

Appendix

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□ Traffic Volume Data

MDM TRANSPORTATION CONSULTANTS, INC.

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Route 9
at Site Driveway
Wellesley, MA
Volume

28 Lord Road, Suite 280
Marlborough, MA
www.mdmtrans.com

Start Time	23-Mar-17 Thu	Eastbound		Hour Totals		Westbound		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		27	343			53	449		
12:15		31	391			43	440		
12:30		8	412			39	395		
12:45		20	363	86	1509	28	388	163	1672
01:00		15	353			16	388		
01:15		10	357			16	388		
01:30		12	357			18	385		
01:45		12	372	49	1439	7	416	57	1577
02:00		9	498			11	427		
02:15		13	404			14	434		
02:30		5	416			15	438		
02:45		6	412	33	1730	16	460	56	1759
03:00		9	439			8	483		
03:15		8	461			16	451		
03:30		17	473			13	520		
03:45		17	454	51	1827	18	431	55	1885
04:00		26	437			16	440		
04:15		30	479			19	434		
04:30		39	512			24	466		
04:45		60	483	155	1911	32	462	91	1802
05:00		68	518			30	417		
05:15		120	512			69	435		
05:30		183	517			82	465		
05:45		217	469	588	2016	120	410	301	1727
06:00		327	527			154	441		
06:15		517	426			171	459		
06:30		662	414			238	430		
06:45		638	343	2144	1710	270	339	833	1669
07:00		608	269			279	375		
07:15		638	294			307	373		
07:30		582	265			406	357		
07:45		513	269	2341	1097	456	280	1448	1385
08:00		635	238			404	258		
08:15		642	223			458	229		
08:30		553	227			487	242		
08:45		573	206	2403	894	491	214	1840	943
09:00		442	198			375	185		
09:15		387	214			444	198		
09:30		406	169			363	209		
09:45		387	135	1622	716	375	158	1557	750
10:00		375	145			354	119		
10:15		374	109			350	151		
10:30		360	88			398	104		
10:45		391	68	1500	410	383	124	1485	498
11:00		380	60			385	119		
11:15		373	56			387	85		
11:30		377	40			403	69		
11:45		430	32	1560	188	363	57	1538	330
Total		12532	15447			9424	15997	21956	31444
Percent		44.8%	55.2%			37.1%	62.9%	41.1%	58.9%
Combined Total		27979				25421		53400	

MDM TRANSPORTATION CONSULTANTS, INC.

Route 9
at Site Driveway
Wellesley, MA
Volume

28 Lord Road, Suite 280
Marlborough, MA
www.mdmtrans.com

Start Time	25-Mar-17 Sat	Eastbound		Hour Totals		Westbound		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		49	434			87	465		
12:15		35	403			64	499		
12:30		40	459			51	492		
12:45		25	392	149	1688	48	500	250	1956
01:00		26	414			52	455		
01:15		23	381			43	468		
01:30		23	490			24	436		
01:45		17	424	89	1709	22	432	141	1791
02:00		19	409			22	414		
02:15		15	491			32	452		
02:30		13	446			19	431		
02:45		12	462	59	1808	27	422	100	1719
03:00		14	473			23	458		
03:15		12	456			11	446		
03:30		14	450			23	393		
03:45		18	480	58	1859	21	423	78	1720
04:00		6	470			9	380		
04:15		14	532			11	400		
04:30		14	495			15	355		
04:45		17	523	51	2020	13	386	48	1521
05:00		32	481			18	397		
05:15		37	475			27	369		
05:30		68	448			26	374		
05:45		60	429	197	1833	25	347	96	1487
06:00		76	435			36	305		
06:15		105	384			56	322		
06:30		161	361			66	323		
06:45		148	351	490	1531	91	302	249	1252
07:00		153	321			103	285		
07:15		218	326			131	247		
07:30		227	254			186	197		
07:45		239	245	837	1146	201	228	621	957
08:00		266	294			234	178		
08:15		280	263			242	189		
08:30		300	245			296	188		
08:45		295	248	1141	1050	345	165	1117	720
09:00		288	257			289	161		
09:15		285	254			334	152		
09:30		366	219			405	153		
09:45		359	208	1298	938	387	143	1415	609
10:00		354	197			417	151		
10:15		336	163			430	149		
10:30		399	129			390	131		
10:45		378	124	1467	613	443	143	1680	574
11:00		417	121			411	127		
11:15		405	101			413	115		
11:30		458	101			469	102		
11:45		425	74	1705	397	468	89	1761	433
Total		7541	16592			7556	14739		
Percent		31.2%	68.8%			33.9%	66.1%		
Combined Total		24133				22295		46428	

PDI File #: 175562 C
 Location: N: Overbrook Drive S: CVS Driveway
 Location: E: Worcester Street (Route 9) W: Worcester Street (Route 9)
 City, State: Wellesley, MA
 Client: MDM/ D. Lindquist
 Site Code: 923
 Count Date: Thursday, March 30, 2017
 Start Time: 7:00 AM
 End Time: 9:00 AM
 Class:



46 Morton Street, Framingham, MA 01702
 Office: 508-875-0100 Fax: 508-875-0118
 Email: datarequests@pdillc.com

Cars and Heavy Vehicles

	Overbrook Drive					Worcester Street (Route 9)					CVS Driveway					Worcester Street (Route 9)					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:00 AM	6	0	14	0	20	5	300	1	16	322	2	0	1	0	3	5	586	6	1	598	943
7:15 AM	2	0	18	0	20	6	297	1	17	321	5	0	2	0	7	6	639	12	3	660	1008
7:30 AM	13	0	12	0	25	14	383	1	11	409	2	0	1	0	3	2	598	17	2	619	1056
7:45 AM	15	0	14	0	29	9	413	3	15	440	3	0	2	0	5	5	552	15	2	574	1048
Total	36	0	58	0	94	34	1393	6	59	1492	12	0	6	0	18	18	2375	50	8	2451	4055
8:00 AM	12	0	21	0	33	12	444	2	13	471	2	0	4	0	6	7	586	19	3	615	1125
8:15 AM	10	2	26	0	38	7	409	2	10	428	4	0	3	0	7	5	565	11	5	586	1059
8:30 AM	11	0	11	0	22	11	461	3	23	498	4	1	2	0	7	5	557	14	3	579	1106
8:45 AM	19	1	23	0	43	7	434	4	21	466	3	0	3	0	6	4	549	26	3	582	1097
Total	52	3	81	0	136	37	1748	11	67	1863	13	1	12	0	26	21	2257	70	14	2362	4387
Grand Total	88	3	139	0	230	71	3141	17	126	3355	25	1	18	0	44	39	4632	120	22	4813	8442
Approach %	38.3	1.3	60.4	0.0		2.1	93.6	0.5	3.8		56.8	2.3	40.9	0.0		0.8	96.2	2.5	0.5		
Total %	1.0	0.0	1.6	0.0	2.7	0.8	37.2	0.2	1.5	39.7	0.3	0.0	0.2	0.0	0.5	0.5	54.9	1.4	0.3	57.0	
Exiting Leg Total	192					4922					59					3269					8442
Cars	84	3	133	0	220	69	3076	17	123	3285	24	1	18	0	43	38	4477	115	18	4648	8196
% Cars	95.5	100.0	95.7	0.0	95.7	97.2	97.9	100.0	97.6	97.9	96.0	100.0	100.0	0.0	97.7	97.4	96.7	95.8	81.8	96.6	97.1
Exiting Leg Total	185					4757					58					3196					8196
Heavy Vehicles	4	0	6	0	10	2	65	0	3	70	1	0	0	0	1	1	155	5	4	165	246
% Heavy Vehicles	4.5	0.0	4.3	0.0	4.3	2.8	2.1	0.0	2.4	2.1	4.0	0.0	0.0	0.0	2.3	2.6	3.3	4.2	18.2	3.4	2.9
Exiting Leg Total	7					165					1					73					246

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

8:00 AM	Overbrook Drive					Worcester Street (Route 9)					CVS Driveway					Worcester Street (Route 9)					Total				
	North					East					South					West									
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total					
8:00 AM	12	0	21	0	33	12	444	2	13	471	2	0	4	0	6	7	586	19	3	615	1125				
8:15 AM	10	2	26	0	38	7	409	2	10	428	4	0	3	0	7	5	565	11	5	586	1059				
8:30 AM	11	0	11	0	22	11	461	3	23	498	4	1	2	0	7	5	557	14	3	579	1106				
8:45 AM	19	1	23	0	43	7	434	4	21	466	3	0	3	0	6	4	549	26	3	582	1097				
Total Volume	52	3	81	0	136	37	1748	11	67	1863	13	1	12	0	26	21	2257	70	14	2362	4387				
% Approach Total	38.2	2.2	59.6	0.0		2.0	93.8	0.6	3.6		50.0	3.8	46.2	0.0		0.9	95.6	3.0	0.6						
PHF	0.684	0.375	0.779	0.000	0.791	0.771	0.948	0.688	0.728	0.935	0.813	0.250	0.750	0.000	0.929	0.750	0.963	0.673	0.700	0.960	0.975				
Cars	50	3	76	0	129	36	1716	11	66	1829	13	1	12	0	26	20	2168	67	11	2266	4250				
Cars %	96.2	100.0	93.8	0.0	94.9	97.3	98.2	100.0	98.5	98.2	100.0	100.0	100.0	0.0	100.0	95.2	96.1	95.7	78.6	95.9	96.9				
Heavy Vehicles	2	0	5	0	7	1	32	0	1	34	0	0	0	0	0	1	89	3	3	96	137				
Heavy Vehicles %	3.8	0.0	6.2	0.0	5.1	2.7	1.8	0.0	1.5	1.8	0.0	0.0	0.0	0.0	0.0	4.8	3.9	4.3	21.4	4.1	3.1				
Cars Enter Leg	50	3	76	0	129	36	1716	11	66	1829	13	1	12	0	26	20	2168	67	11	2266	4250				
Heavy Enter Leg	2	0	5	0	7	1	32	0	1	34	0	0	0	0	0	1	89	3	3	96	137				
Total Entering Leg	52	3	81	0	136	37	1748	11	67	1863	13	1	12	0	26	21	2257	70	14	2362	4387				
Cars Exiting Leg																									
Heavy Exit Leg																									
Total Exiting Leg																									

PDI File #: 175562 C
 Location: N: Overbrook Drive S: CVS Driveway
 Location: E: Worcester Street (Route 9) W: Worcester Street (Route 9)
 City, State: Wellesley, MA
 Client: MDM/ D. Lindquist
 Site Code: 923
 Count Date: Thursday, March 30, 2017
 Start Time: 7:00 AM
 End Time: 9:00 AM
 Class:



46 Morton Street, Framingham, MA 01702
 Office: 508-875-0100 Fax: 508-875-0118
 Email: datarequests@pdillc.com

Cars

	Overbrook Drive					Worcester Street (Route 9)					CVS Driveway					Worcester Street (Route 9)					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:00 AM	5	0	14	0	19	5	295	1	16	317	2	0	1	0	3	5	571	6	1	583	922
7:15 AM	2	0	18	0	20	6	286	1	16	309	5	0	2	0	7	6	621	11	3	641	977
7:30 AM	13	0	11	0	24	14	378	1	11	404	2	0	1	0	3	2	577	17	2	598	1029
7:45 AM	14	0	14	0	28	8	401	3	14	426	2	0	2	0	4	5	540	14	1	560	1018
Total	34	0	57	0	91	33	1360	6	57	1456	11	0	6	0	17	18	2309	48	7	2382	3946
8:00 AM	11	0	20	0	31	11	435	2	13	461	2	0	4	0	6	6	562	17	3	588	1086
8:15 AM	10	2	24	0	36	7	404	2	9	422	4	0	3	0	7	5	543	11	3	562	1027
8:30 AM	11	0	10	0	21	11	450	3	23	487	4	1	2	0	7	5	540	14	2	561	1076
8:45 AM	18	1	22	0	41	7	427	4	21	459	3	0	3	0	6	4	523	25	3	555	1061
Total	50	3	76	0	129	36	1716	11	66	1829	13	1	12	0	26	20	2168	67	11	2266	4250
Grand Total	84	3	133	0	220	69	3076	17	123	3285	24	1	18	0	43	38	4477	115	18	4648	8196
Approach %	38.2	1.4	60.5	0.0		2.1	93.6	0.5	3.7		55.8	2.3	41.9	0.0		0.8	96.3	2.5	0.4		
Total %	1.0	0.0	1.6	0.0	2.7	0.8	37.5	0.2	1.5	40.1	0.3	0.0	0.2	0.0	0.5	0.5	54.6	1.4	0.2	56.7	
Exiting Leg Total	185					4757					58					3196					8196

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

8:00 AM	Overbrook Drive					Worcester Street (Route 9)					CVS Driveway					Worcester Street (Route 9)					
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
8:00 AM	11	0	20	0	31	11	435	2	13	461	2	0	4	0	6	6	562	17	3	588	1086
8:15 AM	10	2	24	0	36	7	404	2	9	422	4	0	3	0	7	5	543	11	3	562	1027
8:30 AM	11	0	10	0	21	11	450	3	23	487	4	1	2	0	7	5	540	14	2	561	1076
8:45 AM	18	1	22	0	41	7	427	4	21	459	3	0	3	0	6	4	523	25	3	555	1061
Total Volume	50	3	76	0	129	36	1716	11	66	1829	13	1	12	0	26	20	2168	67	11	2266	4250
% Approach Total	38.8	2.3	58.9	0.0		2.0	93.8	0.6	3.6		50.0	3.8	46.2	0.0		0.9	95.7	3.0	0.5		
PHF	0.694	0.375	0.792	0.000	0.787	0.818	0.953	0.688	0.717	0.939	0.813	0.250	0.750	0.000	0.929	0.833	0.964	0.670	0.917	0.963	0.978
Entering Leg	50	3	76	0	129	36	1716	11	66	1829	13	1	12	0	26	20	2168	67	11	2266	4250
Exiting Leg	104					2323					34					1789					4250
Total	233					4152					60					4055					8500

PDI File #: 175562 C
 Location: N: Overbrook Drive S: CVS Driveway
 Location: E: Worcester Street (Route 9) W: Worcester Street (Route 9)
 City, State: Wellesley, MA
 Client: MDM/ D. Lindquist
 Site Code: 923
 Count Date: Thursday, March 30, 2017
 Start Time: 7:00 AM
 End Time: 9:00 AM
 Class:



46 Morton Street, Framingham, MA 01702
 Office: 508-875-0100 Fax: 508-875-0118
 Email: datarequests@pdillc.com

Heavy Vehicles

	Overbrook Drive					Worcester Street (Route 9)					CVS Driveway					Worcester Street (Route 9)					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:00 AM	1	0	0	0	1	0	5	0	0	5	0	0	0	0	0	0	15	0	0	15	21
7:15 AM	0	0	0	0	0	0	11	0	1	12	0	0	0	0	0	0	18	1	0	19	31
7:30 AM	0	0	1	0	1	0	5	0	0	5	0	0	0	0	0	0	21	0	0	21	27
7:45 AM	1	0	0	0	1	1	12	0	1	14	1	0	0	0	1	0	12	1	1	14	30
Total	2	0	1	0	3	1	33	0	2	36	1	0	0	0	1	0	66	2	1	69	109
8:00 AM	1	0	1	0	2	1	9	0	0	10	0	0	0	0	0	1	24	2	0	27	39
8:15 AM	0	0	2	0	2	0	5	0	1	6	0	0	0	0	0	0	22	0	2	24	32
8:30 AM	0	0	1	0	1	0	11	0	0	11	0	0	0	0	0	0	17	0	1	18	30
8:45 AM	1	0	1	0	2	0	7	0	0	7	0	0	0	0	0	0	26	1	0	27	36
Total	2	0	5	0	7	1	32	0	1	34	0	0	0	0	0	1	89	3	3	96	137
Grand Total	4	0	6	0	10	2	65	0	3	70	1	0	0	0	1	1	155	5	4	165	246
Approach %	40.0	0.0	60.0	0.0		2.9	92.9	0.0	4.3		100.0	0.0	0.0	0.0		0.6	93.9	3.0	2.4		
Total %	1.6	0.0	2.4	0.0	4.1	0.8	26.4	0.0	1.2	28.5	0.4	0.0	0.0	0.0	0.4	0.4	63.0	2.0	1.6	67.1	
Exiting Leg Total	7					165					1					73					246

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

8:00 AM	Overbrook Drive					Worcester Street (Route 9)					CVS Driveway					Worcester Street (Route 9)					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
8:00 AM	1	0	1	0	2	1	9	0	0	10	0	0	0	0	0	1	24	2	0	27	39
8:15 AM	0	0	2	0	2	0	5	0	1	6	0	0	0	0	0	0	22	0	2	24	32
8:30 AM	0	0	1	0	1	0	11	0	0	11	0	0	0	0	0	0	17	0	1	18	30
8:45 AM	1	0	1	0	2	0	7	0	0	7	0	0	0	0	0	0	26	1	0	27	36
Total Volume	2	0	5	0	7	1	32	0	1	34	0	0	0	0	0	1	89	3	3	96	137
% Approach Total	28.6	0.0	71.4	0.0		2.9	94.1	0.0	2.9		0.0	0.0	0.0	0.0		1.0	92.7	3.1	3.1		
PHF	0.500	0.000	0.625	0.000	0.875	0.250	0.727	0.000	0.250	0.773	0.000	0.000	0.000	0.000	0.000	0.250	0.856	0.375	0.375	0.889	0.878
Entering Leg	2	0	5	0	7	1	32	0	1	34	0	0	0	0	0	1	89	3	3	96	137
Exiting Leg	4					95					1					37					137
Total	11					129					1					133					274

PDI File #: **175562 C**
 Location: **N: Overbrook Drive S: CVS Driveway**
 Location: **E: Worcester Street (Route 9) W: Worcester Street (Route 9)**
 City, State: **Wellesley, MA**
 Client: **MDM/ D. Lindquist**
 Site Code: **923**
 Count Date: **Thursday, March 30, 2017**
 Start Time: **7:00 AM**
 End Time: **9:00 AM**
 Class: **Bicycles (o**



46 Morton Street, Framingham, MA 01702
Office: 508-875-0100 Fax: 508-875-0118
Email: datarequests@pdillc.com

Bicycles (on Roadway and Crosswalks)

	Overbrook Drive							Worcester Street (Route 9)							CVS Driveway							Worcester Street (Route 9)							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
7:00 AM	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	1	
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Total	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		
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Grand Total	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		
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0			
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	100.0		
Exiting Leg Total	0							1							0							0							1

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM		Overbrook Drive							Worcester Street (Route 9)								CVS Driveway								Worcester Street (Route 9)								
		North							East								South								West								
		Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total			
7:00 AM		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	1	1			
7:15 AM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Total Volume		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	1	1			
% Approach Total		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0	0.0					
PHF		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.250				
Entering Leg		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	1				
Exiting Leg								0							1						0							0	1				
Total								0							1						0							1	2				

PDI File #: **175562 C**
 Location: **N: Overbrook Drive S: CVS Driveway**
 Location: **E: Worcester Street (Route 9) W: Worcester Street (Route 9)**
 City, State: **Wellesley, MA**
 Client: **MDM/ D. Lindquist**
 Site Code: **923**
 Mount Date: **Thursday, March 30, 2017**
 Start Time: **7:00 AM**
 End Time: **9:00 AM**
 Class:



46 Morton Street, Framingham, MA 01702
Office: 508-875-0100 Fax: 508-875-0118
Email: datarequests@pdillc.com

Pedestrians

	Overbrook Drive							Worcester Street (Route 9)							CVS Driveway							Worcester Street (Route 9)							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:45 AM	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	1	1	
Total	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	1	1	
Grand Total	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	1	1	1	
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	100.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	100.0		
Exiting Leg Total	0							0							0							1							1

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

8:00 AM		Overbrook Drive							Worcester Street (Route 9)							CVS Driveway							Worcester Street (Route 9)							
		North							East							South							West							
		Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
8:00 AM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM		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	1	1	1
Total Volume		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	1	1	1
% Approach Total		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	100.0	0.0		
PHF		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250		0.250	
Entering Leg		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	1	1	1
Exiting Leg								0							0							0					1		1	1
Total		0							0							0							2							2

PDI File #: 175562 B
 Location: N: Weston Road S: Weston Road
 Location: E: Driveway W: Route 9 EB Ramps
 City, State: Wellesley, MA
 Client: MDM/ D. Lindquist
 Site Code: 923
 Count Date: Thursday, March 30, 2017
 Start Time: 7:00 AM
 End Time: 9:00 AM
 Class:



46 Morton Street, Framingham, MA 01702
 Office: 508-875-0100 Fax: 508-875-0118
 Email: datarequests@pdillc.com

Cars and Heavy Vehicles

	Weston Road					Driveway					Weston Road					Route 9 EB Ramps					
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:00 AM	55	65	1	0	121	1	0	0	0	1	0	164	21	0	185	21	0	32	0	53	360
7:15 AM	63	85	0	0	148	0	0	0	0	0	0	169	11	0	180	16	0	29	0	45	373
7:30 AM	48	101	0	0	149	0	0	0	0	0	0	186	12	0	198	41	0	35	0	76	423
7:45 AM	52	138	0	1	191	1	0	0	0	1	0	215	9	0	224	36	0	46	0	82	498
Total	218	389	1	1	609	2	0	0	0	2	0	734	53	0	787	114	0	142	0	256	1654
8:00 AM	51	118	1	0	170	2	0	0	0	2	0	197	18	0	215	37	0	33	0	70	457
8:15 AM	58	135	0	0	193	0	0	0	0	0	0	179	22	0	201	39	0	28	0	67	461
8:30 AM	47	119	0	0	166	0	0	0	0	0	0	217	12	0	229	24	0	26	0	50	445
8:45 AM	43	84	0	0	127	0	0	0	0	0	0	197	21	0	218	37	0	35	0	72	417
Total	199	456	1	0	656	2	0	0	0	2	0	790	73	0	863	137	0	122	0	259	1780
Grand Total	417	845	2	1	1265	4	0	0	0	4	0	1524	126	0	1650	251	0	264	0	515	3434
Approach %	33.0	66.8	0.2	0.1		100.0	0.0	0.0	0.0		0.0	92.4	7.6	0.0		48.7	0.0	51.3	0.0		
Total %	12.1	24.6	0.1	0.0	36.8	0.1	0.0	0.0	0.0	0.1	0.0	44.4	3.7	0.0	48.0	7.3	0.0	7.7	0.0	15.0	
Exiting Leg Total	1793					2					1096					543					3434
Cars	408	826	2	1	1237	4	0	0	0	4	0	1496	121	0	1617	242	0	253	0	495	3353
% Cars	97.8	97.8	100.0	100.0	97.8	100.0	0.0	0.0	0.0	100.0	0.0	98.2	96.0	0.0	98.0	96.4	0.0	95.8	0.0	96.1	97.6
Exiting Leg Total	1754					2					1068					529					3353
Heavy Vehicles	9	19	0	0	28	0	0	0	0	0	0	28	5	0	33	9	0	11	0	20	81
% Heavy Vehicles	2.2	2.2	0.0	0.0	2.2	0.0	0.0	0.0	0.0	0.0	0.0	1.8	4.0	0.0	2.0	3.6	0.0	4.2	0.0	3.9	2.4
Exiting Leg Total	39					0					28					14					81

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:45 AM	Weston Road					Driveway					Weston Road					Route 9 EB Ramps										
	North					East					South					West										
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total						
7:45 AM	52	138	0	1	191	1	0	0	0	1	0	215	9	0	224	36	0	46	0	82	498					
8:00 AM	51	118	1	0	170	2	0	0	0	2	0	197	18	0	215	37	0	33	0	70	457					
8:15 AM	58	135	0	0	193	0	0	0	0	0	0	179	22	0	201	39	0	28	0	67	461					
8:30 AM	47	119	0	0	166	0	0	0	0	0	0	217	12	0	229	24	0	26	0	50	445					
Total Volume	208	510	1	1	720	3	0	0	0	3	0	808	61	0	869	136	0	133	0	269	1861					
% Approach Total	28.9	70.8	0.1	0.1		100.0	0.0	0.0	0.0		0.0	93.0	7.0	0.0		50.6	0.0	49.4	0.0							
PHF	0.897	0.924	0.250	0.250	0.933	0.375	0.000	0.000	0.000	0.375	0.000	0.931	0.693	0.000	0.949	0.872	0.000	0.723	0.000	0.820	0.934					
Cars	204	498	1	1	704	3	0	0	0	3	0	796	57	0	853	131	0	128	0	259	1819					
Cars %	98.1	97.6	100.0	100.0	97.8	100.0	0.0	0.0	0.0	100.0	0.0	98.5	93.4	0.0	98.2	96.3	0.0	96.2	0.0	96.3	97.7					
Heavy Vehicles	4	12	0	0	16	0	0	0	0	0	0	12	4	0	16	5	0	5	0	10	42					
Heavy Vehicles %	1.9	2.4	0.0	0.0	2.2	0.0	0.0	0.0	0.0	0.0	0.0	1.5	6.6	0.0	1.8	3.7	0.0	3.8	0.0	3.7	2.3					
Cars Enter Leg	204	498	1	1	704	3	0	0	0	3	0	796	57	0	853	131	0	128	0	259	1819					
Heavy Enter Leg	4	12	0	0	16	0	0	0	0	0	0	12	4	0	16	5	0	5	0	10	42					
Total Entering Leg	208	510	1	1	720	3	0	0	0	3	0	808	61	0	869	136	0	133	0	269	1861					
Cars Exiting Leg						928										629					261					1819
Heavy Exit Leg						17										17					8					42
Total Exiting Leg						945					1					646					269					1861

PDI File #: 175562 B
 Location: N: Weston Road S: Weston Road
 Location: E: Driveway W: Route 9 EB Ramps
 City, State: Wellesley, MA
 Client: MDM/ D. Lindquist
 Site Code: 923
 Count Date: Thursday, March 30, 2017
 Start Time: 7:00 AM
 End Time: 9:00 AM
 Class:



46 Morton Street, Framingham, MA 01702
 Office: 508-875-0100 Fax: 508-875-0118
 Email: datarequests@pdillc.com

Cars

	Weston Road					Driveway					Weston Road					Route 9 EB Ramps					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:00 AM	53	64	1	0	118	1	0	0	0	1	0	159	21	0	180	21	0	30	0	51	350
7:15 AM	62	83	0	0	145	0	0	0	0	0	0	169	11	0	180	16	0	28	0	44	369
7:30 AM	47	97	0	0	144	0	0	0	0	0	0	181	12	0	193	39	0	33	0	72	409
7:45 AM	52	134	0	1	187	1	0	0	0	1	0	211	8	0	219	36	0	44	0	80	487
Total	214	378	1	1	594	2	0	0	0	2	0	720	52	0	772	112	0	135	0	247	1615
8:00 AM	50	117	1	0	168	2	0	0	0	2	0	196	17	0	213	36	0	30	0	66	449
8:15 AM	55	133	0	0	188	0	0	0	0	0	0	176	20	0	196	38	0	28	0	66	450
8:30 AM	47	114	0	0	161	0	0	0	0	0	0	213	12	0	225	21	0	26	0	47	433
8:45 AM	42	84	0	0	126	0	0	0	0	0	0	191	20	0	211	35	0	34	0	69	406
Total	194	448	1	0	643	2	0	0	0	2	0	776	69	0	845	130	0	118	0	248	1738
Grand Total	408	826	2	1	1237	4	0	0	0	4	0	1496	121	0	1617	242	0	253	0	495	3353
Approach %	33.0	66.8	0.2	0.1		100.0	0.0	0.0	0.0		0.0	92.5	7.5	0.0		48.9	0.0	51.1	0.0		
Total %	12.2	24.6	0.1	0.0	36.9	0.1	0.0	0.0	0.0	0.1	0.0	44.6	3.6	0.0	48.2	7.2	0.0	7.5	0.0	14.8	
Exiting Leg Total	1754					2					1068					529					3353

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:45 AM	Weston Road					Driveway					Weston Road					Route 9 EB Ramps					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:45 AM	52	134	0	1	187	1	0	0	0	1	0	211	8	0	219	36	0	44	0	80	487
8:00 AM	50	117	1	0	168	2	0	0	0	2	0	196	17	0	213	36	0	30	0	66	449
8:15 AM	55	133	0	0	188	0	0	0	0	0	0	176	20	0	196	38	0	28	0	66	450
8:30 AM	47	114	0	0	161	0	0	0	0	0	0	213	12	0	225	21	0	26	0	47	433
Total Volume	204	498	1	1	704	3	0	0	0	3	0	796	57	0	853	131	0	128	0	259	1819
% Approach Total	29.0	70.7	0.1	0.1		100.0	0.0	0.0	0.0		0.0	93.3	6.7	0.0		50.6	0.0	49.4	0.0		
PHF	0.927	0.929	0.250	0.250	0.936	0.375	0.000	0.000	0.000	0.375	0.000	0.934	0.713	0.000	0.948	0.862	0.000	0.727	0.000	0.809	0.934
Entering Leg	204	498	1	1	704	3	0	0	0	3	0	796	57	0	853	131	0	128	0	259	1819
Exiting Leg	928					1					629					261					1819
Total	1632					4					1482					520					3638

PDI File #: 175562 B
 Location: N: Weston Road S: Weston Road
 Location: E: Driveway W: Route 9 EB Ramps
 City, State: Wellesley, MA
 Client: MDM/ D. Lindquist
 Site Code: 923
 Count Date: Thursday, March 30, 2017
 Start Time: 7:00 AM
 End Time: 9:00 AM
 Class:



Heavy Vehicles

	Weston Road					Driveway					Weston Road					Route 9 EB Ramps					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:00 AM	2	1	0	0	3	0	0	0	0	0	0	5	0	0	5	0	0	2	0	2	10
7:15 AM	1	2	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	4
7:30 AM	1	4	0	0	5	0	0	0	0	0	0	5	0	0	5	2	0	2	0	4	14
7:45 AM	0	4	0	0	4	0	0	0	0	0	0	4	1	0	5	0	0	2	0	2	11
Total	4	11	0	0	15	0	0	0	0	0	0	14	1	0	15	2	0	7	0	9	39
8:00 AM	1	1	0	0	2	0	0	0	0	0	0	1	1	0	2	1	0	3	0	4	8
8:15 AM	3	2	0	0	5	0	0	0	0	0	0	3	2	0	5	1	0	0	0	1	11
8:30 AM	0	5	0	0	5	0	0	0	0	0	0	4	0	0	4	3	0	0	0	3	12
8:45 AM	1	0	0	0	1	0	0	0	0	0	0	6	1	0	7	2	0	1	0	3	11
Total	5	8	0	0	13	0	0	0	0	0	0	14	4	0	18	7	0	4	0	11	42
Grand Total	9	19	0	0	28	0	0	0	0	0	0	28	5	0	33	9	0	11	0	20	81
Approach %	32.1	67.9	0.0	0.0		0.0	0.0	0.0	0.0		0.0	84.8	15.2	0.0		45.0	0.0	55.0	0.0		
Total %	11.1	23.5	0.0	0.0	34.6	0.0	0.0	0.0	0.0	0.0	0.0	34.6	6.2	0.0	40.7	11.1	0.0	13.6	0.0	24.7	
Exiting Leg Total	39					0					28					14					81

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:30 AM	Weston Road					Driveway					Weston Road					Route 9 EB Ramps					
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:30 AM	1	4	0	0	5	0	0	0	0	0	0	5	0	0	5	2	0	2	0	4	14
7:45 AM	0	4	0	0	4	0	0	0	0	0	0	4	1	0	5	0	0	2	0	2	11
8:00 AM	1	1	0	0	2	0	0	0	0	0	0	1	1	0	2	1	0	3	0	4	8
8:15 AM	3	2	0	0	5	0	0	0	0	0	0	3	2	0	5	1	0	0	0	1	11
Total Volume	5	11	0	0	16	0	0	0	0	0	0	13	4	0	17	4	0	7	0	11	44
% Approach Total	31.3	68.8	0.0	0.0		0.0	0.0	0.0	0.0		0.0	76.5	23.5	0.0		36.4	0.0	63.6	0.0		
PHF	0.417	0.688	0.000	0.000	0.800	0.000	0.000	0.000	0.000	0.000	0.000	0.650	0.500	0.000	0.850	0.500	0.000	0.583	0.000	0.688	0.786
Entering Leg	5	11	0	0	16	0	0	0	0	0	0	13	4	0	17	4	0	7	0	11	44
Exiting Leg					20					0				15						9	44
Total					36					0				32						20	88

PDI File #: **175562 B**
 Location: **N: Weston Road S: Weston Road**
 Location: **E: Driveway W: Route 9 EB Ramps**
 City, State: **Wellesley, MA**
 Client: **MDM/ D. Lindquist**
 Site Code: **923**
 Count Date: **Thursday, March 30, 2017**
 Start Time: **7:00 AM**
 End Time: **9:00 AM**
 Class:



PRECISION
DATA
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702
Office: 508-875-0100 Fax: 508-875-0118
Email: datarequests@pdillc.com

Bicycles (on Roadway and Crosswalks)

	Weston Road							Driveway							Weston Road							Route 9 EB Ramps							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	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	1	1
Grand Total	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3	
Approach %	0.0	100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	100.0	0.0		
Total %	0.0	66.7	0.0	0.0	0.0	0.0	66.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.3	0.0	33.3		
Exiting Leg Total	0							0							2							1							3

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:30 AM	Weston Road							Driveway							Weston Road							Route 9 EB Ramps							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
7:30 AM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
7:45 AM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1		
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1		
Total Volume	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3	
% Approach Total	0.0	100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	100.0	0.0		
PHF	0.000	0.500	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.750	
Entering Leg	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3	
Exiting Leg							0							0							2					1	3		
Total							2							0							2					2	6		

PDI File #: **175562 B**
 Location: **N: Weston Road S: Weston Road**
 Location: **E: Driveway W: Route 9 EB Ramps**
 City, State: **Wellesley, MA**
 Client: **MDM/ D. Lindquist**
 Site Code: **923**
 Count Date: **Thursday, March 30, 2017**
 Start Time: **7:00 AM**
 End Time: **9:00 AM**
 Class:



46 Morton Street, Framingham, MA 01702
 Office: 508-875-0100 Fax: 508-875-0118
 Email: datarequests@pdillc.com

Pedestrians

	Weston Road							Driveway						Weston Road							Route 9 EB Ramps							Total	
	North							East						South							West								
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB		Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	1	0	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	0	0	1	0	1	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	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	1	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	1	1	4
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3
Total	0	0	0	0	0	0	0	0	0	0	0	3	3	6	0	0	0	0	0	0	0	0	0	0	0	2	1	3	9
Grand Total	0	0	0	0	1	0	1	0	0	0	0	6	3	9	0	0	0	0	0	0	0	0	0	0	0	2	1	3	13
Approach %	0.0	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	66.7	33.3		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	66.7	33.3		
Total %	0.0	0.0	0.0	0.0	7.7	0.0	7.7	0.0	0.0	0.0	0.0	46.2	23.1	69.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.4	7.7	23.1	
Exiting Leg Total	1							9						0						3						13			

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

8:00 AM	Weston Road							Driveway						Weston Road							Route 9 EB Ramps								Total
	North							East						South							West								
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	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	1	
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
Total Volume	0	0	0	0	0	0	0	0	0	0	0	3	3	6	0	0	0	0	0	0	0	0	0	0	0	2	1	3	
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	50.0	50.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	66.7	33.3		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.375	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.250	0.750	
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	3	3	6	0	0	0	0	0	0	0	0	0	0	0	2	1	3	
Exiting Leg	0							6						0							3								
Total	0							12						0							6								

PDI File #: 175562 A
 Location: N: Weston Road S: Weston Road
 Location: E: Cleveland Road W: Route 9 WB Ramps
 City, State: Wellesley, MA
 Client: MDM/ D. Lindquist
 Site Code: 923
 Count Date: Thursday, March 30, 2017
 Start Time: 7:00 AM
 End Time: 9:00 AM
 Class:



46 Morton Street, Framingham, MA 01702
 Office: 508-875-0100 Fax: 508-875-0118
 Email: datarequests@pdillc.com

Cars and Heavy Vehicles

	Weston Road					Cleveland Road					Weston Road					Route 9 WB Ramps					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:00 AM	18	97	0	0	115	7	1	11	0	19	35	148	8	0	191	9	0	4	0	13	338
7:15 AM	24	114	0	0	138	18	0	16	0	34	30	159	1	0	190	15	0	1	0	16	378
7:30 AM	23	113	0	0	136	22	0	16	1	39	50	151	4	0	205	18	2	3	0	23	403
7:45 AM	13	150	1	0	164	15	0	12	0	27	55	192	0	0	247	26	1	2	0	29	467
Total	78	474	1	0	553	62	1	55	1	119	170	650	13	0	833	68	3	10	0	81	1586
8:00 AM	18	128	3	0	149	30	0	9	0	39	44	185	11	0	240	24	0	2	0	26	454
8:15 AM	17	163	0	0	180	27	0	12	0	39	35	171	4	0	210	23	0	7	0	30	459
8:30 AM	23	126	1	0	150	19	1	12	0	32	58	169	9	0	236	20	1	8	0	29	447
8:45 AM	26	98	2	0	126	14	1	9	0	24	54	157	14	0	225	22	1	0	0	23	398
Total	84	515	6	0	605	90	2	42	0	134	191	682	38	0	911	89	2	17	0	108	1758
Grand Total	162	989	7	0	1158	152	3	97	1	253	361	1332	51	0	1744	157	5	27	0	189	3344
Approach %	14.0	85.4	0.6	0.0		60.1	1.2	38.3	0.4		20.7	76.4	2.9	0.0		83.1	2.6	14.3	0.0		
Total %	4.8	29.6	0.2	0.0	34.6	4.5	0.1	2.9	0.0	7.6	10.8	39.8	1.5	0.0	52.2	4.7	0.1	0.8	0.0	5.7	
Exiting Leg Total	1511					374					1243					216					3344
Cars	157	974	7	0	1138	147	2	94	1	244	348	1303	50	0	1701	150	5	27	0	182	3265
% Cars	96.9	98.5	100.0	0.0	98.3	96.7	66.7	96.9	100.0	96.4	96.4	97.8	98.0	0.0	97.5	95.5	100.0	100.0	0.0	96.3	97.6
Exiting Leg Total	1477					361					1218					209					3265
Heavy Vehicles	5	15	0	0	20	5	1	3	0	9	13	29	1	0	43	7	0	0	0	7	79
% Heavy Vehicles	3.1	1.5	0.0	0.0	1.7	3.3	33.3	3.1	0.0	3.6	3.6	2.2	2.0	0.0	2.5	4.5	0.0	0.0	0.0	3.7	2.4
Exiting Leg Total	34					13					25					7					79

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:45 AM	Weston Road					Cleveland Road					Weston Road					Route 9 WB Ramps					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:45 AM	13	150	1	0	164	15	0	12	0	27	55	192	0	0	247	26	1	2	0	29	467
8:00 AM	18	128	3	0	149	30	0	9	0	39	44	185	11	0	240	24	0	2	0	26	454
8:15 AM	17	163	0	0	180	27	0	12	0	39	35	171	4	0	210	23	0	7	0	30	459
8:30 AM	23	126	1	0	150	19	1	12	0	32	58	169	9	0	236	20	1	8	0	29	447
Total Volume	71	567	5	0	643	91	1	45	0	137	192	717	24	0	933	93	2	19	0	114	1827
% Approach Total	11.0	88.2	0.8	0.0		66.4	0.7	32.8	0.0		20.6	76.8	2.6	0.0		81.6	1.8	16.7	0.0		
PHF	0.772	0.870	0.417	0.000	0.893	0.758	0.250	0.938	0.000	0.878	0.828	0.934	0.545	0.000	0.944	0.894	0.500	0.594	0.000	0.950	0.978
Cars	68	560	5	0	633	88	1	45	0	134	185	704	24	0	913	87	2	19	0	108	1788
Cars %	95.8	98.8	100.0	0.0	98.4	96.7	100.0	100.0	0.0	97.8	96.4	98.2	100.0	0.0	97.9	93.5	100.0	100.0	0.0	94.7	97.9
Heavy Vehicles	3	7	0	0	10	3	0	0	0	3	7	13	0	0	20	6	0	0	0	6	39
Heavy Vehicles %	4.2	1.2	0.0	0.0	1.6	3.3	0.0	0.0	0.0	2.2	3.6	1.8	0.0	0.0	2.1	6.5	0.0	0.0	0.0	5.3	2.1
Cars Enter Leg	68	560	5	0	633	88	1	45	0	134	185	704	24	0	913	87	2	19	0	108	1788
Heavy Enter Leg	3	7	0	0	10	3	0	0	0	3	7	13	0	0	20	6	0	0	0	6	39
Total Entering Leg	71	567	5	0	643	91	1	45	0	137	192	717	24	0	933	93	2	19	0	114	1827
Cars Exiting Leg	811					192					692					93					1788
Heavy Exit Leg	16					7					13					3					39
Total Exiting Leg	827					199					705					96					1827

PDI File #: 175562 A
 Location: N: Weston Road S: Weston Road
 Location: E: Cleveland Road W: Route 9 WB Ramps
 City, State: Wellesley, MA
 Client: MDM/ D. Lindquist
 Site Code: 923
 Count Date: Thursday, March 30, 2017
 Start Time: 7:00 AM
 End Time: 9:00 AM
 Class:



46 Morton Street, Framingham, MA 01702
 Office: 508-875-0100 Fax: 508-875-0118
 Email: datarequests@pdillc.com

Cars

	Weston Road					Cleveland Road					Weston Road					Route 9 WB Ramps					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:00 AM	18	94	0	0	112	7	1	11	0	19	34	142	8	0	184	9	0	4	0	13	328
7:15 AM	24	113	0	0	137	18	0	14	0	32	29	159	1	0	189	15	0	1	0	16	374
7:30 AM	23	109	0	0	132	22	0	16	1	39	49	146	3	0	198	17	2	3	0	22	391
7:45 AM	13	150	1	0	164	14	0	12	0	26	52	187	0	0	239	24	1	2	0	27	456
Total	78	466	1	0	545	61	1	53	1	116	164	634	12	0	810	65	3	10	0	78	1549
8:00 AM	18	127	3	0	148	28	0	9	0	37	44	180	11	0	235	23	0	2	0	25	445
8:15 AM	15	160	0	0	175	27	0	12	0	39	33	169	4	0	206	22	0	7	0	29	449
8:30 AM	22	123	1	0	146	19	1	12	0	32	56	168	9	0	233	18	1	8	0	27	438
8:45 AM	24	98	2	0	124	12	0	8	0	20	51	152	14	0	217	22	1	0	0	23	384
Total	79	508	6	0	593	86	1	41	0	128	184	669	38	0	891	85	2	17	0	104	1716
Grand Total	157	974	7	0	1138	147	2	94	1	244	348	1303	50	0	1701	150	5	27	0	182	3265
Approach %	13.8	85.6	0.6	0.0		60.2	0.8	38.5	0.4		20.5	76.6	2.9	0.0		82.4	2.7	14.8	0.0		
Total %	4.8	29.8	0.2	0.0	34.9	4.5	0.1	2.9	0.0	7.5	10.7	39.9	1.5	0.0	52.1	4.6	0.2	0.8	0.0	5.6	
Exiting Leg Total	1477					361					1218					209					3265

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:45 AM	Weston Road					Cleveland Road					Weston Road					Route 9 WB Ramps					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:45 AM	13	150	1	0	164	14	0	12	0	26	52	187	0	0	239	24	1	2	0	27	456
8:00 AM	18	127	3	0	148	28	0	9	0	37	44	180	11	0	235	23	0	2	0	25	445
8:15 AM	15	160	0	0	175	27	0	12	0	39	33	169	4	0	206	22	0	7	0	29	449
8:30 AM	22	123	1	0	146	19	1	12	0	32	56	168	9	0	233	18	1	8	0	27	438
Total Volume	68	560	5	0	633	88	1	45	0	134	185	704	24	0	913	87	2	19	0	108	1788
% Approach Total	10.7	88.5	0.8	0.0		65.7	0.7	33.6	0.0		20.3	77.1	2.6	0.0		80.6	1.9	17.6	0.0		
PHF	0.773	0.875	0.417	0.000	0.904	0.786	0.250	0.938	0.000	0.859	0.826	0.941	0.545	0.000	0.955	0.906	0.500	0.594	0.000	0.931	0.980
Entering Leg	68	560	5	0	633	88	1	45	0	134	185	704	24	0	913	87	2	19	0	108	1788
Exiting Leg					811					192					692					93	1788
Total					1444					326					1605					201	3576

PDI File #: **175562 A**
 Location: **N: Weston Road S: Weston Road**
 Location: **E: Cleveland Road W: Route 9 WB Ramps**
 City, State: **Wellesley, MA**
 Client: **MDM/ D. Lindquist**
 Site Code: **923**
 Count Date: **Thursday, March 30, 2017**
 Start Time: **7:00 AM**
 End Time: **9:00 AM**
 Class:



46 Morton Street, Framingham, MA 01702
 Office: 508-875-0100 Fax: 508-875-0118
 Email: datarequests@pdillc.com

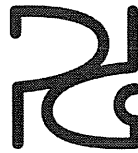
Heavy Vehicles

	Weston Road					Cleveland Road					Weston Road					Route 9 WB Ramps					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:00 AM	0	3	0	0	3	0	0	0	0	0	1	6	0	0	7	0	0	0	0	0	10
7:15 AM	0	1	0	0	1	0	0	2	0	2	1	0	0	0	1	0	0	0	0	0	4
7:30 AM	0	4	0	0	4	0	0	0	0	0	1	5	1	0	7	1	0	0	0	1	12
7:45 AM	0	0	0	0	0	1	0	0	0	1	3	5	0	0	8	2	0	0	0	2	11
Total	0	8	0	0	8	1	0	2	0	3	6	16	1	0	23	3	0	0	0	3	37
8:00 AM	0	1	0	0	1	2	0	0	0	2	0	5	0	0	5	1	0	0	0	1	9
8:15 AM	2	3	0	0	5	0	0	0	0	0	2	2	0	0	4	1	0	0	0	1	10
8:30 AM	1	3	0	0	4	0	0	0	0	0	2	1	0	0	3	2	0	0	0	2	9
8:45 AM	2	0	0	0	2	2	1	1	0	4	3	5	0	0	8	0	0	0	0	0	14
Total	5	7	0	0	12	4	1	1	0	6	7	13	0	0	20	4	0	0	0	4	42
Grand Total	5	15	0	0	20	5	1	3	0	9	13	29	1	0	43	7	0	0	0	7	79
Approach %	25.0	75.0	0.0	0.0		55.6	11.1	33.3	0.0		30.2	67.4	2.3	0.0		100.0	0.0	0.0	0.0		
Total %	6.3	19.0	0.0	0.0	25.3	6.3	1.3	3.8	0.0	11.4	16.5	36.7	1.3	0.0	54.4	8.9	0.0	0.0	0.0	8.9	
Exiting Leg Total	34					13					25					7					79

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:30 AM	Weston Road					Cleveland Road					Weston Road					Route 9 WB Ramps					
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:30 AM	0	4	0	0	4	0	0	0	0	0	1	5	1	0	7	1	0	0	0	1	12
7:45 AM	0	0	0	0	0	1	0	0	0	1	3	5	0	0	8	2	0	0	0	2	11
8:00 AM	0	1	0	0	1	2	0	0	0	2	0	5	0	0	5	1	0	0	0	1	9
8:15 AM	2	3	0	0	5	0	0	0	0	0	2	2	0	0	4	1	0	0	0	1	10
Total Volume	2	8	0	0	10	3	0	0	0	3	6	17	1	0	24	5	0	0	0	5	42
% Approach Total	20.0	80.0	0.0	0.0		100.0	0.0	0.0	0.0		25.0	70.8	4.2	0.0		100.0	0.0	0.0	0.0		
PHF	0.250	0.500	0.000	0.000	0.500	0.375	0.000	0.000	0.000	0.375	0.500	0.850	0.250	0.000	0.750	0.625	0.000	0.000	0.000	0.625	0.875
Entering Leg	2	8	0	0	10	3	0	0	0	3	6	17	1	0	24	5	0	0	0	5	42
Exiting Leg	20					6					13					3					42
Total	30					9					37					8					84

PDI File #: **175562 A**
 Location: **N: Weston Road S: Weston Road**
 Location: **E: Cleveland Road W: Route 9 WB Ramps**
 City, State: **Wellesley, MA**
 Client: **MDM/ D. Lindquist**
 Site Code: **923**
 Count Date: **Thursday, March 30, 2017**
 Start Time: **7:00 AM**
 End Time: **9:00 AM**
 Class:



PRECISION
DATA
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702
Office: 508-875-0100 Fax: 508-875-0118
Email: datarequests@pdillc.com

Bicycles (on Roadway and Crosswalks)

	Weston Road							Cleveland Road							Weston Road							Route 9 WB Ramps							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	1	
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0			
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Exiting Leg Total	1							0							0							0							1

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:15 AM	Weston Road							Cleveland Road							Weston Road							Route 9 WB Ramps							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	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	0	0	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	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	
Total Volume	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	1	
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0			
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.250	
Entering Leg	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	1	
Exiting Leg							1							0		0					0					0		1	
Total							1							0							1					0		2	

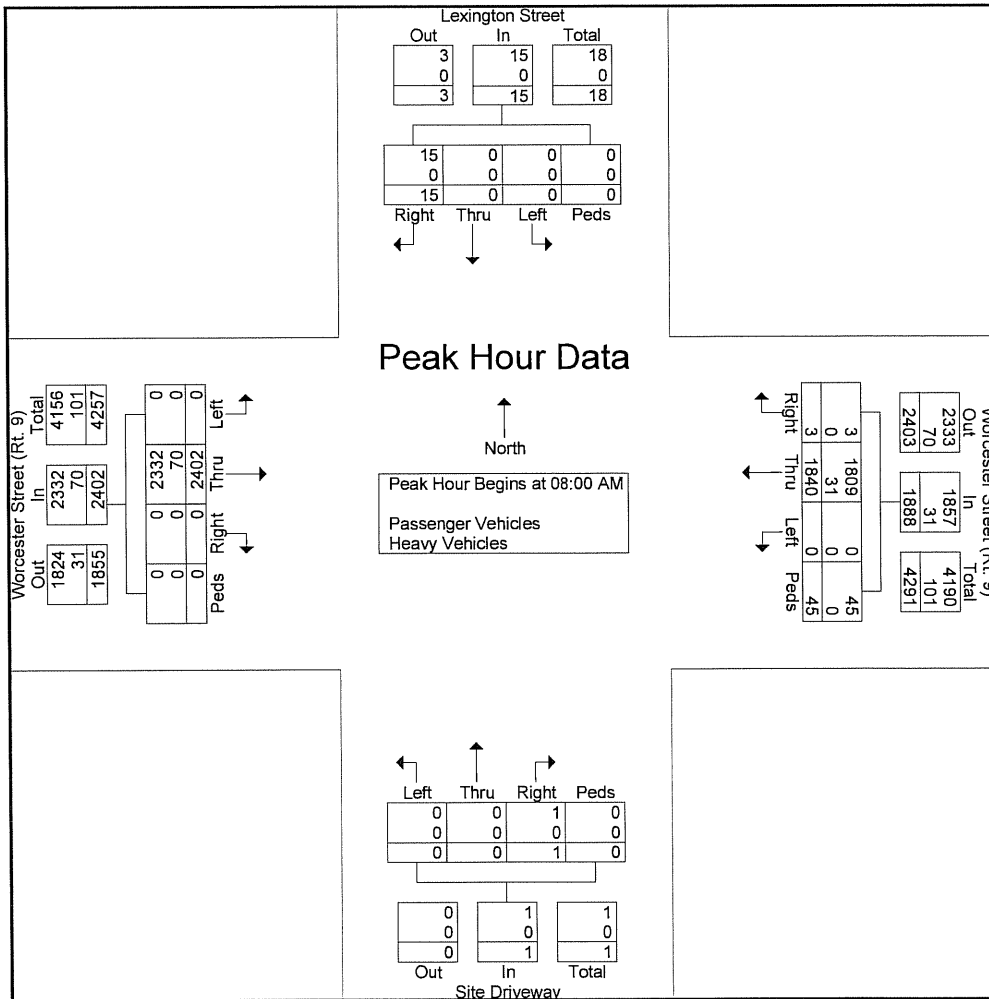
MDM Transportation Consultants, Inc.

28 Lord Road, Suite 280
Marlborough, MA

N/S: Site Driveway/Lexington Street
E/W: Worcester Street (Route 9)
Wellesley, MA

File Name : 923 Rte 9 at Site Driveway AM
Site Code : 00000000
Start Date : 3/23/2017
Page No : 2

	Lexington Street From North					Worcester Street (Rt. 9) From East						Site Driveway From South					Worcester Street (Rt. 9) From West						
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	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 08:00 AM																							
08:00 AM	5	0	0	0	5	0	404	0	8	0	412	0	0	0	0	0	0	635	0	0	0	635	1052
08:15 AM	2	0	0	0	2	1	458	0	12	0	471	1	0	0	0	1	0	642	0	0	0	642	1116
08:30 AM	7	0	0	0	7	0	487	0	13	0	500	0	0	0	0	0	0	553	0	0	0	553	1060
08:45 AM	1	0	0	0	1	2	491	0	12	0	505	0	0	0	0	0	0	572	0	0	0	572	1078
Total Volume	15	0	0	0	15	3	1840	0	45	0	1888	1	0	0	0	1	0	2402	0	0	0	2402	4306
% App. Total	100	0	0	0		0.2	97.5	0	2.4	0		100	0	0	0		0	100	0	0	0		
PHF	.536	.000	.000	.000	.536	.375	.937	.000	.865	.000	.935	.250	.000	.000	.000	.250	.000	.935	.000	.000	.000	.935	.965
Passenger Vehicles	15	0	0	0	15	3	1809	0	45	0	1857	1	0	0	0	1	0	2332	0	0	0	2332	4205
% Passenger Vehicles	100	0	0	0	100	100	98.3	0	100	0	98.4	100	0	0	0	100	0	97.1	0	0	0	97.1	97.7
Heavy Vehicles	0	0	0	0	0	0	31	0	0	0	31	0	0	0	0	0	0	70	0	0	0	70	101
% Heavy Vehicles	0	0	0	0	0	0	1.7	0	0	0	1.6	0	0	0	0	0	0	2.9	0	0	0	2.9	2.3



MDM Transportation Consultants, Inc.

