

## APPENDIX

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TURNING MOVEMENT COUNTS  
AUTOMATIC TRAFFIC RECORDER COUNTS  
SEASONAL ADJUSTMENTS  
SPEEDS  
TRANSIT INFORMATION  
CRASH DATA  
BACKGROUND DEVELOPMENT  
VEHICLE OCCUPANY RATIO  
TRIP GENERATION  
CAPACITY ANALYSIS

## TURNING MOVEMENT COUNTS

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**Accurate Counts**  
978-664-2565

N/S Street : Warren Street  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N010  
Site Code : 73820010  
Start Date : 11/17/2016  
Page No : 1

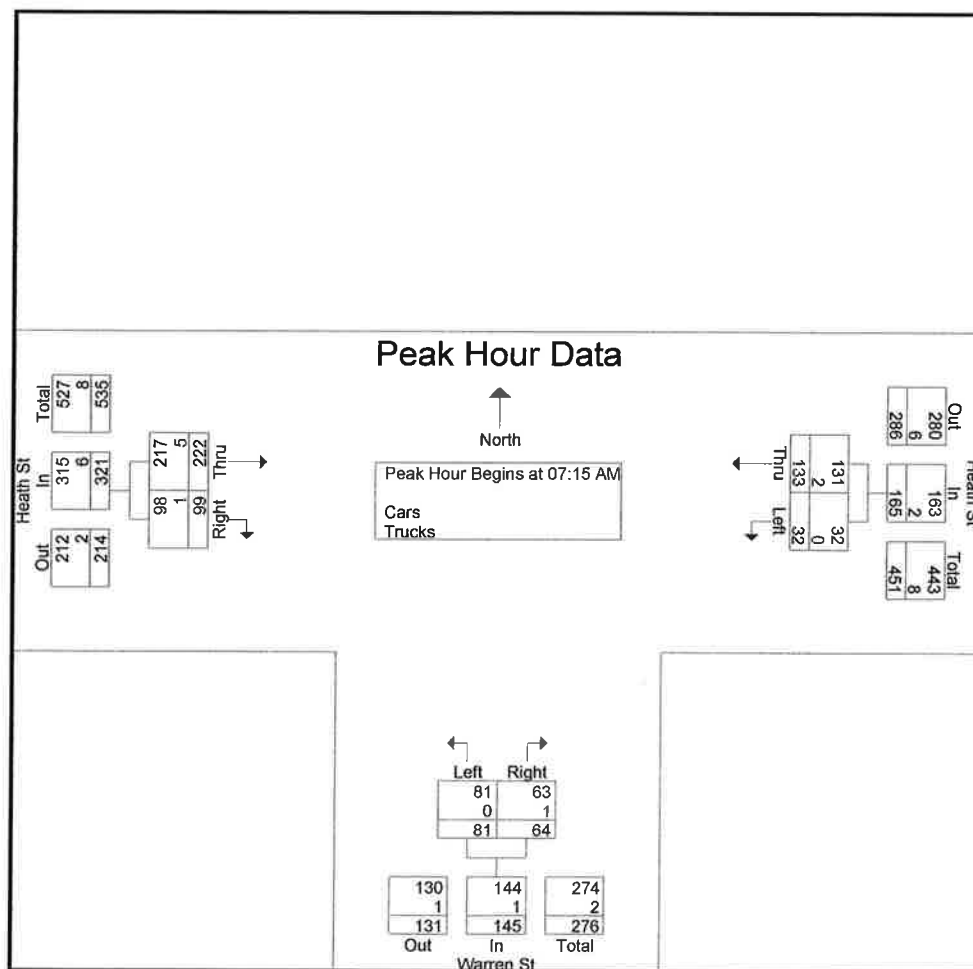
Groups Printed- Cars - Trucks

Start Time	Heath St From East		Warren St From South		Heath St From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
07:00 AM	0	15	11	4	30	16	76
07:15 AM	6	36	16	8	50	27	143
07:30 AM	5	26	19	21	57	16	144
07:45 AM	12	29	26	24	62	33	186
Total	23	106	72	57	199	92	549
08:00 AM	9	42	20	11	53	23	158
08:15 AM	5	39	18	16	42	18	138
08:30 AM	3	19	20	10	47	20	119
08:45 AM	4	30	15	6	36	16	107
Total	21	130	73	43	178	77	522
09:00 AM	3	18	10	5	28	16	80
09:15 AM	4	17	5	3	16	10	55
Grand Total	51	271	160	108	421	195	1206
Apprch %	15.8	84.2	59.7	40.3	68.3	31.7	
Total %	4.2	22.5	13.3	9	34.9	16.2	
Cars	51	266	159	106	414	194	1190
% Cars	100	98.2	99.4	98.1	98.3	99.5	98.7
Trucks	0	5	1	2	7	1	16
% Trucks	0	1.8	0.6	1.9	1.7	0.5	1.3

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Page No : 2

	Heath St From East			Warren St From South			Heath St 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 09:15 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	6	36	42	16	8	24	50	27	77	143
07:30 AM	5	26	31	19	21	40	57	16	73	144
07:45 AM	12	29	41	26	24	50	62	33	95	186
08:00 AM	9	42	51	20	11	31	53	23	76	158
Total Volume	32	133	165	81	64	145	222	99	321	631
% App. Total	19.4	80.6		55.9	44.1		69.2	30.8		
PHF	.667	.792	.809	.779	.667	.725	.895	.750	.845	.848
Cars	32	131	163	81	63	144	217	98	315	622
% Cars	100	98.5	98.8	100	98.4	99.3	97.7	99.0	98.1	98.6
Trucks	0	2	2	0	1	1	5	1	6	9
% Trucks	0	1.5	1.2	0	1.6	0.7	2.3	1.0	1.9	1.4





# Accurate Counts

978-664-2565

N/S Street : Warren Street  
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 Weather : Clear

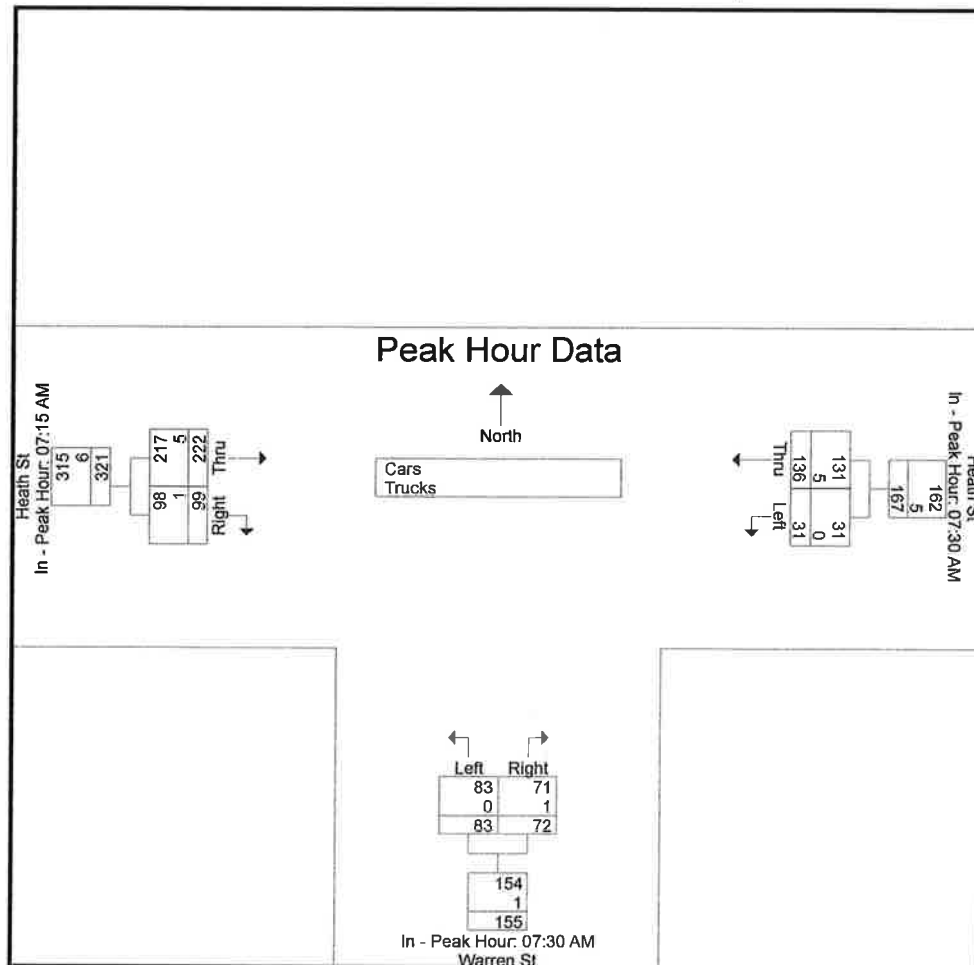
File Name : 7382N010  
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 Start Date : 11/17/2016  
 Page No : 3

	Heath St From East			Warren St From South			Heath St 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 09:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM			07:30 AM			07:15 AM		
+0 mins.	5	26	31	19	21	40	50	27	77
+15 mins.	12	29	41	26	24	50	57	16	73
+30 mins.	9	42	51	20	11	31	62	33	95
+45 mins.	5	39	44	18	16	34	53	23	76
Total Volume	31	136	167	83	72	155	222	99	321
% App. Total	18.6	81.4		53.5	46.5		69.2	30.8	
PHF	.646	.810	.819	.798	.750	.775	.895	.750	.845
Cars	31	131	162	83	71	154	217	98	315
% Cars	100	96.3	97	100	98.6	99.4	97.7	99	98.1
Trucks	0	5	5	0	1	1	5	1	6
% Trucks	0	3.7	3	0	1.4	0.6	2.3	1	1.9



**Accurate Counts**  
978-664-2565

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Site Code : 73820010  
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Page No : 4

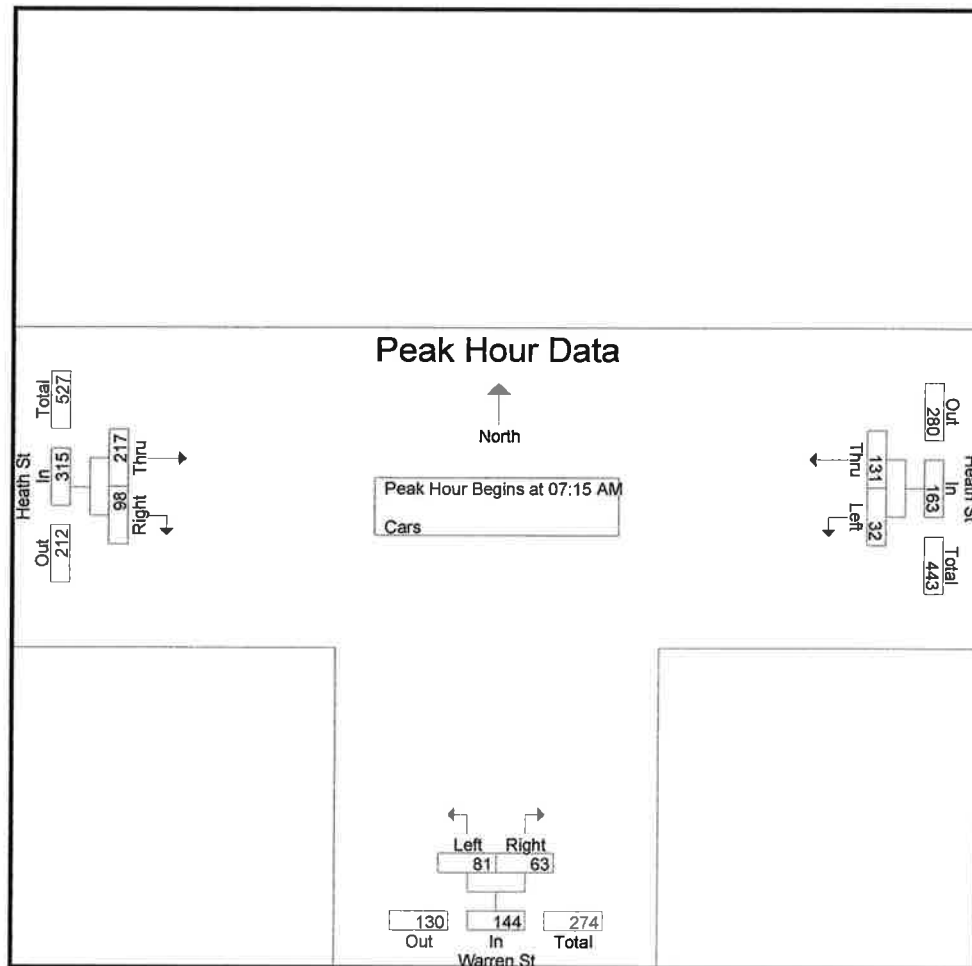
Groups Printed- Cars

Start Time	Heath St From East		Warren St From South		Heath St From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
07:00 AM	0	15	11	4	30	16	76
07:15 AM	6	36	16	8	46	27	139
07:30 AM	5	25	19	21	57	16	143
07:45 AM	12	29	26	23	62	32	184
Total	23	105	72	56	195	91	542
08:00 AM	9	41	20	11	52	23	156
08:15 AM	5	36	18	16	42	18	135
08:30 AM	3	19	20	10	45	20	117
08:45 AM	4	30	14	6	36	16	106
Total	21	126	72	43	175	77	514
09:00 AM	3	18	10	5	28	16	80
09:15 AM	4	17	5	2	16	10	54
Grand Total	51	266	159	106	414	194	1190
Apprch %	16.1	83.9	60	40	68.1	31.9	
Total %	4.3	22.4	13.4	8.9	34.8	16.3	

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	Heath St From East			Warren St From South			Heath St 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 09:15 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	6	36	42	16	8	24	46	27	73	139
07:30 AM	5	25	30	19	21	40	57	16	73	143
07:45 AM	12	29	41	26	23	49	62	32	94	184
08:00 AM	9	41	50	20	11	31	52	23	75	156
Total Volume	32	131	163	81	63	144	217	98	315	622
% App. Total	19.6	80.4		56.2	43.8		68.9	31.1		
PHF	.667	.799	.815	.779	.685	.735	.875	.766	.838	.845



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Weather : Clear

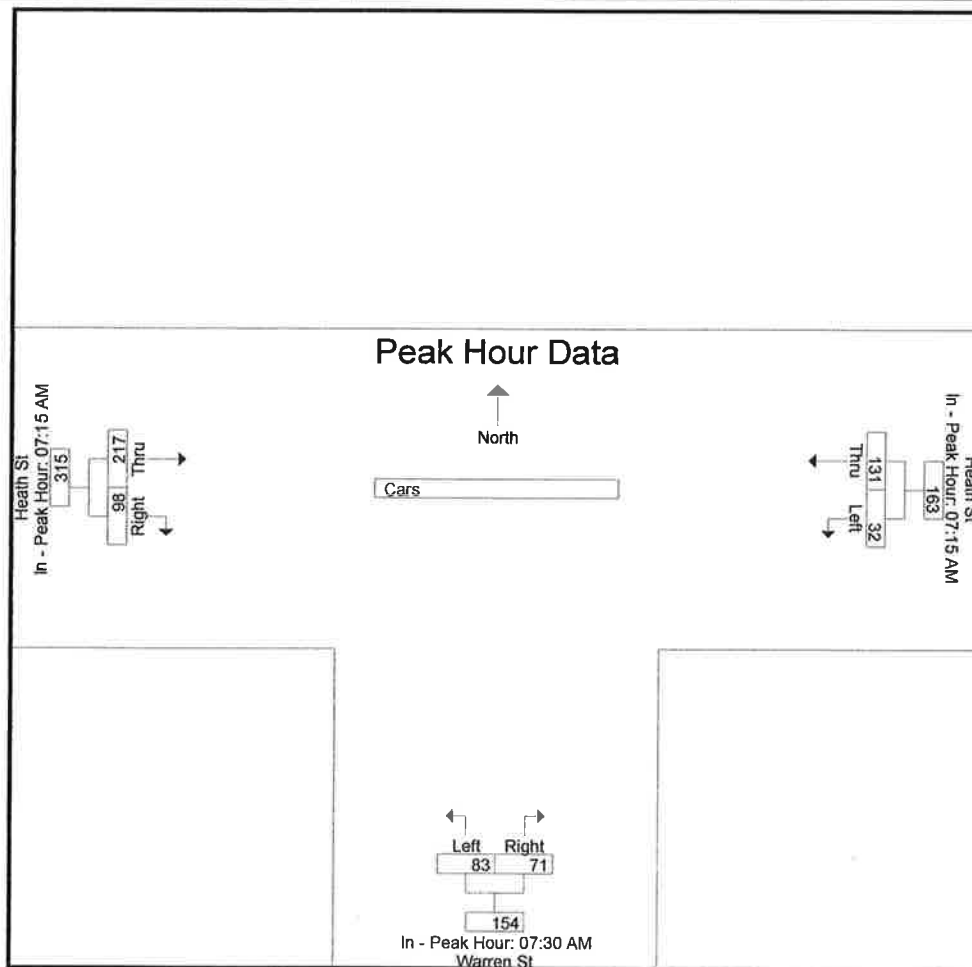
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Site Code : 73820010  
Start Date : 11/17/2016  
Page No : 6

	Heath St From East			Warren St From South			Heath St 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 09:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM			07:30 AM			07:15 AM		
+0 mins.	6	36	42	19	21	40	46	27	73
+15 mins.	5	25	30	26	23	49	57	16	73
+30 mins.	12	29	41	20	11	31	62	32	94
+45 mins.	9	41	50	18	16	34	52	23	75
Total Volume	32	131	163	83	71	154	217	98	315
% App. Total	19.6	80.4		53.9	46.1		68.9	31.1	
PHF	.667	.799	.815	.798	.772	.786	.875	.766	.838



**Accurate Counts**  
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Site Code : 73820010  
Start Date : 11/17/2016  
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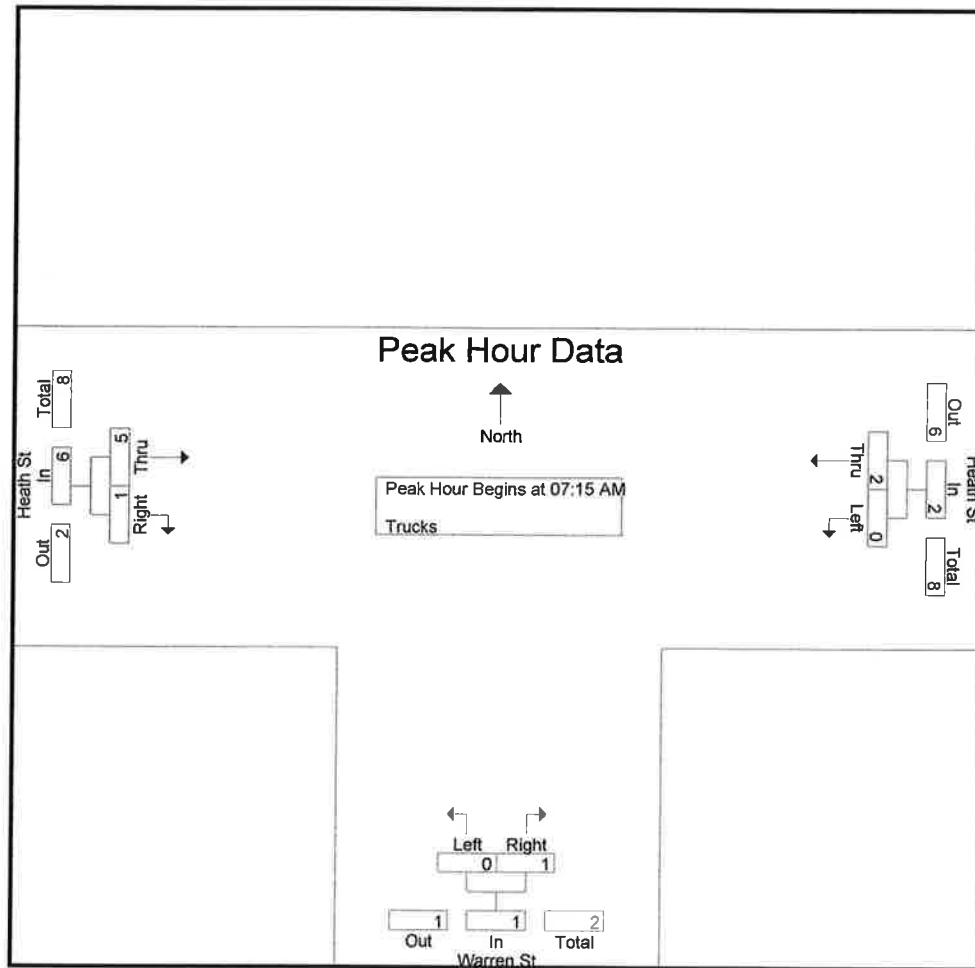
Groups Printed- Trucks

Start Time	Heath St From East		Warren St From South		Heath St From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
07:00 AM	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	4	0	4
07:30 AM	0	1	0	0	0	0	1
07:45 AM	0	0	0	1	0	1	2
Total	0	1	0	1	4	1	7
08:00 AM	0	1	0	0	1	0	2
08:15 AM	0	3	0	0	0	0	3
08:30 AM	0	0	0	0	2	0	2
08:45 AM	0	0	1	0	0	0	1
Total	0	4	1	0	3	0	8
09:00 AM	0	0	0	0	0	0	0
09:15 AM	0	0	0	1	0	0	1
Grand Total	0	5	1	2	7	1	16
Apprch %	0	100	33.3	66.7	87.5	12.5	
Total %	0	31.2	6.2	12.5	43.8	6.2	

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Start Date : 11/17/2016  
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	Heath St From East			Warren St From South			Heath St 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 09:15 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	0	0	0	0	0	0	4	0	4	4
07:30 AM	0	1	1	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	1	1	0	1	1	2
08:00 AM	0	1	1	0	0	0	1	0	1	2
Total Volume	0	2	2	0	1	1	5	1	6	9
% App. Total	0	100		0	100		83.3	16.7		
PHF	.000	.500	.500	.000	.250	.250	.313	.250	.375	.563



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Weather : Clear

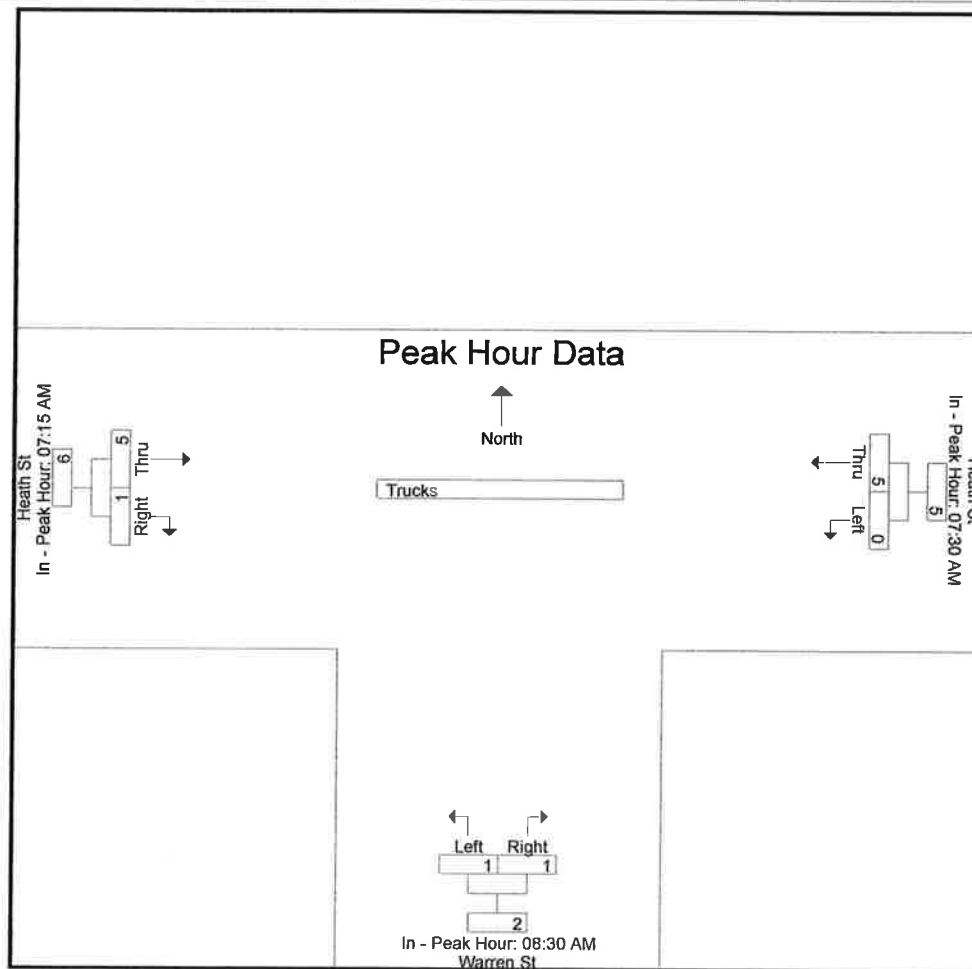
File Name : 7382N010  
Site Code : 73820010  
Start Date : 11/17/2016  
Page No : 9

	Heath St From East			Warren St From South			Heath St 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 09:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM			08:30 AM			07:15 AM		
+0 mins.	0	1	1	0	0	0	4	0	4
+15 mins.	0	0	0	1	0	1	0	0	0
+30 mins.	0	1	1	0	0	0	0	1	1
+45 mins.	0	3	3	0	1	1	1	0	1
Total Volume	0	5	5	1	1	2	5	1	6
% App. Total	0	100		50	50		83.3	16.7	
PHF	.000	.417	.417	.250	.250	.500	.313	.250	.375



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978-664-2565

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Start Date : 11/17/2016  
Page No : 10

Groups Printed- Bikes Peds

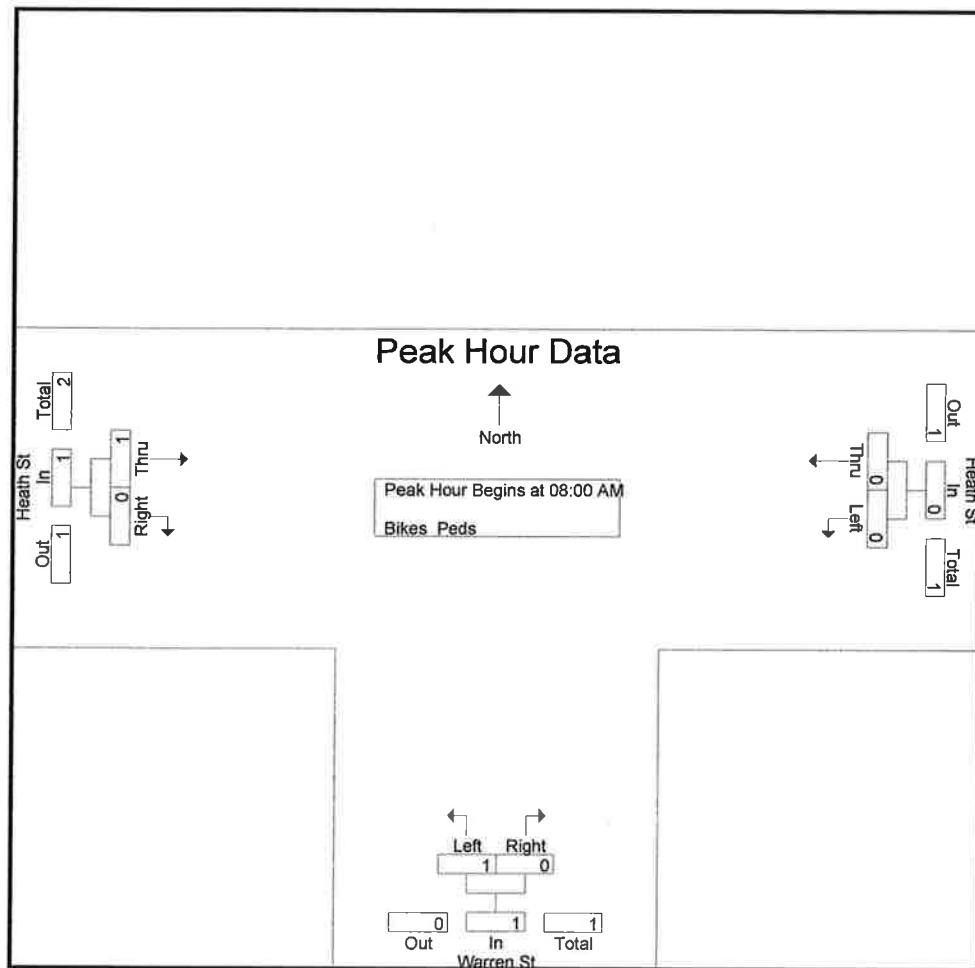
Start Time	Heath St From East			Warren St From South			Heath St From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds			
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	1	0	0	0	0	0	0	0	0	1	1
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	1	0	0	0	1	0	1
Total	0	1	0	0	0	1	0	0	0	1	1	2
08:00 AM	0	0	0	0	0	1	0	0	0	1	0	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	1	1	0	1
08:45 AM	0	0	0	1	0	0	1	0	0	0	2	2
Total	0	0	0	1	0	1	1	0	1	2	2	4
09:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
09:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	1	0	1	0	2	1	0	1	3	3	6
Apprch %	0	100		100	0		100	0				
Total %	0	33.3		33.3	0		33.3	0		50	50	



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Page No : 11

	Heath St From East			Warren St From South			Heath St 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 09:15 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	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	1	0	1	1	0	1	2
Total Volume	0	0	0	1	0	1	1	0	1	2
% App. Total	0	0		100	0		100	0		
PHF	.000	.000	.000	.250	.000	.250	.250	.000	.250	.250



# Accurate Counts

978-664-2565

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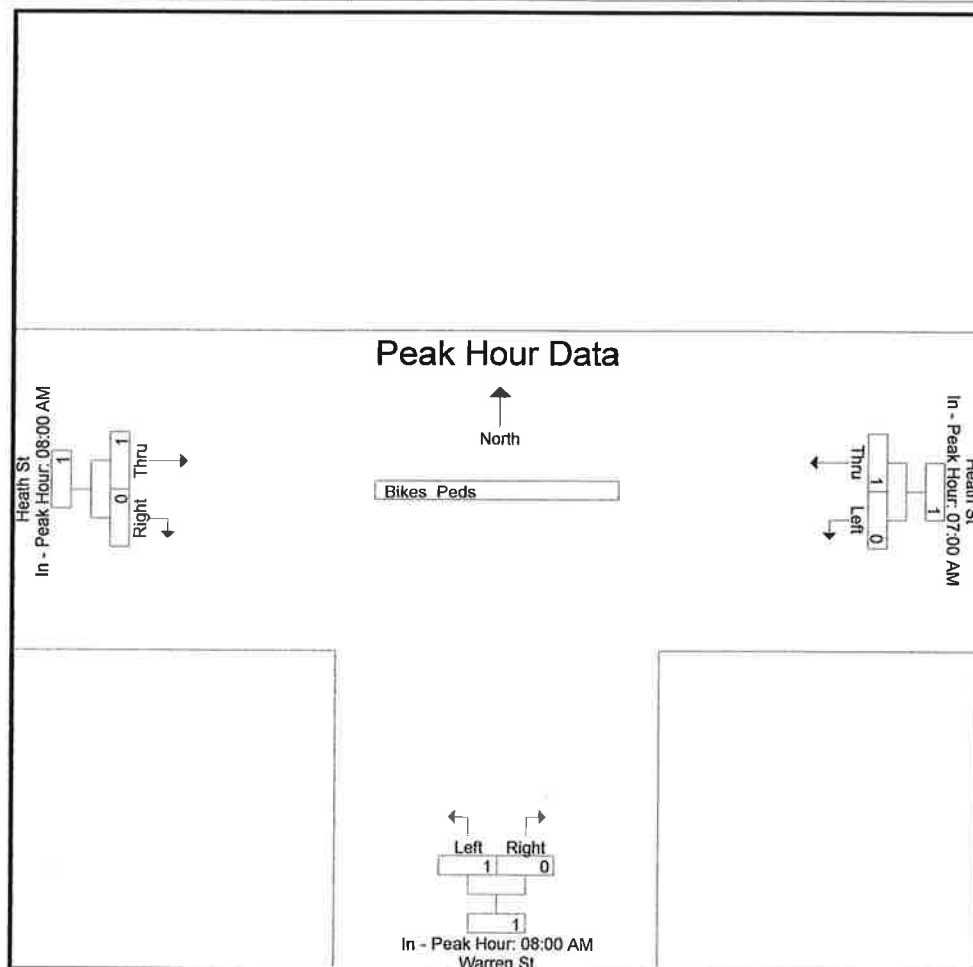
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 Site Code : 73820010  
 Start Date : 11/17/2016  
 Page No : 12

	Heath St From East			Warren St From South			Heath St 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 09:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM			08:00 AM			08:00 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	1	1	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	1	0	1
Total Volume	0	1	1	1	0	1	1	0	1
% App. Total	0	100		100	0		100	0	
PHF	.000	.250	.250	.250	.000	.250	.250	.000	.250



**Accurate Counts**  
978-664-2565

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File Name : 7382N010  
Site Code : 73820010  
Start Date : 11/17/2016  
Page No : 1

Groups Printed- Cars - Trucks

Start Time	Heath St From East		Warren St From South		Heath St From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
02:00 PM	4	35	4	1	12	6	62
02:15 PM	3	25	5	4	15	12	64
02:30 PM	7	36	6	2	13	11	75
02:45 PM	7	37	7	2	17	12	82
Total	21	133	22	9	57	41	283
03:00 PM	8	37	10	4	13	13	85
03:15 PM	6	55	14	4	25	23	127
03:30 PM	3	45	18	4	18	11	99
03:45 PM	9	37	25	3	18	13	105
Total	26	174	67	15	74	60	416
04:00 PM	12	59	16	2	18	14	121
04:15 PM	20	56	22	2	17	11	128
04:30 PM	16	48	23	3	16	8	114
04:45 PM	19	61	25	1	25	7	138
Total	67	224	86	8	76	40	501
Grand Total	114	531	175	32	207	141	1200
Apprch %	17.7	82.3	84.5	15.5	59.5	40.5	
Total %	9.5	44.2	14.6	2.7	17.2	11.8	
Cars	110	529	172	30	205	141	1187
% Cars	96.5	99.6	98.3	93.8	99	100	98.9
Trucks	4	2	3	2	2	0	13
% Trucks	3.5	0.4	1.7	6.2	1	0	1.1

# Accurate Counts

978-664-2565

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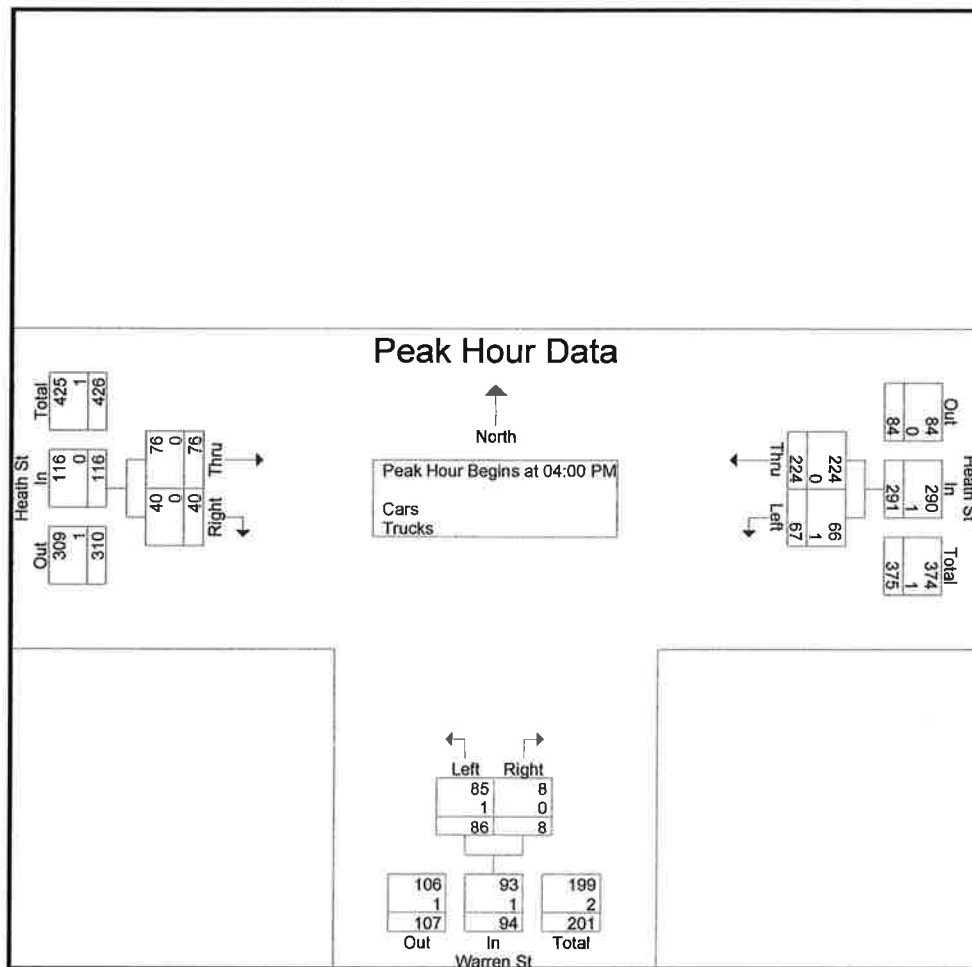
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	Heath St From East			Warren St From South			Heath St From West			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total

Peak Hour Analysis From 02:00 PM to 04:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:00 PM

04:00 PM	12	59	71	16	2	18	18	14	32	121
04:15 PM	20	56	76	22	2	24	17	11	28	128
04:30 PM	16	48	64	23	3	26	16	8	24	114
04:45 PM	19	61	80	25	1	26	25	7	32	138
Total Volume	67	224	291	86	8	94	76	40	116	501
% App. Total	23	77		91.5	8.5		65.5	34.5		
PHF	.838	.918	.909	.860	.667	.904	.760	.714	.906	.908
Cars	66	224	290	85	8	93	76	40	116	499
% Cars	98.5	100	99.7	98.8	100	98.9	100	100	100	99.6
Trucks	1	0	1	1	0	1	0	0	0	2
% Trucks	1.5	0	0.3	1.2	0	1.1	0	0	0	0.4



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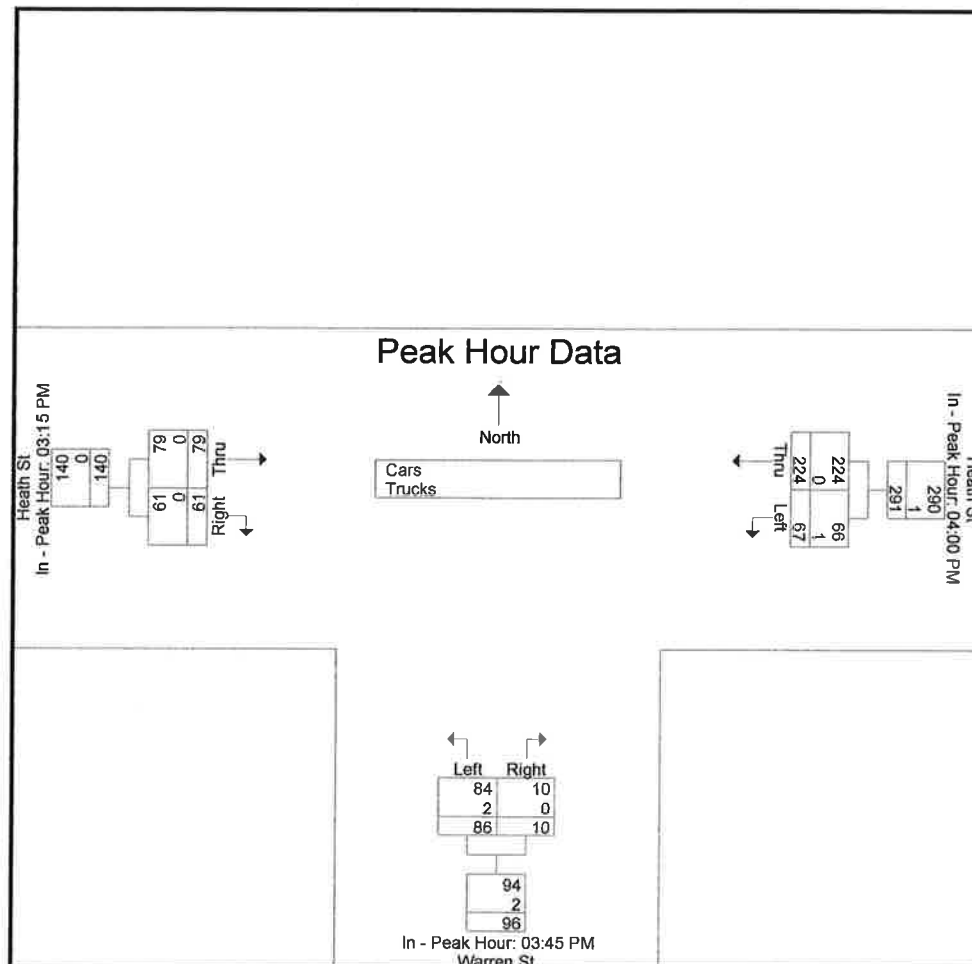
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 Page No : 3

	Heath St From East			Warren St From South			Heath St 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM			03:45 PM			03:15 PM		
+0 mins.	12	59	71	25	3	28	25	23	48
+15 mins.	20	56	76	16	2	18	18	11	29
+30 mins.	16	48	64	22	2	24	18	13	31
+45 mins.	19	61	80	23	3	26	18	14	32
Total Volume	67	224	291	86	10	96	79	61	140
% App. Total	23	77		89.6	10.4		56.4	43.6	
PHF	.838	.918	.909	.860	.833	.857	.790	.663	.729
Cars	66	224	290	84	10	94	79	61	140
% Cars	98.5	100	99.7	97.7	100	97.9	100	100	100
Trucks	1	0	1	2	0	2	0	0	0
% Trucks	1.5	0	0.3	2.3	0	2.1	0	0	0



**Accurate Counts**  
978-664-2565

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Weather : Clear

File Name : 7382N010  
Site Code : 73820010  
Start Date : 11/17/2016  
Page No : 4

Groups Printed- Cars

Start Time	Heath St From East		Warren St From South		Heath St From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
02:00 PM	3	35	4	0	11	6	59
02:15 PM	2	25	4	3	15	12	61
02:30 PM	7	36	6	2	13	11	75
02:45 PM	6	37	7	2	17	12	81
Total	18	133	21	7	56	41	276
03:00 PM	8	37	10	4	12	13	84
03:15 PM	6	55	14	4	25	23	127
03:30 PM	3	44	18	4	18	11	98
03:45 PM	9	36	24	3	18	13	103
Total	26	172	66	15	73	60	412
04:00 PM	12	59	15	2	18	14	120
04:15 PM	19	56	22	2	17	11	127
04:30 PM	16	48	23	3	16	8	114
04:45 PM	19	61	25	1	25	7	138
Total	66	224	85	8	76	40	499
Grand Total	110	529	172	30	205	141	1187
Apprch %	17.2	82.8	85.1	14.9	59.2	40.8	
Total %	9.3	44.6	14.5	2.5	17.3	11.9	

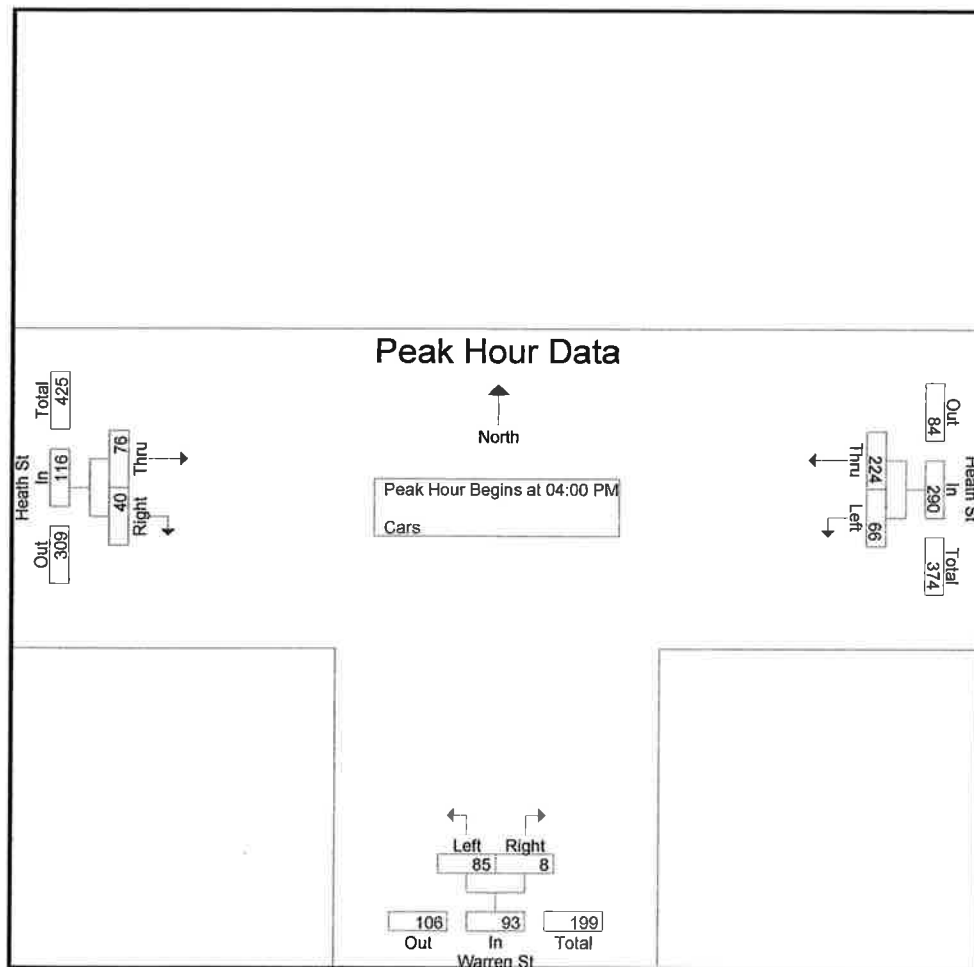
# Accurate Counts

978-664-2565

N/S Street : Warren Street  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 7382N010  
 Site Code : 73820010  
 Start Date : 11/17/2016  
 Page No : 5

	Heath St From East			Warren St From South			Heath St 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 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	12	59	71	15	2	17	18	14	32	120
04:15 PM	19	56	75	22	2	24	17	11	28	127
04:30 PM	16	48	64	23	3	26	16	8	24	114
04:45 PM	19	61	80	25	1	26	25	7	32	138
Total Volume	66	224	290	85	8	93	76	40	116	499
% App. Total	22.8	77.2		91.4	8.6		65.5	34.5		
PHF	.868	.918	.906	.850	.667	.894	.760	.714	.906	.904



N/S Street : Warren Street  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

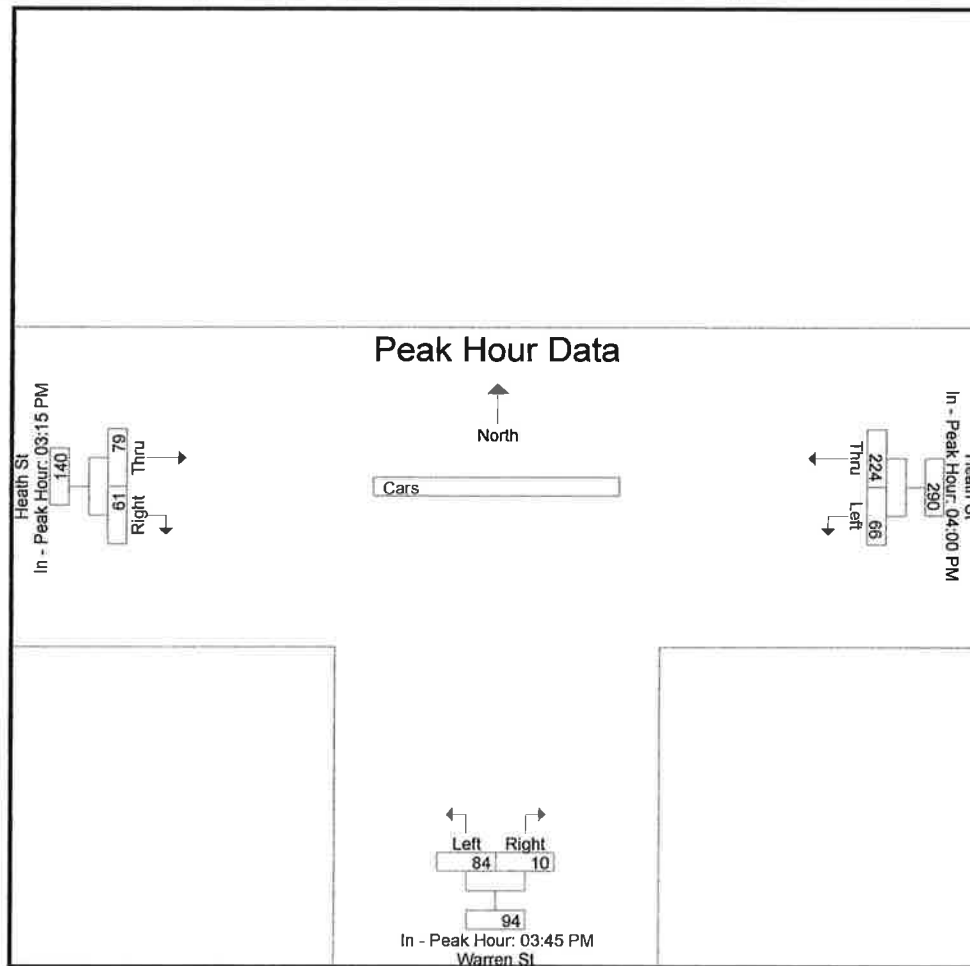
File Name : 7382N010  
Site Code : 73820010  
Start Date : 11/17/2016  
Page No : 6

	Heath St From East			Warren St From South			Heath St 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM			03:45 PM			03:15 PM		
+0 mins.	12	59	71	24	3	27	25	23	48
+15 mins.	19	56	75	15	2	17	18	11	29
+30 mins.	16	48	64	22	2	24	18	13	31
+45 mins.	19	61	80	23	3	26	18	14	32
Total Volume	66	224	290	84	10	94	79	61	140
% App. Total	22.8	77.2		89.4	10.6		56.4	43.6	
PHF	.868	.918	.906	.875	.833	.870	.790	.663	.729





**Accurate Counts**  
978-664-2565

N/S Street : Warren Street  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N010  
Site Code : 73820010  
Start Date : 11/17/2016  
Page No : 7

Groups Printed- Trucks

Start Time	Heath St From East		Warren St From South		Heath St From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
02:00 PM	1	0	0	1	1	0	3
02:15 PM	1	0	1	1	0	0	3
02:30 PM	0	0	0	0	0	0	0
02:45 PM	1	0	0	0	0	0	1
Total	3	0	1	2	1	0	7
03:00 PM	0	0	0	0	1	0	1
03:15 PM	0	0	0	0	0	0	0
03:30 PM	0	1	0	0	0	0	1
03:45 PM	0	1	1	0	0	0	2
Total	0	2	1	0	1	0	4
04:00 PM	0	0	1	0	0	0	1
04:15 PM	1	0	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0
Total	1	0	1	0	0	0	2
Grand Total	4	2	3	2	2	0	13
Apprch %	66.7	33.3	60	40	100	0	
Total %	30.8	15.4	23.1	15.4	15.4	0	

# Accurate Counts

978-664-2565

N/S Street : Warren Street  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

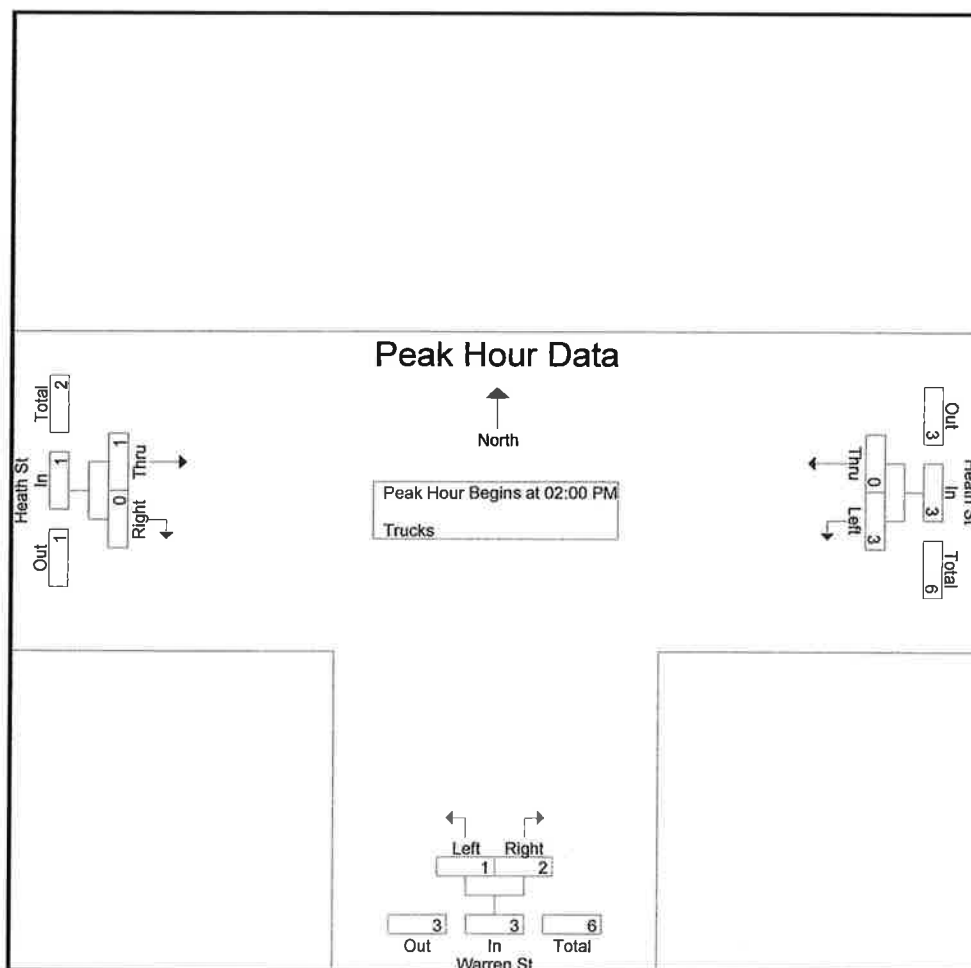
File Name : 7382N010  
 Site Code : 73820010  
 Start Date : 11/17/2016  
 Page No : 8

	Heath St From East			Warren St From South			Heath St 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 04:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 02:00 PM

02:00 PM	1	0	1	0	1	1	1	0	1	3
02:15 PM	1	0	1	1	1	2	0	0	0	3
02:30 PM	0	0	0	0	0	0	0	0	0	0
02:45 PM	1	0	1	0	0	0	0	0	0	1
Total Volume	3	0	3	1	2	3	1	0	1	7
% App. Total	100	0		33.3	66.7		100	0		
PHF	.750	.000	.750	.250	.500	.375	.250	.000	.250	.583



N/S Street : Warren Street  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

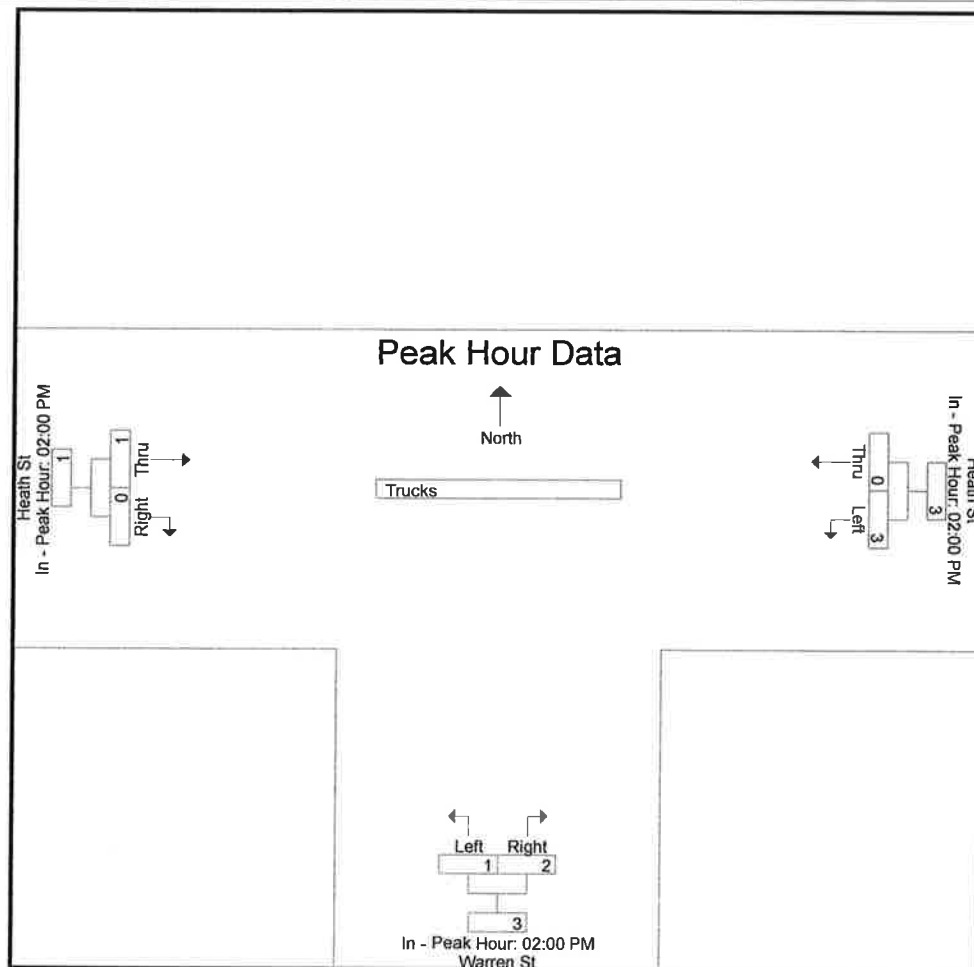
File Name : 7382N010  
Site Code : 73820010  
Start Date : 11/17/2016  
Page No : 9

