	Gahanna	1/1	35	13370	60'
	Hamilton Road	Beecher Road	Minor Arterial	Gahanna	1/1T	35	11080	75'-80'
	Beecher Road	Riva Ridge Road	Minor Arterial	Gahanna	1/1T	35	10910	75'-80'
	Riva Ridge Road	Morse Road	Minor Arterial	Gahanna/Franklin Co	1/1	45	11140	80'
Hamilton Road	Sawyer Road	Morrison Road	Principal Arterial	Gahanna/Columbus	2/2D	45	45750	100'
	Morrison Road	Rocky Fork Drive N	Principal Arterial	Gahanna	2/2T	35	31620	100'
	Rocky Fork Drive N	Granville Street	Principal Arterial	Gahanna	2/2T	35	32540	100'
	Granville Street	Clark State Road	Principal Arterial	Gahanna	2/2T	35	24700	100'
	Clark State Road	Johnstown Road	Principal Arterial	Gahanna	2/2T	35	18120	100'
	Johnstown Road	Beecher Road	Principal Arterial	Gahanna	2/2D	35	20090	100'
	Beecher Road	Morse Road	Principal Arterial	Gahanna	2/2D	35	25750	100'-110'
Clark State Road	Hamilton Road	Clotts Road	Minor Arterial	Gahanna/Franklin Co	1/1	35	7590	80'
	Clotts Road	Darling Road	Minor Arterial	Gahanna/Franklin Co	1/1	35/45	4710	80'
Clotts Road	Clark State Road	Johnstown Road	Local	Gahanna	1/1	25	3090	40'
Helmbright Drive	Taylor Road	Havens Corner Road	Local	Gahanna	1/1	25	1840	60'
Shull Road	Headley Road	Morse Road	Local	Gahanna	1/1	25		50'
Mann Road	Havens Corners Road	Clark State Road	Local	Franklin Co	1/1	45	1410	55'-60'
Morrison Road	Claycraft Road	Tech Center Drive	Local	Gahanna	1/1	35	9280	80'
	Tech Center Drive	Taylor Road	Major Collector	Gahanna	2/2T	35	13770	80'
	Taylor Road	Hamilton Road	Major Collector	Gahanna	2/2T	25	17360	80'
Taylor Station Road	Claycraft Road	Taylor Road	Major Collector	Gahanna/Franklin Co	1/1	35	9430	50'-80'
	Taylor Road	Havens Corner Road	Major Collector	Franklin Co	1/1	45	7890	50'-80'

Existing 2017 Thoroughfare Plan Roadways

Segment	From	To	Classification	Jurisdiction	Thru Lanes	Speed Limit	2017 AADT	Ex. ROW
East-West Corridors								
Claycraft Road	Morrison Road	Taylor Station Road	Local	Gahanna	1/1	35	3176	60'
Taylor Road	Morrison Road	Taylor Station Road	Major Collector	Gahanna/Franklin Co	1/1T	35	18687	50'-80'
	Taylor Station Road	Eastgate Parkway	Major Collector	Gahanna/Franklin Co	1/1	35	11237	50'-80'
W. Johnstown Road	IR-270	Stygler Road	Major Collector	Gahanna	1/1	35	8482	60'
	Stygler Road	Olde Ridenour Road	Local	Gahanna	1/1	35	7111	60'
Granville Street/US 62	Stygler Road	Olde Ridenour Road	Principal Arterial	Gahanna	2/2D	40	33035	90'-110'
	Olde Ridenour Road	Mill Street	Principal Arterial	Gahanna	2/2T	40/25	41573	90'-110'
	Mill Street	Hamilton Road	Principal Arterial	Gahanna	2/2T	25	28066	90'-110'
Havens Corners Road	Hamilton Road	Helmbright Road	Minor Arterial	Gahanna	1/1	35	18561	60'-80'
	Helmbright Road	Taylor Station Road	Minor Arterial	Gahanna/Franklin Co	1/1	45	14913	60'-80'
	Taylor Station Road	Reynoldsburg-NA Road	Minor Arterial	Franklin Co	1/1	45	9045	60'-80'
Havens Road	Clark State Road	Mann Road	Local	Franklin Co	1/1	45	1206	60'
Agler Road	Stelzer Road	Stygler Road	Minor Arterial	Gahanna/Columbus	1/1T	25/35	12761	50'-80'
Carpenter Road	Mill Street	Hamilton Road	Local	Gahanna	1/1	25	2569	50'
Chappelfield Road	Stygler Road	Olde Ridenour Road	Local	Gahanna	1/1	25		50'
McCutcheon Road	Stelzer Road	Stygler Road	Major Collector	Gahanna/Columbus	1/1T	35	9313	60'
Headley Road	Shull Road	Clark State Road	Local	Gahanna/Franklin Co	1/1	35		60'
Beecher Road	Hamilton Road	Johnstown Road	Minor Collector	Gahanna	1/1T	25	6895	60'
Morse Road	IR-270	Stygler Road	Principal Arterial	Columbus	2/2T	45	42313	120'
	Stygler Road	Cherry Bottom Road	Principal Arterial	Columbus	2/2T	45	45216	120'
	Cherry Bottom Road	Hamilton Road	Principal Arterial	Columbus	2/2T	45	35113	110'-120'
	Hamilton Road	Underwood Farms Drive	Minor Arterial	Columbus/Gahanna	1/1	45	21542	80'-110'
	Underwood Farms Drive	Johnstown Road	Minor Arterial	Columbus/Gahanna	1/1T	45	21542	60'-80'
	Johnstown Road	Harlem Road	Minor Arterial	Columbus/Gahanna	1/1	45	14366	60'-80'
Tech Center Drive	S Hamilton Road	Morrison Road	Major Collector	Gahanna	2/2T	35	11752	120'
	Morrison Road	Science Road	Local	Gahanna	1/1T	25	5759	60'

