

APPENDIX

Traffic Count Data

Seasonal Adjustment Worksheets

Crash Data and Worksheets

Trip Generation Worksheets

Capacity Analysis Worksheets

Sight Distance Worksheets

Traffic Count Data

Accurate Counts

978-664-2565

Location : Waltham Road
Location : East of Linway Road
City/State: Wayland, MA

62154VL

Start Time	27-Apr-16 Wed	WB		Hour Totals		EB		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		0	6			0	10				
12:15		2	5			0	20				
12:30		0	4			0	6				
12:45		1	9	3	24	0	17	0	53	3	77
01:00		0	6			0	13				
01:15		0	11			1	11				
01:30		0	2			0	13				
01:45		0	6	0	25	0	9	1	46	1	71
02:00		0	7			0	9				
02:15		0	17			0	7				
02:30		0	4			0	6				
02:45		0	7	0	35	0	8	0	30	0	65
03:00		0	15			0	7				
03:15		0	11			0	8				
03:30		0	12			0	9				
03:45		0	21	0	59	0	7	0	31	0	90
04:00		0	20			0	9				
04:15		0	31			0	13				
04:30		0	27			2	9				
04:45		0	25	0	103	0	6	2	37	2	140
05:00		0	40			1	11				
05:15		1	39			0	7				
05:30		2	45			11	7				
05:45		0	44	3	168	4	8	16	33	19	201
06:00		1	40			7	18				
06:15		2	36			19	9				
06:30		2	23			42	6				
06:45		2	16	7	115	49	5	117	38	124	153
07:00		4	19			72	6				
07:15		10	19			94	6				
07:30		14	13			87	4				
07:45		6	9	34	60	100	7	353	23	387	83
08:00		5	4			101	4				
08:15		5	6			79	5				
08:30		6	7			91	2				
08:45		6	8	22	25	78	2	349	13	371	38
09:00		5	6			39	2				
09:15		6	4			33	5				
09:30		5	5			22	5				
09:45		4	5	20	20	23	3	117	15	137	35
10:00		4	2			15	1				
10:15		4	6			21	5				
10:30		7	6			8	2				
10:45		3	3	18	17	9	0	53	8	71	25
11:00		12	1			11	1				
11:15		2	3			6	1				
11:30		6	1			9	0				
11:45		9	1	29	6	5	1	31	3	60	9
Total		136	657			1039	330			1175	987
Percent		17.2%	82.8%			75.9%	24.1%			54.3%	45.7%

Accurate Counts

978-664-2565

Location : Waltham Road
Location : East of Linway Road
City/State: Wayland, MA

62154VL

Start Time	28-Apr-16 Thu	WB		Hour Totals		EB		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		0	9			1	12				
12:15		0	5			0	5				
12:30		1	10			0	16				
12:45		2	3	3	27	0	9	1	42	4	69
01:00		0	6			0	6				
01:15		0	9			0	6				
01:30		0	10			1	6				
01:45		0	4	0	29	0	16	1	34	1	63
02:00		0	8			0	9				
02:15		1	7			0	9				
02:30		0	5			1	7				
02:45		0	13	1	33	0	18	1	43	2	76
03:00		0	9			0	12				
03:15		0	20			0	8				
03:30		0	19			0	8				
03:45		0	14	0	62	0	13	0	41	0	103
04:00		0	29			0	10				
04:15		0	29			0	7				
04:30		0	33			1	10				
04:45		0	35	0	126	0	10	1	37	1	163
05:00		0	33			0	9				
05:15		0	51			2	18				
05:30		1	46			3	10				
05:45		0	53	1	183	12	6	17	43	18	226
06:00		1	53			9	12				
06:15		3	37			16	11				
06:30		2	23			38	7				
06:45		1	18	7	131	59	9	122	39	129	170
07:00		3	20			78	7				
07:15		8	11			98	10				
07:30		11	9			91	6				
07:45		7	8	29	48	99	8	366	31	395	79
08:00		5	5			98	5				
08:15		7	6			107	1				
08:30		4	3			75	3				
08:45		8	5	24	19	57	4	337	13	361	32
09:00		3	5			32	5				
09:15		2	10			24	4				
09:30		3	5			29	2				
09:45		4	5	12	25	22	1	107	12	119	37
10:00		2	5			15	0				
10:15		8	4			16	6				
10:30		4	2			16	2				
10:45		9	4	23	15	15	0	62	8	85	23
11:00		9	3			4	2				
11:15		3	3			17	1				
11:30		10	1			11	0				
11:45		10	1	32	8	8	0	40	3	72	11
Total		132	706			1055	346			1187	1052
Percent		15.8%	84.2%			75.3%	24.7%			53.0%	47.0%
Grand Total		268	1363			2094	676			2362	2039
Percent		16.4%	83.6%			75.6%	24.4%			53.7%	46.3%

ADT

ADT 2,200

AADT 2,200

Accurate Counts

978-664-2565

Location : Waltham Road
Location : East of Linway Road
City/State: Wayland, MA

62154VL

Start Time	25-Apr-16		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
12:00 AM	*	*	*	*	3	0	3	1	*	*	*	*	*	*	3	0
01:00	*	*	*	*	0	1	0	1	*	*	*	*	*	*	0	1
02:00	*	*	*	*	0	0	1	1	*	*	*	*	*	*	0	0
03:00	*	*	*	*	0	0	0	0	*	*	*	*	*	*	0	0
04:00	*	*	*	*	0	2	0	1	*	*	*	*	*	*	0	2
05:00	*	*	*	*	3	16	1	17	*	*	*	*	*	*	2	16
06:00	*	*	*	*	7	117	7	122	*	*	*	*	*	*	7	120
07:00	*	*	*	*	34	353	29	366	*	*	*	*	*	*	32	360
08:00	*	*	*	*	22	349	24	337	*	*	*	*	*	*	23	343
09:00	*	*	*	*	20	117	12	107	*	*	*	*	*	*	16	112
10:00	*	*	*	*	18	53	23	62	*	*	*	*	*	*	20	58
11:00	*	*	*	*	29	31	32	40	*	*	*	*	*	*	30	36
12:00 PM	*	*	*	*	24	53	27	42	*	*	*	*	*	*	26	48
01:00	*	*	*	*	25	46	29	34	*	*	*	*	*	*	27	40
02:00	*	*	*	*	35	30	33	43	*	*	*	*	*	*	34	36
03:00	*	*	*	*	59	31	62	41	*	*	*	*	*	*	60	36
04:00	*	*	*	*	103	37	126	37	*	*	*	*	*	*	114	37
05:00	*	*	*	*	168	33	183	43	*	*	*	*	*	*	176	38
06:00	*	*	*	*	115	38	131	39	*	*	*	*	*	*	123	38
07:00	*	*	*	*	60	23	48	31	*	*	*	*	*	*	54	27
08:00	*	*	*	*	25	13	19	13	*	*	*	*	*	*	22	13
09:00	*	*	*	*	20	15	25	12	*	*	*	*	*	*	22	14
10:00	*	*	*	*	17	8	15	8	*	*	*	*	*	*	16	8
11:00	*	*	*	*	6	3	8	3	*	*	*	*	*	*	7	3
Lane	0	0	0	0	793	1369	838	1401	0	0	0	0	0	0	814	1386
Day	0		0		2162		2239		0		0		0		2200	
AM Peak	-	-	-	-	07:00	07:00	11:00	07:00	-	-	-	-	-	-	07:00	07:00
Vol.	-	-	-	-	34	353	32	366	-	-	-	-	-	-	32	360
PM Peak	-	-	-	-	17:00	12:00	17:00	14:00	-	-	-	-	-	-	17:00	12:00
Vol.	-	-	-	-	168	53	183	43	-	-	-	-	-	-	176	48

Comb. Total	0	0	2162	2239	0	0	0	2200
ADT	ADT 2,200	AADT 2,200						

Accurate Counts

978-664-2565

Location : Waltham Road
Location : East of Linway Road
City/State: Wayland, MA

62154SP

WB

Start Time	1 3	4 6	7 9	10 12	13 15	16 18	19 21	22 24	25 27	28 30	31 33	34 36	37 39	40 999	Total
04/27/16	0	0	0	0	0	0	0	0	0	1	1	0	0	1	3
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	1	1	0	1	0	0	3
06:00	0	0	0	0	0	0	0	1	1	2	2	1	0	0	7
07:00	0	0	0	0	0	0	0	1	9	10	11	2	1	0	34
08:00	1	0	0	0	0	0	0	4	7	7	2	1	0	0	22
09:00	0	0	0	0	0	0	0	0	6	11	3	0	0	0	20
10:00	0	0	0	0	0	0	3	1	3	8	1	1	1	0	18
11:00	0	0	0	0	0	0	1	5	5	10	7	1	0	0	29
12 PM	0	0	0	0	0	5	0	0	6	8	5	0	0	0	24
13:00	0	0	0	0	0	0	2	3	1	9	9	1	0	0	25
14:00	1	0	0	0	0	0	0	8	8	8	5	4	0	1	35
15:00	0	0	0	0	0	1	0	2	9	26	18	3	0	0	59
16:00	0	0	0	0	0	0	0	4	19	48	23	9	0	0	103
17:00	0	0	0	0	0	0	0	4	26	72	54	11	1	0	168
18:00	0	0	0	0	0	0	1	4	15	50	29	14	2	0	115
19:00	0	0	0	0	0	0	1	3	15	21	16	2	2	0	60
20:00	0	0	0	0	0	0	0	3	4	11	5	1	0	1	25
21:00	0	0	0	0	0	0	0	0	4	5	8	3	0	0	20
22:00	0	0	0	0	0	0	0	2	2	5	6	1	1	0	17
23:00	0	0	0	0	0	0	0	0	1	1	3	0	0	1	6
Total	2	0	0	0	0	6	8	45	142	314	208	56	8	4	793

Daily

15th Percentile : 25 MPH
50th Percentile : 28 MPH
85th Percentile : 32 MPH
95th Percentile : 34 MPH

Mean Speed(Average) : 29 MPH
10 MPH Pace Speed : 25-34 MPH
Number in Pace : 683
Percent in Pace : 86.1%
Number of Vehicles > 30 MPH : 276
Percent of Vehicles > 30 MPH : 34.8%

Accurate Counts

978-664-2565

Location : Waltham Road
Location : East of Linway Road
City/State: Wayland, MA

62154SP

WB

Start Time	1 3	4 6	7 9	10 12	13 15	16 18	19 21	22 24	25 27	28 30	31 33	34 36	37 39	40 999	Total
04/28/16	0	0	0	0	0	0	0	0	1	0	1	0	0	1	3
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
06:00	0	0	0	0	0	0	0	0	1	2	2	2	0	0	7
07:00	0	0	0	0	0	0	3	3	9	5	6	3	0	0	29
08:00	0	0	0	0	0	0	0	1	6	13	2	2	0	0	24
09:00	1	0	0	0	0	0	0	0	4	5	1	1	0	0	12
10:00	0	0	0	0	0	1	0	3	6	9	3	1	0	0	23
11:00	0	0	0	0	0	0	0	3	7	14	5	3	0	0	32
12 PM	0	0	0	0	1	0	2	2	10	9	2	1	0	0	27
13:00	0	0	0	0	0	2	0	6	9	6	4	2	0	0	29
14:00	0	0	0	0	0	2	3	5	10	10	3	0	0	0	33
15:00	0	0	0	0	0	0	3	7	10	27	9	4	2	0	62
16:00	2	0	0	0	0	0	1	4	25	51	33	9	0	1	126
17:00	0	0	0	1	0	0	1	7	25	89	42	17	1	0	183
18:00	5	0	0	0	0	0	1	6	20	45	48	3	1	2	131
19:00	0	0	0	0	0	0	1	3	8	16	11	7	1	1	48
20:00	0	0	0	0	0	0	0	5	2	7	4	1	0	0	19
21:00	0	0	0	0	0	0	1	3	2	10	5	4	0	0	25
22:00	0	0	0	0	0	0	0	1	4	3	3	2	1	1	15
23:00	0	0	0	0	0	0	0	0	0	4	3	0	1	0	8
Total	8	0	0	1	1	5	16	59	160	325	188	62	7	6	838

Daily

15th Percentile : 24 MPH
50th Percentile : 28 MPH
85th Percentile : 32 MPH
95th Percentile : 34 MPH

Mean Speed(Average) : 29 MPH

10 MPH Pace Speed : 25-34 MPH

Number in Pace : 694

Percent in Pace : 82.8%

Number of Vehicles > 30 MPH : 263

Percent of Vehicles > 30 MPH : 31.4%

Grand Total

10 0 0 1 1 11 24 104 302 639 396 118 15 10 1631

Overall

15th Percentile : 24 MPH
50th Percentile : 28 MPH
85th Percentile : 32 MPH
95th Percentile : 34 MPH

Mean Speed(Average) : 29 MPH

10 MPH Pace Speed : 25-34 MPH

Number in Pace : 1376

Percent in Pace : 84.4%

Number of Vehicles > 30 MPH : 539

Percent of Vehicles > 30 MPH : 33.0%

Accurate Counts

978-664-2565

Location : Waltham Road
Location : East of Linway Road
City/State: Wayland, MA

62154SP

EB

Start Time	1 3	4 6	7 9	10 12	13 15	16 18	19 21	22 24	25 27	28 30	31 33	34 36	37 39	40 999	Total
04/27/16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2
05:00	0	0	0	0	0	0	0	0	2	6	5	1	1	1	16
06:00	0	0	0	0	0	0	0	0	5	31	41	28	12	0	117
07:00	0	0	0	0	0	0	1	3	46	81	138	61	17	6	353
08:00	1	0	0	0	0	0	0	4	37	124	120	51	9	3	349
09:00	0	0	0	0	0	0	1	3	10	30	34	30	8	1	117
10:00	0	0	0	0	0	2	4	3	3	19	10	7	1	4	53
11:00	0	0	0	0	0	0	1	3	6	8	6	2	4	1	31
12 PM	0	0	0	0	0	2	5	0	10	8	16	7	3	2	53
13:00	0	0	0	0	2	2	2	2	9	13	8	7	1	0	46
14:00	1	0	0	0	0	1	1	1	3	6	10	4	2	1	30
15:00	0	0	0	0	1	2	1	3	6	5	7	3	0	3	31
16:00	0	0	0	0	0	1	2	3	4	14	7	4	0	2	37
17:00	0	0	0	0	1	0	2	5	4	9	7	4	1	0	33
18:00	0	0	0	0	0	0	0	1	12	12	8	1	4	0	38
19:00	0	0	0	0	0	0	2	0	1	8	7	1	4	0	23
20:00	0	0	0	0	0	0	0	3	3	5	0	2	0	0	13
21:00	0	0	0	0	0	0	0	2	2	6	2	2	0	1	15
22:00	0	0	0	0	0	0	0	0	0	1	4	2	1	0	8
23:00	0	0	0	0	0	0	0	0	0	0	1	1	1	0	3
Total	2	0	0	0	4	10	22	36	163	388	432	218	69	25	1369

Daily

15th Percentile : 26 MPH
50th Percentile : 30 MPH
85th Percentile : 34 MPH
95th Percentile : 36 MPH

Mean Speed(Average) : 31 MPH
10 MPH Pace Speed : 27-36 MPH
Number in Pace : 1092
Percent in Pace : 79.8%
Number of Vehicles > 30 MPH : 744
Percent of Vehicles > 30 MPH : 54.3%

Accurate Counts

978-664-2565

Location : Waltham Road
Location : East of Linway Road
City/State: Wayland, MA

62154SP

EB

Start Time	1 3	4 6	7 9	10 12	13 15	16 18	19 21	22 24	25 27	28 30	31 33	34 36	37 39	40 999	Total
04/28/16	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
01:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
02:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
05:00	0	0	0	0	0	0	0	1	2	6	2	2	4	0	17
06:00	0	0	0	0	0	0	0	0	6	31	38	32	14	1	122
07:00	0	0	0	0	0	0	1	8	26	116	122	64	21	8	366
08:00	0	0	0	0	1	1	0	5	30	109	135	49	5	2	337
09:00	1	0	0	0	0	3	6	3	10	20	39	19	6	0	107
10:00	0	0	0	0	2	0	2	3	9	19	12	11	2	2	62
11:00	0	0	0	1	1	0	0	0	9	16	7	4	2	0	40
12 PM	0	0	0	0	0	0	2	4	12	13	5	4	1	1	42
13:00	0	0	0	0	1	0	1	4	11	6	8	2	0	1	34
14:00	0	0	0	1	0	0	2	8	6	12	12	2	0	0	43
15:00	0	0	0	0	0	1	2	5	6	12	6	7	2	0	41
16:00	0	0	0	0	1	0	0	6	11	7	9	2	0	1	37
17:00	0	0	0	1	0	0	0	2	12	6	12	7	2	1	43
18:00	1	0	0	0	1	1	0	2	6	12	9	4	2	1	39
19:00	0	0	0	0	0	0	0	1	5	15	6	2	2	0	31
20:00	0	0	0	0	0	1	0	1	1	7	0	1	1	1	13
21:00	0	0	0	0	0	0	0	2	3	3	1	0	2	1	12
22:00	0	0	0	0	0	0	0	0	2	1	3	2	0	0	8
23:00	0	0	0	0	0	0	0	0	2	1	0	0	0	0	3
Total	2	0	0	3	7	7	16	55	172	412	427	214	66	20	1401

Daily

15th Percentile : 26 MPH
50th Percentile : 30 MPH
85th Percentile : 34 MPH
95th Percentile : 35 MPH

Mean Speed(Average) : 30 MPH
10 MPH Pace Speed : 27-36 MPH
Number in Pace : 1110
Percent in Pace : 79.2%
Number of Vehicles > 30 MPH : 727
Percent of Vehicles > 30 MPH : 51.9%

Grand Total	4	0	0	3	11	17	38	91	335	800	859	432	135	45	2770
-------------	---	---	---	---	----	----	----	----	-----	-----	-----	-----	-----	----	------

Overall

15th Percentile : 26 MPH
50th Percentile : 30 MPH
85th Percentile : 34 MPH
95th Percentile : 35 MPH

Mean Speed(Average) : 30 MPH
10 MPH Pace Speed : 27-36 MPH
Number in Pace : 2203
Percent in Pace : 79.5%
Number of Vehicles > 30 MPH : 1471
Percent of Vehicles > 30 MPH : 53.1%

Accurate Counts

978-664-2565

Location : Waltham Road
Location : East of Linway Road
City/State: Wayland, MA

62154SP

WB, EB

Start	1	4	7	10	13	16	19	22	25	28	31	34	37	40	
Time	3	6	9	12	15	18	21	24	27	30	33	36	39	999	Total
04/27/16	0	0	0	0	0	0	0	0	0	1	1	0	0	1	3
01:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2
05:00	0	0	0	0	0	0	0	0	3	7	5	2	1	1	19
06:00	0	0	0	0	0	0	0	1	6	33	43	29	12	0	124
07:00	0	0	0	0	0	0	1	4	55	91	149	63	18	6	387
08:00	2	0	0	0	0	0	0	8	44	131	122	52	9	3	371
09:00	0	0	0	0	0	0	1	3	16	41	37	30	8	1	137
10:00	0	0	0	0	0	2	7	4	6	27	11	8	2	4	71
11:00	0	0	0	0	0	0	2	8	11	18	13	3	4	1	60
12 PM	0	0	0	0	0	7	5	0	16	16	21	7	3	2	77
13:00	0	0	0	0	2	2	4	5	10	22	17	8	1	0	71
14:00	2	0	0	0	0	1	1	9	11	14	15	8	2	2	65
15:00	0	0	0	0	1	3	1	5	15	31	25	6	0	3	90
16:00	0	0	0	0	0	1	2	7	23	62	30	13	0	2	140
17:00	0	0	0	0	1	0	2	9	30	81	61	15	2	0	201
18:00	0	0	0	0	0	0	1	5	27	62	37	15	6	0	153
19:00	0	0	0	0	0	0	3	3	16	29	23	3	6	0	83
20:00	0	0	0	0	0	0	0	6	7	16	5	3	0	1	38
21:00	0	0	0	0	0	0	0	2	6	11	10	5	0	1	35
22:00	0	0	0	0	0	0	0	2	2	6	10	3	2	0	25
23:00	0	0	0	0	0	0	0	0	1	1	4	1	1	1	9
Total	4	0	0	0	4	16	30	81	305	702	640	274	77	29	2162

Daily

15th Percentile : 25 MPH
50th Percentile : 29 MPH
85th Percentile : 33 MPH
95th Percentile : 35 MPH

Mean Speed(Average) : 30 MPH
10 MPH Pace Speed : 25-34 MPH
Number in Pace : 1738
Percent in Pace : 80.4%
Number of Vehicles > 30 MPH : 1020
Percent of Vehicles > 30 MPH : 47.2%

Accurate Counts

978-664-2565

Location : Waltham Road
Location : East of Linway Road
City/State: Wayland, MA

62154SP

WB, EB

Start Time	1 3	4 6	7 9	10 12	13 15	16 18	19 21	22 24	25 27	28 30	31 33	34 36	37 39	40 999	Total
04/28/16	0	0	0	0	0	0	0	0	2	0	1	0	0	1	4
01:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
02:00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
05:00	0	0	0	0	0	0	0	1	2	6	3	2	4	0	18
06:00	0	0	0	0	0	0	0	0	7	33	40	34	14	1	129
07:00	0	0	0	0	0	0	4	11	35	121	128	67	21	8	395
08:00	0	0	0	0	1	1	0	6	36	122	137	51	5	2	361
09:00	2	0	0	0	0	3	6	3	14	25	40	20	6	0	119
10:00	0	0	0	0	2	1	2	6	15	28	15	12	2	2	85
11:00	0	0	0	1	1	0	0	3	16	30	12	7	2	0	72
12 PM	0	0	0	0	1	0	4	6	22	22	7	5	1	1	69
13:00	0	0	0	0	1	2	1	10	20	12	12	4	0	1	63
14:00	0	0	0	1	0	2	5	13	16	22	15	2	0	0	76
15:00	0	0	0	0	0	1	5	12	16	39	15	11	4	0	103
16:00	2	0	0	0	1	0	1	10	36	58	42	11	0	2	163
17:00	0	0	0	2	0	0	1	9	37	95	54	24	3	1	226
18:00	6	0	0	0	1	1	1	8	26	57	57	7	3	3	170
19:00	0	0	0	0	0	0	1	4	13	31	17	9	3	1	79
20:00	0	0	0	0	0	1	0	6	3	14	4	2	1	1	32
21:00	0	0	0	0	0	0	1	5	5	13	6	4	2	1	37
22:00	0	0	0	0	0	0	0	1	6	4	6	4	1	1	23
23:00	0	0	0	0	0	0	0	0	2	5	3	0	1	0	11
Total	10	0	0	4	8	12	32	114	332	737	615	276	73	26	2239

Daily

15th Percentile : 25 MPH
50th Percentile : 29 MPH
85th Percentile : 33 MPH
95th Percentile : 35 MPH

Mean Speed(Average) : 30 MPH
10 MPH Pace Speed : 25-34 MPH
Number in Pace : 1776
Percent in Pace : 79.3%
Number of Vehicles > 30 MPH : 990
Percent of Vehicles > 30 MPH : 44.2%

Grand Total	14	0	0	4	12	28	62	195	637	1439	1255	550	150	55	4401
-------------	----	---	---	---	----	----	----	-----	-----	------	------	-----	-----	----	------

Overall

15th Percentile : 25 MPH
50th Percentile : 29 MPH
85th Percentile : 33 MPH
95th Percentile : 35 MPH

Mean Speed(Average) : 30 MPH
10 MPH Pace Speed : 25-34 MPH
Number in Pace : 3514
Percent in Pace : 79.8%
Number of Vehicles > 30 MPH : 2010
Percent of Vehicles > 30 MPH : 45.7%

Accurate Counts

978-664-2565

N/S Street : Appletree Lane
 E/W Street: Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154001
 Site Code : 62154001
 Start Date : 4/27/2016
 Page No : 1

Groups Printed- Cars - Trucks							
	Waltham Rd From East		Appletree Ln From South		Waltham Rd From West		
Start Time	Left	Thru	Left	Right	Thru	Right	Int. Total
07:00 AM	0	9	1	0	76	0	86
07:15 AM	0	20	0	2	87	0	109
07:30 AM	0	9	0	1	87	1	98
07:45 AM	0	9	0	0	94	0	103
Total	0	47	1	3	344	1	396
08:00 AM	0	7	1	0	102	1	111
08:15 AM	0	5	0	0	89	0	94
08:30 AM	0	8	0	1	89	0	98
08:45 AM	0	6	0	0	70	1	77
Total	0	26	1	1	350	2	380
Grand Total	0	73	2	4	694	3	776
Apprch %	0	100	33.3	66.7	99.6	0.4	
Total %	0	9.4	0.3	0.5	89.4	0.4	
Cars	0	73	1	4	693	2	773
% Cars	0	100	50	100	99.9	66.7	99.6
Trucks	0	0	1	0	1	1	3
% Trucks	0	0	50	0	0.1	33.3	0.4

Accurate Counts

978-664-2565

N/S Street : Appletree Lane
 E/W Street: Waltham Road
 City/State : Wayland, MA
 Weather : Clear

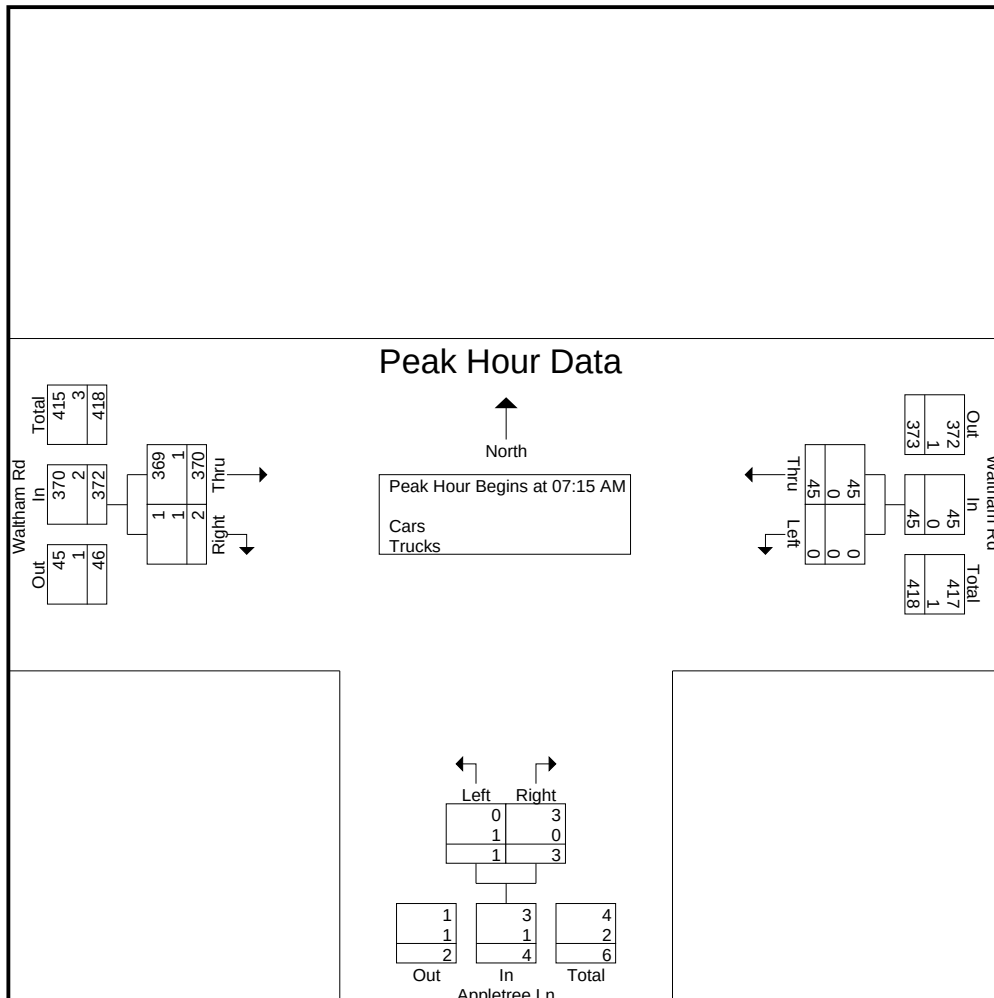
File Name : 62154001
 Site Code : 62154001
 Start Date : 4/27/2016
 Page No : 2

	Waltham Rd From East			Appletree Ln From South			Waltham Rd From West			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total

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

Peak Hour for Entire Intersection Begins at 07:15 AM

07:15 AM	0	20	20	0	2	2	87	0	87	109
07:30 AM	0	9	9	0	1	1	87	1	88	98
07:45 AM	0	9	9	0	0	0	94	0	94	103
08:00 AM	0	7	7	1	0	1	102	1	103	111
Total Volume	0	45	45	1	3	4	370	2	372	421
% App. Total	0	100		25	75		99.5	0.5		
PHF	.000	.563	.563	.250	.375	.500	.907	.500	.903	.948
Cars	0	45	45	0	3	3	369	1	370	418
% Cars	0	100	100	0	100	75.0	99.7	50.0	99.5	99.3
Trucks	0	0	0	1	0	1	1	1	2	3
% Trucks	0	0	0	100	0	25.0	0.3	50.0	0.5	0.7



Accurate Counts

978-664-2565

N/S Street : Appletree Lane
E/W Street: Waltham Road
City/State : Wayland, MA
Weather : Clear

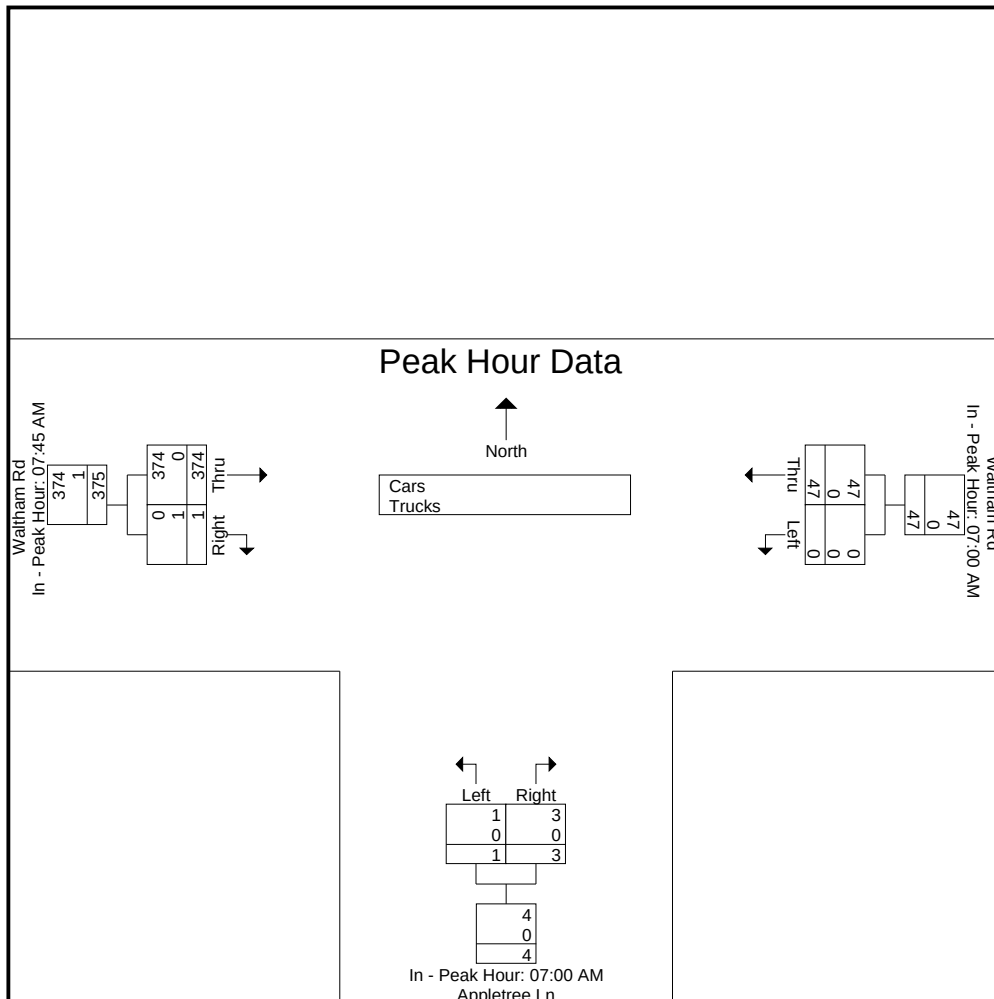
File Name : 62154001
Site Code : 62154001
Start Date : 4/27/2016
Page No : 3

	Waltham Rd From East			Appletree Ln From South			Waltham Rd From West			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total

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

Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:45 AM		
+0 mins.	0	9	9	1	0	1	94	0	94
+15 mins.	0	20	20	0	2	2	102	1	103
+30 mins.	0	9	9	0	1	1	89	0	89
+45 mins.	0	9	9	0	0	0	89	0	89
Total Volume	0	47	47	1	3	4	374	1	375
% App. Total	0	100		25	75		99.7	0.3	
PHF	.000	.588	.588	.250	.375	.500	.917	.250	.910
Cars	0	47	47	1	3	4	374	0	374
% Cars	0	100	100	100	100	100	100	0	99.7
Trucks	0	0	0	0	0	0	0	1	1
% Trucks	0	0	0	0	0	0	0	100	0.3



Accurate Counts

978-664-2565

N/S Street : Appletree Lane
 E/W Street: Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154001
 Site Code : 62154001
 Start Date : 4/27/2016
 Page No : 4

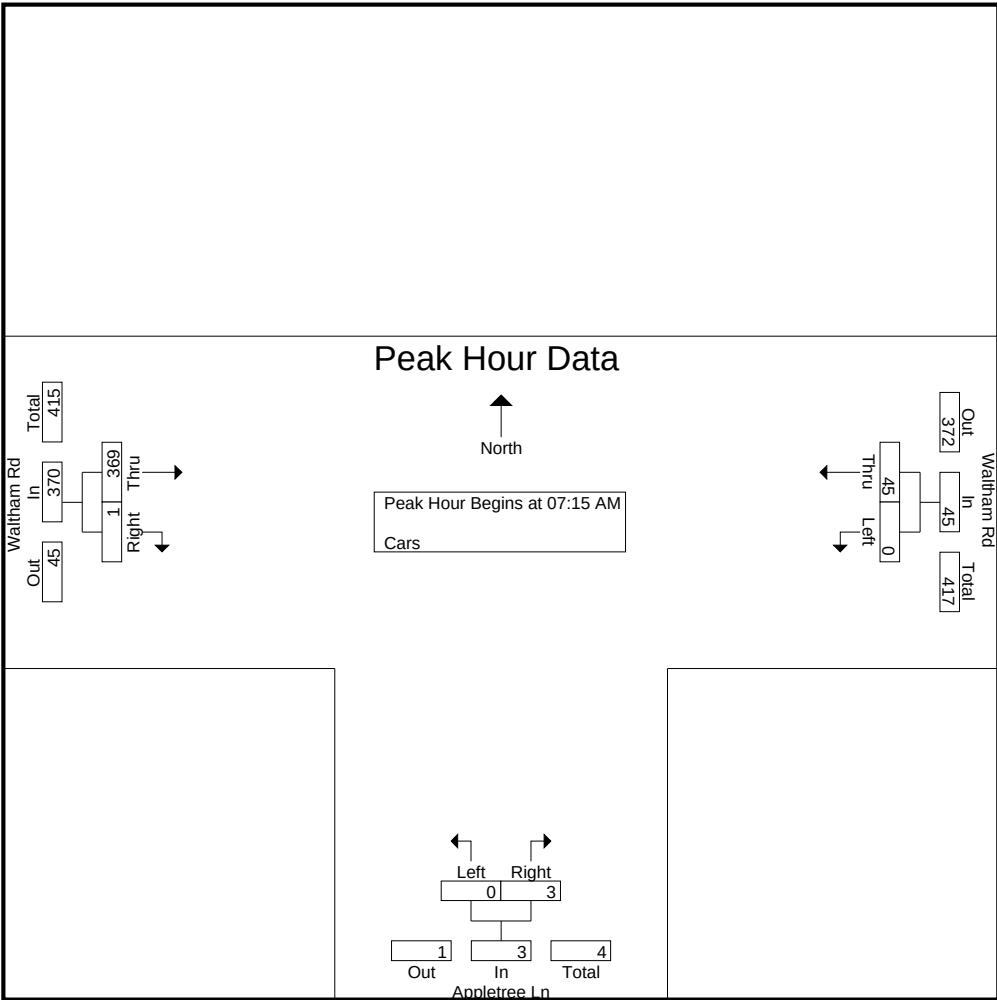
Groups Printed- Cars							
	Waltham Rd From East		Appletree Ln From South		Waltham Rd From West		
Start Time	Left	Thru	Left	Right	Thru	Right	Int. Total
07:00 AM	0	9	1	0	76	0	86
07:15 AM	0	20	0	2	86	0	108
07:30 AM	0	9	0	1	87	1	98
07:45 AM	0	9	0	0	94	0	103
Total	0	47	1	3	343	1	395
08:00 AM	0	7	0	0	102	0	109
08:15 AM	0	5	0	0	89	0	94
08:30 AM	0	8	0	1	89	0	98
08:45 AM	0	6	0	0	70	1	77
Total	0	26	0	1	350	1	378
Grand Total	0	73	1	4	693	2	773
Apprch %	0	100	20	80	99.7	0.3	
Total %	0	9.4	0.1	0.5	89.7	0.3	

Accurate Counts
978-664-2565

N/S Street : Appletree Lane
E/W Street: Waltham Road
City/State : Wayland, MA
Weather : Clear

File Name : 62154001
Site Code : 62154001
Start Date : 4/27/2016
Page No : 5

	Waltham Rd From East			Appletree Ln From South			Waltham Rd From West			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	0	20	20	0	2	2	86	0	86	108
07:30 AM	0	9	9	0	1	1	87	1	88	98
07:45 AM	0	9	9	0	0	0	94	0	94	103
08:00 AM	0	7	7	0	0	0	102	0	102	109
Total Volume	0	45	45	0	3	3	369	1	370	418
% App. Total	0	100		0	100		99.7	0.3		
PHF	.000	.563	.563	.000	.375	.375	.904	.250	.907	.959



Accurate Counts
978-664-2565

N/S Street : Appletree Lane
E/W Street: Waltham Road
City/State : Wayland, MA
Weather : Clear

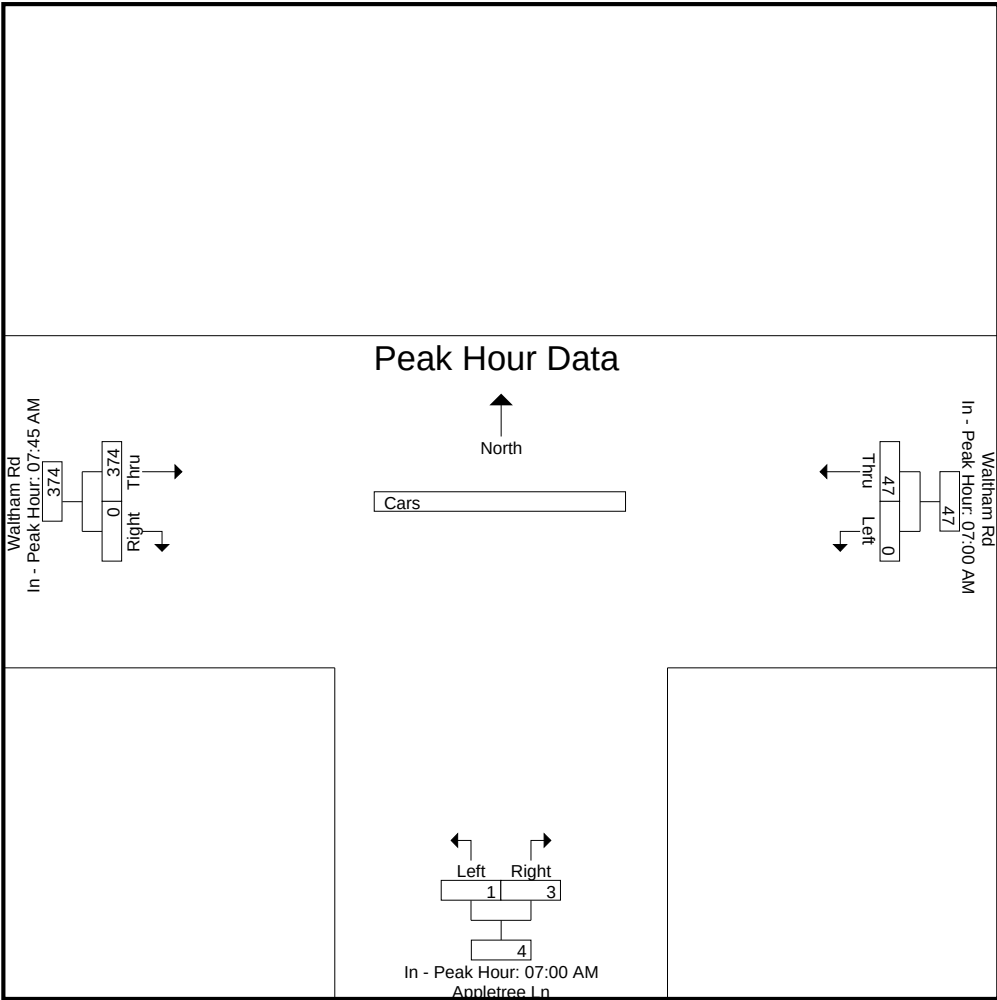
File Name : 62154001
Site Code : 62154001
Start Date : 4/27/2016
Page No : 6

	Waltham Rd From East			Appletree Ln From South			Waltham Rd From West			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total

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

Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:45 AM		
+0 mins.	0	9	9	1	0	1	94	0	94
+15 mins.	0	20	20	0	2	2	102	0	102
+30 mins.	0	9	9	0	1	1	89	0	89
+45 mins.	0	9	9	0	0	0	89	0	89
Total Volume	0	47	47	1	3	4	374	0	374
% App. Total	0	100		25	75		100	0	
PHF	.000	.588	.588	.250	.375	.500	.917	.000	.917



Accurate Counts

978-664-2565

N/S Street : Appletree Lane
 E/W Street: Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154001
 Site Code : 62154001
 Start Date : 4/27/2016
 Page No : 7

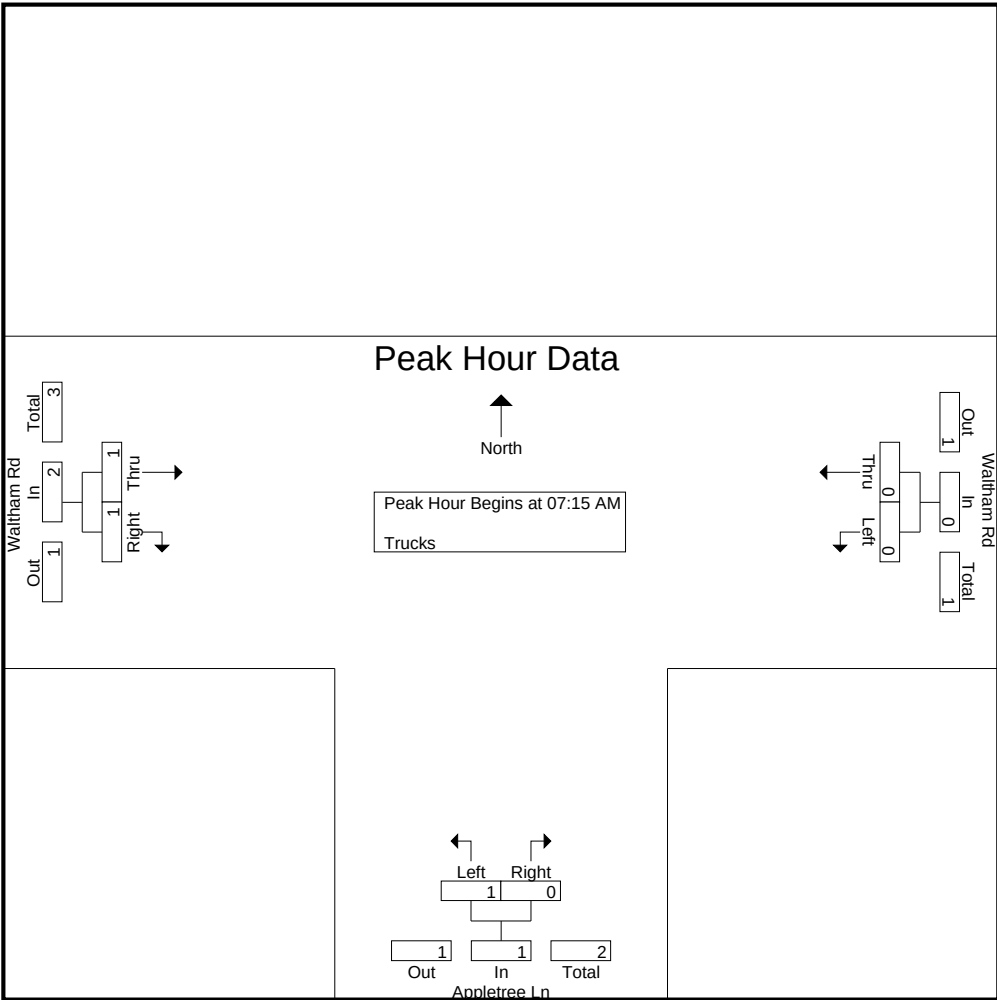
Groups Printed- Trucks							
	Waltham Rd From East		Appletree Ln From South		Waltham Rd From West		
Start Time	Left	Thru	Left	Right	Thru	Right	Int. Total
07:00 AM	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	1	0	1
07:30 AM	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0
Total	0	0	0	0	1	0	1
08:00 AM	0	0	1	0	0	1	2
08:15 AM	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0
Total	0	0	1	0	0	1	2
Grand Total	0	0	1	0	1	1	3
Apprch %	0	0	100	0	50	50	
Total %	0	0	33.3	0	33.3	33.3	

Accurate Counts
978-664-2565

N/S Street : Appletree Lane
E/W Street: Waltham Road
City/State : Wayland, MA
Weather : Clear

File Name : 62154001
Site Code : 62154001
Start Date : 4/27/2016
Page No : 8

	Waltham Rd From East			Appletree Ln From South			Waltham Rd From West			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	0	0	0	0	0	0	1	0	1	1
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	1	0	1	0	1	1	2
Total Volume	0	0	0	1	0	1	1	1	2	3
% App. Total	0	0		100	0		50	50		
PHF	.000	.000	.000	.250	.000	.250	.250	.250	.500	.375



Accurate Counts
978-664-2565

N/S Street : Appletree Lane
E/W Street: Waltham Road
City/State : Wayland, MA
Weather : Clear

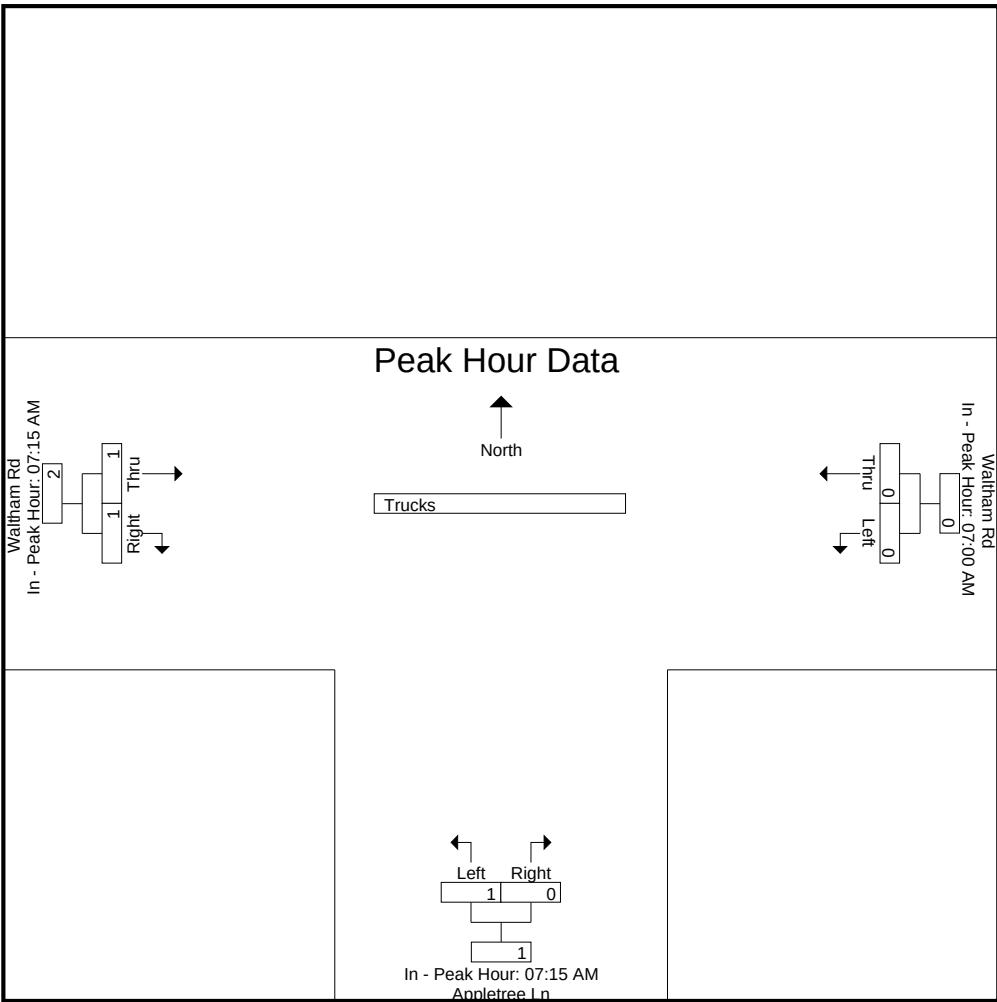
File Name : 62154001
Site Code : 62154001
Start Date : 4/27/2016
Page No : 9

	Waltham Rd From East			Appletree Ln From South			Waltham Rd From West			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total

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

Peak Hour for Each Approach Begins at:

	07:00 AM			07:15 AM			07:15 AM		
+0 mins.	0	0	0	0	0	0	1	0	1
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	1	0	1	0	1	1
Total Volume	0	0	0	1	0	1	1	1	2
% App. Total	0	0		100	0		50	50	
PHF	.000	.000	.000	.250	.000	.250	.250	.250	.500



Accurate Counts
978-664-2565

N/S Street : Appletree Lane
E/W Street: Waltham Road
City/State : Wayland, MA
Weather : Clear

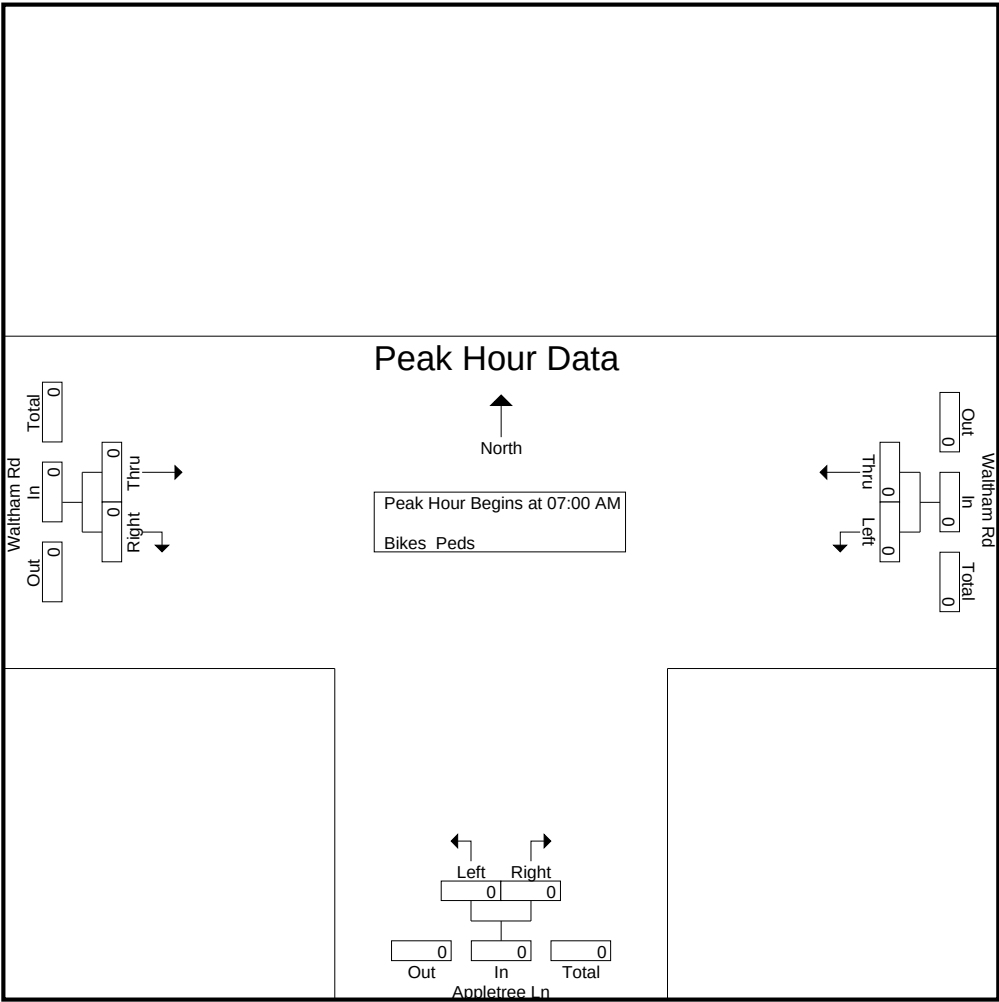
File Name : 62154001
Site Code : 62154001
Start Date : 4/27/2016
Page No : 10

[illegible]

Accurate Counts
978-664-2565

N/S Street : Appletree Lane
E/W Street: Waltham Road
City/State : Wayland, MA
Weather : Clear

File Name : 62154001
Site Code : 62154001
Start Date : 4/27/2016
Page No : 11

[illegible]

Accurate Counts
978-664-2565

N/S Street : Appletree Lane
E/W Street: Waltham Road
City/State : Wayland, MA
Weather : Clear

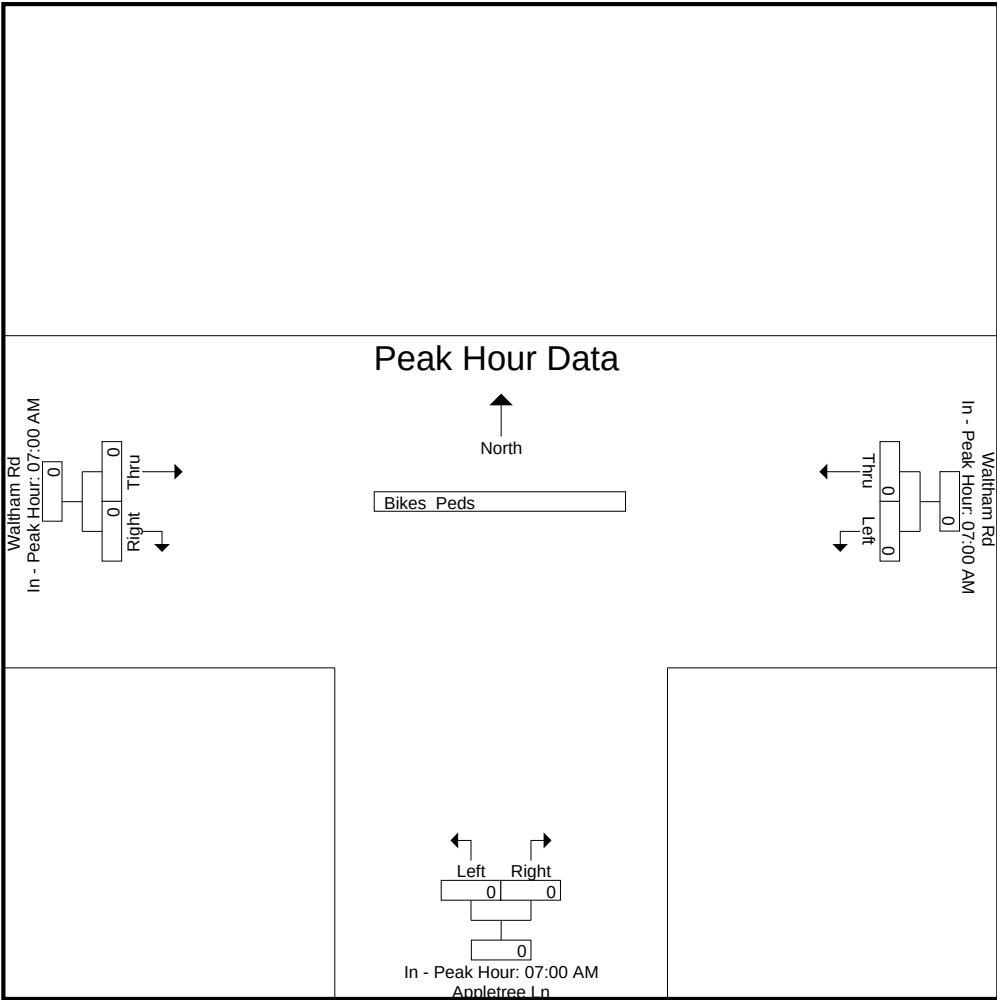
File Name : 62154001
Site Code : 62154001
Start Date : 4/27/2016
Page No : 12

	Waltham Rd From East			Appletree Ln From South			Waltham Rd From West			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total

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

Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000



Accurate Counts

978-664-2565

N/S Street : Appletree Lane
 E/W Street: Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154001
 Site Code : 62154001
 Start Date : 4/27/2016
 Page No : 1

Groups Printed- Cars - Trucks							
	Waltham Rd From East		Appletree Ln From South		Waltham Rd From West		
Start Time	Left	Thru	Left	Right	Thru	Right	Int. Total
02:00 PM	0	9	1	0	6	0	16
02:15 PM	1	17	0	1	7	1	27
02:30 PM	0	5	0	0	9	0	14
02:45 PM	0	13	1	0	3	1	18
Total	1	44	2	1	25	2	75
03:00 PM	0	15	0	2	8	0	25
03:15 PM	0	16	0	0	7	0	23
03:30 PM	1	17	2	0	9	0	29
03:45 PM	0	34	0	0	8	0	42
Total	1	82	2	2	32	0	119
04:00 PM	0	29	1	0	5	1	36
04:15 PM	0	40	0	0	12	0	52
04:30 PM	0	34	0	0	8	0	42
04:45 PM	1	44	0	0	5	1	51
Total	1	147	1	0	30	2	181
05:00 PM	0	54	0	0	11	1	66
05:15 PM	0	60	0	1	9	0	70
05:30 PM	1	55	1	1	6	0	64
05:45 PM	2	58	1	0	9	1	71
Total	3	227	2	2	35	2	271
Grand Total	6	500	7	5	122	6	646
Apprch %	1.2	98.8	58.3	41.7	95.3	4.7	
Total %	0.9	77.4	1.1	0.8	18.9	0.9	
Cars	6	500	7	5	122	6	646
% Cars	100	100	100	100	100	100	100
Trucks	0	0	0	0	0	0	0
% Trucks	0	0	0	0	0	0	0

Accurate Counts
978-664-2565

Accurate Counts

978-664-2565

N/S Street : Appletree Lane
E/W Street: Waltham Road
City/State : Wayland, MA
Weather : Clear

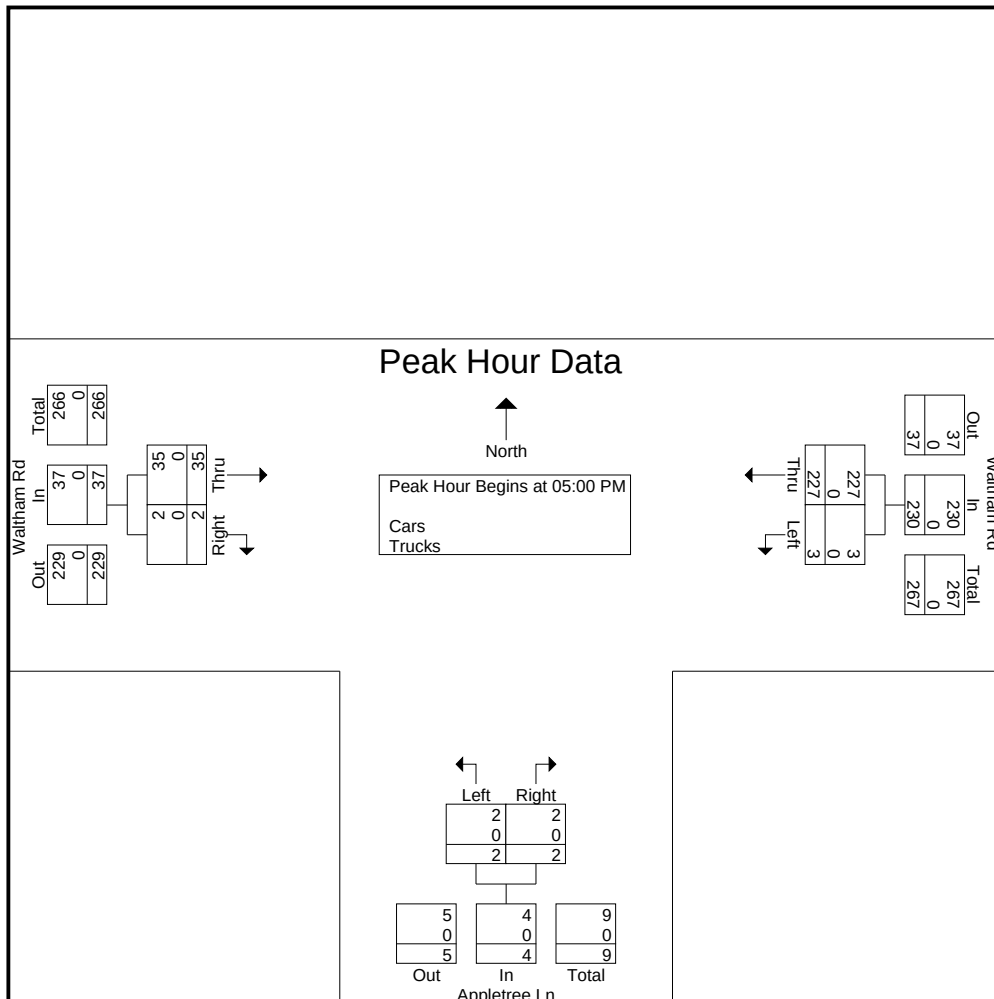
File Name : 62154001
Site Code : 62154001
Start Date : 4/27/2016
Page No : 3

	Waltham Rd From East			Appletree Ln From South			Waltham Rd From West			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 05:00 PM

05:00 PM	0	54	54	0	0	0	11	1	12	66
05:15 PM	0	60	60	0	1	1	9	0	9	70
05:30 PM	1	55	56	1	1	2	6	0	6	64
05:45 PM	2	58	60	1	0	1	9	1	10	71
Total Volume	3	227	230	2	2	4	35	2	37	271
% App. Total	1.3	98.7		50	50		94.6	5.4		
PHF	.375	.946	.958	.500	.500	.500	.795	.500	.771	.954
Cars	3	227	230	2	2	4	35	2	37	271
% Cars	100	100	100	100	100	100	100	100	100	100
Trucks	0	0	0	0	0	0	0	0	0	0
% Trucks	0	0	0	0	0	0	0	0	0	0



Accurate Counts

978-664-2565

N/S Street : Appletree Lane
 E/W Street: Waltham Road
 City/State : Wayland, MA
 Weather : Clear

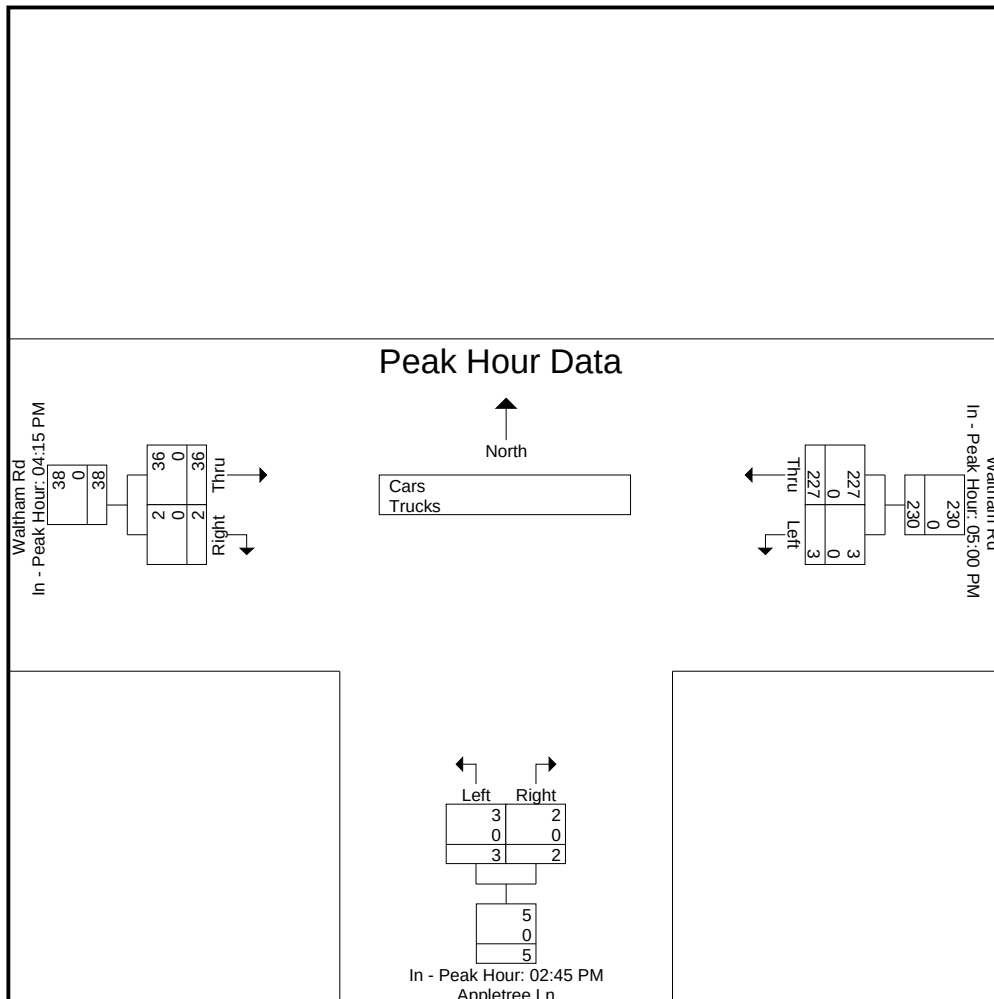
File Name : 62154001
 Site Code : 62154001
 Start Date : 4/27/2016
 Page No : 4

	Waltham Rd From East			Appletree Ln From South			Waltham Rd From West			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM			02:45 PM			04:15 PM		
+0 mins.	0	54	54	1	0	1	12	0	12
+15 mins.	0	60	60	0	2	2	8	0	8
+30 mins.	1	55	56	0	0	0	5	1	6
+45 mins.	2	58	60	2	0	2	11	1	12
Total Volume	3	227	230	3	2	5	36	2	38
% App. Total	1.3	98.7		60	40		94.7	5.3	
PHF	.375	.946	.958	.375	.250	.625	.750	.500	.792
Cars	3	227	230	3	2	5	36	2	38
% Cars	100	100	100	100	100	100	100	100	100
Trucks	0	0	0	0	0	0	0	0	0
% Trucks	0	0	0	0	0	0	0	0	0



Accurate Counts

978-664-2565

N/S Street : Appletree Lane
 E/W Street: Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154001
 Site Code : 62154001
 Start Date : 4/27/2016
 Page No : 5

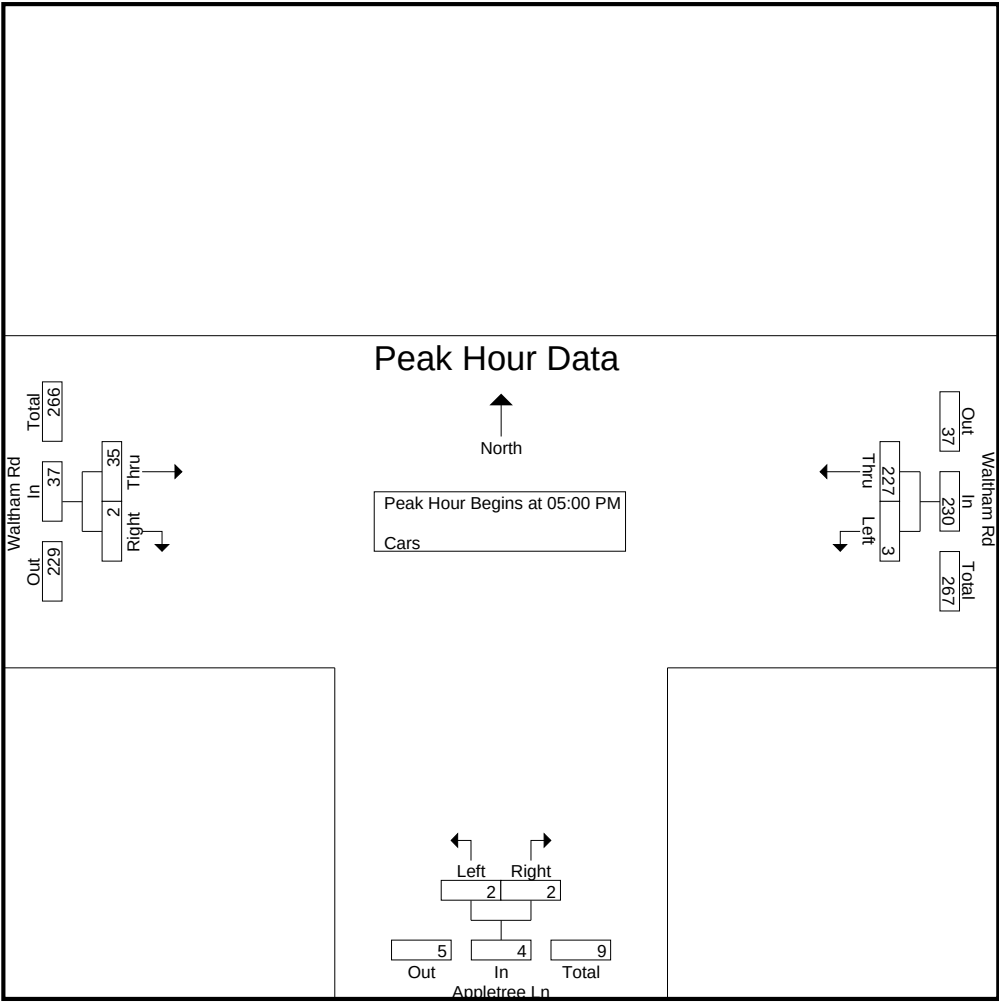
Groups Printed- Cars							
	Waltham Rd From East		Appletree Ln From South		Waltham Rd From West		
Start Time	Left	Thru	Left	Right	Thru	Right	Int. Total
02:00 PM	0	9	1	0	6	0	16
02:15 PM	1	17	0	1	7	1	27
02:30 PM	0	5	0	0	9	0	14
02:45 PM	0	13	1	0	3	1	18
Total	1	44	2	1	25	2	75
03:00 PM	0	15	0	2	8	0	25
03:15 PM	0	16	0	0	7	0	23
03:30 PM	1	17	2	0	9	0	29
03:45 PM	0	34	0	0	8	0	42
Total	1	82	2	2	32	0	119
04:00 PM	0	29	1	0	5	1	36
04:15 PM	0	40	0	0	12	0	52
04:30 PM	0	34	0	0	8	0	42
04:45 PM	1	44	0	0	5	1	51
Total	1	147	1	0	30	2	181
05:00 PM	0	54	0	0	11	1	66
05:15 PM	0	60	0	1	9	0	70
05:30 PM	1	55	1	1	6	0	64
05:45 PM	2	58	1	0	9	1	71
Total	3	227	2	2	35	2	271
Grand Total	6	500	7	5	122	6	646
Apprch %	1.2	98.8	58.3	41.7	95.3	4.7	
Total %	0.9	77.4	1.1	0.8	18.9	0.9	

Accurate Counts
978-664-2565

N/S Street : Appletree Lane
E/W Street: Waltham Road
City/State : Wayland, MA
Weather : Clear

File Name : 62154001
Site Code : 62154001
Start Date : 4/27/2016
Page No : 6

	Waltham Rd From East			Appletree Ln From South			Waltham Rd From West			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	0	54	54	0	0	0	11	1	12	66
05:15 PM	0	60	60	0	1	1	9	0	9	70
05:30 PM	1	55	56	1	1	2	6	0	6	64
05:45 PM	2	58	60	1	0	1	9	1	10	71
Total Volume	3	227	230	2	2	4	35	2	37	271
% App. Total	1.3	98.7		50	50		94.6	5.4		
PHF	.375	.946	.958	.500	.500	.500	.795	.500	.771	.954



Accurate Counts

978-664-2565

N/S Street : Appletree Lane
 E/W Street: Waltham Road
 City/State : Wayland, MA
 Weather : Clear

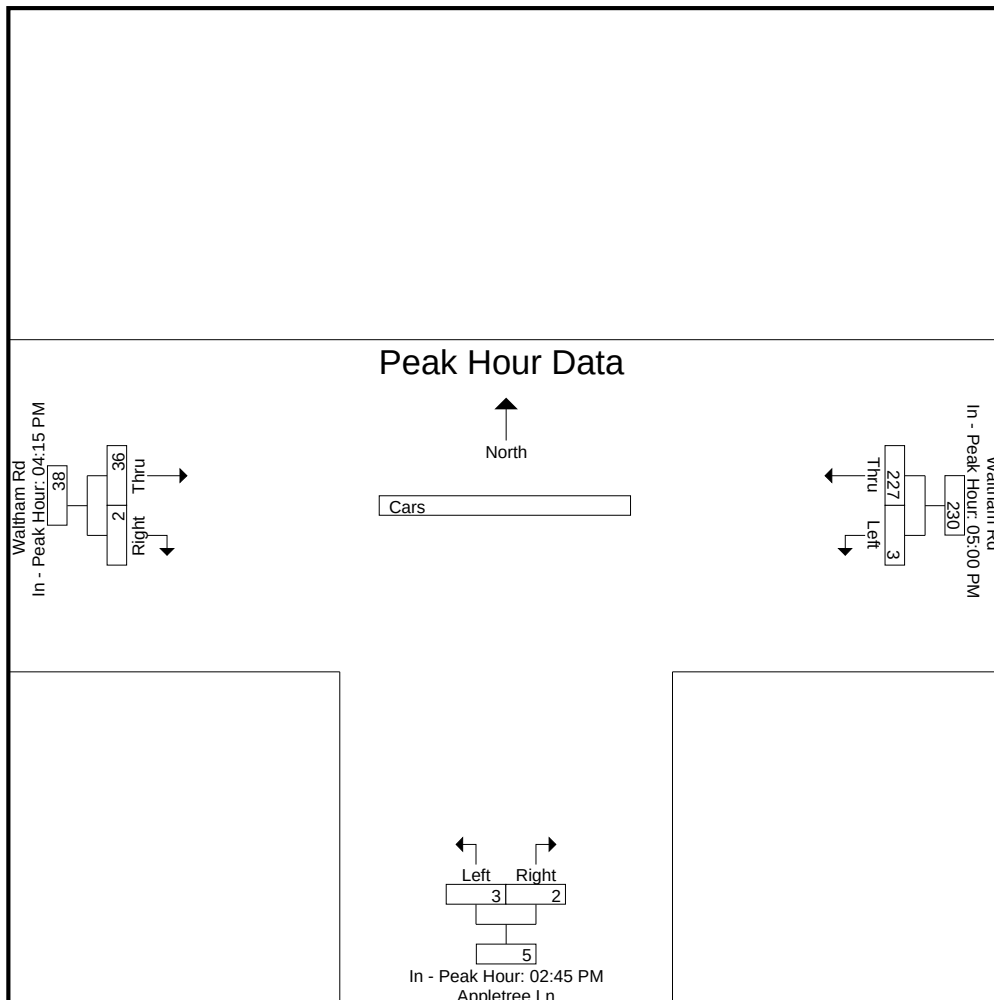
File Name : 62154001
 Site Code : 62154001
 Start Date : 4/27/2016
 Page No : 7

	Waltham Rd From East			Appletree Ln From South			Waltham Rd From West			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM			02:45 PM			04:15 PM		
+0 mins.	0	54	54	1	0	1	12	0	12
+15 mins.	0	60	60	0	2	2	8	0	8
+30 mins.	1	55	56	0	0	0	5	1	6
+45 mins.	2	58	60	2	0	2	11	1	12
Total Volume	3	227	230	3	2	5	36	2	38
% App. Total	1.3	98.7		60	40		94.7	5.3	
PHF	.375	.946	.958	.375	.250	.625	.750	.500	.792



Accurate Counts

978-664-2565

N/S Street : Appletree Lane
 E/W Street: Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154001
 Site Code : 62154001
 Start Date : 4/27/2016
 Page No : 8

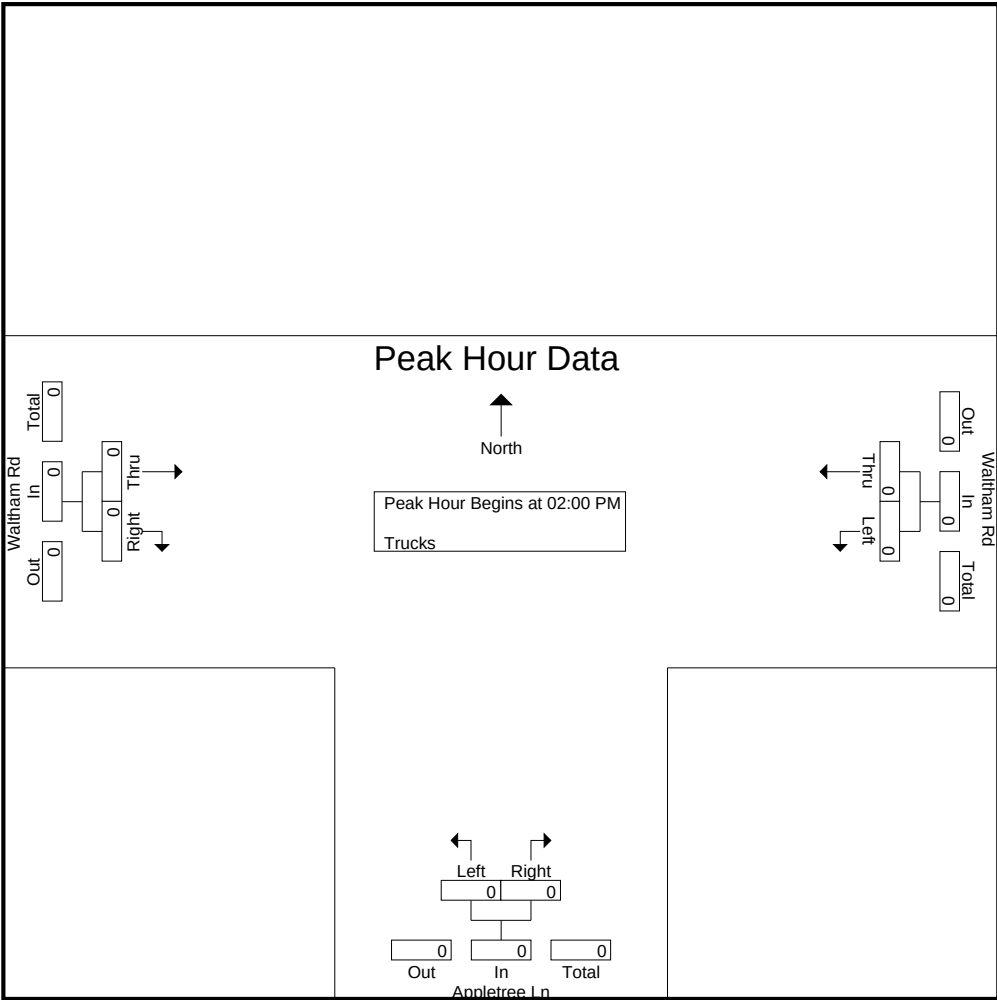
Groups Printed- Trucks							
	Waltham Rd From East		Appletree Ln From South		Waltham Rd From West		
Start Time	Left	Thru	Left	Right	Thru	Right	Int. Total
02:00 PM	0	0	0	0	0	0	0
02:15 PM	0	0	0	0	0	0	0
02:30 PM	0	0	0	0	0	0	0
02:45 PM	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
03:00 PM	0	0	0	0	0	0	0
03:15 PM	0	0	0	0	0	0	0
03:30 PM	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
04:00 PM	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0
Apprch %	0	0	0	0	0	0	
Total %							

Accurate Counts
978-664-2565

N/S Street : Appletree Lane
E/W Street: Waltham Road
City/State : Wayland, MA
Weather : Clear

File Name : 62154001
Site Code : 62154001
Start Date : 4/27/2016
Page No : 9

	Waltham Rd From East			Appletree Ln From South			Waltham Rd From West			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 02:00 PM										
02:00 PM	0	0	0	0	0	0	0	0	0	0
02:15 PM	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000



Accurate Counts
978-664-2565

N/S Street : Appletree Lane
E/W Street: Waltham Road
City/State : Wayland, MA
Weather : Clear

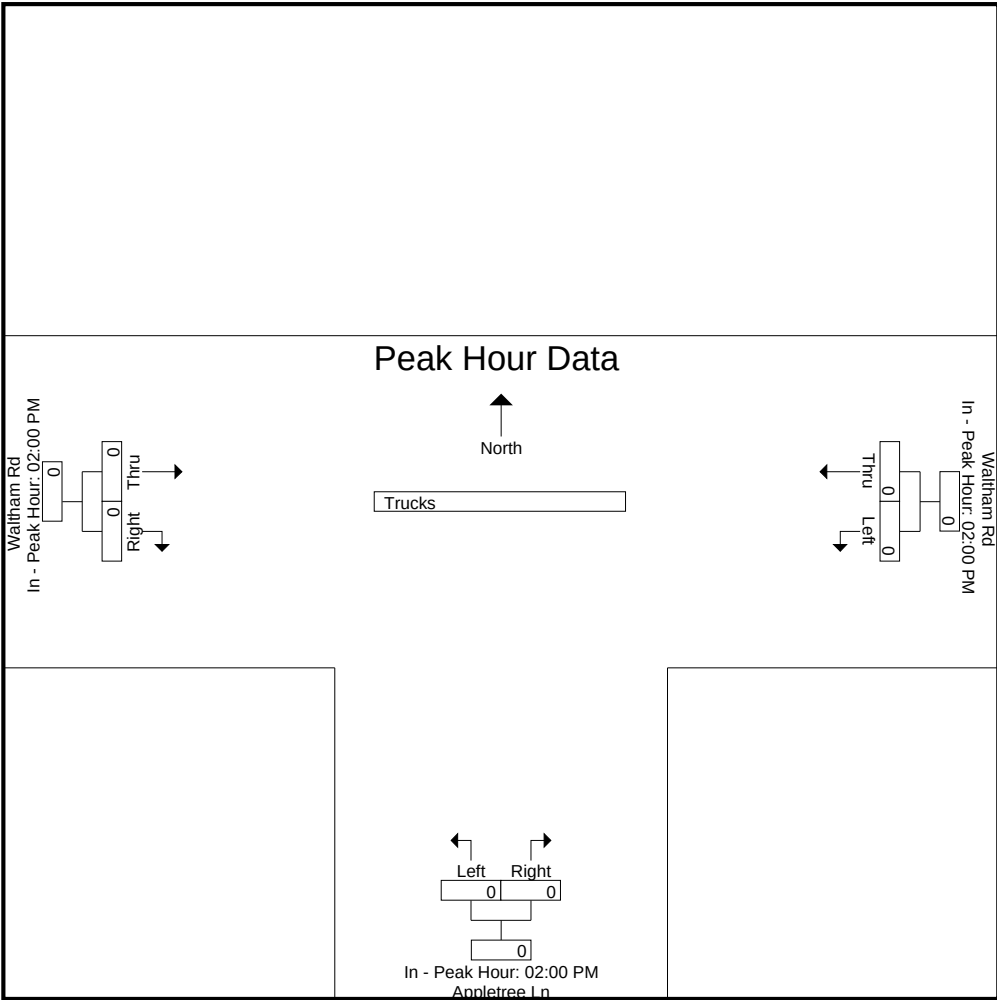
File Name : 62154001
Site Code : 62154001
Start Date : 4/27/2016
Page No : 10