28 Lord Road, Suite 280
Marlborough, MA

N/S: Site Driveway/Lexington Street
E/W: Worcester Street (Route 9)
Wellesley, MA

File Name : 923 Rte 9 at Site Driveway AM
Site Code : 00000000
Start Date : 3/23/2017
Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles

	Lexington Street From North					Worcester Street (Rt. 9) From East						Site Driveway From South					Worcester Street (Rt. 9) From West						
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	279	0	3	0	282	0	0	0	0	0	0	608	0	0	0	608	890
07:15 AM	7	0	0	0	7	0	307	0	4	0	311	0	0	0	0	0	0	638	0	0	0	638	956
07:30 AM	4	0	0	0	4	1	406	0	10	0	417	0	0	0	0	0	0	582	0	0	0	582	1003
07:45 AM	4	0	0	0	4	0	456	0	8	0	464	0	0	0	0	0	1	513	0	1	0	515	983
Total	15	0	0	0	15	1	1448	0	25	0	1474	0	0	0	0	0	1	2341	0	1	0	2343	3832
08:00 AM	5	0	0	0	5	0	404	0	8	0	412	0	0	0	0	0	0	635	0	0	0	635	1052
08:15 AM	2	0	0	0	2	1	458	0	12	0	471	1	0	0	0	1	0	642	0	0	0	642	1116
08:30 AM	7	0	0	0	7	0	487	0	13	0	500	0	0	0	0	0	0	553	0	0	0	553	1060
08:45 AM	1	0	0	0	1	2	491	0	12	0	505	0	0	0	0	0	0	572	0	0	0	572	1078
Total	15	0	0	0	15	3	1840	0	45	0	1888	1	0	0	0	1	0	2402	0	0	0	2402	4306
Grand Total	30	0	0	0	30	4	3288	0	70	0	3362	1	0	0	0	1	1	4743	0	1	0	4745	8138
Apprch %	100	0	0	0		0.1	97.8	0	2.1	0		100	0	0	0		0	100	0	0	0		
Total %	0.4	0	0	0	0.4	0	40.4	0	0.9	0	41.3	0	0	0	0	0	0	58.3	0	0	0	58.3	
Passenger Vehicles	30	0	0	0	30	4	3217	0	70	0	3291	1	0	0	0	1	1	4615	0	1	0	4617	7939
% Passenger Vehicles	100	0	0	0	100	100	97.8	0	100	0	97.9	100	0	0	0	100	100	97.3	0	100	0	97.3	97.6
Heavy Vehicles	0	0	0	0	0	0	71	0	0	0	71	0	0	0	0	0	0	128	0	0	0	128	199
% Heavy Vehicles	0	0	0	0	0	0	2.2	0	0	0	2.1	0	0	0	0	0	0	2.7	0	0	0	2.7	2.4

28 Lord Road, Suite 280
Marlborough, MA

N/S: Site Driveway/Lexington Street
E/W: Worcester Street (Route 9)
Wellesley, MA

File Name : 923 Rte 9 at Site Driveway AM
Site Code : 923
Start Date : 3/23/2017
Page No : 1

Groups Printed- Bicycles

[illegible]

PDI File #: 175562 C
 Location: N: Overbrook Drive S: CVS Driveway
 Location: E: Worcester Street (Route 9) W: Worcester Street (Route 9)
 City, State: Wellesley, MA
 Client: MDM/ D. Lindquist
 Site Code: 923
 Count Date: Thursday, March 30, 2017
 Start Time: 4:00 PM
 End Time: 6:00 PM
 Class:



46 Morton Street, Framingham, MA 01702
 Office: 508-875-0100 Fax: 508-875-0118
 Email: datarequests@pdilc.com

Cars and Heavy Vehicles

	Overbrook Drive					Worcester Street (Route 9)					CVS Driveway					Worcester Street (Route 9)					
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:00 PM	25	2	12	0	39	10	456	2	5	473	9	1	6	0	16	15	431	12	11	469	997
4:15 PM	34	2	10	0	46	3	282	4	6	295	5	0	8	0	13	10	401	12	8	431	785
4:30 PM	24	1	8	0	33	6	335	3	8	352	13	0	6	0	19	11	448	8	2	469	873
4:45 PM	49	2	10	0	61	3	410	1	2	416	8	0	5	0	13	7	445	11	3	466	956
Total	132	7	40	0	179	22	1483	10	21	1536	35	1	25	0	61	43	1725	43	24	1835	3611
5:00 PM	42	2	13	0	57	3	429	2	4	438	5	0	7	0	12	6	497	15	2	520	1027
5:15 PM	32	0	11	0	43	3	440	0	6	449	6	0	1	0	7	8	482	16	4	510	1009
5:30 PM	39	2	11	0	52	4	430	5	4	443	6	0	7	0	13	9	462	16	5	492	1000
5:45 PM	20	2	8	0	30	2	412	5	4	423	8	0	9	0	17	8	462	21	3	494	964
Total	133	6	43	0	182	12	1711	12	18	1753	25	0	24	0	49	31	1903	68	14	2016	4000
Grand Total	265	13	83	0	361	34	3194	22	39	3289	60	1	49	0	110	74	3628	111	38	3851	7611
Approach%	73.4	3.6	23.0	0.0		1.0	97.1	0.7	1.2		54.5	0.9	44.5	0.0		1.9	94.2	2.9	1.0		
Total%	3.5	0.2	1.1	0.0	4.7	0.4	42.0	0.3	0.5	43.2	0.8	0.0	0.6	0.0	1.4	1.0	47.7	1.5	0.5	50.6	
Exiting Leg Total	146					3810					109					3546					7611
Cars	262	13	81	0	356	34	3141	21	38	3234	60	1	49	0	110	74	3591	109	38	3812	7512
% Cars	98.9	100.0	97.6	0.0	98.6	100.0	98.3	95.5	97.4	98.3	100.0	100.0	100.0	0.0	100.0	100.0	99.0	98.2	100.0	99.0	98.7
Exiting Leg Total	144					3770					108					3490					7512
Heavy Vehicles	3	0	2	0	5	0	53	1	1	55	0	0	0	0	0	0	37	2	0	39	99
% Heavy Vehicles	1.1	0.0	2.4	0.0	1.4	0.0	1.7	4.5	2.6	1.7	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.8	0.0	1.0	1.3
Exiting Leg Total	2					40					1					56					99

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

5:00 PM	Overbrook Drive					Worcester Street (Route 9)					CVS Driveway					Worcester Street (Route 9)					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
5:00 PM	42	2	13	0	57	3	429	2	4	438	5	0	7	0	12	6	497	15	2	520	1027
5:15 PM	32	0	11	0	43	3	440	0	6	449	6	0	1	0	7	8	482	16	4	510	1009
5:30 PM	39	2	11	0	52	4	430	5	4	443	6	0	7	0	13	9	462	16	5	492	1000
5:45 PM	20	2	8	0	30	2	412	5	4	423	8	0	9	0	17	8	462	21	3	494	964
Total Volume	133	6	43	0	182	12	1711	12	18	1753	25	0	24	0	49	31	1903	68	14	2016	4000
% Approach Total	73.1	3.3	23.6	0.0		0.7	97.6	0.7	1.0		51.0	0.0	49.0	0.0		1.5	94.4	3.4	0.7		
PHF	0.792	0.750	0.827	0.000	0.798	0.750	0.972	0.600	0.750	0.976	0.781	0.000	0.667	0.000	0.721	0.861	0.957	0.810	0.700	0.969	0.974
Cars	131	6	43	0	180	12	1683	12	18	1725	25	0	24	0	49	31	1890	67	14	2002	3956
Cars %	98.5	100.0	100.0	0.0	98.9	100.0	98.4	100.0	100.0	98.4	100.0	0.0	100.0	0.0	100.0	100.0	99.3	98.5	100.0	99.3	98.9
Heavy Vehicles	2	0	0	0	2	0	28	0	0	28	0	0	0	0	0	0	13	1	0	14	44
Heavy Vehicles %	1.5	0.0	0.0	0.0	1.1	0.0	1.6	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.5	0.0	0.7	1.1
Cars Enter Leg	131	6	43	0	180	12	1683	12	18	1725	25	0	24	0	49	31	1890	67	14	2002	3956
Heavy Enter Leg	2	0	0	0	2	0	28	0	0	28	0	0	0	0	0	0	13	1	0	14	44
Total Entering Leg	133	6	43	0	182	12	1711	12	18	1753	25	0	24	0	49	31	1903	68	14	2016	4000
Cars Exiting Leg	79					1976					49					1852					3956
Heavy Exit Leg	1					13					0					30					44
Total Exiting Leg	80					1989					49					1882					4000

PDI File #: **175562 C**
 Location: **N: Overbrook Drive S: CVS Driveway**
 Location: **E: Worcester Street (Route 9) W: Worcester Street (Route 9)**
 City, State: **Wellesley, MA**
 Client: **MDM/ D. Lindquist**
 Site Code: **923**
 Count Date: **Thursday, March 30, 2017**
 Start Time: **4:00 PM**
 End Time: **6:00 PM**
 Class:



46 Morton Street, Framingham, MA 01702
 Office: 508-875-0100 Fax: 508-875-0118
 Email: datarequests@pdillc.com

Cars

	Overbrook Drive					Worcester Street (Route 9)					CVS Driveway					Worcester Street (Route 9)					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:00 PM	24	2	11	0	37	10	450	2	5	467	9	1	6	0	16	15	417	11	11	454	974
4:15 PM	34	2	10	0	46	3	281	3	6	293	5	0	8	0	13	10	398	12	8	428	780
4:30 PM	24	1	7	0	32	6	329	3	7	345	13	0	6	0	19	11	444	8	2	465	861
4:45 PM	49	2	10	0	61	3	398	1	2	404	8	0	5	0	13	7	442	11	3	463	941
Total	131	7	38	0	176	22	1458	9	20	1509	35	1	25	0	61	43	1701	42	24	1810	3556
5:00 PM	42	2	13	0	57	3	420	2	4	429	5	0	7	0	12	6	493	15	2	516	1014
5:15 PM	32	0	11	0	43	3	434	0	6	443	6	0	1	0	7	8	478	16	4	506	999
5:30 PM	38	2	11	0	51	4	426	5	4	439	6	0	7	0	13	9	461	15	5	490	993
5:45 PM	19	2	8	0	29	2	403	5	4	414	8	0	9	0	17	8	458	21	3	490	950
Total	131	6	43	0	180	12	1683	12	18	1725	25	0	24	0	49	31	1890	67	14	2002	3956
Grand Total	262	13	81	0	356	34	3141	21	38	3234	60	1	49	0	110	74	3591	109	38	3812	7512
Approach %	73.6	3.7	22.8	0.0		1.1	97.1	0.6	1.2		54.5	0.9	44.5	0.0		1.9	94.2	2.9	1.0		
Total %	3.5	0.2	1.1	0.0	4.7	0.5	41.8	0.3	0.5	43.1	0.8	0.0	0.7	0.0	1.5	1.0	47.8	1.5	0.5	50.7	
Exiting Leg Total	144					3770					108					3490					7512

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

5:00 PM	Overbrook Drive					Worcester Street (Route 9)					CVS Driveway					Worcester Street (Route 9)					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
5:00 PM	42	2	13	0	57	3	420	2	4	429	5	0	7	0	12	6	493	15	2	516	1014
5:15 PM	32	0	11	0	43	3	434	0	6	443	6	0	1	0	7	8	478	16	4	506	999
5:30 PM	38	2	11	0	51	4	426	5	4	439	6	0	7	0	13	9	461	15	5	490	993
5:45 PM	19	2	8	0	29	2	403	5	4	414	8	0	9	0	17	8	458	21	3	490	950
Total Volume	131	6	43	0	180	12	1683	12	18	1725	25	0	24	0	49	31	1890	67	14	2002	3956
% Approach Total	72.8	3.3	23.9	0.0		0.7	97.6	0.7	1.0		51.0	0.0	49.0	0.0		1.5	94.4	3.3	0.7		
PHF	0.780	0.750	0.827	0.000	0.789	0.750	0.969	0.600	0.750	0.973	0.781	0.000	0.667	0.000	0.721	0.861	0.958	0.798	0.700	0.970	0.975
Entering Leg	131	6	43	0	180	12	1683	12	18	1725	25	0	24	0	49	31	1890	67	14	2002	3956
Exiting Leg	79					1976					49					1852					3956
Total	259					3701					98					3854					7912

PDI File #: **175562 C**
 Location: **N: Overbrook Drive S: CVS Driveway**
 Location: **E: Worcester Street (Route 9) W: Worcester Street (Route 9)**
 City, State: **Wellesley, MA**
 Client: **MDM/ D. Lindquist**
 Site Code: **923**
 Count Date: **Thursday, March 30, 2017**
 Start Time: **4:00 PM**
 End Time: **6:00 PM**
 Class:



Heavy Vehicles

	Overbrook Drive					Worcester Street (Route 9)					CVS Driveway					Worcester Street (Route 9)					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:00 PM	1	0	1	0	2	0	6	0	0	6	0	0	0	0	0	0	14	1	0	15	23
4:15 PM	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	3	0	0	3	5
4:30 PM	0	0	1	0	1	0	6	0	1	7	0	0	0	0	0	0	4	0	0	4	12
4:45 PM	0	0	0	0	0	0	12	0	0	12	0	0	0	0	0	0	3	0	0	3	15
Total	1	0	2	0	3	0	25	1	1	27	0	0	0	0	0	0	24	1	0	25	55
5:00 PM	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	4	0	0	4	13
5:15 PM	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	4	0	0	4	10
5:30 PM	1	0	0	0	1	0	4	0	0	4	0	0	0	0	0	0	1	1	0	2	7
5:45 PM	1	0	0	0	1	0	9	0	0	9	0	0	0	0	0	0	4	0	0	4	14
Total	2	0	0	0	2	0	28	0	0	28	0	0	0	0	0	0	13	1	0	14	44
Grand Total	3	0	2	0	5	0	53	1	1	55	0	0	0	0	0	0	37	2	0	39	99
Approach %	60.0	0.0	40.0	0.0		0.0	96.4	1.8	1.8		0.0	0.0	0.0	0.0		0.0	94.9	5.1	0.0		
Total %	3.0	0.0	2.0	0.0	5.1	0.0	53.5	1.0	1.0	55.6	0.0	0.0	0.0	0.0	0.0	0.0	37.4	2.0	0.0	39.4	
Exiting Leg Total	2					40					1					56					99

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Overbrook Drive					Worcester Street (Route 9)					CVS Driveway					Worcester Street (Route 9)					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:00 PM	1	0	1	0	2	0	6	0	0	6	0	0	0	0	0	0	14	1	0	15	23
4:15 PM	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	3	0	0	3	5
4:30 PM	0	0	1	0	1	0	6	0	1	7	0	0	0	0	0	0	4	0	0	4	12
4:45 PM	0	0	0	0	0	0	12	0	0	12	0	0	0	0	0	0	3	0	0	3	15
Total Volume	1	0	2	0	3	0	25	1	1	27	0	0	0	0	0	0	24	1	0	25	55
% Approach Total	33.3	0.0	66.7	0.0		0.0	92.6	3.7	3.7		0.0	0.0	0.0	0.0		0.0	96.0	4.0	0.0		
PHF	0.250	0.000	0.500	0.000	0.375	0.000	0.521	0.250	0.250	0.563	0.000	0.000	0.000	0.000	0.000	0.000	0.429	0.250	0.000	0.417	0.598
Entering Leg	1	0	2	0	3	0	25	1	1	27	0	0	0	0	0	0	24	1	0	25	55
Exiting Leg	1					27					1					26					55
Total	4					54					1					51					110

46 Morton Street, Framingham, MA 01702
Office: 508-875-0100 Fax: 508-875-0118
Email: datarequests@pdillc.com

[illegible][illegible]

PDI File #: **175562 C**
 Location: **N: Overbrook Drive S: CVS Driveway**
 Location: **E: Worcester Street (Route 9) W: Worcester Street (Route 9)**
 City, State: **Wellesley, MA**
 Client: **MDM/ D. Lindquist**
 Site Code: **923**
 Count Date: **Thursday, March 30, 2017**
 Start Time: **4:00 PM**
 End Time: **6:00 PM**
 Class:



PRECISION
DATA
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702
Office: 508-875-0100 Fax: 508-875-0118
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Pedestrians

	Overbrook Drive							Worcester Street (Route 9)							CVS Driveway							Worcester Street (Route 9)							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3
4:15 PM	0	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	2	3	3
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	3
4:45 PM	0	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	1	1
Total	0	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	5	10	10
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	1	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	1	2
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	5	6	11	12
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	45.5	54.5		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	8.3	8.3	0.0	0.0	0.0	0.0	41.7	50.0	91.7	
Exiting Leg Total	0							0							1							11							12

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Overbrook Drive							Worcester Street (Route 9)							CVS Driveway							Worcester Street (Route 9)							
	North							East							South							West							Total
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3
4:15 PM	0	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	2	3	3
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	3
4:45 PM	0	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	1	1
Total Volume	0	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	5	10	10
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	50.0	50.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.417	0.417	0.833	0.833
Entering Leg	0	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	5	10	10
Exiting Leg							0							0							0						10		10
Total							0							0							0						20		20

PDI File #: 175562 B
 Location: N: Weston Road S: Weston Road
 Location: E: Driveway W: Route 9 EB Ramps
 City, State: Wellesley, MA
 Client: MDM/ D. Lindquist
 Site Code: 923
 Count Date: Thursday, March 30, 2017
 Start Time: 4:00 PM
 End Time: 6:00 PM
 Class:



46 Morton Street, Framingham, MA 01702
 Office: 508-875-0100 Fax: 508-875-0118
 Email: datarequests@pdillc.com

Cars and Heavy Vehicles

	Weston Road					Driveway					Weston Road					Route 9 EB Ramps					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:00 PM	37	143	2	0	182	1	1	0	0	2	0	173	14	0	187	33	0	36	0	69	440
4:15 PM	49	155	0	0	204	0	0	1	0	1	0	177	12	0	189	28	0	33	0	61	455
4:30 PM	36	163	1	0	200	1	1	0	0	2	0	166	16	0	182	37	1	34	0	72	456
4:45 PM	51	153	0	0	204	0	0	0	0	0	0	123	15	0	138	27	1	32	0	60	402
Total	173	614	3	0	790	2	2	1	0	5	0	639	57	0	696	125	2	135	0	262	1753
5:00 PM	55	162	0	0	217	0	0	0	0	0	0	148	11	0	159	35	0	48	0	83	459
5:15 PM	57	168	0	0	225	0	0	0	0	0	0	153	18	0	171	30	0	34	0	64	460
5:30 PM	44	164	0	0	208	0	0	0	0	0	1	166	19	0	186	34	0	29	0	63	457
5:45 PM	38	179	0	0	217	0	0	0	0	0	0	131	15	0	146	34	0	30	0	64	427
Total	194	673	0	0	867	0	0	0	0	0	1	598	63	0	662	133	0	141	0	274	1803
Grand Total	367	1287	3	0	1657	2	2	1	0	5	1	1237	120	0	1358	258	2	276	0	536	3556
Approach %	22.1	77.7	0.2	0.0		40.0	40.0	20.0	0.0		0.1	91.1	8.8	0.0		48.1	0.4	51.5	0.0		
Total %	10.3	36.2	0.1	0.0	46.6	0.1	0.1	0.0	0.0	0.1	0.0	34.8	3.4	0.0	38.2	7.3	0.1	7.8	0.0	15.1	
Exiting Leg Total	1515					6					1546					489					3556
Cars	360	1273	3	0	1636	2	2	1	0	5	1	1227	118	0	1346	257	2	271	0	530	3517
% Cars	98.1	98.9	100.0	0.0	98.7	100.0	100.0	100.0	0.0	100.0	100.0	99.2	98.3	0.0	99.1	99.6	100.0	98.2	0.0	98.9	98.9
Exiting Leg Total	1500					6					1531					480					3517
Heavy Vehicles	7	14	0	0	21	0	0	0	0	0	0	10	2	0	12	1	0	5	0	6	39
% Heavy Vehicles	1.9	1.1	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.7	0.0	0.9	0.4	0.0	1.8	0.0	1.1	1.1
Exiting Leg Total	15					0					15					9					39

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

5:00 PM	Weston Road					Driveway					Weston Road					Route 9 EB Ramps					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
5:00 PM	55	162	0	0	217	0	0	0	0	0	0	148	11	0	159	35	0	48	0	83	459
5:15 PM	57	168	0	0	225	0	0	0	0	0	0	153	18	0	171	30	0	34	0	64	460
5:30 PM	44	164	0	0	208	0	0	0	0	0	1	166	19	0	186	34	0	29	0	63	457
5:45 PM	38	179	0	0	217	0	0	0	0	0	0	131	15	0	146	34	0	30	0	64	427
Total Volume	194	673	0	0	867	0	0	0	0	0	1	598	63	0	662	133	0	141	0	274	1803
% Approach Total	22.4	77.6	0.0	0.0		0.0	0.0	0.0	0.0		0.2	90.3	9.5	0.0		48.5	0.0	51.5	0.0		
PHF	0.851	0.940	0.000	0.000	0.963	0.000	0.000	0.000	0.000	0.000	0.250	0.901	0.829	0.000	0.890	0.950	0.000	0.734	0.000	0.825	0.980
Cars	193	670	0	0	863	0	0	0	0	0	1	595	62	0	658	132	0	141	0	273	1794
Cars %	99.5	99.6	0.0	0.0	99.5	0.0	0.0	0.0	0.0	0.0	100.0	99.5	98.4	0.0	99.4	99.2	0.0	100.0	0.0	99.6	99.5
Heavy Vehicles	1	3	0	0	4	0	0	0	0	0	0	3	1	0	4	1	0	0	0	1	9
Heavy Vehicles %	0.5	0.4	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.6	0.0	0.6	0.8	0.0	0.0	0.0	0.4	0.5
Cars Enter Leg	193	670	0	0	863	0	0	0	0	0	1	595	62	0	658	132	0	141	0	273	1794
Heavy Enter Leg	1	3	0	0	4	0	0	0	0	0	0	3	1	0	4	1	0	0	0	1	9
Total Entering Leg	194	673	0	0	867	0	0	0	0	0	1	598	63	0	662	133	0	141	0	274	1803
Cars Exiting Leg					736					1					802					255	1794
Heavy Exit Leg					3					0					4					2	9
Total Exiting Leg					739					1					806					257	1803

PDI File #: **175562 B**
 Location: **N: Weston Road S: Weston Road**
 Location: **E: Driveway W: Route 9 EB Ramps**
 City, State: **Wellesley, MA**
 Client: **MDM/ D. Lindquist**
 Site Code: **923**
 Count Date: **Thursday, March 30, 2017**
 Start Time: **4:00 PM**
 End Time: **6:00 PM**
 Class:



46 Morton Street, Framingham, MA 01702
 Office: 508-875-0100 Fax: 508-875-0118
 Email: datarequests@pdillc.com

Cars

	Weston Road					Driveway					Weston Road					Route 9 EB Ramps					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:00 PM	34	139	2	0	175	1	1	0	0	2	0	170	13	0	183	33	0	32	0	65	425
4:15 PM	48	153	0	0	201	0	0	1	0	1	0	174	12	0	186	28	0	33	0	61	449
4:30 PM	34	158	1	0	193	1	1	0	0	2	0	165	16	0	181	37	1	33	0	71	447
4:45 PM	51	153	0	0	204	0	0	0	0	0	0	123	15	0	138	27	1	32	0	60	402
Total	167	603	3	0	773	2	2	1	0	5	0	632	56	0	688	125	2	130	0	257	1723
5:00 PM	55	161	0	0	216	0	0	0	0	0	0	146	11	0	157	35	0	48	0	83	456
5:15 PM	57	168	0	0	225	0	0	0	0	0	0	153	17	0	170	30	0	34	0	64	459
5:30 PM	43	163	0	0	206	0	0	0	0	0	1	165	19	0	185	33	0	29	0	62	453
5:45 PM	38	178	0	0	216	0	0	0	0	0	0	131	15	0	146	34	0	30	0	64	426
Total	193	670	0	0	863	0	0	0	0	0	1	595	62	0	658	132	0	141	0	273	1794
Grand Total	360	1273	3	0	1636	2	2	1	0	5	1	1227	118	0	1346	257	2	271	0	530	3517
Approach %	22.0	77.8	0.2	0.0		40.0	40.0	20.0	0.0		0.1	91.2	8.8	0.0		48.5	0.4	51.1	0.0		
Total %	10.2	36.2	0.1	0.0	46.5	0.1	0.1	0.0	0.0	0.1	0.0	34.9	3.4	0.0	38.3	7.3	0.1	7.7	0.0	15.1	
Exiting Leg Total	1500					6					1531					480					3517

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

5:00 PM	Weston Road					Driveway					Weston Road					Route 9 EB Ramps					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
5:00 PM	55	161	0	0	216	0	0	0	0	0	0	146	11	0	157	35	0	48	0	83	456
5:15 PM	57	168	0	0	225	0	0	0	0	0	0	153	17	0	170	30	0	34	0	64	459
5:30 PM	43	163	0	0	206	0	0	0	0	0	1	165	19	0	185	33	0	29	0	62	453
5:45 PM	38	178	0	0	216	0	0	0	0	0	0	131	15	0	146	34	0	30	0	64	426
Total Volume	193	670	0	0	863	0	0	0	0	0	1	595	62	0	658	132	0	141	0	273	1794
% Approach Total	22.4	77.6	0.0	0.0		0.0	0.0	0.0	0.0		0.2	90.4	9.4	0.0		48.4	0.0	51.6	0.0		
PHF	0.846	0.941	0.000	0.000	0.959	0.000	0.000	0.000	0.000	0.000	0.250	0.902	0.816	0.000	0.889	0.943	0.000	0.734	0.000	0.822	0.977
Entering Leg	193	670	0	0	863	0	0	0	0	0	1	595	62	0	658	132	0	141	0	273	1794
Exiting Leg	736					1					802					255					1794
Total	1599					1					1460					528					3588

PDI File #: 175562 B
 Location: N: Weston Road S: Weston Road
 Location: E: Driveway W: Route 9 EB Ramps
 City, State: Wellesley, MA
 Client: MDM/ D. Lindquist
 Site Code: 923
 Count Date: Thursday, March 30, 2017
 Start Time: 4:00 PM
 End Time: 6:00 PM
 Class:



46 Morton Street, Framingham, MA 01702
 Office: 508-875-0100 Fax: 508-875-0118
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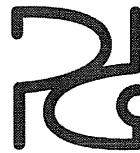
Heavy Vehicles

	Weston Road					Driveway					Weston Road					Route 9 EB Ramps					
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:00 PM	3	4	0	0	7	0	0	0	0	0	0	3	1	0	4	0	0	4	0	4	15
4:15 PM	1	2	0	0	3	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	6
4:30 PM	2	5	0	0	7	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	9
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	6	11	0	0	17	0	0	0	0	0	0	7	1	0	8	0	0	5	0	5	30
5:00 PM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
5:30 PM	1	1	0	0	2	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	4
5:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	1	3	0	0	4	0	0	0	0	0	0	3	1	0	4	1	0	0	0	1	9
Grand Total	7	14	0	0	21	0	0	0	0	0	0	10	2	0	12	1	0	5	0	6	39
Approach %	33.3	66.7	0.0	0.0		0.0	0.0	0.0	0.0		0.0	83.3	16.7	0.0		16.7	0.0	83.3	0.0		
Total %	17.9	35.9	0.0	0.0	53.8	0.0	0.0	0.0	0.0	0.0	0.0	25.6	5.1	0.0	30.8	2.6	0.0	12.8	0.0	15.4	
Exiting Leg Total	15					0					15					9					39

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Weston Road					Driveway					Weston Road					Route 9 EB Ramps					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:00 PM	3	4	0	0	7	0	0	0	0	0	0	3	1	0	4	0	0	4	0	4	15
4:15 PM	1	2	0	0	3	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	6
4:30 PM	2	5	0	0	7	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	9
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	6	11	0	0	17	0	0	0	0	0	0	7	1	0	8	0	0	5	0	5	30
% Approach Total	35.3	64.7	0.0	0.0		0.0	0.0	0.0	0.0		0.0	87.5	12.5	0.0		0.0	0.0	100.0	0.0		
PHF	0.500	0.550	0.000	0.000	0.607	0.000	0.000	0.000	0.000	0.000	0.000	0.583	0.250	0.000	0.500	0.000	0.000	0.313	0.000	0.313	0.500
Entering Leg	6	11	0	0	17	0	0	0	0	0	0	7	1	0	8	0	0	5	0	5	30
Exiting Leg	12					0					11					7					30
Total	29					0					19					12					60

PDI File #: **175562 B**
 Location: **N: Weston Road S: Weston Road**
 Location: **E: Driveway W: Route 9 EB Ramps**
 City, State: **Wellesley, MA**
 Client: **MDM/ D. Lindquist**
 Site Code: **923**
 Mount Date: **Thursday, March 30, 2017**
 Start Time: **4:00 PM**
 End Time: **6:00 PM**
 Class:



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Bicycles (on Roadway and Crosswalks)

	Weston Road							Driveway							Weston Road							Route 9 EB Ramps							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	2	0	0	0	0	2	0	0	0	0	0	1	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	4
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	2
Grand Total	0	2	0	0	0	0	2	0	0	0	0	1	1	2	0	2	0	0	0	0	2	0	0	0	0	0	0	0	6
Approach %	0.0	100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	50.0	50.0		0.0	100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
Total %	0.0	33.3	0.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0	0.0	16.7	16.7	33.3	0.0	33.3	0.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0		
Exiting Leg Total	2							2							2							0							6

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Weston Road							Driveway							Weston Road							Route 9 EB Ramps							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:15 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1	0	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	2	0	0	0	0	2	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	1	0	0	0	0	0	4
% Approach Total	0.0	100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	100.0		0.0	100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.500	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.500	
Entering Leg	0	2	0	0	0	0	2	0	0	0	0	0	1	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	4
Exiting Leg							1						1	1		2					2						0	4	
Total							3						2	2		3					3						0	8	

PDI File #: **175562 B**
 Location: **N: Weston Road S: Weston Road**
 Location: **E: Driveway W: Route 9 EB Ramps**
 City, State: **Wellesley, MA**
 Client: **MDM/ D. Lindquist**
 Site Code: **923**
 Count Date: **Thursday, March 30, 2017**
 Start Time: **4:00 PM**
 End Time: **6:00 PM**
 Class:



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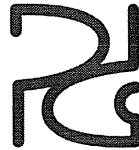
Pedestrians

	Weston Road							Driveway							Weston Road							Route 9 EB Ramps							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	1	1	5
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	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	1	2	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	3
Total	0	0	0	0	0	0	0	0	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	1	3	4	11
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	0	0	0	0	0	0	0	1	1	1	4
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	2	2	4	0	0	0	0	0	0	0	0	0	0	0	0	1	1	5
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2	1	3	4
Total	0	0	0	0	0	0	0	0	0	0	0	5	3	8	0	0	0	0	0	0	0	0	0	0	0	2	3	5	13
Grand Total	0	0	0	0	0	0	0	0	0	0	0	5	10	15	0	0	0	0	0	0	0	0	0	0	0	3	6	9	24
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	33.3	66.7		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	33.3	66.7		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.8	41.7	62.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5	25.0	37.5	
Exiting Leg Total	0							15							0							9							24

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:30 PM	Weston Road							Driveway							Weston Road							Route 9 EB Ramps							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
4:30 PM	0	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	1	2	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	3
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	1	1	4
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	2	2	4	0	0	0	0	0	0	0	0	0	0	0	1	1	5	
Total Volume	0	0	0	0	0	0	0	0	0	0	0	4	5	9	0	0	0	0	0	0	0	0	0	0	0	1	4	5	14
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	44.4	55.6		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	20.0	80.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.625	0.563	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	1.000	0.625	0.700	
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	4	5	9	0	0	0	0	0	0	0	0	0	0	1	4	5	14	
Exiting Leg														9													5	14	
Total	0							18							0							10							28

PDI File #: **175562 A**
 Location: **N: Weston Road S: Weston Road**
 Location: **E: Cleveland Road W: Route 9 WB Ramps**
 City, State: **Wellesley, MA**
 Client: **MDM/ D. Lindquist**
 Site Code: **923**
 Count Date: **Thursday, March 30, 2017**
 Start Time: **4:00 PM**
 End Time: **6:00 PM**
 Class:



**PRECISION
DATA
INDUSTRIES, LLC**

46 Morton Street, Framingham, MA 01702
 Office: 508-875-0100 Fax: 508-875-0118
 Email: datarequests@pdillc.com

Cars and Heavy Vehicles

	Weston Road					Cleveland Road					Weston Road					Route 9 WB Ramps					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:00 PM	25	137	3	0	165	32	1	19	0	52	58	152	22	0	232	27	0	12	0	39	488
4:15 PM	17	157	1	0	175	34	1	14	0	49	45	160	13	0	218	27	0	11	0	38	480
4:30 PM	30	154	3	0	187	47	0	21	0	68	45	164	10	0	219	16	0	9	0	25	499
4:45 PM	14	159	4	0	177	58	1	30	0	89	35	114	6	0	155	13	0	11	0	24	445
Total	86	607	11	0	704	171	3	84	0	258	183	590	51	0	824	83	0	43	0	126	1912
5:00 PM	19	172	1	0	192	44	3	18	0	65	44	145	10	0	199	19	1	2	0	22	478
5:15 PM	14	167	2	0	183	52	0	33	0	85	41	147	13	0	201	21	0	10	0	31	500
5:30 PM	20	148	1	0	169	46	0	37	0	83	31	165	7	0	203	20	0	6	0	26	481
5:45 PM	17	168	1	0	186	36	0	18	0	54	39	120	11	0	170	25	2	11	0	38	448
Total	70	655	5	0	730	178	3	106	0	287	155	577	41	0	773	85	3	29	0	117	1907
Grand Total	156	1262	16	0	1434	349	6	190	0	545	338	1167	92	0	1597	168	3	72	0	243	3819
Approach %	10.9	88.0	1.1	0.0		64.0	1.1	34.9	0.0		21.2	73.1	5.8	0.0		69.1	1.2	29.6	0.0		
Total %	4.1	33.0	0.4	0.0	37.5	9.1	0.2	5.0	0.0	14.3	8.9	30.6	2.4	0.0	41.8	4.4	0.1	1.9	0.0	6.4	
Exiting Leg Total	1588					357					1620					254					3819
Cars	156	1242	16	0	1414	344	6	189	0	539	337	1154	90	0	1581	166	3	72	0	241	3775
% Cars	100.0	98.4	100.0	0.0	98.6	98.6	100.0	99.5	0.0	98.9	99.7	98.9	97.8	0.0	99.0	98.8	100.0	100.0	0.0	99.2	98.8
Exiting Leg Total	1570					356					1597					252					3775
Heavy Vehicles	0	20	0	0	20	5	0	1	0	6	1	13	2	0	16	2	0	0	0	2	44
% Heavy Vehicles	0.0	1.6	0.0	0.0	1.4	1.4	0.0	0.5	0.0	1.1	0.3	1.1	2.2	0.0	1.0	1.2	0.0	0.0	0.0	0.8	1.2
Exiting Leg Total	18					1					23					2					44

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:30 PM	Weston Road					Cleveland Road					Weston Road					Route 9 WB Ramps										
	North					East					South					West										
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total						
4:30 PM	30	154	3	0	187	47	0	21	0	68	45	164	10	0	219	16	0	9	0	25	499					
4:45 PM	14	159	4	0	177	58	1	30	0	89	35	114	6	0	155	13	0	11	0	24	445					
5:00 PM	19	172	1	0	192	44	3	18	0	65	44	145	10	0	199	19	1	2	0	22	478					
5:15 PM	14	167	2	0	183	52	0	33	0	85	41	147	13	0	201	21	0	10	0	31	500					
Total Volume	77	652	10	0	739	201	4	102	0	307	165	570	39	0	774	69	1	32	0	102	1922					
% Approach Total	10.4	88.2	1.4	0.0		65.5	1.3	33.2	0.0		21.3	73.6	5.0	0.0		67.6	1.0	31.4	0.0							
PHF	0.642	0.948	0.625	0.000	0.962	0.866	0.333	0.773	0.000	0.862	0.917	0.869	0.750	0.000	0.884	0.821	0.250	0.727	0.000	0.823	0.961					
Cars	77	646	10	0	733	200	4	102	0	306	165	566	38	0	769	68	1	32	0	101	1909					
Cars %	100.0	99.1	100.0	0.0	99.2	99.5	100.0	100.0	0.0	99.7	100.0	99.3	97.4	0.0	99.4	98.6	100.0	100.0	0.0	99.0	99.3					
Heavy Vehicles	0	6	0	0	6	1	0	0	0	1	0	4	1	0	5	1	0	0	0	1	13					
Heavy Vehicles %	0.0	0.9	0.0	0.0	0.8	0.5	0.0	0.0	0.0	0.3	0.0	0.7	2.6	0.0	0.6	1.4	0.0	0.0	0.0	1.0	0.7					
Cars Enter Leg	77	646	10	0	733	200	4	102	0	306	165	566	38	0	769	68	1	32	0	101	1909					
Heavy Enter Leg	0	6	0	0	6	1	0	0	0	1	0	4	1	0	5	1	0	0	0	1	13					
Total Entering Leg	77	652	10	0	739	201	4	102	0	307	165	570	39	0	774	69	1	32	0	102	1922					
Cars Exiting Leg						798										816					119					1909
Heavy Exit Leg						5										7					1					13
Total Exiting Leg						803										823					120					1922

PDI File #: 175562 A
 Location: N: Weston Road S: Weston Road
 Location: E: Cleveland Road W: Route 9 WB Ramps
 City, State: Wellesley, MA
 Client: MDM/ D. Lindquist
 Site Code: 923
 Count Date: Thursday, March 30, 2017
 Start Time: 4:00 PM
 End Time: 6:00 PM
 Class:



46 Morton Street, Framingham, MA 01702
 Office: 508-875-0100 Fax: 508-875-0118
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Cars

	Weston Road					Cleveland Road					Weston Road					Route 9 WB Ramps					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:00 PM	25	129	3	0	157	32	1	19	0	52	57	147	22	0	226	26	0	12	0	38	473
4:15 PM	17	155	1	0	173	32	1	13	0	46	45	157	12	0	214	27	0	11	0	38	471
4:30 PM	30	149	3	0	182	47	0	21	0	68	45	162	9	0	216	15	0	9	0	24	490
4:45 PM	14	159	4	0	177	57	1	30	0	88	35	114	6	0	155	13	0	11	0	24	444
Total	86	592	11	0	689	168	3	83	0	254	182	580	49	0	811	81	0	43	0	124	1878
5:00 PM	19	171	1	0	191	44	3	18	0	65	44	143	10	0	197	19	1	2	0	22	475
5:15 PM	14	167	2	0	183	52	0	33	0	85	41	147	13	0	201	21	0	10	0	31	500
5:30 PM	20	146	1	0	167	45	0	37	0	82	31	164	7	0	202	20	0	6	0	26	477
5:45 PM	17	166	1	0	184	35	0	18	0	53	39	120	11	0	170	25	2	11	0	38	445
Total	70	650	5	0	725	176	3	106	0	285	155	574	41	0	770	85	3	29	0	117	1897
Grand Total	156	1242	16	0	1414	344	6	189	0	539	337	1154	90	0	1581	166	3	72	0	241	3775
Approach %	11.0	87.8	1.1	0.0		63.8	1.1	35.1	0.0		21.3	73.0	5.7	0.0		68.9	1.2	29.9	0.0		
Total %	4.1	32.9	0.4	0.0	37.5	9.1	0.2	5.0	0.0	14.3	8.9	30.6	2.4	0.0	41.9	4.4	0.1	1.9	0.0	6.4	
Exiting Leg Total	1570					356					1597					252					3775

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:30 PM	Weston Road					Cleveland Road					Weston Road					Route 9 WB Ramps					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:30 PM	30	149	3	0	182	47	0	21	0	68	45	162	9	0	216	15	0	9	0	24	490
4:45 PM	14	159	4	0	177	57	1	30	0	88	35	114	6	0	155	13	0	11	0	24	444
5:00 PM	19	171	1	0	191	44	3	18	0	65	44	143	10	0	197	19	1	2	0	22	475
5:15 PM	14	167	2	0	183	52	0	33	0	85	41	147	13	0	201	21	0	10	0	31	500
Total Volume	77	646	10	0	733	200	4	102	0	306	165	566	38	0	769	68	1	32	0	101	1909
% Approach Total	10.5	88.1	1.4	0.0		65.4	1.3	33.3	0.0		21.5	73.6	4.9	0.0		67.3	1.0	31.7	0.0		
PHF	0.642	0.944	0.625	0.000	0.959	0.877	0.333	0.773	0.000	0.869	0.917	0.873	0.731	0.000	0.890	0.810	0.250	0.727	0.000	0.815	0.955
Entering Leg	77	646	10	0	733	200	4	102	0	306	165	566	38	0	769	68	1	32	0	101	1909
Exiting Leg					798					176					816					119	1909
Total					1531					482					1585					220	3818

PDI File #: 175562 A
 Location: N: Weston Road S: Weston Road
 Location: E: Cleveland Road W: Route 9 WB Ramps
 City, State: Wellesley, MA
 Client: MDM/ D. Lindquist
 Site Code: 923
 Count Date: Thursday, March 30, 2017
 Start Time: 4:00 PM
 End Time: 6:00 PM
 Class:



PRECISION
 DATA
 INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702
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Heavy Vehicles

	Weston Road					Cleveland Road					Weston Road					Route 9 WB Ramps					
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:00 PM	0	8	0	0	8	0	0	0	0	0	1	5	0	0	6	1	0	0	0	1	15
4:15 PM	0	2	0	0	2	2	0	1	0	3	0	3	1	0	4	0	0	0	0	0	9
4:30 PM	0	5	0	0	5	0	0	0	0	0	0	2	1	0	3	1	0	0	0	1	9
4:45 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	15	0	0	15	3	0	1	0	4	1	10	2	0	13	2	0	0	0	2	34
5:00 PM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	2	0	0	2	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	4
5:45 PM	0	2	0	0	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
Total	0	5	0	0	5	2	0	0	0	2	0	3	0	0	3	0	0	0	0	0	10
Grand Total	0	20	0	0	20	5	0	1	0	6	1	13	2	0	16	2	0	0	0	2	44
Approach %	0.0	100.0	0.0	0.0		83.3	0.0	16.7	0.0		6.3	81.3	12.5	0.0		100.0	0.0	0.0	0.0		
Total %	0.0	45.5	0.0	0.0	45.5	11.4	0.0	2.3	0.0	13.6	2.3	29.5	4.5	0.0	36.4	4.5	0.0	0.0	0.0	4.5	
Exiting Leg Total	18					1					23					2					44

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Weston Road					Cleveland Road					Weston Road					Route 9 WB Ramps					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:00 PM	0	8	0	0	8	0	0	0	0	0	1	5	0	0	6	1	0	0	0	1	15
4:15 PM	0	2	0	0	2	2	0	1	0	3	0	3	1	0	4	0	0	0	0	0	9
4:30 PM	0	5	0	0	5	0	0	0	0	0	0	2	1	0	3	1	0	0	0	1	9
4:45 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	15	0	0	15	3	0	1	0	4	1	10	2	0	13	2	0	0	0	2	34
% Approach Total	0.0	100.0	0.0	0.0		75.0	0.0	25.0	0.0		7.7	76.9	15.4	0.0		100.0	0.0	0.0	0.0		
PHF	0.000	0.469	0.000	0.000	0.469	0.375	0.000	0.250	0.000	0.333	0.250	0.500	0.500	0.000	0.542	0.500	0.000	0.000	0.000	0.500	0.567
Entering Leg	0	15	0	0	15	3	0	1	0	4	1	10	2	0	13	2	0	0	0	2	34
Exiting Leg					13					1					18					2	34
Total					28					5					31					4	68

PDI File #: **175562 A**
 Location: **N: Weston Road S: Weston Road**
 Location: **E: Cleveland Road W: Route 9 WB Ramps**
 City, State: **Wellesley, MA**
 Client: **MDM/ D. Lindquist**
 Site Code: **923**
 Count Date: **Thursday, March 30, 2017**
 Start Time: **4:00 PM**
 End Time: **6:00 PM**
 Class:



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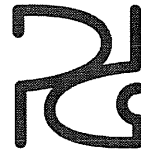
Bicycles (on Roadway and Crosswalks)

	Weston Road							Cleveland Road							Weston Road							Route 9 WB Ramps							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:45 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Total	0	1	0	0	0	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:15 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	0	0	0	0	0	0	3
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	0	0	0	0	0	0	3
Grand Total	0	2	0	0	0	0	2	1	0	0	0	0	0	1	0	1	1	0	0	0	2	0	0	0	0	0	0	5	
Approach %	0.0	100.0	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0	0.0	0.0		0.0	50.0	50.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
Total %	0.0	40.0	0.0	0.0	0.0	0.0	40.0	20.0	0.0	0.0	0.0	0.0	20.0		0.0	20.0	20.0	0.0	0.0	0.0	40.0	0.0	0.0	0.0	0.0	0.0	0.0		
Exiting Leg Total	2							0							2							1							5

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:30 PM	Weston Road							Cleveland Road							Weston Road							Route 9 WB Ramps							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:15 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	0	0	0	0	0	0	3
Total Volume	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	0	0	0	0	0	0	4
% Approach Total	0.0	100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	50.0	50.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.500	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.333	
Entering Leg	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	0	0	0	0	0	0	4
Exiting Leg							1								0						2						1	4	
Total							3							0							4						1	8	

PDI File #: **175562 A**
 Location: **N: Weston Road S: Weston Road**
 Location: **E: Cleveland Road W: Route 9 WB Ramps**
 City, State: **Wellesley, MA**
 Client: **MDM/ D. Lindquist**
 Site Code: **923**
 Count Date: **Thursday, March 30, 2017**
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Pedestrians

	Weston Road							Cleveland Road							Weston Road							Route 9 WB Ramps							Total			
	North							East							South							West										
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total				
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	3	2	5	0	0	0	0	0	2	0	2	9
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	6	
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	1	3	4	0	0	0	0	0	0	0	0	8
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	10	10	0	0	0	0	0	4	5	9	0	0	0	0	0	2	4	6	25
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3	0	0	0	0	0	0	0	0	0	3
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	0	2	1	3	6	
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	
5:45 PM	0	0	0	0	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	1	1	
Total	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	3	3	6	0	0	0	0	0	3	2	5	12	
Grand Total	0	0	0	0	0	0	0	0	0	0	0	1	10	11	0	0	0	0	0	7	8	15	0	0	0	0	0	5	6	11	37	
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	9.1	90.9		0.0	0.0	0.0	0.0	46.7	53.3		0.0	0.0	0.0	0.0	45.5	54.5					
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	27.0	29.7	0.0	0.0	0.0	0.0	18.9	21.6	40.5	0.0	0.0	0.0	0.0	13.5	16.2	29.7				
Exiting Leg Total	0							11							15							11							37			

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	Weston Road							Cleveland Road							Weston Road							Route 9 WB Ramps							Total	
	North							East							South							West								
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	3	2	5	0	0	0	0	2	0	2	9
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	6
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	1	3	4	0	0	0	0	0	0	0	8
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	10	10	0	0	0	0	0	4	5	9	0	0	0	0	2	4	6	25
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	44.4	55.6		0.0	0.0	0.0	0.0	33.3	66.7			
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.625	0.625		0.000	0.000	0.000	0.000	0.333	0.417	0.450	0.000	0.000	0.000	0.000	0.250	0.250	0.375		0.694
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	10	10	0	0	0	0	0	4	5	9	0	0	0	0	2	4	6	25
Exiting Leg	0							10							9							6							25	
Total	0							20							18							12							50	

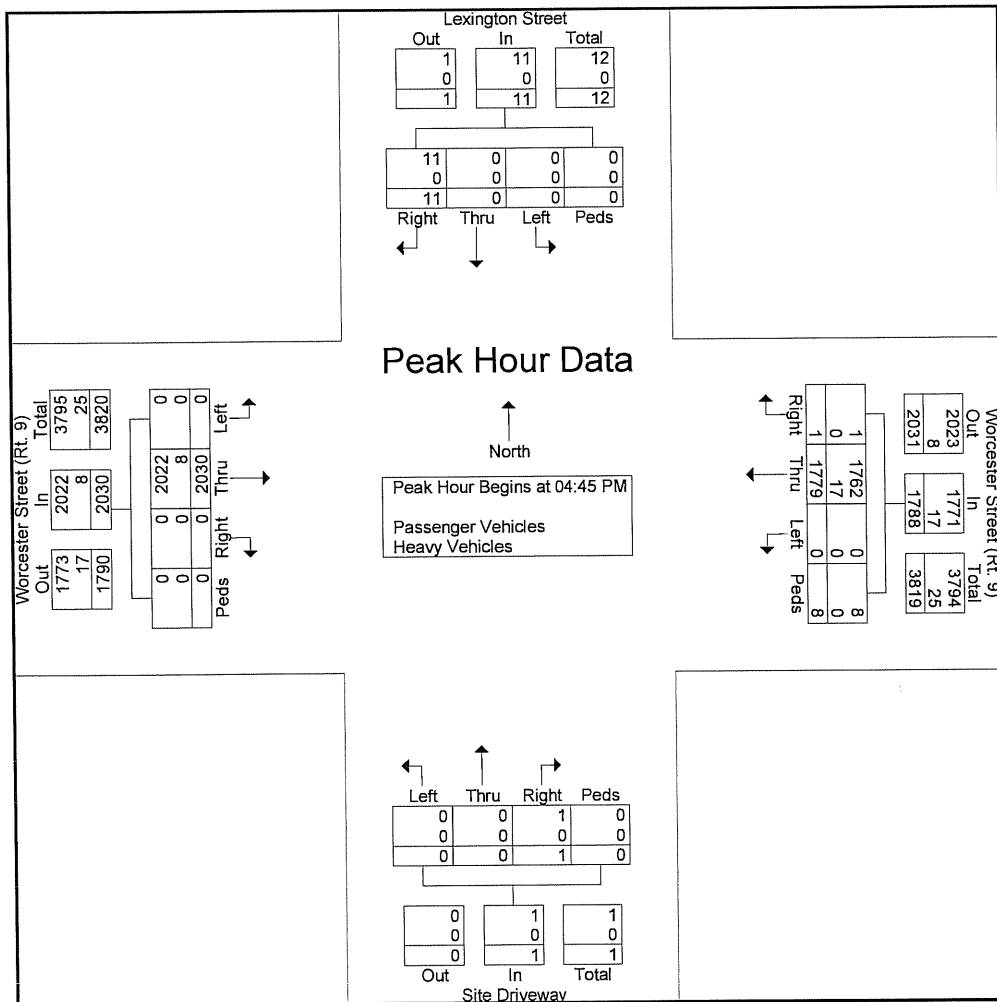
MDM Transportation Consultants, Inc.

28 Lord Road, Suite 280
Marlborough, MA

N/S: Site Driveway/Lexington Street
E/W: Worcester Street (Route 9)
Wellesley, MA

File Name : 923 Rte 9 at Site Driveway PM
Site Code : 923
Start Date : 3/23/2017
Page No : 2

	Lexington Street From North					Worcester Street (Rt. 9) From East						Site Driveway From South					Worcester Street (Rt. 9) From West						
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	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	0	0	0	0	0	0	462	0	2	0	464	1	0	0	0	1	0	483	0	0	483	948	
05:00 PM	5	0	0	0	5	1	417	0	2	0	420	0	0	0	0	0	0	518	0	0	518	943	
05:15 PM	2	0	0	0	2	0	435	0	1	0	436	0	0	0	0	0	0	512	0	0	512	950	
05:30 PM	4	0	0	0	4	0	465	0	3	0	468	0	0	0	0	0	0	517	0	0	517	989	
Total Volume	11	0	0	0	11	1	1779	0	8	0	1788	1	0	0	0	1	0	2030	0	0	2030	3830	
% App. Total							99.5																
PHF	.550	.000	.000	.000	.550	.250	.956	.000	.667	.000	.955	.250	.000	.000	.000	.250	.000	.980	.000	.000	.980	.968	
Passenger Vehicles	11	0	0	0	11	1	1762	0	8	0	1771	1	0	0	0	1	0	2022	0	0	2022	3805	
% Passenger Vehicles							99.0											99.6					
Heavy Vehicles	0	0	0	0	0	0	17	0	0	0	17	0	0	0	0	0	0	8	0	0	8	25	
% Heavy Vehicles	0	0	0	0	0	0	1.0	0	0	0	1.0	0	0	0	0	0	0	0.4	0	0	0.4	0.7	



MDM Transportation Consultants, Inc.