	Heath St From East			Warren St From South			Heath St 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:00 PM			02:00 PM			02:00 PM		
+0 mins.	1	0	1	0	1	1	1	0	1
+15 mins.	1	0	1	1	1	2	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	1	0	1	0	0	0	0	0	0
Total Volume	3	0	3	1	2	3	1	0	1
% App. Total	100	0		33.3	66.7		100	0	
PHF	.750	.000	.750	.250	.500	.375	.250	.000	.250



**Accurate Counts**  
978-664-2565

N/S Street : Warren Street  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N010  
Site Code : 73820010  
Start Date : 11/17/2016  
Page No : 10

Groups Printed- Bikes Peds

Start Time	Heath St From East			Warren St From South			Heath St From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds			
02:00 PM	0	0	0	0	0	1	0	0	0	1	0	1
02:15 PM	0	0	0	0	0	0	0	0	1	1	0	1
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	0	0	1	0	0	0	0	0	0	1	1
Total	0	0	0	1	0	1	0	0	1	2	1	3
03:00 PM	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
03:30 PM	0	0	0	0	1	0	0	1	0	0	2	2
03:45 PM	0	0	0	0	0	1	0	0	0	1	0	1
Total	0	0	0	0	1	1	0	1	0	1	2	3
04:00 PM	0	0	0	0	0	1	0	2	0	1	2	3
04:15 PM	0	0	2	0	0	1	0	0	0	3	0	3
04:30 PM	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
Total	0	0	2	0	0	2	0	2	0	4	2	6
Grand Total	0	0	2	1	1	4	0	3	1	7	5	12
Apprch %	0	0		50	50		0	100				
Total %	0	0		20	20		0	60		58.3	41.7	

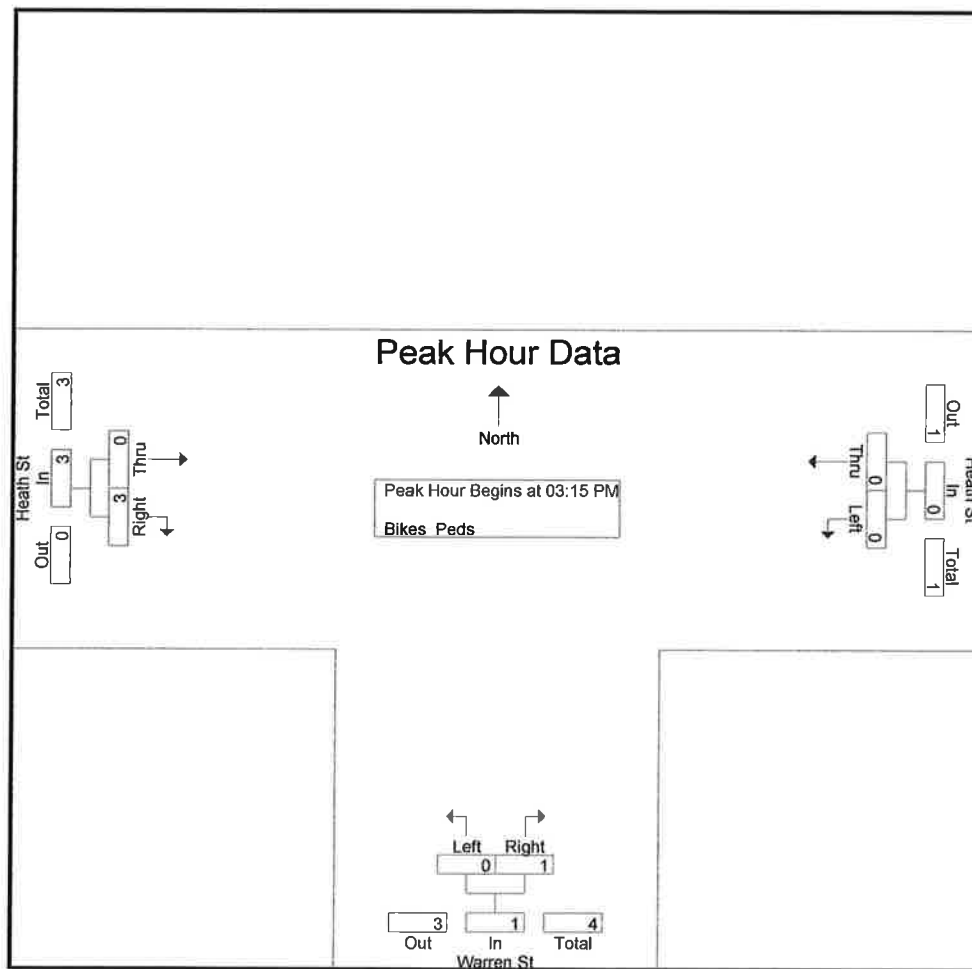
# Accurate Counts

978-664-2565

N/S Street : Warren Street  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 7382N010  
 Site Code : 73820010  
 Start Date : 11/17/2016  
 Page No : 11

	Heath St From East			Warren St From South			Heath St 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 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 03:15 PM										
03:15 PM	0	0	0	0	0	0	0	0	0	0
03:30 PM	0	0	0	0	1	1	0	1	1	2
03:45 PM	0	0	0	0	0	0	0	0	0	0
04:00 PM	0	0	0	0	0	0	0	2	2	2
Total Volume	0	0	0	0	1	1	0	3	3	4
% App. Total	0	0		0	100		0	100		
PHF	.000	.000	.000	.000	.250	.250	.000	.375	.375	.500



N/S Street : Warren Street  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

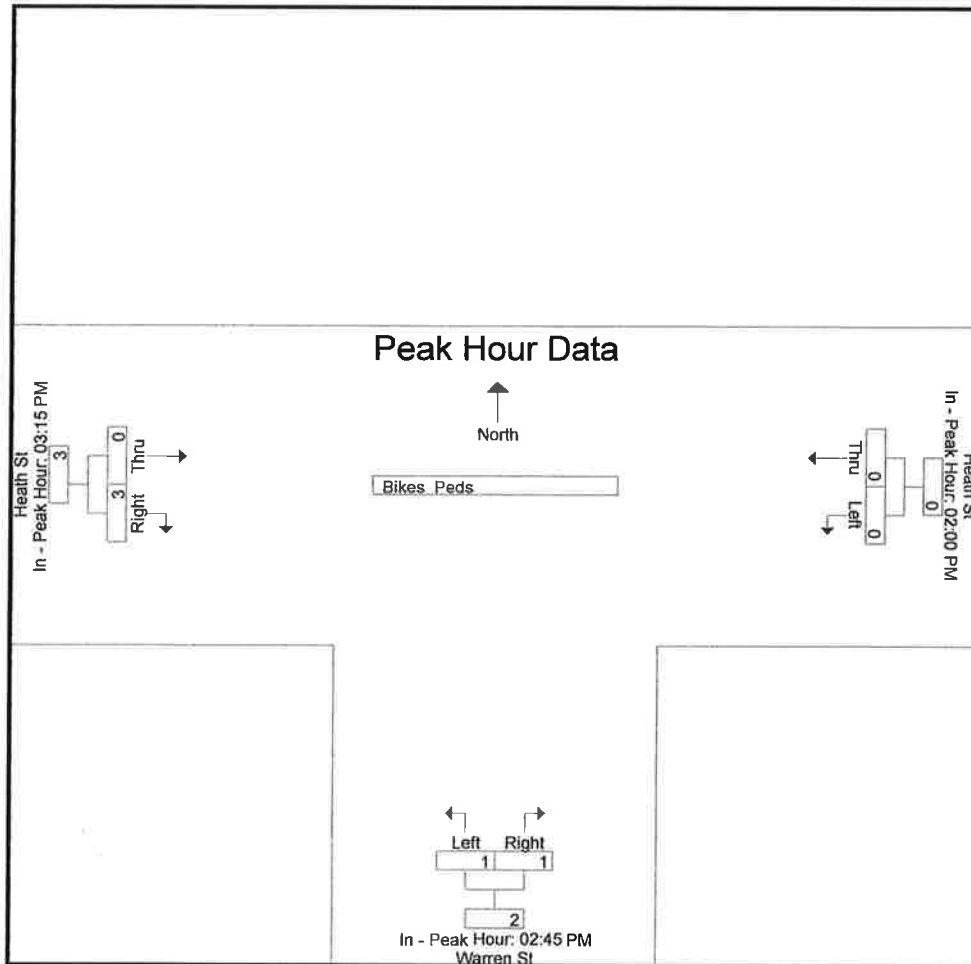
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Site Code : 73820010  
Start Date : 11/17/2016  
Page No : 12

	Heath St From East			Warren St From South			Heath St 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:00 PM			02:45 PM			03:15 PM		
+0 mins.	0	0	0	1	0	1	0	0	0
+15 mins.	0	0	0	0	0	0	0	1	1
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	1	1	0	2	2
Total Volume	0	0	0	1	1	2	0	3	3
% App. Total	0	0		50	50		0	100	
PHF	.000	.000	.000	.250	.250	.500	.000	.375	.375



**Accurate Counts**  
978-664-2565

N/S Street : Randolph Road  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N011  
Site Code : 73820011  
Start Date : 11/17/2016  
Page No : 1

Groups Printed- Cars - Trucks

Start Time	Randolph Rd From North		Heath St From East		Heath St From West		Int. Total
	Left	Right	Thru	Right	Left	Thru	
07:00 AM	2	0	18	1	22	54	97
07:15 AM	2	0	37	3	22	79	143
07:30 AM	0	0	40	4	22	79	145
07:45 AM	3	0	43	2	35	106	189
Total	7	0	138	10	101	318	574
08:00 AM	2	2	44	4	22	86	160
08:15 AM	1	0	56	10	15	68	150
08:30 AM	0	1	43	6	15	74	139
08:45 AM	2	2	38	3	18	61	124
Total	5	5	181	23	70	289	573
09:00 AM	1	0	37	7	21	64	130
09:15 AM	0	1	27	6	19	32	85
Grand Total	13	6	383	46	211	703	1362
Apprch %	68.4	31.6	89.3	10.7	23.1	76.9	
Total %	1	0.4	28.1	3.4	15.5	51.6	
Cars	13	5	376	46	209	691	1340
% Cars	100	83.3	98.2	100	99.1	98.3	98.4
Trucks	0	1	7	0	2	12	22
% Trucks	0	16.7	1.8	0	0.9	1.7	1.6

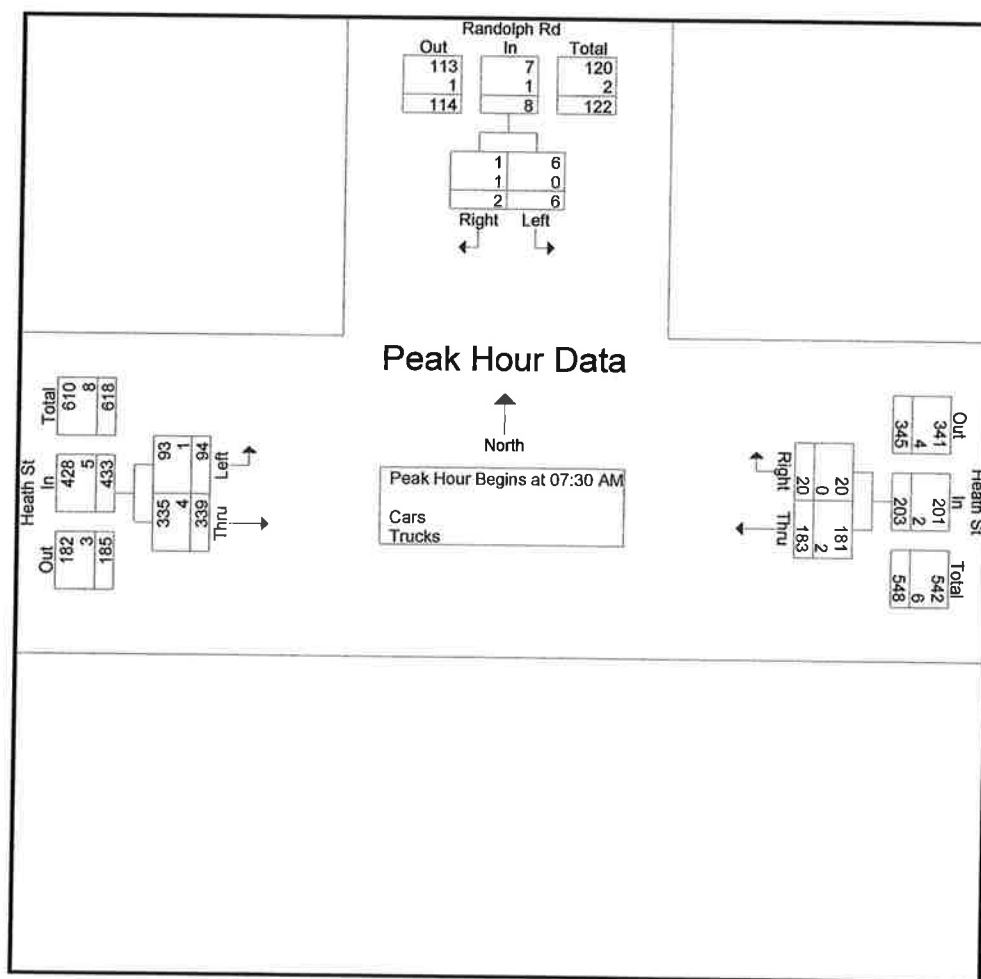
# Accurate Counts

978-664-2565

N/S Street : Randolph Road  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 7382N011  
 Site Code : 73820011  
 Start Date : 11/17/2016  
 Page No : 2

	Randolph Rd From North			Heath St From East			Heath St 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 09:15 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	0	0	0	40	4	44	22	79	101	145
07:45 AM	3	0	3	43	2	45	35	106	141	189
08:00 AM	2	2	4	44	4	48	22	86	108	160
08:15 AM	1	0	1	56	10	66	15	68	83	150
Total Volume	6	2	8	183	20	203	94	339	433	644
% App. Total	75	25		90.1	9.9		21.7	78.3		
PHF	.500	.250	.500	.817	.500	.769	.671	.800	.768	.852
Cars	6	1	7	181	20	201	93	335	428	636
% Cars	100	50.0	87.5	98.9	100	99.0	98.9	98.8	98.8	98.8
Trucks	0	1	1	2	0	2	1	4	5	8
% Trucks	0	50.0	12.5	1.1	0	1.0	1.1	1.2	1.2	1.2





N/S Street : Randolph Road  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

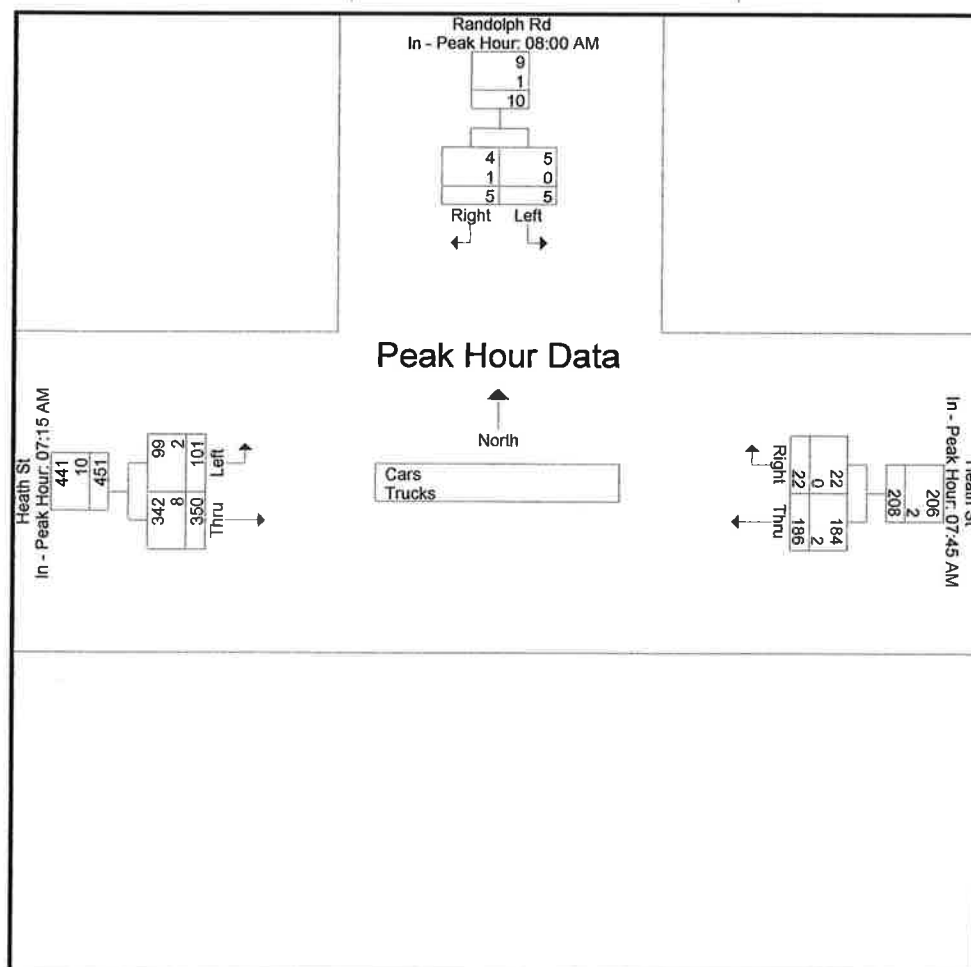
File Name : 7382N011  
Site Code : 73820011  
Start Date : 11/17/2016  
Page No : 3

	Randolph Rd From North			Heath St From East			Heath St 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 09:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00 AM			07:45 AM			07:15 AM		
+0 mins.	2	2	4	43	2	45	22	79	101
+15 mins.	1	0	1	44	4	48	22	79	101
+30 mins.	0	1	1	56	10	66	35	106	141
+45 mins.	2	2	4	43	6	49	22	86	108
Total Volume	5	5	10	186	22	208	101	350	451
% App. Total	50	50		89.4	10.6		22.4	77.6	
PHF	.625	.625	.625	.830	.550	.788	.721	.825	.800
Cars	5	4	9	184	22	206	99	342	441
% Cars	100	80	90	98.9	100	99	98	97.7	97.8
Trucks	0	1	1	2	0	2	2	8	10
% Trucks	0	20	10	1.1	0	1	2	2.3	2.2



**Accurate Counts**  
978-664-2565

N/S Street : Randolph Road  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N011  
Site Code : 73820011  
Start Date : 11/17/2016  
Page No : 4

Groups Printed- Cars

Start Time	Randolph Rd From North		Heath St From East		Heath St From West		Int. Total
	Left	Right	Thru	Right	Left	Thru	
07:00 AM	2	0	18	1	22	54	97
07:15 AM	2	0	37	3	21	74	137
07:30 AM	0	0	40	4	21	79	144
07:45 AM	3	0	43	2	35	104	187
Total	7	0	138	10	99	311	565
08:00 AM	2	1	44	4	22	85	158
08:15 AM	1	0	54	10	15	67	147
08:30 AM	0	1	43	6	15	73	138
08:45 AM	2	2	35	3	18	61	121
Total	5	4	176	23	70	286	564
09:00 AM	1	0	36	7	21	62	127
09:15 AM	0	1	26	6	19	32	84
Grand Total	13	5	376	46	209	691	1340
Apprch %	72.2	27.8	89.1	10.9	23.2	76.8	
Total %	1	0.4	28.1	3.4	15.6	51.6	

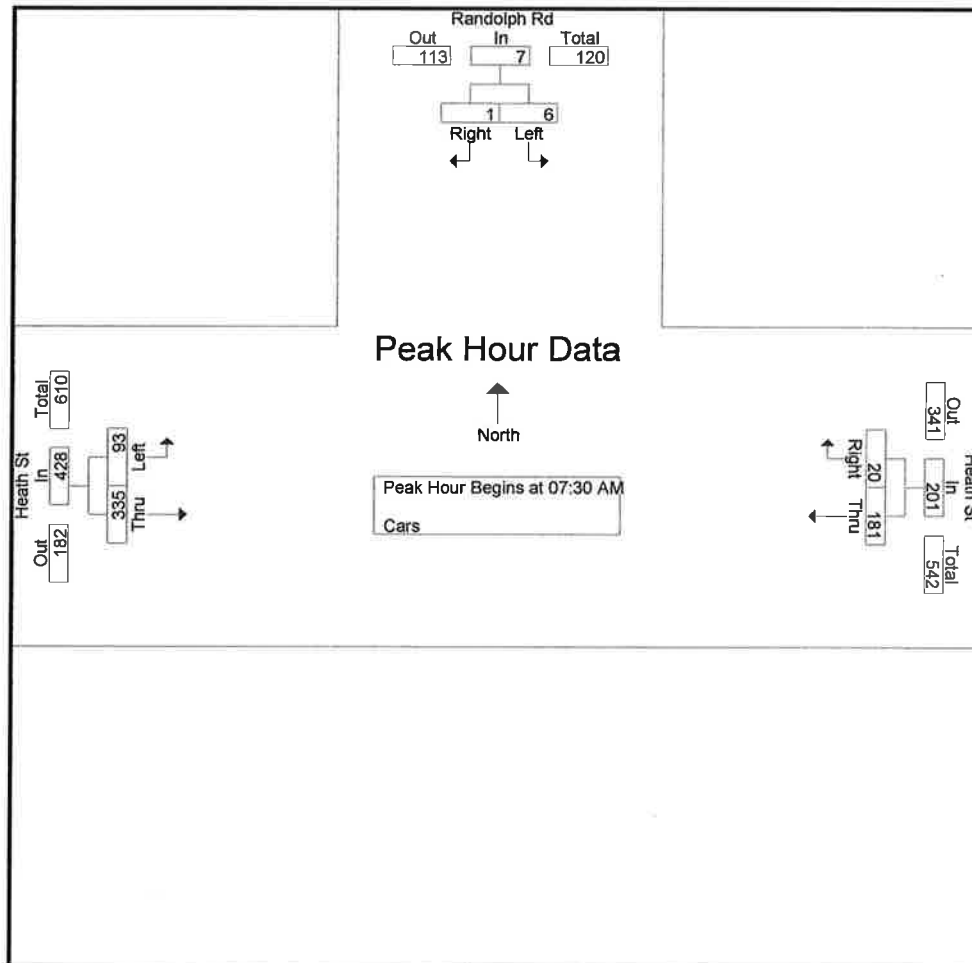
# Accurate Counts

978-664-2565

N/S Street : Randolph Road  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 7382N011  
 Site Code : 73820011  
 Start Date : 11/17/2016  
 Page No : 5

	Randolph Rd From North			Heath St From East			Heath St 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 09:15 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	0	0	0	40	4	44	21	79	100	144
07:45 AM	3	0	3	43	2	45	35	104	139	187
08:00 AM	2	1	3	44	4	48	22	85	107	158
08:15 AM	1	0	1	54	10	64	15	67	82	147
Total Volume	6	1	7	181	20	201	93	335	428	636
% App. Total	85.7	14.3		90	10		21.7	78.3		
PHF	.500	.250	.583	.838	.500	.785	.664	.805	.770	.850



N/S Street : Randolph Road  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

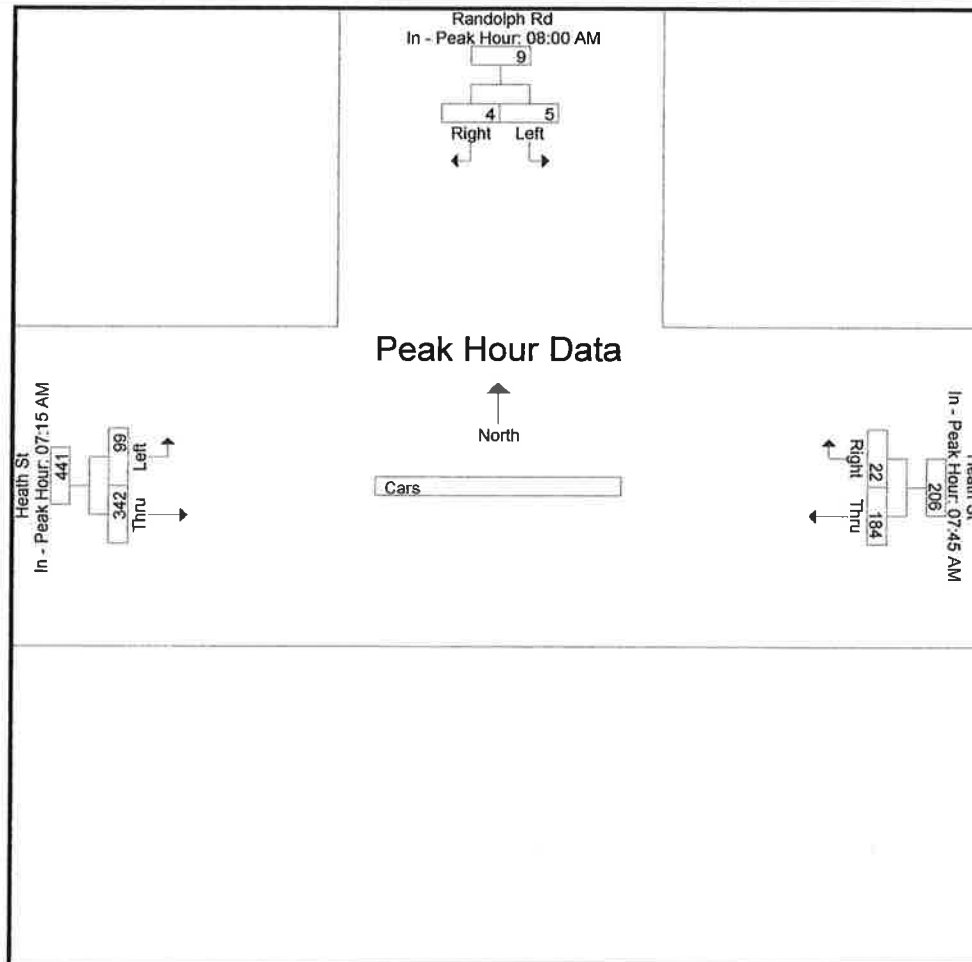
File Name : 7382N011  
Site Code : 73820011  
Start Date : 11/17/2016  
Page No : 6

	Randolph Rd From North			Heath St From East			Heath St 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 09:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00 AM			07:45 AM			07:15 AM		
+0 mins.	2	1	3	43	2	45	21	74	95
+15 mins.	1	0	1	44	4	48	21	79	100
+30 mins.	0	1	1	54	10	64	35	104	139
+45 mins.	2	2	4	43	6	49	22	85	107
Total Volume	5	4	9	184	22	206	99	342	441
% App. Total	55.6	44.4		89.3	10.7		22.4	77.6	
PHF	.625	.500	.563	.852	.550	.805	.707	.822	.793



**Accurate Counts**  
978-664-2565

N/S Street : Randolph Road  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N011  
Site Code : 73820011  
Start Date : 11/17/2016  
Page No : 7

Groups Printed- Trucks

Start Time	Randolph Rd From North		Heath St From East		Heath St From West		Int. Total
	Left	Right	Thru	Right	Left	Thru	
07:00 AM	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	1	5	6
07:30 AM	0	0	0	0	1	0	1
07:45 AM	0	0	0	0	0	2	2
Total	0	0	0	0	2	7	9
08:00 AM	0	1	0	0	0	1	2
08:15 AM	0	0	2	0	0	1	3
08:30 AM	0	0	0	0	0	1	1
08:45 AM	0	0	3	0	0	0	3
Total	0	1	5	0	0	3	9
09:00 AM	0	0	1	0	0	2	3
09:15 AM	0	0	1	0	0	0	1
Grand Total	0	1	7	0	2	12	22
Apprch %	0	100	100	0	14.3	85.7	
Total %	0	4.5	31.8	0	9.1	54.5	

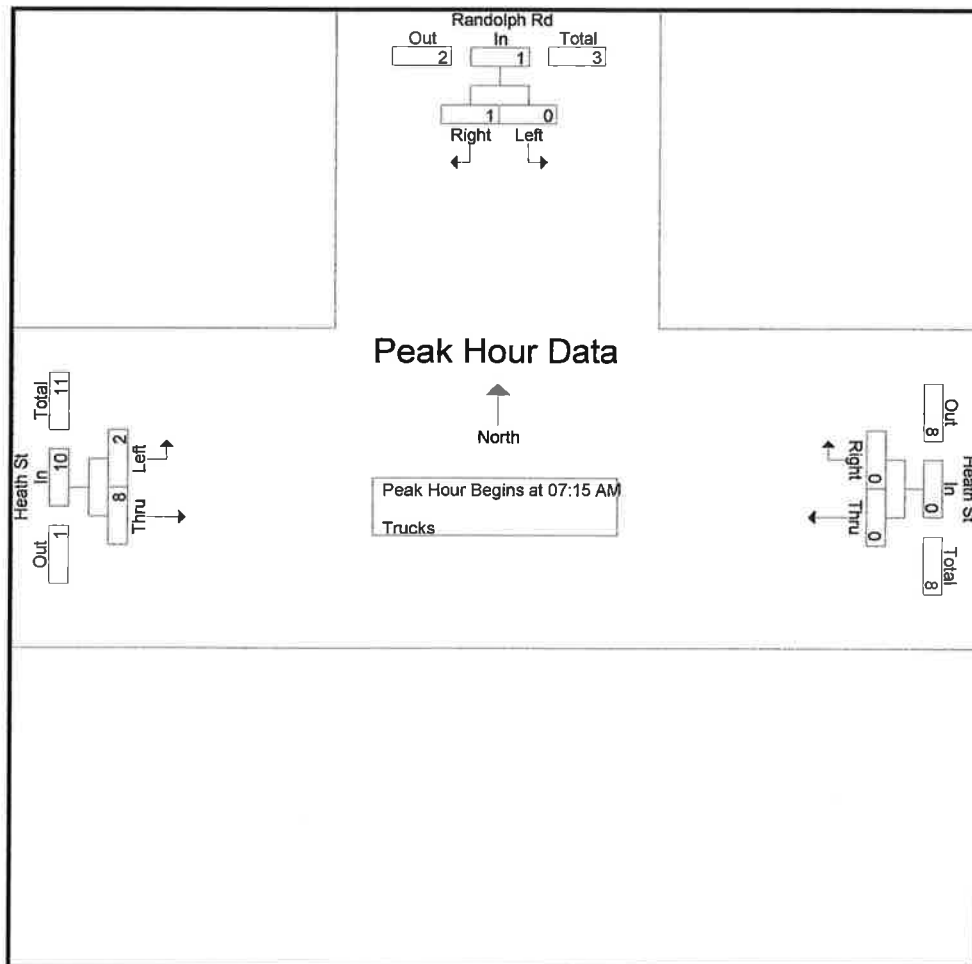
# Accurate Counts

978-664-2565

N/S Street : Randolph Road  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 7382N011  
 Site Code : 73820011  
 Start Date : 11/17/2016  
 Page No : 8

	Randolph Rd From North			Heath St From East			Heath St 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 09:15 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	5	6	6
07:30 AM	0	0	0	0	0	0	1	0	1	1
07:45 AM	0	0	0	0	0	0	0	2	2	2
08:00 AM	0	1	1	0	0	0	0	1	1	2
Total Volume	0	1	1	0	0	0	2	8	10	11
% App. Total	0	100		0	0		20	80		
PHF	.000	.250	.250	.000	.000	.000	.500	.400	.417	.458



N/S Street : Randolph Road  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

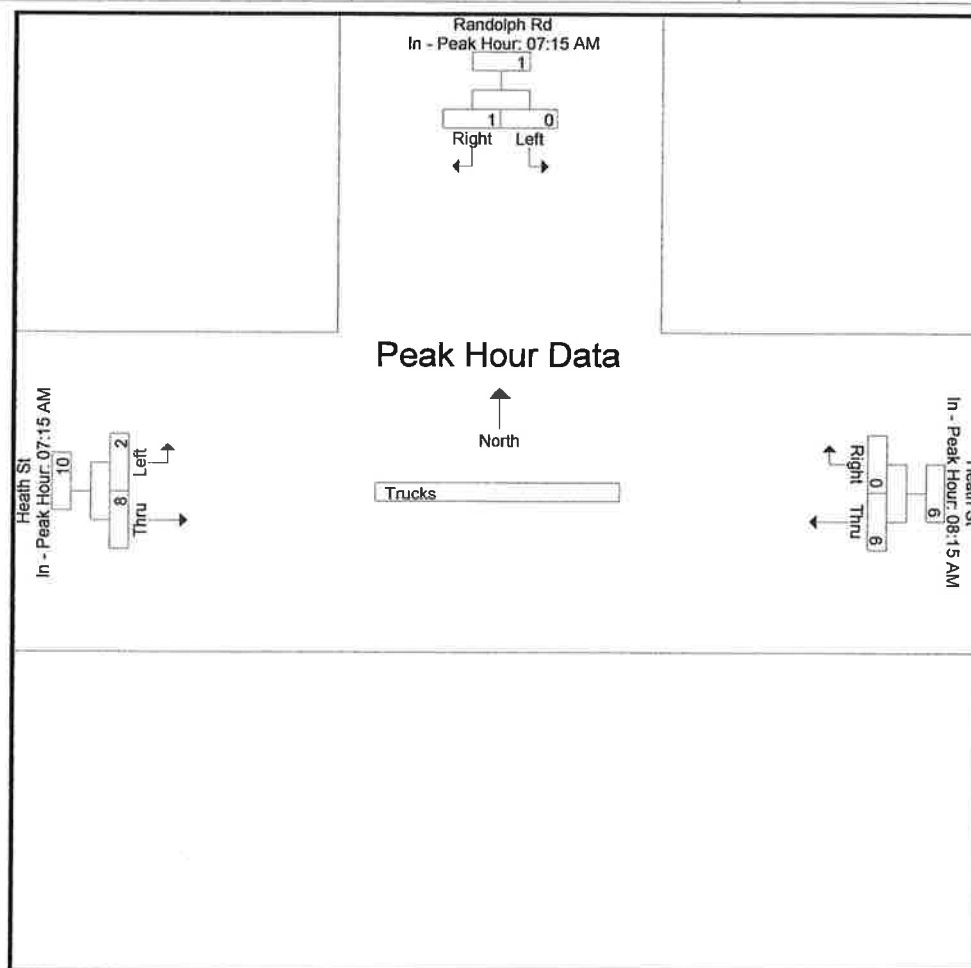
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Start Date : 11/17/2016  
Page No : 9

	Randolph Rd From North			Heath St From East			Heath St 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 09:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM			08:15 AM			07:15 AM		
+0 mins.	0	0	0	2	0	2	1	5	6
+15 mins.	0	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	3	0	3	0	2	2
+45 mins.	0	1	1	1	0	1	0	1	1
Total Volume	0	1	1	6	0	6	2	8	10
% App. Total	0	100		100	0		20	80	
PHF	.000	.250	.250	.500	.000	.500	.500	.400	.417



**Accurate Counts**  
978-664-2565

N/S Street : Randolph Road  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N011  
Site Code : 73820011  
Start Date : 11/17/2016  
Page No : 10

Groups Printed- Bikes Peds

Start Time	Randolph Rd From North			Heath St From East			Heath St From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	1	1	0	0	0	0	1	2	1	3
07:30 AM	0	0	0	0	0	2	0	0	0	2	0	2
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	1	0	2	0	0	1	4	1	5
08:00 AM	0	0	2	0	0	0	0	0	0	2	0	2
08:15 AM	2	0	0	0	0	1	0	1	0	1	3	4
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	1	0	1	0	1	1	2	2	4
Total	2	0	2	1	0	2	0	2	1	5	5	10
09:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
09:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	2	0	3	2	0	4	0	2	2	9	6	15
Apprch %	100	0		100	0		0	100				
Total %	33.3	0		33.3	0		0	33.3		60	40	



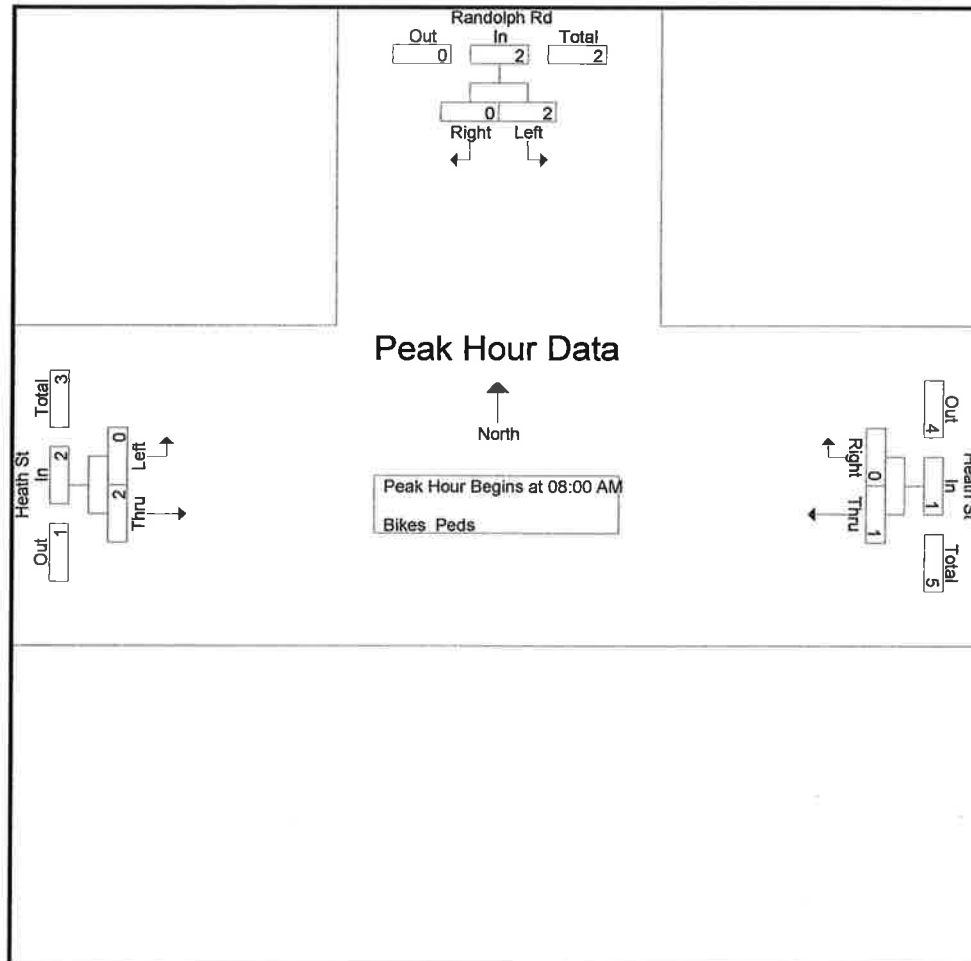
# Accurate Counts

978-664-2565

N/S Street : Randolph Road  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 7382N011  
 Site Code : 73820011  
 Start Date : 11/17/2016  
 Page No : 11

	Randolph Rd From North			Heath St From East			Heath St 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 09:15 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	2	0	2	0	0	0	0	1	1	3
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	1	0	1	0	1	1	2
Total Volume	2	0	2	1	0	1	0	2	2	5
% App. Total	100	0		100	0		0	100		
PHF	.250	.000	.250	.250	.000	.250	.000	.500	.500	.417



N/S Street : Randolph Road  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

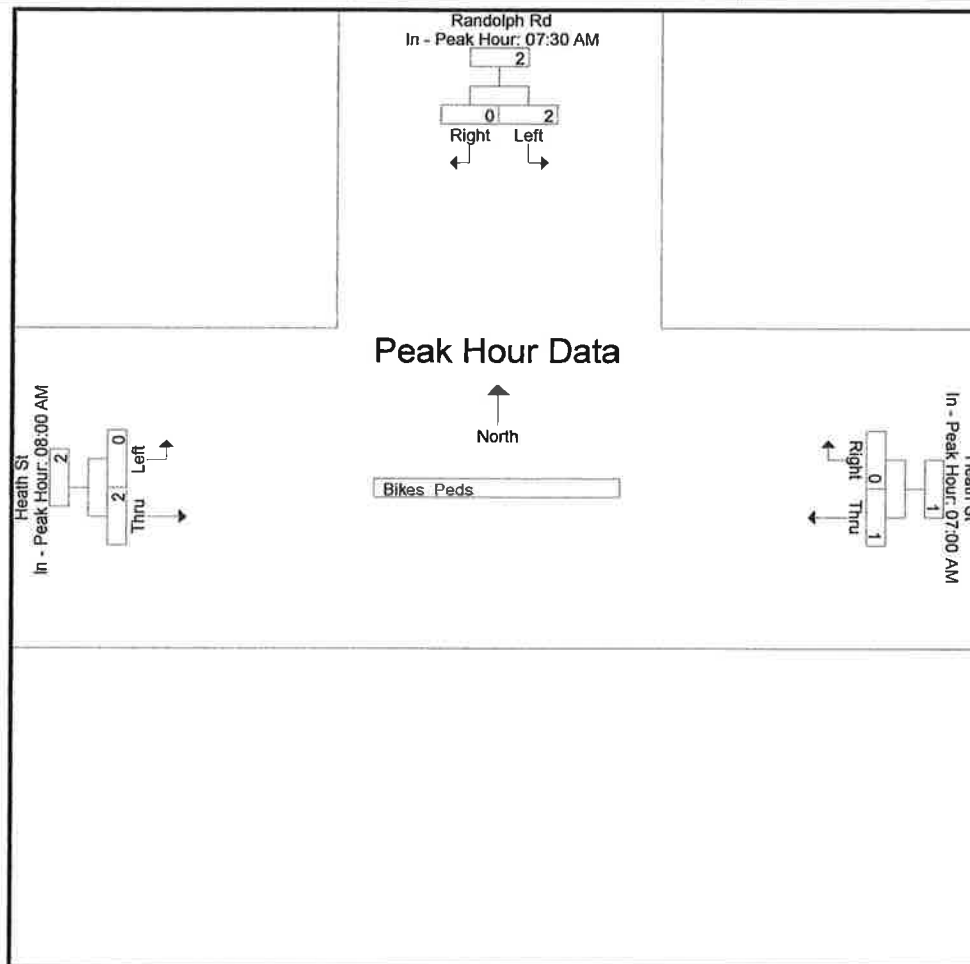
File Name : 7382N011  
Site Code : 73820011  
Start Date : 11/17/2016  
Page No : 12

	Randolph Rd From North			Heath St From East			Heath St 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 09:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM			07:00 AM			08:00 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	1	0	1	0	1	1
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	2	0	2	0	0	0	0	1	1
Total Volume	2	0	2	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 : Randolph Road  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N011  
Site Code : 73820011  
Start Date : 11/17/2016  
Page No : 1

Groups Printed- Cars - Trucks

Start Time	Randolph Rd From North		Heath St From East		Heath St From West		Int. Total
	Left	Right	Thru	Right	Left	Thru	
02:00 PM	3	0	55	5	8	23	94
02:15 PM	1	1	35	5	10	30	82
02:30 PM	1	0	39	2	5	26	73
02:45 PM	3	0	51	1	8	38	101
Total	8	1	180	13	31	117	350
03:00 PM	2	0	61	4	3	28	98
03:15 PM	5	0	71	6	5	44	131
03:30 PM	2	1	63	6	6	34	112
03:45 PM	3	3	66	2	7	27	108
Total	12	4	261	18	21	133	449
04:00 PM	1	2	74	9	9	39	134
04:15 PM	1	3	80	4	6	32	126
04:30 PM	1	0	84	5	6	36	132
04:45 PM	2	0	98	6	7	40	153
Total	5	5	336	24	28	147	545
Grand Total	25	10	777	55	80	397	1344
Apprch %	71.4	28.6	93.4	6.6	16.8	83.2	
Total %	1.9	0.7	57.8	4.1	6	29.5	
Cars	25	10	769	55	78	393	1330
% Cars	100	100	99	100	97.5	99	99
Trucks	0	0	8	0	2	4	14
% Trucks	0	0	1	0	2.5	1	1

# Accurate Counts

978-664-2565

N/S Street : Randolph Road  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

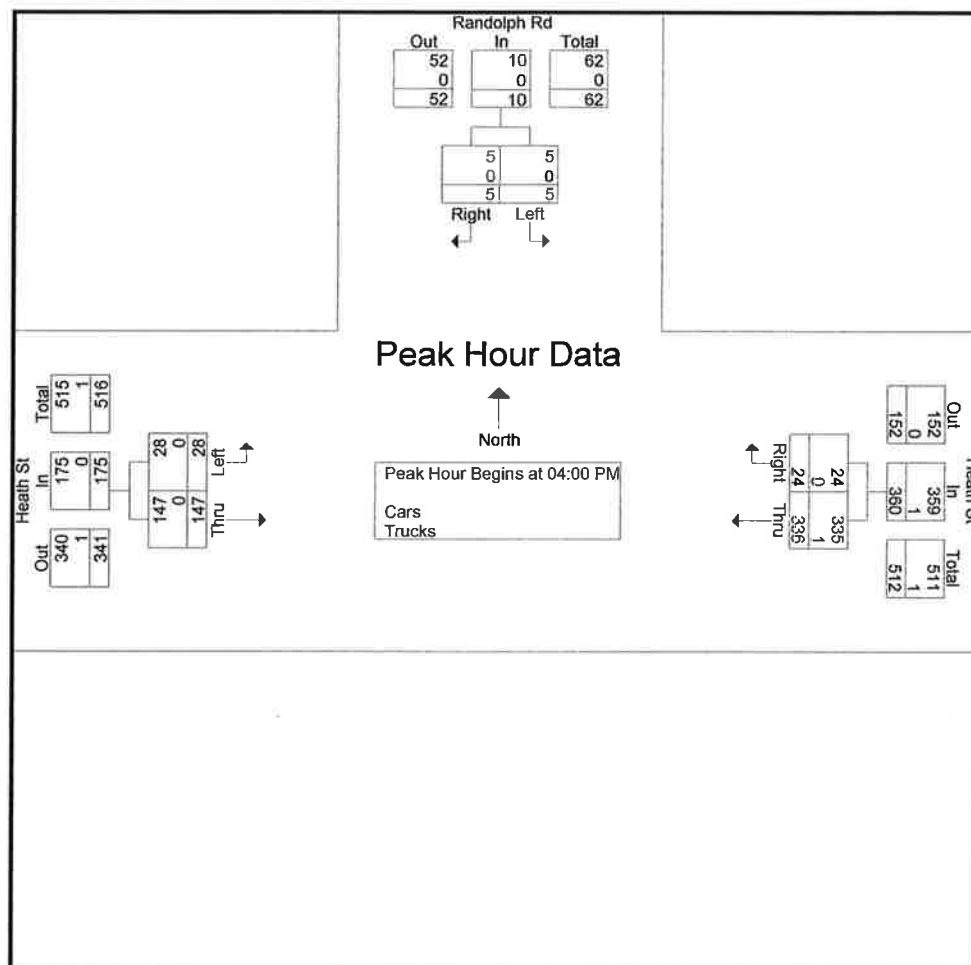
File Name : 7382N011  
 Site Code : 73820011  
 Start Date : 11/17/2016  
 Page No : 2

	Randolph Rd From North			Heath St From East			Heath St 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 04:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:00 PM

04:00 PM	1	2	3	74	9	83	9	39	48	134
04:15 PM	1	3	4	80	4	84	6	32	38	126
04:30 PM	1	0	1	84	5	89	6	36	42	132
04:45 PM	2	0	2	98	6	104	7	40	47	153
Total Volume	5	5	10	336	24	360	28	147	175	545
% App. Total	50	50		93.3	6.7		16	84		
PHF	.625	.417	.625	.857	.667	.865	.778	.919	.911	.891
Cars	5	5	10	335	24	359	28	147	175	544
% Cars	100	100	100	99.7	100	99.7	100	100	100	99.8
Trucks	0	0	0	1	0	1	0	0	0	1
% Trucks	0	0	0	0.3	0	0.3	0	0	0	0.2



# Accurate Counts

978-664-2565

N/S Street : Randolph Road  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

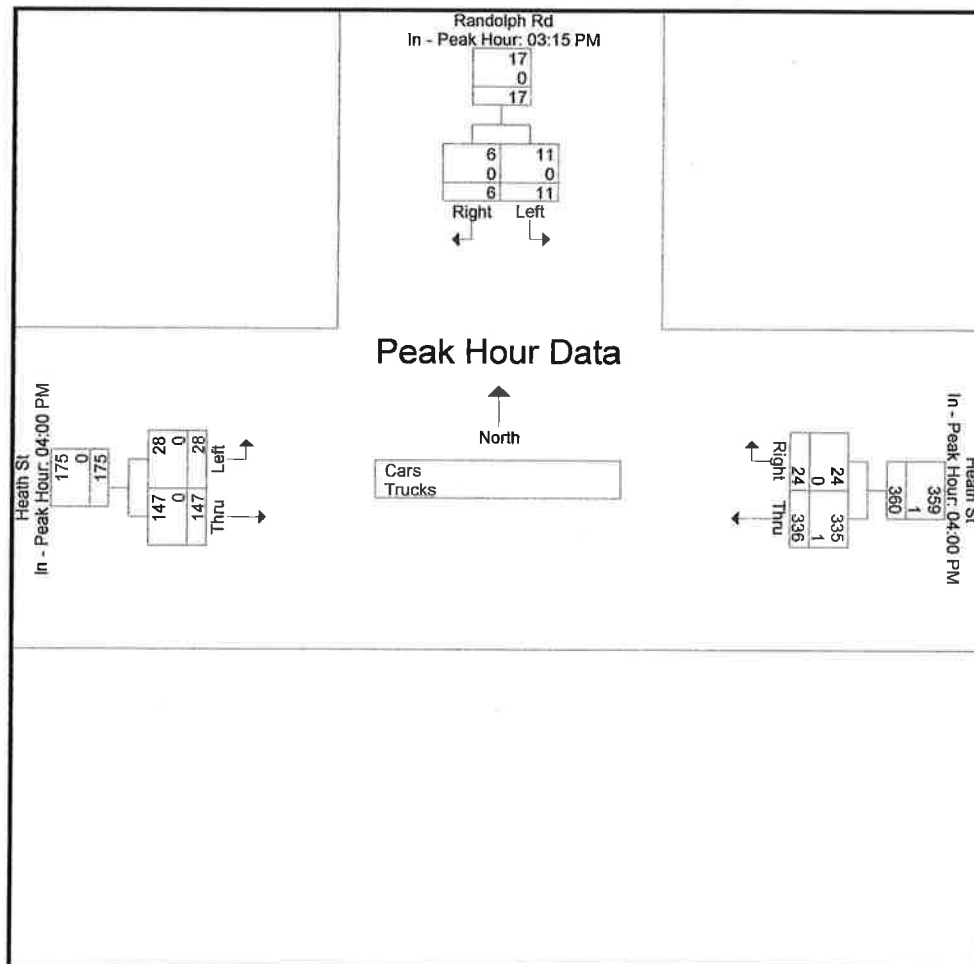
File Name : 7382N011  
 Site Code : 73820011  
 Start Date : 11/17/2016  
 Page No : 3

	Randolph Rd From North			Heath St From East			Heath St 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	03:15 PM			04:00 PM			04:00 PM		
+0 mins.	5	0	5	74	9	83	9	39	48
+15 mins.	2	1	3	80	4	84	6	32	38
+30 mins.	3	3	6	84	5	89	6	36	42
+45 mins.	1	2	3	98	6	104	7	40	47
Total Volume	11	6	17	336	24	360	28	147	175
% App. Total	64.7	35.3		93.3	6.7		16	84	
PHF	.550	.500	.708	.857	.667	.865	.778	.919	.911
Cars	11	6	17	335	24	359	28	147	175
% Cars	100	100	100	99.7	100	99.7	100	100	100
Trucks	0	0	0	1	0	1	0	0	0
% Trucks	0	0	0	0.3	0	0.3	0	0	0



**Accurate Counts**  
978-664-2565

N/S Street : Randolph Road  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N011  
Site Code : 73820011  
Start Date : 11/17/2016  
Page No : 4

Groups Printed- Cars

Start Time	Randolph Rd From North		Heath St From East		Heath St From West		Int. Total
	Left	Right	Thru	Right	Left	Thru	
02:00 PM	3	0	54	5	8	22	92
02:15 PM	1	1	35	5	9	30	81
02:30 PM	1	0	37	2	5	26	71
02:45 PM	3	0	51	1	7	38	100
Total	8	1	177	13	29	116	344
03:00 PM	2	0	61	4	3	26	96
03:15 PM	5	0	70	6	5	44	130
03:30 PM	2	1	62	6	6	33	110
03:45 PM	3	3	64	2	7	27	106
Total	12	4	257	18	21	130	442
04:00 PM	1	2	73	9	9	39	133
04:15 PM	1	3	80	4	6	32	126
04:30 PM	1	0	84	5	6	36	132
04:45 PM	2	0	98	6	7	40	153
Total	5	5	335	24	28	147	544
Grand Total	25	10	769	55	78	393	1330
Apprch %	71.4	28.6	93.3	6.7	16.6	83.4	
Total %	1.9	0.8	57.8	4.1	5.9	29.5	

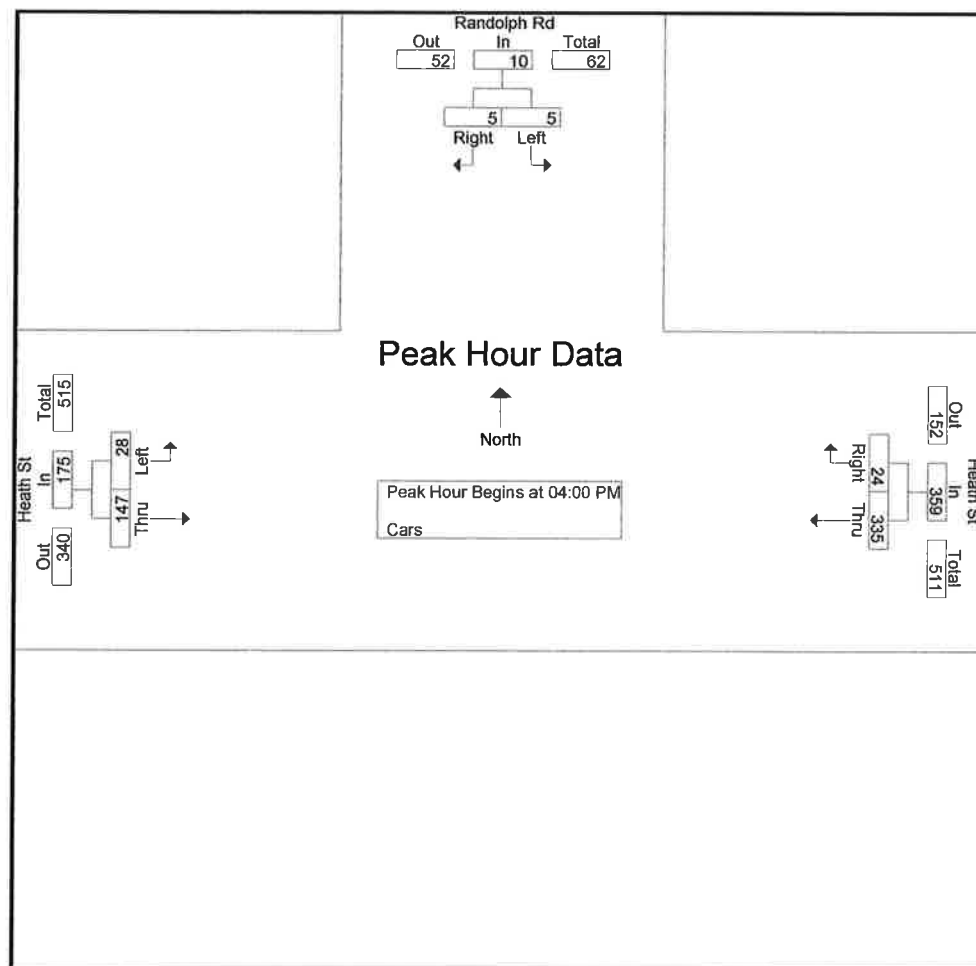
# Accurate Counts

978-664-2565

N/S Street : Randolph Road  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 7382N011  
 Site Code : 73820011  
 Start Date : 11/17/2016  
 Page No : 5