	Waltham Rd From East			Appletree Ln From South			Waltham Rd From West			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:00 PM			02:00 PM			02:00 PM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000



Accurate Counts

978-664-2565

N/S Street : Appletree Lane
 E/W Street: Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154001
 Site Code : 62154001
 Start Date : 4/27/2016
 Page No : 11

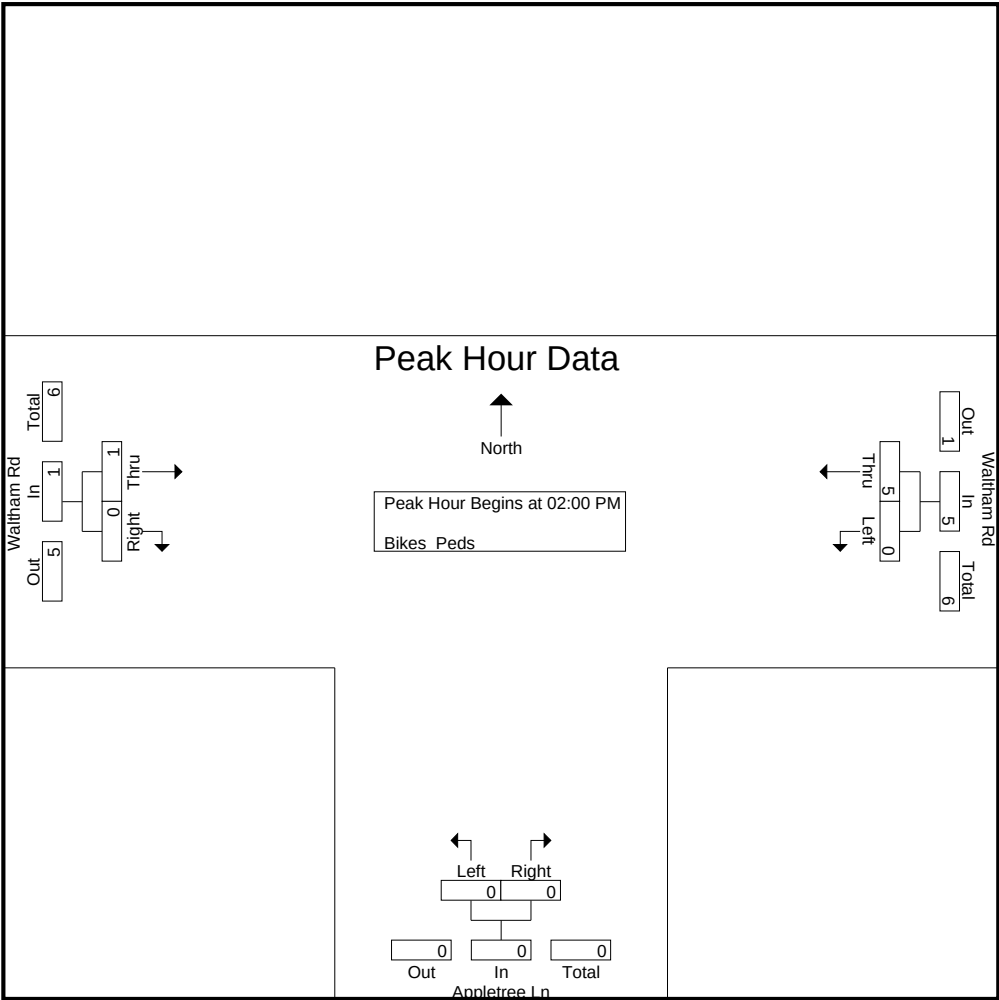
Groups Printed- Bikes Peds												
	Waltham Rd From East			Appletree Ln From South			Waltham Rd From West			Exclu. Total	Inclu. Total	Int. Total
Start Time	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds			
02:00 PM	0	2	0	0	0	0	0	0	0	0	2	2
02:15 PM	0	0	1	0	0	0	0	0	0	1	0	1
02:30 PM	0	2	2	0	0	0	1	0	0	2	3	5
02:45 PM	0	1	2	0	0	0	0	0	0	2	1	3
Total	0	5	5	0	0	0	1	0	0	5	6	11
03:00 PM	0	1	0	0	0	0	0	0	0	0	1	1
03:15 PM	0	1	0	0	0	0	0	0	0	0	1	1
03:30 PM	0	0	0	0	0	0	2	0	0	0	2	2
03:45 PM	0	0	0	0	0	0	1	0	0	0	1	1
Total	0	2	0	0	0	0	3	0	0	0	5	5
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	1	0	0	0	1	1
04:30 PM	0	1	0	0	0	0	1	0	0	0	2	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	0	0	2	0	0	0	3	3
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	2	0	0	0	0	0	0	0	0	2	2
05:30 PM	0	0	0	0	0	0	2	0	0	0	2	2
05:45 PM	0	0	0	0	0	0	1	0	0	0	1	1
Total	0	2	0	0	0	0	3	0	0	0	5	5
Grand Total	0	10	5	0	0	0	9	0	0	5	19	24
Apprch %	0	100		0	0		100	0				
Total %	0	52.6		0	0		47.4	0		20.8	79.2	

Accurate Counts
978-664-2565

N/S Street : Appletree Lane
E/W Street: Waltham Road
City/State : Wayland, MA
Weather : Clear

File Name : 62154001
Site Code : 62154001
Start Date : 4/27/2016
Page No : 12

	Waltham Rd From East			Appletree Ln From South			Waltham Rd From West			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 02:00 PM										
02:00 PM	0	2	2	0	0	0	0	0	0	2
02:15 PM	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	2	2	0	0	0	1	0	1	3
02:45 PM	0	1	1	0	0	0	0	0	0	1
Total Volume	0	5	5	0	0	0	1	0	1	6
% App. Total	0	100		0	0		100	0		
PHF	.000	.625	.625	.000	.000	.000	.250	.000	.250	.500



Accurate Counts
978-664-2565

N/S Street : Appletree Lane
E/W Street: Waltham Road
City/State : Wayland, MA
Weather : Clear

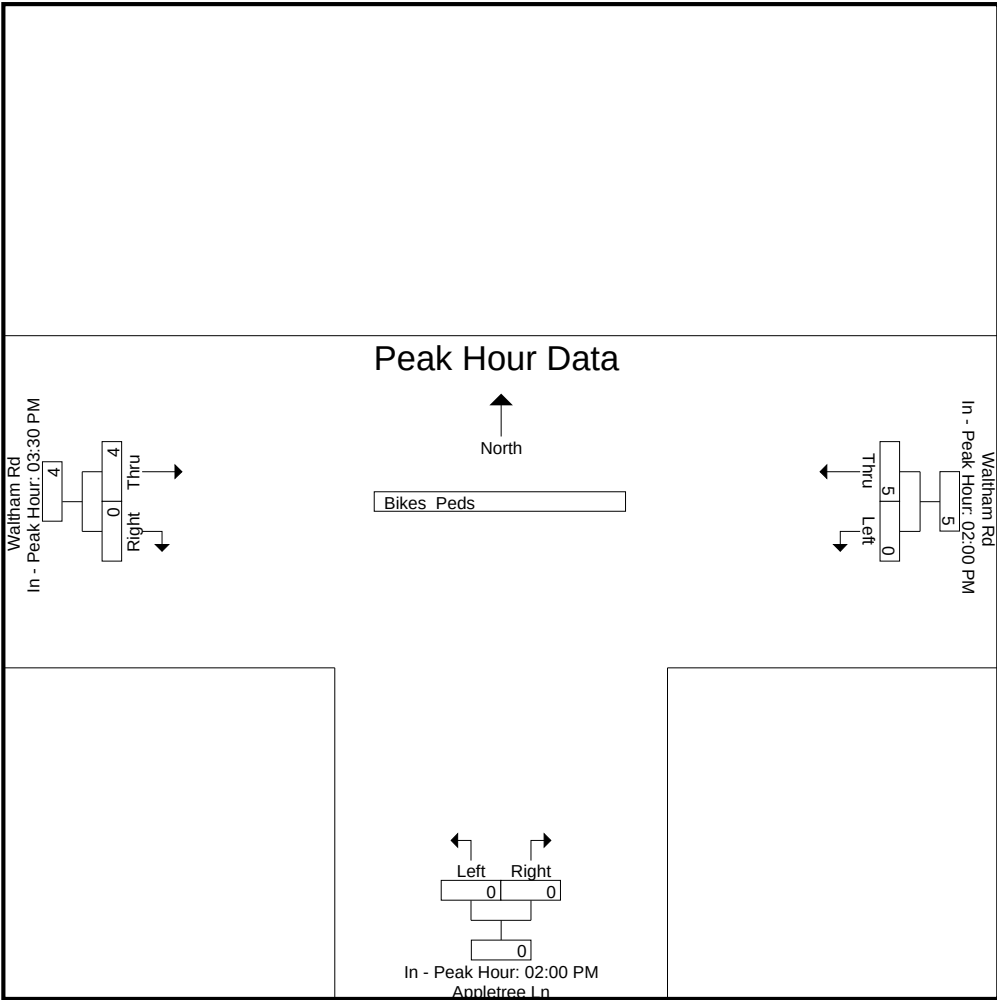
File Name : 62154001
Site Code : 62154001
Start Date : 4/27/2016
Page No : 13

	Waltham Rd From East			Appletree Ln From South			Waltham Rd From West			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:00 PM			02:00 PM			03:30 PM		
+0 mins.	0	2	2	0	0	0	2	0	2
+15 mins.	0	0	0	0	0	0	1	0	1
+30 mins.	0	2	2	0	0	0	0	0	0
+45 mins.	0	1	1	0	0	0	1	0	1
Total Volume	0	5	5	0	0	0	4	0	4
% App. Total	0	100		0	0		100	0	
PHF	.000	.625	.625	.000	.000	.000	.500	.000	.500



Accurate Counts

978-664-2565

N/S Street : Longmeadow Road
 E/W Street : Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154002
 Site Code : 62154002
 Start Date : 4/27/2016
 Page No : 1

Groups Printed- Cars - Trucks								
Start Time	Longmeadow Rd From North		Waltham Rd From East		Waltham Rd From West		Int. Total	
	Left	Right	Thru	Right	Left	Thru		
07:00 AM	0	0	11	0	0	70	81	
07:15 AM	3	1	16	0	0	84	104	
07:30 AM	0	1	14	0	0	90	105	
07:45 AM	1	0	9	0	0	95	105	
Total	4	2	50	0	0	339	395	
08:00 AM	0	0	7	0	1	96	104	
08:15 AM	0	1	5	1	0	90	97	
08:30 AM	0	0	8	0	0	88	96	
08:45 AM	2	0	6	0	0	69	77	
Total	2	1	26	1	1	343	374	
Grand Total	6	3	76	1	1	682	769	
Apprch %	66.7	33.3	98.7	1.3	0.1	99.9		
Total %	0.8	0.4	9.9	0.1	0.1	88.7		
Cars	5	3	75	1	1	680	765	
% Cars	83.3	100	98.7	100	100	99.7	99.5	
Trucks	1	0	1	0	0	2	4	
% Trucks	16.7	0	1.3	0	0	0.3	0.5	

Accurate Counts

978-664-2565

N/S Street : Longmeadow Road
 E/W Street : Waltham Road
 City/State : Wayland, MA
 Weather : Clear

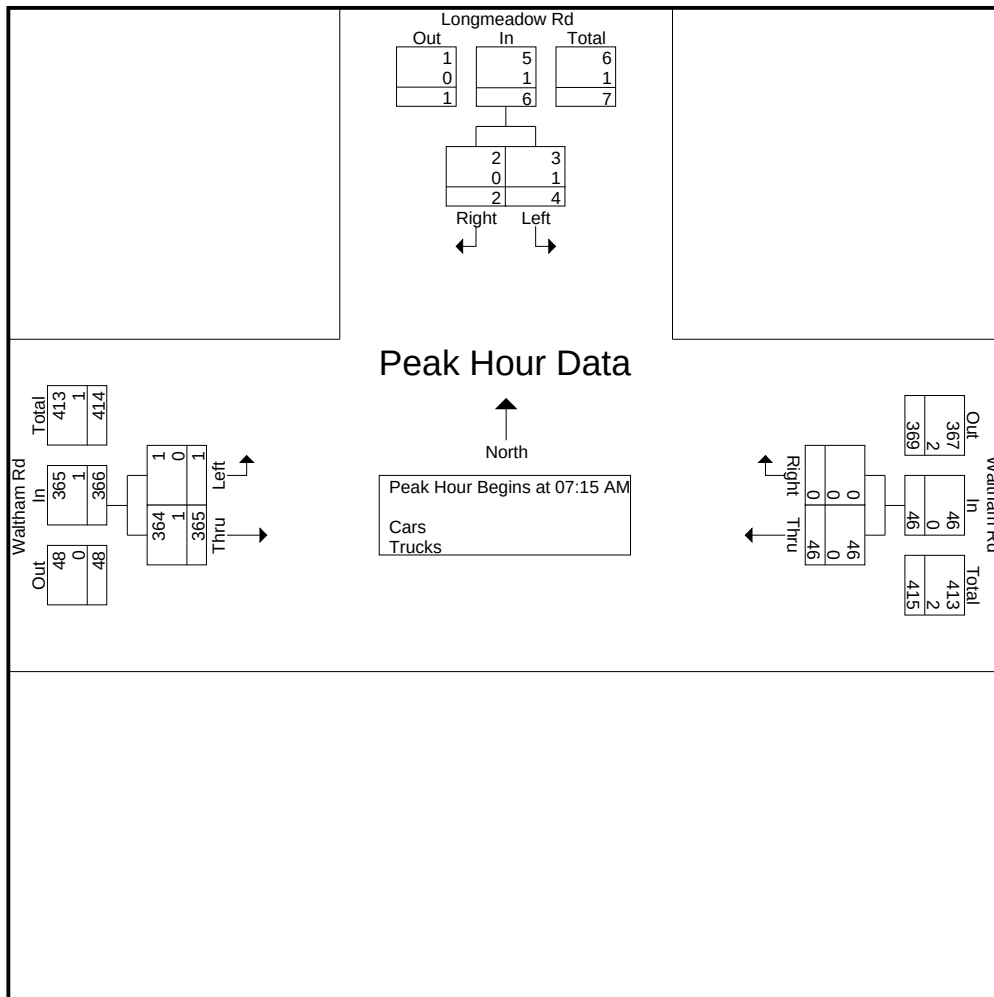
File Name : 62154002
 Site Code : 62154002
 Start Date : 4/27/2016
 Page No : 2

	Longmeadow Rd From North			Waltham Rd From East			Waltham Rd From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total

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

Peak Hour for Entire Intersection Begins at 07:15 AM

07:15 AM	3	1	4	16	0	16	0	84	84	104
07:30 AM	0	1	1	14	0	14	0	90	90	105
07:45 AM	1	0	1	9	0	9	0	95	95	105
08:00 AM	0	0	0	7	0	7	1	96	97	104
Total Volume	4	2	6	46	0	46	1	365	366	418
% App. Total	66.7	33.3		100	0		0.3	99.7		
PHF	.333	.500	.375	.719	.000	.719	.250	.951	.943	.995
Cars	3	2	5	46	0	46	1	364	365	416
% Cars	75.0	100	83.3	100	0	100	100	99.7	99.7	99.5
Trucks	1	0	1	0	0	0	0	1	1	2
% Trucks	25.0	0	16.7	0	0	0	0	0.3	0.3	0.5



Accurate Counts

978-664-2565

N/S Street : Longmeadow Road
 E/W Street : Waltham Road
 City/State : Wayland, MA
 Weather : Clear

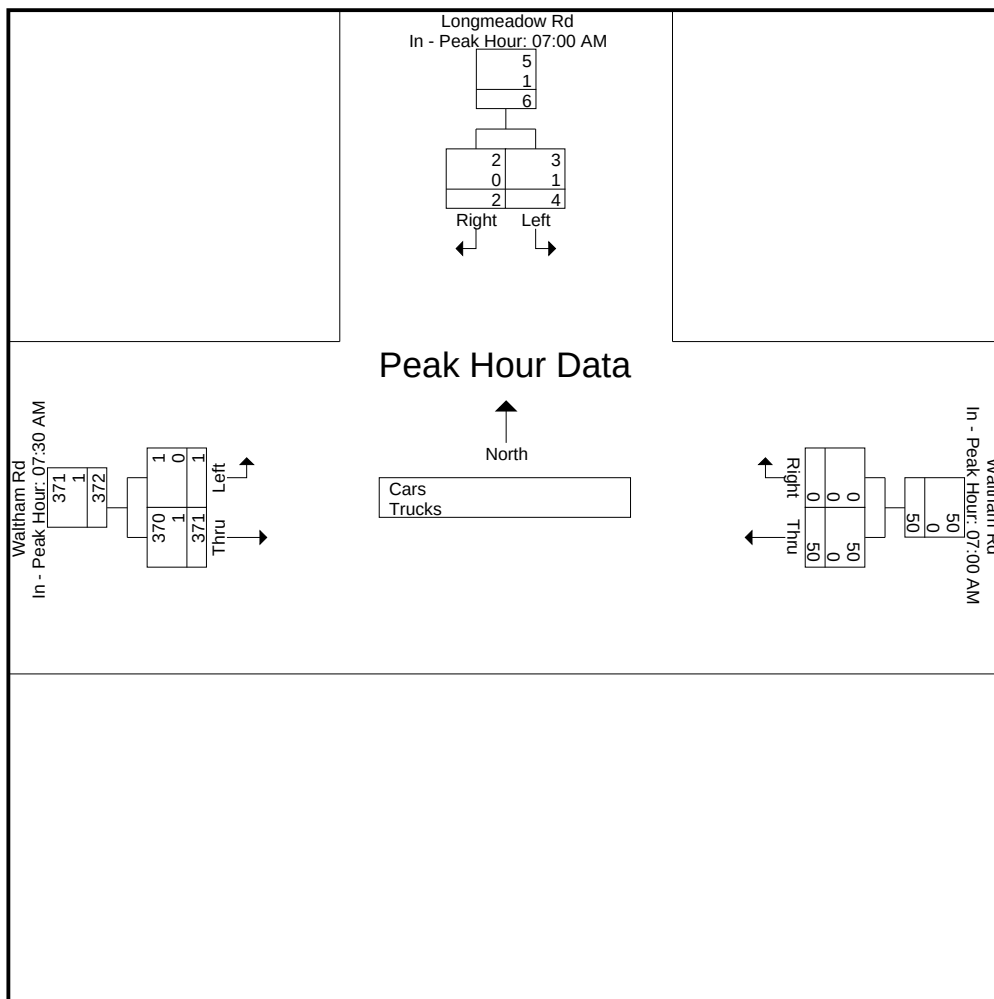
File Name : 62154002
 Site Code : 62154002
 Start Date : 4/27/2016
 Page No : 3

	Longmeadow Rd From North			Waltham Rd From East			Waltham Rd From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total

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

Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:30 AM		
+0 mins.	0	0	0	11	0	11	0	90	90
+15 mins.	3	1	4	16	0	16	0	95	95
+30 mins.	0	1	1	14	0	14	1	96	97
+45 mins.	1	0	1	9	0	9	0	90	90
Total Volume	4	2	6	50	0	50	1	371	372
% App. Total	66.7	33.3		100	0		0.3	99.7	
PHF	.333	.500	.375	.781	.000	.781	.250	.966	.959
Cars	3	2	5	50	0	50	1	370	371
% Cars	75	100	83.3	100	0	100	100	99.7	99.7
Trucks	1	0	1	0	0	0	0	1	1
% Trucks	25	0	16.7	0	0	0	0	0.3	0.3



Accurate Counts

978-664-2565

N/S Street : Longmeadow Road
 E/W Street : Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154002
 Site Code : 62154002
 Start Date : 4/27/2016
 Page No : 4

Groups Printed- Cars

	Longmeadow Rd From North		Waltham Rd From East		Waltham Rd From West		
Start Time	Left	Right	Thru	Right	Left	Thru	Int. Total
07:00 AM	0	0	11	0	0	70	81
07:15 AM	2	1	16	0	0	84	103
07:30 AM	0	1	14	0	0	90	105
07:45 AM	1	0	9	0	0	95	105
Total	3	2	50	0	0	339	394
08:00 AM	0	0	7	0	1	95	103
08:15 AM	0	1	4	1	0	90	96
08:30 AM	0	0	8	0	0	87	95
08:45 AM	2	0	6	0	0	69	77
Total	2	1	25	1	1	341	371
Grand Total	5	3	75	1	1	680	765
Apprch %	62.5	37.5	98.7	1.3	0.1	99.9	
Total %	0.7	0.4	9.8	0.1	0.1	88.9	

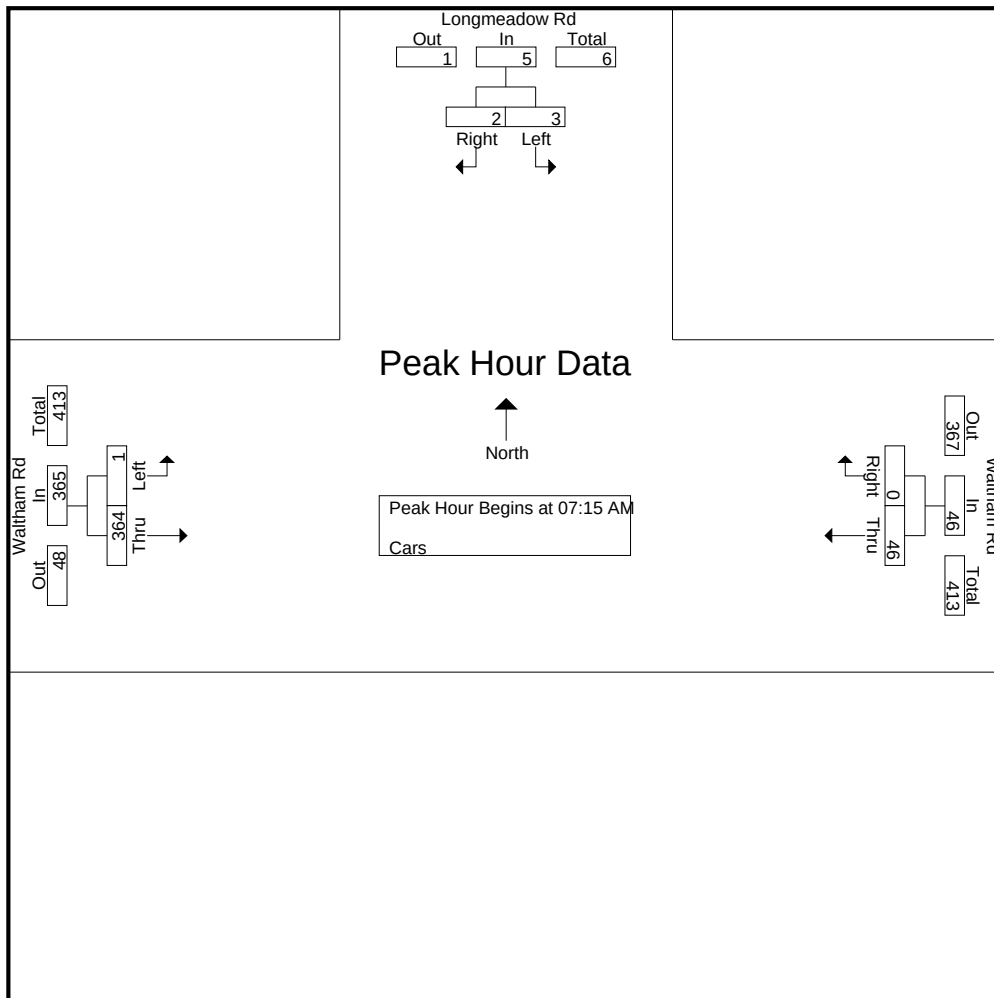
Accurate Counts

978-664-2565

N/S Street : Longmeadow Road
 E/W Street : Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154002
 Site Code : 62154002
 Start Date : 4/27/2016
 Page No : 5

	Longmeadow Rd From North			Waltham Rd From East			Waltham Rd From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	2	1	3	16	0	16	0	84	84	103
07:30 AM	0	1	1	14	0	14	0	90	90	105
07:45 AM	1	0	1	9	0	9	0	95	95	105
08:00 AM	0	0	0	7	0	7	1	95	96	103
Total Volume	3	2	5	46	0	46	1	364	365	416
% App. Total	60	40		100	0		0.3	99.7		
PHF	.375	.500	.417	.719	.000	.719	.250	.958	.951	.990



Accurate Counts

978-664-2565

N/S Street : Longmeadow Road
 E/W Street : Waltham Road
 City/State : Wayland, MA
 Weather : Clear

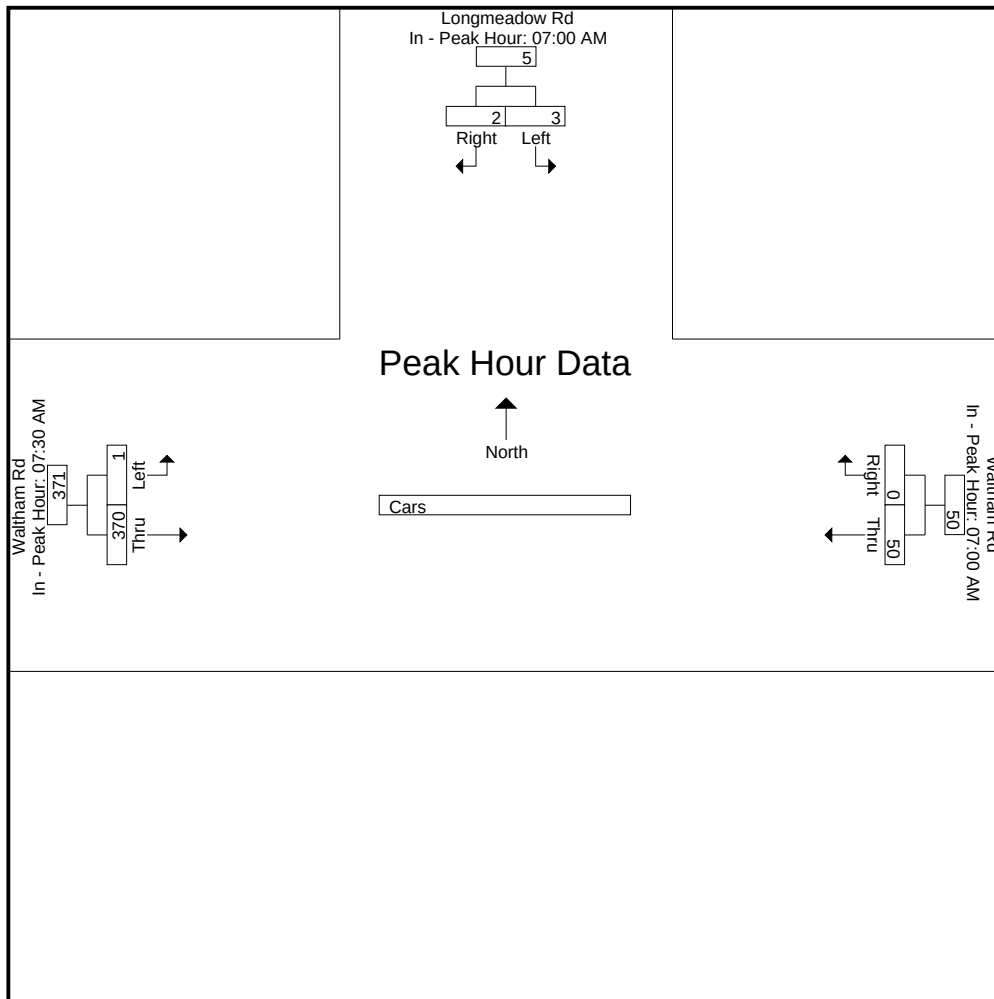
File Name : 62154002
 Site Code : 62154002
 Start Date : 4/27/2016
 Page No : 6

	Longmeadow Rd From North			Waltham Rd From East			Waltham Rd From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total

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

Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:30 AM		
+0 mins.	0	0	0	11	0	11	0	90	90
+15 mins.	2	1	3	16	0	16	0	95	95
+30 mins.	0	1	1	14	0	14	1	95	96
+45 mins.	1	0	1	9	0	9	0	90	90
Total Volume	3	2	5	50	0	50	1	370	371
% App. Total	60	40		100	0		0.3	99.7	
PHF	.375	.500	.417	.781	.000	.781	.250	.974	.966



Accurate Counts

978-664-2565

N/S Street : Longmeadow Road
 E/W Street : Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154002
 Site Code : 62154002
 Start Date : 4/27/2016
 Page No : 7

Groups Printed- Trucks							
	Longmeadow Rd From North		Waltham Rd From East		Waltham Rd From West		
Start Time	Left	Right	Thru	Right	Left	Thru	Int. Total
07:00 AM	0	0	0	0	0	0	0
07:15 AM	1	0	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0
Total	1	0	0	0	0	0	1
08:00 AM	0	0	0	0	0	1	1
08:15 AM	0	0	1	0	0	0	1
08:30 AM	0	0	0	0	0	1	1
08:45 AM	0	0	0	0	0	0	0
Total	0	0	1	0	0	2	3
Grand Total	1	0	1	0	0	2	4
Apprch %	100	0	100	0	0	100	
Total %	25	0	25	0	0	50	

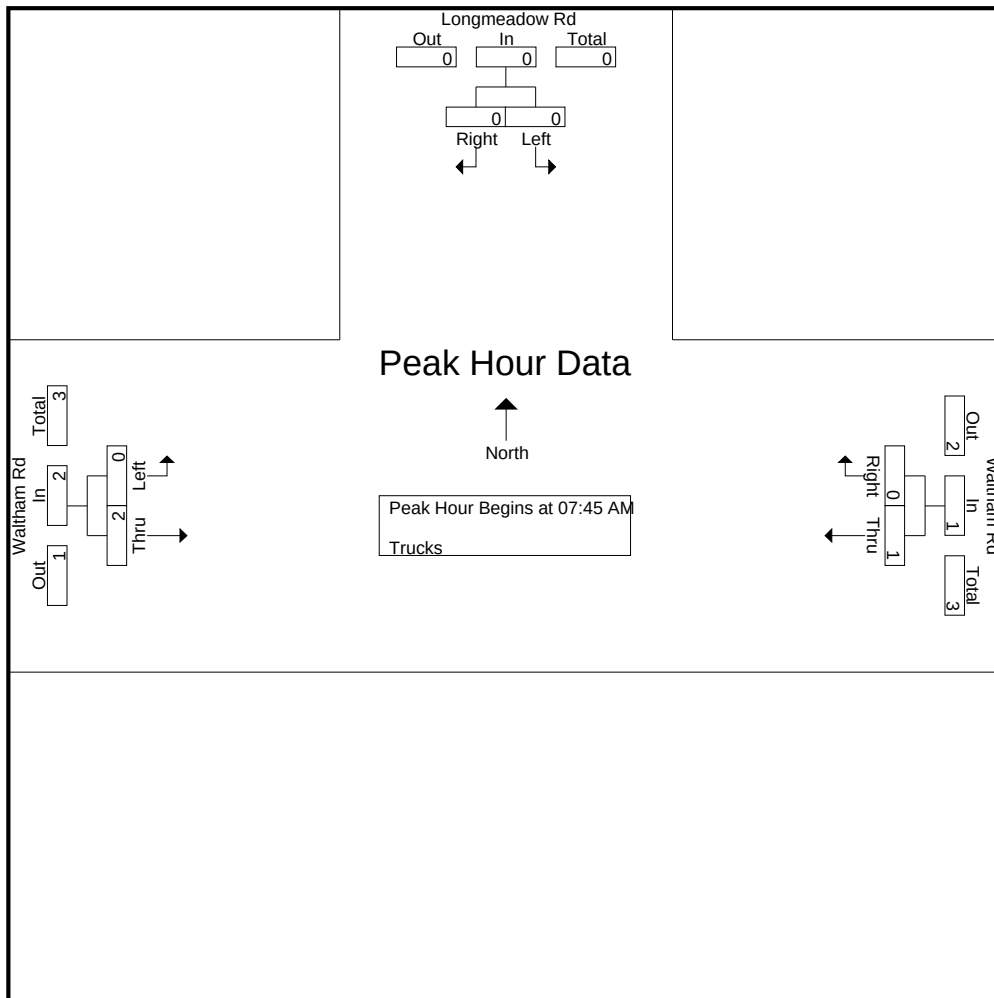
Accurate Counts

978-664-2565

N/S Street : Longmeadow Road
 E/W Street : Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154002
 Site Code : 62154002
 Start Date : 4/27/2016
 Page No : 8

	Longmeadow Rd From North			Waltham Rd From East			Waltham Rd From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	1	1	1
08:15 AM	0	0	0	1	0	1	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	1	1	1
Total Volume	0	0	0	1	0	1	0	2	2	3
% App. Total	0	0		100	0		0	100		
PHF	.000	.000	.000	.250	.000	.250	.000	.500	.500	.750



Accurate Counts

978-664-2565

N/S Street : Longmeadow Road
 E/W Street : Waltham Road
 City/State : Wayland, MA
 Weather : Clear

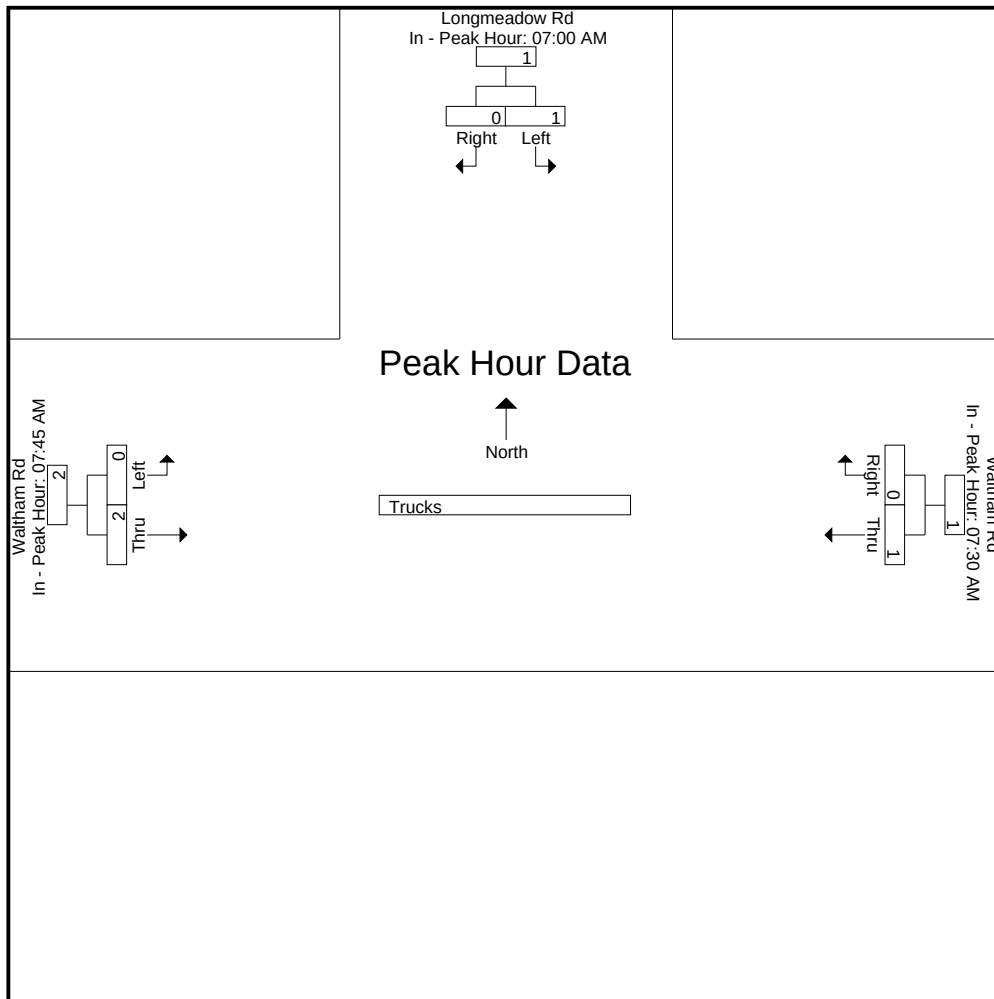
File Name : 62154002
 Site Code : 62154002
 Start Date : 4/27/2016
 Page No : 9

	Longmeadow Rd From North			Waltham Rd From East			Waltham Rd From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total

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

Peak Hour for Each Approach Begins at:

	07:00 AM			07:30 AM			07:45 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	1	0	1	0	0	0	0	1	1
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	1	0	1	0	1	1
Total Volume	1	0	1	1	0	1	0	2	2
% App. Total	100	0		100	0		0	100	
PHF	.250	.000	.250	.250	.000	.250	.000	.500	.500



Accurate Counts

978-664-2565

N/S Street : Longmeadow Road
 E/W Street : Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154002
 Site Code : 62154002
 Start Date : 4/27/2016
 Page No : 10

Groups Printed- Bikes Peds

	Longmeadow Rd From North			Waltham Rd From East			Waltham Rd From West					
Start Time	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	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
08:00 AM	0	0	0	0	0	0	0	1	0	0	1	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	1	0	0	1	1
Grand Total	0	0	0	0	0	0	0	1	0	0	1	1
Apprch %	0	0		0	0		0	100				
Total %	0	0		0	0		0	100		0	100	

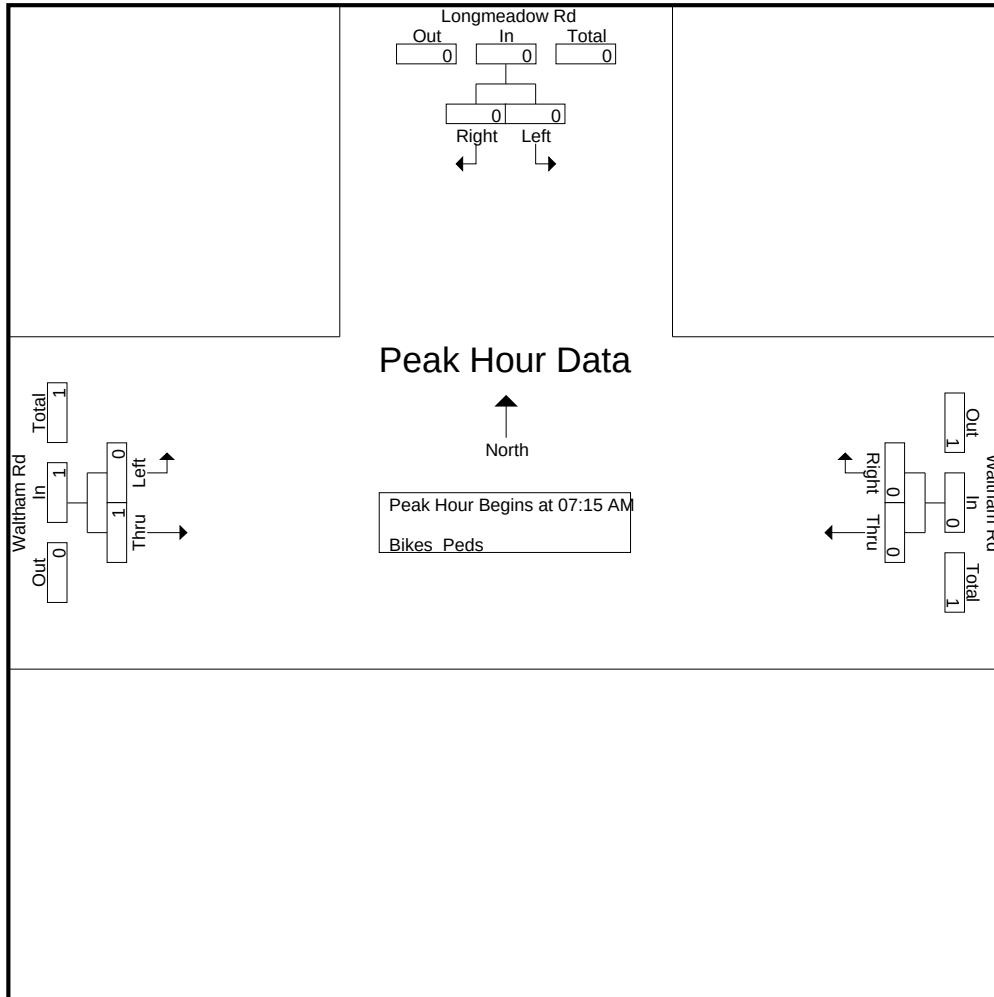
Accurate Counts

978-664-2565

N/S Street : Longmeadow Road
 E/W Street : Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154002
 Site Code : 62154002
 Start Date : 4/27/2016
 Page No : 11

	Longmeadow Rd From North			Waltham Rd From East			Waltham Rd From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	1	1	1
Total Volume	0	0	0	0	0	0	0	1	1	1
% App. Total	0	0		0	0		0	100		
PHF	.000	.000	.000	.000	.000	.000	.000	.250	.250	.250



Accurate Counts

978-664-2565

N/S Street : Longmeadow Road
 E/W Street : Waltham Road
 City/State : Wayland, MA
 Weather : Clear

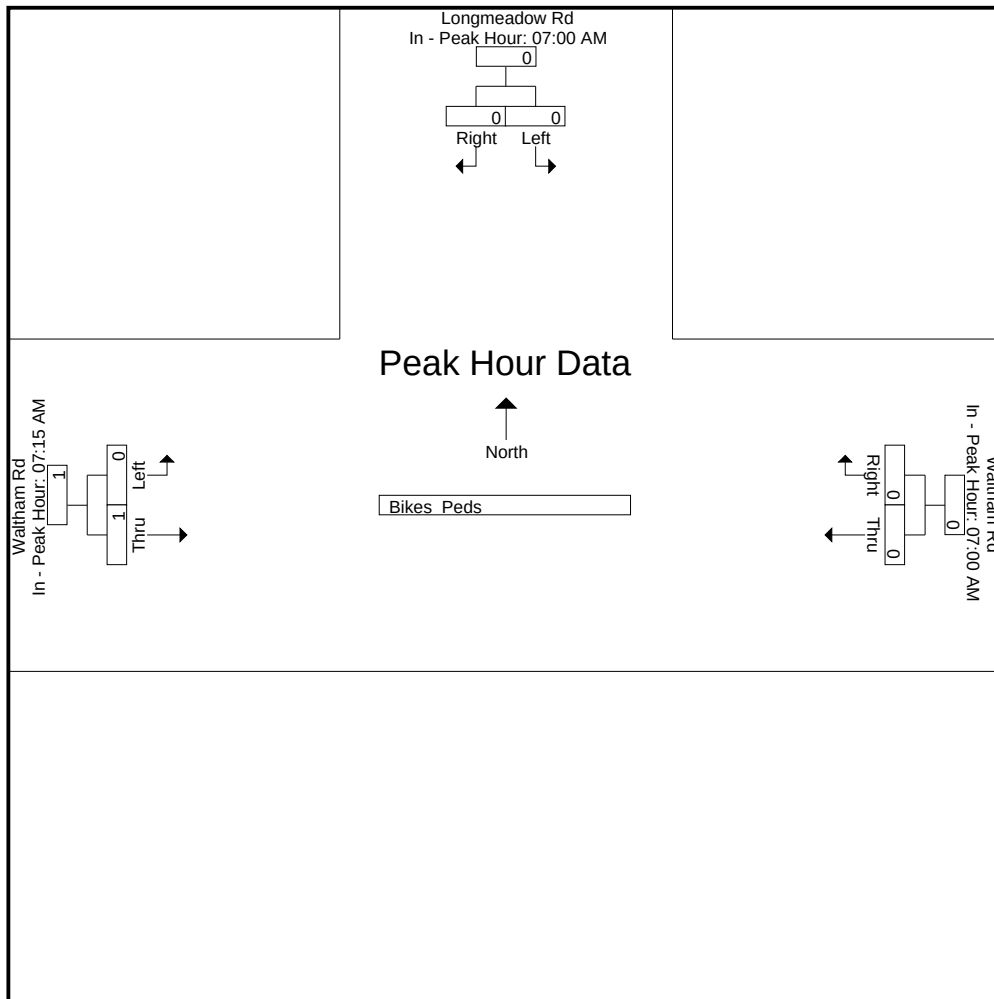
File Name : 62154002
 Site Code : 62154002
 Start Date : 4/27/2016
 Page No : 12

	Longmeadow Rd From North			Waltham Rd From East			Waltham Rd From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total

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

Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:15 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	1	1
Total Volume	0	0	0	0	0	0	0	1	1
% App. Total	0	0	0	0	0	0	0	100	
PHF	.000	.000	.000	.000	.000	.000	.000	.250	.250



Accurate Counts

978-664-2565

N/S Street : Longmeadow Road
 E/W Street : Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154002
 Site Code : 62154002
 Start Date : 4/27/2016
 Page No : 1

Groups Printed- Cars - Trucks

	Longmeadow Rd From North		Waltham Rd From East		Waltham Rd From West		
Start Time	Left	Right	Thru	Right	Left	Thru	Int. Total
02:00 PM	0	0	9	0	0	6	15
02:15 PM	1	1	20	0	0	7	29
02:30 PM	0	0	5	0	0	9	14
02:45 PM	0	0	12	1	0	4	17
Total	1	1	46	1	0	26	75
03:00 PM	0	0	16	0	0	9	25
03:15 PM	1	0	16	0	0	6	23
03:30 PM	0	0	17	2	1	10	30
03:45 PM	0	1	29	1	1	7	39
Total	1	1	78	3	2	32	117
04:00 PM	0	0	27	0	0	6	33
04:15 PM	0	0	36	0	0	12	48
04:30 PM	0	0	31	0	0	8	39
04:45 PM	0	0	43	0	0	7	50
Total	0	0	137	0	0	33	170
05:00 PM	0	0	48	0	0	12	60
05:15 PM	0	1	55	0	0	9	65
05:30 PM	0	0	50	0	0	9	59
05:45 PM	2	0	50	1	1	9	63
Total	2	1	203	1	1	39	247
Grand Total	4	3	464	5	3	130	609
Apprch %	57.1	42.9	98.9	1.1	2.3	97.7	
Total %	0.7	0.5	76.2	0.8	0.5	21.3	
Cars	4	3	464	5	3	129	608
% Cars	100	100	100	100	100	99.2	99.8
Trucks	0	0	0	0	0	1	1
% Trucks	0	0	0	0	0	0.8	0.2

Accurate Counts

978-664-2565

N/S Street : Longmeadow Road
 E/W Street : Waltham Road
 City/State : Wayland, MA
 Weather : Clear

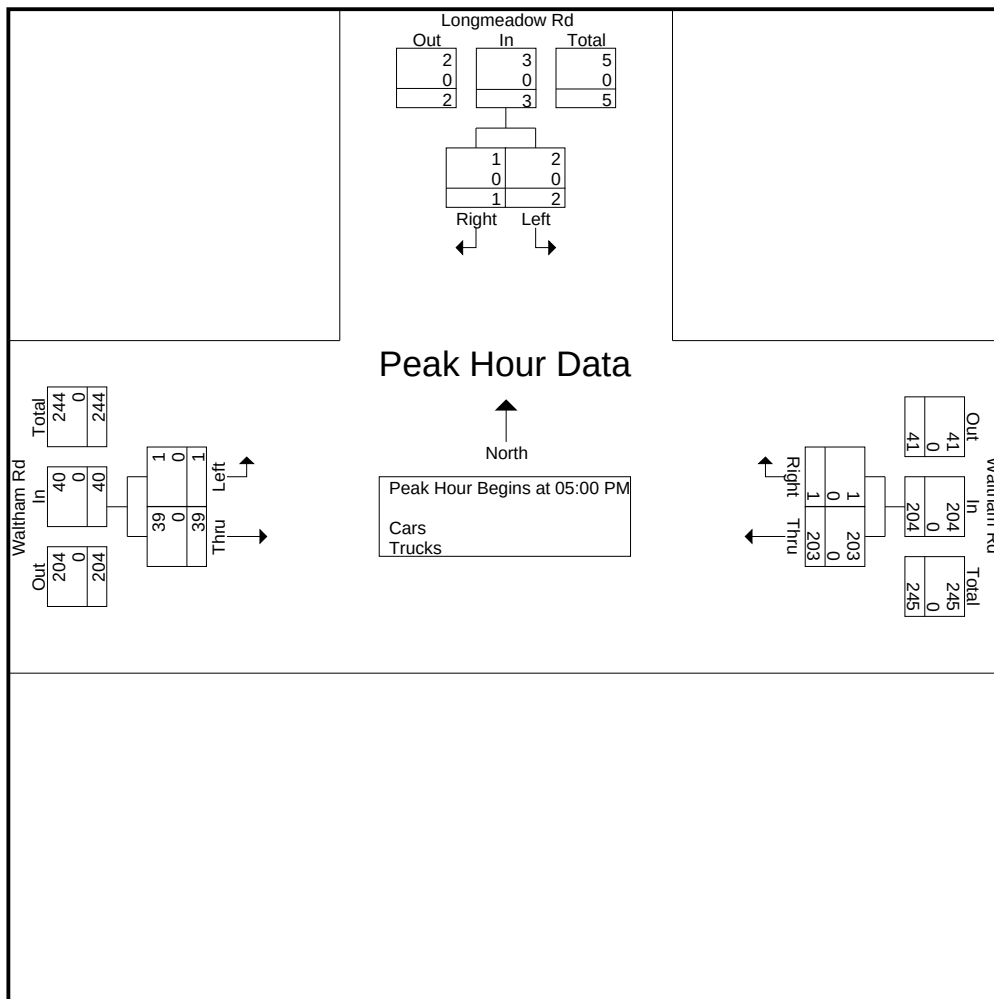
File Name : 62154002
 Site Code : 62154002
 Start Date : 4/27/2016
 Page No : 2

	Longmeadow Rd From North			Waltham Rd From East			Waltham Rd From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 05:00 PM

05:00 PM	0	0	0	48	0	48	0	12	12	60
05:15 PM	0	1	1	55	0	55	0	9	9	65
05:30 PM	0	0	0	50	0	50	0	9	9	59
05:45 PM	2	0	2	50	1	51	1	9	10	63
Total Volume	2	1	3	203	1	204	1	39	40	247
% App. Total	66.7	33.3		99.5	0.5		2.5	97.5		
PHF	.250	.250	.375	.923	.250	.927	.250	.813	.833	.950
Cars	2	1	3	203	1	204	1	39	40	247
% Cars	100	100	100	100	100	100	100	100	100	100
Trucks	0	0	0	0	0	0	0	0	0	0
% Trucks	0	0	0	0	0	0	0	0	0	0



Accurate Counts

978-664-2565

N/S Street : Longmeadow Road
 E/W Street : Waltham Road
 City/State : Wayland, MA
 Weather : Clear

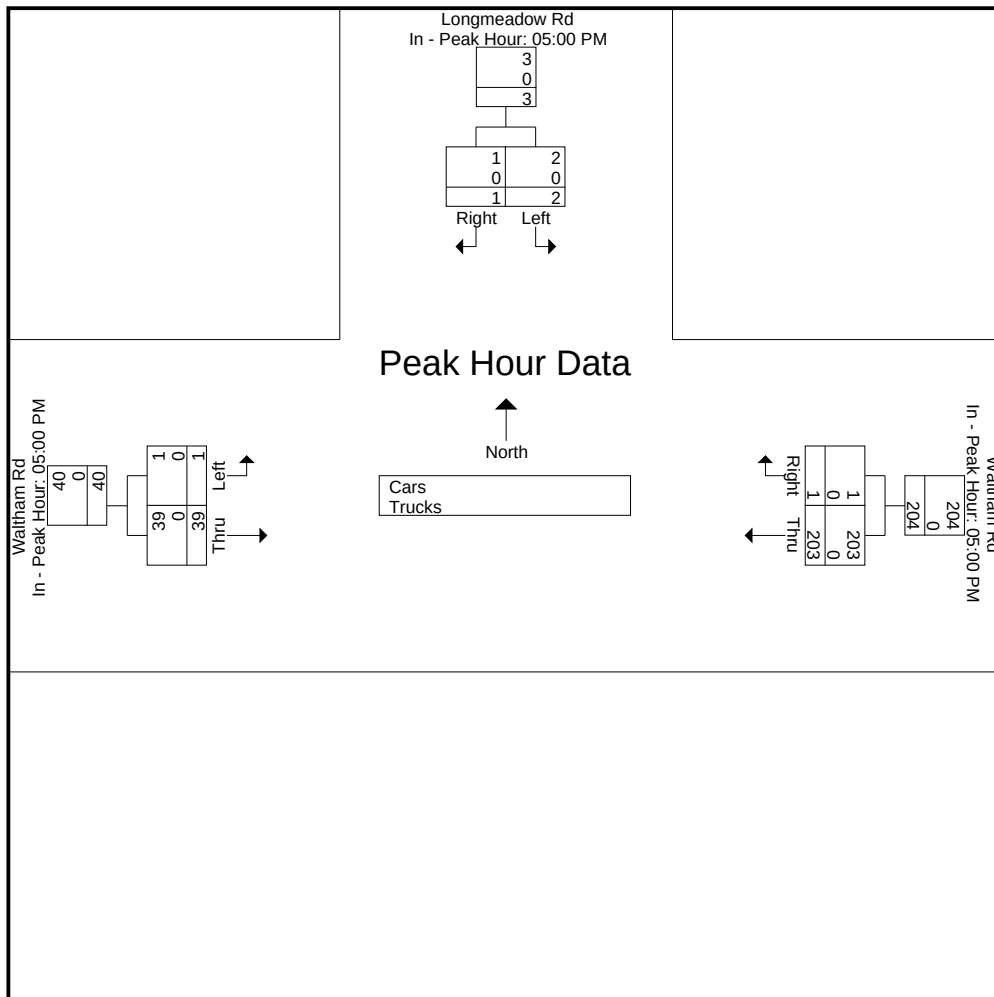
File Name : 62154002
 Site Code : 62154002
 Start Date : 4/27/2016
 Page No : 3

	Longmeadow Rd From North			Waltham Rd From East			Waltham Rd From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM			05:00 PM			05:00 PM		
+0 mins.	0	0	0	48	0	48	0	12	12
+15 mins.	0	1	1	55	0	55	0	9	9
+30 mins.	0	0	0	50	0	50	0	9	9
+45 mins.	2	0	2	50	1	51	1	9	10
Total Volume	2	1	3	203	1	204	1	39	40
% App. Total	66.7	33.3		99.5	0.5		2.5	97.5	
PHF	.250	.250	.375	.923	.250	.927	.250	.813	.833
Cars	2	1	3	203	1	204	1	39	40
% Cars	100	100	100	100	100	100	100	100	100
Trucks	0	0	0	0	0	0	0	0	0
% Trucks	0	0	0	0	0	0	0	0	0



Accurate Counts

978-664-2565

N/S Street : Longmeadow Road
 E/W Street : Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154002
 Site Code : 62154002
 Start Date : 4/27/2016
 Page No : 4

Groups Printed- Cars

	Longmeadow Rd From North		Waltham Rd From East		Waltham Rd From West		
Start Time	Left	Right	Thru	Right	Left	Thru	Int. Total
02:00 PM	0	0	9	0	0	6	15
02:15 PM	1	1	20	0	0	7	29
02:30 PM	0	0	5	0	0	9	14
02:45 PM	0	0	12	1	0	4	17
Total	1	1	46	1	0	26	75
03:00 PM	0	0	16	0	0	9	25
03:15 PM	1	0	16	0	0	6	23
03:30 PM	0	0	17	2	1	10	30
03:45 PM	0	1	29	1	1	7	39
Total	1	1	78	3	2	32	117
04:00 PM	0	0	27	0	0	6	33
04:15 PM	0	0	36	0	0	11	47
04:30 PM	0	0	31	0	0	8	39
04:45 PM	0	0	43	0	0	7	50
Total	0	0	137	0	0	32	169
05:00 PM	0	0	48	0	0	12	60
05:15 PM	0	1	55	0	0	9	65
05:30 PM	0	0	50	0	0	9	59
05:45 PM	2	0	50	1	1	9	63
Total	2	1	203	1	1	39	247
Grand Total	4	3	464	5	3	129	608
Apprch %	57.1	42.9	98.9	1.1	2.3	97.7	
Total %	0.7	0.5	76.3	0.8	0.5	21.2	

Accurate Counts

978-664-2565

N/S Street : Longmeadow Road
 E/W Street : Waltham Road
 City/State : Wayland, MA
 Weather : Clear

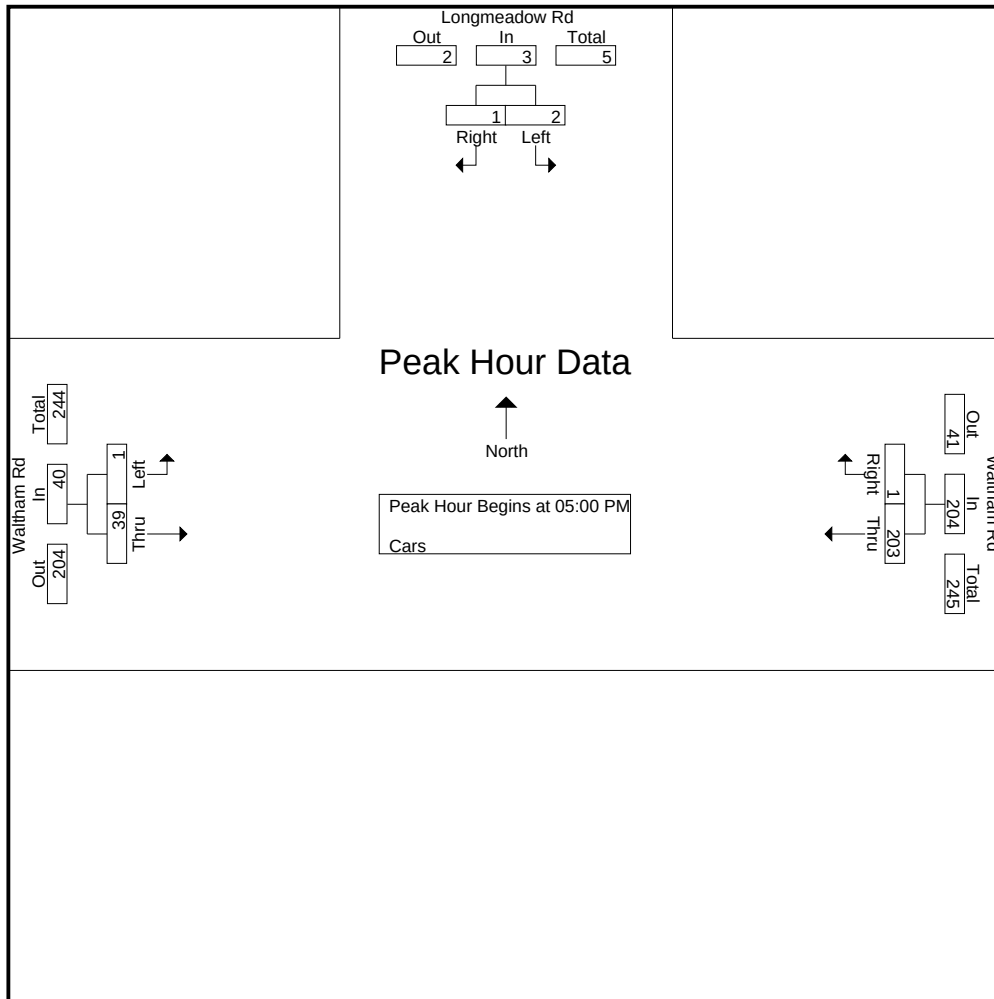
File Name : 62154002
 Site Code : 62154002
 Start Date : 4/27/2016
 Page No : 5

	Longmeadow Rd From North			Waltham Rd From East			Waltham Rd From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 05:00 PM

05:00 PM	0	0	0	48	0	48	0	12	12	60
05:15 PM	0	1	1	55	0	55	0	9	9	65
05:30 PM	0	0	0	50	0	50	0	9	9	59
05:45 PM	2	0	2	50	1	51	1	9	10	63
Total Volume	2	1	3	203	1	204	1	39	40	247
% App. Total	66.7	33.3		99.5	0.5		2.5	97.5		
PHF	.250	.250	.375	.923	.250	.927	.250	.813	.833	.950



Accurate Counts

978-664-2565

N/S Street : Longmeadow Road
 E/W Street : Waltham Road
 City/State : Wayland, MA
 Weather : Clear

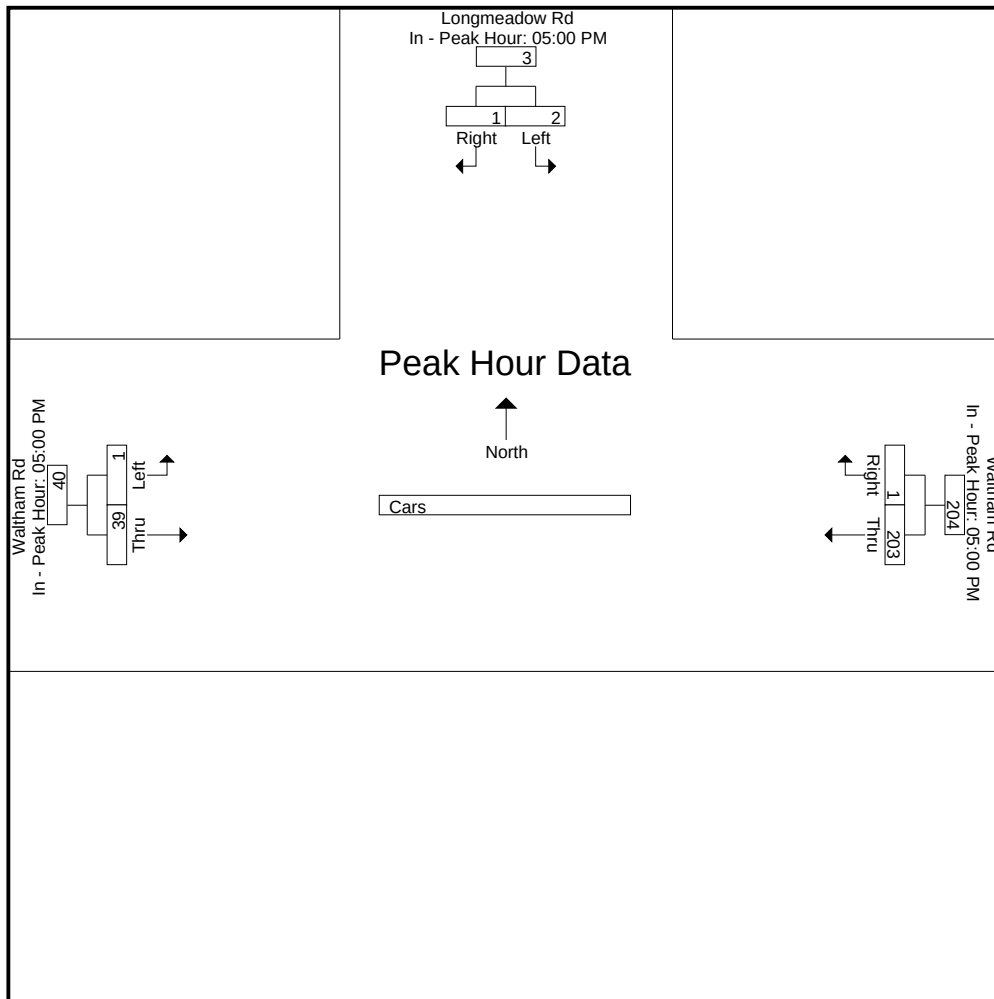
File Name : 62154002
 Site Code : 62154002
 Start Date : 4/27/2016
 Page No : 6

	Longmeadow Rd From North			Waltham Rd From East			Waltham Rd From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM			05:00 PM			05:00 PM		
+0 mins.	0	0	0	48	0	48	0	12	12
+15 mins.	0	1	1	55	0	55	0	9	9
+30 mins.	0	0	0	50	0	50	0	9	9
+45 mins.	2	0	2	50	1	51	1	9	10
Total Volume	2	1	3	203	1	204	1	39	40
% App. Total	66.7	33.3		99.5	0.5		2.5	97.5	
PHF	.250	.250	.375	.923	.250	.927	.250	.813	.833



Accurate Counts

978-664-2565

N/S Street : Longmeadow Road
 E/W Street : Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154002
 Site Code : 62154002
 Start Date : 4/27/2016
 Page No : 7

Groups Printed- Trucks

	Longmeadow Rd From North		Waltham Rd From East		Waltham Rd From West		
Start Time	Left	Right	Thru	Right	Left	Thru	Int. Total
02:00 PM	0	0	0	0	0	0	0
02:15 PM	0	0	0	0	0	0	0
02:30 PM	0	0	0	0	0	0	0
02:45 PM	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
03:00 PM	0	0	0	0	0	0	0
03:15 PM	0	0	0	0	0	0	0
03:30 PM	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
04:00 PM	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	1	1
04:30 PM	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	1
05:00 PM	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	1	1
Apprch %	0	0	0	0	0	100	
Total %	0	0	0	0	0	100	

Accurate Counts

978-664-2565

N/S Street : Longmeadow Road
 E/W Street : Waltham Road
 City/State : Wayland, MA
 Weather : Clear

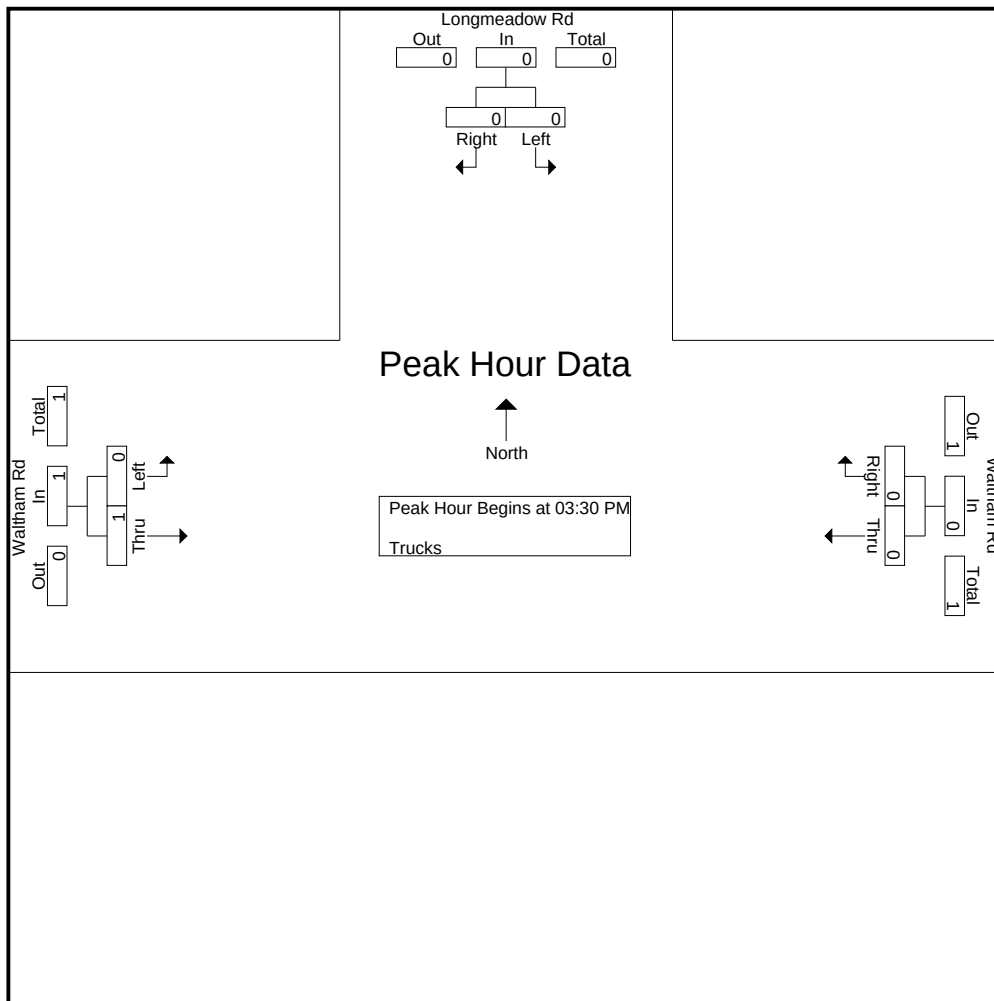
File Name : 62154002
 Site Code : 62154002
 Start Date : 4/27/2016
 Page No : 8

	Longmeadow Rd From North			Waltham Rd From East			Waltham Rd From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 03:30 PM

03:30 PM	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0	0	0	0
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	1	1	1
Total Volume	0	0	0	0	0	0	0	1	1	1
% App. Total	0	0		0	0		0	100		
PHF	.000	.000	.000	.000	.000	.000	.000	.250	.250	.250



Accurate Counts

978-664-2565

N/S Street : Longmeadow Road
 E/W Street : Waltham Road
 City/State : Wayland, MA
 Weather : Clear

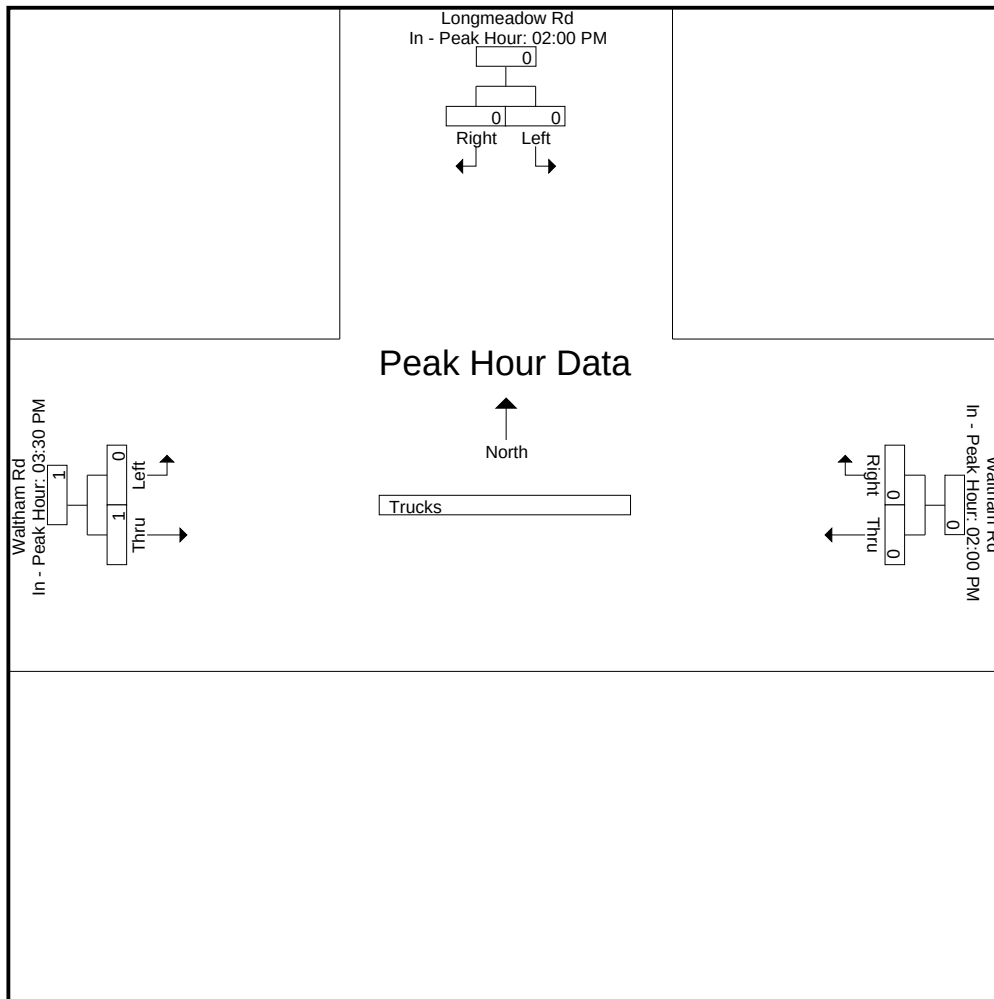
File Name : 62154002
 Site Code : 62154002
 Start Date : 4/27/2016
 Page No : 9

	Longmeadow Rd From North			Waltham Rd From East			Waltham Rd From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:00 PM			02:00 PM			03:30 PM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	1	1
Total Volume	0	0	0	0	0	0	0	1	1
% App. Total	0	0	0	0	0	0	0	100	
PHF	.000	.000	.000	.000	.000	.000	.000	.250	.250



Accurate Counts

978-664-2565

N/S Street : Longmeadow Road
 E/W Street : Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154002
 Site Code : 62154002
 Start Date : 4/27/2016
 Page No : 10

Groups Printed- Bikes Peds

	Longmeadow Rd From North			Waltham Rd From East			Waltham Rd From West					
Start Time	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds	Exclu. Total	Inclu. Total	Int. Total
02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	0	0	1	0	0	0	1	0	0	2	2
02:45 PM	0	0	0	1	0	0	0	0	0	0	1	1
Total	0	0	0	2	0	0	0	1	0	0	3	3
03:00 PM	0	0	0	2	0	0	0	0	0	0	2	2
03:15 PM	0	0	0	1	0	0	0	0	0	0	1	1
03:30 PM	0	0	0	0	0	0	0	2	0	0	2	2
03:45 PM	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	0	3	0	0	0	3	0	0	6	6
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	1	0	0	0	0	0	0	1	0	1
04:30 PM	0	0	0	1	0	0	0	1	0	0	2	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	1	0	0	0	1	0	1	2	3
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	1	0	0	0	0	0	0	1	1
05:30 PM	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
Total	0	0	0	1	0	0	0	0	0	0	1	1
Grand Total	0	0	1	7	0	0	0	5	0	1	12	13
Apprch %	0	0		100	0		0	100				
Total %	0	0		58.3	0		0	41.7		7.7	92.3	

Accurate Counts

978-664-2565

N/S Street : Longmeadow Road
 E/W Street : Waltham Road
 City/State : Wayland, MA
 Weather : Clear

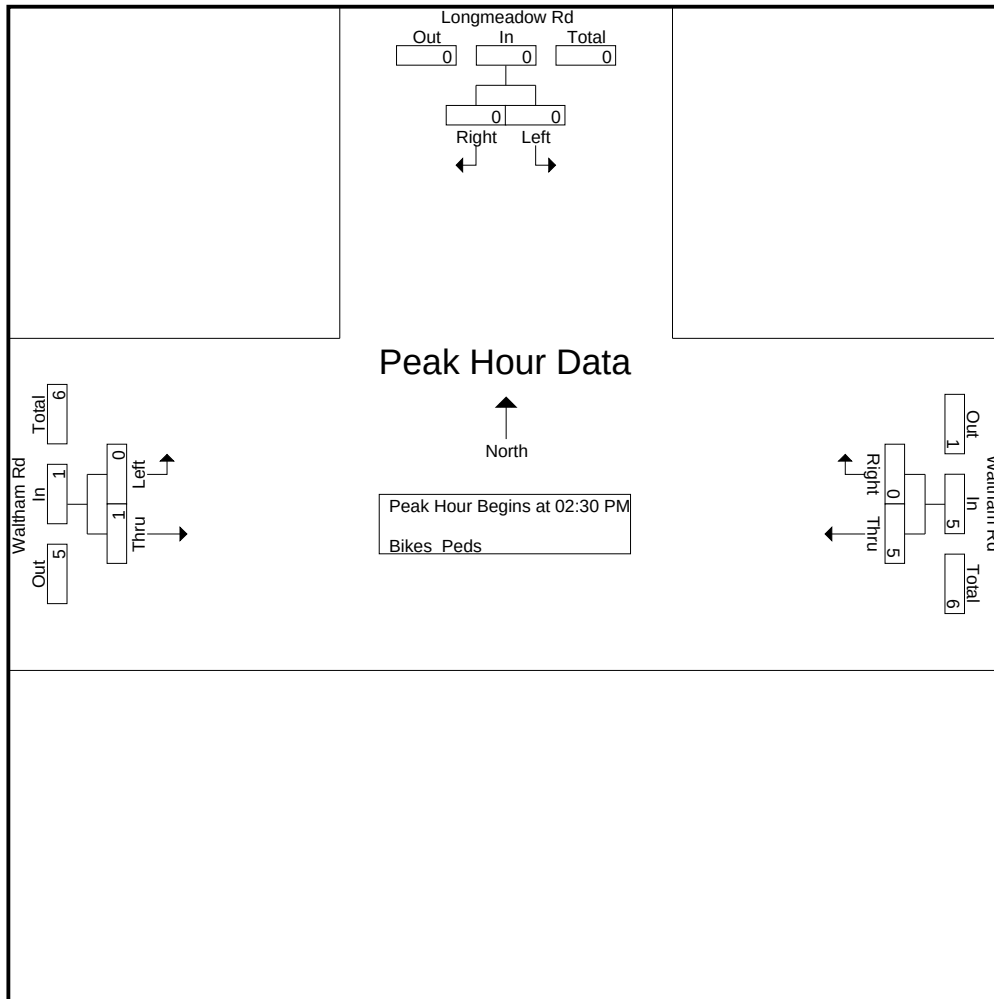
File Name : 62154002
 Site Code : 62154002
 Start Date : 4/27/2016
 Page No : 11

	Longmeadow Rd From North			Waltham Rd From East			Waltham Rd From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 02:30 PM

02:30 PM	0	0	0	1	0	1	0	1	1	2
02:45 PM	0	0	0	1	0	1	0	0	0	1
03:00 PM	0	0	0	2	0	2	0	0	0	2
03:15 PM	0	0	0	1	0	1	0	0	0	1
Total Volume	0	0	0	5	0	5	0	1	1	6
% App. Total	0	0		100	0		0	100		
PHF	.000	.000	.000	.625	.000	.625	.000	.250	.250	.750



Accurate Counts

978-664-2565

N/S Street : Longmeadow Road
 E/W Street : Waltham Road
 City/State : Wayland, MA
 Weather : Clear

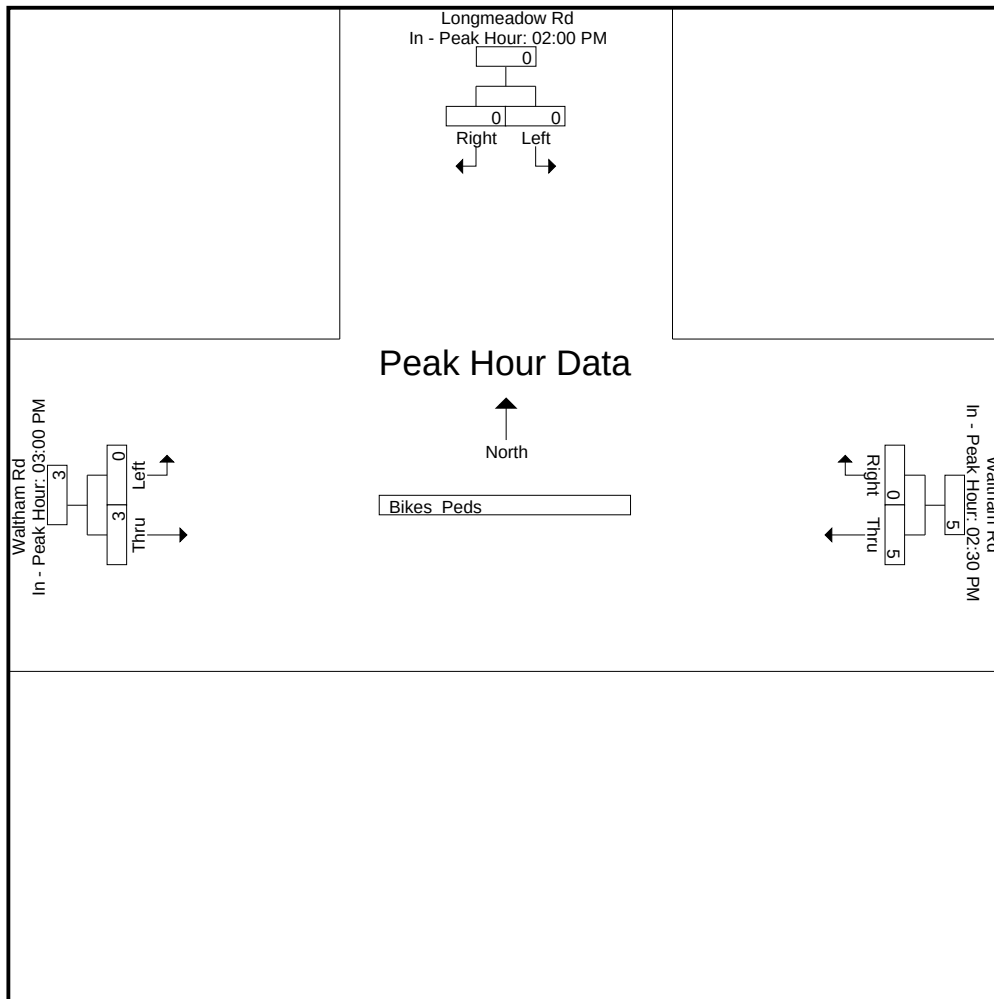
File Name : 62154002
 Site Code : 62154002
 Start Date : 4/27/2016
 Page No : 12

	Longmeadow Rd From North			Waltham Rd From East			Waltham Rd From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:00 PM			02:30 PM			03:00 PM		
+0 mins.	0	0	0	1	0	1	0	0	0
+15 mins.	0	0	0	1	0	1	0	0	0
+30 mins.	0	0	0	2	0	2	0	2	2
+45 mins.	0	0	0	1	0	1	0	1	1
Total Volume	0	0	0	5	0	5	0	3	3
% App. Total	0	0	0	100	0		0	100	
PHF	.000	.000	.000	.625	.000	.625	.000	.375	.375



Accurate Counts

978-664-2565

N/S Street : Lincoln Road
 E/W Street: Waltham Road
 City/State : Waltham, MA
 Weather : Clear

File Name : 62154003
 Site Code : 62154003
 Start Date : 4/27/2016
 Page No : 1

Groups Printed- Cars - Trucks

	Lincoln Rd From North			Waltham Rd From East			Lincoln Rd From South			Waltham Rd From West			
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
07:00 AM	0	0	11	1	9	1	1	0	0	51	77	1	152
07:15 AM	2	1	13	0	15	0	0	2	1	66	90	0	190
07:30 AM	1	1	19	0	12	4	1	2	1	74	89	0	204
07:45 AM	2	1	10	1	9	0	1	1	1	51	99	1	177
Total	5	3	53	2	45	5	3	5	3	242	355	2	723
08:00 AM	0	4	7	0	7	0	0	4	1	47	95	1	166
08:15 AM	0	3	4	0	6	0	0	1	1	38	88	4	145
08:30 AM	1	2	6	0	9	1	1	0	0	51	85	1	157
08:45 AM	0	2	8	0	6	1	2	1	1	32	69	3	125
Total	1	11	25	0	28	2	3	6	3	168	337	9	593
Grand Total	6	14	78	2	73	7	6	11	6	410	692	11	1316
Apprch %	6.1	14.3	79.6	2.4	89	8.5	26.1	47.8	26.1	36.8	62.2	1	
Total %	0.5	1.1	5.9	0.2	5.5	0.5	0.5	0.8	0.5	31.2	52.6	0.8	
Cars	5	12	78	1	71	7	6	11	5	408	692	11	1307
% Cars	83.3	85.7	100	50	97.3	100	100	100	83.3	99.5	100	100	99.3
Trucks	1	2	0	1	2	0	0	0	1	2	0	0	9
% Trucks	16.7	14.3	0	50	2.7	0	0	0	16.7	0.5	0	0	0.7