28 Lord Road, Suite 280
Marlborough, MA

N/S: Site Driveway/Lexington Street
E/W: Worcester Street (Route 9)
Wellesley, MA

File Name : 923 Rte 9 at Site Driveway PM
Site Code : 923
Start Date : 3/23/2017
Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles

	Lexington Street From North					Worcester Street (Rt. 9) From East						Site Driveway From South					Worcester Street (Rt. 9) From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	440	0	0	0	440	0	0	0	0	0	0	437	0	0	437	877
04:15 PM	6	0	0	0	6	0	434	0	6	0	440	0	0	0	0	0	0	479	0	0	479	925
04:30 PM	2	0	0	0	2	0	466	1	0	0	467	1	0	0	0	1	0	512	0	0	512	982
04:45 PM	0	0	0	0	0	0	462	0	2	0	464	1	0	0	0	1	0	483	0	0	483	948
Total	8	0	0	0	8	0	1802	1	8	0	1811	2	0	0	0	2	0	1911	0	0	1911	3732
05:00 PM	5	0	0	0	5	1	417	0	2	0	420	0	0	0	0	0	0	518	0	0	518	943
05:15 PM	2	0	0	0	2	0	435	0	1	0	436	0	0	0	0	0	0	512	0	0	512	950
05:30 PM	4	0	0	0	4	0	465	0	3	0	468	0	0	0	0	0	0	517	0	0	517	989
05:45 PM	2	0	0	0	2	0	410	0	3	0	413	0	0	0	0	0	0	469	0	0	469	884
Total	13	0	0	0	13	1	1727	0	9	0	1737	0	0	0	0	0	0	2016	0	0	2016	3766
Grand Total						3529 1 17 0 3548					2 0 0 0 2					0 3927 0 0 3927					7498	
Apprch %	100	0	0	0		0	99.5	0	0.5	0		100	0	0	0		0	100	0	0		
Total %	0.3	0	0	0	0.3	0	47.1	0	0.2	0	47.3	0	0	0	0	0	0	52.4	0	0	52.4	
Passenger Vehicles																						
% Passenger Vehicles	100	0	0	0	100	100	99.1	100	100	0	99.1	100	0	0	0	100	0	99.4	0	0	99.4	99.3
Heavy Vehicles	0	0	0	0	0	0	33	0	0	0	33	0	0	0	0	0	0	23	0	0	23	56
% Heavy Vehicles	0	0	0	0	0	0	0.9	0	0	0	0.9	0	0	0	0	0	0	0.6	0	0	0.6	0.7

28 Lord Road, Suite 280
Marlborough, MA

File Name : 923 Rte 9 at Site Driveway PM
Site Code : 923
Start Date : 3/23/2017
Page No : 1

	Lexington Street From North					Worcester Street (Rt. 9) From East						Site Driveway From South					Worcester Street (Rt. 9) From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aprch % Total %	0	0	0	0		0	0	0	0	0		0	0	0	0		0	0	0	0		

PDI File #: 175562 C
 Location: N: Overbrook Drive S: CV5 Driveway
 Location: E: Worcester Street (Route 9) W: Worcester Street (Route 9)
 City, State: Wellesley, MA
 Client: MDM/ D. Lindquist
 Site Code: 923
 Count Date: Saturday, April 01, 2017
 Start Time: 11:00 AM
 End Time: 1:00 PM
 Class:



46 Morton Street, Framingham, MA 01702
 Office: 508-875-0100 Fax: 508-875-0118
 Email: datarequests@pdillc.com

Cars and Heavy Vehicles

	Overbrook Drive					Worcester Street (Route 9)					CVS Driveway					Worcester Street (Route 9)					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
11:00 AM	7	2	7	0	16	2	266	2	7	277	3	0	4	0	7	5	256	12	7	280	580
11:15 AM	14	5	8	0	27	5	247	3	5	260	7	0	4	0	11	3	292	9	12	316	614
11:30 AM	14	0	8	0	22	10	326	1	8	345	7	1	5	0	13	8	277	6	9	300	680
11:45 AM	11	0	9	0	20	5	313	2	10	330	5	0	3	0	8	8	336	11	7	362	720
Total	46	7	32	0	85	22	1152	8	30	1212	22	1	16	0	39	24	1161	38	35	1258	2594
12:00 PM	9	0	8	0	17	7	324	5	2	338	4	1	7	0	12	6	289	11	5	311	678
12:15 PM	8	1	8	0	17	4	367	1	10	382	3	0	5	0	8	11	336	5	7	359	766
12:30 PM	11	0	8	0	19	3	307	1	5	316	6	0	5	0	11	8	276	8	5	297	643
12:45 PM	10	0	8	0	18	5	380	1	6	392	7	1	4	0	12	15	304	14	5	338	760
Total	38	1	32	0	71	19	1378	8	23	1428	20	2	21	0	43	40	1205	38	22	1305	2847
Grand Total	84	8	64	0	156	41	2530	16	53	2640	42	3	37	0	82	64	2366	76	57	2563	5441
Approach %	53.8	5.1	41.0	0.0		1.6	95.8	0.6	2.0		51.2	3.7	45.1	0.0		2.5	92.3	3.0	2.2		
Total %	1.5	0.1	1.2	0.0	2.9	0.8	46.5	0.3	1.0	48.5	0.8	0.1	0.7	0.0	1.5	1.2	43.5	1.4	1.0	47.1	
Exiting Leg Total	120					2525					88					2708					5441
Cars	82	8	64	0	154	41	2502	15	51	2609	42	3	36	0	81	64	2338	75	57	2534	5378
% Cars	97.6	100.0	100.0	0.0	98.7	100.0	98.9	93.8	96.2	98.8	100.0	100.0	97.3	0.0	98.8	100.0	98.8	98.7	100.0	98.9	98.8
Exiting Leg Total	119					2495					87					2677					5378
Heavy Vehicles	2	0	0	0	2	0	28	1	2	31	0	0	1	0	1	0	28	1	0	29	63
% Heavy Vehicles	2.4	0.0	0.0	0.0	1.3	0.0	1.1	6.3	3.8	1.2	0.0	0.0	2.7	0.0	1.2	0.0	1.2	1.3	0.0	1.1	1.2
Exiting Leg Total	1					30					1					31					63

Peak Hour Analysis from 11:00 AM to 01:00 PM begins at:

12:00 PM	Overbrook Drive					Worcester Street (Route 9)					CVS Driveway					Worcester Street (Route 9)					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
12:00 PM	9	0	8	0	17	7	324	5	2	338	4	1	7	0	12	6	289	11	5	311	678
12:15 PM	8	1	8	0	17	4	367	1	10	382	3	0	5	0	8	11	336	5	7	359	766
12:30 PM	11	0	8	0	19	3	307	1	5	316	6	0	5	0	11	8	276	8	5	297	643
12:45 PM	10	0	8	0	18	5	380	1	6	392	7	1	4	0	12	15	304	14	5	338	760
Total Volume	38	1	32	0	71	19	1378	8	23	1428	20	2	21	0	43	40	1205	38	22	1305	2847
% Approach Total	53.5	1.4	45.1	0.0		1.3	96.5	0.6	1.6		46.5	4.7	48.8	0.0		3.1	92.3	2.9	1.7		
PHF	0.864	0.250	1.000	0.000	0.934	0.679	0.907	0.400	0.575	0.911	0.714	0.500	0.750	0.000	0.896	0.667	0.897	0.679	0.786	0.909	0.929
Cars	37	1	32	0	70	19	1364	7	23	1413	20	2	20	0	42	40	1189	38	22	1289	2814
Cars %	97.4	100.0	100.0	0.0	98.6	100.0	99.0	87.5	100.0	98.9	100.0	100.0	95.2	0.0	97.7	100.0	98.7	100.0	100.0	98.8	98.8
Heavy Vehicles	1	0	0	0	1	0	14	1	0	15	0	0	1	0	1	0	16	0	0	16	33
Heavy Vehicles %	2.6	0.0	0.0	0.0	1.4	0.0	1.0	12.5	0.0	1.1	0.0	0.0	4.8	0.0	2.3	0.0	1.3	0.0	0.0	1.2	1.2
Cars Enter Leg	37	1	32	0	70	19	1364	7	23	1413	20	2	20	0	42	40	1189	38	22	1289	2814
Heavy Enter Leg	1	0	0	0	1	0	14	1	0	15	0	0	1	0	1	0	16	0	0	16	33
Total Entering Leg	38	1	32	0	71	19	1378	8	23	1428	20	2	21	0	43	40	1205	38	22	1305	2847
Cars Exiting Leg	59					1264					48					1443					2814
Heavy Exit Leg	0					16					1					16					33
Total Exiting Leg	59					1280					49					1459					2847

PDI File #: 175562 C
 Location: N: Overbrook Drive S: CVS Driveway
 Location: E: Worcester Street (Route 9) W: Worcester Street (Route 9)
 City, State: Wellesley, MA
 Client: MDM/ D. Lindquist
 Site Code: 923
 Count Date: Saturday, April 01, 2017
 Start Time: 11:00 AM
 End Time: 1:00 PM
 Class:



46 Morton Street, Framingham, MA 01702
 Office: 508-875-0100 Fax: 508-875-0118
 Email: datarequests@pdillc.com

Cars

	Overbrook Drive					Worcester Street (Route 9)					CVS Driveway					Worcester Street (Route 9)					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
11:00 AM	7	2	7	0	16	2	263	2	6	273	3	0	4	0	7	5	254	11	7	277	573
11:15 AM	13	5	8	0	26	5	244	3	5	257	7	0	4	0	11	3	289	9	12	313	607
11:30 AM	14	0	8	0	22	10	323	1	7	341	7	1	5	0	13	8	275	6	9	298	674
11:45 AM	11	0	9	0	20	5	308	2	10	325	5	0	3	0	8	8	331	11	7	357	710
Total	45	7	32	0	84	22	1138	8	28	1196	22	1	16	0	39	24	1149	37	35	1245	2564
12:00 PM	9	0	8	0	17	7	324	5	2	338	4	1	7	0	12	6	286	11	5	308	675
12:15 PM	8	1	8	0	17	4	362	0	10	376	3	0	5	0	8	11	334	5	7	357	758
12:30 PM	10	0	8	0	18	3	305	1	5	314	6	0	4	0	10	8	269	8	5	290	632
12:45 PM	10	0	8	0	18	5	373	1	6	385	7	1	4	0	12	15	300	14	5	334	749
Total	37	1	32	0	70	19	1364	7	23	1413	20	2	20	0	42	40	1189	38	22	1289	2814
Grand Total	82	8	64	0	154	41	2502	15	51	2609	42	3	36	0	81	64	2338	75	57	2534	5378
Approach %	53.2	5.2	41.6	0.0		1.6	95.9	0.6	2.0		51.9	3.7	44.4	0.0		2.5	92.3	3.0	2.2		
Total %	1.5	0.1	1.2	0.0	2.9	0.8	46.5	0.3	0.9	48.5	0.8	0.1	0.7	0.0	1.5	1.2	43.5	1.4	1.1	47.1	
Exiting Leg Total	119					2495					87					2677					5378

Peak Hour Analysis from 11:00 AM to 01:00 PM begins at:

11:30 AM	Overbrook Drive					Worcester Street (Route 9)					CVS Driveway					Worcester Street (Route 9)					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
11:30 AM	14	0	8	0	22	10	323	1	7	341	7	1	5	0	13	8	275	6	9	298	674
11:45 AM	11	0	9	0	20	5	308	2	10	325	5	0	3	0	8	8	331	11	7	357	710
12:00 PM	9	0	8	0	17	7	324	5	2	338	4	1	7	0	12	6	286	11	5	308	675
12:15 PM	8	1	8	0	17	4	362	0	10	376	3	0	5	0	8	11	334	5	7	357	758
Total Volume	42	1	33	0	76	26	1317	8	29	1380	19	2	20	0	41	33	1226	33	28	1320	2817
% Approach Total	55.3	1.3	43.4	0.0		1.9	95.4	0.6	2.1		46.3	4.9	48.8	0.0		2.5	92.9	2.5	2.1		
PHF	0.750	0.250	0.917	0.000	0.864	0.650	0.910	0.400	0.725	0.918	0.679	0.500	0.714	0.000	0.788	0.750	0.918	0.750	0.778	0.924	0.929
Entering Leg	42	1	33	0	76	26	1317	8	29	1380	19	2	20	0	41	33	1226	33	28	1320	2817
Exiting Leg					61					1307					42					1407	2817
Total					137					2687					83					2727	5634

PDI File #: 175562 C
 Location: N: Overbrook Drive S: CVS Driveway
 Location: E: Worcester Street (Route 9) W: Worcester Street (Route 9)
 City, State: Wellesley, MA
 Client: MDM/ D. Lindquist
 Site Code: 923
 Count Date: Saturday, April 01, 2017
 Start Time: 11:00 AM
 End Time: 1:00 PM
 Class:



PRECISION
 DATA
 INDUSTRIES, LLC
 46 Morton Street, Framingham, MA 01702
 Office: 508-875-0100 Fax: 508-875-0118
 Email: datarequests@pdillc.com

Heavy Vehicles

	Overbrook Drive					Worcester Street (Route 9)					CVS Driveway					Worcester Street (Route 9)					
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
11:00 AM	0	0	0	0	0	0	3	0	1	4	0	0	0	0	0	0	2	1	0	3	7
11:15 AM	1	0	0	0	1	0	3	0	0	3	0	0	0	0	0	0	3	0	0	3	7
11:30 AM	0	0	0	0	0	0	3	0	1	4	0	0	0	0	0	0	2	0	0	2	6
11:45 AM	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	5	0	0	5	10
Total	1	0	0	0	1	0	14	0	2	16	0	0	0	0	0	0	12	1	0	13	30
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	3
12:15 PM	0	0	0	0	0	0	5	1	0	6	0	0	0	0	0	0	2	0	0	2	8
12:30 PM	1	0	0	0	1	0	2	0	0	2	0	0	1	0	1	0	7	0	0	7	11
12:45 PM	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	4	0	0	4	11
Total	1	0	0	0	1	0	14	1	0	15	0	0	1	0	1	0	16	0	0	16	33
Grand Total	2	0	0	0	2	0	28	1	2	31	0	0	1	0	1	0	28	1	0	29	63
Approach %	100.0	0.0	0.0	0.0		0.0	90.3	3.2	6.5		0.0	0.0	100.0	0.0		0.0	96.6	3.4	0.0		
Total %	3.2	0.0	0.0	0.0	3.2	0.0	44.4	1.6	3.2	49.2	0.0	0.0	1.6	0.0	1.6	0.0	44.4	1.6	0.0	46.0	
Exiting Leg Total					1					30					1					31	63

Peak Hour Analysis from 11:00 AM to 01:00 PM begins at:

12:00 PM	Overbrook Drive					Worcester Street (Route 9)					CVS Driveway					Worcester Street (Route 9)					
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	3
12:15 PM	0	0	0	0	0	0	5	1	0	6	0	0	0	0	0	0	2	0	0	2	8
12:30 PM	1	0	0	0	1	0	2	0	0	2	0	0	1	0	1	0	7	0	0	7	11
12:45 PM	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	4	0	0	4	11
Total Volume	1	0	0	0	1	0	14	1	0	15	0	0	1	0	1	0	16	0	0	16	33
% Approach Total	100.0	0.0	0.0	0.0		0.0	93.3	6.7	0.0		0.0	0.0	100.0	0.0		0.0	100.0	0.0	0.0		
PHF	0.250	0.000	0.000	0.000	0.250	0.000	0.500	0.250	0.000	0.536	0.000	0.000	0.250	0.000	0.250	0.000	0.571	0.000	0.000	0.571	0.750
Entering Leg	1	0	0	0	1	0	14	1	0	15	0	0	1	0	1	0	16	0	0	16	33
Exiting Leg					0					16					1					16	33
Total					1					31					2					32	66

46 Morton Street, Framingham, MA 01702
Office: 508-875-0100 Fax: 508-875-0118
Email: datarequests@pdillc.com

PDI File #: **175562 C**
 Location: **N: Overbrook Drive S: CVS Driveway**
 Location: **E: Worcester Street (Route 9) W: Worcester Street (Route 9)**
 City, State: **Wellesley, MA**
 Client: **MDM/ D. Lindquist**
 Site Code: **923**
 Count Date: **Saturday, April 01, 2017**
 Start Time: **11:00 AM**
 End Time: **1:00 PM**
 Class: **Bicycles (o**

Bicycles (on Roadway and Crosswalks)

	Overbrook Drive							Worcester Street (Route 9)							CVS Driveway							Worcester Street (Route 9)							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0			
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Exiting Leg Total	0							0							0							0							0

Peak Hour Analysis from 11:00 AM to 01:00 PM begins at:

[illegible]

46 Morton Street, Framingham, MA 01702
Office: 508-875-0100 Fax: 508-875-0118
Email: datarequests@pdillc.com

PDI File #: **175562 C**
 Location: **N: Overbrook Drive S: CVS Driveway**
 Location: **E: Worcester Street (Route 9) W: Worcester Street (Route 9)**
 City, State: **Wellesley, MA**
 Client: **MDM/ D. Lindquist**
 Site Code: **923**
 Count Date: **Saturday, April 01, 2017**
 Start Time: **11:00 AM**
 End Time: **1:00 PM**
 Class:

Pedestrians

	Overbrook Drive							Worcester Street (Route 9)							CVS Driveway							Worcester Street (Route 9)							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0			
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Exiting Leg Total	0							0							0							0							0

Peak Hour Analysis from 11:00 AM to 01:00 PM begins at:

[illegible]

PDI File #: **175562 B**
 Location: **N: Weston Road S: Weston Road**
 Location: **E: Driveway W: Route 9 EB Ramps**
 City, State: **Wellesley, MA**
 Client: **MDM/ D. Lindquist**
 Site Code: **923**
 Count Date: **Saturday, April 01, 2017**
 Start Time: **11:00 AM**
 End Time: **1:00 PM**
 Class:



46 Morton Street, Framingham, MA 01702
 Office: 508-875-0100 Fax: 508-875-0118
 Email: datarequests@pdilc.com

Cars and Heavy Vehicles

	Weston Road					Driveway					Weston Road					Route 9 EB Ramps					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
11:00 AM	34	87	0	0	121	0	2	1	0	3	0	147	21	0	168	33	0	23	0	56	348
11:15 AM	31	70	0	0	101	0	0	0	0	0	0	91	18	0	109	29	0	22	0	51	261
11:30 AM	36	69	0	0	105	1	0	1	0	2	2	113	13	0	128	23	0	26	0	49	284
11:45 AM	21	78	0	0	99	1	0	0	0	1	0	122	14	0	136	32	0	27	0	59	295
Total	122	304	0	0	426	2	2	2	0	6	2	473	66	0	541	117	0	98	0	215	1188
12:00 PM	24	76	0	0	100	1	0	0	0	1	0	135	19	0	154	49	1	20	0	70	325
12:15 PM	29	91	0	0	120	0	0	0	0	0	0	132	14	0	146	34	0	31	0	65	331
12:30 PM	26	49	0	0	75	0	0	0	0	0	1	116	16	0	133	45	0	14	0	59	267
12:45 PM	30	77	0	0	107	1	1	0	0	2	4	109	12	0	125	25	0	13	0	38	272
Total	109	293	0	0	402	2	1	0	0	3	5	492	61	0	558	153	1	78	0	232	1195
Grand Total	231	597	0	0	828	4	3	2	0	9	7	965	127	0	1099	270	1	176	0	447	2383
Approach %	27.9	72.1	0.0	0.0		44.4	33.3	22.2	0.0		0.6	87.8	11.6	0.0		60.4	0.2	39.4	0.0		
Total %	9.7	25.1	0.0	0.0	34.7	0.2	0.1	0.1	0.0	0.4	0.3	40.5	5.3	0.0	46.1	11.3	0.0	7.4	0.0	18.8	
Exiting Leg Total	1145					8					869					361					2383
Cars	227	584	0	0	811	4	3	2	0	9	7	957	124	0	1088	269	1	174	0	444	2352
% Cars	98.3	97.8	0.0	0.0	97.9	100.0	100.0	100.0	0.0	100.0	100.0	99.2	97.6	0.0	99.0	99.6	100.0	98.9	0.0	99.3	98.7
Exiting Leg Total	1135					8					855					354					2352
Heavy Vehicles	4	13	0	0	17	0	0	0	0	0	0	8	3	0	11	1	0	2	0	3	31
% Heavy Vehicles	1.7	2.2	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.8	2.4	0.0	1.0	0.4	0.0	1.1	0.0	0.7	1.3
Exiting Leg Total	10					0					14					7					31

Peak Hour Analysis from 11:00 AM to 01:00 PM begins at:

11:30 AM	Weston Road					Driveway					Weston Road					Route 9 EB Ramps					
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
11:30 AM	36	69	0	0	105	1	0	1	0	2	2	113	13	0	128	23	0	26	0	49	284
11:45 AM	21	78	0	0	99	1	0	0	0	1	0	122	14	0	136	32	0	27	0	59	295
12:00 PM	24	76	0	0	100	1	0	0	0	1	0	135	19	0	154	49	1	20	0	70	325
12:15 PM	29	91	0	0	120	0	0	0	0	0	0	132	14	0	146	34	0	31	0	65	331
Total Volume	110	314	0	0	424	3	0	1	0	4	2	502	60	0	564	138	1	104	0	243	1235
% Approach Total	25.9	74.1	0.0	0.0		75.0	0.0	25.0	0.0		0.4	89.0	10.6	0.0		56.8	0.4	42.8	0.0		
PHF	0.764	0.863	0.000	0.000	0.883	0.750	0.000	0.250	0.000	0.500	0.250	0.930	0.789	0.000	0.916	0.704	0.250	0.839	0.000	0.868	0.933
Cars	108	310	0	0	418	3	0	1	0	4	2	498	59	0	559	138	1	102	0	241	1222
Cars %	98.2	98.7	0.0	0.0	98.6	100.0	0.0	100.0	0.0	100.0	100.0	99.2	98.3	0.0	99.1	100.0	100.0	98.1	0.0	99.2	98.9
Heavy Vehicles	2	4	0	0	6	0	0	0	0	0	0	4	1	0	5	0	0	2	0	2	13
Heavy Vehicles %	1.8	1.3	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.7	0.0	0.9	0.0	0.0	1.9	0.0	0.8	1.1
Cars Enter Leg	108	310	0	0	418	3	0	1	0	4	2	498	59	0	559	138	1	102	0	241	1222
Heavy Enter Leg	2	4	0	0	6	0	0	0	0	0	0	4	1	0	5	0	0	2	0	2	13
Total Entering Leg	110	314	0	0	424	3	0	1	0	4	2	502	60	0	564	138	1	104	0	243	1235
Cars Exiting Leg					603					3					449					167	1222
Heavy Exit Leg					6					0					4					3	13
Total Exiting Leg					609					3					453					170	1235

PDI File #: 175562 B
 Location: N: Weston Road S: Weston Road
 Location: E: Driveway W: Route 9 EB Ramps
 City, State: Wellesley, MA
 Client: MDM/ D. Lindquist
 Site Code: 923
 Count Date: Saturday, April 01, 2017
 Start Time: 11:00 AM
 End Time: 1:00 PM
 Class:



46 Morton Street, Framingham, MA 01702
 Office: 508-875-0100 Fax: 508-875-0118
 Email: datarequests@pdillc.com

Cars

	Weston Road					Driveway					Weston Road					Route 9 EB Ramps					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
11:00 AM	34	86	0	0	120	0	2	1	0	3	0	146	20	0	166	32	0	23	0	55	344
11:15 AM	30	69	0	0	99	0	0	0	0	0	0	91	18	0	109	29	0	22	0	51	259
11:30 AM	36	68	0	0	104	1	0	1	0	2	2	112	13	0	127	23	0	25	0	48	281
11:45 AM	20	77	0	0	97	1	0	0	0	1	0	119	13	0	132	32	0	27	0	59	289
Total	120	300	0	0	420	2	2	2	0	6	2	468	64	0	534	116	0	97	0	213	1173
12:00 PM	23	74	0	0	97	1	0	0	0	1	0	135	19	0	154	49	1	19	0	69	321
12:15 PM	29	91	0	0	120	0	0	0	0	0	0	132	14	0	146	34	0	31	0	65	331
12:30 PM	25	49	0	0	74	0	0	0	0	0	1	114	15	0	130	45	0	14	0	59	263
12:45 PM	30	70	0	0	100	1	1	0	0	2	4	108	12	0	124	25	0	13	0	38	264
Total	107	284	0	0	391	2	1	0	0	3	5	489	60	0	554	153	1	77	0	231	1179
Grand Total	227	584	0	0	811	4	3	2	0	9	7	957	124	0	1088	269	1	174	0	444	2352
Approach %	28.0	72.0	0.0	0.0		44.4	33.3	22.2	0.0		0.6	88.0	11.4	0.0		60.6	0.2	39.2	0.0		
Total %	9.7	24.8	0.0	0.0	34.5	0.2	0.1	0.1	0.0	0.4	0.3	40.7	5.3	0.0	46.3	11.4	0.0	7.4	0.0	18.9	
Exiting Leg Total	1135					8					855					354					2352

Peak Hour Analysis from 11:00 AM to 01:00 PM begins at:

11:30 AM	Weston Road					Driveway					Weston Road					Route 9 EB Ramps					
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
11:30 AM	36	68	0	0	104	1	0	1	0	2	2	112	13	0	127	23	0	25	0	48	281
11:45 AM	20	77	0	0	97	1	0	0	0	1	0	119	13	0	132	32	0	27	0	59	289
12:00 PM	23	74	0	0	97	1	0	0	0	1	0	135	19	0	154	49	1	19	0	69	321
12:15 PM	29	91	0	0	120	0	0	0	0	0	0	132	14	0	146	34	0	31	0	65	331
Total Volume	108	310	0	0	418	3	0	1	0	4	2	498	59	0	559	138	1	102	0	241	1222
% Approach Total	25.8	74.2	0.0	0.0		75.0	0.0	25.0	0.0		0.4	89.1	10.6	0.0		57.3	0.4	42.3	0.0		
PHF	0.750	0.852	0.000	0.000	0.871	0.750	0.000	0.250	0.000	0.500	0.250	0.922	0.776	0.000	0.907	0.704	0.250	0.823	0.000	0.873	0.923
Entering Leg	108	310	0	0	418	3	0	1	0	4	2	498	59	0	559	138	1	102	0	241	1222
Exiting Leg					603					3					449					167	1222
Total					1021					7					1008					408	2444

PDI File #: **175562 B**
 Location: **N: Weston Road S: Weston Road**
 Location: **E: Driveway W: Route 9 EB Ramps**
 City, State: **Wellesley, MA**
 Client: **MDM/ D. Lindquist**
 Site Code: **923**
 Count Date: **Saturday, April 01, 2017**
 Start Time: **11:00 AM**
 End Time: **1:00 PM**
 Class:



Heavy Vehicles

	Weston Road					Driveway					Weston Road					Route 9 EB Ramps					
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
11:00 AM	0	1	0	0	1	0	0	0	0	0	0	1	1	0	2	1	0	0	0	1	4
11:15 AM	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11:30 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	3
11:45 AM	1	1	0	0	2	0	0	0	0	0	0	3	1	0	4	0	0	0	0	0	6
Total	2	4	0	0	6	0	0	0	0	0	0	5	2	0	7	1	0	1	0	2	15
12:00 PM	1	2	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	4
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	1	0	0	0	1	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	4
12:45 PM	0	7	0	0	7	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	8
Total	2	9	0	0	11	0	0	0	0	0	0	3	1	0	4	0	0	1	0	1	16
Grand Total	4	13	0	0	17	0	0	0	0	0	0	8	3	0	11	1	0	2	0	3	31
Approach %	23.5	76.5	0.0	0.0		0.0	0.0	0.0	0.0		0.0	72.7	27.3	0.0		33.3	0.0	66.7	0.0		
Total %	12.9	41.9	0.0	0.0	54.8	0.0	0.0	0.0	0.0	0.0	0.0	25.8	9.7	0.0	35.5	3.2	0.0	6.5	0.0	9.7	
Exiting Leg Total	10					0					14					7					31

Peak Hour Analysis from 11:00 AM to 01:00 PM begins at:

12:00 PM	Weston Road					Driveway					Weston Road					Route 9 EB Ramps					Total	
	North					East					South					West						
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total		
12:00 PM	1	2	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	4
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	1	0	0	0	1	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	0	4
12:45 PM	0	7	0	0	7	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	8
Total Volume	2	9	0	0	11	0	0	0	0	0	0	3	1	0	4	0	0	1	0	1	16	
% Approach Total	18.2	81.8	0.0	0.0		0.0	0.0	0.0	0.0		0.0	75.0	25.0	0.0		0.0	0.0	100.0	0.0			
PHF	0.500	0.321	0.000	0.000	0.393	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.250	0.000	0.333	0.000	0.000	0.250	0.000	0.250	0.500	
Entering Leg	2	9	0	0	11	0	0	0	0	0	0	3	1	0	4	0	0	1	0	1	16	
Exiting Leg	4					0					9					3					16	
Total	15					0					13					4					32	

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[illegible]

11:00 AM		Weston Road							Driveway							Weston Road							Route 9 EB Ramps								
		North							East							South							West								
		Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total	
11:00 AM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:15 AM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:30 AM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:45 AM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
% Approach Total		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0			
PHF		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Entering Leg		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Exiting Leg								0						0							0							0	0		
Total		0							0							0							0								

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PDI File #: **175562 B**
 Location: **N: Weston Road S: Weston Road**
 Location: **E: Driveway W: Route 9 EB Ramps**
 City, State: **Wellesley, MA**
 Client: **MDM/ D. Lindquist**
 Site Code: **923**
 Count Date: **Saturday, April 01, 2017**
 Start Time: **11:00 AM**
 End Time: **1:00 PM**
 Class:

Pedestrians

	Weston Road							Driveway							Weston Road							Route 9 EB Ramps							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
12:30 PM	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	3	
12:45 PM	0	0	0	0	0	0	0	0	0	0	4	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
Total	0	0	0	0	0	0	0	0	0	0	8	1	9	0	0	0	0	0	0	0	0	0	0	0	0	1	1	10	
Grand Total	0	0	0	0	0	0	0	0	0	0	8	1	9	0	0	0	0	0	0	0	0	0	0	0	0	1	1	10	
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	88.9	11.1		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	100.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.0	10.0	90.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	10.0		
Exiting Leg Total	0							9							0							1							10

Peak Hour Analysis from 11:00 AM to 01:00 PM begins at:

12:00 PM	Weston Road							Driveway							Weston Road							Route 9 EB Ramps							
	North							East							South							West							Total
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	1	1	3	
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	4	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
Total Volume	0	0	0	0	0	0	0	0	0	0	0	8	1	9	0	0	0	0	0	0	0	0	0	0	0	1	1	10	
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	88.9	11.1		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	100.0			
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.250	0.450	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250		0.500	
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	8	1	9	0	0	0	0	0	0	0	0	0	0	0	1	1	10	
Exiting Leg							0							9													1	10	
Total							0						18								0					2		20	

PDI File #: **175562 A**
 Location: **N: Weston Road S: Weston Road**
 Location: **E: Cleveland Road W: Route 9 WB Ramps**
 City, State: **Wellesley, MA**
 Client: **MDM/ D. Lindquist**
 Site Code: **923**
 Count Date: **Saturday, April 01, 2017**
 Start Time: **11:00 AM**
 End Time: **1:00 PM**
 Class:



46 Morton Street, Framingham, MA 01702
 Office: 508-875-0100 Fax: 508-875-0118
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Cars and Heavy Vehicles

	Weston Road					Cleveland Road					Weston Road					Route 9 WB Ramps					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
11:00 AM	19	78	2	0	99	9	0	15	0	24	66	72	19	0	157	21	1	5	0	27	307
11:15 AM	22	76	0	0	98	12	2	12	0	26	39	73	7	0	119	11	2	4	0	17	260
11:30 AM	22	76	0	0	98	16	3	13	1	33	46	80	12	0	138	11	1	5	0	17	286
11:45 AM	17	70	1	0	88	22	4	9	0	35	42	74	18	0	134	13	4	4	1	22	279
Total	80	300	3	0	383	59	9	49	1	118	193	299	56	0	548	56	8	18	1	83	1132
12:00 PM	25	67	0	0	92	15	1	12	0	28	61	89	10	0	160	23	3	8	0	34	314
12:15 PM	14	82	1	0	97	14	2	15	0	31	57	88	18	0	163	15	0	7	0	22	313
12:30 PM	22	48	1	0	71	14	2	15	0	31	47	69	15	0	131	10	2	3	0	15	248
12:45 PM	27	72	2	0	101	15	1	12	1	29	35	63	13	0	111	13	5	5	0	23	264
Total	88	269	4	0	361	58	6	54	1	119	200	309	56	0	565	61	10	23	0	94	1139
Grand Total	168	569	7	0	744	117	15	103	2	237	393	608	112	0	1113	117	18	41	1	177	2271
Approach %	22.6	76.5	0.9	0.0		49.4	6.3	43.5	0.8		35.3	54.6	10.1	0.0		66.1	10.2	23.2	0.6		
Total %	7.4	25.1	0.3	0.0	32.8	5.2	0.7	4.5	0.1	10.4	17.3	26.8	4.9	0.0	49.0	5.2	0.8	1.8	0.0	7.8	
Exiting Leg Total	766					420					789					296					2271
Cars	165	565	6	0	736	114	14	102	1	231	390	604	111	0	1105	111	16	40	1	168	2240
% Cars	98.2	99.3	85.7	0.0	98.9	97.4	93.3	99.0	50.0	97.5	99.2	99.3	99.1	0.0	99.3	94.9	88.9	97.6	100.0	94.9	98.6
Exiting Leg Total	758					413					778					291					2240
Heavy Vehicles	3	4	1	0	8	3	1	1	1	6	3	4	1	0	8	6	2	1	0	9	31
% Heavy Vehicles	1.8	0.7	14.3	0.0	1.1	2.6	6.7	1.0	50.0	2.5	0.8	0.7	0.9	0.0	0.7	5.1	11.1	2.4	0.0	5.1	1.4
Exiting Leg Total	8					7					11					5					31

Peak Hour Analysis from 11:00 AM to 01:00 PM begins at:

11:30 AM	Weston Road					Cleveland Road					Weston Road					Route 9 WB Ramps					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
11:30 AM	22	76	0	0	98	16	3	13	1	33	46	80	12	0	138	11	1	5	0	17	286
11:45 AM	17	70	1	0	88	22	4	9	0	35	42	74	18	0	134	13	4	4	1	22	279
12:00 PM	25	67	0	0	92	15	1	12	0	28	61	89	10	0	160	23	3	8	0	34	314
12:15 PM	14	82	1	0	97	14	2	15	0	31	57	88	18	0	163	15	0	7	0	22	313
Total Volume	78	295	2	0	375	67	10	49	1	127	206	331	58	0	595	62	8	24	1	95	1192
% Approach Total	20.8	78.7	0.5	0.0		52.8	7.9	38.6	0.8		34.6	55.6	9.7	0.0		65.3	8.4	25.3	1.1		
PHF	0.780	0.899	0.500	0.000	0.957	0.761	0.625	0.817	0.250	0.907	0.844	0.930	0.806	0.000	0.913	0.674	0.500	0.750	0.250	0.699	0.949
Cars	76	295	2	0	373	66	9	49	0	124	204	330	58	0	592	58	8	23	1	90	1179
Cars %	97.4	100.0	100.0	0.0	99.5	98.5	90.0	100.0	0.0	97.6	99.0	99.7	100.0	0.0	99.5	93.5	100.0	95.8	100.0	94.7	98.9
Heavy Vehicles	2	0	0	0	2	1	1	0	1	3	2	1	0	0	3	4	0	1	0	5	13
Heavy Vehicles %	2.6	0.0	0.0	0.0	0.5	1.5	10.0	0.0	100.0	2.4	1.0	0.3	0.0	0.0	0.5	6.5	0.0	4.2	0.0	5.3	1.1
Cars Enter Leg	76	295	2	0	373	66	9	49	0	124	204	330	58	0	592	58	8	23	1	90	1179
Heavy Enter Leg	2	0	0	0	2	1	1	0	1	3	2	1	0	0	3	4	0	1	0	5	13
Total Entering Leg	78	295	2	0	375	67	10	49	1	127	206	331	58	0	595	62	8	24	1	95	1192
Cars Exiting Leg	419					214					402					144					1179
Heavy Exit Leg	3					3					4					3					13
Total Exiting Leg	422					217					406					147					1192

PDI File #: 175562 A
 Location: N: Weston Road S: Weston Road
 Location: E: Cleveland Road W: Route 9 WB Ramps
 City, State: Wellesley, MA
 Client: MDM/ D. Lindquist
 Site Code: 923
 Count Date: Saturday, April 01, 2017
 Start Time: 11:00 AM
 End Time: 1:00 PM
 Class:



Cars

	Weston Road					Cleveland Road					Weston Road					Route 9 WB Ramps					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
11:00 AM	19	78	2	0	99	9	0	15	0	24	66	72	18	0	156	20	1	5	0	26	305
11:15 AM	22	75	0	0	97	11	2	11	0	24	39	73	7	0	119	11	2	4	0	17	257
11:30 AM	22	76	0	0	98	15	2	13	0	30	46	80	12	0	138	10	1	5	0	16	282
11:45 AM	15	70	1	0	86	22	4	9	0	35	41	73	18	0	132	11	4	3	1	19	272
Total	78	299	3	0	380	57	8	48	0	113	192	298	55	0	545	52	8	17	1	78	1116
12:00 PM	25	67	0	0	92	15	1	12	0	28	60	89	10	0	159	22	3	8	0	33	312
12:15 PM	14	82	1	0	97	14	2	15	0	31	57	88	18	0	163	15	0	7	0	22	313
12:30 PM	22	48	0	0	70	14	2	15	0	31	47	66	15	0	128	9	2	3	0	14	243
12:45 PM	26	69	2	0	97	14	1	12	1	28	34	63	13	0	110	13	3	5	0	21	256
Total	87	266	3	0	356	57	6	54	1	118	198	306	56	0	560	59	8	23	0	90	1124
Grand Total	165	565	6	0	736	114	14	102	1	231	390	604	111	0	1105	111	16	40	1	168	2240
Approach %	22.4	76.8	0.8	0.0		49.4	6.1	44.2	0.4		35.3	54.7	10.0	0.0		66.1	9.5	23.8	0.6		
Total %	7.4	25.2	0.3	0.0	32.9	5.1	0.6	4.6	0.0	10.3	17.4	27.0	5.0	0.0	49.3	5.0	0.7	1.8	0.0	7.5	
Exiting Leg Total	758					413					778					291					2240

Peak Hour Analysis from 11:00 AM to 01:00 PM begins at:

11:30 AM	Weston Road					Cleveland Road					Weston Road					Route 9 WB Ramps					Total
	North					East					South					West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
11:30 AM	22	76	0	0	98	15	2	13	0	30	46	80	12	0	138	10	1	5	0	16	282
11:45 AM	15	70	1	0	86	22	4	9	0	35	41	73	18	0	132	11	4	3	1	19	272
12:00 PM	25	67	0	0	92	15	1	12	0	28	60	89	10	0	159	22	3	8	0	33	312
12:15 PM	14	82	1	0	97	14	2	15	0	31	57	88	18	0	163	15	0	7	0	22	313
Total Volume	76	295	2	0	373	66	9	49	0	124	204	330	58	0	592	58	8	23	1	90	1179
% Approach Total	20.4	79.1	0.5	0.0		53.2	7.3	39.5	0.0		34.5	55.7	9.8	0.0		64.4	8.9	25.6	1.1		
PHF	0.760	0.899	0.500	0.000	0.952	0.750	0.563	0.817	0.000	0.886	0.850	0.927	0.806	0.000	0.908	0.659	0.500	0.719	0.250	0.682	0.942
Entering Leg	76	295	2	0	373	66	9	49	0	124	204	330	58	0	592	58	8	23	1	90	1179
Exiting Leg	419					214					402					144					1179
Total	792					338					994					234					2358

PDI File #: **175562 A**
 Location: **N: Weston Road S: Weston Road**
 Location: **E: Cleveland Road W: Route 9 WB Ramps**
 City, State: **Wellesley, MA**
 Client: **MDM/ D. Lindquist**
 Site Code: **923**
 Count Date: **Saturday, April 01, 2017**
 Start Time: **11:00 AM**
 End Time: **1:00 PM**
 Class:



PRECISION
 DATA
 INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702
 Office: 508-875-0100 Fax: 508-875-0118
 Email: datarequests@pdillc.com

Heavy Vehicles

	Weston Road					Cleveland Road					Weston Road					Route 9 WB Ramps					Total	
	North					East					South					West						
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total		
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	1	2
11:15 AM	0	1	0	0	1	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	3
11:30 AM	0	0	0	0	0	1	1	0	1	3	0	0	0	0	0	1	0	0	0	0	1	4
11:45 AM	2	0	0	0	2	0	0	0	0	0	1	1	0	0	2	2	0	1	0	3	7	
Total	2	1	0	0	3	2	1	1	1	5	1	1	1	0	3	4	0	1	0	5	16	
12:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	1	2
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	1	0	1	0	0	0	0	0	0	3	0	0	3	1	0	0	0	0	1	5
12:45 PM	1	3	0	0	4	1	0	0	0	1	1	0	0	0	1	0	2	0	0	0	2	8
Total	1	3	1	0	5	1	0	0	0	1	2	3	0	0	5	2	2	0	0	4	15	
Grand Total	3	4	1	0	8	3	1	1	1	6	3	4	1	0	8	6	2	1	0	9	31	
Approach %	37.5	50.0	12.5	0.0		50.0	16.7	16.7	16.7		37.5	50.0	12.5	0.0		66.7	22.2	11.1	0.0			
Total %	9.7	12.9	3.2	0.0	25.8	9.7	3.2	3.2	3.2	19.4	9.7	12.9	3.2	0.0	25.8	19.4	6.5	3.2	0.0	29.0		
Exiting Leg Total	8					7					11					5					31	

Peak Hour Analysis from 11:00 AM to 01:00 PM begins at:

11:00 AM	Weston Road					Cleveland Road					Weston Road					Route 9 WB Ramps						
	North					East					South					West						
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total		
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	1	2
11:15 AM	0	1	0	0	1	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	3
11:30 AM	0	0	0	0	0	1	1	0	1	3	0	0	0	0	0	1	0	0	0	0	1	4
11:45 AM	2	0	0	0	2	0	0	0	0	0	1	1	0	0	2	2	0	1	0	3	7	
Total Volume	2	1	0	0	3	2	1	1	1	5	1	1	1	0	3	4	0	1	0	5	16	
% Approach Total	66.7	33.3	0.0	0.0		40.0	20.0	20.0	20.0		33.3	33.3	33.3	0.0		80.0	0.0	20.0	0.0			
PHF	0.250	0.250	0.000	0.000	0.375	0.500	0.250	0.250	0.250	0.417	0.250	0.250	0.250	0.000	0.375	0.500	0.000	0.250	0.000	0.417	0.571	
Entering Leg	2	1	0	0	3	2	1	1	1	5	1	1	1	0	3	4	0	1	0	5	16	
Exiting Leg	4					2					6					4					16	
Total	7					7					9					9					32	

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	Weston Road							Cleveland Road							Weston Road							Route 9 WB Ramps							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0			
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	0							0							0							0							0

11:00 AM	Weston Road							Cleveland Road							Weston Road							Route 9 WB Ramps							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0			
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Exiting Leg							0						0								0					0		0	
Total							0						0								0					0		0	

46 Morton Street, Framingham, MA 01702
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PDI File #: **175562 A**
 Location: **N: Weston Road S: Weston Road**
 Location: **E: Cleveland Road W: Route 9 WB Ramps**
 City, State: **Wellesley, MA**
 Client: **MDM/ D. Lindquist**
 Site Code: **923**
 Count Date: **Saturday, April 01, 2017**
 Start Time: **11:00 AM**
 End Time: **1:00 PM**
 Class:

Pedestrians

	Weston Road							Cleveland Road							Weston Road							Route 9 WB Ramps							Total
	North							East							South							West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:30 AM	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	1	2	2	
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	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	1	2	2	
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1	2	3	0	0	0	0	0	0	0	4
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	2	
12:45 PM	0	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	2	4	4
Total	0	0	0	0	0	0	0	0	0	0	0	3	1	4	0	0	0	0	1	2	3	0	0	0	0	2	3	5	12
Grand Total	0	0	0	0	0	0	0	0	0	0	0	3	1	4	0	0	0	0	1	2	3	0	0	0	0	3	4	7	14
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	75.0	25.0		0.0	0.0	0.0	0.0	33.3	66.7		0.0	0.0	0.0	0.0	42.9	57.1		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.4	7.1	28.6	0.0	0.0	0.0	0.0	7.1	14.3	21.4	0.0	0.0	0.0	0.0	21.4	28.6	50.0	
Exiting Leg Total	0							4							3							7							14

Peak Hour Analysis from 11:00 AM to 01:00 PM begins at:

12:00 PM	Weston Road							Cleveland Road							Weston Road							Route 9 WB Ramps								
	North							East							South							West								
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total		Total
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1	2	3	0	0	0	0	0	0	0	0	4
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	
12:45 PM	0	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	2	4	4	
Total Volume	0	0	0	0	0	0	0	0	0	0	0	3	1	4	0	0	0	0	1	2	3	0	0	0	0	2	3	5	12	
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	75.0	25.0		0.0	0.0	0.0	0.0	33.3	66.7		0.0	0.0	0.0	0.0	40.0	60.0			
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.250	0.500	0.000	0.000	0.000	0.000	0.250	0.250	0.250	0.000	0.000	0.000	0.000	0.250	0.375	0.313	0.750	
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	3	1	4	0	0	0	0	1	2	3	0	0	0	0	2	3	5	12	
Exiting Leg							0							4						3							5	12		
Total							0							8						6							10	24		

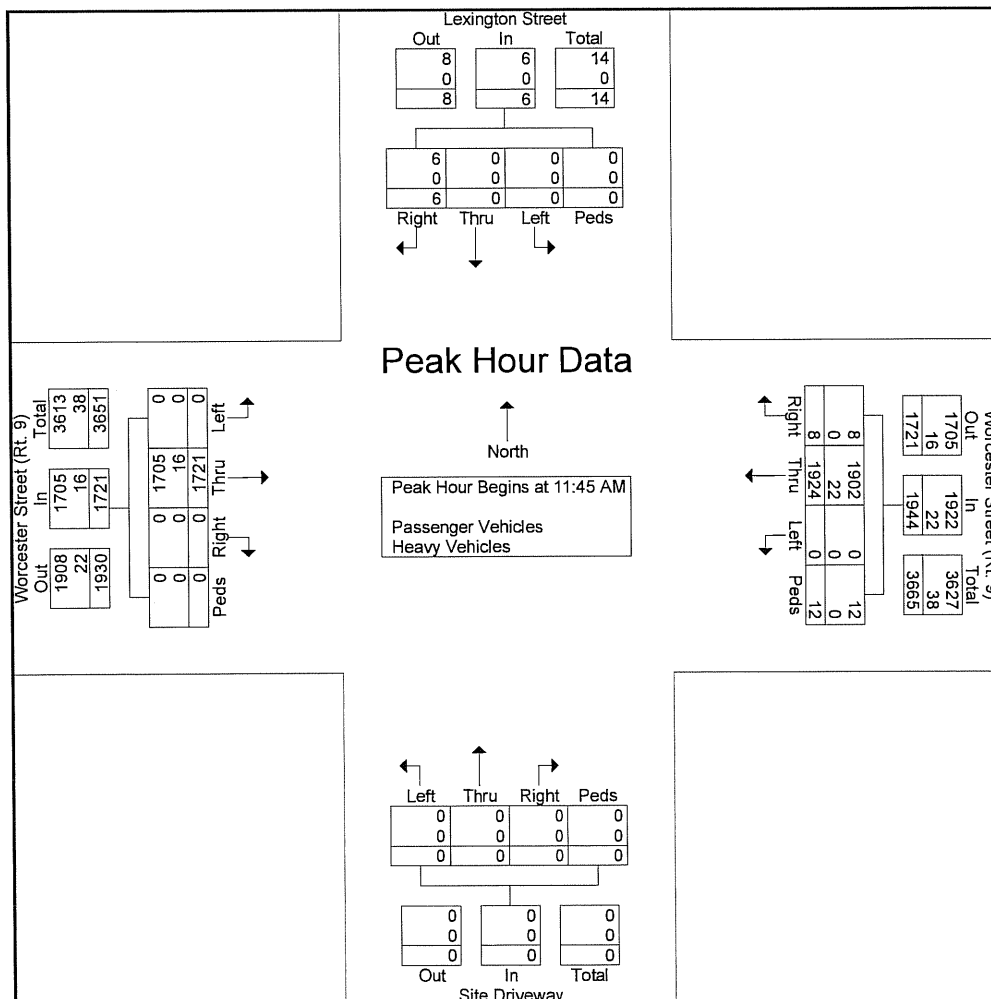
MDM Transportation Consultants, Inc.

28 Lord Road, Suite 280
Marlborough, MA

N/S: Site Driveway/Lexington Street
E/W: Worcester Street (Route 9)
Wellesley, MA

File Name : 923 Rte 9 at Site Driveway SAT
Site Code : 923
Start Date : 3/25/2017
Page No : 2

	Lexington Street From North					Worcester Street (Rt. 9) From East						Site Driveway From South					Worcester Street (Rt. 9) From West						
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																							
Peak Hour for Entire Intersection Begins at 11:45 AM																							
11:45 AM	3	0	0	0	3	2	468	0	3	0	473	0	0	0	0	0	0	425	0	0	0	425	901
12:00 PM	1	0	0	0	1	4	465	0	4	0	473	0	0	0	0	0	0	434	0	0	0	434	908
12:15 PM	2	0	0	0	2	0	499	0	3	0	502	0	0	0	0	0	0	403	0	0	0	403	907
12:30 PM	0	0	0	0	0	2	492	0	2	0	496	0	0	0	0	0	0	459	0	0	0	459	955
Total Volume	6	0	0	0	6	8	1924	0	12	0	1944	0	0	0	0	0	0	1721	0	0	0	1721	3671
% App. Total	100	0	0	0		0.4	99	0	0.6	0		0	0	0	0		0	100	0	0	0		
PHF	.500	.000	.000	.000	.500	.500	.964	.000	.750	.000	.968	.000	.000	.000	.000	.000	.000	.937	.000	.000	.000	.937	.961
Passenger Vehicles	6	0	0	0	6	8	1902	0	12	0	1922	0	0	0	0	0	0	1705	0	0	0	1705	3633
% Passenger Vehicles	100	0	0	0	100	100	98.9	0	100	0	98.9	0	0	0	0	0	0	99.1	0	0	0	99.1	99.0
Heavy Vehicles	0	0	0	0	0	0	22	0	0	0	22	0	0	0	0	0	0	16	0	0	0	16	38
% Heavy Vehicles	0	0	0	0	0	0	1.1	0	0	0	1.1	0	0	0	0	0	0	0.9	0	0	0	0.9	1.0



MDM Transportation Consultants, Inc.

28 Lord Road, Suite 280
Marlborough, MA

N/S: Site Driveway/Lexington Street
E/W: Worcester Street (Route 9)
Wellesley, MA

File Name : 923 Rte 9 at Site Driveway SAT
Site Code : 923
Start Date : 3/25/2017
Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles

	Lexington Street From North					Worcester Street (Rt. 9) From East						Site Driveway From South					Worcester Street (Rt. 9) From West							
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Int. Total	
11:00 AM	0	0	0	2	2	2	411	0	0	0	413	1	0	0	0	1	0	417	0	0	0	0	417	833
11:15 AM	4	0	0	0	4	1	413	0	0	0	414	0	0	0	0	0	0	405	0	0	0	0	405	823
11:30 AM	2	0	0	0	2	2	469	0	2	0	473	0	0	0	0	0	0	458	0	0	0	0	458	933
11:45 AM	3	0	0	0	3	2	468	0	3	0	473	0	0	0	0	0	0	425	0	0	0	0	425	901
Total	9	0	0	2	11	7	1761	0	5	0	1773	1	0	0	0	1	0	1705	0	0	0	0	1705	3490
12:00 PM	1	0	0	0	1	4	465	0	4	0	473	0	0	0	0	0	0	434	0	0	0	0	434	908
12:15 PM	2	0	0	0	2	0	499	0	3	0	502	0	0	0	0	0	0	403	0	0	0	0	403	907
12:30 PM	0	0	0	0	0	2	492	0	2	0	496	0	0	0	0	0	0	459	0	0	0	0	459	955
12:45 PM	0	0	0	1	1	2	500	0	2	0	504	0	0	0	0	0	0	392	0	0	0	0	392	897
Total	3	0	0	1	4	8	1956	0	11	0	1975	0	0	0	0	0	0	1688	0	0	0	0	1688	3667
Grand Total	12	0	0	3	15	15	3717	0	16	0	3748	1	0	0	0	1	0	3393	0	0	0	0	3393	7157
Apprch %	80	0	0	20		0.4	99.2	0	0.4	0		100	0	0	0		0	100	0	0	0	0		
Total %	0.2	0	0	0	0.2	0.2	51.9	0	0.2	0	52.4	0	0	0	0	0	0	47.4	0	0	0	0	47.4	
Passenger Vehicles	12	0	0	3	15	15	3678	0	16	0	3709	1	0	0	0	1	0	3363	0	0	0	0	3363	7088
% Passenger Vehicles	100	0	0	100	100	100	99	0	100	0	99	100	0	0	0	100	0	99.1	0	0	0	0	99.1	99
Heavy Vehicles	0	0	0	0	0	0	39	0	0	0	39	0	0	0	0	0	0	30	0	0	0	0	30	69
% Heavy Vehicles	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0.9	0	0	0	0	0.9	1

28 Lord Road, Suite 280
Marlborough, MA

File Name : 923 Rte 9 at Site Driveway SAT
Site Code : 923
Start Date : 3/25/2017
Page No : 1

[illegible]

□ Seasonal/Yearly Growth

SECTION I - CONTINUOUS COUNTING STATION MONTHLY AVERAGE DAILY TRAFFIC

STATION 307 - WESTBOROUGH - RTE.9 - EAST OF NORTHBOROUGH T.L.

YR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
07	47,505	47,283	49,268	49,136	50,000	52,000	53,000	52,322	49,031	50,571	49,662	47,007	49,732
	-4%	-2%	-3%	1%	1%	-4%	-8%	-7%	-1%	-3%	-4%	-1%	-3%
08	45,614	46,112	47,829	49,816	50,518	49,936	48,629	48,759	48,531	49,009	47,490	46,696	48,245
	-3%	1%	-3%	-2%	-2%	0%	-2%	-3%	-2%	-1%	0%	2%	-1%
09	44,103	46,434	46,455	49,049	49,474	49,934	47,638	47,056	47,762	48,663	47,379	47,564	47,626
	-1%	0%	2%	0%	0%	1%	-1%	1%	1%	1%	2%	2%	1%
11	43,244	46,150	48,016	48,943	49,781	50,525	46,812	48,234	48,825	49,198	49,151	49,888	48,231
	7%	2%	1%	-1%	1%	-1%	3%	4%	0%	2%	2%	-5%	1%
12	46,381	46,883	48,608	48,662	50,126	49,961	48,380	49,941	48,882	50,056	50,015	47,600	48,791
	0%	-1%	-2%	1%	1%	-9%	3%	-1%	2%	0%	-1%	2%	0%
13	46,393	46,220	47,421	49,359	50,657	45,623	49,797	49,223	49,935	50,021	49,651	48,441	48,562
	1.07	1.04	1.01	0.99	0.97	0.98	0.99	0.99	0.99	0.98	0.99	1.01	
Seasonal Adjustment Factor (to average month)	Growth -0.65%												

STATION 4165 - NEWTON - I-95/ ROUTE 128 SOUTH OF I-90

YR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
12	130,033	133,659	138,451	142,034	158,583	148,787	138,599	144,999	141,340	146,271	140,898	128,666	141,027
	1%	-6%	0%	3%	-7%	1%	10%	3%	6%	5%	2%	1%	1%
13	131,812	125,662	138,122	145,780	147,000	149,925	151,813	149,393	150,507	153,009	143,498	130,116	143,053
	-18%	1%	3%	3%	3%	3%	-5%	0%	1%	-1%	-1%	6%	0%
14	107,508	127,134	142,024	150,125	151,576	153,916	144,679	149,503	151,538	152,148	141,875	137,826	142,488
	1.17	1.10	1.02	0.97	0.93	0.94	0.98	0.96	0.96	0.95	1.00	1.08	
Seasonal Adjustment Factor (to average month)	Growth 0.52%												

Average

Seasonal Adjustment Factor
(to average month)

1.12	1.07	1.02	0.98	0.95	0.96	0.99	0.97	0.97	0.98	0.96	1.00	1.05
------	------	------	------	------	------	------	------	------	------	------	------	------

Average Yearly Growth Calculated -0.1%
Yearly Growth Factor Used 1.0%

ITALICS = ESTIMATED DATA
MADT

□ Speed Data

MDM Transportation Consultants, Inc.

28 Lord Road, Suite 280
Marlborough, MA

E/W: Worcester Street (Route 9)
East of Lexington Road
Freeflow Speeds
Wellesley, MA

File Name : 923 rte 9 Speeds
Site Code : 923
Start Date : 3/27/2017
Page No : 1

#	Eastbound	Westbound
1	34	44
2	41	47
3	39	55
4	36	55
5	45	50
6	43	44
7	47	50
8	44	46
9	41	43
10	38	45
11	42	40
12	41	44
13	34	52
14	40	39
15	45	41
16	42	50
17	51	44
18	42	44
19	40	44
20	41	42
21	39	54
22	47	49
23	36	49
24	36	43
25	53	46
26	49	40
27	46	43
28	39	49
29	38	50
30	38	50
31	38	48
32	40	46
33	43	50
34	55	44
35	38	59
36	36	44
37	45	42
38	49	39
39	47	50
40	45	59
41	36	50
42	54	48
43	45	58
44	48	49
45	42	52
46	42	48
47	47	55
48	40	54
49	48	45
50	44	44
51	49	40
52	47	46
53	53	44
54	50	51
55	38	50
56	41	41
57	45	45
58	51	48
59	46	42
60	38	41
61	47	41
62	44	43
63	45	47

MDM Transportation Consultants, Inc.

28 Lord Road, Suite 280
Marlborough, MA

File Name : 923 rte 9 Speeds

Site Code : 923

Start Date : 3/27/2017

Page No : 2

#	Eastbound	Westbound
64	43	49
65	42	58
66	50	50
67	50	50
68	50	51
69	53	50
70	49	60
71	47	51
72	54	48
73	49	50
74	36	44
75	39	44
76	42	45
77	33	41
78	62	47
79	47	45
80	49	50
81	47	52
82	54	53
83	64	42
84	45	51
85	43	60
86	48	42
87	47	43
88	54	39
89	46	48
90	51	49
91	48	41
92	46	44
93	42	40
94	54	45
95	55	43
96	46	49
97	48	51
98	51	50
99	48	62
100	45	54
101		

MDM Transportation Consultants, Inc.