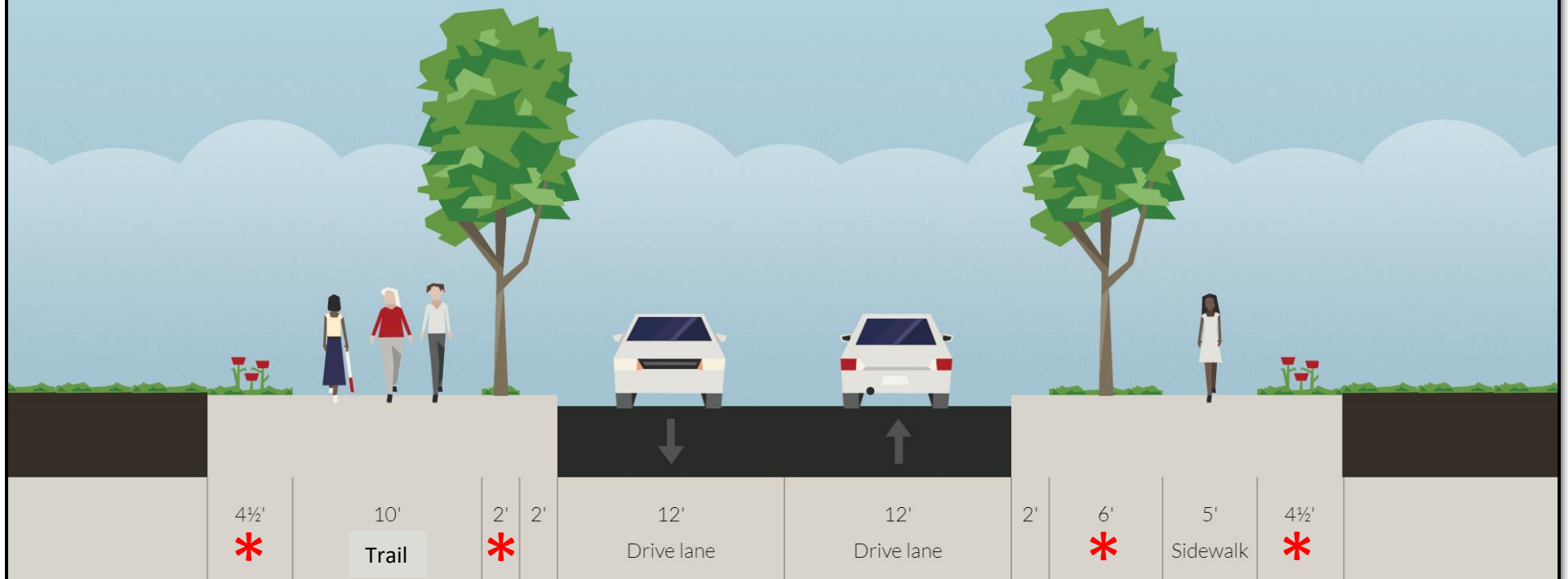
Design Year 2040 Thoroughfare Plan Roadways