Accurate Counts

978-664-2565

N/S Street : Lincoln Road
E/W Street: Waltham Road
City/State : Waltham, MA
Weather : Clear

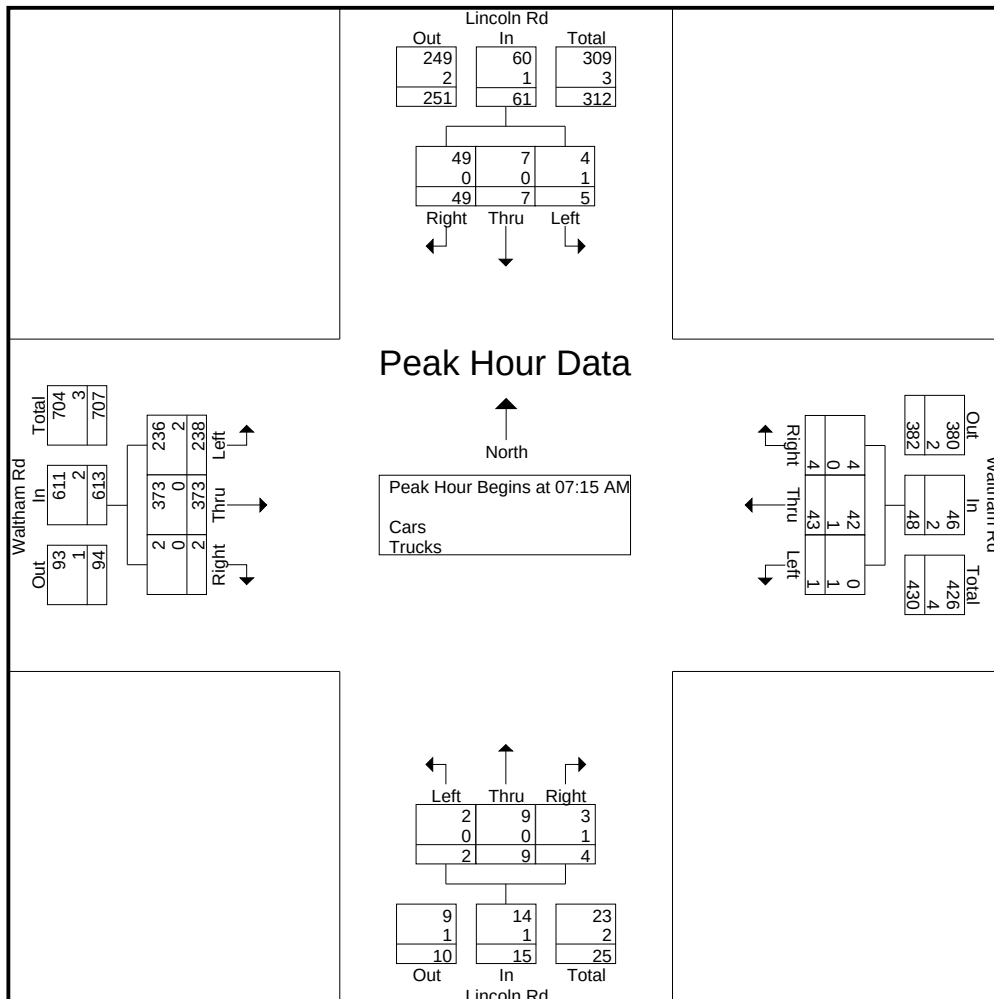
File Name : 62154003
Site Code : 62154003
Start Date : 4/27/2016
Page No : 2

	Lincoln Rd From North				Waltham Rd From East				Lincoln Rd From South				Waltham Rd From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total

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

Peak Hour for Entire Intersection Begins at 07:15 AM

07:15 AM	2	1	13	16	0	15	0	15	0	2	1	3	66	90	0	156	190
07:30 AM	1	1	19	21	0	12	4	16	1	2	1	4	74	89	0	163	204
07:45 AM	2	1	10	13	1	9	0	10	1	1	1	3	51	99	1	151	177
08:00 AM	0	4	7	11	0	7	0	7	0	4	1	5	47	95	1	143	166
Total Volume	5	7	49	61	1	43	4	48	2	9	4	15	238	373	2	613	737
% App. Total	8.2	11.5	80.3		2.1	89.6	8.3		13.3	60	26.7		38.8	60.8	0.3		
PHF	.625	.438	.645	.726	.250	.717	.250	.750	.500	.563	1.00	.750	.804	.942	.500	.940	.903
Cars	4	7	49	60	0	42	4	46	2	9	3	14	236	373	2	611	731
% Cars	80.0	100	100	98.4	0	97.7	100	95.8	100	100	75.0	93.3	99.2	100	100	99.7	99.2
Trucks	1	0	0	1	1	1	0	2	0	0	1	1	2	0	0	2	6
% Trucks	20.0	0	0	1.6	100	2.3	0	4.2	0	0	25.0	6.7	0.8	0	0	0.3	0.8



Accurate Counts

978-664-2565

N/S Street : Lincoln Road
E/W Street: Waltham Road
City/State : Waltham, MA
Weather : Clear

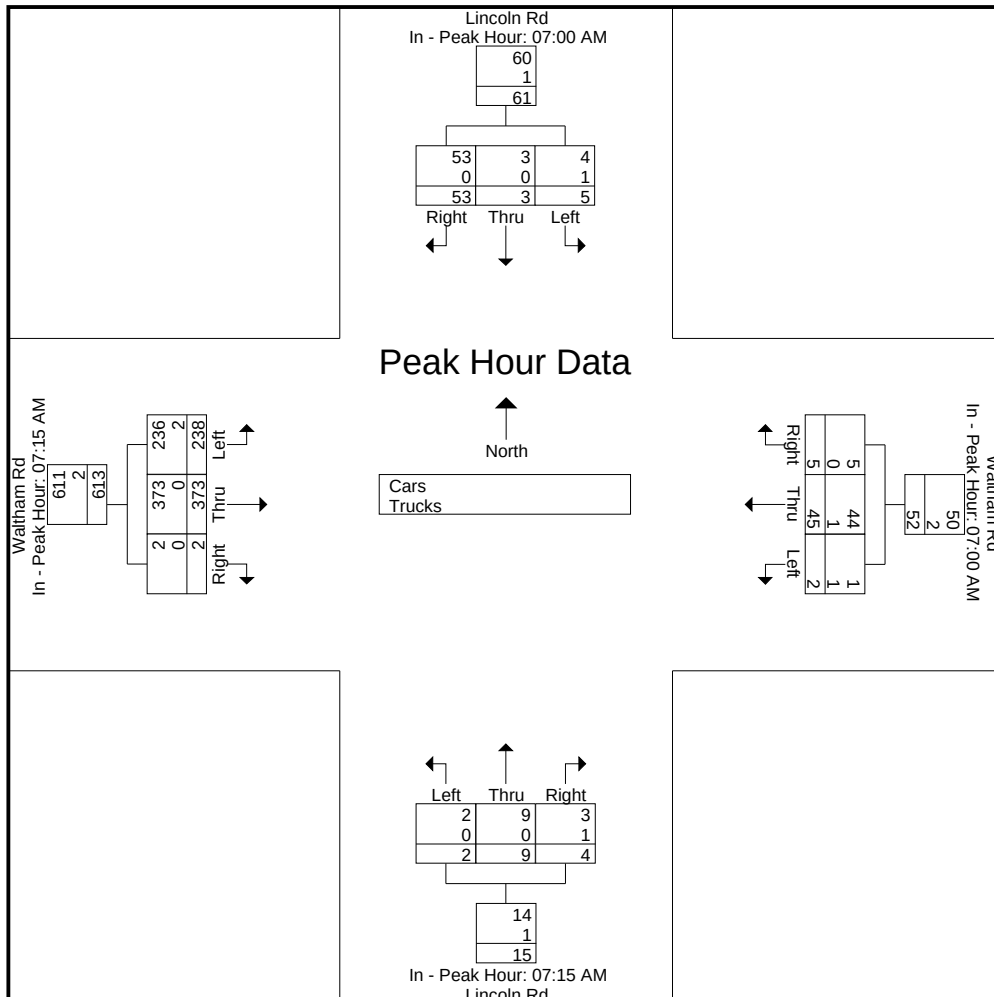
File Name : 62154003
Site Code : 62154003
Start Date : 4/27/2016
Page No : 3

	Lincoln Rd From North				Waltham Rd From East				Lincoln Rd From South				Waltham Rd From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total

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

Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	11	11	1	9	1	11	0	2	1	3	66	90	0	156
+15 mins.	2	1	13	16	0	15	0	15	1	2	1	4	74	89	0	163
+30 mins.	1	1	19	21	0	12	4	16	1	1	1	3	51	99	1	151
+45 mins.	2	1	10	13	1	9	0	10	0	4	1	5	47	95	1	143
Total Volume	5	3	53	61	2	45	5	52	2	9	4	15	238	373	2	613
% App. Total	8.2	4.9	86.9		3.8	86.5	9.6		13.3	60	26.7		38.8	60.8	0.3	
PHF	.625	.750	.697	.726	.500	.750	.313	.813	.500	.563	1.000	.750	.804	.942	.500	.940
Cars	4	3	53	60	1	44	5	50	2	9	3	14	236	373	2	611
% Cars	80	100	100	98.4	50	97.8	100	96.2	100	100	75	93.3	99.2	100	100	99.7
Trucks	1	0	0	1	1	1	0	2	0	0	1	1	2	0	0	2
% Trucks	20	0	0	1.6	50	2.2	0	3.8	0	0	25	6.7	0.8	0	0	0.3



Accurate Counts

978-664-2565

N/S Street : Lincoln Road
 E/W Street: Waltham Road
 City/State : Waltham, MA
 Weather : Clear

File Name : 62154003
 Site Code : 62154003
 Start Date : 4/27/2016
 Page No : 4

Groups Printed- Cars													
	Lincoln Rd From North			Waltham Rd From East			Lincoln Rd From South			Waltham Rd From West			
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
07:00 AM	0	0	11	1	9	1	1	0	0	51	77	1	152
07:15 AM	1	1	13	0	14	0	0	2	1	65	90	0	187
07:30 AM	1	1	19	0	12	4	1	2	1	74	89	0	204
07:45 AM	2	1	10	0	9	0	1	1	1	51	99	1	176
Total	4	3	53	1	44	5	3	5	3	241	355	2	719
08:00 AM	0	4	7	0	7	0	0	4	0	46	95	1	164
08:15 AM	0	3	4	0	5	0	0	1	1	38	88	4	144
08:30 AM	1	0	6	0	9	1	1	0	0	51	85	1	155
08:45 AM	0	2	8	0	6	1	2	1	1	32	69	3	125
Total	1	9	25	0	27	2	3	6	2	167	337	9	588
Grand Total	5	12	78	1	71	7	6	11	5	408	692	11	1307
Apprch %	5.3	12.6	82.1	1.3	89.9	8.9	27.3	50	22.7	36.7	62.3	1	
Total %	0.4	0.9	6	0.1	5.4	0.5	0.5	0.8	0.4	31.2	52.9	0.8	

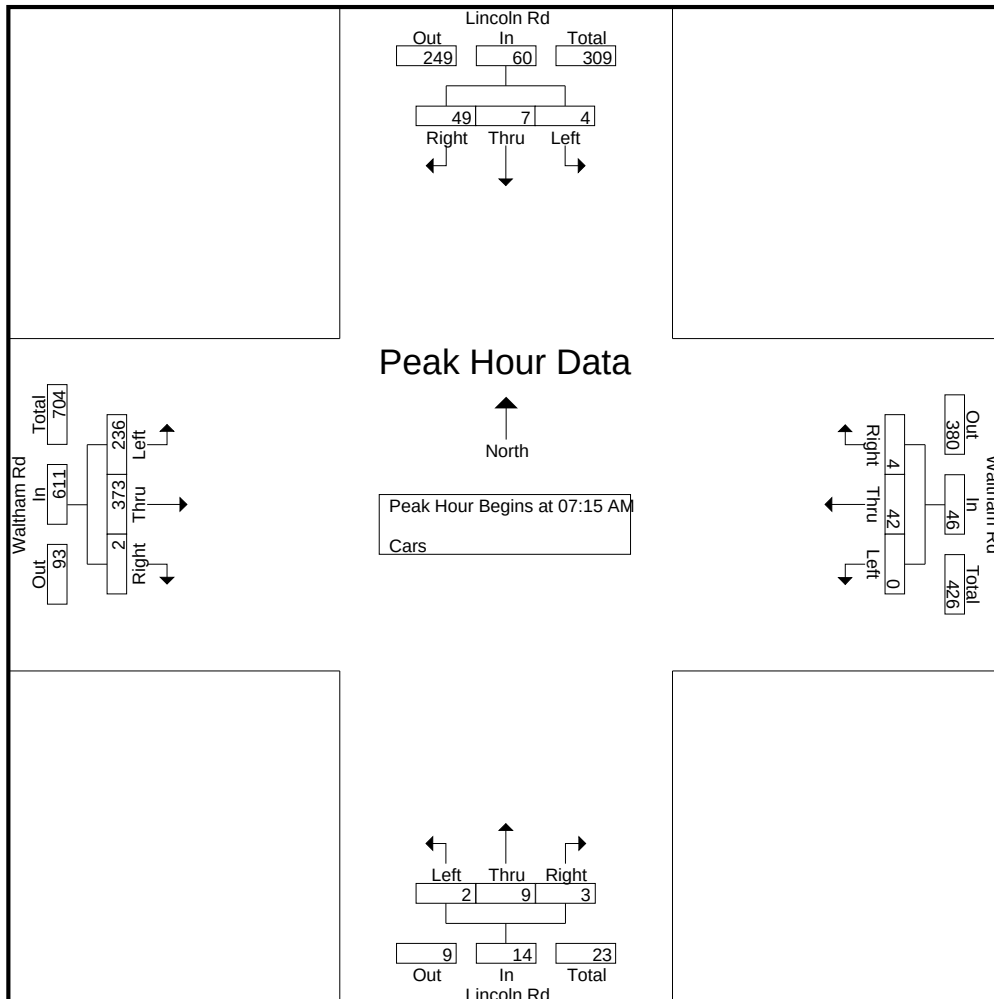
Accurate Counts

978-664-2565

N/S Street : Lincoln Road
E/W Street: Waltham Road
City/State : Waltham, MA
Weather : Clear

File Name : 62154003
Site Code : 62154003
Start Date : 4/27/2016
Page No : 5

	Lincoln Rd From North				Waltham Rd From East				Lincoln Rd From South				Waltham Rd From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	1	1	13	15	0	14	0	14	0	2	1	3	65	90	0	155	187
07:30 AM	1	1	19	21	0	12	4	16	1	2	1	4	74	89	0	163	204
07:45 AM	2	1	10	13	0	9	0	9	1	1	1	3	51	99	1	151	176
08:00 AM	0	4	7	11	0	7	0	7	0	4	0	4	46	95	1	142	164
Total Volume	4	7	49	60	0	42	4	46	2	9	3	14	236	373	2	611	731
% App. Total	6.7	11.7	81.7		0	91.3	8.7		14.3	64.3	21.4		38.6	61	0.3		
PHF	.500	.438	.645	.714	.000	.750	.250	.719	.500	.563	.750	.875	.797	.942	.500	.937	.896



Accurate Counts

978-664-2565

N/S Street : Lincoln Road
E/W Street: Waltham Road
City/State : Waltham, MA
Weather : Clear

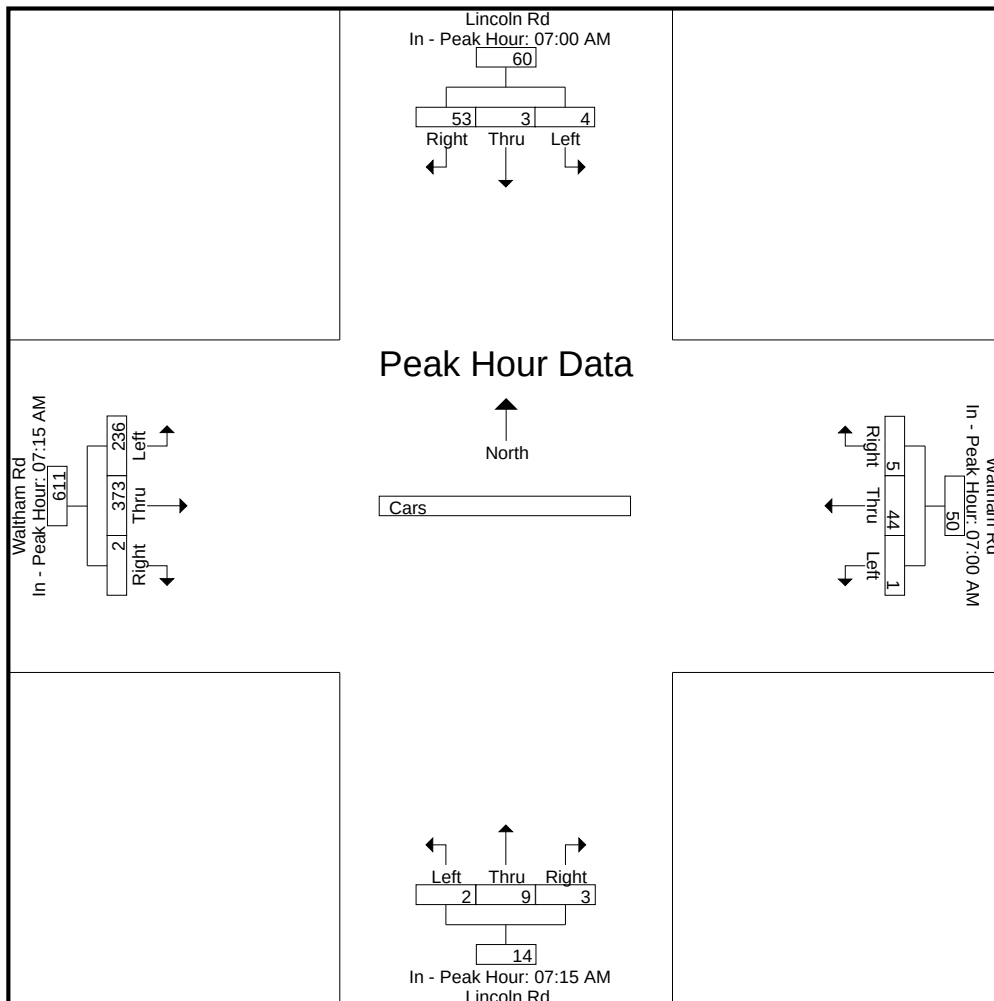
File Name : 62154003
Site Code : 62154003
Start Date : 4/27/2016
Page No : 6

	Lincoln Rd From North				Waltham Rd From East				Lincoln Rd From South				Waltham Rd From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total

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

Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	11	11	1	9	1	11	0	2	1	3	65	90	0	155
+15 mins.	1	1	13	15	0	14	0	14	1	2	1	4	74	89	0	163
+30 mins.	1	1	19	21	0	12	4	16	1	1	1	3	51	99	1	151
+45 mins.	2	1	10	13	0	9	0	9	0	4	0	4	46	95	1	142
Total Volume	4	3	53	60	1	44	5	50	2	9	3	14	236	373	2	611
% App. Total	6.7	5	88.3		2	88	10		14.3	64.3	21.4		38.6	61	0.3	
PHF	.500	.750	.697	.714	.250	.786	.313	.781	.500	.563	.750	.875	.797	.942	.500	.937



Accurate Counts

978-664-2565

N/S Street : Lincoln Road
 E/W Street: Waltham Road
 City/State : Waltham, MA
 Weather : Clear

File Name : 62154003
 Site Code : 62154003
 Start Date : 4/27/2016
 Page No : 7

Groups Printed- Trucks

	Lincoln Rd From North			Waltham Rd From East			Lincoln Rd From South			Waltham Rd From West			
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	1	0	0	0	1	0	0	0	0	1	0	0	3
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	1	0	0	0	0	0	0	0	0	1
Total	1	0	0	1	1	0	0	0	0	1	0	0	4
08:00 AM	0	0	0	0	0	0	0	0	1	1	0	0	2
08:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
08:30 AM	0	2	0	0	0	0	0	0	0	0	0	0	2
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	0	0	1	0	0	0	1	1	0	0	5
Grand Total	1	2	0	1	2	0	0	0	1	2	0	0	9
Apprch %	33.3	66.7	0	33.3	66.7	0	0	0	100	100	0	0	
Total %	11.1	22.2	0	11.1	22.2	0	0	0	11.1	22.2	0	0	

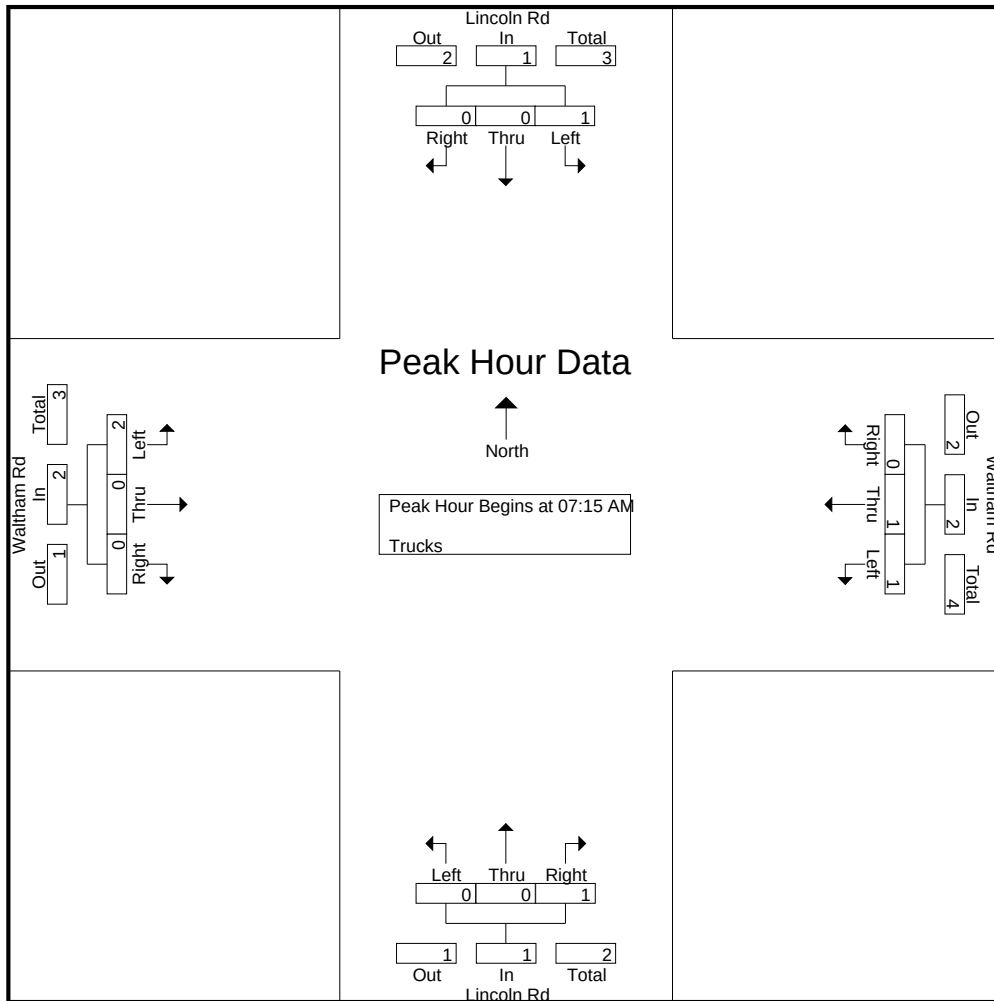
Accurate Counts

978-664-2565

N/S Street : Lincoln Road
E/W Street: Waltham Road
City/State : Waltham, MA
Weather : Clear

File Name : 62154003
Site Code : 62154003
Start Date : 4/27/2016
Page No : 8

	Lincoln Rd From North				Waltham Rd From East				Lincoln Rd From South				Waltham Rd From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	1	0	0	1	0	1	0	1	0	0	0	0	1	0	0	1	3
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	1	2
Total Volume	1	0	0	1	1	1	0	2	0	0	1	1	2	0	0	2	6
% App. Total	100	0	0		50	50	0		0	0	100		100	0	0		
PHF	.250	.000	.000	.250	.250	.250	.000	.500	.000	.000	.250	.250	.500	.000	.000	.500	.500



Accurate Counts

978-664-2565

N/S Street : Lincoln Road
E/W Street: Waltham Road
City/State : Waltham, MA
Weather : Clear

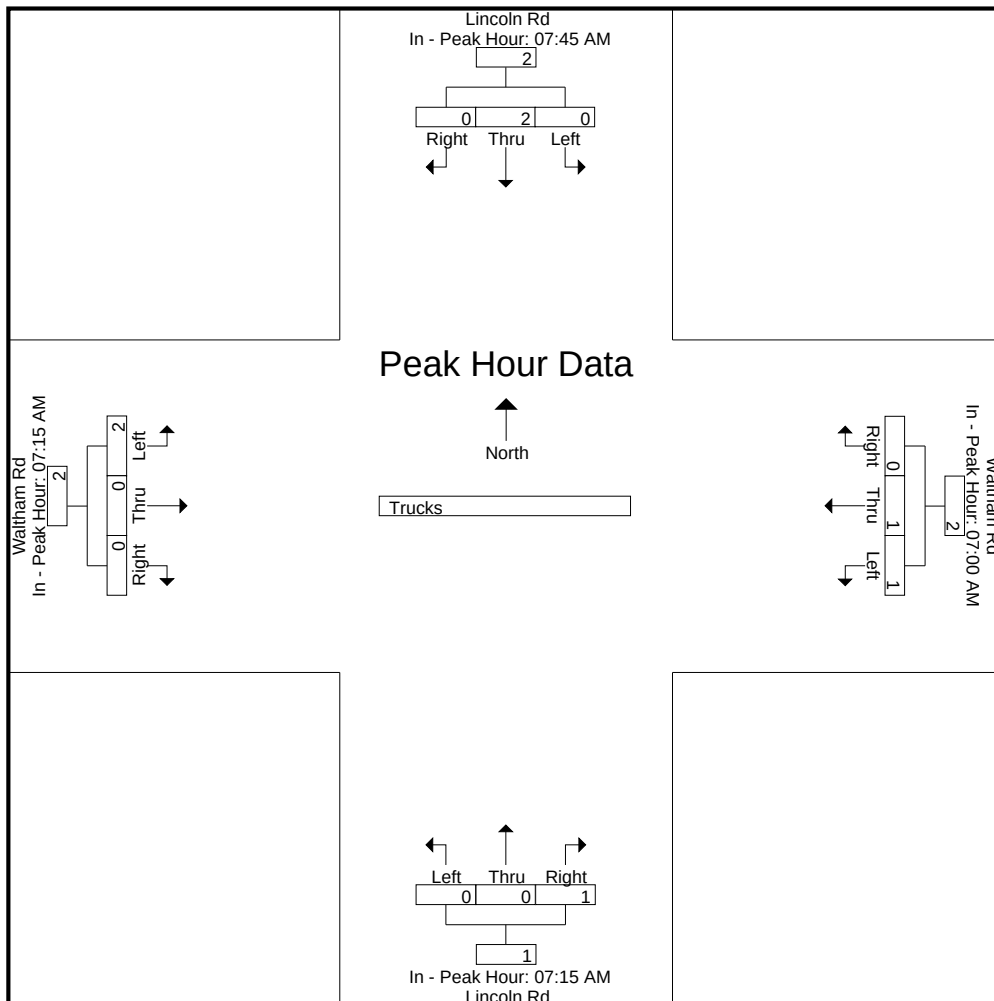
File Name : 62154003
Site Code : 62154003
Start Date : 4/27/2016
Page No : 9

	Lincoln Rd From North				Waltham Rd From East				Lincoln Rd From South				Waltham Rd From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total

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

Peak Hour for Each Approach Begins at:

	07:45 AM				07:00 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	2	0	2	1	0	0	1	0	0	1	1	1	0	0	1
Total Volume	0	2	0	2	1	1	0	2	0	0	1	1	2	0	0	2
% App. Total	0	100	0		50	50	0		0	0	100		100	0	0	
PHF	.000	.250	.000	.250	.250	.250	.000	.500	.000	.000	.250	.250	.500	.000	.000	.500



Accurate Counts

978-664-2565

N/S Street : Lincoln Road
 E/W Street: Waltham Road
 City/State : Waltham, MA
 Weather : Clear

File Name : 62154003
 Site Code : 62154003
 Start Date : 4/27/2016
 Page No : 10

Groups Printed- Bikes Peds																			
	Lincoln Rd From North				Waltham Rd From East				Lincoln Rd From South				Waltham Rd From West				Exclu. Total	Inclu. Total	Int. Total
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	2
07:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	2	2
Total	0	1	0	0	0	1	0	0	0	1	0	0	1	0	0	0	0	4	4
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Grand Total	0	1	1	0	0	1	0	0	0	1	0	0	1	0	0	0	0	5	5
Apprch %	0	50	50		0	100	0		0	100	0		100	0	0				
Total %	0	20	20		0	20	0		0	20	0		20	0	0		0	100	

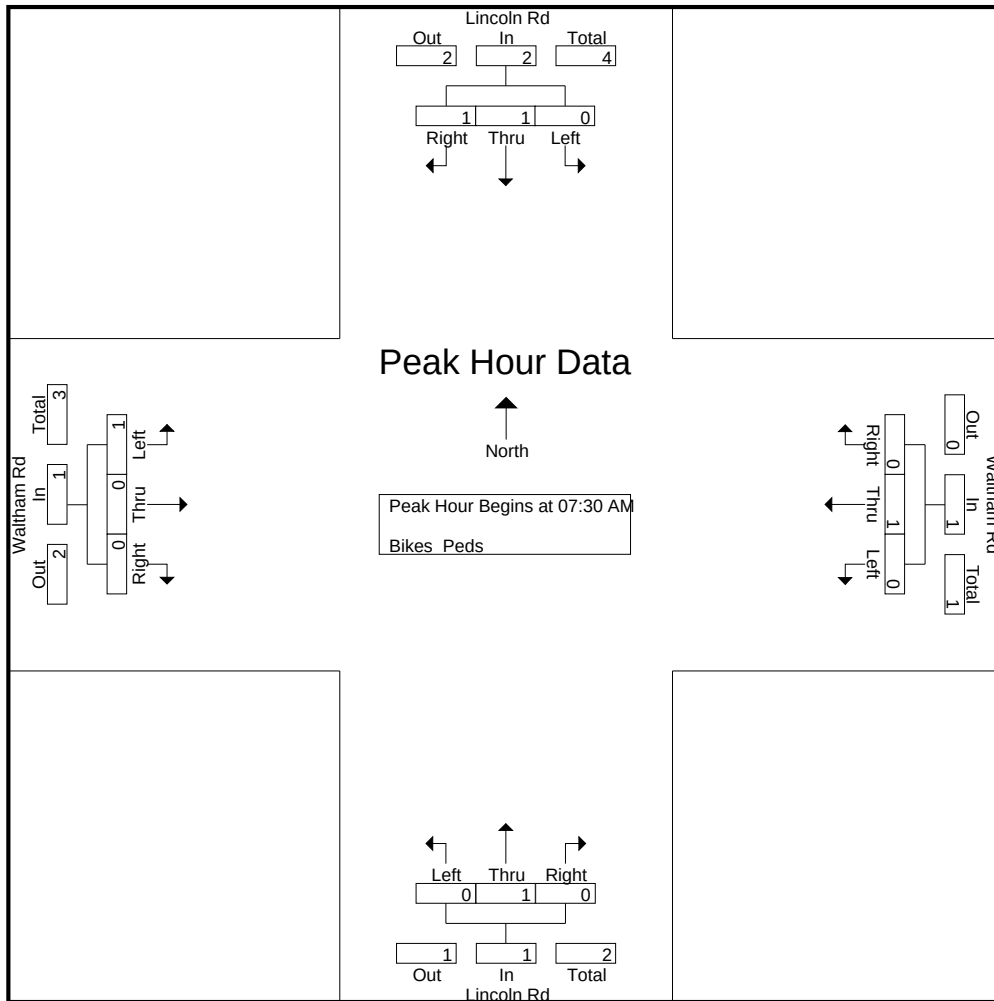
Accurate Counts

978-664-2565

N/S Street : Lincoln Road
E/W Street: Waltham Road
City/State : Waltham, MA
Weather : Clear

File Name : 62154003
Site Code : 62154003
Start Date : 4/27/2016
Page No : 11

	Lincoln Rd From North				Waltham Rd From East				Lincoln Rd From South				Waltham Rd From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
07:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	1	0	0	1	2
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	1	1	2	0	1	0	1	0	1	0	1	1	0	0	1	5
% App. Total	0	50	50		0	100	0		0	100	0		100	0	0		
PHF	.000	.250	.250	.500	.000	.250	.000	.250	.000	.250	.000	.250	.250	.000	.000	.250	.625



Accurate Counts

978-664-2565

N/S Street : Lincoln Road
E/W Street: Waltham Road
City/State : Waltham, MA
Weather : Clear

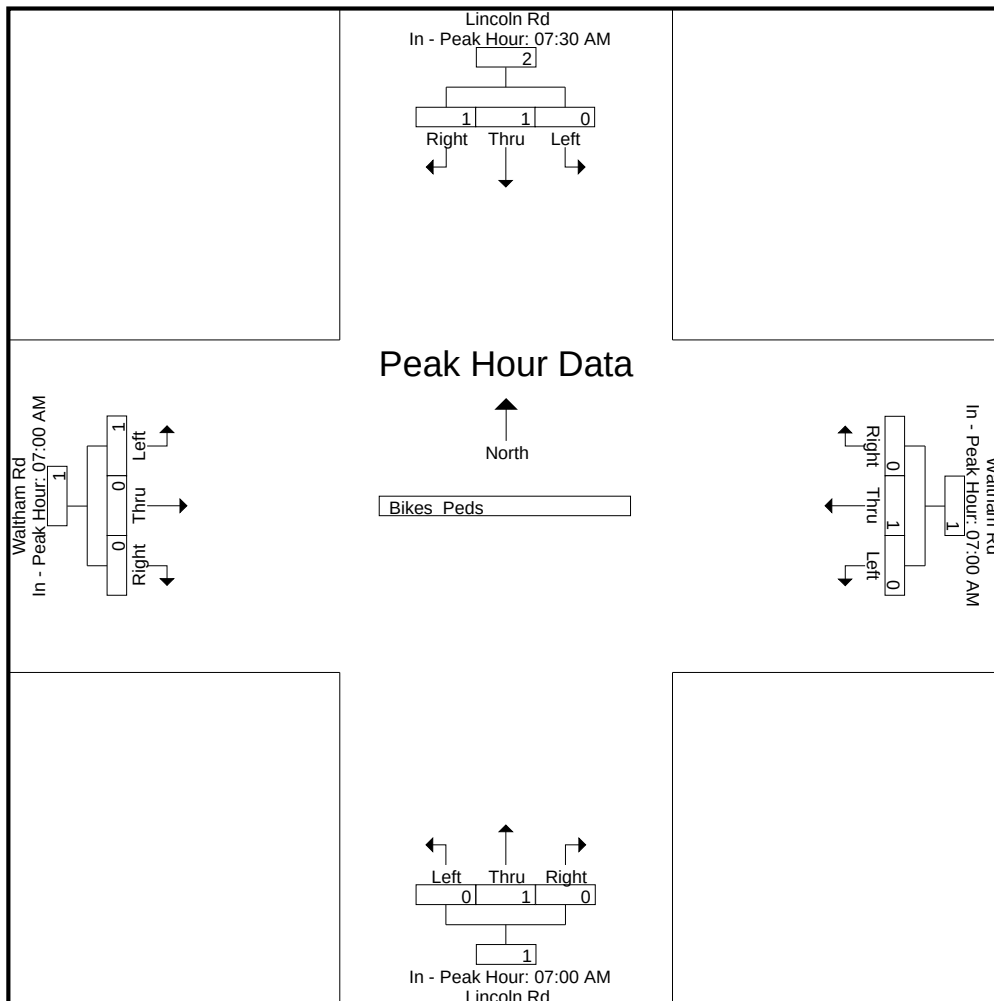
File Name : 62154003
Site Code : 62154003
Start Date : 4/27/2016
Page No : 12

	Lincoln Rd From North				Waltham Rd From East				Lincoln Rd From South				Waltham Rd From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total

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

Peak Hour for Each Approach Begins at:

	07:30 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
+45 mins.	0	0	1	1	0	1	0	1	0	0	0	0	1	0	0	1
Total Volume	0	1	1	2	0	1	0	1	0	1	0	1	1	0	0	1
% App. Total	0	50	50		0	100	0		0	100	0		100	0	0	
PHF	.000	.250	.250	.500	.000	.250	.000	.250	.000	.250	.000	.250	.250	.000	.000	.250



Accurate Counts

978-664-2565

N/S Street : Lincoln Road
 E/W Street: Waltham Road
 City/State : Waltham, MA
 Weather : Clear

File Name : 62154003
 Site Code : 62154003
 Start Date : 4/27/2016
 Page No : 1

Groups Printed- Cars - Trucks

	Lincoln Rd From North			Waltham Rd From East			Lincoln Rd From South			Waltham Rd From West			
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
02:00 PM	0	1	6	1	7	1	3	2	1	6	6	0	34
02:15 PM	0	1	7	2	17	2	0	0	1	5	5	0	40
02:30 PM	1	1	10	0	4	0	1	0	1	6	8	1	33
02:45 PM	1	0	7	1	12	2	4	1	0	7	3	1	39
Total	2	3	30	4	40	5	8	3	3	24	22	2	146
03:00 PM	1	0	15	1	14	1	1	1	2	8	6	1	51
03:15 PM	2	1	20	1	15	0	3	1	0	16	5	0	64
03:30 PM	0	0	31	0	15	0	1	0	0	8	10	4	69
03:45 PM	0	1	42	1	28	2	2	0	0	10	6	0	92
Total	3	2	108	3	72	3	7	2	2	42	27	5	276
04:00 PM	1	2	37	0	26	0	1	0	2	12	4	1	86
04:15 PM	4	0	46	1	38	1	1	1	0	10	11	1	114
04:30 PM	1	1	52	1	33	0	1	0	0	11	6	2	108
04:45 PM	0	0	48	0	44	1	3	0	0	7	8	3	114
Total	6	3	183	2	141	2	6	1	2	40	29	7	422
05:00 PM	2	1	62	0	52	0	0	2	1	10	10	2	142
05:15 PM	1	1	64	0	55	6	2	0	0	7	7	1	144
05:30 PM	1	2	57	1	53	1	3	1	0	8	5	2	134
05:45 PM	3	3	81	3	50	1	0	0	0	17	7	0	165
Total	7	7	264	4	210	8	5	3	1	42	29	5	585
Grand Total	18	15	585	13	463	18	26	9	8	148	107	19	1429
Apprch %	2.9	2.4	94.7	2.6	93.7	3.6	60.5	20.9	18.6	54	39.1	6.9	
Total %	1.3	1	40.9	0.9	32.4	1.3	1.8	0.6	0.6	10.4	7.5	1.3	
Cars	18	15	584	13	463	18	25	9	8	148	107	19	1427
% Cars	100	100	99.8	100	100	100	96.2	100	100	100	100	100	99.9
Trucks	0	0	1	0	0	0	1	0	0	0	0	0	2
% Trucks	0	0	0.2	0	0	0	3.8	0	0	0	0	0	0.1

Accurate Counts
978-664-2565

Accurate Counts

978-664-2565

N/S Street : Lincoln Road
E/W Street: Waltham Road
City/State : Waltham, MA
Weather : Clear

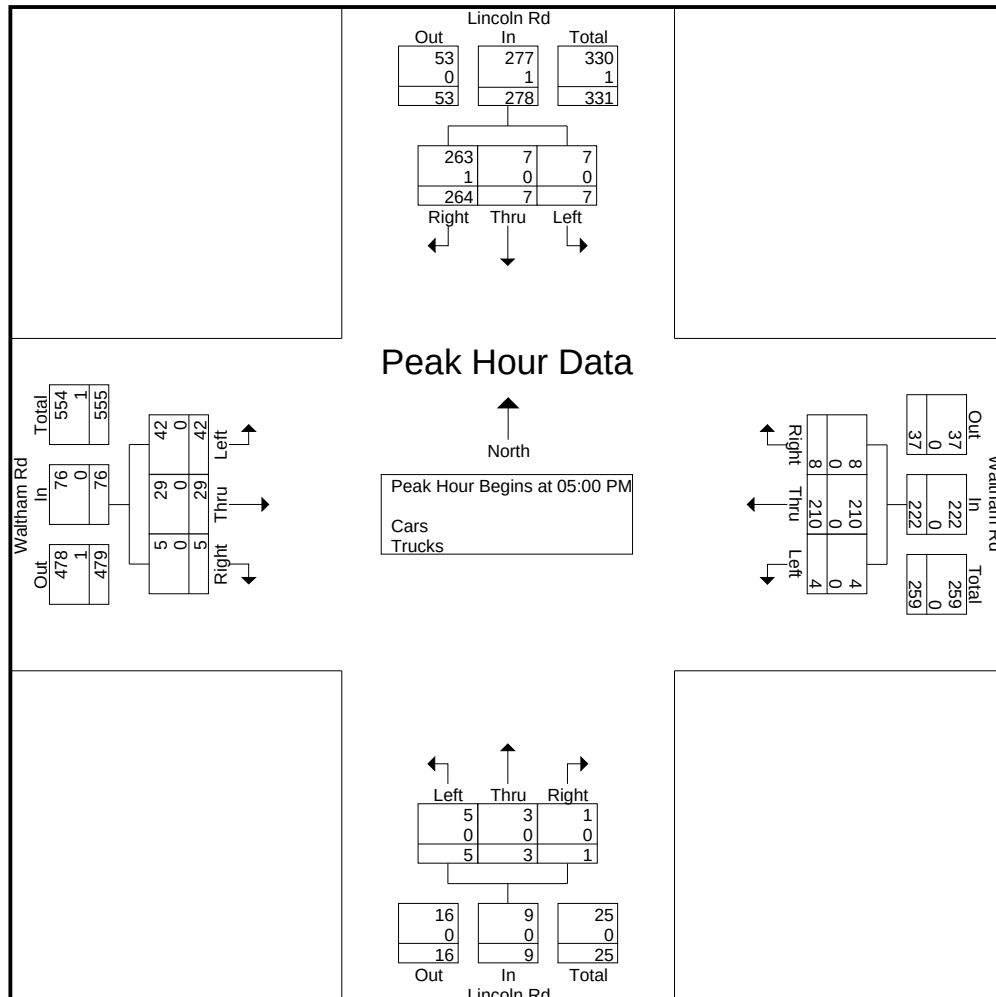
File Name : 62154003
Site Code : 62154003
Start Date : 4/27/2016
Page No : 3

	Lincoln Rd From North				Waltham Rd From East				Lincoln Rd From South				Waltham Rd From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 05:00 PM

05:00 PM	2	1	62	65	0	52	0	52	0	2	1	3	10	10	2	22	142
05:15 PM	1	1	64	66	0	55	6	61	2	0	0	2	7	7	1	15	144
05:30 PM	1	2	57	60	1	53	1	55	3	1	0	4	8	5	2	15	134
05:45 PM	3	3	81	87	3	50	1	54	0	0	0	0	17	7	0	24	165
Total Volume	7	7	264	278	4	210	8	222	5	3	1	9	42	29	5	76	585
% App. Total	2.5	2.5	95		1.8	94.6	3.6		55.6	33.3	11.1		55.3	38.2	6.6		
PHF	.583	.583	.815	.799	.333	.955	.333	.910	.417	.375	.250	.563	.618	.725	.625	.792	.886
Cars	7	7	263	277	4	210	8	222	5	3	1	9	42	29	5	76	584
% Cars	100	100	99.6	99.6	100	100	100	100	100	100	100	100	100	100	100	100	99.8
Trucks	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
% Trucks	0	0	0.4	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0.2



Accurate Counts

978-664-2565

N/S Street : Lincoln Road
E/W Street: Waltham Road
City/State : Waltham, MA
Weather : Clear

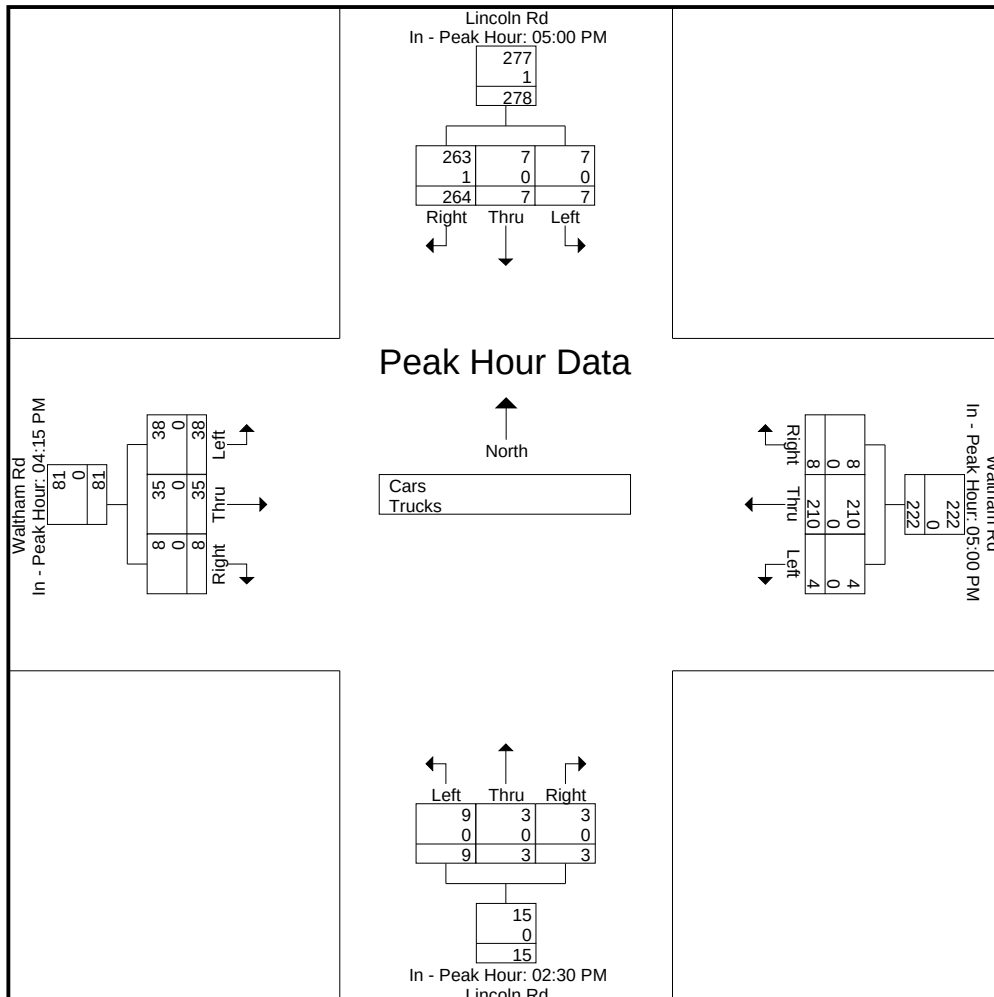
File Name : 62154003
Site Code : 62154003
Start Date : 4/27/2016
Page No : 4

	Lincoln Rd From North				Waltham Rd From East				Lincoln Rd From South				Waltham Rd From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				02:30 PM				04:15 PM			
+0 mins.	2	1	62	65	0	52	0	52	1	0	1	2	10	11	1	22
+15 mins.	1	1	64	66	0	55	6	61	4	1	0	5	11	6	2	19
+30 mins.	1	2	57	60	1	53	1	55	1	1	2	4	7	8	3	18
+45 mins.	3	3	81	87	3	50	1	54	3	1	0	4	10	10	2	22
Total Volume	7	7	264	278	4	210	8	222	9	3	3	15	38	35	8	81
% App. Total	2.5	2.5	95		1.8	94.6	3.6		60	20	20		46.9	43.2	9.9	
PHF	.583	.583	.815	.799	.333	.955	.333	.910	.563	.750	.375	.750	.864	.795	.667	.920
Cars	7	7	263	277	4	210	8	222	9	3	3	15	38	35	8	81
% Cars	100	100	99.6	99.6	100	100	100	100	100	100	100	100	100	100	100	100
Trucks	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
% Trucks	0	0	0.4	0.4	0	0	0	0	0	0	0	0	0	0	0	0



Accurate Counts

978-664-2565

N/S Street : Lincoln Road
 E/W Street: Waltham Road
 City/State : Waltham, MA
 Weather : Clear

File Name : 62154003
 Site Code : 62154003
 Start Date : 4/27/2016
 Page No : 5

Groups Printed- Cars

	Lincoln Rd From North			Waltham Rd From East			Lincoln Rd From South			Waltham Rd From West			
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
02:00 PM	0	1	6	1	7	1	2	2	1	6	6	0	33
02:15 PM	0	1	7	2	17	2	0	0	1	5	5	0	40
02:30 PM	1	1	10	0	4	0	1	0	1	6	8	1	33
02:45 PM	1	0	7	1	12	2	4	1	0	7	3	1	39
Total	2	3	30	4	40	5	7	3	3	24	22	2	145
03:00 PM	1	0	15	1	14	1	1	1	2	8	6	1	51
03:15 PM	2	1	20	1	15	0	3	1	0	16	5	0	64
03:30 PM	0	0	31	0	15	0	1	0	0	8	10	4	69
03:45 PM	0	1	42	1	28	2	2	0	0	10	6	0	92
Total	3	2	108	3	72	3	7	2	2	42	27	5	276
04:00 PM	1	2	37	0	26	0	1	0	2	12	4	1	86
04:15 PM	4	0	46	1	38	1	1	1	0	10	11	1	114
04:30 PM	1	1	52	1	33	0	1	0	0	11	6	2	108
04:45 PM	0	0	48	0	44	1	3	0	0	7	8	3	114
Total	6	3	183	2	141	2	6	1	2	40	29	7	422
05:00 PM	2	1	62	0	52	0	0	2	1	10	10	2	142
05:15 PM	1	1	63	0	55	6	2	0	0	7	7	1	143
05:30 PM	1	2	57	1	53	1	3	1	0	8	5	2	134
05:45 PM	3	3	81	3	50	1	0	0	0	17	7	0	165
Total	7	7	263	4	210	8	5	3	1	42	29	5	584
Grand Total	18	15	584	13	463	18	25	9	8	148	107	19	1427
Apprch %	2.9	2.4	94.7	2.6	93.7	3.6	59.5	21.4	19	54	39.1	6.9	
Total %	1.3	1.1	40.9	0.9	32.4	1.3	1.8	0.6	0.6	10.4	7.5	1.3	

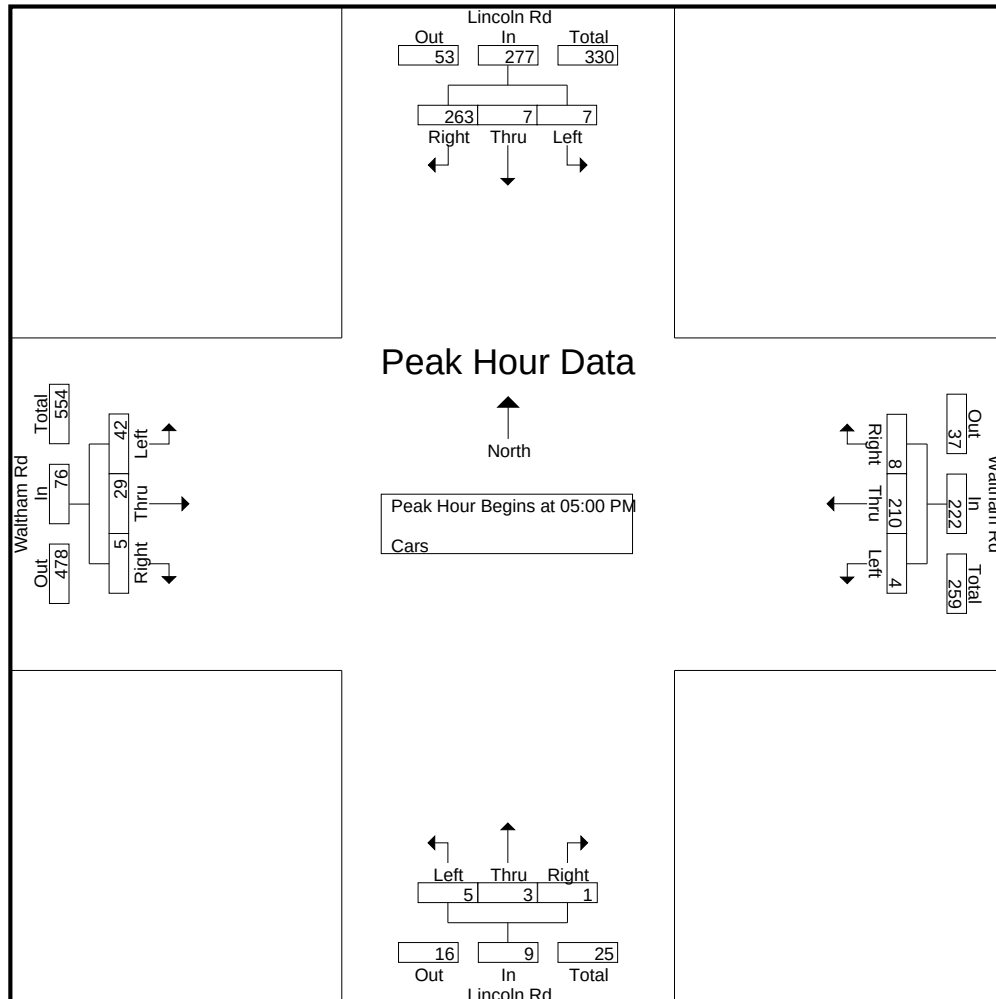
Accurate Counts

978-664-2565

N/S Street : Lincoln Rd
E/W Street: Waltham Road
City/State : Waltham, MA
Weather : Clear

File Name : 62154003
Site Code : 62154003
Start Date : 4/27/2016
Page No : 6

	Lincoln Rd From North				Waltham Rd From East				Lincoln Rd From South				Waltham Rd From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	2	1	62	65	0	52	0	52	0	2	1	3	10	10	2	22	142
05:15 PM	1	1	63	65	0	55	6	61	2	0	0	2	7	7	1	15	143
05:30 PM	1	2	57	60	1	53	1	55	3	1	0	4	8	5	2	15	134
05:45 PM	3	3	81	87	3	50	1	54	0	0	0	0	17	7	0	24	165
Total Volume	7	7	263	277	4	210	8	222	5	3	1	9	42	29	5	76	584
% App. Total	2.5	2.5	94.9		1.8	94.6	3.6		55.6	33.3	11.1		55.3	38.2	6.6		
PHF	.583	.583	.812	.796	.333	.955	.333	.910	.417	.375	.250	.563	.618	.725	.625	.792	.885



Accurate Counts

978-664-2565

N/S Street : Lincoln Road
E/W Street: Waltham Road
City/State : Waltham, MA
Weather : Clear

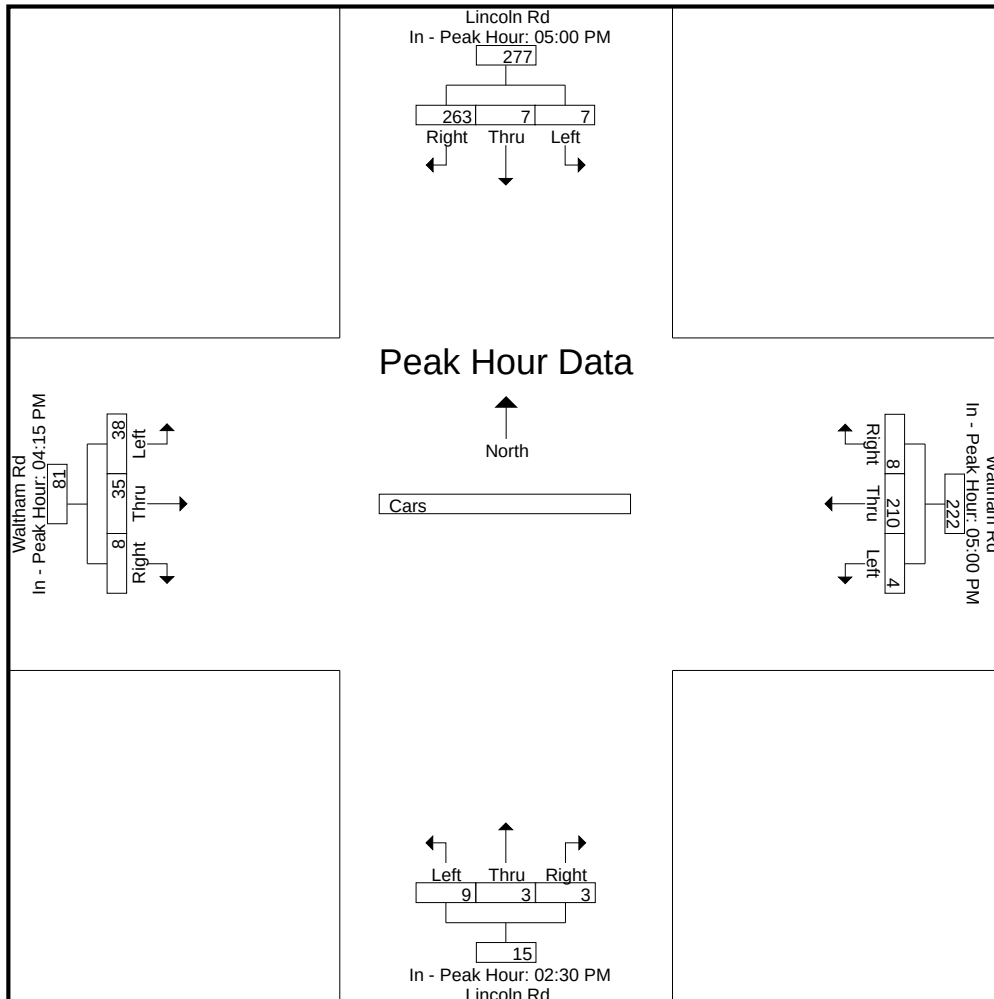
File Name : 62154003
Site Code : 62154003
Start Date : 4/27/2016
Page No : 7

	Lincoln Rd From North				Waltham Rd From East				Lincoln Rd From South				Waltham Rd From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				02:30 PM				04:15 PM			
+0 mins.	2	1	62	65	0	52	0	52	1	0	1	2	10	11	1	22
+15 mins.	1	1	63	65	0	55	6	61	4	1	0	5	11	6	2	19
+30 mins.	1	2	57	60	1	53	1	55	1	1	2	4	7	8	3	18
+45 mins.	3	3	81	87	3	50	1	54	3	1	0	4	10	10	2	22
Total Volume	7	7	263	277	4	210	8	222	9	3	3	15	38	35	8	81
% App. Total	2.5	2.5	94.9		1.8	94.6	3.6		60	20	20		46.9	43.2	9.9	
PHF	.583	.583	.812	.796	.333	.955	.333	.910	.563	.750	.375	.750	.864	.795	.667	.920



Accurate Counts

978-664-2565

N/S Street : Lincoln Road
 E/W Street: Waltham Road
 City/State : Waltham, MA
 Weather : Clear

File Name : 62154003
 Site Code : 62154003
 Start Date : 4/27/2016
 Page No : 8

Groups Printed- Trucks

	Lincoln Rd From North			Waltham Rd From East			Lincoln Rd From South			Waltham Rd From West			
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
02:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	1
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	0	0	0	0	0	1
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	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
04:00 PM	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
04:30 PM	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
Total	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
05:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
05:30 PM	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
Total	0	0	1	0	0	0	0	0	0	0	0	0	1
Grand Total	0	0	1	0	0	0	1	0	0	0	0	0	2
Apprch %	0	0	100	0	0	0	100	0	0	0	0	0	
Total %	0	0	50	0	0	0	50	0	0	0	0	0	

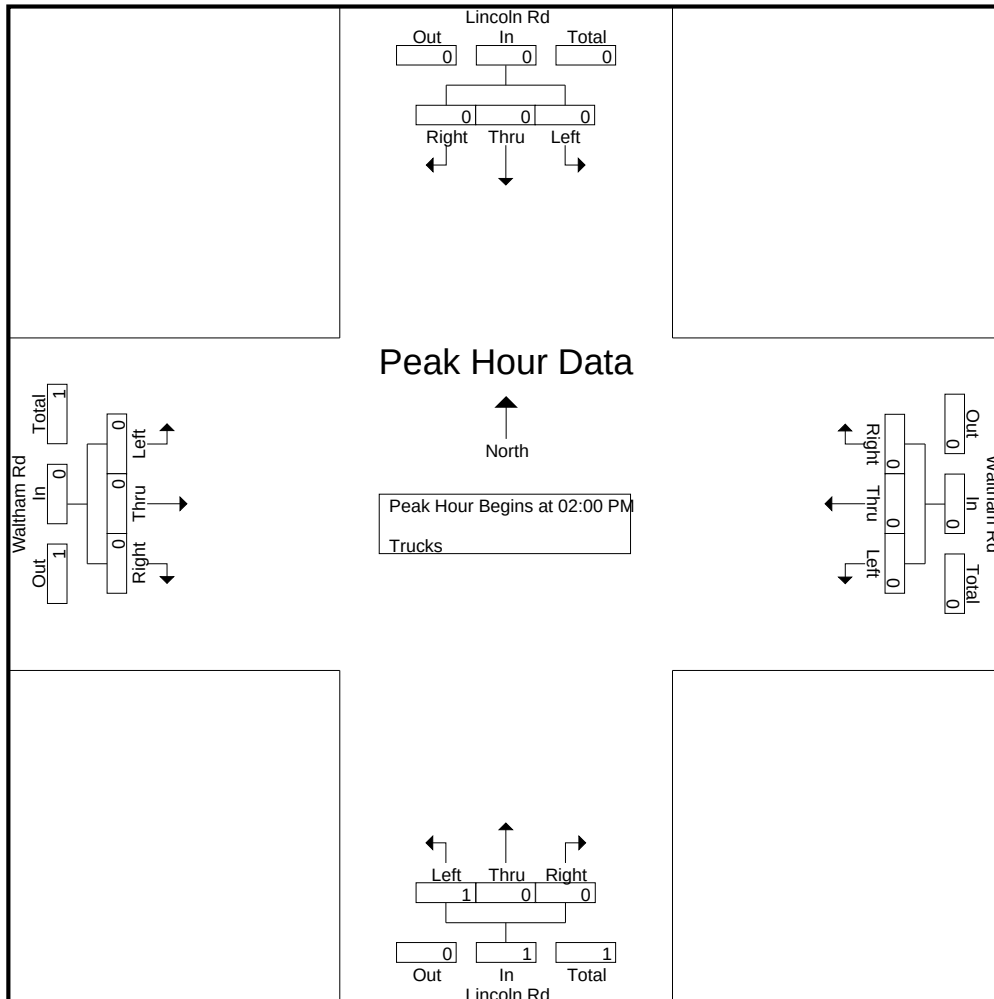
Accurate Counts

978-664-2565

N/S Street : Lincoln Rd
E/W Street: Waltham Road
City/State : Waltham, MA
Weather : Clear

File Name : 62154003
Site Code : 62154003
Start Date : 4/27/2016
Page No : 9

	Lincoln Rd From North				Waltham Rd From East				Lincoln Rd From South				Waltham Rd From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 02:00 PM																	
02:00 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 PM	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	1	0	0	1	0	0	0	0	1
% App. Total	0	0	0		0	0	0		100	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.000	.250	.000	.000	.000	.000	.250



Accurate Counts

978-664-2565

N/S Street : Lincoln Road
E/W Street: Waltham Road
City/State : Waltham, MA
Weather : Clear

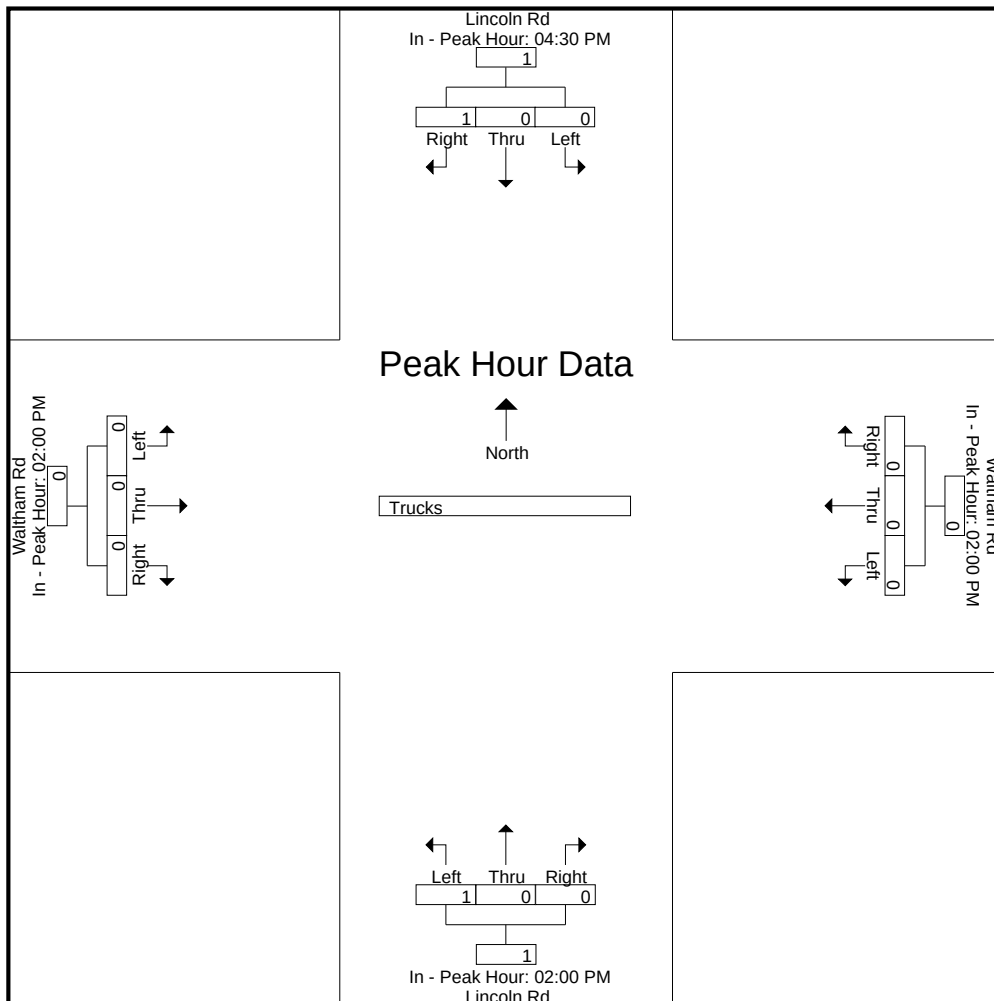
File Name : 62154003
Site Code : 62154003
Start Date : 4/27/2016
Page No : 10

	Lincoln Rd From North				Waltham Rd From East				Lincoln Rd From South				Waltham Rd From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:30 PM				02:00 PM				02:00 PM				02:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	1	1	0	0	0	0	1	0	0	1	0	0	0	0
% App. Total	0	0	100		0	0	0		100	0	0		0	0	0	
PHF	.000	.000	.250	.250	.000	.000	.000	.000	.250	.000	.000	.250	.000	.000	.000	.000



Accurate Counts

978-664-2565

N/S Street : Lincoln Road
 E/W Street: Waltham Road
 City/State : Waltham, MA
 Weather : Clear

File Name : 62154003
 Site Code : 62154003
 Start Date : 4/27/2016
 Page No : 11

Groups Printed- Bikes Peds

	Lincoln Rd From North				Waltham Rd From East				Lincoln Rd From South				Waltham Rd From West				Exclu. Total	Inclu. Total	Int. Total
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2	2
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	2
Total	0	0	0	0	0	2	0	0	0	0	0	0	1	0	1	0	0	4	4
03:00 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	2
03:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	3
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	2	3
Total	0	0	0	0	0	2	0	0	0	0	0	0	1	4	1	1	1	8	9
04:00 PM	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	1	1	0	0	0	0	0	0	0	0	1	1	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
04:45 PM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	2
Total	0	0	1	0	0	0	1	2	0	0	0	0	0	1	0	0	2	3	5
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1
05:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	2
05:30 PM	0	0	1	1	0	0	0	1	0	1	0	0	0	1	0	0	2	3	5
05:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	2
Total	0	0	3	1	0	0	0	1	0	1	0	0	0	3	0	1	3	7	10
Grand Total	0	0	4	1	0	4	1	3	0	1	0	0	2	8	2	2	6	22	28
Apprch %	0	0	100		0	80	20		0	100	0		16.7	66.7	16.7				
Total %	0	0	18.2		0	18.2	4.5		0	4.5	0		9.1	36.4	9.1		21.4	78.6	

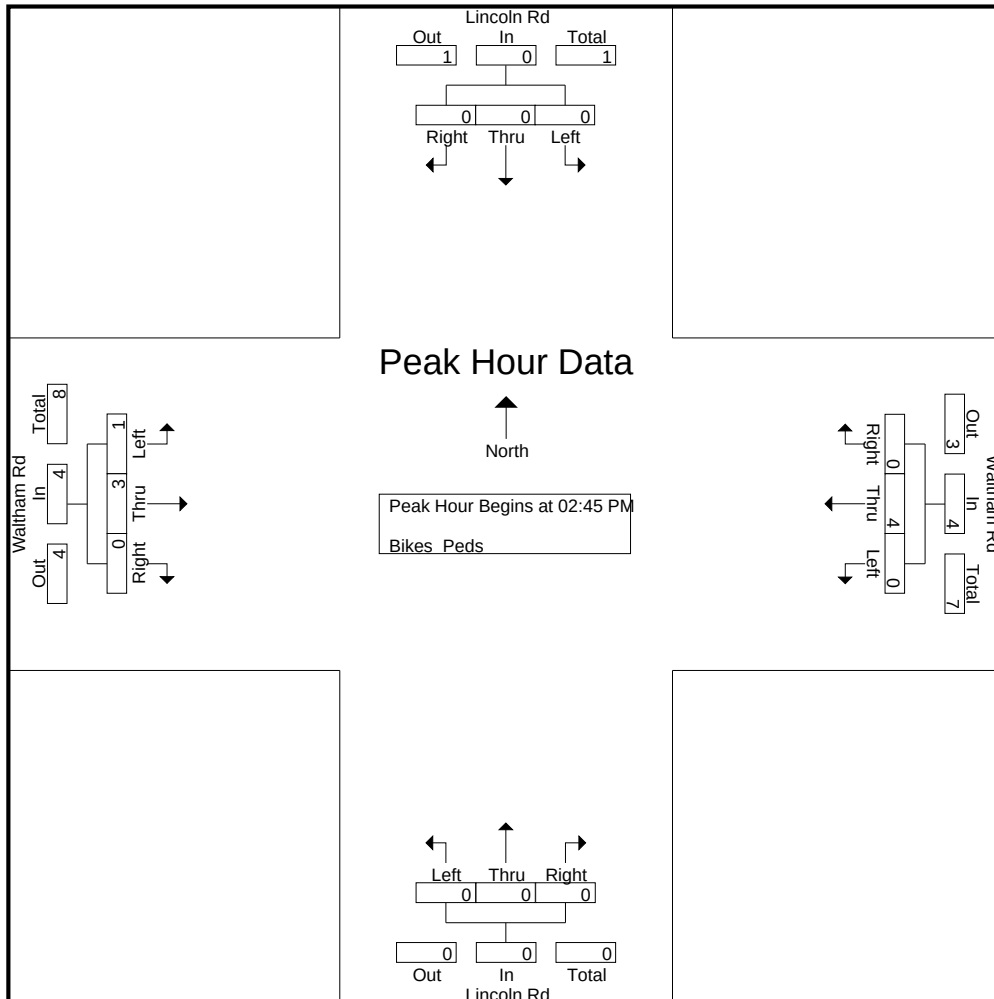
Accurate Counts

978-664-2565

N/S Street : Lincoln Road
E/W Street: Waltham Road
City/State : Waltham, MA
Weather : Clear

File Name : 62154003
Site Code : 62154003
Start Date : 4/27/2016
Page No : 12

	Lincoln Rd From North				Waltham Rd From East				Lincoln Rd From South				Waltham Rd From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 02:45 PM																	
02:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
03:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
03:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	3
Total Volume	0	0	0	0	0	4	0	4	0	0	0	0	1	3	0	4	8
% App. Total	0	0	0		0	100	0		0	0	0		25	75	0		
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.250	.250	.000	.333	.667



Accurate Counts

978-664-2565

N/S Street : Lincoln Road
E/W Street: Waltham Road
City/State : Waltham, MA
Weather : Clear

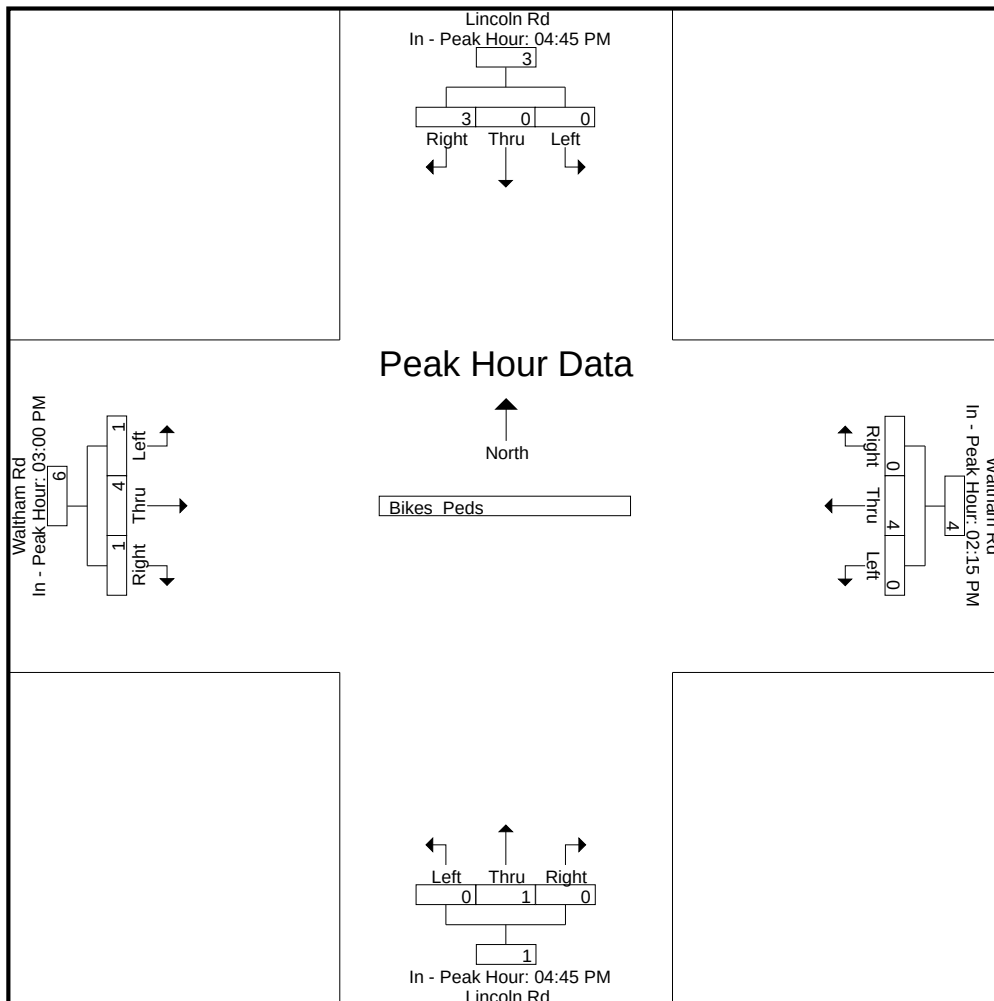
File Name : 62154003
Site Code : 62154003
Start Date : 4/27/2016
Page No : 13

	Lincoln Rd From North				Waltham Rd From East				Lincoln Rd From South				Waltham Rd From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				02:15 PM				04:45 PM				03:00 PM			
+0 mins.	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
+30 mins.	0	0	1	1	0	2	0	2	0	0	0	0	0	3	0	3
+45 mins.	0	0	1	1	0	2	0	2	0	1	0	1	0	1	1	2
Total Volume	0	0	3	3	0	4	0	4	0	1	0	1	1	4	1	6
% App. Total	0	0	100		0	100	0		0	100	0		16.7	66.7	16.7	
PHF	.000	.000	.750	.750	.000	.500	.000	.500	.000	.250	.000	.250	.250	.333	.250	.500



Accurate Counts

978-664-2565

N/S Street : Concord Road
 E/W Street: Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154004
 Site Code : 62154004
 Start Date : 4/27/2016
 Page No : 1

Groups Printed- Cars - Trucks							
	Concord Rd From North		Waltham Rd From East		Concord Rd From South		
Start Time	Left	Thru	Left	Right	Thru	Right	Int. Total
07:00 AM	4	44	20	2	80	136	286
07:15 AM	12	42	26	2	100	138	320
07:30 AM	8	70	29	2	103	153	365
07:45 AM	15	38	18	3	124	135	333
Total	39	194	93	9	407	562	1304
08:00 AM	8	60	11	4	107	133	323
08:15 AM	12	60	10	2	92	121	297
08:30 AM	14	64	15	1	114	120	328
08:45 AM	8	54	9	7	80	95	253
Total	42	238	45	14	393	469	1201
Grand Total	81	432	138	23	800	1031	2505
Apprch %	15.8	84.2	85.7	14.3	43.7	56.3	
Total %	3.2	17.2	5.5	0.9	31.9	41.2	
Cars	79	427	137	21	784	1028	2476
% Cars	97.5	98.8	99.3	91.3	98	99.7	98.8
Trucks	2	5	1	2	16	3	29
% Trucks	2.5	1.2	0.7	8.7	2	0.3	1.2

Accurate Counts

978-664-2565

N/S Street : Concord Road
E/W Street: Waltham Road
City/State : Wayland, MA
Weather : Clear

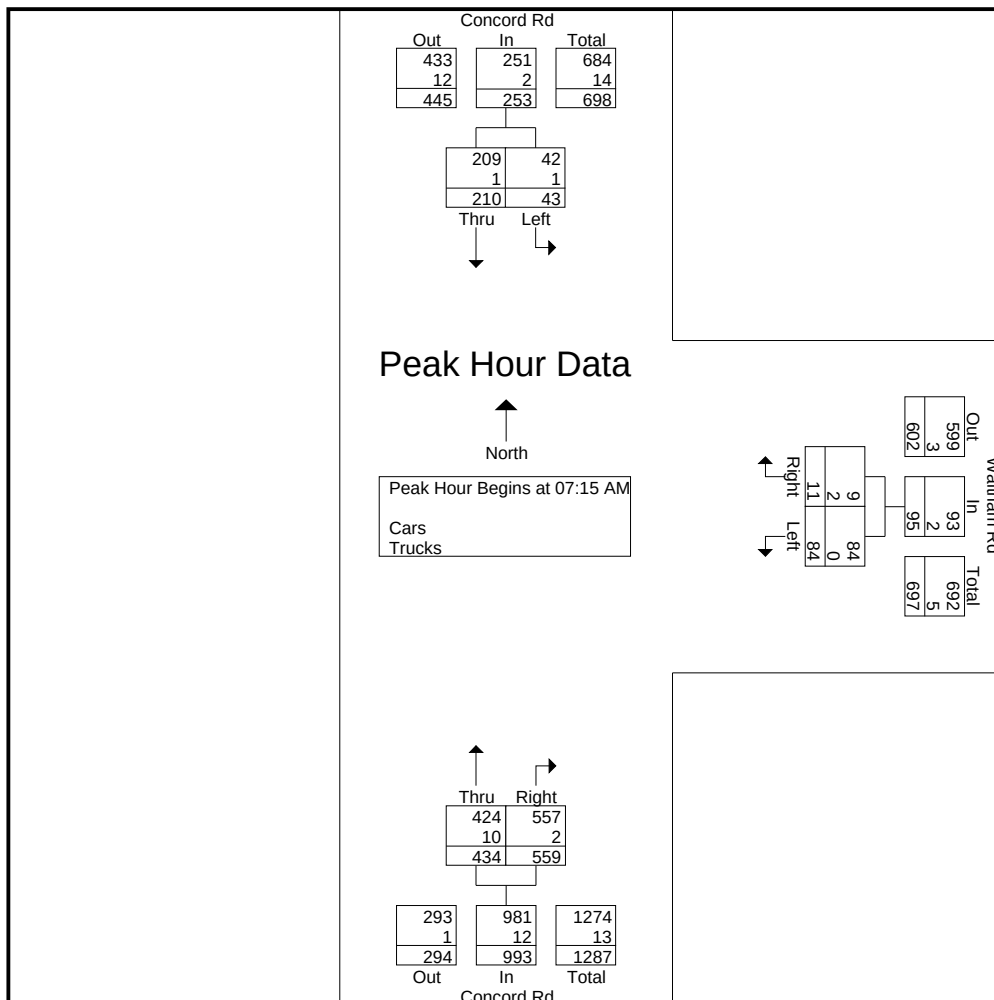
File Name : 62154004
Site Code : 62154004
Start Date : 4/27/2016
Page No : 2

	Concord Rd From North			Waltham Rd From East			Concord Rd From South			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total

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

Peak Hour for Entire Intersection Begins at 07:15 AM

07:15 AM	12	42	54	26	2	28	100	138	238	320
07:30 AM	8	70	78	29	2	31	103	153	256	365
07:45 AM	15	38	53	18	3	21	124	135	259	333
08:00 AM	8	60	68	11	4	15	107	133	240	323
Total Volume	43	210	253	84	11	95	434	559	993	1341
% App. Total	17	83		88.4	11.6		43.7	56.3		
PHF	.717	.750	.811	.724	.688	.766	.875	.913	.958	.918
Cars	42	209	251	84	9	93	424	557	981	1325
% Cars	97.7	99.5	99.2	100	81.8	97.9	97.7	99.6	98.8	98.8
Trucks	1	1	2	0	2	2	10	2	12	16
% Trucks	2.3	0.5	0.8	0	18.2	2.1	2.3	0.4	1.2	1.2



Accurate Counts

978-664-2565

N/S Street : Concord Road
E/W Street: Waltham Road
City/State : Wayland, MA
Weather : Clear