	Randolph Rd From North			Heath St From East			Heath St 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 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	1	2	3	73	9	82	9	39	48	133
04:15 PM	1	3	4	80	4	84	6	32	38	126
04:30 PM	1	0	1	84	5	89	6	36	42	132
04:45 PM	2	0	2	98	6	104	7	40	47	153
Total Volume	5	5	10	335	24	359	28	147	175	544
% App. Total	50	50		93.3	6.7		16	84		
PHF	.625	.417	.625	.855	.667	.863	.778	.919	.911	.889



N/S Street : Randolph Road  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

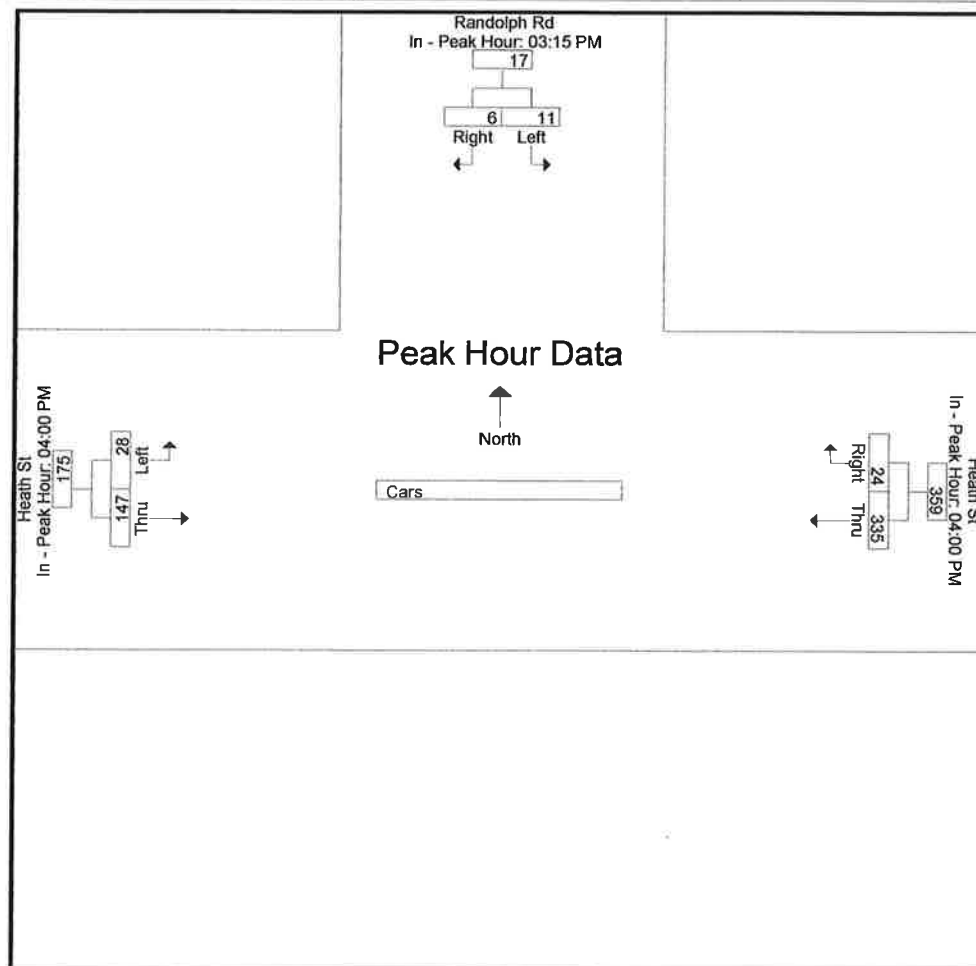
File Name : 7382N011  
Site Code : 73820011  
Start Date : 11/17/2016  
Page No : 6

	Randolph Rd From North			Heath St From East			Heath St 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	03:15 PM			04:00 PM			04:00 PM		
+0 mins.	5	0	5	73	9	82	9	39	48
+15 mins.	2	1	3	80	4	84	6	32	38
+30 mins.	3	3	6	84	5	89	6	36	42
+45 mins.	1	2	3	98	6	104	7	40	47
Total Volume	11	6	17	335	24	359	28	147	175
% App. Total	64.7	35.3		93.3	6.7		16	84	
PHF	.550	.500	.708	.855	.667	.863	.778	.919	.911





**Accurate Counts**  
978-664-2565

N/S Street : Randolph Road  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N011  
Site Code : 73820011  
Start Date : 11/17/2016  
Page No : 7

Groups Printed- Trucks

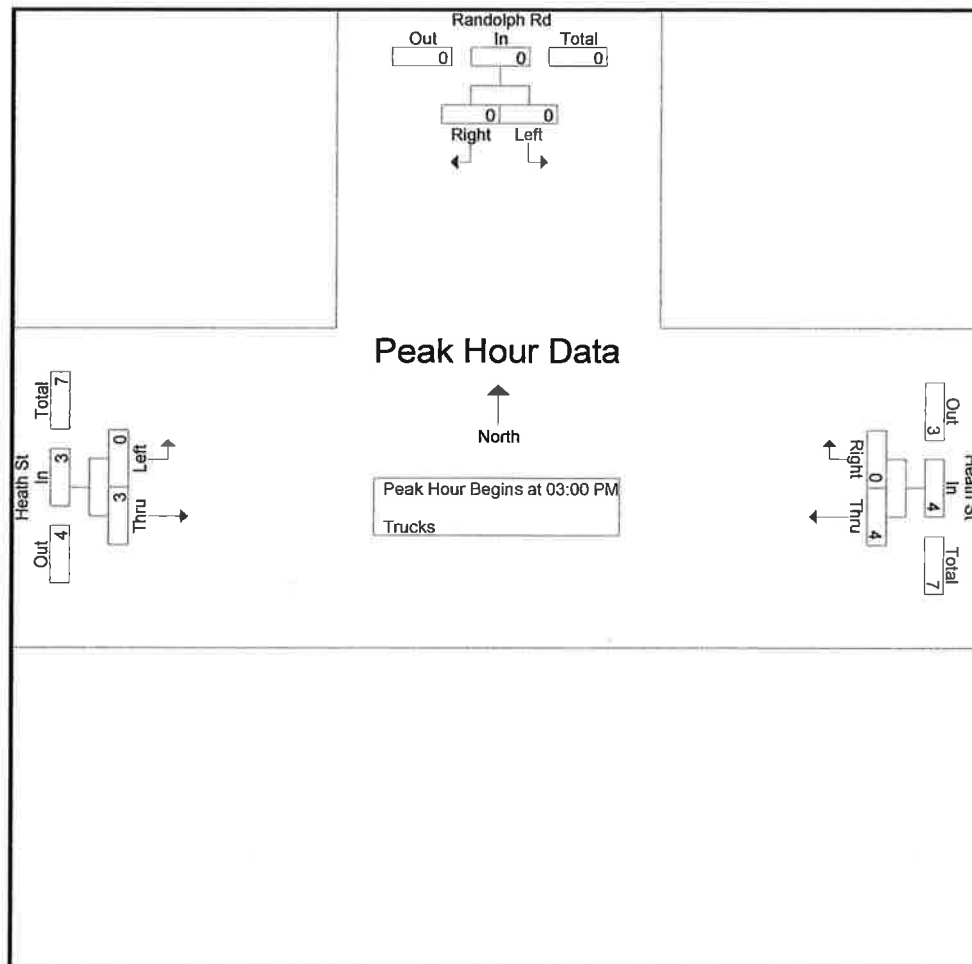
Start Time	Randolph Rd From North		Heath St From East		Heath St From West		Int. Total
	Left	Right	Thru	Right	Left	Thru	
02:00 PM	0	0	1	0	0	1	2
02:15 PM	0	0	0	0	1	0	1
02:30 PM	0	0	2	0	0	0	2
02:45 PM	0	0	0	0	1	0	1
Total	0	0	3	0	2	1	6
03:00 PM	0	0	0	0	0	2	2
03:15 PM	0	0	1	0	0	0	1
03:30 PM	0	0	1	0	0	1	2
03:45 PM	0	0	2	0	0	0	2
Total	0	0	4	0	0	3	7
04:00 PM	0	0	1	0	0	0	1
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	1	0	0	0	1
Grand Total	0	0	8	0	2	4	14
Apprch %	0	0	100	0	33.3	66.7	
Total %	0	0	57.1	0	14.3	28.6	

**Accurate Counts**  
978-664-2565

N/S Street : Randolph Road  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N011  
Site Code : 73820011  
Start Date : 11/17/2016  
Page No : 8

	Randolph Rd From North			Heath St From East			Heath St 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 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 03:00 PM										
03:00 PM	0	0	0	0	0	0	0	2	2	2
03:15 PM	0	0	0	1	0	1	0	0	0	1
03:30 PM	0	0	0	1	0	1	0	1	1	2
03:45 PM	0	0	0	2	0	2	0	0	0	2
Total Volume	0	0	0	4	0	4	0	3	3	7
% App. Total	0	0		100	0		0	100		
PHF	.000	.000	.000	.500	.000	.500	.000	.375	.375	.875



N/S Street : Randolph Road  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

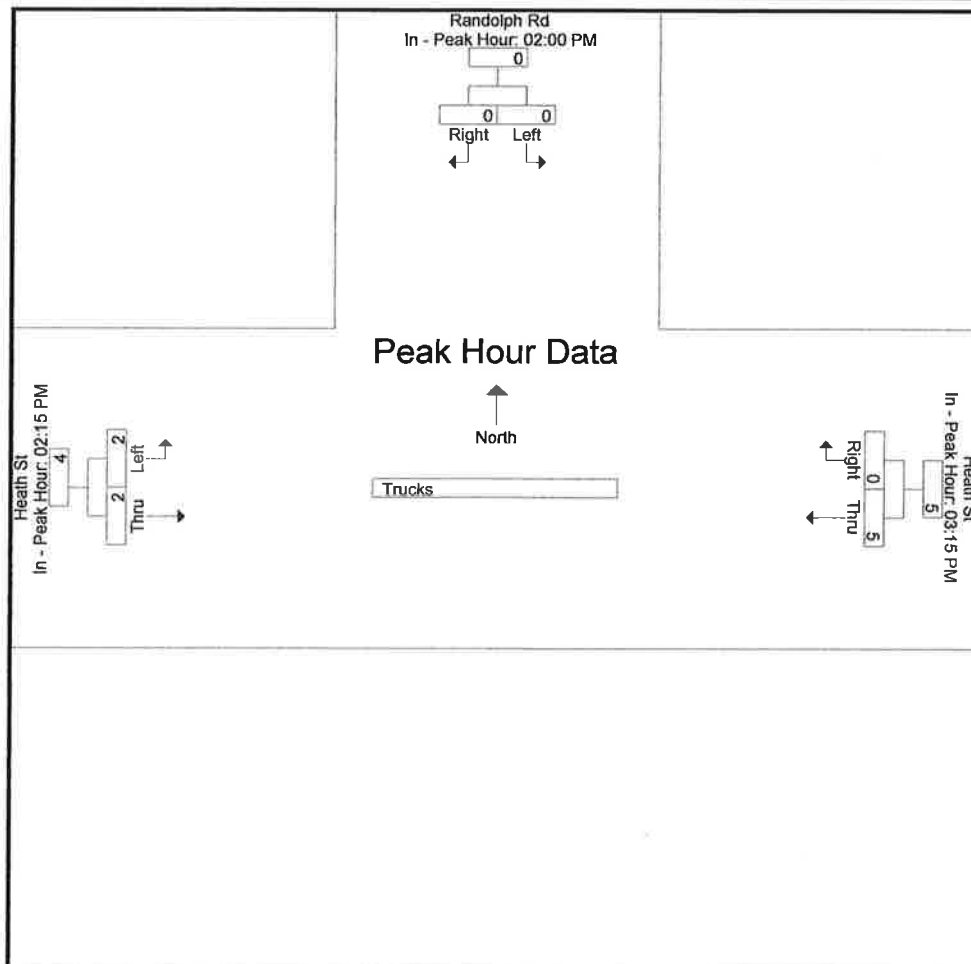
File Name : 7382N011  
Site Code : 73820011  
Start Date : 11/17/2016  
Page No : 9

	Randolph Rd From North			Heath St From East			Heath St 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:00 PM			03:15 PM			02:15 PM		
+0 mins.	0	0	0	1	0	1	1	0	1
+15 mins.	0	0	0	1	0	1	0	0	0
+30 mins.	0	0	0	2	0	2	1	0	1
+45 mins.	0	0	0	1	0	1	0	2	2
Total Volume	0	0	0	5	0	5	2	2	4
% App. Total	0	0		100	0		50	50	
PHF	.000	.000	.000	.625	.000	.625	.500	.250	.500



**978-664-2565**

N/S Street : Randolph Road  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N011  
Site Code : 73820011  
Start Date : 11/17/2016  
Page No : 10

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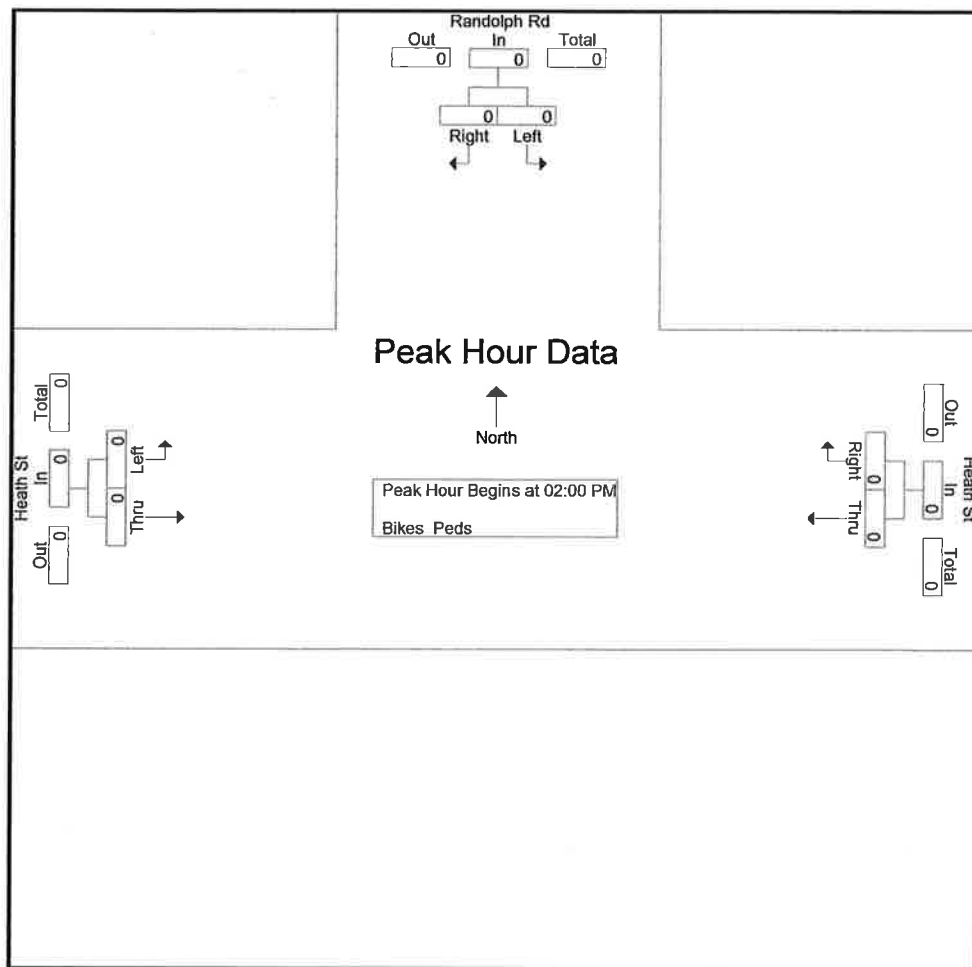
# Accurate Counts

978-664-2565

N/S Street : Randolph Road  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 7382N011  
 Site Code : 73820011  
 Start Date : 11/17/2016  
 Page No : 11

	Randolph Rd From North			Heath St From East			Heath St 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 04:45 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



N/S Street : Randolph Road  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

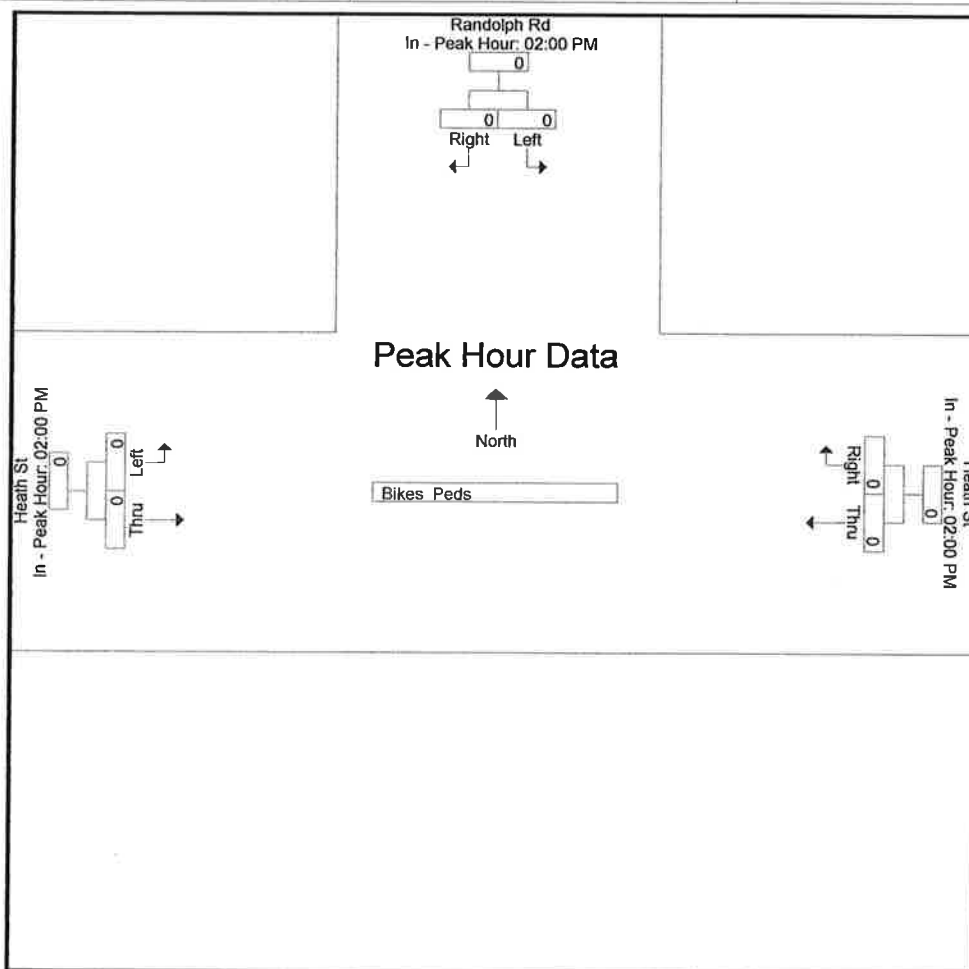
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Site Code : 73820011  
Start Date : 11/17/2016  
Page No : 12

	Randolph Rd From North			Heath St From East			Heath St 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 04:45 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 : Hammond Street  
 E/W Street : Route 9  
 City/State : Brookline, MA  
 Weather : Cloudy

File Name : 7382N001  
 Site Code : 73820001  
 Start Date : 11/16/2016  
 Page No : 1

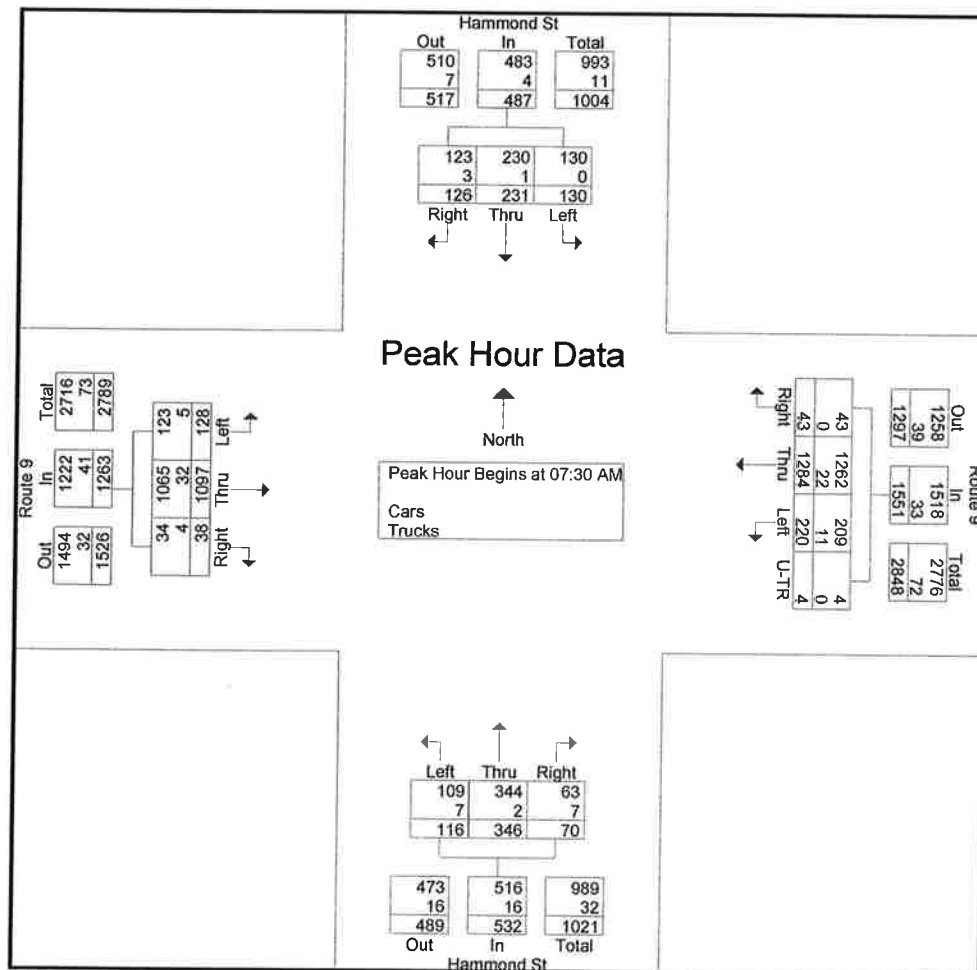
## Groups Printed- Cars - Trucks

Start Time	Hammond St From North			Route 9 From East				Hammond St From South			Route 9 From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	U-TR	Left	Thru	Right	Left	Thru	Right	
07:00 AM	11	36	16	36	342	11	0	24	68	17	38	304	7	910
07:15 AM	20	51	30	48	311	11	2	21	87	23	30	275	10	919
07:30 AM	32	55	30	51	345	10	2	26	91	23	40	299	5	1009
07:45 AM	38	68	30	60	314	14	1	31	89	9	24	259	6	943
Total	101	210	106	195	1312	46	5	102	335	72	132	1137	28	3781
08:00 AM	34	64	34	56	321	8	0	35	88	18	28	254	13	953
08:15 AM	26	44	32	53	304	11	1	24	78	20	36	285	14	928
08:30 AM	28	53	25	66	297	6	1	33	61	26	32	269	8	905
08:45 AM	33	39	24	51	249	9	0	34	84	26	36	279	7	871
Total	121	200	115	226	1171	34	2	126	311	90	132	1087	42	3657
09:00 AM	25	39	19	37	279	9	0	32	68	28	34	282	17	869
09:15 AM	30	25	23	55	272	8	1	38	67	29	40	276	10	874
Grand Total	277	474	263	513	3034	97	8	298	781	219	338	2782	97	9181
Apprch %	27.3	46.7	25.9	14	83.1	2.7	0.2	23	60.2	16.9	10.5	86.5	3	
Total %	3	5.2	2.9	5.6	33	1.1	0.1	3.2	8.5	2.4	3.7	30.3	1.1	
Cars	276	467	257	489	2979	97	8	283	776	194	327	2705	85	8943
% Cars	99.6	98.5	97.7	95.3	98.2	100	100	95	99.4	88.6	96.7	97.2	87.6	97.4
Trucks	1	7	6	24	55	0	0	15	5	25	11	77	12	238
% Trucks	0.4	1.5	2.3	4.7	1.8	0	0	5	0.6	11.4	3.3	2.8	12.4	2.6

N/S Street : Hammond Street  
E/W Street : Route 9  
City/State : Brookline, MA  
Weather : Cloudy

File Name : 7382N001  
Site Code : 73820001  
Start Date : 11/16/2016  
Page No : 2

	Hammond St From North				Route 9 From East					Hammond St From South				Route 9 From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	U-TR	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:15 AM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 07:30 AM																		
07:30 AM	32	55	30	117	51	345	10	2	408	26	91	23	140	40	299	5	344	1009
07:45 AM	38	68	30	136	60	314	14	1	389	31	89	9	129	24	259	6	289	943
08:00 AM	34	64	34	132	56	321	8	0	385	35	88	18	141	28	254	13	295	953
08:15 AM	26	44	32	102	53	304	11	1	369	24	78	20	122	36	285	14	335	928
Total Volume	130	231	126	487	220	1284	43	4	1551	116	346	70	532	128	1097	38	1263	3833
% App. Total	26.7	47.4	25.9		14.2	82.8	2.8	0.3		21.8	65	13.2		10.1	86.9	3		
PHF	.855	.849	.926	.895	.917	.930	.768	.500	.950	.829	.951	.761	.943	.800	.917	.679	.918	.950
Cars	130	230	123	483	209	1262	43	4	1518	109	344	63	516	123	1065	34	1222	3739
% Cars	100	99.6	97.6	99.2	95.0	98.3	100	100	97.9	94.0	99.4	90.0	97.0	96.1	97.1	89.5	96.8	97.5
Trucks	0	1	3	4	11	22	0	0	33	7	2	7	16	5	32	4	41	94
% Trucks	0	0.4	2.4	0.8	5.0	1.7	0	0	2.1	6.0	0.6	10.0	3.0	3.9	2.9	10.5	3.2	2.5





# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
 E/W Street : Route 9  
 City/State : Brookline, MA  
 Weather : Cloudy

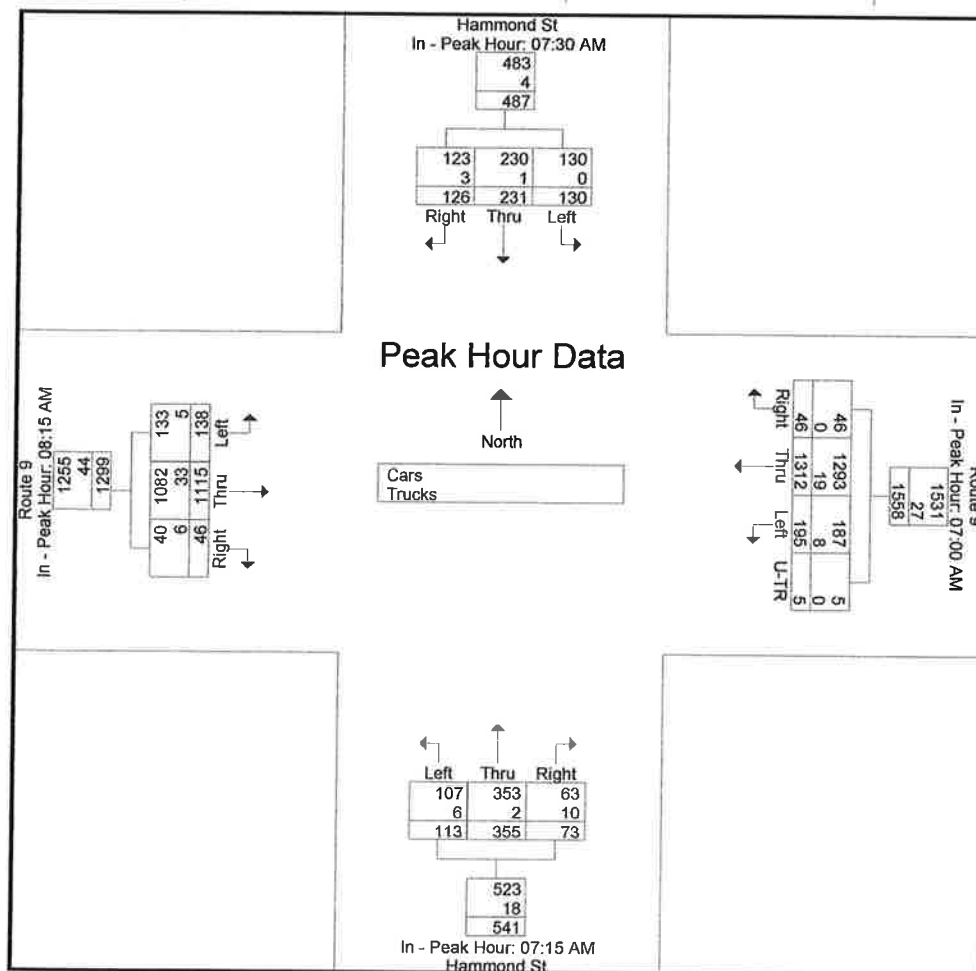
File Name : 7382N001  
 Site Code : 73820001  
 Start Date : 11/16/2016  
 Page No : 3

	Hammond St From North				Route 9 From East					Hammond St From South				Route 9 From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	U-TR	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total

Peak Hour Analysis From 07:00 AM to 09:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				07:00 AM					07:15 AM				08:15 AM				
+0 mins.	32	55	30	117	36	342	11	0	389	21	87	23	131	36	285	14	335	
+15 mins.	38	68	30	136	48	311	11	2	372	26	91	23	140	32	269	8	309	
+30 mins.	34	64	34	132	51	345	10	2	408	31	89	9	129	36	279	7	322	
+45 mins.	26	44	32	102	60	314	14	1	389	35	88	18	141	34	282	17	333	
Total Volume	130	231	126	487	195	1312	46	5	1558	113	355	73	541	138	1115	46	1299	
% App. Total	26.7	47.4	25.9		12.5	84.2	3	0.3		20.9	65.6	13.5		10.6	85.8	3.5		
PHF	.855	.849	.926	.895	.813	.951	.821	.625	.955	.807	.975	.793	.959	.958	.978	.676	.969	
Cars	130	230	123	483	187	1293	46	5	1531	107	353	63	523	133	1082	40	1255	
% Cars	100	99.6	97.6	99.2	95.9	98.6	100	100	98.3	94.7	99.4	86.3	96.7	96.4	97	87	96.6	
Trucks	0	1	3	4	8	19	0	0	27	6	2	10	18	5	33	6	44	
% Trucks	0	0.4	2.4	0.8	4.1	1.4	0	0	1.7	5.3	0.6	13.7	3.3	3.6	3	13	3.4	



# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
 E/W Street : Route 9  
 City/State : Brookline, MA  
 Weather : Cloudy

File Name : 7382N001  
 Site Code : 73820001  
 Start Date : 11/16/2016  
 Page No : 1

## Groups Printed- Cars

Start Time	Hammond St From North			Route 9 From East				Hammond St From South			Route 9 From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	U-TR	Left	Thru	Right	Left	Thru	Right	
07:00 AM	11	36	15	35	340	11	0	24	68	17	36	298	5	896
07:15 AM	20	48	28	47	306	11	2	21	86	19	29	270	9	896
07:30 AM	32	55	30	47	339	10	2	25	90	19	39	289	5	982
07:45 AM	38	67	28	58	308	14	1	28	89	9	23	250	5	918
Total	101	206	101	187	1293	46	5	98	333	64	127	1107	24	3692
08:00 AM	34	64	33	55	317	8	0	33	88	16	27	249	11	935
08:15 AM	26	44	32	49	298	11	1	23	77	19	34	277	13	904
08:30 AM	27	51	25	64	291	6	1	33	61	25	31	254	6	875
08:45 AM	33	39	24	48	241	9	0	32	83	24	35	274	5	847
Total	120	198	114	216	1147	34	2	121	309	84	127	1054	35	3561
09:00 AM	25	38	19	34	274	9	0	29	67	23	33	277	16	844
09:15 AM	30	25	23	52	265	8	1	35	67	23	40	267	10	846
Grand Total	276	467	257	489	2979	97	8	283	776	194	327	2705	85	8943
Apprch %	27.6	46.7	25.7	13.7	83.4	2.7	0.2	22.6	61.9	15.5	10.5	86.8	2.7	
Total %	3.1	5.2	2.9	5.5	33.3	1.1	0.1	3.2	8.7	2.2	3.7	30.2	1	

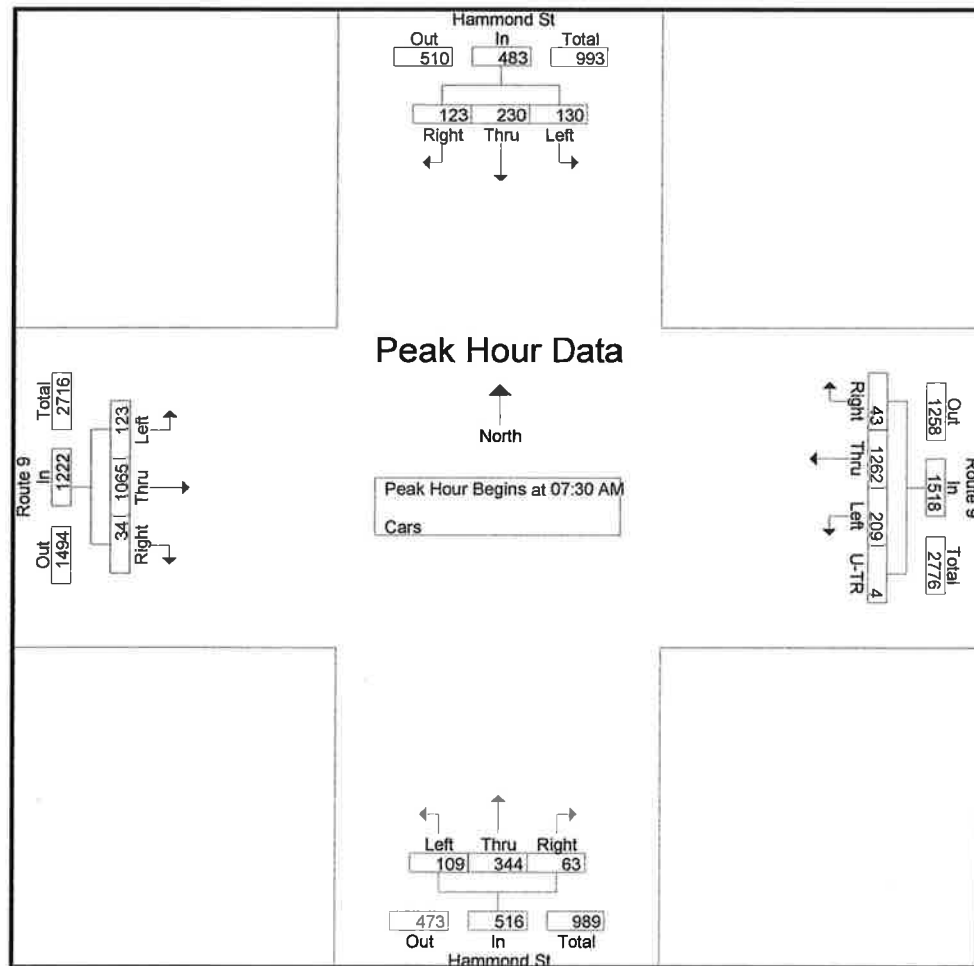
# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
 E/W Street : Route 9  
 City/State : Brookline, MA  
 Weather : Cloudy

File Name : 7382N001  
 Site Code : 73820001  
 Start Date : 11/16/2016  
 Page No : 2

	Hammond St From North				Route 9 From East					Hammond St From South				Route 9 From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	U-TR	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:15 AM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 07:30 AM																		
07:30 AM	32	55	30	117	47	339	10	2	398	25	90	19	134	39	289	5	333	982
07:45 AM	38	67	28	133	58	308	14	1	381	28	89	9	126	23	250	5	278	918
08:00 AM	34	64	33	131	55	317	8	0	380	33	88	16	137	27	249	11	287	935
08:15 AM	26	44	32	102	49	298	11	1	359	23	77	19	119	34	277	13	324	904
Total Volume	130	230	123	483	209	1262	43	4	1518	109	344	63	516	123	1065	34	1222	3739
% App. Total	26.9	47.6	25.5		13.8	83.1	2.8	0.3		21.1	66.7	12.2		10.1	87.2	2.8		
PHF	.855	.858	.932	.908	.901	.931	.768	.500	.954	.826	.956	.829	.942	.788	.921	.654	.917	.952



N/S Street : Hammond Street  
E/W Street : Route 9  
City/State : Brookline, MA  
Weather : Cloudy

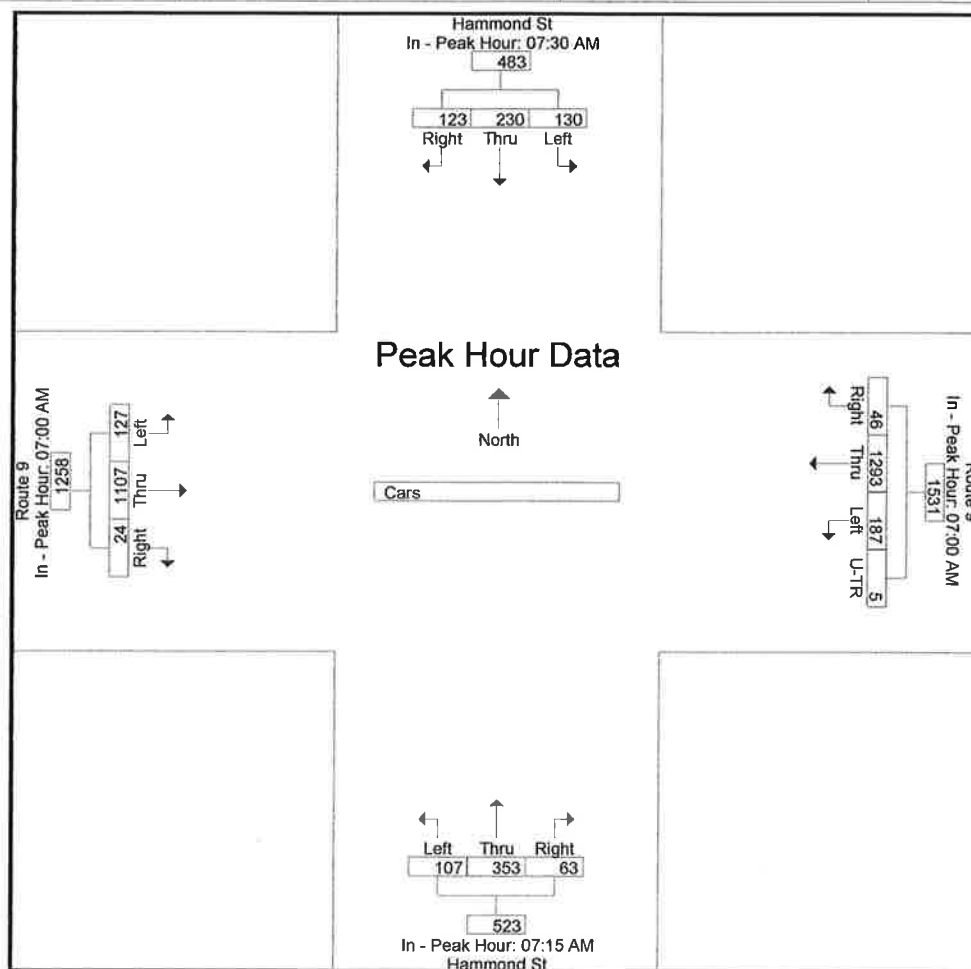
File Name : 7382N001  
Site Code : 73820001  
Start Date : 11/16/2016  
Page No : 3

	Hammond St From North				Route 9 From East					Hammond St From South				Route 9 From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	U-TR	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total

Peak Hour Analysis From 07:00 AM to 09:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				07:00 AM					07:15 AM				07:00 AM				
+0 mins.	32	55	30	117	35	340	11	0	386	21	86	19	126	36	298	5	339	
+15 mins.	38	67	28	133	47	306	11	2	366	25	90	19	134	29	270	9	308	
+30 mins.	34	64	33	131	47	339	10	2	398	28	89	9	126	39	289	5	333	
+45 mins.	26	44	32	102	58	308	14	1	381	33	88	16	137	23	250	5	278	
Total Volume	130	230	123	483	187	1293	46	5	1531	107	353	63	523	127	1107	24	1258	
% App. Total	26.9	47.6	25.5		12.2	84.5	3	0.3		20.5	67.5	12		10.1	88	1.9		
PHF	.855	.858	.932	.908	.806	.951	.821	.625	.962	.811	.981	.829	.954	.814	.929	.667	.928	



# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
 E/W Street : Route 9  
 City/State : Brookline, MA  
 Weather : Cloudy

File Name : 7382N001  
 Site Code : 73820001  
 Start Date : 11/16/2016  
 Page No : 1

## Groups Printed- Trucks

Start Time	Hammond St From North			Route 9 From East				Hammond St From South			Route 9 From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	U-TR	Left	Thru	Right	Left	Thru	Right	
07:00 AM	0	0	1	1	2	0	0	0	0	0	2	6	2	14
07:15 AM	0	3	2	1	5	0	0	0	1	4	1	5	1	23
07:30 AM	0	0	0	4	6	0	0	1	1	4	1	10	0	27
07:45 AM	0	1	2	2	6	0	0	3	0	0	1	9	1	25
Total	0	4	5	8	19	0	0	4	2	8	5	30	4	89
08:00 AM	0	0	1	1	4	0	0	2	0	2	1	5	2	18
08:15 AM	0	0	0	4	6	0	0	1	1	1	2	8	1	24
08:30 AM	1	2	0	2	6	0	0	0	0	1	1	15	2	30
08:45 AM	0	0	0	3	8	0	0	2	1	2	1	5	2	24
Total	1	2	1	10	24	0	0	5	2	6	5	33	7	96
09:00 AM	0	1	0	3	5	0	0	3	1	5	1	5	1	25
09:15 AM	0	0	0	3	7	0	0	3	0	6	0	9	0	28
Grand Total	1	7	6	24	55	0	0	15	5	25	11	77	12	238
Apprch %	7.1	50	42.9	30.4	69.6	0	0	33.3	11.1	55.6	11	77	12	
Total %	0.4	2.9	2.5	10.1	23.1	0	0	6.3	2.1	10.5	4.6	32.4	5	

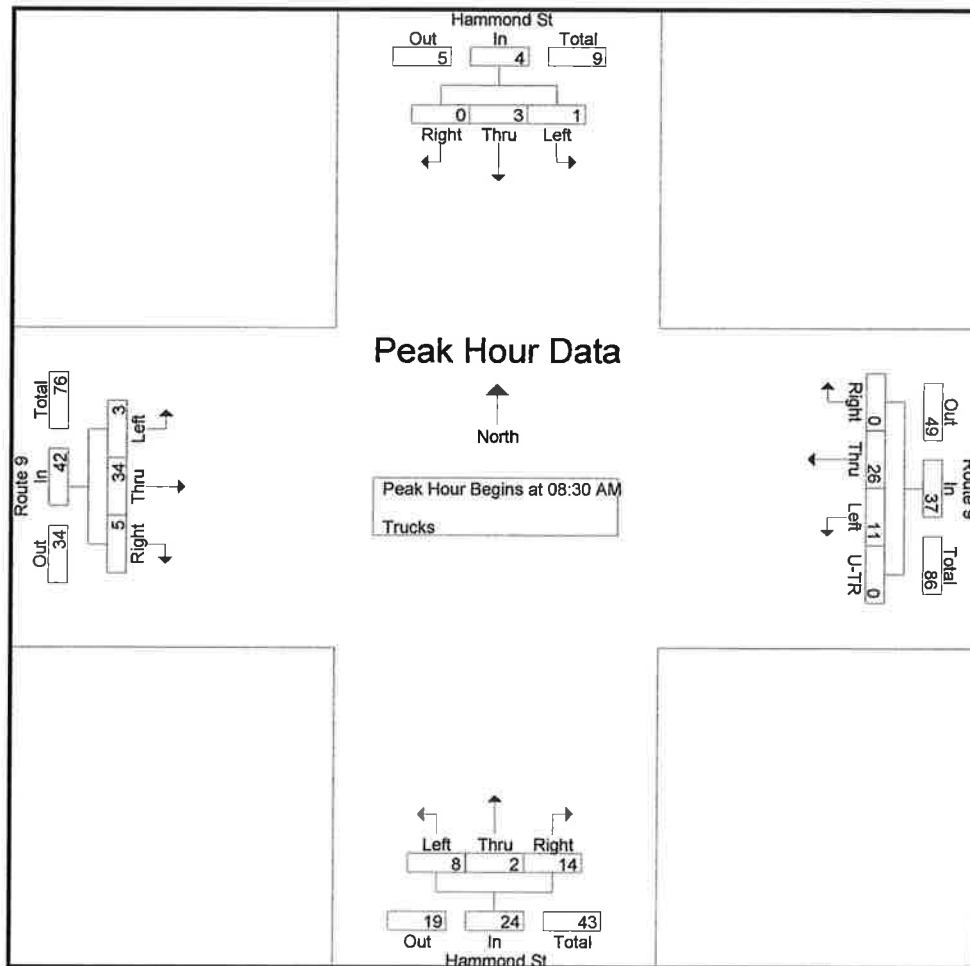
# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
 E/W Street : Route 9  
 City/State : Brookline, MA  
 Weather : Cloudy

File Name : 7382N001  
 Site Code : 73820001  
 Start Date : 11/16/2016  
 Page No : 2

	Hammond St From North				Route 9 From East					Hammond St From South				Route 9 From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	U-TR	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:15 AM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 08:30 AM																		
08:30 AM	1	2	0	3	2	6	0	0	8	0	0	1	1	1	15	2	18	30
08:45 AM	0	0	0	0	3	8	0	0	11	2	1	2	5	1	5	2	8	24
09:00 AM	0	1	0	1	3	5	0	0	8	3	1	5	9	1	5	1	7	25
09:15 AM	0	0	0	0	3	7	0	0	10	3	0	6	9	0	9	0	9	28
Total Volume	1	3	0	4	11	26	0	0	37	8	2	14	24	3	34	5	42	107
% App. Total	25	75	0		29.7	70.3	0	0		33.3	8.3	58.3		7.1	81	11.9		
PHF	.250	.375	.000	.333	.917	.813	.000	.000	.841	.667	.500	.583	.667	.750	.567	.625	.583	.892



N/S Street : Hammond Street  
E/W Street : Route 9  
City/State : Brookline, MA  
Weather : Cloudy

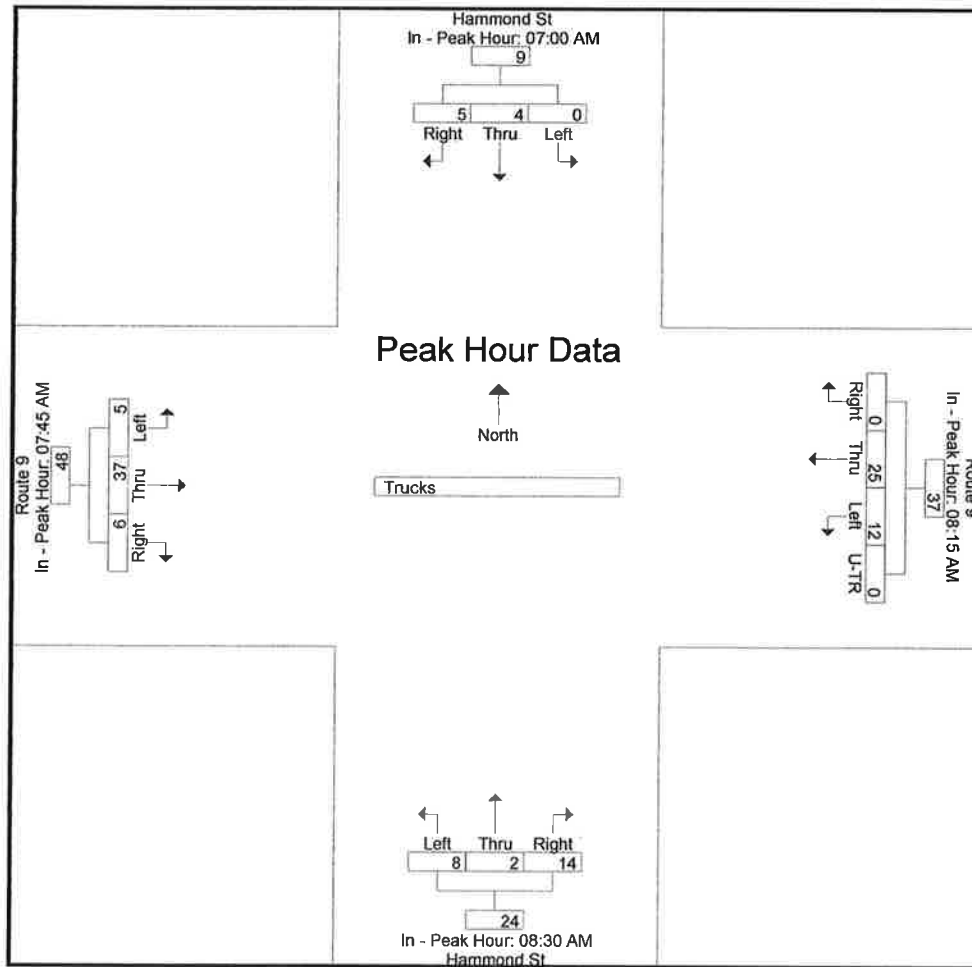
File Name : 7382N001  
Site Code : 73820001  
Start Date : 11/16/2016  
Page No : 3

	Hammond St From North				Route 9 From East					Hammond St From South				Route 9 From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	U-TR	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total

Peak Hour Analysis From 07:00 AM to 09:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				08:15 AM					08:30 AM				07:45 AM				
+0 mins.	0	0	1	1	4	6	0	0	10	0	0	1	1	1	9	1	11	
+15 mins.	0	3	2	5	2	6	0	0	8	2	1	2	5	1	5	2	8	
+30 mins.	0	0	0	0	3	8	0	0	11	3	1	5	9	2	8	1	11	
+45 mins.	0	1	2	3	3	5	0	0	8	3	0	6	9	1	15	2	18	
Total Volume	0	4	5	9	12	25	0	0	37	8	2	14	24	5	37	6	48	
% App. Total	0	44.4	55.6		32.4	67.6	0	0		33.3	8.3	58.3		10.4	77.1	12.5		
PHF	.000	.333	.625	.450	.750	.781	.000	.000	.841	.667	.500	.583	.667	.625	.617	.750	.667	



N/S Street : Hammond Street  
 E/W Street : Route 9  
 City/State : Brookline, MA  
 Weather : Cloudy

File Name : 7382N001  
 Site Code : 73820001  
 Start Date : 11/16/2016  
 Page No : 1

## Groups Printed- Bikes Peds

Start Time	Hammond St From North				Route 9 From East				Hammond St From South				Route 9 From West				Exclu. Total	Inclu. Total	Int. Total
	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	3	0	0	0	4	7	0	7
07:15 AM	1	0	0	1	0	0	0	1	0	0	1	3	0	1	0	6	11	3	14
07:30 AM	0	0	0	1	0	0	0	2	0	0	0	2	2	2	0	4	9	4	13
07:45 AM	0	0	0	0	0	0	0	9	0	0	0	5	0	0	0	4	18	0	18
Total	1	0	0	2	0	0	0	12	0	0	1	13	2	3	0	18	45	7	52
08:00 AM	0	0	0	1	0	0	0	8	0	0	0	3	0	1	0	5	17	1	18
08:15 AM	0	0	0	1	0	0	0	10	2	1	0	7	0	0	0	9	27	3	30
08:30 AM	0	0	0	0	0	0	0	7	0	1	0	1	0	0	0	9	17	1	18
08:45 AM	1	1	0	2	0	1	0	4	0	0	0	0	0	0	0	7	13	3	16
Total	1	1	0	4	0	1	0	29	2	2	0	11	0	1	0	30	74	8	82
09:00 AM	0	0	0	1	0	0	0	2	0	0	0	1	0	0	0	7	11	0	11
09:15 AM	0	0	0	0	0	0	0	2	0	0	0	3	0	0	0	2	7	0	7
Grand Total	2	1	0	7	0	1	0	45	2	2	1	28	2	4	0	57	137	15	152
Apprch %	66.7	33.3	0		0	100	0		40	40	20		33.3	66.7	0				
Total %	13.3	6.7	0		0	6.7	0		13.3	13.3	6.7		13.3	26.7	0		90.1	9.9	



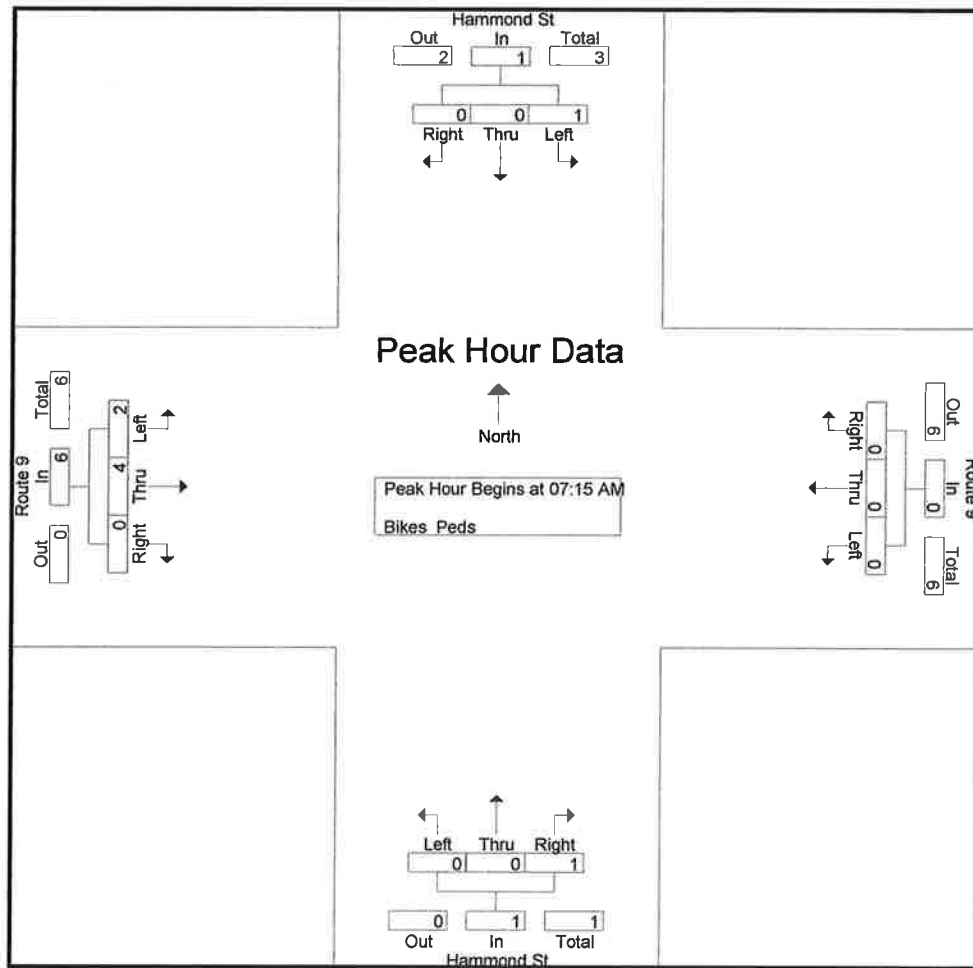
# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
 E/W Street : Route 9  
 City/State : Brookline, MA  
 Weather : Cloudy

File Name : 7382N001  
 Site Code : 73820001  
 Start Date : 11/16/2016  
 Page No : 2

	Hammond St From North				Route 9 From East				Hammond St From South				Route 9 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 09:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	1	0	0	1	0	0	0	0	0	0	1	1	0	1	0	1	3
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	4	4
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Volume	1	0	0	1	0	0	0	0	0	0	1	1	2	4	0	6	8
% App. Total	100	0	0		0	0	0		0	0	100		33.3	66.7	0		
PHF	.250	.000	.000	.250	.000	.000	.000	.000	.000	.000	.250	.250	.250	.500	.000	.375	.500



N/S Street : Hammond Street  
E/W Street : Route 9  
City/State : Brookline, MA  
Weather : Cloudy