Segment	From	To	Jurisdiction	2017 AADT	Ex. Thru Lanes	Ex. ROW	Prop. Classification	2040 AADT	Prop. 2040 Thru Lanes	Prop. 2040 ROW
North-South Corridors										
Hines Rd	McCutcheon Road	Wendler Boulevard	Gahanna		1/1	40'-50'	Local		1/1	60'
Lincolnshire Road	Agler Road	Wendler Boulevard	Gahanna		1/1	50'-60'	Local		1/1	60'
Olde Ridenour Road	W Johnstown Road	Granville Street	Gahanna	8460	1/1	60'	Major Collector	10010	1/1	60'
	Granville Street	Chappelfield Road	Gahanna	5190	1/1	60'	Major Collector	5790	1/1	60'
Styler Road	Johnstown Road	Granville Street	Gahanna	7940	1/1	50'-80'	Major Collector	9040	1/1T	80'
	Granville Street	Agler Road	Gahanna	24710	2/2T	80'	Minor Arterial	33230	2/2T	100'
	Agler Road	McCutcheon Road	Gahanna	13950	1/1T	80'	Major Collector	19080	2/2D	120'
	McCutcheon Road	Ridenour Road	Gahanna	12440	1/1T	80'	Major Collector	16440	1/1T	80'
	Ridenour Road	Morse Road	Gahanna/Columbus	9100	1/1	80'	Major Collector	12440	1/1	80'
Mill Street	Granville Street	Carpenter Road	Gahanna	18310	1/1T	60'	Minor Arterial	21250	1/1T	80'
	Carpenter Road	Johnstown Road	Gahanna	15760	1/1	60'	Minor Arterial	19020	1/1T	80'
Cherry Bottom Road	E. Johnstown Road	Academy Woods Drive	Gahanna	5090	1/1	80'	Major Collector	5670	1/1	80'
	Academy Woods Drive	Morse Road	Gahanna	7550	1/1	80'	Major Collector	8420	1/1	80'
E. Johnstown Road	Mill Street	Hamilton Road	Gahanna	13370	1/1	60'	Minor Arterial	16750	1/1T	80'
	Hamilton Road	Beecher Road	Gahanna	11080	1/1T	75'-80'	Minor Arterial	13880	1/1T	80'
	Beecher Road	Riva Ridge Road	Gahanna	10910	1/1T	75'-80'	Minor Arterial	13670	1/1T	80'
	Riva Ridge Road	Morse Road	Gahanna/Franklin Co	11140	1/1	80'	Minor Arterial	14470	1/1T	80'
Hamilton Road	Sawyer Road	Morrison Road	Gahanna/Columbus	45750	2/2D	100'	Principal Arterial	52070	3/3D	130'
	Morrison Road	Rocky Fork Drive N	Gahanna	31620	2/2T	100'	Principal Arterial	37440	3/3D	130'
	Rocky Fork Drive N	Granville Street	Gahanna	32540	2/2T	100'	Principal Arterial	38530	3/3D	130'
	Granville Street	Clark State Road	Gahanna	24700	2/2T	100'	Principal Arterial	31520	2/2D	120'
	Clark State Road	Johnstown Road	Gahanna	18120	2/2T	100'	Principal Arterial	23960	2/2T	100'
	Johnstown Road	Beecher Road	Gahanna	20090	2/2D	100'	Principal Arterial	26100	2/2D	120'
Clark State Road	Beecher Road	Morse Road	Gahanna	25750	2/2D	100'-110'	Principal Arterial	33450	3/3D	130'
	Hamilton Road	Clotts Road	Gahanna/Franklin Co	7590	1/1	80'	Minor Arterial	9160	1/1T	80'
	Clotts Road	Darling Road	Gahanna/Franklin Co	4710	1/1	80'	Minor Arterial	6330	1/1	80'
Clotts Road	Clark State Road	Johnstown Road	Gahanna	3090	1/1	40'	Local	3440	1/1	60'
Helmbright Drive	Taylor Road	Havens Corner Road	Gahanna	1840	1/1	60'	Local	2060	1/1	60'
Shull Road	Headley Road	Morse Road	Gahanna		1/1	50'	Local		1/1	60'
Mann Road	Havens Corners Road	Clark State Road	Franklin Co	1410	1/1	55'-60'	Local	2050	1/1	60'
Morrison Road	Claycraft Road	Tech Center Drive	Gahanna	9280	1/1	80'	Major Collector	11410	1/1T	80'
	Tech Center Drive	Taylor Road	Gahanna	13770	2/2T	80'	Minor Arterial	18210	2/2T	100'
	Taylor Road	Hamilton Road	Gahanna	17360	2/2T	80'	Major Collector	20160	2/2T	100'
Taylor Station Road	Claycraft Road	Taylor Road	Gahanna/Franklin Co	9430	1/1	50'-80'	Major Collector	10740	1/1T	80'
	Taylor Road	Havens Corner Road	Franklin Co	7890	1/1	50'-80'	Major Collector	10790	1/1	80'