28 Lord Road, Suite 280
Marlborough, MA

File Name : 923 rte 9 Speeds

Site Code : 923

Start Date : 3/27/2017

Page No : 3

Class	Vehicle Count	Average Speed	True Median (50th Percentile)	85 Percentile	10 MPH Pace Speed	Number in Pace	Percent in Pace	Number of Vehicles Over 50 MPH	Percent of Vehicles Over 50 MPH
Eastbound	100	45	45	51	40 - 49	60	60	16	16
Westbound	100	47	48	52	41 - 50	71	71	22	22
Summary	200	46	46	51	41 - 50	131	66	38	19

□ Crash Data

INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Natick COUNT DATE : Mar-17

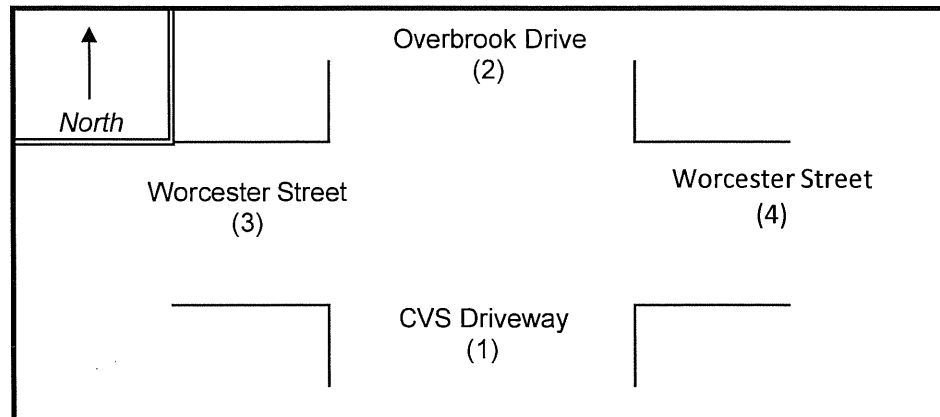
DISTRICT : 3 UNSIGNALIZED : ☐ SIGNALIZED : ☒

~ INTERSECTION DATA ~

MAJOR STREET : Worcester Street

MINOR STREET(S) : Overbrook Drive

**INTERSECTION
DIAGRAM**
(Label Approaches)



PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	NB	SB	EB	WB		
PEAK HOURLY VOLUMES (PM) :	49	182	2,016	1,753		4,000

"K" FACTOR : **0.074** INTERSECTION ADT (**V**) = TOTAL DAILY APPROACH VOLUME : **54,054**

TOTAL # OF CRASHES : **37** # OF YEARS : **3** AVERAGE # OF CRASHES PER YEAR (**A**) : **12.33**

CRASH RATE CALCULATION :

0.63

$$\text{RATE} = \frac{(A * 1,000,000)}{(V * 365)}$$

Comments : MassDOT District 3 Avg: Signalized = 0.90; Unsignalized = 0.65

Project Title & Date: 923 - Wellesley

INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Wellesley COUNT DATE : Mar-17
 DISTRICT : 6 UNSIGNALIZED : ☒ SIGNALIZED : ☐

~ INTERSECTION DATA ~

MAJOR STREET : Worcester Street
 MINOR STREET(S) : 900 Worcester Street Driveways

**INTERSECTION
 DIAGRAM**
 (Label Approaches)



PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	NB	SB	EB	WB		
PEAK HOURLY VOLUMES (PM) :	0	0	2,030	1,779		3,809

" K " FACTOR :

0.074

INTERSECTION ADT (**V**) = TOTAL DAILY
 APPROACH VOLUME :

51,473

TOTAL # OF CRASHES :

10

OF
 YEARS :

3

AVERAGE # OF
 CRASHES PER YEAR (**A**) :

3.33

CRASH RATE CALCULATION :

0.18

RATE =

$$\frac{(A * 1,000,000)}{(V * 365)}$$

Comments : MassDOT District 6 Avg: Signalized = 0.70; Unsignalized = 0.53

Project Title & Date: 923 - Wellesley

INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Wellesley COUNT DATE : Mar-17

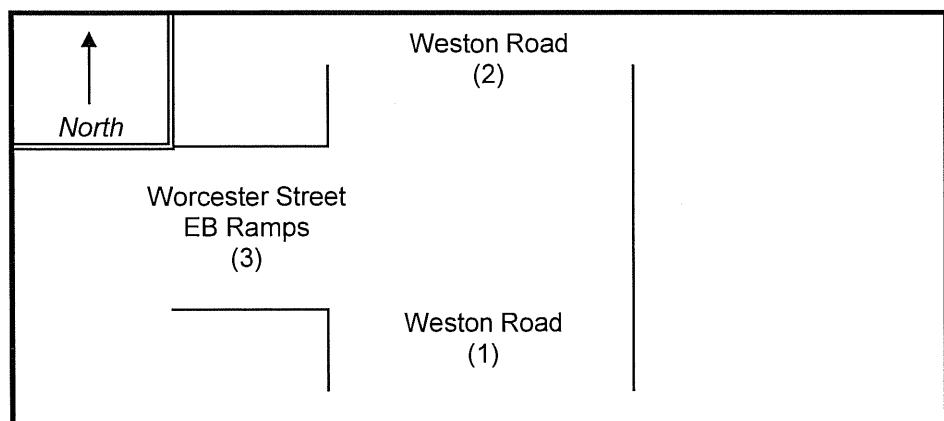
DISTRICT : 6 UNSIGNALIZED : ☒ SIGNALIZED : ☐

~ INTERSECTION DATA ~

MAJOR STREET : Weston Road

MINOR STREET(S) : Worcester Street Eastbound Ramps

INTERSECTION
DIAGRAM
(Label Approaches)



PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	NB	SB	EB	WB		
PEAK HOURLY VOLUMES (PM) :	662	867	274			1,803

" K " FACTOR :

0.074

INTERSECTION ADT (V) = TOTAL DAILY APPROACH VOLUME :

24,365

TOTAL # OF CRASHES :

13

OF YEARS :

3

AVERAGE # OF CRASHES PER YEAR (A) :

4.33

CRASH RATE CALCULATION :

0.49

RATE =

$$\frac{(A * 1,000,000)}{(V * 365)}$$

Comments : MassDOT District 6 Avg: Signalized = 0.70; Unsignalized = 0.53

Project Title & Date: 923 - Wellesley

INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Wellesley COUNT DATE : Mar-17

DISTRICT : 6 UNSIGNALIZED : ☒ X SIGNALIZED : ☐

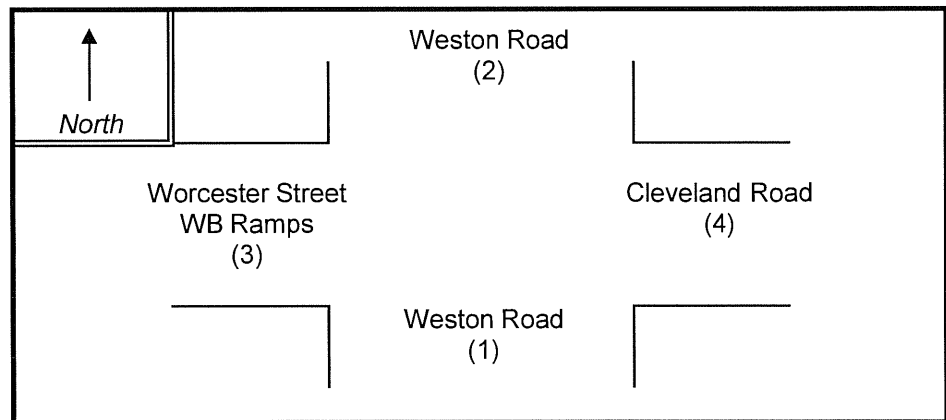
~ INTERSECTION DATA ~

MAJOR STREET : Weston Road

MINOR STREET(S) : Worcester Street Westbound Ramps

Cleveland Road

**INTERSECTION
DIAGRAM**
(Label Approaches)



PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	NB	SB	EB	WB		
PEAK HOURLY VOLUMES (PM) :	774	739	102	307		1,922

"K" FACTOR :

0.074

INTERSECTION ADT (V) = TOTAL DAILY
APPROACH VOLUME :

25,973

TOTAL # OF CRASHES :

9

OF
YEARS :

3

AVERAGE # OF
CRASHES PER YEAR (A) :

3.00

CRASH RATE CALCULATION :

0.32

$$\text{RATE} = \frac{(A * 1,000,000)}{(V * 365)}$$

Comments : MassDOT District 6 Avg: Signalized = 0.70; Unsignalized = 0.53

Project Title & Date: 923 - Wellesley

MassDOT Crash Report for WELLESLEY for the year 2012

Crash Number	City/Town Name	Crash Date	Crash Time	Crash Severity	Number of Vehicles	Total Fatal Injuries	Total Non-Fatal Injuries	Number of Collision	Vehicle Action Prior to Crash	Vehicle Travel Direction	Most Hazardous Events	Vehicle Configuration	Road Surface Condition	Amber Light	Weather Condition	At Roadway Intersection	Distance from Nearest Roadway Intersection	Location from Nearest Landmark	X Coordinate	Y Coordinate	Continued
3330917	WELLESLEY	15-Sep-2012	2:46 PM	Non-fatal injury	2	1	0	Rear-end	V1: Traveling straight ahead / V2: Traveling straight ahead	V1: Westbound / V2: Westbound	V1: Collision with motor vehicle in traffic / V2: Collision with motor vehicle in traffic	V1: Passenger car / V2: Passenger car	Dry	Daylight	Clear		WORCESTER ST Rte 9 W	214305.841	864601.7046		
3021953	WELLESLEY	26-Jan-2012	3:17 PM	Property damage only (none injured)	2	0	0	Rear-end	V1: Slowing or stopped in traffic / V2: Slowing or stopped in traffic	V1: Eastbound / V2: Eastbound	V1: Collision with motor vehicle in traffic	V1: Passenger car / V2: Passenger car	Dry	Daylight	Clear		WORCESTER ST Rte 9 E / OVERBROOK DR	214401.0275	864603.3735		
2044653	WELLESLEY	06-Feb-2012	8:20 AM	Non-fatal injury	2	1	0	Rear-end	V1: Slowing or stopped in traffic / V2: Slowing or stopped in traffic	V1: Westbound / V2: Westbound	V1: Collision with motor vehicle in traffic	V1: Passenger car / V2: Passenger car	Dry	Daylight	Clear		OVERBROOK DRIVE @ RTE 9 WEST	214401.0275	864603.3735		
3306564	WELLESLEY	04-Apr-2012	7:10 AM	Property damage only (none injured)	2	0	0	Angle	V1: Slowing or stopped in traffic / V2: Changing lanes	V1: Eastbound / V2: Eastbound	V1: Collision with motor vehicle in traffic	V1: Passenger car / V2: Passenger car	Dry	Daylight	Clear		WORCESTER ST Rte 9 E / OVERBROOK DR	214401.0275	864603.3735		
3306955	WELLESLEY	04-Apr-2012	8:35 PM	Non-fatal injury	2	1	0	Rear-end	V1: Slowing or stopped in traffic / V2: Slowing or stopped in traffic	V1: Eastbound / V2: Eastbound	V1: Collision with motor vehicle in traffic	V1: Passenger car / V2: Passenger car	Wet	Dark - lighted roadway	Rain		WORCESTER ST / OVERBROOK DR	214401.0275	864603.3735		
3331037	WELLESLEY	30-Sep-2012	12:35 PM	Property damage only (none injured)	2	0	0	Rear-end	V1: Traveling straight ahead / V2: Slowing or stopped in traffic	V1: Westbound / V2: Westbound	V1: Collision with motor vehicle in traffic	V1: Passenger car / V2: Passenger car	Wet	Daylight	Cloudy/Rain		WORCESTER ST / OVERBROOK DR	214401.0275	864603.3735		
3331066	WELLESLEY	10-Oct-2012	2:38 PM	Non-fatal injury	2	1	0	Rear-end	V1: Slowing or stopped in traffic / V2: Traveling straight ahead	V1: Eastbound / V2: Eastbound	V1: Collision with motor vehicle in traffic	V1: Passenger car / V2: Passenger car	Dry	Daylight	Clear		WORCESTER ST / OVERBROOK DR	214401.0275	864603.3735		
3331098	WELLESLEY	05-Nov-2012	11:41 AM	Property damage only (none injured)	2	0	0	Sideswipe	V1: Traveling straight ahead / V2: Traveling straight ahead	V1: Eastbound / V2: Eastbound	V1: Collision with motor vehicle in traffic	V1: Passenger car / V2: Passenger car	Dry	Daylight	Clear		WORCESTER ST Rte 9 E / OVERBROOK DR	214401.0275	864603.3735		
3306556	WELLESLEY	14-Mar-2012	10:01 AM	Property damage only (none injured)	2	0	0	Rear-end	V1: Slowing or stopped in traffic / V2: Slowing or stopped in traffic	V1: Westbound / V2: Westbound	V1: Collision with motor vehicle in traffic	V1: Passenger car / V2: Passenger car	Dry	Daylight	Clear		WORCESTER ST Rte 9 E	214409.5768	864604.3592		
3318426	WELLESLEY	20-Jun-2012	5:39 PM	Property damage only (none injured)	3	0	0	Rear-end	V1: Slowing or stopped in traffic / V2: Slowing or stopped in traffic	V1: Westbound / V2: Westbound	V1: Collision with motor vehicle in traffic	V1: Passenger car / V2: Passenger car	Dry	Daylight	Clear		WORCESTER ST	214409.5768	864604.3592		
3318490	WELLESLEY	20-Jun-2012	5:02 PM	Non-fatal injury	3	4	0	Angle	V1: Slowing or stopped in traffic / V2: Traveling straight ahead	V1: Eastbound / V2: Eastbound	V1: Collision with motor vehicle in traffic	V1: Passenger car / V2: Passenger car	Dry	Daylight	Clear		WORCESTER ST	214409.5768	864604.3592		
3331028	WELLESLEY	22-May-2012	3:17 PM	Property damage only (none injured)	2	0	0	Rear-end	V1: Slowing or stopped in traffic / V2: Traveling straight ahead	V1: Westbound / V2: Westbound	V1: Collision with motor vehicle in traffic	V1: Passenger car / V2: Passenger car	Dry	Daylight	Clear		WORCESTER ST	214409.5768	864604.3592		
3306733	WELLESLEY	22-Apr-2012	1:39 PM	Property damage only (none injured)	2	0	0	Rear-end	V1: Slowing or stopped in traffic / V2: Slowing or stopped in traffic	V1: Westbound / V2: Westbound	V1: Collision with motor vehicle in traffic	V1: Passenger car / V2: Passenger car	Wet	Daylight	Rain		WORCESTER ST Rte 9 W / LENOX RD	214617.851	864655.5458		
3330950	WELLESLEY	19-May-2012	5:59 PM	Property damage only (none injured)	2	0	0	Rear-end	V1: Changing lanes / V2: Traveling straight ahead	V1: Westbound / V2: Westbound	V1: Collision with motor vehicle in traffic	V1: Passenger car / V2: Passenger car	Dry	Daylight	Clear		WORCESTER ST / LENOX RD	214617.851	864655.5458		
3330960	WELLESLEY	22-May-2012	7:35 PM	Property damage only (none injured)	2	0	0	direction	V1: Traveling straight ahead / V2: Traveling straight ahead	V1: Westbound / V2: Westbound	V1: Collision with motor vehicle in traffic	V1: Passenger car / V2: Passenger car	Dry	Daylight	Clear		WORCESTER ST Rte 9 W / LENOX RD	214617.851	864655.5458		
3331146	WELLESLEY	23-Nov-2012	11:42 AM	Property damage only (none injured)	2	0	0	Angle	V1: Traveling straight ahead / V2: Traveling straight ahead	V1: Eastbound / V2: Southbound	V1: Collision with motor vehicle in traffic	V1: Passenger car / V2: Passenger car	Dry	Daylight	Cloudy		WESTON RD / CLEVELAND RD	215379.1836	865062.1184		
3330918	WELLESLEY	20-Sep-2012	5:20 PM	Property damage only (none injured)	2	0	0	Angle	V1: Traveling straight ahead / V2: Traveling straight ahead	V1: Southbound / V2: Eastbound	V1: Collision with motor vehicle in traffic	V1: Passenger car / V2: Passenger car	Dry	Daylight	Clear		WESTON ROAD / RAMP-RT 9 WB TO WESTON RD	215379.1836	865062.1184		
3331057	WELLESLEY	08-Oct-2012	1:07 PM	Non-fatal injury	2	1	0	Angle	V1: Traveling straight ahead / V2: Traveling straight ahead	V1: Eastbound / V2: Southbound	V1: Collision with motor vehicle in traffic	V1: Passenger car / V2: Passenger car	Dry	Daylight	Clear		WESTON RD / WESTON ROAD	215379.1836	865062.1184		
3306748	WELLESLEY	28-Apr-2012	2:51 PM	Property damage only (none injured)	2	0	0	Rear-end	V1: Slowing or stopped in traffic / V2: Slowing or stopped in traffic	V1: Northbound / V2: Northbound	V1: Collision with motor vehicle in traffic	V1: Passenger car / V2: Passenger car	Dry	Daylight	Clear		RAMP FROM WESTON ROAD TO RT 9 EB	215380.3814	864686.0208		
3334168	WELLESLEY	16-Nov-2012	7:33 AM	Property damage only (none injured)	2	0	0	Angle	V1: Traveling straight ahead / V2: Traveling straight ahead	V1: Eastbound / V2: Southbound	V1: Collision with motor vehicle in traffic	V1: Light truck / V2: Light truck	Dry	Daylight	Clear		WESTON ROAD / WESTON ROAD	215437.1093	865068.3005		
3330997	WELLESLEY	05-Sep-2012	5:18 PM	Property damage only (none injured)	1	0	0	crash	V1: Traveling straight ahead	V1: Southbound	V1: Collision with curb	V1: Passenger car	Dry	Daylight	Clear		WESTON ROAD / WESTON ROAD	215478.0282	864651.8231		
3330961	WELLESLEY	26-Oct-2012	4:25 PM	Property damage only (none injured)	2	0	0	Rear-end	V1: Slowing or stopped in traffic / V2: Traveling straight ahead	V1: Northbound / V2: Northbound	V1: Collision with motor vehicle in traffic	V1: Passenger car / V2: Passenger car	Dry	Daylight	Clear		WESTON RD	215505.5217	864942.808		

MassDOT Crash Report for WELLESLEY for the year 2014

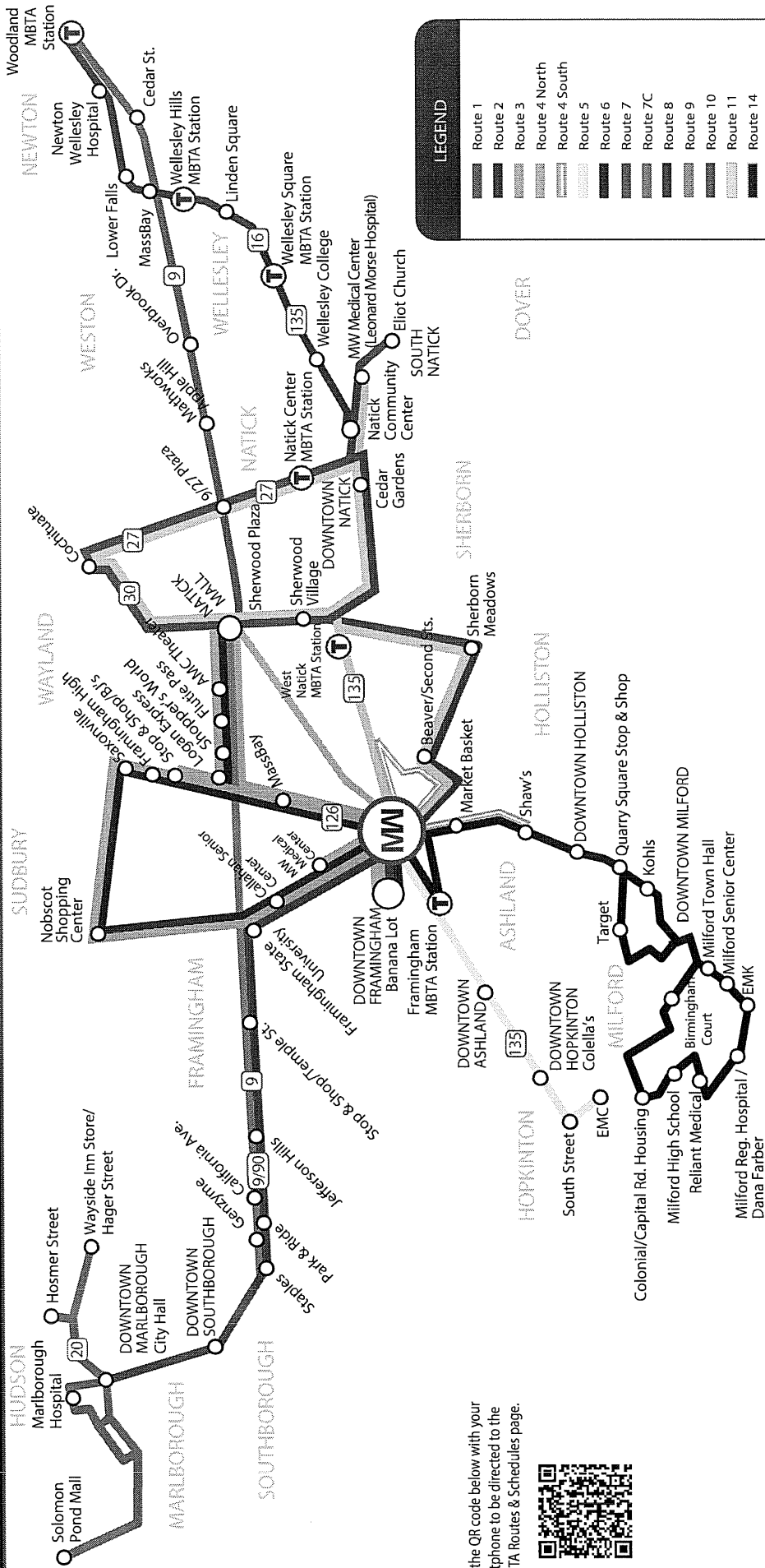
Crash Number	City/Town Name	Crash Date	Crash Time	Crash Severity	Number of Vehicles Involved	Total Number of Injuries	Number of Fatalities	Motorist of Faulty Vehicle	Vehicle Action Prior to Collision	Most Damaged Vehicle	Vehicle Configuration	Road Surface Condition	Accident Type	Weather Condition	At Roadway Intersection	Distance from Nearest Hospital (Miles)	Distance from Nearest Fire Station (Miles)	X Coordinate	Y Coordinate
3742026	WELLESLEY	25-Jun-14	8:02 PM	Property damage only (one injured)	3	0	0	Rear-end	V1: Slowing or stopped in traffic / V2: Slowing or stopped in traffic / V3: Continuing lane	V1: Westbound / V2: Westbound / V3: Westbound	V1: Passenger car / V2: Passenger car / V3: Passenger car	Snow	Dusk	Snow	WORCESTER ST			214355.841	864001.7648
3841770	WELLESLEY	12-Sep-14	12:31 PM	Property damage only (one injured)	2	0	0	Angle	V1: Traveling straight ahead / V2: Parked	V1: Eastbound / V2: Not reported vehicle	V1: Passenger car / V2: Passenger car	Dry	Daylight	Clear	OVERBROOK DR			214361.691	864029.8819
3742025	WELLESLEY	23-Jun-14	10:40 AM	Property damage only (one injured)	2	0	0	Angle	V1: Turning left / V2: Traveling straight ahead	V1: Northbound / V2: Northbound	V1: Passenger car / V2: Passenger car	Dry	Daylight	Clear	OVERBROOK DR / WORCESTER ST			214401.0275	864802.3735
3838068	WELLESLEY	03-Jun-14	4:42 PM	Property damage only (one injured)	2	0	0	Rear-end	V1: Slowing or stopped in traffic / V2: Slowing or stopped in traffic	V1: Eastbound / V2: Eastbound	V1: Passenger car / V2: Passenger car	Dry	Overnight	Clear	WORCESTER ST / OVERBROOK DR			214401.0275	864802.3735
3838039	WELLESLEY	04-Jun-14	7:38 AM	Property damage only (one injured)	1	0	0	Single vehicle crash	V1: Traveling straight ahead	V1: Eastbound	V1: Passenger car	Dry	Overnight	Clear	WORCESTER ST Rte 9 E / OVERBROOK DR			214401.0275	864802.3735
3848803	WELLESLEY	18-Sep-14	3:47 PM	Property damage only (one injured)	2	0	0	Rear-end	V1: Traveling straight ahead / V2: Slowing or stopped in traffic	V1: Westbound / V2: Westbound	V1: Passenger car / V2: Light truck	Dry	Daylight	Clear	WORCESTER ST Rte 9 W / OVERBROOK DR			214401.0275	864802.3735
3868464	WELLESLEY	02-Nov-14	5:30 PM	Property damage only (one injured)	2	0	0	Angle	V1: Traveling straight ahead / V2: Making left turn	V1: Westbound / V2: Westbound	V1: Passenger car / V2: Passenger car	Dark, rainy, not heated	Cloudy		WORCESTER ST			214408.9798	864804.2502
3887148	WELLESLEY	03-Jun-14	10:48 AM	Property damage only (one injured)	2	0	0	Same direction	V1: Traveling straight ahead	V1: Westbound / V2: Westbound	V1: Single wheel truck (3 axle, 6 tire) / V2: Passenger car	Dry	Daylight	Clear	WORCESTER STREET Rte 9 W			214441.1558	864808.9712
3888468	WELLESLEY	28-Jun-14	7:31 AM	Property damage only (one injured)	2	0	0	Rear-end	V1: Slowing or stopped in traffic / V2: Slowing or stopped in traffic	V1: Westbound / V2: Eastbound	V1: Passenger car / V2: Passenger car	Wet	Daylight	Cloudy	WORCESTER ST			214448.1658	864802.5712
3742023	WELLESLEY	28-Jun-14	8:39 AM	Property damage only (one injured)	2	0	0	Rear-end	V1: Slowing or stopped in traffic / V2: Backing	V1: Eastbound / V2: Eastbound	V1: Passenger car / V2: Passenger car	Dry	Daylight	Clear	WORCESTER ST			214482.1801	864887.4784
3792468	WELLESLEY	25-Jun-14	2:18 PM	Property damage only (one injured)	2	0	0	Rear-end	V1: Traveling straight ahead / V2: Traveling straight ahead	V1: Eastbound / V2: Eastbound	V1: Passenger car / V2: Passenger car	Wet	Daylight	Cloudy	WORCESTER ST			214482.1801	864887.4784
3864403	WELLESLEY	17-May-14	2:11 PM	Property damage only (one injured)	2	0	0	Rear-end	V1: Slowing or stopped in traffic / V2: Slowing or stopped in traffic	V1: Westbound / V2: Westbound	V1: Passenger car / V2: Passenger car	Dry	Daylight	Clear	WORCESTER ST			214658.0798	864848.918
3864000	WELLESLEY	12-Jun-14	5:41 PM	Property damage only (one injured)	3	0	0	Rear-end	V1: Traveling straight ahead / V2: Traveling straight ahead / V3: Changing lanes	V1: Westbound / V2: Westbound / V3: Westbound	V1: Passenger car / V2: Passenger car / V3: Passenger car	Dry	Daylight	Clear	WORCESTER ST Rte 9 W			214658.0798	864848.918
3830154	WELLESLEY	07-Jun-14	12:45 PM	Property damage only (one injured)	2	0	0	Rear-end	V1: Traveling straight ahead / V2: Traveling straight ahead	V1: Westbound / V2: Westbound	V1: Passenger car / V2: Passenger car	Dry	Daylight	Clear	WORCESTER ST Rte 9 W / LEBANON RD			214817.891	864852.5458
3831893	WELLESLEY	02-Sep-14	5:54 PM	Property damage only (one injured)	2	0	0	Rear-end	V1: Slowing or stopped in traffic / V2: Traveling straight ahead	V1: Westbound / V2: Westbound	V1: Passenger car / V2: Passenger car	Dry	Daylight	Cloudy	RAMPTON RD TO CLEVELAND WESTON			215381.8444	865086.9104
3868571	WELLESLEY	03-Jun-14	11:20 AM	Property damage only (one injured)	2	0	0	Rear-end	V1: Slowing or stopped in traffic / V2: Slowing or stopped in traffic	V1: Westbound / V2: Westbound	V1: Passenger car / V2: Passenger car	Dry	Daylight	Clear	WESTON ROAD			215381.8444	865086.9104
3776248	WELLESLEY	18-Jun-14	8:18 AM	Property damage only (one injured)	2	0	0	Rear-end	V1: Slowing or stopped in traffic / V2: Traveling straight ahead	V1: Northbound / V2: Northbound	V1: Passenger car / V2: Passenger car	Dry	Daylight	Clear	WESTON RD / CLEVELAND RD			215376.1836	865082.1184
3850238	WELLESLEY	15-Jun-14	11:29 AM	Property damage only (one injured)	2	0	0	Angle	V1: Traveling straight ahead / V2: Traveling straight ahead	V1: Westbound / V2: Westbound	V1: Passenger car / V2: Passenger car	Dry	Daylight	Clear	WESTON RD / CLEVELAND RD			215376.1836	865082.1184
3780098	WELLESLEY	20-Jun-14	7:43 AM	Property damage only (one injured)	2	0	0	Angle	V1: Traveling straight ahead / V2: Traveling straight ahead	V1: Southbound / V2: Southbound	V1: Passenger car / V2: Passenger car	Wet	Daylight	Rain/Cloudy	WORCESTER ST RAMPTON RD			215383.3873	865086.4265
3795705	WELLESLEY	25-Aug-14	11:17 AM	Property damage only (one injured)	2	0	0	Angle	V1: Traveling straight ahead / V2: Traveling straight ahead	V1: Westbound / V2: Westbound	V1: Passenger car / V2: Passenger car	Wet	Daylight	Cloudy	OFFICE WESTON RD			215470.0201	864951.8231
3820188	WELLESLEY	02-Jun-14	11:03 AM	Property damage only (one injured)	2	0	0	Angle	V1: Slowing or stopped in traffic / V2: Traveling straight ahead	V1: Westbound / V2: Westbound	V1: Passenger car / V2: Passenger car	Dry	Daylight	Clear	WESTON RD			215487.4021	864928.4203
3878905	WELLESLEY	14-May-14	2:15 PM	Property damage only (one injured)	2	0	0	Angle	V1: Slowing or stopped in traffic / V2: Traveling straight ahead	V1: Southbound / V2: Southbound	V1: Passenger car / V2: Passenger car	Dry	Daylight	Clear	WESTON RD			215484.8853	864928.8402

☐ Public Transportation Information



METROWEST REGIONAL TRANSIT AUTHORITY

Public Transportation System



Scan the QR code below with your smartphone to be directed to the MWRTA Routes & Schedules page.



MetroWest Regional Transit Authority

From Solomon Pond Mall in Marlborough to Woodland Station in Newton—We've got you covered.

MetroWest Regional Transit Authority (MWRTA) provides public transportation along twelve different bus routes connecting the entire MetroWest community.

We provide access to all major area employers, medical facilities, and shopping locations. MWRTA also connects commuters with the Massachusetts Bay Transportation Authority (MBTA) system. The commuter rail connection can take you eastbound or westbound to Boston or Worcester.
Go Green! Be friendly to our environment and be mindful of your carbon footprint.

Customer Service & Travel Information
Please call 508.935.2222 or visit us online at mwrtta.com.

Blandin Hub is located at 15 Blandin Avenue in Framingham.

www.mwrtta.com 508.935.2222

@mwrtta

v1.17

1

1

ROUTE 1 Weekday (Monday-Friday Service)

AM

EASTBOUND											
	Blandin Hub	5:30	5:55								
	Concord & Howards Sts.	5:34	5:59								
	Flutie Pass	5:46	6:11								
	Natick Mall (Macy's Shelter)	5:47	6:12	6:55	7:20	8:14	8:28	9:38	9:47	10:57	
	Mathworks Apple Hill	-	6:18	7:03	7:26	8:22	8:36	9:46	9:55	11:05	
	Overbrook Drive	5:55	6:24	7:10	7:32	8:29	8:43	9:53	10:02	11:12	
	Woodland T Stop	6:10	6:46	7:35	7:54	8:54	9:08	10:18	10:27	11:37	
	Woodland T Stop	6:20	6:55	7:44	8:03	9:03	9:17	10:22	10:31	11:41	
	Overbrook Drive	6:36	7:11	8:00	8:19	9:19	9:33	10:38	10:47	11:57	
	Mathworks Lakeside	6:44	7:16	8:07	8:24	9:26	9:40	10:45	10:54	12:04	
	Natick Mall (Macy's Shelter)	6:50	7:20	8:14	8:28	9:33	9:47	10:52	11:01	12:11	
WESTBOUND	Blandin Hub	11:16									

Transfers

Route 1 passengers can make the following transfers:
Route 8 at the Woodland T Stop
Routes 2, 3, 4N, 9, 10, 11, Natick Commuter Shuttle, and MassBay Shuttle at the Natick Mall (Macy's Shelter).
Time: P-PM
Blandin Hub: 15 Blandin Ave. Framingham

PM

EASTBOUND											
	Blandin Hub	1:35	3:35								
	Concord & Howards Sts.										
	Flutie Pass										
	Natick Mall (Macy's Shelter)	12:26	1:50	3:09	3:50	4:29	5:09	5:48	6:28	7:07	7:47
	Mathworks Apple Hill	12:36	1:58	3:17	3:58	4:37	5:17	5:56	6:36	7:15	7:53
	Overbrook Drive	12:44	2:05	3:25	4:05	4:44	5:24	6:03	6:43	7:22	7:54
	Woodland T Stop	1:10	2:30	3:50	4:30	5:09	5:49	6:28	7:08	7:47	8:14
	Woodland T Stop	1:22	2:34	3:54	4:34	5:13	5:53	6:32	7:12	7:51	8:14
	Overbrook Drive	1:38	2:50	4:10	4:50	5:29	6:09	6:48	7:28	8:07	8:28
	Mathworks Lakeside	1:45	2:57	4:17	4:57	5:36	6:16	6:55	7:35	8:14	8:33
	Natick Mall (Macy's Shelter)	1:52	3:04	4:24	5:04	5:43	6:23	7:02	7:42	8:21	8:35
WESTBOUND	Blandin Hub	2:05	8:33 8:45								

Scheduled Times

Scheduled times are only approximate; please wait for the MWRTA ten minutes in advance of scheduled times to assure not missing the bus.
For up to the minute bus information call the MWRTA at 508.935.2222 or 888.996.9782, or visit www.mwrtat.com for GPS tracking. The MWRTA uses the Flag Down System which allows buses to stop anywhere along their routes to pick up passengers, where it is safe to do so. Passengers can hail MWRTA buses by waving.

□ Sight Distance Calculations

Stopping Sight Distance - Regulatory

Worcester Street (Route 9) at Lexington Road, Wellesley, MA

		SPEED (MPH)	BRAKE REACTION DISTANCE (FT)	BRAKING DISTANCE (FT)	CALCULATED STOPPING SIGHT DISTANCE (FT)
Direction 1	EB	50	183.75	239.6	423.3
Direction 2	WB	50	183.75	239.6	423.3

INPUTS

Direction 1

Direction 2

Travel Direction

EB

WB

Speed

50

50

Grade

0

0

t

2.5

2.5

a

11.2

11.2

Stopping Sight Distance (SSD) - Source: AASHTO

SSD = Reaction Distance + Brake Distance

Reaction Distance = $1.47 \times t \times V$

Brake Distance = $V^2 / (30 \times ((a/32.2) + G))$

Where:

t = reaction time (sec)

V = travel speed (mph)

G = roadway grade

a = deceleration rate (ft/sec²)

Stopping Sight Distance - Observed 85th Percentile

Worcester Street (Route 9) at Lexington Road, Wellesley, MA

		SPEED (MPH)	BRAKE REACTION DISTANCE (FT)	BRAKING DISTANCE (FT)	CALCULATED STOPPING SIGHT DISTANCE (FT)
Direction 1	EB	51	187.425	249.3	436.7
Direction 2	WB	52	191.1	259.1	450.2

INPUTS

Direction 1

Direction 2

Travel Direction

EB

WB

Speed

51

52

Grade

0

0

t

2.5

2.5

a

11.2

11.2

Stopping Sight Distance (SSD) - Source: AASHTO

SSD = Reaction Distance + Brake Distance

Reaction Distance = $1.47 \times t \times V$

Brake Distance = $V^2 / (30 \times ((a/32.2) + G))$

Where:

t = reaction time (sec)

V = travel speed (mph)

G = roadway grade

a = deceleration rate (ft/sec²)

Intersection Sight Distance Calculations

Source: *A Policy on Geometric Design of Highways and Street, 6th Edition*; AASHTO; 2011.

$$ISD = 1.47 * V * t$$

V = speed

t = time gap

t = 7.5 s for a passenger car for Left Turn from a Stop

t = 6.5 s for a passenger car for Right Turn from a Stop

Posted (Advisory) Speed Limit

Lexington Road ISD = $1.47 * 50 * 6.5 = 478$ ft
(right-turn from a stop)

Proposed Site Driveway ISD = $1.47 * 50 * 6.5 = 478$ ft
(right-turn from a stop)

- Site Specific Developments

Institute of Transportation Engineers (ITE) 9th Edition
Land Use Code (LUC) 710 - General Office Building

Average Vehicle Trips Ends vs: 1000 Sq. Feet Gross Floor Area
 Independent Variable (X): 510

AVERAGE WEEKDAY DAILY

$$\ln T = 0.76 \ln (X) + 3.68$$

$$\ln T = 0.76 \ln 510 + (3.68)$$

$$\ln T = 8.42$$

$$T = 4528.53$$

$$T = 4,528 \text{ vehicle trips}$$

with 50% (2,264 vpd) entering and 50% (2,264 vpd) exiting.

WEEKDAY MORNING PEAK HOUR OF ADJACENT STREET TRAFFIC

$$\ln T = 0.80 \ln (X) + 1.57$$

$$\ln T = 0.80 \ln 510 + (1.57)$$

$$\ln T = 6.56$$

$$T = 704.53$$

$$T = 705 \text{ vehicle trips}$$

with 88% (620 vph) entering and 12% (85 vph) exiting.

62

9

WEEKDAY EVENING PEAK HOUR OF ADJACENT STREET TRAFFIC

$$T = 1.12 * (X) + 78.45$$

$$T = 1.12 * 510 + (78.45)$$

$$T = 649.65$$

$$T = 650 \text{ vehicle trips}$$

with 17% (111 vph) entering and 83% (539 vph) exiting.

11

54

SATURDAY DAILY

$$T = 2.03 * (X) + 31.75$$

$$T = 2.03 * 510 + 31.75$$

$$T = 1067.05$$

$$T = 1,068 \text{ vehicle trips}$$

with 50% (534 vpd) entering and 50% (534 vpd) exiting.

SATURDAY MIDDAY PEAK HOUR OF GENERATOR

$$T = 0.43 * (X)$$

$$T = 0.43 * 510$$

$$T = 219.30$$

$$T = 219 \text{ vehicle trips}$$

with 54% (118 vpd) entering and 46% (101 vpd) exiting.

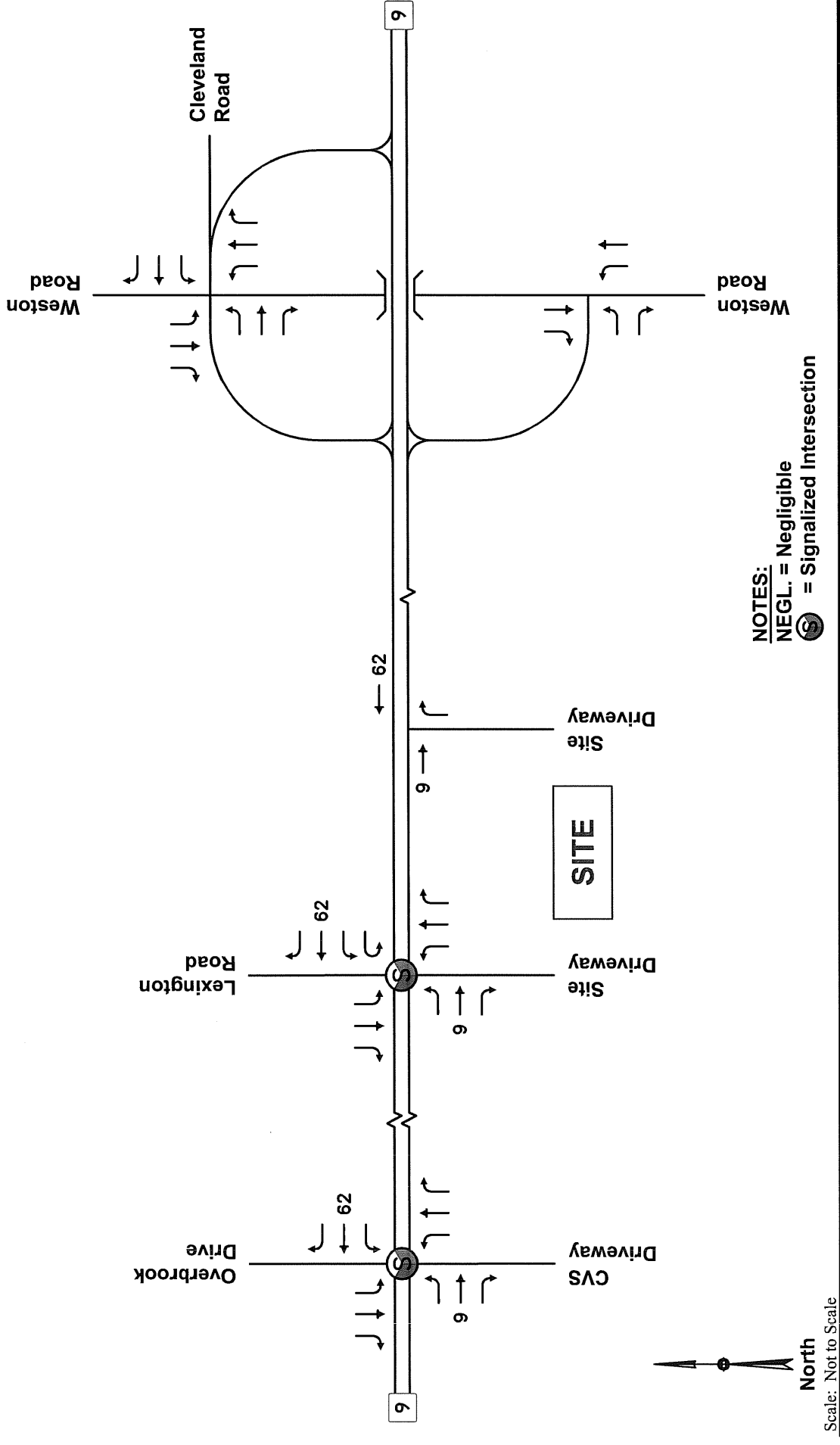
12

10

Journey-to-Work Distribution
US Census Journey-to-Work Data

Residence Town Name	Workplace Town Name	All Workers	% of Total Rounded
Natick town	Natick town	4,503	26%
Framingham town	Natick town	3,151	18%
Boston city	Natick town	896	5%
Marlborough city	Natick town	643	4%
Ashland town	Natick town	637	4%
Worcester city	Natick town	619	4%
Milford town	Natick town	527	3%
Holliston town	Natick town	492	3%
Franklin Town city	Natick town	405	2%
Newton city	Natick town	374	2%
Waltham city	Natick town	351	2%
Wayland town	Natick town	289	2%
Medway town	Natick town	261	1%
Millis town	Natick town	251	1%
Shrewsbury town	Natick town	250	1%
Brookline town	Natick town	239	1%
Needham town	Natick town	230	1%
Cambridge city	Natick town	224	1%
Hopkinton town	Natick town	224	1%
Southborough town	Natick town	222	1%
Westborough town	Natick town	219	1%
Grafton town	Natick town	217	1%
Sudbury town	Natick town	206	1%
Wellesley town	Natick town	199	1%
Somerville city	Natick town	198	1%
Northbridge town	Natick town	195	1%
Northborough town	Natick town	175	1%
Sherborn town	Natick town	172	1%
Belmont town	Natick town	171	1%
Leominster city	Natick town	168	1%
Weston town	Natick town	164	1%
Bellingham town	Natick town	162	1%
Hudson town	Natick town	146	1%
Quincy city	Natick town	135	1%
Nashua city	Natick town	130	1%
		17,445	100%

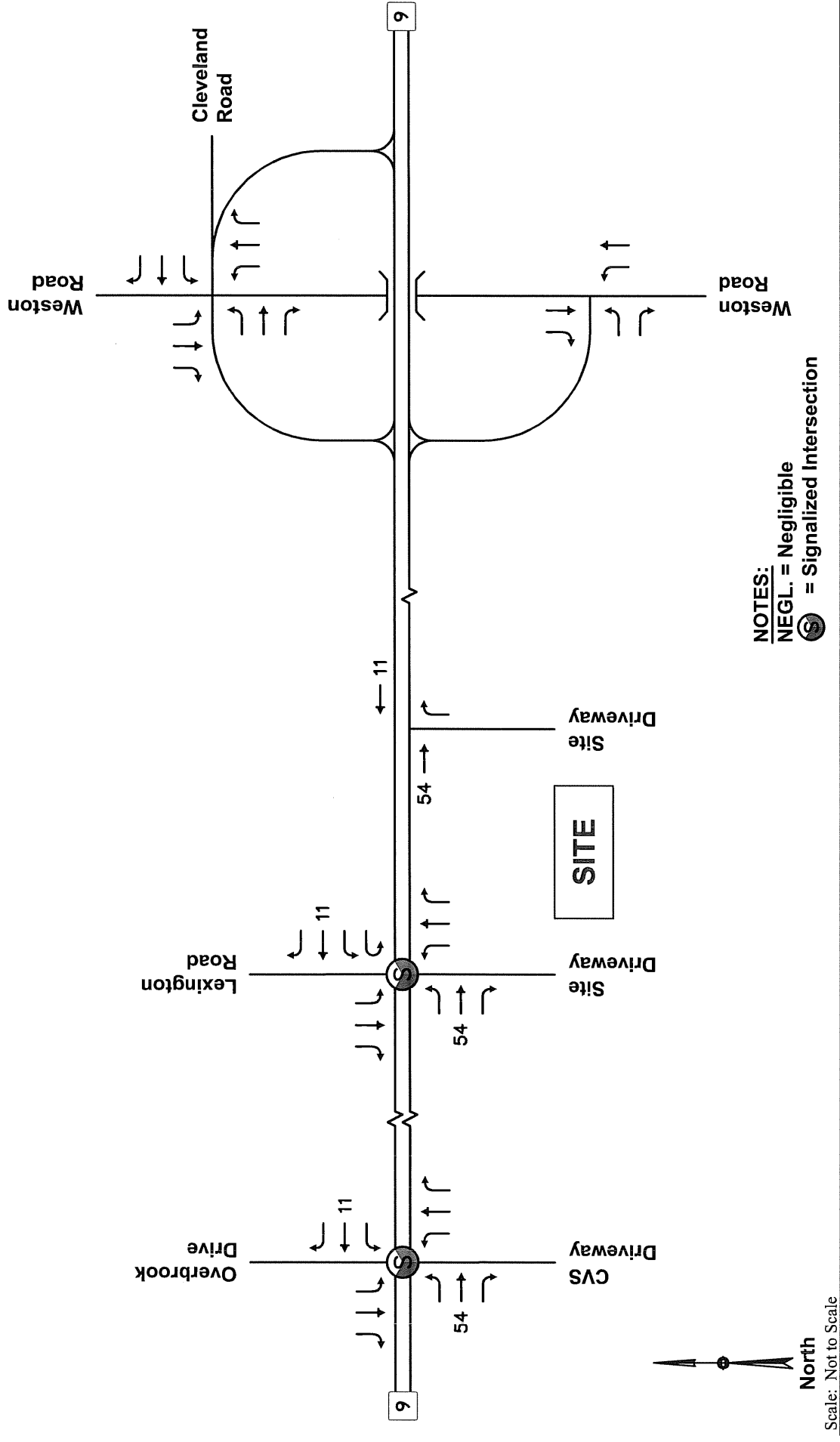
Residence	To/From Routes			
	Route 9 (To/From East)			Total
Natick town	0%	0.0%	0.0%	0.0%
Framingham town	0%	0.0%	0.0%	0.0%
Boston city	25%	1.3%	0.0%	1.3%
Marlborough city	0%	0.0%	0.0%	0.0%
Ashland town	0%	0.0%	0.0%	0.0%
Worcester city	0%	0.0%	0.0%	0.0%
Milford town	0%	0.0%	0.0%	0.0%
Holliston town	0%	0.0%	0.0%	0.0%
Franklin Town city	0%	0.0%	0.0%	0.0%
Newton city	100%	2.1%	0.0%	2.1%
Waltham city	100%	2.0%	0.0%	2.0%
Wayland town	0%	0.0%	0.0%	0.0%
Medway town	0%	0.0%	0.0%	0.0%
Millis town	0%	0.0%	0.0%	0.0%
Shrewsbury town	0%	0.0%	0.0%	0.0%
Brookline town	100%	1.4%	0.0%	1.4%
Needham town	100%	1.3%	0.0%	1.3%
Cambridge city	0%	0.0%	0.0%	0.0%
Hopkinton town	0%	0.0%	0.0%	0.0%
Southborough town	0%	0.0%	0.0%	0.0%
Westborough town	0%	0.0%	0.0%	0.0%
Grafton town	0%	0.0%	0.0%	0.0%
Sudbury town	0%	0.0%	0.0%	0.0%
Wellesley town	100%	1.1%	0.0%	1.1%
Somerville city	0%	0.0%	0.0%	0.0%
Northbridge town	0%	0.0%	0.0%	0.0%
Northborough town	0%	0.0%	0.0%	0.0%
Sherborn town	0%	0.0%	0.0%	0.0%
Belmont town	0%	0.0%	0.0%	0.0%
Leominster city	0%	0.0%	0.0%	0.0%
Weston town	0%	0.0%	0.0%	0.0%
Bellingham town	0%	0.0%	0.0%	0.0%
Hudson town	0%	0.0%	0.0%	0.0%
Quincy city	100%	0.8%	0.0%	0.8%
Nashua city	0%	0.0%	0.0%	0.0%
	10.0%		0.0%	10.0%
SAY	10%			10%



Attachments

Proposed Mathworks Facility Weekday Morning Peak Hour Traffic Volumes

MDM TRANSPORTATION CONSULTANTS, INC.
 Planners & Engineers



Attachments

MDM TRANSPORTATION CONSULTANTS, INC.
Planners & Engineers

Proposed Mathworks Facility Weekday Evening Peak Hour Traffic Volumes



Scale: Not to Scale

Proposed Mathworks Facility Saturday Midday Peak Hour Traffic Volumes

□ Trip Generation

		Ice Rinks Empirical 2 Rinks Peak Hour of Street	Turf Field ITE LUC 488 1 Field	Health/Fitness Club ITE LUC 492 35,000 s.f.	Total
AM	In	20	1	24	45
	Out	130	0	26	156
	Total	150	1	50	201
PM	In	67	12	72	151
	Out	56	6	70	132
	Total	123	18	142	283
SAT ³	In	64	14	44	122
	Out	58	16	53	127
	Total	122	30	97	249
Weekday Daily ¹		1476	300	1152	2928
Saturday Daily ²		1464	420	730	2614

¹Weekday Daily Trip Gen Calcs:

Ice Rinks = 12 hrs x 123 Trips/hr = 1476 trips per day

Turf Field = 10 hrs x 30 Trips/hr = 300 trips per day

²Saturday Daily Trip Gen Calcs:

Ice Rinks = 12 hrs x 122 Trips/hr = 1464 trips per day

Turf Field = 14 hrs x 30 Trips/hr = 420 trips per day

³Saturday Midday Ice Rink Trip Gen

Observed Trips at Essex Sports Center on 3/25/2017 minus ITE LUC 488 Applied to 1 field

Observed Trips	LUC 488 Trips	2 Ice Rinks
78	-14	64
74	-16	58
152	-30	122

Institute of Transportation Engineers (ITE) 9th Edition
Land Use Code (LUC) 488 - Soccer Complex

Average Vehicle Trips Ends vs: Number of Fields

Independent Variable (X): 1

AVERAGE WEEKDAY DAILY

$$T = 71.33 * (X)$$

$$T = 71.33 * 1$$

$$T = 71.33$$

$$T = 72 \text{ vehicle trips}$$

with 50% (36 vpd) entering and 50% (36 vpd) exiting.

WEEKDAY MORNING PEAK HOUR OF ADJACENT STREET TRAFFIC

$$T = 1.12 * (X)$$

$$T = 1.12 * 1$$

$$T = 1.12$$

$$T = 1 \text{ vehicle trips}$$

with 57% (1 vph) entering and 43% (0 vph) exiting.

WEEKDAY EVENING PEAK HOUR OF ADJACENT STREET TRAFFIC

$$T = 17.70 * (X)$$

$$T = 17.70 * 1$$

$$T = 17.70$$

$$T = 18 \text{ vehicle trips}$$

with 67% (12 vph) entering and 33% (6 vph) exiting.

SATURDAY DAILY

$$T = 117.43 * (X)$$

$$T = 117.43 * 0$$

$$T = 117.43$$

$$T = 118 \text{ vehicle trips}$$

with 50% (59 vpd) entering and 50% (59 vpd) exiting.

SATURDAY MIDDAY PEAK HOUR OF GENERATOR

$$T = 30.34 * (X)$$

$$T = 30.34 * 1$$

$$T = 30.34$$

$$T = 30 \text{ vehicle trips}$$

with 48% (14 vph) entering and 52% (16 vph) exiting.

Time Period	Donald Lynch Boulevard (vehicles per hour)	Entering		Exiting		Total		Available # of Ice Rinks (#)	In-Use # of Ice Rinks (#)	Trip Rate (per Ice Risk)			Total Sqft (ksf)	Trip Rate (per Sqft)			Projected # Hockey Rinks (#)	Projected Trip Generation Per Ice Risk	
		Entering	Exiting	Entering	Exiting	Entering	Exiting			Entering	Exiting	Total		Entering	Exiting	Total		Entering	Exiting
<i>Peak Hour of Generator</i>																			
Weekday AM (7:45-8:45 am)	311	10	78	88				6	1	10.00	78.00	88.00	212	0.05	0.37	0.42	2	20	156
Weekday PM (4:15-5:15 pm)	432	91	61	152				6	2	45.50	30.50	76.00	212	0.43	0.29	0.72	2	91	61
<i>Peak Hour of Adjacent Street</i>																			
Weekday AM (7:15-8:15 am)	318	10	65	75				6	1	10.00	65.00	75.00	212	0.05	0.31	0.35	2	20	130
Weekday PM (5:00-6:00 pm)	442	67	56	123				6	2	33.50	28.00	61.50	212	0.32	0.26	0.58	2	67	56

Institute of Transportation Engineers (ITE) 9th Edition
Land Use Code (LUC) 492 - Health/Fitness Club

Average Vehicle Trips Ends vs: 1000 Sq. Feet Gross Floor Area
Independent Variable (X): 35

AVERAGE WEEKDAY DAILY

$T = 32.93 * (X)$
 $T = 32.93 * 35$
 $T = 1152.55$
 $T = 1,152$ vehicle trips
with 50% (576 vpd) entering and 50% (576 vpd) exiting.

WEEKDAY MORNING PEAK HOUR OF ADJACENT STREET TRAFFIC

$T = 1.41 * (X)$
 $T = 1.41 * 35$
 $T = 49.35$
 $T = 49$ vehicle trips
with 50% (25 vph) entering and 50% (24 vph) exiting.

WEEKDAY EVENING PEAK HOUR OF ADJACENT STREET TRAFFIC

$T = 3.53 * (X)$
 $T = 3.53 * 35$
 $T = 123.55$
 $T = 124$ vehicle trips
with 57% (71 vph) entering and 43% (53 vph) exiting.

WEEKDAY MORNING PEAK HOUR OF GENERATOR

$T = 1.43 * (X)$
 $T = 1.43 * 35$
 $T = 50.05$
 $T = 50$ vehicle trips
with 47% (24 vpd) entering and 53% (26 vpd) exiting.

WEEKDAY EVENING PEAK HOUR OF GENERATOR

$T = 4.06 * (X)$
 $T = 4.06 * 35$
 $T = 142.10$
 $T = 142$ vehicle trips
with 51% (72 vph) entering and 49% (70 vph) exiting.

SATURDAY DAILY

$T = 20.87 * (X)$
 $T = 20.87 * 35$
 $T = 730.45$
 $T = 730$ vehicle trips
with 50% (365 vph) entering and 50% (365 vph) exiting.

SATURDAY PEAK HOUR OF GENERATOR

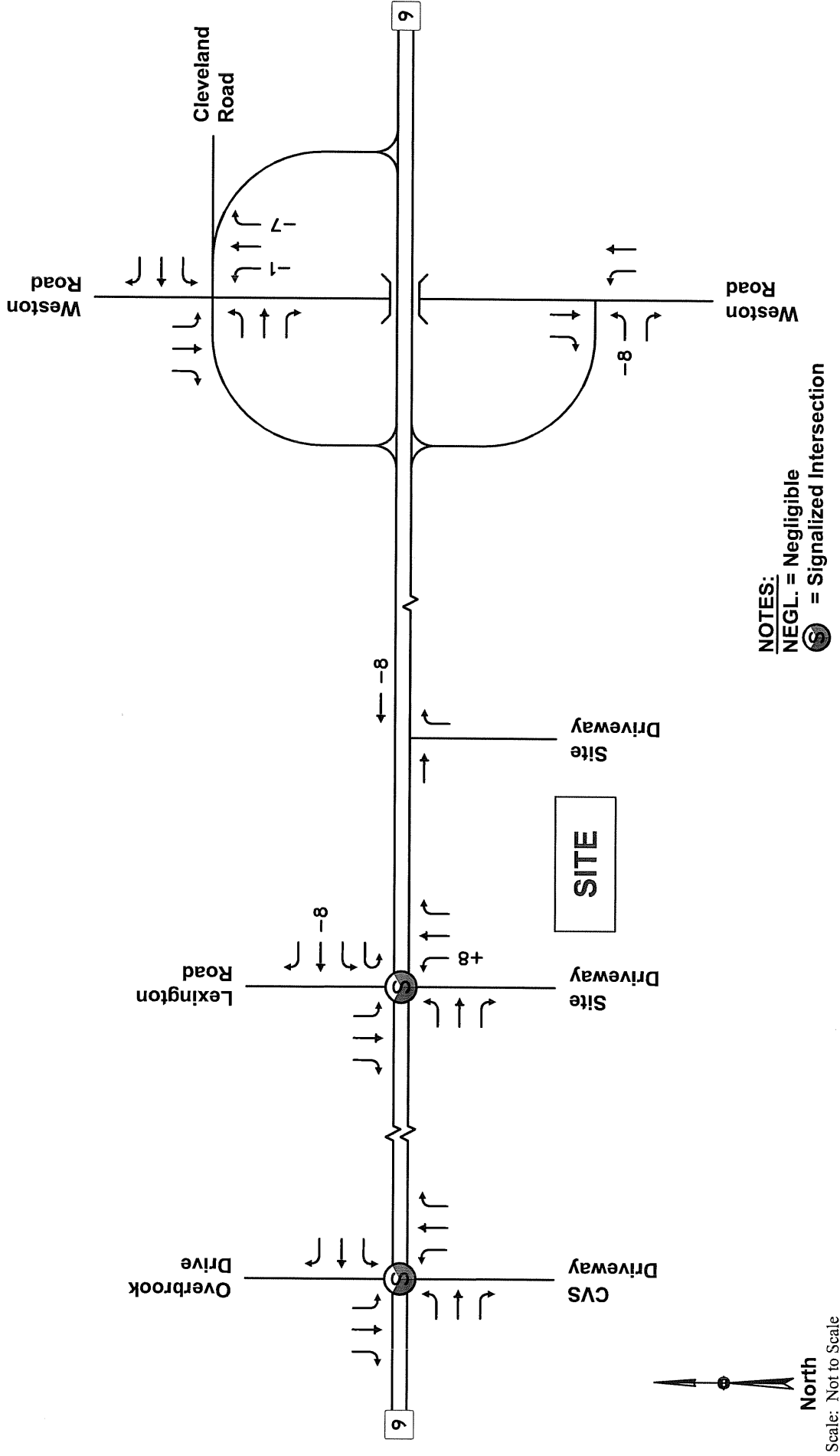
$T = 2.78 * (X)$
 $T = 2.78 * 0$
 $T = 97.30$
 $T = 97$ vehicle trips
with 45% (44 vph) entering and 55% (53 vph) exiting.