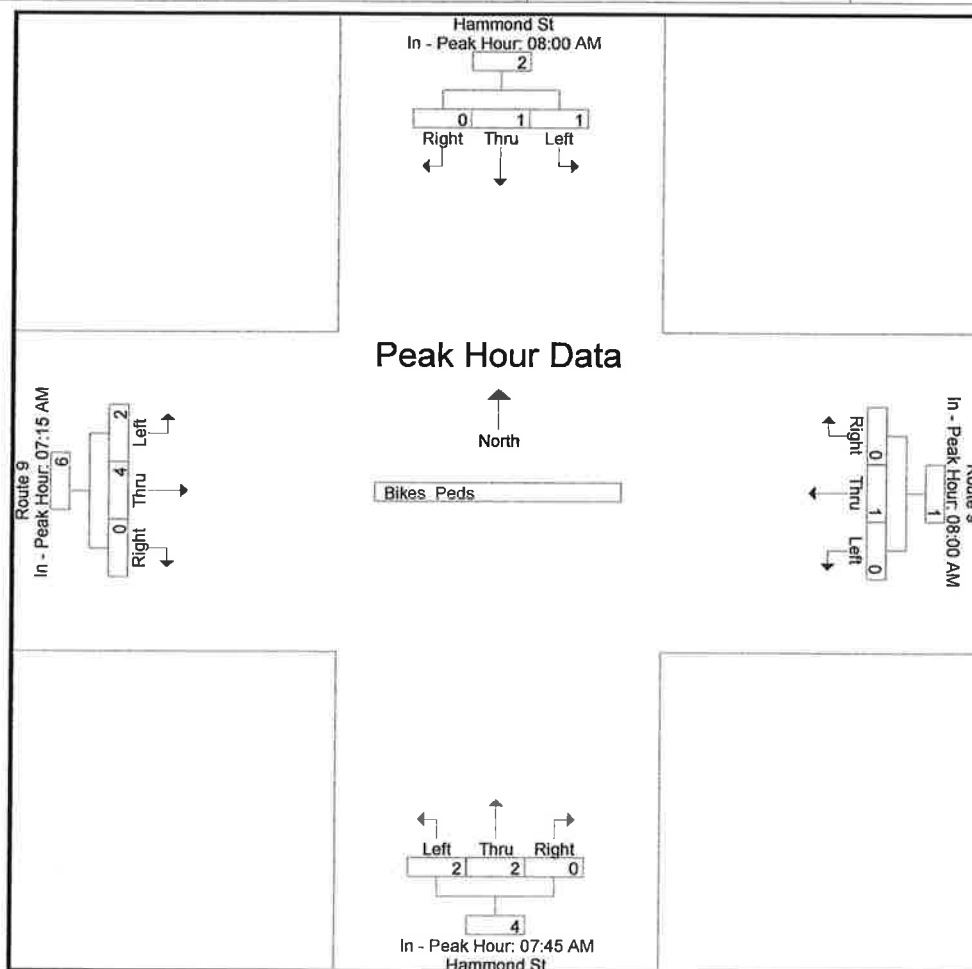
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Site Code : 73820001  
Start Date : 11/16/2016  
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	Hammond St From North				Route 9 From East				Hammond St From South				Route 9 From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total

Peak Hour Analysis From 07:00 AM to 09:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				07:45 AM				07:15 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	4
+30 mins.	0	0	0	0	0	0	0	0	2	1	0	3	0	0	0	0
+45 mins.	1	1	0	2	0	1	0	1	0	1	0	1	0	1	0	1
Total Volume	1	1	0	2	0	1	0	1	2	2	0	4	2	4	0	6
% App. Total	50	50	0		0	100	0		50	50	0		33.3	66.7	0	
PHF	.250	.250	.000	.250	.000	.250	.000	.250	.250	.500	.000	.333	.250	.500	.000	.375



# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
 E/W Street : Route 9  
 City/State : Brookline, MA  
 Weather : Cloudy

File Name : 7382N001  
 Site Code : 73820001  
 Start Date : 11/16/2016  
 Page No : 1

## Groups Printed- Cars - Trucks

Start Time	Hammond St From North			Route 9 From East				Hammond St From South			Route 9 From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	U-TR	Left	Thru	Right	Left	Thru	Right	
02:00 PM	44	64	23	48	288	17	0	51	36	18	37	234	22	882
02:15 PM	31	50	23	57	347	14	0	43	50	21	19	312	10	977
02:30 PM	29	68	18	60	284	15	1	30	38	22	32	259	22	878
02:45 PM	28	68	31	58	309	10	0	40	55	28	34	239	19	919
Total	132	250	95	223	1228	56	1	164	179	89	122	1044	73	3656
03:00 PM	34	74	28	58	286	20	0	47	56	19	33	260	18	933
03:15 PM	34	74	21	72	316	11	0	44	51	21	33	250	13	940
03:30 PM	43	96	28	76	320	19	1	51	55	18	35	249	5	996
03:45 PM	25	67	25	60	279	18	1	44	46	22	52	288	17	944
Total	136	311	102	266	1201	68	2	186	208	80	153	1047	53	3813
04:00 PM	26	71	16	51	367	11	0	48	59	18	30	268	16	981
04:15 PM	28	90	19	54	316	16	1	50	52	15	40	236	13	930
04:30 PM	26	81	19	62	291	14	1	42	60	21	37	264	14	932
04:45 PM	38	108	18	61	291	6	0	44	59	15	39	262	12	953
Total	118	350	72	228	1265	47	2	184	230	69	146	1030	55	3796
Grand Total	386	911	269	717	3694	171	5	534	617	238	421	3121	181	11265
Apprch %	24.6	58.2	17.2	15.6	80.5	3.7	0.1	38.4	44.4	17.1	11.3	83.8	4.9	
Total %	3.4	8.1	2.4	6.4	32.8	1.5	0	4.7	5.5	2.1	3.7	27.7	1.6	
Cars	382	904	266	707	3636	169	5	523	613	228	418	3083	177	11111
% Cars	99	99.2	98.9	98.6	98.4	98.8	100	97.9	99.4	95.8	99.3	98.8	97.8	98.6
Trucks	4	7	3	10	58	2	0	11	4	10	3	38	4	154
% Trucks	1	0.8	1.1	1.4	1.6	1.2	0	2.1	0.6	4.2	0.7	1.2	2.2	1.4

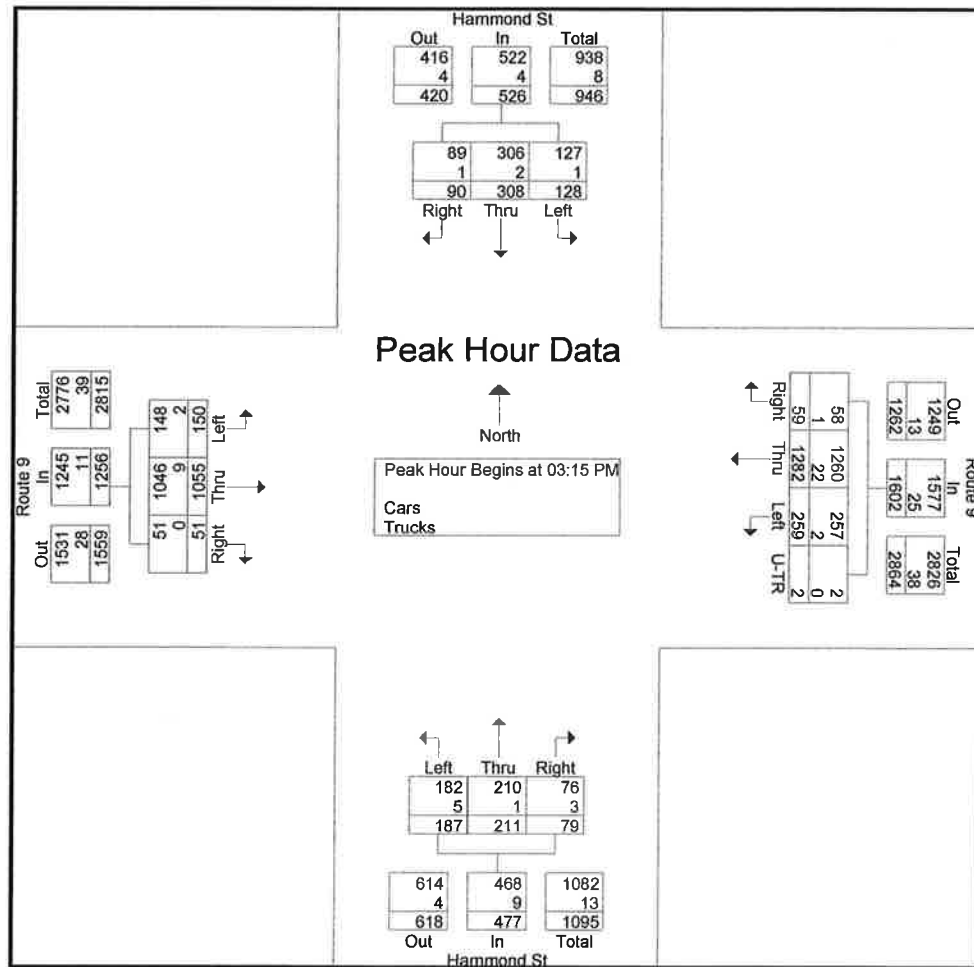
# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
 E/W Street : Route 9  
 City/State : Brookline, MA  
 Weather : Cloudy

File Name : 7382N001  
 Site Code : 73820001  
 Start Date : 11/16/2016  
 Page No : 2

	Hammond St From North				Route 9 From East					Hammond St From South				Route 9 From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	U-TR	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 04:45 PM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 03:15 PM																		
03:15 PM	34	74	21	129	72	316	11	0	399	44	51	21	116	33	250	13	296	940
03:30 PM	43	96	28	167	76	320	19	1	416	51	55	18	124	35	249	5	289	996
03:45 PM	25	67	25	117	60	279	18	1	358	44	46	22	112	52	288	17	357	944
04:00 PM	26	71	16	113	51	367	11	0	429	48	59	18	125	30	268	16	314	981
Total Volume	128	308	90	526	259	1282	59	2	1602	187	211	79	477	150	1055	51	1256	3861
% App. Total	24.3	58.6	17.1		16.2	80	3.7	0.1		39.2	44.2	16.6		11.9	84	4.1		
PHF	.744	.802	.804	.787	.852	.873	.776	.500	.934	.917	.894	.898	.954	.721	.916	.750	.880	.969
Cars	127	306	89	522	257	1260	58	2	1577	182	210	76	468	148	1046	51	1245	3812
% Cars	99.2	99.4	98.9	99.2	99.2	98.3	98.3	100	98.4	97.3	99.5	96.2	98.1	98.7	99.1	100	99.1	98.7
Trucks	1	2	1	4	2	22	1	0	25	5	1	3	9	2	9	0	11	49
% Trucks	0.8	0.6	1.1	0.8	0.8	1.7	1.7	0	1.6	2.7	0.5	3.8	1.9	1.3	0.9	0	0.9	1.3



N/S Street : Hammond Street  
E/W Street : Route 9  
City/State : Brookline, MA  
Weather : Cloudy

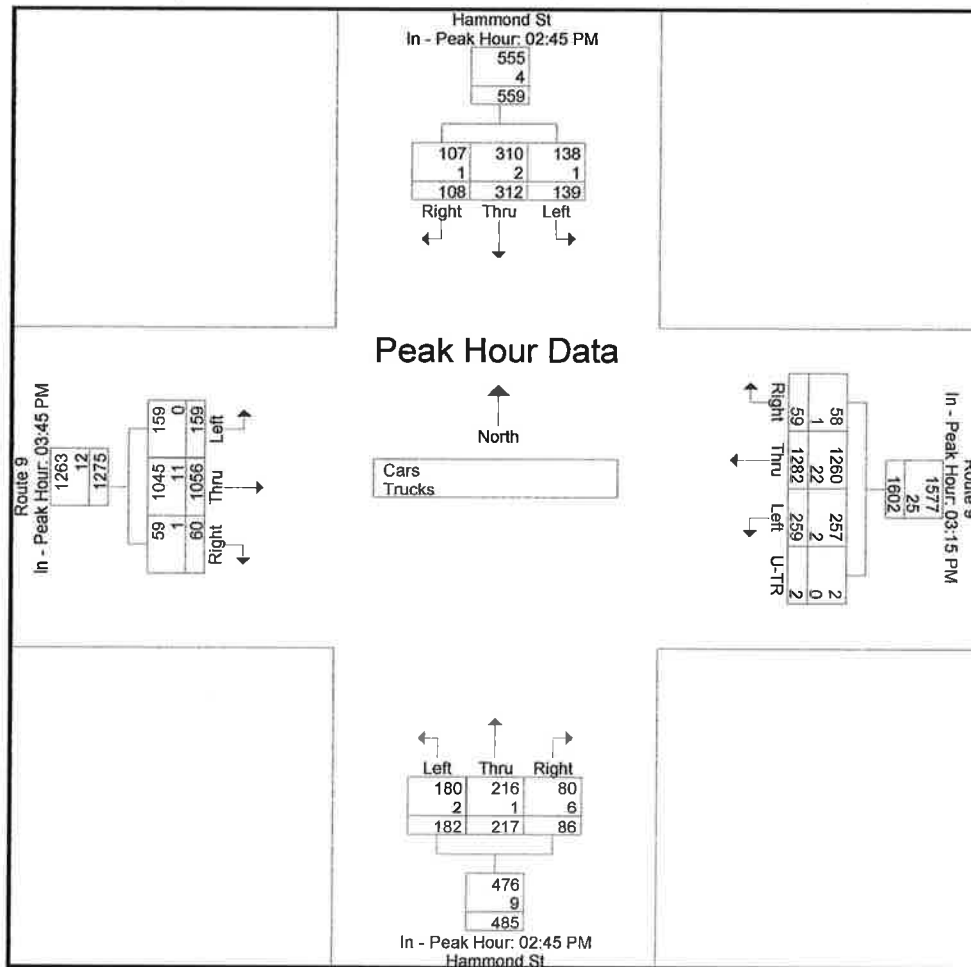
File Name : 7382N001  
Site Code : 73820001  
Start Date : 11/16/2016  
Page No : 3

	Hammond St From North				Route 9 From East					Hammond St From South				Route 9 From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	U-TR	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total

Peak Hour Analysis From 02:00 PM to 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:45 PM				03:15 PM					02:45 PM				03:45 PM				
+0 mins.	28	68	31	127	72	316	11	0	399	40	55	28	123	52	288	17	357	
+15 mins.	34	74	28	136	76	320	19	1	416	47	56	19	122	30	268	16	314	
+30 mins.	34	74	21	129	60	279	18	1	358	44	51	21	116	40	236	13	289	
+45 mins.	43	96	28	167	51	367	11	0	429	51	55	18	124	37	264	14	315	
Total Volume	139	312	108	559	259	1282	59	2	1602	182	217	86	485	159	1056	60	1275	
% App. Total	24.9	55.8	19.3		16.2	80	3.7	0.1		37.5	44.7	17.7		12.5	82.8	4.7		
PHF	.808	.813	.871	.837	.852	.873	.776	.500	.934	.892	.969	.768	.978	.764	.917	.882	.893	
Cars	138	310	107	555	257	1260	58	2	1577	180	216	80	476	159	1045	59	1263	
% Cars	99.3	99.4	99.1	99.3	99.2	98.3	98.3	100	98.4	98.9	99.5	93	98.1	100	99	98.3	99.1	
Trucks	1	2	1	4	2	22	1	0	25	2	1	6	9	0	11	1	12	
% Trucks	0.7	0.6	0.9	0.7	0.8	1.7	1.7	0	1.6	1.1	0.5	7	1.9	0	1	1.7	0.9	



# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
 E/W Street : Route 9  
 City/State : Brookline, MA  
 Weather : Cloudy

File Name : 7382N001  
 Site Code : 73820001  
 Start Date : 11/16/2016  
 Page No : 1

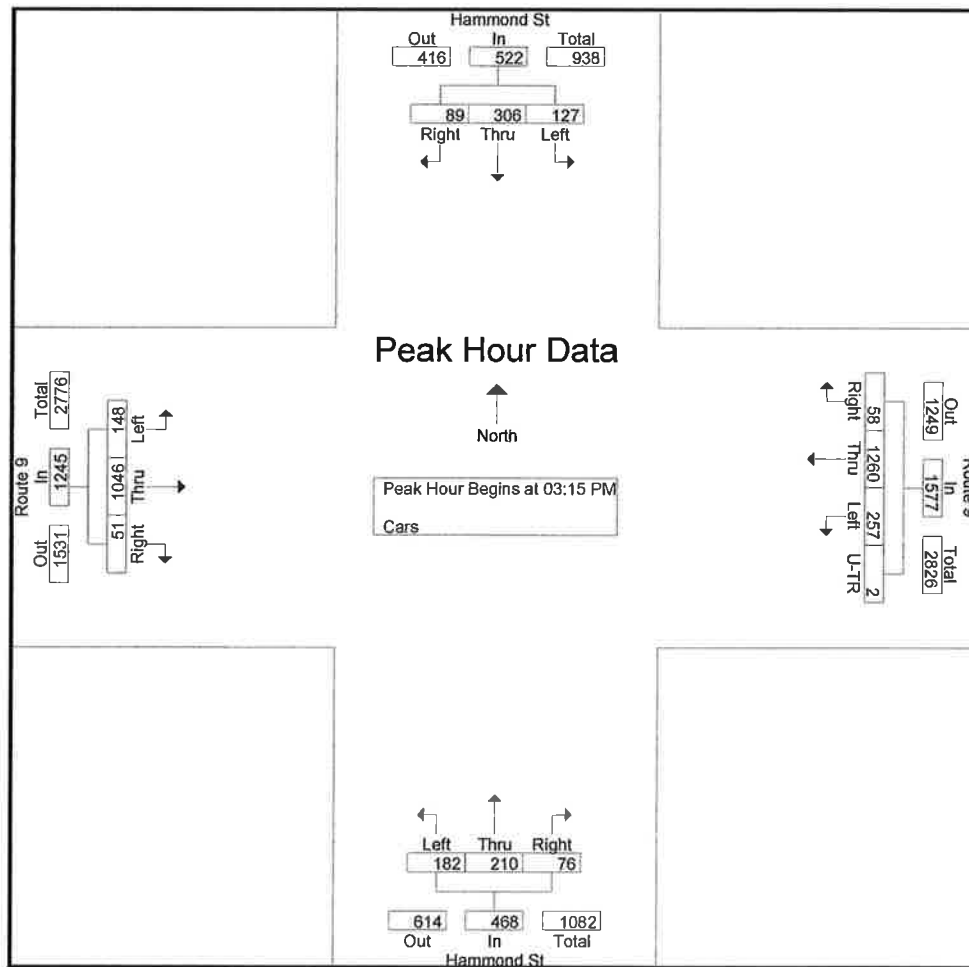
## Groups Printed- Cars

Start Time	Hammond St From North			Route 9 From East				Hammond St From South			Route 9 From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	U-TR	Left	Thru	Right	Left	Thru	Right	
02:00 PM	44	63	21	47	282	16	0	51	36	18	36	232	20	866
02:15 PM	30	49	23	55	341	14	0	40	49	18	19	306	10	954
02:30 PM	29	67	18	58	275	15	1	30	38	21	32	255	22	861
02:45 PM	27	67	31	57	303	10	0	40	54	26	34	233	18	900
Total	130	246	93	217	1201	55	1	161	177	83	121	1026	70	3581
03:00 PM	34	74	28	56	282	20	0	46	56	18	33	258	18	923
03:15 PM	34	74	20	72	309	11	0	43	51	20	32	248	13	927
03:30 PM	43	95	28	74	313	19	1	51	55	16	34	247	5	981
03:45 PM	25	67	25	60	275	17	1	41	45	22	52	286	17	933
Total	136	310	101	262	1179	67	2	181	207	76	151	1039	53	3764
04:00 PM	25	70	16	51	363	11	0	47	59	18	30	265	16	971
04:15 PM	27	90	19	54	314	16	1	49	51	15	40	231	13	920
04:30 PM	26	80	19	62	289	14	1	42	60	21	37	263	13	927
04:45 PM	38	108	18	61	290	6	0	43	59	15	39	259	12	948
Total	116	348	72	228	1256	47	2	181	229	69	146	1018	54	3766
Grand Total	382	904	266	707	3636	169	5	523	613	228	418	3083	177	11111
Apprch %	24.6	58.2	17.1	15.7	80.5	3.7	0.1	38.3	44.9	16.7	11.4	83.8	4.8	
Total %	3.4	8.1	2.4	6.4	32.7	1.5	0	4.7	5.5	2.1	3.8	27.7	1.6	

N/S Street : Hammond Street  
E/W Street : Route 9  
City/State : Brookline, MA  
Weather : Cloudy

File Name : 7382N001  
Site Code : 73820001  
Start Date : 11/16/2016  
Page No : 2

	Hammond St From North				Route 9 From East					Hammond St From South				Route 9 From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	U-TR	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 04:45 PM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 03:15 PM																		
03:15 PM	34	74	20	128	72	309	11	0	392	43	51	20	114	32	248	13	293	927
03:30 PM	43	95	28	166	74	313	19	1	407	51	55	16	122	34	247	5	286	981
03:45 PM	25	67	25	117	60	275	17	1	353	41	45	22	108	52	286	17	355	933
04:00 PM	25	70	16	111	51	363	11	0	425	47	59	18	124	30	265	16	311	971
Total Volume	127	306	89	522	257	1260	58	2	1577	182	210	76	468	148	1046	51	1245	3812
% App. Total	24.3	58.6	17		16.3	79.9	3.7	0.1		38.9	44.9	16.2		11.9	84	4.1		
PHF	.738	.805	.795	.786	.868	.868	.763	.500	.928	.892	.890	.864	.944	.712	.914	.750	.877	.971



N/S Street : Hammond Street  
E/W Street : Route 9  
City/State : Brookline, MA  
Weather : Cloudy

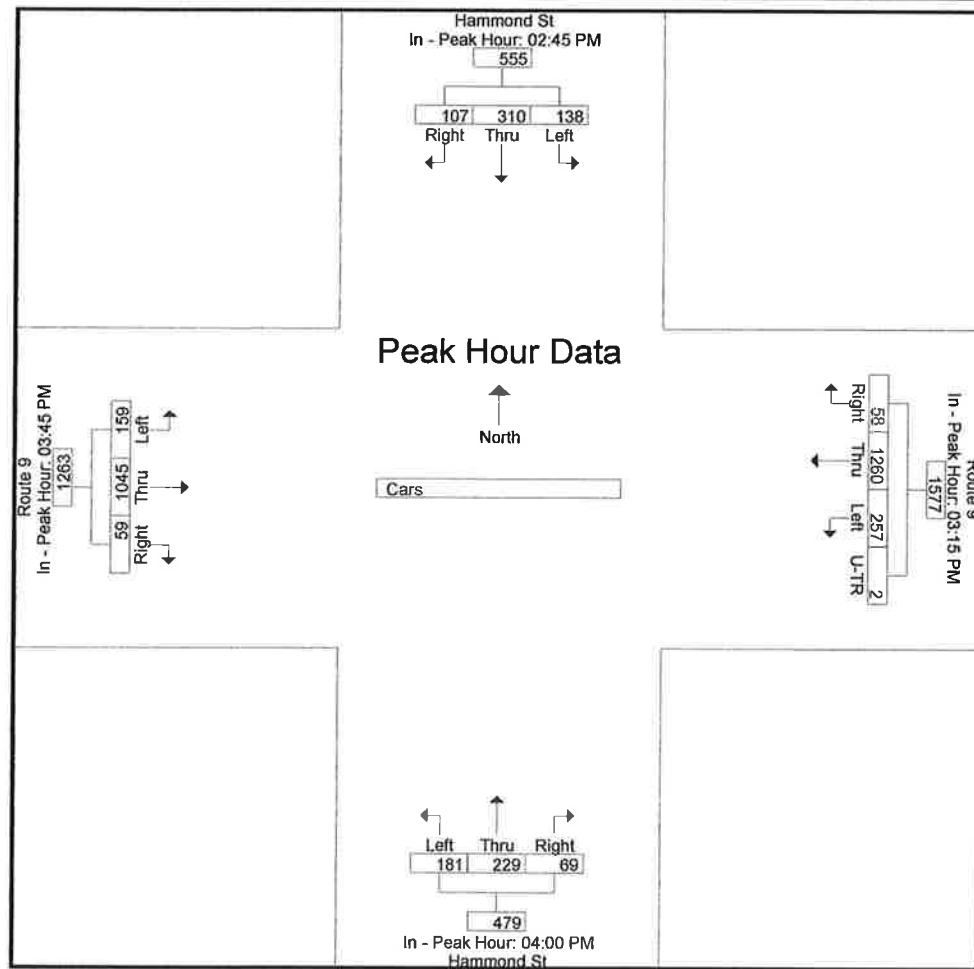
File Name : 7382N001  
Site Code : 73820001  
Start Date : 11/16/2016  
Page No : 3

	Hammond St From North				Route 9 From East					Hammond St From South				Route 9 From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	U-TR	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total

Peak Hour Analysis From 02:00 PM to 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:45 PM				03:15 PM					04:00 PM				03:45 PM				
+0 mins.	27	67	31	125	72	309	11	0	392	47	59	18	124	52	286	17	355	
+15 mins.	34	74	28	136	74	313	19	1	407	49	51	15	115	30	265	16	311	
+30 mins.	34	74	20	128	60	275	17	1	353	42	60	21	123	40	231	13	284	
+45 mins.	43	95	28	166	51	363	11	0	425	43	59	15	117	37	263	13	313	
Total Volume	138	310	107	555	257	1260	58	2	1577	181	229	69	479	159	1045	59	1263	
% App. Total	24.9	55.9	19.3		16.3	79.9	3.7	0.1		37.8	47.8	14.4		12.6	82.7	4.7		
PHF	.802	.816	.863	.836	.868	.868	.763	.500	.928	.923	.954	.821	.966	.764	.913	.868	.889	





**Accurate Counts**  
978-664-2565

N/S Street : Hammond Street  
E/W Street : Route 9  
City/State : Brookline, MA  
Weather : Cloudy

File Name : 7382N001  
Site Code : 73820001  
Start Date : 11/16/2016  
Page No : 1

Groups Printed- Trucks

Start Time	Hammond St From North			Route 9 From East				Hammond St From South			Route 9 From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	U-TR	Left	Thru	Right	Left	Thru	Right	
02:00 PM	0	1	2	1	6	1	0	0	0	0	1	2	2	16
02:15 PM	1	1	0	2	6	0	0	3	1	3	0	6	0	23
02:30 PM	0	1	0	2	9	0	0	0	0	1	0	4	0	17
02:45 PM	1	1	0	1	6	0	0	0	1	2	0	6	1	19
Total	2	4	2	6	27	1	0	3	2	6	1	18	3	75
03:00 PM	0	0	0	2	4	0	0	1	0	1	0	2	0	10
03:15 PM	0	0	1	0	7	0	0	1	0	1	1	2	0	13
03:30 PM	0	1	0	2	7	0	0	0	0	2	1	2	0	15
03:45 PM	0	0	0	0	4	1	0	3	1	0	0	2	0	11
Total	0	1	1	4	22	1	0	5	1	4	2	8	0	49
04:00 PM	1	1	0	0	4	0	0	1	0	0	0	3	0	10
04:15 PM	1	0	0	0	2	0	0	1	1	0	0	5	0	10
04:30 PM	0	1	0	0	2	0	0	0	0	0	0	1	1	5
04:45 PM	0	0	0	0	1	0	0	1	0	0	0	3	0	5
Total	2	2	0	0	9	0	0	3	1	0	0	12	1	30
Grand Total	4	7	3	10	58	2	0	11	4	10	3	38	4	154
Apprch %	28.6	50	21.4	14.3	82.9	2.9	0	44	16	40	6.7	84.4	8.9	
Total %	2.6	4.5	1.9	6.5	37.7	1.3	0	7.1	2.6	6.5	1.9	24.7	2.6	

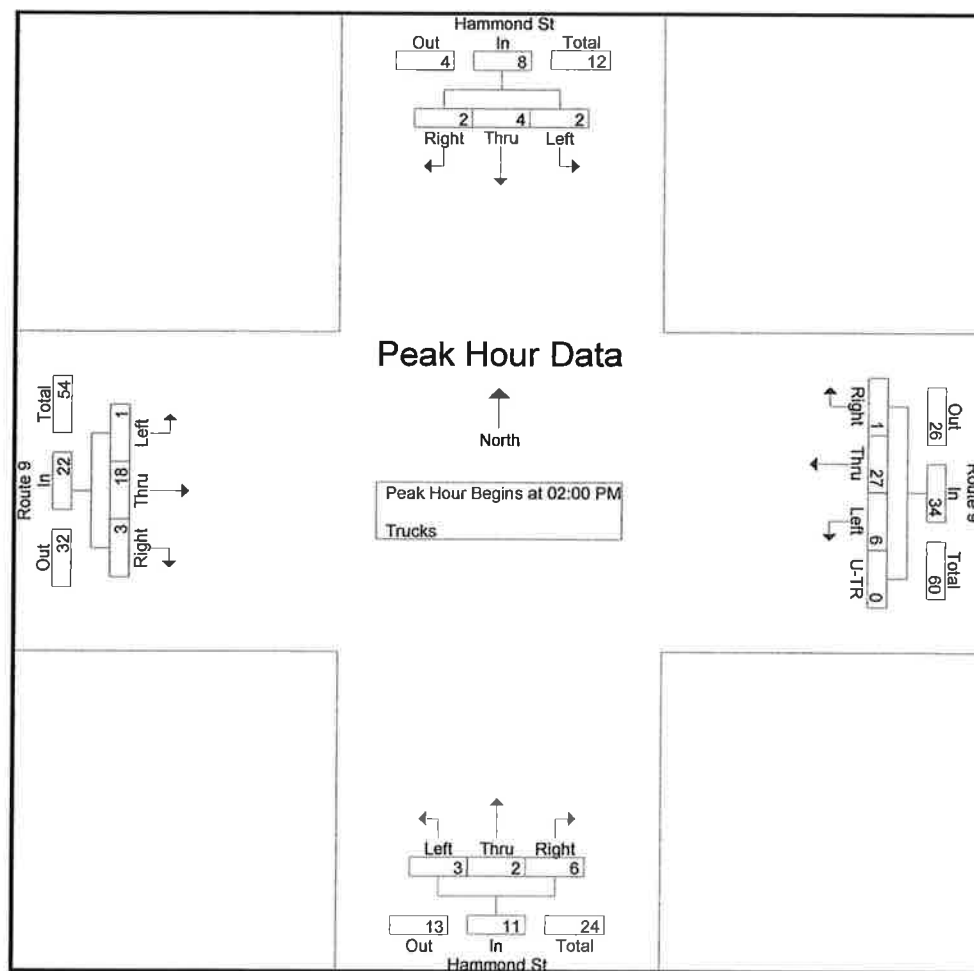
# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
 E/W Street : Route 9  
 City/State : Brookline, MA  
 Weather : Cloudy

File Name : 7382N001  
 Site Code : 73820001  
 Start Date : 11/16/2016  
 Page No : 2

	Hammond St From North				Route 9 From East					Hammond St From South				Route 9 From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	U-TR	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 04:45 PM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 02:00 PM																		
02:00 PM	0	1	2	3	1	6	1	0	8	0	0	0	0	1	2	2	5	16
02:15 PM	1	1	0	2	2	6	0	0	8	3	1	3	7	0	6	0	6	23
02:30 PM	0	1	0	1	2	9	0	0	11	0	0	1	1	0	4	0	4	17
02:45 PM	1	1	0	2	1	6	0	0	7	0	1	2	3	0	6	1	7	19
Total Volume	2	4	2	8	6	27	1	0	34	3	2	6	11	1	18	3	22	75
% App. Total	25	50	25		17.6	79.4	2.9	0		27.3	18.2	54.5		4.5	81.8	13.6		
PHF	.500	1.00	.250	.667	.750	.750	.250	.000	.773	.250	.500	.500	.393	.250	.750	.375	.786	.815



N/S Street : Hammond Street  
E/W Street : Route 9  
City/State : Brookline, MA  
Weather : Cloudy

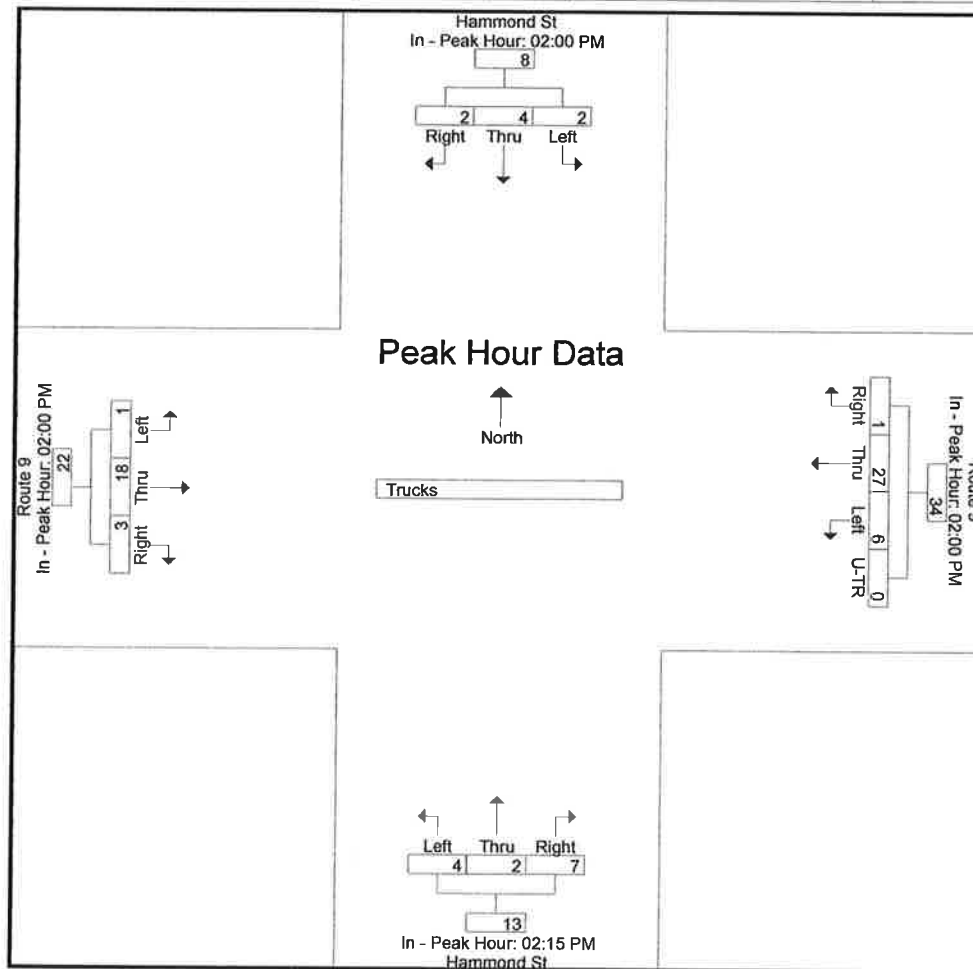
File Name : 7382N001  
Site Code : 73820001  
Start Date : 11/16/2016  
Page No : 3

	Hammond St From North				Route 9 From East					Hammond St From South				Route 9 From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	U-TR	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total

Peak Hour Analysis From 02:00 PM to 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:00 PM				02:00 PM					02:15 PM				02:00 PM				
+0 mins.	0	1	2	3	1	6	1	0	8	3	1	3	7	1	2	2	5	
+15 mins.	1	1	0	2	2	6	0	0	8	0	0	1	1	0	6	0	6	
+30 mins.	0	1	0	1	2	9	0	0	11	0	1	2	3	0	4	0	4	
+45 mins.	1	1	0	2	1	6	0	0	7	1	0	1	2	0	6	1	7	
Total Volume	2	4	2	8	6	27	1	0	34	4	2	7	13	1	18	3	22	
% App. Total	25	50	25		17.6	79.4	2.9	0		30.8	15.4	53.8		4.5	81.8	13.6		
PHF	.500	1.000	.250	.667	.750	.750	.250	.000	.773	.333	.500	.583	.464	.250	.750	.375	.786	



**Accurate Counts**  
978-664-2565

N/S Street : Hammond Street  
E/W Street : Route 9  
City/State : Brookline, MA  
Weather : Cloudy

File Name : 7382N001  
Site Code : 73820001  
Start Date : 11/16/2016  
Page No : 1

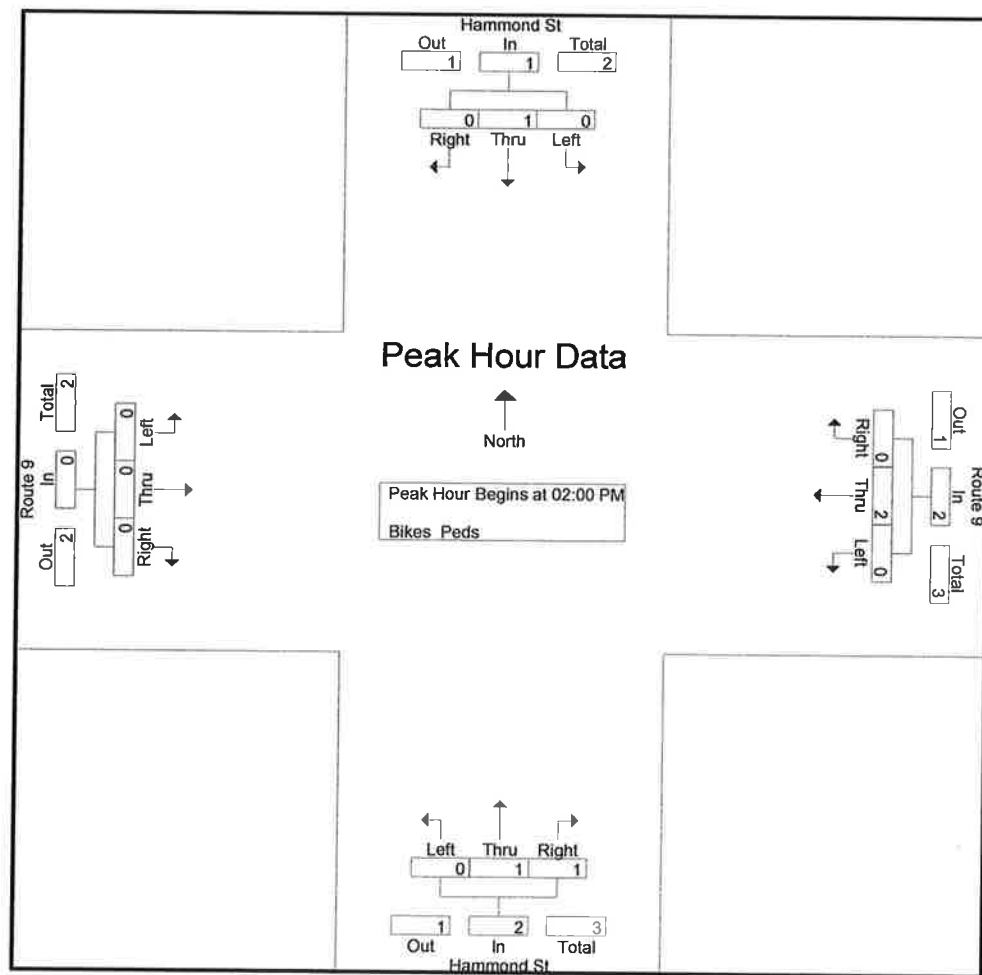
Groups Printed- Bikes Peds

Start Time	Hammond St From North				Route 9 From East				Hammond St From South				Route 9 From West				Exclu. Total	Inclu. Total	Int. Total
	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	2	2	0	2
02:15 PM	0	0	0	0	0	0	0	3	0	1	0	4	0	0	0	3	10	1	11
02:30 PM	0	0	0	5	0	1	0	6	0	0	1	1	0	0	0	4	16	2	18
02:45 PM	0	1	0	1	0	1	0	3	0	0	0	4	0	0	0	9	17	2	19
Total	0	1	0	6	0	2	0	12	0	1	1	9	0	0	0	18	45	5	50
03:00 PM	0	0	0	1	0	0	0	7	0	0	0	2	0	0	0	5	15	0	15
03:15 PM	0	0	0	6	0	0	0	9	0	0	0	5	0	0	0	4	24	0	24
03:30 PM	0	0	0	0	0	0	0	3	0	1	0	4	0	0	0	7	14	1	15
03:45 PM	0	0	0	2	0	0	0	5	0	0	0	1	0	0	0	3	11	0	11
Total	0	0	0	9	0	0	0	24	0	1	0	12	0	0	0	19	64	1	65
04:00 PM	0	1	0	1	0	0	0	9	0	0	1	3	0	1	0	3	16	3	19
04:15 PM	0	0	0	1	0	0	0	13	0	0	0	7	0	0	0	0	21	0	21
04:30 PM	0	1	0	2	0	1	0	7	0	0	0	5	0	0	0	4	18	2	20
04:45 PM	0	0	0	2	0	0	0	3	0	0	0	3	0	0	0	5	13	0	13
Total	0	2	0	6	0	1	0	32	0	0	1	18	0	1	0	12	68	5	73
Grand Total	0	3	0	21	0	3	0	68	0	2	2	39	0	1	0	49	177	11	188
Apprch %	0	100	0		0	100	0		0	50	50		0	100	0				
Total %	0	27.3	0		0	27.3	0		0	18.2	18.2		0	9.1	0		94.1	5.9	

N/S Street : Hammond Street  
E/W Street : Route 9  
City/State : Brookline, MA  
Weather : Cloudy

File Name : 7382N001  
Site Code : 73820001  
Start Date : 11/16/2016  
Page No : 2

	Hammond St From North				Route 9 From East				Hammond St From South				Route 9 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 04:45 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	0	0	0	0	0	0	0
02:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
02:30 PM	0	0	0	0	0	1	0	1	0	0	1	1	0	0	0	0	2
02:45 PM	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
Total Volume	0	1	0	1	0	2	0	2	0	1	1	2	0	0	0	0	5
% App. Total	0	100	0		0	100	0		0	50	50		0	0	0		
PHF	.000	.250	.000	.250	.000	.500	.000	.500	.000	.250	.250	.500	.000	.000	.000	.000	.625



# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
 E/W Street : Route 9  
 City/State : Brookline, MA  
 Weather : Cloudy

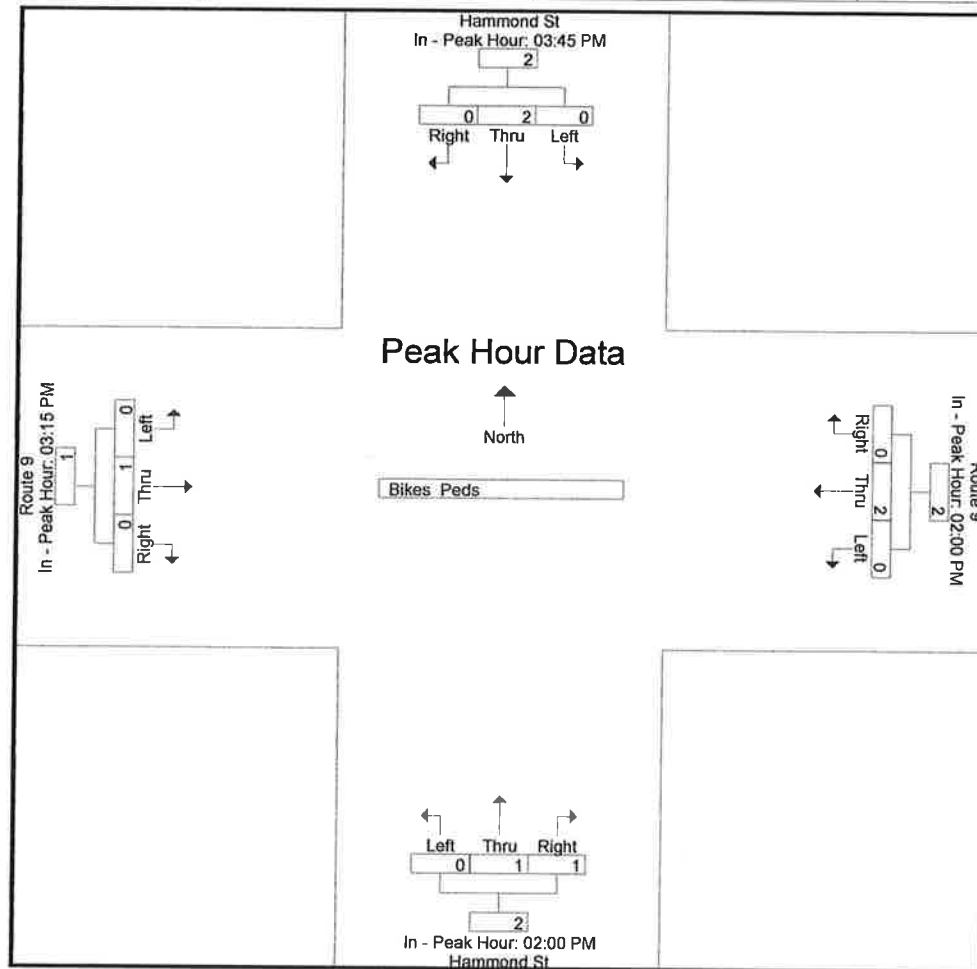
File Name : 7382N001  
 Site Code : 73820001  
 Start Date : 11/16/2016  
 Page No : 3

	Hammond St From North				Route 9 From East				Hammond St From South				Route 9 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	03:45 PM				02:00 PM				02:00 PM				03:15 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0
+30 mins.	0	0	0	0	0	1	0	1	0	0	1	1	0	0	0	0
+45 mins.	0	1	0	1	0	1	0	1	0	0	0	0	0	1	0	1
Total Volume	0	2	0	2	0	2	0	2	0	1	1	2	0	1	0	1
% App. Total	0	100	0		0	100	0		0	50	50		0	100	0	
PHF	.000	.500	.000	.500	.000	.500	.000	.500	.000	.250	.250	.500	.000	.250	.000	.250



N/S Street : Dunster Road / Driveway  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N002  
Site Code : 73820002  
Start Date : 11/17/2016  
Page No : 1

Groups Printed- Cars - Trucks

Start Time	Dunster From North			Heath St From East			Drwy From South			Heath St From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:00 AM	3	0	1	0	27	1	0	0	0	30	8	0	70
07:15 AM	1	0	0	0	43	1	0	0	0	29	8	0	82
07:30 AM	3	0	3	0	55	6	0	0	0	21	12	0	100
07:45 AM	5	0	1	0	60	0	0	0	0	29	11	0	106
Total	12	0	5	0	185	8	0	0	0	109	39	0	358
08:00 AM	6	0	3	0	52	0	0	0	0	11	14	0	86
08:15 AM	5	0	2	1	63	1	0	0	0	19	8	0	99
08:30 AM	8	0	4	0	50	1	0	0	0	21	22	0	106
08:45 AM	6	0	1	0	51	4	0	0	0	19	11	0	92
Total	25	0	10	1	216	6	0	0	0	70	55	0	383
09:00 AM	7	0	0	0	41	1	0	0	0	27	10	0	86
09:15 AM	6	0	4	0	31	0	0	0	0	32	2	0	75
Grand Total	50	0	19	1	473	15	0	0	0	238	106	0	902
Apprch %	72.5	0	27.5	0.2	96.7	3.1	0	0	0	69.2	30.8	0	
Total %	5.5	0	2.1	0.1	52.4	1.7	0	0	0	26.4	11.8	0	
Cars	50	0	19	1	463	15	0	0	0	237	103	0	888
% Cars	100	0	100	100	97.9	100	0	0	0	99.6	97.2	0	98.4
Trucks	0	0	0	0	10	0	0	0	0	1	3	0	14
% Trucks	0	0	0	0	2.1	0	0	0	0	0.4	2.8	0	1.6

N/S Street : Dunster Road / Driveway  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

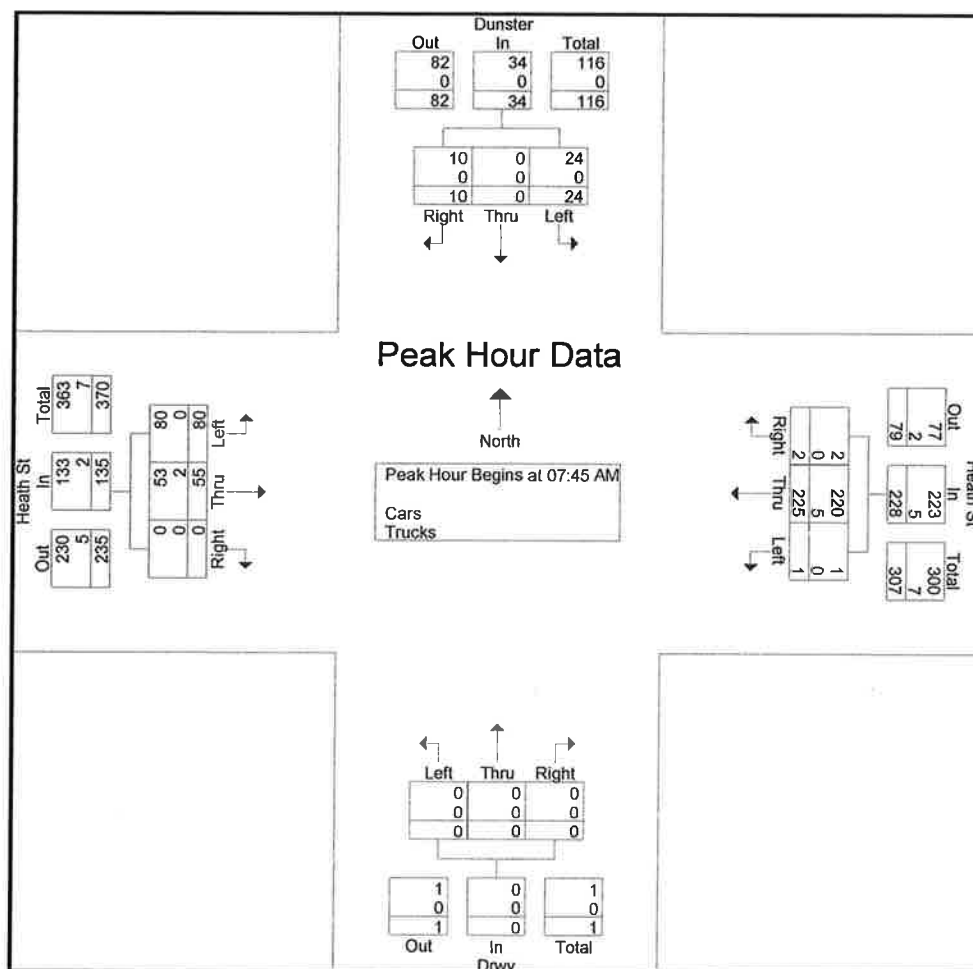
File Name : 7382N002  
Site Code : 73820002  
Start Date : 11/17/2016  
Page No : 2

	Dunster From North				Heath St From East				Drwy From South				Heath St 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 09:15 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:45 AM

07:45 AM	5	0	1	6	0	60	0	60	0	0	0	0	29	11	0	40	106
08:00 AM	6	0	3	9	0	52	0	52	0	0	0	0	11	14	0	25	86
08:15 AM	5	0	2	7	1	63	1	65	0	0	0	0	19	8	0	27	99
08:30 AM	8	0	4	12	0	50	1	51	0	0	0	0	21	22	0	43	106
Total Volume	24	0	10	34	1	225	2	228	0	0	0	0	80	55	0	135	397
% App. Total	70.6	0	29.4		0.4	98.7	0.9		0	0	0		59.3	40.7	0		
PHF	.750	.000	.625	.708	.250	.893	.500	.877	.000	.000	.000	.000	.690	.625	.000	.785	.936
Cars	24	0	10	34	1	220	2	223	0	0	0	0	80	53	0	133	390
% Cars	100	0	100	100	100	97.8	100	97.8	0	0	0	0	100	96.4	0	98.5	98.2
Trucks	0	0	0	0	0	5	0	5	0	0	0	0	0	2	0	2	7
% Trucks	0	0	0	0	0	2.2	0	2.2	0	0	0	0	0	3.6	0	1.5	1.8





N/S Street : Dunster Road / Driveway  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

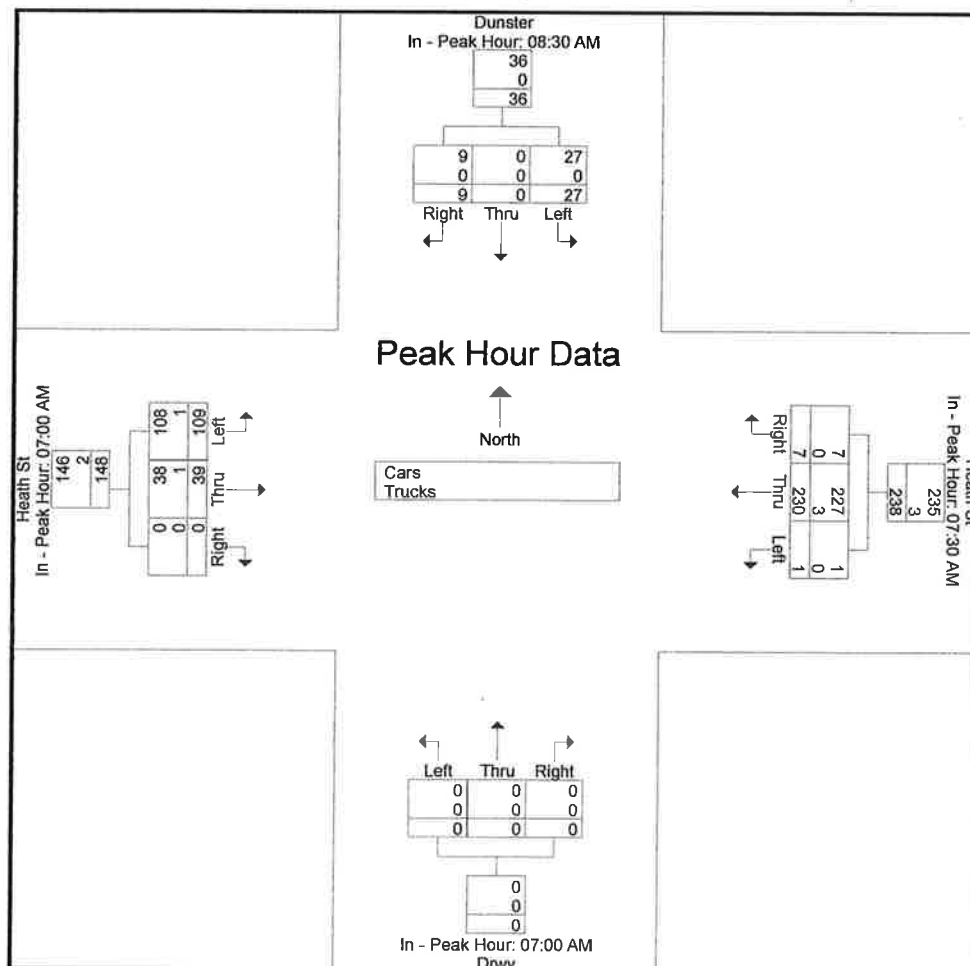
File Name : 7382N002  
Site Code : 73820002  
Start Date : 11/17/2016  
Page No : 3

	Dunster From North				Heath St From East				Drwy From South				Heath St 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 09:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:30 AM				07:30 AM				07:00 AM				07:00 AM				
+0 mins.	8	0	4	12	0	55	6	61	0	0	0	0	30	8	0	38	
+15 mins.	6	0	1	7	0	60	0	60	0	0	0	0	29	8	0	37	
+30 mins.	7	0	0	7	0	52	0	52	0	0	0	0	21	12	0	33	
+45 mins.	6	0	4	10	1	63	1	65	0	0	0	0	29	11	0	40	
Total Volume	27	0	9	36	1	230	7	238	0	0	0	0	109	39	0	148	
% App. Total	75	0	25		0.4	96.6	2.9		0	0	0		73.6	26.4	0		
PHF	.844	.000	.563	.750	.250	.913	.292	.915	.000	.000	.000	.000	.908	.813	.000	.925	
Cars	27	0	9	36	1	227	7	235	0	0	0	0	108	38	0	146	
% Cars	100	0	100	100	100	98.7	100	98.7	0	0	0	0	99.1	97.4	0	98.6	
Trucks	0	0	0	0	0	3	0	3	0	0	0	0	1	1	0	2	
% Trucks	0	0	0	0	0	1.3	0	1.3	0	0	0	0	0.9	2.6	0	1.4	



# Accurate Counts

978-664-2565

N/S Street : Dunster Road / Driveway  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N002  
Site Code : 73820002  
Start Date : 11/17/2016  
Page No : 4