Design Year 2040 Thoroughfare Plan Roadways

Segment	From	To	Jurisdiction	2017 AADT	Ex. Thru Lanes	Ex. ROW	Prop. Classification	2040 AADT	Prop. 2040 Thru Lanes	Prop. 2040 ROW
East-West Corridors										
Claycraft Road	Morrison Road	Taylor Station Road	Gahanna	3180	1/1	60'	Major Collector	3770	1/1T	80'
Taylor Road	Morrison Road	Taylor Station Road	Gahanna/Franklin Co	18690	1/1T	50'-80'	Major Collector	20840	2/2T	100'
	Taylor Station Road	Eastgate Parkway	Gahanna/Franklin Co	11240	1/1	50'-80'	Major Collector	12530	1/1	80'
W. Johnstown Road	IR-270	Stygler Road	Gahanna	8490	1/1	60'	Major Collector	10050	1/1T	80'
	Stygler Road	Olde Ridenour Road	Gahanna	7120	1/1	60'	Major Collector	8420	1/1T	80'
Granville Street/US 62	Stygler Road	Olde Ridenour Road	Gahanna	33040	2/2D	90'-110'	Principal Arterial	39880	3/3D	130'
	Olde Ridenour Road	Mill Street	Gahanna	41580	2/2T	90'-110'	Principal Arterial	49230	3/3D	130'
	Mill Street	Hamilton Road	Gahanna	28070	2/2T	90'-110'	Principal Arterial	32590	3/3D	130'
Havens Corners Road	Hamilton Road	Helmbright Road	Gahanna	18570	1/1	60'-80'	Minor Arterial	21550	2/2T	100'
	Helmbright Road	Taylor Station Road	Gahanna/Franklin Co	14920	1/1	60'-80'	Minor Arterial	17320	1/1T	80'
	Taylor Station Road	Reynoldsburg-NA Road	Franklin Co	9050	1/1	60'-80'	Minor Arterial	11550	1/1T	80'
Havens Road	Clark State Road	Mann Road	Franklin Co	1210	1/1	60'	Local	1350	1/1	60'
Agler Road	Stelzer Road	Stygler Road	Gahanna/Columbus	12770	1/1T	50'-80'	Minor Arterial	16580	1/1T	80'
Carpenter Road	Mill Street	Hamilton Road	Gahanna	2570	1/1	50'	Local	2870	1/1	60'
Chappelfield Road	Stygler Road	Olde Ridenour Road	Gahanna		1/1	50'	Local		1/1	60'
McCutcheon Road	Stelzer Road	Stygler Road	Gahanna/Columbus	9320	1/1T	60'	Major Collector	12530	1/1T	80'
Headley Road	Shull Road	Clark State Road	Gahanna/Franklin Co		1/1	60'	Local		1/1	60'
Beecher Road	Hamilton Road	Johnstown Road	Gahanna	6900	1/1T	60'	Minor Collector	7690	1/1T	80'
Morse Road	IR-270	Stygler Road	Columbus	42320	2/2T	120'	Principal Arterial	47180	3/3D	130'
	Stygler Road	Cherry Bottom Road	Columbus	45220	2/2T	120'	Principal Arterial	52500	3/3D	130'
	Cherry Bottom Road	Hamilton Road	Columbus	35120	2/2T	110'-120'	Principal Arterial	40770	3/3D	130'
	Hamilton Road	Underwood Farms Drive	Columbus/Gahanna	21550	1/1	80'-110'	Minor Arterial	24020	2/2D	120'
	Underwood Farms Drive	Johnstown Road	Columbus/Gahanna	21550	1/1T	60'-80'	Minor Arterial	26500	2/2D	120'
	Johnstown Road	Harlem Road	Columbus/Gahanna	14370	1/1	60'-80'	Minor Arterial	18010	2/2D	120'
Tech Center Drive	S Hamilton Road	Morrison Road	Gahanna	11760	2/2T	120'	Major Collector	17430	2/2T	120'
	Morrison Road	Science Road	Gahanna	5760	1/1T	60'	Major Collector	6960	1/1T	80'