□ Trip Distribution Calculations

Populoaction Distribution (20 Minute Travel Time)

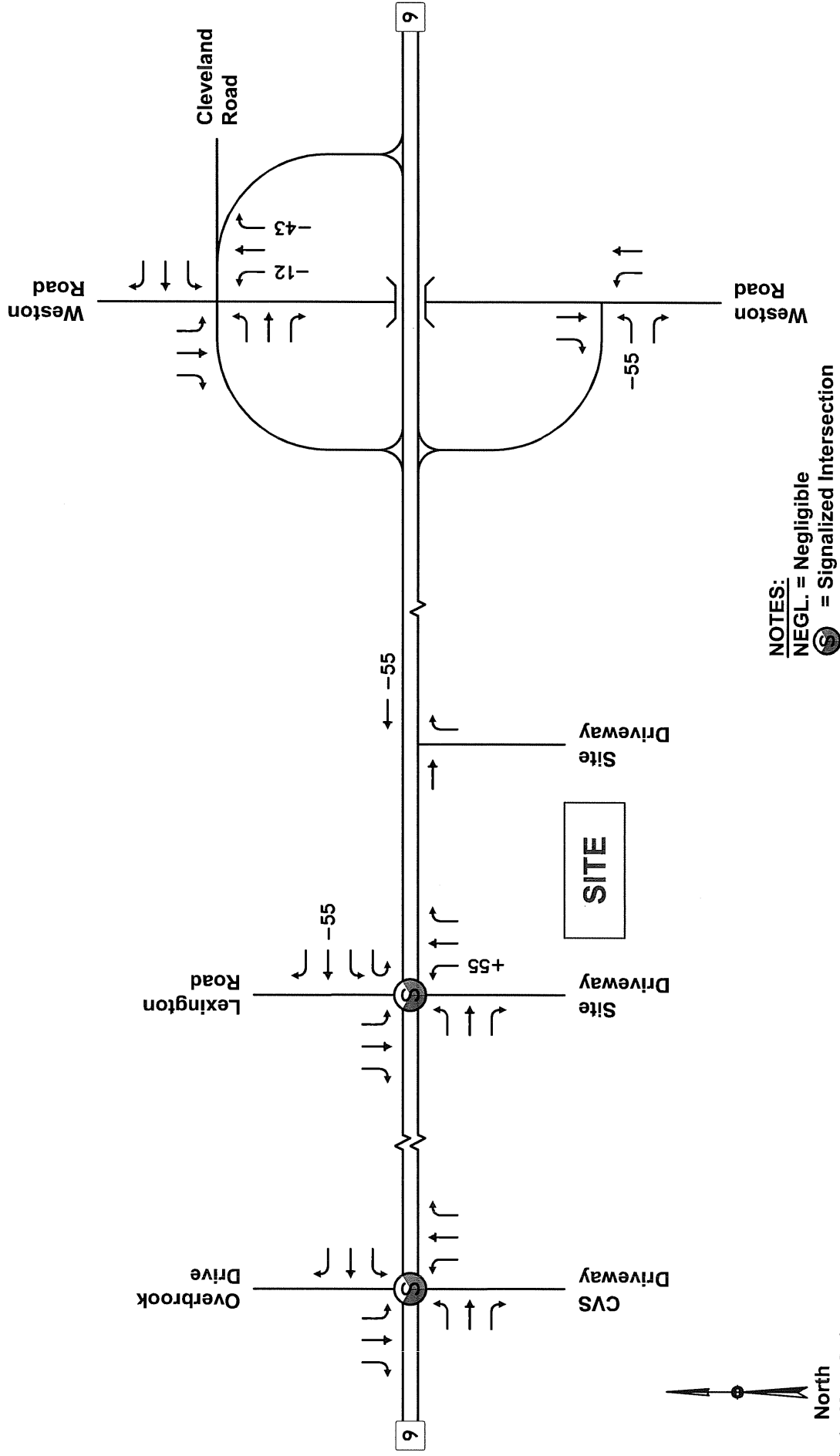
2010 US Census Data

Town Name	Population	% of Town Within 20 min. zone	Adjusted Population	% of Total Rounded	To/From Routes					
					Worcester Street (West)		Worcester Street (East)		Weston Road (North)	
										Weston Road (South)
Ashland	14,674	50%	7,337	1.9%	100%	1.9%		0.0%		0.0%
Boston	589,141	5%	29,457	7.7%		0.0%	100%	7.7%		0.0%
Brookline	57,107	50%	28,554	7.4%		0.0%	100%	7.4%		0.0%
Dedham	23,464	50%	11,732	3.0%		0.0%	100%	3.0%		0.0%
Dover	5,558	50%	2,779	0.7%	50%	0.4%		0.0%		50%
Frammingham	66,910	100%	66,910	17.4%	100%	17.4%		0.0%		0.0%
Holliston	13,801	10%	1,380	0.4%	100%	0.4%		0.0%		0.0%
Medfield	12,273	10%	1,227	0.3%	100%	0.3%		0.0%		0.0%
Millis	7,902	10%	790	0.2%	75%	0.2%		0.0%		25%
Natick	32,107	100%	32,107	8.3%	100%	8.3%		0.0%		0.0%
Needham	28,911	100%	28,911	7.5%		0.0%	50%	3.8%		50%
Newton	83,829	75%	62,872	16.3%		0.0%	90%	14.7%	10%	1.6%
Sherborn	4,200	100%	4,200	1.1%	100%	1.1%		0.0%		0.0%
Southborough	8,781	10%	878	0.2%	100%	0.2%		0.0%		0.0%
Sudbury	16,841	75%	12,631	3.3%	100%	3.3%		0.0%		0.0%
Waltham	59,226	50%	29,613	7.7%		0.0%	50%	3.8%	50%	3.8%
Wayland	13,100	100%	13,100	3.4%	100%	3.4%		0.0%		0.0%
Wellesley	26,613	100%	26,613	6.9%	25%	1.7%	40%	2.8%	10%	0.7%
Weston	11,469	95%	10,896	2.8%	50%	1.4%	50%	1.4%		0.0%
Westwood	14,117	90%	12,705	3.3%		0.0%	50%	1.7%		50%
Total	1,090,024		384,692	100.0%		40.0%		46.3%		6.2%
					SAY	40%		45%		5%
										10%



Attachments 888 Worcester Street Office Trips Relocated to Proposed Signal Weekday Morning Peak Hour Traffic Volumes

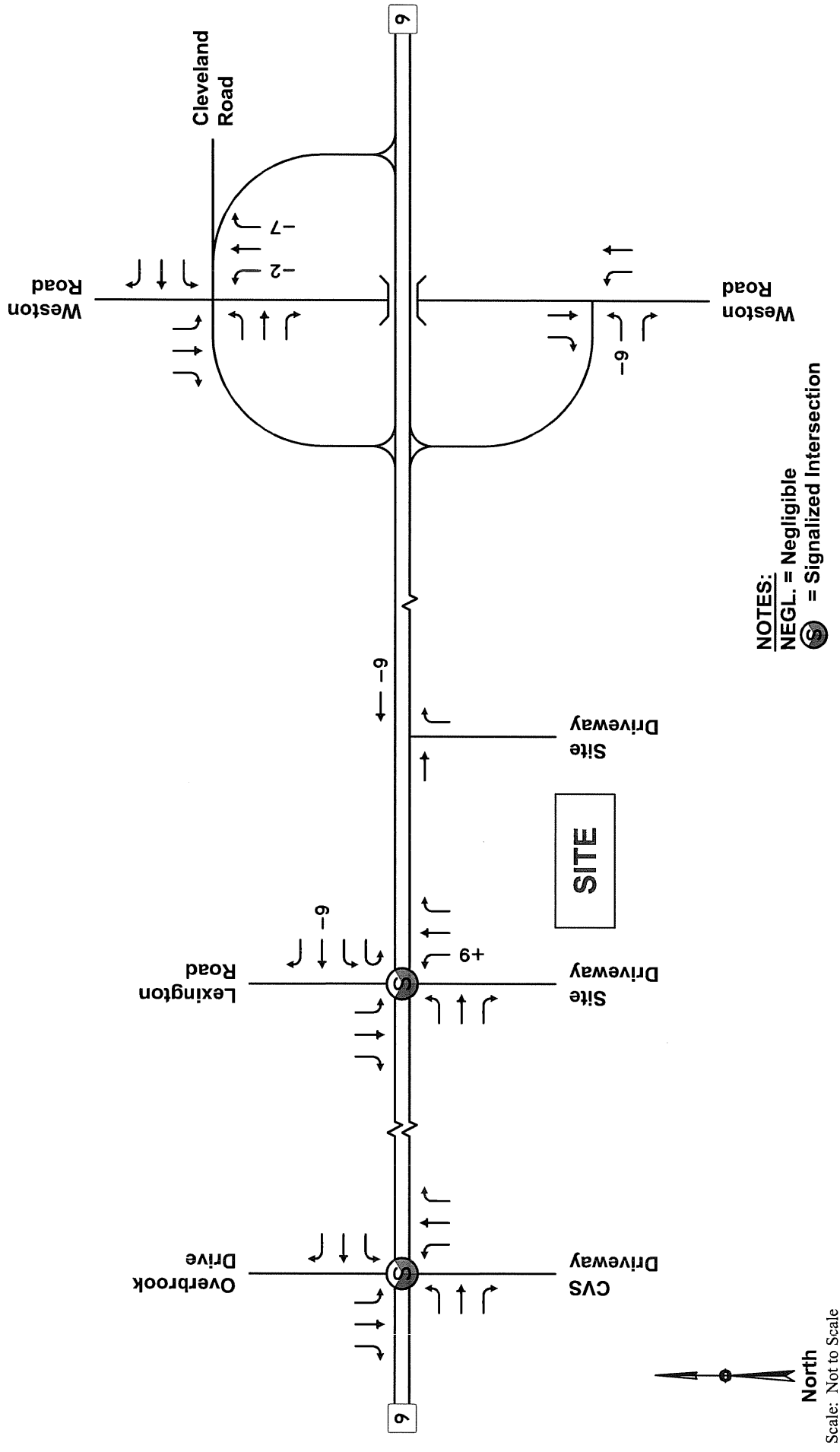
MDM TRANSPORTATION CONSULTANTS, INC.
Planners & Engineers



Attachments

888 Worcester Street Office Trips Relocated to Proposed Signal Weekday Evening Peak Hour Traffic Volumes

MDM TRANSPORTATION CONSULTANTS, INC.
Planners & Engineers



NOTES:
NEGL. = Negligible
S = Signalized Intersection

Attachments

888 Worcester Street Office Trips Relocated to Proposed Signal Saturday Midday Peak Hour Traffic Volumes

MDM TRANSPORTATION CONSULTANTS, INC.
Planners & Engineers

□ Signal Warrant Calculations

MUTCD TRAFFIC SIGNAL WARRANT ANALYSIS

INTERSECTION : Route 9 at Site Drive

Project Name	923 - Wellesley
Scenario	Existing Volumes + 35 ksf Health Center + 2 Ice Skating Rinks + 1 Turf Field
Comments	-

	Street Name	Direction	No. of Lanes
Left turn volumes only	Major Street 1	Route 9 WB	2
	Major Street 2	Route 9 EB	2
	Minor Street 1	Site Drive NB	1
	Minor Street 2	Lexington Road SB	1

Operating Speed on Major Roadway >40 MPH 50+ mph

Distance to nearest traffic signal (ft) >300 1700± feet

Time Period	Warrant 1				Lexington Road SB Approach Volume	Higher Minor St. Volume	Warrant 1			
	Route 9 WB Approach Volume	Route 9 EB Approach Volume	Total Major St. Volume	Site Drive NB Approach Volume			CONDITION A Minimum Volume Threshold Met Maj. 420 / Min. 105	CONDITION B Minimum Volume Threshold Met Maj. 630 / Min. 53	56% CONDITION A Minimum Volume Threshold Met Maj. 336 / Min. 84	56% CONDITION B Minimum Volume Threshold Met Maj. 504 / Min. 42
6:00-7:00 AM	833	2144	2977	25		25	NO	NO	NO	NO
7:00-8:00 AM	1448	2341	3789	64		64	NO	YES	NO	YES
8:00-9:00 AM	1840	2403	4243	64		64	NO	YES	NO	YES
9:00-10:00 AM	1557	1622	3179	57		57	NO	YES	NO	YES
10:00-11:00 AM	1485	1500	2985	56		56	NO	YES	NO	YES
11:00-12:00 PM	1538	1560	3098	41		41	NO	NO	NO	NO
12:00-1:00 PM	3181	1509	4690	60		60	NO	YES	NO	YES
1:00 PM - 2:00 PM	3016	1439	4455	37		37	NO	NO	NO	NO
2:00 PM - 3:00 PM	3489	1730	5219	31		31	NO	NO	NO	NO
3:00 PM - 4:00 PM	3712	1827	5539	63		63	NO	YES	NO	YES
4:00 PM - 5:00 PM	3713	1911	5624	100		100	NO	YES	YES	YES
5:00 PM - 6:00 PM	3743	2016	5759	108		108	YES	YES	YES	YES
6:00 PM - 7:00 PM	3379	1710	5089	55		55	NO	YES	NO	YES
7:00 PM - 8:00 PM	2482	1097	3579	39		39	NO	NO	NO	NO
8:00 PM - 9:00 PM	1837	894	2731	8		8	NO	NO	NO	NO
9:00 PM - 10:00 PM	1466	716	2182	20		20	NO	NO	NO	NO
				Hours Met		20	1	9	2	9
				Warrant Met			NO	YES	NO	YES

Table 4C-1. Warrant 1, Eight-Hour Vehicular Volume

Condition A—Minimum Vehicular Volume

Number of lanes for moving traffic on each approach		Vehicles per hour on major street minor-street approach (one direction only)					
		100% ^a	80% ^a	70% ^a	50% ^a	30% ^a	55% ^a
Major Street	Minor Street	500	400	350	280	180	120
1	1	800	480	420	336	150	105
2 or more	1	600	480	420	336	200	160
2 or more	2 or more	500	400	350	280	200	160
1	2 or more	500	400	350	280	140	112

^a Based minimum hourly volume

Condition B—Interruption of Continuous Traffic

Number of lanes for moving traffic on each approach		Vehicles per hour on major street minor-street approach (one direction only)					
		100% ^a	80% ^a	70% ^a	50% ^a	30% ^a	55% ^a
Major Street	Minor Street	750	600	525	420	75	60
1	1	900	720	630	504	75	60
2 or more	2 or more	900	720	630	504	100	80
1	2 or more	750	600	525	420	100	80

^a Based minimum hourly volume

Source: ITE Parking Generation 4th Edition

Parking Generation Land Use 701 - Office Building

Job: 923 - Wellesley
Location: 888 Worcester Street - Wellesley, MA
Analysis: Estimate of Hourly Traffic Volumes - (74,786 sf Office)

Time	1st Iteration		
	Difference	Normalized Differences	Total Hourly Volumes
6:00 AM - 7:00 AM	0.53	0.53	62
7:00 AM - 8:00 AM	0.20	1.00	117
8:00 AM - 9:00 AM	0.16	1.00	117
9:00 AM - 10:00 AM	0.05	0.05	6
10:00 AM - 11:00 AM	-0.02	0.02	2
11:00 AM - 12:00 PM	-0.08	0.08	9
12:00 PM - 1:00 PM	-0.13	0.13	15
1:00 PM - 2:00 PM	0.07	0.07	8
2:00 PM - 3:00 PM	-0.03	0.05	6
3:00 PM - 4:00 PM	-0.09	0.09	11
4:00 PM - 5:00 PM	-0.26	0.92	111
5:00 PM - 6:00 PM	-0.21	0.92	111
6:00 PM - 7:00 PM	n/a	0.10	12
After 7:00 PM	n/a	0.21	25

Calculated Daily Total = 612 vpd
Desired Daily Total = 824 vpd
Size = 75 ksf
Maximum Peak Hour Volume = 117 vph

Subsequent Iterations			
Normalized Differences		Total Hourly Volumes	Exiting %
0.82		96	12%
1.00		117	12%
1.00		117	12%
0.19		23	50%
0.08		9	50%
0.31		36	65%
0.50		59	60%
0.27		32	40%
0.12		14	35%
0.52		61	17%
1.00		111	83%
1.00		111	17%
0.23		27	10%
0.10		12	90%

Calculated Daily Total = 824 vpd
Desired Daily Total = 824 vpd
Size = 75 ksf
Maximum Peak Hour Volume = 117 vph

Time	Entering	Exiting	Total
6:00 AM - 7:00 AM	85	12	96
7:00 AM - 8:00 AM	103	14	117
8:00 AM - 9:00 AM	103	14	117
9:00 AM - 10:00 AM	11	11	23
10:00 AM - 11:00 AM	5	5	9
11:00 AM - 12:00 PM	13	23	36
12:00 PM - 1:00 PM	23	35	59
1:00 PM - 2:00 PM	13	19	32
2:00 PM - 3:00 PM	5	9	14
3:00 PM - 4:00 PM	10	50	61
4:00 PM - 5:00 PM	19	92	111
5:00 PM - 6:00 PM	19	92	111
6:00 PM - 7:00 PM	3	24	27
After 7:00 PM	1	11	12
Total			824

vpd

Additional Left-Turn Movements (Enter)	Additional Left-Turn Movements (Exit)
34	7
41	8
41	8
5	7
2	3
5	14
9	21
5	11
2	5
4	30
8	55
1	15
	6

Job: 923 - Wellesley
Location: 888 Worcester Street - Wellesley, MA
Analysis: Estimate of Hourly Traffic Volumes - (2 Skating Rinks + 1 Turf Field)

		1st Iteration	
Time	Difference	Normalized Differences	Total Hourly Volumes
6:00 AM - 7:00 AM	0.20	0.20	19
7:00 AM - 8:00 AM	0.08	0.08	150
8:00 AM - 9:00 AM	0.13	0.13	150
9:00 AM - 10:00 AM	0.29	0.29	28
10:00 AM - 11:00 AM	0.29	0.29	28
11:00 AM - 12:00 PM	-0.10	0.10	10
12:00 PM - 1:00 PM	-0.20	0.20	19
1:00 PM - 2:00 PM	-0.10	0.10	10
2:00 PM - 3:00 PM	-0.10	0.10	10
3:00 PM - 4:00 PM	0.00	0.00	0
4:00 PM - 5:00 PM	0.15	0.15	141
5:00 PM - 6:00 PM	0.05	0.05	141
6:00 PM - 7:00 PM	0.13	0.13	12
7:00 PM - 8:00 PM	-0.06	0.06	6
8:00 PM - 9:00 PM			
9:00 PM - 10:00 PM			
After 10:00 PM			

Calculated Daily Total = 723 vpd
Desired Daily Total = 1,776 vpd
Size = 35 ksf
Maximum Peak Hour Volume = 96 vph
1.47
1.88

Time	Entering	Exiting	Total
6:00 AM - 7:00 AM	55	3	58
7:00 AM - 8:00 AM	38	113	151
8:00 AM - 9:00 AM	38	113	151
9:00 AM - 10:00 AM	84	69	154
10:00 AM - 11:00 AM	77	77	154
11:00 AM - 12:00 PM	31	37	68
12:00 PM - 1:00 PM	43	53	96
1:00 PM - 2:00 PM	32	39	71
2:00 PM - 3:00 PM	36	36	71
3:00 PM - 4:00 PM	52	41	92
4:00 PM - 5:00 PM	53	41	94
5:00 PM - 6:00 PM	79	62	141
6:00 PM - 7:00 PM	75	59	134
7:00 PM - 8:00 PM	86	68	154
8:00 PM - 9:00 PM	32	21	53
9:00 PM - 10:00 PM	75	50	125
After 8:00 PM	2	8	10
Total			1,775

vpd

Subsequent Iterations		
Normalized Differences	Total Hourly Volumes	Entering % Exiting %
0.60	58	95% 5%
1.50	151	25% 75%
0.75	151	25% 75%
1.60	154	55% 45%
1.60	154	50% 50%
0.71	88	45% 55%
1.00	96	45% 55%
0.74	71	45% 55%
0.74	71	50% 50%
0.96	92	56% 44%
0.98	94	56% 44%
1.00	141	56% 44%
1.40	134	56% 44%
1.60	154	56% 44%
0.55	53	60% 40%
1.30	125	60% 40%
0.10	10	20% 80%

Calculated Daily Total = 1,775 vpd
Desired Daily Total = 1,776 vpd
Size = 35 ksf
Maximum Peak Hour Volume = 96 vph

Additional Left-Turn Movements (Enter)	Additional Left-Turn Movements (Exit)
33	1
23	45
23	45
51	28
46	31
18	15
26	21
19	16
21	14
31	16
32	17
47	25
45	24
52	27
19	8
45	20

Source: Empirical Parking Data for Health Club

Job: 923 - Wellesley
Location: 888 Worcester Street - Wellesley, MA
Analysis: Estimate of Hourly Traffic Volumes - (35,000 sf Health/Fitness Center)

Time	1st Iteration		
	Difference	Normalized Differences	Total Hourly Volumes
6:00 AM - 7:00 AM	0.20	0.20	19
7:00 AM - 8:00 AM	0.08	0.08	50
8:00 AM - 9:00 AM	0.13	0.13	50
9:00 AM - 10:00 AM	0.29	0.29	28
10:00 AM - 11:00 AM	0.29	0.29	28
11:00 AM - 12:00 PM	-0.10	0.10	10
12:00 PM - 1:00 PM	-0.20	0.20	19
1:00 PM - 2:00 PM	-0.10	0.10	10
2:00 PM - 3:00 PM	-0.10	0.10	10
3:00 PM - 4:00 PM	0.00	0.00	0
4:00 PM - 5:00 PM	0.15	0.15	142
5:00 PM - 6:00 PM	0.05	0.05	142
6:00 PM - 7:00 PM	0.13	0.13	12
7:00 PM - 8:00 PM	-0.06	0.06	6
After 8:00 PM	-0.26	0.26	25

Calculated Daily Total = 550 vpd
Desired Daily Total = 1,152 vpd
Size = 35 ksf
Maximum Peak Hour Volume = 96 vph
1.73
2.14

Time	Entering	Exiting	Total
6:00 AM - 7:00 AM	42	42	84
7:00 AM - 8:00 AM	24	26	50
8:00 AM - 9:00 AM	24	26	50
9:00 AM - 10:00 AM	56	56	111
10:00 AM - 11:00 AM	56	56	111
11:00 AM - 12:00 PM	29	29	58
12:00 PM - 1:00 PM	44	44	87
1:00 PM - 2:00 PM	24	24	49
2:00 PM - 3:00 PM	29	29	59
3:00 PM - 4:00 PM	41	41	82
4:00 PM - 5:00 PM	72	70	142
5:00 PM - 6:00 PM	72	70	142
6:00 PM - 7:00 PM	38	41	80
7:00 - 8:00 PM	13	14	27
After 8:00 PM	9	15	25
Total			1,156

vpd

Subsequent Iterations			
Normalized Differences	Total Hourly Volumes	Entering %	Exiting %
0.87	84	50%	50%
	50	48%	52%
	50	48%	52%
1.16	111	50%	50%
1.16	111	50%	50%
0.60	58	50%	50%
0.91	87	50%	50%
0.51	49	50%	50%
0.61	59	50%	50%
0.85	82	50%	50%
	142	51%	49%
	142	51%	49%
0.83	80	48%	52%
0.28	27	48%	52%
0.26	25	38%	62%

Calculated Daily Total = 1,156 vpd
Desired Daily Total = 1,152 vpd
Size = 35 ksf
Maximum Peak Hour Volume = 96 vph

Additional Left-Turn Movements (Enter)	Additional Left-Turn Movements (Exit)
25	17
14	10
14	10
33	22
33	22
17	12
26	17
15	10
18	12
24	16
43	28
43	28
23	17
8	6

Westborough YMCA Parking Survey

Date: Thursday 1/11/07

Time	Zone												Total Cars	% Peak	Δ Parking		
	1	2	3	HC	HC	4	5	6	7	8	9	10				11	12
6:00 AM															45	20%	0.20
7:00 AM	4	1	0	2	0	4	13	11	14	16	0	2	0	3	70	31%	0.11
8:00 AM	5	2	0	4	0	8	12	20	19	15	1	2	0	7	95	43%	0.11
9:00 AM	4	5	0	7	1	14	21	43	21	21	5	4	0	11	157	70%	0.28
10:00 AM	4	3	0	12	2	21	38	59	20	25	12	10	0	17	223	100%	0.30
11:00 AM	3	2	0	7	2	17	26	57	18	25	7	7	0	18	189	85%	-0.15
12:00 PM	3	0	0	5	4	9	18	47	19	25	4	3	0	9	146	65%	-0.19
1:00 PM	3	2	0	3	2	10	13	49	20	19	3	4	2	11	141	63%	-0.02
2:00 PM	5	1	0	1	0	9	10	38	17	13	2	4	0	8	108	48%	-0.15
3:00 PM	6	0	0	1	0	6	15	27	20	20	1	3	1	10	110	49%	0.01
4:00 PM	5	2	0	6	2	15	23	33	19	25	3	4	0	14	151	68%	0.18
5:00 PM	5	4	0	9	2	15	32	39	21	27	8	4	0	20	186	83%	0.16
6:00 PM	5	6	0	8	0	17	34	40	22	25	8	6	0	19	190	85%	0.02
7:00 PM	4	0	0	6	0	17	33	31	20	24	14	9	0	19	177	79%	-0.06
8:00 PM															112	50%	-0.29
Max															223		
Total # Spaces																	
6	18	2	11	8	22	24	54	90	22	27	22	16	10	30	340		

Framingham YMCA Parking Survey

Date: Tuesday 1/9/07

Time	Zone										Firelane	Total Cars	% Peak	Δ Parking	Average Parking Rate %	
	1	HC	Zone 1 Total	2	3	4	HC	Zone 4 Total	5	6					Framingham & Westborough % Peak	Δ Parking
6:00 AM	4	0	4	21	11	2	1	3	0	13		46	20%	0.20	20%	0.20
7:00 AM	15	0	15	25	5	5	1	6	10	11		59	25%	0.05	28%	0.08
8:00 AM	38	0	38	23	13	7	0	7	26	13		93	40%	0.15	41%	0.13
9:00 AM	43	3	46	23	24	16	0	16	35	26		165	71%	0.31	71%	0.29
10:00 AM	44	2	46	22	22	16	1	17	26	24		232	100%	0.29	100%	0.29
11:00 AM	35	1	36	24	15	14	3	17	14	11		220	95%	-0.05	90%	-0.10
12:00 PM	30	0	30	22	10	6	0	6	12	12		170	73%	-0.22	69%	-0.20
1:00 PM	27	0	27	20	12	7	0	7	9	9		128	55%	-0.18	59%	-0.10
2:00 PM	30	1	31	19	9	3	1	4	7	11		118	51%	-0.04	50%	-0.10
3:00 PM	26	1	27	25	13	5	1	6	24	13	3	116	50%	-0.01	50%	0.00
4:00 PM	24	1	25	23	15	3	0	3	21	14		144	62%	0.12	65%	0.15
5:00 PM	35	1	36	25	19	5	1	6	34	21	1	129	56%	-0.06	70%	0.05
6:00 PM	32	1	33	24	16	5	1	6	34	17	1	184	79%	0.24	82%	0.13
7:00 PM												170	73%	-0.06	76%	-0.06
8:00 PM												116	50%	-0.23	50%	-0.26
											Max	232				

Total # Spaces

44	7	51	25	29	16	4	20	36	37	Illegal	198
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□ Capacity Analysis

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2017 Baseline Condition
Weekday Morning Peak Hour

												
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	14	71	2302	21	68	11	1783	38	12	0	13	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	16	12	12	12	16	12	12	12	12
Storage Length (ft)		250		0		350		0	0		0	0
Storage Lanes		1		0		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.999				0.997				0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1691	3467	0	0	1774	3528	0	1805	0	1615	0
Flt Permitted		0.950				0.950			0.617			
Satd. Flow (perm)	0	1691	3467	0	0	1774	3528	0	1172	0	1615	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				4				136	
Link Speed (mph)			30				30			30		
Link Distance (ft)			500				1700			500		
Travel Time (s)			11.4				38.6			11.4		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	21%	4%	4%	5%	2%	0%	2%	3%	0%	0%	0%	6%
Adj. Flow (vph)	14	72	2349	21	69	11	1819	39	12	0	13	85
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	86	2370	0	0	80	1858	0	12	0	13	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	0.85	1.00	1.00	1.00	0.85	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1		1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left		Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20		20	20
Trailing Detector (ft)	0	0	0		0	0	0		0		0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0		0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20		20	20
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex		CI+Ex		CI+Ex	CI+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			CI+Ex				CI+Ex					
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0					
Turn Type	Prot	Prot	NA		Prot	Prot	NA		Perm		Perm	Perm
Protected Phases	5	5	2		1	1	6					

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2017 Baseline Condition
Weekday Morning Peak Hour

	↓	↙
Lane Group	SBT	SBR
Lane Configurations	↕	
Volume (vph)	3	53
Ideal Flow (vphpl)	1900	1900
Lane Width (ft)	12	12
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.949	
Flt Protected	0.971	
Satd. Flow (prot)	1666	0
Flt Permitted	0.971	
Satd. Flow (perm)	1666	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	20	
Link Speed (mph)	30	
Link Distance (ft)	500	
Travel Time (s)	11.4	
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	4%
Adj. Flow (vph)	3	54
Shared Lane Traffic (%)		
Lane Group Flow (vph)	142	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	
Detector Template	Thru	
Leading Detector (ft)	100	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	CI+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	CI+Ex	
Detector 2 Channel		
Detector 2 Extend (s)	0.0	
Turn Type	NA	
Protected Phases	4	

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2017 Baseline Condition

Weekday Morning Peak Hour

												
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Permitted Phases									8		8	4
Detector Phase	5	5	2		1	1	6		8		8	4
Switch Phase												
Minimum Initial (s)	6.0	6.0	15.0		6.0	6.0	15.0		6.0		6.0	6.0
Minimum Split (s)	12.0	12.0	21.0		12.0	12.0	21.0		12.0		12.0	12.0
Total Split (s)	19.0	19.0	91.0		13.0	13.0	85.0		16.0		16.0	16.0
Total Split (%)	15.8%	15.8%	75.8%		10.8%	10.8%	70.8%		13.3%		13.3%	13.3%
Maximum Green (s)	13.0	13.0	85.0		7.0	7.0	79.0		10.0		10.0	10.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0	4.0		3.0		3.0	3.0
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0	2.0		3.0		3.0	3.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0		0.0	
Total Lost Time (s)		6.0	6.0			6.0	6.0		6.0		6.0	
Lead/Lag	Lead	Lead	Lead		Lag	Lag	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0		3.0	3.0
Recall Mode	None	None	C-Max		None	None	Min		None		None	None
Act Effct Green (s)		10.8	85.0			7.0	83.8		10.0		10.0	
Actuated g/C Ratio		0.09	0.71			0.06	0.70		0.08		0.08	
v/c Ratio		0.57	0.96			0.78	0.75		0.12		0.05	
Control Delay		66.6	28.4			99.0	15.2		54.2		0.4	
Queue Delay		0.0	0.0			0.0	0.0		0.0		0.0	
Total Delay		66.6	28.4			99.0	15.2		54.2		0.4	
LOS		E	C			F	B		D		A	
Approach Delay			29.8				18.7					
Approach LOS			C				B					
90th %ile Green (s)	13.0	13.0	85.0		7.0	7.0	79.0		10.0		10.0	10.0
90th %ile Term Code	Max	Max	Coord		Max	Max	Coord		Hold		Hold	Max
70th %ile Green (s)	13.0	13.0	85.0		7.0	7.0	79.0		10.0		10.0	10.0
70th %ile Term Code	Max	Max	Coord		Max	Max	Coord		Hold		Hold	Max
50th %ile Green (s)	11.4	11.4	85.0		7.0	7.0	80.6		10.0		10.0	10.0
50th %ile Term Code	Gap	Gap	Coord		Max	Max	Coord		Hold		Hold	Max
30th %ile Green (s)	9.5	9.5	85.0		7.0	7.0	82.5		10.0		10.0	10.0
30th %ile Term Code	Gap	Gap	Coord		Max	Max	Coord		Hold		Hold	Max
10th %ile Green (s)	0.0	0.0	85.0		7.0	7.0	98.0		10.0		10.0	10.0
10th %ile Term Code	Skip	Skip	Coord		Max	Max	Coord		Hold		Hold	Max
Queue Length 50th (ft)		65	793			62	478		9		0	
Queue Length 95th (ft)		118	#1103			#150	604		29		0	
Internal Link Dist (ft)			420				1620			420		
Turn Bay Length (ft)		250				350						
Base Capacity (vph)		183	2456			103	2465		97		259	
Starvation Cap Reductn		0	0			0	0		0		0	
Spillback Cap Reductn		0	0			0	0		0		0	
Storage Cap Reductn		0	0			0	0		0		0	
Reduced v/c Ratio		0.47	0.96			0.78	0.75		0.12		0.05	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2017 Baseline Condition
Weekday Morning Peak Hour

	↓	↙
Lane Group	SBT	SBR
Permitted Phases		
Detector Phase	4	
Switch Phase		
Minimum Initial (s)	6.0	
Minimum Split (s)	12.0	
Total Split (s)	16.0	
Total Split (%)	13.3%	
Maximum Green (s)	10.0	
Yellow Time (s)	3.0	
All-Red Time (s)	3.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	6.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Act Effct Green (s)	10.0	
Actuated g/C Ratio	0.08	
v/c Ratio	0.90	
Control Delay	97.5	
Queue Delay	0.0	
Total Delay	97.5	
LOS	F	
Approach Delay	97.5	
Approach LOS	F	
90th %ile Green (s)	10.0	
90th %ile Term Code	Max	
70th %ile Green (s)	10.0	
70th %ile Term Code	Max	
50th %ile Green (s)	10.0	
50th %ile Term Code	Max	
30th %ile Green (s)	10.0	
30th %ile Term Code	Max	
10th %ile Green (s)	10.0	
10th %ile Term Code	Max	
Queue Length 50th (ft)	95	
Queue Length 95th (ft)	#221	
Internal Link Dist (ft)	420	
Turn Bay Length (ft)		
Base Capacity (vph)	157	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.90	
Intersection Summary		

Lanes, Volumes, Timings

1: CVS Driveway/Overbrook Drive & Route 9

2017 Baseline Condition
Weekday Morning Peak Hour

Offset: 69 (58%), Referenced to phase 2:EBT, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.96

Intersection Signal Delay: 27.2

Intersection LOS: C

Intersection Capacity Utilization 98.6%

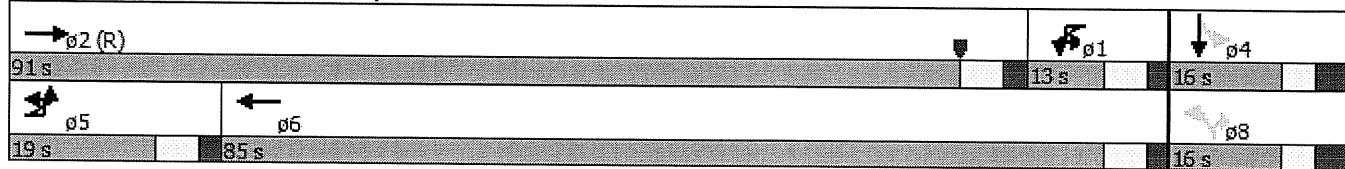
ICU Level of Service F

Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

Splits and Phases: 1: CVS Driveway/Overbrook Drive & Route 9



HCM 2010 TWSC
2: Weston Road & Route 9 EB Ramp

2017 Baseline Condition (Calibrated)
Weekday Morning Peak Hour

Intersection

Int Delay, s/veh 4.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	136	139	62	824	520	212
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	4	4	7	2	2	2
Mvmt Flow	146	149	67	886	559	228

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	1692	673	787
Stage 1	673	-	-
Stage 2	1019	-	-
Critical Hdwy	4	3.5	4.17
Critical Hdwy Stg 1	3.5	-	-
Critical Hdwy Stg 2	3.5	-	-
Follow-up Hdwy	3.536	3.336	2.263
Pot Cap-1 Maneuver	319	754	810
Stage 1	723	-	-
Stage 2	598	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	293	754	810
Mov Cap-2 Maneuver	293	-	-
Stage 1	723	-	-
Stage 2	549	-	-

Approach	EB	NB	SB
HCM Control Delay, s	30.8	0.7	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	810	-	424	-	-
HCM Lane V/C Ratio	0.082	-	0.697	-	-
HCM Control Delay (s)	9.8	-	30.8	-	-
HCM Lane LOS	A	-	D	-	-
HCM 95th %tile Q(veh)	0.3	-	5.2	-	-

HCM 2010 TWSC
3: Weston Road & Rout 9 WB Ramp/Cleveland Road

2017 Baseline Condition
Weekday Morning Peak Hour

Intersection

Int Delay, s/veh 4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	19	2	93	46	1	93	0	755	196	5	578	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	125	-	-	-	-	25	-	-	60	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	0	7	0	0	3	0	2	4	0	1	4
Mvmt Flow	19	2	95	47	1	95	0	770	200	5	590	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1371	1370	590	1418	1370	770	590	0	0	770	0	0
Stage 1	600	600	-	770	770	-	-	-	-	-	-	-
Stage 2	771	770	-	648	600	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.27	7.1	6.5	6.23	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.363	3.5	4	3.327	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	125	148	498	116	148	399	995	-	-	854	-	-
Stage 1	491	493	-	396	413	-	-	-	-	-	-	-
Stage 2	396	413	-	462	493	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	94	147	498	92	147	399	995	-	-	854	-	-
Mov Cap-2 Maneuver	94	147	-	92	147	-	-	-	-	-	-	-
Stage 1	491	489	-	396	413	-	-	-	-	-	-	-
Stage 2	301	413	-	369	489	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	20.9	37.7	0	0.1
HCM LOS	C	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	995	-	-	94	474	93	399	854	-	-
HCM Lane V/C Ratio	-	-	-	0.206	0.205	0.516	0.238	0.006	-	-
HCM Control Delay (s)	0	-	-	53	14.5	79.2	16.8	9.2	0	-
HCM Lane LOS	A	-	-	F	B	F	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.7	0.8	2.3	0.9	0	-	-

HCM 2010 TWSC
5: Site Driveway/Lexington Road & Route 9

2017 Baseline Condition
Weekday Morning Peak Hour

Intersection

Int Delay, s/veh 4.8

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	2451	0	45	0	1877	3	0	0	0	0	0	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	250	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	3	0	0	0	2	0	0	0	0	0	0	0
Mvmt Flow	0	2527	0	46	0	1935	3	0	0	0	0	0	15

Major/Minor	Major1		Major2				Minor1			Minor2			
Conflicting Flow All	1938	0	0	2527	2527	0	0	3587	4558	1263	3292	4556	969
Stage 1	-	-	-	-	-	-	-	2527	2527	-	2029	2029	-
Stage 2	-	-	-	-	-	-	-	1060	2031	-	1263	2527	-
Critical Hdwy	4.1	-	-	6.4	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.5	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	307	-	-	~ 34	181	-	-	2	1	164	4	1	257
Stage 1	-	-	-	-	-	-	-	29	57	-	60	102	-
Stage 2	-	-	-	-	-	-	-	243	102	-	183	57	-
Platoon blocked, %		-	-			-	-						
Mov Cap-1 Maneuver	307	-	-	~ 34	34	-	-	2	1	164	4	1	257
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	2	1	-	4	1	-
Stage 1	-	-	-	-	-	-	-	29	57	-	60	102	-
Stage 2	-	-	-	-	-	-	-	228	102	-	183	57	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	10.8	0	19.9
HCM LOS			A	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	307	-	-	34	-	-	257
HCM Lane V/C Ratio	-	-	-	-	1.364	-	-	0.06
HCM Control Delay (s)	0	0	-	-	460.7	-	-	19.9
HCM Lane LOS	A	A	-	-	F	-	-	C
HCM 95th %tile Q(veh)	-	0	-	-	5	-	-	0.2

Notes

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

HCM 2010 TWSC
6: Site Driveway & Route 9

2017 Baseline Condition
Weekday Morning Peak Hour

Intersection

Int Delay, s/veh 0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	2496	0	0	1925	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	0	0	2	0	0
Mvmt Flow	2713	0	0	2092	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	3759
Stage 1	-	-	2713
Stage 2	-	-	1046
Critical Hdwy	-	4.1	6.8
Critical Hdwy Stg 1	-	-	5.8
Critical Hdwy Stg 2	-	-	5.8
Follow-up Hdwy	-	2.2	3.5
Pot Cap-1 Maneuver	-	153	3
Stage 1	-	-	37
Stage 2	-	-	304
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	153	3
Mov Cap-2 Maneuver	-	-	3
Stage 1	-	-	37
Stage 2	-	-	304

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	153	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2024 No-Build Condition

Weekday Morning Peak Hour

												
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	15	76	2477	23	73	12	1974	41	13	0	14	89
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	16	12	12	12	16	12	12	12	12
Storage Length (ft)		250		0		350		0	0		0	0
Storage Lanes		1		0		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.999				0.997				0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1691	3467	0	0	1774	3528	0	1805	0	1615	0
Flt Permitted		0.950				0.950			0.609			
Satd. Flow (perm)	0	1691	3467	0	0	1774	3528	0	1157	0	1615	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				4				136	
Link Speed (mph)			30				30			30		
Link Distance (ft)			500				1700			500		
Travel Time (s)			11.4				38.6			11.4		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	21%	4%	4%	5%	2%	0%	2%	3%	0%	0%	0%	6%
Adj. Flow (vph)	15	78	2528	23	74	12	2014	42	13	0	14	91
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	93	2551	0	0	86	2056	0	13	0	14	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	0.85	1.00	1.00	1.00	0.85	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1		1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left		Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20		20	20
Trailing Detector (ft)	0	0	0		0	0	0		0		0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0		0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20		20	20
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex		CI+Ex		CI+Ex	CI+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			CI+Ex				CI+Ex					
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0					
Turn Type	Prot	Prot	NA		Prot	Prot	NA		Perm		Perm	Perm
Protected Phases	5	5	2		1	1	6					

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2024 No-Build Condition
Weekday Morning Peak Hour

	↓	↘
Lane Group	SBT	SBR
Lane Configurations	↕	
Volume (vph)	3	57
Ideal Flow (vphpl)	1900	1900
Lane Width (ft)	12	12
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.948	
Flt Protected	0.971	
Satd. Flow (prot)	1664	0
Flt Permitted	0.971	
Satd. Flow (perm)	1664	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	20	
Link Speed (mph)	30	
Link Distance (ft)	500	
Travel Time (s)	11.4	
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	4%
Adj. Flow (vph)	3	58
Shared Lane Traffic (%)		
Lane Group Flow (vph)	152	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	
Detector Template	Thru	
Leading Detector (ft)	100	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	CI+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	CI+Ex	
Detector 2 Channel		
Detector 2 Extend (s)	0.0	
Turn Type	NA	
Protected Phases	4	

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2024 No-Build Condition
Weekday Morning Peak Hour

												
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Permitted Phases									8		8	4
Detector Phase	5	5	2		1	1	6		8		8	4
Switch Phase												
Minimum Initial (s)	6.0	6.0	15.0		6.0	6.0	15.0		6.0		6.0	6.0
Minimum Split (s)	12.0	12.0	21.0		12.0	12.0	21.0		12.0		12.0	12.0
Total Split (s)	19.0	19.0	91.0		13.0	13.0	85.0		16.0		16.0	16.0
Total Split (%)	15.8%	15.8%	75.8%		10.8%	10.8%	70.8%		13.3%		13.3%	13.3%
Maximum Green (s)	13.0	13.0	85.0		7.0	7.0	79.0		10.0		10.0	10.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0	4.0		3.0		3.0	3.0
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0	2.0		3.0		3.0	3.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0		0.0	
Total Lost Time (s)		6.0	6.0			6.0	6.0		6.0		6.0	
Lead/Lag	Lead	Lead	Lead		Lag	Lag	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0		3.0	3.0
Recall Mode	None	None	C-Max		None	None	Min		None		None	None
Act Effct Green (s)		11.0	85.0			7.0	81.0		10.0		10.0	
Actuated g/C Ratio		0.09	0.71			0.06	0.68		0.08		0.08	
v/c Ratio		0.60	1.04			0.83	0.86		0.14		0.05	
Control Delay		68.2	47.8			108.5	20.6		54.6		0.4	
Queue Delay		0.0	0.0			0.0	0.0		0.0		0.0	
Total Delay		68.2	47.8			108.5	20.6		54.6		0.4	
LOS		E	D			F	C		D		A	
Approach Delay			48.5				24.2					
Approach LOS			D				C					
90th %ile Green (s)	13.0	13.0	85.0		7.0	7.0	79.0		10.0		10.0	10.0
90th %ile Term Code	Max	Max	Coord		Max	Max	Coord		Hold		Hold	Max
70th %ile Green (s)	13.0	13.0	85.0		7.0	7.0	79.0		10.0		10.0	10.0
70th %ile Term Code	Max	Max	Coord		Max	Max	Coord		Hold		Hold	Max
50th %ile Green (s)	11.9	11.9	85.0		7.0	7.0	80.1		10.0		10.0	10.0
50th %ile Term Code	Gap	Gap	Coord		Max	Max	Coord		Hold		Hold	Max
30th %ile Green (s)	10.0	10.0	85.0		7.0	7.0	82.0		10.0		10.0	10.0
30th %ile Term Code	Gap	Gap	Coord		Max	Max	Coord		Hold		Hold	Max
10th %ile Green (s)	7.2	7.2	85.0		7.0	7.0	84.8		10.0		10.0	10.0
10th %ile Term Code	Gap	Gap	Coord		Max	Max	Coord		Hold		Hold	Max
Queue Length 50th (ft)		70	~1123			67	610		10		0	
Queue Length 95th (ft)		126	#1256			#163	764		31		0	
Internal Link Dist (ft)			420				1620			420		
Turn Bay Length (ft)		250				350						
Base Capacity (vph)		183	2456			103	2382		96		259	
Starvation Cap Reductn		0	0			0	0		0		0	
Spillback Cap Reductn		0	0			0	0		0		0	
Storage Cap Reductn		0	0			0	0		0		0	
Reduced v/c Ratio		0.51	1.04			0.83	0.86		0.14		0.05	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2024 No-Build Condition
Weekday Morning Peak Hour

	↓	↙
Lane Group	SBT	SBR
Permitted Phases		
Detector Phase	4	
Switch Phase		
Minimum Initial (s)	6.0	
Minimum Split (s)	12.0	
Total Split (s)	16.0	
Total Split (%)	13.3%	
Maximum Green (s)	10.0	
Yellow Time (s)	3.0	
All-Red Time (s)	3.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	6.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Act Effct Green (s)	10.0	
Actuated g/C Ratio	0.08	
v/c Ratio	0.97	
Control Delay	112.0	
Queue Delay	0.0	
Total Delay	112.0	
LOS	F	
Approach Delay	112.0	
Approach LOS	F	
90th %ile Green (s)	10.0	
90th %ile Term Code	Max	
70th %ile Green (s)	10.0	
70th %ile Term Code	Max	
50th %ile Green (s)	10.0	
50th %ile Term Code	Max	
30th %ile Green (s)	10.0	
30th %ile Term Code	Max	
10th %ile Green (s)	10.0	
10th %ile Term Code	Max	
Queue Length 50th (ft)	104	
Queue Length 95th (ft)	#242	
Internal Link Dist (ft)	420	
Turn Bay Length (ft)		
Base Capacity (vph)	157	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.97	
Intersection Summary		

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

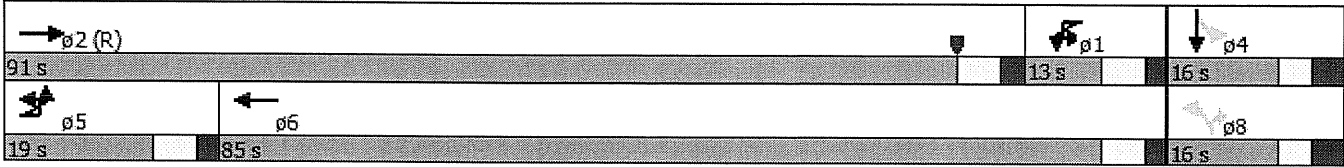
2024 No-Build Condition
Weekday Morning Peak Hour

Offset: 69 (58%), Referenced to phase 2:EBT, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.04
Intersection Signal Delay: 39.8
Intersection Capacity Utilization 104.2%
Analysis Period (min) 15
Intersection LOS: D
ICU Level of Service G

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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

Splits and Phases: 1: CVS Driveway/Overbrook Drive & Route 9



HCM 2010 TWSC
2: Weston Road & Route 9 EB Ramp

2024 No-Build Condition (Calibrated)
Weekday Morning Peak Hour

Intersection

Int Delay, s/veh 6.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	146	149	66	883	558	227
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	4	4	7	2	2	2
Mvmt Flow	157	160	71	949	600	244

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1813	722	844	0	-	0
Stage 1	722	-	-	-	-	-
Stage 2	1091	-	-	-	-	-
Critical Hdwy	4	3.5	4.17	-	-	-
Critical Hdwy Stg 1	3.5	-	-	-	-	-
Critical Hdwy Stg 2	3.5	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.263	-	-	-
Pot Cap-1 Maneuver	291	734	771	-	-	-
Stage 1	704	-	-	-	-	-
Stage 2	574	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	264	734	771	-	-	-
Mov Cap-2 Maneuver	264	-	-	-	-	-
Stage 1	704	-	-	-	-	-
Stage 2	521	-	-	-	-	-

Approach	EB		NB		SB
HCM Control Delay, s	43.9		0.7		0
HCM LOS	E				

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	771	-	390	-	-
HCM Lane V/C Ratio	0.092	-	0.813	-	-
HCM Control Delay (s)	10.1	-	43.9	-	-
HCM Lane LOS	B	-	E	-	-
HCM 95th %tile Q(veh)	0.3	-	7.3	-	-

HCM 2010 TWSC
3: Weston Road & Route 9 WB Ramp/Cleveland Road

2024 No-Build Condition
Weekday Morning Peak Hour

Intersection

Int Delay, s/veh 5.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	20	2	100	49	1	100	0	810	210	5	620	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	125	-	-	-	-	25	-	-	60	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	0	7	0	0	3	0	2	4	0	1	4
Mvmt Flow	20	2	102	50	1	102	0	827	214	5	633	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1470	1470	633	1522	1470	827	633	0	0	827	0	0
Stage 1	643	643	-	827	827	-	-	-	-	-	-	-
Stage 2	827	827	-	695	643	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.27	7.1	6.5	6.23	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.363	3.5	4	3.327	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	106	129	471	98	129	370	960	-	-	813	-	-
Stage 1	465	472	-	369	389	-	-	-	-	-	-	-
Stage 2	369	389	-	436	472	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	76	128	471	75	128	370	960	-	-	813	-	-
Mov Cap-2 Maneuver	76	128	-	75	128	-	-	-	-	-	-	-
Stage 1	465	468	-	369	389	-	-	-	-	-	-	-
Stage 2	267	389	-	337	468	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	24.3	52	0	0.1
HCM LOS	C	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	960	-	-	76	447	76	370	813	-	-
HCM Lane V/C Ratio	-	-	-	0.269	0.233	0.671	0.276	0.006	-	-
HCM Control Delay (s)	0	-	-	68.9	15.5	119.1	18.4	9.5	0	-
HCM Lane LOS	A	-	-	F	C	F	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1	0.9	3.1	1.1	0	-	-

HCM 2010 TWSC
5: Site Driveway/Lexington Road & Route 9

2024 No-Build Condition
Weekday Morning Peak Hour

Intersection

Int Delay, s/veh 8

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	2637	0	48	0	2075	3	0	0	0	0	0	16
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	250	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	3	0	0	0	2	0	0	0	0	0	0	0
Mvmt Flow	0	2719	0	49	0	2139	3	0	0	0	0	0	16

Major/Minor	Major1		Major2					Minor1			Minor2		
Conflicting Flow All	2142	0	0	2719	2719	0	0	3888	4960	1359	3599	4959	1071
Stage 1	-	-	-	-	-	-	-	2719	2719	-	2240	2240	-
Stage 2	-	-	-	-	-	-	-	1169	2241	-	1359	2719	-
Critical Hdwy	4.1	-	-	6.4	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.5	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	256	-	-	~ 25	152	-	-	1	1	141	2	1	220
Stage 1	-	-	-	-	-	-	-	22	45	-	44	80	-
Stage 2	-	-	-	-	-	-	-	209	80	-	159	45	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	256	-	-	~ 25	25	-	-	1	1	141	2	1	220
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	1	1	-	2	1	-
Stage 1	-	-	-	-	-	-	-	22	45	-	44	80	-
Stage 2	-	-	-	-	-	-	-	193	80	-	159	45	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	17.8	0	22.7
HCM LOS			A	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	256	-	-	25	-	-	220
HCM Lane V/C Ratio	-	-	-	-	1.979	-	-	0.075
HCM Control Delay (s)	0	0	-	-	\$ 789.9	-	-	22.7
HCM Lane LOS	A	A	-	-	F	-	-	C
HCM 95th %tile Q(veh)	-	0	-	-	6.1	-	-	0.2

Notes

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

HCM 2010 TWSC
6: Site Driveway & Route 9

2024 No-Build Condition
Weekday Morning Peak Hour

Intersection

Int Delay, s/veh 0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	2685	0	0	2126	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	0	0	2	0	0
Mvmt Flow	2918	0	0	2311	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	4073
Stage 1	-	-	2918
Stage 2	-	-	1155
Critical Hdwy	-	4.1	6.8
Critical Hdwy Stg 1	-	-	5.8
Critical Hdwy Stg 2	-	-	5.8
Follow-up Hdwy	-	2.2	3.5
Pot Cap-1 Maneuver	-	126	2
Stage 1	-	-	28
Stage 2	-	-	266
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	126	2
Mov Cap-2 Maneuver	-	-	2
Stage 1	-	-	28
Stage 2	-	-	266

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	126	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2024 Build Condition
Weekday Morning Peak Hour

												
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	15	76	2495	23	73	12	2036	41	13	0	14	89
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	16	12	12	12	16	12	12	12	12
Storage Length (ft)		250		0		350		0	0		0	0
Storage Lanes		1		0		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.999				0.997				0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1691	3467	0	0	1774	3528	0	1805	0	1615	0
Flt Permitted		0.950				0.950			0.609			
Satd. Flow (perm)	0	1691	3467	0	0	1774	3528	0	1157	0	1615	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				3				136	
Link Speed (mph)			30				30			30		
Link Distance (ft)			500				1700			500		
Travel Time (s)			11.4				38.6			11.4		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	21%	4%	4%	5%	2%	0%	2%	3%	0%	0%	0%	6%
Adj. Flow (vph)	15	78	2546	23	74	12	2078	42	13	0	14	91
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	93	2569	0	0	86	2120	0	13	0	14	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	0.85	1.00	1.00	1.00	0.85	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1		1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left		Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20		20	20
Trailing Detector (ft)	0	0	0		0	0	0		0		0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0		0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20		20	20
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex		CI+Ex		CI+Ex	CI+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			CI+Ex				CI+Ex					
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0					
Turn Type	Prot	Prot	NA		Prot	Prot	NA		Perm		Perm	Perm
Protected Phases	5	5	2		1	1	6					

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2024 Build Condition
Weekday Morning Peak Hour

	↓	↙
Lane Group	SBT	SBR
Lane Configurations	↕	
Volume (vph)	3	57
Ideal Flow (vphpl)	1900	1900
Lane Width (ft)	12	12
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.948	
Flt Protected	0.971	
Satd. Flow (prot)	1664	0
Flt Permitted	0.971	
Satd. Flow (perm)	1664	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	20	
Link Speed (mph)	30	
Link Distance (ft)	500	
Travel Time (s)	11.4	
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	4%
Adj. Flow (vph)	3	58
Shared Lane Traffic (%)		
Lane Group Flow (vph)	152	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	
Detector Template	Thru	
Leading Detector (ft)	100	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	CI+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	CI+Ex	
Detector 2 Channel		
Detector 2 Extend (s)	0.0	
Turn Type	NA	
Protected Phases	4	

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2024 Build Condition
Weekday Morning Peak Hour