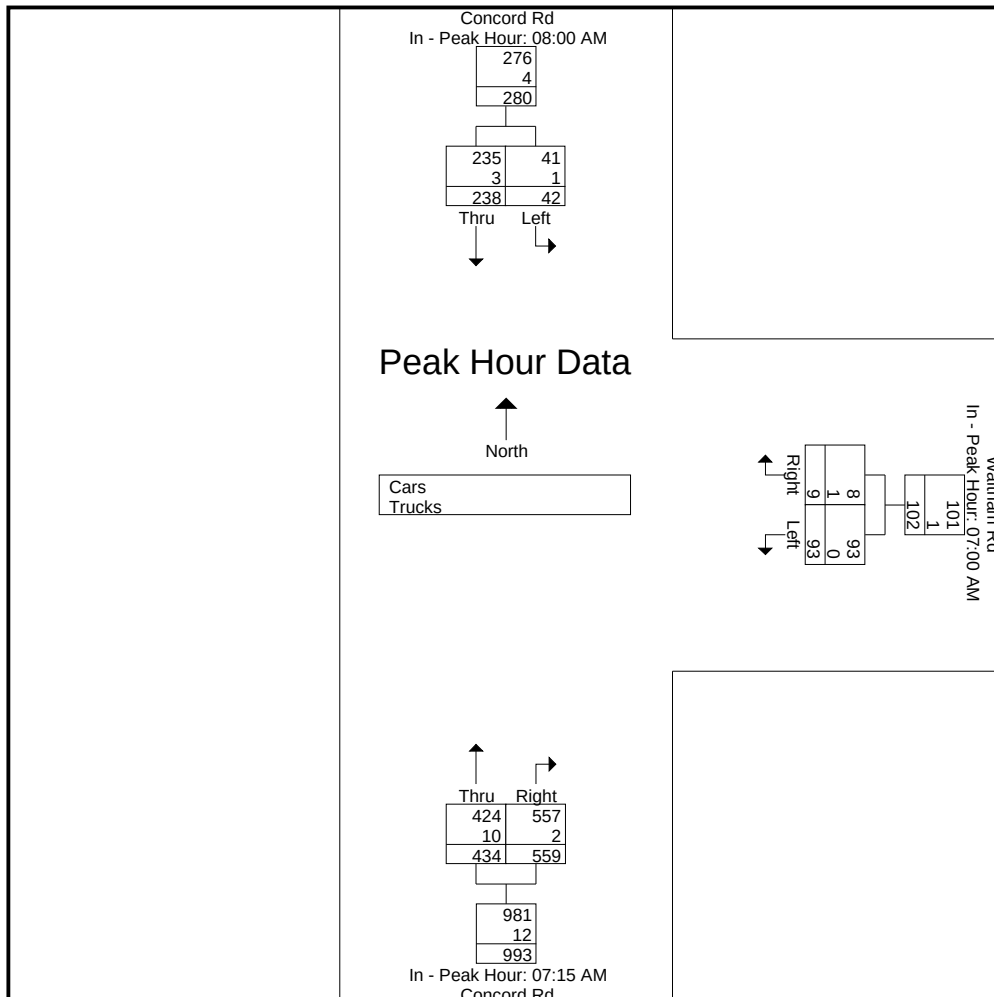
File Name : 62154004
Site Code : 62154004
Start Date : 4/27/2016
Page No : 3

	Concord Rd From North			Waltham Rd From East			Concord Rd From South			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total

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

Peak Hour for Each Approach Begins at:

	08:00 AM			07:00 AM			07:15 AM		
+0 mins.	8	60	68	20	2	22	100	138	238
+15 mins.	12	60	72	26	2	28	103	153	256
+30 mins.	14	64	78	29	2	31	124	135	259
+45 mins.	8	54	62	18	3	21	107	133	240
Total Volume	42	238	280	93	9	102	434	559	993
% App. Total	15	85		91.2	8.8		43.7	56.3	
PHF	.750	.930	.897	.802	.750	.823	.875	.913	.958
Cars	41	235	276	93	8	101	424	557	981
% Cars	97.6	98.7	98.6	100	88.9	99	97.7	99.6	98.8
Trucks	1	3	4	0	1	1	10	2	12
% Trucks	2.4	1.3	1.4	0	11.1	1	2.3	0.4	1.2



Accurate Counts

978-664-2565

N/S Street : Concord Road
 E/W Street: Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154004
 Site Code : 62154004
 Start Date : 4/27/2016
 Page No : 4

Groups Printed- Cars							
	Concord Rd From North		Waltham Rd From East		Concord Rd From South		
Start Time	Left	Thru	Left	Right	Thru	Right	Int. Total
07:00 AM	4	43	20	2	79	135	283
07:15 AM	11	42	26	1	97	137	314
07:30 AM	8	70	29	2	100	153	362
07:45 AM	15	37	18	3	122	135	330
Total	38	192	93	8	398	560	1289
08:00 AM	8	60	11	3	105	132	319
08:15 AM	12	59	9	2	91	121	294
08:30 AM	14	64	15	1	111	120	325
08:45 AM	7	52	9	7	79	95	249
Total	41	235	44	13	386	468	1187
Grand Total	79	427	137	21	784	1028	2476
Apprch %	15.6	84.4	86.7	13.3	43.3	56.7	
Total %	3.2	17.2	5.5	0.8	31.7	41.5	

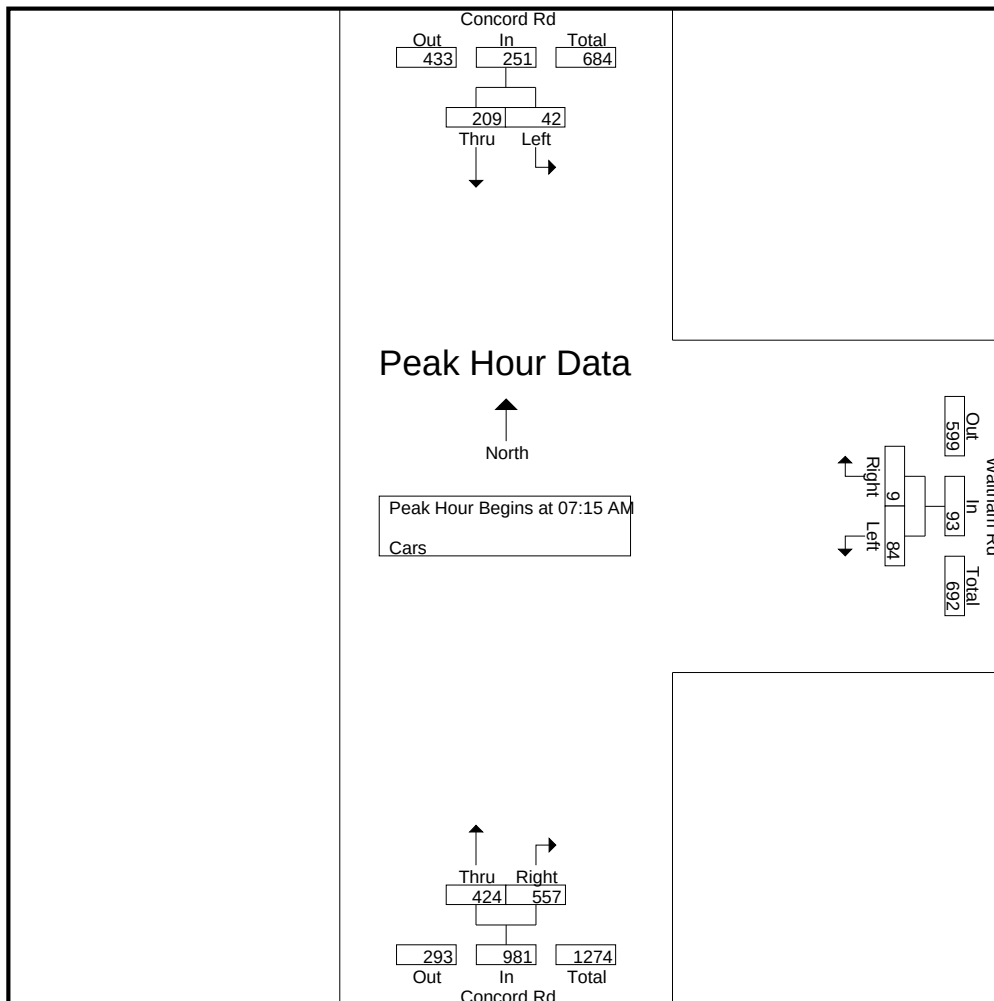
Accurate Counts

978-664-2565

N/S Street : Concord Road
 E/W Street: Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154004
 Site Code : 62154004
 Start Date : 4/27/2016
 Page No : 5

	Concord Rd From North			Waltham Rd From East			Concord Rd From South			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	11	42	53	26	1	27	97	137	234	314
07:30 AM	8	70	78	29	2	31	100	153	253	362
07:45 AM	15	37	52	18	3	21	122	135	257	330
08:00 AM	8	60	68	11	3	14	105	132	237	319
Total Volume	42	209	251	84	9	93	424	557	981	1325
% App. Total	16.7	83.3		90.3	9.7		43.2	56.8		
PHF	.700	.746	.804	.724	.750	.750	.869	.910	.954	.915



Accurate Counts

978-664-2565

N/S Street : Concord Road
E/W Street: Waltham Road
City/State : Wayland, MA
Weather : Clear

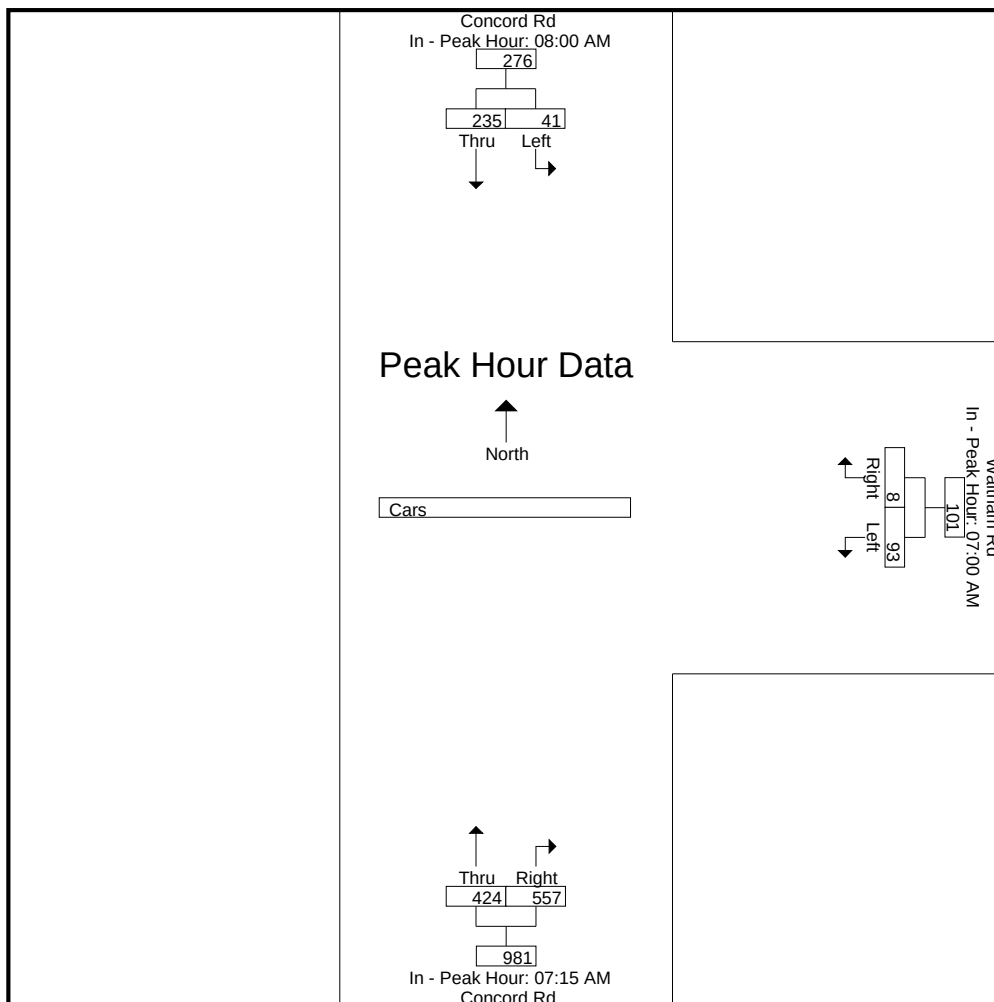
File Name : 62154004
Site Code : 62154004
Start Date : 4/27/2016
Page No : 6

	Concord Rd From North			Waltham Rd From East			Concord Rd From South			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total

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

Peak Hour for Each Approach Begins at:

	08:00 AM			07:00 AM			07:15 AM		
+0 mins.	8	60	68	20	2	22	97	137	234
+15 mins.	12	59	71	26	1	27	100	153	253
+30 mins.	14	64	78	29	2	31	122	135	257
+45 mins.	7	52	59	18	3	21	105	132	237
Total Volume	41	235	276	93	8	101	424	557	981
% App. Total	14.9	85.1		92.1	7.9		43.2	56.8	
PHF	.732	.918	.885	.802	.667	.815	.869	.910	.954



Accurate Counts

978-664-2565

N/S Street : Concord Road
 E/W Street: Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154004
 Site Code : 62154004
 Start Date : 4/27/2016
 Page No : 7

Groups Printed- Trucks							
	Concord Rd From North		Waltham Rd From East		Concord Rd From South		
Start Time	Left	Thru	Left	Right	Thru	Right	Int. Total
07:00 AM	0	1	0	0	1	1	3
07:15 AM	1	0	0	1	3	1	6
07:30 AM	0	0	0	0	3	0	3
07:45 AM	0	1	0	0	2	0	3
Total	1	2	0	1	9	2	15
08:00 AM	0	0	0	1	2	1	4
08:15 AM	0	1	1	0	1	0	3
08:30 AM	0	0	0	0	3	0	3
08:45 AM	1	2	0	0	1	0	4
Total	1	3	1	1	7	1	14
Grand Total	2	5	1	2	16	3	29
Apprch %	28.6	71.4	33.3	66.7	84.2	15.8	
Total %	6.9	17.2	3.4	6.9	55.2	10.3	

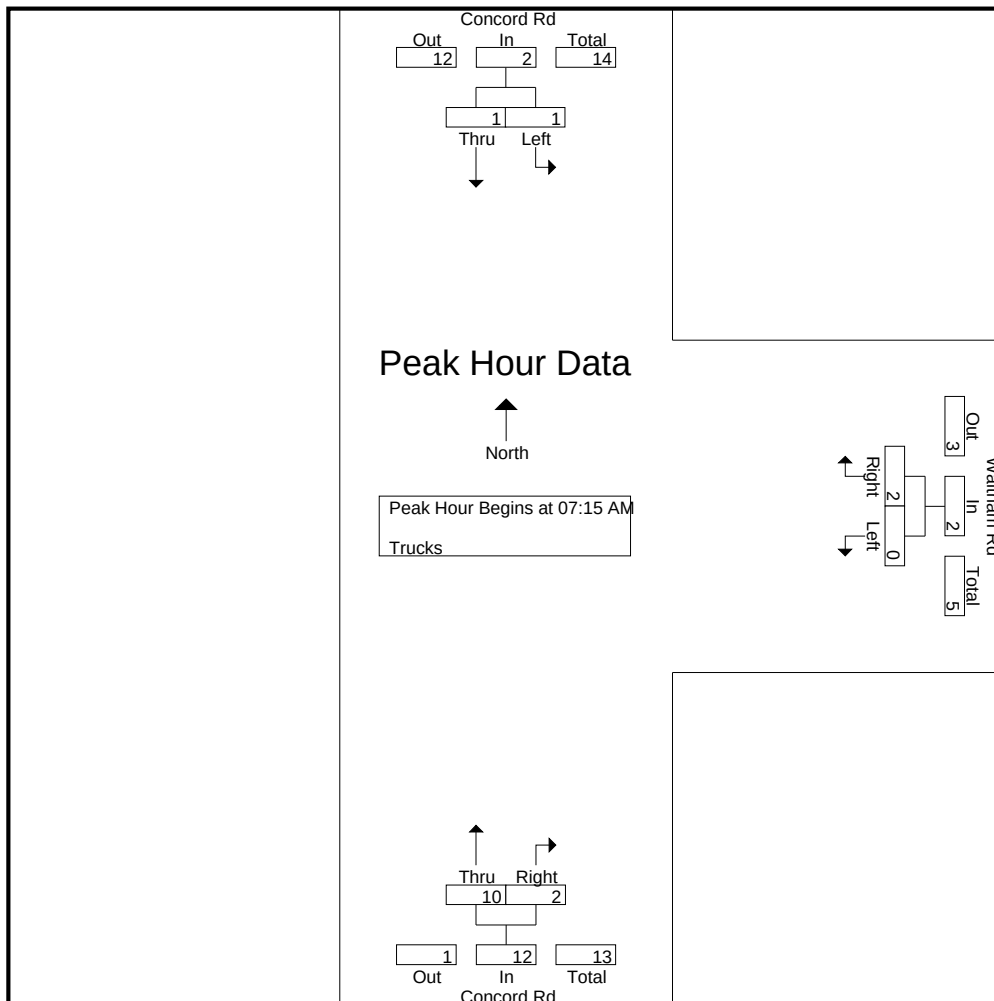
Accurate Counts

978-664-2565

N/S Street : Concord Road
 E/W Street: Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154004
 Site Code : 62154004
 Start Date : 4/27/2016
 Page No : 8

	Concord Rd From North			Waltham Rd From East			Concord Rd From South			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	1	0	1	0	1	1	3	1	4	6
07:30 AM	0	0	0	0	0	0	3	0	3	3
07:45 AM	0	1	1	0	0	0	2	0	2	3
08:00 AM	0	0	0	0	1	1	2	1	3	4
Total Volume	1	1	2	0	2	2	10	2	12	16
% App. Total	50	50		0	100		83.3	16.7		
PHF	.250	.250	.500	.000	.500	.500	.833	.500	.750	.667



Accurate Counts

978-664-2565

N/S Street : Concord Road
 E/W Street: Waltham Road
 City/State : Wayland, MA
 Weather : Clear

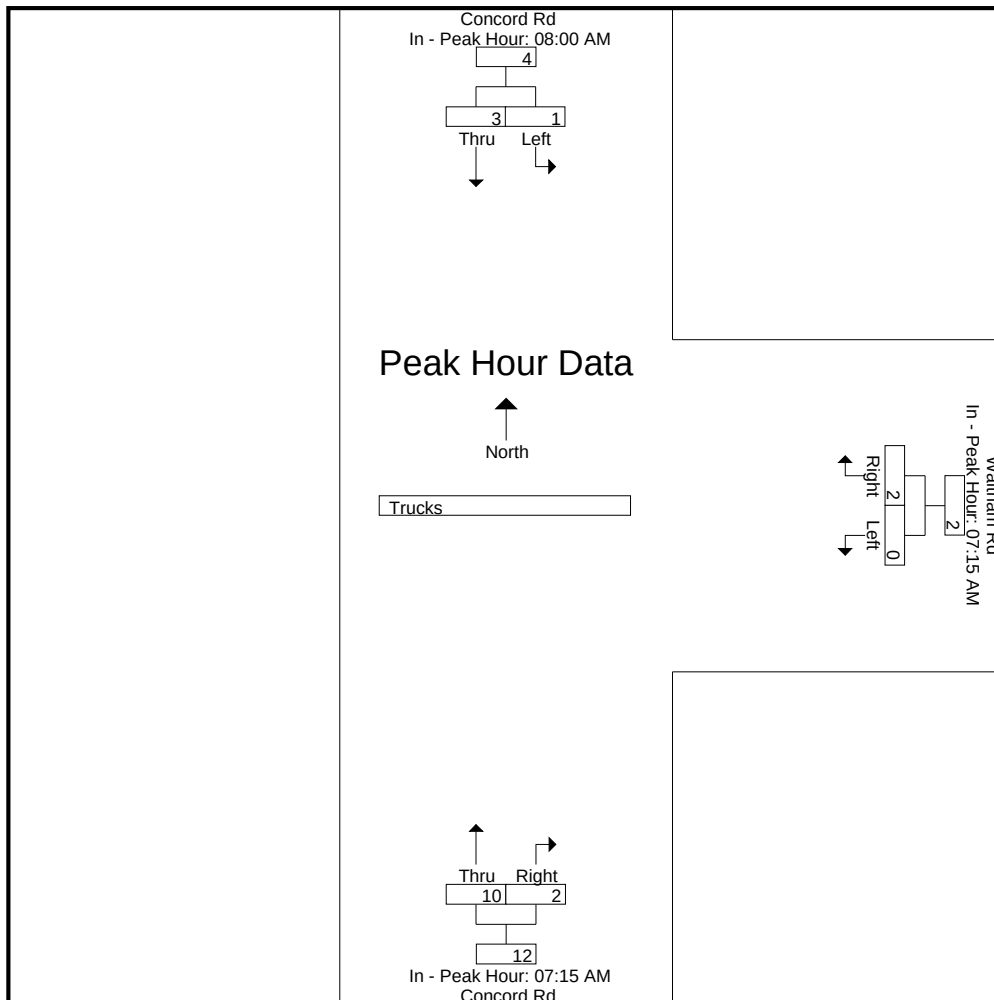
File Name : 62154004
 Site Code : 62154004
 Start Date : 4/27/2016
 Page No : 9

	Concord Rd From North			Waltham Rd From East			Concord Rd From South			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total

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

Peak Hour for Each Approach Begins at:

	08:00 AM			07:15 AM			07:15 AM		
+0 mins.	0	0	0	0	1	1	3	1	4
+15 mins.	0	1	1	0	0	0	3	0	3
+30 mins.	0	0	0	0	0	0	2	0	2
+45 mins.	1	2	3	0	1	1	2	1	3
Total Volume	1	3	4	0	2	2	10	2	12
% App. Total	25	75		0	100		83.3	16.7	
PHF	.250	.375	.333	.000	.500	.500	.833	.500	.750



Accurate Counts

978-664-2565

N/S Street : Concord Road
 E/W Street: Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154004
 Site Code : 62154004
 Start Date : 4/27/2016
 Page No : 10

Groups Printed- Bikes Peds												
	Concord Rd From North			Waltham Rd From East			Concord Rd From South			Exclu. Total	Inclu. Total	Int. Total
Start Time	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds			
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	1	0	0	0	1	1
07:30 AM	0	1	0	0	0	0	0	0	0	0	1	1
07:45 AM	0	0	0	0	0	0	1	1	0	0	2	2
Total	0	1	0	0	0	0	2	1	0	0	4	4
08:00 AM	0	0	0	0	0	0	1	0	0	0	1	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	0	0	0	1	1
Grand Total	0	1	0	0	0	0	3	1	0	0	5	5
Apprch %	0	100		0	0		75	25				
Total %	0	20		0	0		60	20		0	100	

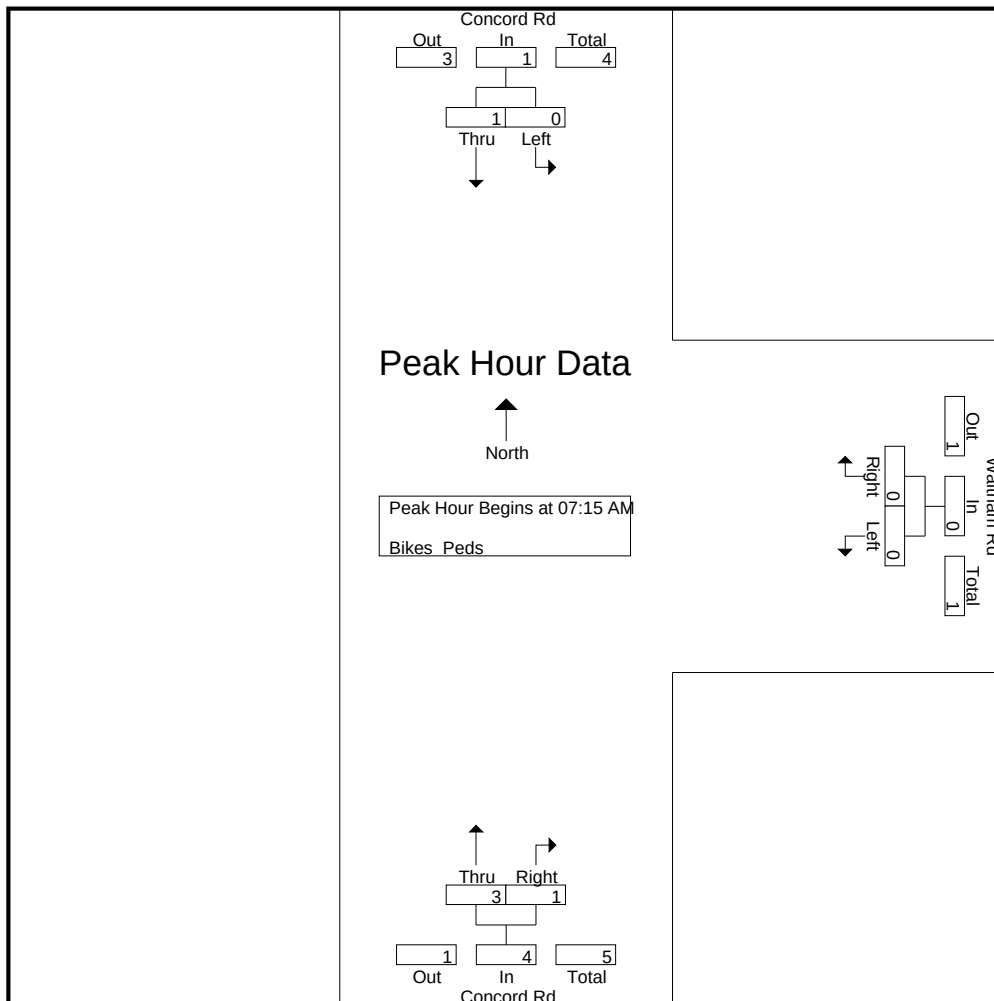
Accurate Counts

978-664-2565

N/S Street : Concord Road
 E/W Street: Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154004
 Site Code : 62154004
 Start Date : 4/27/2016
 Page No : 11

	Concord Rd From North			Waltham Rd From East			Concord Rd From South			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	0	0	0	0	0	0	1	0	1	1
07:30 AM	0	1	1	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	1	1	2	2
08:00 AM	0	0	0	0	0	0	1	0	1	1
Total Volume	0	1	1	0	0	0	3	1	4	5
% App. Total	0	100		0	0		75	25		
PHF	.000	.250	.250	.000	.000	.000	.750	.250	.500	.625



Accurate Counts

978-664-2565

N/S Street : Concord Road
E/W Street: Waltham Road
City/State : Wayland, MA
Weather : Clear

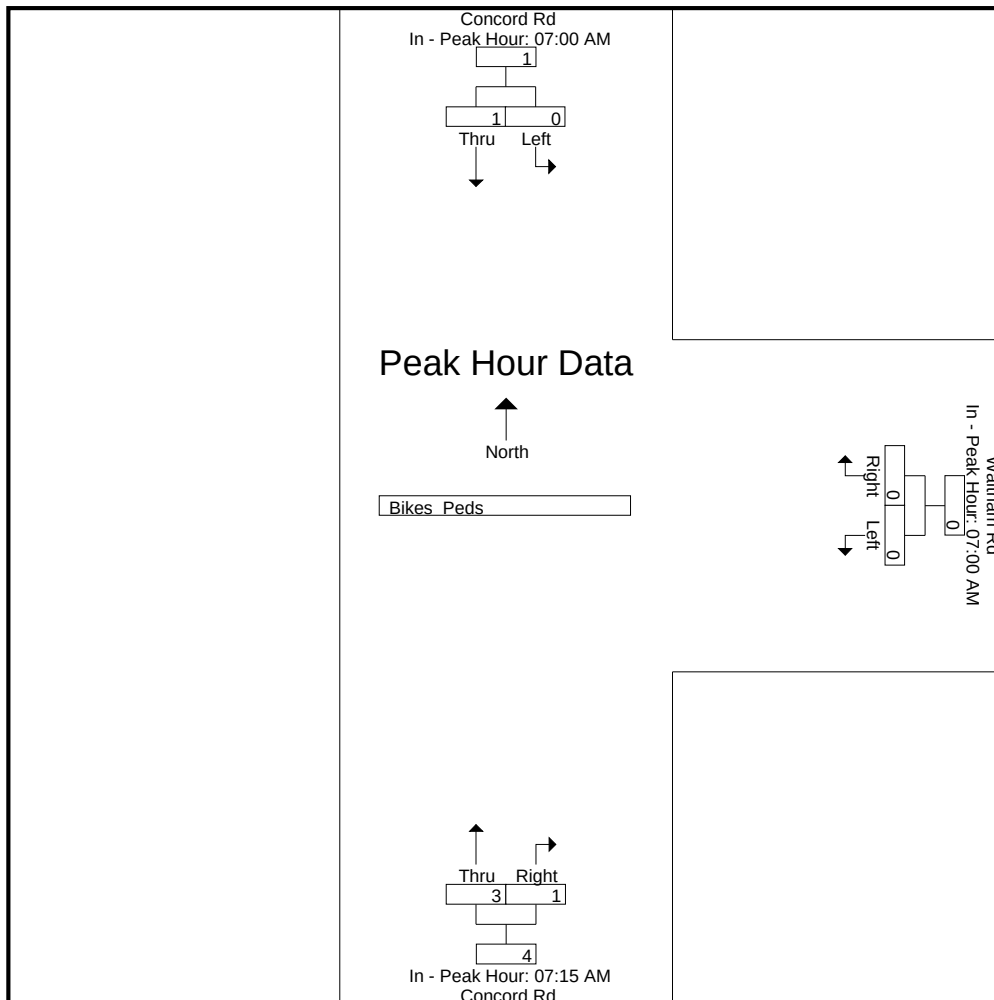
File Name : 62154004
Site Code : 62154004
Start Date : 4/27/2016
Page No : 12

	Concord Rd From North			Waltham Rd From East			Concord Rd From South			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total

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

Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:15 AM		
+0 mins.	0	0	0	0	0	0	1	0	1
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	1	1	0	0	0	1	1	2
+45 mins.	0	0	0	0	0	0	1	0	1
Total Volume	0	1	1	0	0	0	3	1	4
% App. Total	0	100		0	0		75	25	
PHF	.000	.250	.250	.000	.000	.000	.750	.250	.500



Accurate Counts

978-664-2565

N/S Street : Concord Road
 E/W Street: Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154004
 Site Code : 62154004
 Start Date : 4/27/2016
 Page No : 1

Groups Printed- Cars - Trucks							
	Concord Rd From North		Waltham Rd From East		Concord Rd From South		
Start Time	Left	Thru	Left	Right	Thru	Right	Int. Total
02:00 PM	3	38	13	3	39	10	106
02:15 PM	2	49	22	2	41	9	125
02:30 PM	4	46	15	0	42	11	118
02:45 PM	0	44	19	2	41	12	118
Total	9	177	69	7	163	42	467
03:00 PM	2	56	22	4	50	13	147
03:15 PM	1	89	35	7	49	22	203
03:30 PM	4	101	43	4	59	17	228
03:45 PM	2	96	67	8	57	16	246
Total	9	342	167	23	215	68	824
04:00 PM	1	102	59	5	43	17	227
04:15 PM	7	130	80	7	68	17	309
04:30 PM	4	120	76	5	48	13	266
04:45 PM	4	139	91	6	49	15	304
Total	16	491	306	23	208	62	1106
05:00 PM	4	120	115	11	51	23	324
05:15 PM	2	116	116	5	40	11	290
05:30 PM	4	123	109	4	60	12	312
05:45 PM	7	123	105	7	65	17	324
Total	17	482	445	27	216	63	1250
Grand Total	51	1492	987	80	802	235	3647
Apprch %	3.3	96.7	92.5	7.5	77.3	22.7	
Total %	1.4	40.9	27.1	2.2	22	6.4	
Cars	51	1481	983	80	785	234	3614
% Cars	100	99.3	99.6	100	97.9	99.6	99.1
Trucks	0	11	4	0	17	1	33
% Trucks	0	0.7	0.4	0	2.1	0.4	0.9

Accurate Counts
978-664-2565

Accurate Counts

978-664-2565

N/S Street : Concord Road
 E/W Street: Waltham Road
 City/State : Wayland, MA
 Weather : Clear

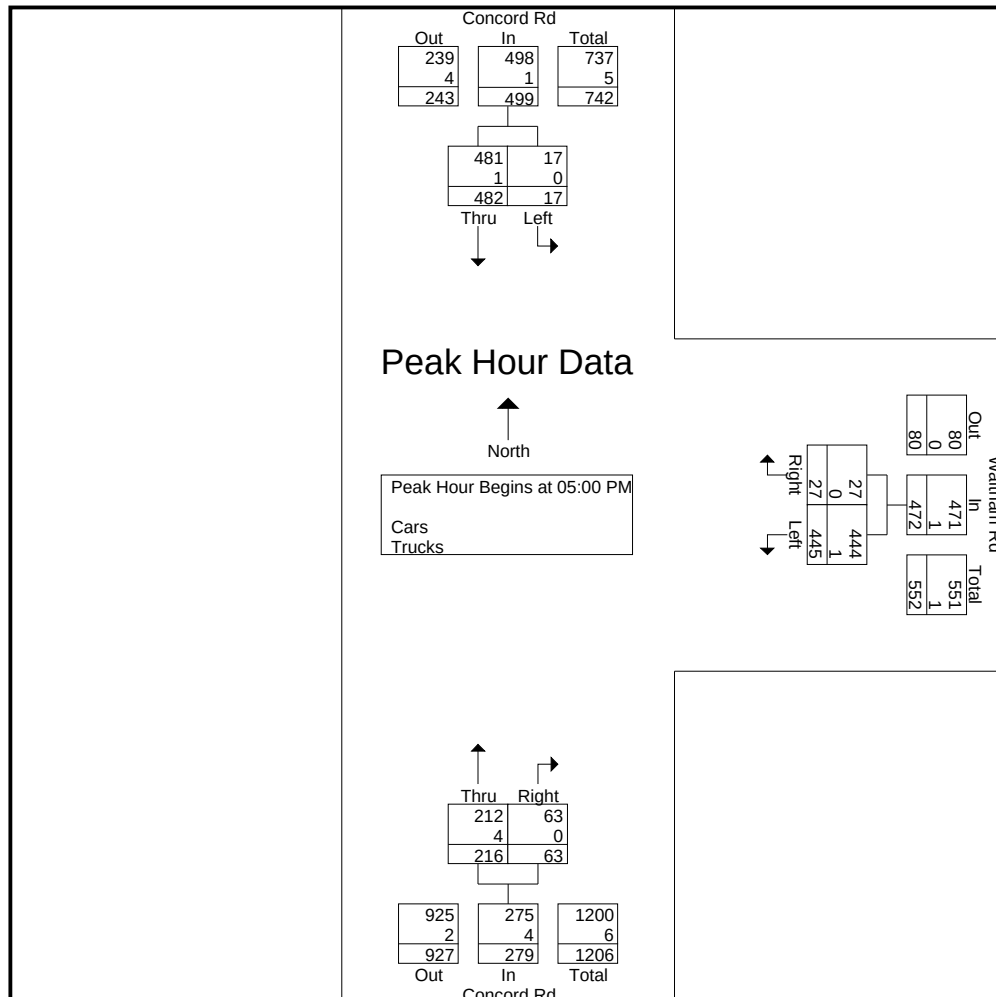
File Name : 62154004
 Site Code : 62154004
 Start Date : 4/27/2016
 Page No : 3

	Concord Rd From North			Waltham Rd From East			Concord Rd From South			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 05:00 PM

05:00 PM	4	120	124	115	11	126	51	23	74	324
05:15 PM	2	116	118	116	5	121	40	11	51	290
05:30 PM	4	123	127	109	4	113	60	12	72	312
05:45 PM	7	123	130	105	7	112	65	17	82	324
Total Volume	17	482	499	445	27	472	216	63	279	1250
% App. Total	3.4	96.6		94.3	5.7		77.4	22.6		
PHF	.607	.980	.960	.959	.614	.937	.831	.685	.851	.965
Cars	17	481	498	444	27	471	212	63	275	1244
% Cars	100	99.8	99.8	99.8	100	99.8	98.1	100	98.6	99.5
Trucks	0	1	1	1	0	1	4	0	4	6
% Trucks	0	0.2	0.2	0.2	0	0.2	1.9	0	1.4	0.5



Accurate Counts

978-664-2565

N/S Street : Concord Road
E/W Street: Waltham Road
City/State : Wayland, MA
Weather : Clear

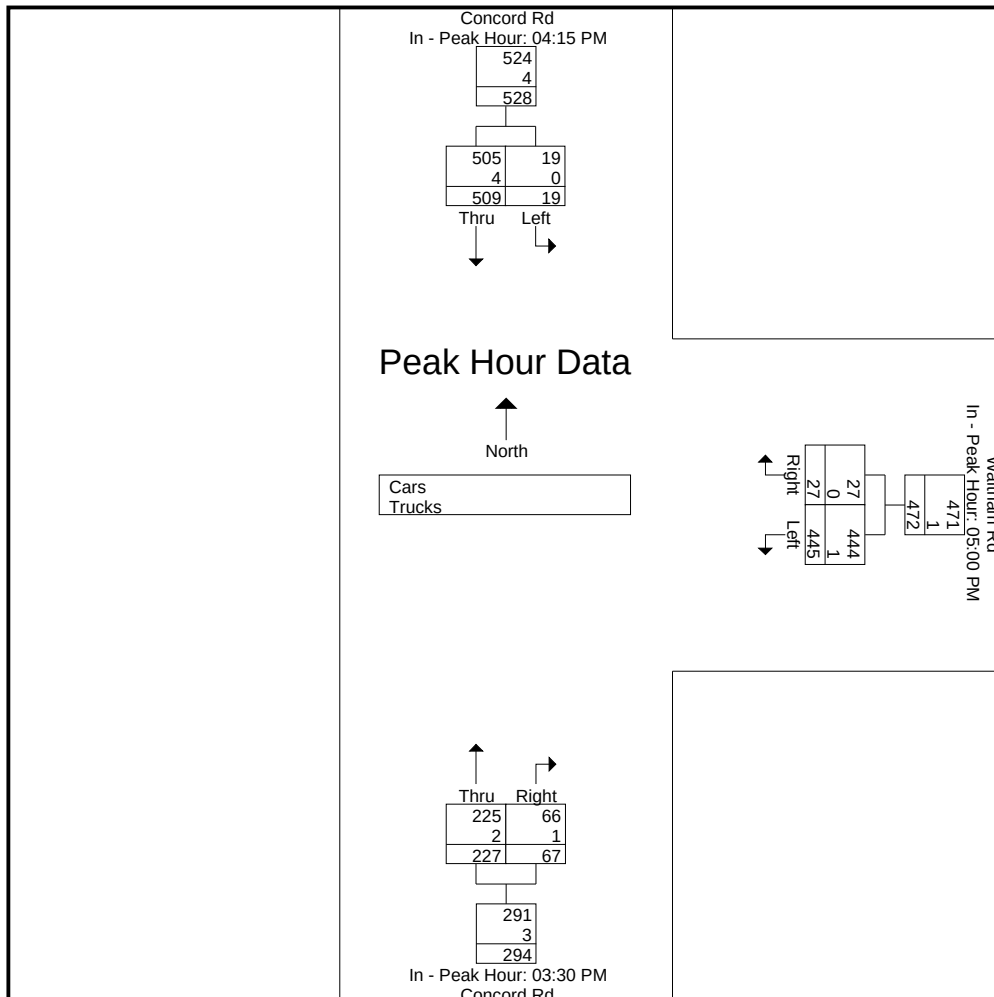
File Name : 62154004
Site Code : 62154004
Start Date : 4/27/2016
Page No : 4

	Concord Rd From North			Waltham Rd From East			Concord Rd From South			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:15 PM			05:00 PM			03:30 PM		
+0 mins.	7	130	137	115	11	126	59	17	76
+15 mins.	4	120	124	116	5	121	57	16	73
+30 mins.	4	139	143	109	4	113	43	17	60
+45 mins.	4	120	124	105	7	112	68	17	85
Total Volume	19	509	528	445	27	472	227	67	294
% App. Total	3.6	96.4		94.3	5.7		77.2	22.8	
PHF	.679	.915	.923	.959	.614	.937	.835	.985	.865
Cars	19	505	524	444	27	471	225	66	291
% Cars	100	99.2	99.2	99.8	100	99.8	99.1	98.5	99
Trucks	0	4	4	1	0	1	2	1	3
% Trucks	0	0.8	0.8	0.2	0	0.2	0.9	1.5	1



Accurate Counts

978-664-2565

N/S Street : Concord Road
 E/W Street: Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154004
 Site Code : 62154004
 Start Date : 4/27/2016
 Page No : 5

Groups Printed- Cars							
	Concord Rd From North		Waltham Rd From East		Concord Rd From South		
Start Time	Left	Thru	Left	Right	Thru	Right	Int. Total
02:00 PM	3	36	12	3	37	10	101
02:15 PM	2	48	22	2	41	9	124
02:30 PM	4	46	15	0	39	11	115
02:45 PM	0	44	19	2	39	12	116
Total	9	174	68	7	156	42	456
03:00 PM	2	56	22	4	49	13	146
03:15 PM	1	88	35	7	49	22	202
03:30 PM	4	100	43	4	58	16	225
03:45 PM	2	94	66	8	57	16	243
Total	9	338	166	23	213	67	816
04:00 PM	1	102	59	5	42	17	226
04:15 PM	7	127	80	7	68	17	306
04:30 PM	4	120	76	5	48	13	266
04:45 PM	4	139	90	6	46	15	300
Total	16	488	305	23	204	62	1098
05:00 PM	4	119	115	11	51	23	323
05:15 PM	2	116	115	5	36	11	285
05:30 PM	4	123	109	4	60	12	312
05:45 PM	7	123	105	7	65	17	324
Total	17	481	444	27	212	63	1244
Grand Total	51	1481	983	80	785	234	3614
Apprch %	3.3	96.7	92.5	7.5	77	23	
Total %	1.4	41	27.2	2.2	21.7	6.5	

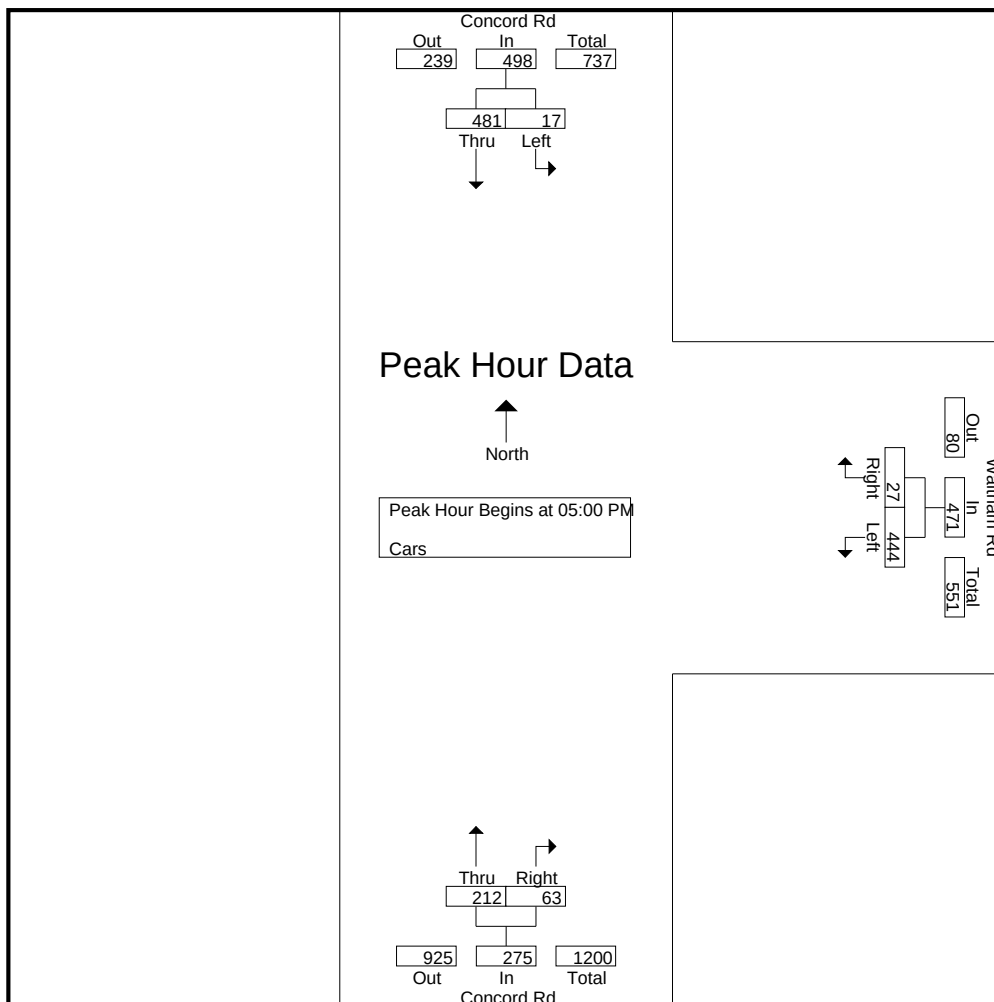
Accurate Counts

978-664-2565

N/S Street : Concord Road
 E/W Street: Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154004
 Site Code : 62154004
 Start Date : 4/27/2016
 Page No : 6

	Concord Rd From North			Waltham Rd From East			Concord Rd From South			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	4	119	123	115	11	126	51	23	74	323
05:15 PM	2	116	118	115	5	120	36	11	47	285
05:30 PM	4	123	127	109	4	113	60	12	72	312
05:45 PM	7	123	130	105	7	112	65	17	82	324
Total Volume	17	481	498	444	27	471	212	63	275	1244
% App. Total	3.4	96.6		94.3	5.7		77.1	22.9		
PHF	.607	.978	.958	.965	.614	.935	.815	.685	.838	.960



Accurate Counts

978-664-2565

N/S Street : Concord Road
E/W Street: Waltham Road
City/State : Wayland, MA
Weather : Clear

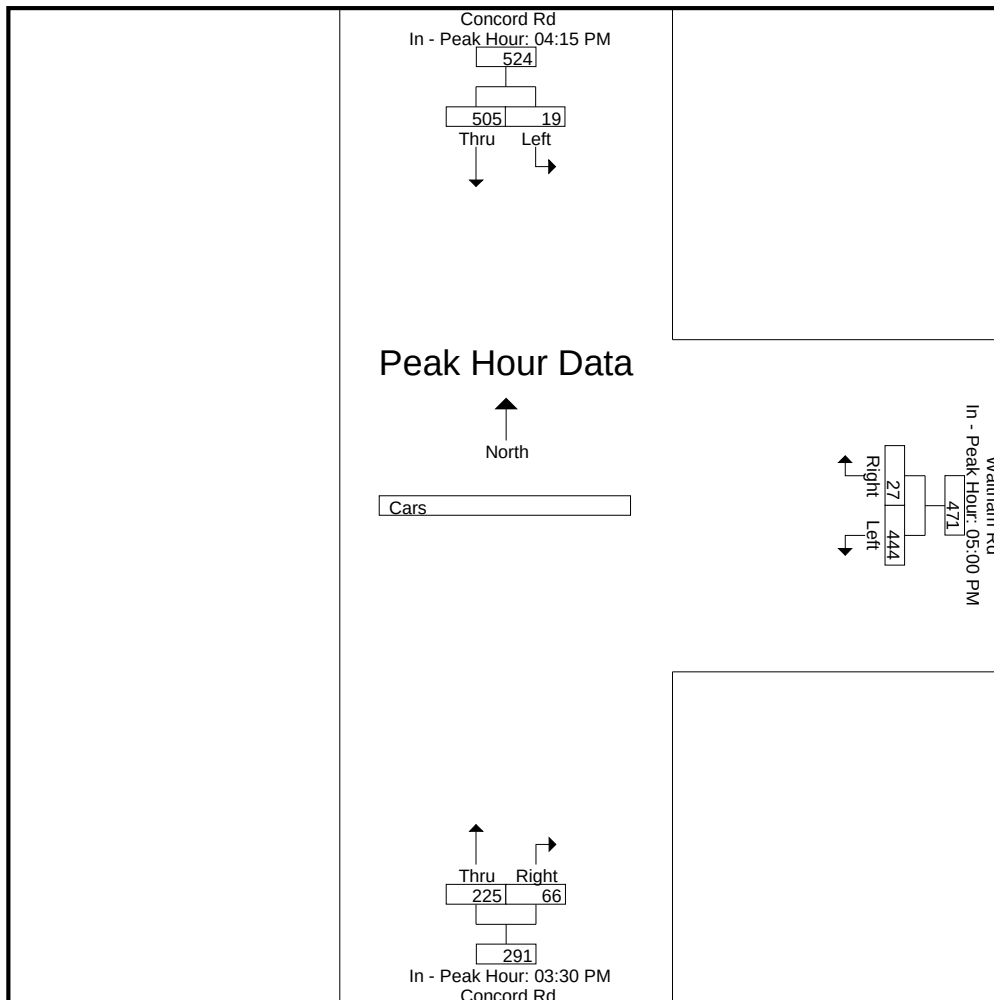
File Name : 62154004
Site Code : 62154004
Start Date : 4/27/2016
Page No : 7

	Concord Rd From North			Waltham Rd From East			Concord Rd From South			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:15 PM			05:00 PM			03:30 PM		
+0 mins.	7	127	134	115	11	126	58	16	74
+15 mins.	4	120	124	115	5	120	57	16	73
+30 mins.	4	139	143	109	4	113	42	17	59
+45 mins.	4	119	123	105	7	112	68	17	85
Total Volume	19	505	524	444	27	471	225	66	291
% App. Total	3.6	96.4		94.3	5.7		77.3	22.7	
PHF	.679	.908	.916	.965	.614	.935	.827	.971	.856



Accurate Counts

978-664-2565

N/S Street : Concord Road
 E/W Street: Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154004
 Site Code : 62154004
 Start Date : 4/27/2016
 Page No : 8

Groups Printed- Trucks

	Concord Rd From North		Waltham Rd From East		Concord Rd From South		
Start Time	Left	Thru	Left	Right	Thru	Right	Int. Total
02:00 PM	0	2	1	0	2	0	5
02:15 PM	0	1	0	0	0	0	1
02:30 PM	0	0	0	0	3	0	3
02:45 PM	0	0	0	0	2	0	2
Total	0	3	1	0	7	0	11
03:00 PM	0	0	0	0	1	0	1
03:15 PM	0	1	0	0	0	0	1
03:30 PM	0	1	0	0	1	1	3
03:45 PM	0	2	1	0	0	0	3
Total	0	4	1	0	2	1	8
04:00 PM	0	0	0	0	1	0	1
04:15 PM	0	3	0	0	0	0	3
04:30 PM	0	0	0	0	0	0	0
04:45 PM	0	0	1	0	3	0	4
Total	0	3	1	0	4	0	8
05:00 PM	0	1	0	0	0	0	1
05:15 PM	0	0	1	0	4	0	5
05:30 PM	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0
Total	0	1	1	0	4	0	6
Grand Total	0	11	4	0	17	1	33
Apprch %	0	100	100	0	94.4	5.6	
Total %	0	33.3	12.1	0	51.5	3	

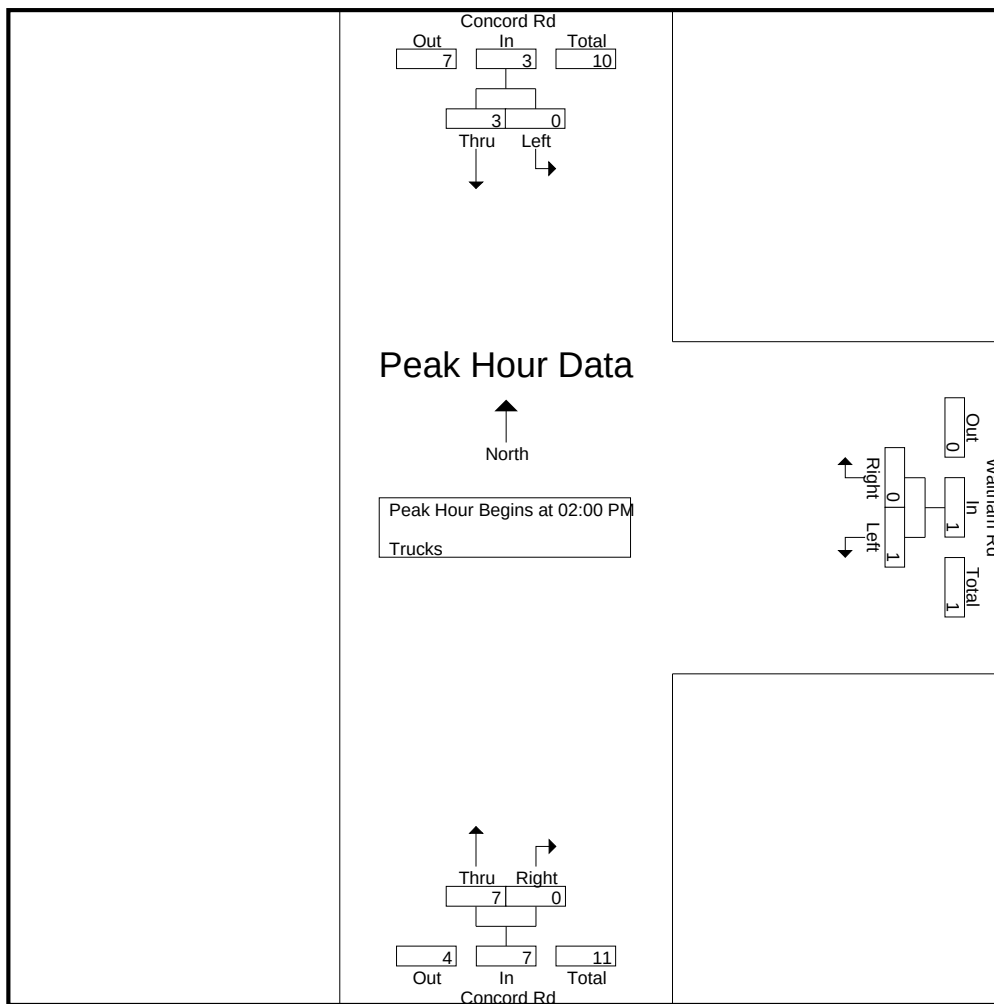
Accurate Counts

978-664-2565

N/S Street : Concord Road
 E/W Street: Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154004
 Site Code : 62154004
 Start Date : 4/27/2016
 Page No : 9

	Concord Rd From North			Waltham Rd From East			Concord Rd From South			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 02:00 PM										
02:00 PM	0	2	2	1	0	1	2	0	2	5
02:15 PM	0	1	1	0	0	0	0	0	0	1
02:30 PM	0	0	0	0	0	0	3	0	3	3
02:45 PM	0	0	0	0	0	0	2	0	2	2
Total Volume	0	3	3	1	0	1	7	0	7	11
% App. Total	0	100		100	0		100	0		
PHF	.000	.375	.375	.250	.000	.250	.583	.000	.583	.550



Accurate Counts

978-664-2565

N/S Street : Concord Road
E/W Street: Waltham Road
City/State : Wayland, MA
Weather : Clear

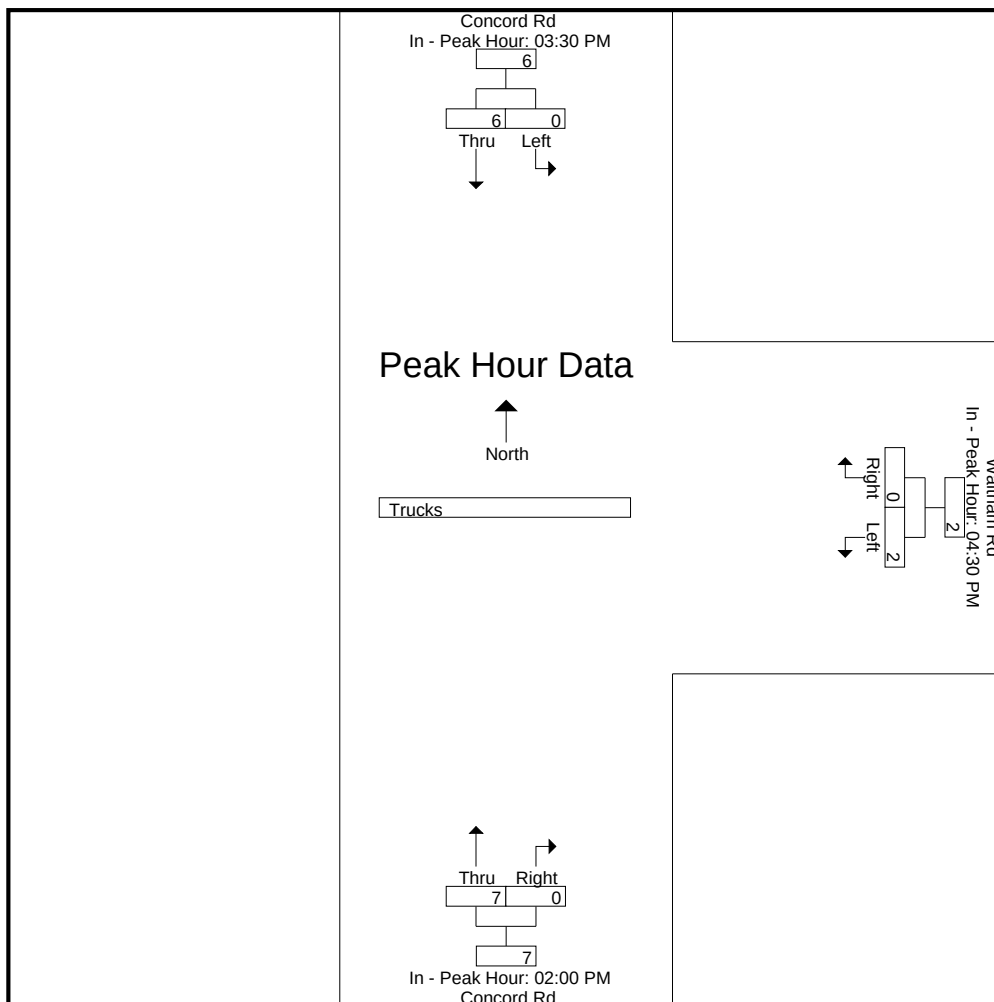
File Name : 62154004
Site Code : 62154004
Start Date : 4/27/2016
Page No : 10

	Concord Rd From North			Waltham Rd From East			Concord Rd From South			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	03:30 PM			04:30 PM			02:00 PM		
+0 mins.	0	1	1	0	0	0	2	0	2
+15 mins.	0	2	2	1	0	1	0	0	0
+30 mins.	0	0	0	0	0	0	3	0	3
+45 mins.	0	3	3	1	0	1	2	0	2
Total Volume	0	6	6	2	0	2	7	0	7
% App. Total	0	100		100	0		100	0	
PHF	.000	.500	.500	.500	.000	.500	.583	.000	.583



Accurate Counts

978-664-2565

N/S Street : Concord Road
 E/W Street: Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154004
 Site Code : 62154004
 Start Date : 4/27/2016
 Page No : 11

Groups Printed- Bikes Peds												
	Concord Rd From North			Waltham Rd From East			Concord Rd From South					
Start Time	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
02:00 PM	0	0	0	1	0	0	1	0	0	0	2	2
02:15 PM	1	0	0	0	2	0	0	1	0	0	4	4
02:30 PM	0	0	0	0	0	2	0	0	0	2	0	2
02:45 PM	0	1	0	0	2	0	2	0	0	0	5	5
Total	1	1	0	1	4	2	3	1	0	2	11	13
03:00 PM	0	0	0	0	1	0	0	0	0	0	1	1
03:15 PM	0	1	0	0	0	0	0	0	0	0	1	1
03:30 PM	1	0	0	0	0	2	0	1	0	2	2	4
03:45 PM	0	2	0	0	0	0	0	1	0	0	3	3
Total	1	3	0	0	1	2	0	2	0	2	7	9
04:00 PM	0	1	0	0	0	0	0	0	0	0	1	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	1	0	0	0	0	1	1	0	0	1	2	3
04:45 PM	0	0	0	0	0	0	2	0	0	0	2	2
Total	1	1	0	0	0	1	3	0	0	1	5	6
05:00 PM	0	1	0	0	0	0	2	0	0	0	3	3
05:15 PM	0	0	0	0	1	0	1	1	0	0	3	3
05:30 PM	0	0	0	1	0	0	0	1	0	0	2	2
05:45 PM	1	1	0	0	0	0	0	1	0	0	3	3
Total	1	2	0	1	1	0	3	3	0	0	11	11
Grand Total	4	7	0	2	6	5	9	6	0	5	34	39
Apprch %	36.4	63.6		25	75		60	40				
Total %	11.8	20.6		5.9	17.6		26.5	17.6		12.8	87.2	

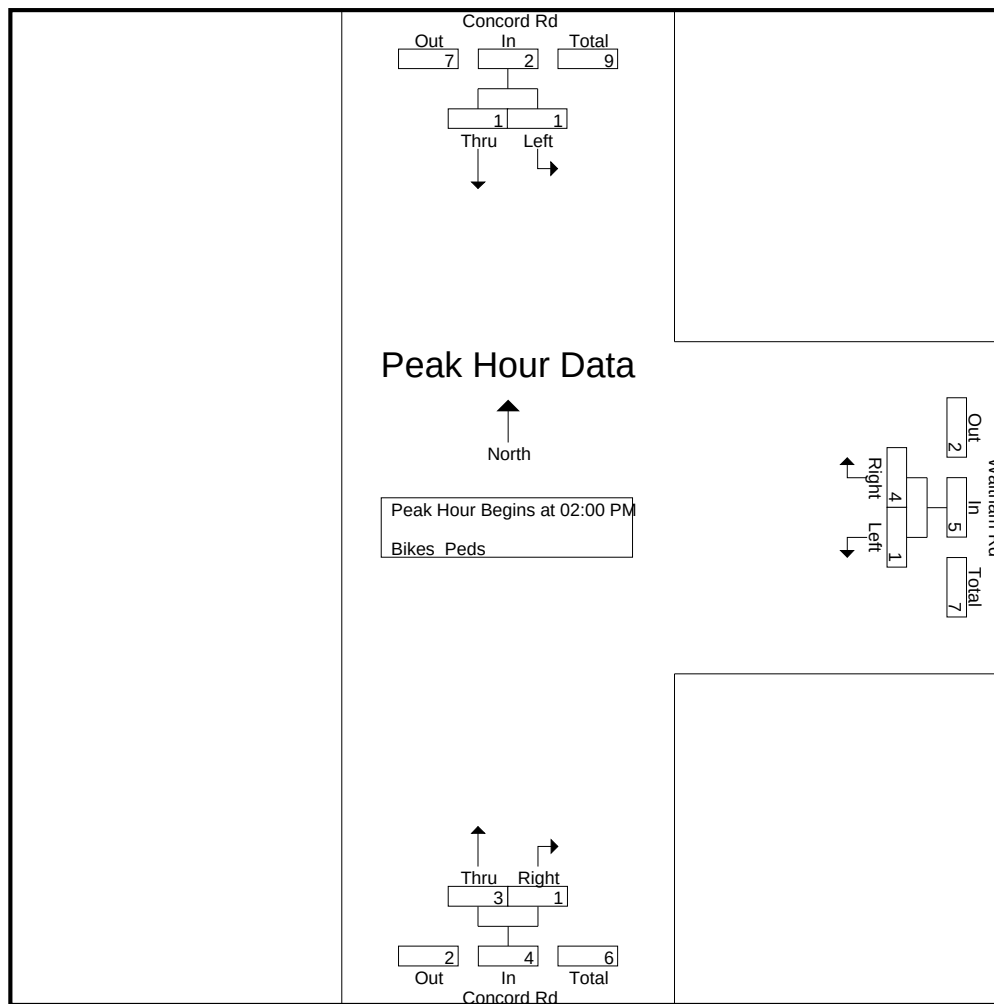
Accurate Counts

978-664-2565

N/S Street : Concord Road
E/W Street: Waltham Road
City/State : Wayland, MA
Weather : Clear

File Name : 62154004
Site Code : 62154004
Start Date : 4/27/2016
Page No : 12

	Concord Rd From North			Waltham Rd From East			Concord Rd From South			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 02:00 PM										
02:00 PM	0	0	0	1	0	1	1	0	1	2
02:15 PM	1	0	1	0	2	2	0	1	1	4
02:30 PM	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	1	1	0	2	2	2	0	2	5
Total Volume	1	1	2	1	4	5	3	1	4	11
% App. Total	50	50		20	80		75	25		
PHF	.250	.250	.500	.250	.500	.625	.375	.250	.500	.550



Accurate Counts

978-664-2565

N/S Street : Concord Road
E/W Street: Waltham Road
City/State : Wayland, MA
Weather : Clear

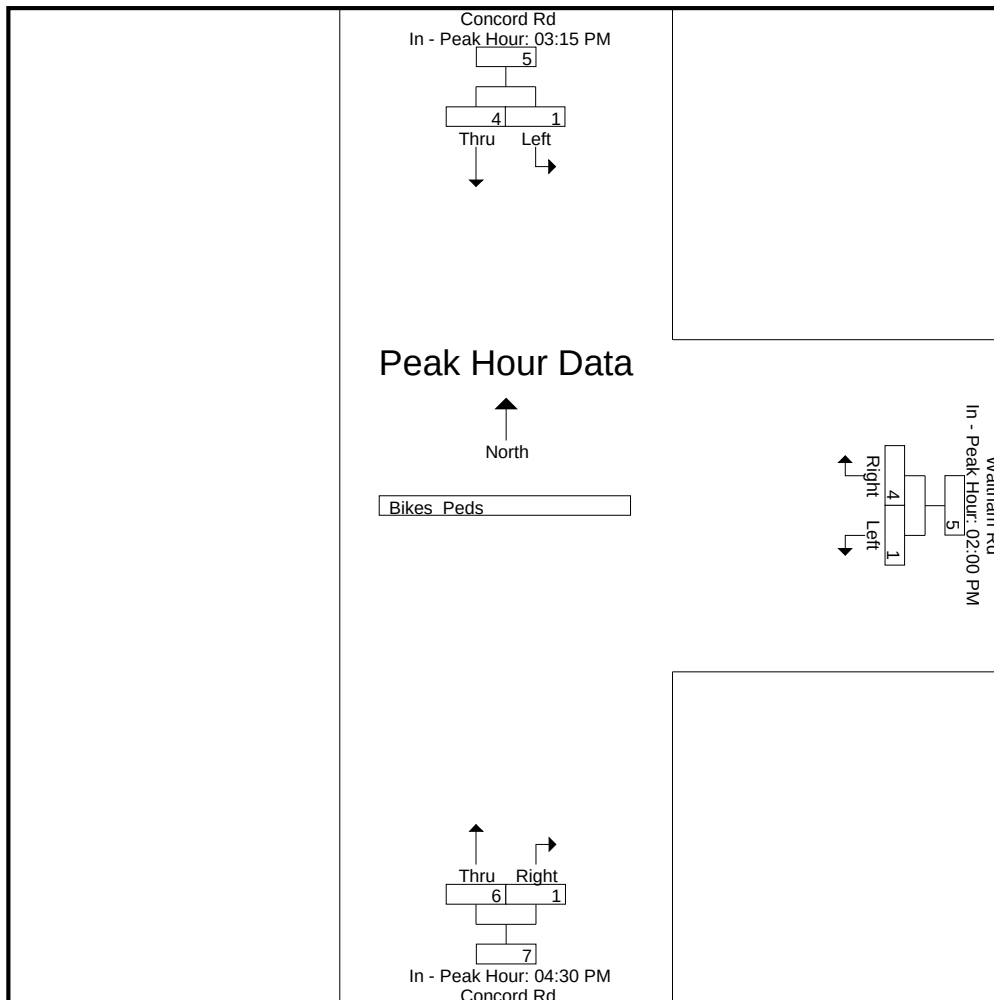
File Name : 62154004
Site Code : 62154004
Start Date : 4/27/2016
Page No : 13

	Concord Rd From North			Waltham Rd From East			Concord Rd From South			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	03:15 PM			02:00 PM			04:30 PM		
+0 mins.	0	1	1	1	0	1	1	0	1
+15 mins.	1	0	1	0	2	2	2	0	2
+30 mins.	0	2	2	0	0	0	2	0	2
+45 mins.	0	1	1	0	2	2	1	1	2
Total Volume	1	4	5	1	4	5	6	1	7
% App. Total	20	80		20	80		85.7	14.3	
PHF	.250	.500	.625	.250	.500	.625	.750	.250	.875



Accurate Counts

978-664-2565

N/S Street : South Great Rd East
 E/W Street: Old Sudbury Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154005
 Site Code : 62154005
 Start Date : 4/27/2016
 Page No : 1

Groups Printed- Cars - Trucks							
	So Geat Rd East From North		So Geat Rd East From South		Old Sudbury Rd From West		
Start Time	Thru	Right	Left	Thru	Left	Right	Int. Total
07:00 AM	202	0	9	33	0	79	323
07:15 AM	204	0	16	44	1	86	351
07:30 AM	176	0	9	65	0	99	349
07:45 AM	192	0	8	70	1	102	373
Total	774	0	42	212	2	366	1396
08:00 AM	209	0	8	64	1	92	374
08:15 AM	139	0	5	61	1	82	288
08:30 AM	175	0	6	66	4	95	346
08:45 AM	159	0	5	56	0	78	298
Total	682	0	24	247	6	347	1306
Grand Total	1456	0	66	459	8	713	2702
Apprch %	100	0	12.6	87.4	1.1	98.9	
Total %	53.9	0	2.4	17	0.3	26.4	
Cars	1451	0	65	453	8	712	2689
% Cars	99.7	0	98.5	98.7	100	99.9	99.5
Trucks	5	0	1	6	0	1	13
% Trucks	0.3	0	1.5	1.3	0	0.1	0.5

Accurate Counts

978-664-2565

N/S Street : South Great Rd East
 E/W Street: Old Sudbury Road
 City/State : Wayland, MA
 Weather : Clear

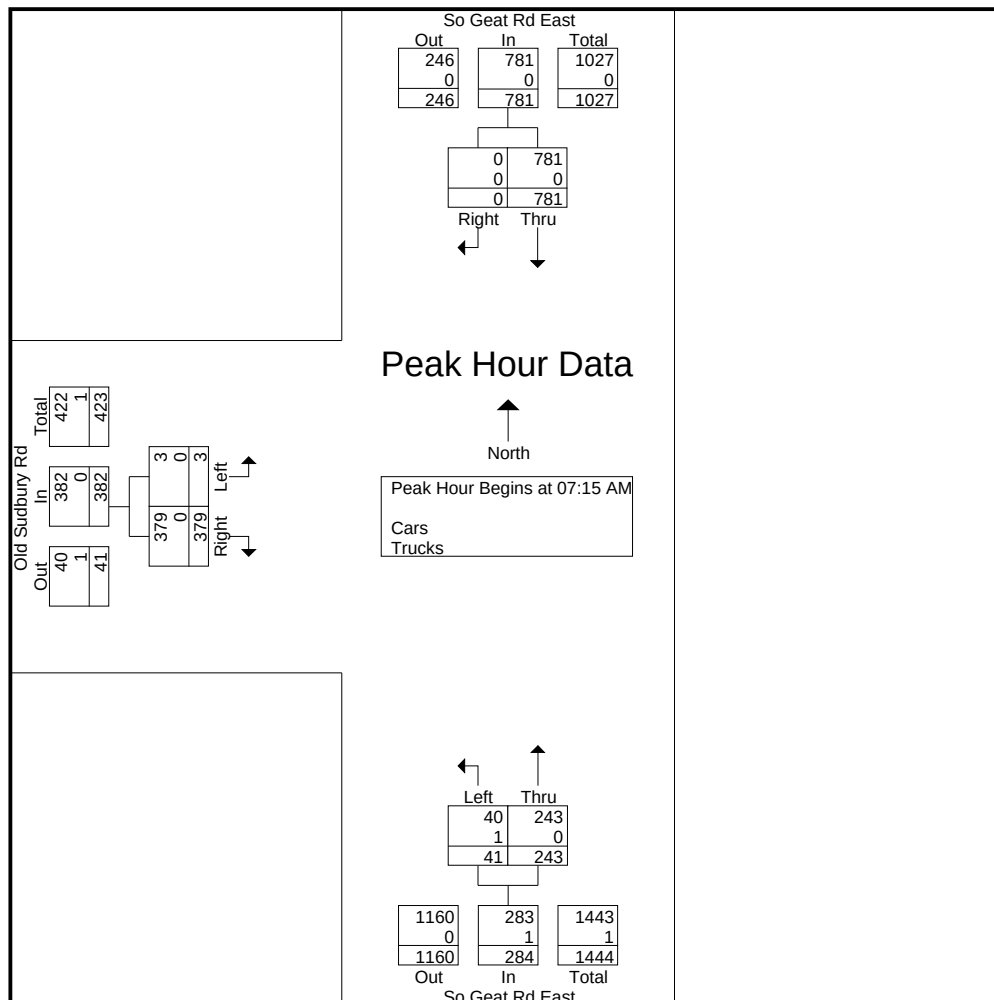
File Name : 62154005
 Site Code : 62154005
 Start Date : 4/27/2016
 Page No : 2

	So Geat Rd East From North			So Geat Rd East From South			Old Sudbury Rd From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total

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

Peak Hour for Entire Intersection Begins at 07:15 AM

07:15 AM	204	0	204	16	44	60	1	86	87	351
07:30 AM	176	0	176	9	65	74	0	99	99	349
07:45 AM	192	0	192	8	70	78	1	102	103	373
08:00 AM	209	0	209	8	64	72	1	92	93	374
Total Volume	781	0	781	41	243	284	3	379	382	1447
% App. Total	100	0		14.4	85.6		0.8	99.2		
PHF	.934	.000	.934	.641	.868	.910	.750	.929	.927	.967
Cars	781	0	781	40	243	283	3	379	382	1446
% Cars	100	0	100	97.6	100	99.6	100	100	100	99.9
Trucks	0	0	0	1	0	1	0	0	0	1
% Trucks	0	0	0	2.4	0	0.4	0	0	0	0.1



Accurate Counts

978-664-2565

N/S Street : South Great Rd East
 E/W Street: Old Sudbury Road
 City/State : Wayland, MA
 Weather : Clear

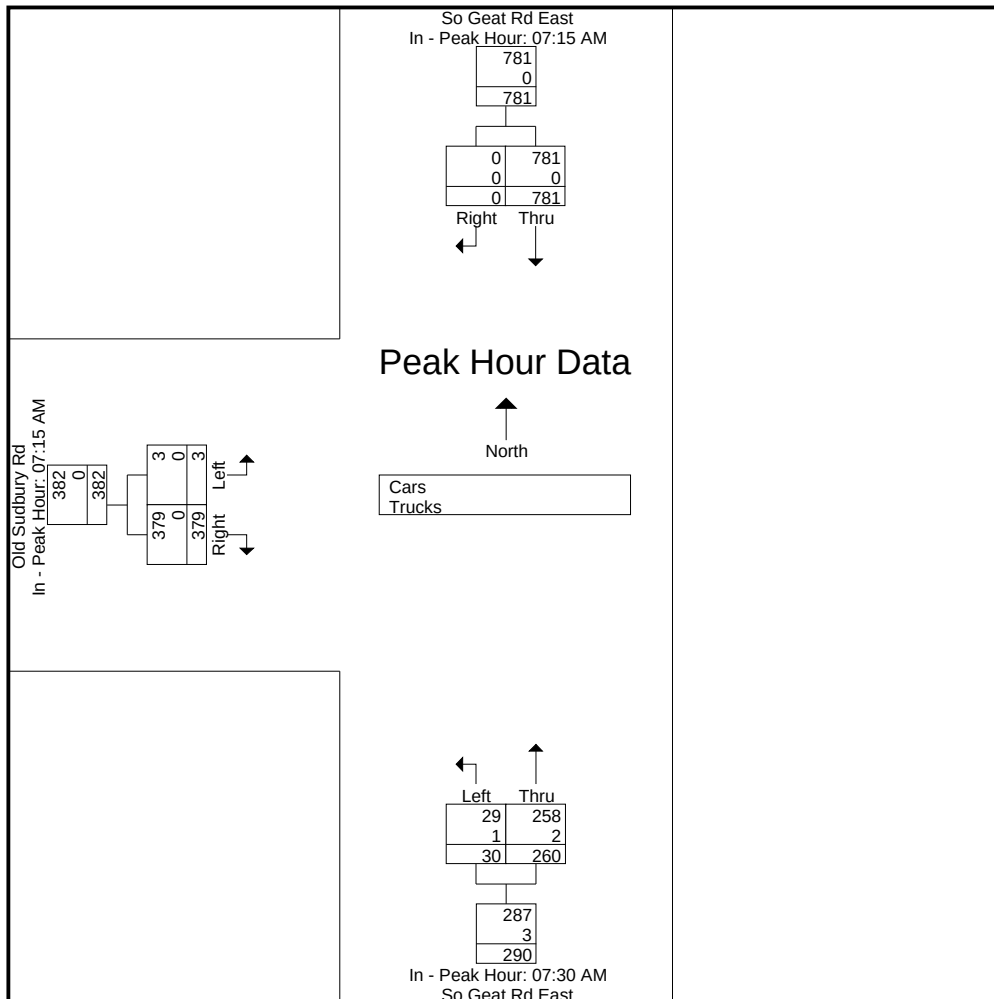
File Name : 62154005
 Site Code : 62154005
 Start Date : 4/27/2016
 Page No : 3

	So Geat Rd East From North			So Geat Rd East From South			Old Sudbury Rd From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total

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

Peak Hour for Each Approach Begins at:

	07:15 AM			07:30 AM			07:15 AM		
+0 mins.	204	0	204	9	65	74	1	86	87
+15 mins.	176	0	176	8	70	78	0	99	99
+30 mins.	192	0	192	8	64	72	1	102	103
+45 mins.	209	0	209	5	61	66	1	92	93
Total Volume	781	0	781	30	260	290	3	379	382
% App. Total	100	0		10.3	89.7		0.8	99.2	
PHF	.934	.000	.934	.833	.929	.929	.750	.929	.927
Cars	781	0	781	29	258	287	3	379	382
% Cars	100	0	100	96.7	99.2	99	100	100	100
Trucks	0	0	0	1	2	3	0	0	0
% Trucks	0	0	0	3.3	0.8	1	0	0	0



Accurate Counts

978-664-2565

N/S Street : South Great Rd East
 E/W Street: Old Sudbury Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154005
 Site Code : 62154005
 Start Date : 4/27/2016
 Page No : 4

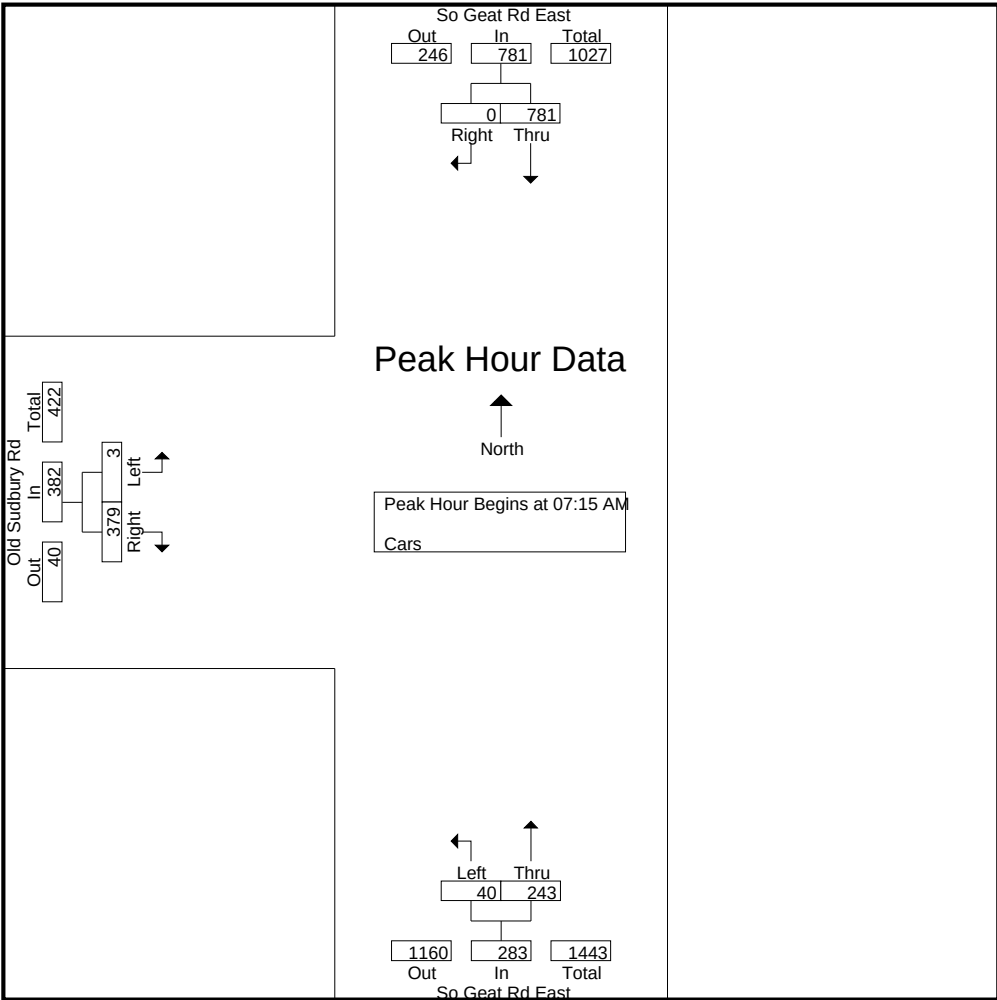
Groups Printed- Cars							
	So Geat Rd East From North		So Geat Rd East From South		Old Sudbury Rd From West		
Start Time	Thru	Right	Left	Thru	Left	Right	Int. Total
07:00 AM	202	0	9	33	0	79	323
07:15 AM	204	0	16	44	1	86	351
07:30 AM	176	0	8	65	0	99	348
07:45 AM	192	0	8	70	1	102	373
Total	774	0	41	212	2	366	1395
08:00 AM	209	0	8	64	1	92	374
08:15 AM	138	0	5	59	1	82	285
08:30 AM	172	0	6	64	4	94	340
08:45 AM	158	0	5	54	0	78	295
Total	677	0	24	241	6	346	1294
Grand Total	1451	0	65	453	8	712	2689
Apprch %	100	0	12.5	87.5	1.1	98.9	
Total %	54	0	2.4	16.8	0.3	26.5	

Accurate Counts
978-664-2565

N/S Street : South Great Rd East
E/W Street: Old Sudbury Road
City/State : Wayland, MA
Weather : Clear

File Name : 62154005
Site Code : 62154005
Start Date : 4/27/2016
Page No : 5

	So Geat Rd East From North			So Geat Rd East From South			Old Sudbury Rd From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	204	0	204	16	44	60	1	86	87	351
07:30 AM	176	0	176	8	65	73	0	99	99	348
07:45 AM	192	0	192	8	70	78	1	102	103	373
08:00 AM	209	0	209	8	64	72	1	92	93	374
Total Volume	781	0	781	40	243	283	3	379	382	1446
% App. Total	100	0		14.1	85.9		0.8	99.2		
PHF	.934	.000	.934	.625	.868	.907	.750	.929	.927	.967



Accurate Counts
978-664-2565

N/S Street : South Great Rd East
E/W Street: Old Sudbury Road
City/State : Wayland, MA
Weather : Clear