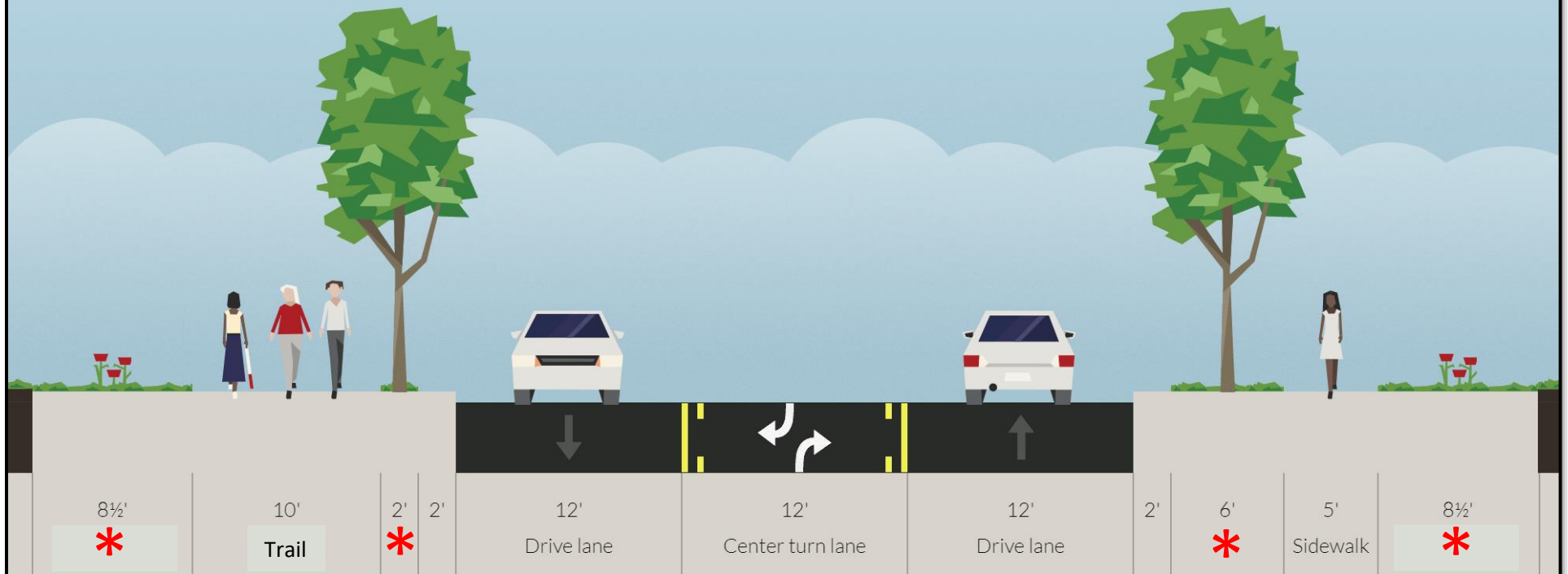
Collector Street (1/1)