												
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Permitted Phases									8		8	4
Detector Phase	5	5	2		1	1	6		8		8	4
Switch Phase												
Minimum Initial (s)	6.0	6.0	15.0		6.0	6.0	15.0		6.0		6.0	6.0
Minimum Split (s)	12.0	12.0	21.0		12.0	12.0	21.0		12.0		12.0	12.0
Total Split (s)	19.0	19.0	91.0		13.0	13.0	85.0		16.0		16.0	16.0
Total Split (%)	15.8%	15.8%	75.8%		10.8%	10.8%	70.8%		13.3%		13.3%	13.3%
Maximum Green (s)	13.0	13.0	85.0		7.0	7.0	79.0		10.0		10.0	10.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0	4.0		3.0		3.0	3.0
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0	2.0		3.0		3.0	3.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0		0.0	
Total Lost Time (s)		6.0	6.0			6.0	6.0		6.0		6.0	
Lead/Lag	Lead	Lead	Lead		Lag	Lag	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0		3.0	3.0
Recall Mode	None	None	C-Max		None	None	Min		None		None	None
Act Effct Green (s)		11.0	85.0			7.0	81.0		10.0		10.0	
Actuated g/C Ratio		0.09	0.71			0.06	0.68		0.08		0.08	
v/c Ratio		0.60	1.05			0.83	0.89		0.14		0.05	
Control Delay		68.2	50.3			95.1	19.2		54.6		0.4	
Queue Delay		0.0	0.0			0.0	0.0		0.0		0.0	
Total Delay		68.2	50.3			95.1	19.2		54.6		0.4	
LOS		E	D			F	B		D		A	
Approach Delay			50.9				22.2					
Approach LOS			D				C					
90th %ile Green (s)	13.0	13.0	85.0		7.0	7.0	79.0		10.0		10.0	10.0
90th %ile Term Code	Max	Max	Coord		Max	Max	Coord		Hold		Hold	Max
70th %ile Green (s)	13.0	13.0	85.0		7.0	7.0	79.0		10.0		10.0	10.0
70th %ile Term Code	Max	Max	Coord		Max	Max	Coord		Hold		Hold	Max
50th %ile Green (s)	11.9	11.9	85.0		7.0	7.0	80.1		10.0		10.0	10.0
50th %ile Term Code	Gap	Gap	Coord		Max	Max	Coord		Hold		Hold	Max
30th %ile Green (s)	10.0	10.0	85.0		7.0	7.0	82.0		10.0		10.0	10.0
30th %ile Term Code	Gap	Gap	Coord		Max	Max	Coord		Hold		Hold	Max
10th %ile Green (s)	7.2	7.2	85.0		7.0	7.0	84.8		10.0		10.0	10.0
10th %ile Term Code	Gap	Gap	Coord		Max	Max	Coord		Hold		Hold	Max
Queue Length 50th (ft)		70	~1138			67	487		10		0	
Queue Length 95th (ft)		126	#1271			m#123	570		31		0	
Internal Link Dist (ft)			420				1620			420		
Turn Bay Length (ft)		250				350						
Base Capacity (vph)		183	2456			103	2381		96		259	
Starvation Cap Reductn		0	0			0	0		0		0	
Spillback Cap Reductn		0	0			0	0		0		0	
Storage Cap Reductn		0	0			0	0		0		0	
Reduced v/c Ratio		0.51	1.05			0.83	0.89		0.14		0.05	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2024 Build Condition
Weekday Morning Peak Hour

	↓	↙
Lane Group	SBT	SBR
Permitted Phases		
Detector Phase	4	
Switch Phase		
Minimum Initial (s)	6.0	
Minimum Split (s)	12.0	
Total Split (s)	16.0	
Total Split (%)	13.3%	
Maximum Green (s)	10.0	
Yellow Time (s)	3.0	
All-Red Time (s)	3.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	6.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Act Effct Green (s)	10.0	
Actuated g/C Ratio	0.08	
v/c Ratio	0.97	
Control Delay	112.0	
Queue Delay	0.0	
Total Delay	112.0	
LOS	F	
Approach Delay	112.0	
Approach LOS	F	
90th %ile Green (s)	10.0	
90th %ile Term Code	Max	
70th %ile Green (s)	10.0	
70th %ile Term Code	Max	
50th %ile Green (s)	10.0	
50th %ile Term Code	Max	
30th %ile Green (s)	10.0	
30th %ile Term Code	Max	
10th %ile Green (s)	10.0	
10th %ile Term Code	Max	
Queue Length 50th (ft)	104	
Queue Length 95th (ft)	#242	
Internal Link Dist (ft)	420	
Turn Bay Length (ft)		
Base Capacity (vph)	157	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.97	
Intersection Summary		

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2024 Build Condition
Weekday Morning Peak Hour

Offset: 69 (58%), Referenced to phase 2:EBT, Start of Yellow
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.05
Intersection Signal Delay: 40.1
Intersection Capacity Utilization 104.2%
Analysis Period (min) 15
Intersection LOS: D
ICU Level of Service G

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: CVS Driveway/Overbrook Drive & Route 9

 Ø2 (R)		 Ø1	 Ø4
91 s		13 s	16 s
 Ø5	 Ø6	 Ø3	
19 s	85 s	16 s	

HCM 2010 TWSC
2: Weston Road & Route 9 EB Ramp

2024 Build Condition (Calibrated)
Weekday Morning Peak Hour

Intersection

Int Delay, s/veh 7.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	146	165	64	888	558	227
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	4	4	7	2	2	2
Mvmt Flow	157	177	69	955	600	244

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1814	722	844	0	-	0
Stage 1	722	-	-	-	-	-
Stage 2	1092	-	-	-	-	-
Critical Hdwy	4	3.5	4.17	-	-	-
Critical Hdwy Stg 1	3.5	-	-	-	-	-
Critical Hdwy Stg 2	3.5	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.263	-	-	-
Pot Cap-1 Maneuver	291	734	771	-	-	-
Stage 1	704	-	-	-	-	-
Stage 2	574	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	265	734	771	-	-	-
Mov Cap-2 Maneuver	265	-	-	-	-	-
Stage 1	704	-	-	-	-	-
Stage 2	523	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	45.6	0.7	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	771	-	401	-	-
HCM Lane V/C Ratio	0.089	-	0.834	-	-
HCM Control Delay (s)	10.1	-	45.6	-	-
HCM Lane LOS	B	-	E	-	-
HCM 95th %tile Q(veh)	0.3	-	7.8	-	-

HCM 2010 TWSC
3: Weston Road & Route 9 EB Ramp/Cleveland Road

2024 Build Condition
Weekday Morning Peak Hour

Intersection

Int Delay, s/veh 5.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	20	2	100	49	1	100	0	818	207	5	620	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	125	-	-	-	-	25	-	-	60	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	0	7	0	0	3	0	2	4	0	1	4
Mvmt Flow	20	2	102	50	1	102	0	835	211	5	633	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1478	1478	633	1530	1478	835	633	0	0	835	0	0
Stage 1	643	643	-	835	835	-	-	-	-	-	-	-
Stage 2	835	835	-	695	643	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.27	7.1	6.5	6.23	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.363	3.5	4	3.327	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	105	127	471	97	127	366	960	-	-	807	-	-
Stage 1	465	472	-	365	386	-	-	-	-	-	-	-
Stage 2	365	386	-	436	472	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	75	126	471	74	126	366	960	-	-	807	-	-
Mov Cap-2 Maneuver	75	126	-	74	126	-	-	-	-	-	-	-
Stage 1	465	467	-	365	386	-	-	-	-	-	-	-
Stage 2	263	386	-	337	467	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	24.5	53.1	0	0.1
HCM LOS	C	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	960	-	-	75	447	75	366	807	-	-
HCM Lane V/C Ratio	-	-	-	0.272	0.233	0.68	0.279	0.006	-	-
HCM Control Delay (s)	0	-	-	70.1	15.5	122	18.6	9.5	0	-
HCM Lane LOS	A	-	-	F	C	F	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1	0.9	3.1	1.1	0	-	-

Lanes, Volumes, Timings
5: Site Driveway/Lexington Road & Route 9

2024 Build Condition
Weekday Morning Peak Hour

												
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	0	2637	18	48	27	2067	3	70	0	80	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	16	12	12	15	15	12	12	12	12	12
Storage Length (ft)	200		0		250		0	0		0	0	
Storage Lanes	0		0		1		0	1		1	0	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Frt		0.999								0.850		
Flt Protected					0.950			0.950				
Satd. Flow (prot)	0	3969	0	0	1805	3893	0	1805	0	1615	0	0
Flt Permitted					0.950			0.950				
Satd. Flow (perm)	0	3969	0	0	1805	3893	0	1805	0	1615	0	0
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		1								82		
Link Speed (mph)		30				30			30			30
Link Distance (ft)		1700				400			250			250
Travel Time (s)		38.6				9.1			5.7			5.7
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	3%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	2719	19	49	28	2131	3	72	0	82	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2738	0	0	77	2134	0	72	0	82	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			12			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	0.85	0.85	1.00	1.00	0.88	0.88	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors		2		1	1	2		1		1		
Detector Template		Thru		Left	Left	Thru		Left		Right		
Leading Detector (ft)		100		20	20	100		20		20		
Trailing Detector (ft)		0		0	0	0		0		0		
Detector 1 Position(ft)		0		0	0	0		0		0		
Detector 1 Size(ft)		6		20	20	6		20		20		
Detector 1 Type		CI+Ex		CI+Ex	CI+Ex	CI+Ex		CI+Ex		CI+Ex		
Detector 1 Channel												
Detector 1 Extend (s)		0.0		0.0	0.0	0.0		0.0		0.0		
Detector 1 Queue (s)		0.0		0.0	0.0	0.0		0.0		0.0		
Detector 1 Delay (s)		0.0		0.0	0.0	0.0		0.0		0.0		
Detector 2 Position(ft)		94				94						
Detector 2 Size(ft)		6				6						
Detector 2 Type		CI+Ex				CI+Ex						
Detector 2 Channel												
Detector 2 Extend (s)		0.0				0.0						
Turn Type		NA		Prot	Prot	NA		Perm		Perm		
Protected Phases		2		1	1	6						

Lanes, Volumes, Timings
5: Site Driveway/Lexington Road & Route 9

2024 Build Condition
Weekday Morning Peak Hour

Lane Group	SBR
Lane Configurations	↗
Volume (vph)	16
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Storage Length (ft)	0
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Frt	0.865
Flt Protected	
Satd. Flow (prot)	1644
Flt Permitted	
Satd. Flow (perm)	1644
Right Turn on Red	Yes
Satd. Flow (RTOR)	82
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.97
Heavy Vehicles (%)	0%
Adj. Flow (vph)	16
Shared Lane Traffic (%)	
Lane Group Flow (vph)	16
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	1
Detector Template	Right
Leading Detector (ft)	20
Trailing Detector (ft)	0
Detector 1 Position(ft)	0
Detector 1 Size(ft)	20
Detector 1 Type	Cl+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	Perm
Protected Phases	

Lanes, Volumes, Timings
5: Site Driveway/Lexington Road & Route 9

2024 Build Condition
Weekday Morning Peak Hour

												
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Permitted Phases								8		8		
Detector Phase		2		1	1	6		8		8		
Switch Phase												
Minimum Initial (s)		15.0		4.0	4.0	15.0		6.0		6.0		
Minimum Split (s)		21.0		10.0	10.0	21.0		12.0		12.0		
Total Split (s)		84.0		19.0	19.0	103.0		17.0		17.0		
Total Split (%)		70.0%		15.8%	15.8%	85.8%		14.2%		14.2%		
Maximum Green (s)		78.0		13.0	13.0	97.0		11.0		11.0		
Yellow Time (s)		4.0		4.0	4.0	4.0		4.0		4.0		
All-Red Time (s)		2.0		2.0	2.0	2.0		2.0		2.0		
Lost Time Adjust (s)		0.0			0.0	0.0		0.0		0.0		
Total Lost Time (s)		6.0			6.0	6.0		6.0		6.0		
Lead/Lag		Lag		Lead	Lead							
Lead-Lag Optimize?		Yes		Yes	Yes							
Vehicle Extension (s)		3.0		3.0	3.0	3.0		3.0		3.0		
Recall Mode		C-Max		None	None	Min		None		None		
Act Effct Green (s)		85.0			10.1	98.6		9.4		9.4		
Actuated g/C Ratio		0.71			0.08	0.82		0.08		0.08		
v/c Ratio		0.97			0.51	0.67		0.51		0.41		
Control Delay		9.9			63.5	5.6		65.6		17.2		
Queue Delay		0.0			0.0	0.0		0.0		0.0		
Total Delay		9.9			63.5	5.6		65.6		17.2		
LOS		A			E	A		E		B		
Approach Delay		9.9				7.6						
Approach LOS		A				A						
90th %ile Green (s)		78.0		13.0	13.0	97.0		11.0		11.0		
90th %ile Term Code		Coord		Max	Max	Coord		Max		Max		
70th %ile Green (s)		78.9		12.1	12.1	97.0		11.0		11.0		
70th %ile Term Code		Coord		Gap	Gap	Coord		Max		Max		
50th %ile Green (s)		81.5		10.4	10.4	97.9		10.1		10.1		
50th %ile Term Code		Coord		Gap	Gap	Coord		Gap		Gap		
30th %ile Green (s)		84.6		8.8	8.8	99.4		8.6		8.6		
30th %ile Term Code		Coord		Gap	Gap	Coord		Gap		Gap		
10th %ile Green (s)		101.8		0.0	0.0	101.8		6.2		6.2		
10th %ile Term Code		Coord		Skip	Skip	Coord		Gap		Gap		
Queue Length 50th (ft)		~703			58	278		54		0		
Queue Length 95th (ft)		m#894			106	348		103		49		
Internal Link Dist (ft)		1620				320			170			170
Turn Bay Length (ft)					250							
Base Capacity (vph)		2810			195	3199		165		222		
Starvation Cap Reductn		0			0	0		0		0		
Spillback Cap Reductn		0			0	0		0		0		
Storage Cap Reductn		0			0	0		0		0		
Reduced v/c Ratio		0.97			0.39	0.67		0.44		0.37		

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Lanes, Volumes, Timings
5: Site Driveway/Lexington Road & Route 9

2024 Build Condition
Weekday Morning Peak Hour

Lane Group SBR

Permitted Phases 4

Detector Phase 4

Switch Phase

Minimum Initial (s) 6.0

Minimum Split (s) 12.0

Total Split (s) 17.0

Total Split (%) 14.2%

Maximum Green (s) 11.0

Yellow Time (s) 4.0

All-Red Time (s) 2.0

Lost Time Adjust (s) 0.0

Total Lost Time (s) 6.0

Lead/Lag

Lead-Lag Optimize?

Vehicle Extension (s) 3.0

Recall Mode None

Act Effct Green (s) 9.4

Actuated g/C Ratio 0.08

v/c Ratio 0.08

Control Delay 0.8

Queue Delay 0.0

Total Delay 0.8

LOS A

Approach Delay

Approach LOS

90th %ile Green (s) 11.0

90th %ile Term Code Hold

70th %ile Green (s) 11.0

70th %ile Term Code Hold

50th %ile Green (s) 10.1

50th %ile Term Code Hold

30th %ile Green (s) 8.6

30th %ile Term Code Hold

10th %ile Green (s) 6.2

10th %ile Term Code Hold

Queue Length 50th (ft) 0

Queue Length 95th (ft) 0

Internal Link Dist (ft)

Turn Bay Length (ft)

Base Capacity (vph) 225

Starvation Cap Reductn 0

Spillback Cap Reductn 0

Storage Cap Reductn 0

Reduced v/c Ratio 0.07

Intersection Summary

Lanes, Volumes, Timings
5: Site Driveway/Lexington Road & Route 9

2024 Build Condition
Weekday Morning Peak Hour

Offset: 29 (24%), Referenced to phase 2:EBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.97
Intersection Signal Delay: 9.8
Intersection Capacity Utilization 88.5%
Analysis Period (min) 15
Intersection LOS: A
ICU Level of Service E

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Site Driveway/Lexington Road & Route 9

 ϕ1	 ϕ2 (R)	 ϕ4
19 s	84 s	17 s
 ϕ6		 ϕ8
103 s		17 s

HCM 2010 TWSC
6: Site Driveway & Route 9

2024 Build Condition
Weekday Morning Peak Hour

Intersection

Int Delay, s/veh 0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	2765	0	0	2145	0	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	0	0	2	0	0
Mvmt Flow	3005	0	0	2332	0	15

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	3005	4171
Stage 1	-	-	3005
Stage 2	-	-	1166
Critical Hdwy	-	4.1	6.8
Critical Hdwy Stg 1	-	-	5.8
Critical Hdwy Stg 2	-	-	5.8
Follow-up Hdwy	-	2.2	3.5
Pot Cap-1 Maneuver	-	117	2
Stage 1	-	-	25
Stage 2	-	-	263
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	117	2
Mov Cap-2 Maneuver	-	-	2
Stage 1	-	-	25
Stage 2	-	-	263

Approach	EB	WB	NB
HCM Control Delay, s	0	0	41.8
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	113	-	-	117	-
HCM Lane V/C Ratio	0.135	-	-	-	-
HCM Control Delay (s)	41.8	-	-	0	-
HCM Lane LOS	E	-	-	A	-
HCM 95th %tile Q(veh)	0.5	-	-	0	-

Lanes, Volumes, Timings

2024 Build Condition (Unsignalized Option)

1: CVS Driveway/Overbrook Drive & Route 9

Weekday Morning Peak Hour

												
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	15	76	2495	23	73	12	2036	41	13	0	14	89
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	16	12	12	12	16	12	12	12	12
Storage Length (ft)		250		0		350		0	0		0	0
Storage Lanes		1		0		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.999				0.997				0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1691	3467	0	0	1774	3528	0	1805	0	1615	0
Flt Permitted		0.950				0.950			0.609			
Satd. Flow (perm)	0	1691	3467	0	0	1774	3528	0	1157	0	1615	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				3				136	
Link Speed (mph)			30				30			30		
Link Distance (ft)			500				1700			500		
Travel Time (s)			11.4				38.6			11.4		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	21%	4%	4%	5%	2%	0%	2%	3%	0%	0%	0%	6%
Adj. Flow (vph)	15	78	2546	23	74	12	2078	42	13	0	14	91
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	93	2569	0	0	86	2120	0	13	0	14	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	0.85	1.00	1.00	1.00	0.85	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1		1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left		Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20		20	20
Trailing Detector (ft)	0	0	0		0	0	0		0		0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0		0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20		20	20
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex		CI+Ex		CI+Ex	CI+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			CI+Ex				CI+Ex					
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0					
Turn Type	Prot	Prot	NA		Prot	Prot	NA		Perm		Perm	Perm
Protected Phases	5	5	2		1	1	6					

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MDM Transportation Consultants, Inc.

Lanes, Volumes, Timings

2024 Build Condition (Unsignalized Option)

1: CVS Driveway/Overbrook Drive & Route 9

Weekday Morning Peak Hour

	↓	↙
Lane Group	SBT	SBR
Lane Configurations	↕	
Volume (vph)	3	57
Ideal Flow (vphpl)	1900	1900
Lane Width (ft)	12	12
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.948	
Flt Protected	0.971	
Satd. Flow (prot)	1664	0
Flt Permitted	0.971	
Satd. Flow (perm)	1664	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	20	
Link Speed (mph)	30	
Link Distance (ft)	500	
Travel Time (s)	11.4	
Peak Hour Factor	0.98	0.98
Heavy Vehicles (%)	0%	4%
Adj. Flow (vph)	3	58
Shared Lane Traffic (%)		
Lane Group Flow (vph)	152	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	
Detector Template	Thru	
Leading Detector (ft)	100	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	CI+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	CI+Ex	
Detector 2 Channel		
Detector 2 Extend (s)	0.0	
Turn Type	NA	
Protected Phases	4	

Lanes, Volumes, Timings

2024 Build Condition (Unsignalized Option)

1: CVS Driveway/Overbrook Drive & Route 9

Weekday Morning Peak Hour

												
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Permitted Phases									8		8	4
Detector Phase	5	5	2		1	1	6		8		8	4
Switch Phase												
Minimum Initial (s)	6.0	6.0	15.0		6.0	6.0	15.0		6.0		6.0	6.0
Minimum Split (s)	12.0	12.0	21.0		12.0	12.0	21.0		12.0		12.0	12.0
Total Split (s)	19.0	19.0	91.0		13.0	13.0	85.0		16.0		16.0	16.0
Total Split (%)	15.8%	15.8%	75.8%		10.8%	10.8%	70.8%		13.3%		13.3%	13.3%
Maximum Green (s)	13.0	13.0	85.0		7.0	7.0	79.0		10.0		10.0	10.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0	4.0		3.0		3.0	3.0
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0	2.0		3.0		3.0	3.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0		0.0	
Total Lost Time (s)		6.0	6.0			6.0	6.0		6.0		6.0	
Lead/Lag	Lead	Lead	Lead		Lag	Lag	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0		3.0	3.0
Recall Mode	None	None	C-Max		None	None	Min		None		None	None
Act Effct Green (s)		11.0	85.0			7.0	81.0		10.0		10.0	
Actuated g/C Ratio		0.09	0.71			0.06	0.68		0.08		0.08	
v/c Ratio		0.60	1.05			0.83	0.89		0.14		0.05	
Control Delay		68.2	50.3			108.5	22.5		54.6		0.4	
Queue Delay		0.0	0.0			0.0	0.0		0.0		0.0	
Total Delay		68.2	50.3			108.5	22.5		54.6		0.4	
LOS		E	D			F	C		D		A	
Approach Delay			50.9				25.8					
Approach LOS			D				C					
90th %ile Green (s)	13.0	13.0	85.0		7.0	7.0	79.0		10.0		10.0	10.0
90th %ile Term Code	Max	Max	Coord		Max	Max	Coord		Hold		Hold	Max
70th %ile Green (s)	13.0	13.0	85.0		7.0	7.0	79.0		10.0		10.0	10.0
70th %ile Term Code	Max	Max	Coord		Max	Max	Coord		Hold		Hold	Max
50th %ile Green (s)	11.9	11.9	85.0		7.0	7.0	80.1		10.0		10.0	10.0
50th %ile Term Code	Gap	Gap	Coord		Max	Max	Coord		Hold		Hold	Max
30th %ile Green (s)	10.0	10.0	85.0		7.0	7.0	82.0		10.0		10.0	10.0
30th %ile Term Code	Gap	Gap	Coord		Max	Max	Coord		Hold		Hold	Max
10th %ile Green (s)	7.2	7.2	85.0		7.0	7.0	84.8		10.0		10.0	10.0
10th %ile Term Code	Gap	Gap	Coord		Max	Max	Coord		Hold		Hold	Max
Queue Length 50th (ft)		70	~1138			67	656		10		0	
Queue Length 95th (ft)		126	#1271			#163	825		31		0	
Internal Link Dist (ft)			420				1620			420		
Turn Bay Length (ft)		250				350						
Base Capacity (vph)		183	2456			103	2381		96		259	
Starvation Cap Reductn		0	0			0	0		0		0	
Spillback Cap Reductn		0	0			0	0		0		0	
Storage Cap Reductn		0	0			0	0		0		0	
Reduced v/c Ratio		0.51	1.05			0.83	0.89		0.14		0.05	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2024 Build Condition (Unsignalized Option)

Weekday Morning Peak Hour

	↓	↙
Lane Group	SBT	SBR
Permitted Phases		
Detector Phase	4	
Switch Phase		
Minimum Initial (s)	6.0	
Minimum Split (s)	12.0	
Total Split (s)	16.0	
Total Split (%)	13.3%	
Maximum Green (s)	10.0	
Yellow Time (s)	3.0	
All-Red Time (s)	3.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	6.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Act Effct Green (s)	10.0	
Actuated g/C Ratio	0.08	
v/c Ratio	0.97	
Control Delay	112.0	
Queue Delay	0.0	
Total Delay	112.0	
LOS	F	
Approach Delay	112.0	
Approach LOS	F	
90th %ile Green (s)	10.0	
90th %ile Term Code	Max	
70th %ile Green (s)	10.0	
70th %ile Term Code	Max	
50th %ile Green (s)	10.0	
50th %ile Term Code	Max	
30th %ile Green (s)	10.0	
30th %ile Term Code	Max	
10th %ile Green (s)	10.0	
10th %ile Term Code	Max	
Queue Length 50th (ft)	104	
Queue Length 95th (ft)	#242	
Internal Link Dist (ft)	420	
Turn Bay Length (ft)		
Base Capacity (vph)	157	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.97	
Intersection Summary		

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2024 Build Condition (Unsignalized Option)

Weekday Morning Peak Hour

Offset: 69 (58%), Referenced to phase 2:EBT, Start of Yellow

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.05

Intersection Signal Delay: 41.7

Intersection LOS: D

Intersection Capacity Utilization 104.2%

ICU Level of Service G

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

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

Queue shown is maximum after two cycles.

Splits and Phases: 1: CVS Driveway/Overbrook Drive & Route 9

→ ρ2 (R)		↖ ρ1	↓ ρ4
91 s		13 s	16 s
↙ ρ5	← ρ6	↗ ρ8	
19 s	85 s	16 s	

HCM 2010 TWSC
2: Weston Road & Route 9 EB Ramp

2024 Build Condition (Unsignalized Option Calibrated)
Weekday Morning Peak Hour

Intersection

Int Delay, s/veh 21.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	216	165	66	888	558	227
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	4	4	7	2	2	2
Mvmt Flow	232	177	71	955	600	244

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1819	722	844	0	-	0
Stage 1	722	-	-	-	-	-
Stage 2	1097	-	-	-	-	-
Critical Hdwy	4	3.5	4.17	-	-	-
Critical Hdwy Stg 1	3.5	-	-	-	-	-
Critical Hdwy Stg 2	3.5	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.263	-	-	-
Pot Cap-1 Maneuver	290	734	771	-	-	-
Stage 1	704	-	-	-	-	-
Stage 2	572	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	263	734	771	-	-	-
Mov Cap-2 Maneuver	263	-	-	-	-	-
Stage 1	704	-	-	-	-	-
Stage 2	519	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	119.3	0.7	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	771	-	364	-	-
HCM Lane V/C Ratio	0.092	-	1.125	-	-
HCM Control Delay (s)	10.1	-	119.3	-	-
HCM Lane LOS	B	-	F	-	-
HCM 95th %tile Q(veh)	0.3	-	15.6	-	-

Intersection

Int Delay, s/veh 5.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	20	2	100	49	1	100	0	826	269	5	620	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	125	-	-	-	-	25	-	-	60	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	0	7	0	0	3	0	2	4	0	1	4
Mvmt Flow	20	2	102	50	1	102	0	843	274	5	633	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1486	1486	633	1538	1486	843	633	0	0	843	0	0
Stage 1	643	643	-	843	843	-	-	-	-	-	-	-
Stage 2	843	843	-	695	643	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.27	7.1	6.5	6.23	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.363	3.5	4	3.327	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	104	126	471	95	126	362	960	-	-	802	-	-
Stage 1	465	472	-	361	382	-	-	-	-	-	-	-
Stage 2	361	382	-	436	472	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	74	125	471	73	125	362	960	-	-	802	-	-
Mov Cap-2 Maneuver	74	125	-	73	125	-	-	-	-	-	-	-
Stage 1	465	467	-	361	382	-	-	-	-	-	-	-
Stage 2	259	382	-	337	467	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	24.6	54.2	0	0.1
HCM LOS	C	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	960	-	-	74	447	74	362	802	-	-
HCM Lane V/C Ratio	-	-	-	0.276	0.233	0.689	0.282	0.006	-	-
HCM Control Delay (s)	0	-	-	71.2	15.5	125.1	18.8	9.5	0	-
HCM Lane LOS	A	-	-	F	C	F	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1	0.9	3.2	1.1	0	-	-

HCM 2010 TWSC
5: Site Driveway/Lexington Road & Route 9

2024 Build Condition (Unsignalized Option)
Weekday Morning Peak Hour

Intersection

Int Delay, s/veh 4.4

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	2637	18	48	27	2137	3	0	0	142	0	0	16
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	250	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	3	0	0	0	2	0	0	0	0	0	0	0
Mvmt Flow	0	2719	19	49	28	2203	3	0	0	146	0	0	16

Major/Minor	Major1			Major2			Minor1			Minor2			
Conflicting Flow All	2206	0	0	2884	2737	0	0	3984	5089	1369	3718	5096	1103
Stage 1	-	-	-	-	-	-	-	2728	2728	-	2359	2359	-
Stage 2	-	-	-	-	-	-	-	1256	2361	-	1359	2737	-
Critical Hdwy	4.1	-	-	6.4	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.5	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	242	-	-	~ 20	149	-	-	1	1	~ 139	2	1	209
Stage 1	-	-	-	-	-	-	-	21	44	-	37	69	-
Stage 2	-	-	-	-	-	-	-	184	69	-	159	44	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	242	-	-	~ -3	~ -3	-	-	1	1	~ 139	-	1	209
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	1	1	-	-	1	-
Stage 1	-	-	-	-	-	-	-	21	44	-	37	69	-
Stage 2	-	-	-	-	-	-	-	169	69	-	-	44	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0		154.3	23.7
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	139	242	-	-	+	-	-	209
HCM Lane V/C Ratio	1.053	-	-	-	-	-	-	0.079
HCM Control Delay (s)	154.3	0	-	-	-	-	-	23.7
HCM Lane LOS	F	A	-	-	-	-	-	C
HCM 95th %tile Q(veh)	7.9	0	-	-	-	-	-	0.3

Notes

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

HCM 2010 TWSC
6: Site Driveway & Route 9

2024 Build Condition (Unsignalized Option)
Weekday Morning Peak Hour

Intersection

Int Delay, s/veh 0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	2827	0	0	2215	0	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	0	0	2	0	0
Mvmt Flow	3073	0	0	2408	0	15

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	4277
Stage 1	-	-	3073
Stage 2	-	-	1204
Critical Hdwy	-	4.1	6.8
Critical Hdwy Stg 1	-	-	5.8
Critical Hdwy Stg 2	-	-	5.8
Follow-up Hdwy	-	2.2	3.5
Pot Cap-1 Maneuver	-	110	1
Stage 1	-	-	23
Stage 2	-	-	251
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	110	1
Mov Cap-2 Maneuver	-	-	1
Stage 1	-	-	23
Stage 2	-	-	251

Approach	EB	WB	NB
HCM Control Delay, s	0	0	44.1
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	107	-	-	110	-
HCM Lane V/C Ratio	0.142	-	-	-	-
HCM Control Delay (s)	44.1	-	-	0	-
HCM Lane LOS	E	-	-	A	-
HCM 95th %tile Q(veh)	0.5	-	-	0	-

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2017 Baseline Condition
Weekday Evening Peak Hour

												
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	14	69	1941	31	18	12	1745	12	24	0	25	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	16	12	12	12	16	12	12	12	12
Storage Length (ft)		250		0		350		0	0		0	0
Storage Lanes		1		0		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.998				0.999				0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1775	3568	0	0	1805	3536	0	1805	0	1615	0
Flt Permitted		0.950				0.950			0.351			
Satd. Flow (perm)	0	1775	3568	0	0	1805	3536	0	667	0	1615	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				1				136	
Link Speed (mph)			30				30			30		
Link Distance (ft)			500				1700			500		
Travel Time (s)			11.4				38.6			11.4		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	2%	1%	0%	0%	0%	2%	0%	0%	0%	0%	0%
Adj. Flow (vph)	14	71	2001	32	19	12	1799	12	25	0	26	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	85	2033	0	0	31	1811	0	25	0	26	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	0.85	1.00	1.00	1.00	0.85	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1		1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left		Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20		20	20
Trailing Detector (ft)	0	0	0		0	0	0		0		0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0		0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20		20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0					
Turn Type	Prot	Prot	NA		Prot	Prot	NA		Perm		Perm	Perm
Protected Phases	5	5	2		1	1	6					

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2017 Baseline Condition
Weekday Evening Peak Hour

	↓	↙
Lane Group	SBT	SBR
Lane Configurations	↕	
Volume (vph)	6	136
Ideal Flow (vphpl)	1900	1900
Lane Width (ft)	12	12
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.901	
Flt Protected	0.988	
Satd. Flow (prot)	1667	0
Flt Permitted	0.988	
Satd. Flow (perm)	1667	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	93	
Link Speed (mph)	30	
Link Distance (ft)	500	
Travel Time (s)	11.4	
Peak Hour Factor	0.97	0.98
Heavy Vehicles (%)	0%	2%
Adj. Flow (vph)	6	139
Shared Lane Traffic (%)		
Lane Group Flow (vph)	190	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	
Detector Template	Thru	
Leading Detector (ft)	100	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	CI+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	CI+Ex	
Detector 2 Channel		
Detector 2 Extend (s)	0.0	
Turn Type	NA	
Protected Phases	4	

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2017 Baseline Condition
Weekday Evening Peak Hour

												
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Permitted Phases									8		8	4
Detector Phase	5	5	2		1	1	6		8		8	4
Switch Phase												
Minimum Initial (s)	6.0	6.0	15.0		6.0	6.0	15.0		6.0		6.0	6.0
Minimum Split (s)	12.0	12.0	21.0		12.0	12.0	21.0		12.0		12.0	12.0
Total Split (s)	13.0	13.0	81.0		19.0	19.0	87.0		20.0		20.0	20.0
Total Split (%)	10.8%	10.8%	67.5%		15.8%	15.8%	72.5%		16.7%		16.7%	16.7%
Maximum Green (s)	7.0	7.0	75.0		13.0	13.0	81.0		14.0		14.0	14.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0	4.0		3.0		3.0	3.0
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0	2.0		3.0		3.0	3.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0		0.0	
Total Lost Time (s)		6.0	6.0			6.0	6.0		6.0		6.0	
Lead/Lag	Lead	Lead	Lead		Lag	Lag	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0		3.0	3.0
Recall Mode	None	None	C-Max		None	None	Min		None		None	None
Act Effct Green (s)		7.0	86.4			9.1	83.6		11.4		11.4	
Actuated g/C Ratio		0.06	0.72			0.08	0.70		0.10		0.10	
v/c Ratio		0.83	0.79			0.23	0.73		0.40		0.09	
Control Delay		106.8	16.8			54.6	14.1		68.5		0.7	
Queue Delay		0.0	0.0			0.0	0.0		0.0		0.0	
Total Delay		106.8	16.8			54.6	14.1		68.5		0.7	
LOS		F	B			D	B		E		A	
Approach Delay			20.4				14.7					
Approach LOS			C				B					
90th %ile Green (s)	7.0	7.0	75.0		13.0	13.0	81.0		14.0		14.0	14.0
90th %ile Term Code	Max	Max	Coord		Hold	Hold	Coord		Max		Max	Max
70th %ile Green (s)	7.0	7.0	75.5		12.5	12.5	81.0		14.0		14.0	14.0
70th %ile Term Code	Max	Max	Coord		Hold	Hold	Coord		Hold		Hold	Max
50th %ile Green (s)	7.0	7.0	81.6		7.5	7.5	82.1		12.9		12.9	12.9
50th %ile Term Code	Max	Max	Coord		Gap	Gap	Coord		Hold		Hold	Gap
30th %ile Green (s)	7.0	7.0	98.1		0.0	0.0	85.1		9.9		9.9	9.9
30th %ile Term Code	Max	Max	Coord		Skip	Skip	Coord		Hold		Hold	Gap
10th %ile Green (s)	7.0	7.0	102.0		0.0	0.0	89.0		6.0		6.0	6.0
10th %ile Term Code	Max	Max	Coord		Skip	Skip	Coord		Hold		Hold	Min
Queue Length 50th (ft)		66	560			23	433		18		0	
Queue Length 95th (ft)		#160	812			53	540		48		0	
Internal Link Dist (ft)			420				1620			420		
Turn Bay Length (ft)		250				350						
Base Capacity (vph)		103	2570			195	2464		77		308	
Starvation Cap Reductn		0	0			0	0		0		0	
Spillback Cap Reductn		0	0			0	0		0		0	
Storage Cap Reductn		0	0			0	0		0		0	
Reduced v/c Ratio		0.83	0.79			0.16	0.73		0.32		0.08	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2017 Baseline Condition
Weekday Evening Peak Hour

	↓	↙
Lane Group	SBT	SBR
Permitted Phases		
Detector Phase	4	
Switch Phase		
Minimum Initial (s)	6.0	
Minimum Split (s)	12.0	
Total Split (s)	20.0	
Total Split (%)	16.7%	
Maximum Green (s)	14.0	
Yellow Time (s)	3.0	
All-Red Time (s)	3.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	6.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Act Effct Green (s)	11.4	
Actuated g/C Ratio	0.10	
v/c Ratio	0.79	
Control Delay	49.0	
Queue Delay	0.0	
Total Delay	49.0	
LOS	D	
Approach Delay	49.0	
Approach LOS	D	
90th %ile Green (s)	14.0	
90th %ile Term Code	Max	
70th %ile Green (s)	14.0	
70th %ile Term Code	Max	
50th %ile Green (s)	12.9	
50th %ile Term Code	Gap	
30th %ile Green (s)	9.9	
30th %ile Term Code	Gap	
10th %ile Green (s)	6.0	
10th %ile Term Code	Min	
Queue Length 50th (ft)	72	
Queue Length 95th (ft)	#165	
Internal Link Dist (ft)	420	
Turn Bay Length (ft)		
Base Capacity (vph)	276	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.69	
Intersection Summary		

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2017 Baseline Condition
Weekday Evening Peak Hour

Offset: 61 (51%), Referenced to phase 2:EBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.83
Intersection Signal Delay: 19.4
Intersection LOS: B
Intersection Capacity Utilization 95.8%
ICU Level of Service F
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: CVS Driveway/Overbrook Drive & Route 9

 ρ2 (R)	 ρ1	 ρ4
81 s	19 s	20 s
 ρ5	 ρ6	 ρ8
13 s	87 s	20 s

HCM 2010 TWSC
2: Weston Road & Route 9 EB Ramp

2017 Baseline Condition (Calibrated)
Weekday Evening Peak Hour

Intersection

Int Delay, s/veh 4.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	144	136	64	610	686	198
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	0	0	2	1	1	2
Mvmt Flow	147	139	65	622	700	202

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1554	801	902	0	-	0
Stage 1	801	-	-	-	-	-
Stage 2	753	-	-	-	-	-
Critical Hdwy	4	3.5	4.12	-	-	-
Critical Hdwy Stg 1	3.5	-	-	-	-	-
Critical Hdwy Stg 2	3.5	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.218	-	-	-
Pot Cap-1 Maneuver	355	707	754	-	-	-
Stage 1	680	-	-	-	-	-
Stage 2	698	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	324	707	754	-	-	-
Mov Cap-2 Maneuver	324	-	-	-	-	-
Stage 1	680	-	-	-	-	-
Stage 2	638	-	-	-	-	-

Approach	EB		NB		SB
HCM Control Delay, s	27.1		1		0
HCM LOS	D				

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	754	-	440	-	-
HCM Lane V/C Ratio	0.087	-	0.649	-	-
HCM Control Delay (s)	10.2	-	27.1	-	-
HCM Lane LOS	B	-	D	-	-
HCM 95th %tile Q(veh)	0.3	-	4.5	-	-

HCM 2010 TWSC
3: Weston Road & Rout 9 WB Ramp/Cleveland Road

2017 Baseline Condition
Weekday Evening Peak Hour

Intersection

Int Delay, s/veh 21

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	30	3	87	108	3	182	0	631	158	5	668	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	125	-	-	-	-	25	-	-	60	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	1	1	0	1	0	1	0	0	2	0
Mvmt Flow	32	3	92	114	3	192	0	664	166	5	703	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1380	1378	703	1425	1378	664	703	0	0	664	0	0
Stage 1	714	714	-	664	664	-	-	-	-	-	-	-
Stage 2	666	664	-	761	714	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.21	7.11	6.5	6.21	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.11	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.11	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.309	3.509	4	3.309	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	123	146	439	114	146	462	904	-	-	935	-	-
Stage 1	425	438	-	452	461	-	-	-	-	-	-	-
Stage 2	452	461	-	399	438	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	70	145	439	~ 88	145	462	904	-	-	935	-	-
Mov Cap-2 Maneuver	70	145	-	~ 88	145	-	-	-	-	-	-	-
Stage 1	425	434	-	452	461	-	-	-	-	-	-	-
Stage 2	263	461	-	311	434	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	35.6	119.5	0	0.1
HCM LOS	E	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	904	-	-	70	411	89	462	935	-	-
HCM Lane V/C Ratio	-	-	-	0.451	0.231	1.313	0.415	0.006	-	-
HCM Control Delay (s)	0	-	-	93.2	16.4	285.7	18.2	8.9	0	-
HCM Lane LOS	A	-	-	F	C	F	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1.8	0.9	8.6	2	0	-	-

Notes

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

HCM 2010 TWSC
5: Site Driveway/Lexington Road & Route 9

2017 Baseline Condition
Weekday Evening Peak Hour

Intersection

Int Delay, s/veh 0.2

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	2063	0	8	0	1779	1	0	0	0	0	0	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	250	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	0	2127	0	8	0	1834	1	0	0	0	0	0	11

Major/Minor	Major1		Major2				Minor1			Minor2			
Conflicting Flow All	1835	0	0	2127	2127	0	0	3061	3979	1063	2914	3978	918
Stage 1	-	-	-	-	-	-	-	2127	2127	-	1851	1851	-
Stage 2	-	-	-	-	-	-	-	934	1852	-	1063	2127	-
Critical Hdwy	4.1	-	-	6.4	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.5	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	337	-	-	63	259	-	-	5	3	223	7	3	278
Stage 1	-	-	-	-	-	-	-	52	91	-	78	126	-
Stage 2	-	-	-	-	-	-	-	290	125	-	242	91	-
Platoon blocked, %		-	-			-	-						
Mov Cap-1 Maneuver	337	-	-	63	63	-	-	5	3	223	7	3	278
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	5	3	-	7	3	-
Stage 1	-	-	-	-	-	-	-	52	91	-	78	126	-
Stage 2	-	-	-	-	-	-	-	278	125	-	242	91	

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.3	0	18.5
HCM LOS			A	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	337	-	-	63	-	-	278
HCM Lane V/C Ratio	-	-	-	-	0.131	-	-	0.041
HCM Control Delay (s)	0	0	-	-	70.6	-	-	18.5
HCM Lane LOS	A	A	-	-	F	-	-	C
HCM 95th %tile Q(veh)	-	0	-	-	0.4	-	-	0.1

HCM 2010 TWSC
6: Site Driveway & Route 9

2017 Baseline Condition
Weekday Evening Peak Hour

Intersection

Int Delay, s/veh 0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	2071	0	0	1788	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	1	0	0
Mvmt Flow	2251	0	0	1943	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	2251	3223
Stage 1	-	-	2251
Stage 2	-	-	972
Critical Hdwy	-	4.1	6.8
Critical Hdwy Stg 1	-	-	5.8
Critical Hdwy Stg 2	-	-	5.8
Follow-up Hdwy	-	2.2	3.5
Pot Cap-1 Maneuver	-	232	8
Stage 1	-	-	67
Stage 2	-	-	332
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	232	8
Mov Cap-2 Maneuver	-	-	8
Stage 1	-	-	67
Stage 2	-	-	332

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	232	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2024 No-Build Condition
Weekday Evening Peak Hour

												
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	15	74	2135	33	19	13	1882	13	26	0	27	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	16	12	12	12	16	12	12	12	12
Storage Length (ft)		250		0		350		0	0		0	0
Storage Lanes		1		0		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.998				0.999				0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1775	3568	0	0	1805	3536	0	1805	0	1615	0
Flt Permitted		0.950				0.950			0.328			
Satd. Flow (perm)	0	1775	3568	0	0	1805	3536	0	623	0	1615	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				1				136	
Link Speed (mph)			30				30			30		
Link Distance (ft)			500				1700			500		
Travel Time (s)			11.4				38.6			11.4		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	2%	1%	0%	0%	0%	2%	0%	0%	0%	0%	0%
Adj. Flow (vph)	15	76	2201	34	20	13	1940	13	27	0	28	48
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	91	2235	0	0	33	1953	0	27	0	28	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	0.85	1.00	1.00	1.00	0.85	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1		1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left		Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20		20	20
Trailing Detector (ft)	0	0	0		0	0	0		0		0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0		0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20		20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0					
Turn Type	Prot	Prot	NA		Prot	Prot	NA		Perm		Perm	Perm
Protected Phases	5	5	2		1	1	6					

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2024 No-Build Condition
Weekday Evening Peak Hour

	↓	↙
Lane Group	SBT	SBR
Lane Configurations	↕	
Volume (vph)	6	146
Ideal Flow (vphpl)	1900	1900
Lane Width (ft)	12	12
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.901	
Flt Protected	0.988	
Satd. Flow (prot)	1667	0
Flt Permitted	0.988	
Satd. Flow (perm)	1667	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	87	
Link Speed (mph)	30	
Link Distance (ft)	500	
Travel Time (s)	11.4	
Peak Hour Factor	0.97	0.98
Heavy Vehicles (%)	0%	2%
Adj. Flow (vph)	6	149
Shared Lane Traffic (%)		
Lane Group Flow (vph)	203	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	
Detector Template	Thru	
Leading Detector (ft)	100	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		
Detector 2 Extend (s)	0.0	
Turn Type	NA	
Protected Phases	4	

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2024 No-Build Condition

Weekday Evening Peak Hour

												
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Permitted Phases									8		8	4
Detector Phase	5	5	2		1	1	6		8		8	4
Switch Phase												
Minimum Initial (s)	6.0	6.0	15.0		6.0	6.0	15.0		6.0		6.0	6.0
Minimum Split (s)	12.0	12.0	21.0		12.0	12.0	21.0		12.0		12.0	12.0
Total Split (s)	13.0	13.0	81.0		19.0	19.0	87.0		20.0		20.0	20.0
Total Split (%)	10.8%	10.8%	67.5%		15.8%	15.8%	72.5%		16.7%		16.7%	16.7%
Maximum Green (s)	7.0	7.0	75.0		13.0	13.0	81.0		14.0		14.0	14.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0	4.0		3.0		3.0	3.0
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0	2.0		3.0		3.0	3.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0		0.0	
Total Lost Time (s)		6.0	6.0			6.0	6.0		6.0		6.0	
Lead/Lag	Lead	Lead	Lead		Lag	Lag	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0		3.0	3.0
Recall Mode	None	None	C-Max		None	None	Min		None		None	None
Act Effct Green (s)		7.0	84.4			10.3	82.8		12.2		12.2	
Actuated g/C Ratio		0.06	0.70			0.09	0.69		0.10		0.10	
v/c Ratio		0.88	0.89			0.21	0.80		0.43		0.10	
Control Delay		117.8	22.9			52.8	16.5		71.0		0.7	
Queue Delay		0.0	0.0			0.0	0.0		0.0		0.0	
Total Delay		117.8	22.9			52.8	16.5		71.0		0.7	
LOS		F	C			D	B		E		A	
Approach Delay			26.6				17.1					
Approach LOS			C				B					
90th %ile Green (s)	7.0	7.0	75.0		13.0	13.0	81.0		14.0		14.0	14.0
90th %ile Term Code	Max	Max	Coord		Hold	Hold	Coord		Max		Max	Max
70th %ile Green (s)	7.0	7.0	75.0		13.0	13.0	81.0		14.0		14.0	14.0
70th %ile Term Code	Max	Max	Coord		Hold	Hold	Coord		Hold		Hold	Max
50th %ile Green (s)	7.0	7.0	75.0		13.0	13.0	81.0		14.0		14.0	14.0
50th %ile Term Code	Max	Max	Coord		Hold	Hold	Coord		Hold		Hold	Max
30th %ile Green (s)	7.0	7.0	96.4		0.0	0.0	83.4		11.6		11.6	11.6
30th %ile Term Code	Max	Max	Coord		Skip	Skip	Coord		Hold		Hold	Gap
10th %ile Green (s)	7.0	7.0	100.8		0.0	0.0	87.8		7.2		7.2	7.2
10th %ile Term Code	Max	Max	Coord		Skip	Skip	Coord		Hold		Hold	Gap
Queue Length 50th (ft)		71	~857			24	526		20		0	
Queue Length 95th (ft)		#173	#1087			56	635		52		0	
Internal Link Dist (ft)			420				1620			420		
Turn Bay Length (ft)		250				350						
Base Capacity (vph)		103	2511			195	2441		72		308	
Starvation Cap Reductn		0	0			0	0		0		0	
Spillback Cap Reductn		0	0			0	0		0		0	
Storage Cap Reductn		0	0			0	0		0		0	
Reduced v/c Ratio		0.88	0.89			0.17	0.80		0.38		0.09	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2024 No-Build Condition
Weekday Evening Peak Hour

	↓	↙
Lane Group	SBT	SBR
Permitted Phases		
Detector Phase	4	
Switch Phase		
Minimum Initial (s)	6.0	
Minimum Split (s)	12.0	
Total Split (s)	20.0	
Total Split (%)	16.7%	
Maximum Green (s)	14.0	
Yellow Time (s)	3.0	
All-Red Time (s)	3.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	6.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Act Effct Green (s)	12.2	
Actuated g/C Ratio	0.10	
v/c Ratio	0.82	
Control Delay	55.6	
Queue Delay	0.0	
Total Delay	55.6	
LOS	E	
Approach Delay	55.6	
Approach LOS	E	
90th %ile Green (s)	14.0	
90th %ile Term Code	Max	
70th %ile Green (s)	14.0	
70th %ile Term Code	Max	
50th %ile Green (s)	14.0	
50th %ile Term Code	Max	
30th %ile Green (s)	11.6	
30th %ile Term Code	Gap	
10th %ile Green (s)	7.2	
10th %ile Term Code	Gap	
Queue Length 50th (ft)	88	
Queue Length 95th (ft)	#198	
Internal Link Dist (ft)	420	
Turn Bay Length (ft)		
Base Capacity (vph)	271	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.75	
Intersection Summary		

Lanes, Volumes, Timings 1: CVS Driveway/Overbrook Drive & Route 9

2024 No-Build Condition
Weekday Evening Peak Hour

Offset: 61 (51%), Referenced to phase 2:EBT, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 23.9

Intersection LOS: C

Intersection Capacity Utilization 102.0%

ICU Level of Service G

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

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

Queue shown is maximum after two cycles.