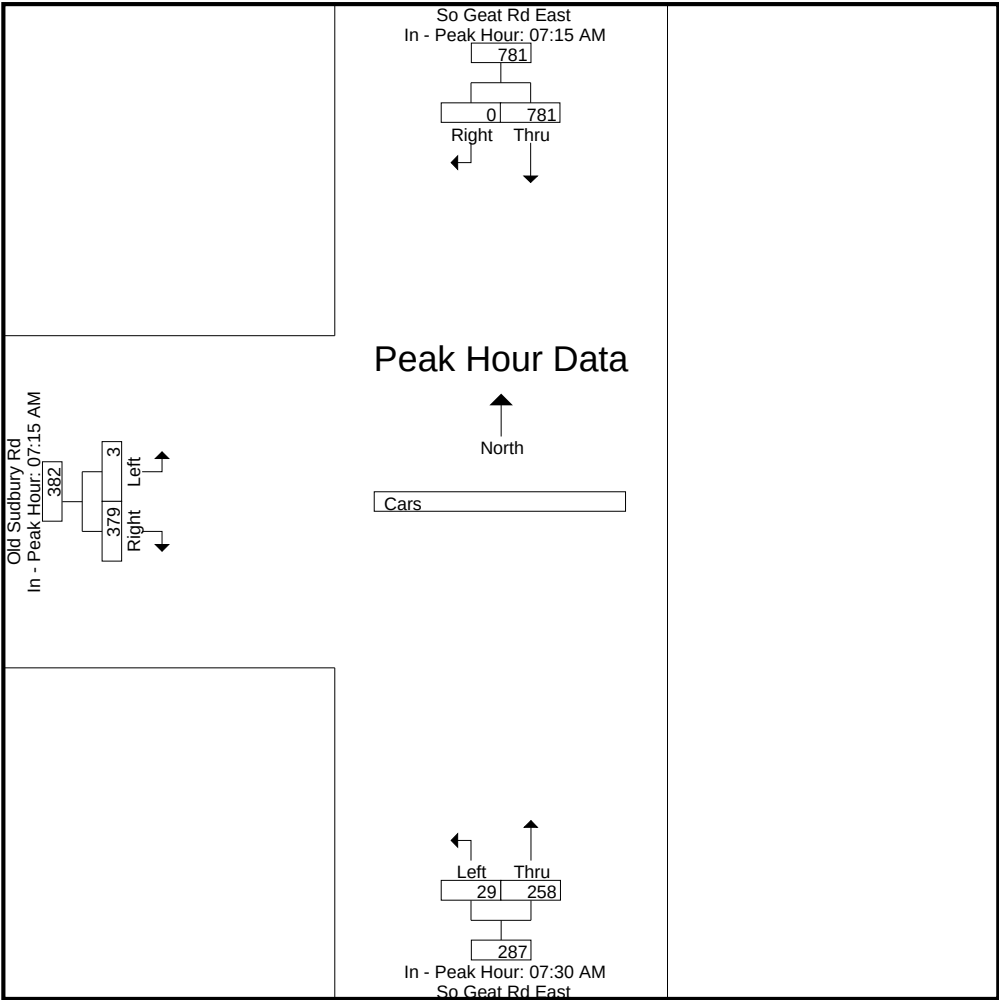
File Name : 62154005
Site Code : 62154005
Start Date : 4/27/2016
Page No : 6

	So Geat Rd East From North			So Geat Rd East From South			Old Sudbury Rd From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total

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

Peak Hour for Each Approach Begins at:

	07:15 AM			07:30 AM			07:15 AM		
+0 mins.	204	0	204	8	65	73	1	86	87
+15 mins.	176	0	176	8	70	78	0	99	99
+30 mins.	192	0	192	8	64	72	1	102	103
+45 mins.	209	0	209	5	59	64	1	92	93
Total Volume	781	0	781	29	258	287	3	379	382
% App. Total	100	0		10.1	89.9		0.8	99.2	
PHF	.934	.000	.934	.906	.921	.920	.750	.929	.927



Accurate Counts

978-664-2565

N/S Street : South Great Rd East
 E/W Street: Old Sudbury Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154005
 Site Code : 62154005
 Start Date : 4/27/2016
 Page No : 7

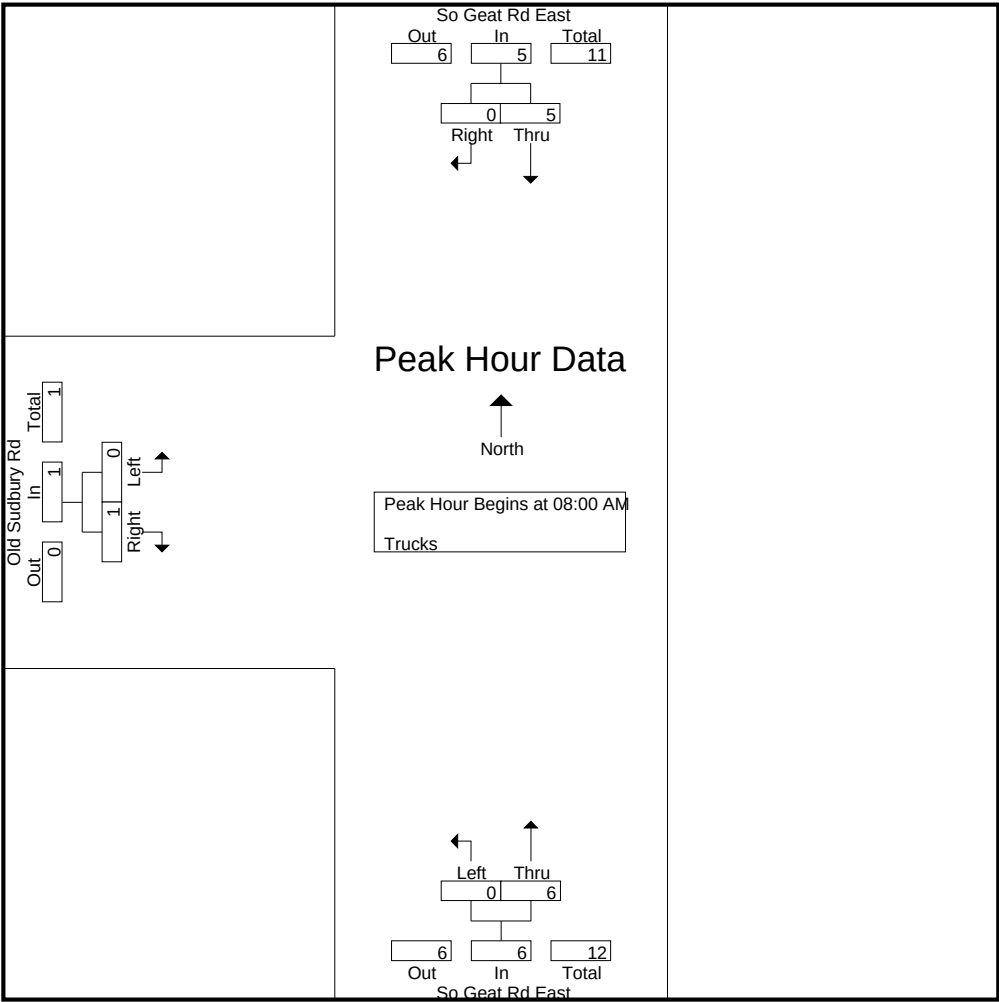
Groups Printed- Trucks							
	So Geat Rd East From North		So Geat Rd East From South		Old Sudbury Rd From West		
Start Time	Thru	Right	Left	Thru	Left	Right	Int. Total
07:00 AM	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0
07:30 AM	0	0	1	0	0	0	1
07:45 AM	0	0	0	0	0	0	0
Total	0	0	1	0	0	0	1
08:00 AM	0	0	0	0	0	0	0
08:15 AM	1	0	0	2	0	0	3
08:30 AM	3	0	0	2	0	1	6
08:45 AM	1	0	0	2	0	0	3
Total	5	0	0	6	0	1	12
Grand Total	5	0	1	6	0	1	13
Apprch %	100	0	14.3	85.7	0	100	
Total %	38.5	0	7.7	46.2	0	7.7	

Accurate Counts
978-664-2565

N/S Street : South Great Rd East
E/W Street: Old Sudbury Road
City/State : Wayland, MA
Weather : Clear

File Name : 62154005
Site Code : 62154005
Start Date : 4/27/2016
Page No : 8

	So Geat Rd East From North			So Geat Rd East From South			Old Sudbury Rd From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	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	0	0	0	0	0	0	0	0	0	0
08:15 AM	1	0	1	0	2	2	0	0	0	3
08:30 AM	3	0	3	0	2	2	0	1	1	6
08:45 AM	1	0	1	0	2	2	0	0	0	3
Total Volume	5	0	5	0	6	6	0	1	1	12
% App. Total	100	0		0	100		0	100		
PHF	.417	.000	.417	.000	.750	.750	.000	.250	.250	.500



Accurate Counts

978-664-2565

N/S Street : South Great Rd East
 E/W Street: Old Sudbury Road
 City/State : Wayland, MA
 Weather : Clear

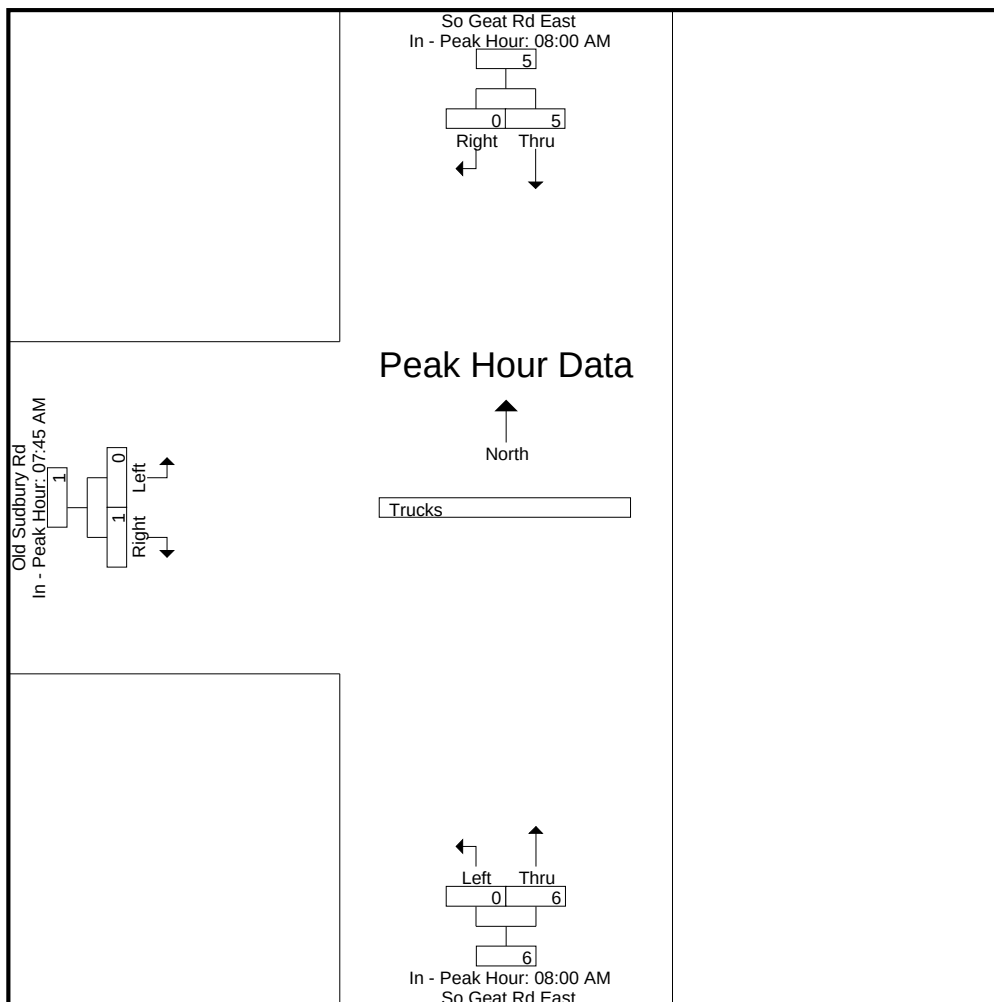
File Name : 62154005
 Site Code : 62154005
 Start Date : 4/27/2016
 Page No : 9

	So Geat Rd East From North			So Geat Rd East From South			Old Sudbury Rd From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total

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

Peak Hour for Each Approach Begins at:

	08:00 AM			08:00 AM			07:45 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	1	0	1	0	2	2	0	0	0
+30 mins.	3	0	3	0	2	2	0	0	0
+45 mins.	1	0	1	0	2	2	0	1	1
Total Volume	5	0	5	0	6	6	0	1	1
% App. Total	100	0		0	100		0	100	
PHF	.417	.000	.417	.000	.750	.750	.000	.250	.250



Accurate Counts

978-664-2565

N/S Street : South Great Rd East
 E/W Street: Old Sudbury Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154005
 Site Code : 62154005
 Start Date : 4/27/2016
 Page No : 10

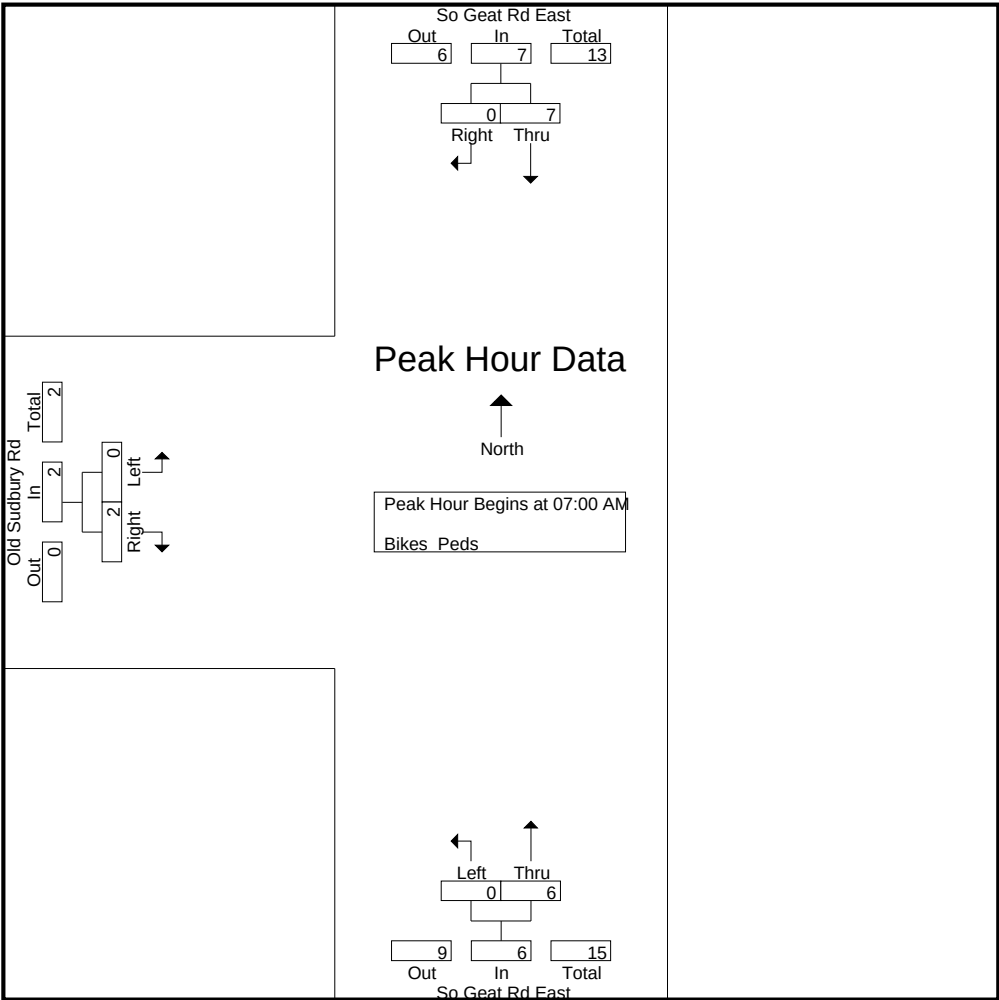
Groups Printed- Bikes Peds												
	So Geat Rd East From North			So Geat Rd East From South			Old Sudbury Rd From West					
Start Time	Thru	Right	Peds	Left	Thru	Peds	Left	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	3	0	0	0	2	0	0	1	0	0	6	6
07:15 AM	1	0	0	0	1	0	0	0	0	0	2	2
07:30 AM	1	0	0	0	2	0	0	1	0	0	4	4
07:45 AM	2	0	0	0	1	0	0	0	0	0	3	3
Total	7	0	0	0	6	0	0	2	0	0	15	15
08:00 AM	2	0	0	0	0	0	0	0	0	0	2	2
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	0	0	0	0	0	0	0	0	0	2	2
Grand Total	9	0	0	0	6	0	0	2	0	0	17	17
Apprch %	100	0		0	100		0	100				
Total %	52.9	0		0	35.3		0	11.8		0	100	

Accurate Counts
978-664-2565

N/S Street : South Great Rd East
E/W Street: Old Sudbury Road
City/State : Wayland, MA
Weather : Clear

File Name : 62154005
Site Code : 62154005
Start Date : 4/27/2016
Page No : 11

	So Geat Rd East From North			So Geat Rd East From South			Old Sudbury Rd From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	3	0	3	0	2	2	0	1	1	6
07:15 AM	1	0	1	0	1	1	0	0	0	2
07:30 AM	1	0	1	0	2	2	0	1	1	4
07:45 AM	2	0	2	0	1	1	0	0	0	3
Total Volume	7	0	7	0	6	6	0	2	2	15
% App. Total	100	0		0	100		0	100		
PHF	.583	.000	.583	.000	.750	.750	.000	.500	.500	.625



Accurate Counts
978-664-2565

N/S Street : South Great Rd East
E/W Street: Old Sudbury Road
City/State : Wayland, MA
Weather : Clear

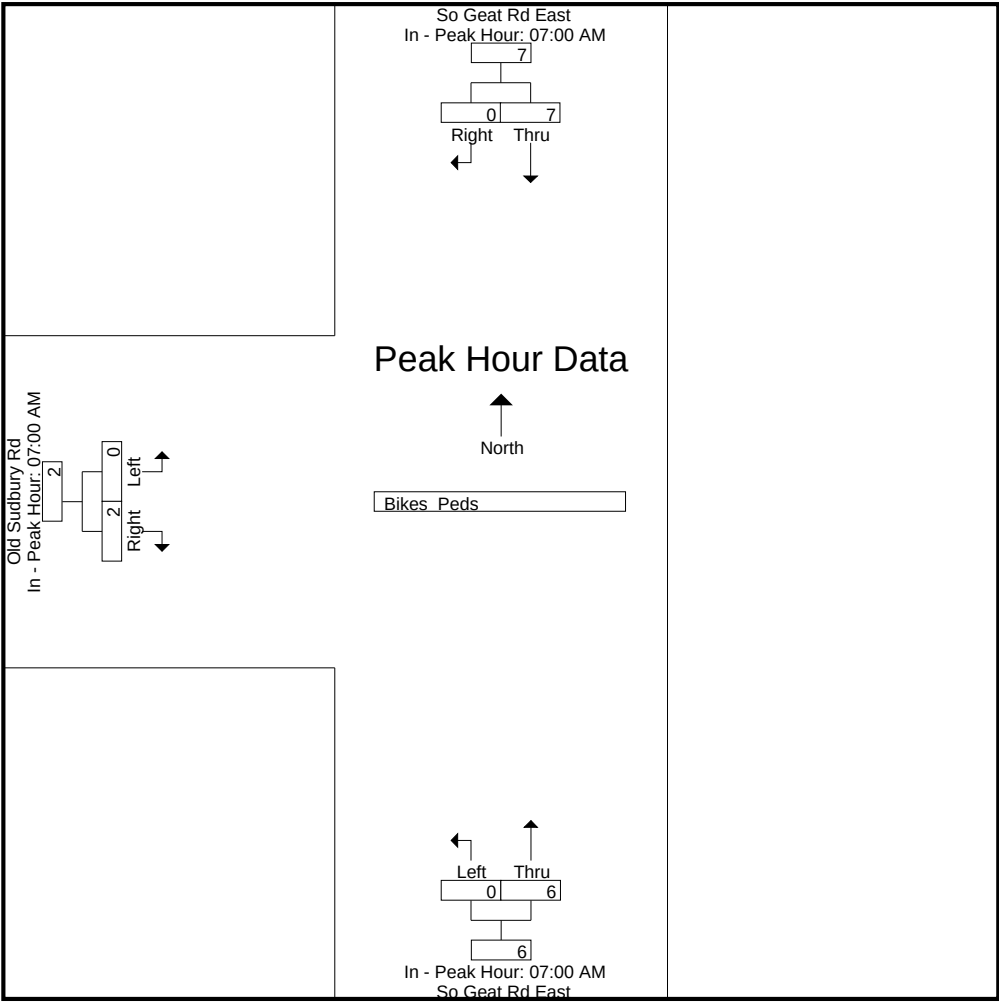
File Name : 62154005
Site Code : 62154005
Start Date : 4/27/2016
Page No : 12

	So Geat Rd East From North			So Geat Rd East From South			Old Sudbury Rd From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total

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

Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	3	0	3	0	2	2	0	1	1
+15 mins.	1	0	1	0	1	1	0	0	0
+30 mins.	1	0	1	0	2	2	0	1	1
+45 mins.	2	0	2	0	1	1	0	0	0
Total Volume	7	0	7	0	6	6	0	2	2
% App. Total	100	0		0	100		0	100	
PHF	.583	.000	.583	.000	.750	.750	.000	.500	.500



Accurate Counts

978-664-2565

N/S Street : South Great Rd East
 E/W Street: Old Sudbury Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154005
 Site Code : 62154005
 Start Date : 4/27/2016
 Page No : 1

Groups Printed- Cars - Trucks

	So Geat Rd East From North		So Geat Rd East From South		Old Sudbury Rd From West		
Start Time	Thru	Right	Left	Thru	Left	Right	Int. Total
02:00 PM	58	0	8	85	2	10	163
02:15 PM	62	0	14	77	1	7	161
02:30 PM	62	0	7	85	0	8	162
02:45 PM	57	0	13	95	1	3	169
Total	239	0	42	342	4	28	655
03:00 PM	69	0	15	135	1	10	230
03:15 PM	63	0	15	109	1	7	195
03:30 PM	64	0	20	154	1	8	247
03:45 PM	98	0	38	183	0	8	327
Total	294	0	88	581	3	33	999
04:00 PM	78	1	32	176	1	5	293
04:15 PM	77	0	32	204	2	11	326
04:30 PM	71	1	40	165	0	9	286
04:45 PM	79	1	47	185	2	8	322
Total	305	3	151	730	5	33	1227
05:00 PM	80	1	54	226	0	11	372
05:15 PM	102	0	67	227	2	12	410
05:30 PM	124	1	59	205	0	6	395
05:45 PM	80	0	43	151	2	3	279
Total	386	2	223	809	4	32	1456
Grand Total	1224	5	504	2462	16	126	4337
Apprch %	99.6	0.4	17	83	11.3	88.7	
Total %	28.2	0.1	11.6	56.8	0.4	2.9	
Cars	1217	5	504	2455	16	126	4323
% Cars	99.4	100	100	99.7	100	100	99.7
Trucks	7	0	0	7	0	0	14
% Trucks	0.6	0	0	0.3	0	0	0.3

Accurate Counts
978-664-2565

Accurate Counts

978-664-2565

N/S Street : South Great Rd East
 E/W Street: Old Sudbury Road
 City/State : Wayland, MA
 Weather : Clear

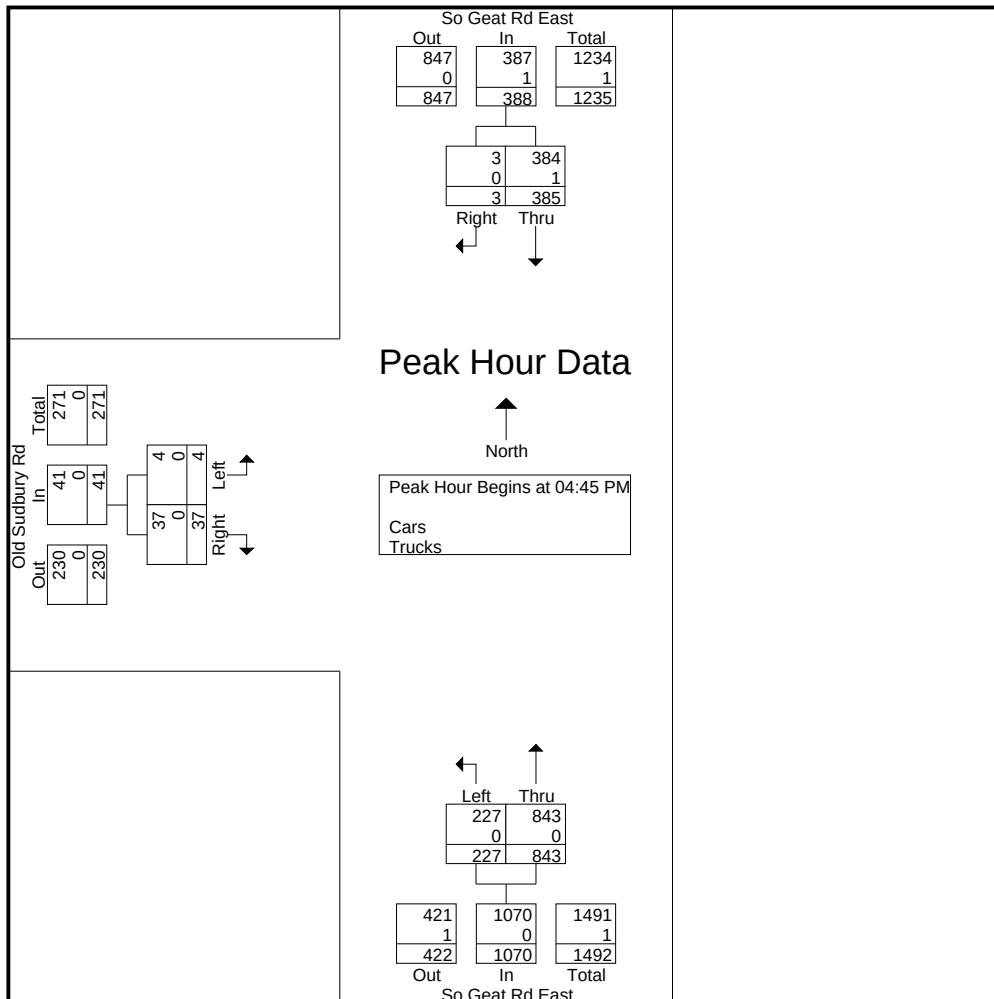
File Name : 62154005
 Site Code : 62154005
 Start Date : 4/27/2016
 Page No : 3

	So Geat Rd East From North			So Geat Rd East From South			Old Sudbury Rd From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:45 PM

04:45 PM	79	1	80	47	185	232	2	8	10	322
05:00 PM	80	1	81	54	226	280	0	11	11	372
05:15 PM	102	0	102	67	227	294	2	12	14	410
05:30 PM	124	1	125	59	205	264	0	6	6	395
Total Volume	385	3	388	227	843	1070	4	37	41	1499
% App. Total	99.2	0.8		21.2	78.8		9.8	90.2		
PHF	.776	.750	.776	.847	.928	.910	.500	.771	.732	.914
Cars	384	3	387	227	843	1070	4	37	41	1498
% Cars	99.7	100	99.7	100	100	100	100	100	100	99.9
Trucks	1	0	1	0	0	0	0	0	0	1
% Trucks	0.3	0	0.3	0	0	0	0	0	0	0.1



Accurate Counts

978-664-2565

N/S Street : South Great Rd East
 E/W Street: Old Sudbury Road
 City/State : Wayland, MA
 Weather : Clear

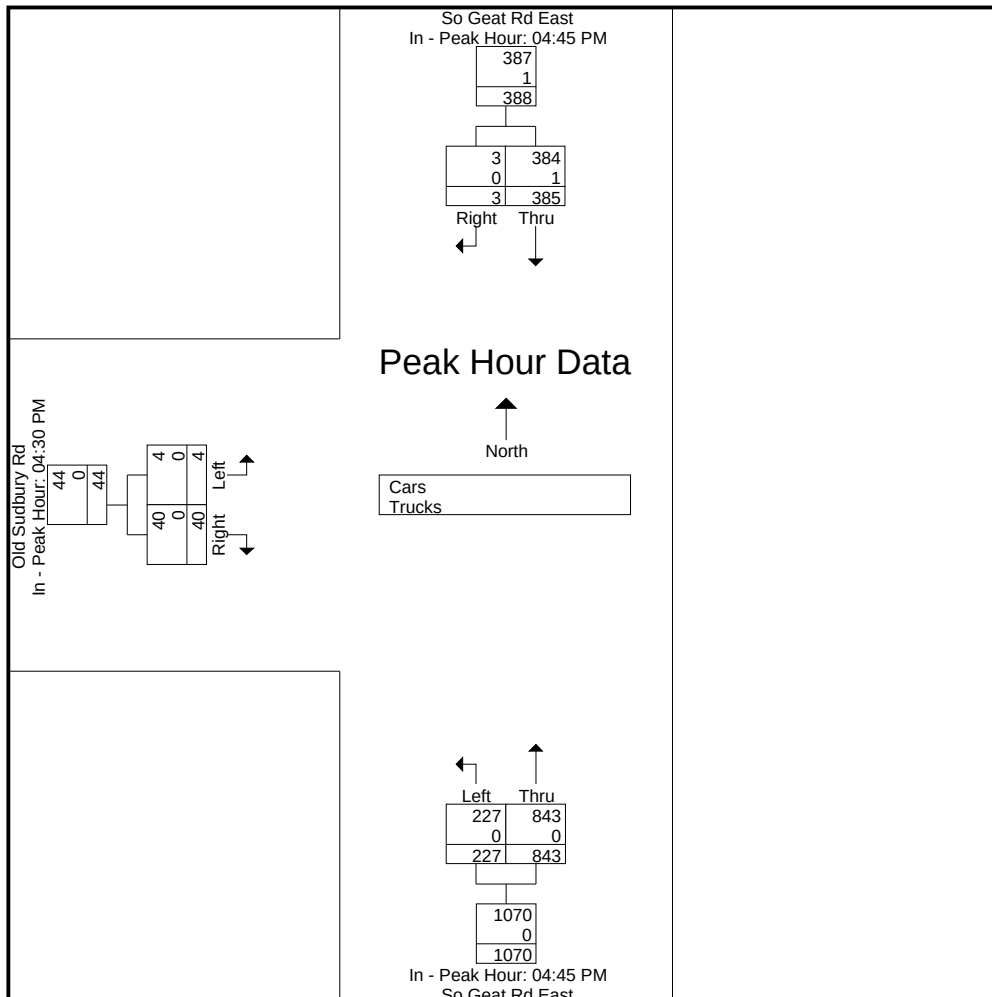
File Name : 62154005
 Site Code : 62154005
 Start Date : 4/27/2016
 Page No : 4

	So Geat Rd East From North			So Geat Rd East From South			Old Sudbury Rd From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM			04:45 PM			04:30 PM		
+0 mins.	79	1	80	47	185	232	0	9	9
+15 mins.	80	1	81	54	226	280	2	8	10
+30 mins.	102	0	102	67	227	294	0	11	11
+45 mins.	124	1	125	59	205	264	2	12	14
Total Volume	385	3	388	227	843	1070	4	40	44
% App. Total	99.2	0.8		21.2	78.8		9.1	90.9	
PHF	.776	.750	.776	.847	.928	.910	.500	.833	.786
Cars	384	3	387	227	843	1070	4	40	44
% Cars	99.7	100	99.7	100	100	100	100	100	100
Trucks	1	0	1	0	0	0	0	0	0
% Trucks	0.3	0	0.3	0	0	0	0	0	0



Accurate Counts

978-664-2565

N/S Street : South Great Rd East
 E/W Street: Old Sudbury Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154005
 Site Code : 62154005
 Start Date : 4/27/2016
 Page No : 5

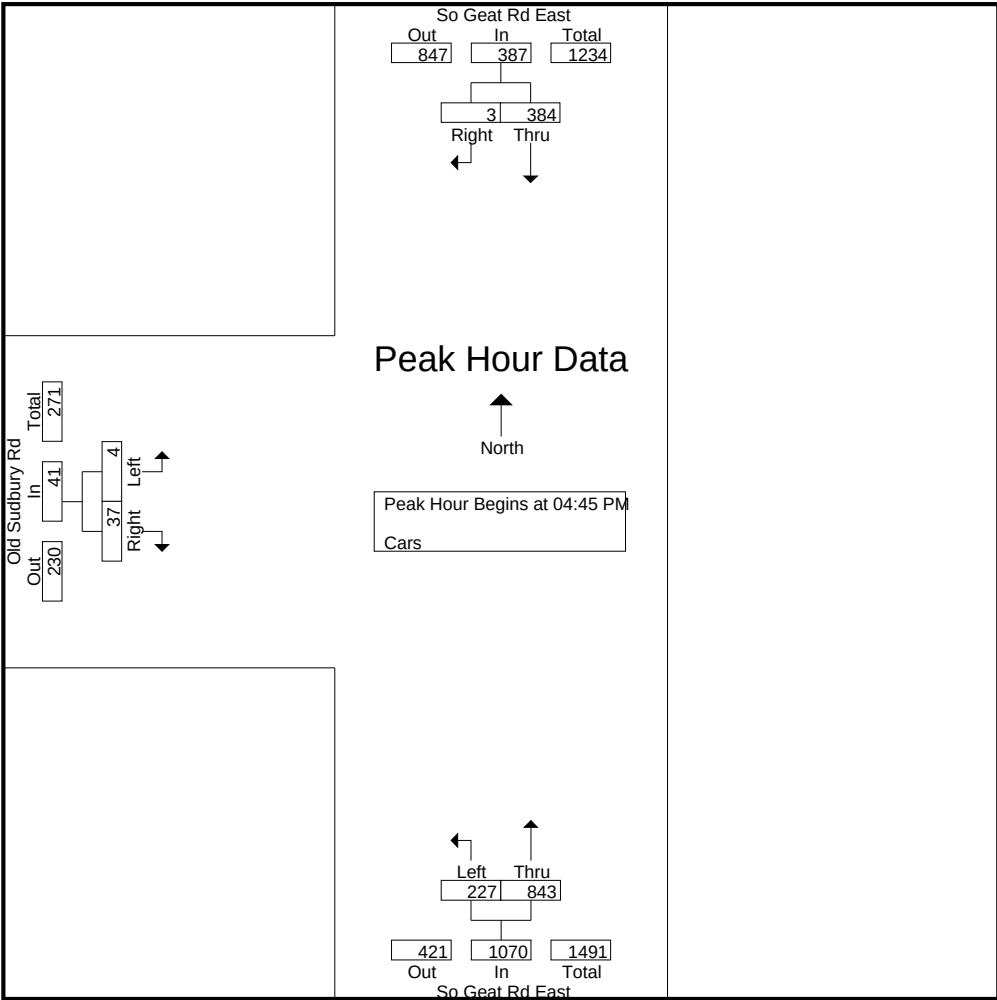
Groups Printed- Cars							
	So Geat Rd East From North		So Geat Rd East From South		Old Sudbury Rd From West		
Start Time	Thru	Right	Left	Thru	Left	Right	Int. Total
02:00 PM	56	0	8	83	2	10	159
02:15 PM	62	0	14	77	1	7	161
02:30 PM	62	0	7	85	0	8	162
02:45 PM	55	0	13	94	1	3	166
Total	235	0	42	339	4	28	648
03:00 PM	67	0	15	133	1	10	226
03:15 PM	63	0	15	109	1	7	195
03:30 PM	64	0	20	154	1	8	247
03:45 PM	98	0	38	183	0	8	327
Total	292	0	88	579	3	33	995
04:00 PM	78	1	32	174	1	5	291
04:15 PM	77	0	32	204	2	11	326
04:30 PM	71	1	40	165	0	9	286
04:45 PM	78	1	47	185	2	8	321
Total	304	3	151	728	5	33	1224
05:00 PM	80	1	54	226	0	11	372
05:15 PM	102	0	67	227	2	12	410
05:30 PM	124	1	59	205	0	6	395
05:45 PM	80	0	43	151	2	3	279
Total	386	2	223	809	4	32	1456
Grand Total	1217	5	504	2455	16	126	4323
Apprch %	99.6	0.4	17	83	11.3	88.7	
Total %	28.2	0.1	11.7	56.8	0.4	2.9	

Accurate Counts
978-664-2565

N/S Street : South Great Rd East
E/W Street: Old Sudbury Road
City/State : Wayland, MA
Weather : Clear

File Name : 62154005
Site Code : 62154005
Start Date : 4/27/2016
Page No : 6

	So Geat Rd East From North			So Geat Rd East From South			Old Sudbury Rd From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	78	1	79	47	185	232	2	8	10	321
05:00 PM	80	1	81	54	226	280	0	11	11	372
05:15 PM	102	0	102	67	227	294	2	12	14	410
05:30 PM	124	1	125	59	205	264	0	6	6	395
Total Volume	384	3	387	227	843	1070	4	37	41	1498
% App. Total	99.2	0.8		21.2	78.8		9.8	90.2		
PHF	.774	.750	.774	.847	.928	.910	.500	.771	.732	.913



Accurate Counts

978-664-2565

N/S Street : South Great Rd East
 E/W Street: Old Sudbury Road
 City/State : Wayland, MA
 Weather : Clear

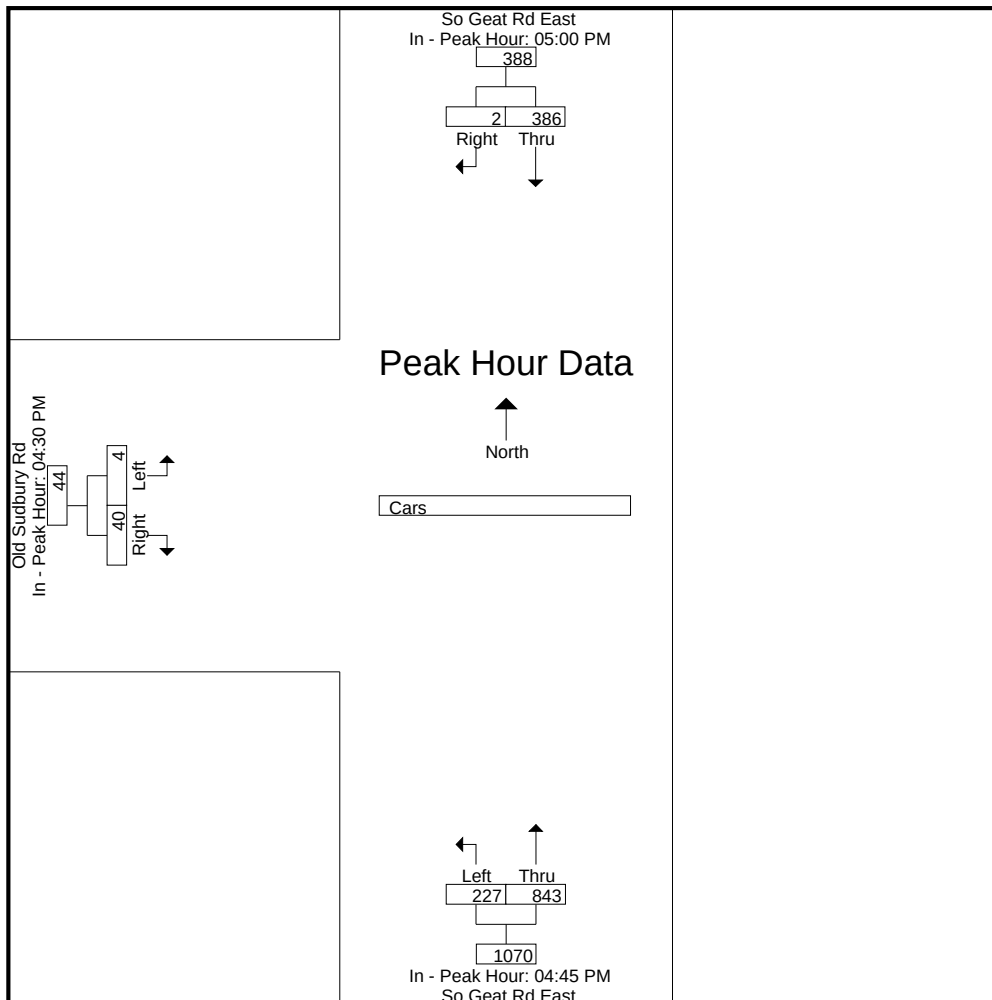
File Name : 62154005
 Site Code : 62154005
 Start Date : 4/27/2016
 Page No : 7

	So Geat Rd East From North			So Geat Rd East From South			Old Sudbury Rd From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM			04:45 PM			04:30 PM		
+0 mins.	80	1	81	47	185	232	0	9	9
+15 mins.	102	0	102	54	226	280	2	8	10
+30 mins.	124	1	125	67	227	294	0	11	11
+45 mins.	80	0	80	59	205	264	2	12	14
Total Volume	386	2	388	227	843	1070	4	40	44
% App. Total	99.5	0.5		21.2	78.8		9.1	90.9	
PHF	.778	.500	.776	.847	.928	.910	.500	.833	.786



Accurate Counts

978-664-2565

N/S Street : South Great Rd East
 E/W Street: Old Sudbury Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154005
 Site Code : 62154005
 Start Date : 4/27/2016
 Page No : 8

Groups Printed- Trucks

	So Geat Rd East From North		So Geat Rd East From South		Old Sudbury Rd From West		
Start Time	Thru	Right	Left	Thru	Left	Right	Int. Total
02:00 PM	2	0	0	2	0	0	4
02:15 PM	0	0	0	0	0	0	0
02:30 PM	0	0	0	0	0	0	0
02:45 PM	2	0	0	1	0	0	3
Total	4	0	0	3	0	0	7
03:00 PM	2	0	0	2	0	0	4
03:15 PM	0	0	0	0	0	0	0
03:30 PM	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0
Total	2	0	0	2	0	0	4
04:00 PM	0	0	0	2	0	0	2
04:15 PM	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0
04:45 PM	1	0	0	0	0	0	1
Total	1	0	0	2	0	0	3
05:00 PM	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
Grand Total	7	0	0	7	0	0	14
Apprch %	100	0	0	100	0	0	
Total %	50	0	0	50	0	0	

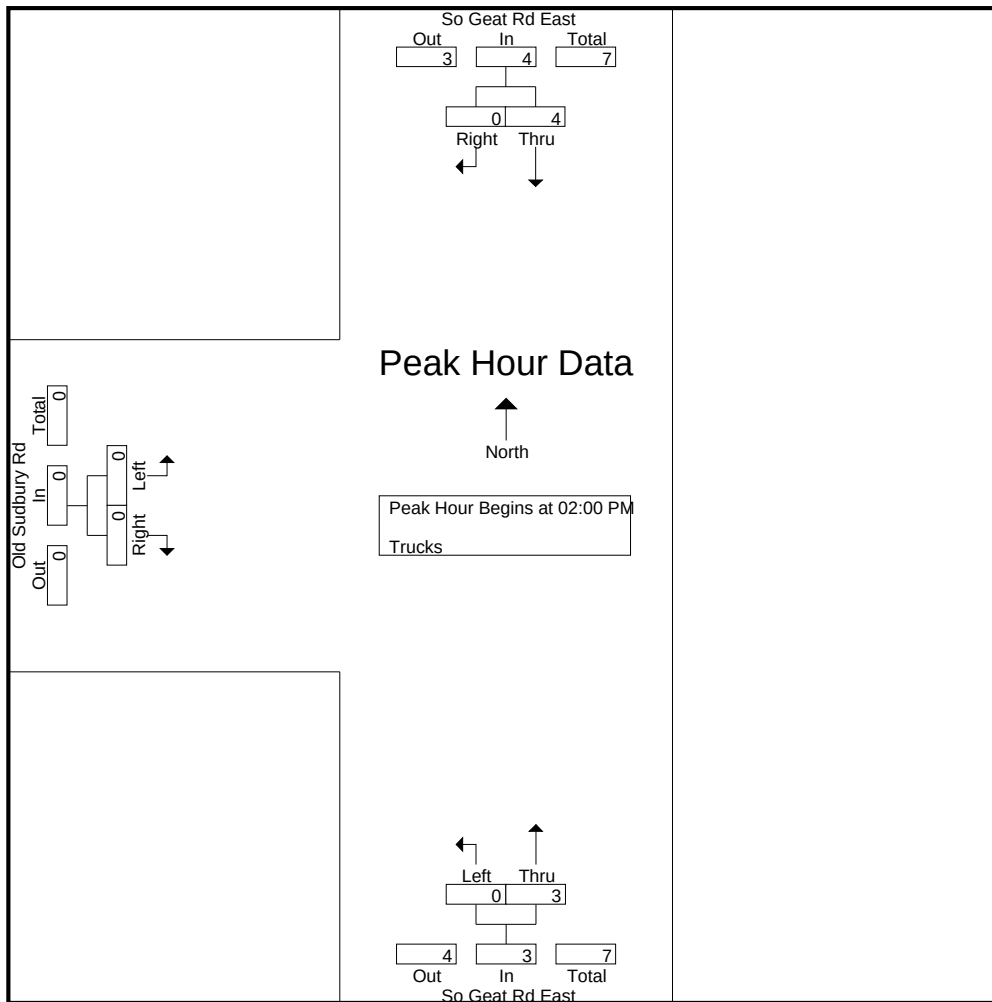
Accurate Counts

978-664-2565

N/S Street : South Great Rd East
 E/W Street: Old Sudbury Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154005
 Site Code : 62154005
 Start Date : 4/27/2016
 Page No : 9

	So Geat Rd East From North			So Geat Rd East From South			Old Sudbury Rd From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 02:00 PM										
02:00 PM	2	0	2	0	2	2	0	0	0	4
02:15 PM	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	0	0	0	0	0	0	0	0	0
02:45 PM	2	0	2	0	1	1	0	0	0	3
Total Volume	4	0	4	0	3	3	0	0	0	7
% App. Total	100	0		0	100		0	0		
PHF	.500	.000	.500	.000	.375	.375	.000	.000	.000	.438



Accurate Counts

978-664-2565

N/S Street : South Great Rd East
 E/W Street: Old Sudbury Road
 City/State : Wayland, MA
 Weather : Clear

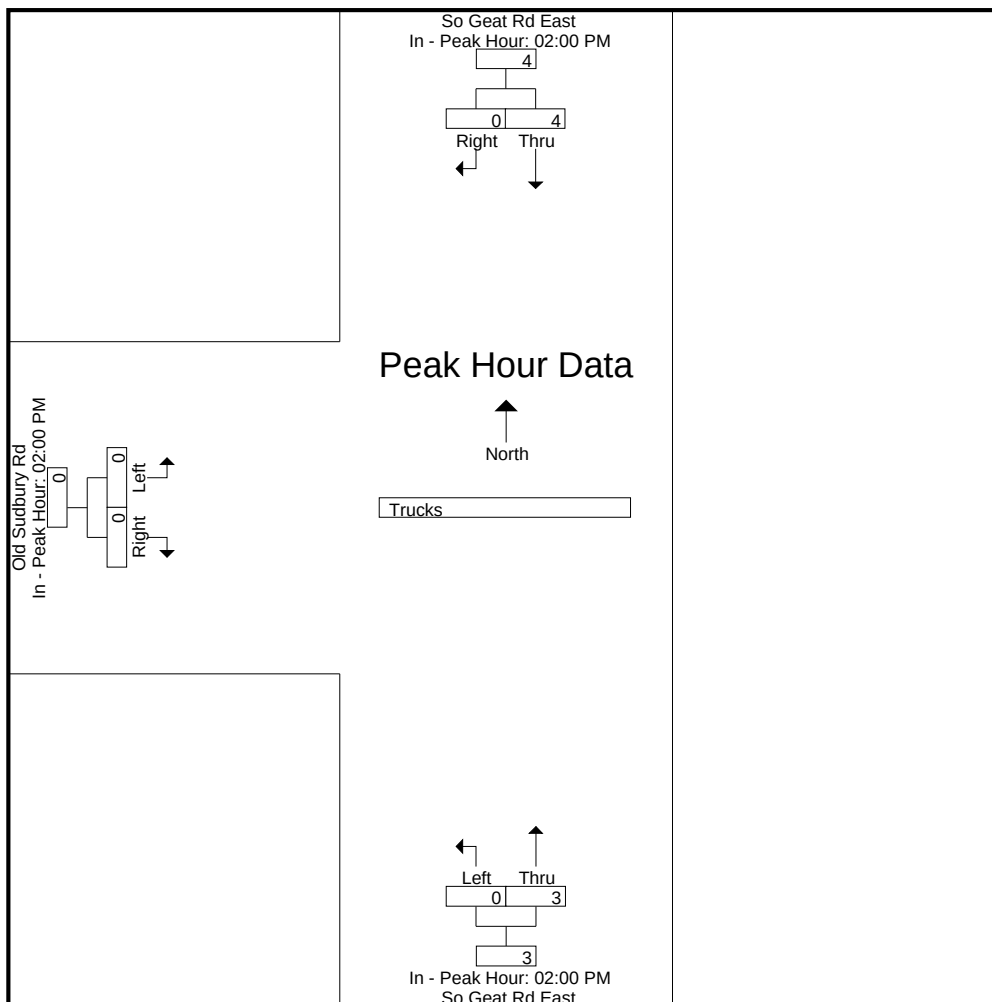
File Name : 62154005
 Site Code : 62154005
 Start Date : 4/27/2016
 Page No : 10

	So Geat Rd East From North			So Geat Rd East From South			Old Sudbury Rd From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:00 PM			02:00 PM			02:00 PM		
+0 mins.	2	0	2	0	2	2	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	2	0	2	0	1	1	0	0	0
Total Volume	4	0	4	0	3	3	0	0	0
% App. Total	100	0		0	100		0	0	
PHF	.500	.000	.500	.000	.375	.375	.000	.000	.000



Accurate Counts

978-664-2565

N/S Street : South Great Rd East
 E/W Street: Old Sudbury Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154005
 Site Code : 62154005
 Start Date : 4/27/2016
 Page No : 11

Groups Printed- Bikes Peds

	So Geat Rd East From North			So Geat Rd East From South			Old Sudbury Rd From West					
Start Time	Thru	Right	Peds	Left	Thru	Peds	Left	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
02:15 PM	0	0	0	0	1	0	0	0	0	0	1	1
02:30 PM	2	0	0	0	0	0	0	1	0	0	3	3
02:45 PM	2	0	0	0	3	0	0	0	0	0	5	5
Total	4	0	0	0	4	0	0	1	0	0	9	9
03:00 PM	1	0	0	1	0	0	0	0	0	0	2	2
03:15 PM	1	0	0	0	2	0	0	0	0	0	3	3
03:30 PM	2	0	0	1	2	0	0	1	0	0	6	6
03:45 PM	0	0	0	0	0	0	0	1	0	0	1	1
Total	4	0	0	2	4	0	0	2	0	0	12	12
04:00 PM	1	0	0	0	1	0	0	1	0	0	3	3
04:15 PM	1	0	0	0	1	0	0	0	0	0	2	2
04:30 PM	6	0	0	0	2	0	0	0	0	0	8	8
04:45 PM	4	0	0	0	0	0	0	0	0	0	4	4
Total	12	0	0	0	4	0	0	1	0	0	17	17
05:00 PM	0	0	0	0	2	0	0	0	0	0	2	2
05:15 PM	3	0	0	1	3	0	0	0	0	0	7	7
05:30 PM	1	0	0	0	1	0	0	1	0	0	3	3
05:45 PM	1	0	0	0	0	0	0	0	0	0	1	1
Total	5	0	0	1	6	0	0	1	0	0	13	13
Grand Total	25	0	0	3	18	0	0	5	0	0	51	51
Apprch %	100	0		14.3	85.7		0	100				
Total %	49	0		5.9	35.3		0	9.8		0	100	

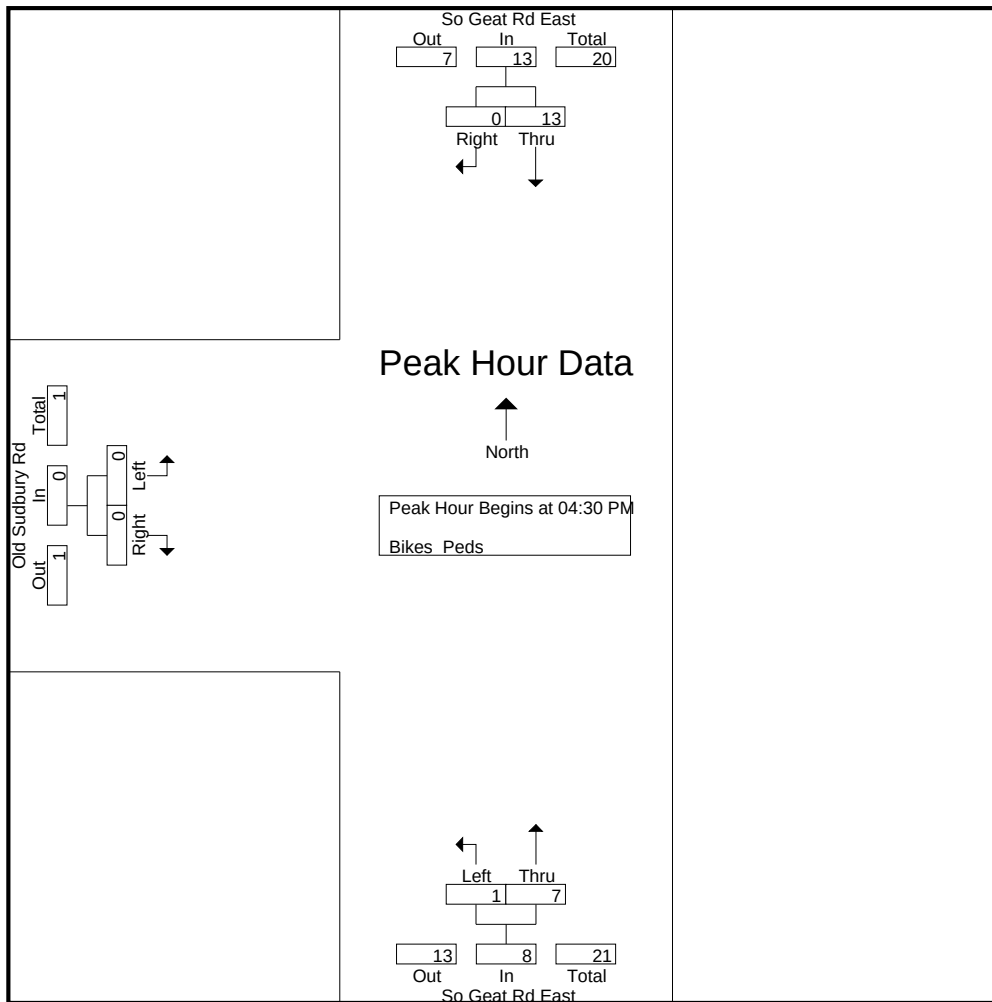
Accurate Counts

978-664-2565

N/S Street : South Great Rd East
 E/W Street: Old Sudbury Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154005
 Site Code : 62154005
 Start Date : 4/27/2016
 Page No : 12

	So Geat Rd East From North			So Geat Rd East From South			Old Sudbury Rd From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	6	0	6	0	2	2	0	0	0	8
04:45 PM	4	0	4	0	0	0	0	0	0	4
05:00 PM	0	0	0	0	2	2	0	0	0	2
05:15 PM	3	0	3	1	3	4	0	0	0	7
Total Volume	13	0	13	1	7	8	0	0	0	21
% App. Total	100	0		12.5	87.5		0	0		
PHF	.542	.000	.542	.250	.583	.500	.000	.000	.000	.656



Accurate Counts

978-664-2565

N/S Street : South Great Rd East
 E/W Street: Old Sudbury Road
 City/State : Wayland, MA
 Weather : Clear

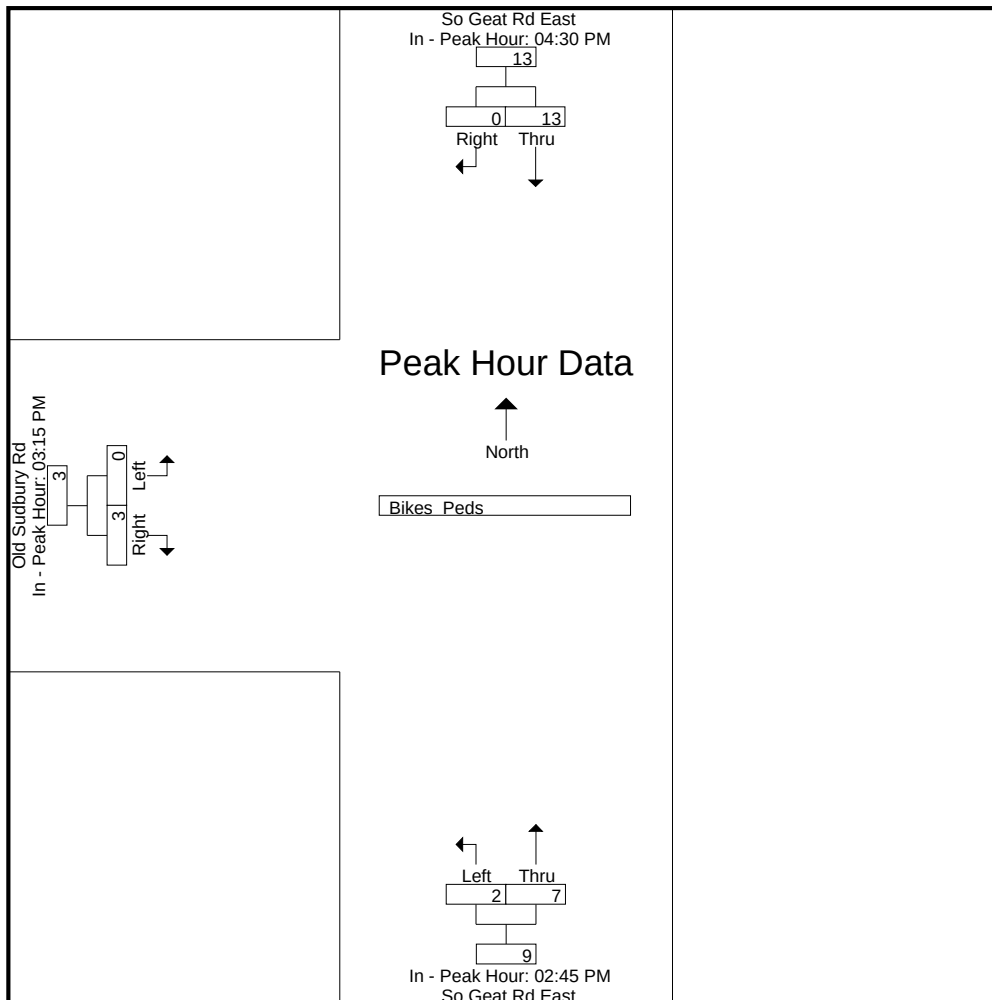
File Name : 62154005
 Site Code : 62154005
 Start Date : 4/27/2016
 Page No : 13

	So Geat Rd East From North			So Geat Rd East From South			Old Sudbury Rd From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:30 PM			02:45 PM			03:15 PM		
+0 mins.	6	0	6	0	3	3	0	0	0
+15 mins.	4	0	4	1	0	1	0	1	1
+30 mins.	0	0	0	0	2	2	0	1	1
+45 mins.	3	0	3	1	2	3	0	1	1
Total Volume	13	0	13	2	7	9	0	3	3
% App. Total	100	0		22.2	77.8		0	100	
PHF	.542	.000	.542	.500	.583	.750	.000	.750	.750



Accurate Counts

978-664-2565

N/S Street : South Great Rd West
 E/W Street: Old Sudbury Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154006
 Site Code : 62154006
 Start Date : 4/27/2016
 Page No : 1

Groups Printed- Cars - Trucks

	So Great Rd West From North		Old Sudbury Rd From East		Old Sudbury Rd From West		
Start Time	Left	Right	Thru	Right	Left	Thru	Int. Total
07:00 AM	0	0	10	0	0	84	94
07:15 AM	0	2	14	0	0	89	105
07:30 AM	0	0	11	0	0	95	106
07:45 AM	0	3	7	0	0	99	109
Total	0	5	42	0	0	367	414
08:00 AM	0	0	8	0	0	99	107
08:15 AM	0	1	3	0	0	89	93
08:30 AM	0	0	6	0	0	91	97
08:45 AM	0	1	5	0	0	76	82
Total	0	2	22	0	0	355	379
Grand Total	0	7	64	0	0	722	793
Apprch %	0	100	100	0	0	100	
Total %	0	0.9	8.1	0	0	91	
Cars	0	7	63	0	0	720	790
% Cars	0	100	98.4	0	0	99.7	99.6
Trucks	0	0	1	0	0	2	3
% Trucks	0	0	1.6	0	0	0.3	0.4

Accurate Counts

978-664-2565

N/S Street : South Great Rd West
 E/W Street: Old Sudbury Road
 City/State : Wayland, MA
 Weather : Clear

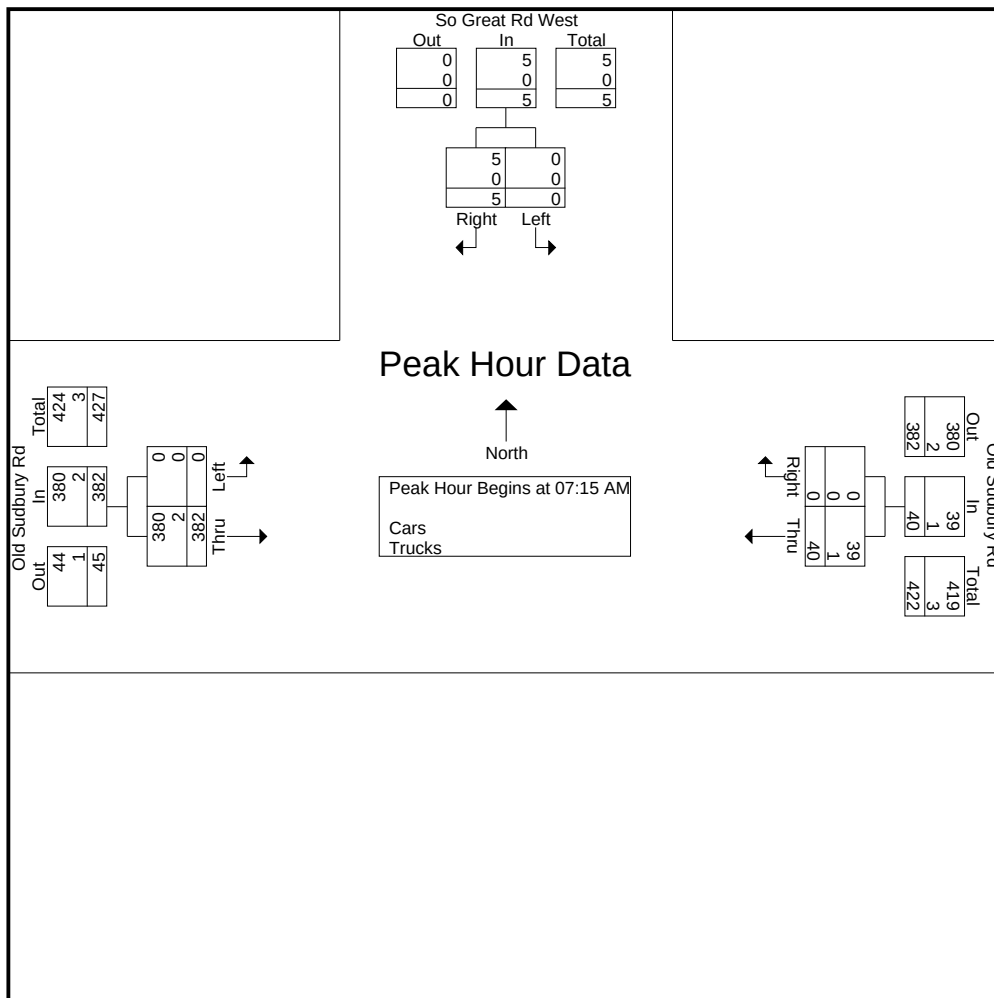
File Name : 62154006
 Site Code : 62154006
 Start Date : 4/27/2016
 Page No : 2

	So Great Rd West From North			Old Sudbury Rd From East			Old Sudbury Rd From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total

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

Peak Hour for Entire Intersection Begins at 07:15 AM

07:15 AM	0	2	2	14	0	14	0	89	89	105
07:30 AM	0	0	0	11	0	11	0	95	95	106
07:45 AM	0	3	3	7	0	7	0	99	99	109
08:00 AM	0	0	0	8	0	8	0	99	99	107
Total Volume	0	5	5	40	0	40	0	382	382	427
% App. Total	0	100		100	0		0	100		
PHF	.000	.417	.417	.714	.000	.714	.000	.965	.965	.979
Cars	0	5	5	39	0	39	0	380	380	424
% Cars	0	100	100	97.5	0	97.5	0	99.5	99.5	99.3
Trucks	0	0	0	1	0	1	0	2	2	3
% Trucks	0	0	0	2.5	0	2.5	0	0.5	0.5	0.7



Accurate Counts

978-664-2565

N/S Street : South Great Rd West
 E/W Street: Old Sudbury Road
 City/State : Wayland, MA
 Weather : Clear

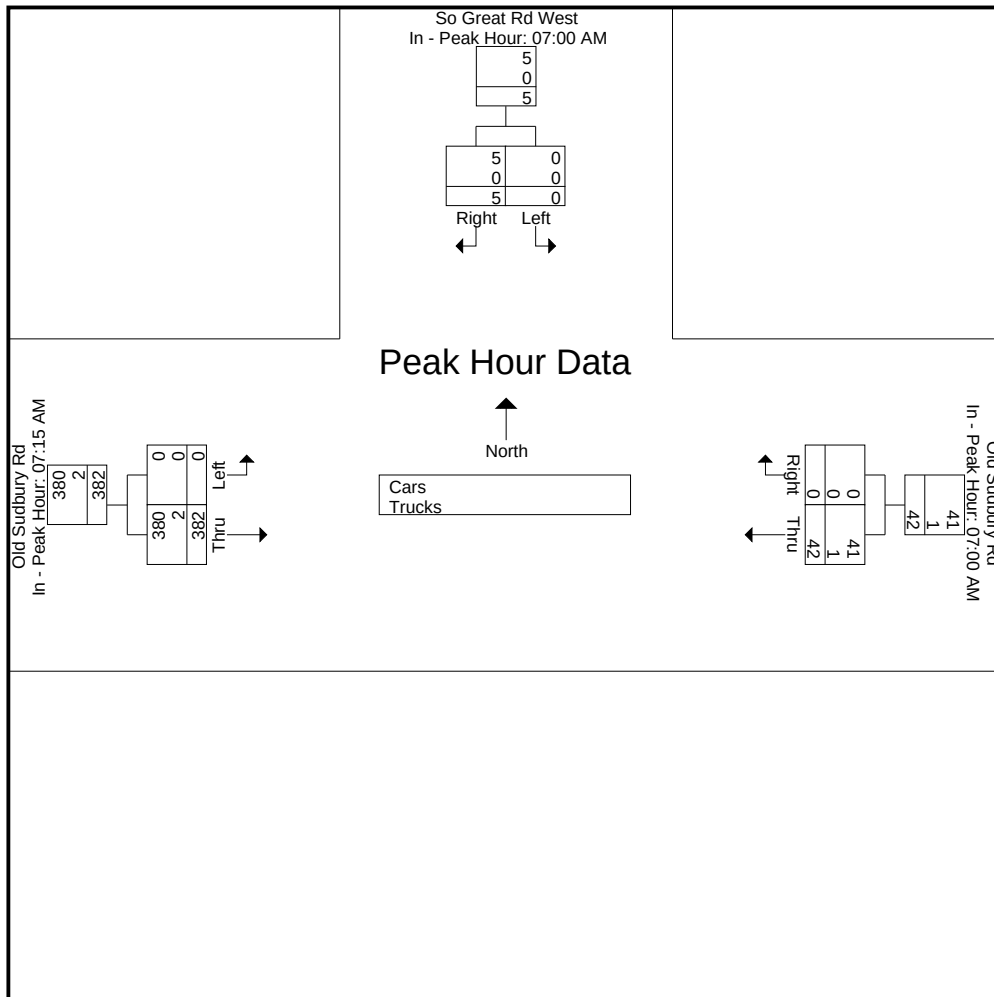
File Name : 62154006
 Site Code : 62154006
 Start Date : 4/27/2016
 Page No : 3

	So Great Rd West From North			Old Sudbury Rd From East			Old Sudbury Rd From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total

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

Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:15 AM		
+0 mins.	0	0	0	10	0	10	0	89	89
+15 mins.	0	2	2	14	0	14	0	95	95
+30 mins.	0	0	0	11	0	11	0	99	99
+45 mins.	0	3	3	7	0	7	0	99	99
Total Volume	0	5	5	42	0	42	0	382	382
% App. Total	0	100		100	0		0	100	
PHF	.000	.417	.417	.750	.000	.750	.000	.965	.965
Cars	0	5	5	41	0	41	0	380	380
% Cars	0	100	100	97.6	0	97.6	0	99.5	99.5
Trucks	0	0	0	1	0	1	0	2	2
% Trucks	0	0	0	2.4	0	2.4	0	0.5	0.5



Accurate Counts

978-664-2565

N/S Street : South Great Rd West
 E/W Street: Old Sudbury Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154006
 Site Code : 62154006
 Start Date : 4/27/2016
 Page No : 4

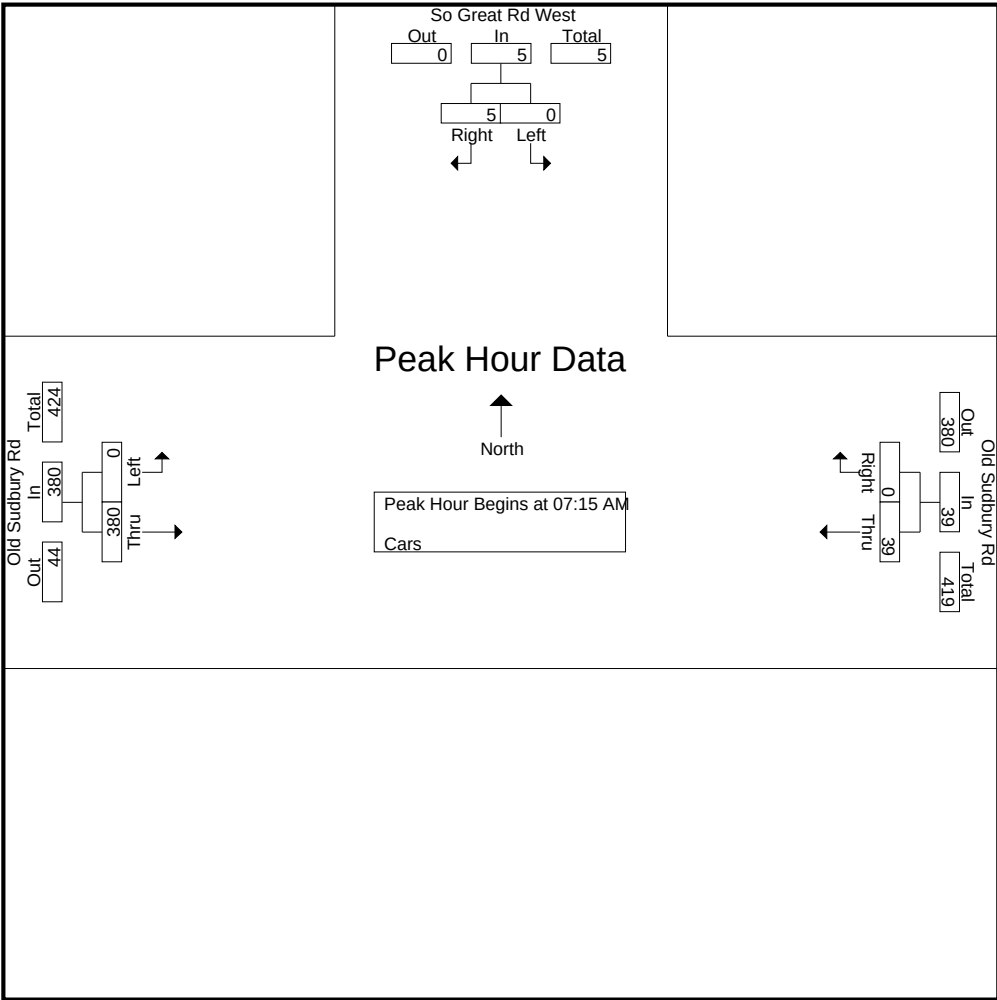
Groups Printed- Cars							
	So Great Rd West From North		Old Sudbury Rd From East		Old Sudbury Rd From West		
Start Time	Left	Right	Thru	Right	Left	Thru	Int. Total
07:00 AM	0	0	10	0	0	84	94
07:15 AM	0	2	14	0	0	87	103
07:30 AM	0	0	10	0	0	95	105
07:45 AM	0	3	7	0	0	99	109
Total	0	5	41	0	0	365	411
08:00 AM	0	0	8	0	0	99	107
08:15 AM	0	1	3	0	0	89	93
08:30 AM	0	0	6	0	0	91	97
08:45 AM	0	1	5	0	0	76	82
Total	0	2	22	0	0	355	379
Grand Total	0	7	63	0	0	720	790
Apprch %	0	100	100	0	0	100	
Total %	0	0.9	8	0	0	91.1	

Accurate Counts
978-664-2565

N/S Street : South Great Rd West
E/W Street: Old Sudbury Road
City/State : Wayland, MA
Weather : Clear

File Name : 62154006
Site Code : 62154006
Start Date : 4/27/2016
Page No : 5

	So Great Rd West From North			Old Sudbury Rd From East			Old Sudbury Rd From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	0	2	2	14	0	14	0	87	87	103
07:30 AM	0	0	0	10	0	10	0	95	95	105
07:45 AM	0	3	3	7	0	7	0	99	99	109
08:00 AM	0	0	0	8	0	8	0	99	99	107
Total Volume	0	5	5	39	0	39	0	380	380	424
% App. Total	0	100		100	0		0	100		
PHF	.000	.417	.417	.696	.000	.696	.000	.960	.960	.972



Accurate Counts
978-664-2565

N/S Street : South Great Rd West
E/W Street: Old Sudbury Road
City/State : Wayland, MA
Weather : Clear

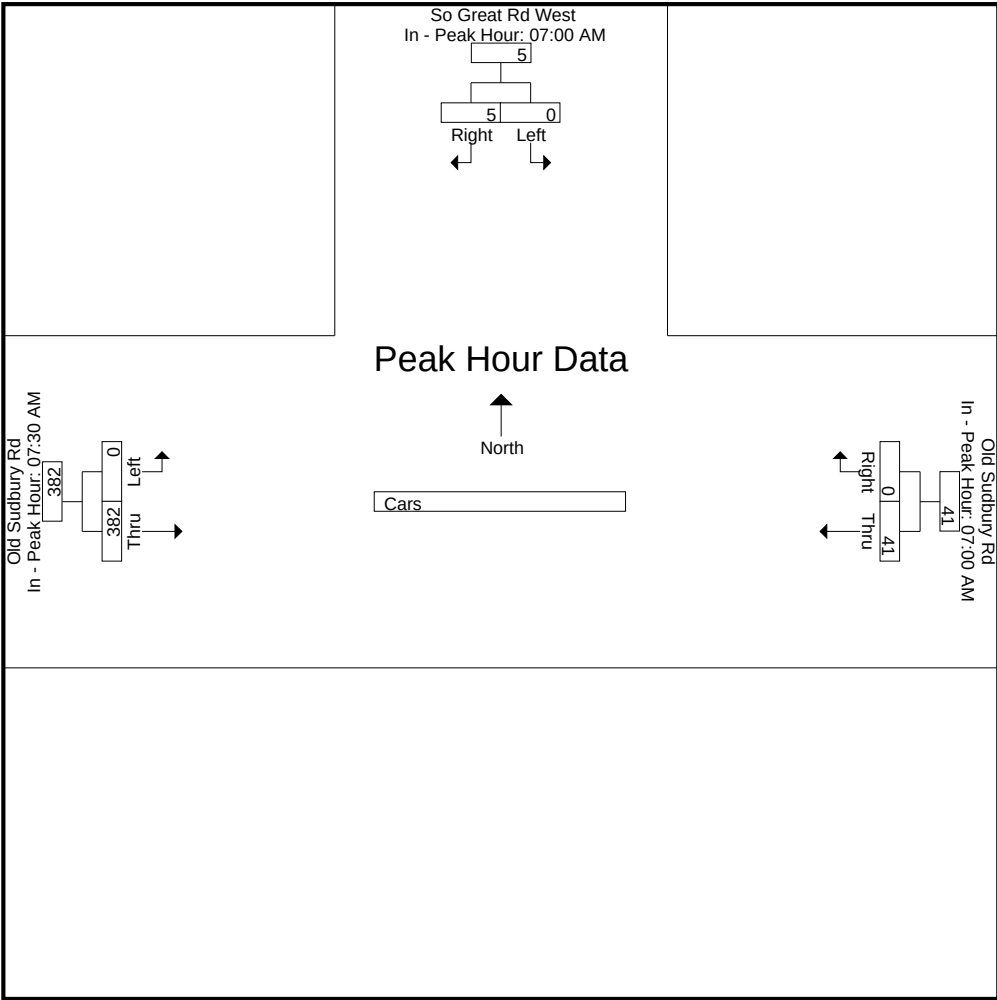
File Name : 62154006
Site Code : 62154006
Start Date : 4/27/2016
Page No : 6

	So Great Rd West From North			Old Sudbury Rd From East			Old Sudbury Rd From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total

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

Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:30 AM		
+0 mins.	0	0	0	10	0	10	0	95	95
+15 mins.	0	2	2	14	0	14	0	99	99
+30 mins.	0	0	0	10	0	10	0	99	99
+45 mins.	0	3	3	7	0	7	0	89	89
Total Volume	0	5	5	41	0	41	0	382	382
% App. Total	0	100		100	0		0	100	
PHF	.000	.417	.417	.732	.000	.732	.000	.965	.965



Accurate Counts

978-664-2565

N/S Street : South Great Rd West
 E/W Street: Old Sudbury Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154006
 Site Code : 62154006
 Start Date : 4/27/2016
 Page No : 7

Groups Printed- Trucks

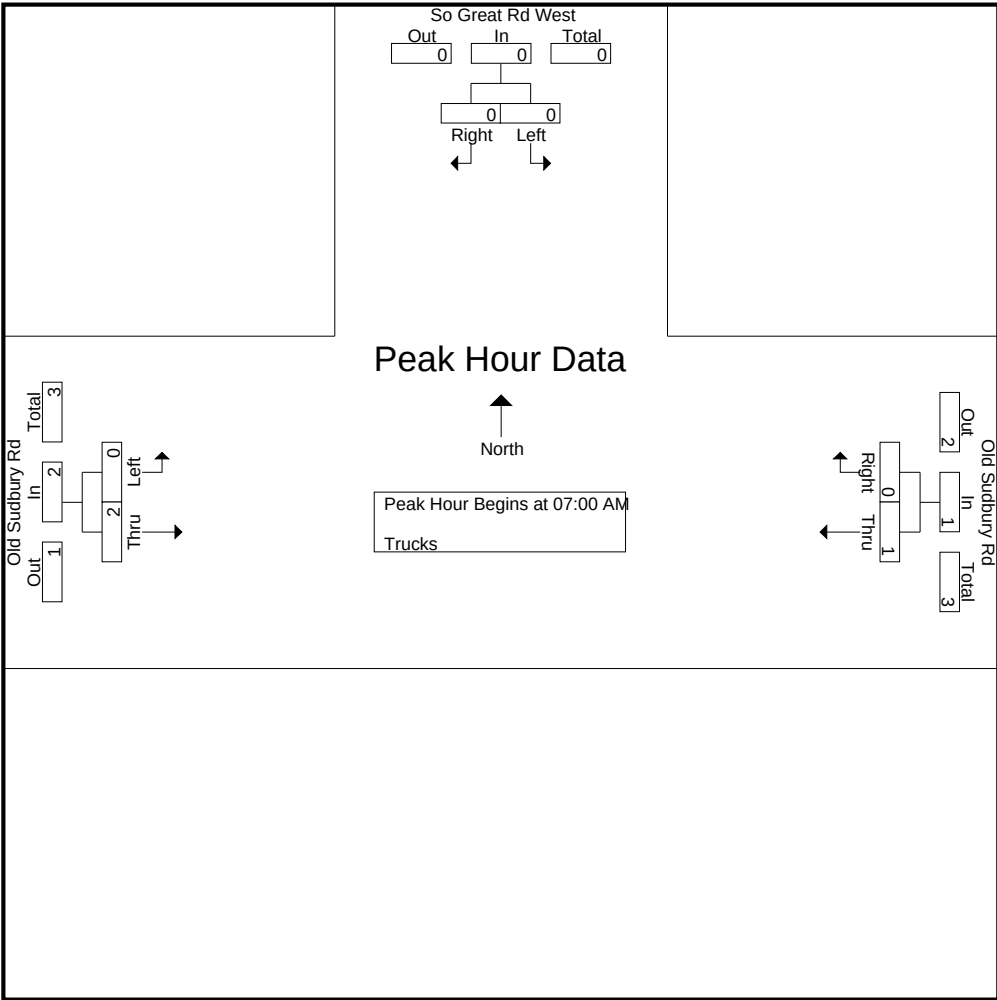
	So Great Rd West From North		Old Sudbury Rd From East		Old Sudbury Rd From West		
Start Time	Left	Right	Thru	Right	Left	Thru	Int. Total
07:00 AM	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	2	2
07:30 AM	0	0	1	0	0	0	1
07:45 AM	0	0	0	0	0	0	0
Total	0	0	1	0	0	2	3
08:00 AM	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
Grand Total	0	0	1	0	0	2	3
Apprch %	0	0	100	0	0	100	
Total %	0	0	33.3	0	0	66.7	

Accurate Counts
978-664-2565

N/S Street : South Great Rd West
E/W Street: Old Sudbury Road
City/State : Wayland, MA
Weather : Clear

File Name : 62154006
Site Code : 62154006
Start Date : 4/27/2016
Page No : 8

	So Great Rd West From North			Old Sudbury Rd From East			Old Sudbury Rd From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	2	2	2
07:30 AM	0	0	0	1	0	1	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	1	0	1	0	2	2	3
% App. Total	0	0		100	0		0	100		
PHF	.000	.000	.000	.250	.000	.250	.000	.250	.250	.375



Accurate Counts
978-664-2565

N/S Street : South Great Rd West
E/W Street: Old Sudbury Road
City/State : Wayland, MA
Weather : Clear