* = Width varies

50 to 60 feet minimum right-of-way

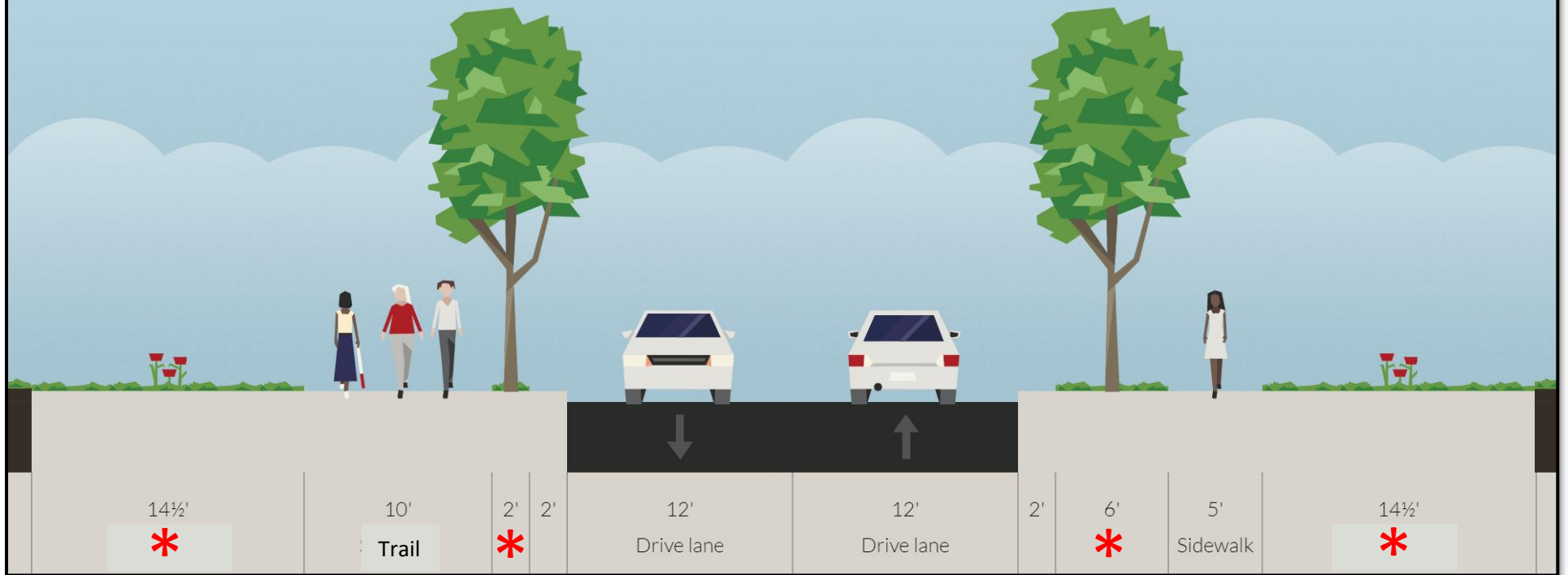
Collector Street (1/1T)



60 to 80 feet minimum right-of-way

* = Width varies

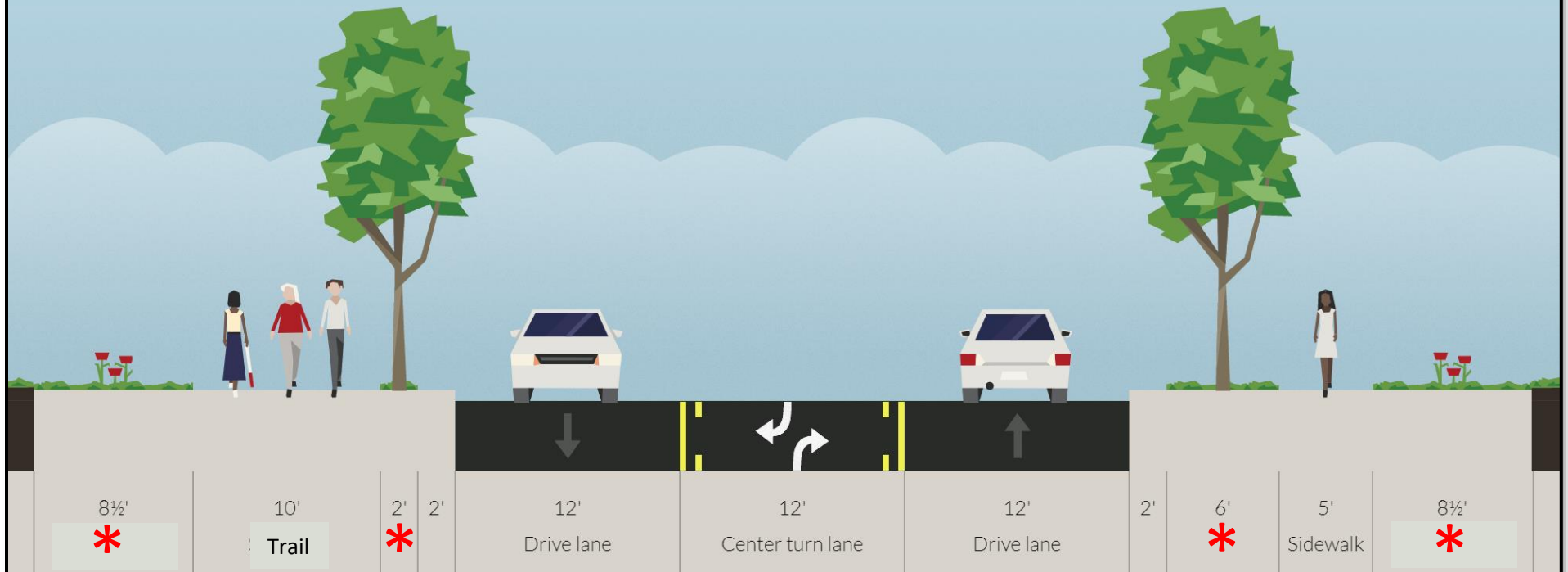
Minor Arterial (1/1)