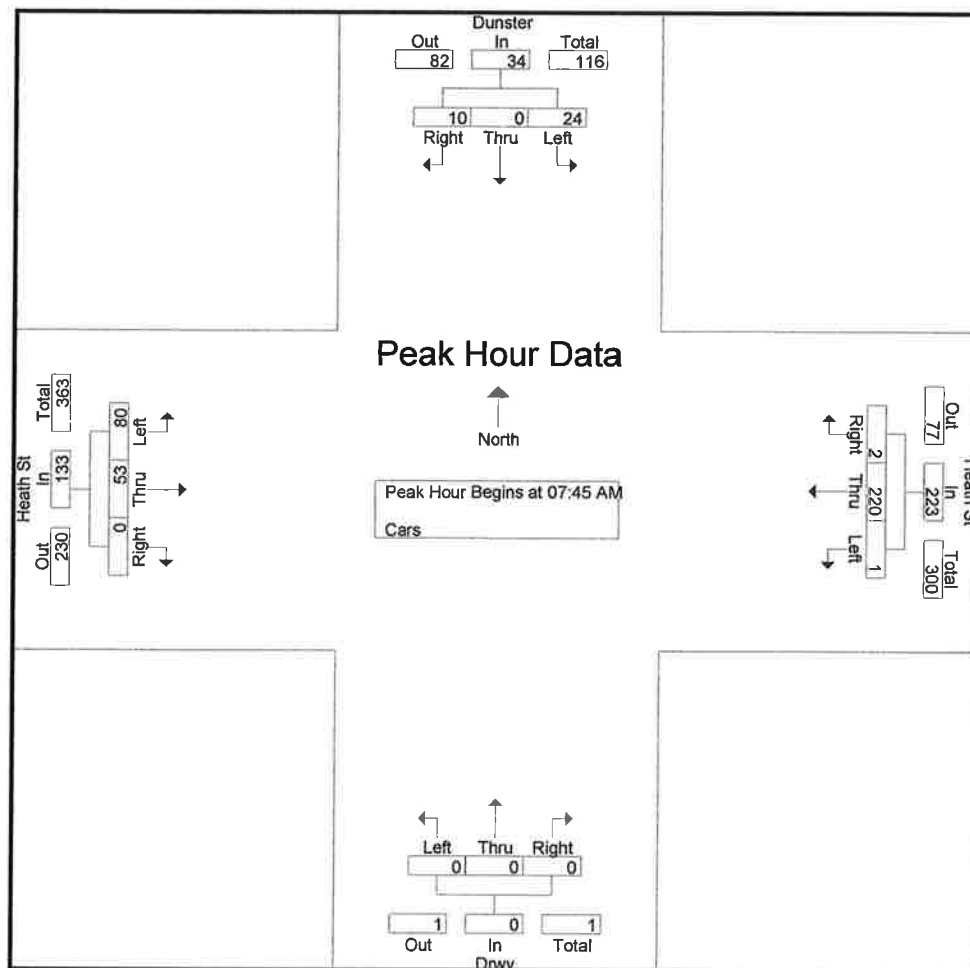
## Groups Printed- Cars

Start Time	Dunster From North			Heath St From East			Drwy From South			Heath St From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:00 AM	3	0	1	0	27	1	0	0	0	29	8	0	69
07:15 AM	1	0	0	0	42	1	0	0	0	29	7	0	80
07:30 AM	3	0	3	0	55	6	0	0	0	21	12	0	100
07:45 AM	5	0	1	0	60	0	0	0	0	29	11	0	106
Total	12	0	5	0	184	8	0	0	0	108	38	0	355
08:00 AM	6	0	3	0	51	0	0	0	0	11	13	0	84
08:15 AM	5	0	2	1	61	1	0	0	0	19	8	0	97
08:30 AM	8	0	4	0	48	1	0	0	0	21	21	0	103
08:45 AM	6	0	1	0	49	4	0	0	0	19	11	0	90
Total	25	0	10	1	209	6	0	0	0	70	53	0	374
09:00 AM	7	0	0	0	40	1	0	0	0	27	10	0	85
09:15 AM	6	0	4	0	30	0	0	0	0	32	2	0	74
Grand Total	50	0	19	1	463	15	0	0	0	237	103	0	888
Apprch %	72.5	0	27.5	0.2	96.7	3.1	0	0	0	69.7	30.3	0	
Total %	5.6	0	2.1	0.1	52.1	1.7	0	0	0	26.7	11.6	0	

N/S Street : Dunster Road / Driveway  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N002  
Site Code : 73820002  
Start Date : 11/17/2016  
Page No : 5

	Dunster From North				Heath St From East				Drwy From South				Heath St 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 09:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	5	0	1	6	0	60	0	60	0	0	0	0	29	11	0	40	106
08:00 AM	6	0	3	9	0	51	0	51	0	0	0	0	11	13	0	24	84
08:15 AM	5	0	2	7	1	61	1	63	0	0	0	0	19	8	0	27	97
08:30 AM	8	0	4	12	0	48	1	49	0	0	0	0	21	21	0	42	103
Total Volume	24	0	10	34	1	220	2	223	0	0	0	0	80	53	0	133	390
% App. Total	70.6	0	29.4		0.4	98.7	0.9		0	0	0		60.2	39.8	0		
PHF	.750	.000	.625	.708	.250	.902	.500	.885	.000	.000	.000	.000	.690	.631	.000	.792	.920



N/S Street : Dunster Road / Driveway  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

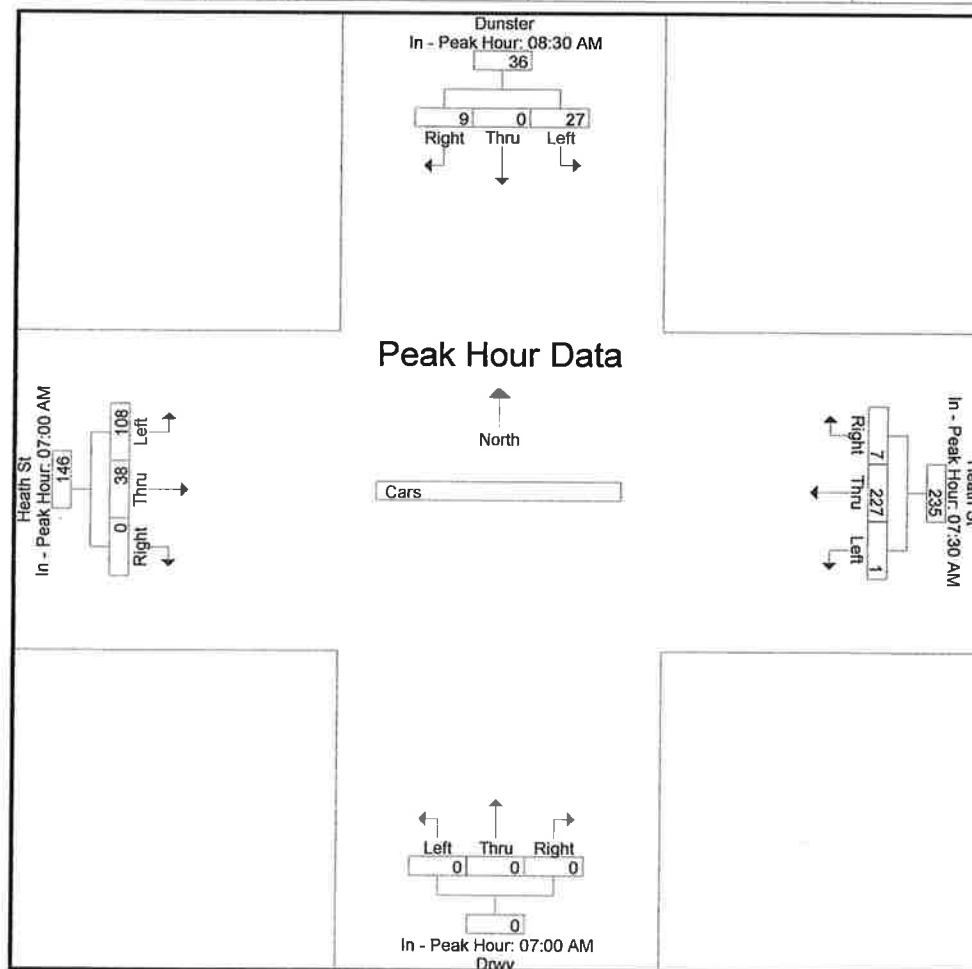
File Name : 7382N002  
Site Code : 73820002  
Start Date : 11/17/2016  
Page No : 6

	Dunster From North				Heath St From East				Drwy From South				Heath St 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 09:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:30 AM				07:30 AM				07:00 AM				07:00 AM				
+0 mins.	8	0	4	12	0	55	6	61	0	0	0	0	29	8	0	37	
+15 mins.	6	0	1	7	0	60	0	60	0	0	0	0	29	7	0	36	
+30 mins.	7	0	0	7	0	51	0	51	0	0	0	0	21	12	0	33	
+45 mins.	6	0	4	10	1	61	1	63	0	0	0	0	29	11	0	40	
Total Volume	27	0	9	36	1	227	7	235	0	0	0	0	108	38	0	146	
% App. Total	75	0	25		0.4	96.6	3		0	0	0		74	26	0		
PHF	.844	.000	.563	.750	.250	.930	.292	.933	.000	.000	.000	.000	.931	.792	.000	.913	



**Accurate Counts**  
978-664-2565

N/S Street : Dunster Road / Driveway  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N002  
Site Code : 73820002  
Start Date : 11/17/2016  
Page No : 7

Groups Printed- Trucks

Start Time	Dunster From North			Heath St From East			Drwy From South			Heath St From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	1
07:15 AM	0	0	0	0	1	0	0	0	0	0	1	0	2
07:30 AM	0	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	0
Total	0	0	0	0	1	0	0	0	0	1	1	0	3
08:00 AM	0	0	0	0	1	0	0	0	0	0	1	0	2
08:15 AM	0	0	0	0	2	0	0	0	0	0	0	0	2
08:30 AM	0	0	0	0	2	0	0	0	0	0	1	0	3
08:45 AM	0	0	0	0	2	0	0	0	0	0	0	0	2
Total	0	0	0	0	7	0	0	0	0	0	2	0	9
09:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
09:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
Grand Total	0	0	0	0	10	0	0	0	0	1	3	0	14
Apprch %	0	0	0	0	100	0	0	0	0	25	75	0	
Total %	0	0	0	0	71.4	0	0	0	0	7.1	21.4	0	

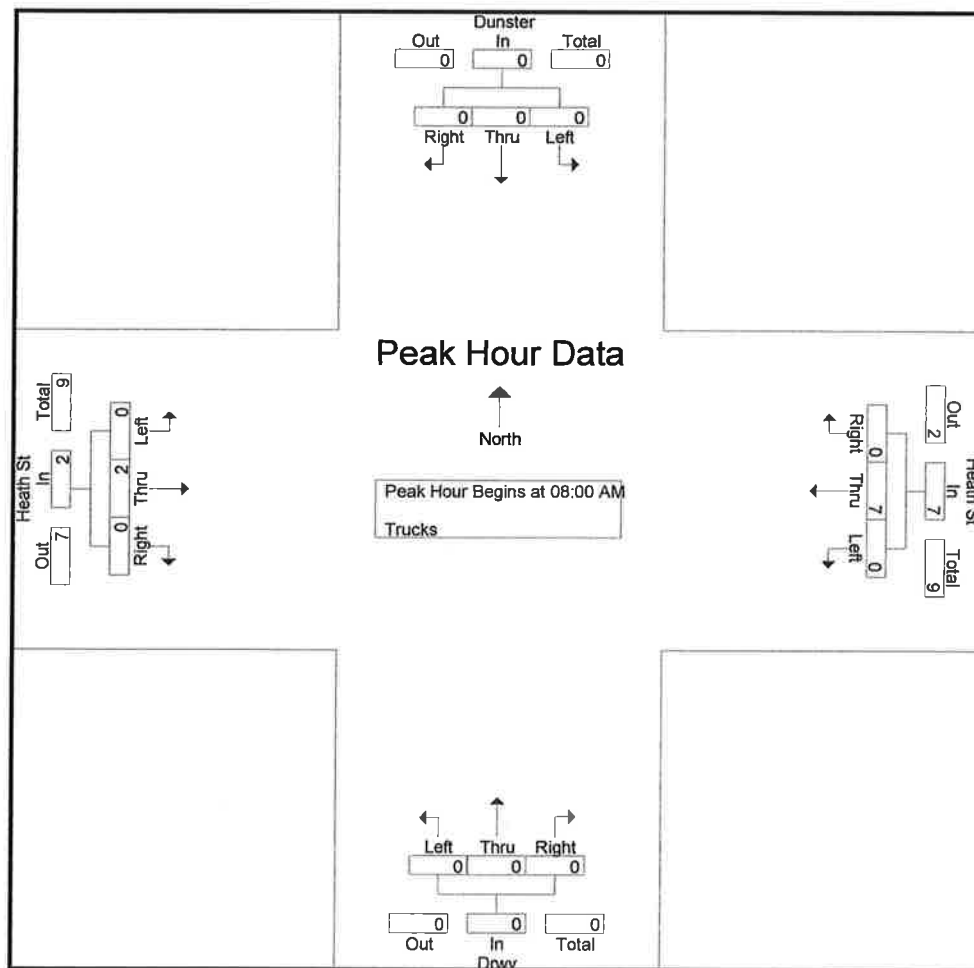
# Accurate Counts

978-664-2565

N/S Street : Dunster Road / Driveway  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 7382N002  
 Site Code : 73820002  
 Start Date : 11/17/2016  
 Page No : 8

	Dunster From North				Heath St From East				Drwy From South				Heath St 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 09:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
08:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
08:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
08:45 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
Total Volume	0	0	0	0	0	7	0	7	0	0	0	0	0	2	0	2	9
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.875	.000	.875	.000	.000	.000	.000	.000	.500	.000	.500	.750



N/S Street : Dunster Road / Driveway  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

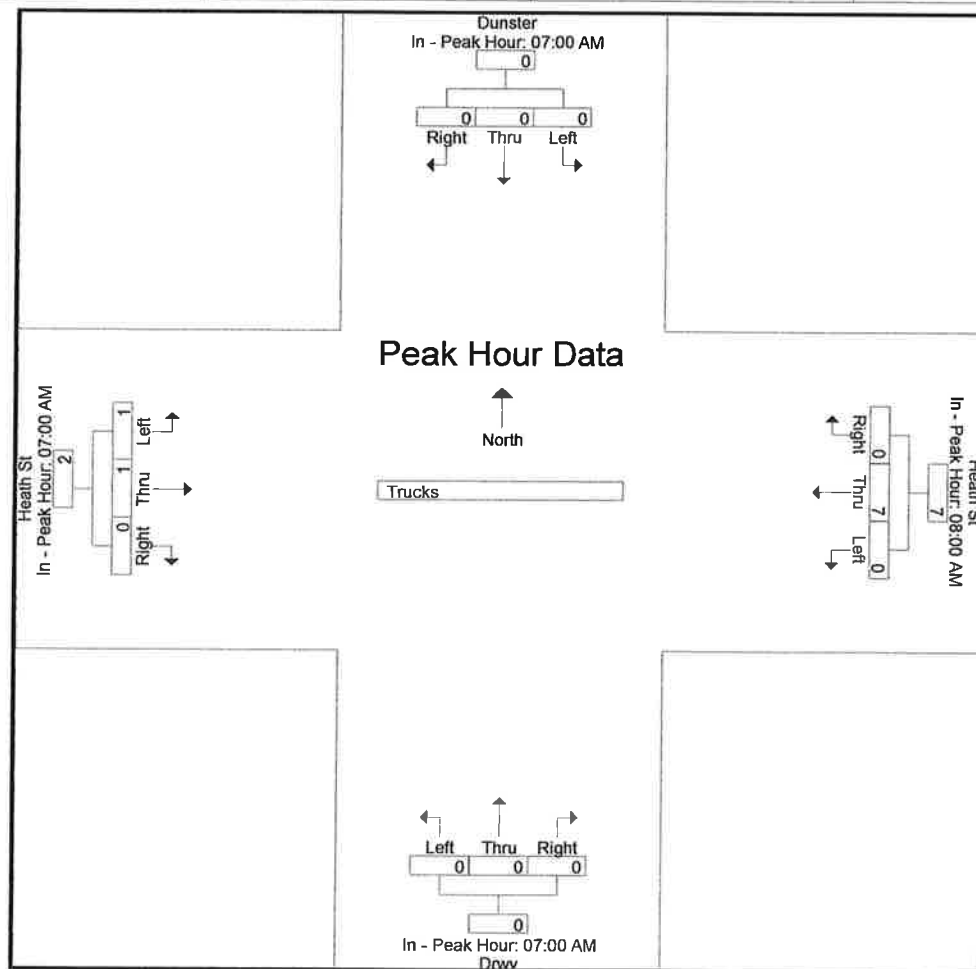
File Name : 7382N002  
Site Code : 73820002  
Start Date : 11/17/2016  
Page No : 9

	Dunster From North				Heath St From East				Drwy From South				Heath St 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 09:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				08:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	1	0	1	0	0	0	0	1	0	0	1
+15 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	7	0	7	0	0	0	0	1	1	0	2
% App. Total	0	0	0		0	100	0		0	0	0		50	50	0	
PHF	.000	.000	.000	.000	.000	.875	.000	.875	.000	.000	.000	.000	.250	.250	.000	.500



**Accurate Counts**  
978-664-2565

N/S Street : Dunster Road / Driveway  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N002  
Site Code : 73820002  
Start Date : 11/17/2016  
Page No : 10

Groups Printed- Bikes Peds

Start Time	Dunster From North				Heath St From East				Drwy From South				Heath St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
07:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
07:15 AM	0	0	0	4	0	1	0	1	0	0	0	1	0	0	0	0	6	1	7
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4
Total	0	0	0	9	0	1	0	1	0	0	0	1	0	0	0	0	11	1	12
08:00 AM	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
08:15 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	2
08:30 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	1	1	2
08:45 AM	0	0	0	3	0	1	0	0	0	0	0	0	1	0	0	0	3	2	5
Total	1	0	0	7	0	1	0	0	0	0	0	0	1	1	0	1	8	4	12
09:00 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
09:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	1	0	0	18	0	2	0	1	0	0	0	1	1	1	0	1	21	5	26
Apprch %	100	0	0		0	100	0		0	0	0		50	50	0				
Total %	20	0	0		0	40	0		0	0	0		20	20	0		80.8	19.2	



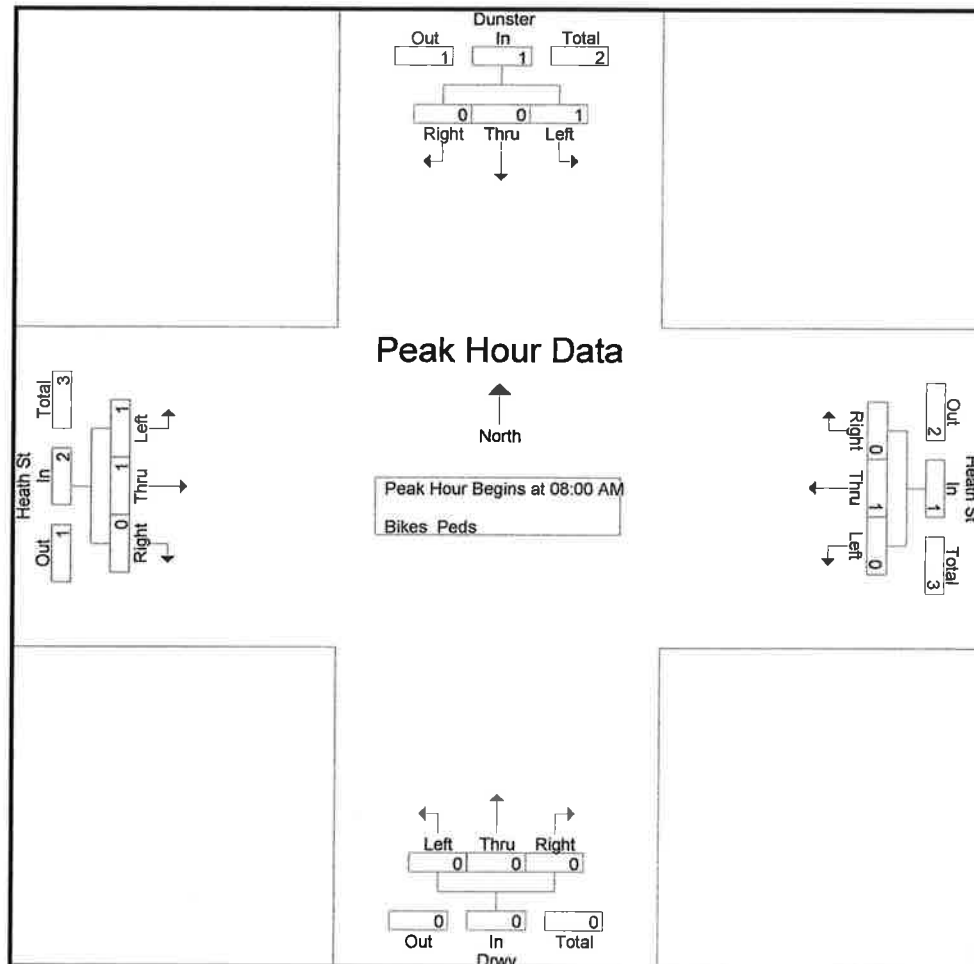
# Accurate Counts

978-664-2565

N/S Street : Dunster Road / Driveway  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 7382N002  
 Site Code : 73820002  
 Start Date : 11/17/2016  
 Page No : 11

	Dunster From North				Heath St From East				Drwy From South				Heath St 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 09:15 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	0	0	0	0	0	0	0
08:15 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	1	0	0	1	2
Total Volume	1	0	0	1	0	1	0	1	0	0	0	0	1	1	0	2	4
% App. Total	100	0	0		0	100	0		0	0	0		50	50	0		
PHF	.250	.000	.000	.250	.000	.250	.000	.250	.000	.000	.000	.000	.250	.250	.000	.500	.500



# Accurate Counts

978-664-2565

N/S Street : Dunster Road / Driveway  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

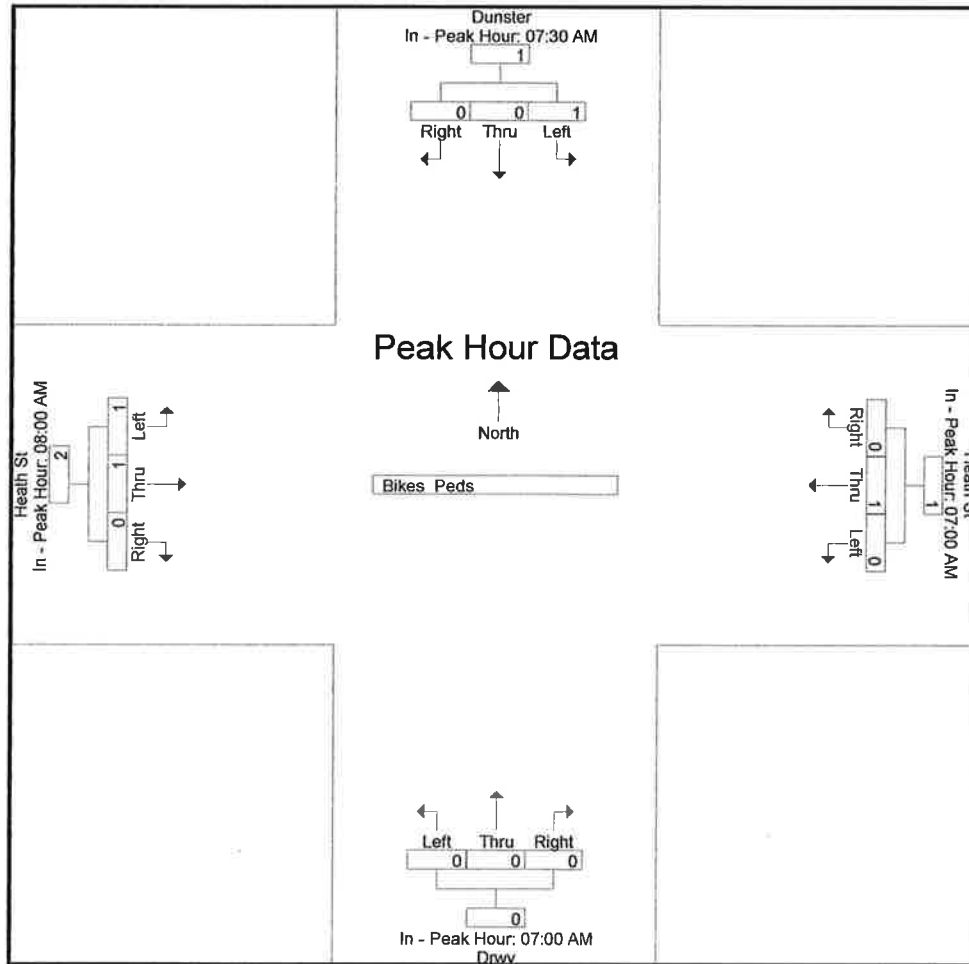
File Name : 7382N002  
 Site Code : 73820002  
 Start Date : 11/17/2016  
 Page No : 12

	Dunster From North				Heath St From East				Drwy From South				Heath St 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 09:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				07:00 AM				07:00 AM				08:00 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+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	1	0	1	
+45 mins.	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	
Total Volume	1	0	0	1	0	1	0	1	0	0	0	0	1	1	0	2	
% App. Total	100	0	0		0	100	0		0	0	0		50	50	0		
PHF	.250	.000	.000	.250	.000	.250	.000	.250	.000	.000	.000	.000	.250	.250	.000	.500	



# Accurate Counts

978-664-2565

N/S Street : Dunster Road / Driveway  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 7382N002  
 Site Code : 73820002  
 Start Date : 11/17/2016  
 Page No : 1

## Groups Printed- Cars - Trucks

Start Time	Dunster From North			Heath St From East			Drwy From South			Heath St From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
02:00 PM	3	0	1	0	58	3	0	0	0	22	7	0	94
02:15 PM	7	1	2	0	43	0	0	0	0	12	13	0	78
02:30 PM	4	0	8	1	49	1	0	0	0	19	11	0	93
02:45 PM	6	0	3	0	53	3	0	1	1	21	5	0	93
Total	20	1	14	1	203	7	0	1	1	74	36	0	358
03:00 PM	4	0	3	0	69	0	0	0	0	22	5	0	103
03:15 PM	10	0	2	0	78	0	0	0	0	29	15	0	134
03:30 PM	3	0	4	0	65	0	0	0	0	29	10	0	111
03:45 PM	5	0	2	0	65	5	0	0	0	18	12	0	107
Total	22	0	11	0	277	5	0	0	0	98	42	0	455
04:00 PM	4	0	2	0	79	0	0	0	0	27	14	0	126
04:15 PM	7	0	3	0	93	2	0	0	0	27	9	0	141
04:30 PM	6	0	3	1	84	1	0	0	0	21	12	0	128
04:45 PM	6	0	5	0	98	1	0	0	0	25	11	0	146
Total	23	0	13	1	354	4	0	0	0	100	46	0	541
Grand Total	65	1	38	2	834	16	0	1	1	272	124	0	1354
Apprch %	62.5	1	36.5	0.2	97.9	1.9	0	50	50	68.7	31.3	0	
Total %	4.8	0.1	2.8	0.1	61.6	1.2	0	0.1	0.1	20.1	9.2	0	
Cars	65	1	37	2	825	15	0	1	1	272	123	0	1342
% Cars	100	100	97.4	100	98.9	93.8	0	100	100	100	99.2	0	99.1
Trucks	0	0	1	0	9	1	0	0	0	0	1	0	12
% Trucks	0	0	2.6	0	1.1	6.2	0	0	0	0	0.8	0	0.9

N/S Street : Dunster Road / Driveway  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

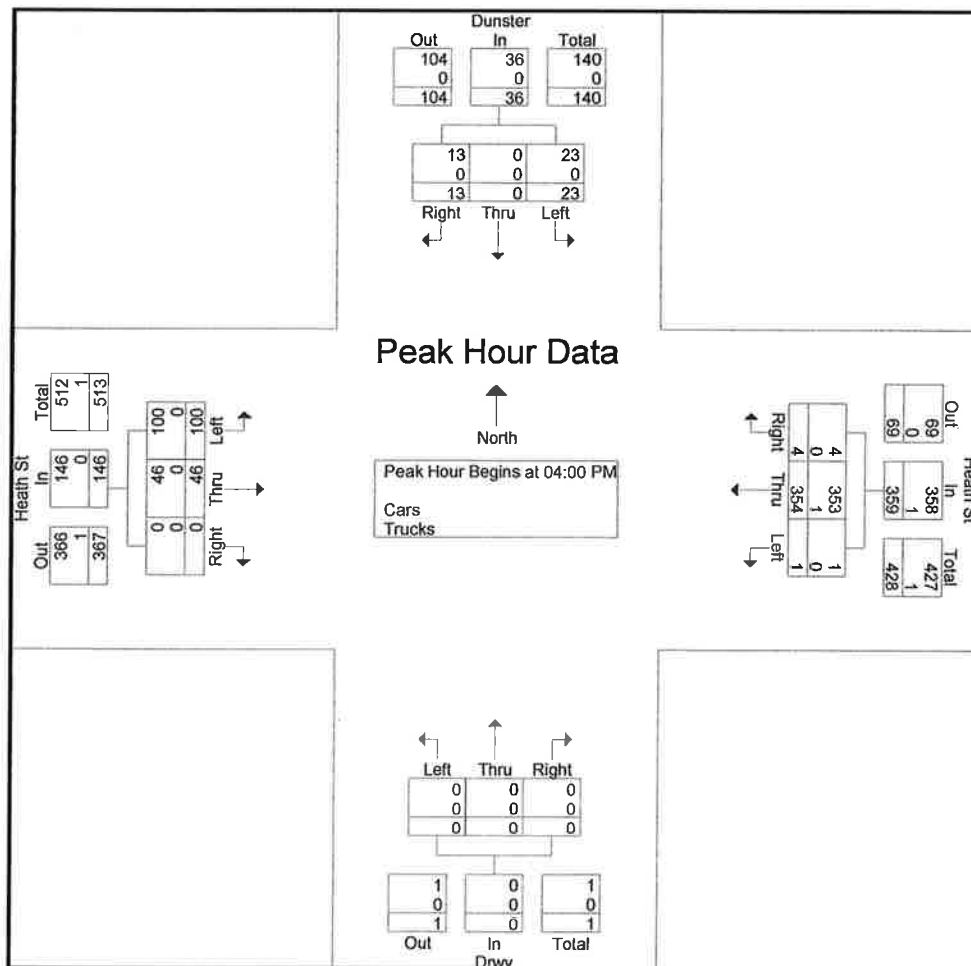
File Name : 7382N002  
Site Code : 73820002  
Start Date : 11/17/2016  
Page No : 2

	Dunster From North				Heath St From East				Drwy From South				Heath St 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 04:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:00 PM

04:00 PM	4	0	2	6	0	79	0	79	0	0	0	0	27	14	0	41	126
04:15 PM	7	0	3	10	0	93	2	95	0	0	0	0	27	9	0	36	141
04:30 PM	6	0	3	9	1	84	1	86	0	0	0	0	21	12	0	33	128
04:45 PM	6	0	5	11	0	98	1	99	0	0	0	0	25	11	0	36	146
Total Volume	23	0	13	36	1	354	4	359	0	0	0	0	100	46	0	146	541
% App. Total	63.9	0	36.1		0.3	98.6	1.1		0	0	0		68.5	31.5	0		
PHF	.821	.000	.650	.818	.250	.903	.500	.907	.000	.000	.000	.000	.926	.821	.000	.890	.926
Cars	23	0	13	36	1	353	4	358	0	0	0	0	100	46	0	146	540
% Cars	100	0	100	100	100	99.7	100	99.7	0	0	0	0	100	100	0	100	99.8
Trucks	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
% Trucks	0	0	0	0	0	0.3	0	0.3	0	0	0	0	0	0	0	0	0.2



N/S Street : Dunster Road / Driveway  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

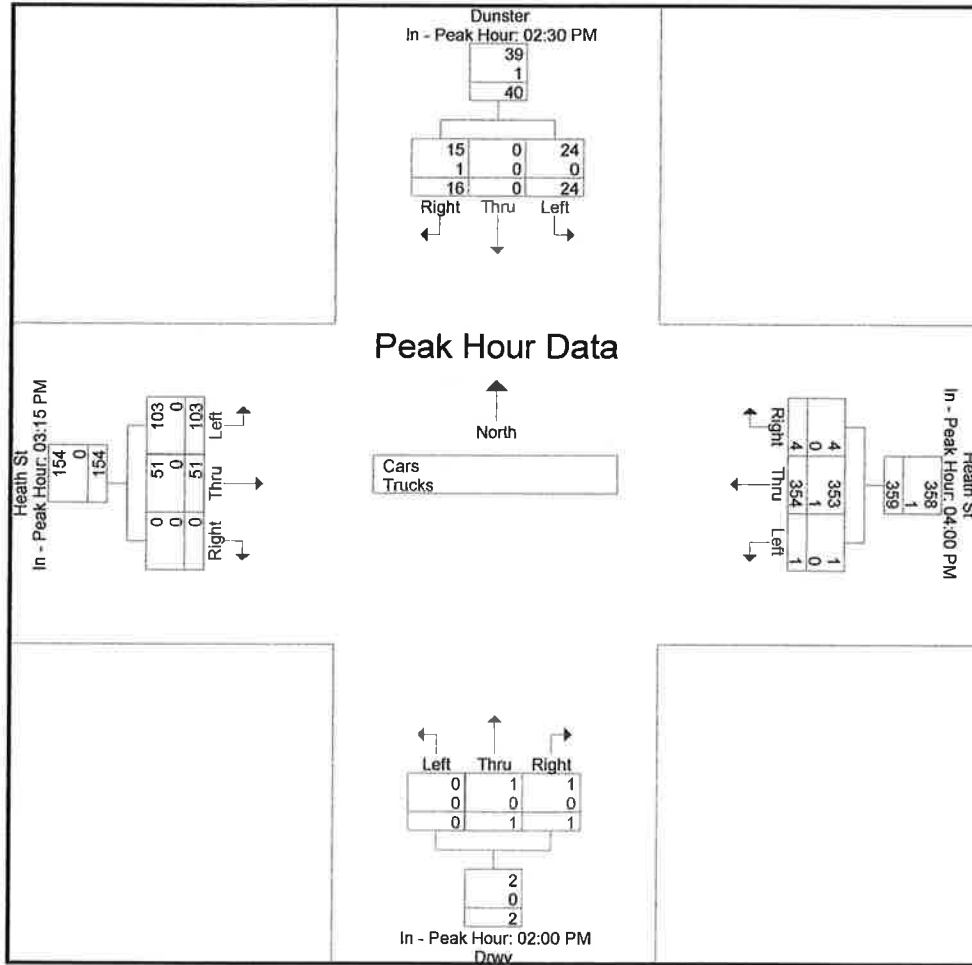
File Name : 7382N002  
Site Code : 73820002  
Start Date : 11/17/2016  
Page No : 3

	Dunster From North				Heath St From East				Drwy From South				Heath St 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:30 PM				04:00 PM				02:00 PM				03:15 PM				
+0 mins.	4	0	8	12	0	79	0	79	0	0	0	0	29	15	0	44	
+15 mins.	6	0	3	9	0	93	2	95	0	0	0	0	29	10	0	39	
+30 mins.	4	0	3	7	1	84	1	86	0	0	0	0	18	12	0	30	
+45 mins.	10	0	2	12	0	98	1	99	0	1	1	2	27	14	0	41	
Total Volume	24	0	16	40	1	354	4	359	0	1	1	2	103	51	0	154	
% App. Total	60	0	40		0.3	98.6	1.1		0	50	50		66.9	33.1	0		
PHF	.600	.000	.500	.833	.250	.903	.500	.907	.000	.250	.250	.250	.888	.850	.000	.875	
Cars	24	0	15	39	1	353	4	358	0	1	1	2	103	51	0	154	
% Cars	100	0	93.8	97.5	100	99.7	100	99.7	0	100	100	100	100	100	0	100	
Trucks	0	0	1	1	0	1	0	1	0	0	0	0	0	0	0	0	
% Trucks	0	0	6.2	2.5	0	0.3	0	0.3	0	0	0	0	0	0	0	0	



# Accurate Counts

978-664-2565

N/S Street : Dunster Road / Driveway  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 7382N002  
 Site Code : 73820002  
 Start Date : 11/17/2016  
 Page No : 4

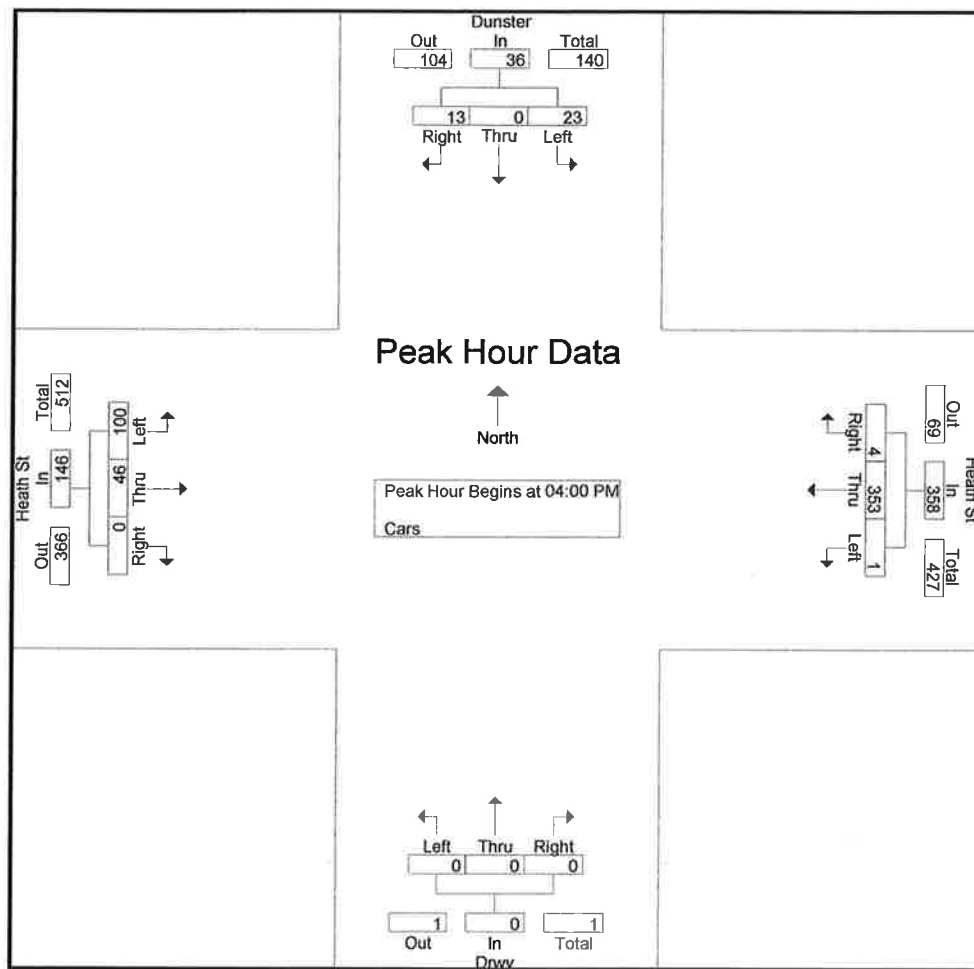
## Groups Printed- Cars

Start Time	Dunster From North			Heath St From East			Drwy From South			Heath St From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
02:00 PM	3	0	1	0	58	2	0	0	0	22	7	0	93
02:15 PM	7	1	2	0	42	0	0	0	0	12	12	0	76
02:30 PM	4	0	7	1	46	1	0	0	0	19	11	0	89
02:45 PM	6	0	3	0	53	3	0	1	1	21	5	0	93
Total	20	1	13	1	199	6	0	1	1	74	35	0	351
03:00 PM	4	0	3	0	69	0	0	0	0	22	5	0	103
03:15 PM	10	0	2	0	77	0	0	0	0	29	15	0	133
03:30 PM	3	0	4	0	64	0	0	0	0	29	10	0	110
03:45 PM	5	0	2	0	63	5	0	0	0	18	12	0	105
Total	22	0	11	0	273	5	0	0	0	98	42	0	451
04:00 PM	4	0	2	0	78	0	0	0	0	27	14	0	125
04:15 PM	7	0	3	0	93	2	0	0	0	27	9	0	141
04:30 PM	6	0	3	1	84	1	0	0	0	21	12	0	128
04:45 PM	6	0	5	0	98	1	0	0	0	25	11	0	146
Total	23	0	13	1	353	4	0	0	0	100	46	0	540
Grand Total	65	1	37	2	825	15	0	1	1	272	123	0	1342
Apprch %	63.1	1	35.9	0.2	98	1.8	0	50	50	68.9	31.1	0	
Total %	4.8	0.1	2.8	0.1	61.5	1.1	0	0.1	0.1	20.3	9.2	0	

N/S Street : Dunster Road / Driveway  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N002  
Site Code : 73820002  
Start Date : 11/17/2016  
Page No : 5

	Dunster From North				Heath St From East				Drwy From South				Heath St 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 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	4	0	2	6	0	78	0	78	0	0	0	0	27	14	0	41	125
04:15 PM	7	0	3	10	0	93	2	95	0	0	0	0	27	9	0	36	141
04:30 PM	6	0	3	9	1	84	1	86	0	0	0	0	21	12	0	33	128
04:45 PM	6	0	5	11	0	98	1	99	0	0	0	0	25	11	0	36	146
Total Volume	23	0	13	36	1	353	4	358	0	0	0	0	100	46	0	146	540
% App. Total	63.9	0	36.1		0.3	98.6	1.1		0	0	0		68.5	31.5	0		
PHF	.821	.000	.650	.818	.250	.901	.500	.904	.000	.000	.000	.000	.926	.821	.000	.890	.925



N/S Street : Dunster Road / Driveway  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

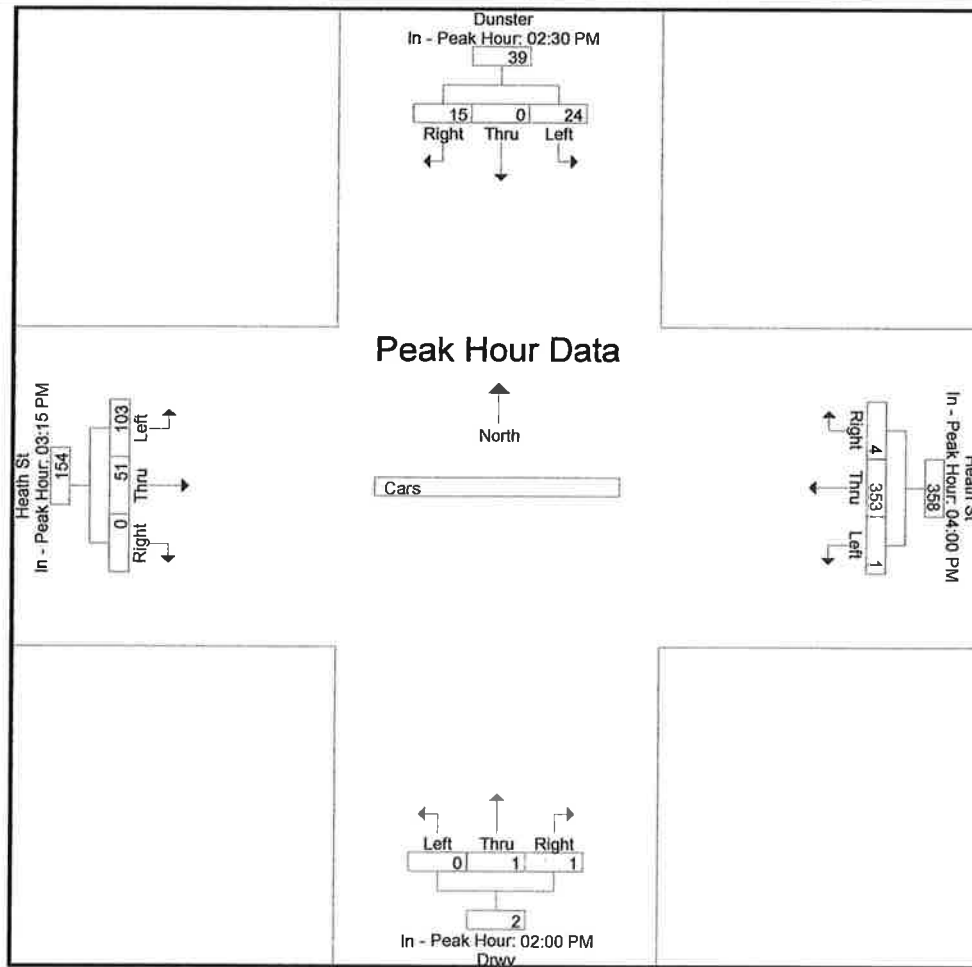
File Name : 7382N002  
Site Code : 73820002  
Start Date : 11/17/2016  
Page No : 6

	Dunster From North				Heath St From East				Drwy From South				Heath St 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:30 PM				04:00 PM				02:00 PM				03:15 PM				
+0 mins.	4	0	7	11	0	78	0	78	0	0	0	0	29	15	0	44	
+15 mins.	6	0	3	9	0	93	2	95	0	0	0	0	29	10	0	39	
+30 mins.	4	0	3	7	1	84	1	86	0	0	0	0	18	12	0	30	
+45 mins.	10	0	2	12	0	98	1	99	0	1	1	2	27	14	0	41	
Total Volume	24	0	15	39	1	353	4	358	0	1	1	2	103	51	0	154	
% App. Total	61.5	0	38.5		0.3	98.6	1.1		0	50	50		66.9	33.1	0		
PHF	.600	.000	.536	.813	.250	.901	.500	.904	.000	.250	.250	.250	.888	.850	.000	.875	





**Accurate Counts**  
978-664-2565

N/S Street : Dunster Road / Driveway  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N002  
Site Code : 73820002  
Start Date : 11/17/2016  
Page No : 7

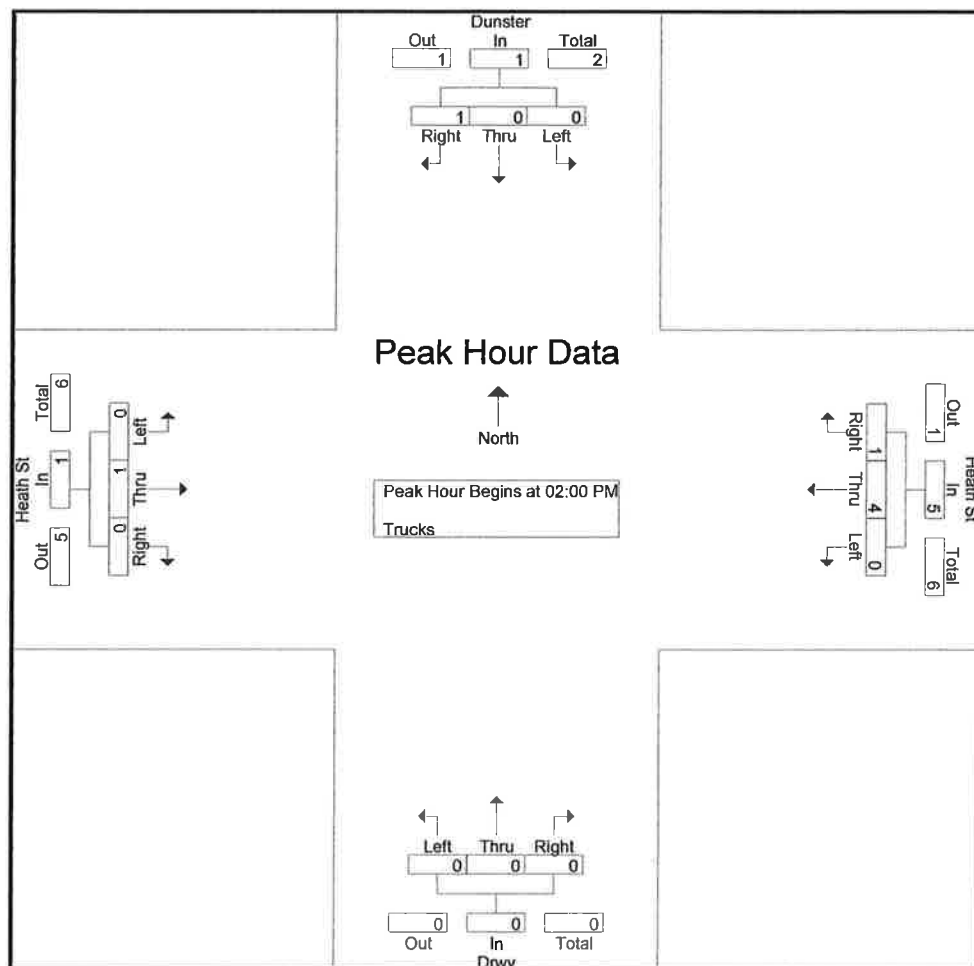
Groups Printed- Trucks

Start Time	Dunster From North			Heath St From East			Drwy From South			Heath St From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
02:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	1
02:15 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
02:30 PM	0	0	1	0	3	0	0	0	0	0	0	0	4
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	0	4	1	0	0	0	0	1	0	7
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
03:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
03:45 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
Total	0	0	0	0	4	0	0	0	0	0	0	0	4
04:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
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	1	0	0	0	0	0	0	0	1
Grand Total	0	0	1	0	9	1	0	0	0	0	1	0	12
Apprch %	0	0	100	0	90	10	0	0	0	0	100	0	
Total %	0	0	8.3	0	75	8.3	0	0	0	0	8.3	0	

N/S Street : Dunster Road / Driveway  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N002  
Site Code : 73820002  
Start Date : 11/17/2016  
Page No : 8

	Dunster From North				Heath St From East				Drwy From South				Heath St 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 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 02:00 PM																	
02:00 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
02:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
02:30 PM	0	0	1	1	0	3	0	3	0	0	0	0	0	0	0	0	4
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	1	1	0	4	1	5	0	0	0	0	0	1	0	1	7
% App. Total	0	0	100		0	80	20		0	0	0		0	100	0		
PHF	.000	.000	.250	.250	.000	.333	.250	.417	.000	.000	.000	.000	.000	.250	.000	.250	.438



N/S Street : Dunster Road / Driveway  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

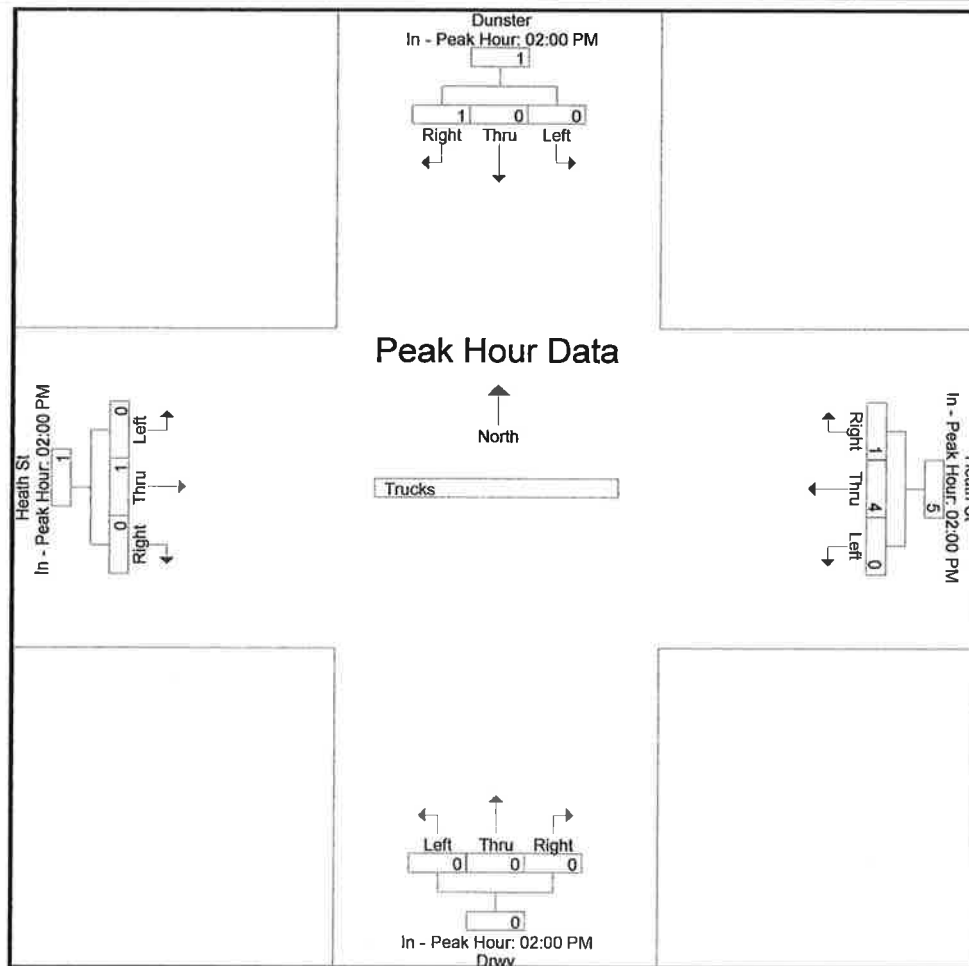
File Name : 7382N002  
Site Code : 73820002  
Start Date : 11/17/2016  
Page No : 9

	Dunster From North				Heath St From East				Drwy From South				Heath St 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:00 PM				02:00 PM				02:00 PM				02:00 PM				
+0 mins.	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	
+30 mins.	0	0	1	1	0	3	0	3	0	0	0	0	0	0	0	0	
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	0	1	1	0	4	1	5	0	0	0	0	0	1	0	1	
% App. Total	0	0	100		0	80	20		0	0	0		0	100	0		
PHF	.000	.000	.250	.250	.000	.333	.250	.417	.000	.000	.000	.000	.000	.250	.000	.250	



978-664-2565

File Name : 7382N002  
Site Code : 73820002  
Start Date : 11/17/2016  
Page No : 10

Groups Printed- Bikes Peds

[illegible]

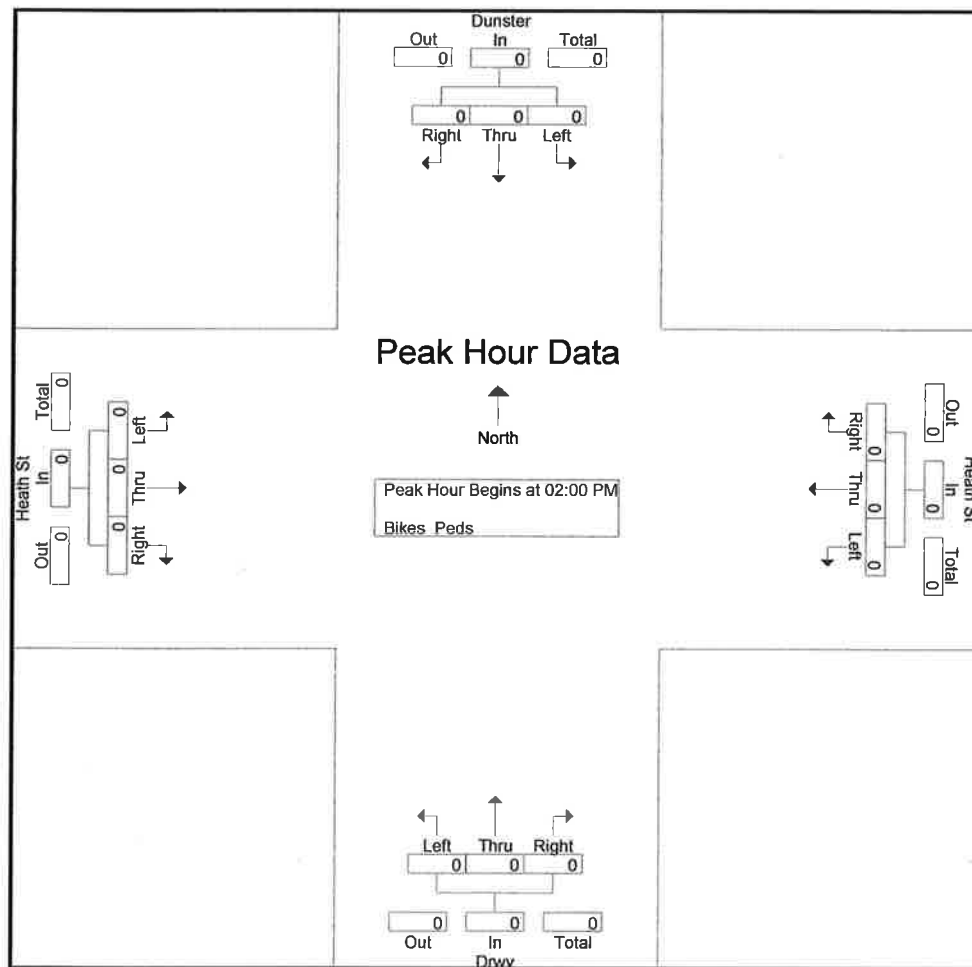
# Accurate Counts

978-664-2565

N/S Street : Dunster Road / Driveway  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 7382N002  
 Site Code : 73820002  
 Start Date : 11/17/2016  
 Page No : 11

	Dunster From North				Heath St From East				Drwy From South				Heath St 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 04:45 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	0	0	0	0	0	0	0
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	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000



# Accurate Counts

978-664-2565

N/S Street : Dunster Road / Driveway  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