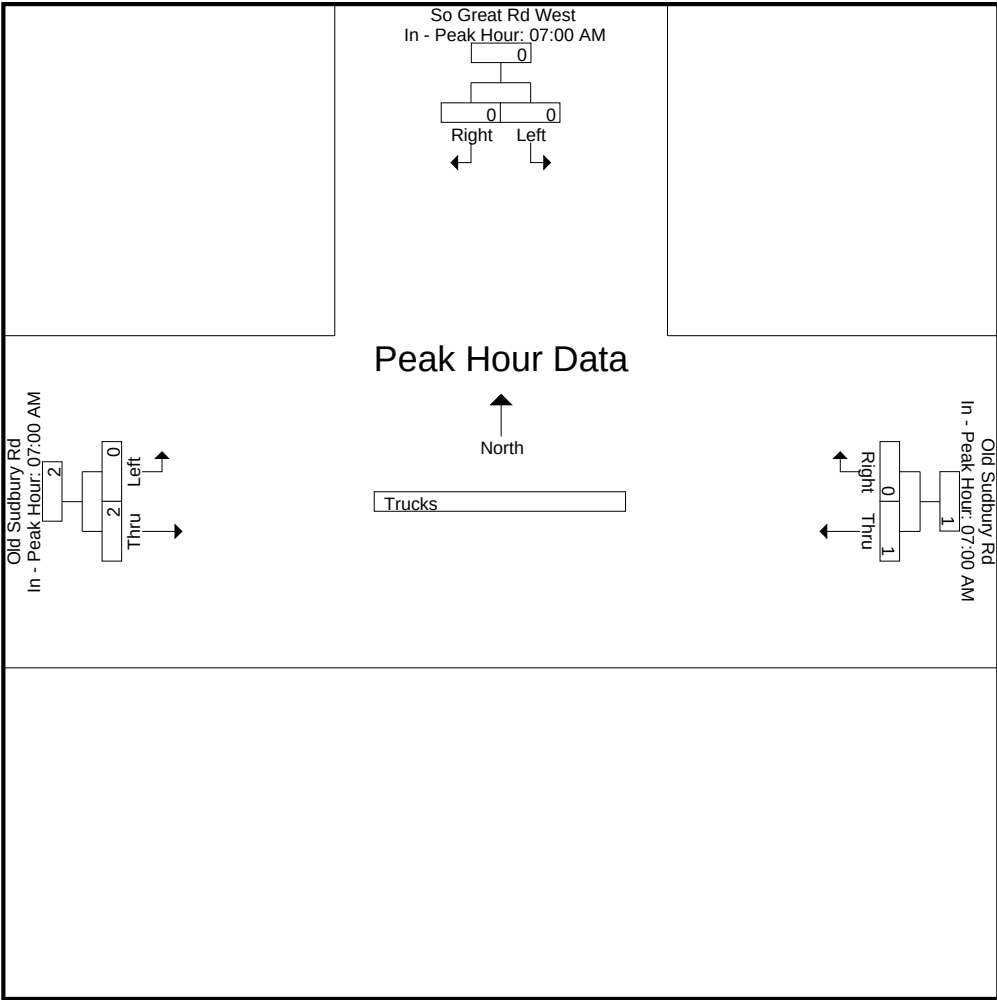
File Name : 62154006
Site Code : 62154006
Start Date : 4/27/2016
Page No : 9

	So Great Rd West From North			Old Sudbury Rd From East			Old Sudbury Rd From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total

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

Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	2	2
+30 mins.	0	0	0	1	0	1	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	1	0	1	0	2	2
% App. Total	0	0		100	0		0	100	
PHF	.000	.000	.000	.250	.000	.250	.000	.250	.250



Accurate Counts
978-664-2565

N/S Street : South Great Rd West
E/W Street: Old Sudbury Road
City/State : Wayland, MA
Weather : Clear

File Name : 62154006
Site Code : 62154006
Start Date : 4/27/2016
Page No : 10

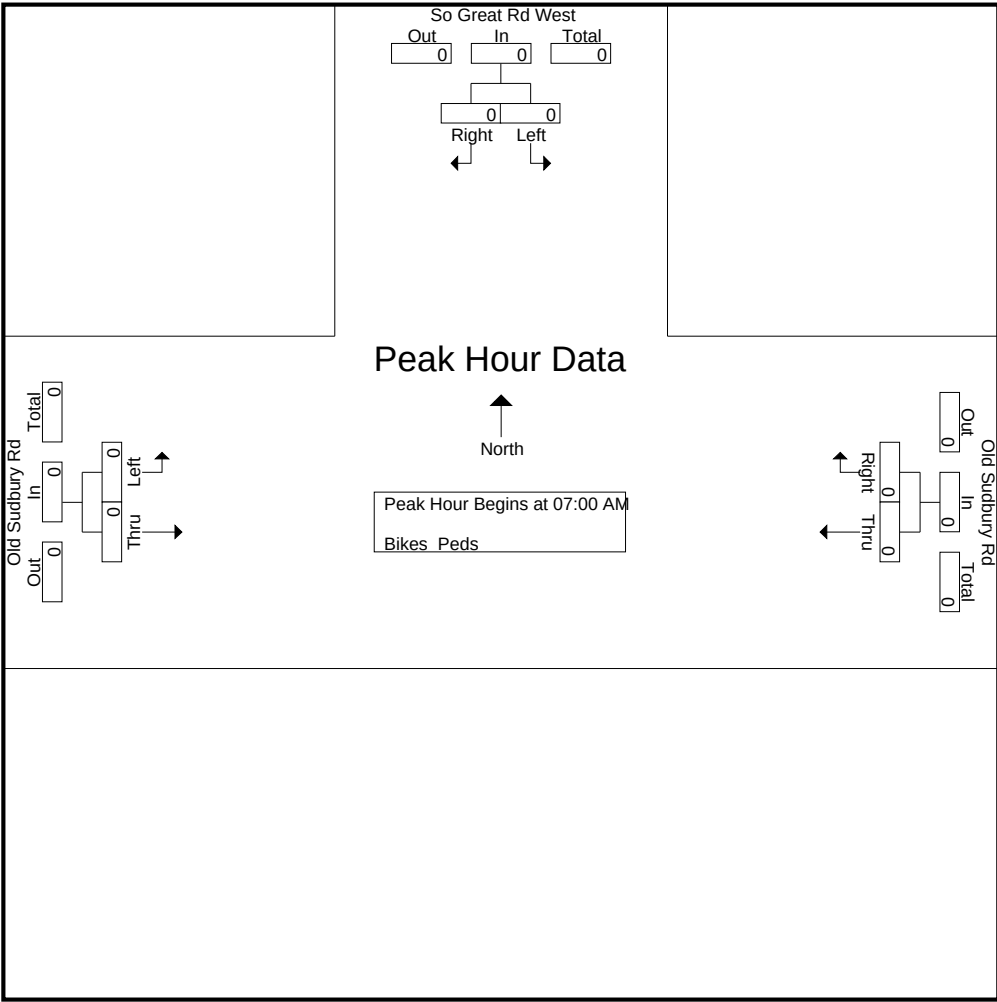
[illegible]

Accurate Counts
978-664-2565

N/S Street : South Great Rd West
E/W Street: Old Sudbury Road
City/State : Wayland, MA
Weather : Clear

File Name : 62154006
Site Code : 62154006
Start Date : 4/27/2016
Page No : 11

	So Great Rd West From North			Old Sudbury Rd From East			Old Sudbury Rd From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000



Accurate Counts
978-664-2565

N/S Street : South Great Rd West
E/W Street: Old Sudbury Road
City/State : Wayland, MA
Weather : Clear

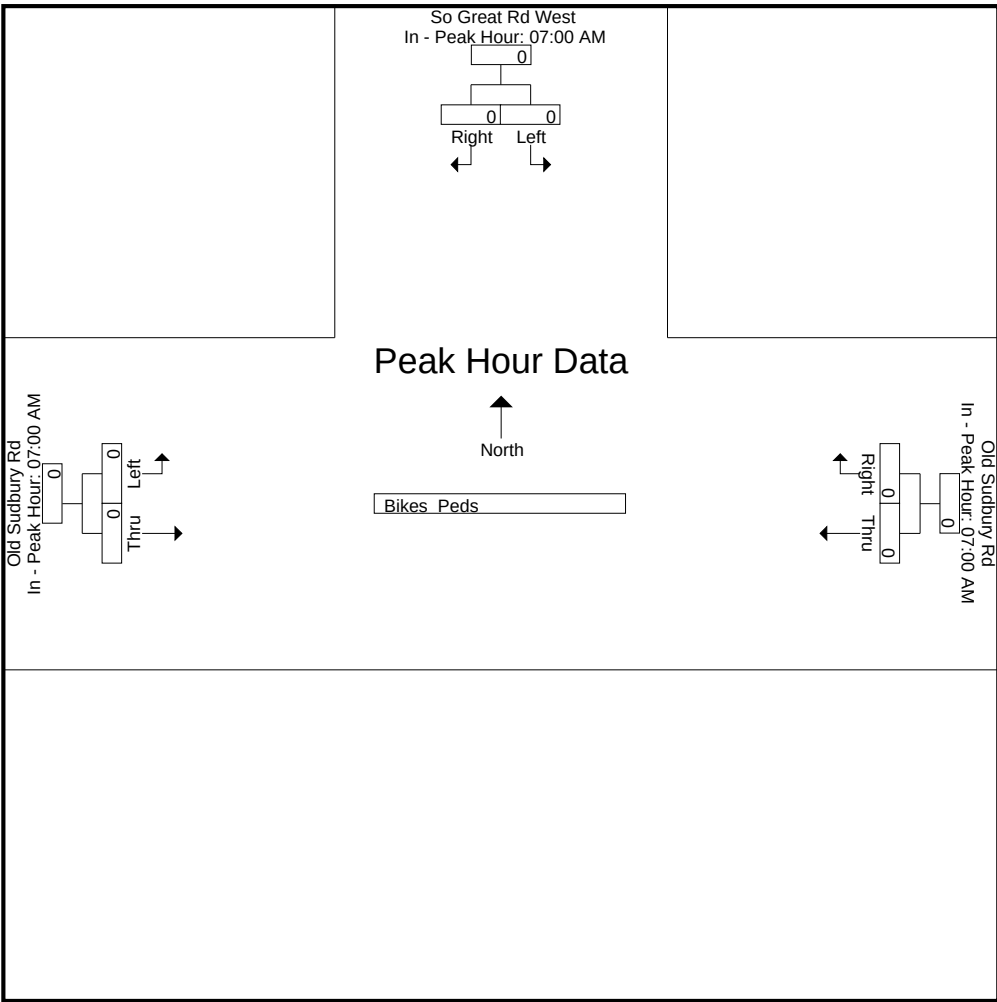
File Name : 62154006
Site Code : 62154006
Start Date : 4/27/2016
Page No : 12

	So Great Rd West From North			Old Sudbury Rd From East			Old Sudbury Rd From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total

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

Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000



Accurate Counts

978-664-2565

N/S Street : South Great Rd West
 E/W Street: Old Sudbury Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154006
 Site Code : 62154006
 Start Date : 4/27/2016
 Page No : 1

Groups Printed- Cars - Trucks

	So Great Rd West From North		Old Sudbury Rd From East		Old Sudbury Rd From West		
Start Time	Left	Right	Thru	Right	Left	Thru	Int. Total
02:00 PM	0	1	8	0	0	10	19
02:15 PM	0	2	13	0	0	7	22
02:30 PM	0	0	8	0	0	8	16
02:45 PM	0	0	16	0	0	6	22
Total	0	3	45	0	0	31	79
03:00 PM	0	0	11	0	0	9	20
03:15 PM	0	2	17	0	0	10	29
03:30 PM	1	3	30	0	0	7	41
03:45 PM	0	2	29	0	0	7	38
Total	1	7	87	0	0	33	128
04:00 PM	0	2	34	0	0	8	44
04:15 PM	0	1	33	0	0	12	46
04:30 PM	0	0	40	0	0	8	48
04:45 PM	0	2	52	0	0	12	66
Total	0	5	159	0	0	40	204
05:00 PM	0	3	52	0	0	9	64
05:15 PM	0	4	64	0	0	13	81
05:30 PM	0	2	49	0	0	6	57
05:45 PM	0	3	51	0	0	10	64
Total	0	12	216	0	0	38	266
Grand Total	1	27	507	0	0	142	677
Apprch %	3.6	96.4	100	0	0	100	
Total %	0.1	4	74.9	0	0	21	
Cars	1	27	506	0	0	142	676
% Cars	100	100	99.8	0	0	100	99.9
Trucks	0	0	1	0	0	0	1
% Trucks	0	0	0.2	0	0	0	0.1

Accurate Counts
978-664-2565

Accurate Counts

978-664-2565

N/S Street : South Great Rd West
 E/W Street: Old Sudbury Road
 City/State : Wayland, MA
 Weather : Clear

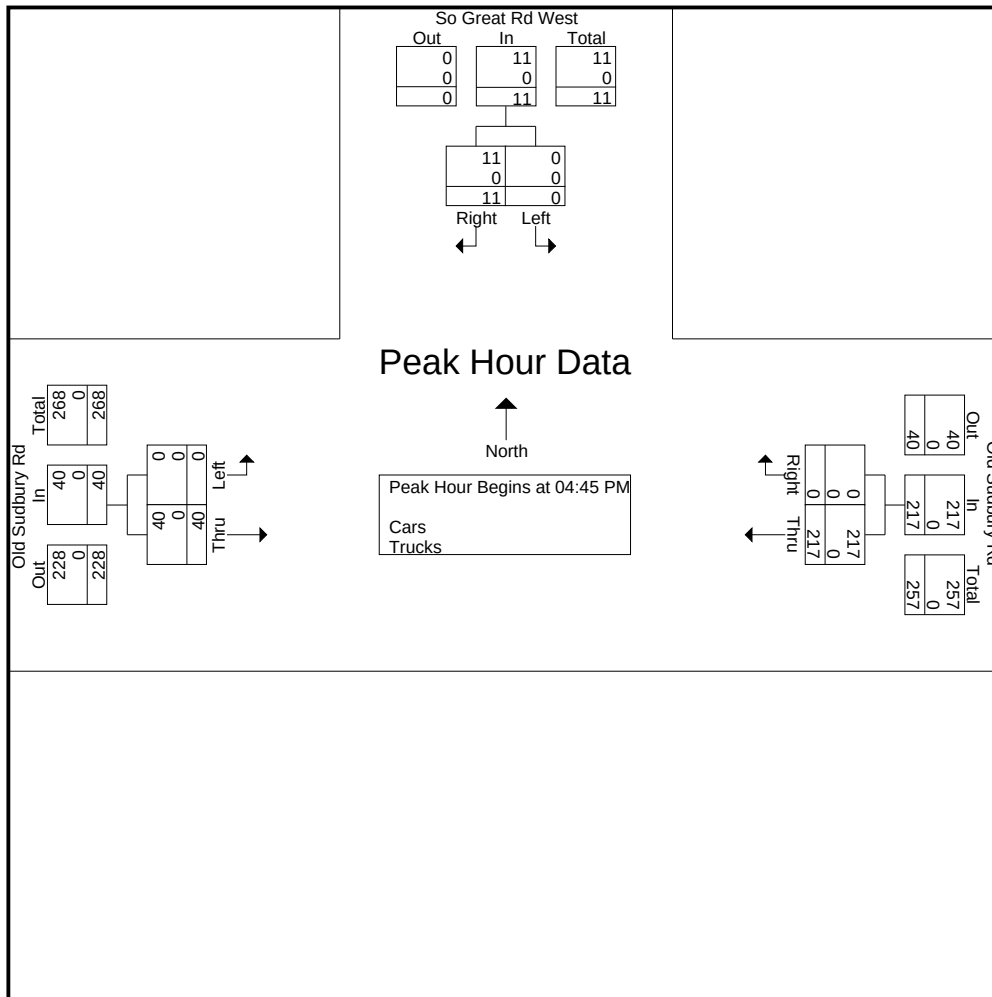
File Name : 62154006
 Site Code : 62154006
 Start Date : 4/27/2016
 Page No : 3

	So Great Rd West From North			Old Sudbury Rd From East			Old Sudbury Rd From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:45 PM

04:45 PM	0	2	2	52	0	52	0	12	12	66
05:00 PM	0	3	3	52	0	52	0	9	9	64
05:15 PM	0	4	4	64	0	64	0	13	13	81
05:30 PM	0	2	2	49	0	49	0	6	6	57
Total Volume	0	11	11	217	0	217	0	40	40	268
% App. Total	0	100		100	0		0	100		
PHF	.000	.688	.688	.848	.000	.848	.000	.769	.769	.827
Cars	0	11	11	217	0	217	0	40	40	268
% Cars	0	100	100	100	0	100	0	100	100	100
Trucks	0	0	0	0	0	0	0	0	0	0
% Trucks	0	0	0	0	0	0	0	0	0	0



Accurate Counts

978-664-2565

N/S Street : South Great Rd West
 E/W Street: Old Sudbury Road
 City/State : Wayland, MA
 Weather : Clear

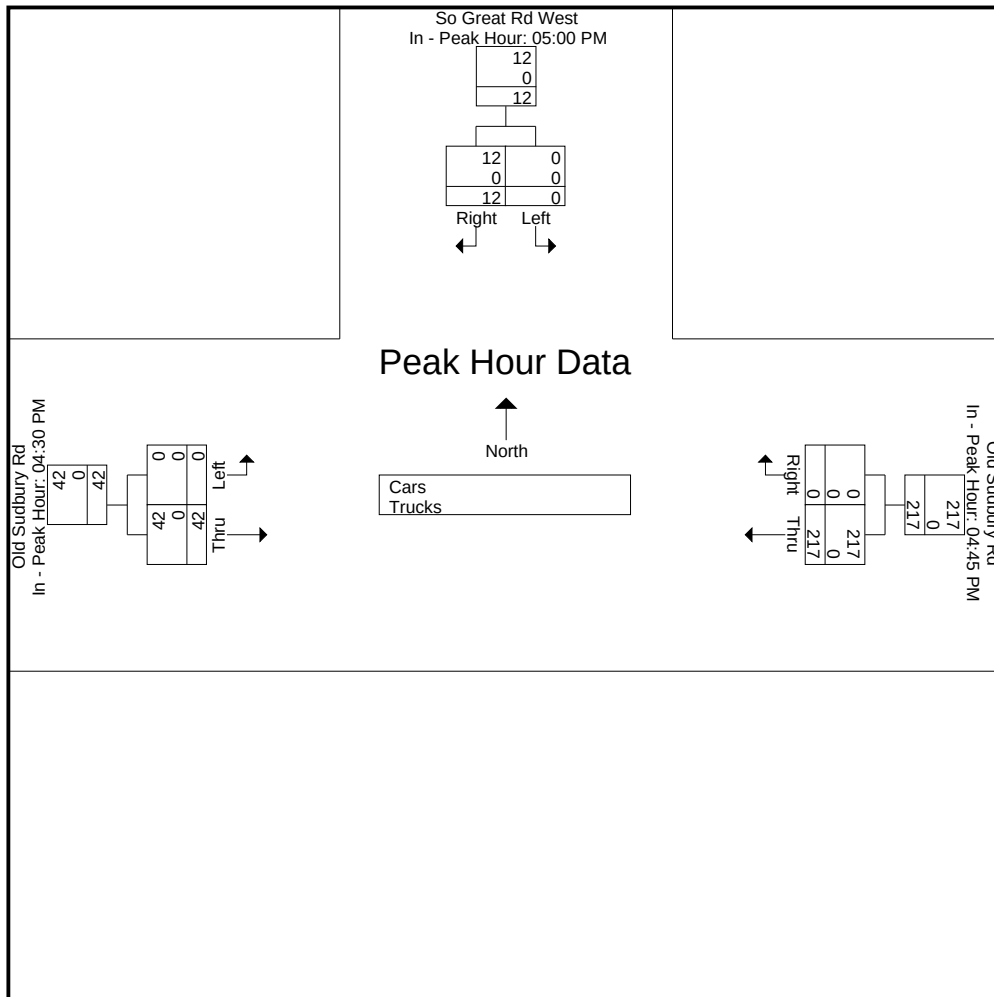
File Name : 62154006
 Site Code : 62154006
 Start Date : 4/27/2016
 Page No : 4

	So Great Rd West From North			Old Sudbury Rd From East			Old Sudbury Rd From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM			04:45 PM			04:30 PM		
+0 mins.	0	3	3	52	0	52	0	8	8
+15 mins.	0	4	4	52	0	52	0	12	12
+30 mins.	0	2	2	64	0	64	0	9	9
+45 mins.	0	3	3	49	0	49	0	13	13
Total Volume	0	12	12	217	0	217	0	42	42
% App. Total	0	100		100	0		0	100	
PHF	.000	.750	.750	.848	.000	.848	.000	.808	.808
Cars	0	12	12	217	0	217	0	42	42
% Cars	0	100	100	100	0	100	0	100	100
Trucks	0	0	0	0	0	0	0	0	0
% Trucks	0	0	0	0	0	0	0	0	0



Accurate Counts

978-664-2565

N/S Street : South Great Rd West
 E/W Street: Old Sudbury Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154006
 Site Code : 62154006
 Start Date : 4/27/2016
 Page No : 5

Groups Printed- Cars

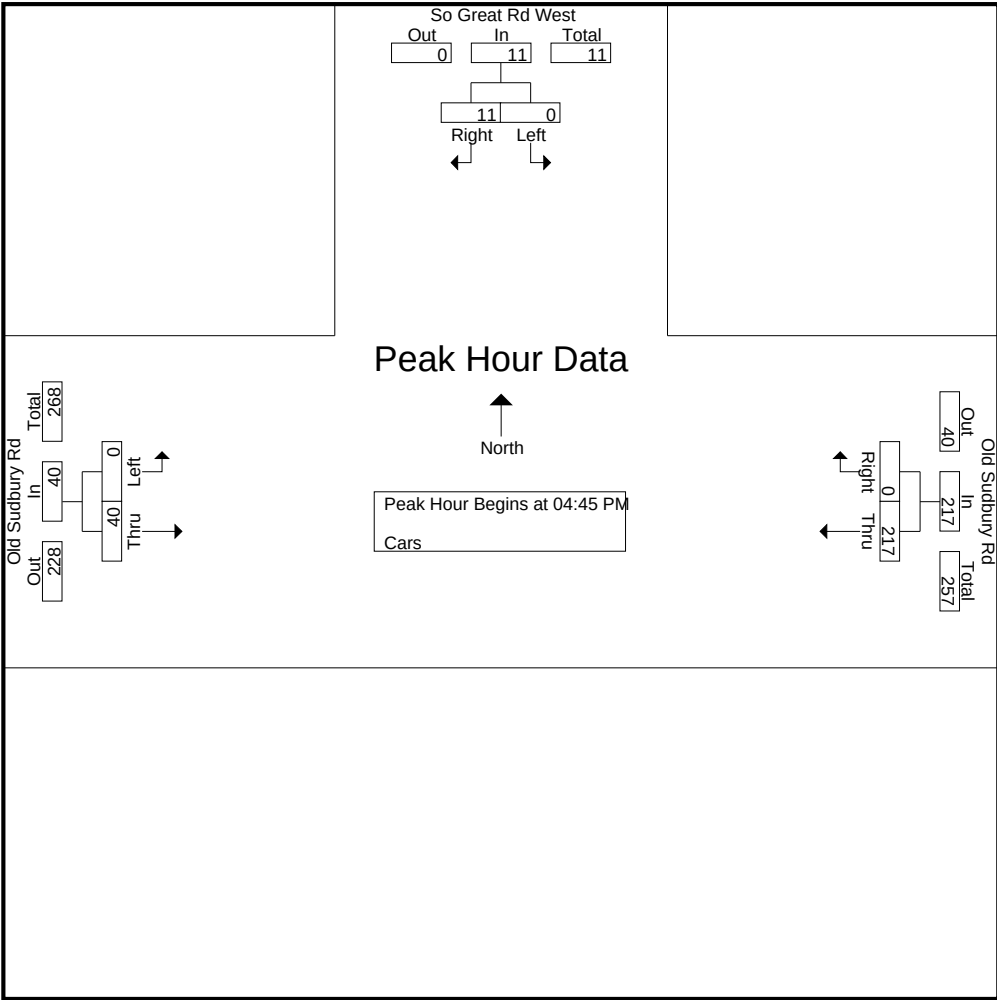
	So Great Rd West From North		Old Sudbury Rd From East		Old Sudbury Rd From West		
Start Time	Left	Right	Thru	Right	Left	Thru	Int. Total
02:00 PM	0	1	8	0	0	10	19
02:15 PM	0	2	13	0	0	7	22
02:30 PM	0	0	8	0	0	8	16
02:45 PM	0	0	16	0	0	6	22
Total	0	3	45	0	0	31	79
03:00 PM	0	0	10	0	0	9	19
03:15 PM	0	2	17	0	0	10	29
03:30 PM	1	3	30	0	0	7	41
03:45 PM	0	2	29	0	0	7	38
Total	1	7	86	0	0	33	127
04:00 PM	0	2	34	0	0	8	44
04:15 PM	0	1	33	0	0	12	46
04:30 PM	0	0	40	0	0	8	48
04:45 PM	0	2	52	0	0	12	66
Total	0	5	159	0	0	40	204
05:00 PM	0	3	52	0	0	9	64
05:15 PM	0	4	64	0	0	13	81
05:30 PM	0	2	49	0	0	6	57
05:45 PM	0	3	51	0	0	10	64
Total	0	12	216	0	0	38	266
Grand Total	1	27	506	0	0	142	676
Apprch %	3.6	96.4	100	0	0	100	
Total %	0.1	4	74.9	0	0	21	

Accurate Counts
978-664-2565

N/S Street : South Great Rd West
E/W Street: Old Sudbury Road
City/State : Wayland, MA
Weather : Clear

File Name : 62154006
Site Code : 62154006
Start Date : 4/27/2016
Page No : 6

	So Great Rd West From North			Old Sudbury Rd From East			Old Sudbury Rd From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	0	2	2	52	0	52	0	12	12	66
05:00 PM	0	3	3	52	0	52	0	9	9	64
05:15 PM	0	4	4	64	0	64	0	13	13	81
05:30 PM	0	2	2	49	0	49	0	6	6	57
Total Volume	0	11	11	217	0	217	0	40	40	268
% App. Total	0	100		100	0		0	100		
PHF	.000	.688	.688	.848	.000	.848	.000	.769	.769	.827



Accurate Counts
978-664-2565

N/S Street : South Great Rd West
E/W Street: Old Sudbury Road
City/State : Wayland, MA
Weather : Clear

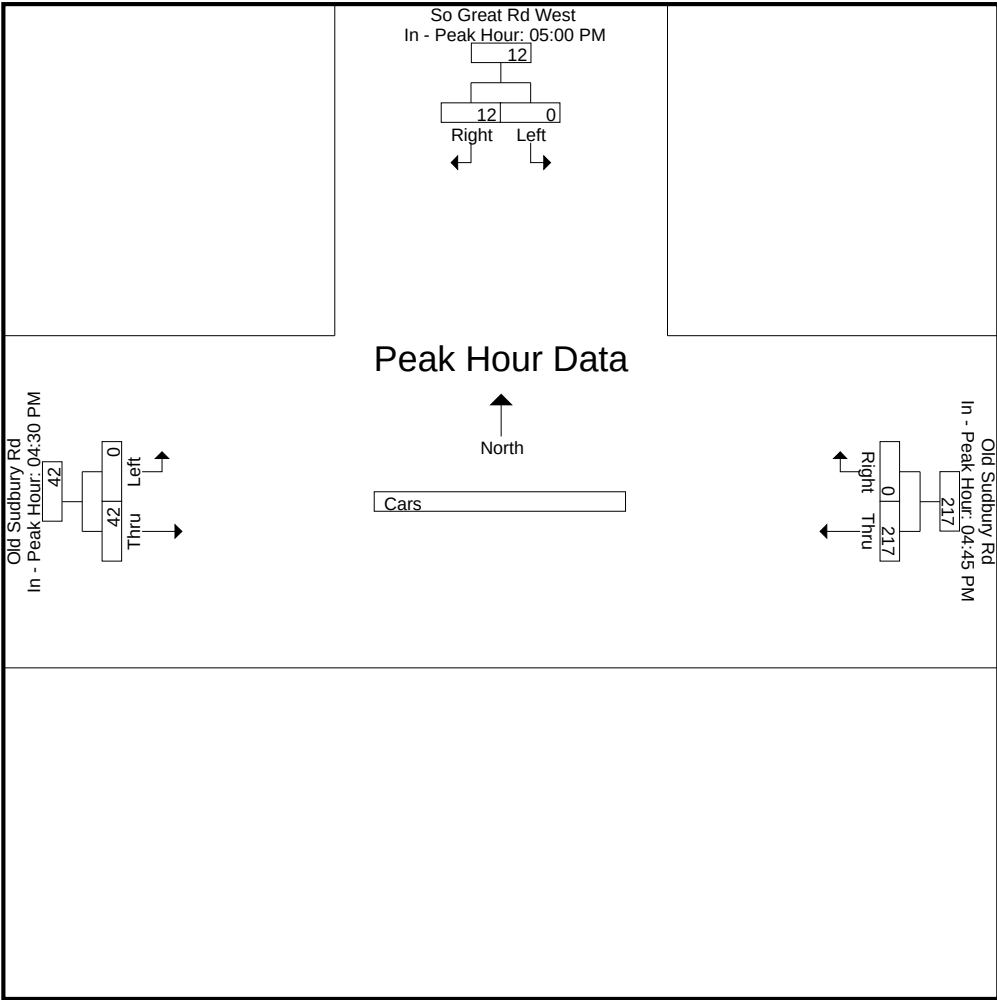
File Name : 62154006
Site Code : 62154006
Start Date : 4/27/2016
Page No : 7

	So Great Rd West From North			Old Sudbury Rd From East			Old Sudbury Rd From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM			04:45 PM			04:30 PM		
+0 mins.	0	3	3	52	0	52	0	8	8
+15 mins.	0	4	4	52	0	52	0	12	12
+30 mins.	0	2	2	64	0	64	0	9	9
+45 mins.	0	3	3	49	0	49	0	13	13
Total Volume	0	12	12	217	0	217	0	42	42
% App. Total	0	100		100	0		0	100	
PHF	.000	.750	.750	.848	.000	.848	.000	.808	.808



Accurate Counts

978-664-2565

N/S Street : South Great Rd West
 E/W Street: Old Sudbury Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154006
 Site Code : 62154006
 Start Date : 4/27/2016
 Page No : 8

Groups Printed- Trucks

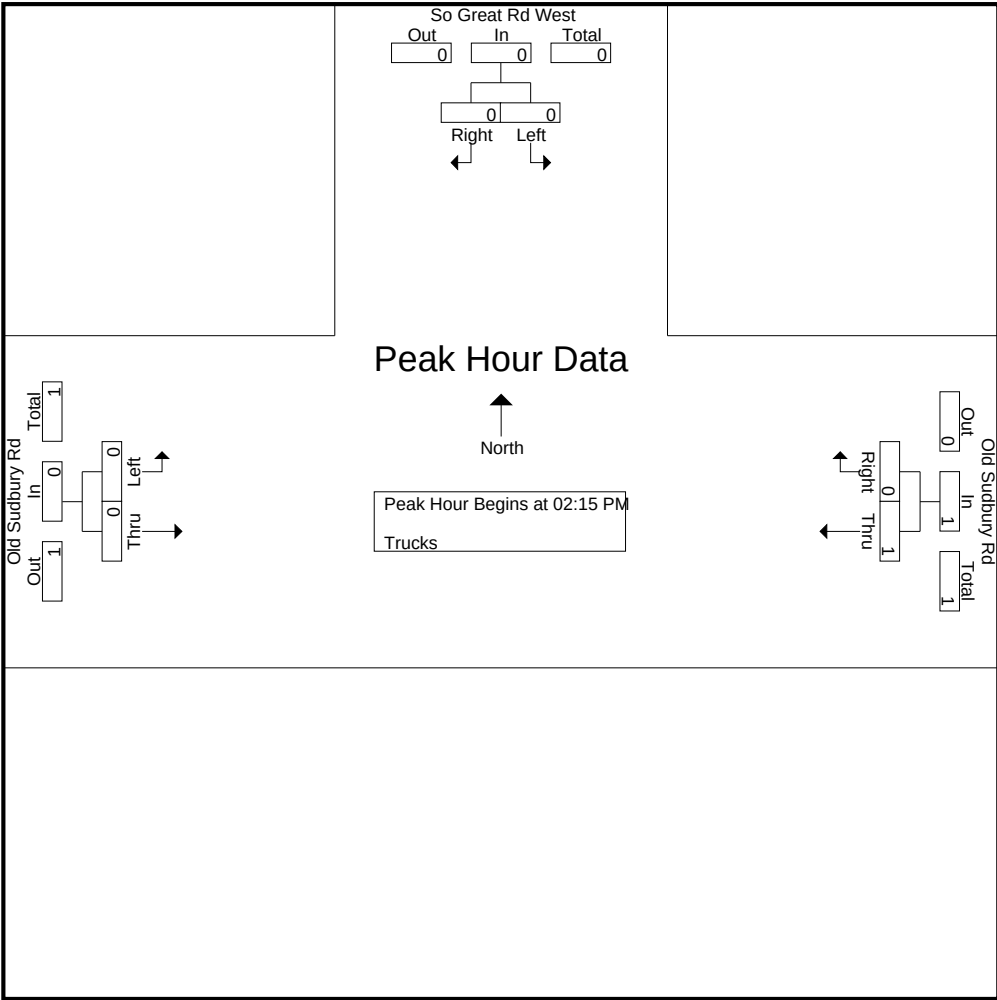
	So Great Rd West From North		Old Sudbury Rd From East		Old Sudbury Rd From West		
Start Time	Left	Right	Thru	Right	Left	Thru	Int. Total
02:00 PM	0	0	0	0	0	0	0
02:15 PM	0	0	0	0	0	0	0
02:30 PM	0	0	0	0	0	0	0
02:45 PM	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
03:00 PM	0	0	1	0	0	0	1
03:15 PM	0	0	0	0	0	0	0
03:30 PM	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0
Total	0	0	1	0	0	0	1
04:00 PM	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
Grand Total	0	0	1	0	0	0	1
Apprch %	0	0	100	0	0	0	
Total %	0	0	100	0	0	0	

Accurate Counts
978-664-2565

N/S Street : South Great Rd West
E/W Street: Old Sudbury Road
City/State : Wayland, MA
Weather : Clear

File Name : 62154006
Site Code : 62154006
Start Date : 4/27/2016
Page No : 9

	So Great Rd West			Old Sudbury Rd			Old Sudbury Rd			
	From North			From East			From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 02:15 PM										
02:15 PM	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	0	0	0	0	0	0	0	0	0
03:00 PM	0	0	0	1	0	1	0	0	0	1
Total Volume	0	0	0	1	0	1	0	0	0	1
% App. Total	0	0		100	0		0	0		
PHF	.000	.000	.000	.250	.000	.250	.000	.000	.000	.250



Accurate Counts
978-664-2565

N/S Street : South Great Rd West
E/W Street: Old Sudbury Road
City/State : Wayland, MA
Weather : Clear

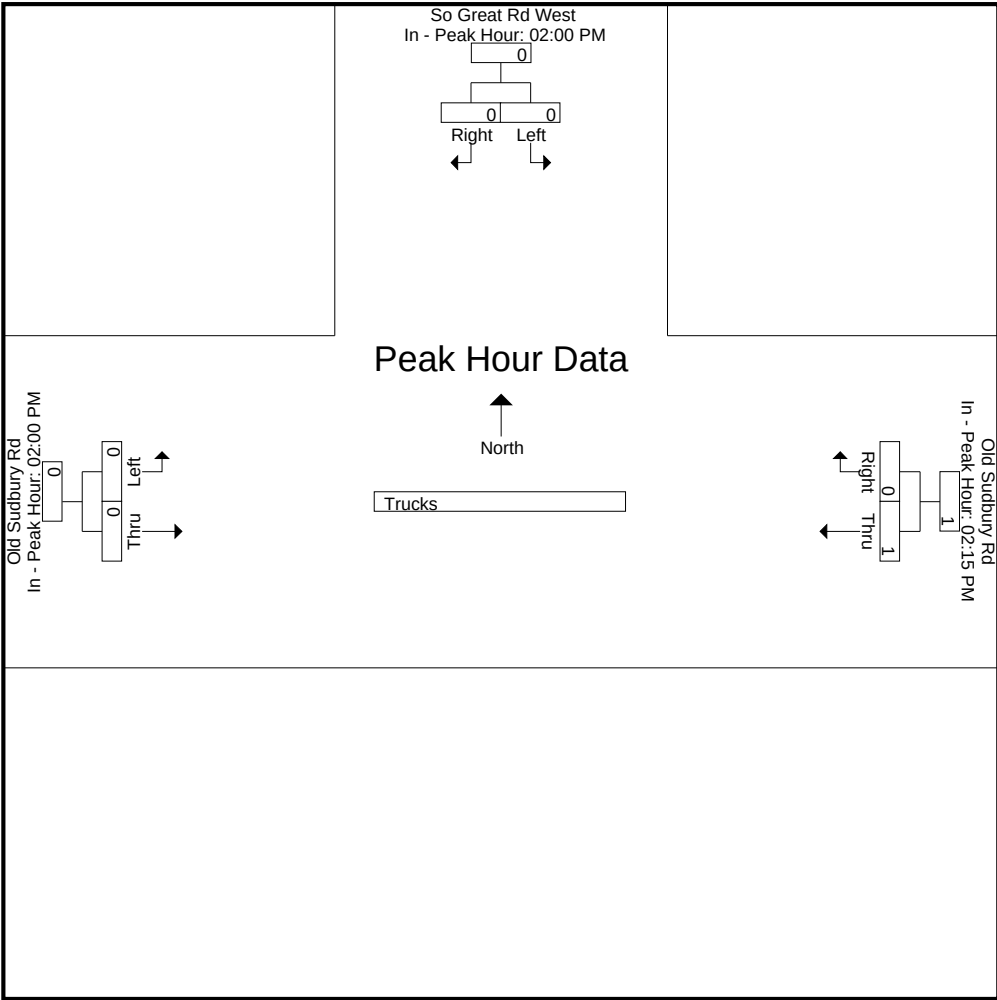
File Name : 62154006
Site Code : 62154006
Start Date : 4/27/2016
Page No : 10

	So Great Rd West From North			Old Sudbury Rd From East			Old Sudbury Rd From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:00 PM			02:15 PM			02:00 PM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	1	0	1	0	0	0
Total Volume	0	0	0	1	0	1	0	0	0
% App. Total	0	0		100	0		0	0	
PHF	.000	.000	.000	.250	.000	.250	.000	.000	.000



Accurate Counts

978-664-2565

N/S Street : South Great Rd West
 E/W Street: Old Sudbury Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154006
 Site Code : 62154006
 Start Date : 4/27/2016
 Page No : 11

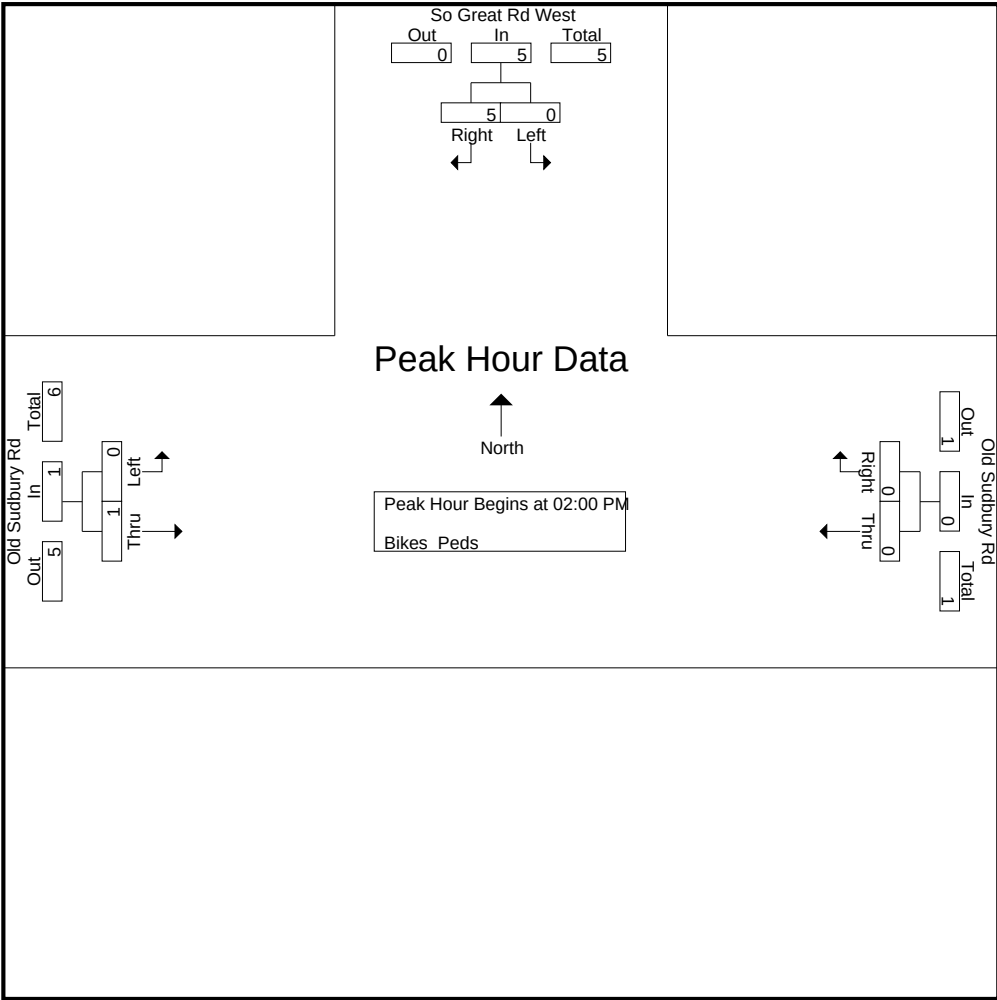
Groups Printed- Bikes Peds												
	So Great Rd West From North			Old Sudbury Rd From East			Old Sudbury Rd From West					
Start Time	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds	Exclu. Total	Inclu. Total	Int. Total
02:00 PM	0	2	0	0	0	0	0	0	0	0	2	2
02:15 PM	0	2	0	0	0	0	0	0	0	0	2	2
02:30 PM	0	0	0	0	0	0	0	1	0	0	1	1
02:45 PM	0	1	0	0	0	0	0	0	0	0	1	1
Total	0	5	0	0	0	0	0	1	0	0	6	6
03:00 PM	0	0	0	1	0	0	0	0	0	0	1	1
03:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
03:30 PM	0	0	0	0	0	0	0	2	0	0	2	2
03:45 PM	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	0	1	0	0	0	3	0	0	4	4
04:00 PM	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
04:30 PM	0	0	0	0	0	0	1	0	0	0	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	0	0	0	1	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	1	0	0	0	0	0	0	1	1
05:30 PM	0	0	0	0	0	0	0	1	0	0	1	1
05:45 PM	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	0	1	0	0	0	2	0	0	3	3
Grand Total	0	5	0	2	0	0	1	6	0	0	14	14
Apprch %	0	100		100	0		14.3	85.7				
Total %	0	35.7		14.3	0		7.1	42.9		0	100	

Accurate Counts
978-664-2565

N/S Street : South Great Rd West
E/W Street: Old Sudbury Road
City/State : Wayland, MA
Weather : Clear

File Name : 62154006
Site Code : 62154006
Start Date : 4/27/2016
Page No : 12

	So Great Rd West From North			Old Sudbury Rd From East			Old Sudbury Rd From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 02:00 PM										
02:00 PM	0	2	2	0	0	0	0	0	0	2
02:15 PM	0	2	2	0	0	0	0	0	0	2
02:30 PM	0	0	0	0	0	0	0	1	1	1
02:45 PM	0	1	1	0	0	0	0	0	0	1
Total Volume	0	5	5	0	0	0	0	1	1	6
% App. Total	0	100		0	0		0	100		
PHF	.000	.625	.625	.000	.000	.000	.000	.250	.250	.750



Accurate Counts
978-664-2565

N/S Street : South Great Rd West
E/W Street: Old Sudbury Road
City/State : Wayland, MA
Weather : Clear

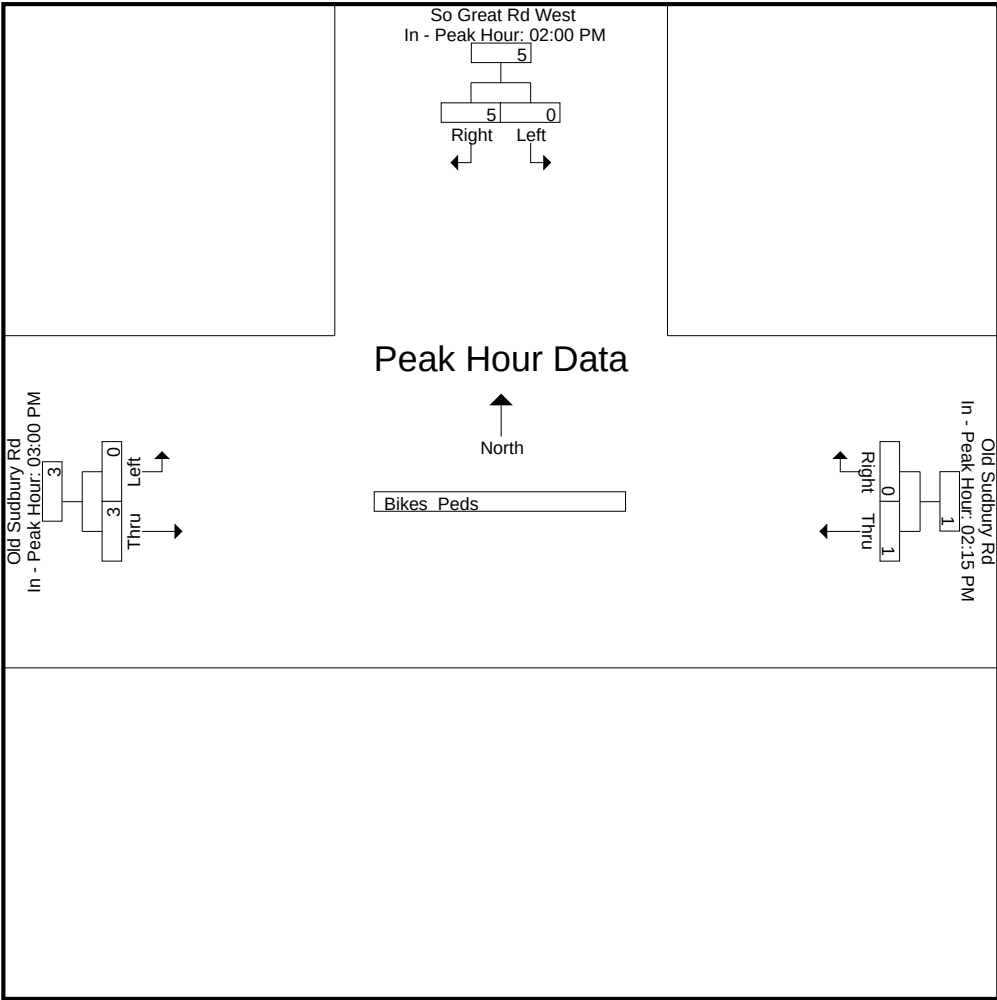
File Name : 62154006
Site Code : 62154006
Start Date : 4/27/2016
Page No : 13

	So Great Rd West From North			Old Sudbury Rd From East			Old Sudbury Rd From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:00 PM			02:15 PM			03:00 PM		
+0 mins.	0	2	2	0	0	0	0	0	0
+15 mins.	0	2	2	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	2	2
+45 mins.	0	1	1	1	0	1	0	1	1
Total Volume	0	5	5	1	0	1	0	3	3
% App. Total	0	100		100	0		0	100	
PHF	.000	.625	.625	.250	.000	.250	.000	.375	.375



Accurate Counts

978-664-2565

N/S Street : Concord Road
 E/W Street : Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154SDAM
 Site Code : 62154004
 Start Date : 4/27/2016
 Page No : 1

L n.	No.	Joined Queue	Released From Queue	Delay
1	1	7:01:28 AM	7:01:30 AM	2
1	2	7:03:01 AM	7:03:07 AM	6
1	3	7:04:17 AM	7:04:19 AM	2
1	4	7:04:48 AM	7:04:53 AM	5
1	5	7:05:27 AM	7:05:36 AM	9
1	6	7:06:10 AM	7:06:26 AM	16
1	7	7:06:35 AM	7:06:39 AM	4
1	8	7:08:18 AM	7:08:21 AM	3
1	9	7:08:24 AM	7:08:28 AM	4
1	10	7:10:09 AM	7:10:17 AM	8
1	11	7:10:10 AM	7:10:23 AM	13
1	12	7:11:38 AM	7:11:48 AM	10
1	13	7:11:39 AM	7:12:00 AM	21
1	14	7:11:40 AM	7:12:04 AM	24
1	15	7:12:54 AM	7:12:58 AM	4
1	16	7:12:56 AM	7:13:04 AM	8
1	17	7:12:59 AM	7:13:05 AM	6
1	18	7:13:03 AM	7:13:07 AM	4
1	19	7:13:09 AM	7:13:13 AM	4
1	20	7:14:25 AM	7:14:30 AM	5
1	21	7:14:26 AM	7:14:32 AM	6

Summary Information:

7:00:00 AM - 7:15:00 AM	Waltham Rd WB
Total Vehicle Count:	21
Delayed Vehicle Count:	21
Through Vehicle Count:	0
Average Stopped Time:	7.81
Maximum Stopped Time:	24
Min. Secs. for Delay:	0
Average Queue:	0.21
Queue Density:	1.43
Maximum Queue:	3
Delay in Vehicle Hour:	0.21
Total Delay:	164

L n.	No.	Joined Queue	Released From Queue	Delay
1	22	7:15:28 AM	7:15:33 AM	5
1	23	7:16:56 AM	7:17:00 AM	4
1	24	7:17:34 AM	7:17:48 AM	14
1	25	7:18:19 AM	7:18:23 AM	4
1	26	7:19:09 AM	7:19:15 AM	6

Accurate Counts

978-664-2565

1	27	7:19:16 AM	7:19:21 AM	5
1	28	7:19:53 AM	7:20:04 AM	11
1	29	7:19:55 AM	7:20:07 AM	12
1	30	7:20:00 AM	7:20:13 AM	13
1	31	7:21:26 AM	7:21:35 AM	9
1	32	7:22:10 AM	7:22:25 AM	15
1	33	7:22:35 AM	7:22:40 AM	5
1	34	7:22:37 AM	7:22:49 AM	12
1	35	7:22:42 AM	7:22:52 AM	10
1	36	7:23:14 AM	7:23:17 AM	3
1	37	7:23:37 AM	7:23:51 AM	14
1	38	7:23:39 AM	7:23:54 AM	15
1	39	7:24:35 AM	7:24:40 AM	5
1	40	7:25:17 AM	7:25:28 AM	11
1	41	7:25:59 AM	7:26:04 AM	5
1	42	7:26:26 AM	7:26:36 AM	10
1	43	7:26:43 AM	7:26:49 AM	6
1	44	7:27:33 AM	7:27:41 AM	8
1	45	7:29:13 AM	7:29:27 AM	14
1	46	7:29:16 AM	7:29:34 AM	18
1	47	7:29:36 AM	7:29:41 AM	5
1	48	7:29:39 AM	7:29:54 AM	15
1	49	7:29:41 AM	7:29:59 AM	18

Summary Information:

7:15:00 AM - 7:30:00 AM	Waltham Rd WB
Total Vehicle Count:	28
Delayed Vehicle Count:	28
Through Vehicle Count:	0
Average Stopped Time:	9.71
Maximum Stopped Time:	18
Min. Secs. for Delay:	0
Average Queue:	0.31
Queue Density:	1.31
Maximum Queue:	3
Delay in Vehicle Hour:	0.31
Total Delay:	272

L	No.	Joined Queue	Released From Queue	Delay
1	50	7:30:32 AM	7:30:46 AM	14
1	51	7:30:34 AM	7:30:50 AM	16
1	52	7:31:04 AM	7:31:16 AM	12
1	53	7:31:07 AM	7:31:19 AM	12
1	54	7:31:49 AM	7:32:21 AM	32
1	55	7:32:09 AM	7:32:28 AM	19
1	56	7:32:45 AM	7:32:50 AM	5
1	57	7:33:10 AM	7:33:23 AM	13
1	58	7:34:06 AM	7:34:11 AM	5
1	59	7:34:50 AM	7:35:01 AM	11
1	60	7:34:56 AM	7:35:15 AM	19
1	61	7:35:00 AM	7:35:19 AM	19

Accurate Counts

978-664-2565

N/S Street : Concord Road
 E/W Street : Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154SDAM
 Site Code : 62154004
 Start Date : 4/27/2016
 Page No : 3

L n.	No.	Joined Queue	Released From Queue	Delay
1	62	7:35:04 AM	7:35:22 AM	18
1	63	7:36:03 AM	7:36:29 AM	26
1	64	7:36:09 AM	7:36:44 AM	35
1	65	7:36:49 AM	7:36:53 AM	4
1	66	7:36:50 AM	7:36:59 AM	9
1	67	7:36:52 AM	7:37:06 AM	14
1	68	7:37:29 AM	7:37:42 AM	13
1	69	7:38:32 AM	7:38:41 AM	9
1	70	7:38:51 AM	7:39:27 AM	36
1	71	7:39:21 AM	7:39:35 AM	14
1	72	7:39:33 AM	7:39:52 AM	19
1	73	7:39:46 AM	7:39:55 AM	9
1	74	7:40:11 AM	7:40:16 AM	5
1	75	7:40:19 AM	7:40:24 AM	5
1	76	7:40:41 AM	7:41:16 AM	35
1	77	7:41:01 AM	7:41:21 AM	20
1	78	7:41:31 AM	7:41:40 AM	9
1	79	7:43:12 AM	7:43:18 AM	6
1	80	7:43:16 AM	7:43:23 AM	7
1	81	7:44:20 AM	7:44:53 AM	33

Summary Information:

7:30:00 AM - 7:45:00 AM	Waltham Rd WB
Total Vehicle Count:	32
Delayed Vehicle Count:	32
Through Vehicle Count:	0
Average Stopped Time:	15.72
Maximum Stopped Time:	36
Min. Secs. for Delay:	0
Average Queue:	0.58
Queue Density:	1.35
Maximum Queue:	3
Delay in Vehicle Hour:	0.58
Total Delay:	503

L n.	No.	Joined Queue	Released From Queue	Delay
1	82	7:45:07 AM	7:45:11 AM	4
1	83	7:46:09 AM	7:46:25 AM	16
1	84	7:46:30 AM	7:46:35 AM	5
1	85	7:46:42 AM	7:46:48 AM	6
1	86	7:47:38 AM	7:47:45 AM	7
1	87	7:47:39 AM	7:47:53 AM	14
1	88	7:48:02 AM	7:48:20 AM	18
1	89	7:48:04 AM	7:48:29 AM	25

Accurate Counts

978-664-2565

1	90	7:48:20 AM	7:48:35 AM	15
1	91	7:49:46 AM	7:50:03 AM	17
1	92	7:51:34 AM	7:51:40 AM	6
1	93	7:51:48 AM	7:51:58 AM	10
1	94	7:53:24 AM	7:53:29 AM	5
1	95	7:54:17 AM	7:54:24 AM	7
1	96	7:55:01 AM	7:55:06 AM	5
1	97	7:55:08 AM	7:55:15 AM	7
1	98	7:55:47 AM	7:55:49 AM	2
1	99	7:57:38 AM	7:57:49 AM	11
1	100	7:57:46 AM	7:57:59 AM	13
1	101	7:59:41 AM	7:59:48 AM	7

Summary Information:

7:45:00 AM - 8:00:00 AM	Waltham Rd WB
Total Vehicle Count:	20
Delayed Vehicle Count:	20
Through Vehicle Count:	0
Average Stopped Time:	10.00
Maximum Stopped Time:	25
Min. Secs. for Delay:	0
Average Queue:	0.23
Queue Density:	1.21
Maximum Queue:	2
Delay in Vehicle Hour:	0.23
Total Delay:	200

L	No.	Joined Queue	Released From Queue	Delay
1	102	8:00:10 AM	8:00:16 AM	6
1	103	8:00:20 AM	8:00:29 AM	9
1	104	8:02:38 AM	8:02:42 AM	4
1	105	8:02:53 AM	8:02:55 AM	2
1	106	8:04:28 AM	8:04:52 AM	24
1	107	8:04:59 AM	8:05:05 AM	6
1	108	8:05:15 AM	8:05:29 AM	14
1	109	8:06:04 AM	8:06:09 AM	5
1	110	8:06:34 AM	8:06:57 AM	23
1	111	8:09:02 AM	8:09:20 AM	18
1	112	8:09:31 AM	8:09:39 AM	8
1	113	8:10:28 AM	8:10:39 AM	11
1	114	8:10:38 AM	8:10:45 AM	7
1	115	8:13:54 AM	8:14:14 AM	20
1	116	8:14:52 AM	8:15:12 AM	20
1	117	8:14:53 AM	8:15:22 AM	29

Summary Information:

8:00:00 AM - 8:15:00 AM	Waltham Rd WB
Total Vehicle Count:	16
Delayed Vehicle Count:	16
Through Vehicle Count:	0
Average Stopped Time:	12.88

Accurate Counts

978-664-2565

Maximum Stopped Time:	29
Min. Secs. for Delay:	0
Average Queue:	0.22
Queue Density:	1.11
Maximum Queue:	2
Delay in Vehicle Hour:	0.23
Total Delay:	206

L n.	No.	Joined Queue	Released From Queue	Delay
1	118	8:16:22 AM	8:16:28 AM	6
1	119	8:16:30 AM	8:16:33 AM	3
1	120	8:17:14 AM	8:17:44 AM	30
1	121	8:17:35 AM	8:17:50 AM	15
1	122	8:20:25 AM	8:20:37 AM	12
1	123	8:20:39 AM	8:20:55 AM	16
1	124	8:20:56 AM	8:21:05 AM	9
1	125	8:21:55 AM	8:22:03 AM	8
1	126	8:24:05 AM	8:24:17 AM	12
1	127	8:28:06 AM	8:28:11 AM	5
1	128	8:29:21 AM	8:29:28 AM	7

Summary Information:

8:15:00 AM - 8:30:00 AM	Waltham Rd WB
Total Vehicle Count:	11
Delayed Vehicle Count:	11
Through Vehicle Count:	0
Average Stopped Time:	11.18
Maximum Stopped Time:	30
Min. Secs. for Delay:	0
Average Queue:	0.16
Queue Density:	1.08
Maximum Queue:	2
Delay in Vehicle Hour:	0.16
Total Delay:	123

L n.	No.	Joined Queue	Released From Queue	Delay
1	129	8:30:56 AM	8:30:58 AM	2
1	130	8:32:25 AM	8:32:36 AM	11
1	131	8:38:05 AM	8:38:22 AM	17
1	132	8:38:57 AM	8:39:10 AM	13
1	133	8:39:01 AM	8:39:27 AM	26
1	134	8:40:00 AM	8:40:27 AM	27
1	135	8:41:14 AM	8:41:25 AM	11
1	136	8:41:36 AM	8:41:46 AM	10
1	137	8:42:00 AM	8:42:45 AM	45
1	138	8:42:07 AM	8:42:51 AM	44
1	139	8:42:22 AM	8:43:17 AM	55
1	140	8:42:44 AM	8:43:22 AM	38
1	141	8:43:35 AM	8:43:40 AM	5
1	142	8:44:11 AM	8:44:25 AM	14

Accurate Counts

978-664-2565

N/S Street : Concord Road
E/W Street : Waltham Road
City/State : Wayland, MA
Weather : Clear

File Name : 62154SDAM
Site Code : 62154004
Start Date : 4/27/2016
Page No : 6

L n.	No.	Joined Queue	Released From Queue	Delay
1	143	8:44:18 AM	8:44:29 AM	11
1	144	8:44:22 AM	8:44:33 AM	11

Summary Information:

8:30:00 AM - 8:45:00 AM	Waltham Rd WB
Total Vehicle Count:	16
Delayed Vehicle Count:	16
Through Vehicle Count:	0
Average Stopped Time:	21.25
Maximum Stopped Time:	55
Min. Secs. for Delay:	0
Average Queue:	0.41
Queue Density:	1.57
Maximum Queue:	4
Delay in Vehicle Hour:	0.42
Total Delay:	340

L n.	No.	Joined Queue	Released From Queue	Delay
1	145	8:45:54 AM	8:45:58 AM	4
1	146	8:49:14 AM	8:49:25 AM	11
1	147	8:49:15 AM	8:49:39 AM	24
1	148	8:49:22 AM	8:49:44 AM	22
1	149	8:49:46 AM	8:49:50 AM	4
1	150	8:49:56 AM	8:50:10 AM	14
1	151	8:50:38 AM	8:50:44 AM	6
1	152	8:52:08 AM	8:52:15 AM	7
1	153	8:53:01 AM	8:53:09 AM	8
1	154	8:53:56 AM	8:54:04 AM	8
1	155	8:53:58 AM	8:54:08 AM	10
1	156	8:54:41 AM	8:54:52 AM	11
1	157	8:56:39 AM	8:56:55 AM	16
1	158	8:56:50 AM	8:57:01 AM	11
1	159	8:57:33 AM	8:57:46 AM	13
1	160	8:59:38 AM	8:59:56 AM	18

Summary Information:

8:45:00 AM - 9:00:00 AM	Waltham Rd WB
Total Vehicle Count:	16
Delayed Vehicle Count:	16
Through Vehicle Count:	0
Average Stopped Time:	11.69
Maximum Stopped Time:	24
Min. Secs. for Delay:	0
Average Queue:	0.22

Accurate Counts

978-664-2565

Queue Density:	1.26
Maximum Queue:	3
Delay in Vehicle Hour:	0.22
Total Delay:	187

Summary Information:

7:00:00 AM - 9:00:00 AM	Waltham Rd WB
Total Vehicle Count:	160
Delayed Vehicle Count:	160
Through Vehicle Count:	0
Average Stopped Time:	12.47
Maximum Stopped Time:	55
Min. Secs. for Delay:	0
Average Queue:	0.28
Queue Density:	1.30
Maximum Queue:	4
Delay in Vehicle Hour:	0.28
Total Delay:	1995

Accurate Counts

978-664-2565

N/S Street : Concord Road
 E/W Street : Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154SDPM
 Site Code : 62154004
 Start Date : 4/27/2016
 Page No : 1

L n.	No.	Joined Queue	Released From Queue	Delay
1	1	2:01:53 PM	2:01:55 PM	2
1	2	2:03:08 PM	2:03:13 PM	5
1	3	2:03:35 PM	2:03:38 PM	3
1	4	2:04:36 PM	2:04:40 PM	4
1	5	2:04:45 PM	2:04:48 PM	3
1	6	2:06:25 PM	2:06:45 PM	20
1	7	2:06:47 PM	2:06:49 PM	2
1	8	2:06:55 PM	2:07:00 PM	5
1	9	2:07:49 PM	2:07:55 PM	6
1	10	2:08:28 PM	2:08:41 PM	13
1	11	2:08:31 PM	2:09:04 PM	33
1	12	2:08:32 PM	2:09:09 PM	37
1	13	2:11:09 PM	2:11:23 PM	14
1	14	2:12:41 PM	2:12:51 PM	10
1	15	2:12:43 PM	2:12:56 PM	13
1	16	2:14:47 PM	2:14:54 PM	7
1	17	2:14:57 PM	2:15:15 PM	18

Summary Information:

2:00:00 PM - 2:15:00 PM	Waltham Rd WB
Total Vehicle Count:	17
Delayed Vehicle Count:	17
Through Vehicle Count:	0
Average Stopped Time:	11.47
Maximum Stopped Time:	37
Min. Secs. for Delay:	0
Average Queue:	0.24
Queue Density:	1.35
Maximum Queue:	3
Delay in Vehicle Hour:	0.24
Total Delay:	195

L n.	No.	Joined Queue	Released From Queue	Delay
1	18	2:15:31 PM	2:15:37 PM	6
1	19	2:15:40 PM	2:15:48 PM	8
1	20	2:15:41 PM	2:15:49 PM	8
1	21	2:16:23 PM	2:16:29 PM	6
1	22	2:16:25 PM	2:16:47 PM	22
1	23	2:16:29 PM	2:16:51 PM	22
1	24	2:16:33 PM	2:16:54 PM	21
1	25	2:17:15 PM	2:17:22 PM	7
1	26	2:21:19 PM	2:21:21 PM	2

Accurate Counts
978-664-2565

1	27	2:22:18 PM	2:22:21 PM	3
1	28	2:23:03 PM	2:23:10 PM	7
1	29	2:23:06 PM	2:23:11 PM	5
1	30	2:23:15 PM	2:23:20 PM	5
1	31	2:23:33 PM	2:23:37 PM	4
1	32	2:24:44 PM	2:24:57 PM	13
1	33	2:25:14 PM	2:25:37 PM	23
1	34	2:25:15 PM	2:25:40 PM	25
1	35	2:25:22 PM	2:25:51 PM	29
1	36	2:25:46 PM	2:25:58 PM	12
1	37	2:25:59 PM	2:26:04 PM	5
1	38	2:28:18 PM	2:28:25 PM	7
1	39	2:28:52 PM	2:28:57 PM	5
1	40	2:29:50 PM	2:29:59 PM	9

Summary Information:

2:15:00 PM - 2:30:00 PM	Waltham Rd WB
Total Vehicle Count:	23
Delayed Vehicle Count:	23
Through Vehicle Count:	0
Average Stopped Time:	11.04
Maximum Stopped Time:	29
Min. Secs. for Delay:	0
Average Queue:	0.29
Queue Density:	1.61
Maximum Queue:	3
Delay in Vehicle Hour:	0.29
Total Delay:	254

L n.	No.	Joined Queue	Released From Queue	Delay
1	41	2:31:46 PM	2:31:50 PM	4
1	42	2:33:52 PM	2:34:04 PM	12
1	43	2:34:46 PM	2:34:49 PM	3
1	44	2:35:12 PM	2:35:16 PM	4
1	45	2:35:53 PM	2:35:59 PM	6
1	46	2:37:19 PM	2:37:25 PM	6
1	47	2:39:37 PM	2:39:44 PM	7
1	48	2:41:40 PM	2:41:45 PM	5
1	49	2:41:53 PM	2:41:57 PM	4
1	50	2:42:04 PM	2:42:08 PM	4
1	51	2:43:27 PM	2:43:30 PM	3
1	52	2:43:44 PM	2:43:53 PM	9
1	53	2:43:48 PM	2:43:56 PM	8
1	54	2:44:24 PM	2:44:27 PM	3
1	55	2:44:49 PM	2:44:55 PM	6
1	56	2:44:50 PM	2:44:57 PM	7

Accurate Counts

978-664-2565

N/S Street : Concord Road
E/W Street : Waltham Road
City/State : Wayland, MA
Weather : Clear

File Name : 62154SDPM
Site Code : 62154004
Start Date : 4/27/2016
Page No : 3

Summary Information:

2:30:00 PM - 2:45:00 PM	Waltham Rd WB
Total Vehicle Count:	16
Delayed Vehicle Count:	16
Through Vehicle Count:	0
Average Stopped Time:	5.69
Maximum Stopped Time:	12
Min. Secs. for Delay:	0
Average Queue:	0.11
Queue Density:	1.13
Maximum Queue:	2
Delay in Vehicle Hour:	0.12
Total Delay:	91

L n.	No.	Joined Queue	Released From Queue	Delay
1	57	2:46:08 PM	2:46:11 PM	3
1	58	2:46:53 PM	2:47:10 PM	17
1	59	2:47:22 PM	2:47:36 PM	14
1	60	2:47:43 PM	2:47:45 PM	2
1	61	2:49:07 PM	2:49:25 PM	18
1	62	2:50:19 PM	2:50:37 PM	18
1	63	2:50:52 PM	2:50:54 PM	2
1	64	2:51:09 PM	2:51:15 PM	6
1	65	2:51:26 PM	2:51:27 PM	1
1	66	2:51:40 PM	2:51:42 PM	2
1	67	2:52:22 PM	2:52:25 PM	3
1	68	2:52:23 PM	2:52:29 PM	6
1	69	2:52:51 PM	2:52:55 PM	4
1	70	2:53:34 PM	2:53:37 PM	3
1	71	2:54:10 PM	2:54:13 PM	3
1	72	2:54:54 PM	2:54:59 PM	5
1	73	2:56:13 PM	2:56:22 PM	9
1	74	2:57:36 PM	2:57:38 PM	2
1	75	2:57:45 PM	2:57:50 PM	5
1	76	2:58:46 PM	2:58:47 PM	1
1	77	2:58:51 PM	2:59:00 PM	9
1	78	2:59:15 PM	2:59:27 PM	12
1	79	2:59:30 PM	2:59:33 PM	3

Summary Information:

2:45:00 PM - 3:00:00 PM	Waltham Rd WB
Total Vehicle Count:	23
Delayed Vehicle Count:	23
Through Vehicle Count:	0
Average Stopped Time:	6.43

Accurate Counts

978-664-2565

Maximum Stopped Time:	18
Min. Secs. for Delay:	0
Average Queue:	0.18
Queue Density:	1.01
Maximum Queue:	2
Delay in Vehicle Hour:	0.18
Total Delay:	148

L n.	No.	Joined Queue	Released From Queue	Delay
1	80	3:00:15 PM	3:00:27 PM	12
1	81	3:00:46 PM	3:00:49 PM	3
1	82	3:01:21 PM	3:01:25 PM	4
1	83	3:01:43 PM	3:01:45 PM	2
1	84	3:02:10 PM	3:02:16 PM	6
1	85	3:02:30 PM	3:02:32 PM	2
1	86	3:02:43 PM	3:02:56 PM	13
1	87	3:03:12 PM	3:03:27 PM	15
1	88	3:03:55 PM	3:04:06 PM	11
1	89	3:03:56 PM	3:04:08 PM	12
1	90	3:05:04 PM	3:05:07 PM	3
1	91	3:05:23 PM	3:05:25 PM	2
1	92	3:05:30 PM	3:05:34 PM	4
1	93	3:05:46 PM	3:05:59 PM	13
1	94	3:05:51 PM	3:06:02 PM	11
1	95	3:06:39 PM	3:06:55 PM	16
1	96	3:06:50 PM	3:07:00 PM	10
1	97	3:07:24 PM	3:07:27 PM	3
1	98	3:07:31 PM	3:07:36 PM	5
1	99	3:07:58 PM	3:08:02 PM	4
1	100	3:08:40 PM	3:08:46 PM	6
1	101	3:09:14 PM	3:09:16 PM	2
1	102	3:10:35 PM	3:10:39 PM	4
1	103	3:11:47 PM	3:11:51 PM	4
1	104	3:11:49 PM	3:12:03 PM	14
1	105	3:14:09 PM	3:14:20 PM	11
1	106	3:14:25 PM	3:14:42 PM	17
1	107	3:14:31 PM	3:14:49 PM	18
1	108	3:14:51 PM	3:14:59 PM	8

Summary Information:

3:00:00 PM - 3:15:00 PM	Waltham Rd WB
Total Vehicle Count:	29
Delayed Vehicle Count:	29
Through Vehicle Count:	0
Average Stopped Time:	8.10
Maximum Stopped Time:	18
Min. Secs. for Delay:	0
Average Queue:	0.26
Queue Density:	1.18
Maximum Queue:	2
Delay in Vehicle Hour:	0.27

Accurate Counts

978-664-2565

Total Delay:	235
--------------	-----

L n.	No.	Joined Queue	Released From Queue	Delay
1	109	3:15:01 PM	3:15:09 PM	8
1	110	3:15:15 PM	3:15:23 PM	8
1	111	3:15:53 PM	3:15:56 PM	3
1	112	3:16:27 PM	3:16:49 PM	22
1	113	3:16:37 PM	3:16:51 PM	14
1	114	3:16:38 PM	3:16:53 PM	15
1	115	3:16:40 PM	3:16:57 PM	17
1	116	3:17:51 PM	3:18:05 PM	14
1	117	3:18:57 PM	3:19:10 PM	13
1	118	3:19:01 PM	3:19:13 PM	12
1	119	3:19:15 PM	3:19:19 PM	4
1	120	3:19:46 PM	3:19:49 PM	3
1	121	3:19:53 PM	3:20:03 PM	10
1	122	3:19:55 PM	3:20:12 PM	17
1	123	3:19:56 PM	3:20:14 PM	18
1	124	3:19:57 PM	3:20:17 PM	20
1	125	3:20:06 PM	3:20:24 PM	18
1	126	3:20:10 PM	3:20:28 PM	18
1	127	3:20:19 PM	3:20:31 PM	12
1	128	3:20:22 PM	3:20:35 PM	13
1	129	3:20:23 PM	3:20:37 PM	14
1	130	3:22:24 PM	3:22:28 PM	4
1	131	3:22:59 PM	3:23:01 PM	2
1	132	3:23:12 PM	3:23:16 PM	4
1	133	3:23:14 PM	3:23:18 PM	4
1	134	3:23:46 PM	3:23:51 PM	5
1	135	3:24:26 PM	3:24:31 PM	5
1	136	3:24:28 PM	3:24:33 PM	5
1	137	3:24:29 PM	3:24:35 PM	6
1	138	3:24:33 PM	3:24:42 PM	9
1	139	3:25:16 PM	3:25:24 PM	8
1	140	3:26:11 PM	3:26:39 PM	28
1	141	3:26:12 PM	3:26:41 PM	29
1	142	3:26:15 PM	3:26:44 PM	29
1	143	3:26:53 PM	3:26:58 PM	5
1	144	3:27:48 PM	3:27:54 PM	6
1	145	3:28:09 PM	3:28:18 PM	9
1	146	3:28:23 PM	3:28:31 PM	8
1	147	3:28:26 PM	3:28:34 PM	8
1	148	3:29:15 PM	3:29:20 PM	5
1	149	3:29:17 PM	3:29:23 PM	6
1	150	3:29:40 PM	3:29:52 PM	12

Accurate Counts

978-664-2565

N/S Street : Concord Road
 E/W Street : Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154SDPM
 Site Code : 62154004
 Start Date : 4/27/2016
 Page No : 6

Summary Information:

3:15:00 PM - 3:30:00 PM	Waltham Rd WB
Total Vehicle Count:	42
Delayed Vehicle Count:	42
Through Vehicle Count:	0
Average Stopped Time:	11.19
Maximum Stopped Time:	29
Min. Secs. for Delay:	0
Average Queue:	0.53
Queue Density:	1.85
Maximum Queue:	5
Delay in Vehicle Hour:	0.53
Total Delay:	470

L n.	No.	Joined Queue	Released From Queue	Delay
1	151	3:30:19 PM	3:30:23 PM	4
1	152	3:31:21 PM	3:31:26 PM	5
1	153	3:31:53 PM	3:31:58 PM	5
1	154	3:32:01 PM	3:32:14 PM	13
1	155	3:32:03 PM	3:32:36 PM	33
1	156	3:32:05 PM	3:32:38 PM	33
1	157	3:32:13 PM	3:32:42 PM	29
1	158	3:32:18 PM	3:32:44 PM	26
1	159	3:32:32 PM	3:32:47 PM	15
1	160	3:32:34 PM	3:32:50 PM	16
1	161	3:32:47 PM	3:32:54 PM	7
1	162	3:33:24 PM	3:33:32 PM	8
1	163	3:34:10 PM	3:34:29 PM	19
1	164	3:34:11 PM	3:34:34 PM	23
1	165	3:34:14 PM	3:34:45 PM	31
1	166	3:34:18 PM	3:34:49 PM	31
1	167	3:34:19 PM	3:34:52 PM	33
1	168	3:34:24 PM	3:34:55 PM	31
1	169	3:35:02 PM	3:35:07 PM	5
1	170	3:35:43 PM	3:35:48 PM	5
1	171	3:35:46 PM	3:36:02 PM	16
1	172	3:36:08 PM	3:36:16 PM	8
1	173	3:36:10 PM	3:36:18 PM	8
1	174	3:36:13 PM	3:36:19 PM	6
1	175	3:36:14 PM	3:36:22 PM	8
1	176	3:36:46 PM	3:37:09 PM	23
1	177	3:36:50 PM	3:37:19 PM	29
1	178	3:37:10 PM	3:37:32 PM	22
1	179	3:37:29 PM	3:37:38 PM	9
1	180	3:38:04 PM	3:38:09 PM	5

Accurate Counts
978-664-2565

1	181	3:38:39 PM	3:38:41 PM	2
1	182	3:39:17 PM	3:39:21 PM	4
1	183	3:39:19 PM	3:39:38 PM	19
1	184	3:39:38 PM	3:39:55 PM	17
1	185	3:39:41 PM	3:40:07 PM	26
1	186	3:40:20 PM	3:40:23 PM	3
1	187	3:40:31 PM	3:40:49 PM	18
1	188	3:40:49 PM	3:40:56 PM	7
1	189	3:41:14 PM	3:41:19 PM	5
1	190	3:41:18 PM	3:41:24 PM	6
1	191	3:41:41 PM	3:41:56 PM	15
1	192	3:42:00 PM	3:42:06 PM	6
1	193	3:42:26 PM	3:42:29 PM	3
1	194	3:42:32 PM	3:42:34 PM	2
1	195	3:44:03 PM	3:44:08 PM	5
1	196	3:44:09 PM	3:44:13 PM	4
1	197	3:44:53 PM	3:44:58 PM	5

Summary Information:

3:30:00 PM - 3:45:00 PM	Waltham Rd WB
Total Vehicle Count:	47
Delayed Vehicle Count:	47
Through Vehicle Count:	0
Average Stopped Time:	13.89
Maximum Stopped Time:	33
Min. Secs. for Delay:	0
Average Queue:	0.74
Queue Density:	1.90
Maximum Queue:	6
Delay in Vehicle Hour:	0.74
Total Delay:	653

L	No.	Joined Queue	Released From Queue	Delay
1	198	3:45:01 PM	3:45:04 PM	3
1	199	3:45:40 PM	3:45:56 PM	16
1	200	3:45:45 PM	3:45:59 PM	14
1	201	3:45:49 PM	3:46:04 PM	15
1	202	3:45:56 PM	3:46:10 PM	14
1	203	3:46:35 PM	3:46:42 PM	7
1	204	3:46:38 PM	3:46:48 PM	10
1	205	3:47:22 PM	3:47:46 PM	24
1	206	3:47:25 PM	3:47:48 PM	23
1	207	3:47:29 PM	3:47:52 PM	23
1	208	3:48:03 PM	3:48:12 PM	9
1	209	3:48:05 PM	3:48:14 PM	9
1	210	3:48:07 PM	3:48:16 PM	9
1	211	3:48:09 PM	3:48:22 PM	13
1	212	3:48:12 PM	3:48:24 PM	12
1	213	3:48:15 PM	3:48:26 PM	11
1	214	3:48:19 PM	3:48:30 PM	11
1	215	3:48:55 PM	3:48:55 PM	0

Accurate Counts

978-664-2565

N/S Street : Concord Road
E/W Street : Waltham Road
City/State : Wayland, MA
Weather : Clear

File Name : 62154SDPM
Site Code : 62154004
Start Date : 4/27/2016
Page No : 8

L n.	No.	Joined Queue	Released From Queue	Delay
1	216	3:49:15 PM	3:49:19 PM	4
1	217	3:49:23 PM	3:49:26 PM	3
1	218	3:49:27 PM	3:49:50 PM	23
1	219	3:49:29 PM	3:50:10 PM	41
1	220	3:49:38 PM	3:50:19 PM	41
1	221	3:49:42 PM	3:50:29 PM	47
1	222	3:49:47 PM	3:50:31 PM	44
1	223	3:49:52 PM	3:50:33 PM	41
1	224	3:50:05 PM	3:51:00 PM	55
1	225	3:50:17 PM	3:51:04 PM	47
1	226	3:50:37 PM	3:51:06 PM	29
1	227	3:50:42 PM	3:51:08 PM	26
1	228	3:50:50 PM	3:51:12 PM	22
1	229	3:50:58 PM	3:51:18 PM	20
1	230	3:51:05 PM	3:51:25 PM	20
1	231	3:51:31 PM	3:51:42 PM	11
1	232	3:51:39 PM	3:51:46 PM	7
1	233	3:52:26 PM	3:52:30 PM	4
1	234	3:52:29 PM	3:52:34 PM	5
1	235	3:52:42 PM	3:52:51 PM	9
1	236	3:52:44 PM	3:52:59 PM	15
1	237	3:53:22 PM	3:53:26 PM	4
1	238	3:53:27 PM	3:53:32 PM	5
1	239	3:53:34 PM	3:53:35 PM	1
1	240	3:53:36 PM	3:53:39 PM	3
1	241	3:53:41 PM	3:54:02 PM	21
1	242	3:54:02 PM	3:54:10 PM	8
1	243	3:54:23 PM	3:54:26 PM	3
1	244	3:54:26 PM	3:54:28 PM	2
1	245	3:54:31 PM	3:54:35 PM	4
1	246	3:54:51 PM	3:54:59 PM	8
1	247	3:54:57 PM	3:55:02 PM	5
1	248	3:55:08 PM	3:55:21 PM	13
1	249	3:55:11 PM	3:55:30 PM	19
1	250	3:55:19 PM	3:55:33 PM	14
1	251	3:55:26 PM	3:55:35 PM	9
1	252	3:55:57 PM	3:56:06 PM	9
1	253	3:56:00 PM	3:56:09 PM	9
1	254	3:56:28 PM	3:56:32 PM	4
1	255	3:56:40 PM	3:56:44 PM	4
1	256	3:56:47 PM	3:56:57 PM	10
1	257	3:56:59 PM	3:57:06 PM	7
1	258	3:57:34 PM	3:57:46 PM	12
1	259	3:57:34 PM	3:57:48 PM	14
1	260	3:57:35 PM	3:57:51 PM	16

Accurate Counts

978-664-2565

1	261	3:57:35 PM	3:57:53 PM	18
1	262	3:57:37 PM	3:57:55 PM	18
1	263	3:57:43 PM	3:57:56 PM	13
1	264	3:58:00 PM	3:58:04 PM	4
1	265	3:58:11 PM	3:58:17 PM	6
1	266	3:58:13 PM	3:58:21 PM	8
1	267	3:58:42 PM	3:58:44 PM	2
1	268	3:58:49 PM	3:58:59 PM	10
1	269	3:58:53 PM	3:59:03 PM	10
1	270	3:59:23 PM	3:59:27 PM	4
1	271	3:59:25 PM	3:59:29 PM	4
1	272	3:59:36 PM	3:59:40 PM	4

Summary Information:

3:45:00 PM - 4:00:00 PM	Waltham Rd WB
Total Vehicle Count:	75
Delayed Vehicle Count:	75
Through Vehicle Count:	0
Average Stopped Time:	13.89
Maximum Stopped Time:	55
Min. Secs. for Delay:	0
Average Queue:	1.18
Queue Density:	2.29
Maximum Queue:	6
Delay in Vehicle Hour:	1.19
Total Delay:	1042

L	No.	Joined Queue	Released From Queue	Delay
1	273	4:00:13 PM	4:00:19 PM	6
1	274	4:00:34 PM	4:00:37 PM	3
1	275	4:00:48 PM	4:00:52 PM	4
1	276	4:01:35 PM	4:01:41 PM	6
1	277	4:01:42 PM	4:01:47 PM	5
1	278	4:01:44 PM	4:01:51 PM	7
1	279	4:02:17 PM	4:02:34 PM	17
1	280	4:02:23 PM	4:02:43 PM	20
1	281	4:02:27 PM	4:02:45 PM	18
1	282	4:02:35 PM	4:02:49 PM	14
1	283	4:02:39 PM	4:03:12 PM	33
1	284	4:02:40 PM	4:03:20 PM	40
1	285	4:02:46 PM	4:03:23 PM	37
1	286	4:02:49 PM	4:03:30 PM	41
1	287	4:02:53 PM	4:03:44 PM	51
1	288	4:03:00 PM	4:03:48 PM	48
1	289	4:03:24 PM	4:04:19 PM	55
1	290	4:03:28 PM	4:04:27 PM	59
1	291	4:03:32 PM	4:04:29 PM	57
1	292	4:03:52 PM	4:04:33 PM	41
1	293	4:04:00 PM	4:04:36 PM	36
1	294	4:04:14 PM	4:04:39 PM	25
1	295	4:04:17 PM	4:04:40 PM	23

Accurate Counts

978-664-2565

N/S Street : Concord Road
E/W Street : Waltham Road
City/State : Wayland, MA
Weather : Clear