60 to 80 feet minimum right-of-way

* = Width varies

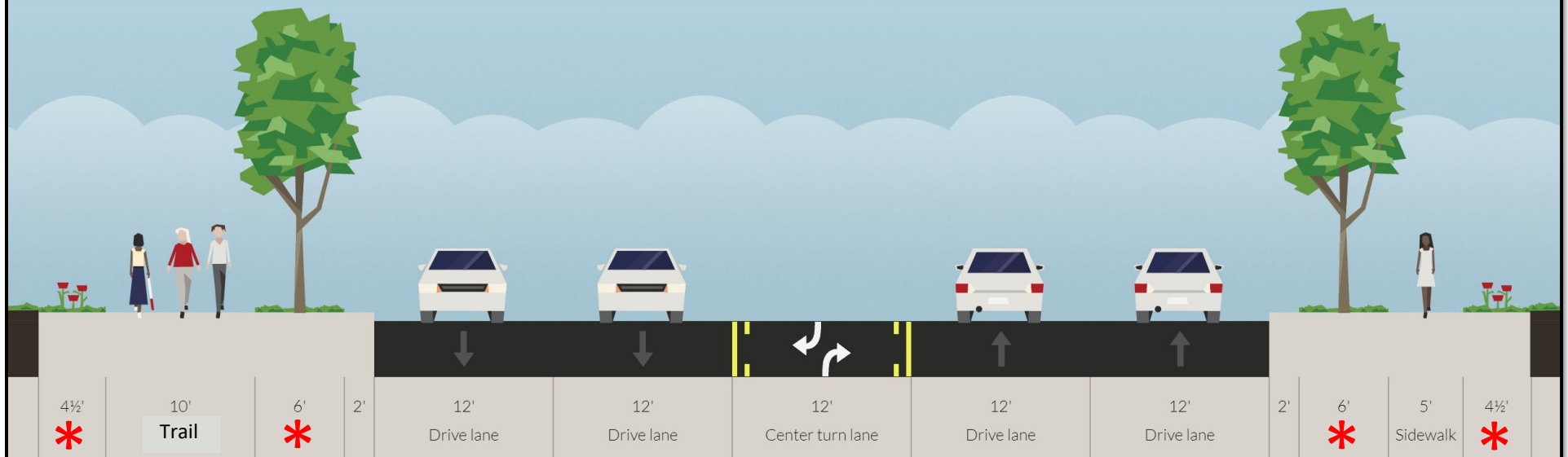
Minor Arterial (1/1T)