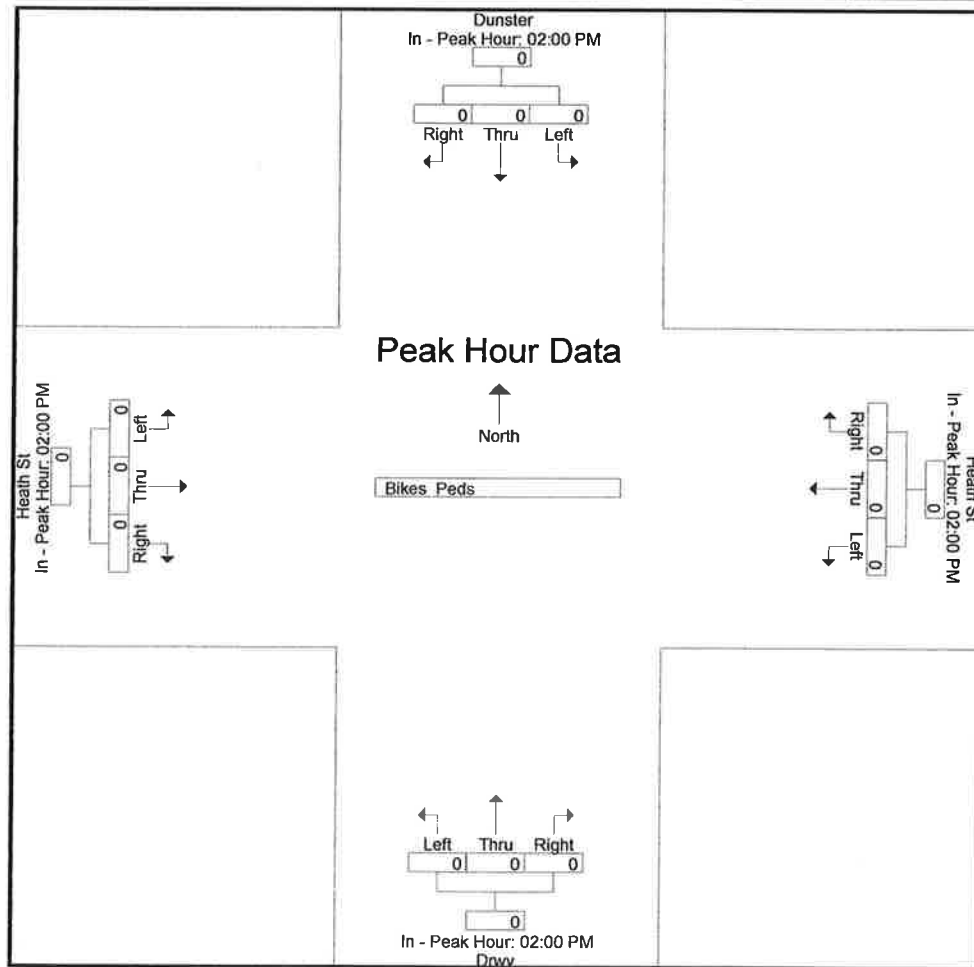
File Name : 7382N002  
 Site Code : 73820002  
 Start Date : 11/17/2016  
 Page No : 12

	Dunster From North				Heath St From East				Drwy From South				Heath St 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

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



**Accurate Counts**  
978-664-2565

N/S Street : Hammond Street  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N003  
Site Code : 73820003  
Start Date : 11/17/2016  
Page No : 1

**Groups Printed- Cars - Trucks**

Start Time	Hammond St From North			Heath St From East			Hammond St From South			Heath St From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:00 AM	5	65	5	8	6	9	5	102	28	0	0	0	233
07:15 AM	11	92	7	16	7	14	4	125	30	0	0	0	306
07:30 AM	7	103	7	22	4	30	0	111	23	0	0	0	307
07:45 AM	17	122	4	23	7	27	5	101	15	0	0	0	321
Total	40	382	23	69	24	80	14	439	96	0	0	0	1167
08:00 AM	11	99	8	23	5	16	4	117	23	0	0	0	306
08:15 AM	8	84	10	23	17	30	2	109	18	0	0	0	301
08:30 AM	12	87	5	24	7	23	5	109	27	0	0	0	299
08:45 AM	11	101	8	22	7	29	9	112	26	0	0	0	325
Total	42	371	31	92	36	98	20	447	94	0	0	0	1231
09:00 AM	7	77	9	13	7	29	8	106	32	0	0	0	288
09:15 AM	4	72	9	13	9	16	6	118	31	0	0	0	278
Grand Total	93	902	72	187	76	223	48	1110	253	0	0	0	2964
Apprch %	8.7	84.5	6.7	38.5	15.6	45.9	3.4	78.7	17.9	0	0	0	
Total %	3.1	30.4	2.4	6.3	2.6	7.5	1.6	37.4	8.5	0	0	0	
Cars	91	860	67	183	76	216	48	1083	250	0	0	0	2874
% Cars	97.8	95.3	93.1	97.9	100	96.9	100	97.6	98.8	0	0	0	97
Trucks	2	42	5	4	0	7	0	27	3	0	0	0	90
% Trucks	2.2	4.7	6.9	2.1	0	3.1	0	2.4	1.2	0	0	0	3

N/S Street : Hammond Street  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

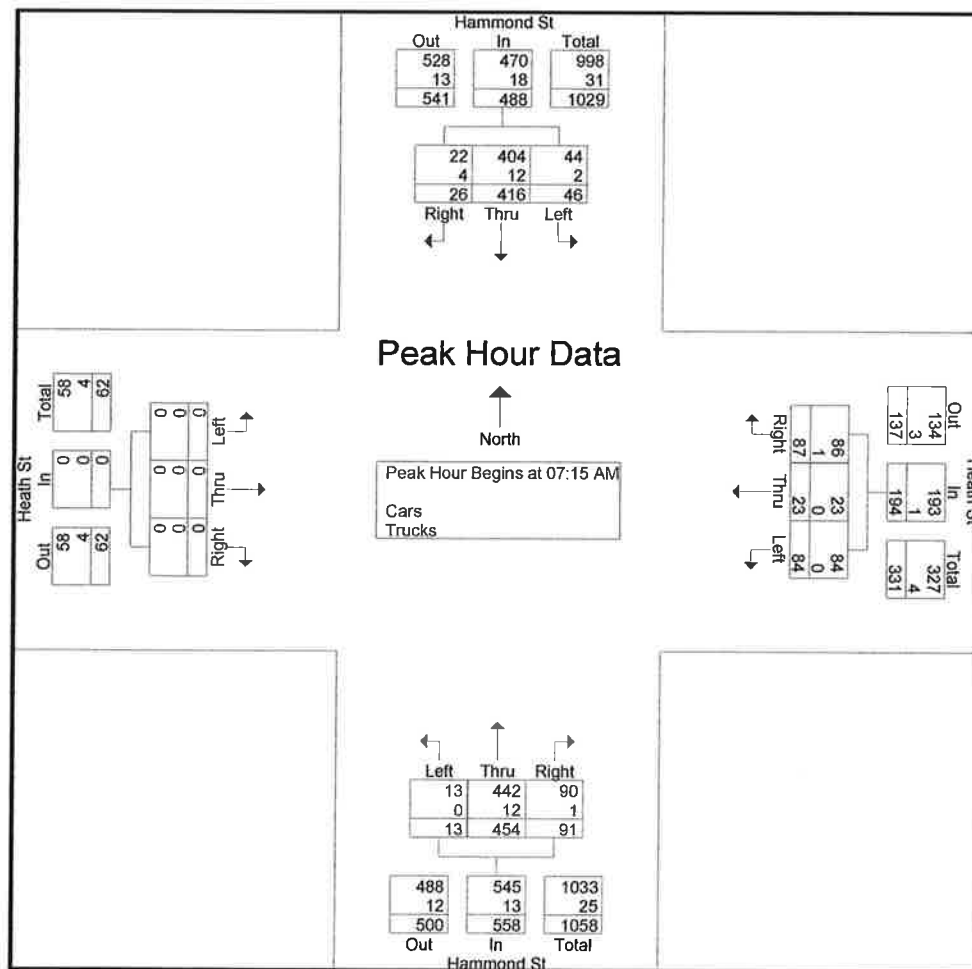
File Name : 7382N003  
Site Code : 73820003  
Start Date : 11/17/2016  
Page No : 2

	Hammond St From North				Heath St From East				Hammond St From South				Heath St 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 09:15 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:15 AM

07:15 AM	11	92	7	110	16	7	14	37	4	125	30	159	0	0	0	0	306
07:30 AM	7	103	7	117	22	4	30	56	0	111	23	134	0	0	0	0	307
07:45 AM	17	122	4	143	23	7	27	57	5	101	15	121	0	0	0	0	321
08:00 AM	11	99	8	118	23	5	16	44	4	117	23	144	0	0	0	0	306
Total Volume	46	416	26	488	84	23	87	194	13	454	91	558	0	0	0	0	1240
% App. Total	9.4	85.2	5.3		43.3	11.9	44.8		2.3	81.4	16.3		0	0	0		
PHF	.676	.852	.813	.853	.913	.821	.725	.851	.650	.908	.758	.877	.000	.000	.000	.000	.966
Cars	44	404	22	470	84	23	86	193	13	442	90	545	0	0	0	0	1208
% Cars	95.7	97.1	84.6	96.3	100	100	98.9	99.5	100	97.4	98.9	97.7	0	0	0	0	97.4
Trucks	2	12	4	18	0	0	1	1	0	12	1	13	0	0	0	0	32
% Trucks	4.3	2.9	15.4	3.7	0	0	1.1	0.5	0	2.6	1.1	2.3	0	0	0	0	2.6





N/S Street : Hammond Street  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

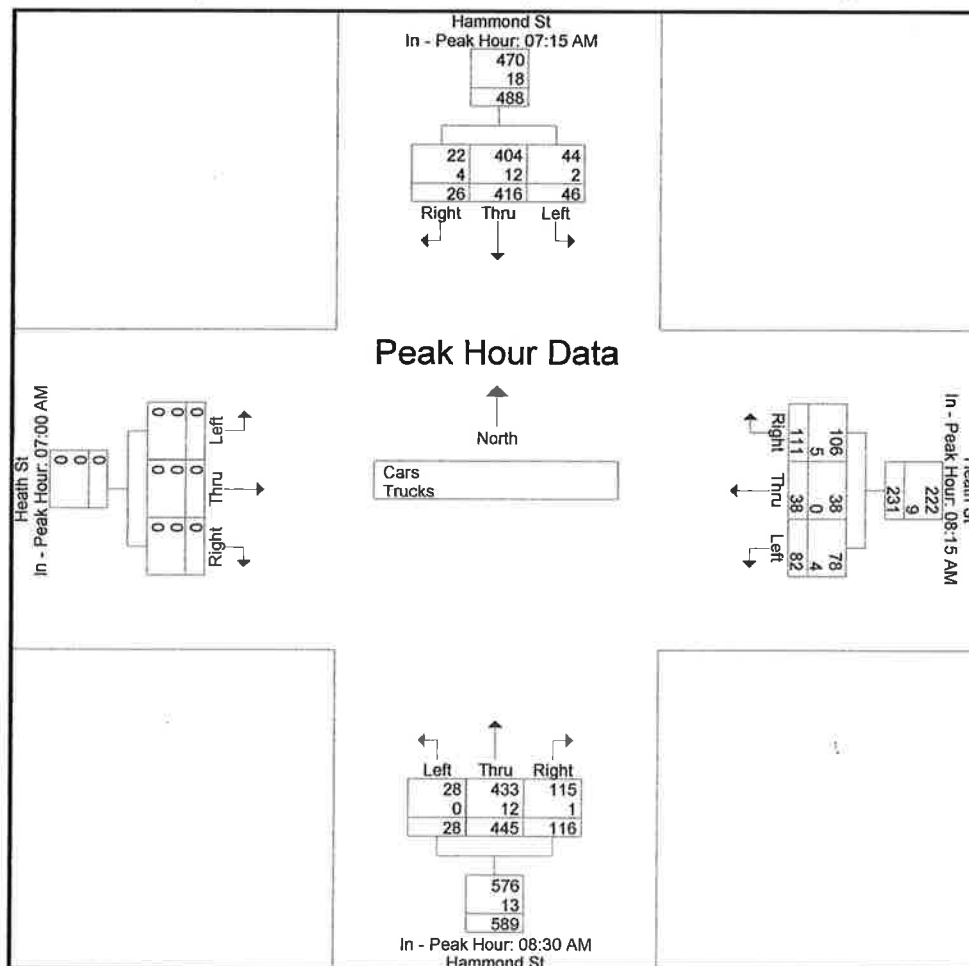
File Name : 7382N003  
Site Code : 73820003  
Start Date : 11/17/2016  
Page No : 3

	Hammond St From North				Heath St From East				Hammond St From South				Heath St 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 09:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				08:15 AM				08:30 AM				07:00 AM			
+0 mins.	11	92	7	110	23	17	30	70	5	109	27	141	0	0	0	0
+15 mins.	7	103	7	117	24	7	23	54	9	112	26	147	0	0	0	0
+30 mins.	17	122	4	143	22	7	29	58	8	106	32	146	0	0	0	0
+45 mins.	11	99	8	118	13	7	29	49	6	118	31	155	0	0	0	0
Total Volume	46	416	26	488	82	38	111	231	28	445	116	589	0	0	0	0
% App. Total	9.4	85.2	5.3		35.5	16.5	48.1		4.8	75.6	19.7		0	0	0	
PHF	.676	.852	.813	.853	.854	.559	.925	.825	.778	.943	.906	.950	.000	.000	.000	.000
Cars	44	404	22	470	78	38	106	222	28	433	115	576	0	0	0	0
% Cars	95.7	97.1	84.6	96.3	95.1	100	95.5	96.1	100	97.3	99.1	97.8	0	0	0	0
Trucks	2	12	4	18	4	0	5	9	0	12	1	13	0	0	0	0
% Trucks	4.3	2.9	15.4	3.7	4.9	0	4.5	3.9	0	2.7	0.9	2.2	0	0	0	0



**Accurate Counts**  
978-664-2565

N/S Street : Hammond Street  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N003  
Site Code : 73820003  
Start Date : 11/17/2016  
Page No : 4

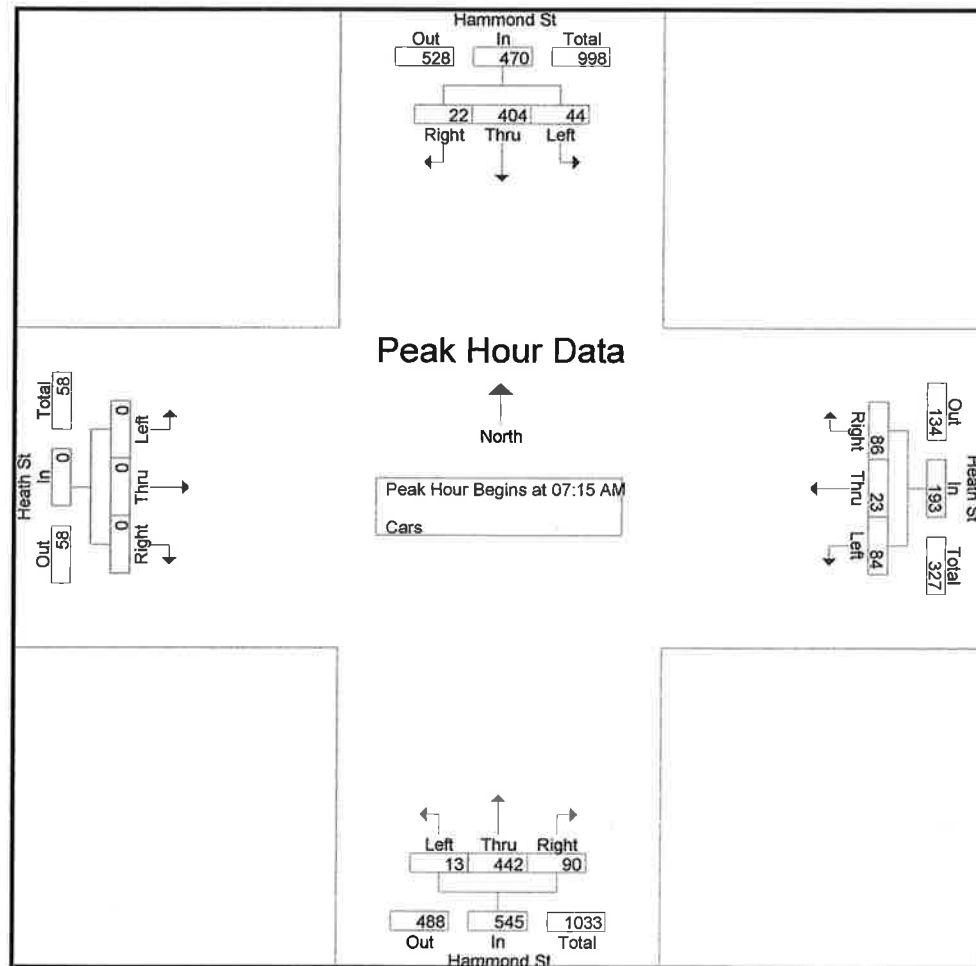
Groups Printed- Cars

Start Time	Hammond St From North			Heath St From East			Hammond St From South			Heath St From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:00 AM	5	61	5	8	6	9	5	101	27	0	0	0	227
07:15 AM	10	89	4	16	7	13	4	125	30	0	0	0	298
07:30 AM	7	99	6	22	4	30	0	108	23	0	0	0	299
07:45 AM	17	120	4	23	7	27	5	98	15	0	0	0	316
Total	39	369	19	69	24	79	14	432	95	0	0	0	1140
08:00 AM	10	96	8	23	5	16	4	111	22	0	0	0	295
08:15 AM	8	81	10	22	17	29	2	107	18	0	0	0	294
08:30 AM	12	83	5	23	7	21	5	107	26	0	0	0	289
08:45 AM	11	93	8	20	7	28	9	110	26	0	0	0	312
Total	41	353	31	88	36	94	20	435	92	0	0	0	1190
09:00 AM	7	71	9	13	7	28	8	106	32	0	0	0	281
09:15 AM	4	67	8	13	9	15	6	110	31	0	0	0	263
Grand Total	91	860	67	183	76	216	48	1083	250	0	0	0	2874
Apprch %	8.9	84.5	6.6	38.5	16	45.5	3.5	78.4	18.1	0	0	0	
Total %	3.2	29.9	2.3	6.4	2.6	7.5	1.7	37.7	8.7	0	0	0	

N/S Street : Hammond Street  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N003  
Site Code : 73820003  
Start Date : 11/17/2016  
Page No : 5

	Hammond St From North				Heath St From East				Hammond St From South				Heath St 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 09:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	10	89	4	103	16	7	13	36	4	125	30	159	0	0	0	0	298
07:30 AM	7	99	6	112	22	4	30	56	0	108	23	131	0	0	0	0	299
07:45 AM	17	120	4	141	23	7	27	57	5	98	15	118	0	0	0	0	316
08:00 AM	10	96	8	114	23	5	16	44	4	111	22	137	0	0	0	0	295
Total Volume	44	404	22	470	84	23	86	193	13	442	90	545	0	0	0	0	1208
% App. Total	9.4	86	4.7		43.5	11.9	44.6		2.4	81.1	16.5		0	0	0		
PHF	.647	.842	.688	.833	.913	.821	.717	.846	.650	.884	.750	.857	.000	.000	.000	.000	.956



N/S Street : Hammond Street  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

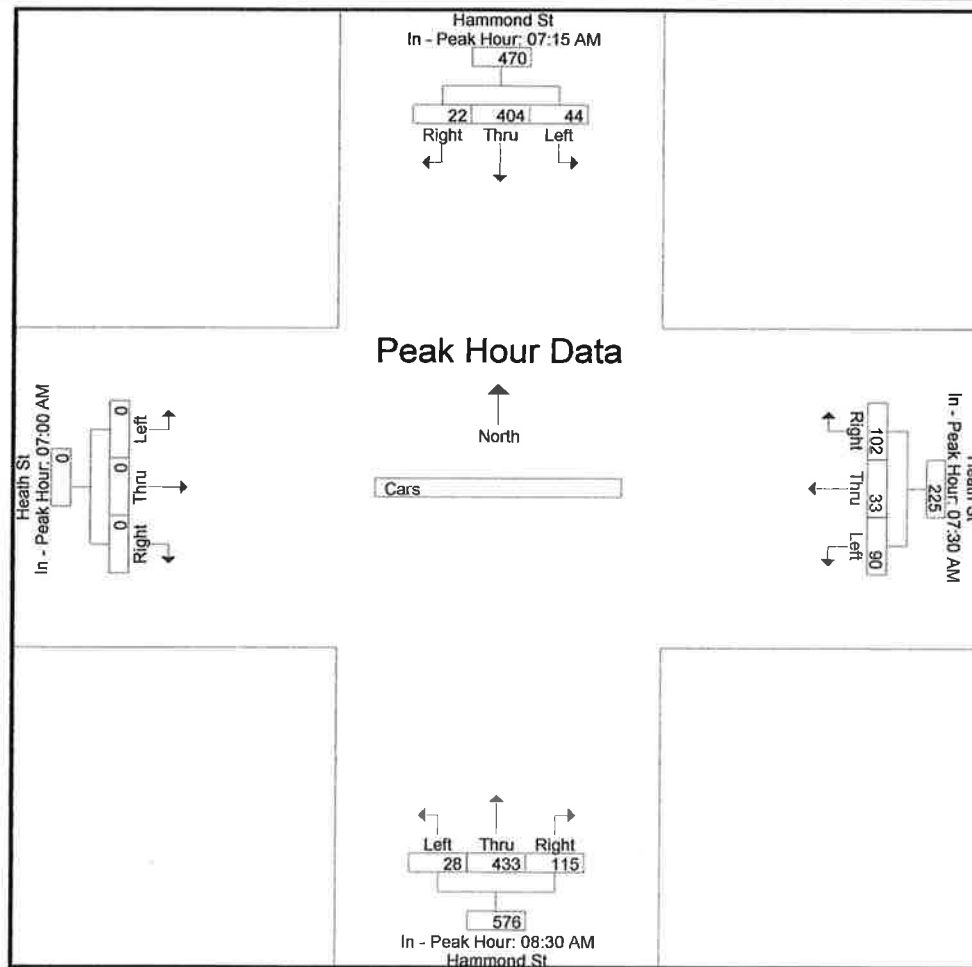
File Name : 7382N003  
Site Code : 73820003  
Start Date : 11/17/2016  
Page No : 6

	Hammond St From North				Heath St From East				Hammond St From South				Heath St 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 09:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:30 AM				08:30 AM				07:00 AM			
+0 mins.	10	89	4	103	22	4	30	56	5	107	26	138	0	0	0	0
+15 mins.	7	99	6	112	23	7	27	57	9	110	26	145	0	0	0	0
+30 mins.	17	120	4	141	23	5	16	44	8	106	32	146	0	0	0	0
+45 mins.	10	96	8	114	22	17	29	68	6	110	31	147	0	0	0	0
Total Volume	44	404	22	470	90	33	102	225	28	433	115	576	0	0	0	0
% App. Total	9.4	86	4.7		40	14.7	45.3		4.9	75.2	20		0	0	0	
PHF	.647	.842	.688	.833	.978	.485	.850	.827	.778	.984	.898	.980	.000	.000	.000	.000



N/S Street : Hammond Street  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N003  
Site Code : 73820003  
Start Date : 11/17/2016  
Page No : 7

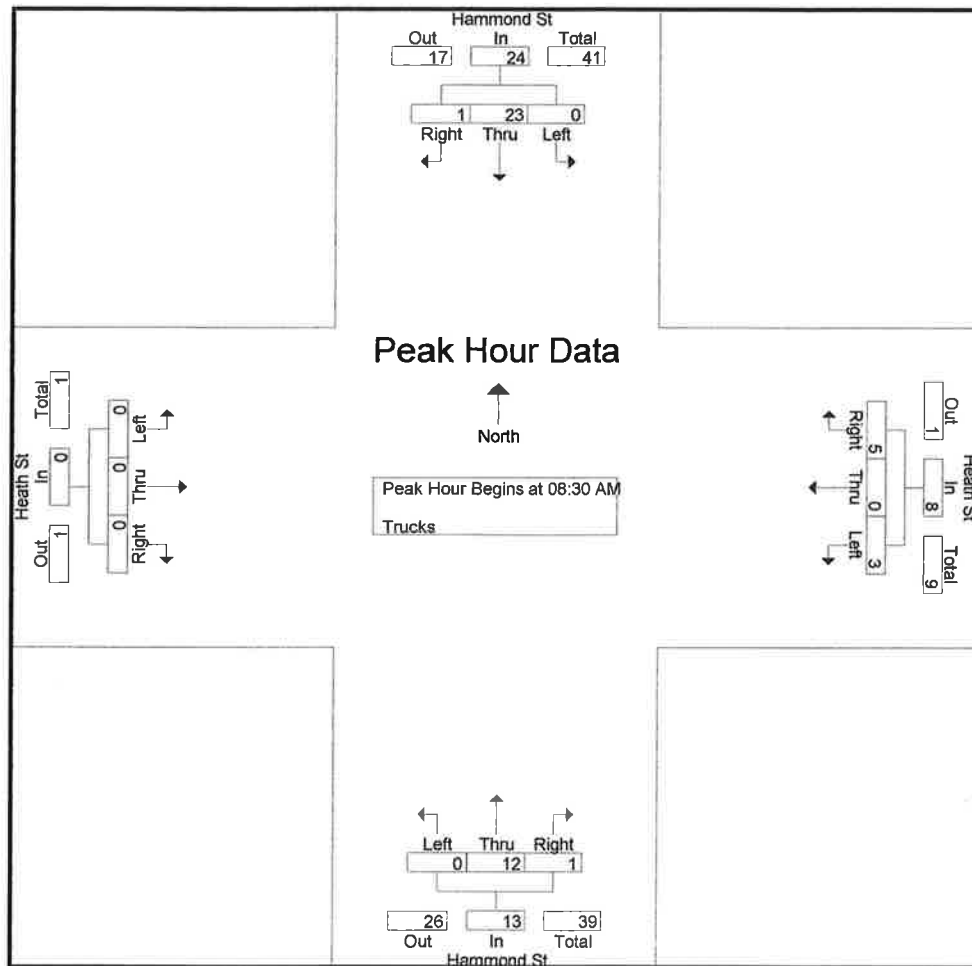
Groups Printed- Trucks

Start Time	Hammond St From North			Heath St From East			Hammond St From South			Heath St From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:00 AM	0	4	0	0	0	0	0	1	1	0	0	0	6
07:15 AM	1	3	3	0	0	1	0	0	0	0	0	0	8
07:30 AM	0	4	1	0	0	0	0	3	0	0	0	0	8
07:45 AM	0	2	0	0	0	0	0	3	0	0	0	0	5
Total	1	13	4	0	0	1	0	7	1	0	0	0	27
08:00 AM	1	3	0	0	0	0	0	6	1	0	0	0	11
08:15 AM	0	3	0	1	0	1	0	2	0	0	0	0	7
08:30 AM	0	4	0	1	0	2	0	2	1	0	0	0	10
08:45 AM	0	8	0	2	0	1	0	2	0	0	0	0	13
Total	1	18	0	4	0	4	0	12	2	0	0	0	41
09:00 AM	0	6	0	0	0	1	0	0	0	0	0	0	7
09:15 AM	0	5	1	0	0	1	0	8	0	0	0	0	15
Grand Total	2	42	5	4	0	7	0	27	3	0	0	0	90
Apprch %	4.1	85.7	10.2	36.4	0	63.6	0	90	10	0	0	0	
Total %	2.2	46.7	5.6	4.4	0	7.8	0	30	3.3	0	0	0	

N/S Street : Hammond Street  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N003  
Site Code : 73820003  
Start Date : 11/17/2016  
Page No : 8

	Hammond St From North				Heath St From East				Hammond St From South				Heath St 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 09:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:30 AM																	
08:30 AM	0	4	0	4	1	0	2	3	0	2	1	3	0	0	0	0	10
08:45 AM	0	8	0	8	2	0	1	3	0	2	0	2	0	0	0	0	13
09:00 AM	0	6	0	6	0	0	1	1	0	0	0	0	0	0	0	0	7
09:15 AM	0	5	1	6	0	0	1	1	0	8	0	8	0	0	0	0	15
Total Volume	0	23	1	24	3	0	5	8	0	12	1	13	0	0	0	0	45
% App. Total	0	95.8	4.2		37.5	0	62.5		0	92.3	7.7		0	0	0		
PHF	.000	.719	.250	.750	.375	.000	.625	.667	.000	.375	.250	.406	.000	.000	.000	.000	.750



N/S Street : Hammond Street  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

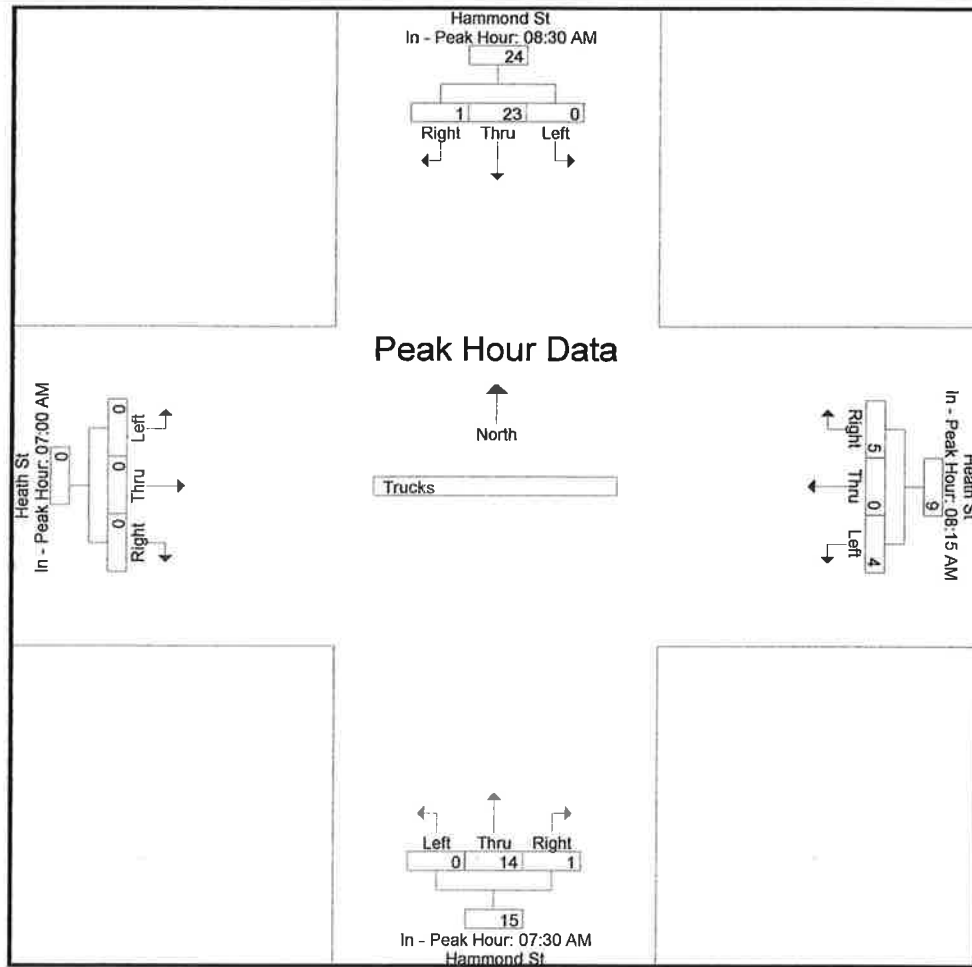
File Name : 7382N003  
Site Code : 73820003  
Start Date : 11/17/2016  
Page No : 9

	Hammond St From North				Heath St From East				Hammond St From South				Heath St 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 09:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:30 AM				08:15 AM				07:30 AM				07:00 AM			
+0 mins.	0	4	0	4	1	0	1	2	0	3	0	3	0	0	0	0
+15 mins.	0	8	0	8	1	0	2	3	0	3	0	3	0	0	0	0
+30 mins.	0	6	0	6	2	0	1	3	0	6	1	7	0	0	0	0
+45 mins.	0	5	1	6	0	0	1	1	0	2	0	2	0	0	0	0
Total Volume	0	23	1	24	4	0	5	9	0	14	1	15	0	0	0	0
% App. Total	0	95.8	4.2		44.4	0	55.6		0	93.3	6.7		0	0	0	
PHF	.000	.719	.250	.750	.500	.000	.625	.750	.000	.583	.250	.536	.000	.000	.000	.000



N/S Street : Hammond Street  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 7382N003  
 Site Code : 73820003  
 Start Date : 11/17/2016  
 Page No : 10

## Groups Printed- Bikes Peds

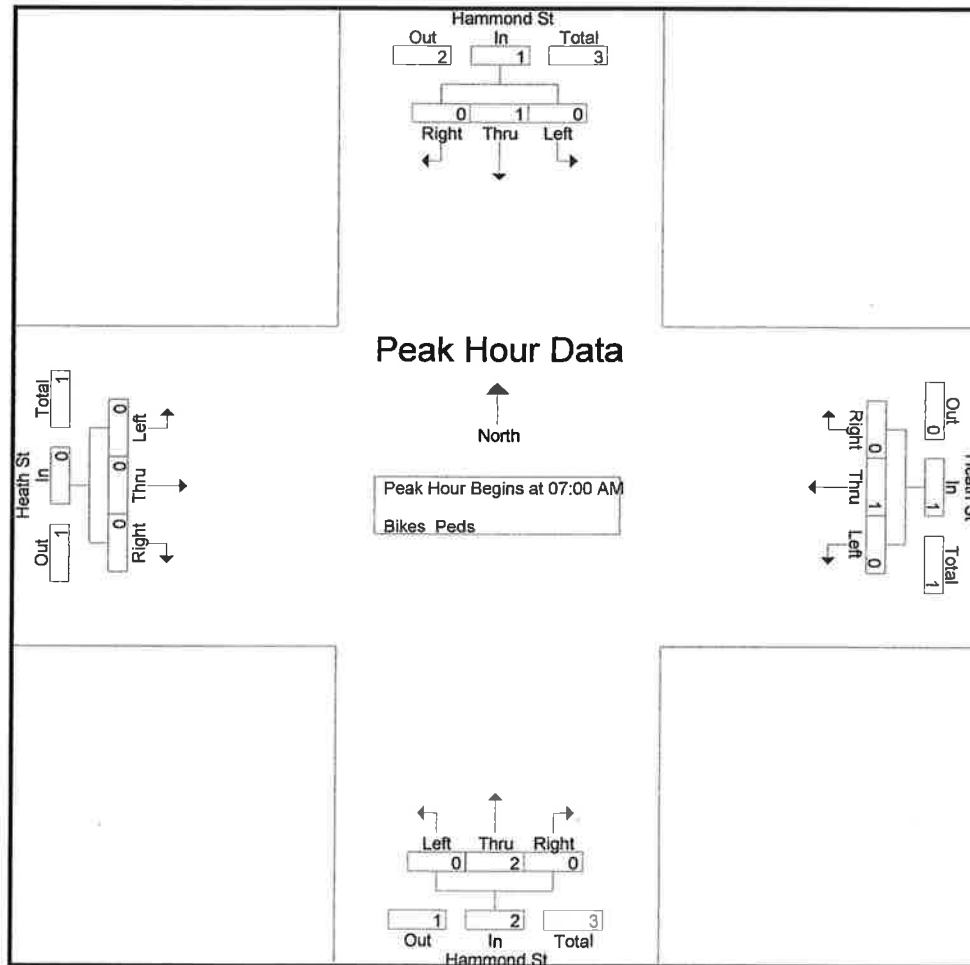
Start Time	Hammond St From North				Heath St From East				Hammond St From South				Heath St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
07:00 AM	0	0	0	1	0	0	0	4	0	1	0	1	0	0	0	0	6	1	7
07:15 AM	0	0	0	2	0	1	0	3	0	1	0	0	0	0	0	4	9	2	11
07:30 AM	0	1	0	4	0	0	0	0	0	0	0	1	0	0	0	0	5	1	6
07:45 AM	0	0	0	2	0	0	0	1	0	0	0	1	0	0	0	4	8	0	8
Total	0	1	0	9	0	1	0	8	0	2	0	3	0	0	0	8	28	4	32
08:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	3	0	3
08:15 AM	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	1	4	0	4
08:30 AM	0	0	0	5	0	0	0	1	0	0	0	0	0	0	0	0	6	0	6
08:45 AM	0	0	0	5	0	1	0	2	0	1	0	2	0	0	0	0	9	2	11
Total	0	0	0	12	0	1	0	5	0	1	0	2	0	0	0	3	22	2	24
09:00 AM	0	0	0	6	0	0	0	0	0	1	0	0	0	0	0	1	7	1	8
09:15 AM	0	0	0	9	0	0	0	0	0	1	0	0	0	0	0	1	10	1	11
Grand Total	0	1	0	36	0	2	0	13	0	5	0	5	0	0	0	13	67	8	75
Apprch %	0	100	0		0	100	0		0	100	0		0	0	0				
Total %	0	12.5	0		0	25	0		0	62.5	0		0	0	0		89.3	10.7	



N/S Street : Hammond Street  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N003  
Site Code : 73820003  
Start Date : 11/17/2016  
Page No : 11

	Hammond St From North				Heath St From East				Hammond St From South				Heath St 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 09:15 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	1	0	1	0	0	0	0	1
07:15 AM	0	0	0	0	0	1	0	1	0	1	0	1	0	0	0	0	2
07:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	1	0	1	0	1	0	2	0	2	0	0	0	0	4
% App. Total	0	100	0		0	100	0		0	100	0		0	0	0		
PHF	.000	.250	.000	.250	.000	.250	.000	.250	.000	.500	.000	.500	.000	.000	.000	.000	.500



# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

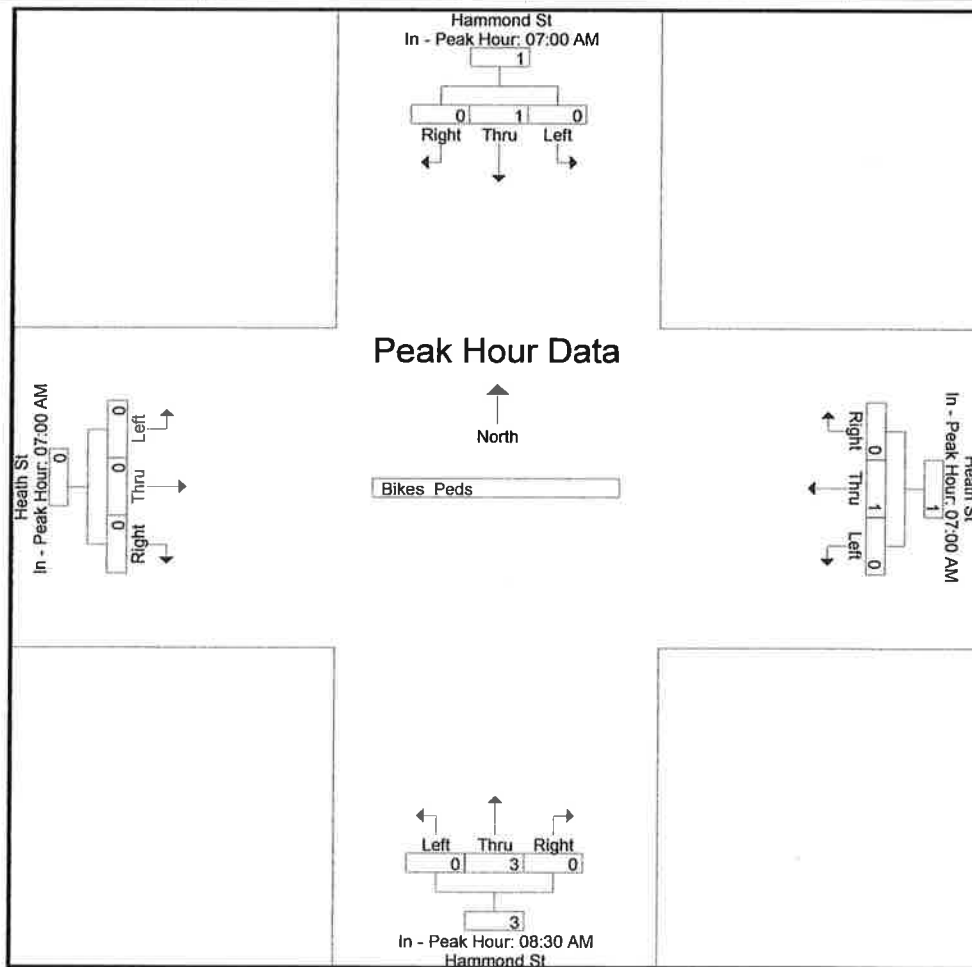
File Name : 7382N003  
 Site Code : 73820003  
 Start Date : 11/17/2016  
 Page No : 12

	Hammond St From North				Heath St From East				Hammond St From South				Heath St 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 09:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

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



N/S Street : Hammond Street  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 7382N003  
 Site Code : 73820003  
 Start Date : 11/17/2016  
 Page No : 1

## Groups Printed- Cars - Trucks

Start Time	Hammond St From North			Heath St From East			Hammond St From South			Heath St From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
02:00 PM	5	119	10	20	5	29	5	87	22	0	0	0	302
02:15 PM	14	116	8	26	4	20	1	89	16	0	0	0	294
02:30 PM	6	117	6	24	4	21	2	78	19	0	0	0	277
02:45 PM	7	126	12	33	8	20	4	113	25	0	0	0	348
Total	32	478	36	103	21	90	12	367	82	0	0	0	1221
03:00 PM	5	137	6	35	10	26	4	86	22	0	0	0	331
03:15 PM	11	143	9	50	8	21	2	105	33	0	0	0	382
03:30 PM	14	156	4	54	10	14	3	112	18	0	0	0	385
03:45 PM	7	131	11	35	8	22	6	93	25	0	0	0	338
Total	37	567	30	174	36	83	15	396	98	0	0	0	1436
04:00 PM	10	140	7	48	17	29	5	106	30	0	0	0	392
04:15 PM	9	129	7	44	14	31	3	95	28	0	0	0	360
04:30 PM	13	134	7	40	12	39	6	88	21	0	0	0	360
04:45 PM	6	172	7	41	18	41	5	85	30	0	0	0	405
Total	38	575	28	173	61	140	19	374	109	0	0	0	1517
Grand Total	107	1620	94	450	118	313	46	1137	289	0	0	0	4174
Apprch %	5.9	89	5.2	51.1	13.4	35.5	3.1	77.2	19.6	0	0	0	
Total %	2.6	38.8	2.3	10.8	2.8	7.5	1.1	27.2	6.9	0	0	0	
Cars	107	1597	94	446	117	307	46	1110	288	0	0	0	4112
% Cars	100	98.6	100	99.1	99.2	98.1	100	97.6	99.7	0	0	0	98.5
Trucks	0	23	0	4	1	6	0	27	1	0	0	0	62
% Trucks	0	1.4	0	0.9	0.8	1.9	0	2.4	0.3	0	0	0	1.5

N/S Street : Hammond Street  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

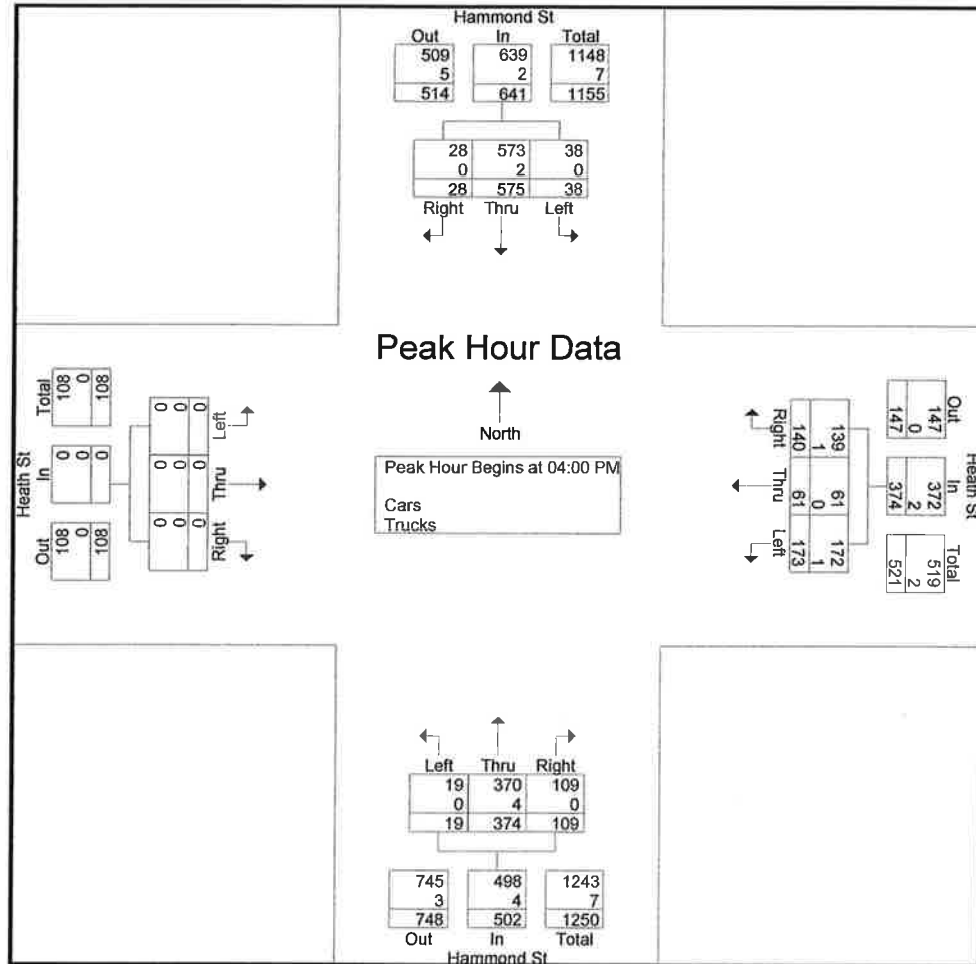
File Name : 7382N003  
Site Code : 73820003  
Start Date : 11/17/2016  
Page No : 2

	Hammond St From North				Heath St From East				Hammond St From South				Heath St 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 04:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:00 PM

04:00 PM	10	140	7	157	48	17	29	94	5	106	30	141	0	0	0	0	392
04:15 PM	9	129	7	145	44	14	31	89	3	95	28	126	0	0	0	0	360
04:30 PM	13	134	7	154	40	12	39	91	6	88	21	115	0	0	0	0	360
04:45 PM	6	172	7	185	41	18	41	100	5	85	30	120	0	0	0	0	405
Total Volume	38	575	28	641	173	61	140	374	19	374	109	502	0	0	0	0	1517
% App. Total	5.9	89.7	4.4		46.3	16.3	37.4		3.8	74.5	21.7		0	0	0		
PHF	.731	.836	1.00	.866	.901	.847	.854	.935	.792	.882	.908	.890	.000	.000	.000	.000	.936
Cars	38	573	28	639	172	61	139	372	19	370	109	498	0	0	0	0	1509
% Cars	100	99.7	100	99.7	99.4	100	99.3	99.5	100	98.9	100	99.2	0	0	0	0	99.5
Trucks	0	2	0	2	1	0	1	2	0	4	0	4	0	0	0	0	8
% Trucks	0	0.3	0	0.3	0.6	0	0.7	0.5	0	1.1	0	0.8	0	0	0	0	0.5



N/S Street : Hammond Street  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

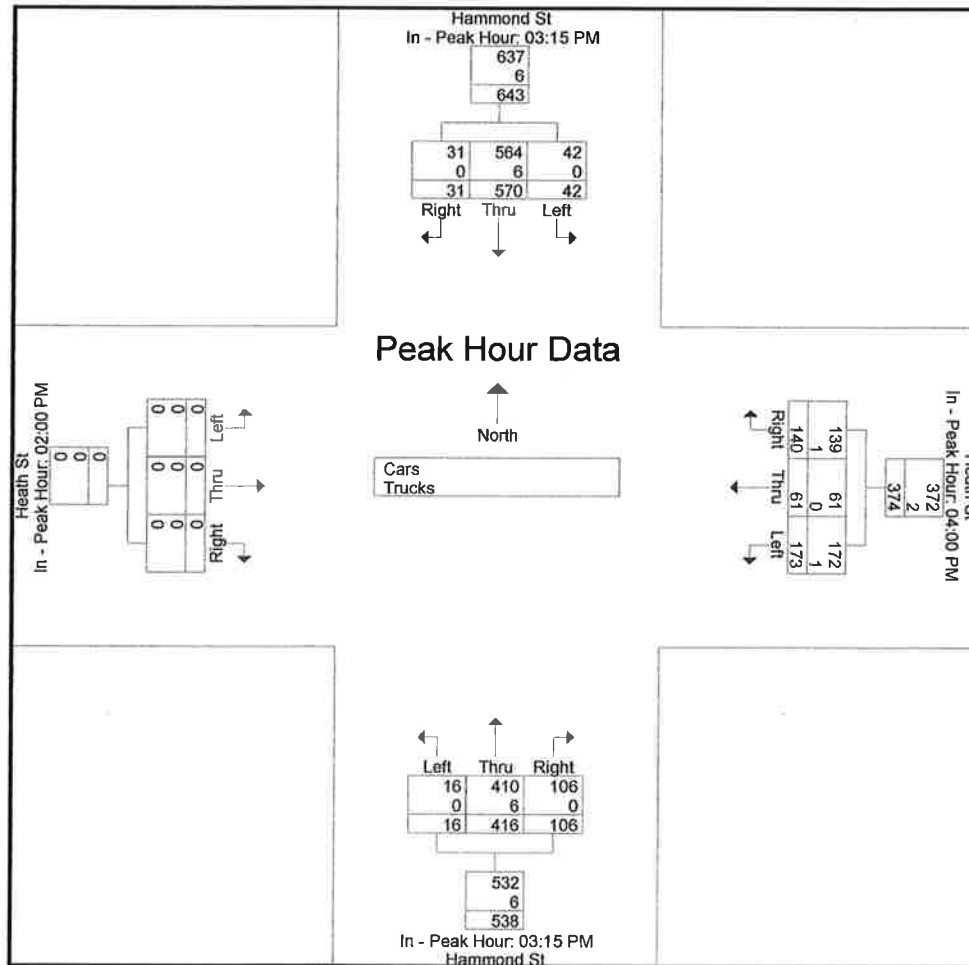
File Name : 7382N003  
Site Code : 73820003  
Start Date : 11/17/2016  
Page No : 3

	Hammond St From North				Heath St From East				Hammond St From South				Heath St 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	03:15 PM				04:00 PM				03:15 PM				02:00 PM			
+0 mins.	11	143	9	163	48	17	29	94	2	105	33	140	0	0	0	0
+15 mins.	14	156	4	174	44	14	31	89	3	112	18	133	0	0	0	0
+30 mins.	7	131	11	149	40	12	39	91	6	93	25	124	0	0	0	0
+45 mins.	10	140	7	157	41	18	41	100	5	106	30	141	0	0	0	0
Total Volume	42	570	31	643	173	61	140	374	16	416	106	538	0	0	0	0
% App. Total	6.5	88.6	4.8		46.3	16.3	37.4		3	77.3	19.7		0	0	0	
PHF	.750	.913	.705	.924	.901	.847	.854	.935	.667	.929	.803	.954	.000	.000	.000	.000
Cars	42	564	31	637	172	61	139	372	16	410	106	532	0	0	0	0
% Cars	100	98.9	100	99.1	99.4	100	99.3	99.5	100	98.6	100	98.9	0	0	0	0
Trucks	0	6	0	6	1	0	1	2	0	6	0	6	0	0	0	0
% Trucks	0	1.1	0	0.9	0.6	0	0.7	0.5	0	1.4	0	1.1	0	0	0	0



**Accurate Counts**  
978-664-2565

N/S Street : Hammond Street  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N003  
Site Code : 73820003  
Start Date : 11/17/2016  
Page No : 4

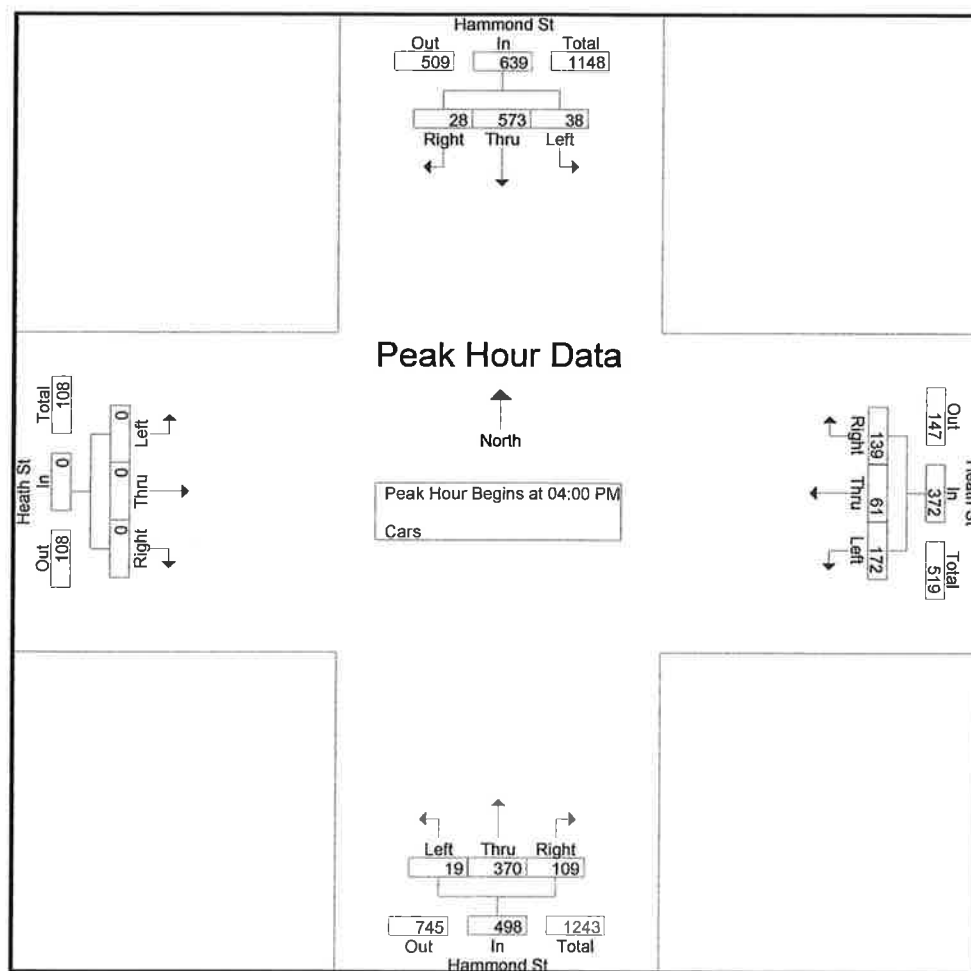
Groups Printed- Cars

Start Time	Hammond St From North			Heath St From East			Hammond St From South			Heath St From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
02:00 PM	5	117	10	20	5	29	5	83	22	0	0	0	296
02:15 PM	14	111	8	26	4	19	1	87	15	0	0	0	285
02:30 PM	6	112	6	24	4	19	2	72	19	0	0	0	264
02:45 PM	7	123	12	33	7	20	4	110	25	0	0	0	341
Total	32	463	36	103	20	87	12	352	81	0	0	0	1186
03:00 PM	5	136	6	35	10	25	4	82	22	0	0	0	325
03:15 PM	11	142	9	50	8	20	2	104	33	0	0	0	379
03:30 PM	14	154	4	53	10	14	3	111	18	0	0	0	381
03:45 PM	7	129	11	33	8	22	6	91	25	0	0	0	332
Total	37	561	30	171	36	81	15	388	98	0	0	0	1417
04:00 PM	10	139	7	47	17	29	5	104	30	0	0	0	388
04:15 PM	9	129	7	44	14	30	3	94	28	0	0	0	358
04:30 PM	13	133	7	40	12	39	6	87	21	0	0	0	358
04:45 PM	6	172	7	41	18	41	5	85	30	0	0	0	405
Total	38	573	28	172	61	139	19	370	109	0	0	0	1509
Grand Total	107	1597	94	446	117	307	46	1110	288	0	0	0	4112
Apprch %	6	88.8	5.2	51.3	13.4	35.3	3.2	76.9	19.9	0	0	0	
Total %	2.6	38.8	2.3	10.8	2.8	7.5	1.1	27	7	0	0	0	

N/S Street : Hammond Street  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N003  
Site Code : 73820003  
Start Date : 11/17/2016  
Page No : 5

	Hammond St From North				Heath St From East				Hammond St From South				Heath St 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 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	10	139	7	156	47	17	29	93	5	104	30	139	0	0	0	0	388
04:15 PM	9	129	7	145	44	14	30	88	3	94	28	125	0	0	0	0	358
04:30 PM	13	133	7	153	40	12	39	91	6	87	21	114	0	0	0	0	358
04:45 PM	6	172	7	185	41	18	41	100	5	85	30	120	0	0	0	0	405
Total Volume	38	573	28	639	172	61	139	372	19	370	109	498	0	0	0	0	1509
% App. Total	5.9	89.7	4.4		46.2	16.4	37.4		3.8	74.3	21.9		0	0	0		
PHF	.731	.833	1.00	.864	.915	.847	.848	.930	.792	.889	.908	.896	.000	.000	.000	.000	.931



N/S Street : Hammond Street  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