File Name : 62154SDPM
Site Code : 62154004
Start Date : 4/27/2016
Page No : 10

L n.	No.	Joined Queue	Released From Queue	Delay
1	296	4:04:22 PM	4:04:43 PM	21
1	297	4:05:04 PM	4:05:10 PM	6
1	298	4:05:20 PM	4:05:27 PM	7
1	299	4:05:39 PM	4:05:52 PM	13
1	300	4:05:43 PM	4:05:57 PM	14
1	301	4:05:46 PM	4:05:59 PM	13
1	302	4:05:48 PM	4:06:05 PM	17
1	303	4:06:30 PM	4:06:37 PM	7
1	304	4:06:31 PM	4:06:38 PM	7
1	305	4:06:44 PM	4:07:02 PM	18
1	306	4:06:45 PM	4:07:06 PM	21
1	307	4:06:48 PM	4:07:15 PM	27
1	308	4:07:00 PM	4:07:17 PM	17
1	309	4:07:13 PM	4:07:21 PM	8
1	310	4:07:21 PM	4:07:29 PM	8
1	311	4:08:06 PM	4:08:11 PM	5
1	312	4:08:34 PM	4:08:45 PM	11
1	313	4:09:01 PM	4:09:03 PM	2
1	314	4:09:32 PM	4:09:34 PM	2
1	315	4:10:19 PM	4:10:21 PM	2
1	316	4:10:27 PM	4:10:30 PM	3
1	317	4:10:49 PM	4:10:57 PM	8
1	318	4:11:08 PM	4:11:13 PM	5
1	319	4:11:21 PM	4:11:24 PM	3
1	320	4:11:22 PM	4:11:25 PM	3
1	321	4:11:40 PM	4:11:41 PM	1
1	322	4:11:48 PM	4:11:52 PM	4
1	323	4:12:32 PM	4:12:35 PM	3
1	324	4:12:33 PM	4:12:37 PM	4
1	325	4:12:34 PM	4:12:39 PM	5
1	326	4:12:41 PM	4:13:00 PM	19
1	327	4:12:43 PM	4:13:08 PM	25
1	328	4:12:45 PM	4:13:09 PM	24
1	329	4:12:49 PM	4:13:18 PM	29
1	330	4:12:54 PM	4:13:22 PM	28
1	331	4:13:07 PM	4:13:25 PM	18
1	332	4:13:15 PM	4:13:29 PM	14
1	333	4:13:49 PM	4:13:55 PM	6
1	334	4:13:51 PM	4:13:58 PM	7
1	335	4:14:00 PM	4:14:02 PM	2
1	336	4:14:25 PM	4:14:33 PM	8
1	337	4:14:31 PM	4:14:35 PM	4
1	338	4:14:32 PM	4:14:38 PM	6

Accurate Counts

978-664-2565

N/S Street : Concord Road
 E/W Street : Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154SDPM
 Site Code : 62154004
 Start Date : 4/27/2016
 Page No : 11

Summary Information:

4:00:00 PM - 4:15:00 PM	Waltham Rd WB
Total Vehicle Count:	66
Delayed Vehicle Count:	66
Through Vehicle Count:	0
Average Stopped Time:	16.68
Maximum Stopped Time:	59
Min. Secs. for Delay:	0
Average Queue:	1.27
Queue Density:	2.81
Maximum Queue:	7
Delay in Vehicle Hour:	1.27
Total Delay:	1101

L n.	No.	Joined Queue	Released From Queue	Delay
1	339	4:15:17 PM	4:15:22 PM	5
1	340	4:15:19 PM	4:15:25 PM	6
1	341	4:15:20 PM	4:15:28 PM	8
1	342	4:15:35 PM	4:15:39 PM	4
1	343	4:15:47 PM	4:15:51 PM	4
1	344	4:16:01 PM	4:16:05 PM	4
1	345	4:16:04 PM	4:16:08 PM	4
1	346	4:16:05 PM	4:16:12 PM	7
1	347	4:16:21 PM	4:16:28 PM	7
1	348	4:16:24 PM	4:16:29 PM	5
1	349	4:16:26 PM	4:16:43 PM	17
1	350	4:16:27 PM	4:16:50 PM	23
1	351	4:16:32 PM	4:16:52 PM	20
1	352	4:16:44 PM	4:17:00 PM	16
1	353	4:17:13 PM	4:17:32 PM	19
1	354	4:17:19 PM	4:17:36 PM	17
1	355	4:17:24 PM	4:17:39 PM	15
1	356	4:17:46 PM	4:18:04 PM	18
1	357	4:18:03 PM	4:18:18 PM	15
1	358	4:18:07 PM	4:18:29 PM	22
1	359	4:18:10 PM	4:18:34 PM	24
1	360	4:18:26 PM	4:18:36 PM	10
1	361	4:18:49 PM	4:19:15 PM	26
1	362	4:18:51 PM	4:19:22 PM	31
1	363	4:18:54 PM	4:19:27 PM	33
1	364	4:18:56 PM	4:19:28 PM	32
1	365	4:19:12 PM	4:19:33 PM	21
1	366	4:19:39 PM	4:19:42 PM	3
1	367	4:19:44 PM	4:19:54 PM	10
1	368	4:19:46 PM	4:20:11 PM	25

Accurate Counts
978-664-2565

1	369	4:19:51 PM	4:20:19 PM	28
1	370	4:20:19 PM	4:20:26 PM	7
1	371	4:20:23 PM	4:20:30 PM	7
1	372	4:21:05 PM	4:21:08 PM	3
1	373	4:21:56 PM	4:22:01 PM	5
1	374	4:22:10 PM	4:22:14 PM	4
1	375	4:22:16 PM	4:22:20 PM	4
1	376	4:22:19 PM	4:22:24 PM	5
1	377	4:22:53 PM	4:22:58 PM	5
1	378	4:23:01 PM	4:23:05 PM	4
1	379	4:23:41 PM	4:23:46 PM	5
1	380	4:23:55 PM	4:24:09 PM	14
1	381	4:23:57 PM	4:24:12 PM	15
1	382	4:23:59 PM	4:24:14 PM	15
1	383	4:24:03 PM	4:24:45 PM	42
1	384	4:24:05 PM	4:25:01 PM	56
1	385	4:24:08 PM	4:25:06 PM	58
1	386	4:24:23 PM	4:25:36 PM	73
1	387	4:24:28 PM	4:25:40 PM	72
1	388	4:24:30 PM	4:25:44 PM	74
1	389	4:24:32 PM	4:25:46 PM	74
1	390	4:24:36 PM	4:25:48 PM	72
1	391	4:24:51 PM	4:25:50 PM	59
1	392	4:25:00 PM	4:25:50 PM	50
1	393	4:25:09 PM	4:25:53 PM	44
1	394	4:25:30 PM	4:25:56 PM	26
1	395	4:25:31 PM	4:26:00 PM	29
1	396	4:25:31 PM	4:26:04 PM	33
1	397	4:25:49 PM	4:26:06 PM	17
1	398	4:25:52 PM	4:26:12 PM	20
1	399	4:25:59 PM	4:26:42 PM	43
1	400	4:26:02 PM	4:26:44 PM	42
1	401	4:26:08 PM	4:26:58 PM	50
1	402	4:26:15 PM	4:27:08 PM	53
1	403	4:26:23 PM	4:27:12 PM	49
1	404	4:26:27 PM	4:27:16 PM	49
1	405	4:26:37 PM	4:27:21 PM	44
1	406	4:26:39 PM	4:27:23 PM	44
1	407	4:27:01 PM	4:27:38 PM	37
1	408	4:27:03 PM	4:27:39 PM	36
1	409	4:27:05 PM	4:27:45 PM	40
1	410	4:27:15 PM	4:28:18 PM	63
1	411	4:27:25 PM	4:28:21 PM	56
1	412	4:27:27 PM	4:28:24 PM	57
1	413	4:27:43 PM	4:28:27 PM	44
1	414	4:27:47 PM	4:28:29 PM	42
1	415	4:28:00 PM	4:28:32 PM	32
1	416	4:28:01 PM	4:28:33 PM	32
1	417	4:28:06 PM	4:28:36 PM	30
1	418	4:28:10 PM	4:28:40 PM	30
1	419	4:28:42 PM	4:28:45 PM	3
1	420	4:28:47 PM	4:29:35 PM	48

Accurate Counts

978-664-2565

N/S Street : Concord Road
 E/W Street : Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154SDPM
 Site Code : 62154004
 Start Date : 4/27/2016
 Page No : 13

L n.	No.	Joined Queue	Released From Queue	Delay
1	421	4:28:49 PM	4:29:38 PM	49
1	422	4:28:53 PM	4:29:42 PM	49
1	423	4:28:55 PM	4:29:44 PM	49
1	424	4:28:57 PM	4:29:46 PM	49
1	425	4:29:07 PM	4:29:47 PM	40
1	426	4:29:11 PM	4:29:50 PM	39
1	427	4:29:14 PM	4:29:51 PM	37
1	428	4:29:19 PM	4:29:53 PM	34

Summary Information:

4:15:00 PM - 4:30:00 PM	Waltham Rd WB
Total Vehicle Count:	90
Delayed Vehicle Count:	90
Through Vehicle Count:	0
Average Stopped Time:	29.34
Maximum Stopped Time:	74
Min. Secs. for Delay:	0
Average Queue:	3.01
Queue Density:	4.22
Maximum Queue:	11
Delay in Vehicle Hour:	3.01
Total Delay:	2641

L n.	No.	Joined Queue	Released From Queue	Delay
1	429	4:30:36 PM	4:30:39 PM	3
1	430	4:31:00 PM	4:31:04 PM	4
1	431	4:31:26 PM	4:31:35 PM	9
1	432	4:31:49 PM	4:31:58 PM	9
1	433	4:31:51 PM	4:32:01 PM	10
1	434	4:31:53 PM	4:32:05 PM	12
1	435	4:32:04 PM	4:32:08 PM	4
1	436	4:32:27 PM	4:32:35 PM	8
1	437	4:32:28 PM	4:32:36 PM	8
1	438	4:32:33 PM	4:32:38 PM	5
1	439	4:32:45 PM	4:32:51 PM	6
1	440	4:33:05 PM	4:33:10 PM	5
1	441	4:33:34 PM	4:33:42 PM	8
1	442	4:33:43 PM	4:33:48 PM	5
1	443	4:33:56 PM	4:34:12 PM	16
1	444	4:34:14 PM	4:34:34 PM	20
1	445	4:34:15 PM	4:34:38 PM	23
1	446	4:34:18 PM	4:34:49 PM	31
1	447	4:34:23 PM	4:34:51 PM	28
1	448	4:34:25 PM	4:34:55 PM	30

Accurate Counts
978-664-2565

1	449	4:34:27 PM	4:35:06 PM	39
1	450	4:34:31 PM	4:35:09 PM	38
1	451	4:34:41 PM	4:35:11 PM	30
1	452	4:34:43 PM	4:35:14 PM	31
1	453	4:34:52 PM	4:35:16 PM	24
1	454	4:34:59 PM	4:35:24 PM	25
1	455	4:35:00 PM	4:35:55 PM	55
1	456	4:35:05 PM	4:36:09 PM	64
1	457	4:35:19 PM	4:36:14 PM	55
1	458	4:35:21 PM	4:36:21 PM	60
1	459	4:35:23 PM	4:36:23 PM	60
1	460	4:35:40 PM	4:36:40 PM	60
1	461	4:35:48 PM	4:36:43 PM	55
1	462	4:36:02 PM	4:36:44 PM	42
1	463	4:36:13 PM	4:36:48 PM	35
1	464	4:36:18 PM	4:36:55 PM	37
1	465	4:36:25 PM	4:36:56 PM	31
1	466	4:36:31 PM	4:36:57 PM	26
1	467	4:36:36 PM	4:37:03 PM	27
1	468	4:36:38 PM	4:37:04 PM	26
1	469	4:36:39 PM	4:37:14 PM	35
1	470	4:36:52 PM	4:37:26 PM	34
1	471	4:36:52 PM	4:37:28 PM	36
1	472	4:36:59 PM	4:37:30 PM	31
1	473	4:37:06 PM	4:37:32 PM	26
1	474	4:37:07 PM	4:37:35 PM	28
1	475	4:37:17 PM	4:37:45 PM	28
1	476	4:37:20 PM	4:37:48 PM	28
1	477	4:37:25 PM	4:37:52 PM	27
1	478	4:37:50 PM	4:38:01 PM	11
1	479	4:37:57 PM	4:38:05 PM	8
1	480	4:38:04 PM	4:38:06 PM	2
1	481	4:38:10 PM	4:38:12 PM	2
1	482	4:38:18 PM	4:38:43 PM	25
1	483	4:38:20 PM	4:38:44 PM	24
1	484	4:38:23 PM	4:38:45 PM	22
1	485	4:38:30 PM	4:38:47 PM	17
1	486	4:38:31 PM	4:38:49 PM	18
1	487	4:38:32 PM	4:38:52 PM	20
1	488	4:38:37 PM	4:38:58 PM	21
1	489	4:39:16 PM	4:39:20 PM	4
1	490	4:39:20 PM	4:39:22 PM	2
1	491	4:40:03 PM	4:40:08 PM	5
1	492	4:40:14 PM	4:40:20 PM	6
1	493	4:40:17 PM	4:40:25 PM	8
1	494	4:40:29 PM	4:40:39 PM	10
1	495	4:40:31 PM	4:40:40 PM	9
1	496	4:40:34 PM	4:40:41 PM	7
1	497	4:40:59 PM	4:41:04 PM	5
1	498	4:41:08 PM	4:41:22 PM	14
1	499	4:41:10 PM	4:41:30 PM	20
1	500	4:41:12 PM	4:41:41 PM	29

Accurate Counts

978-664-2565

N/S Street : Concord Road
 E/W Street : Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154SDPM
 Site Code : 62154004
 Start Date : 4/27/2016
 Page No : 15

L n.	No.	Joined Queue	Released From Queue	Delay
1	501	4:41:14 PM	4:41:45 PM	31
1	502	4:41:15 PM	4:41:48 PM	33
1	503	4:42:08 PM	4:42:12 PM	4
1	504	4:42:16 PM	4:42:27 PM	11
1	505	4:42:36 PM	4:42:53 PM	17
1	506	4:42:40 PM	4:42:54 PM	14
1	507	4:42:50 PM	4:42:58 PM	8
1	508	4:42:51 PM	4:43:03 PM	12
1	509	4:43:11 PM	4:43:19 PM	8
1	510	4:43:18 PM	4:43:21 PM	3
1	511	4:43:54 PM	4:43:57 PM	3
1	512	4:44:08 PM	4:44:14 PM	6
1	513	4:44:46 PM	4:44:59 PM	13
1	514	4:44:51 PM	4:45:22 PM	31
1	515	4:44:58 PM	4:45:26 PM	28

Summary Information:

4:30:00 PM - 4:45:00 PM	Waltham Rd WB
Total Vehicle Count:	87
Delayed Vehicle Count:	87
Through Vehicle Count:	0
Average Stopped Time:	21.24
Maximum Stopped Time:	64
Min. Secs. for Delay:	0
Average Queue:	2.08
Queue Density:	3.43
Maximum Queue:	10
Delay in Vehicle Hour:	2.08
Total Delay:	1848

L n.	No.	Joined Queue	Released From Queue	Delay
1	516	4:45:01 PM	4:45:27 PM	26
1	517	4:45:02 PM	4:45:30 PM	28
1	518	4:45:10 PM	4:45:32 PM	22
1	519	4:45:39 PM	4:45:46 PM	7
1	520	4:45:39 PM	4:45:47 PM	8
1	521	4:45:41 PM	4:45:49 PM	8
1	522	4:45:44 PM	4:45:52 PM	8
1	523	4:46:18 PM	4:46:30 PM	12
1	524	4:46:22 PM	4:46:42 PM	20
1	525	4:46:25 PM	4:46:44 PM	19
1	526	4:46:26 PM	4:46:46 PM	20
1	527	4:46:27 PM	4:46:49 PM	22
1	528	4:46:38 PM	4:46:52 PM	14

Accurate Counts
978-664-2565

1	529	4:46:40 PM	4:46:57 PM	17
1	530	4:46:42 PM	4:47:00 PM	18
1	531	4:46:58 PM	4:47:14 PM	16
1	532	4:47:04 PM	4:47:20 PM	16
1	533	4:47:27 PM	4:47:35 PM	8
1	534	4:47:29 PM	4:47:41 PM	12
1	535	4:47:56 PM	4:48:06 PM	10
1	536	4:48:02 PM	4:48:08 PM	6
1	537	4:48:04 PM	4:48:19 PM	15
1	538	4:48:10 PM	4:48:22 PM	12
1	539	4:48:12 PM	4:48:26 PM	14
1	540	4:48:29 PM	4:48:38 PM	9
1	541	4:48:35 PM	4:48:40 PM	5
1	542	4:48:43 PM	4:48:49 PM	6
1	543	4:48:47 PM	4:48:55 PM	8
1	544	4:49:27 PM	4:49:41 PM	14
1	545	4:49:30 PM	4:49:42 PM	12
1	546	4:49:32 PM	4:49:43 PM	11
1	547	4:49:43 PM	4:49:50 PM	7
1	548	4:49:44 PM	4:49:53 PM	9
1	549	4:49:45 PM	4:49:56 PM	11
1	550	4:50:00 PM	4:50:12 PM	12
1	551	4:50:02 PM	4:50:21 PM	19
1	552	4:50:04 PM	4:50:44 PM	40
1	553	4:50:41 PM	4:50:52 PM	11
1	554	4:50:54 PM	4:51:22 PM	28
1	555	4:50:57 PM	4:51:28 PM	31
1	556	4:50:58 PM	4:51:40 PM	42
1	557	4:51:00 PM	4:51:48 PM	48
1	558	4:51:04 PM	4:51:52 PM	48
1	559	4:51:08 PM	4:51:57 PM	49
1	560	4:51:11 PM	4:52:00 PM	49
1	561	4:51:14 PM	4:52:02 PM	48
1	562	4:51:17 PM	4:52:13 PM	56
1	563	4:51:19 PM	4:52:15 PM	56
1	564	4:51:34 PM	4:52:19 PM	45
1	565	4:51:45 PM	4:52:20 PM	35
1	566	4:51:58 PM	4:52:22 PM	24
1	567	4:52:05 PM	4:52:40 PM	35
1	568	4:52:08 PM	4:52:40 PM	32
1	569	4:52:29 PM	4:52:42 PM	13
1	570	4:52:30 PM	4:52:50 PM	20
1	571	4:52:37 PM	4:53:11 PM	34
1	572	4:52:44 PM	4:53:33 PM	49
1	573	4:52:56 PM	4:53:33 PM	37
1	574	4:53:46 PM	4:53:49 PM	3
1	575	4:53:50 PM	4:53:58 PM	8
1	576	4:53:51 PM	4:54:00 PM	9
1	577	4:53:56 PM	4:54:05 PM	9
1	578	4:54:14 PM	4:54:19 PM	5
1	579	4:54:15 PM	4:54:19 PM	4
1	580	4:54:18 PM	4:54:24 PM	6

Accurate Counts

978-664-2565

N/S Street : Concord Road
 E/W Street : Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154SDPM
 Site Code : 62154004
 Start Date : 4/27/2016
 Page No : 17

L n.	No.	Joined Queue	Released From Queue	Delay
1	581	4:54:43 PM	4:54:47 PM	4
1	582	4:55:05 PM	4:55:17 PM	12
1	583	4:55:08 PM	4:55:18 PM	10
1	584	4:55:11 PM	4:55:23 PM	12
1	585	4:55:19 PM	4:55:25 PM	6
1	586	4:55:37 PM	4:55:51 PM	14
1	587	4:55:46 PM	4:56:00 PM	14
1	588	4:55:51 PM	4:56:03 PM	12
1	589	4:55:59 PM	4:56:09 PM	10
1	590	4:56:08 PM	4:56:12 PM	4
1	591	4:56:22 PM	4:56:35 PM	13
1	592	4:56:26 PM	4:56:37 PM	11
1	593	4:56:27 PM	4:56:40 PM	13
1	594	4:56:31 PM	4:56:43 PM	12
1	595	4:57:01 PM	4:57:14 PM	13
1	596	4:57:04 PM	4:57:16 PM	12
1	597	4:57:09 PM	4:57:19 PM	10
1	598	4:57:10 PM	4:57:23 PM	13
1	599	4:57:13 PM	4:57:26 PM	13
1	600	4:57:42 PM	4:57:52 PM	10
1	601	4:57:58 PM	4:58:02 PM	4
1	602	4:58:24 PM	4:58:38 PM	14
1	603	4:58:28 PM	4:58:48 PM	20
1	604	4:58:31 PM	4:58:52 PM	21
1	605	4:58:33 PM	4:58:56 PM	23
1	606	4:58:37 PM	4:59:05 PM	28
1	607	4:58:51 PM	4:59:08 PM	17
1	608	4:58:57 PM	4:59:12 PM	15
1	609	4:59:20 PM	4:59:26 PM	6
1	610	4:59:23 PM	4:59:28 PM	5
1	611	4:59:49 PM	4:59:57 PM	8
1	612	4:59:53 PM	4:59:58 PM	5
1	613	4:59:56 PM	4:59:59 PM	3

Summary Information:

4:45:00 PM - 5:00:00 PM	Waltham Rd WB
Total Vehicle Count:	98
Delayed Vehicle Count:	98
Through Vehicle Count:	0
Average Stopped Time:	17.78
Maximum Stopped Time:	56
Min. Secs. for Delay:	0
Average Queue:	1.94
Queue Density:	2.79
Maximum Queue:	10

Accurate Counts

978-664-2565

Delay in Vehicle Hour:	1.94
Total Delay:	1742

L n.	No.	Joined Queue	Released From Queue	Delay
1	614	5:00:21 PM	5:00:30 PM	9
1	615	5:00:22 PM	5:00:32 PM	10
1	616	5:00:29 PM	5:00:39 PM	10
1	617	5:00:34 PM	5:00:40 PM	6
1	618	5:00:36 PM	5:00:43 PM	7
1	619	5:00:40 PM	5:00:45 PM	5
1	620	5:00:42 PM	5:00:50 PM	8
1	621	5:00:45 PM	5:01:22 PM	37
1	622	5:00:49 PM	5:01:24 PM	35
1	623	5:00:54 PM	5:01:27 PM	33
1	624	5:00:57 PM	5:01:30 PM	33
1	625	5:01:03 PM	5:01:31 PM	28
1	626	5:01:06 PM	5:01:58 PM	52
1	627	5:01:32 PM	5:02:07 PM	35
1	628	5:01:33 PM	5:02:16 PM	43
1	629	5:01:40 PM	5:02:19 PM	39
1	630	5:01:42 PM	5:02:22 PM	40
1	631	5:01:53 PM	5:02:27 PM	34
1	632	5:02:12 PM	5:02:28 PM	16
1	633	5:02:46 PM	5:02:49 PM	3
1	634	5:02:57 PM	5:03:01 PM	4
1	635	5:03:13 PM	5:03:23 PM	10
1	636	5:03:15 PM	5:03:27 PM	12
1	637	5:03:20 PM	5:03:31 PM	11
1	638	5:03:54 PM	5:04:15 PM	21
1	639	5:03:58 PM	5:04:23 PM	25
1	640	5:03:59 PM	5:04:25 PM	26
1	641	5:04:00 PM	5:04:28 PM	28
1	642	5:04:04 PM	5:04:31 PM	27
1	643	5:04:07 PM	5:04:33 PM	26
1	644	5:04:10 PM	5:04:40 PM	30
1	645	5:04:12 PM	5:04:41 PM	29
1	646	5:04:14 PM	5:05:00 PM	46
1	647	5:04:17 PM	5:05:02 PM	45
1	648	5:04:23 PM	5:05:05 PM	42
1	649	5:04:27 PM	5:05:06 PM	39
1	650	5:04:34 PM	5:05:08 PM	34
1	651	5:04:36 PM	5:05:27 PM	51
1	652	5:04:39 PM	5:05:31 PM	52
1	653	5:04:42 PM	5:05:33 PM	51
1	654	5:04:47 PM	5:05:36 PM	49
1	655	5:04:52 PM	5:05:37 PM	45
1	656	5:05:00 PM	5:05:37 PM	37
1	657	5:05:03 PM	5:05:38 PM	35
1	658	5:05:07 PM	5:05:41 PM	34
1	659	5:05:12 PM	5:05:50 PM	38
1	660	5:05:19 PM	5:05:51 PM	32

Accurate Counts

978-664-2565

N/S Street : Concord Road
E/W Street : Waltham Road
City/State : Wayland, MA
Weather : Clear

File Name : 62154SDPM
Site Code : 62154004
Start Date : 4/27/2016
Page No : 19

L n.	No.	Joined Queue	Released From Queue	Delay
1	661	5:05:20 PM	5:05:52 PM	32
1	662	5:05:22 PM	5:05:53 PM	31
1	663	5:05:29 PM	5:05:54 PM	25
1	664	5:05:30 PM	5:05:57 PM	27
1	665	5:05:55 PM	5:06:04 PM	9
1	666	5:06:41 PM	5:07:00 PM	19
1	667	5:06:42 PM	5:07:03 PM	21
1	668	5:06:44 PM	5:07:07 PM	23
1	669	5:06:47 PM	5:07:10 PM	23
1	670	5:06:51 PM	5:07:14 PM	23
1	671	5:06:58 PM	5:07:18 PM	20
1	672	5:06:58 PM	5:07:19 PM	21
1	673	5:06:59 PM	5:07:20 PM	21
1	674	5:07:01 PM	5:07:22 PM	21
1	675	5:07:04 PM	5:07:23 PM	19
1	676	5:07:12 PM	5:07:25 PM	13
1	677	5:07:34 PM	5:07:44 PM	10
1	678	5:07:34 PM	5:07:46 PM	12
1	679	5:08:00 PM	5:08:27 PM	27
1	680	5:08:02 PM	5:08:30 PM	28
1	681	5:08:04 PM	5:08:34 PM	30
1	682	5:08:06 PM	5:08:35 PM	29
1	683	5:08:08 PM	5:08:37 PM	29
1	684	5:08:11 PM	5:08:39 PM	28
1	685	5:08:43 PM	5:09:03 PM	20
1	686	5:08:44 PM	5:09:07 PM	23
1	687	5:08:50 PM	5:09:10 PM	20
1	688	5:08:51 PM	5:09:13 PM	22
1	689	5:08:55 PM	5:09:17 PM	22
1	690	5:09:01 PM	5:09:18 PM	17
1	691	5:09:06 PM	5:09:20 PM	14
1	692	5:09:07 PM	5:09:22 PM	15
1	693	5:09:11 PM	5:09:26 PM	15
1	694	5:09:34 PM	5:09:40 PM	6
1	695	5:09:37 PM	5:09:46 PM	9
1	696	5:09:57 PM	5:10:01 PM	4
1	697	5:09:59 PM	5:10:02 PM	3
1	698	5:10:10 PM	5:10:23 PM	13
1	699	5:10:13 PM	5:10:27 PM	14
1	700	5:10:32 PM	5:10:38 PM	6
1	701	5:10:36 PM	5:10:40 PM	4
1	702	5:10:45 PM	5:10:47 PM	2
1	703	5:10:55 PM	5:11:06 PM	11
1	704	5:11:01 PM	5:11:06 PM	5
1	705	5:11:04 PM	5:11:08 PM	4

Accurate Counts

978-664-2565

1	706	5:11:30 PM	5:11:35 PM	5
1	707	5:11:31 PM	5:11:49 PM	18
1	708	5:11:33 PM	5:12:02 PM	29
1	709	5:12:04 PM	5:12:23 PM	19
1	710	5:12:10 PM	5:12:26 PM	16
1	711	5:12:13 PM	5:12:29 PM	16
1	712	5:12:15 PM	5:12:31 PM	16
1	713	5:12:25 PM	5:12:33 PM	8
1	714	5:12:49 PM	5:12:53 PM	4
1	715	5:12:52 PM	5:12:54 PM	2
1	716	5:13:01 PM	5:13:04 PM	3
1	717	5:13:16 PM	5:13:35 PM	19
1	718	5:13:17 PM	5:13:42 PM	25
1	719	5:13:18 PM	5:13:49 PM	31
1	720	5:13:22 PM	5:13:56 PM	34
1	721	5:13:24 PM	5:13:57 PM	33
1	722	5:13:30 PM	5:13:59 PM	29
1	723	5:13:33 PM	5:14:03 PM	30
1	724	5:13:42 PM	5:14:06 PM	24
1	725	5:13:46 PM	5:14:10 PM	24
1	726	5:14:09 PM	5:14:28 PM	19
1	727	5:14:17 PM	5:14:40 PM	23
1	728	5:14:19 PM	5:14:42 PM	23
1	729	5:14:20 PM	5:14:43 PM	23
1	730	5:14:23 PM	5:14:50 PM	27
1	731	5:14:47 PM	5:14:57 PM	10
1	732	5:14:57 PM	5:15:03 PM	6

Summary Information:

5:00:00 PM - 5:15:00 PM	Waltham Rd WB
Total Vehicle Count:	119
Delayed Vehicle Count:	119
Through Vehicle Count:	0
Average Stopped Time:	22.42
Maximum Stopped Time:	52
Min. Secs. for Delay:	0
Average Queue:	3.02
Queue Density:	4.09
Maximum Queue:	13
Delay in Vehicle Hour:	3.02
Total Delay:	2668

L	No.	Joined Queue	Released From Queue	Delay
1	733	5:15:16 PM	5:15:34 PM	18
1	734	5:15:18 PM	5:16:02 PM	44
1	735	5:15:18 PM	5:16:15 PM	57
1	736	5:15:20 PM	5:16:31 PM	71
1	737	5:15:23 PM	5:16:32 PM	69
1	738	5:15:32 PM	5:16:34 PM	62
1	739	5:15:49 PM	5:16:36 PM	47
1	740	5:15:52 PM	5:16:42 PM	50

Accurate Counts

978-664-2565

N/S Street : Concord Road
E/W Street : Waltham Road
City/State : Wayland, MA
Weather : Clear

File Name : 62154SDPM
Site Code : 62154004
Start Date : 4/27/2016
Page No : 21

L n.	No.	Joined Queue	Released From Queue	Delay
1	741	5:15:58 PM	5:17:05 PM	67
1	742	5:16:05 PM	5:17:07 PM	62
1	743	5:16:08 PM	5:17:11 PM	63
1	744	5:16:11 PM	5:17:15 PM	64
1	745	5:16:23 PM	5:17:20 PM	57
1	746	5:16:39 PM	5:17:36 PM	57
1	747	5:16:44 PM	5:17:40 PM	56
1	748	5:16:51 PM	5:18:09 PM	78
1	749	5:16:57 PM	5:18:30 PM	93
1	750	5:16:59 PM	5:18:35 PM	96
1	751	5:17:01 PM	5:18:37 PM	96
1	752	5:17:14 PM	5:18:39 PM	85
1	753	5:17:21 PM	5:18:40 PM	79
1	754	5:17:31 PM	5:18:41 PM	70
1	755	5:17:33 PM	5:18:42 PM	69
1	756	5:17:45 PM	5:18:46 PM	61
1	757	5:17:47 PM	5:19:11 PM	84
1	758	5:17:48 PM	5:19:13 PM	85
1	759	5:17:49 PM	5:19:15 PM	86
1	760	5:17:52 PM	5:19:16 PM	84
1	761	5:18:02 PM	5:19:26 PM	84
1	762	5:18:05 PM	5:19:47 PM	102
1	763	5:18:07 PM	5:19:48 PM	101
1	764	5:18:13 PM	5:19:50 PM	97
1	765	5:18:44 PM	5:20:19 PM	95
1	766	5:18:48 PM	5:20:22 PM	94
1	767	5:18:52 PM	5:20:24 PM	92
1	768	5:18:55 PM	5:20:26 PM	91
1	769	5:19:04 PM	5:20:29 PM	85
1	770	5:19:07 PM	5:20:32 PM	85
1	771	5:19:21 PM	5:20:36 PM	75
1	772	5:19:23 PM	5:20:39 PM	76
1	773	5:19:27 PM	5:20:41 PM	74
1	774	5:19:31 PM	5:20:43 PM	72
1	775	5:19:34 PM	5:20:44 PM	70
1	776	5:19:40 PM	5:20:46 PM	66
1	777	5:19:44 PM	5:20:57 PM	73
1	778	5:19:52 PM	5:21:03 PM	71
1	779	5:19:53 PM	5:21:20 PM	87
1	780	5:20:00 PM	5:21:27 PM	87
1	781	5:20:07 PM	5:21:31 PM	84
1	782	5:20:38 PM	5:21:40 PM	62
1	783	5:20:44 PM	5:21:41 PM	57
1	784	5:20:48 PM	5:21:44 PM	56
1	785	5:20:49 PM	5:21:57 PM	68

Accurate Counts
978-664-2565

1	786	5:20:55 PM	5:21:59 PM	64
1	787	5:21:12 PM	5:22:02 PM	50
1	788	5:21:12 PM	5:22:05 PM	53
1	789	5:21:15 PM	5:22:08 PM	53
1	790	5:21:39 PM	5:22:10 PM	31
1	791	5:21:47 PM	5:22:19 PM	32
1	792	5:21:49 PM	5:22:23 PM	34
1	793	5:21:53 PM	5:22:34 PM	41
1	794	5:21:59 PM	5:22:35 PM	36
1	795	5:22:30 PM	5:22:55 PM	25
1	796	5:22:31 PM	5:23:39 PM	68
1	797	5:22:32 PM	5:23:43 PM	71
1	798	5:22:34 PM	5:23:48 PM	74
1	799	5:22:36 PM	5:23:56 PM	80
1	800	5:22:39 PM	5:23:58 PM	79
1	801	5:22:46 PM	5:24:00 PM	74
1	802	5:22:48 PM	5:24:06 PM	78
1	803	5:22:50 PM	5:24:06 PM	76
1	804	5:22:53 PM	5:24:08 PM	75
1	805	5:22:59 PM	5:24:11 PM	72
1	806	5:23:03 PM	5:24:14 PM	71
1	807	5:23:05 PM	5:24:16 PM	71
1	808	5:23:17 PM	5:24:18 PM	61
1	809	5:23:17 PM	5:24:20 PM	63
1	810	5:23:25 PM	5:24:20 PM	55
1	811	5:23:49 PM	5:24:23 PM	34
1	812	5:23:57 PM	5:24:23 PM	26
1	813	5:23:59 PM	5:24:28 PM	29
1	814	5:24:05 PM	5:24:41 PM	36
1	815	5:24:09 PM	5:24:41 PM	32
1	816	5:24:19 PM	5:24:43 PM	24
1	817	5:24:26 PM	5:24:44 PM	18
1	818	5:24:27 PM	5:24:45 PM	18
1	819	5:24:40 PM	5:24:50 PM	10
1	820	5:24:48 PM	5:25:11 PM	23
1	821	5:24:53 PM	5:25:17 PM	24
1	822	5:24:53 PM	5:25:19 PM	26
1	823	5:24:59 PM	5:25:24 PM	25
1	824	5:25:02 PM	5:25:29 PM	27
1	825	5:26:05 PM	5:26:10 PM	5
1	826	5:26:07 PM	5:26:12 PM	5
1	827	5:26:08 PM	5:26:15 PM	7
1	828	5:26:21 PM	5:26:35 PM	14
1	829	5:26:25 PM	5:26:37 PM	12
1	830	5:26:27 PM	5:26:38 PM	11
1	831	5:26:30 PM	5:26:42 PM	12
1	832	5:26:33 PM	5:26:50 PM	17
1	833	5:26:33 PM	5:26:51 PM	18
1	834	5:27:06 PM	5:27:29 PM	23
1	835	5:27:10 PM	5:27:37 PM	27
1	836	5:27:12 PM	5:27:42 PM	30
1	837	5:27:13 PM	5:27:44 PM	31

Accurate Counts

978-664-2565

N/S Street : Concord Road
 E/W Street : Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154SDPM
 Site Code : 62154004
 Start Date : 4/27/2016
 Page No : 23

L n.	No.	Joined Queue	Released From Queue	Delay
1	838	5:27:16 PM	5:27:44 PM	28
1	839	5:27:18 PM	5:27:49 PM	31
1	840	5:27:21 PM	5:27:50 PM	29
1	841	5:27:40 PM	5:27:55 PM	15
1	842	5:27:47 PM	5:27:58 PM	11
1	843	5:28:14 PM	5:28:21 PM	7
1	844	5:28:15 PM	5:28:23 PM	8
1	845	5:28:29 PM	5:28:53 PM	24
1	846	5:28:38 PM	5:28:54 PM	16
1	847	5:28:39 PM	5:28:56 PM	17
1	848	5:28:40 PM	5:28:58 PM	18
1	849	5:28:46 PM	5:28:59 PM	13
1	850	5:28:47 PM	5:29:01 PM	14
1	851	5:28:48 PM	5:29:25 PM	37
1	852	5:29:08 PM	5:29:27 PM	19
1	853	5:29:09 PM	5:29:28 PM	19
1	854	5:29:13 PM	5:29:32 PM	19
1	855	5:29:19 PM	5:29:35 PM	16
1	856	5:29:50 PM	5:29:51 PM	1
1	857	5:29:56 PM	5:29:59 PM	3

Summary Information:

5:15:00 PM - 5:30:00 PM	Waltham Rd WB
Total Vehicle Count:	125
Delayed Vehicle Count:	125
Through Vehicle Count:	0
Average Stopped Time:	50.48
Maximum Stopped Time:	102
Min. Secs. for Delay:	0
Average Queue:	7.14
Queue Density:	8.06
Maximum Queue:	17
Delay in Vehicle Hour:	7.15
Total Delay:	6310

L n.	No.	Joined Queue	Released From Queue	Delay
1	858	5:30:07 PM	5:30:25 PM	18
1	859	5:30:10 PM	5:30:25 PM	15
1	860	5:30:12 PM	5:30:27 PM	15
1	861	5:30:14 PM	5:30:27 PM	13
1	862	5:30:16 PM	5:30:29 PM	13
1	863	5:30:19 PM	5:30:31 PM	12
1	864	5:30:23 PM	5:30:42 PM	19
1	865	5:30:24 PM	5:30:46 PM	22

Accurate Counts
978-664-2565

1	866	5:30:25 PM	5:30:48 PM	23
1	867	5:30:37 PM	5:31:06 PM	29
1	868	5:30:41 PM	5:31:10 PM	29
1	869	5:30:50 PM	5:31:15 PM	25
1	870	5:30:54 PM	5:31:21 PM	27
1	871	5:31:04 PM	5:31:24 PM	20
1	872	5:31:18 PM	5:31:28 PM	10
1	873	5:31:26 PM	5:31:30 PM	4
1	874	5:31:49 PM	5:31:56 PM	7
1	875	5:31:51 PM	5:31:58 PM	7
1	876	5:31:53 PM	5:32:02 PM	9
1	877	5:32:08 PM	5:33:00 PM	52
1	878	5:32:09 PM	5:33:22 PM	73
1	879	5:32:11 PM	5:33:29 PM	78
1	880	5:32:13 PM	5:33:31 PM	78
1	881	5:32:15 PM	5:33:39 PM	84
1	882	5:32:16 PM	5:33:43 PM	87
1	883	5:32:19 PM	5:34:00 PM	101
1	884	5:32:21 PM	5:34:04 PM	103
1	885	5:32:27 PM	5:34:08 PM	101
1	886	5:32:54 PM	5:34:12 PM	78
1	887	5:33:05 PM	5:34:18 PM	73
1	888	5:33:14 PM	5:34:34 PM	80
1	889	5:33:21 PM	5:34:38 PM	77
1	890	5:33:27 PM	5:34:41 PM	74
1	891	5:33:29 PM	5:34:43 PM	74
1	892	5:33:34 PM	5:34:49 PM	75
1	893	5:33:41 PM	5:34:53 PM	72
1	894	5:33:45 PM	5:34:56 PM	71
1	895	5:33:53 PM	5:34:58 PM	65
1	896	5:33:59 PM	5:35:07 PM	68
1	897	5:33:59 PM	5:35:11 PM	72
1	898	5:34:14 PM	5:35:15 PM	61
1	899	5:34:15 PM	5:35:17 PM	62
1	900	5:34:22 PM	5:35:21 PM	59
1	901	5:34:25 PM	5:35:22 PM	57
1	902	5:34:29 PM	5:35:24 PM	55
1	903	5:34:31 PM	5:35:24 PM	53
1	904	5:34:37 PM	5:35:26 PM	49
1	905	5:34:40 PM	5:35:27 PM	47
1	906	5:34:47 PM	5:35:36 PM	49
1	907	5:34:48 PM	5:35:37 PM	49
1	908	5:34:51 PM	5:35:48 PM	57
1	909	5:34:58 PM	5:35:49 PM	51
1	910	5:35:03 PM	5:35:50 PM	47
1	911	5:35:07 PM	5:36:00 PM	53
1	912	5:35:18 PM	5:36:46 PM	88
1	913	5:35:20 PM	5:36:47 PM	87
1	914	5:35:25 PM	5:36:55 PM	90
1	915	5:35:26 PM	5:36:57 PM	91
1	916	5:35:29 PM	5:36:59 PM	90
1	917	5:35:32 PM	5:37:28 PM	116

Accurate Counts

978-664-2565

N/S Street : Concord Road
 E/W Street : Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154SDPM
 Site Code : 62154004
 Start Date : 4/27/2016
 Page No : 25

L n.	No.	Joined Queue	Released From Queue	Delay
1	918	5:35:35 PM	5:37:28 PM	113
1	919	5:35:41 PM	5:37:29 PM	108
1	920	5:35:41 PM	5:37:29 PM	108
1	921	5:35:48 PM	5:37:30 PM	102
1	922	5:35:54 PM	5:37:30 PM	96
1	923	5:36:01 PM	5:37:31 PM	90
1	924	5:36:10 PM	5:37:31 PM	81
1	925	5:36:11 PM	5:37:32 PM	81
1	926	5:36:15 PM	5:37:34 PM	79
1	927	5:36:41 PM	5:37:34 PM	53
1	928	5:37:03 PM	5:37:46 PM	43
1	929	5:37:12 PM	5:37:53 PM	41
1	930	5:37:17 PM	5:37:58 PM	41
1	931	5:37:19 PM	5:38:08 PM	49
1	932	5:37:25 PM	5:38:10 PM	45
1	933	5:37:27 PM	5:38:12 PM	45
1	934	5:37:28 PM	5:38:14 PM	46
1	935	5:37:34 PM	5:38:14 PM	40
1	936	5:37:36 PM	5:38:15 PM	39
1	937	5:37:40 PM	5:38:17 PM	37
1	938	5:38:23 PM	5:38:47 PM	24
1	939	5:38:26 PM	5:38:50 PM	24
1	940	5:38:28 PM	5:38:52 PM	24
1	941	5:38:46 PM	5:38:54 PM	8
1	942	5:38:56 PM	5:39:03 PM	7
1	943	5:39:01 PM	5:39:04 PM	3
1	944	5:39:02 PM	5:39:07 PM	5
1	945	5:39:23 PM	5:39:29 PM	6
1	946	5:39:26 PM	5:39:32 PM	6
1	947	5:39:37 PM	5:39:52 PM	15
1	948	5:39:42 PM	5:39:58 PM	16
1	949	5:39:48 PM	5:40:06 PM	18
1	950	5:39:50 PM	5:40:10 PM	20
1	951	5:40:28 PM	5:40:33 PM	5
1	952	5:40:31 PM	5:40:37 PM	6
1	953	5:40:55 PM	5:41:07 PM	12
1	954	5:41:01 PM	5:41:08 PM	7
1	955	5:41:02 PM	5:41:11 PM	9
1	956	5:41:29 PM	5:41:31 PM	2
1	957	5:41:29 PM	5:42:05 PM	36
1	958	5:41:31 PM	5:42:07 PM	36
1	959	5:41:33 PM	5:42:12 PM	39
1	960	5:41:35 PM	5:42:20 PM	45
1	961	5:41:36 PM	5:42:38 PM	62
1	962	5:41:40 PM	5:42:39 PM	59

Accurate Counts

978-664-2565

1	963	5:41:52 PM	5:42:52 PM	60
1	964	5:42:07 PM	5:42:57 PM	50
1	965	5:42:10 PM	5:43:04 PM	54
1	966	5:42:16 PM	5:43:06 PM	50
1	967	5:42:41 PM	5:43:08 PM	27
1	968	5:42:46 PM	5:43:13 PM	27
1	969	5:42:49 PM	5:43:38 PM	49
1	970	5:43:20 PM	5:43:38 PM	18
1	971	5:43:21 PM	5:43:38 PM	17
1	972	5:43:27 PM	5:43:40 PM	13
1	973	5:43:28 PM	5:43:45 PM	17
1	974	5:43:32 PM	5:43:54 PM	22
1	975	5:43:33 PM	5:43:55 PM	22
1	976	5:43:34 PM	5:43:56 PM	22
1	977	5:43:40 PM	5:43:58 PM	18
1	978	5:43:41 PM	5:44:10 PM	29
1	979	5:44:05 PM	5:44:12 PM	7
1	980	5:44:18 PM	5:44:39 PM	21
1	981	5:44:26 PM	5:44:39 PM	13
1	982	5:44:28 PM	5:44:39 PM	11
1	983	5:44:29 PM	5:44:41 PM	12
1	984	5:44:31 PM	5:44:42 PM	11
1	985	5:44:58 PM	5:45:06 PM	8

Summary Information:

5:30:00 PM - 5:45:00 PM	Waltham Rd WB
Total Vehicle Count:	128
Delayed Vehicle Count:	128
Through Vehicle Count:	0
Average Stopped Time:	44.32
Maximum Stopped Time:	116
Min. Secs. for Delay:	0
Average Queue:	6.31
Queue Density:	7.39
Maximum Queue:	17
Delay in Vehicle Hour:	6.31
Total Delay:	5673

L	No.	Joined Queue	Released From Queue	Delay
1	986	5:45:00 PM	5:45:06 PM	6
1	987	5:45:03 PM	5:45:07 PM	4
1	988	5:45:05 PM	5:45:11 PM	6
1	989	5:45:09 PM	5:45:18 PM	9
1	990	5:45:26 PM	5:45:30 PM	4
1	991	5:45:35 PM	5:45:37 PM	2
1	992	5:45:41 PM	5:45:46 PM	5
1	993	5:45:43 PM	5:45:49 PM	6
1	994	5:46:02 PM	5:46:37 PM	35
1	995	5:46:06 PM	5:46:39 PM	33
1	996	5:46:14 PM	5:46:43 PM	29
1	997	5:46:19 PM	5:46:47 PM	28

Accurate Counts

978-664-2565

N/S Street : Concord Road
 E/W Street : Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154SDPM
 Site Code : 62154004
 Start Date : 4/27/2016
 Page No : 27

L n.	No.	Joined Queue	Released From Queue	Delay
1	998	5:46:31 PM	5:46:52 PM	21
1	999	5:46:35 PM	5:46:53 PM	18
1	1000	5:46:36 PM	5:46:54 PM	18
1	1001	5:46:43 PM	5:46:56 PM	13
1	1002	5:47:03 PM	5:47:08 PM	5
1	1003	5:47:06 PM	5:47:11 PM	5
1	1004	5:47:30 PM	5:47:34 PM	4
1	1005	5:47:32 PM	5:47:36 PM	4
1	1006	5:47:43 PM	5:47:47 PM	4
1	1007	5:47:46 PM	5:47:48 PM	2
1	1008	5:47:54 PM	5:48:00 PM	6
1	1009	5:47:55 PM	5:48:01 PM	6
1	1010	5:47:56 PM	5:48:22 PM	26
1	1011	5:48:06 PM	5:48:27 PM	21
1	1012	5:48:10 PM	5:48:32 PM	22
1	1013	5:48:13 PM	5:48:33 PM	20
1	1014	5:48:16 PM	5:48:44 PM	28
1	1015	5:48:17 PM	5:49:01 PM	44
1	1016	5:48:18 PM	5:49:02 PM	44
1	1017	5:48:21 PM	5:49:05 PM	44
1	1018	5:48:26 PM	5:49:06 PM	40
1	1019	5:48:30 PM	5:49:07 PM	37
1	1020	5:48:33 PM	5:49:08 PM	35
1	1021	5:48:41 PM	5:49:09 PM	28
1	1022	5:48:46 PM	5:49:11 PM	25
1	1023	5:48:59 PM	5:49:13 PM	14
1	1024	5:49:00 PM	5:49:15 PM	15
1	1025	5:49:01 PM	5:49:16 PM	15
1	1026	5:49:34 PM	5:49:58 PM	24
1	1027	5:49:35 PM	5:50:09 PM	34
1	1028	5:49:36 PM	5:50:13 PM	37
1	1029	5:49:38 PM	5:50:22 PM	44
1	1030	5:49:50 PM	5:50:47 PM	57
1	1031	5:49:54 PM	5:50:50 PM	56
1	1032	5:49:56 PM	5:50:54 PM	58
1	1033	5:49:56 PM	5:50:55 PM	59
1	1034	5:49:59 PM	5:50:56 PM	57
1	1035	5:50:09 PM	5:50:57 PM	48
1	1036	5:50:19 PM	5:51:34 PM	75
1	1037	5:50:28 PM	5:51:34 PM	66
1	1038	5:50:29 PM	5:51:36 PM	67
1	1039	5:50:37 PM	5:52:05 PM	88
1	1040	5:50:52 PM	5:52:13 PM	81
1	1041	5:50:53 PM	5:52:13 PM	80
1	1042	5:51:06 PM	5:52:15 PM	69

Accurate Counts
978-664-2565

1	1043	5:51:06 PM	5:52:18 PM	72
1	1044	5:51:11 PM	5:52:20 PM	69
1	1045	5:51:30 PM	5:52:24 PM	54
1	1046	5:51:31 PM	5:52:27 PM	56
1	1047	5:51:33 PM	5:52:29 PM	56
1	1048	5:51:42 PM	5:52:31 PM	49
1	1049	5:51:46 PM	5:52:32 PM	46
1	1050	5:51:51 PM	5:52:37 PM	46
1	1051	5:51:52 PM	5:52:38 PM	46
1	1052	5:51:59 PM	5:52:40 PM	41
1	1053	5:52:09 PM	5:52:41 PM	32
1	1054	5:52:12 PM	5:52:48 PM	36
1	1055	5:52:17 PM	5:53:14 PM	57
1	1056	5:52:23 PM	5:53:14 PM	51
1	1057	5:52:27 PM	5:53:18 PM	51
1	1058	5:52:30 PM	5:53:20 PM	50
1	1059	5:52:35 PM	5:53:28 PM	53
1	1060	5:52:36 PM	5:54:01 PM	85
1	1061	5:52:45 PM	5:54:03 PM	78
1	1062	5:52:52 PM	5:54:03 PM	71
1	1063	5:53:07 PM	5:54:04 PM	57
1	1064	5:53:10 PM	5:54:09 PM	59
1	1065	5:53:26 PM	5:54:59 PM	93
1	1066	5:53:27 PM	5:55:04 PM	97
1	1067	5:53:30 PM	5:55:32 PM	122
1	1068	5:53:45 PM	5:55:34 PM	109
1	1069	5:53:49 PM	5:55:36 PM	107
1	1070	5:53:55 PM	5:55:53 PM	118
1	1071	5:53:58 PM	5:55:55 PM	117
1	1072	5:54:00 PM	5:55:56 PM	116
1	1073	5:54:13 PM	5:55:57 PM	104
1	1074	5:54:15 PM	5:56:02 PM	107
1	1075	5:54:45 PM	5:56:37 PM	112
1	1076	5:54:57 PM	5:56:37 PM	100
1	1077	5:54:58 PM	5:57:01 PM	123
1	1078	5:55:02 PM	5:57:28 PM	146
1	1079	5:55:09 PM	5:57:32 PM	143
1	1080	5:55:14 PM	5:57:38 PM	144
1	1081	5:55:18 PM	5:57:39 PM	141
1	1082	5:55:22 PM	5:57:46 PM	144
1	1083	5:55:25 PM	5:57:49 PM	144
1	1084	5:55:29 PM	5:57:49 PM	140
1	1085	5:55:31 PM	5:57:50 PM	139
1	1086	5:55:35 PM	5:57:52 PM	137
1	1087	5:55:38 PM	5:57:55 PM	137
1	1088	5:55:53 PM	5:57:56 PM	123
1	1089	5:55:56 PM	5:57:57 PM	121
1	1090	5:55:59 PM	5:57:57 PM	118
1	1091	5:56:03 PM	5:57:57 PM	114
1	1092	5:56:16 PM	5:57:58 PM	102
1	1093	5:56:20 PM	5:57:59 PM	99
1	1094	5:56:25 PM	5:57:59 PM	94

Accurate Counts

978-664-2565

N/S Street : Concord Road
 E/W Street : Waltham Road
 City/State : Wayland, MA
 Weather : Clear

File Name : 62154SDPM
 Site Code : 62154004
 Start Date : 4/27/2016
 Page No : 29

L n.	No.	Joined Queue	Released From Queue	Delay
1	1095	5:56:33 PM	5:58:01 PM	88
1	1096	5:56:36 PM	5:58:01 PM	85
1	1097	5:57:01 PM	5:58:02 PM	61
1	1098	5:57:08 PM	5:58:30 PM	82
1	1099	5:57:41 PM	5:58:30 PM	49
1	1100	5:57:44 PM	5:58:34 PM	50
1	1101	5:57:54 PM	5:58:38 PM	44
1	1102	5:58:00 PM	5:58:42 PM	42
1	1103	5:58:06 PM	5:58:47 PM	41
1	1104	5:58:07 PM	5:58:47 PM	40
1	1105	5:58:07 PM	5:58:48 PM	41
1	1106	5:58:12 PM	5:59:15 PM	63
1	1107	5:58:18 PM	5:59:15 PM	57
1	1108	5:58:21 PM	5:59:21 PM	60
1	1109	5:58:21 PM	5:59:39 PM	78
1	1110	5:58:27 PM	5:59:53 PM	86
1	1111	5:58:40 PM	5:59:58 PM	78

Summary Information:

5:45:00 PM - 6:00:00 PM	Waltham Rd WB
Total Vehicle Count:	126
Delayed Vehicle Count:	126
Through Vehicle Count:	0
Average Stopped Time:	60.33
Maximum Stopped Time:	146
Min. Secs. for Delay:	0
Average Queue:	8.46
Queue Density:	9.38
Maximum Queue:	22
Delay in Vehicle Hour:	8.47
Total Delay:	7602

Summary Information:

2:00:00 PM - 6:00:00 PM	Waltham Rd WB
Total Vehicle Count:	1111
Delayed Vehicle Count:	1111
Through Vehicle Count:	0
Average Stopped Time:	29.41
Maximum Stopped Time:	146
Min. Secs. for Delay:	0
Average Queue:	2.29
Queue Density:	4.70
Maximum Queue:	22
Delay in Vehicle Hour:	2.29

Accurate Counts
978-664-2565

Total Delay:	32673
--------------	-------

Seasonal Adjustment Worksheets

SECTION I - CONTINUOUS COUNTING STATION MONTHLY AVERAGE DAILY TRAFFIC

STATION 415 - NEWTON - RTE.I-95 (128) - SOUTH OF RTE.I-90

YR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
06	126,000	126,906	136,149	136,322	140,602	142,863	135,563	142,863	140,973	<i>141,211</i>	138,206	133,710

STATION 6189 - DEDHAM - RTE.I-95 (128) - NORTH OF RTE.109

YR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
05	138,000	132,174	136,654	142,226	145,240	152,638	138,350	146,758	142,964	139,299	131,242	132,683

278,548

April is higher by approximately 0.69 %

Adjustment Factor to average = 1.000

242

ITALICS = ESTIMATED DATA
MADT

MASSACHUSETTS HIGHWAY DEPARTMENT - STATEWIDE TRAFFIC DATA COLLECTION
2010 WEEKDAY SEASONAL FACTORS *

* Note: These are weekday factors. The average of the factors for the year will not equal 1, as weekend data are not considered

FACTOR GROUP	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
GROUP 1 - WEST INTERSTATE	0.97	0.93	0.89	0.88	0.89	0.87	0.91	0.89	0.89	0.90	0.93	0.95
Use group 2 for R5, R6, & R0												
GROUP 2 - RURAL MAJOR COLLECTOR (R-5)	1.11	1.10	1.07	1.00	0.91	0.89	0.87	0.86	0.90	0.92	1.02	1.06
GROUP 3A - RECREATIONAL **(1-4) See below	1.26	1.25	1.19	1.08	0.95	0.88	0.77	0.76	0.93	1.00	1.08	1.15
GROUP 3B - RECREATIONAL *** (5) See below	1.25	1.23	1.16	1.10	0.96	0.90	0.75	0.73	0.93	0.99	1.13	1.16
GROUP 4 - I-495 INTERSTATE	1.02	0.99	0.98	0.95	0.92	0.88	0.86	0.84	0.93	0.95	0.99	1.03
GROUP 5 - EAST INTERSTATE	1.04	1.00	0.97	0.93	0.92	0.91	0.92	0.89	0.92	0.93	0.97	1.01
GROUP 6: Use group 6 for U2, U3, U5, U6, U0, R2, & R3												
URBAN ARTERIALS, COLLECTORS & RURAL ARTERIALS (R-2, R-3)	1.01	1.00	0.96	0.93	0.91	0.90	0.91	0.90	0.92	0.93	0.97	0.99
GROUP 7 - I-84 PROXIMITY (STA. 17, 3921)	1.21	1.20	1.11	1.06	1.00	1.01	0.95	0.90	1.06	1.06	1.06	1.14
GROUP 8 - I-295 PROXIMITY (STA. 6590)	1.00	0.99	0.95	0.92	0.88	0.87	0.92	0.88	0.91	0.91	0.92	0.94
GROUP 9 - I-195 PROXIMITY (STA. 7)	1.10	1.05	1.03	0.96	0.90	0.86	0.85	0.79	0.88	0.93	0.99	1.04

RECREATIONAL: (ALL YEARS)
****GROUP 3A:**

1. CAPE COD (ALL TOWNS)

2. PLYMOUTH (SOUTH OF RTE. 3A)

7014, 7079, 7080, 7090, 7091, 7092, 7093, 7094, 7095, 7096, 7097, 7108, 7178

3. MARTHA'S VINEYARD

4. NANTUCKET

*****GROUP 3B:**

5. PERMANENTS 2 & 189

1066, 1067, 1083, 1084, 1085, 1086, 1087, 1088, 1089, 1090, 1091, 1092,

1093, 1094, 1095, 1096, 1097, 1098, 1099, 1100, 1101, 1102, 1103, 1104,

1105, 1106, 1107, 1108, 1113, 1114, 1116, 2196, 2197, 2198

2010 AXLE CORRECTION FACTORS

ROAD INVENTORY	AXLE CORRECTION
FUNCTIONAL CLASSIFICATION	FACTOR
RURAL	
1	0.93
2	0.97
3	0.98
0,5,6	0.98
URBAN	
1	0.96
2,3	0.97
5	0.98
0,6	0.98
I-84	0.78

ROUND OFF

0 - 999.....10
> 1,000.....100

Apply I-84 factor to stations:

3290, 3921, 3929

Crash Data and Worksheets

Concord Road and Waltham Road

[illegible]

INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Wayland, MA COUNT DATE : April 2016

DISTRICT : 4 UNSIGNALIZED : ☒ X SIGNALIZED : ☐

~ INTERSECTION DATA ~

MAJOR STREET : Concord Road

MINOR STREET(S) : Waltham Road

INTERSECTION
DIAGRAM
(Label Approaches)



PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	NB	SB	WB			
PEAK HOURLY VOLUMES (AM/PM) :	279	499	472			1,250

" K " FACTOR :

0.122

INTERSECTION ADT (V) = TOTAL DAILY APPROACH VOLUME :

10,246

TOTAL # OF CRASHES :

1

OF YEARS :

5

AVERAGE # OF CRASHES PER YEAR (A) :

0.20

CRASH RATE CALCULATION :

0.05

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

Comments : _____

Project Title & Date: _____

Waltham Road and Lincoln Road

[illegible]

INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Wayland, MA COUNT DATE : April 2016

DISTRICT : 4 UNSIGNALIZED : ☒ X SIGNALIZED : ☐

~ INTERSECTION DATA ~

MAJOR STREET : Waltham Road

MINOR STREET(S) : Lincoln Road

INTERSECTION
DIAGRAM
(Label Approaches)



PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	NB	SB	WB	EB		
PEAK HOURLY VOLUMES (AM/PM) :	9	272	76	222		579

" K " FACTOR :

0.122

INTERSECTION ADT (V) = TOTAL DAILY APPROACH VOLUME :

4,746

TOTAL # OF CRASHES :

3

OF YEARS :

5

AVERAGE # OF CRASHES PER YEAR (A) :

0.60

CRASH RATE CALCULATION :

0.35

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

Comments : _____

Project Title & Date: _____

Waltham Road and Longmeadow Road

[illegible]

INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Wayland, MA COUNT DATE : April 2016

DISTRICT : 4 UNSIGNALIZED : ☒ X SIGNALIZED : ☐

~ INTERSECTION DATA ~

MAJOR STREET : Waltham Road

MINOR STREET(S) : Longmeadow Road

INTERSECTION
DIAGRAM
(Label Approaches)



PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :		SB	WB	EB		
PEAK HOURLY VOLUMES (AM/PM) :		3	229	40		272

" K " FACTOR :

0.122

INTERSECTION ADT (V) = TOTAL DAILY
APPROACH VOLUME :

2,230

TOTAL # OF CRASHES :

2

OF
YEARS :

5

AVERAGE # OF
CRASHES PER YEAR (A) :

0.40

CRASH RATE CALCULATION :

0.49

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

Comments : _____

Project Title & Date: _____

[illegible]

INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Sudbury, MA COUNT DATE : April 2016

DISTRICT : 4 UNSIGNALIZED : ☒ X SIGNALIZED : ☐

~ INTERSECTION DATA ~

MAJOR STREET : South Great Road

MINOR STREET(S) : Old Sudbury Road

INTERSECTION
DIAGRAM
(Label Approaches)



PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	NB	SB		EB		
PEAK HOURLY VOLUMES (AM/PM) :	1,070	385		41		1,496

" K " FACTOR :

0.122

INTERSECTION ADT (V) = TOTAL DAILY APPROACH VOLUME :

12,262

TOTAL # OF CRASHES :

7

OF YEARS :

5

AVERAGE # OF CRASHES PER YEAR (A) :

1.40

CRASH RATE CALCULATION :

0.31

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

Comments : _____

Project Title & Date: _____

Trip Generation Worksheets

Proposed Carroll School Campus, Wayland, MA

Land Use Code (LUC) 522 - Middle School/Junior High School

Source : Institute of Transportation Engineers (ITE) Trip Generation, 9th Edition

Average Vehicle Trips Ends vs.: Students
Independent Variable (X): 60 students

AVERAGE WEEKDAY DAILY

T = 1.62 * X	No formula
T = 1.62 * 60	20 Studies
T = 97.20	AR = 1.62 trips/student
T = 98 vehicle trips	
with 50% (49 vpd) entering and 50% (49 vpd) exiting.	

WEEKDAY MORNING PEAK HOUR OF ADJACENT STREET TRAFFIC

T = 0.54 * (X)	No formula
T = 0.54 * 60	25 Studies
T = 32.40	AR = 0.54 trips/student
T = 32 vehicle trips	
with 55% (18 vph) entering and 45% (14 vph) exiting.	
0.29	0.25

WEEKDAY MORNING PEAK HOUR OF GENERATOR

No Data

WEEKDAY EVENING PEAK HOUR OF ADJACENT STREET TRAFFIC

T = 0.16 * X	No formula
T = 0.16 * 60	16 Studies
T = 9.60	AR = 0.16 trips/student
T = 10 vehicle trips	
with 49% (5 vph) entering and 51% (5 vph) exiting.	
0.08	0.08

WEEKDAY EVENING PEAK HOUR OF GENERATOR

T = 0.30 * X	No formula
T = 0.30 * 60	25 Studies
T = 18.00	AR = 0.30 trips/student
T = 18 vehicle trips	
with 45% (8 vph) entering and 55% (10 vph) exiting.	
0.14	0.16

Proposed Carroll School Campus, Wayland, MA

Land Use Code (LUC) 522 - Middle School/Junior High School

Source : Institute of Transportation Engineers (ITE) Trip Generation, 9th Edition

Average Vehicle Trips Ends vs.: Students
Independent Variable (X): 60 students

SATURDAY DAILY

No Data

SATURDAY MIDDAY PEAK HOUR OF GENERATOR

No Data

SUNDAY DAILY

No Data

SUNDAY MIDDAY PEAK HOUR OF GENERATOR

No Data

Proposed Carroll School Campus, Wayland, MA

Land Use Code (LUC) 534 - Private School (K-8)

Source : Institute of Transportation Engineers (ITE) Trip Generation, 9th Edition

Average Vehicle Trips Ends vs.: Students
Independent Variable (X): 60 students

AVERAGE WEEKDAY DAILY

No Data

WEEKDAY MORNING PEAK HOUR OF ADJACENT STREET TRAFFIC

$T = 0.90 * X + 3.01$	$R^2 = 0.97$
$T = 0.90 * (60) + 3.01$	10 Studies
$T = 57.01$	AR = 0.90 trips/student
$T = 57$ vehicle trips	
with 55% (31 vph) entering and 45% (26 vph) exiting.	
0.08	0.08

WEEKDAY MORNING PEAK HOUR OF GENERATOR

No Data

WEEKDAY EVENING PEAK HOUR OF ADJACENT STREET TRAFFIC

No Data

WEEKDAY EVENING PEAK HOUR OF GENERATOR

$T = 0.61 * X - 4.70$	$R^2 = 0.97$
$T = 0.61 * (0) - 4.70$	10 Studies
$T = 31.90$	AR = 0.90 trips/student
$T = 32$ vehicle trips	
with 47% (15 vph) entering and 53% (17 vph) exiting.	
0.08	0.08

Proposed Carroll School Campus, Wayland, MA

Land Use Code (LUC) 534 - Private School (K-8)

Source : Institute of Transportation Engineers (ITE) Trip Generation, 9th Edition

Average Vehicle Trips Ends vs.: Students
Independent Variable (X): 60 students

SATURDAY DAILY

No Data

SATURDAY MIDDAY PEAK HOUR OF GENERATOR

No Data

SUNDAY DAILY

No Data

SUNDAY MIDDAY PEAK HOUR OF GENERATOR

No Data

Carroll School Trip Generation Worksheet

		<u>Existing for 40 Students</u>	
AM Generation		22 private cars	
		6 small busses/mini vans	
		2 busses	
	0.55	60 students	
		33 private cars	
		6 small busses/mini vans	
		2 busses	
		<u>40</u> staff	
		81 vehicles enter	
		<u>41</u> vehicles exit	
		122 total trips	

3 PM Generation Regular Practice

	0.55	20 students	
		11 private cars	
		6 small busses/mini vans	
		2 busses	
		<u>0</u> staff	
		19 vehicles enter	
		<u>19</u> vehicles exit	
		38 total trips	

3 PM Generation Game Day

	0.55	20 students	
		11 private cars	
		6 small busses/mini vans	
		3 busses (visiting team bus comes and stays)	
		<u>0</u> staff	
		20 vehicles enter	
		<u>19</u> vehicles exit	
		39 total trips	

5 PM Generation Regular Practice Departure

	0.55	60 students	
		33 private cars	
		6 small busses/mini vans	
		2 busses	
		<u>40</u> staff	
		41 vehicles enter	
		<u>81</u> vehicles exit	
		122 total trips	

5 PM Generation Game Day Departure

	0.55	60 students	
		33 private cars	
		6 small busses/mini vans	
		3 busses (visiting team bus already on-site)	
		<u>40</u> staff	
		41 vehicles enter	
		<u>82</u> vehicles exit	
		123 total trips	

284
340.8

Capacity Analysis Worksheets

3: Wayland Rd. & Concord Rd. Lanes, Volumes, Timings

2016 Existing AM Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	84	11	434	559	43	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	75		0	0	
Storage Lanes	1	1		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.924			
Flt Protected	0.950					0.992
Satd. Flow (prot)	1805	1369	1731	0	0	1863
Flt Permitted	0.950					0.992
Satd. Flow (perm)	1805	1369	1731	0	0	1863
Link Speed (mph)	30		30			30
Link Distance (ft)	992		825			847
Travel Time (s)	22.5		18.8			19.3
Peak Hour Factor	0.77	0.77	0.95	0.95	0.81	0.81
Heavy Vehicles (%)	0%	18%	2%	1%	2%	1%
Adj. Flow (vph)	109	14	457	588	53	259
Shared Lane Traffic (%)						
Lane Group Flow (vph)	109	14	1045	0	0	312
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	68.4%			ICU Level of Service C		
Analysis Period (min)	15					

Intersection						
Int Delay, s/veh	3.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	84	11	434	559	43	210
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	75	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	77	77	95	95	81	81
Heavy Vehicles, %	0	18	2	1	2	1
Mvmt Flow	109	14	457	588	53	259
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	1116	751	0	0	1045	0
Stage 1	751	-	-	-	-	-
Stage 2	365	-	-	-	-	-
Critical Hdwy	6.4	6.38	-	-	4.12	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.462	-	-	2.218	-
Pot Cap-1 Maneuver	232	386	-	-	666	-
Stage 1	470	-	-	-	-	-
Stage 2	707	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	210	386	-	-	666	-
Mov Cap-2 Maneuver	210	-	-	-	-	-
Stage 1	470	-	-	-	-	-
Stage 2	641	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	36.5		0		1.8	
HCM LOS	E					
Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT		
Capacity (veh/h)	-	- 210 386	666	-		
HCM Lane V/C Ratio	-	- 0.519 0.037	0.08	-		
HCM Control Delay (s)	-	- 39.3 14.7	10.9	0		
HCM Lane LOS	-	- E B	B	A		
HCM 95th %tile Q(veh)	-	- 2.7 0.1	0.3	-		

3: Wayland Rd. & Concord Rd. Lanes, Volumes, Timings

2016 Existing AM Peak Hour ADJ Gap

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	84	11	434	559	43	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	75		0	0	
Storage Lanes	1	0		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.985		0.924			
Flt Protected	0.958					0.992
Satd. Flow (prot)	1757	0	1731	0	0	1863
Flt Permitted	0.958					0.992
Satd. Flow (perm)	1757	0	1731	0	0	1863
Link Speed (mph)	30		30			30
Link Distance (ft)	992		825			847
Travel Time (s)	22.5		18.8			19.3
Peak Hour Factor	0.77	0.77	0.95	0.95	0.81	0.81
Heavy Vehicles (%)	0%	18%	2%	1%	2%	1%
Adj. Flow (vph)	109	14	457	588	53	259
Shared Lane Traffic (%)						
Lane Group Flow (vph)	123	0	1045	0	0	312
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	69.1%			ICU Level of Service C		
Analysis Period (min)	15					

3: Wayland Rd. & Concord Rd.
HCM 2010 TWSC

2016 Existing AM Peak Hour ADJ Gap

Intersection						
Int Delay, s/veh	1.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	84	11	434	559	43	210
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	77	77	95	95	81	81
Heavy Vehicles, %	0	18	2	1	2	1
Mvmt Flow	109	14	457	588	53	259
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	1116	751	0	0	1045	0
Stage 1	751	-	-	-	-	-
Stage 2	365	-	-	-	-	-
Critical Hdwy	4.5	4.5	-	-	4.12	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	2	2	-	-	2.218	-
Pot Cap-1 Maneuver	599	861	-	-	666	-
Stage 1	714	-	-	-	-	-
Stage 2	1150	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	543	861	-	-	666	-
Mov Cap-2 Maneuver	543	-	-	-	-	-
Stage 1	714	-	-	-	-	-
Stage 2	1043	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	13.1		0		1.8	
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	567	666	-	
HCM Lane V/C Ratio	-	-	0.218	0.08	-	
HCM Control Delay (s)	-	-	13.1	10.9	0	
HCM Lane LOS	-	-	B	B	A	
HCM 95th %tile Q(veh)	-	-	0.8	0.3	-	

5: Lincoln Rd. & Wayland Rd.

Lanes, Volumes, Timings

2016 Existing AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	238	373	2	1	43	4	2	9	4	70	75	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.989			0.966			0.975	
Flt Protected		0.981			0.999			0.993			0.981	
Satd. Flow (prot)	0	1857	0	0	1816	0	0	1715	0	0	1685	0
Flt Permitted		0.981			0.999			0.993			0.981	
Satd. Flow (perm)	0	1857	0	0	1816	0	0	1715	0	0	1685	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		992			714			1001			877	
Travel Time (s)		22.5			16.2			22.8			19.9	
Peak Hour Factor	0.94	0.94	0.94	0.75	0.75	0.75	0.75	0.75	0.75	0.73	0.73	0.73
Heavy Vehicles (%)	1%	0%	0%	100%	2%	0%	0%	0%	25%	20%	0%	0%
Adj. Flow (vph)	253	397	2	1	57	5	3	12	5	96	103	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	652	0	0	63	0	0	20	0	0	244	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	62.7%				ICU Level of Service B							
Analysis Period (min)	15											

5: Lincoln Rd. & Wayland Rd.
HCM 2010 TWSC

2016 Existing AM Peak Hour

Intersection												
Int Delay, s/veh	38.1											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	238	373	2	1	43	4	2	9	4	70	75	33
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	75	75	75	75	75	75	73	73	73
Heavy Vehicles, %	1	0	0	100	2	0	0	0	25	20	0	0
Mvmt Flow	253	397	2	1	57	5	3	12	5	96	103	45

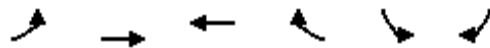
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	63	0	0	399	0	0	1041	969	398	976	968	60
Stage 1	-	-	-	-	-	-	904	904	-	63	63	-
Stage 2	-	-	-	-	-	-	137	65	-	913	905	-
Critical Hdwy	4.11	-	-	5.1	-	-	7.1	6.5	6.45	7.3	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.3	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.3	5.5	-
Follow-up Hdwy	2.209	-	-	3.1	-	-	3.5	4	3.525	3.68	4	3.3
Pot Cap-1 Maneuver	1546	-	-	780	-	-	210	256	604	214	256	1011
Stage 1	-	-	-	-	-	-	334	358	-	905	846	-
Stage 2	-	-	-	-	-	-	871	845	-	304	358	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1546	-	-	780	-	-	103	202	604	170	202	1011
Mov Cap-2 Maneuver	-	-	-	-	-	-	103	202	-	170	202	-
Stage 1	-	-	-	-	-	-	264	283	-	715	845	-
Stage 2	-	-	-	-	-	-	730	844	-	228	283	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3	0.2	23.7	143.2
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	212	1546	-	-	780	-	-	218
HCM Lane V/C Ratio	0.094	0.164	-	-	0.002	-	-	1.119
HCM Control Delay (s)	23.7	7.8	0	-	9.6	0	-	143.2
HCM Lane LOS	C	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	0.3	0.6	-	-	0	-	-	11.3

13: Waltham Road & Longmeadow Road Lanes, Volumes, Timings

2016 Existing AM Peak Hour



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	1	368	46	0	4	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.958	
Flt Protected					0.967	
Satd. Flow (prot)	0	1900	1900	0	1502	0
Flt Permitted					0.967	
Satd. Flow (perm)	0	1900	1900	0	1502	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		223	95		325	
Travel Time (s)		5.1	2.2		7.4	
Peak Hour Factor	0.94	0.94	0.72	0.72	0.38	0.38
Heavy Vehicles (%)	1%	0%	0%	0%	25%	0%
Adj. Flow (vph)	1	391	64	0	11	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	392	64	0	16	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 30.2% ICU Level of Service A

Analysis Period (min) 15

13: Waltham Road & Longmeadow Road
HCM 2010 TWSC

2016 Existing AM Peak Hour

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	1	368	46	0	4	2
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	94	94	72	72	38	38
Heavy Vehicles, %	1	0	0	0	25	0
Mvmt Flow	1	391	64	0	11	5
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	64	0	-	0	458	64
Stage 1	-	-	-	-	64	-
Stage 2	-	-	-	-	394	-
Critical Hdwy	4.11	-	-	-	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	5.65	-
Critical Hdwy Stg 2	-	-	-	-	5.65	-
Follow-up Hdwy	2.209	-	-	-	3.725	3.3
Pot Cap-1 Maneuver	1545	-	-	-	521	1006
Stage 1	-	-	-	-	903	-
Stage 2	-	-	-	-	634	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1545	-	-	-	520	1006
Mov Cap-2 Maneuver	-	-	-	-	520	-
Stage 1	-	-	-	-	903	-
Stage 2	-	-	-	-	633	-
Approach	EB		WB		SB	
HCM Control Delay, s	0		0		11	
HCM LOS					B	
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1545	-	-	-	620	
HCM Lane V/C Ratio	0.001	-	-	-	0.025	
HCM Control Delay (s)	7.3	0	-	-	11	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

17: Appletree Lane & Waltham Road Lanes, Volumes, Timings

2016 Existing AM Peak Hour

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰			↱	↱	
Volume (vph)	370	2	0	45	1	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.999				0.899	
Flt Protected					0.988	
Satd. Flow (prot)	1875	0	0	1900	1688	0
Flt Permitted					0.988	
Satd. Flow (perm)	1875	0	0	1900	1688	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	297			961	236	
Travel Time (s)	6.8			21.8	5.4	
Peak Hour Factor	0.90	0.90	0.56	0.56	0.50	0.50
Heavy Vehicles (%)	1%	50%	0%	0%	0%	0%
Adj. Flow (vph)	411	2	0	80	2	6
Shared Lane Traffic (%)						
Lane Group Flow (vph)	413	0	0	80	8	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	
Intersection Summary						
Area Type:	Other					
Control Type: Unsignalized						
Intersection Capacity Utilization 29.6%				ICU Level of Service A		
Analysis Period (min) 15						

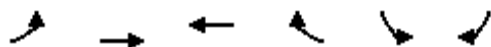
17: Appletree Lane & Waltham Road
HCM 2010 TWSC

2016 Existing AM Peak Hour

Intersection						
Int Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	370	2	0	45	1	3
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	90	90	56	56	50	50
Heavy Vehicles, %	1	50	0	0	0	0
Mvmt Flow	411	2	0	80	2	6
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	413	0	492	412
Stage 1	-	-	-	-	412	-
Stage 2	-	-	-	-	80	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1157	-	540	644
Stage 1	-	-	-	-	673	-
Stage 2	-	-	-	-	948	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1157	-	540	644
Mov Cap-2 Maneuver	-	-	-	-	540	-
Stage 1	-	-	-	-	673	-
Stage 2	-	-	-	-	948	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		10.9	
HCM LOS					B	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	614	-	-	1157	-	
HCM Lane V/C Ratio	0.013	-	-	-	-	
HCM Control Delay (s)	10.9	-	-	0	-	
HCM Lane LOS	B	-	-	A	-	
HCM 95th %tile Q(veh)	0	-	-	0	-	

24: Old Sudbury Road Lanes, Volumes, Timings

2016 Existing AM Peak Hour



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		↔	
Volume (vph)	382	0	41	0	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.865	
Flt Protected		0.950				
Satd. Flow (prot)	0	1770	1863	0	1611	0
Flt Permitted		0.950				
Satd. Flow (perm)	0	1770	1863	0	1611	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		452	74		130	
Travel Time (s)		10.3	1.7		3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	415	0	45	0	0	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	415	45	0	5	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 37.8% ICU Level of Service A

Analysis Period (min) 15

Intersection						
Int Delay, s/veh	7.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	382	0	41	0	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	415	0	45	0	0	5
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	45	0	-	0	875	45
Stage 1	-	-	-	-	45	-
Stage 2	-	-	-	-	830	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1563	-	-	-	320	1025
Stage 1	-	-	-	-	977	-
Stage 2	-	-	-	-	428	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1563	-	-	-	235	1025
Mov Cap-2 Maneuver	-	-	-	-	235	-
Stage 1	-	-	-	-	977	-
Stage 2	-	-	-	-	314	-
Approach	EB		WB		SB	
HCM Control Delay, s	8.1		0		8.5	
HCM LOS	A					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1563	-	-	-	1025	
HCM Lane V/C Ratio	0.266	-	-	-	0.005	
HCM Control Delay (s)	8.1	0	-	-	8.5	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	1.1	-	-	-	0	

20: Old Sudbury Road & South Great Road Lanes, Volumes, Timings

2016 Existing AM Peak Hour

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	3	379	41	243	781	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.866				0.999	
Flt Protected				0.993		
Satd. Flow (prot)	1645	0	0	1881	1898	0
Flt Permitted				0.993		
Satd. Flow (perm)	1645	0	0	1881	1898	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	74			218	133	
Travel Time (s)	1.7			5.0	3.0	
Peak Hour Factor	0.93	0.93	0.91	0.91	0.93	0.93
Heavy Vehicles (%)	0%	0%	2%	0%	0%	0%
Adj. Flow (vph)	3	408	45	267	840	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	411	0	0	312	845	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	77.9%			ICU Level of Service D		
Analysis Period (min)	15					

Intersection	
Int Delay, s/veh	31.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	3	379	41	243	781	5
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	91	91	93	93
Heavy Vehicles, %	0	0	2	0	0	0
Mvmt Flow	3	408	45	267	840	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1199	842	845	0	-	0
Stage 1	842	-	-	-	-	-
Stage 2	357	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.12	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.218	-	-	-
Pot Cap-1 Maneuver	207	~ 367	792	-	-	-
Stage 1	426	-	-	-	-	-
Stage 2	713	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	193	~ 367	792	-	-	-
Mov Cap-2 Maneuver	193	-	-	-	-	-
Stage 1	426	-	-	-	-	-
Stage 2	665	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	120.3	1.4	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	792	-	364	-	-
HCM Lane V/C Ratio	0.057	-	1.128	-	-
HCM Control Delay (s)	9.8	0	120.3	-	-
HCM Lane LOS	A	A	F	-	-
HCM 95th %tile Q(veh)	0.2	-	15.7	-	-

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

23: Old Sudbury Road & South Great Road Lanes, Volumes, Timings

2016 Existing AM Peak Hour

						
Lane Group	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Volume (vph)	0	243	781	5	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.999				
Flt Protected						
Satd. Flow (prot)	0	1863	1861	0	0	1863
Flt Permitted						
Satd. Flow (perm)	0	1863	1861	0	0	1863
Link Speed (mph)		30	30		30	
Link Distance (ft)		133	126		130	
Travel Time (s)		3.0	2.9		3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	264	849	5	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	264	854	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	44.7%			ICU Level of Service A		
Analysis Period (min)	15					

23: Old Sudbury Road & South Great Road
HCM 2010 TWSC

2016 Existing AM Peak Hour

Intersection						
Int Delay, s/veh	0					
Movement	NBL	NBT	SBT	SBR	NEL	NER
Vol, veh/h	0	243	781	5	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, %	2	2	2	2	2	2
Mvmt Flow	0	264	849	5	0	0
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	854	0	-	0	1116	852
Stage 1	-	-	-	-	852	-
Stage 2	-	-	-	-	264	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	785	-	-	-	230	359
Stage 1	-	-	-	-	418	-
Stage 2	-	-	-	-	780	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	785	-	-	-	230	359
Mov Cap-2 Maneuver	-	-	-	-	230	-
Stage 1	-	-	-	-	418	-
Stage 2	-	-	-	-	780	-
Approach	NB		SB		NE	
HCM Control Delay, s	0		0		0	
HCM LOS					A	
Minor Lane/Major Mvmt	NELn1	NBL	NBT	SBT	SBR	
Capacity (veh/h)	-	785	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	0	-	-	-	
HCM Lane LOS	A	A	-	-	-	
HCM 95th %tile Q(veh)	-	0	-	-	-	

3: Wayland Rd. & Concord Rd. Lanes, Volumes, Timings

2023 No-Build AM Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	90	12	465	599	46	225
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	75		0	0	
Storage Lanes	1	0		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.984		0.924			
Flt Protected	0.958					0.992
Satd. Flow (prot)	1753	0	1731	0	0	1863
Flt Permitted	0.958					0.992
Satd. Flow (perm)	1753	0	1731	0	0	1863
Link Speed (mph)	30		30			30
Link Distance (ft)	992		825			847
Travel Time (s)	22.5		18.8			19.3
Peak Hour Factor	0.77	0.77	0.95	0.95	0.81	0.81
Heavy Vehicles (%)	0%	18%	2%	1%	2%	1%
Adj. Flow (vph)	117	16	489	631	57	278
Shared Lane Traffic (%)						
Lane Group Flow (vph)	133	0	1120	0	0	335
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	73.5%			ICU Level of Service D		
Analysis Period (min)	15					

Intersection						
Int Delay, s/veh	4.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	90	12	465	599	46	225
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	77	77	95	95	81	81
Heavy Vehicles, %	0	18	2	1	2	1
Mvmt Flow	117	16	489	631	57	278
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	1196	805	0	0	1120	0
Stage 1	805	-	-	-	-	-
Stage 2	391	-	-	-	-	-
Critical Hdwy	6.4	6.4	-	-	4.12	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.5	-	-	2.218	-
Pot Cap-1 Maneuver	208	355	-	-	624	-
Stage 1	443	-	-	-	-	-
Stage 2	688	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	186	355	-	-	624	-
Mov Cap-2 Maneuver	186	-	-	-	-	-
Stage 1	443	-	-	-	-	-
Stage 2	614	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	54.3		0		1.9	
HCM LOS	F					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	- 197	624	-		
HCM Lane V/C Ratio	-	- 0.672	0.091	-		
HCM Control Delay (s)	-	- 54.3	11.3	0		
HCM Lane LOS	-	- F	B	A		
HCM 95th %tile Q(veh)	-	- 4.1	0.3	-		

3: Wayland Rd. & Concord Rd. Lanes, Volumes, Timings

2023 No-Build AM Peak Hour ADJ Gap

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	90	12	465	599	46	225
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	75		0	0	
Storage Lanes	1	0		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.984		0.924			
Flt Protected	0.958					0.992
Satd. Flow (prot)	1753	0	1731	0	0	1863
Flt Permitted	0.958					0.992
Satd. Flow (perm)	1753	0	1731	0	0	1863
Link Speed (mph)	30		30			30
Link Distance (ft)	992		825			847
Travel Time (s)	22.5		18.8			19.3
Peak Hour Factor	0.77	0.77	0.95	0.95	0.81	0.81
Heavy Vehicles (%)	0%	18%	2%	1%	2%	1%
Adj. Flow (vph)	117	16	489	631	57	278
Shared Lane Traffic (%)						
Lane Group Flow (vph)	133	0	1120	0	0	335
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	73.5%			ICU Level of Service D		
Analysis Period (min)	15					

Intersection						
Int Delay, s/veh	1.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	90	12	465	599	46	225
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	77	77	95	95	81	81
Heavy Vehicles, %	0	18	2	1	2	1
Mvmt Flow	117	16	489	631	57	278
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	1196	805	0	0	1120	0
Stage 1	805	-	-	-	-	-
Stage 2	391	-	-	-	-	-
Critical Hdwy	4.5	4.5	-	-	4.12	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	2	2	-	-	2.218	-
Pot Cap-1 Maneuver	552	816	-	-	624	-
Stage 1	667	-	-	-	-	-
Stage 2	1114	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	492	816	-	-	624	-
Mov Cap-2 Maneuver	492	-	-	-	-	-
Stage 1	667	-	-	-	-	-
Stage 2	994	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	14.4		0		1.9	
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	516	624	-	
HCM Lane V/C Ratio	-	-	0.257	0.091	-	
HCM Control Delay (s)	-	-	14.4	11.3	0	
HCM Lane LOS	-	-	B	B	A	
HCM 95th %tile Q(veh)	-	-	1	0.3	-	

5: Lincoln Rd. & Wayland Rd.