80 feet minimum right-of-way

* = Width varies

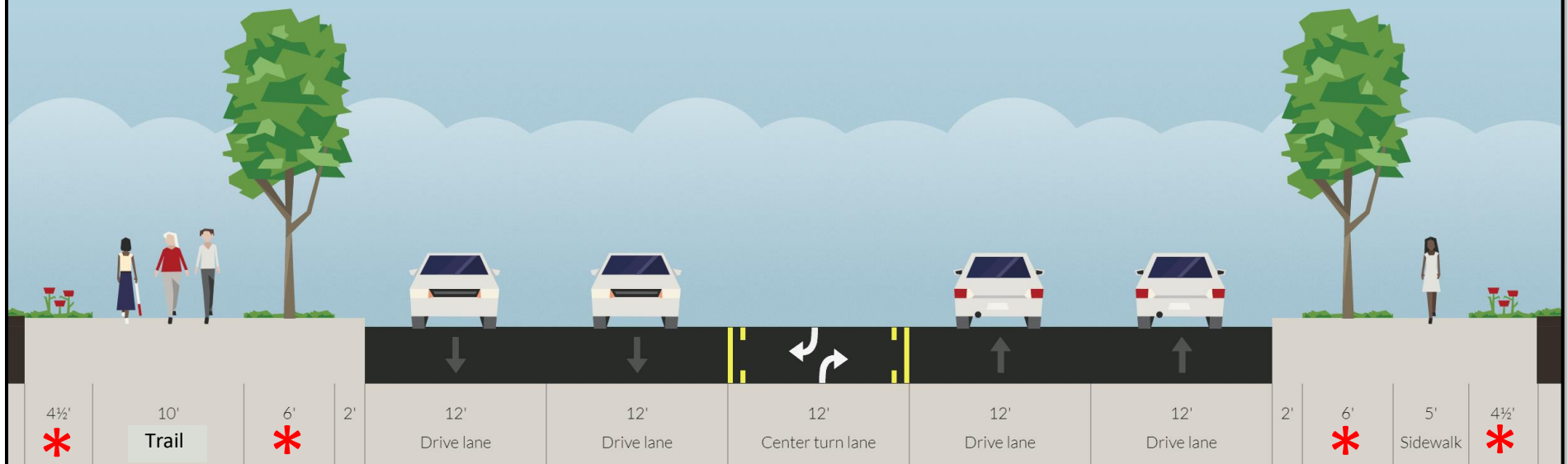
Minor Arterial (2/2T)



100 feet minimum right-of-way

* = Width varies

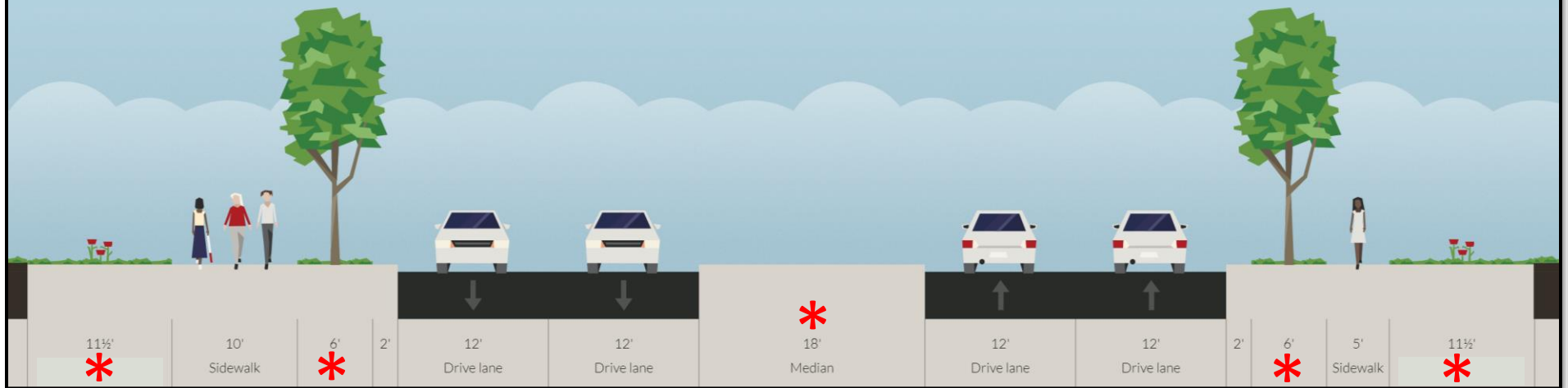
Major Arterial (2/2T)



100 feet minimum right-of-way

* = Width varies

Major Arterial (2/2D)



120 feet minimum right-of-way

* = Width varies