Splits and Phases: 1: CVS Driveway/Overbrook Drive & Route 9

 ϕ2 (R)			 ϕ1			 ϕ4		
81 s			19 s			20 s		
 ϕ5		 ϕ6				 ϕ8		
13 s		87 s				20 s		

HCM 2010 TWSC
2: Weston Road & Route 9 EB Ramp

2024 No-Build Condition (Calibrated)
Weekday Evening Peak Hour

Intersection

Int Delay, s/veh 5.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	154	147	69	654	735	212
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	0	0	2	1	1	2
Mvmt Flow	157	150	70	667	750	216

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1666	858	966	0	-	0
Stage 1	858	-	-	-	-	-
Stage 2	808	-	-	-	-	-
Critical Hdwy	4	3.5	4.12	-	-	-
Critical Hdwy Stg 1	3.5	-	-	-	-	-
Critical Hdwy Stg 2	3.5	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.218	-	-	-
Pot Cap-1 Maneuver	326	684	713	-	-	-
Stage 1	659	-	-	-	-	-
Stage 2	677	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	294	684	713	-	-	-
Mov Cap-2 Maneuver	294	-	-	-	-	-
Stage 1	659	-	-	-	-	-
Stage 2	611	-	-	-	-	-

Approach	EB		NB		SB
HCM Control Delay, s	36.4		1		0
HCM LOS	E				

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	713	-	407	-	-
HCM Lane V/C Ratio	0.099	-	0.755	-	-
HCM Control Delay (s)	10.6	-	36.4	-	-
HCM Lane LOS	B	-	E	-	-
HCM 95th %tile Q(veh)	0.3	-	6.2	-	-

HCM 2010 TWSC
3: Weston Road & Route 9 WB Ramp/Cleveland Road

2024 No-Build Condition
Weekday Evening Peak Hour

Intersection

Int Delay, s/veh 33

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	32	3	93	116	3	195	0	676	169	5	716	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	125	-	-	-	-	25	-	-	60	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	1	1	0	1	0	1	0	0	2	0
Mvmt Flow	34	3	98	122	3	205	0	712	178	5	754	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1477	1476	754	1527	1476	712	754	0	0	712	0	0
Stage 1	764	764	-	712	712	-	-	-	-	-	-	-
Stage 2	713	712	-	815	764	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.21	7.11	6.5	6.21	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.11	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.11	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.309	3.509	4	3.309	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	105	127	411	~ 97	127	434	865	-	-	897	-	-
Stage 1	399	416	-	425	439	-	-	-	-	-	-	-
Stage 2	426	439	-	373	416	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	54	126	411	~ 72	126	434	865	-	-	897	-	-
Mov Cap-2 Maneuver	54	126	-	~ 72	126	-	-	-	-	-	-	-
Stage 1	399	412	-	425	439	-	-	-	-	-	-	-
Stage 2	223	439	-	279	412	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	50.3	190.2	0	0.1
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	865	-	-	54	384	73	434	897	-	-
HCM Lane V/C Ratio	-	-	-	0.624	0.263	1.716	0.473	0.006	-	-
HCM Control Delay (s)	0	-	-	147.9	17.7	468.4	20.5	9	0	-
HCM Lane LOS	A	-	-	F	C	F	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	2.5	1	10.9	2.5	0	-	-

Notes

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

HCM 2010 TWSC
5: Site Driveway/Lexington Road & Route 9

2024 No-Build Condition
Weekday Evening Peak Hour

Intersection

Int Delay, s/veh 0.3

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	2266	0	9	0	1918	1	0	0	0	0	0	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	250	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	0	2336	0	9	0	1977	1	0	0	0	0	0	11

Major/Minor	Major1			Major2			Minor1			Minor2			
Conflicting Flow All	1978	0	0	2336	2336	0	0	3343	4333	1168	3164	4332	989
Stage 1	-	-	-	-	-	-	-	2336	2336	-	1996	1996	-
Stage 2	-	-	-	-	-	-	-	1007	1997	-	1168	2336	-
Critical Hdwy	4.1	-	-	6.4	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.5	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	296	-	-	46	215	-	-	3	2	189	5	2	249
Stage 1	-	-	-	-	-	-	-	38	71	-	63	106	-
Stage 2	-	-	-	-	-	-	-	262	106	-	209	71	-
Platoon blocked, %		-	-			-	-						
Mov Cap-1 Maneuver	296	-	-	46	46	-	-	3	2	189	5	2	249
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	3	2	-	5	2	-
Stage 1	-	-	-	-	-	-	-	38	71	-	63	106	-
Stage 2	-	-	-	-	-	-	-	250	106	-	209	71	

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.5	0	20.1
HCM LOS			A	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	296	-	-	46	-	-	249
HCM Lane V/C Ratio	-	-	-	-	0.202	-	-	0.046
HCM Control Delay (s)	0	0	-	-	102.1	-	-	20.1
HCM Lane LOS	A	A	-	-	F	-	-	C
HCM 95th %tile Q(veh)	-	0	-	-	0.7	-	-	0.1

HCM 2010 TWSC
6: Site Driveway & Route 9

2024 No-Build Condition
Weekday Evening Peak Hour

Intersection

Int Delay, s/veh 0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	2275	0	0	1928	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	1	0	0
Mvmt Flow	2473	0	0	2096	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	2473	0	3521	1236
Stage 1	-	-	-	-	2473	-
Stage 2	-	-	-	-	1048	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	190	-	5	171
Stage 1	-	-	-	-	51	-
Stage 2	-	-	-	-	303	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	190	-	5	171
Mov Cap-2 Maneuver	-	-	-	-	5	-
Stage 1	-	-	-	-	51	-
Stage 2	-	-	-	-	303	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	190	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2024 Build Condition
Weekday Evening Peak Hour

												
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	15	74	2195	33	19	13	1935	13	26	0	27	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	16	12	12	12	16	12	12	12	12
Storage Length (ft)		250		0		350		0	0		0	0
Storage Lanes		1		0		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.998				0.999				0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1775	3568	0	0	1805	3536	0	1805	0	1615	0
Flt Permitted		0.950				0.950			0.328			
Satd. Flow (perm)	0	1775	3568	0	0	1805	3536	0	623	0	1615	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				1				136	
Link Speed (mph)			30				30			30		
Link Distance (ft)			500				1700			500		
Travel Time (s)			11.4				38.6			11.4		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	2%	1%	0%	0%	0%	2%	0%	0%	0%	0%	0%
Adj. Flow (vph)	15	76	2263	34	20	13	1995	13	27	0	28	48
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	91	2297	0	0	33	2008	0	27	0	28	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	0.85	1.00	1.00	1.00	0.85	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1		1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left		Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20		20	20
Trailing Detector (ft)	0	0	0		0	0	0		0		0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0		0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20		20	20
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex		CI+Ex		CI+Ex	CI+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			CI+Ex				CI+Ex					
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0					
Turn Type	Prot	Prot	NA		Prot	Prot	NA		Perm		Perm	Perm
Protected Phases	5	5	2		1	1	6					

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2024 Build Condition
Weekday Evening Peak Hour

	↓	↙
Lane Group	SBT	SBR
Lane Configurations	↕	
Volume (vph)	6	146
Ideal Flow (vphpl)	1900	1900
Lane Width (ft)	12	12
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.901	
Flt Protected	0.988	
Satd. Flow (prot)	1667	0
Flt Permitted	0.988	
Satd. Flow (perm)	1667	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	85	
Link Speed (mph)	30	
Link Distance (ft)	500	
Travel Time (s)	11.4	
Peak Hour Factor	0.97	0.98
Heavy Vehicles (%)	0%	2%
Adj. Flow (vph)	6	149
Shared Lane Traffic (%)		
Lane Group Flow (vph)	203	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	
Detector Template	Thru	
Leading Detector (ft)	100	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	CI+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	CI+Ex	
Detector 2 Channel		
Detector 2 Extend (s)	0.0	
Turn Type	NA	
Protected Phases	4	

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2024 Build Condition
Weekday Evening Peak Hour

												
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Permitted Phases									8		8	4
Detector Phase	5	5	2		1	1	6		8		8	4
Switch Phase												
Minimum Initial (s)	6.0	6.0	15.0		6.0	6.0	15.0		6.0		6.0	6.0
Minimum Split (s)	12.0	12.0	21.0		12.0	12.0	21.0		12.0		12.0	12.0
Total Split (s)	13.0	13.0	81.0		19.0	19.0	87.0		20.0		20.0	20.0
Total Split (%)	10.8%	10.8%	67.5%		15.8%	15.8%	72.5%		16.7%		16.7%	16.7%
Maximum Green (s)	7.0	7.0	75.0		13.0	13.0	81.0		14.0		14.0	14.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0	4.0		3.0		3.0	3.0
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0	2.0		3.0		3.0	3.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0		0.0	
Total Lost Time (s)		6.0	6.0			6.0	6.0		6.0		6.0	
Lead/Lag	Lead	Lead	Lead		Lag	Lag	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0		3.0	3.0
Recall Mode	None	None	C-Max		None	None	Min		None		None	None
Act Effct Green (s)		7.0	84.4			10.3	82.8		12.2		12.2	
Actuated g/C Ratio		0.06	0.70			0.09	0.69		0.10		0.10	
v/c Ratio		0.88	0.92			0.21	0.82		0.43		0.10	
Control Delay		117.8	25.0			46.9	14.7		70.6		0.7	
Queue Delay		0.0	0.0			0.0	0.0		0.0		0.0	
Total Delay		117.8	25.0			46.9	14.7		70.6		0.7	
LOS		F	C			D	B		E		A	
Approach Delay			28.5				15.2					
Approach LOS			C				B					
90th %ile Green (s)	7.0	7.0	75.0		13.0	13.0	81.0		14.0		14.0	14.0
90th %ile Term Code	Max	Max	Coord		Hold	Hold	Coord		Max		Max	Max
70th %ile Green (s)	7.0	7.0	75.0		13.0	13.0	81.0		14.0		14.0	14.0
70th %ile Term Code	Max	Max	Coord		Hold	Hold	Coord		Hold		Hold	Max
50th %ile Green (s)	7.0	7.0	75.0		13.0	13.0	81.0		14.0		14.0	14.0
50th %ile Term Code	Max	Max	Coord		Hold	Hold	Coord		Hold		Hold	Max
30th %ile Green (s)	7.0	7.0	96.2		0.0	0.0	83.2		11.8		11.8	11.8
30th %ile Term Code	Max	Max	Coord		Skip	Skip	Coord		Hold		Hold	Gap
10th %ile Green (s)	7.0	7.0	100.6		0.0	0.0	87.6		7.4		7.4	7.4
10th %ile Term Code	Max	Max	Coord		Skip	Skip	Coord		Hold		Hold	Gap
Queue Length 50th (ft)		71	~1003			22	404		20		0	
Queue Length 95th (ft)		#173	#1140			m33	456		52		0	
Internal Link Dist (ft)			420				1620			420		
Turn Bay Length (ft)		250				350						
Base Capacity (vph)		103	2508			195	2439		72		308	
Starvation Cap Reductn		0	0			0	0		0		0	
Spillback Cap Reductn		0	0			0	0		0		0	
Storage Cap Reductn		0	0			0	0		0		0	
Reduced v/c Ratio		0.88	0.92			0.17	0.82		0.38		0.09	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2024 Build Condition
Weekday Evening Peak Hour

	↓	↙
Lane Group	SBT	SBR
Permitted Phases		
Detector Phase	4	
Switch Phase		
Minimum Initial (s)	6.0	
Minimum Split (s)	12.0	
Total Split (s)	20.0	
Total Split (%)	16.7%	
Maximum Green (s)	14.0	
Yellow Time (s)	3.0	
All-Red Time (s)	3.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	6.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Act Effct Green (s)	12.2	
Actuated g/C Ratio	0.10	
v/c Ratio	0.83	
Control Delay	56.5	
Queue Delay	0.0	
Total Delay	56.5	
LOS	E	
Approach Delay	56.5	
Approach LOS	E	
90th %ile Green (s)	14.0	
90th %ile Term Code	Max	
70th %ile Green (s)	14.0	
70th %ile Term Code	Max	
50th %ile Green (s)	14.0	
50th %ile Term Code	Max	
30th %ile Green (s)	11.8	
30th %ile Term Code	Gap	
10th %ile Green (s)	7.4	
10th %ile Term Code	Gap	
Queue Length 50th (ft)	89	
Queue Length 95th (ft)	#201	
Internal Link Dist (ft)	420	
Turn Bay Length (ft)		
Base Capacity (vph)	269	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.75	
Intersection Summary		

Lanes, Volumes, Timings

1: CVS Driveway/Overbrook Drive & Route 9

2024 Build Condition
Weekday Evening Peak Hour

Offset: 61 (51%), Referenced to phase 2:EBT, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.92

Intersection Signal Delay: 24.0

Intersection LOS: C

Intersection Capacity Utilization 103.6%

ICU Level of Service G

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

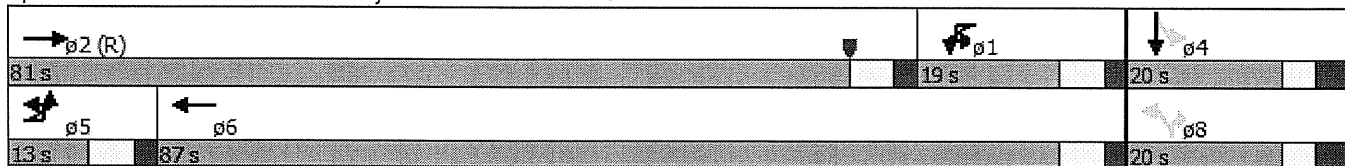
Queue shown is maximum after two cycles.

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

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: CVS Driveway/Overbrook Drive & Route 9



HCM 2010 TWSC
2: Weston Road & Route 9 EB Ramp

2024 Build Condition (Calibrated)
Weekday Evening Peak Hour

Intersection

Int Delay, s/veh 3.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	106	160	69	669	735	212
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	0	0	2	1	1	2
Mvmt Flow	108	163	70	683	750	216

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1681	858	966	0	-	0
Stage 1	858	-	-	-	-	-
Stage 2	823	-	-	-	-	-
Critical Hdwy	4	3.5	4.12	-	-	-
Critical Hdwy Stg 1	3.5	-	-	-	-	-
Critical Hdwy Stg 2	3.5	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.218	-	-	-
Pot Cap-1 Maneuver	323	684	713	-	-	-
Stage 1	659	-	-	-	-	-
Stage 2	671	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	291	684	713	-	-	-
Mov Cap-2 Maneuver	291	-	-	-	-	-
Stage 1	659	-	-	-	-	-
Stage 2	605	-	-	-	-	-

Approach	EB		NB		SB
HCM Control Delay, s	24.9		1		0
HCM LOS	C				

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	713	-	445	-	-
HCM Lane V/C Ratio	0.099	-	0.61	-	-
HCM Control Delay (s)	10.6	-	24.9	-	-
HCM Lane LOS	B	-	C	-	-
HCM 95th %tile Q(veh)	0.3	-	4	-	-

HCM 2010 TWSC
3: Weston Road & Route 9 EB Ramp/Cleveland Road

2024 Build Condition
Weekday Evening Peak Hour

Intersection

Int Delay, s/veh 33.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	32	3	93	116	3	195	0	674	138	5	716	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	125	-	-	-	-	25	-	-	60	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	1	1	0	1	0	1	0	0	2	0
Mvmt Flow	34	3	98	122	3	205	0	709	145	5	754	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1475	1473	754	1524	1473	709	754	0	0	709	0	0
Stage 1	764	764	-	709	709	-	-	-	-	-	-	-
Stage 2	711	709	-	815	764	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.21	7.11	6.5	6.21	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.11	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.11	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.309	3.509	4	3.309	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	106	128	411	~ 97	128	436	865	-	-	899	-	-
Stage 1	399	416	-	427	440	-	-	-	-	-	-	-
Stage 2	427	440	-	373	416	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	55	127	411	~ 72	127	436	865	-	-	899	-	-
Mov Cap-2 Maneuver	55	127	-	~ 72	127	-	-	-	-	-	-	-
Stage 1	399	412	-	427	440	-	-	-	-	-	-	-
Stage 2	224	440	-	279	412	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	49.1	190.2	0	0.1
HCM LOS	E	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	865	-	-	55	384	73	436	899	-	-
HCM Lane V/C Ratio	-	-	-	0.612	0.263	1.716	0.471	0.006	-	-
HCM Control Delay (s)	0	-	-	143.4	17.7	468.4	20.4	9	0	-
HCM Lane LOS	A	-	-	F	C	F	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	2.5	1	10.9	2.5	0	-	-

Notes

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

Lanes, Volumes, Timings
5: Site Driveway/Lexington Road & Route 9

2024 Build Condition
Weekday Evening Peak Hour

												
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	0	2266	60	9	91	1863	1	108	0	67	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	16	12	12	15	15	12	12	12	12	12
Storage Length (ft)	200		0		250		0	0		0	0	
Storage Lanes	0		0		1		0	1		1	0	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Flt		0.996								0.850		
Flt Protected					0.950			0.950				
Satd. Flow (prot)	0	4075	0	0	1805	3932	0	1805	0	1615	0	0
Flt Permitted					0.950			0.950				
Satd. Flow (perm)	0	4075	0	0	1805	3932	0	1805	0	1615	0	0
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		4								82		
Link Speed (mph)		30				30			30			30
Link Distance (ft)		1700				400			250			250
Travel Time (s)		38.6				9.1			5.7			5.7
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	2336	62	9	94	1921	1	111	0	69	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2398	0	0	103	1922	0	111	0	69	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			12			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	0.85	0.85	1.00	1.00	0.88	0.88	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors		2		1	1	2		1		1		
Detector Template		Thru		Left	Left	Thru		Left		Right		
Leading Detector (ft)		100		20	20	100		20		20		
Trailing Detector (ft)		0		0	0	0		0		0		
Detector 1 Position(ft)		0		0	0	0		0		0		
Detector 1 Size(ft)		6		20	20	6		20		20		
Detector 1 Type		CI+Ex		CI+Ex	CI+Ex	CI+Ex		CI+Ex		CI+Ex		
Detector 1 Channel												
Detector 1 Extend (s)		0.0		0.0	0.0	0.0		0.0		0.0		
Detector 1 Queue (s)		0.0		0.0	0.0	0.0		0.0		0.0		
Detector 1 Delay (s)		0.0		0.0	0.0	0.0		0.0		0.0		
Detector 2 Position(ft)		94				94						
Detector 2 Size(ft)		6				6						
Detector 2 Type		CI+Ex				CI+Ex						
Detector 2 Channel												
Detector 2 Extend (s)		0.0				0.0						
Turn Type		NA		Prot	Prot	NA		Perm		Perm		
Protected Phases		2		1	1	6						

Lanes, Volumes, Timings
5: Site Driveway/Lexington Road & Route 9

2024 Build Condition
Weekday Evening Peak Hour

Lane Group	SBR
Lane Configurations	7
Volume (vph)	12
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Storage Length (ft)	0
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Frt	0.865
Flt Protected	
Satd. Flow (prot)	1644
Flt Permitted	
Satd. Flow (perm)	1644
Right Turn on Red	Yes
Satd. Flow (RTOR)	82
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.97
Heavy Vehicles (%)	0%
Adj. Flow (vph)	12
Shared Lane Traffic (%)	
Lane Group Flow (vph)	12
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	1
Detector Template	Right
Leading Detector (ft)	20
Trailing Detector (ft)	0
Detector 1 Position(ft)	0
Detector 1 Size(ft)	20
Detector 1 Type	CI+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	Perm
Protected Phases	

Lanes, Volumes, Timings
5: Site Driveway/Lexington Road & Route 9

2024 Build Condition
Weekday Evening Peak Hour

												
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Permitted Phases								8		8		
Detector Phase		2		1	1	6		8		8		
Switch Phase												
Minimum Initial (s)		15.0		6.0	6.0	15.0		6.0		6.0		
Minimum Split (s)		21.0		12.0	12.0	21.0		12.0		12.0		
Total Split (s)		79.0		20.0	20.0	99.0		21.0		21.0		
Total Split (%)		65.8%		16.7%	16.7%	82.5%		17.5%		17.5%		
Maximum Green (s)		73.0		14.0	14.0	93.0		15.0		15.0		
Yellow Time (s)		4.0		4.0	4.0	4.0		4.0		4.0		
All-Red Time (s)		2.0		2.0	2.0	2.0		2.0		2.0		
Lost Time Adjust (s)		0.0			0.0	0.0		0.0		0.0		
Total Lost Time (s)		6.0			6.0	6.0		6.0		6.0		
Lead/Lag		Lag		Lead	Lead							
Lead-Lag Optimize?		Yes		Yes	Yes							
Vehicle Extension (s)		3.0		3.0	3.0	3.0		3.0		3.0		
Recall Mode		C-Max		None	None	Min		None		None		
Act Effct Green (s)		78.2			11.6	95.8		12.2		12.2		
Actuated g/C Ratio		0.65			0.10	0.80		0.10		0.10		
v/c Ratio		0.90			0.59	0.61		0.61		0.29		
Control Delay		8.3			65.6	6.0		65.3		10.7		
Queue Delay		0.0			0.0	0.0		0.0		0.0		
Total Delay		8.3			65.6	6.0		65.3		10.7		
LOS		A			E	A		E		B		
Approach Delay		8.3				9.1						
Approach LOS		A				A						
90th %ile Green (s)		73.0		14.0	14.0	93.0		15.0		15.0		
90th %ile Term Code		Coord		Max	Max	Coord		Max		Max		
70th %ile Green (s)		73.4		14.0	14.0	93.4		14.6		14.6		
70th %ile Term Code		Coord		Max	Max	Coord		Gap		Gap		
50th %ile Green (s)		77.2		12.1	12.1	95.3		12.7		12.7		
50th %ile Term Code		Coord		Gap	Gap	Coord		Gap		Gap		
30th %ile Green (s)		81.0		10.3	10.3	97.3		10.7		10.7		
30th %ile Term Code		Coord		Gap	Gap	Coord		Gap		Gap		
10th %ile Green (s)		86.6		7.5	7.5	100.1		7.9		7.9		
10th %ile Term Code		Coord		Gap	Gap	Coord		Gap		Gap		
Queue Length 50th (ft)		35			77	258		83		0		
Queue Length 95th (ft)		#1096			135	341		142		34		
Internal Link Dist (ft)		1620				320			170			170
Turn Bay Length (ft)					250							
Base Capacity (vph)		2658			210	3139		225		273		
Starvation Cap Reductn		0			0	0		0		0		
Spillback Cap Reductn		0			0	0		0		0		
Storage Cap Reductn		0			0	0		0		0		
Reduced v/c Ratio		0.90			0.49	0.61		0.49		0.25		

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Lanes, Volumes, Timings
5: Site Driveway/Lexington Road & Route 9

2024 Build Condition
Weekday Evening Peak Hour

Lane Group	SBR
Permitted Phases	4
Detector Phase	4
Switch Phase	
Minimum Initial (s)	6.0
Minimum Split (s)	12.0
Total Split (s)	21.0
Total Split (%)	17.5%
Maximum Green (s)	15.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	6.0
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Act Effect Green (s)	12.2
Actuated g/C Ratio	0.10
v/c Ratio	0.05
Control Delay	0.4
Queue Delay	0.0
Total Delay	0.4
LOS	A
Approach Delay	
Approach LOS	
90th %ile Green (s)	15.0
90th %ile Term Code	Hold
70th %ile Green (s)	14.6
70th %ile Term Code	Hold
50th %ile Green (s)	12.7
50th %ile Term Code	Hold
30th %ile Green (s)	10.7
30th %ile Term Code	Hold
10th %ile Green (s)	7.9
10th %ile Term Code	Hold
Queue Length 50th (ft)	0
Queue Length 95th (ft)	0
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	277
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.04
Intersection Summary	

Lanes, Volumes, Timings

5: Site Driveway/Lexington Road & Route 9

2024 Build Condition

Weekday Evening Peak Hour

Offset: 26 (22%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 10.0

Intersection Capacity Utilization 90.1%

Analysis Period (min) 15

Intersection LOS: B

ICU Level of Service E

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

Queue shown is maximum after two cycles.

Splits and Phases: 5: Site Driveway/Lexington Road & Route 9

 ø1	 ø2 (R)	 ø4
20 s	79 s	21 s
 ø6		 ø8
99 s		21 s

HCM 2010 TWSC
6: Site Driveway & Route 9

2024 Build Condition
Weekday Evening Peak Hour

Intersection

Int Delay, s/veh 0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	2342	0	0	1964	0	12
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, %	0	0	0	1	0	0
Mvmt Flow	2546	0	0	2135	0	13

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	2546	0	3613	1273
Stage 1	-	-	-	-	2546	-
Stage 2	-	-	-	-	1067	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	178	-	4	161
Stage 1	-	-	-	-	46	-
Stage 2	-	-	-	-	296	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	178	-	4	161
Mov Cap-2 Maneuver	-	-	-	-	4	-
Stage 1	-	-	-	-	46	-
Stage 2	-	-	-	-	296	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	29.3
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	161	-	-	178	-
HCM Lane V/C Ratio	0.081	-	-	-	-
HCM Control Delay (s)	29.3	-	-	0	-
HCM Lane LOS	D	-	-	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0	-

Lanes, Volumes, Timings

2024 Build Condition (Unsignalized Option)

1: CVS Driveway/Overbrook Drive & Route 9

Weekday Evening Peak Hour

												
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	15	74	2195	33	19	13	1935	13	26	0	27	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	16	12	12	12	16	12	12	12	12
Storage Length (ft)		250		0		350		0	0		0	0
Storage Lanes		1		0		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.998				0.999				0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1775	3568	0	0	1805	3536	0	1805	0	1615	0
Flt Permitted		0.950				0.950			0.328			
Satd. Flow (perm)	0	1775	3568	0	0	1805	3536	0	623	0	1615	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				1				136	
Link Speed (mph)			30				30			30		
Link Distance (ft)			500				1700			500		
Travel Time (s)			11.4				38.6			11.4		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	2%	1%	0%	0%	0%	2%	0%	0%	0%	0%	0%
Adj. Flow (vph)	15	76	2263	34	20	13	1995	13	27	0	28	48
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	91	2297	0	0	33	2008	0	27	0	28	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	0.85	1.00	1.00	1.00	0.85	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1		1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left		Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20		20	20
Trailing Detector (ft)	0	0	0		0	0	0		0		0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0		0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20		20	20
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex		CI+Ex		CI+Ex	CI+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			CI+Ex				CI+Ex					
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0					
Turn Type	Prot	Prot	NA		Prot	Prot	NA		Perm		Perm	Perm
Protected Phases	5	5	2		1	1	6					

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2024 Build Condition (Unsignalized Option)
Weekday Evening Peak Hour

	↓	↙
Lane Group	SBT	SBR
Lane Configurations	↕	
Volume (vph)	6	146
Ideal Flow (vphpl)	1900	1900
Lane Width (ft)	12	12
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.901	
Flt Protected	0.988	
Satd. Flow (prot)	1667	0
Flt Permitted	0.988	
Satd. Flow (perm)	1667	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	85	
Link Speed (mph)	30	
Link Distance (ft)	500	
Travel Time (s)	11.4	
Peak Hour Factor	0.97	0.98
Heavy Vehicles (%)	0%	2%
Adj. Flow (vph)	6	149
Shared Lane Traffic (%)		
Lane Group Flow (vph)	203	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	
Detector Template	Thru	
Leading Detector (ft)	100	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	Cl+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	Cl+Ex	
Detector 2 Channel		
Detector 2 Extend (s)	0.0	
Turn Type	NA	
Protected Phases	4	

Lanes, Volumes, Timings

2024 Build Condition (Unsignalized Option)

1: CVS Driveway/Overbrook Drive & Route 9

Weekday Evening Peak Hour

												
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Permitted Phases									8		8	4
Detector Phase	5	5	2		1	1	6		8		8	4
Switch Phase												
Minimum Initial (s)	6.0	6.0	15.0		6.0	6.0	15.0		6.0		6.0	6.0
Minimum Split (s)	12.0	12.0	21.0		12.0	12.0	21.0		12.0		12.0	12.0
Total Split (s)	13.0	13.0	81.0		19.0	19.0	87.0		20.0		20.0	20.0
Total Split (%)	10.8%	10.8%	67.5%		15.8%	15.8%	72.5%		16.7%		16.7%	16.7%
Maximum Green (s)	7.0	7.0	75.0		13.0	13.0	81.0		14.0		14.0	14.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0	4.0		3.0		3.0	3.0
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0	2.0		3.0		3.0	3.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0		0.0	
Total Lost Time (s)		6.0	6.0			6.0	6.0		6.0		6.0	
Lead/Lag	Lead	Lead	Lead		Lag	Lag	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0		3.0	3.0
Recall Mode	None	None	C-Max		None	None	Min		None		None	None
Act Effct Green (s)		7.0	84.4			10.3	82.8		12.2		12.2	
Actuated g/C Ratio		0.06	0.70			0.09	0.69		0.10		0.10	
v/c Ratio		0.88	0.92			0.21	0.82		0.43		0.10	
Control Delay		117.8	25.0			52.8	17.6		70.6		0.7	
Queue Delay		0.0	0.0			0.0	0.0		0.0		0.0	
Total Delay		117.8	25.0			52.8	17.6		70.6		0.7	
LOS		F	C			D	B		E		A	
Approach Delay			28.5				18.1					
Approach LOS			C				B					
90th %ile Green (s)	7.0	7.0	75.0		13.0	13.0	81.0		14.0		14.0	14.0
90th %ile Term Code	Max	Max	Coord		Hold	Hold	Coord		Max		Max	Max
70th %ile Green (s)	7.0	7.0	75.0		13.0	13.0	81.0		14.0		14.0	14.0
70th %ile Term Code	Max	Max	Coord		Hold	Hold	Coord		Hold		Hold	Max
50th %ile Green (s)	7.0	7.0	75.0		13.0	13.0	81.0		14.0		14.0	14.0
50th %ile Term Code	Max	Max	Coord		Hold	Hold	Coord		Hold		Hold	Max
30th %ile Green (s)	7.0	7.0	96.2		0.0	0.0	83.2		11.8		11.8	11.8
30th %ile Term Code	Max	Max	Coord		Skip	Skip	Coord		Hold		Hold	Gap
10th %ile Green (s)	7.0	7.0	100.6		0.0	0.0	87.6		7.4		7.4	7.4
10th %ile Term Code	Max	Max	Coord		Skip	Skip	Coord		Hold		Hold	Gap
Queue Length 50th (ft)		71	~1003			24	560		20		0	
Queue Length 95th (ft)		#173	#1140			56	679		52		0	
Internal Link Dist (ft)			420				1620			420		
Turn Bay Length (ft)		250				350						
Base Capacity (vph)		103	2508			195	2439		72		308	
Starvation Cap Reductn		0	0			0	0		0		0	
Spillback Cap Reductn		0	0			0	0		0		0	
Storage Cap Reductn		0	0			0	0		0		0	
Reduced v/c Ratio		0.88	0.92			0.17	0.82		0.38		0.09	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

G:\Projects\923 - Wellesley (Marathon)\Synchro\TIAS02\923 B PM Unsignalized.syn

MDM Transportation Consultants, Inc.

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2024 Build Condition (Unsignalized Option)
Weekday Evening Peak Hour

	↓	↙
Lane Group	SBT	SBR
Permitted Phases		
Detector Phase	4	
Switch Phase		
Minimum Initial (s)	6.0	
Minimum Split (s)	12.0	
Total Split (s)	20.0	
Total Split (%)	16.7%	
Maximum Green (s)	14.0	
Yellow Time (s)	3.0	
All-Red Time (s)	3.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	6.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Act Effct Green (s)	12.2	
Actuated g/C Ratio	0.10	
v/c Ratio	0.83	
Control Delay	56.5	
Queue Delay	0.0	
Total Delay	56.5	
LOS	E	
Approach Delay	56.5	
Approach LOS	E	
90th %ile Green (s)	14.0	
90th %ile Term Code	Max	
70th %ile Green (s)	14.0	
70th %ile Term Code	Max	
50th %ile Green (s)	14.0	
50th %ile Term Code	Max	
30th %ile Green (s)	11.8	
30th %ile Term Code	Gap	
10th %ile Green (s)	7.4	
10th %ile Term Code	Gap	
Queue Length 50th (ft)	89	
Queue Length 95th (ft)	#201	
Internal Link Dist (ft)	420	
Turn Bay Length (ft)		
Base Capacity (vph)	269	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.75	
Intersection Summary		

Lanes, Volumes, Timings

1: CVS Driveway/Overbrook Drive & Route 9

2024 Build Condition (Unsignalized Option)

Weekday Evening Peak Hour

Offset: 61 (51%), Referenced to phase 2:EBT, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.92

Intersection Signal Delay: 25.3

Intersection LOS: C

Intersection Capacity Utilization 103.6%

ICU Level of Service G

Analysis Period (min) 15

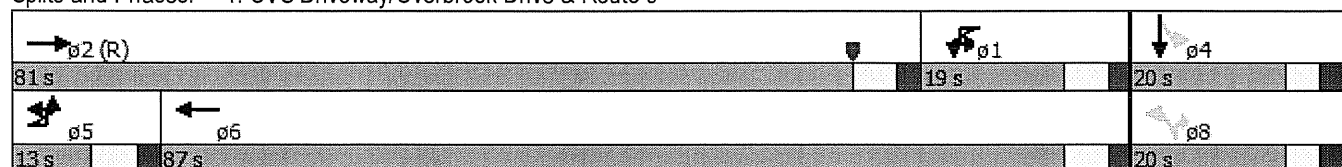
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

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

Queue shown is maximum after two cycles.

Splits and Phases: 1: CVS Driveway/Overbrook Drive & Route 9



HCM 2010 TWSC
2: Weston Road & Route 9 EB Ramp

2024 Build Condition (Unsignalized Option Calibrated)
Weekday Evening Peak Hour

Intersection

Int Delay, s/veh 14.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	214	160	69	669	735	212
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	0	0	2	1	1	2
Mvmt Flow	218	163	70	683	750	216

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1681	858	966	0	-	0
Stage 1	858	-	-	-	-	-
Stage 2	823	-	-	-	-	-
Critical Hdwy	4	3.5	4.12	-	-	-
Critical Hdwy Stg 1	3.5	-	-	-	-	-
Critical Hdwy Stg 2	3.5	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.218	-	-	-
Pot Cap-1 Maneuver	323	684	713	-	-	-
Stage 1	659	-	-	-	-	-
Stage 2	671	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	291	684	713	-	-	-
Mov Cap-2 Maneuver	291	-	-	-	-	-
Stage 1	659	-	-	-	-	-
Stage 2	605	-	-	-	-	-

Approach	EB		NB		SB
HCM Control Delay, s	76.2		1		0
HCM LOS	F				

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	713	-	386	-	-
HCM Lane V/C Ratio	0.099	-	0.989	-	-
HCM Control Delay (s)	10.6	-	76.2	-	-
HCM Lane LOS	B	-	F	-	-
HCM 95th %tile Q(veh)	0.3	-	11.7	-	-

Intersection

Int Delay, s/veh 34.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	32	3	93	116	3	195	0	697	223	5	716	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	125	-	-	-	-	25	-	-	60	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	1	1	0	1	0	1	0	0	2	0
Mvmt Flow	34	3	98	122	3	205	0	734	235	5	754	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1499	1498	754	1549	1498	734	754	0	0	734	0	0
Stage 1	764	764	-	734	734	-	-	-	-	-	-	-
Stage 2	735	734	-	815	764	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.21	7.11	6.5	6.21	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.11	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.11	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.309	3.509	4	3.309	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	102	124	411	~ 93	124	422	865	-	-	880	-	-
Stage 1	399	416	-	413	429	-	-	-	-	-	-	-
Stage 2	414	429	-	373	416	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	51	123	411	~ 69	123	422	865	-	-	880	-	-
Mov Cap-2 Maneuver	51	123	-	~ 69	123	-	-	-	-	-	-	-
Stage 1	399	412	-	413	429	-	-	-	-	-	-	-
Stage 2	211	429	-	279	412	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	54	204.3	0	0.1
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	865	-	-	51	383	70	422	880	-	-
HCM Lane V/C Ratio	-	-	-	0.66	0.264	1.789	0.486	0.006	-	-
HCM Control Delay (s)	0	-	-	163	17.7	504.2	21.3	9.1	0	-
HCM Lane LOS	A	-	-	F	C	F	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	2.6	1	11.1	2.6	0	-	-

Notes

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

HCM 2010 TWSC
5: Site Driveway/Lexington Road & Route 9

2024 Build Condition (Unsignalized Option)
Weekday Evening Peak Hour

Intersection

Int Delay, s/veh 8.2

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	2266	60	9	91	1971	1	0	0	120	0	0	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	250	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	0	2336	62	9	94	2032	1	0	0	124	0	0	12

Major/Minor	Major1			Major2				Minor1				Minor2		
Conflicting Flow All	2033	0	0	2522	2398	0	0	3589	4606	1199		3407	4637	1016
Stage 1	-	-	-	-	-	-	-	2367	2367	-		2239	2239	-
Stage 2	-	-	-	-	-	-	-	1222	2239	-		1168	2398	-
Critical Hdwy	4.1	-	-	6.4	4.1	-	-	7.5	6.5	6.9		7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	-	6.5	5.5	-		6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	6.5	5.5	-		6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.5	2.2	-	-	3.5	4	3.3		3.5	4	3.3
Pot Cap-1 Maneuver	282	-	-	34	203	-	-	2	1	181		3	1	239
Stage 1	-	-	-	-	-	-	-	37	69	-		44	80	-
Stage 2	-	-	-	-	-	-	-	194	80	-		209	66	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-		-	-	-
Mov Cap-1 Maneuver	282	-	-	79	~ 79	-	-	2	1	181		1	1	239
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	2	1	-		1	1	-
Stage 1	-	-	-	-	-	-	-	37	69	-		44	80	-
Stage 2	-	-	-	-	-	-	-	184	80	-		66	66	-

Approach	EB			WB				NB				SB
HCM Control Delay, s	0			14.3				59.5				20.9
HCM LOS								F				C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	181	282	-	-	~ 79	-	-	239
HCM Lane V/C Ratio	0.683	-	-	-	1.305	-	-	0.052
HCM Control Delay (s)	59.5	0	-	-	296.9	-	-	20.9
HCM Lane LOS	F	A	-	-	F	-	-	C
HCM 95th %tile Q(veh)	4.1	0	-	-	7.9	-	-	0.2

Notes

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

HCM 2010 TWSC
6: Site Driveway & Route 9

2024 Build Condition (Unsignalized Option)
Weekday Evening Peak Hour

Intersection

Int Delay, s/veh 0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	2395	0	0	2072	0	12
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, %	0	0	0	1	0	0
Mvmt Flow	2603	0	0	2252	0	13

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	2603	0	3729	1302
Stage 1	-	-	-	-	2603	-
Stage 2	-	-	-	-	1126	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	169	-	3	154
Stage 1	-	-	-	-	43	-
Stage 2	-	-	-	-	276	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	169	-	3	154
Mov Cap-2 Maneuver	-	-	-	-	3	-
Stage 1	-	-	-	-	43	-
Stage 2	-	-	-	-	276	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	30.5
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	154	-	-	169	-
HCM Lane V/C Ratio	0.085	-	-	-	-
HCM Control Delay (s)	30.5	-	-	0	-
HCM Lane LOS	D	-	-	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0	-

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2017 Baseline Condition
Saturday Midday Peak Hour

												
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	22	39	1679	40	23	8	1918	19	21	0	20	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		0		350		0	0		0	0
Storage Lanes		1		0		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.997				0.999				0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	3564	0	0	1745	3571	0	1719	0	1615	0
Flt Permitted		0.950				0.950			0.847			
Satd. Flow (perm)	0	1805	3564	0	0	1745	3571	0	1533	0	1615	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				1				128	
Link Speed (mph)			30				30			30		
Link Distance (ft)			500				1700			500		
Travel Time (s)			11.4				38.6			11.4		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	0%	1%	0%	0%	13%	1%	0%	5%	0%	0%	0%
Adj. Flow (vph)	24	42	1805	43	25	9	2062	20	23	0	22	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	66	1848	0	0	34	2082	0	23	0	22	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1		1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left		Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20		20	20
Trailing Detector (ft)	0	0	0		0	0	0		0		0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0		0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20		20	20
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex		CI+Ex		CI+Ex	CI+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			CI+Ex				CI+Ex					
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0					
Turn Type	Prot	Prot	NA		Prot	Prot	NA		Perm		Perm	Perm
Protected Phases	5	5	2		1	1	6					
Permitted Phases									8		8	4

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2017 Baseline Condition
Saturday Midday Peak Hour

	↓	↙
Lane Group	SBT	SBR
Lane Configurations	↕	
Volume (vph)	1	39
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.927	
Flt Protected	0.978	
Satd. Flow (prot)	1695	0
Flt Permitted	0.978	
Satd. Flow (perm)	1695	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	42	
Link Speed (mph)	30	
Link Distance (ft)	500	
Travel Time (s)	11.4	
Peak Hour Factor	0.93	0.93
Heavy Vehicles (%)	0%	3%
Adj. Flow (vph)	1	42
Shared Lane Traffic (%)		
Lane Group Flow (vph)	78	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	
Detector Template	Thru	
Leading Detector (ft)	100	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	CI+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	CI+Ex	
Detector 2 Channel		
Detector 2 Extend (s)	0.0	
Turn Type	NA	
Protected Phases	4	
Permitted Phases		

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2017 Baseline Condition
Saturday Midday Peak Hour

												
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector Phase	5	5	2		1	1	6		8		8	4
Switch Phase												
Minimum Initial (s)	6.0	6.0	15.0		6.0	6.0	15.0		6.0		6.0	6.0
Minimum Split (s)	12.0	12.0	21.0		12.0	12.0	21.0		12.0		12.0	12.0
Total Split (s)	36.0	36.0	56.0		36.0	36.0	56.0		36.0		36.0	36.0
Total Split (%)	28.1%	28.1%	43.8%		28.1%	28.1%	43.8%		28.1%		28.1%	28.1%
Maximum Green (s)	30.0	30.0	50.0		30.0	30.0	50.0		30.0		30.0	30.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0	4.0		3.0		3.0	3.0
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0	2.0		3.0		3.0	3.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0		0.0	
Total Lost Time (s)		6.0	6.0			6.0	6.0		6.0		6.0	
Lead/Lag	Lead	Lead	Lead		Lag	Lag	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0		3.0	3.0
Recall Mode	None	None	Min		None	None	Min		None		None	None
Act Effct Green (s)		8.4	57.9			8.2	55.2		7.6		7.6	
Actuated g/C Ratio		0.10	0.70			0.10	0.67		0.09		0.09	
v/c Ratio		0.36	0.74			0.20	0.87		0.16		0.08	
Control Delay		41.4	14.9			37.9	21.5		38.5		0.6	
Queue Delay		0.0	0.0			0.0	0.0		0.0		0.0	
Total Delay		41.4	14.9			37.9	21.5		38.5		0.6	
LOS		D	B			D	C		D		A	
Approach Delay			15.9				21.7					
Approach LOS			B				C					
90th %ile Green (s)	11.3	11.3	50.0		11.3	11.3	50.0		10.6		10.6	10.6
90th %ile Term Code	Gap	Gap	Max		Hold	Hold	Max		Hold		Hold	Gap
70th %ile Green (s)	9.6	9.6	50.0		9.6	9.6	50.0		8.6		8.6	8.6
70th %ile Term Code	Gap	Gap	Max		Hold	Hold	Max		Hold		Hold	Gap
50th %ile Green (s)	8.4	8.4	50.0		8.4	8.4	50.0		7.2		7.2	7.2
50th %ile Term Code	Gap	Gap	Max		Hold	Hold	Max		Hold		Hold	Gap
30th %ile Green (s)	7.3	7.3	63.3		0.0	0.0	50.0		6.1		6.1	6.1
30th %ile Term Code	Gap	Gap	Hold		Skip	Skip	Max		Hold		Hold	Hold
10th %ile Green (s)	0.0	0.0	65.0		0.0	0.0	65.0		0.0		0.0	0.0
10th %ile Term Code	Skip	Skip	Dwell		Skip	Skip	Dwell		Skip		Skip	Skip
Queue Length 50th (ft)		33	387			17	504		11		0	
Queue Length 95th (ft)		74	#675			46	#826		35		0	
Internal Link Dist (ft)			420				1620			420		
Turn Bay Length (ft)		250				350						
Base Capacity (vph)		661	2504			639	2391		561		672	
Starvation Cap Reductn		0	0			0	0		0		0	
Spillback Cap Reductn		0	0			0	0		0		0	
Storage Cap Reductn		0	0			0	0		0		0	
Reduced v/c Ratio		0.10	0.74			0.05	0.87		0.04		0.03	

Intersection Summary

Area Type: Other
Cycle Length: 128
Actuated Cycle Length: 82.4
Natural Cycle: 75

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2017 Baseline Condition
Saturday Midday Peak Hour

	↓	↙
Lane Group	SBT	SBR
Detector Phase	4	
Switch Phase		
Minimum Initial (s)	6.0	
Minimum Split (s)	12.0	
Total Split (s)	36.0	
Total Split (%)	28.1%	
Maximum Green (s)	30.0	
Yellow Time (s)	3.0	
All-Red Time (s)	3.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	6.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Act Effct Green (s)	7.6	
Actuated g/C Ratio	0.09	
v/c Ratio	0.40	
Control Delay	26.7	
Queue Delay	0.0	
Total Delay	26.7	
LOS	C	
Approach Delay	26.7	
Approach LOS	C	
90th %ile Green (s)	10.6	
90th %ile Term Code	Gap	
70th %ile Green (s)	8.6	
70th %ile Term Code	Gap	
50th %ile Green (s)	7.2	
50th %ile Term Code	Gap	
30th %ile Green (s)	6.1	
30th %ile Term Code	Hold	
10th %ile Green (s)	0.0	
10th %ile Term Code	Skip	
Queue Length 50th (ft)	18	
Queue Length 95th (ft)	61	
Internal Link Dist (ft)	420	
Turn Bay Length (ft)		
Base Capacity (vph)	647	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.12	
Intersection Summary		

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2017 Baseline Condition
Saturday Midday Peak Hour

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 19.1

Intersection Capacity Utilization 78.6%

Analysis Period (min) 15

90th %ile Actuated Cycle: 89.9

70th %ile Actuated Cycle: 86.2

50th %ile Actuated Cycle: 83.6

30th %ile Actuated Cycle: 81.4

10th %ile Actuated Cycle: 71

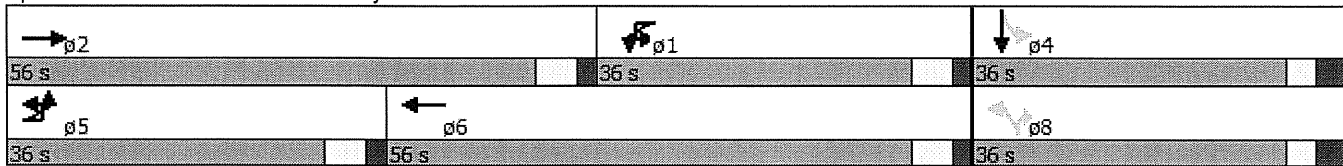
Intersection LOS: B

ICU Level of Service D

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

Queue shown is maximum after two cycles.

Splits and Phases: 1: CVS Driveway/Overbrook Drive & Route 9



HCM 2010 TWSC
2: Weston Road & Route 9 EB Ramp

2017 Baseline Condition (Calibrated)
Saturday Midday Peak Hour

Intersection

Int Delay, s/veh 3.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	106	141	61	512	320	112
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	0	1	4	4	2
Mvmt Flow	114	152	66	551	344	120

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1086	404	465	0	-	0
Stage 1	404	-	-	-	-	-
Stage 2	682	-	-	-	-	-
Critical Hdwy	4	3.5	4.11	-	-	-
Critical Hdwy Stg 1	3.5	-	-	-	-	-
Critical Hdwy Stg 2	3.5	-	-	-	-	-
Follow-up Hdwy	3.518	3.3	2.209	-	-	-
Pot Cap-1 Maneuver	497	881	1102	-	-	-
Stage 1	836	-	-	-	-	-
Stage 2	722	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	467	881	1102	-	-	-
Mov Cap-2 Maneuver	467	-	-	-	-	-
Stage 1	836	-	-	-	-	-
Stage 2	679	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.6	0.9	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1102	-	638	-	-
HCM Lane V/C Ratio	0.06	-	0.416	-	-
HCM Control Delay (s)	8.5	-	14.6	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.2	-	2	-	-

HCM 2010 TWSC
3: Weston Road & Rout 9 WB Ramp/Cleveland Road

2017 Baseline Condition
Saturday Midday Peak Hour

Intersection

Int Delay, s/veh 2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	24	8	62	50	10	68	0	397	210	2	301	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	125	-	-	-	-	25	-	-	60	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	1	0	0	0	10	2	0	0	1	0	0	3
Mvmt Flow	25	8	65	53	11	72	0	418	221	2	317	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	744	739	317	776	739	418	317	0	0	418	0	0
Stage 1	321	321	-	418	418	-	-	-	-	-	-	-
Stage 2	423	418	-	358	321	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.5	6.2	7.1	6.6	6.22	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.11	5.5	-	6.1	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.5	-	6.1	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4	3.3	3.5	4.09	3.318	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	332	347	728	317	336	635	1255	-	-	1152	-	-
Stage 1	693	655	-	616	577	-	-	-	-	-	-	-
Stage 2	611	594	-	664	638	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	287	346	728	283	335	635	1255	-	-	1152	-	-
Mov Cap-2 Maneuver	287	346	-	283	335	-	-	-	-	-	-	-
Stage 1	693	654	-	616	577	-	-	-	-	-	-	-
Stage 2	532	594	-	595	637	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.2	15.8	0	0.1
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1255	-	-	287	646	291	635	1152	-	-
HCM Lane V/C Ratio	-	-	-	0.088	0.114	0.217	0.113	0.002	-	-
HCM Control Delay (s)	0	-	-	18.8	11.3	20.8	11.4	8.1	0	-
HCM Lane LOS	A	-	-	C	B	C	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.4	0.8	0.4	0	-	-

HCM 2010 TWSC
5: Site Driveway/Lexington Road & Route 9

2017 Baseline Condition
Saturday Midday Peak Hour

Intersection

Int Delay, s/veh 0.2

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	1755	0	12	0	1962	8	0	0	0	0	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	250	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	1	0	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	0	1828	0	12	0	2044	8	0	0	0	0	0	6

Major/Minor	Major1			Major2				Minor1			Minor2		
Conflicting Flow All	2052	0	0	1828	1828	0	0	2875	3905	914	2987	3901	1026
Stage 1	-	-	-	-	-	-	-	1828	1828	-	2073	2073	-
Stage 2	-	-	-	-	-	-	-	1047	2077	-	914	1828	-
Critical Hdwy	4.1	-	-	6.4	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.5	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	277	-	-	99	339	-	-	8	3	279	6	3	236
Stage 1	-	-	-	-	-	-	-	81	129	-	57	97	-
Stage 2	-	-	-	-	-	-	-	248	97	-	298	129	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	277	-	-	99	99	-	-	8	3	279	6	3	236
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	8	3	-	6	3	-
Stage 1	-	-	-	-	-	-	-	81	129	-	57	97	-
Stage 2	-	-	-	-	-	-	-	241	97	-	298	129	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.3	0	20.7
HCM LOS			A	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	277	-	-	99	-	-	236
HCM Lane V/C Ratio	-	-	-	-	0.126	-	-	0.026
HCM Control Delay (s)	0	0	-	-	46.6	-	-	20.7
HCM Lane LOS	A	A	-	-	E	-	-	C
HCM 95th %tile Q(veh)	-	0	-	-	0.4	-	-	0.1

HCM 2010 TWSC
6: Site Driveway & Route 9

2017 Baseline Condition
Saturday Midday Peak Hour

Intersection

Int Delay, s/veh 0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	1767	0	0	1982	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	0	0	1	0	0
Mvmt Flow	1921	0	0	2154	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1921	0	2998	960
Stage 1	-	-	-	-	1921	-
Stage 2	-	-	-	-	1077	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	312	-	11	261
Stage 1	-	-	-	-	103	-
Stage 2	-	-	-	-	293	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	312	-	11	261
Mov Cap-2 Maneuver	-	-	-	-	11	-
Stage 1	-	-	-	-	103	-
Stage 2	-	-	-	-	293	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	312	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2024 No-Build Condition
Saturday Midday Peak Hour

												
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	24	42	1810	43	25	9	2068	20	23	0	21	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		0		350		0	0		0	0
Storage Lanes		1		0		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.997				0.999				0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	3564	0	0	1744	3571	0	1719	0	1615	0
Flt Permitted		0.950				0.950			0.807			
Satd. Flow (perm)	0	1805	3564	0	0	1744	3571	0	1460	0	1615	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				1				128	
Link Speed (mph)			30				30			30		
Link Distance (ft)			500				1700			500		
Travel Time (s)			11.4				38.6			11.4		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	0%	1%	0%	0%	13%	1%	0%	5%	0%	0%	0%
Adj. Flow (vph)	26	45	1946	46	27	10	2224	22	25	0	23	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	71	1992	0	0	37	2246	0	25	0	23	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1		1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left		Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20		20	20
Trailing Detector (ft)	0	0	0		0	0	0		0		0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0		0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20		20	20
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex		CI+Ex		CI+Ex	CI+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			CI+Ex				CI+Ex					
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0					
Turn Type	Prot	Prot	NA		Prot	Prot	NA		Perm		Perm	Perm
Protected Phases	5	5	2		1	1	6					
Permitted Phases									8		8	4

Lanes, Volumes, Timings

1: CVS Driveway/Overbrook Drive & Route 9

2024 No-Build Condition

Saturday Midday Peak Hour

	↓	↙
Lane Group	SBT	SBR
Lane Configurations	↕	
Volume (vph)	1	42
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.928	
Flt Protected	0.978	
Satd. Flow (prot)	1697	0
Flt Permitted	0.978	
Satd. Flow (perm)	1697	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	42	
Link Speed (mph)	30	
Link Distance (ft)	500	
Travel Time (s)	11.4	
Peak Hour Factor	0.93	0.93
Heavy Vehicles (%)	0%	3%
Adj. Flow (vph)	1	45
Shared Lane Traffic (%)		
Lane Group Flow (vph)	84	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	
Detector Template	Thru	
Leading Detector (ft)	100	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	CI+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	CI+Ex	
Detector 2 Channel		
Detector 2 Extend (s)	0.0	
Turn Type	NA	
Protected Phases	4	
Permitted Phases		

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2024 No-Build Condition
Saturday Midday Peak Hour

	↓	↙
Lane Group	SBT	SBR
Detector Phase	4	
Switch Phase		
Minimum Initial (s)	6.0	
Minimum Split (s)	12.0	
Total Split (s)	36.0	
Total Split (%)	28.1%	
Maximum Green (s)	30.0	
Yellow Time (s)	3.0	
All-Red Time (s)	3.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	6.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Act Effct Green (s)	7.9	
Actuated g/C Ratio	0.10	
v/c Ratio	0.42	
Control Delay	28.2	
Queue Delay	0.0	
Total Delay	28.2	
LOS	C	
Approach Delay	28.2	
Approach LOS	C	
90th %ile Green (s)	11.1	
90th %ile Term Code	Gap	
70th %ile Green (s)	8.9	
70th %ile Term Code	Gap	
50th %ile Green (s)	7.5	
50th %ile Term Code	Gap	
30th %ile Green (s)	6.2	
30th %ile Term Code	Gap	
10th %ile Green (s)	0.0	
10th %ile Term Code	Skip	
Queue Length 50th (ft)	21	
Queue Length 95th (ft)	66	
Internal Link Dist (ft)	420	
Turn Bay Length (ft)		
Base Capacity (vph)	644	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.13	
Intersection Summary		

HCM 2010 TWSC
3: Weston Road & Route 9 WB Ramp/Cleveland Road

2024 No-Build Condition
Saturday Midday Peak Hour

Intersection

Int Delay, s/veh 3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	26	9	66	52	11	73	0	425	225	2	323	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	125	-	-	-	-	25	-	-	60	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	1	0	0	0	10	2	0	0	1	0	0	3
Mvmt Flow	27	9	69	55	12	77	0	447	237	2	340	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	797	791	340	831	791	447	340	0	0	447	0	0
Stage 1	344	344	-	447	447	-	-	-	-	-	-	-
Stage 2	453	447	-	384	344	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.5	6.2	7.1	6.6	6.22	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.11	5.5	-	6.1	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.5	-	6.1	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4	3.3	3.5	4.09	3.318	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	306	324	707	291	313	612	1230	-	-	1124	-	-
Stage 1	673	640	-	595	560	-	-	-	-	-	-	-
Stage 2	588	577	-	643	623	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	260	323	707	256	312	612	1230	-	-	1124	-	-
Mov Cap-2 Maneuver	260	323	-	256	312	-	-	-	-	-	-	-
Stage 1	673	639	-	595	560	-	-	-	-	-	-	-
Stage 2	504	577	-	570	622	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14	17	0	0.1
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1230	-	-	260	619	264	612	1124	-	-
HCM Lane V/C Ratio	-	-	-	0.105	0.128	0.251	0.126	0.002	-	-
HCM Control Delay (s)	0	-	-	20.5	11.7	23.2	11.7	8.2	0	-
HCM Lane LOS	A	-	-	C	B	C	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.4	1	0.4	0	-	-

HCM 2010 TWSC
5: Site Driveway/Lexington Road & Route 9

2024 No-Build Condition
Saturday Midday Peak Hour

Intersection

Int Delay, s/veh 0.2

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	1892	0	13	0	2116	9	0	0	0	0	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	250	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	1	0	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	0	1971	0	14	0	2204	9	0	0	0	0	0	6

Major/Minor	Major1			Major2			Minor1			Minor2			
Conflicting Flow All	2214	0	0	1971	1971	0	0	3100	4212	985	3221	4207	1107
Stage 1	-	-	-	-	-	-	-	1971	1971	-	2236	2236	-
Stage 2	-	-	-	-	-	-	-	1129	2241	-	985	1971	-
Critical Hdwy	4.1	-	-	6.4	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.5	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	240	-	-	80	298	-	-	5	2	251	4	2	208
Stage 1	-	-	-	-	-	-	-	66	109	-	45	80	-
Stage 2	-	-	-	-	-	-	-	221	80	-	270	109	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	240	-	-	80	80	-	-	5	2	251	4	2	208
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	5	2	-	4	2	-
Stage 1	-	-	-	-	-	-	-	66	109	-	45	80	-
Stage 2	-	-	-	-	-	-	-	214	80	-	270	109	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.4	0	22.8
HCM LOS			A	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	240	-	-	80	-	-	208
HCM Lane V/C Ratio	-	-	-	-	0.169	-	-	0.03
HCM Control Delay (s)	0	0	-	-	59	-	-	22.8
HCM Lane LOS	A	A	-	-	F	-	-	C
HCM 95th %tile Q(veh)	-	0	-	-	0.6	-	-	0.1

HCM 2010 TWSC
6: Site Driveway & Route 9

2024 No-Build Condition
Saturday Midday Peak Hour

Intersection

Int Delay, s/veh 0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	1905	0	0	2138	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	0	0	1	0	0
Mvmt Flow	2071	0	0	2324	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	2071	0	3233	1035
Stage 1	-	-	-	-	2071	-
Stage 2	-	-	-	-	1162	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	273	-	8	232
Stage 1	-	-	-	-	85	-
Stage 2	-	-	-	-	264	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	273	-	8	232
Mov Cap-2 Maneuver	-	-	-	-	8	-
Stage 1	-	-	-	-	85	-
Stage 2	-	-	-	-	264	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	273	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2024 Build Condition
Saturday Midday Peak Hour

												
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	24	42	1859	43	25	9	2119	20	23	0	21	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		0		350		0	0		0	0
Storage Lanes		1		0		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.997				0.999				0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	3564	0	0	1744	3571	0	1719	0	1615	0
Flt Permitted		0.950				0.950			0.807			
Satd. Flow (perm)	0	1805	3564	0	0	1744	3571	0	1460	0	1615	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				1				128	
Link Speed (mph)			30				30			30		
Link Distance (ft)			500				1700			500		
Travel Time (s)			11.4				38.6			11.4		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	0%	1%	0%	0%	13%	1%	0%	5%	0%	0%	0%
Adj. Flow (vph)	26	45	1999	46	27	10	2278	22	25	0	23	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	71	2045	0	0	37	2300	0	25	0	23	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1		1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left		Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20		20	20
Trailing Detector (ft)	0	0	0		0	0	0		0		0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0		0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20		20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			Cl+Ex				Cl+Ex					
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0					
Turn Type	Prot	Prot	NA		Prot	Prot	NA		Perm		Perm	Perm
Protected Phases	5	5	2		1	1	6					
Permitted Phases									8		8	4

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2024 Build Condition
Saturday Midday Peak Hour

	↓	↙
Lane Group	SBT	SBR
Lane Configurations	↕	
Volume (vph)	1	42
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.928	
Flt Protected	0.978	
Satd. Flow (prot)	1697	0
Flt Permitted	0.978	
Satd. Flow (perm)	1697	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	42	
Link Speed (mph)	30	
Link Distance (ft)	500	
Travel Time (s)	11.4	
Peak Hour Factor	0.93	0.93
Heavy Vehicles (%)	0%	3%
Adj. Flow (vph)	1	45
Shared Lane Traffic (%)		
Lane Group Flow (vph)	84	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	
Detector Template	Thru	
Leading Detector (ft)	100	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	CI+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	CI+Ex	
Detector 2 Channel		
Detector 2 Extend (s)	0.0	
Turn Type	NA	
Protected Phases	4	
Permitted Phases		

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2024 Build Condition
Saturday Midday Peak Hour

												
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector Phase	5	5	2		1	1	6		8		8	4
Switch Phase												
Minimum Initial (s)	6.0	6.0	15.0		6.0	6.0	15.0		6.0		6.0	6.0
Minimum Split (s)	12.0	12.0	21.0		12.0	12.0	21.0		12.0		12.0	12.0
Total Split (s)	36.0	36.0	56.0		36.0	36.0	56.0		36.0		36.0	36.0
Total Split (%)	28.1%	28.1%	43.8%		28.1%	28.1%	43.8%		28.1%		28.1%	28.1%
Maximum Green (s)	30.0	30.0	50.0		30.0	30.0	50.0		30.0		30.0	30.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0	4.0		3.0		3.0	3.0
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0	2.0		3.0		3.0	3.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0		0.0	
Total Lost Time (s)		6.0	6.0			6.0	6.0		6.0		6.0	
Lead/Lag	Lead	Lead	Lead		Lag	Lag	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0		3.0	3.0
Recall Mode	None	None	Min		None	None	Min		None		None	None
Act Effct Green (s)		8.7	58.0			8.5	55.2		7.9		7.9	
Actuated g/C Ratio		0.10	0.70			0.10	0.67		0.10		0.10	
v/c Ratio		0.38	0.82			0.21	0.97		0.18		0.09	
Control Delay		41.8	18.4			38.2	31.8		39.0		0.6	
Queue Delay		0.0	0.0			0.0	0.0		0.0		0.0	
Total Delay		41.8	18.4			38.2	31.8		39.0		0.6	
LOS		D	B			D	C		D		A	
Approach Delay			19.2				31.9					
Approach LOS			B				C					
90th %ile Green (s)	11.8	11.8	50.0		11.8	11.8	50.0		11.1		11.1	11.1
90th %ile Term Code	Gap	Gap	Max		Hold	Hold	Max		Hold		Hold	Gap
70th %ile Green (s)	9.9	9.9	50.0		9.9	9.9	50.0		8.9		8.9	8.9
70th %ile Term Code	Gap	Gap	Max		Hold	Hold	Max		Hold		Hold	Gap
50th %ile Green (s)	8.7	8.7	50.0		8.7	8.7	50.0		7.5		7.5	7.5
50th %ile Term Code	Gap	Gap	Max		Hold	Hold	Max		Hold		Hold	Gap
30th %ile Green (s)	7.6	7.6	63.6		0.0	0.0	50.0		6.2		6.2	6.2
30th %ile Term Code	Gap	Gap	Hold		Skip	Skip	Max		Hold		Hold	Gap
10th %ile Green (s)	0.0	0.0	65.0		0.0	0.0	65.0		0.0		0.0	0.0
10th %ile Term Code	Skip	Skip	Dwell		Skip	Skip	Dwell		Skip		Skip	Skip
Queue Length 50th (ft)		36	494			18	~729		12		0	
Queue Length 95th (ft)		78	#818			48	#982		37		0	
Internal Link Dist (ft)			420				1620			420		
Turn Bay Length (ft)		250				350						
Base Capacity (vph)		657	2493			635	2379		531		669	
Starvation Cap Reductn		0	0			0	0		0		0	
Spillback Cap Reductn		0	0			0	0		0		0	
Storage Cap Reductn		0	0			0	0		0		0	
Reduced v/c Ratio		0.11	0.82			0.06	0.97		0.05		0.03	

Intersection Summary

Area Type: Other
Cycle Length: 128
Actuated Cycle Length: 82.9
Natural Cycle: 90

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2024 Build Condition
Saturday Midday Peak Hour

	↓	↙
Lane Group	SBT	SBR
Detector Phase	4	
Switch Phase		
Minimum Initial (s)	6.0	
Minimum Split (s)	12.0	
Total Split (s)	36.0	
Total Split (%)	28.1%	
Maximum Green (s)	30.0	
Yellow Time (s)	3.0	
All-Red Time (s)	3.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	6.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Act Effct Green (s)	7.9	
Actuated g/C Ratio	0.10	
v/c Ratio	0.42	
Control Delay	28.2	
Queue Delay	0.0	
Total Delay	28.2	
LOS	C	
Approach Delay	28.2	
Approach LOS	C	
90th %ile Green (s)	11.1	
90th %ile Term Code	Gap	
70th %ile Green (s)	8.9	
70th %ile Term Code	Gap	
50th %ile Green (s)	7.5	
50th %ile Term Code	Gap	
30th %ile Green (s)	6.2	
30th %ile Term Code	Gap	
10th %ile Green (s)	0.0	
10th %ile Term Code	Skip	
Queue Length 50th (ft)	21	
Queue Length 95th (ft)	66	
Internal Link Dist (ft)	420	
Turn Bay Length (ft)		
Base Capacity (vph)	644	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.13	
Intersection Summary		

Lanes, Volumes, Timings

1: CVS Driveway/Overbrook Drive & Route 9

2024 Build Condition
Saturday MIDDAY Peak Hour

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.97

Intersection Signal Delay: 25.9

Intersection Capacity Utilization 84.2%

Analysis Period (min) 15

90th %ile Actuated Cycle: 90.9

70th %ile Actuated Cycle: 86.8

50th %ile Actuated Cycle: 84.2

30th %ile Actuated Cycle: 81.8

10th %ile Actuated Cycle: 71

Intersection LOS: C

ICU Level of Service E

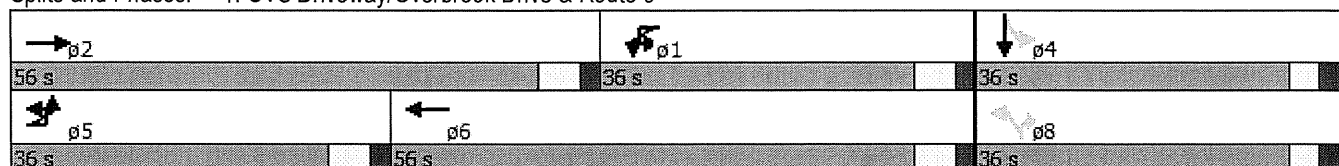
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

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

Queue shown is maximum after two cycles.