Lanes, Volumes, Timings

2023 No-Build AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	255	400	2	1	46	4	2	10	4	75	80	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.990			0.968			0.975	
Flt Protected		0.981			0.999			0.993			0.981	
Satd. Flow (prot)	0	1857	0	0	1819	0	0	1724	0	0	1684	0
Flt Permitted		0.981			0.999			0.993			0.981	
Satd. Flow (perm)	0	1857	0	0	1819	0	0	1724	0	0	1684	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		992			714			1001			877	
Travel Time (s)		22.5			16.2			22.8			19.9	
Peak Hour Factor	0.94	0.94	0.94	0.75	0.75	0.75	0.75	0.75	0.75	0.73	0.73	0.73
Heavy Vehicles (%)	1%	0%	0%	100%	2%	0%	0%	0%	25%	20%	0%	0%
Adj. Flow (vph)	271	426	2	1	61	5	3	13	5	103	110	48
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	699	0	0	67	0	0	21	0	0	261	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization 65.8%	ICU Level of Service C											
Analysis Period (min) 15												

5: Lincoln Rd. & Wayland Rd.
HCM 2010 TWSC

2023 No-Build AM Peak Hour

Intersection												
Int Delay, s/veh	55.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	255	400	2	1	46	4	2	10	4	75	80	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	75	75	75	75	75	75	73	73	73
Heavy Vehicles, %	1	0	0	100	2	0	0	0	25	20	0	0
Mvmt Flow	271	426	2	1	61	5	3	13	5	103	110	48
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	67	0	0	428	0	0	1114	1038	427	1045	1037	64
Stage 1	-	-	-	-	-	-	969	969	-	67	67	-
Stage 2	-	-	-	-	-	-	145	69	-	978	970	-
Critical Hdwy	4.11	-	-	5.1	-	-	7.1	6.5	6.45	7.1	6.5	6.5
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.3	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.3	5.5	-
Follow-up Hdwy	2.209	-	-	3.1	-	-	3.5	4	3.525	3.5	4	3.5
Pot Cap-1 Maneuver	1541	-	-	757	-	-	187	233	581	209	233	945
Stage 1	-	-	-	-	-	-	307	334	-	945	843	-
Stage 2	-	-	-	-	-	-	863	841	-	288	334	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1541	-	-	757	-	-	76	179	581	161	179	945
Mov Cap-2 Maneuver	-	-	-	-	-	-	76	179	-	161	179	-
Stage 1	-	-	-	-	-	-	236	257	-	727	842	-
Stage 2	-	-	-	-	-	-	712	840	-	208	257	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	3			0.2			27.7			213.8		
HCM LOS							D			F		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	180	1541	-	-	757	-	-	200				
HCM Lane V/C Ratio	0.119	0.176	-	-	0.002	-	-	1.301				
HCM Control Delay (s)	27.7	7.8	0	-	9.8	0	-	213.8				
HCM Lane LOS	D	A	A	-	A	A	-	F				
HCM 95th %tile Q(veh)	0.4	0.6	-	-	0	-	-	14.3				

13: Waltham Road & Longmeadow Road Lanes, Volumes, Timings

2023 No-Build AM Peak Hour



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	1	395	49	0	4	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.958	
Flt Protected					0.967	
Satd. Flow (prot)	0	1900	1900	0	1502	0
Flt Permitted					0.967	
Satd. Flow (perm)	0	1900	1900	0	1502	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		223	95		325	
Travel Time (s)		5.1	2.2		7.4	
Peak Hour Factor	0.94	0.94	0.72	0.72	0.38	0.38
Heavy Vehicles (%)	1%	0%	0%	0%	25%	0%
Adj. Flow (vph)	1	420	68	0	11	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	421	68	0	16	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	31.6%
Analysis Period (min)	15
	ICU Level of Service A

13: Waltham Road & Longmeadow Road
HCM 2010 TWSC

2023 No-Build AM Peak Hour

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	1	395	49	0	4	2
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	94	94	72	72	38	38
Heavy Vehicles, %	1	0	0	0	25	0
Mvmt Flow	1	420	68	0	11	5
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	68	0	-	0	490	68
Stage 1	-	-	-	-	68	-
Stage 2	-	-	-	-	422	-
Critical Hdwy	4.11	-	-	-	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	5.65	-
Critical Hdwy Stg 2	-	-	-	-	5.65	-
Follow-up Hdwy	2.209	-	-	-	3.725	3.3
Pot Cap-1 Maneuver	1540	-	-	-	498	1001
Stage 1	-	-	-	-	900	-
Stage 2	-	-	-	-	615	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1540	-	-	-	498	1001
Mov Cap-2 Maneuver	-	-	-	-	498	-
Stage 1	-	-	-	-	900	-
Stage 2	-	-	-	-	614	-
Approach	EB		WB		SB	
HCM Control Delay, s	0		0		11.2	
HCM LOS					B	
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1540	-	-	-	598	
HCM Lane V/C Ratio	0.001	-	-	-	0.026	
HCM Control Delay (s)	7.3	0	-	-	11.2	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

17: Appletree Lane & Waltham Road Lanes, Volumes, Timings

2023 No-Build AM Peak Hour

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰			↱	↰	↱
Volume (vph)	399	2	0	49	1	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.999				0.899	
Flt Protected					0.988	
Satd. Flow (prot)	1875	0	0	1900	1688	0
Flt Permitted					0.988	
Satd. Flow (perm)	1875	0	0	1900	1688	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	297			961	236	
Travel Time (s)	6.8			21.8	5.4	
Peak Hour Factor	0.90	0.90	0.56	0.56	0.50	0.50
Heavy Vehicles (%)	1%	50%	0%	0%	0%	0%
Adj. Flow (vph)	443	2	0	88	2	6
Shared Lane Traffic (%)						
Lane Group Flow (vph)	445	0	0	88	8	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	31.1%			ICU Level of Service A		
Analysis Period (min)	15					

17: Appletree Lane & Waltham Road
HCM 2010 TWSC

2023 No-Build AM Peak Hour

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	399	2	0	49	1	3
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	90	90	56	56	50	50
Heavy Vehicles, %	1	50	0	0	0	0
Mvmt Flow	443	2	0	88	2	6

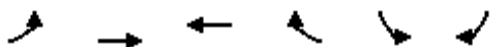
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	446	0	532	444
Stage 1	-	-	-	-	444	-
Stage 2	-	-	-	-	88	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1125	-	512	618
Stage 1	-	-	-	-	651	-
Stage 2	-	-	-	-	940	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1125	-	512	618
Mov Cap-2 Maneuver	-	-	-	-	512	-
Stage 1	-	-	-	-	651	-
Stage 2	-	-	-	-	940	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	11.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	588	-	-	1125	-
HCM Lane V/C Ratio	0.014	-	-	-	-
HCM Control Delay (s)	11.2	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

24: Old Sudbury Road Lanes, Volumes, Timings

2023 No-Build AM Peak Hour



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		↑↑	
Volume (vph)	0	409	44	0	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.865	
Flt Protected						
Satd. Flow (prot)	0	1863	1863	0	1611	0
Flt Permitted						
Satd. Flow (perm)	0	1863	1863	0	1611	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		452	74		130	
Travel Time (s)		10.3	1.7		3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	445	48	0	0	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	445	48	0	5	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 31.5% ICU Level of Service A

Analysis Period (min) 15

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	409	44	0	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	445	48	0	0	5
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	48	0	-	0	493	48
Stage 1	-	-	-	-	48	-
Stage 2	-	-	-	-	445	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1559	-	-	-	535	1021
Stage 1	-	-	-	-	974	-
Stage 2	-	-	-	-	646	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1559	-	-	-	535	1021
Mov Cap-2 Maneuver	-	-	-	-	535	-
Stage 1	-	-	-	-	974	-
Stage 2	-	-	-	-	646	-
Approach	EB		WB		SB	
HCM Control Delay, s	0		0		8.5	
HCM LOS					A	
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1559	-	-	-	1021	
HCM Lane V/C Ratio	-	-	-	-	0.005	
HCM Control Delay (s)	0	-	-	-	8.5	
HCM Lane LOS	A	-	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0	

20: Old Sudbury Road & South Great Road

Lanes, Volumes, Timings

2023 No-Build AM Peak Hour

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	3	406	44	261	837	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.866					
Flt Protected				0.993		
Satd. Flow (prot)	1645	0	0	1881	1900	0
Flt Permitted				0.993		
Satd. Flow (perm)	1645	0	0	1881	1900	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	74			218	133	
Travel Time (s)	1.7			5.0	3.0	
Peak Hour Factor	0.93	0.93	0.91	0.91	0.93	0.93
Heavy Vehicles (%)	0%	0%	2%	0%	0%	0%
Adj. Flow (vph)	3	437	48	287	900	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	440	0	0	335	900	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	83.1%			ICU Level of Service E		
Analysis Period (min)	15					

Intersection						
Int Delay, s/veh	49.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	3	406	44	261	837	0
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	91	91	93	93
Heavy Vehicles, %	0	0	2	0	0	0
Mvmt Flow	3	437	48	287	900	0
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1284	900	900	0	-	0
Stage 1	900	-	-	-	-	-
Stage 2	384	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.12	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.218	-	-	-
Pot Cap-1 Maneuver	184	~ 340	755	-	-	-
Stage 1	400	-	-	-	-	-
Stage 2	693	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	170	~ 340	755	-	-	-
Mov Cap-2 Maneuver	170	-	-	-	-	-
Stage 1	400	-	-	-	-	-
Stage 2	640	-	-	-	-	-
Approach	EB		NB		SB	
HCM Control Delay, s	187.5		1.5		0	
HCM LOS	F					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	755	-	338	-	-	
HCM Lane V/C Ratio	0.064	-	1.301	-	-	
HCM Control Delay (s)	10.1	0	187.5	-	-	
HCM Lane LOS	B	A	F	-	-	
HCM 95th %tile Q(veh)	0.2	-	20.7	-	-	
Notes						
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon						

23: Old Sudbury Road & South Great Road Lanes, Volumes, Timings

2023 No-Build AM Peak Hour

						
Lane Group	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Volume (vph)	0	264	837	5	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.999				
Flt Protected						
Satd. Flow (prot)	0	1863	1861	0	0	1863
Flt Permitted						
Satd. Flow (perm)	0	1863	1861	0	0	1863
Link Speed (mph)		30	30		30	
Link Distance (ft)		133	126		130	
Travel Time (s)		3.0	2.9		3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	287	910	5	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	287	915	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	47.7%			ICU Level of Service A		
Analysis Period (min)	15					

23: Old Sudbury Road & South Great Road
HCM 2010 TWSC

2023 No-Build AM Peak Hour

Intersection						
Int Delay, s/veh	0					
Movement	NBL	NBT	SBT	SBR	NEL	NER
Vol, veh/h	0	264	837	5	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, %	2	2	2	2	2	2
Mvmt Flow	0	287	910	5	0	0
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	915	0	-	0	1200	913
Stage 1	-	-	-	-	913	-
Stage 2	-	-	-	-	287	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	745	-	-	-	204	331
Stage 1	-	-	-	-	391	-
Stage 2	-	-	-	-	762	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	745	-	-	-	204	331
Mov Cap-2 Maneuver	-	-	-	-	204	-
Stage 1	-	-	-	-	391	-
Stage 2	-	-	-	-	762	-
Approach	NB		SB		NE	
HCM Control Delay, s	0		0		0	
HCM LOS					A	
Minor Lane/Major Mvmt	NELn1	NBL	NBT	SBT	SBR	
Capacity (veh/h)	-	745	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	0	-	-	-	
HCM Lane LOS	A	A	-	-	-	
HCM 95th %tile Q(veh)	-	0	-	-	-	

3: Wayland Rd. & Concord Rd. Lanes, Volumes, Timings

2023 Build AM Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	101	24	465	622	69	225
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	75		0	0	
Storage Lanes	1	0		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.974		0.923			
Flt Protected	0.961					0.988
Satd. Flow (prot)	1719	0	1729	0	0	1854
Flt Permitted	0.961					0.988
Satd. Flow (perm)	1719	0	1729	0	0	1854
Link Speed (mph)	30		30			30
Link Distance (ft)	992		825			847
Travel Time (s)	22.5		18.8			19.3
Peak Hour Factor	0.77	0.77	0.95	0.95	0.81	0.81
Heavy Vehicles (%)	0%	18%	2%	1%	2%	1%
Adj. Flow (vph)	131	31	489	655	85	278
Shared Lane Traffic (%)						
Lane Group Flow (vph)	162	0	1144	0	0	363
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	85.6%			ICU Level of Service E		
Analysis Period (min)	15					

Intersection						
Int Delay, s/veh	10.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	101	24	465	622	69	225
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	77	77	95	95	81	81
Heavy Vehicles, %	0	18	2	1	2	1
Mvmt Flow	131	31	489	655	85	278
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	1265	817	0	0	1144	0
Stage 1	817	-	-	-	-	-
Stage 2	448	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.12	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.218	-
Pot Cap-1 Maneuver	189	380	-	-	611	-
Stage 1	438	-	-	-	-	-
Stage 2	648	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	158	380	-	-	611	-
Mov Cap-2 Maneuver	158	-	-	-	-	-
Stage 1	438	-	-	-	-	-
Stage 2	541	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	98.7		0		2.8	
HCM LOS	F					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	178	611	-	
HCM Lane V/C Ratio	-	-	0.912	0.139	-	
HCM Control Delay (s)	-	-	98.7	11.8	0	
HCM Lane LOS	-	-	F	B	A	
HCM 95th %tile Q(veh)	-	-	6.9	0.5	-	

3: Wayland Rd. & Concord Rd. Lanes, Volumes, Timings

2023 Build AM Peak Hour ADJ Gap

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	101	24	465	622	69	225
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	75		0	0	
Storage Lanes	1	0		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.974		0.923			
Flt Protected	0.961					0.988
Satd. Flow (prot)	1719	0	1729	0	0	1854
Flt Permitted	0.961					0.988
Satd. Flow (perm)	1719	0	1729	0	0	1854
Link Speed (mph)	30		30			30
Link Distance (ft)	992		825			847
Travel Time (s)	22.5		18.8			19.3
Peak Hour Factor	0.77	0.77	0.95	0.95	0.81	0.81
Heavy Vehicles (%)	0%	18%	2%	1%	2%	1%
Adj. Flow (vph)	131	31	489	655	85	278
Shared Lane Traffic (%)						
Lane Group Flow (vph)	162	0	1144	0	0	363
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	85.6%			ICU Level of Service E		
Analysis Period (min)	15					

Intersection						
Int Delay, s/veh	2.9					
Movement	WBL	WBR		NBT	NBR	SBL SBT
Vol, veh/h	101	24		465	622	69 225
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	-		-	-	- -
Veh in Median Storage, #	0	-		0	-	- 0
Grade, %	0	-		0	-	- 0
Peak Hour Factor	77	77		95	95	81 81
Heavy Vehicles, %	0	18		2	1	2 1
Mvmt Flow	131	31		489	655	85 278
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1265	817		0	0	1144 0
Stage 1	817	-		-	-	- -
Stage 2	448	-		-	-	- -
Critical Hdwy	5.4	5.4		-	-	4.12 -
Critical Hdwy Stg 1	5.4	-		-	-	- -
Critical Hdwy Stg 2	5.4	-		-	-	- -
Follow-up Hdwy	2	2		-	-	2.218 -
Pot Cap-1 Maneuver	376	657		-	-	611 -
Stage 1	657	-		-	-	- -
Stage 2	1038	-		-	-	- -
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	314	657		-	-	611 -
Mov Cap-2 Maneuver	314	-		-	-	- -
Stage 1	657	-		-	-	- -
Stage 2	867	-		-	-	- -
Approach	WB		NB		SB	
HCM Control Delay, s	24		0		2.8	
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT	
Capacity (veh/h)	-	-	349	611	-	
HCM Lane V/C Ratio	-	-	0.465	0.139	-	
HCM Control Delay (s)	-	-	24	11.8	0	
HCM Lane LOS	-	-	C	B	A	
HCM 95th %tile Q(veh)	-	-	2.4	0.5	-	

5: Lincoln Rd. & Wayland Rd.

Lanes, Volumes, Timings

2023 Build AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	255	446	2	1	69	7	2	10	4	80	80	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.988			0.968			0.976	
Flt Protected		0.982						0.993			0.980	
Satd. Flow (prot)	0	1859	0	0	1826	0	0	1724	0	0	1679	0
Flt Permitted		0.982						0.993			0.980	
Satd. Flow (perm)	0	1859	0	0	1826	0	0	1724	0	0	1679	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		992			714			1001			877	
Travel Time (s)		22.5			16.2			22.8			19.9	
Peak Hour Factor	0.94	0.94	0.94	0.75	0.75	0.75	0.75	0.75	0.75	0.73	0.73	0.73
Heavy Vehicles (%)	1%	0%	0%	100%	2%	0%	0%	0%	25%	20%	0%	0%
Adj. Flow (vph)	271	474	2	1	92	9	3	13	5	110	110	48
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	747	0	0	102	0	0	21	0	0	268	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization 68.5%	ICU Level of Service C											
Analysis Period (min) 15												

Intersection												
Int Delay, s/veh	77.5											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	255	446	2	1	69	7	2	10	4	80	80	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	75	75	75	75	75	75	73	73	73
Heavy Vehicles, %	1	0	0	100	2	0	0	0	25	20	0	0
Mvmt Flow	271	474	2	1	92	9	3	13	5	110	110	48

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	101	0	0	477	0	0	1196	1122	476	1126	1118	97
Stage 1	-	-	-	-	-	-	1018	1018	-	99	99	-
Stage 2	-	-	-	-	-	-	178	104	-	1027	1019	-
Critical Hdwy	4.11	-	-	5.1	-	-	7.1	6.5	6.45	7.1	6.5	6.5
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.3	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.3	5.5	-
Follow-up Hdwy	2.209	-	-	3.1	-	-	3.5	4	3.525	3.5	4	3.5
Pot Cap-1 Maneuver	1498	-	-	720	-	-	164	208	545	184	209	905
Stage 1	-	-	-	-	-	-	289	317	-	907	817	-
Stage 2	-	-	-	-	-	-	828	813	-	270	317	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1498	-	-	720	-	-	56	157	545	138	157	905
Mov Cap-2 Maneuver	-	-	-	-	-	-	56	157	-	138	157	-
Stage 1	-	-	-	-	-	-	218	239	-	684	816	-
Stage 2	-	-	-	-	-	-	678	812	-	190	239	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.9	0.1	32.9	\$ 319.8
HCM LOS			D	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	150	1498	-	-	720	-	-	173
HCM Lane V/C Ratio	0.142	0.181	-	-	0.002	-	-	1.544
HCM Control Delay (s)	32.9	7.9	0	-	10	0	-	\$ 319.8
HCM Lane LOS	D	A	A	-	B	A	-	F
HCM 95th %tile Q(veh)	0.5	0.7	-	-	0	-	-	17.5

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

11: West Driveway & Waltham Road Lanes, Volumes, Timings

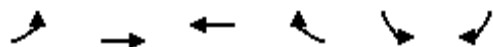
2023 Build AM Peak Hour

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	396	51	30	77	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.985					
Flt Protected				0.986		
Satd. Flow (prot)	1855	0	0	1860	1900	0
Flt Permitted				0.986		
Satd. Flow (perm)	1855	0	0	1860	1900	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	120			223	268	
Travel Time (s)	2.7			5.1	6.1	
Peak Hour Factor	0.94	0.94	0.72	0.72	0.92	0.92
Heavy Vehicles (%)	1%	0%	0%	1%	0%	0%
Adj. Flow (vph)	421	54	42	107	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	475	0	0	149	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	33.7%			ICU Level of Service A		
Analysis Period (min)	15					

Intersection						
Int Delay, s/veh	0.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	396	51	30	77	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	94	94	72	72	92	92
Heavy Vehicles, %	1	0	0	1	0	0
Mvmt Flow	421	54	42	107	0	0
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	476	0	638	448
Stage 1	-	-	-	-	448	-
Stage 2	-	-	-	-	190	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1097	-	444	615
Stage 1	-	-	-	-	648	-
Stage 2	-	-	-	-	847	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1097	-	426	615
Mov Cap-2 Maneuver	-	-	-	-	426	-
Stage 1	-	-	-	-	648	-
Stage 2	-	-	-	-	812	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		2.4		0	
HCM LOS					A	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	-	-	-	1097	-	
HCM Lane V/C Ratio	-	-	-	0.038	-	
HCM Control Delay (s)	0	-	-	8.4	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	-	-	-	0.1	-	

13: Waltham Road & Longmeadow Road Lanes, Volumes, Timings

2023 Build AM Peak Hour



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	1	395	105	0	4	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.958	
Flt Protected					0.967	
Satd. Flow (prot)	0	1900	1900	0	1502	0
Flt Permitted					0.967	
Satd. Flow (perm)	0	1900	1900	0	1502	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		223	95		325	
Travel Time (s)		5.1	2.2		7.4	
Peak Hour Factor	0.94	0.94	0.72	0.72	0.38	0.38
Heavy Vehicles (%)	1%	0%	0%	0%	25%	0%
Adj. Flow (vph)	1	420	146	0	11	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	421	146	0	16	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	31.6%
Analysis Period (min)	15
	ICU Level of Service A

13: Waltham Road & Longmeadow Road
HCM 2010 TWSC

2023 Build AM Peak Hour

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	1	395	105	0	4	2
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	94	94	72	72	38	38
Heavy Vehicles, %	1	0	0	0	25	0
Mvmt Flow	1	420	146	0	11	5
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	146	0	-	0	568	146
Stage 1	-	-	-	-	146	-
Stage 2	-	-	-	-	422	-
Critical Hdwy	4.11	-	-	-	6.65	6.2
Critical Hdwy Stg 1	-	-	-	-	5.65	-
Critical Hdwy Stg 2	-	-	-	-	5.65	-
Follow-up Hdwy	2.209	-	-	-	3.725	3.3
Pot Cap-1 Maneuver	1442	-	-	-	448	906
Stage 1	-	-	-	-	828	-
Stage 2	-	-	-	-	615	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1442	-	-	-	448	906
Mov Cap-2 Maneuver	-	-	-	-	448	-
Stage 1	-	-	-	-	828	-
Stage 2	-	-	-	-	614	-
Approach	EB		WB		SB	
HCM Control Delay, s	0		0		11.9	
HCM LOS					B	
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1442	-	-	-	539	
HCM Lane V/C Ratio	0.001	-	-	-	0.029	
HCM Control Delay (s)	7.5	0	-	-	11.9	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

15: East Driveway & Waltham Road Lanes, Volumes, Timings

2023 Build AM Peak Hour

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	399	0	0	79	26	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.951	
Flt Protected					0.969	
Satd. Flow (prot)	1881	0	0	1881	1707	0
Flt Permitted					0.969	
Satd. Flow (perm)	1881	0	0	1881	1707	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	95			297	233	
Travel Time (s)	2.2			6.8	5.3	
Peak Hour Factor	0.94	0.94	0.72	0.72	0.92	0.92
Heavy Vehicles (%)	1%	0%	0%	1%	4%	0%
Adj. Flow (vph)	424	0	0	110	28	16
Shared Lane Traffic (%)						
Lane Group Flow (vph)	424	0	0	110	44	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	31.0%			ICU Level of Service A		
Analysis Period (min)	15					

15: East Driveway & Waltham Road
HCM 2010 TWSC

2023 Build AM Peak Hour

Intersection						
Int Delay, s/veh	0.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	399	0	0	79	26	15
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	94	94	72	72	92	92
Heavy Vehicles, %	1	0	0	1	4	0
Mvmt Flow	424	0	0	110	28	16
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	424	0	534	424
Stage 1	-	-	-	-	424	-
Stage 2	-	-	-	-	110	-
Critical Hdwy	-	-	4.1	-	6.44	6.2
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	-	-	2.2	-	3.536	3.3
Pot Cap-1 Maneuver	-	-	1146	-	503	634
Stage 1	-	-	-	-	656	-
Stage 2	-	-	-	-	910	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1146	-	503	634
Mov Cap-2 Maneuver	-	-	-	-	503	-
Stage 1	-	-	-	-	656	-
Stage 2	-	-	-	-	910	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		12.2	
HCM LOS					B	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	544	-	-	1146	-	
HCM Lane V/C Ratio	0.082	-	-	-	-	
HCM Control Delay (s)	12.2	-	-	0	-	
HCM Lane LOS	B	-	-	A	-	
HCM 95th %tile Q(veh)	0.3	-	-	0	-	

17: Appletree Lane & Waltham Road Lanes, Volumes, Timings

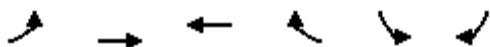
2023 Build AM Peak Hour

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰			↱	↰	↱
Volume (vph)	412	2	0	78	1	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.999				0.899	
Flt Protected					0.988	
Satd. Flow (prot)	1875	0	0	1900	1688	0
Flt Permitted					0.988	
Satd. Flow (perm)	1875	0	0	1900	1688	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	297			961	236	
Travel Time (s)	6.8			21.8	5.4	
Peak Hour Factor	0.90	0.90	0.56	0.56	0.50	0.50
Heavy Vehicles (%)	1%	50%	0%	0%	0%	0%
Adj. Flow (vph)	458	2	0	139	2	6
Shared Lane Traffic (%)						
Lane Group Flow (vph)	460	0	0	139	8	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	31.8%			ICU Level of Service A		
Analysis Period (min)	15					

Intersection						
Int Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	412	2	0	78	1	3
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	90	90	56	56	50	50
Heavy Vehicles, %	1	50	0	0	0	0
Mvmt Flow	458	2	0	139	2	6
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	460	0	598	459
Stage 1	-	-	-	-	459	-
Stage 2	-	-	-	-	139	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1112	-	468	606
Stage 1	-	-	-	-	641	-
Stage 2	-	-	-	-	893	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1112	-	468	606
Mov Cap-2 Maneuver	-	-	-	-	468	-
Stage 1	-	-	-	-	641	-
Stage 2	-	-	-	-	893	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		11.5	
HCM LOS					B	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	564	-	-	1112	-	
HCM Lane V/C Ratio	0.014	-	-	-	-	
HCM Control Delay (s)	11.5	-	-	0	-	
HCM Lane LOS	B	-	-	A	-	
HCM 95th %tile Q(veh)	0	-	-	0	-	

24: Old Sudbury Road Lanes, Volumes, Timings

2023 Build AM Peak Hour



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		↑↑	
Volume (vph)	0	424	54	0	0	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.865	
Flt Protected						
Satd. Flow (prot)	0	1863	1863	0	1611	0
Flt Permitted						
Satd. Flow (perm)	0	1863	1863	0	1611	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		452	74		130	
Travel Time (s)		10.3	1.7		3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	461	59	0	0	27
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	461	59	0	27	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 32.3% ICU Level of Service A

Analysis Period (min) 15

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	424	54	0	0	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	461	59	0	0	27
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	59	0	-	0	520	59
Stage 1	-	-	-	-	59	-
Stage 2	-	-	-	-	461	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1545	-	-	-	516	1007
Stage 1	-	-	-	-	964	-
Stage 2	-	-	-	-	635	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1545	-	-	-	516	1007
Mov Cap-2 Maneuver	-	-	-	-	516	-
Stage 1	-	-	-	-	964	-
Stage 2	-	-	-	-	635	-
Approach	EB		WB		SB	
HCM Control Delay, s	0		0		8.7	
HCM LOS					A	
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1545	-	-	-	1007	
HCM Lane V/C Ratio	-	-	-	-	0.027	
HCM Control Delay (s)	0	-	-	-	8.7	
HCM Lane LOS	A	-	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

20: Old Sudbury Road & South Great Road

Lanes, Volumes, Timings

2023 Build AM Peak Hour

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	13	411	54	261	837	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.869					
Flt Protected	0.998			0.992		
Satd. Flow (prot)	1648	0	0	1878	1900	0
Flt Permitted	0.998			0.992		
Satd. Flow (perm)	1648	0	0	1878	1900	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	74			218	133	
Travel Time (s)	1.7			5.0	3.0	
Peak Hour Factor	0.93	0.93	0.91	0.91	0.93	0.93
Heavy Vehicles (%)	0%	0%	2%	0%	0%	0%
Adj. Flow (vph)	14	442	59	287	900	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	456	0	0	346	900	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	92.8%			ICU Level of Service F		
Analysis Period (min)	15					

Intersection						
Int Delay, s/veh		60				
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	13	411	54	261	837	0
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	91	91	93	93
Heavy Vehicles, %	0	0	2	0	0	0
Mvmt Flow	14	442	59	287	900	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1305	900	900	0	-	0
Stage 1	900	-	-	-	-	-
Stage 2	405	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.12	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.218	-	-	-
Pot Cap-1 Maneuver	178	~ 340	755	-	-	-
Stage 1	400	-	-	-	-	-
Stage 2	678	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	161	~ 340	755	-	-	-
Mov Cap-2 Maneuver	161	-	-	-	-	-
Stage 1	400	-	-	-	-	-
Stage 2	615	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	222.6	1.7		0		
HCM LOS	F					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	755	-	329	-	-	
HCM Lane V/C Ratio	0.079	-	1.386	-	-	
HCM Control Delay (s)	10.2	0	222.6	-	-	
HCM Lane LOS	B	A	F	-	-	
HCM 95th %tile Q(veh)	0.3	-	23.2	-	-	
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

23: Old Sudbury Road & South Great Road

Lanes, Volumes, Timings

2023 Build AM Peak Hour

						
Lane Group	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Volume (vph)	0	274	837	25	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.996					
Flt Protected						
Satd. Flow (prot)	0	1863	1855	0	0	1863
Flt Permitted						
Satd. Flow (perm)	0	1863	1855	0	0	1863
Link Speed (mph)		30	30		30	
Link Distance (ft)		133	126		130	
Travel Time (s)		3.0	2.9		3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	298	910	27	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	298	937	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	48.9%			ICU Level of Service A		
Analysis Period (min)	15					

23: Old Sudbury Road & South Great Road
HCM 2010 TWSC

2023 Build AM Peak Hour

Intersection						
Int Delay, s/veh	0					
Movement	NBL	NBT	SBT	SBR	NEL	NER
Vol, veh/h	0	274	837	25	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, %	2	2	2	2	2	2
Mvmt Flow	0	298	910	27	0	0
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	937	0	-	0	1221	923
Stage 1	-	-	-	-	923	-
Stage 2	-	-	-	-	298	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	731	-	-	-	199	327
Stage 1	-	-	-	-	387	-
Stage 2	-	-	-	-	753	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	731	-	-	-	199	327
Mov Cap-2 Maneuver	-	-	-	-	199	-
Stage 1	-	-	-	-	387	-
Stage 2	-	-	-	-	753	-
Approach	NB		SB		NE	
HCM Control Delay, s	0		0		0	
HCM LOS					A	
Minor Lane/Major Mvmt	NELn1	NBL	NBT	SBT	SBR	
Capacity (veh/h)	-	731	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	0	-	-	-	
HCM Lane LOS	A	A	-	-	-	
HCM 95th %tile Q(veh)	-	0	-	-	-	

3: Wayland Rd. & Concord Rd. Lanes, Volumes, Timings

2016 Existing PM Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	445	27	216	63	17	482
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	75		0	0	
Storage Lanes	1	1		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.970			
Flt Protected	0.950					0.998
Satd. Flow (prot)	1787	1615	1835	0	0	1878
Flt Permitted	0.950					0.998
Satd. Flow (perm)	1787	1615	1835	0	0	1878
Link Speed (mph)	30		30			30
Link Distance (ft)	992		825			847
Travel Time (s)	22.5		18.8			19.3
Peak Hour Factor	0.94	0.94	0.85	0.85	0.95	0.95
Heavy Vehicles (%)	1%	0%	0%	2%	0%	1%
Adj. Flow (vph)	473	29	254	74	18	507
Shared Lane Traffic (%)						
Lane Group Flow (vph)	473	29	328	0	0	525
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	70.4%			ICU Level of Service C		
Analysis Period (min)	15					

Intersection						
Int Delay, s/veh	83.7					
Movement	WBL	WBR		NBT	NBR	SBL SBT
Vol, veh/h	445	27		216	63	17 482
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	75		-	-	- -
Veh in Median Storage, #	0	-		0	-	- 0
Grade, %	0	-		0	-	- 0
Peak Hour Factor	94	94		85	85	95 95
Heavy Vehicles, %	1	0		0	2	0 1
Mvmt Flow	473	29		254	74	18 507
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	834	291	0	0	328	0
Stage 1	291	-	-	-	-	-
Stage 2	543	-	-	-	-	-
Critical Hdwy	6.41	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	~ 339	753	-	-	1243	-
Stage 1	761	-	-	-	-	-
Stage 2	584	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 332	753	-	-	1243	-
Mov Cap-2 Maneuver	~ 332	-	-	-	-	-
Stage 1	761	-	-	-	-	-
Stage 2	572	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	225.6		0		0.3	
HCM LOS	F					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	332	753	1243	-
HCM Lane V/C Ratio	-	-	1.426	0.038	0.014	-
HCM Control Delay (s)	-	-	238.7	10	7.9	0
HCM Lane LOS	-	-	F	B	A	A
HCM 95th %tile Q(veh)	-	-	24.8	0.1	0	-
Notes						
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon						

3: Wayland Rd. & Concord Rd. Lanes, Volumes, Timings

2016 Existing PM Peak Hour ADJ Gap

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	445	27	216	63	17	482
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	75		0	0	
Storage Lanes	1	1		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.970			
Flt Protected	0.950					0.998
Satd. Flow (prot)	1787	1615	1835	0	0	1878
Flt Permitted	0.950					0.998
Satd. Flow (perm)	1787	1615	1835	0	0	1878
Link Speed (mph)	30		30			30
Link Distance (ft)	992		825			847
Travel Time (s)	22.5		18.8			19.3
Peak Hour Factor	0.94	0.94	0.85	0.85	0.95	0.95
Heavy Vehicles (%)	1%	0%	0%	2%	0%	1%
Adj. Flow (vph)	473	29	254	74	18	507
Shared Lane Traffic (%)						
Lane Group Flow (vph)	473	29	328	0	0	525
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	70.4%			ICU Level of Service C		
Analysis Period (min)	15					

Intersection						
Int Delay, s/veh	15.7					
Movement	WBL	WBR		NBT	NBR	SBL SBT
Vol, veh/h	445	27		216	63	17 482
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	75		-	-	- -
Veh in Median Storage, #	0	-		0	-	- 0
Grade, %	0	-		0	-	- 0
Peak Hour Factor	94	94		85	85	95 95
Heavy Vehicles, %	1	0		0	2	0 1
Mvmt Flow	473	29		254	74	18 507
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	834	291		0	0	328 0
Stage 1	291	-		-	-	- -
Stage 2	543	-		-	-	- -
Critical Hdwy	5.8	5.8		-	-	4.1 -
Critical Hdwy Stg 1	5.41	-		-	-	- -
Critical Hdwy Stg 2	5.41	-		-	-	- -
Follow-up Hdwy	2.2	2.2		-	-	2.2 -
Pot Cap-1 Maneuver	545	1118		-	-	1243 -
Stage 1	1153	-		-	-	- -
Stage 2	850	-		-	-	- -
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	534	1118		-	-	1243 -
Mov Cap-2 Maneuver	534	-		-	-	- -
Stage 1	1153	-		-	-	- -
Stage 2	833	-		-	-	- -
Approach	WB		NB		SB	
HCM Control Delay, s	42		0		0.3	
HCM LOS	E					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	534	1118	1243	-
HCM Lane V/C Ratio	-	-	0.887	0.026	0.014	-
HCM Control Delay (s)	-	-	44	8.3	7.9	0
HCM Lane LOS	-	-	E	A	A	A
HCM 95th %tile Q(veh)	-	-	10.1	0.1	0	-

5: Lincoln Rd. & Wayland Rd.

Lanes, Volumes, Timings

2016 Existing PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	42	29	5	4	210	8	5	3	1	7	7	264
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.992			0.995			0.983			0.872	
Flt Protected		0.973			0.999			0.973			0.999	
Satd. Flow (prot)	0	1834	0	0	1889	0	0	1815	0	0	1655	0
Flt Permitted		0.973			0.999			0.973			0.999	
Satd. Flow (perm)	0	1834	0	0	1889	0	0	1815	0	0	1655	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		992			714			1001			877	
Travel Time (s)		22.5			16.2			22.8			19.9	
Peak Hour Factor	0.79	0.79	0.79	0.91	0.91	0.91	0.56	0.56	0.56	0.80	0.80	0.80
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	53	37	6	4	231	9	9	5	2	9	9	330
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	96	0	0	244	0	0	16	0	0	348	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 42.9% ICU Level of Service A

Analysis Period (min) 15

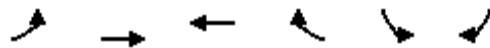
5: Lincoln Rd. & Wayland Rd.
HCM 2010 TWSC

2016 Existing PM Peak Hour

Intersection												
Int Delay, s/veh	7.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	42	29	5	4	210	8	5	3	1	7	7	264
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	91	91	91	56	56	56	80	80	80
Heavy Vehicles, %	0	0	0	0	0	0	0	0	1	0	0	0
Mvmt Flow	53	37	6	4	231	9	9	5	2	9	9	330
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	240	0	0	43	0	0	559	394	40	394	393	235
Stage 1	-	-	-	-	-	-	146	146	-	244	244	-
Stage 2	-	-	-	-	-	-	413	248	-	150	149	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.21	7.1	6.5	6.2
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	2.2	-	-	2.2	-	-	3.5	4	3.309	3.5	4	3.3
Pot Cap-1 Maneuver	1339	-	-	1579	-	-	443	546	1034	569	546	809
Stage 1	-	-	-	-	-	-	861	780	-	764	708	-
Stage 2	-	-	-	-	-	-	620	705	-	857	778	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1339	-	-	1579	-	-	250	522	1034	545	522	809
Mov Cap-2 Maneuver	-	-	-	-	-	-	250	522	-	545	522	-
Stage 1	-	-	-	-	-	-	826	748	-	733	706	-
Stage 2	-	-	-	-	-	-	361	703	-	815	746	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	4.3			0.1			16.2			13.1		
HCM LOS							C			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	337	1339	-	-	1579	-	-	788				
HCM Lane V/C Ratio	0.048	0.04	-	-	0.003	-	-	0.441				
HCM Control Delay (s)	16.2	7.8	0	-	7.3	0	-	13.1				
HCM Lane LOS	C	A	A	-	A	A	-	B				
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	2.3				

13: Waltham Road & Longmeadow Road Lanes, Volumes, Timings

2016 Existing PM Peak Hour



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	1	39	228	1	2	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.999		0.949	
Flt Protected		0.999			0.970	
Satd. Flow (prot)	0	1898	1898	0	1749	0
Flt Permitted		0.999			0.970	
Satd. Flow (perm)	0	1898	1898	0	1749	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		223	95		325	
Travel Time (s)		5.1	2.2		7.4	
Peak Hour Factor	0.83	0.83	0.93	0.93	0.38	0.38
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	1	47	245	1	5	3
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	48	246	0	8	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	22.1%
Analysis Period (min)	15
	ICU Level of Service A

13: Waltham Road & Longmeadow Road
HCM 2010 TWSC

2016 Existing PM Peak Hour

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	1	39	228	1	2	1
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	83	83	93	93	38	38
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	47	245	1	5	3
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	246	0	-	0	295	246
Stage 1	-	-	-	-	246	-
Stage 2	-	-	-	-	49	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1332	-	-	-	700	798
Stage 1	-	-	-	-	800	-
Stage 2	-	-	-	-	979	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1332	-	-	-	699	798
Mov Cap-2 Maneuver	-	-	-	-	699	-
Stage 1	-	-	-	-	800	-
Stage 2	-	-	-	-	978	-
Approach	EB		WB		SB	
HCM Control Delay, s	0.2		0		10	
HCM LOS					B	
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1332	-	-	-	729	
HCM Lane V/C Ratio	0.001	-	-	-	0.011	
HCM Control Delay (s)	7.7	0	-	-	10	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0	-	-	-	0	

17: Appletree Lane & Waltham Road Lanes, Volumes, Timings

2016 Existing PM Peak Hour

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↗			↖	↘↗	
Volume (vph)	39	2	3	227	2	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.992				0.932	
Flt Protected				0.999	0.976	
Satd. Flow (prot)	1885	0	0	1898	1728	0
Flt Permitted				0.999	0.976	
Satd. Flow (perm)	1885	0	0	1898	1728	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	297			961	236	
Travel Time (s)	6.8			21.8	5.4	
Peak Hour Factor	0.77	0.77	0.95	0.95	0.50	0.50
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	51	3	3	239	4	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	54	0	0	242	8	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	24.3%			ICU Level of Service A		
Analysis Period (min)	15					

17: Appletree Lane & Waltham Road
HCM 2010 TWSC

2016 Existing PM Peak Hour

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	39	2	3	227	2	2
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	77	77	95	95	50	50
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	51	3	3	239	4	4

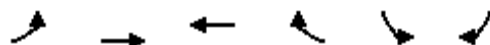
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	53	0	297	52
Stage 1	-	-	-	-	52	-
Stage 2	-	-	-	-	245	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1566	-	698	1021
Stage 1	-	-	-	-	976	-
Stage 2	-	-	-	-	800	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1566	-	697	1021
Mov Cap-2 Maneuver	-	-	-	-	697	-
Stage 1	-	-	-	-	976	-
Stage 2	-	-	-	-	798	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	9.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	828	-	-	1566	-
HCM Lane V/C Ratio	0.01	-	-	0.002	-
HCM Control Delay (s)	9.4	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

24: Old Sudbury Road Lanes, Volumes, Timings

2016 Existing PM Peak Hour



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		↘	
Volume (vph)	41	0	227	0	0	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.865	
Flt Protected		0.950				
Satd. Flow (prot)	0	1805	1900	0	1644	0
Flt Permitted		0.950				
Satd. Flow (perm)	0	1805	1900	0	1644	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		452	74		130	
Travel Time (s)		10.3	1.7		3.0	
Peak Hour Factor	0.73	0.73	0.85	0.85	0.75	0.75
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	56	0	267	0	0	19
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	56	267	0	19	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 28.6% ICU Level of Service A

Analysis Period (min) 15

Intersection						
Int Delay, s/veh	1.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	41	0	227	0	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	73	73	85	85	75	75
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	56	0	267	0	0	19
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	267	0	-	0	379	267
Stage 1	-	-	-	-	267	-
Stage 2	-	-	-	-	112	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1308	-	-	-	627	777
Stage 1	-	-	-	-	782	-
Stage 2	-	-	-	-	918	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1308	-	-	-	600	777
Mov Cap-2 Maneuver	-	-	-	-	600	-
Stage 1	-	-	-	-	782	-
Stage 2	-	-	-	-	879	-
Approach	EB		WB		SB	
HCM Control Delay, s	7.9		0		9.7	
HCM LOS					A	
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1308	-	-	-	777	
HCM Lane V/C Ratio	0.043	-	-	-	0.024	
HCM Control Delay (s)	7.9	0	-	-	9.7	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1	

20: Old Sudbury Road & South Great Road Lanes, Volumes, Timings

2016 Existing PM Peak Hour

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	4	37	227	843	385	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.877					
Flt Protected	0.996			0.990		
Satd. Flow (prot)	1660	0	0	1881	1900	0
Flt Permitted	0.996			0.990		
Satd. Flow (perm)	1660	0	0	1881	1900	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	74			218	133	
Travel Time (s)	1.7			5.0	3.0	
Peak Hour Factor	0.73	0.73	0.91	0.91	0.78	0.78
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	51	249	926	494	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	56	0	0	1175	494	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	90.5%			ICU Level of Service E		
Analysis Period (min)	15					

20: Old Sudbury Road & South Great Road
HCM 2010 TWSC

2016 Existing PM Peak Hour

Intersection						
Int Delay, s/veh	2.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	4	37	227	843	385	0
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	73	73	91	91	78	78
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	5	51	249	926	494	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1919	494	494	0	-	0
Stage 1	494	-	-	-	-	-
Stage 2	1425	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	75	579	1080	-	-	-
Stage 1	617	-	-	-	-	-
Stage 2	224	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	39	579	1080	-	-	-
Mov Cap-2 Maneuver	39	-	-	-	-	-
Stage 1	617	-	-	-	-	-
Stage 2	118	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	23.9	2		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1080	-	246	-	-	
HCM Lane V/C Ratio	0.231	-	0.228	-	-	
HCM Control Delay (s)	9.3	0	23.9	-	-	
HCM Lane LOS	A	A	C	-	-	
HCM 95th %tile Q(veh)	0.9	-	0.9	-	-	

23: Old Sudbury Road & South Great Road Lanes, Volumes, Timings

2016 Existing PM Peak Hour

						
Lane Group	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Volume (vph)	0	847	385	14	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995				
Flt Protected						
Satd. Flow (prot)	0	1900	1890	0	0	1900
Flt Permitted						
Satd. Flow (perm)	0	1900	1890	0	0	1900
Link Speed (mph)		30	30		30	
Link Distance (ft)		133	126		130	
Travel Time (s)		3.0	2.9		3.0	
Peak Hour Factor	0.91	0.91	0.78	0.78	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	931	494	18	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	931	512	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	47.9%			ICU Level of Service A		
Analysis Period (min)	15					

23: Old Sudbury Road & South Great Road
HCM 2010 TWSC

2016 Existing PM Peak Hour

Intersection						
Int Delay, s/veh	0					
Movement	NBL	NBT	SBT	SBR	NEL	NER
Vol, veh/h	0	847	385	14	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	91	91	78	78	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	931	494	18	0	0
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	512	0	-	0	1434	503
Stage 1	-	-	-	-	503	-
Stage 2	-	-	-	-	931	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1064	-	-	-	149	573
Stage 1	-	-	-	-	612	-
Stage 2	-	-	-	-	387	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1064	-	-	-	149	573
Mov Cap-2 Maneuver	-	-	-	-	149	-
Stage 1	-	-	-	-	612	-
Stage 2	-	-	-	-	387	-
Approach	NB		SB		NE	
HCM Control Delay, s	0		0		0	
HCM LOS					A	
Minor Lane/Major Mvmt	NELn1	NBL	NBT	SBT	SBR	
Capacity (veh/h)	-	1064	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	0	-	-	-	
HCM Lane LOS	A	A	-	-	-	
HCM 95th %tile Q(veh)	-	0	-	-	-	

3: Wayland Rd. & Concord Rd. Lanes, Volumes, Timings

2023 No-Build PM Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	477	29	232	68	18	517
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	75		0	0	
Storage Lanes	1	1		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.969			
Flt Protected	0.950					0.998
Satd. Flow (prot)	1787	1615	1833	0	0	1878
Flt Permitted	0.950					0.998
Satd. Flow (perm)	1787	1615	1833	0	0	1878
Link Speed (mph)	30		30			30
Link Distance (ft)	992		825			847
Travel Time (s)	22.5		18.8			19.3
Peak Hour Factor	0.94	0.94	0.85	0.85	0.95	0.95
Heavy Vehicles (%)	1%	0%	0%	2%	0%	1%
Adj. Flow (vph)	507	31	273	80	19	544
Shared Lane Traffic (%)						
Lane Group Flow (vph)	507	31	353	0	0	563
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	74.9%			ICU Level of Service D		
Analysis Period (min)	15					

Intersection	
Int Delay, s/veh	118.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	477	29	232	68	18	517
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	75	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	85	85	95	95
Heavy Vehicles, %	1	0	0	2	0	1
Mvmt Flow	507	31	273	80	19	544

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	895	313	0
Stage 1	313	-	-
Stage 2	582	-	-
Critical Hdwy	6.4	6.2	4.1
Critical Hdwy Stg 1	5.41	-	-
Critical Hdwy Stg 2	5.41	-	-
Follow-up Hdwy	3.5	3.3	2.2
Pot Cap-1 Maneuver	~ 314	732	1217
Stage 1	745	-	-
Stage 2	562	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	~ 307	732	1217
Mov Cap-2 Maneuver	~ 307	-	-
Stage 1	745	-	-
Stage 2	550	-	-

Approach	WB	NB	SB
HCM Control Delay, s	\$ 318.9	0	0.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	307	732	1217	-
HCM Lane V/C Ratio	-	-	1.653	0.042	0.016	-
HCM Control Delay (s)	-	-	\$ 337.7	10.1	8	0
HCM Lane LOS	-	-	F	B	A	A
HCM 95th %tile Q(veh)	-	-	31.2	0.1	0	-

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

3: Wayland Rd. & Concord Rd. Lanes, Volumes, Timings

2023 No-Build PM Peak Hour ADJ Gap

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	477	29	232	68	18	517
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	75		0	0	
Storage Lanes	1	1		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.969			
Flt Protected	0.950					0.998
Satd. Flow (prot)	1787	1615	1833	0	0	1878
Flt Permitted	0.950					0.998
Satd. Flow (perm)	1787	1615	1833	0	0	1878
Link Speed (mph)	30		30			30
Link Distance (ft)	992		825			847
Travel Time (s)	22.5		18.8			19.3
Peak Hour Factor	0.94	0.94	0.85	0.85	0.95	0.95
Heavy Vehicles (%)	1%	0%	0%	2%	0%	1%
Adj. Flow (vph)	507	31	273	80	19	544
Shared Lane Traffic (%)						
Lane Group Flow (vph)	507	31	353	0	0	563
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	74.9%			ICU Level of Service D		
Analysis Period (min)	15					

Intersection						
Int Delay, s/veh	27.8					
Movement	WBL	WBR		NBT	NBR	SBL SBT
Vol, veh/h	477	29		232	68	18 517
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	75		-	-	- -
Veh in Median Storage, #	0	-		0	-	- 0
Grade, %	0	-		0	-	- 0
Peak Hour Factor	94	94		85	85	95 95
Heavy Vehicles, %	1	0		0	2	0 1
Mvmt Flow	507	31		273	80	19 544
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	895	313		0	0	353 0
Stage 1	313	-		-	-	- -
Stage 2	582	-		-	-	- -
Critical Hdwy	5.8	5.8		-	-	4.1 -
Critical Hdwy Stg 1	5.41	-		-	-	- -
Critical Hdwy Stg 2	5.41	-		-	-	- -
Follow-up Hdwy	2.2	2.2		-	-	2.2 -
Pot Cap-1 Maneuver	~ 502	1086		-	-	1217 -
Stage 1	1123	-		-	-	- -
Stage 2	811	-		-	-	- -
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 491	1086		-	-	1217 -
Mov Cap-2 Maneuver	~ 491	-		-	-	- -
Stage 1	1123	-		-	-	- -
Stage 2	793	-		-	-	- -
Approach	WB		NB		SB	
HCM Control Delay, s	74.7		0		0.3	
HCM LOS	F					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	491	1086	1217	-
HCM Lane V/C Ratio	-	-	1.033	0.028	0.016	-
HCM Control Delay (s)	-	-	78.7	8.4	8	0
HCM Lane LOS	-	-	F	A	A	A
HCM 95th %tile Q(veh)	-	-	14.9	0.1	0	-
Notes						
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon						

5: Lincoln Rd. & Wayland Rd.

Lanes, Volumes, Timings

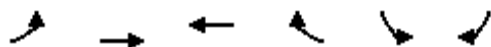
2023 No-Build PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	45	31	5	4	225	9	5	3	1	8	8	283
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.992			0.995			0.983			0.872	
Flt Protected		0.973			0.999			0.973			0.999	
Satd. Flow (prot)	0	1834	0	0	1889	0	0	1815	0	0	1655	0
Flt Permitted		0.973			0.999			0.973			0.999	
Satd. Flow (perm)	0	1834	0	0	1889	0	0	1815	0	0	1655	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		992			714			1001			877	
Travel Time (s)		22.5			16.2			22.8			19.9	
Peak Hour Factor	0.79	0.79	0.79	0.91	0.91	0.91	0.56	0.56	0.56	0.80	0.80	0.80
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	57	39	6	4	247	10	9	5	2	10	10	354
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	102	0	0	261	0	0	16	0	0	374	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	45.3%											
Analysis Period (min)	15											
	ICU Level of Service A											

Intersection												
Int Delay, s/veh	7.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	45	31	5	4	225	9	5	3	1	8	8	283
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	91	91	91	56	56	56	80	80	80
Heavy Vehicles, %	0	0	0	0	0	0	0	0	1	0	0	0
Mvmt Flow	57	39	6	4	247	10	9	5	2	10	10	354
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	257	0	0	46	0	0	599	422	42	421	420	252
Stage 1	-	-	-	-	-	-	156	156	-	261	261	-
Stage 2	-	-	-	-	-	-	443	266	-	160	159	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.21	7.1	6.5	6.2
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	2.2	-	-	2.2	-	-	3.5	4	3.309	3.5	4	3.3
Pot Cap-1 Maneuver	1320	-	-	1575	-	-	416	526	1032	546	528	792
Stage 1	-	-	-	-	-	-	851	772	-	748	696	-
Stage 2	-	-	-	-	-	-	598	692	-	847	770	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1320	-	-	1575	-	-	219	501	1032	521	503	792
Mov Cap-2 Maneuver	-	-	-	-	-	-	219	501	-	521	503	-
Stage 1	-	-	-	-	-	-	814	738	-	715	694	-
Stage 2	-	-	-	-	-	-	325	690	-	802	736	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	4.4			0.1			17.6			14		
HCM LOS							C			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	302	1320	-	-	1575	-	-	769				
HCM Lane V/C Ratio	0.053	0.043	-	-	0.003	-	-	0.486				
HCM Control Delay (s)	17.6	7.9	0	-	7.3	0	-	14				
HCM Lane LOS	C	A	A	-	A	A	-	B				
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	2.7				

13: Waltham Road & Longmeadow Road Lanes, Volumes, Timings

2023 No-Build PM Peak Hour



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	1	42	244	1	2	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.999		0.949	
Flt Protected		0.999			0.970	
Satd. Flow (prot)	0	1898	1898	0	1749	0
Flt Permitted		0.999			0.970	
Satd. Flow (perm)	0	1898	1898	0	1749	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		223	95		325	
Travel Time (s)		5.1	2.2		7.4	
Peak Hour Factor	0.83	0.83	0.93	0.93	0.38	0.38
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	1	51	262	1	5	3
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	52	263	0	8	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	22.9%
Analysis Period (min)	15
	ICU Level of Service A

13: Waltham Road & Longmeadow Road
HCM 2010 TWSC

2023 No-Build PM Peak Hour

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	1	42	244	1	2	1
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	83	83	93	93	38	38
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	51	262	1	5	3
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	263	0	-	0	316	263
Stage 1	-	-	-	-	263	-
Stage 2	-	-	-	-	53	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1313	-	-	-	681	781
Stage 1	-	-	-	-	786	-
Stage 2	-	-	-	-	975	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1313	-	-	-	680	781
Mov Cap-2 Maneuver	-	-	-	-	680	-
Stage 1	-	-	-	-	786	-
Stage 2	-	-	-	-	974	-
Approach	EB		WB		SB	
HCM Control Delay, s	0.2		0		10.1	
HCM LOS					B	
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1313	-	-	-	711	
HCM Lane V/C Ratio	0.001	-	-	-	0.011	
HCM Control Delay (s)	7.7	0	-	-	10.1	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0	-	-	-	0	

17: Appletree Lane & Waltham Road Lanes, Volumes, Timings

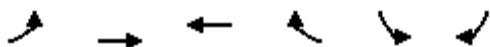
2023 No-Build PM Peak Hour

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↱			↰	↘↙	
Volume (vph)	42	2	3	243	2	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.993				0.932	
Flt Protected				0.999	0.976	
Satd. Flow (prot)	1887	0	0	1898	1728	0
Flt Permitted				0.999	0.976	
Satd. Flow (perm)	1887	0	0	1898	1728	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	297			961	236	
Travel Time (s)	6.8			21.8	5.4	
Peak Hour Factor	0.77	0.77	0.95	0.95	0.50	0.50
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	55	3	3	256	4	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	58	0	0	259	8	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	25.2%			ICU Level of Service A		
Analysis Period (min)	15					

Intersection						
Int Delay, s/veh	0.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	42	2	3	243	2	2
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	77	77	95	95	50	50
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	55	3	3	256	4	4
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	57	0	318	56
Stage 1	-	-	-	-	56	-
Stage 2	-	-	-	-	262	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1560	-	679	1016
Stage 1	-	-	-	-	972	-
Stage 2	-	-	-	-	786	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1560	-	678	1016
Mov Cap-2 Maneuver	-	-	-	-	678	-
Stage 1	-	-	-	-	972	-
Stage 2	-	-	-	-	784	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.1		9.5	
HCM LOS					A	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	813	-	-	1560	-	
HCM Lane V/C Ratio	0.01	-	-	0.002	-	
HCM Control Delay (s)	9.5	-	-	7.3	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0	-	-	0	-	

24: Old Sudbury Road Lanes, Volumes, Timings

2023 No-Build PM Peak Hour



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		↘	
Volume (vph)	44	0	243	0	0	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.865	
Flt Protected		0.950				
Satd. Flow (prot)	0	1805	1900	0	1644	0
Flt Permitted		0.950				
Satd. Flow (perm)	0	1805	1900	0	1644	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		452	74		130	
Travel Time (s)		10.3	1.7		3.0	
Peak Hour Factor	0.73	0.73	0.85	0.85	0.75	0.75
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	60	0	286	0	0	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	60	286	0	20	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 29.5% ICU Level of Service A

Analysis Period (min) 15

Intersection						
Int Delay, s/veh	1.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	44	0	243	0	0	15
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	73	73	85	85	75	75
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	60	0	286	0	0	20
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	286	0	-	0	407	286
Stage 1	-	-	-	-	286	-
Stage 2	-	-	-	-	121	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1288	-	-	-	604	758
Stage 1	-	-	-	-	767	-
Stage 2	-	-	-	-	909	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1288	-	-	-	576	758
Mov Cap-2 Maneuver	-	-	-	-	576	-
Stage 1	-	-	-	-	767	-
Stage 2	-	-	-	-	866	-
Approach	EB		WB		SB	
HCM Control Delay, s	7.9		0		9.9	
HCM LOS					A	
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1288	-	-	-	758	
HCM Lane V/C Ratio	0.047	-	-	-	0.026	
HCM Control Delay (s)	7.9	0	-	-	9.9	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1	

20: Old Sudbury Road & South Great Road Lanes, Volumes, Timings

2023 No-Build PM Peak Hour

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	4	40	243	904	413	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.876					
Flt Protected	0.996			0.990		
Satd. Flow (prot)	1658	0	0	1881	1900	0
Flt Permitted	0.996			0.990		
Satd. Flow (perm)	1658	0	0	1881	1900	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	74			218	133	
Travel Time (s)	1.7			5.0	3.0	
Peak Hour Factor	0.73	0.73	0.91	0.91	0.78	0.78
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	5	55	267	993	529	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	60	0	0	1260	529	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	96.1%			ICU Level of Service F		
Analysis Period (min)	15					

Intersection						
Int Delay, s/veh	2.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	4	40	243	904	413	0
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	73	73	91	91	78	78
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	5	55	267	993	529	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	2056	529	529	0	-	0
Stage 1	529	-	-	-	-	-
Stage 2	1527	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	61	554	1048	-	-	-
Stage 1	595	-	-	-	-	-
Stage 2	200	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	26	554	1048	-	-	-
Mov Cap-2 Maneuver	26	-	-	-	-	-
Stage 1	595	-	-	-	-	-
Stage 2	86	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	31.5	2		0		
HCM LOS	D					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1048	-	195	-	-	
HCM Lane V/C Ratio	0.255	-	0.309	-	-	
HCM Control Delay (s)	9.6	0	31.5	-	-	
HCM Lane LOS	A	A	D	-	-	
HCM 95th %tile Q(veh)	1	-	1.2	-	-	

23: Old Sudbury Road & South Great Road

Lanes, Volumes, Timings

2023 No-Build PM Peak Hour

						
Lane Group	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Volume (vph)	0	908	413	15	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.995					
Flt Protected						
Satd. Flow (prot)	0	1900	1890	0	0	1900
Flt Permitted						
Satd. Flow (perm)	0	1900	1890	0	0	1900
Link Speed (mph)	30		30	30		
Link Distance (ft)	133		126	130		
Travel Time (s)	3.0		2.9	3.0		
Peak Hour Factor	0.91	0.91	0.78	0.78	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	998	529	19	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	998	548	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)	0		0	0		
Link Offset(ft)	0		0	0		
Crosswalk Width(ft)	16		16	16		
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control	Free		Free	Stop		
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	51.1%			ICU Level of Service A		
Analysis Period (min)	15					

23: Old Sudbury Road & South Great Road
HCM 2010 TWSC

2023 No-Build PM Peak Hour

Intersection						
Int Delay, s/veh	0					
Movement	NBL	NBT	SBT	SBR	NEL	NER
Vol, veh/h	0	908	413	15	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	91	91	78	78	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	998	529	19	0	0
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	549	0	-	0	1537	539
Stage 1	-	-	-	-	539	-
Stage 2	-	-	-	-	998	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1031	-	-	-	129	546
Stage 1	-	-	-	-	589	-
Stage 2	-	-	-	-	360	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1031	-	-	-	129	546
Mov Cap-2 Maneuver	-	-	-	-	129	-
Stage 1	-	-	-	-	589	-
Stage 2	-	-	-	-	360	-
Approach	NB		SB		NE	
HCM Control Delay, s	0		0		0	
HCM LOS					A	
Minor Lane/Major Mvmt	NELn1	NBL	NBT	SBT	SBR	
Capacity (veh/h)	-	1031	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	0	-	-	-	
HCM Lane LOS	A	A	-	-	-	
HCM 95th %tile Q(veh)	-	0	-	-	-	

3: Wayland Rd. & Concord Rd. Lanes, Volumes, Timings

2023 Build PM Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	500	53	232	79	30	517
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	75		0	0	
Storage Lanes	1	1		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.966			
Flt Protected	0.950					0.997
Satd. Flow (prot)	1787	1615	1826	0	0	1877
Flt Permitted	0.950					0.997
Satd. Flow (perm)	1787	1615	1826	0	0	1877
Link Speed (mph)	30		30			30
Link Distance (ft)	992		825			847
Travel Time (s)	22.5		18.8			19.3
Peak Hour Factor	0.94	0.94	0.85	0.85	0.95	0.95
Heavy Vehicles (%)	1%	0%	0%	2%	0%	1%
Adj. Flow (vph)	532	56	273	93	32	544
Shared Lane Traffic (%)						
Lane Group Flow (vph)	532	56	366	0	0	576
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	83.6%			ICU Level of Service E		
Analysis Period (min)	15					

Intersection						
Int Delay, s/veh	146					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	500	53	232	79	30	517
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	75	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	85	85	95	95
Heavy Vehicles, %	1	0	0	2	0	1
Mvmt Flow	532	56	273	93	32	544
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	926	319	0	0	366	0
Stage 1	319	-	-	-	-	-
Stage 2	607	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	~ 301	726	-	-	1204	-
Stage 1	741	-	-	-	-	-
Stage 2	547	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 290	726	-	-	1204	-
Mov Cap-2 Maneuver	~ 290	-	-	-	-	-
Stage 1	741	-	-	-	-	-
Stage 2	~ 526	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	\$ 379.3	0		0.4		
HCM LOS	F					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	290	726	1204	-
HCM Lane V/C Ratio	-	-	1.834	0.078	0.026	-
HCM Control Delay (s)	-	-\$	418.4	10.4	8.1	0
HCM Lane LOS	-	-	F	B	A	A
HCM 95th %tile Q(veh)	-	-	35.8	0.3	0.1	-
Notes						
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon						

3: Wayland Rd. & Concord Rd. Lanes, Volumes, Timings

2023 Build PM Peak Hour ADJ Gap

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	500	53	232	79	30	517
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	75		0	0	
Storage Lanes	1	1		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.966			
Flt Protected	0.950					0.997
Satd. Flow (prot)	1787	1615	1826	0	0	1877
Flt Permitted	0.950					0.997
Satd. Flow (perm)	1787	1615	1826	0	0	1877
Link Speed (mph)	30		30			30
Link Distance (ft)	992		825			847
Travel Time (s)	22.5		18.8			19.3
Peak Hour Factor	0.94	0.94	0.85	0.85	0.95	0.95
Heavy Vehicles (%)	1%	0%	0%	2%	0%	1%
Adj. Flow (vph)	532	56	273	93	32	544
Shared Lane Traffic (%)						
Lane Group Flow (vph)	532	56	366	0	0	576
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	83.6%			ICU Level of Service E		
Analysis Period (min)	15					

Intersection						
Int Delay, s/veh	41.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	500	53	232	79	30	517
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	75	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	85	85	95	95
Heavy Vehicles, %	1	0	0	2	0	1
Mvmt Flow	532	56	273	93	32	544
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	926	319	0	0	366	0
Stage 1	319	-	-	-	-	-
Stage 2	607	-	-	-	-	-
Critical Hdwy	5.8	5.8	-	-	4.1	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	2.2	2.2	-	-	2.2	-
Pot Cap-1 Maneuver	~ 482	1077	-	-	1204	-
Stage 1	1115	-	-	-	-	-
Stage 2	787	-	-	-	-	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	~ 464	1077	-	-	1204	-
Mov Cap-2 Maneuver	~ 464	-	-	-	-	-
Stage 1	1115	-	-	-	-	-
Stage 2	757	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	106.6	0		0.4		
HCM LOS	F					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	464	1077	1204	-
HCM Lane V/C Ratio	-	-	1.146	0.052	0.026	-
HCM Control Delay (s)	-	-	117	8.5	8.1	0
HCM Lane LOS	-	-	F	A	A	A
HCM 95th %tile Q(veh)	-	-	19	0.2	0.1	-
Notes						
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon						

5: Lincoln Rd. & Wayland Rd.

Lanes, Volumes, Timings

2023 Build PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	45	54	5	4	272	14	5	3	1	11	8	283
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.994			0.994			0.983			0.874	
Flt Protected		0.979			0.999			0.973			0.998	
Satd. Flow (prot)	0	1849	0	0	1887	0	0	1815	0	0	1657	0
Flt Permitted		0.979			0.999			0.973			0.998	
Satd. Flow (perm)	0	1849	0	0	1887	0	0	1815	0	0	1657	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		992			714			1001			877	
Travel Time (s)		22.5			16.2			22.8			19.9	
Peak Hour Factor	0.79	0.79	0.79	0.91	0.91	0.91	0.56	0.56	0.56	0.80	0.80	0.80
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	57	68	6	4	299	15	9	5	2	14	10	354
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	131	0	0	318	0	0	16	0	0	378	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	49.5%				ICU Level of Service A							
Analysis Period (min)	15											

Intersection												
Int Delay, s/veh	8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	45	54	5	4	272	14	5	3	1	11	8	283
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	91	91	91	56	56	56	80	80	80
Heavy Vehicles, %	0	0	0	0	0	0	0	0	1	0	0	0
Mvmt Flow	57	68	6	4	299	15	9	5	2	14	10	354
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	314	0	0	75	0	0	682	508	72	504	504	307
Stage 1	-	-	-	-	-	-	185	185	-	315	315	-
Stage 2	-	-	-	-	-	-	497	323	-	189	189	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.21	7.1	6.5	6.2
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	2.2	-	-	2.2	-	-	3.5	4	3.309	3.5	4	3.3
Pot Cap-1 Maneuver	1258	-	-	1537	-	-	367	471	993	482	473	738
Stage 1	-	-	-	-	-	-	821	751	-	700	659	-
Stage 2	-	-	-	-	-	-	559	654	-	817	748	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1258	-	-	1537	-	-	181	448	993	459	449	738
Mov Cap-2 Maneuver	-	-	-	-	-	-	181	448	-	459	449	-
Stage 1	-	-	-	-	-	-	782	716	-	667	657	-
Stage 2	-	-	-	-	-	-	286	652	-	771	713	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	3.5			0.1			20.1			15.7		
HCM LOS							C			C		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	255	1258	-	-	1537	-	-	710				
HCM Lane V/C Ratio	0.063	0.045	-	-	0.003	-	-	0.532				
HCM Control Delay (s)	20.1	8	0	-	7.3	0	-	15.7				
HCM Lane LOS	C	A	A	-	A	A	-	C				
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	3.2				

11: West Driveway & Waltham Road Lanes, Volumes, Timings

2023 Build PM Peak Hour

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	43	26	15	297	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.950					
Flt Protected				0.998		
Satd. Flow (prot)	1770	0	0	1859	1863	0
Flt Permitted				0.998		
Satd. Flow (perm)	1770	0	0	1859	1863	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	120			223	268	
Travel Time (s)	2.7			5.1	6.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	47	28	16	323	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	75	0	0	339	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	26.5%			ICU Level of Service A		
Analysis Period (min)	15					

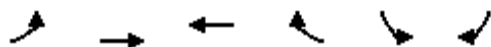
11: West Driveway & Waltham Road
HCM 2010 TWSC

2023 Build PM Peak Hour

Intersection						
Int Delay, s/veh	0.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	43	26	15	297	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, %	2	2	2	2	2	2
Mvmt Flow	47	28	16	323	0	0
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	75	0	416	61
Stage 1	-	-	-	-	61	-
Stage 2	-	-	-	-	355	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1524	-	593	1004
Stage 1	-	-	-	-	962	-
Stage 2	-	-	-	-	710	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1524	-	585	1004
Mov Cap-2 Maneuver	-	-	-	-	585	-
Stage 1	-	-	-	-	962	-
Stage 2	-	-	-	-	701	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.4		0	
HCM LOS					A	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	-	-	-	1524	-	
HCM Lane V/C Ratio	-	-	-	0.011	-	
HCM Control Delay (s)	0	-	-	7.4	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	-	-	-	0	-	

13: Waltham Road & Longmeadow Road Lanes, Volumes, Timings

2023 Build PM Peak Hour



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	1	42	311	1	2	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.949	
Flt Protected		0.999			0.970	
Satd. Flow (prot)	0	1898	1900	0	1749	0
Flt Permitted		0.999			0.970	
Satd. Flow (perm)	0	1898	1900	0	1749	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		223	95		325	
Travel Time (s)		5.1	2.2		7.4	
Peak Hour Factor	0.83	0.83	0.93	0.93	0.38	0.38
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	1	51	334	1	5	3
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	52	335	0	8	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	26.4%
Analysis Period (min)	15
	ICU Level of Service A

13: Waltham Road & Longmeadow Road
HCM 2010 TWSC

2023 Build PM Peak Hour

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	1	42	311	1	2	1
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	83	83	93	93	38	38
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	51	334	1	5	3
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	335	0	-	0	388	335
Stage 1	-	-	-	-	335	-
Stage 2	-	-	-	-	53	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1236	-	-	-	619	712
Stage 1	-	-	-	-	729	-
Stage 2	-	-	-	-	975	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1236	-	-	-	618	712
Mov Cap-2 Maneuver	-	-	-	-	618	-
Stage 1	-	-	-	-	729	-
Stage 2	-	-	-	-	974	-
Approach	EB		WB		SB	
HCM Control Delay, s	0.2		0		10.6	
HCM LOS					B	
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1236	-	-	-	646	
HCM Lane V/C Ratio	0.001	-	-	-	0.012	
HCM Control Delay (s)	7.9	0	-	-	10.6	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0	-	-	-	0	

15: East Driveway & Waltham Road Lanes, Volumes, Timings

2023 Build PM Peak Hour

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	44	0	0	260	52	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.950	
Flt Protected					0.969	
Satd. Flow (prot)	1863	0	0	1863	1715	0
Flt Permitted					0.969	
Satd. Flow (perm)	1863	0	0	1863	1715	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	95			297	233	
Travel Time (s)	2.2			6.8	5.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	48	0	0	283	57	33
Shared Lane Traffic (%)						
Lane Group Flow (vph)	48	0	0	283	90	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	25.1%			ICU Level of Service A		
Analysis Period (min)	15					

15: East Driveway & Waltham Road
HCM 2010 TWSC

2023 Build PM Peak Hour

Intersection

Int Delay, s/veh 2.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	44	0	0	260	52	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	48	0	0	283	57	33

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	48	331
Stage 1	-	-	48
Stage 2	-	-	283
Critical Hdwy	-	4.12	6.42
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	-	2.218	3.518
Pot Cap-1 Maneuver	-	1559	664
Stage 1	-	-	974
Stage 2	-	-	765
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1559	664
Mov Cap-2 Maneuver	-	-	664
Stage 1	-	-	974
Stage 2	-	-	765

Approach	EB	WB	NB
HCM Control Delay, s	0	0	10.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	761	-	-	1559	-
HCM Lane V/C Ratio	0.117	-	-	-	-
HCM Control Delay (s)	10.4	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.4	-	-	0	-

17: Appletree Lane & Waltham Road Lanes, Volumes, Timings

2023 Build PM Peak Hour

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰			↱	↰	↱
Volume (vph)	72	2	3	258	2	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.996				0.932	
Flt Protected				0.999	0.976	
Satd. Flow (prot)	1892	0	0	1898	1728	0
Flt Permitted				0.999	0.976	
Satd. Flow (perm)	1892	0	0	1898	1728	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	297			961	236	
Travel Time (s)	6.8			21.8	5.4	
Peak Hour Factor	0.77	0.77	0.95	0.95	0.50	0.50
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	94	3	3	272	4	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	97	0	0	275	8	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	26.0%			ICU Level of Service A		
Analysis Period (min)	15					

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	72	2	3	258	2	2
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	77	77	95	95	50	50
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	94	3	3	272	4	4

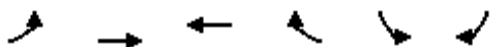
Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	96
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.1
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.2
Pot Cap-1 Maneuver	-	-	1510
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1510
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	9.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	764	-	-	1510	-
HCM Lane V/C Ratio	0.01	-	-	0.002	-
HCM Control Delay (s)	9.8	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

24: Old Sudbury Road Lanes, Volumes, Timings

2023 Build PM Peak Hour



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		↘	
Volume (vph)	0	75	248	0	0	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.865	
Flt Protected						
Satd. Flow (prot)	0	1900	1900	0	1644	0
Flt Permitted						
Satd. Flow (perm)	0	1900	1900	0	1644	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		452	74		130	
Travel Time (s)		10.3	1.7		3.0	
Peak Hour Factor	0.73	0.73	0.85	0.85	0.75	0.75
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	103	292	0	0	33
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	103	292	0	33	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 23.1% ICU Level of Service A

Analysis Period (min) 15

Intersection						
Int Delay, s/veh	0.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	75	248	0	0	25
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	73	73	85	85	75	75
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	103	292	0	0	33
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	292	0	-	0	395	292
Stage 1	-	-	-	-	292	-
Stage 2	-	-	-	-	103	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1281	-	-	-	614	752
Stage 1	-	-	-	-	762	-
Stage 2	-	-	-	-	926	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1281	-	-	-	614	752
Mov Cap-2 Maneuver	-	-	-	-	614	-
Stage 1	-	-	-	-	762	-
Stage 2	-	-	-	-	926	-
Approach	EB		WB		SB	
HCM Control Delay, s	0		0		10	
HCM LOS					B	
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1281	-	-	-	752	
HCM Lane V/C Ratio	-	-	-	-	0.044	
HCM Control Delay (s)	0	-	-	-	10	
HCM Lane LOS	A	-	-	-	B	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

20: Old Sudbury Road & South Great Road Lanes, Volumes, Timings

2023 Build PM Peak Hour

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	24	50	248	904	413	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.909					
Flt Protected	0.984			0.989		
Satd. Flow (prot)	1699	0	0	1879	1900	0
Flt Permitted	0.984			0.989		
Satd. Flow (perm)	1699	0	0	1879	1900	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	74			218	133	
Travel Time (s)	1.7			5.0	3.0	
Peak Hour Factor	0.73	0.73	0.91	0.91	0.78	0.78
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	33	68	273	993	529	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	101	0	0	1266	529	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	97.4%			ICU Level of Service F		
Analysis Period (min)	15					

Intersection

Int Delay, s/veh 19.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	24	50	248	904	413	0
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	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	73	73	91	91	78	78
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	33	68	273	993	529	0

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	2067	529	0
Stage 1	529	-	-
Stage 2	1538	-	-
Critical Hdwy	6.4	6.2	4.1
Critical Hdwy Stg 1	5.4	-	-
Critical Hdwy Stg 2	5.4	-	-
Follow-up Hdwy	3.5	3.3	2.2
Pot Cap-1 Maneuver	61	554	1048
Stage 1	595	-	-
Stage 2	197	-	-
Platoon blocked, %			-
Mov Cap-1 Maneuver	~ 26	554	1048
Mov Cap-2 Maneuver	~ 26	-	-
Stage 1	595	-	-
Stage 2	83	-	-

Approach	EB	NB	SB
HCM Control Delay, s	\$ 337.9	2.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1048	-	73	-	-
HCM Lane V/C Ratio	0.26	-	1.389	-	-
HCM Control Delay (s)	9.6	0	\$ 337.9	-	-
HCM Lane LOS	A	A	F	-	-
HCM 95th %tile Q(veh)	1	-	8.2	-	-

Notes

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

23: Old Sudbury Road & South Great Road

Lanes, Volumes, Timings

2023 Build PM Peak Hour

						
Lane Group	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Volume (vph)	0	928	413	25	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.992					
Flt Protected						
Satd. Flow (prot)	0	1900	1885	0	0	1900
Flt Permitted						
Satd. Flow (perm)	0	1900	1885	0	0	1900
Link Speed (mph)	30		30	30		
Link Distance (ft)	133		126	130		
Travel Time (s)	3.0		2.9	3.0		
Peak Hour Factor	0.91	0.91	0.78	0.78	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	0	1020	529	32	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1020	561	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)	0		0	0		
Link Offset(ft)	0		0	0		
Crosswalk Width(ft)	16		16	16		
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control	Free		Free	Stop		
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	52.2%			ICU Level of Service A		
Analysis Period (min)	15					

23: Old Sudbury Road & South Great Road
HCM 2010 TWSC

2023 Build PM Peak Hour

Intersection						
Int Delay, s/veh	0					
Movement	NBL	NBT	SBT	SBR	NEL	NER
Vol, veh/h	0	928	413	25	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	91	91	78	78	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	1020	529	32	0	0
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	562	0	-	0	1566	546
Stage 1	-	-	-	-	546	-
Stage 2	-	-	-	-	1020	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1019	-	-	-	124	541
Stage 1	-	-	-	-	584	-
Stage 2	-	-	-	-	351	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1019	-	-	-	124	541
Mov Cap-2 Maneuver	-	-	-	-	124	-
Stage 1	-	-	-	-	584	-
Stage 2	-	-	-	-	351	-
Approach	NB		SB		NE	
HCM Control Delay, s	0		0		0	
HCM LOS					A	
Minor Lane/Major Mvmt	NELn1	NBL	NBT	SBT	SBR	
Capacity (veh/h)	-	1019	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	0	-	-	-	
HCM Lane LOS	A	A	-	-	-	
HCM 95th %tile Q(veh)	-	0	-	-	-	

Sight Distance Worksheets

Sight Distance Calculations

Proposed Carroll School, Wayland, MA

Inputs

Posted Speed Limit = 30 mph WB and 30 mph EB

Direction 1 =	Waltham Road WB	85% Speed =	32	mph	Grade =	0	t =	2.5 s	a =	11.2 ft/s ²
Direction 2 =	Waltham Road EB	85% Speed =	34	mph	Grade =	0	t =	2.5 s	a =	11.2 ft/s ²
							Left: t _g =	7.5 s		
							Right: t _g =	6.5 s		

SSD = Reaction Distance + Braking Distance

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

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

ISD = $1.47 \times V \times t_g$

Where

- t = reaction time (sec)
- t_g = time gap for minor road vehicle to enter the major road
- V = travel speed (mph)
- G = roadway grade
- a = deceleration rate (ft/s²)

Calculations

	Reaction Distance (ft)	Brake Distance (ft)	SSD (ft)
Waltham Road WB	117.6	98.1	216
Waltham Road EB	125.0	110.8	236

For	32 mph:		
Left Turn ISD =	353	ft	
Right Turn ISD =	306	ft	
For	34 mph:		
Left Turn ISD =	375	ft	
Right Turn ISD =	325	ft	