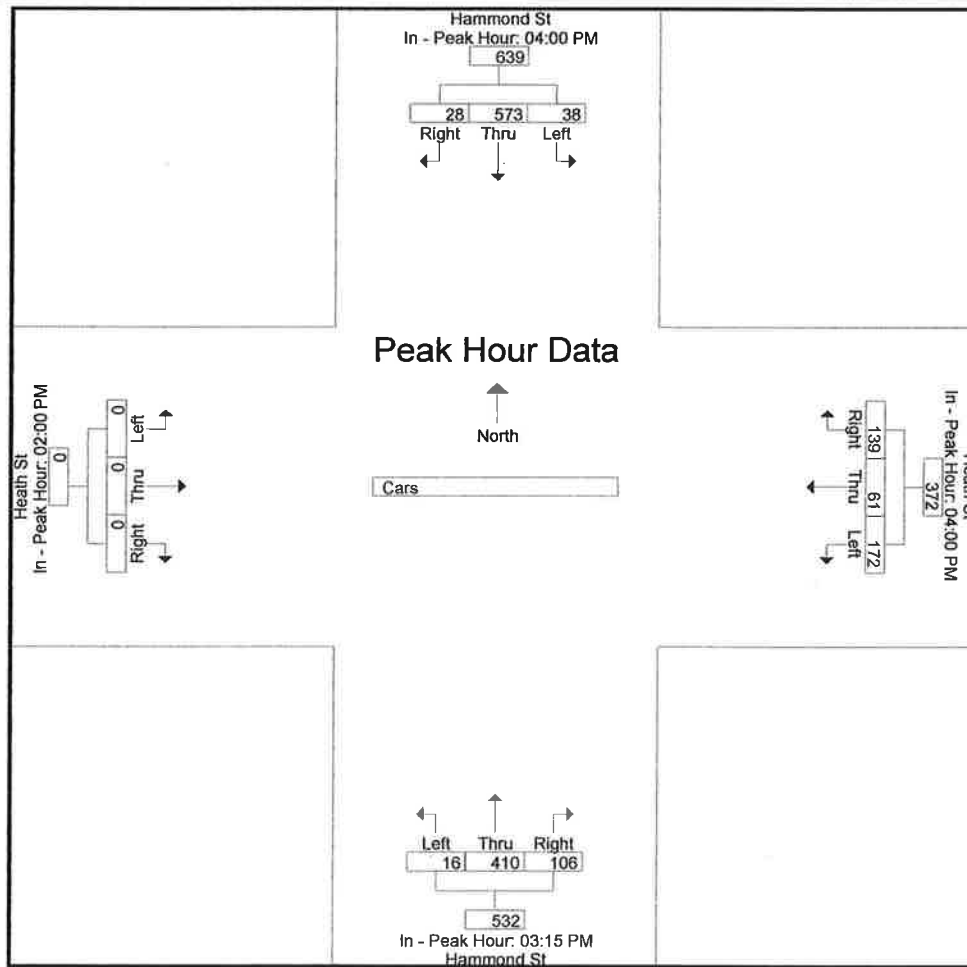
File Name : 7382N003  
Site Code : 73820003  
Start Date : 11/17/2016  
Page No : 6

	Hammond St From North				Heath St From East				Hammond St From South				Heath St 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				03:15 PM				02:00 PM			
+0 mins.	10	139	7	156	47	17	29	93	2	104	33	139	0	0	0	0
+15 mins.	9	129	7	145	44	14	30	88	3	111	18	132	0	0	0	0
+30 mins.	13	133	7	153	40	12	39	91	6	91	25	122	0	0	0	0
+45 mins.	6	172	7	185	41	18	41	100	5	104	30	139	0	0	0	0
Total Volume	38	573	28	639	172	61	139	372	16	410	106	532	0	0	0	0
% App. Total	5.9	89.7	4.4		46.2	16.4	37.4		3	77.1	19.9		0	0	0	
PHF	.731	.833	1.000	.864	.915	.847	.848	.930	.667	.923	.803	.957	.000	.000	.000	.000





**Accurate Counts**  
978-664-2565

N/S Street : Hammond Street  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N003  
Site Code : 73820003  
Start Date : 11/17/2016  
Page No : 7

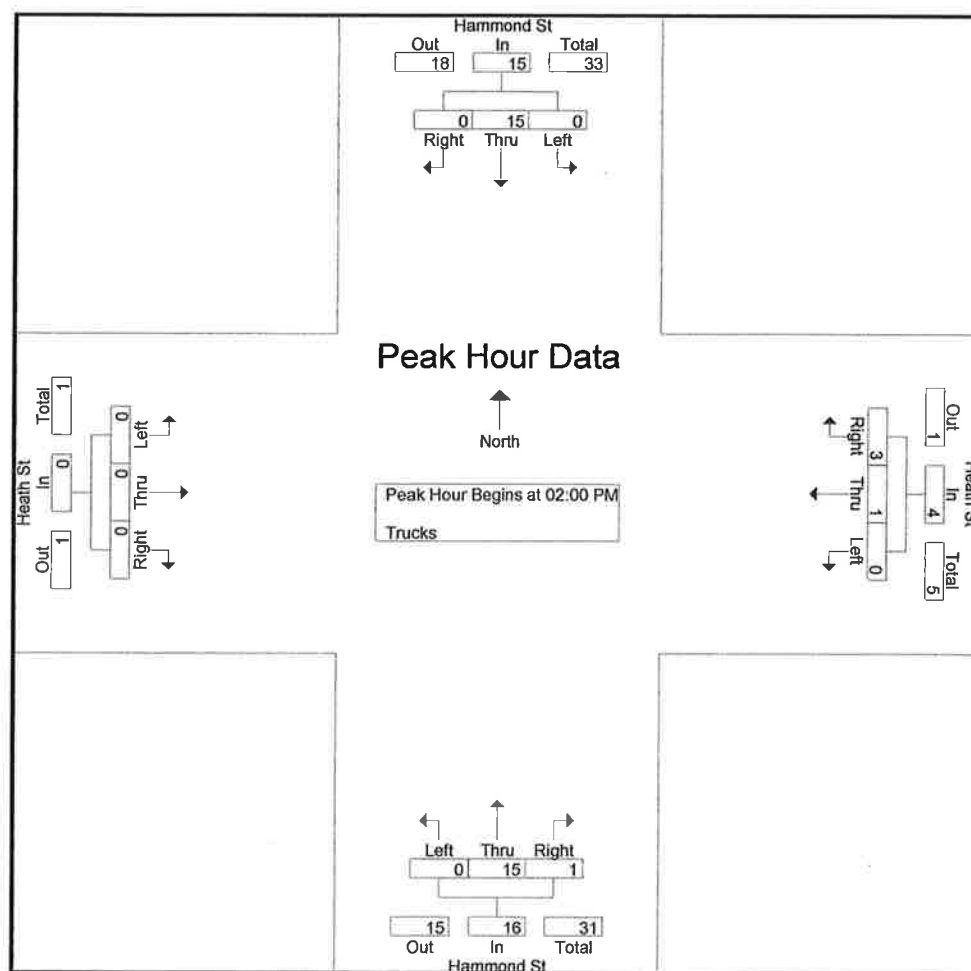
Groups Printed- Trucks

Start Time	Hammond St From North			Heath St From East			Hammond St From South			Heath St From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
02:00 PM	0	2	0	0	0	0	0	4	0	0	0	0	6
02:15 PM	0	5	0	0	0	1	0	2	1	0	0	0	9
02:30 PM	0	5	0	0	0	2	0	6	0	0	0	0	13
02:45 PM	0	3	0	0	1	0	0	3	0	0	0	0	7
Total	0	15	0	0	1	3	0	15	1	0	0	0	35
03:00 PM	0	1	0	0	0	1	0	4	0	0	0	0	6
03:15 PM	0	1	0	0	0	1	0	1	0	0	0	0	3
03:30 PM	0	2	0	1	0	0	0	1	0	0	0	0	4
03:45 PM	0	2	0	2	0	0	0	2	0	0	0	0	6
Total	0	6	0	3	0	2	0	8	0	0	0	0	19
04:00 PM	0	1	0	1	0	0	0	2	0	0	0	0	4
04:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	2
04:30 PM	0	1	0	0	0	0	0	1	0	0	0	0	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	0	1	0	1	0	4	0	0	0	0	8
Grand Total	0	23	0	4	1	6	0	27	1	0	0	0	62
Apprch %	0	100	0	36.4	9.1	54.5	0	96.4	3.6	0	0	0	
Total %	0	37.1	0	6.5	1.6	9.7	0	43.5	1.6	0	0	0	

N/S Street : Hammond Street  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N003  
Site Code : 73820003  
Start Date : 11/17/2016  
Page No : 8

	Hammond St From North				Heath St From East				Hammond St From South				Heath St 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 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 02:00 PM																	
02:00 PM	0	2	0	2	0	0	0	0	0	4	0	4	0	0	0	0	6
02:15 PM	0	5	0	5	0	0	1	1	0	2	1	3	0	0	0	0	9
02:30 PM	0	5	0	5	0	0	2	2	0	6	0	6	0	0	0	0	13
02:45 PM	0	3	0	3	0	1	0	1	0	3	0	3	0	0	0	0	7
Total Volume	0	15	0	15	0	1	3	4	0	15	1	16	0	0	0	0	35
% App. Total	0	100	0		0	25	75		0	93.8	6.2		0	0	0		
PHF	.000	.750	.000	.750	.000	.250	.375	.500	.000	.625	.250	.667	.000	.000	.000	.000	.673



N/S Street : Hammond Street  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

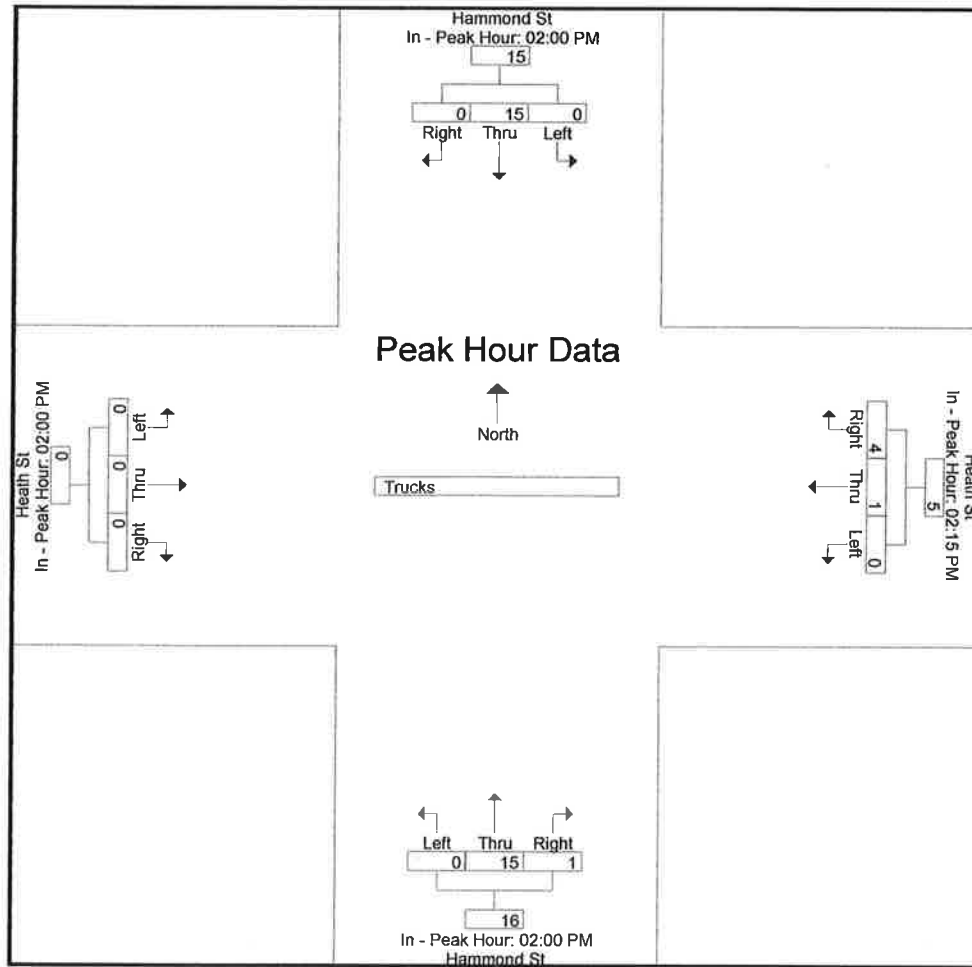
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Site Code : 73820003  
Start Date : 11/17/2016  
Page No : 9

	Hammond St From North				Heath St From East				Hammond St From South				Heath St 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:00 PM				02:15 PM				02:00 PM				02:00 PM			
+0 mins.	0	2	0	2	0	0	1	1	0	4	0	4	0	0	0	0
+15 mins.	0	5	0	5	0	0	2	2	0	2	1	3	0	0	0	0
+30 mins.	0	5	0	5	0	1	0	1	0	6	0	6	0	0	0	0
+45 mins.	0	3	0	3	0	0	1	1	0	3	0	3	0	0	0	0
Total Volume	0	15	0	15	0	1	4	5	0	15	1	16	0	0	0	0
% App. Total	0	100	0		0	20	80		0	93.8	6.2		0	0	0	
PHF	.000	.750	.000	.750	.000	.250	.500	.625	.000	.625	.250	.667	.000	.000	.000	.000



**Accurate Counts**  
978-664-2565

N/S Street : Hammond Street  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N003  
Site Code : 73820003  
Start Date : 11/17/2016  
Page No : 10

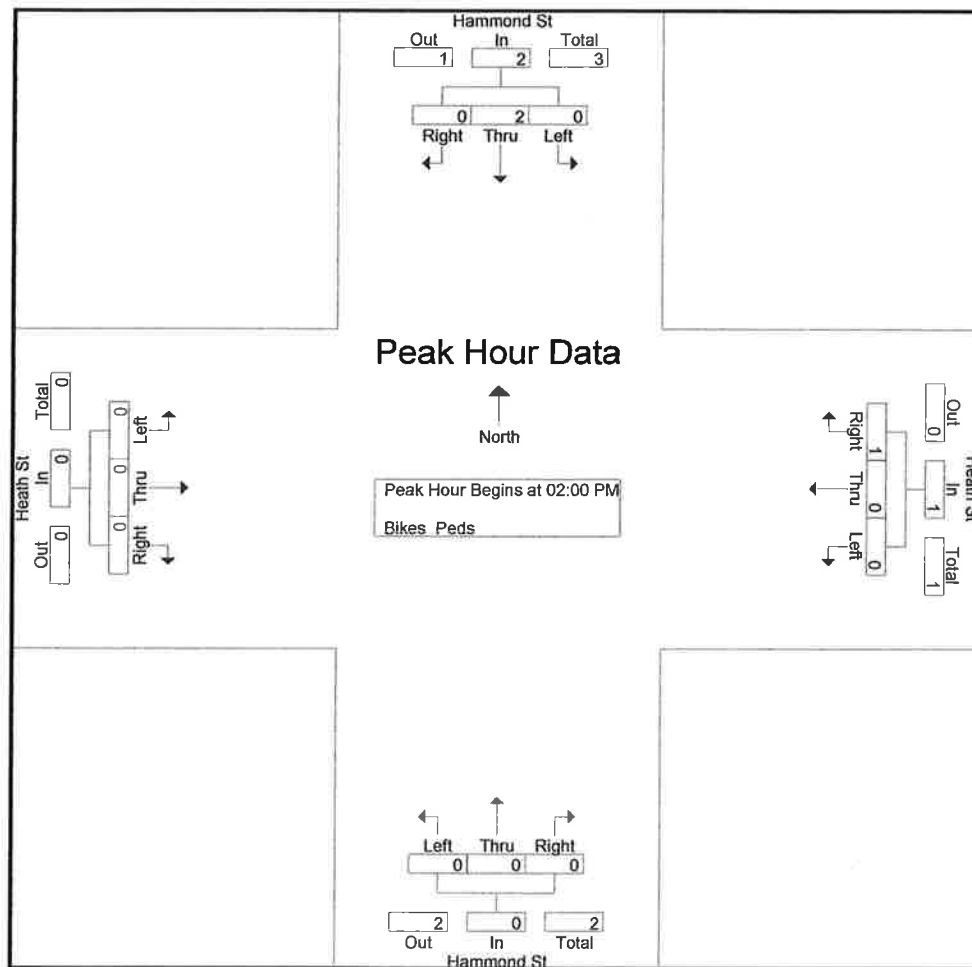
Groups Printed- Bikes Peds

Start Time	Hammond St From North				Heath St From East				Hammond St From South				Heath St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
02:00 PM	0	0	0	10	0	0	0	2	0	0	0	1	0	0	0	1	14	0	14
02:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	2
02:30 PM	0	0	0	4	0	0	1	3	0	0	0	0	0	0	0	2	9	1	10
02:45 PM	0	1	0	2	0	0	0	2	0	0	0	1	0	0	0	2	7	1	8
Total	0	2	0	16	0	0	1	7	0	0	0	2	0	0	0	6	31	3	34
03:00 PM	0	0	0	3	0	0	0	1	0	0	0	3	0	0	0	0	7	0	7
03:15 PM	0	0	0	1	0	0	0	2	0	1	0	0	0	0	0	3	6	1	7
03:30 PM	0	0	0	11	0	0	0	2	0	0	0	0	0	0	0	0	13	0	13
03:45 PM	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	16	0	16
Total	0	0	0	31	0	0	0	5	0	1	0	3	0	0	0	3	42	1	43
04:00 PM	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	18	35	0	35
04:15 PM	0	0	0	21	0	0	0	22	0	0	0	0	0	0	0	15	58	0	58
04:30 PM	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1	4	0	4
04:45 PM	0	0	0	2	0	0	0	3	0	1	0	0	0	0	0	1	6	1	7
Total	0	0	0	43	0	0	0	25	0	1	0	0	0	0	0	35	103	1	104
Grand Total	0	2	0	90	0	0	1	37	0	2	0	5	0	0	0	44	176	5	181
Apprch %	0	100	0		0	0	100		0	100	0		0	0	0				
Total %	0	40	0		0	0	20		0	40	0		0	0	0		97.2	2.8	

N/S Street : Hammond Street  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N003  
Site Code : 73820003  
Start Date : 11/17/2016  
Page No : 11

	Hammond St From North				Heath St From East				Hammond St From South				Heath St 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 04:45 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	0	0	0	0	0	0	0
02:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
02:30 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
02:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	2	0	2	0	0	1	1	0	0	0	0	0	0	0	0	3
% App. Total	0	100	0		0	0	100		0	0	0		0	0	0		
PHF	.000	.500	.000	.500	.000	.000	.250	.250	.000	.000	.000	.000	.000	.000	.000	.000	.750



N/S Street : Hammond Street  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

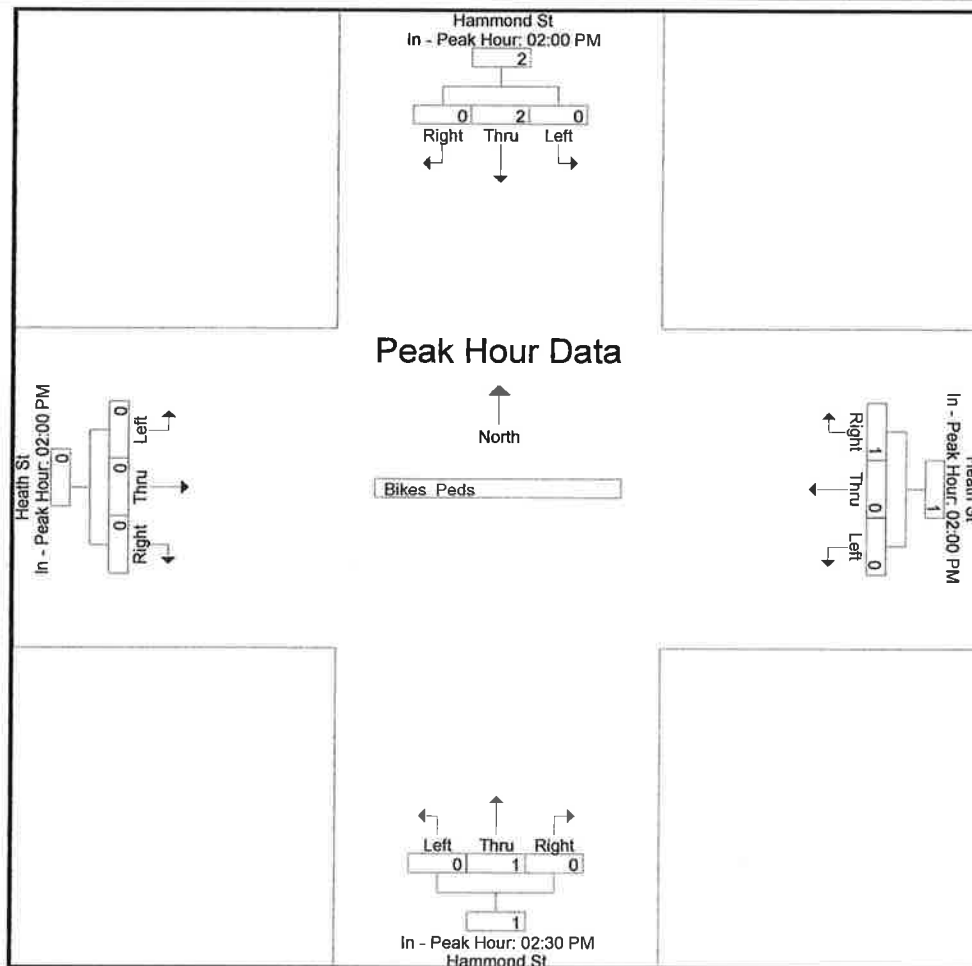
File Name : 7382N003  
Site Code : 73820003  
Start Date : 11/17/2016  
Page No : 12

	Hammond St From North				Heath St From East				Hammond St From South				Heath St 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:00 PM				02:00 PM				02:30 PM				02:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
+45 mins.	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0
Total Volume	0	2	0	2	0	0	1	1	0	1	0	1	0	0	0	0
% App. Total	0	100	0		0	0	100		0	100	0		0	0	0	
PHF	.000	.500	.000	.500	.000	.000	.250	.250	.000	.250	.000	.250	.000	.000	.000	.000



# Accurate Counts

978-664-2565

Street : Hammond Street  
 W Street: Soule Recreation / Driveway  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 7382N004  
 Site Code : 73820004  
 Start Date : 11/17/2016  
 Page No : 1

## Groups Printed- Cars - Trucks

Start Time	Hammond St From North			Soule Recreation Center From East			Hammond St From South			Drwy From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:00 AM	2	59	0	0	0	0	0	138	2	0	0	0	201
07:15 AM	2	106	0	2	0	0	0	154	2	0	0	0	266
07:30 AM	0	115	0	1	0	1	1	134	2	0	0	0	254
07:45 AM	4	150	1	2	0	0	1	128	3	0	0	0	289
Total	8	430	1	5	0	1	2	554	9	0	0	0	1010
08:00 AM	6	112	1	2	0	5	0	115	8	1	0	0	250
08:15 AM	11	83	1	6	0	6	0	135	7	0	0	0	249
08:30 AM	4	112	0	5	0	11	0	126	1	0	0	0	259
08:45 AM	3	123	0	1	0	4	0	131	1	0	0	0	263
Total	24	430	2	14	0	26	0	507	17	1	0	0	1021
09:00 AM	2	83	0	1	0	0	0	127	1	0	0	0	214
09:15 AM	0	90	2	0	0	1	0	131	0	0	0	0	224
Grand Total	34	1033	5	20	0	28	2	1319	27	1	0	0	2469
Apprch %	3.2	96.4	0.5	41.7	0	58.3	0.1	97.8	2	100	0	0	
Total %	1.4	41.8	0.2	0.8	0	1.1	0.1	53.4	1.1	0	0	0	
Cars	33	987	5	20	0	27	2	1283	27	1	0	0	2385
% Cars	97.1	95.5	100	100	0	96.4	100	97.3	100	100	0	0	96.6
Trucks	1	46	0	0	0	1	0	36	0	0	0	0	84
% Trucks	2.9	4.5	0	0	0	3.6	0	2.7	0	0	0	0	3.4

N/S Street : Hammond Street  
E/W Street: Soule Recreation / Driveway  
City/State : Brookline, MA  
Weather : Clear

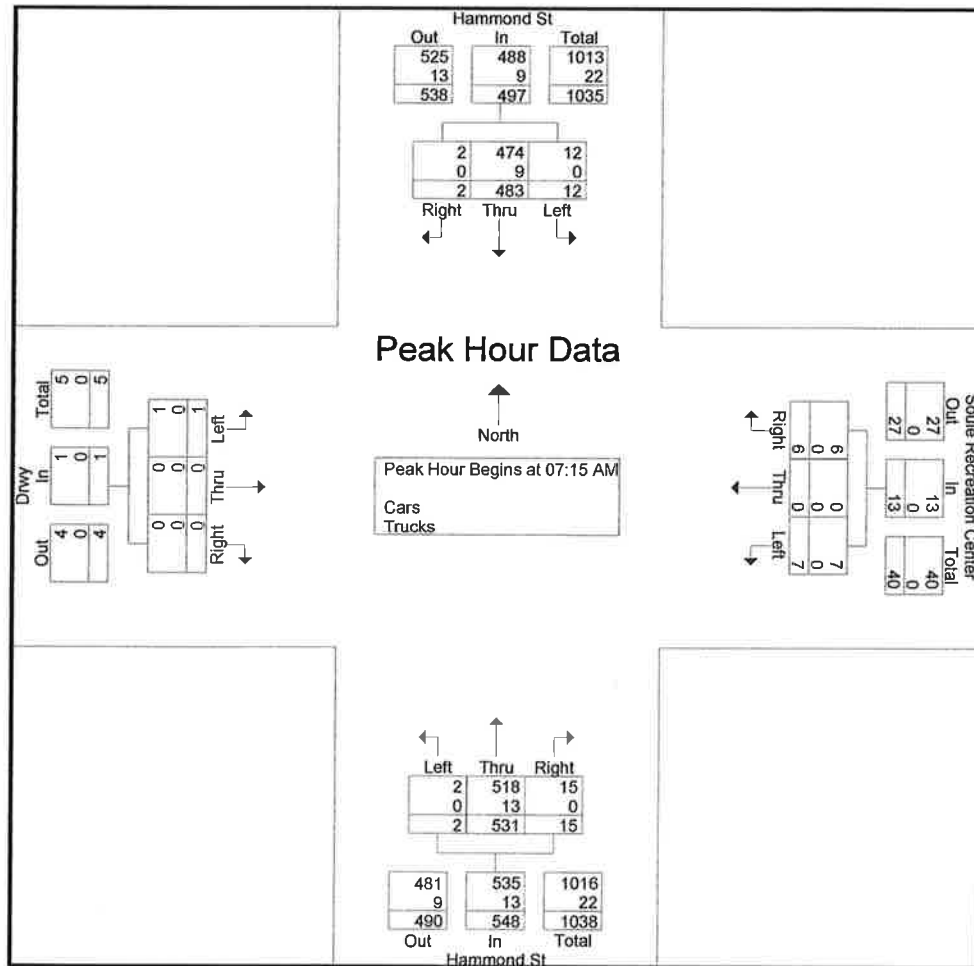
File Name : 7382N004  
Site Code : 73820004  
Start Date : 11/17/2016  
Page No : 2

	Hammond St From North				Soule Recreation Center From East				Hammond St From South				Drwy 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 09:15 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:15 AM

07:15 AM	2	106	0	108	2	0	0	2	0	154	2	156	0	0	0	0	266
07:30 AM	0	115	0	115	1	0	1	2	1	134	2	137	0	0	0	0	254
07:45 AM	4	150	1	155	2	0	0	2	1	128	3	132	0	0	0	0	289
08:00 AM	6	112	1	119	2	0	5	7	0	115	8	123	1	0	0	1	250
Total Volume	12	483	2	497	7	0	6	13	2	531	15	548	1	0	0	1	1059
% App. Total	2.4	97.2	0.4		53.8	0	46.2		0.4	96.9	2.7		100	0	0		
PHF	.500	.805	.500	.802	.875	.000	.300	.464	.500	.862	.469	.878	.250	.000	.000	.250	.916
Cars	12	474	2	488	7	0	6	13	2	518	15	535	1	0	0	1	1037
% Cars	100	98.1	100	98.2	100	0	100	100	100	97.6	100	97.6	100	0	0	100	97.9
Trucks	0	9	0	9	0	0	0	0	0	13	0	13	0	0	0	0	22
% Trucks	0	1.9	0	1.8	0	0	0	0	0	2.4	0	2.4	0	0	0	0	2.1





N/S Street : Hammond Street  
E/W Street: Soule Recreation / Driveway  
City/State : Brookline, MA  
Weather : Clear

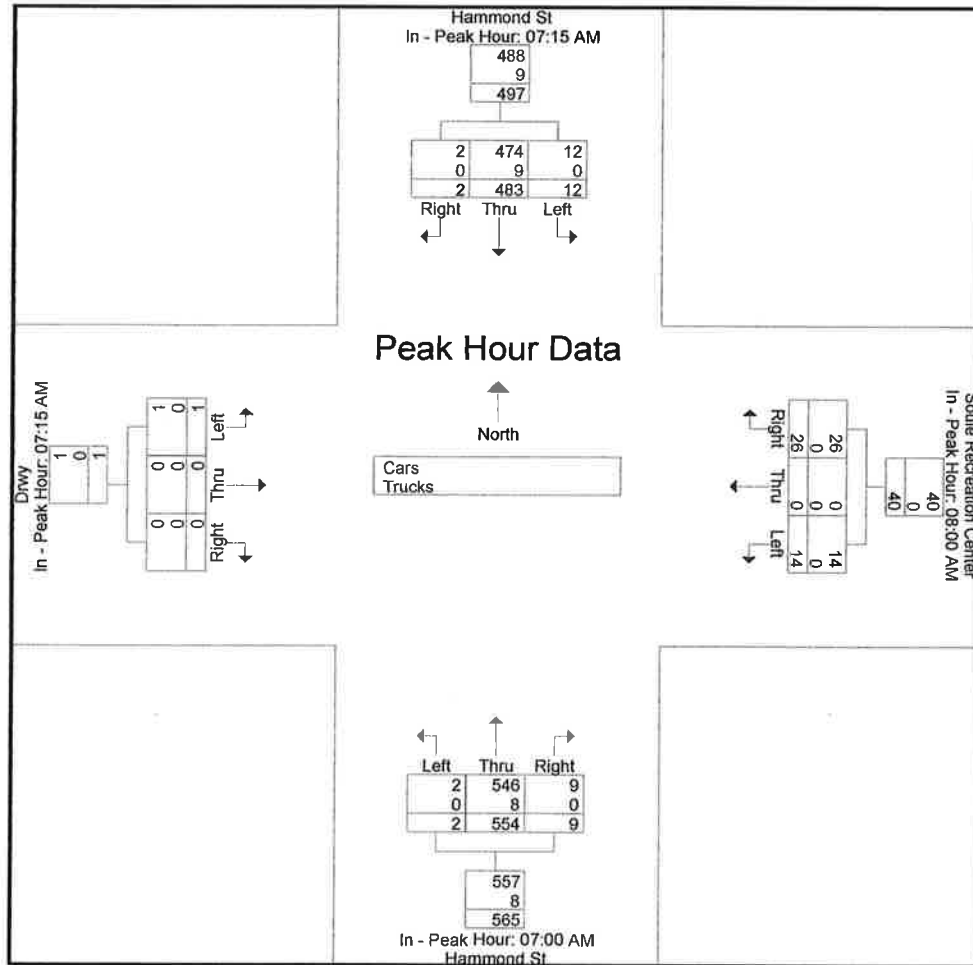
File Name : 7382N004  
Site Code : 73820004  
Start Date : 11/17/2016  
Page No : 3

	Hammond St From North				Soule Recreation Center From East				Hammond St From South				Drwy 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 09:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				08:00 AM				07:00 AM				07:15 AM			
+0 mins.	2	106	0	108	2	0	5	7	0	138	2	140	0	0	0	0
+15 mins.	0	115	0	115	6	0	6	12	0	154	2	156	0	0	0	0
+30 mins.	4	150	1	155	5	0	11	16	1	134	2	137	0	0	0	0
+45 mins.	6	112	1	119	1	0	4	5	1	128	3	132	1	0	0	1
Total Volume	12	483	2	497	14	0	26	40	2	554	9	565	1	0	0	1
% App. Total	2.4	97.2	0.4		35	0	65		0.4	98.1	1.6		100	0	0	
PHF	.500	.805	.500	.802	.583	.000	.591	.625	.500	.899	.750	.905	.250	.000	.000	.250
Cars	12	474	2	488	14	0	26	40	2	546	9	557	1	0	0	1
% Cars	100	98.1	100	98.2	100	0	100	100	100	98.6	100	98.6	100	0	0	100
Trucks	0	9	0	9	0	0	0	0	0	8	0	8	0	0	0	0
% Trucks	0	1.9	0	1.8	0	0	0	0	0	1.4	0	1.4	0	0	0	0



**Accurate Counts**  
978-664-2565

N/S Street : Hammond Street  
E/W Street: Soule Recreation / Driveway  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N004  
Site Code : 73820004  
Start Date : 11/17/2016  
Page No : 4

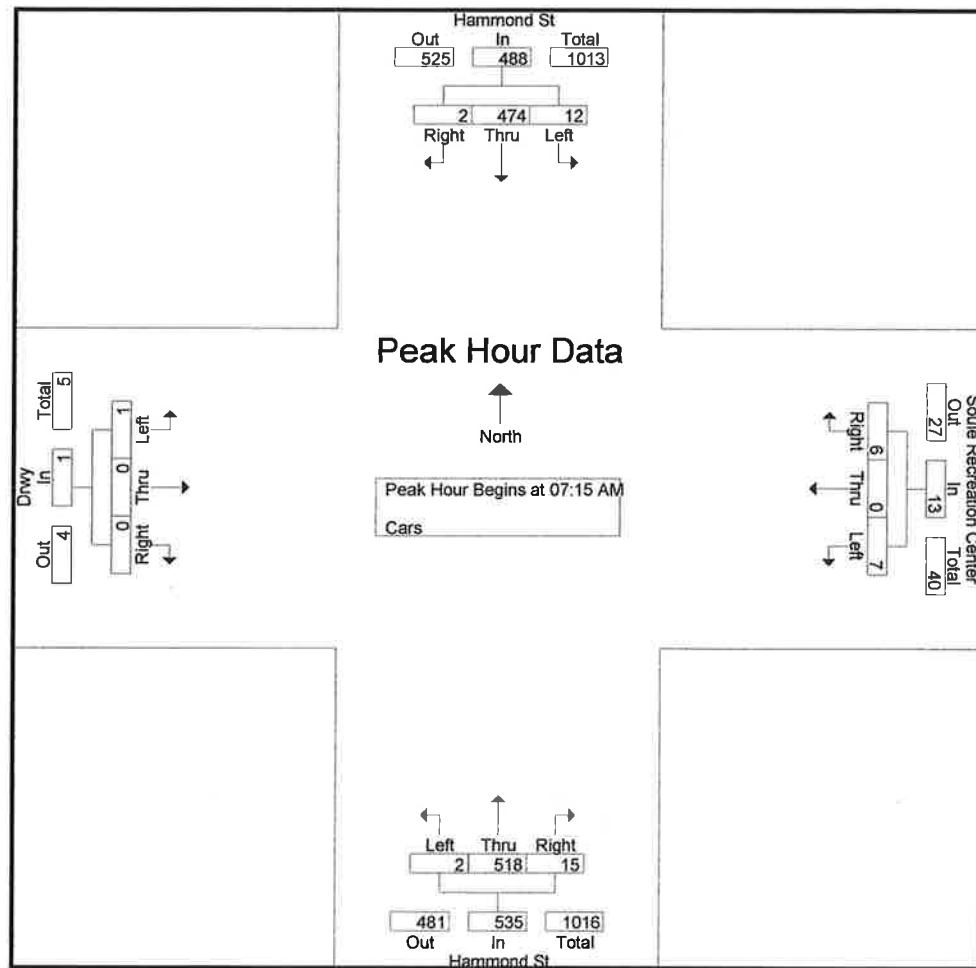
Groups Printed- Cars

Start Time	Hammond St From North			Soule Recreation Center From East			Hammond St From South			Drwy From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:00 AM	2	55	0	0	0	0	0	136	2	0	0	0	195
07:15 AM	2	105	0	2	0	0	0	154	2	0	0	0	265
07:30 AM	0	111	0	1	0	1	1	131	2	0	0	0	247
07:45 AM	4	149	1	2	0	0	1	125	3	0	0	0	285
Total	8	420	1	5	0	1	2	546	9	0	0	0	992
08:00 AM	6	109	1	2	0	5	0	108	8	1	0	0	240
08:15 AM	11	79	1	6	0	6	0	133	7	0	0	0	243
08:30 AM	4	106	0	5	0	11	0	122	1	0	0	0	249
08:45 AM	2	113	0	1	0	4	0	128	1	0	0	0	249
Total	23	407	2	14	0	26	0	491	17	1	0	0	981
09:00 AM	2	78	0	1	0	0	0	122	1	0	0	0	204
09:15 AM	0	82	2	0	0	0	0	124	0	0	0	0	208
Grand Total	33	987	5	20	0	27	2	1283	27	1	0	0	2385
Apprch %	3.2	96.3	0.5	42.6	0	57.4	0.2	97.8	2.1	100	0	0	
Total %	1.4	41.4	0.2	0.8	0	1.1	0.1	53.8	1.1	0	0	0	

N/S Street : Hammond Street  
E/W Street: Soule Recreation / Driveway  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N004  
Site Code : 73820004  
Start Date : 11/17/2016  
Page No : 5

	Hammond St From North				Soule Recreation Center From East				Hammond St From South				Drwy 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 09:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	2	105	0	107	2	0	0	2	0	154	2	156	0	0	0	0	265
07:30 AM	0	111	0	111	1	0	1	2	1	131	2	134	0	0	0	0	247
07:45 AM	4	149	1	154	2	0	0	2	1	125	3	129	0	0	0	0	285
08:00 AM	6	109	1	116	2	0	5	7	0	108	8	116	1	0	0	1	240
Total Volume	12	474	2	488	7	0	6	13	2	518	15	535	1	0	0	1	1037
% App. Total	2.5	97.1	0.4		53.8	0	46.2		0.4	96.8	2.8		100	0	0		
PHF	.500	.795	.500	.792	.875	.000	.300	.464	.500	.841	.469	.857	.250	.000	.000	.250	.910



N/S Street : Hammond Street  
E/W Street: Soule Recreation / Driveway  
City/State : Brookline, MA  
Weather : Clear

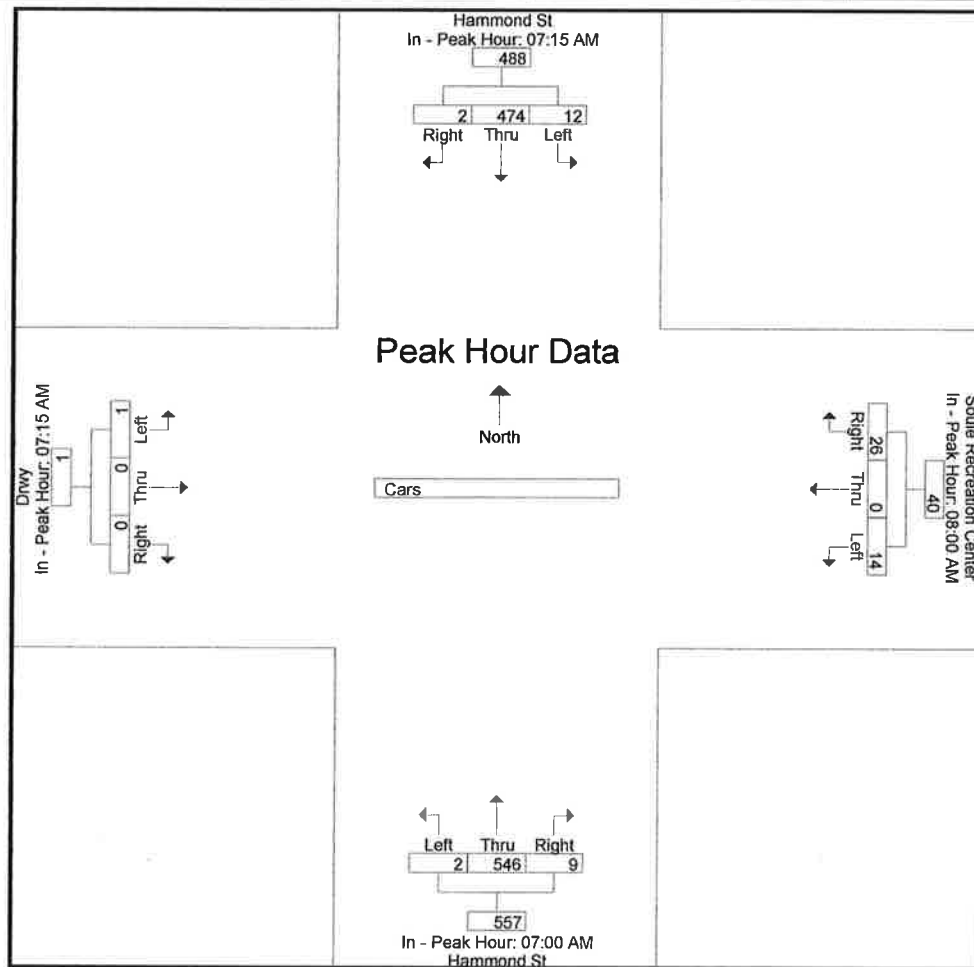
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Site Code : 73820004  
Start Date : 11/17/2016  
Page No : 6

	Hammond St From North				Soule Recreation Center From East				Hammond St From South				Drwy 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 09:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				08:00 AM				07:00 AM				07:15 AM			
+0 mins.	2	105	0	107	2	0	5	7	0	136	2	138	0	0	0	0
+15 mins.	0	111	0	111	6	0	6	12	0	154	2	156	0	0	0	0
+30 mins.	4	149	1	154	5	0	11	16	1	131	2	134	0	0	0	0
+45 mins.	6	109	1	116	1	0	4	5	1	125	3	129	1	0	0	1
Total Volume	12	474	2	488	14	0	26	40	2	546	9	557	1	0	0	1
% App. Total	2.5	97.1	0.4		35	0	65		0.4	98	1.6		100	0	0	
PHF	.500	.795	.500	.792	.583	.000	.591	.625	.500	.886	.750	.893	.250	.000	.000	.250



# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
E/W Street: Soule Recreation / Driveway  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N004  
Site Code : 73820004  
Start Date : 11/17/2016  
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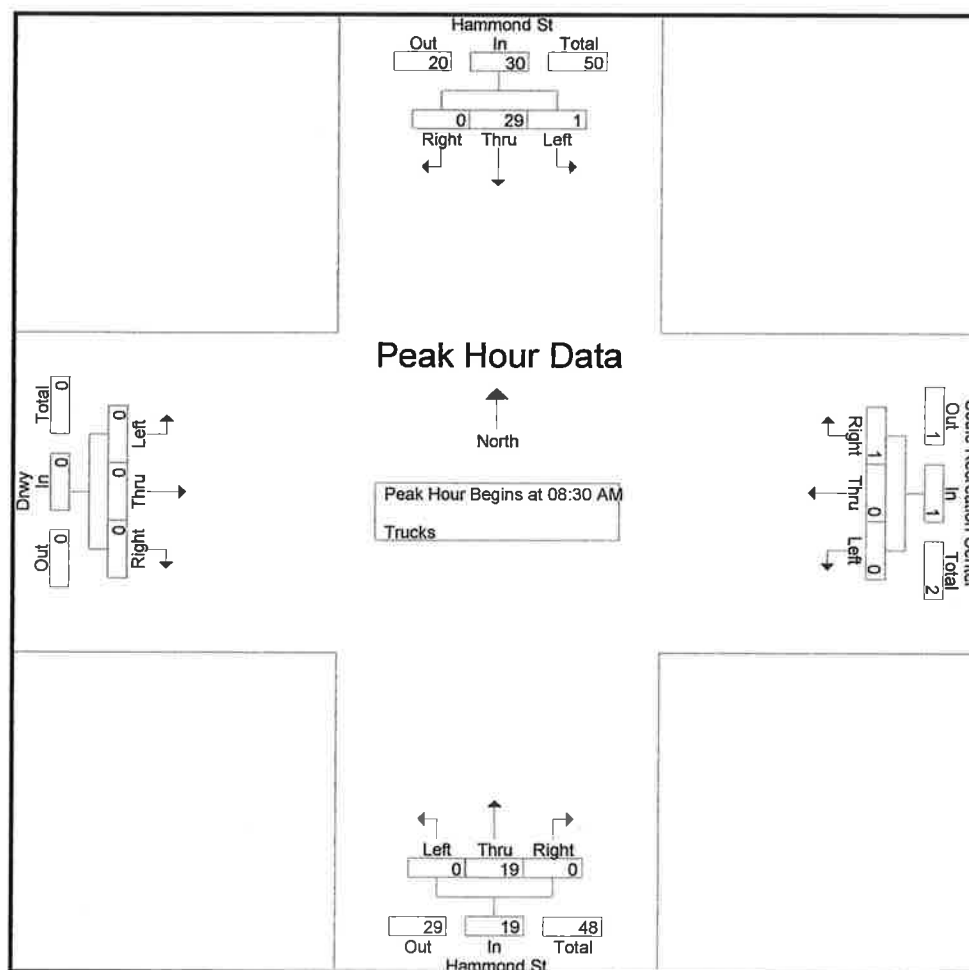
## Groups Printed- Trucks

Start Time	Hammond St From North			Soule Recreation Center From East			Hammond St From South			Drwy From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:00 AM	0	4	0	0	0	0	0	2	0	0	0	0	6
07:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
07:30 AM	0	4	0	0	0	0	0	3	0	0	0	0	7
07:45 AM	0	1	0	0	0	0	0	3	0	0	0	0	4
Total	0	10	0	0	0	0	0	8	0	0	0	0	18
08:00 AM	0	3	0	0	0	0	0	7	0	0	0	0	10
08:15 AM	0	4	0	0	0	0	0	2	0	0	0	0	6
08:30 AM	0	6	0	0	0	0	0	4	0	0	0	0	10
08:45 AM	1	10	0	0	0	0	0	3	0	0	0	0	14
Total	1	23	0	0	0	0	0	16	0	0	0	0	40
09:00 AM	0	5	0	0	0	0	0	5	0	0	0	0	10
09:15 AM	0	8	0	0	0	1	0	7	0	0	0	0	16
Grand Total	1	46	0	0	0	1	0	36	0	0	0	0	84
Apprch %	2.1	97.9	0	0	0	100	0	100	0	0	0	0	
Total %	1.2	54.8	0	0	0	1.2	0	42.9	0	0	0	0	

N/S Street : Hammond Street  
E/W Street: Soule Recreation / Driveway  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N004  
Site Code : 73820004  
Start Date : 11/17/2016  
Page No : 8

	Hammond St From North				Soule Recreation Center From East				Hammond St From South				Drwy 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 09:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:30 AM																	
08:30 AM	0	6	0	6	0	0	0	0	0	4	0	4	0	0	0	0	10
08:45 AM	1	10	0	11	0	0	0	0	0	3	0	3	0	0	0	0	14
09:00 AM	0	5	0	5	0	0	0	0	0	5	0	5	0	0	0	0	10
09:15 AM	0	8	0	8	0	0	1	1	0	7	0	7	0	0	0	0	16
Total Volume	1	29	0	30	0	0	1	1	0	19	0	19	0	0	0	0	50
% App. Total	3.3	96.7	0		0	0	100		0	100	0		0	0	0		
PHF	.250	.725	.000	.682	.000	.000	.250	.250	.000	.679	.000	.679	.000	.000	.000	.000	.781



N/S Street : Hammond Street  
 E/W Street: Soule Recreation / Driveway  
 City/State : Brookline, MA  
 Weather : Clear

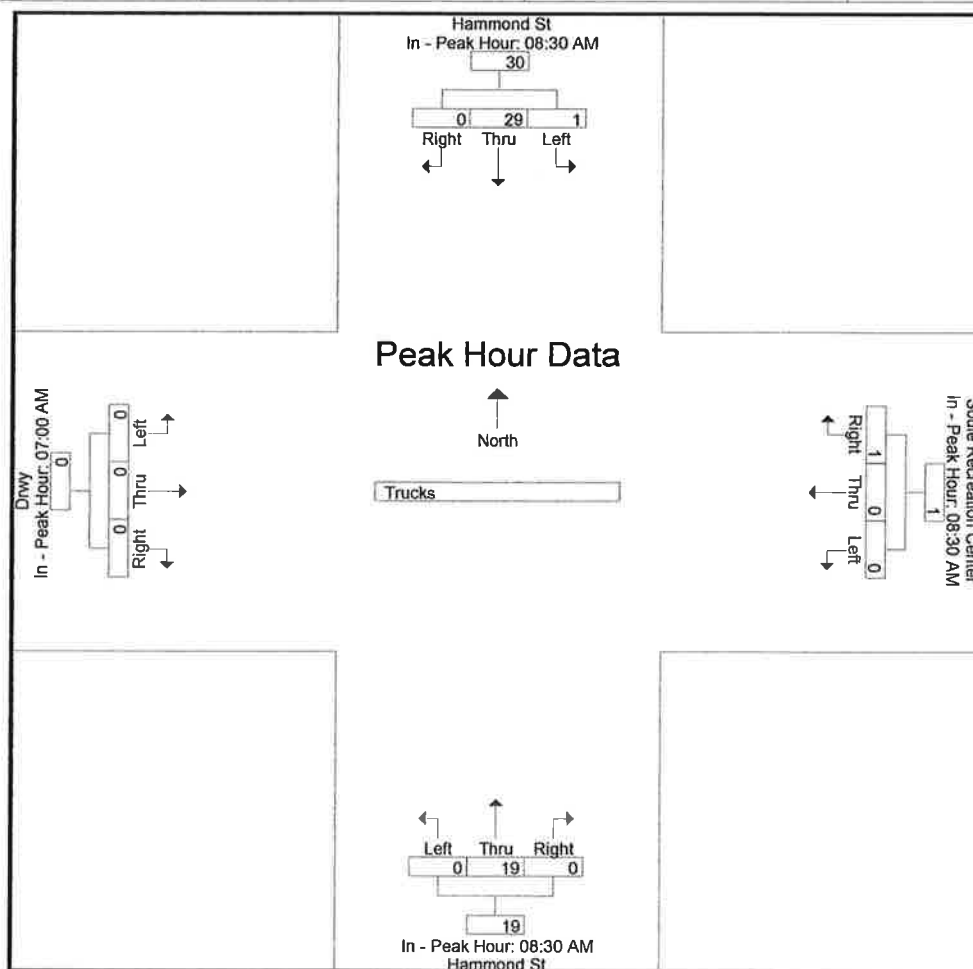
File Name : 7382N004  
 Site Code : 73820004  
 Start Date : 11/17/2016  
 Page No : 9

	Hammond St From North				Soule Recreation Center From East				Hammond St From South				Drwy 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 09:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:30 AM				08:30 AM				08:30 AM				07:00 AM			
+0 mins.	0	6	0	6	0	0	0	0	0	4	0	4	0	0	0	0
+15 mins.	1	10	0	11	0	0	0	0	0	3	0	3	0	0	0	0
+30 mins.	0	5	0	5	0	0	0	0	0	5	0	5	0	0	0	0
+45 mins.	0	8	0	8	0	0	1	1	0	7	0	7	0	0	0	0
Total Volume	1	29	0	30	0	0	1	1	0	19	0	19	0	0	0	0
% App. Total	3.3	96.7	0		0	0	100		0	100	0		0	0	0	
PHF	.250	.725	.000	.682	.000	.000	.250	.250	.000	.679	.000	.679	.000	.000	.000	.000



**Accurate Counts**  
978-664-2565

N/S Street : Hammond Street  
E/W Street: Soule Recreation / Driveway  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N004  
Site Code : 73820004  
Start Date : 11/17/2016  
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Groups Printed- Bikes Peds

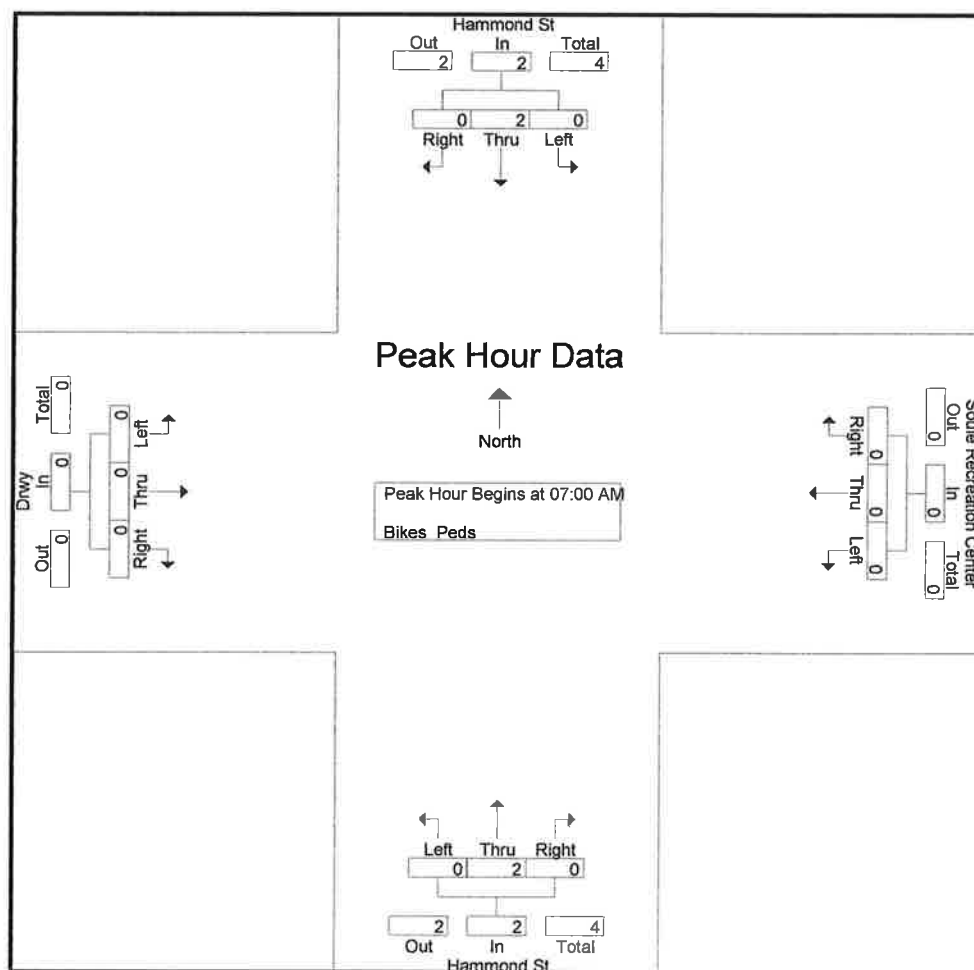
Start Time	Hammond St From North				Soule Recreation Center From East				Hammond St From South				Drwy From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
07:00 AM	0	0	0	0	0	0	0	2	0	1	0	0	0	0	0	1	3	1	4
07:15 AM	0	1	0	0	0	0	0	2	0	1	0	1	0	0	0	3	6	2	8
07:30 AM	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	1	2	1	3
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	4
Total	0	2	0	0	0	0	0	5	0	2	0	1	0	0	0	9	15	4	19
08:00 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	4	6	0	6
08:15 AM	0	0	0	0	0	0	0	3	0	0	0	2	0	0	0	4	9	0	9
08:30 AM	0	0	0	0	0	0	0	4	0	0	0	2	0	0	0	4	10	0	10
08:45 AM	0	0	0	0	0	0	0	2	0	1	0	0	0	0	0	0	2	1	3
Total	0	0	0	0	0	0	0	11	0	1	0	4	0	0	0	12	27	1	28
09:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	5	5	1	6
09:15 AM	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	2	3
Grand Total	0	2	0	0	0	0	0	16	0	5	1	5	0	0	0	27	48	8	56
Apprch %	0	100	0		0	0	0		0	83.3	16.7		0	0	0				
Total %	0	25	0		0	0	0		0	62.5	12.5		0	0	0		85.7	14.3	



N/S Street : Hammond Street  
E/W Street: Soule Recreation / Driveway  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N004  
Site Code : 73820004  
Start Date : 11/17/2016  
Page No : 11

	Hammond St From North				Soule Recreation Center From East				Hammond St From South				Drwy 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 09:15 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	1	0	1	0	0	0	0	1
07:15 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
07:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	4
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.500



N/S Street : Hammond Street  
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City/State : Brookline, MA  
Weather : Clear

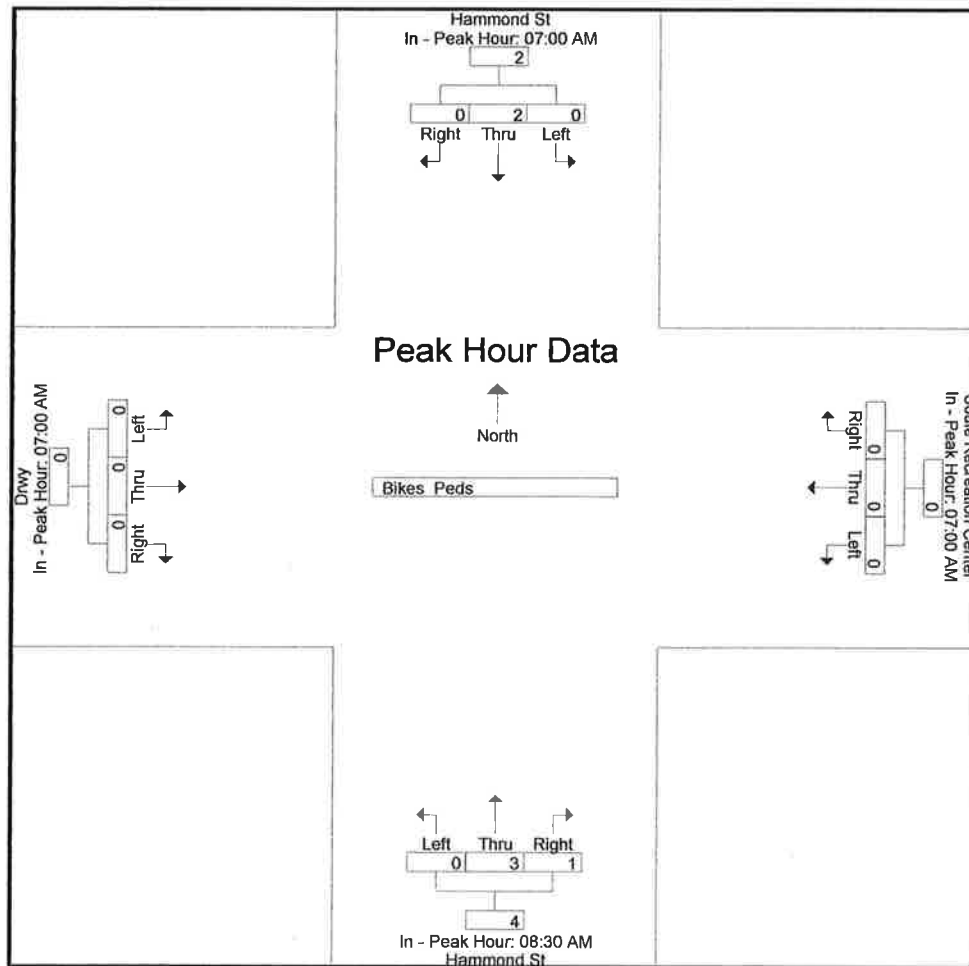
File Name : 7382N004  
Site Code : 73820004  
Start Date : 11/17/2016  
Page No : 12