Splits and Phases: 1: CVS Driveway/Overbrook Drive & Route 9



HCM 2010 TWSC
2: Weston Road & Route 9 WB Ramp

2024 Build Condition (Calibrated)
Saturday Midday Peak Hour

Intersection

Int Delay, s/veh 3.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	111	164	63	561	343	120
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	0	1	4	4	2
Mvmt Flow	119	176	68	603	369	129

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1172	433	498	0	-	0
Stage 1	433	-	-	-	-	-
Stage 2	739	-	-	-	-	-
Critical Hdwy	4	3.5	4.11	-	-	-
Critical Hdwy Stg 1	3.5	-	-	-	-	-
Critical Hdwy Stg 2	3.5	-	-	-	-	-
Follow-up Hdwy	3.518	3.3	2.209	-	-	-
Pot Cap-1 Maneuver	467	868	1071	-	-	-
Stage 1	824	-	-	-	-	-
Stage 2	700	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	437	868	1071	-	-	-
Mov Cap-2 Maneuver	437	-	-	-	-	-
Stage 1	824	-	-	-	-	-
Stage 2	656	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16	0.9	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1071	-	621	-	-
HCM Lane V/C Ratio	0.063	-	0.476	-	-
HCM Control Delay (s)	8.6	-	16	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.2	-	2.6	-	-

HCM 2010 TWSC
3: Weston Road & Route 9 EB Ramp/Cleveland Road

2024 Build Condition
Saturday Midday Peak Hour

Intersection

Int Delay, s/veh 3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	26	9	66	52	11	73	0	432	227	2	323	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	125	-	-	-	-	25	-	-	60	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	1	0	0	0	10	2	0	0	1	0	0	3
Mvmt Flow	27	9	69	55	12	77	0	455	239	2	340	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	805	799	340	839	799	455	340	0	0	455	0	0
Stage 1	344	344	-	455	455	-	-	-	-	-	-	-
Stage 2	461	455	-	384	344	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.5	6.2	7.1	6.6	6.22	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.11	5.5	-	6.1	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.5	-	6.1	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4	3.3	3.5	4.09	3.318	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	302	321	707	288	310	605	1230	-	-	1116	-	-
Stage 1	673	640	-	589	555	-	-	-	-	-	-	-
Stage 2	582	572	-	643	623	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	256	320	707	253	309	605	1230	-	-	1116	-	-
Mov Cap-2 Maneuver	256	320	-	253	309	-	-	-	-	-	-	-
Stage 1	673	639	-	589	555	-	-	-	-	-	-	-
Stage 2	497	572	-	570	622	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14	17.2	0	0.1
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1230	-	-	256	617	261	605	1116	-	-
HCM Lane V/C Ratio	-	-	-	0.107	0.128	0.254	0.127	0.002	-	-
HCM Control Delay (s)	0	-	-	20.7	11.7	23.4	11.8	8.2	0	-
HCM Lane LOS	A	-	-	C	B	C	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.4	1	0.4	0	-	-

Lanes, Volumes, Timings
5: Site Driveway/Lexington Road & Route 9

2024 Build Condition
Saturday MIDDAY Peak Hour

												
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	0	1892	49	13	73	2107	9	60	0	65	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	16	12	12	15	15	12	12	12	12	12
Storage Length (ft)	200		0		250		0	0		0	0	
Storage Lanes	0		0		1		0	1		1	0	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00
Frt		0.996				0.999				0.850		
Flt Protected					0.950			0.950				
Satd. Flow (prot)	0	4036	0	0	1805	3928	0	1805	0	1615	0	0
Flt Permitted					0.950			0.950				
Satd. Flow (perm)	0	4036	0	0	1805	3928	0	1805	0	1615	0	0
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		4				1				109		
Link Speed (mph)		30				30			30			30
Link Distance (ft)		1700				400			250			250
Travel Time (s)		38.6				9.1			5.7			5.7
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	1971	51	14	76	2195	9	62	0	68	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2022	0	0	90	2204	0	62	0	68	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left
Median Width(ft)		12				12			12			12
Link Offset(ft)		0				0			0			0
Crosswalk Width(ft)		16				16			16			16
Two way Left Turn Lane												
Headway Factor	1.00	0.85	0.85	1.00	1.00	0.88	0.88	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	9	15		9	15		9	15	
Number of Detectors		2		1	1	2		1		1		
Detector Template		Thru		Left	Left	Thru		Left		Right		
Leading Detector (ft)		100		20	20	100		20		20		
Trailing Detector (ft)		0		0	0	0		0		0		
Detector 1 Position(ft)		0		0	0	0		0		0		
Detector 1 Size(ft)		6		20	20	6		20		20		
Detector 1 Type		CI+Ex		CI+Ex	CI+Ex	CI+Ex		CI+Ex		CI+Ex		
Detector 1 Channel												
Detector 1 Extend (s)		0.0		0.0	0.0	0.0		0.0		0.0		
Detector 1 Queue (s)		0.0		0.0	0.0	0.0		0.0		0.0		
Detector 1 Delay (s)		0.0		0.0	0.0	0.0		0.0		0.0		
Detector 2 Position(ft)		94				94						
Detector 2 Size(ft)		6				6						
Detector 2 Type		CI+Ex				CI+Ex						
Detector 2 Channel												
Detector 2 Extend (s)		0.0				0.0						
Turn Type		NA		Prot	Prot	NA		Perm		Perm		
Protected Phases		2		1	1	6						

Lanes, Volumes, Timings
5: Site Driveway/Lexington Road & Route 9

2024 Build Condition
Saturday Midday Peak Hour

Lane Group	SBR
Lane Configurations	7
Volume (vph)	6
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Storage Length (ft)	0
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Frt	0.865
Flt Protected	
Satd. Flow (prot)	1644
Flt Permitted	
Satd. Flow (perm)	1644
Right Turn on Red	Yes
Satd. Flow (RTOR)	109
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	0.96
Heavy Vehicles (%)	0%
Adj. Flow (vph)	6
Shared Lane Traffic (%)	
Lane Group Flow (vph)	6
Enter Blocked Intersection	No
Lane Alignment	Right
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	1.00
Turning Speed (mph)	9
Number of Detectors	1
Detector Template	Right
Leading Detector (ft)	20
Trailing Detector (ft)	0
Detector 1 Position(ft)	0
Detector 1 Size(ft)	20
Detector 1 Type	CI+Ex
Detector 1 Channel	
Detector 1 Extend (s)	0.0
Detector 1 Queue (s)	0.0
Detector 1 Delay (s)	0.0
Detector 2 Position(ft)	
Detector 2 Size(ft)	
Detector 2 Type	
Detector 2 Channel	
Detector 2 Extend (s)	
Turn Type	Perm
Protected Phases	

Lanes, Volumes, Timings
5: Site Driveway/Lexington Road & Route 9

2024 Build Condition
Saturday Midday Peak Hour

												
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Permitted Phases								8		8		
Detector Phase		2		1	1	6		8		8		
Switch Phase												
Minimum Initial (s)		15.0		6.0	6.0	15.0		6.0		6.0		
Minimum Split (s)		21.0		12.0	12.0	21.0		12.0		12.0		
Total Split (s)		50.0		20.0	20.0	70.0		20.0		20.0		
Total Split (%)		55.6%		22.2%	22.2%	77.8%		22.2%		22.2%		
Maximum Green (s)		44.0		14.0	14.0	64.0		14.0		14.0		
Yellow Time (s)		4.0		4.0	4.0	4.0		4.0		4.0		
All-Red Time (s)		2.0		2.0	2.0	2.0		2.0		2.0		
Lost Time Adjust (s)		0.0			0.0	0.0		0.0		0.0		
Total Lost Time (s)		6.0			6.0	6.0		6.0		6.0		
Lead/Lag		Lag		Lead	Lead							
Lead-Lag Optimize?		Yes		Yes	Yes							
Vehicle Extension (s)		3.0		3.0	3.0	3.0		3.0		3.0		
Recall Mode		Min		None	None	Min		None		None		
Act Effct Green (s)		51.4			9.4	64.0		8.3		8.3		
Actuated g/C Ratio		0.64			0.12	0.80		0.10		0.10		
v/c Ratio		0.78			0.42	0.70		0.33		0.26		
Control Delay		18.2			40.6	7.0		39.9		5.0		
Queue Delay		0.0			0.0	0.0		0.0		0.0		
Total Delay		18.2			40.6	7.0		39.9		5.0		
LOS		B			D	A		D		A		
Approach Delay		18.2				8.3						
Approach LOS		B				A						
90th %ile Green (s)		44.8		13.2	13.2	64.0		11.3		11.3		
90th %ile Term Code		Hold		Gap	Gap	Max		Gap		Gap		
70th %ile Green (s)		47.0		11.0	11.0	64.0		9.5		9.5		
70th %ile Term Code		Hold		Gap	Gap	Max		Gap		Gap		
50th %ile Green (s)		48.5		9.5	9.5	64.0		8.2		8.2		
50th %ile Term Code		Hold		Gap	Gap	Max		Gap		Gap		
30th %ile Green (s)		44.8		8.1	8.1	58.9		7.0		7.0		
30th %ile Term Code		Hold		Gap	Gap	Gap		Gap		Gap		
10th %ile Green (s)		59.0		0.0	0.0	59.0		0.0		0.0		
10th %ile Term Code		Dwell		Skip	Skip	Dwell		Skip		Skip		
Queue Length 50th (ft)		439			45	261		31		0		
Queue Length 95th (ft)		#739			89	403		69		15		
Internal Link Dist (ft)		1620				320			170			170
Turn Bay Length (ft)					250							
Base Capacity (vph)		2595			319	3180		319		375		
Starvation Cap Reductn		0			0	0		0		0		
Spillback Cap Reductn		0			0	0		0		0		
Storage Cap Reductn		0			0	0		0		0		
Reduced v/c Ratio		0.78			0.28	0.69		0.19		0.18		

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 80

Lanes, Volumes, Timings
5: Site Driveway/Lexington Road & Route 9

2024 Build Condition
Saturday Midday Peak Hour



Lane Group	SBR
Permitted Phases	4
Detector Phase	4
Switch Phase	
Minimum Initial (s)	6.0
Minimum Split (s)	12.0
Total Split (s)	20.0
Total Split (%)	22.2%
Maximum Green (s)	14.0
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	6.0
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Act Effct Green (s)	8.3
Actuated g/C Ratio	0.10
v/c Ratio	0.02
Control Delay	0.2
Queue Delay	0.0
Total Delay	0.2
LOS	A
Approach Delay	
Approach LOS	
90th %ile Green (s)	11.3
90th %ile Term Code	Hold
70th %ile Green (s)	9.5
70th %ile Term Code	Hold
50th %ile Green (s)	8.2
50th %ile Term Code	Hold
30th %ile Green (s)	7.0
30th %ile Term Code	Hold
10th %ile Green (s)	0.0
10th %ile Term Code	Skip
Queue Length 50th (ft)	0
Queue Length 95th (ft)	0
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	380
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.02
Intersection Summary	

Lanes, Volumes, Timings
5: Site Driveway/Lexington Road & Route 9

2024 Build Condition
Saturday Midday Peak Hour

Natural Cycle: 60
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.78
Intersection Signal Delay: 13.2
Intersection Capacity Utilization 80.2%
Analysis Period (min) 15
90th %ile Actuated Cycle: 87.3
70th %ile Actuated Cycle: 85.5
50th %ile Actuated Cycle: 84.2
30th %ile Actuated Cycle: 77.9
10th %ile Actuated Cycle: 65
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: Site Driveway/Lexington Road & Route 9

 p1	 p2	 p4
20 s	50 s	20 s
 p5		 p8
70 s		20 s

HCM 2010 TWSC
6: Site Driveway & Route 9

2024 Build Condition
Saturday Midday Peak Hour

Intersection

Int Delay, s/veh 0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	1970	0	0	2202	0	11
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, %	1	0	0	1	0	0
Mvmt Flow	2141	0	0	2393	0	12

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	2141	3338
Stage 1	-	-	2141
Stage 2	-	-	1197
Critical Hdwy	-	4.1	6.8
Critical Hdwy Stg 1	-	-	5.8
Critical Hdwy Stg 2	-	-	5.8
Follow-up Hdwy	-	2.2	3.5
Pot Cap-1 Maneuver	-	256	6
Stage 1	-	-	78
Stage 2	-	-	253
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	256	6
Mov Cap-2 Maneuver	-	-	6
Stage 1	-	-	78
Stage 2	-	-	253

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	220	-	-	256	-
HCM Lane V/C Ratio	0.054	-	-	-	-
HCM Control Delay (s)	22.3	-	-	0	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Lanes, Volumes, Timings

2024 Build Condition (Unsignalized Option)

1: CVS Driveway/Overbrook Drive & Route 9

Saturday Midday Peak Hour

												
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	24	42	1859	43	25	9	2068	20	23	0	21	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		250		0		350		0	0		0	0
Storage Lanes		1		0		1		0	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.95	1.00	0.95	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.997				0.999				0.850	
Flt Protected		0.950				0.950			0.950			
Satd. Flow (prot)	0	1805	3564	0	0	1744	3571	0	1719	0	1615	0
Flt Permitted		0.950				0.950			0.807			
Satd. Flow (perm)	0	1805	3564	0	0	1744	3571	0	1460	0	1615	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2				1				128	
Link Speed (mph)			30				30			30		
Link Distance (ft)			500				1700			500		
Travel Time (s)			11.4				38.6			11.4		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	0%	1%	0%	0%	13%	1%	0%	5%	0%	0%	0%
Adj. Flow (vph)	26	45	1999	46	27	10	2224	22	25	0	23	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	71	2045	0	0	37	2246	0	25	0	23	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left
Median Width(ft)			12				12			12		
Link Offset(ft)			0				0			0		
Crosswalk Width(ft)			16				16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9	15		9	9	15		9	15		9	15
Number of Detectors	1	1	2		1	1	2		1		1	1
Detector Template	Left	Left	Thru		Left	Left	Thru		Left		Right	Left
Leading Detector (ft)	20	20	100		20	20	100		20		20	20
Trailing Detector (ft)	0	0	0		0	0	0		0		0	0
Detector 1 Position(ft)	0	0	0		0	0	0		0		0	0
Detector 1 Size(ft)	20	20	6		20	20	6		20		20	20
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex		CI+Ex		CI+Ex	CI+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0
Detector 2 Position(ft)			94				94					
Detector 2 Size(ft)			6				6					
Detector 2 Type			CI+Ex				CI+Ex					
Detector 2 Channel												
Detector 2 Extend (s)			0.0				0.0					
Turn Type	Prot	Prot	NA		Prot	Prot	NA		Perm		Perm	Perm
Protected Phases	5	5	2		1	1	6					
Permitted Phases									8		8	4

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2024 Build Condition (Unsignalized Option)
Saturday Midday Peak Hour

	↓	↙
Lane Group	SBT	SBR
Lane Configurations	↕	
Volume (vph)	1	42
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Frt	0.928	
Flt Protected	0.978	
Satd. Flow (prot)	1697	0
Flt Permitted	0.978	
Satd. Flow (perm)	1697	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	42	
Link Speed (mph)	30	
Link Distance (ft)	500	
Travel Time (s)	11.4	
Peak Hour Factor	0.93	0.93
Heavy Vehicles (%)	0%	3%
Adj. Flow (vph)	1	45
Shared Lane Traffic (%)		
Lane Group Flow (vph)	84	0
Enter Blocked Intersection	No	No
Lane Alignment	Left	Right
Median Width(ft)	12	
Link Offset(ft)	0	
Crosswalk Width(ft)	16	
Two way Left Turn Lane		
Headway Factor	1.00	1.00
Turning Speed (mph)		9
Number of Detectors	2	
Detector Template	Thru	
Leading Detector (ft)	100	
Trailing Detector (ft)	0	
Detector 1 Position(ft)	0	
Detector 1 Size(ft)	6	
Detector 1 Type	CI+Ex	
Detector 1 Channel		
Detector 1 Extend (s)	0.0	
Detector 1 Queue (s)	0.0	
Detector 1 Delay (s)	0.0	
Detector 2 Position(ft)	94	
Detector 2 Size(ft)	6	
Detector 2 Type	CI+Ex	
Detector 2 Channel		
Detector 2 Extend (s)	0.0	
Turn Type	NA	
Protected Phases	4	
Permitted Phases		

Lanes, Volumes, Timings

2024 Build Condition (Unsignalized Option)

1: CVS Driveway/Overbrook Drive & Route 9

Saturday Midday Peak Hour

												
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Detector Phase	5	5	2		1	1	6		8		8	4
Switch Phase												
Minimum Initial (s)	6.0	6.0	15.0		6.0	6.0	15.0		6.0		6.0	6.0
Minimum Split (s)	12.0	12.0	21.0		12.0	12.0	21.0		12.0		12.0	12.0
Total Split (s)	36.0	36.0	56.0		36.0	36.0	56.0		36.0		36.0	36.0
Total Split (%)	28.1%	28.1%	43.8%		28.1%	28.1%	43.8%		28.1%		28.1%	28.1%
Maximum Green (s)	30.0	30.0	50.0		30.0	30.0	50.0		30.0		30.0	30.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0	4.0		3.0		3.0	3.0
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0	2.0		3.0		3.0	3.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0		0.0		0.0	
Total Lost Time (s)		6.0	6.0			6.0	6.0		6.0		6.0	
Lead/Lag	Lead	Lead	Lead		Lag	Lag	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0		3.0	3.0
Recall Mode	None	None	Min		None	None	Min		None		None	None
Act Effct Green (s)		8.7	58.0			8.5	55.2		7.9		7.9	
Actuated g/C Ratio		0.10	0.70			0.10	0.67		0.10		0.10	
v/c Ratio		0.38	0.82			0.21	0.94		0.18		0.09	
Control Delay		41.8	18.4			38.2	28.4		39.0		0.6	
Queue Delay		0.0	0.0			0.0	0.0		0.0		0.0	
Total Delay		41.8	18.4			38.2	28.4		39.0		0.6	
LOS		D	B			D	C		D		A	
Approach Delay			19.2				28.6					
Approach LOS			B				C					
90th %ile Green (s)	11.8	11.8	50.0		11.8	11.8	50.0		11.1		11.1	11.1
90th %ile Term Code	Gap	Gap	Max		Hold	Hold	Max		Hold		Hold	Gap
70th %ile Green (s)	9.9	9.9	50.0		9.9	9.9	50.0		8.9		8.9	8.9
70th %ile Term Code	Gap	Gap	Max		Hold	Hold	Max		Hold		Hold	Gap
50th %ile Green (s)	8.7	8.7	50.0		8.7	8.7	50.0		7.5		7.5	7.5
50th %ile Term Code	Gap	Gap	Max		Hold	Hold	Max		Hold		Hold	Gap
30th %ile Green (s)	7.6	7.6	63.6		0.0	0.0	50.0		6.2		6.2	6.2
30th %ile Term Code	Gap	Gap	Hold		Skip	Skip	Max		Hold		Hold	Gap
10th %ile Green (s)	0.0	0.0	65.0		0.0	0.0	65.0		0.0		0.0	0.0
10th %ile Term Code	Skip	Skip	Dwell		Skip	Skip	Dwell		Skip		Skip	Skip
Queue Length 50th (ft)		36	494			18	~697		12		0	
Queue Length 95th (ft)		78	#818			48	#948		37		0	
Internal Link Dist (ft)			420				1620			420		
Turn Bay Length (ft)		250				350						
Base Capacity (vph)		657	2493			635	2379		531		669	
Starvation Cap Reductn		0	0			0	0		0		0	
Spillback Cap Reductn		0	0			0	0		0		0	
Storage Cap Reductn		0	0			0	0		0		0	
Reduced v/c Ratio		0.11	0.82			0.06	0.94		0.05		0.03	

Intersection Summary

Area Type: Other

Cycle Length: 128

Actuated Cycle Length: 82.9

Natural Cycle: 90

G:\Projects\923 - Wellesley (Marathon)\Synchro\TIAS02\923 B SAT Unsignalized.syn

MDM Transportation Consultants, Inc.

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2024 Build Condition (Unsignalized Option)
Saturday Midday Peak Hour

	↓	↙
Lane Group	SBT	SBR
Detector Phase	4	
Switch Phase		
Minimum Initial (s)	6.0	
Minimum Split (s)	12.0	
Total Split (s)	36.0	
Total Split (%)	28.1%	
Maximum Green (s)	30.0	
Yellow Time (s)	3.0	
All-Red Time (s)	3.0	
Lost Time Adjust (s)	0.0	
Total Lost Time (s)	6.0	
Lead/Lag		
Lead-Lag Optimize?		
Vehicle Extension (s)	3.0	
Recall Mode	None	
Act Effct Green (s)	7.9	
Actuated g/C Ratio	0.10	
v/c Ratio	0.42	
Control Delay	28.2	
Queue Delay	0.0	
Total Delay	28.2	
LOS	C	
Approach Delay	28.2	
Approach LOS	C	
90th %ile Green (s)	11.1	
90th %ile Term Code	Gap	
70th %ile Green (s)	8.9	
70th %ile Term Code	Gap	
50th %ile Green (s)	7.5	
50th %ile Term Code	Gap	
30th %ile Green (s)	6.2	
30th %ile Term Code	Gap	
10th %ile Green (s)	0.0	
10th %ile Term Code	Skip	
Queue Length 50th (ft)	21	
Queue Length 95th (ft)	66	
Internal Link Dist (ft)	420	
Turn Bay Length (ft)		
Base Capacity (vph)	644	
Starvation Cap Reductn	0	
Spillback Cap Reductn	0	
Storage Cap Reductn	0	
Reduced v/c Ratio	0.13	
Intersection Summary		

Lanes, Volumes, Timings
1: CVS Driveway/Overbrook Drive & Route 9

2024 Build Condition (Unsignalized Option)
Saturday Midday Peak Hour

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.94

Intersection Signal Delay: 24.1

Intersection Capacity Utilization 82.8%

Intersection LOS: C

ICU Level of Service E

Analysis Period (min) 15

90th %ile Actuated Cycle: 90.9

70th %ile Actuated Cycle: 86.8

50th %ile Actuated Cycle: 84.2

30th %ile Actuated Cycle: 81.8

10th %ile Actuated Cycle: 71

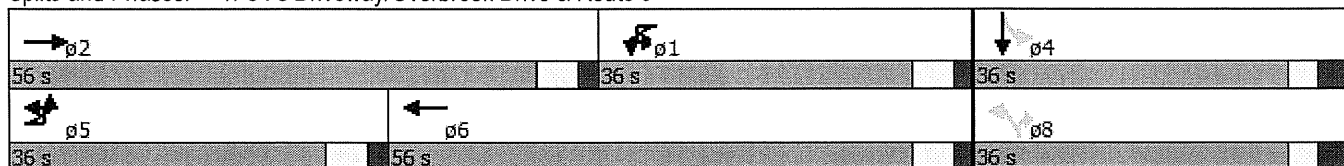
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

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

Queue shown is maximum after two cycles.

Splits and Phases: 1: CVS Driveway/Overbrook Drive & Route 9



HCM 2010 TWSC
2: Weston Road & Route 9 EB Ramp

2024 Build Condition (Unsignalized Option Calibrated)
Saturday Midday Peak Hour

Intersection

Int Delay, s/veh 5.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	171	164	65	561	343	120
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	0	1	4	4	2
Mvmt Flow	184	176	70	603	369	129

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1176	433	498	0	-	0
Stage 1	433	-	-	-	-	-
Stage 2	743	-	-	-	-	-
Critical Hdwy	4	3.5	4.11	-	-	-
Critical Hdwy Stg 1	3.5	-	-	-	-	-
Critical Hdwy Stg 2	3.5	-	-	-	-	-
Follow-up Hdwy	3.518	3.3	2.209	-	-	-
Pot Cap-1 Maneuver	466	868	1071	-	-	-
Stage 1	824	-	-	-	-	-
Stage 2	699	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	436	868	1071	-	-	-
Mov Cap-2 Maneuver	436	-	-	-	-	-
Stage 1	824	-	-	-	-	-
Stage 2	653	-	-	-	-	-

Approach	EB		NB		SB
HCM Control Delay, s	21.1		0.9		0
HCM LOS	C				

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1071	-	576	-	-
HCM Lane V/C Ratio	0.065	-	0.625	-	-
HCM Control Delay (s)	8.6	-	21.1	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.2	-	4.3	-	-

Intersection

Int Delay, s/veh 3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	26	9	66	52	11	73	0	445	274	2	323	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	125	-	-	-	-	25	-	-	60	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	1	0	0	0	10	2	0	0	1	0	0	3
Mvmt Flow	27	9	69	55	12	77	0	468	288	2	340	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	818	812	340	852	812	468	340	0	0	468	0	0
Stage 1	344	344	-	468	468	-	-	-	-	-	-	-
Stage 2	474	468	-	384	344	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.5	6.2	7.1	6.6	6.22	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.11	5.5	-	6.1	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.5	-	6.1	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4	3.3	3.5	4.09	3.318	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	296	315	707	282	304	595	1230	-	-	1104	-	-
Stage 1	673	640	-	579	548	-	-	-	-	-	-	-
Stage 2	573	565	-	643	623	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	250	314	707	248	303	595	1230	-	-	1104	-	-
Mov Cap-2 Maneuver	250	314	-	248	303	-	-	-	-	-	-	-
Stage 1	673	639	-	579	548	-	-	-	-	-	-	-
Stage 2	488	565	-	570	622	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.1	17.5	0	0.1
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1230	-	-	250	615	256	595	1104	-	-
HCM Lane V/C Ratio	-	-	-	0.109	0.128	0.259	0.129	0.002	-	-
HCM Control Delay (s)	0	-	-	21.2	11.7	23.9	11.9	8.3	0	-
HCM Lane LOS	A	-	-	C	B	C	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.4	1	0.4	0	-	-

HCM 2010 TWSC
5: Site Driveway/Lexington Road & Route 9

2024 Build Condition (Unsignalized Option)
Saturday Midday Peak Hour

Intersection

Int Delay, s/veh 2.5

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	1892	49	13	73	2167	9	0	0	116	0	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	250	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	1	0	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	0	1971	51	14	76	2257	9	0	0	121	0	0	6

Major/Minor	Major1			Major2				Minor1			Minor2		
Conflicting Flow All	2267	0	0	2143	2022	0	0	3304	4442	1011	3426	4463	1133
Stage 1	-	-	-	-	-	-	-	1996	1996	-	2441	2441	-
Stage 2	-	-	-	-	-	-	-	1308	2446	-	985	2022	-
Critical Hdwy	4.1	-	-	6.4	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.5	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	229	-	-	61	285	-	-	4	1	241	3	1	200
Stage 1	-	-	-	-	-	-	-	63	106	-	33	63	-
Stage 2	-	-	-	-	-	-	-	171	62	-	270	103	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	229	-	-	130	130	-	-	4	1	241	1	1	200
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	4	1	-	1	1	-
Stage 1	-	-	-	-	-	-	-	63	106	-	33	63	-
Stage 2	-	-	-	-	-	-	-	166	62	-	135	103	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	3	34.1	23.6
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	241	229	-	-	130	-	-	200
HCM Lane V/C Ratio	0.501	-	-	-	0.689	-	-	0.031
HCM Control Delay (s)	34.1	0	-	-	79.1	-	-	23.6
HCM Lane LOS	D	A	-	-	F	-	-	C
HCM 95th %tile Q(veh)	2.6	0	-	-	3.8	-	-	0.1

HCM 2010 TWSC
6: Site Driveway & Route 9

2024 Build Condition (Unsignalized Option)
Saturday Midday Peak Hour

Intersection

Int Delay, s/veh 0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	2021	0	0	2262	0	11
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, %	1	0	0	1	0	0
Mvmt Flow	2197	0	0	2459	0	12

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	2197	0	3426	1098
Stage 1	-	-	-	-	2197	-
Stage 2	-	-	-	-	1229	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	244	-	5	211
Stage 1	-	-	-	-	72	-
Stage 2	-	-	-	-	243	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	244	-	5	211
Mov Cap-2 Maneuver	-	-	-	-	5	-
Stage 1	-	-	-	-	72	-
Stage 2	-	-	-	-	243	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	23.1
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	211	-	-	244	-
HCM Lane V/C Ratio	0.057	-	-	-	-
HCM Control Delay (s)	23.1	-	-	0	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-

□ Delay Study

MDM Transportation Consultants, INC.

28 Lord Road, Suite 280
Marlborough, MA

EB: Route 9 Exit Ramp
N/S: Weston Road
Wellesley, MA

File Name : 923 Rte 9 EB Ramp Delay Study
Site Code : 923
Start Date : 5/25/2017
Page No : 1

Summary Information:

7:45:00 AM - 8:45:00 AM	Lane 1
Total Vehicle Count:	260
Delayed Vehicle Count:	260
Through Vehicle Count:	0
Average Stopped Time:	30.90
Maximum Stopped Time:	193
Min. Secs. for Delay:	0
Average Queue:	2.31
Queue Density:	3.10
Maximum Queue:	11
Delay in Vehicle Hour:	2.31
Total Delay:	8035

□ Parking Analysis

Empirical Data
 YMCA Parking Counts
 Observations Conducted on Tuesday, January 9, 2007 and Saturday, January 6, 2007

Peak Hour Parking Rate

		Framingham	Westborough	Average	85th
<u>Observed</u>					
Peak Weekday Hour		10:30 AM	9:30 AM		
Usage		170	223		
Size (1000 sqft)		40	62		
Rate (vh/ 1000 sqft)		4.25	3.60	3.93	4.15
Peak Weekend Hour		10:00 AM	10:00 AM		
Usage		162	289		
Size (1000 sqft)		40	62		
Rate (vh/ 1000 sqft)		4.05	4.66	4.36	4.57

Empirical Data
Winchester Soccer Club
Observations Conducted on Saturday, June 9, 2012

Field/Beginning of Observation Period	# Active Fields	# Teams	# Players	# Coaches	# Spectators	# Parked Vehicles	# Players/Field	# Players/Team	# Parked Cars/Field
Leonard & Muraco Field									
10:15 AM	3	6	69	17	106	62	23	12	21
11:30 AM	5	10	110	27	113	163	22	11	20
12:45 PM	3	6	45	18	156	186	15	8	23
2:15 PM	4	8	80	24	122	177	20	10	25
Lynch Field									
10:15 AM	2	4	41	9	39	39	21	10	20
Manchester Field									
8:45 AM	2	4	40	8	33	40	20	10	20
10:15 AM	1	2	24	4	23	27	24	12	27
2:15 PM	1	2	32	4	18	21	32	16	21
3:45 PM	2	4	61	7	48	42	31	15	21

Average	22	parked vehicles/field
85th Percentile	25	parked vehicles/field
Max	27	parked vehicles/field

Empirical Data
YMCA Parking Counts
Observations Conducted on Tuesday, January 9, 2007

	Metrowest	Westborough	Average	Index
7:00 AM	26%	21%	0.23	0.31
7:30 AM	30%	21%	0.26	0.34
8:00 AM	36%	28%	0.32	0.43
8:30 AM	39%	31%	0.35	0.47
9:00 AM	61%	46%	0.53	0.71
9:30 AM	82%	63%	0.73	0.97
10:00 AM	84%	66%	0.75	1.00
10:30 AM	86%	59%	0.72	0.97
11:00 AM	79%	56%	0.67	0.90
11:30 AM	71%	45%	0.58	0.78
12:00 PM	59%	43%	0.51	0.68
12:30 PM	48%	46%	0.47	0.63
1:00 PM	46%	41%	0.44	0.59
1:30 PM	48%	38%	0.43	0.58
2:00 PM	42%	32%	0.37	0.50
2:30 PM	38%	32%	0.35	0.47
3:00 PM	41%	32%	0.37	0.49
3:30 PM	42%	35%	0.39	0.52
4:00 PM	43%	44%	0.44	0.58
4:30 PM	56%	53%	0.54	0.73
5:00 PM	51%	55%	0.53	0.71
5:30 PM	55%	56%	0.55	0.74
6:00 PM	72%	48%	0.60	0.80
6:30 PM	66%	51%	0.59	0.78
7:00 PM	61%	52%	0.56	0.75

Empirical Data
YMCA Parking Counts
Observations Conducted on Saturday, January 6, 2007

	Metrowest	Westborough	Average	Index
7:00 AM	6%	17%	0.11	0.14
7:30 AM	16%	29%	0.22	0.27
8:00 AM	21%	39%	0.30	0.37
8:30 AM	54%	57%	0.56	0.67
9:00 AM	75%	71%	0.73	0.88
9:30 AM	77%	79%	0.78	0.94
10:00 AM	82%	81%	0.81	0.98
10:30 AM	80%	85%	0.83	1.00
11:00 AM	66%	74%	0.70	0.85
11:30 AM	70%	68%	0.69	0.83
12:00 PM	56%	44%	0.50	0.61
12:30 PM	49%	36%	0.43	0.52
1:00 PM	49%	34%	0.42	0.50
1:30 PM	45%	31%	0.38	0.46
2:00 PM	51%	30%	0.40	0.49
2:30 PM	45%	27%	0.36	0.44
3:00 PM	42%	31%	0.37	0.45
3:30 PM	41%	35%	0.38	0.46
4:00 PM	46%	31%	0.38	0.46
4:30 PM	46%	33%	0.40	0.48
5:00 PM	45%	31%	0.38	0.46
5:30 PM	45%	26%	0.36	0.43
6:00 PM	36%	24%	0.30	0.36
6:30 PM	29%	16%	0.22	0.27
7:00 PM	11%	14%	0.12	0.15

Framingham YMCA Parking Survey

Date: 5/24/17 & 5/25/17 Sq. ft. 50,300 Peak Parking Rate 3.76
 (spaces per 1000 sq. ft.)

<u>Time</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>Firelane</u>	<u>Total Cars</u>	<u>% full</u>
5/25/2017				HC					
9:30 AM	46	24	18	6	0	40	18	3	155 66.24%
10:00 AM	44	24	26	6	2	50	19	1	172 73.50%
10:30 AM	42	25	28	6	4	58	26	0	189 80.77%
									0 0.00%
5/24/2017									0 0.00%
5:00 PM	29	25	23	3	2	46	20	0	148 63.25%
5:30 PM	44	25	25	4	1	51	16	0	166 70.94%
6:00 PM	34	24	22	4	0	48	17	1	150 64.10%
6:30 PM	32	24	14	2	1	43	16	1	133 56.84%
									0 0.00%
<u>Total # Spaces</u>									
	48	25	29	6	7	66	53	Illegal	234

Wellfleet Sports Complex

TYPICAL OPERATIONS - PEAK PARKING DEMAND ESTIMATES - ITE AVERAGE RATES

Weekday - Individual Land Uses				
Land Use	Size Units	50th Rate	Parking Demand	
Health Club	35 ksf	5.27	185	
Turf & Ice Rink	3 Field/Rink	38.30	115	
Total			300	Available 355

Saturday - Individual Land Uses				
Land Use	Size Units	50th Rate	Parking Demand	
Health Club	35 ksf	2.89	102	
Turf & Ice Rink	3 Field/Rink	58.80	177	
Total			279	Available 355

Notes:
 -ITE LUC 462 (Health Club) and distribution for Metrowest and Westborough branch YMCA facilities
 -Turf Field and Ice Rink based ITE LUC 488 Soccer Complex Data

Weekday Hourly Parking Distribution

Average Demand	Health Club	Turf & Ice Rink	Total
12:00 AM	0.00	0.00	0.00
1:00 AM	0.00	0.00	0.00
2:00 AM	0.00	0.00	0.00
3:00 AM	0.00	0.00	0.00
4:00 AM	0.00	0.00	0.00
5:00 AM	0.00	0.00	0.00
6:00 AM	0.18	0.18	0.36
7:00 AM	0.31	0.31	0.62
8:00 AM	0.43	0.43	0.86
9:00 AM	0.71	0.71	1.42
10:00 AM	1.00	1.00	2.00
11:00 AM	0.90	0.90	1.80
12:00 PM	0.68	0.68	1.36
1:00 PM	0.59	0.59	1.18
2:00 PM	0.50	0.50	1.00
3:00 PM	0.49	0.49	0.98
4:00 PM	0.58	0.58	1.16
5:00 PM	0.71	0.71	1.42
6:00 PM	0.80	0.80	1.60
7:00 PM	0.75	0.75	1.50
8:00 PM	0.53	0.53	1.06
9:00 PM	0.47	0.47	0.94
10:00 PM	0.00	0.00	0.00
11:00 PM	0.00	0.00	0.00

Saturday Hourly Parking Distribution

Average Demand	Health Club	Turf & Ice Rink	Total
12:00 AM	0.00	0.00	0.00
1:00 AM	0.00	0.00	0.00
2:00 AM	0.00	0.00	0.00
3:00 AM	0.00	0.00	0.00
4:00 AM	0.00	0.00	0.00
5:00 AM	0.00	0.00	0.00
6:00 AM	0.15	0.15	0.30
7:00 AM	0.15	0.15	0.30
8:00 AM	0.41	0.41	0.82
9:00 AM	0.81	0.81	1.62
10:00 AM	1.00	1.00	2.00
11:00 AM	0.87	0.87	1.74
12:00 PM	0.63	0.63	1.26
1:00 PM	0.51	0.51	1.02
2:00 PM	0.49	0.49	0.98
3:00 PM	0.49	0.49	0.98
4:00 PM	0.54	0.54	1.08
5:00 PM	0.55	0.55	1.10
6:00 PM	0.40	0.40	0.80
7:00 PM	0.20	0.20	0.40
8:00 PM	0.00	0.00	0.00
9:00 PM	0.00	0.00	0.00
10:00 PM	0.00	0.00	0.00
11:00 PM	0.00	0.00	0.00

Unadjusted Weekday Hourly Parking Demand

Average Demand	Health Club	Turf & Ice Rink	Total
12:00 AM	0	0	0
1:00 AM	0	0	0
2:00 AM	0	0	0
3:00 AM	0	0	0
4:00 AM	0	0	0
5:00 AM	0	0	0
6:00 AM	34	21	55
7:00 AM	59	37	96
8:00 AM	80	50	130
9:00 AM	133	83	216
10:00 AM	185	115	300
11:00 AM	167	104	271
12:00 PM	127	79	206
1:00 PM	109	68	177
2:00 PM	92	58	150
3:00 PM	91	57	148
4:00 PM	109	68	177
5:00 PM	131	82	213
6:00 PM	148	92	240
7:00 PM	140	87	227
8:00 PM	99	62	161
9:00 PM	88	55	143
10:00 PM	0	0	0
11:00 PM	0	0	0
Max			300

Unadjusted Saturday Hourly Parking Demand

Average Demand	Health Club	Turf & Ice Rink	Total
12:00 AM	0	0	0
1:00 AM	0	0	0
2:00 AM	0	0	0
3:00 AM	0	0	0
4:00 AM	0	0	0
5:00 AM	0	0	0
6:00 AM	16	27	43
7:00 AM	16	27	43
8:00 AM	42	73	115
9:00 AM	83	144	227
10:00 AM	102	177	279
11:00 AM	89	154	243
12:00 PM	65	112	177
1:00 PM	53	91	144
2:00 PM	50	87	137
3:00 PM	50	87	137
4:00 PM	56	96	152
5:00 PM	57	98	155
6:00 PM	41	71	112
7:00 PM	21	36	57
8:00 PM	0	0	0
9:00 PM	0	0	0
10:00 PM	0	0	0
11:00 PM	0	0	0
Max			279

Wellesley Sports Complex

TYPICAL OPERATIONS - PEAK PARKING DEMAND ESTIMATES - EMPIRICAL DATA

Weekday - Individual Land Uses				
Land Use	Size Units	85th Rate	Parking Demand	
Health Club	35 ksf	4.15	146	
Turf & Ice Rink	3 Field/Rink	54.00	162	Available
Total			308	355

Saturday - Individual Land Uses				
Land Use	Size Units	85th Rate	Parking Demand	
Health Club	35 ksf	4.57	160	
Turf & Ice Rink	3 Field/Rink	54.00	162	Available
Total			322	355

Notes:
-Based on observed rates for Metrowest and Westborough branch YMCA facilities
-Turf Field and Ice Rink based Empirical Soccer Complex Data

Weekday Hourly Parking Distribution

Average Demand	Health Club	Turf & Ice Rink	162
12:00 AM	0.00	0.00	0.00
1:00 AM	0.00	0.00	0.00
2:00 AM	0.00	0.00	0.00
3:00 AM	0.00	0.00	0.00
4:00 AM	0.00	0.00	0.00
5:00 AM	0.00	0.00	0.00
6:00 AM	0.18	0.18	0.18
7:00 AM	0.31	0.31	0.31
8:00 AM	0.43	0.43	0.43
9:00 AM	0.71	0.71	0.71
10:00 AM	1.00	1.00	1.00
11:00 AM	0.90	0.90	0.90
12:00 PM	0.68	0.68	0.68
1:00 PM	0.59	0.59	0.59
2:00 PM	0.50	0.50	0.50
3:00 PM	0.49	0.49	0.49
4:00 PM	0.58	0.58	0.58
5:00 PM	0.71	0.71	0.71
6:00 PM	0.80	0.80	0.80
7:00 PM	0.75	0.75	0.75
8:00 PM	0.53	0.53	0.53
9:00 PM	0.47	0.47	0.47
10:00 PM	0.00	0.00	0.00
11:00 PM	0.00	0.00	0.00

Saturday Hourly Parking Distribution

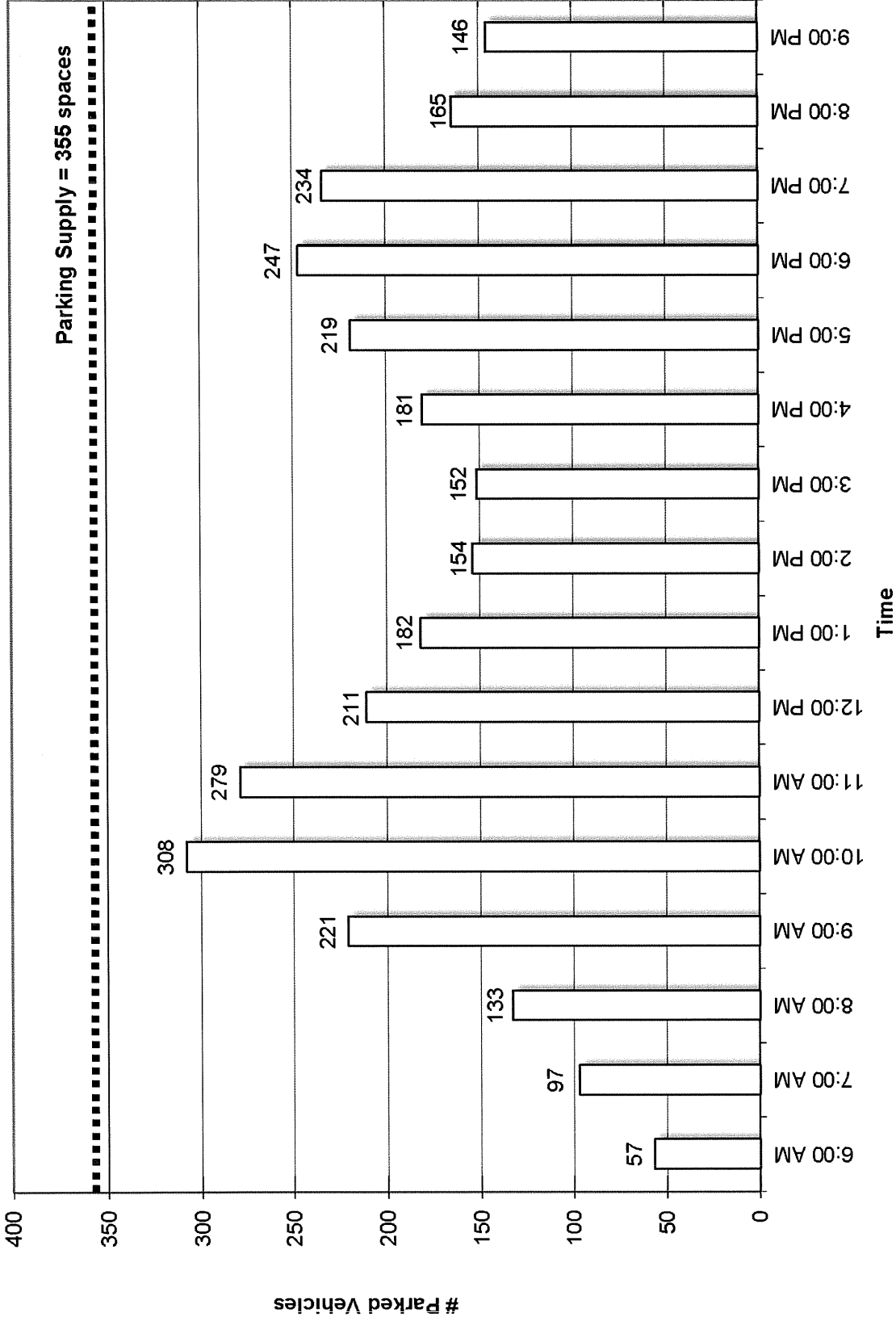
Average Demand	Health Club	Turf & Ice Rink	162
12:00 AM	0.00	0.00	0.00
1:00 AM	0.00	0.00	0.00
2:00 AM	0.00	0.00	0.00
3:00 AM	0.00	0.00	0.00
4:00 AM	0.00	0.00	0.00
5:00 AM	0.00	0.00	0.00
6:00 AM	0.15	0.15	0.15
7:00 AM	0.15	0.15	0.15
8:00 AM	0.41	0.41	0.41
9:00 AM	0.81	0.81	0.81
10:00 AM	1.00	1.00	1.00
11:00 AM	0.87	0.87	0.87
12:00 PM	0.63	0.63	0.63
1:00 PM	0.51	0.51	0.51
2:00 PM	0.49	0.49	0.49
3:00 PM	0.49	0.49	0.49
4:00 PM	0.54	0.54	0.54
5:00 PM	0.55	0.55	0.55
6:00 PM	0.40	0.40	0.40
7:00 PM	0.20	0.20	0.20
8:00 PM	0.00	0.00	0.00
9:00 PM	0.00	0.00	0.00
10:00 PM	0.00	0.00	0.00
11:00 PM	0.00	0.00	0.00

Unadjusted Weekday Hourly Parking Demand

Average Demand	Health Club	Turf & Ice Rink	162	Total
12:00 AM	0	0	0	0
1:00 AM	0	0	0	0
2:00 AM	0	0	0	0
3:00 AM	0	0	0	0
4:00 AM	0	0	0	0
5:00 AM	0	0	0	0
6:00 AM	27	30	30	57
7:00 AM	46	51	51	97
8:00 AM	63	70	70	133
9:00 AM	105	116	116	221
10:00 AM	146	162	162	308
11:00 AM	132	147	147	279
12:00 PM	100	111	111	211
1:00 PM	86	96	96	182
2:00 PM	73	81	81	154
3:00 PM	72	80	80	152
4:00 PM	86	95	95	181
5:00 PM	104	115	115	219
6:00 PM	117	130	130	247
7:00 PM	111	123	123	234
8:00 PM	78	87	87	165
9:00 PM	69	77	77	146
10:00 PM	0	0	0	0
11:00 PM	0	0	0	0
Max			308	

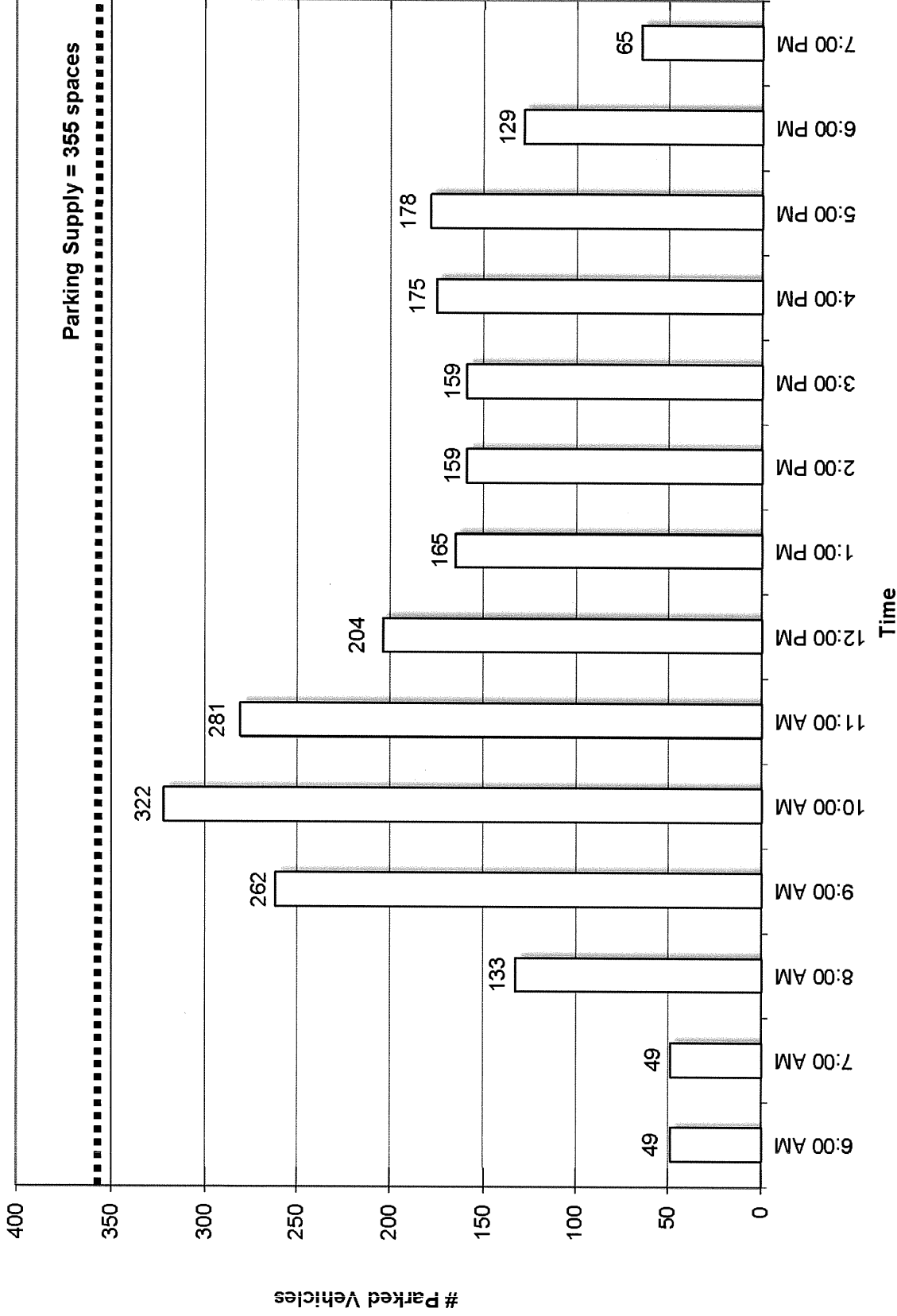
Unadjusted Saturday Hourly Parking Demand

Average Demand	Health Club	Turf & Ice Rink	162	Total
12:00 AM	0	0	0	0
1:00 AM	0	0	0	0
2:00 AM	0	0	0	0
3:00 AM	0	0	0	0
4:00 AM	0	0	0	0
5:00 AM	0	0	0	0
6:00 AM	24	25	25	49
7:00 AM	24	25	25	49
8:00 AM	66	67	67	133
9:00 AM	130	132	132	262
10:00 AM	160	162	162	322
11:00 AM	140	141	141	281
12:00 PM	101	103	103	204
1:00 PM	82	83	83	165
2:00 PM	79	80	80	159
3:00 PM	79	80	80	159
4:00 PM	87	88	88	175
5:00 PM	88	90	90	178
6:00 PM	64	65	65	129
7:00 PM	32	33	33	65
8:00 PM	0	0	0	0
9:00 PM	0	0	0	0
10:00 PM	0	0	0	0
11:00 PM	0	0	0	0
Max			322	



Attachments

Projected Weekday Parking Demand



Attachments

Projected Saturday Parking Demand