	Hammond St From North				Soule Recreation Center From East				Hammond St From South				Drwy 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 09:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

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



**Accurate Counts**  
978-664-2565

N/S Street : Hammond Street  
E/W Street: Soule Recreation / Driveway  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N004  
Site Code : 73820004  
Start Date : 11/17/2016  
Page No : 1

**Groups Printed- Cars - Trucks**

Start Time	Hammond St From North			Soule Recreation Center From East			Hammond St From South			Drwy From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
02:00 PM	4	133	1	1	0	2	0	116	1	0	0	0	258
02:15 PM	2	137	0	0	0	1	0	101	2	1	0	0	244
02:30 PM	2	141	1	1	0	3	0	105	1	0	0	1	255
02:45 PM	2	149	0	1	0	3	0	129	1	0	0	0	285
Total	10	560	2	3	0	9	0	451	5	1	0	1	1042
03:00 PM	4	160	0	1	0	2	0	105	0	0	0	0	272
03:15 PM	0	191	0	1	0	1	0	141	0	0	0	0	334
03:30 PM	1	196	0	2	0	3	0	124	2	0	0	0	328
03:45 PM	6	155	0	0	0	1	0	120	3	0	0	0	285
Total	11	702	0	4	0	7	0	490	5	0	0	0	1219
04:00 PM	5	180	0	3	0	8	0	128	1	0	0	0	325
04:15 PM	1	166	0	0	0	4	0	119	1	0	0	0	291
04:30 PM	0	176	1	2	0	4	0	110	0	1	0	0	294
04:45 PM	4	210	0	1	0	2	0	109	1	1	0	1	329
Total	10	732	1	6	0	18	0	466	3	2	0	1	1239
Grand Total	31	1994	3	13	0	34	0	1407	13	3	0	2	3500
Apprch %	1.5	98.3	0.1	27.7	0	72.3	0	99.1	0.9	60	0	40	
Total %	0.9	57	0.1	0.4	0	1	0	40.2	0.4	0.1	0	0.1	
Cars	31	1972	3	13	0	34	0	1378	13	3	0	2	3449
% Cars	100	98.9	100	100	0	100	0	97.9	100	100	0	100	98.5
Trucks	0	22	0	0	0	0	0	29	0	0	0	0	51
% Trucks	0	1.1	0	0	0	0	0	2.1	0	0	0	0	1.5

N/S Street : Hammond Street  
E/W Street: Soule Recreation / Driveway  
City/State : Brookline, MA  
Weather : Clear

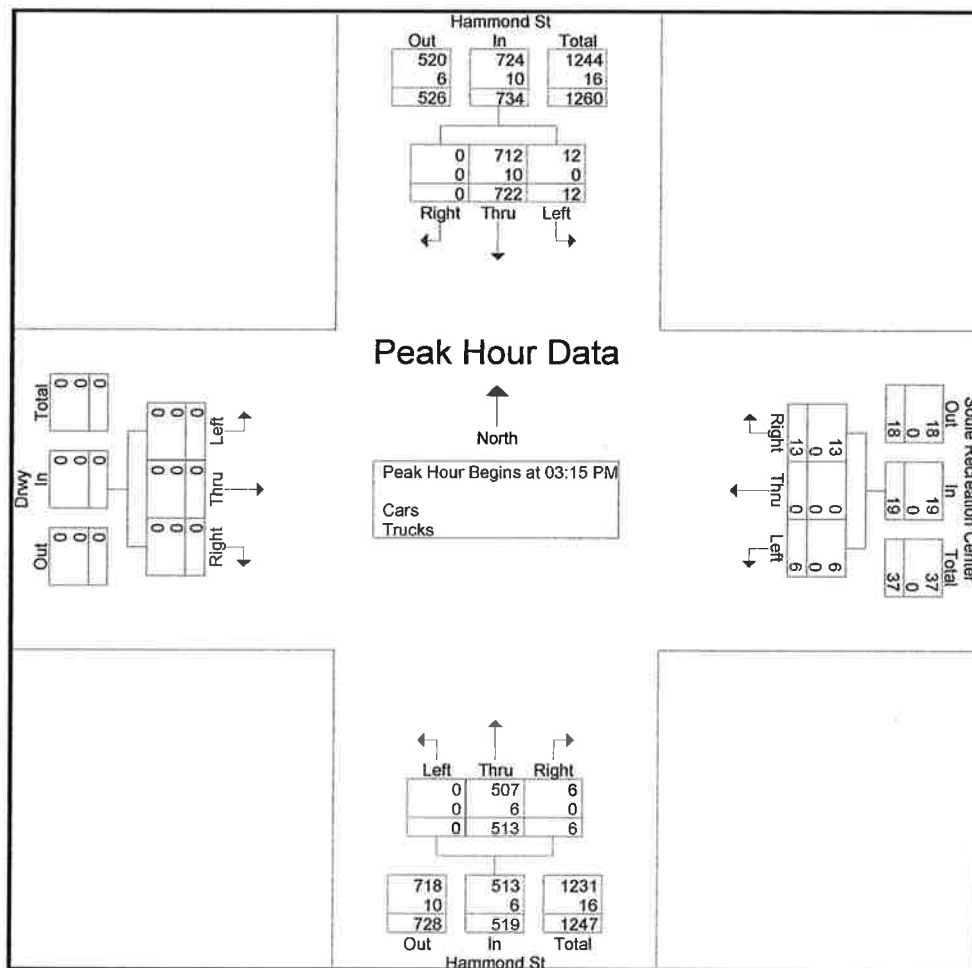
File Name : 7382N004  
Site Code : 73820004  
Start Date : 11/17/2016  
Page No : 2

	Hammond St From North				Soule Recreation Center From East				Hammond St From South				Drwy 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 04:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 03:15 PM

03:15 PM	0	191	0	191	1	0	1	2	0	<b>141</b>	0	<b>141</b>	0	0	0	0	<b>334</b>
03:30 PM	1	<b>196</b>	0	<b>197</b>	2	0	3	5	0	124	2	126	0	0	0	0	328
03:45 PM	<b>6</b>	155	0	161	0	0	1	1	0	120	<b>3</b>	123	0	0	0	0	285
04:00 PM	5	180	0	185	<b>3</b>	0	<b>8</b>	<b>11</b>	0	128	1	129	0	0	0	0	325
Total Volume	12	722	0	734	6	0	13	19	0	513	6	519	0	0	0	0	1272
% App. Total	1.6	98.4	0		31.6	0	68.4		0	98.8	1.2		0	0	0		
PHF	.500	.921	.000	.931	.500	.000	.406	.432	.000	.910	.500	.920	.000	.000	.000	.000	.952
Cars	12	712	0	724	6	0	13	19	0	507	6	513	0	0	0	0	1256
% Cars	100	98.6	0	98.6	100	0	100	100	0	98.8	100	98.8	0	0	0	0	98.7
Trucks	0	10	0	10	0	0	0	0	0	6	0	6	0	0	0	0	16
% Trucks	0	1.4	0	1.4	0	0	0	0	0	1.2	0	1.2	0	0	0	0	1.3



# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
 E/W Street: Soule Recreation / Driveway  
 City/State : Brookline, MA  
 Weather : Clear

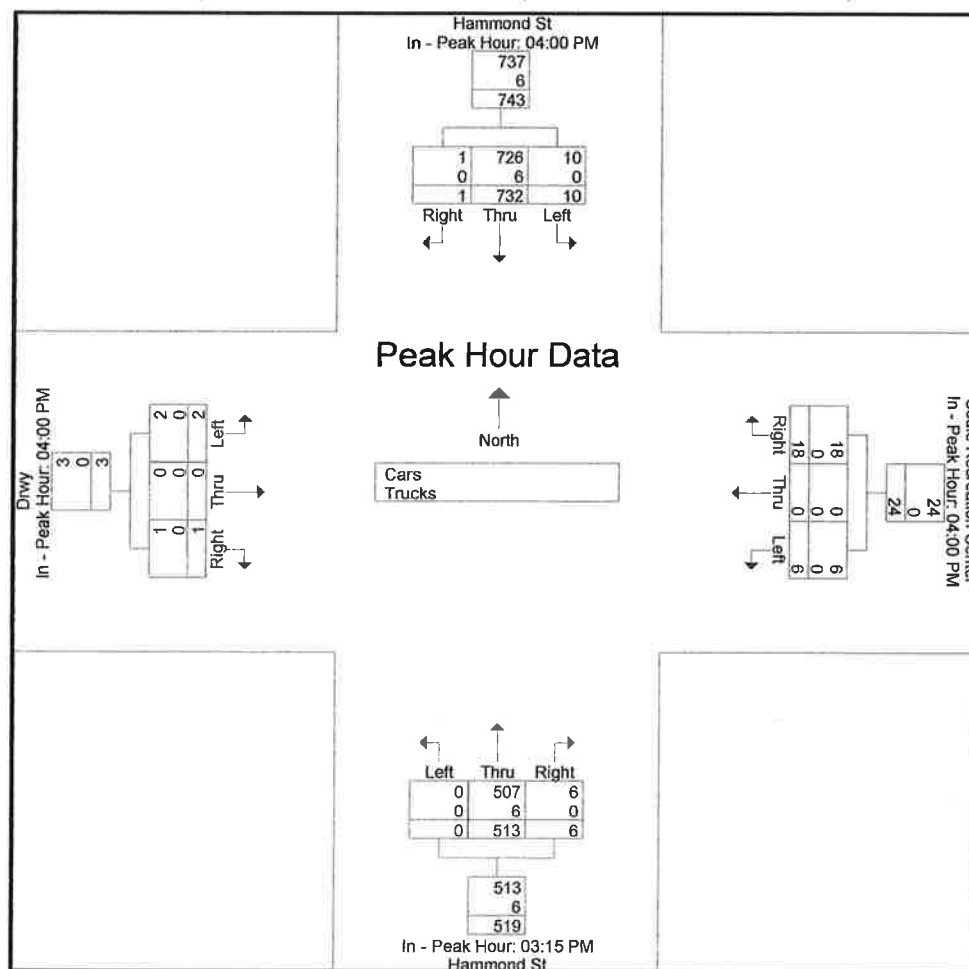
File Name : 7382N004  
 Site Code : 73820004  
 Start Date : 11/17/2016  
 Page No : 3

	Hammond St From North				Soule Recreation Center From East				Hammond St From South				Drwy 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				03:15 PM				04:00 PM			
+0 mins.	5	180	0	185	3	0	8	11	0	141	0	141	0	0	0	0
+15 mins.	1	166	0	167	0	0	4	4	0	124	2	126	0	0	0	0
+30 mins.	0	176	1	177	2	0	4	6	0	120	3	123	1	0	0	1
+45 mins.	4	210	0	214	1	0	2	3	0	128	1	129	1	0	1	2
Total Volume	10	732	1	743	6	0	18	24	0	513	6	519	2	0	1	3
% App. Total	1.3	98.5	0.1		25	0	75		0	98.8	1.2		66.7	0	33.3	
PHF	.500	.871	.250	.868	.500	.000	.563	.545	.000	.910	.500	.920	.500	.000	.250	.375
Cars	10	726	1	737	6	0	18	24	0	507	6	513	2	0	1	3
% Cars	100	99.2	100	99.2	100	0	100	100	0	98.8	100	98.8	100	0	100	100
Trucks	0	6	0	6	0	0	0	0	0	6	0	6	0	0	0	0
% Trucks	0	0.8	0	0.8	0	0	0	0	0	1.2	0	1.2	0	0	0	0



# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
E/W Street: Soule Recreation / Driveway  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N004  
Site Code : 73820004  
Start Date : 11/17/2016  
Page No : 4

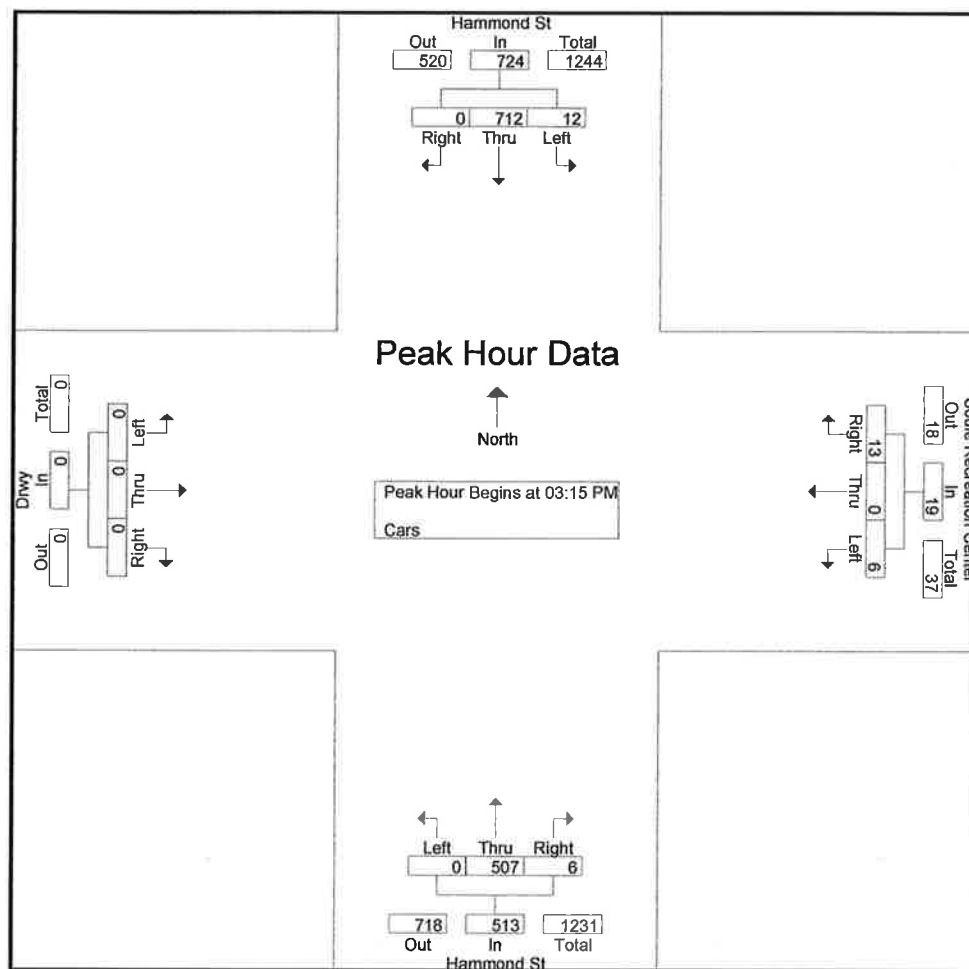
## Groups Printed- Cars

Start Time	Hammond St From North			Soule Recreation Center From East			Hammond St From South			Drwy From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
02:00 PM	4	131	1	1	0	2	0	113	1	0	0	0	253
02:15 PM	2	133	0	0	0	1	0	97	2	1	0	0	236
02:30 PM	2	139	1	1	0	3	0	99	1	0	0	1	247
02:45 PM	2	148	0	1	0	3	0	124	1	0	0	0	279
Total	10	551	2	3	0	9	0	433	5	1	0	1	1015
03:00 PM	4	159	0	1	0	2	0	102	0	0	0	0	268
03:15 PM	0	190	0	1	0	1	0	140	0	0	0	0	332
03:30 PM	1	194	0	2	0	3	0	123	2	0	0	0	325
03:45 PM	6	152	0	0	0	1	0	118	3	0	0	0	280
Total	11	695	0	4	0	7	0	483	5	0	0	0	1205
04:00 PM	5	176	0	3	0	8	0	126	1	0	0	0	319
04:15 PM	1	166	0	0	0	4	0	118	1	0	0	0	290
04:30 PM	0	175	1	2	0	4	0	109	0	1	0	0	292
04:45 PM	4	209	0	1	0	2	0	109	1	1	0	1	328
Total	10	726	1	6	0	18	0	462	3	2	0	1	1229
Grand Total	31	1972	3	13	0	34	0	1378	13	3	0	2	3449
Apprch %	1.5	98.3	0.1	27.7	0	72.3	0	99.1	0.9	60	0	40	
Total %	0.9	57.2	0.1	0.4	0	1	0	40	0.4	0.1	0	0.1	

N/S Street : Hammond Street  
E/W Street: Soule Recreation / Driveway  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N004  
Site Code : 73820004  
Start Date : 11/17/2016  
Page No : 5

	Hammond St From North				Soule Recreation Center From East				Hammond St From South				Drwy 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 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:15 PM																	
03:15 PM	0	190	0	190	1	0	1	2	0	<b>140</b>	0	<b>140</b>	0	0	0	0	<b>332</b>
03:30 PM	1	<b>194</b>	0	<b>195</b>	2	0	3	5	0	123	2	125	0	0	0	0	325
03:45 PM	<b>6</b>	152	0	158	0	0	1	1	0	118	<b>3</b>	121	0	0	0	0	280
04:00 PM	5	176	0	181	<b>3</b>	0	<b>8</b>	<b>11</b>	0	126	1	127	0	0	0	0	319
Total Volume	12	712	0	724	6	0	13	19	0	507	6	513	0	0	0	0	1256
% App. Total	1.7	98.3	0		31.6	0	68.4		0	98.8	1.2		0	0	0		
PHF	.500	.918	.000	.928	.500	.000	.406	.432	.000	.905	.500	.916	.000	.000	.000	.000	.946



N/S Street : Hammond Street  
E/W Street: Soule Recreation / Driveway  
City/State : Brookline, MA  
Weather : Clear

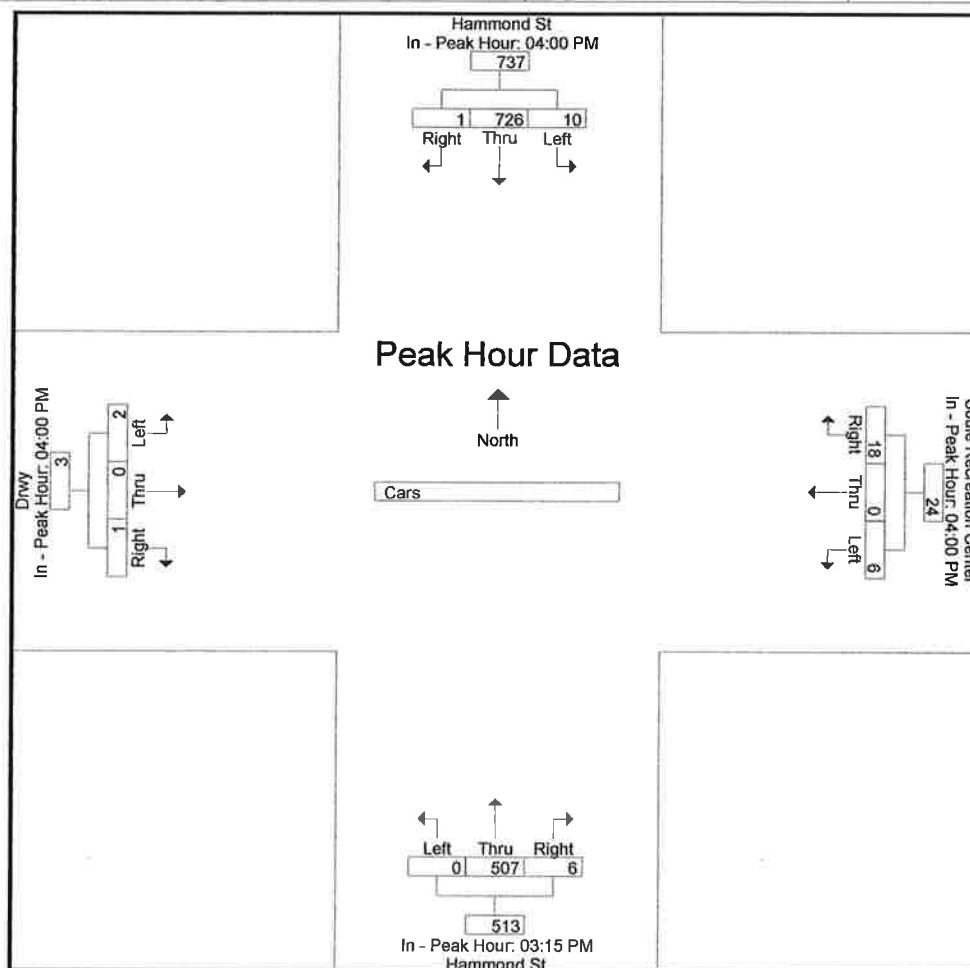
File Name : 7382N004  
Site Code : 73820004  
Start Date : 11/17/2016  
Page No : 6

	Hammond St From North				Soule Recreation Center From East				Hammond St From South				Drwy 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				03:15 PM				04:00 PM			
+0 mins.	5	176	0	181	3	0	8	11	0	140	0	140	0	0	0	0
+15 mins.	1	166	0	167	0	0	4	4	0	123	2	125	0	0	0	0
+30 mins.	0	175	1	176	2	0	4	6	0	118	3	121	1	0	0	1
+45 mins.	4	209	0	213	1	0	2	3	0	126	1	127	1	0	1	2
Total Volume	10	726	1	737	6	0	18	24	0	507	6	513	2	0	1	3
% App. Total	1.4	98.5	0.1		25	0	75		0	98.8	1.2		66.7	0	33.3	
PHF	.500	.868	.250	.865	.500	.000	.563	.545	.000	.905	.500	.916	.500	.000	.250	.375





**Accurate Counts**  
978-664-2565

N/S Street : Hammond Street  
E/W Street: Soule Recreation / Driveway  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N004  
Site Code : 73820004  
Start Date : 11/17/2016  
Page No : 7

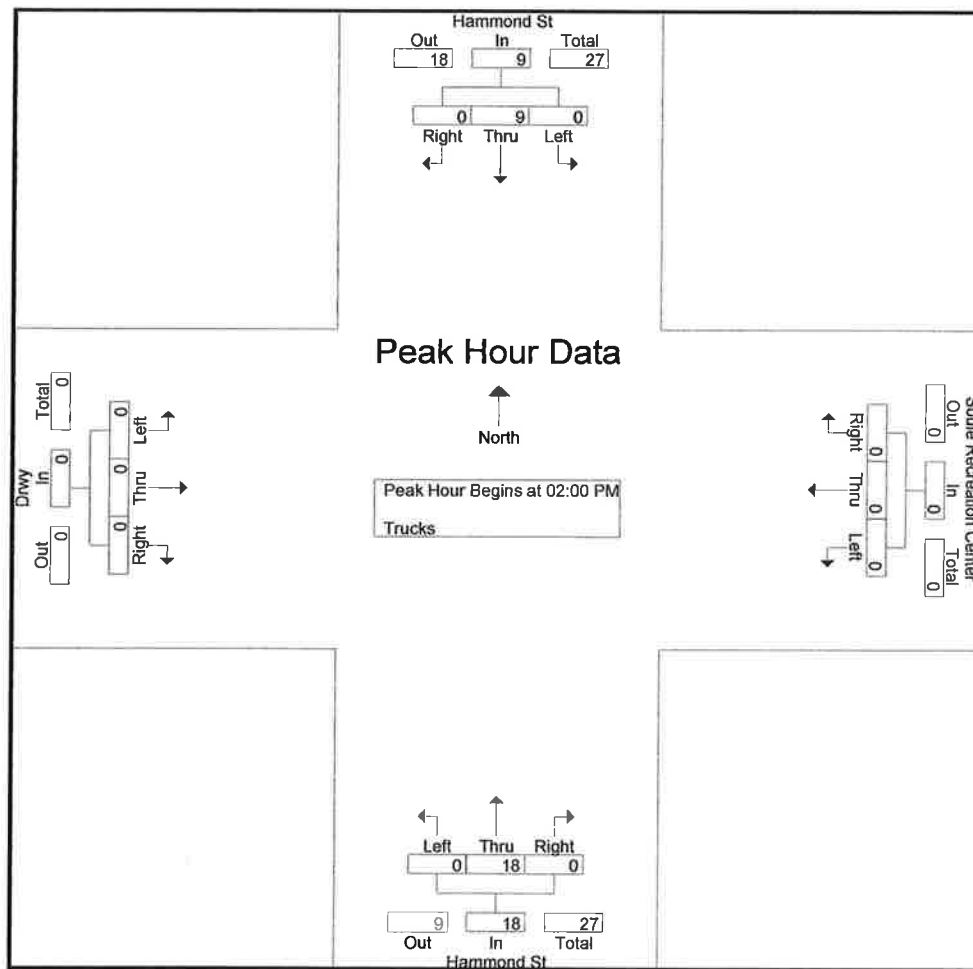
Groups Printed- Trucks

Start Time	Hammond St From North			Soule Recreation Center From East			Hammond St From South			Drwy From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
02:00 PM	0	2	0	0	0	0	0	3	0	0	0	0	5
02:15 PM	0	4	0	0	0	0	0	4	0	0	0	0	8
02:30 PM	0	2	0	0	0	0	0	6	0	0	0	0	8
02:45 PM	0	1	0	0	0	0	0	5	0	0	0	0	6
Total	0	9	0	0	0	0	0	18	0	0	0	0	27
03:00 PM	0	1	0	0	0	0	0	3	0	0	0	0	4
03:15 PM	0	1	0	0	0	0	0	1	0	0	0	0	2
03:30 PM	0	2	0	0	0	0	0	1	0	0	0	0	3
03:45 PM	0	3	0	0	0	0	0	2	0	0	0	0	5
Total	0	7	0	0	0	0	0	7	0	0	0	0	14
04:00 PM	0	4	0	0	0	0	0	2	0	0	0	0	6
04:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
04:30 PM	0	1	0	0	0	0	0	1	0	0	0	0	2
04:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	6	0	0	0	0	0	4	0	0	0	0	10
Grand Total	0	22	0	0	0	0	0	29	0	0	0	0	51
Apprch %	0	100	0	0	0	0	0	100	0	0	0	0	
Total %	0	43.1	0	0	0	0	0	56.9	0	0	0	0	

N/S Street : Hammond Street  
E/W Street: Soule Recreation / Driveway  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N004  
Site Code : 73820004  
Start Date : 11/17/2016  
Page No : 8

	Hammond St From North				Soule Recreation Center From East				Hammond St From South				Drwy 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 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 02:00 PM																	
02:00 PM	0	2	0	2	0	0	0	0	0	3	0	3	0	0	0	0	5
02:15 PM	0	4	0	4	0	0	0	0	0	4	0	4	0	0	0	0	8
02:30 PM	0	2	0	2	0	0	0	0	0	6	0	6	0	0	0	0	8
02:45 PM	0	1	0	1	0	0	0	0	0	5	0	5	0	0	0	0	6
Total Volume	0	9	0	9	0	0	0	0	0	18	0	18	0	0	0	0	27
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.563	.000	.563	.000	.000	.000	.000	.000	.750	.000	.750	.000	.000	.000	.000	.844



N/S Street : Hammond Street  
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City/State : Brookline, MA  
Weather : Clear

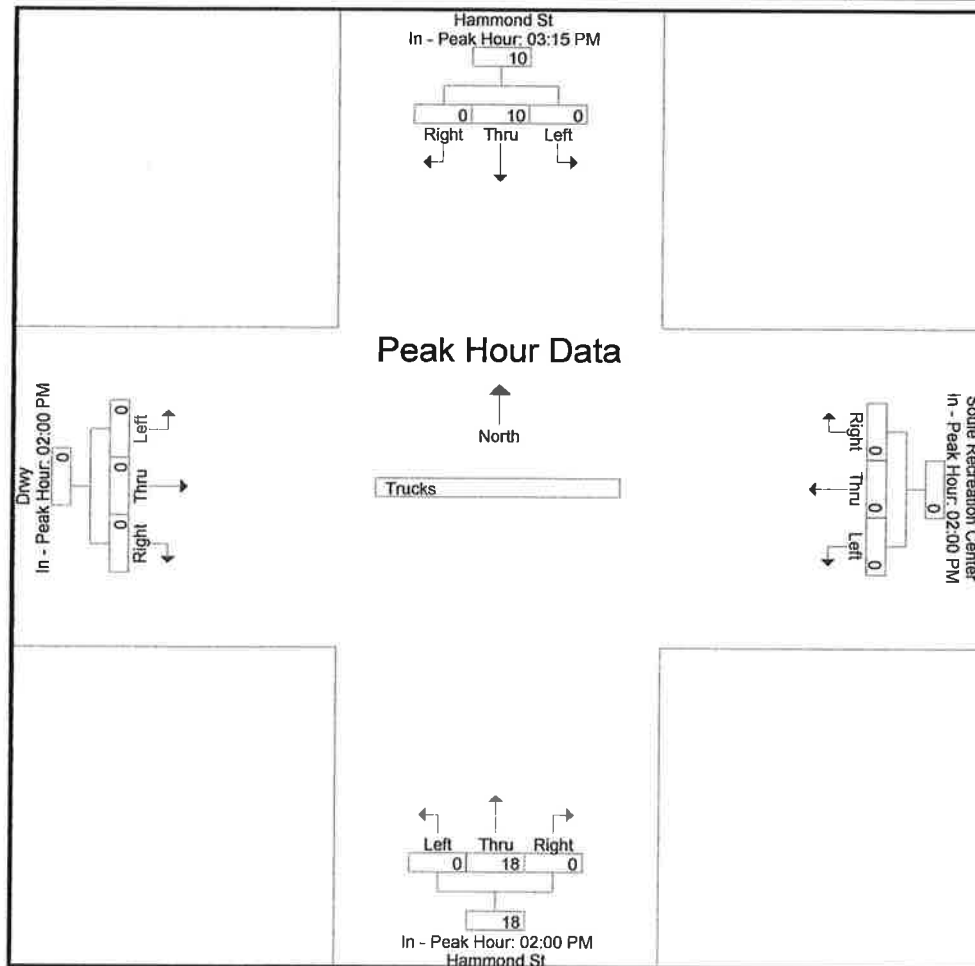
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Site Code : 73820004  
Start Date : 11/17/2016  
Page No : 9

	Hammond St From North				Soule Recreation Center From East				Hammond St From South				Drwy 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	03:15 PM				02:00 PM				02:00 PM				02:00 PM				
+0 mins.	0	1	0	1	0	0	0	0	0	3	0	3	0	0	0	0	0
+15 mins.	0	2	0	2	0	0	0	0	0	4	0	4	0	0	0	0	0
+30 mins.	0	3	0	3	0	0	0	0	0	6	0	6	0	0	0	0	0
+45 mins.	0	4	0	4	0	0	0	0	0	5	0	5	0	0	0	0	0
Total Volume	0	10	0	10	0	0	0	0	0	18	0	18	0	0	0	0	0
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.625	.000	.625	.000	.000	.000	.000	.000	.750	.000	.750	.000	.000	.000	.000	.000



**Accurate Counts**  
978-664-2565

N/S Street : Hammond Street  
E/W Street: Soule Recreation / Driveway  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N004  
Site Code : 73820004  
Start Date : 11/17/2016  
Page No : 10

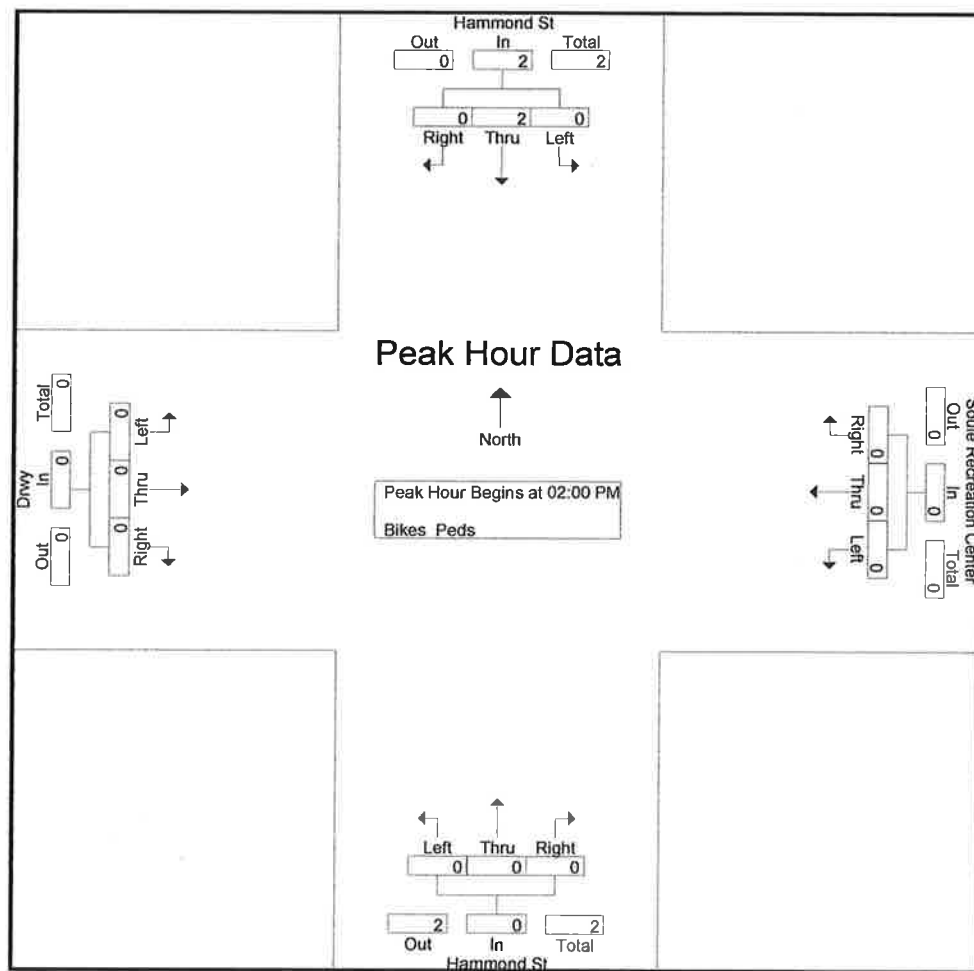
Groups Printed- Bikes Peds

Start Time	Hammond St From North				Soule Recreation Center From East				Hammond St From South				Drwy From West				Exclu. Total	Inclu. Total	Int. Total
	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	1	0	0	0	1	0	0	0	5	7	0	7
02:15 PM	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	2	3	1	4
02:30 PM	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	3	7	0	7
02:45 PM	0	1	0	0	0	0	0	2	0	0	0	3	0	0	0	3	8	1	9
Total	0	2	0	0	0	0	0	5	0	0	0	7	0	0	0	13	25	2	27
03:00 PM	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	5	7	0	7
03:15 PM	0	0	0	0	0	0	0	1	0	1	0	1	0	0	0	7	9	1	10
03:30 PM	0	0	0	1	0	0	0	10	0	0	0	0	0	0	0	2	13	0	13
03:45 PM	0	0	0	1	0	0	0	7	0	0	0	1	0	0	0	4	13	0	13
Total	0	0	0	3	0	0	0	19	0	1	0	2	0	0	0	18	42	1	43
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	19	20	0	20
04:15 PM	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	14	25	0	25
04:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	1	6
04:45 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3	0	3
Total	0	1	0	0	0	0	0	14	0	0	0	1	0	0	0	38	53	1	54
Grand Total	0	3	0	3	0	0	0	38	0	1	0	10	0	0	0	69	120	4	124
Apprch %	0	100	0		0	0	0		0	100	0		0	0	0				
Total %	0	75	0		0	0	0		0	25	0		0	0	0		96.8	3.2	

N/S Street : Hammond Street  
E/W Street: Soule Recreation / Driveway  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N004  
Site Code : 73820004  
Start Date : 11/17/2016  
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	Hammond St From North				Soule Recreation Center From East				Hammond St From South				Drwy 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 04:45 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	0	0	0	0	0	0	0
02:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
% App. Total	0	100	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.500



N/S Street : Hammond Street  
E/W Street: Soule Recreation / Driveway  
City/State : Brookline, MA  
Weather : Clear

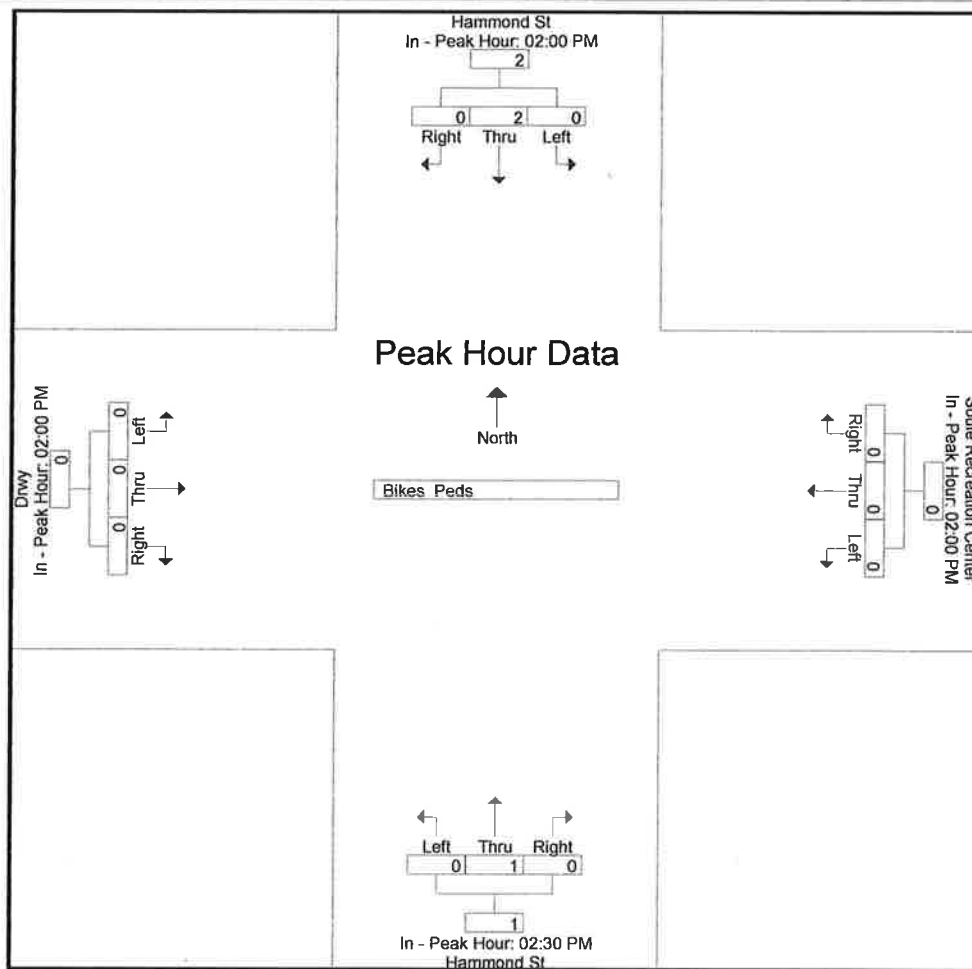
File Name : 7382N004  
Site Code : 73820004  
Start Date : 11/17/2016  
Page No : 12

	Hammond St From North				Soule Recreation Center From East				Hammond St From South				Drwy 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:00 PM				02:00 PM				02:30 PM				02:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	1	0	1	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	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0
Total Volume	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0	
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000



N/S Street : Hammond Street  
E/W Street: Woodland Road  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N005  
Site Code : 73820005  
Start Date : 11/17/2016  
Page No : 1

Groups Printed- Cars - Trucks

Start Time	Hammond St From North			Woodland Rd From East			Hammond St From South			Woodland Rd From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:00 AM	2	48	8	0	0	0	9	140	103	2	7	3	322
07:15 AM	0	86	20	0	0	0	12	167	129	3	17	3	437
07:30 AM	4	103	20	0	0	0	24	148	112	3	21	9	444
07:45 AM	2	115	26	0	0	0	40	114	133	8	41	23	502
Total	8	352	74	0	0	0	85	569	477	16	86	38	1705
08:00 AM	2	82	15	0	0	0	17	120	108	4	27	8	383
08:15 AM	1	81	13	0	0	0	23	152	86	3	32	8	399
08:30 AM	0	99	17	0	0	0	19	125	106	3	20	6	395
08:45 AM	0	100	18	0	0	0	22	130	101	7	19	13	410
Total	3	362	63	0	0	0	81	527	401	17	98	35	1587
09:00 AM	2	68	6	0	0	1	5	121	75	3	13	2	296
09:15 AM	1	85	5	0	0	0	1	130	63	1	7	5	298
Grand Total	14	867	148	0	0	1	172	1347	1016	37	204	80	3886
Apprch %	1.4	84.3	14.4	0	0	100	6.8	53.1	40.1	11.5	63.6	24.9	
Total %	0.4	22.3	3.8	0	0	0	4.4	34.7	26.1	1	5.2	2.1	
Cars	13	825	144	0	0	1	172	1313	1005	36	203	77	3789
% Cars	92.9	95.2	97.3	0	0	100	100	97.5	98.9	97.3	99.5	96.2	97.5
Trucks	1	42	4	0	0	0	0	34	11	1	1	3	97
% Trucks	7.1	4.8	2.7	0	0	0	0	2.5	1.1	2.7	0.5	3.8	2.5

# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
E/W Street: Woodland Road  
City/State : Brookline, MA  
Weather : Clear

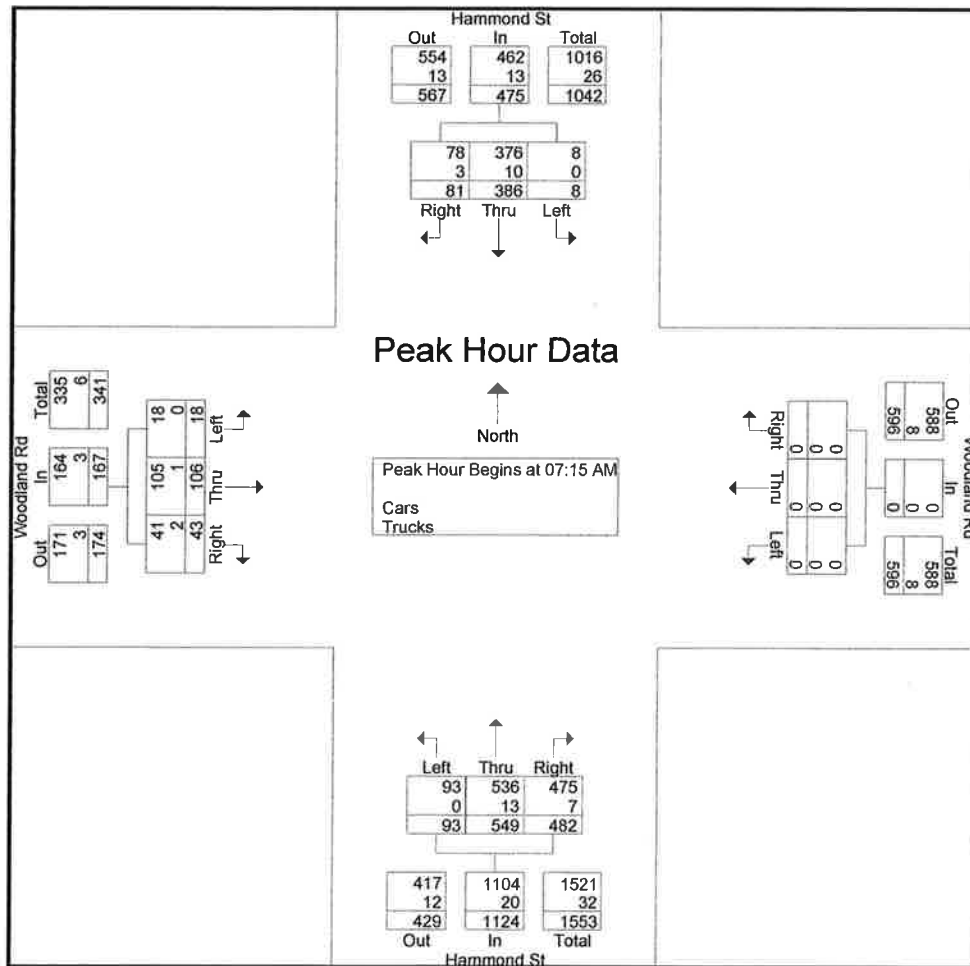
File Name : 7382N005  
Site Code : 73820005  
Start Date : 11/17/2016  
Page No : 2

	Hammond St From North				Woodland Rd From East				Hammond St From South				Woodland 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 09:15 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:15 AM

07:15 AM	0	86	20	106	0	0	0	0	12	<b>167</b>	129	<b>308</b>	3	17	3	23	437
07:30 AM	<b>4</b>	103	20	127	0	0	0	0	24	148	112	284	3	21	9	33	444
07:45 AM	2	<b>115</b>	<b>26</b>	<b>143</b>	0	0	0	0	<b>40</b>	114	<b>133</b>	287	<b>8</b>	<b>41</b>	<b>23</b>	<b>72</b>	<b>502</b>
08:00 AM	2	82	15	99	0	0	0	0	17	120	108	245	4	27	8	39	383
Total Volume	8	386	81	475	0	0	0	0	93	549	482	1124	18	106	43	167	1766
% App. Total	1.7	81.3	17.1		0	0	0		8.3	48.8	42.9		10.8	63.5	25.7		
PHF	.500	.839	.779	.830	.000	.000	.000	.000	.581	.822	.906	.912	.563	.646	.467	.580	.879
Cars	8	376	78	462	0	0	0	0	93	536	475	1104	18	105	41	164	1730
% Cars	100	97.4	96.3	97.3	0	0	0	0	100	97.6	98.5	98.2	100	99.1	95.3	98.2	98.0
Trucks	0	10	3	13	0	0	0	0	0	13	7	20	0	1	2	3	36
% Trucks	0	2.6	3.7	2.7	0	0	0	0	0	2.4	1.5	1.8	0	0.9	4.7	1.8	2.0





N/S Street : Hammond Street  
E/W Street: Woodland Road  
City/State : Brookline, MA  
Weather : Clear

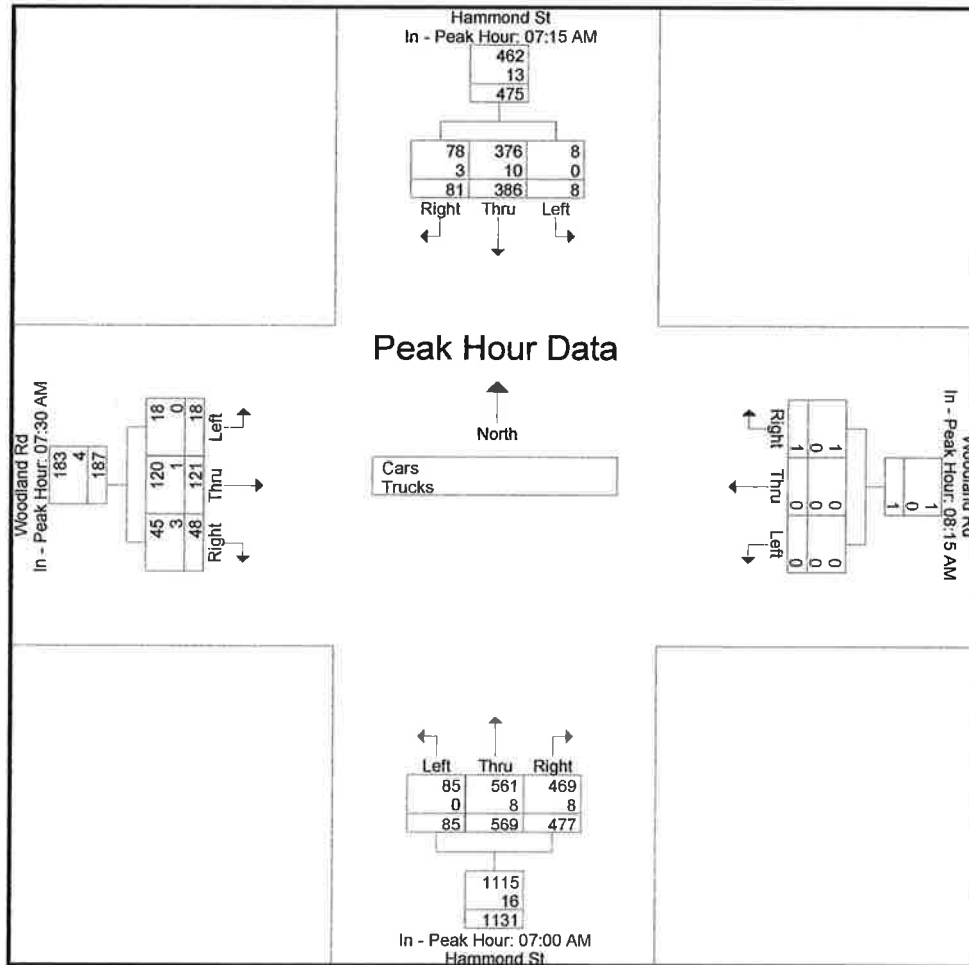
File Name : 7382N005  
Site Code : 73820005  
Start Date : 11/17/2016  
Page No : 3

	Hammond St From North				Woodland Rd From East				Hammond St From South				Woodland 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 09:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				08:15 AM				07:00 AM				07:30 AM				
+0 mins.	0	86	20	106	0	0	0	0	9	140	103	252	3	21	9	33	
+15 mins.	4	103	20	127	0	0	0	0	12	167	129	308	8	41	23	72	
+30 mins.	2	115	26	143	0	0	0	0	24	148	112	284	4	27	8	39	
+45 mins.	2	82	15	99	0	0	1	1	40	114	133	287	3	32	8	43	
Total Volume	8	386	81	475	0	0	1	1	85	569	477	1131	18	121	48	187	
% App. Total	1.7	81.3	17.1		0	0	100		7.5	50.3	42.2		9.6	64.7	25.7		
PHF	.500	.839	.779	.830	.000	.000	.250	.250	.531	.852	.897	.918	.563	.738	.522	.649	
Cars	8	376	78	462	0	0	1	1	85	561	469	1115	18	120	45	183	
% Cars	100	97.4	96.3	97.3	0	0	100	100	100	98.6	98.3	98.6	100	99.2	93.8	97.9	
Trucks	0	10	3	13	0	0	0	0	0	8	8	16	0	1	3	4	
% Trucks	0	2.6	3.7	2.7	0	0	0	0	0	1.4	1.7	1.4	0	0.8	6.2	2.1	



**Accurate Counts**  
978-664-2565

N/S Street : Hammond Street  
E/W Street: Woodland Road  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N005  
Site Code : 73820005  
Start Date : 11/17/2016  
Page No : 4

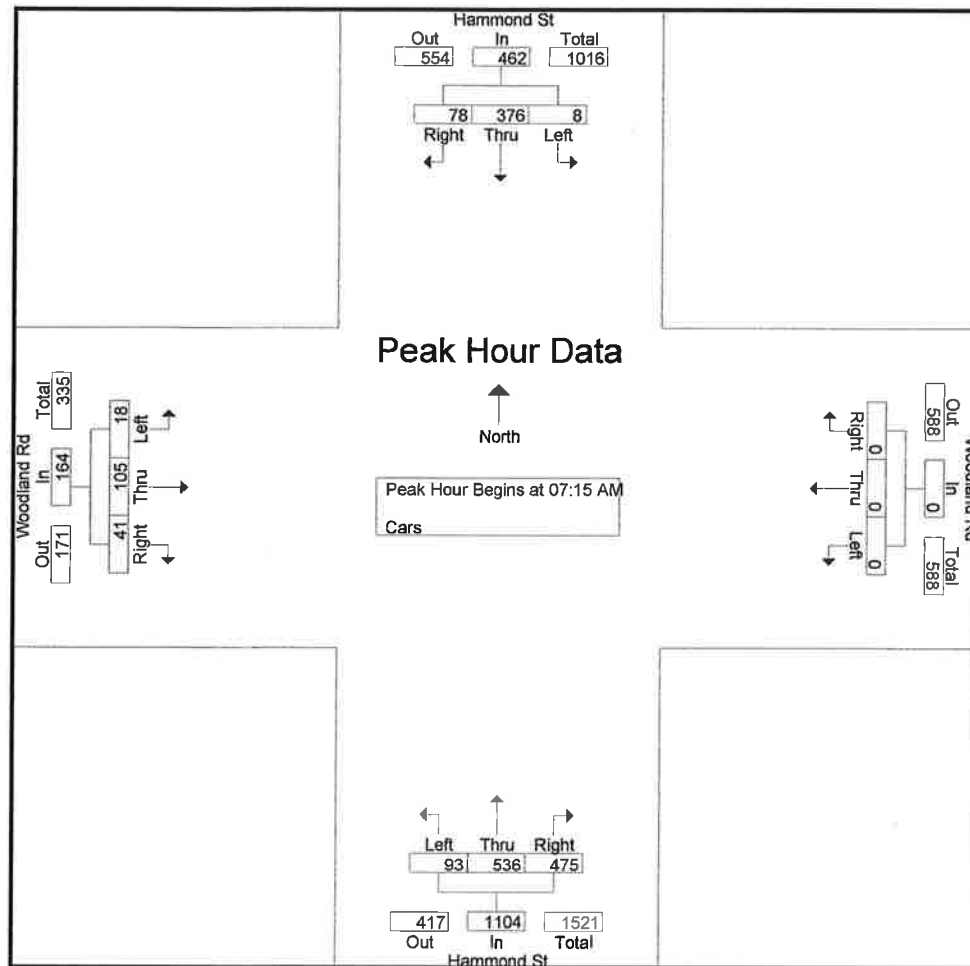
Groups Printed- Cars

Start Time	Hammond St From North			Woodland Rd From East			Hammond St From South			Woodland Rd From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:00 AM	2	44	8	0	0	0	9	138	102	2	7	3	315
07:15 AM	0	84	20	0	0	0	12	167	122	3	17	3	428
07:30 AM	4	101	18	0	0	0	24	144	112	3	21	7	434
07:45 AM	2	112	25	0	0	0	40	112	133	8	40	23	495
Total	8	341	71	0	0	0	85	561	469	16	85	36	1672
08:00 AM	2	79	15	0	0	0	17	113	108	4	27	8	373
08:15 AM	0	78	13	0	0	0	23	150	85	3	32	7	391
08:30 AM	0	94	17	0	0	0	19	121	106	2	20	6	385
08:45 AM	0	91	18	0	0	0	22	127	101	7	19	13	398
Total	2	342	63	0	0	0	81	511	400	16	98	34	1547
09:00 AM	2	64	5	0	0	1	5	118	74	3	13	2	287
09:15 AM	1	78	5	0	0	0	1	123	62	1	7	5	283
Grand Total	13	825	144	0	0	1	172	1313	1005	36	203	77	3789
Apprch %	1.3	84	14.7	0	0	100	6.9	52.7	40.4	11.4	64.2	24.4	
Total %	0.3	21.8	3.8	0	0	0	4.5	34.7	26.5	1	5.4	2	

N/S Street : Hammond Street  
E/W Street: Woodland Road  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N005  
Site Code : 73820005  
Start Date : 11/17/2016  
Page No : 5

	Hammond St From North				Woodland Rd From East				Hammond St From South				Woodland 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 09:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	84	20	104	0	0	0	0	12	<b>167</b>	122	<b>301</b>	3	17	3	23	428
07:30 AM	4	101	18	123	0	0	0	0	24	144	112	280	3	21	7	31	434
07:45 AM	2	<b>112</b>	<b>25</b>	<b>139</b>	0	0	0	0	<b>40</b>	112	<b>133</b>	285	<b>8</b>	<b>40</b>	<b>23</b>	<b>71</b>	<b>495</b>
08:00 AM	2	79	15	96	0	0	0	0	17	113	108	238	4	27	8	39	373
Total Volume	8	376	78	462	0	0	0	0	93	536	475	1104	18	105	41	164	1730
% App. Total	1.7	81.4	16.9		0	0	0		8.4	48.6	43		11	64	25		
PHF	.500	.839	.780	.831	.000	.000	.000	.000	.581	.802	.893	.917	.563	.656	.446	.577	.874



N/S Street : Hammond Street  
E/W Street: Woodland Road  
City/State : Brookline, MA  
Weather : Clear

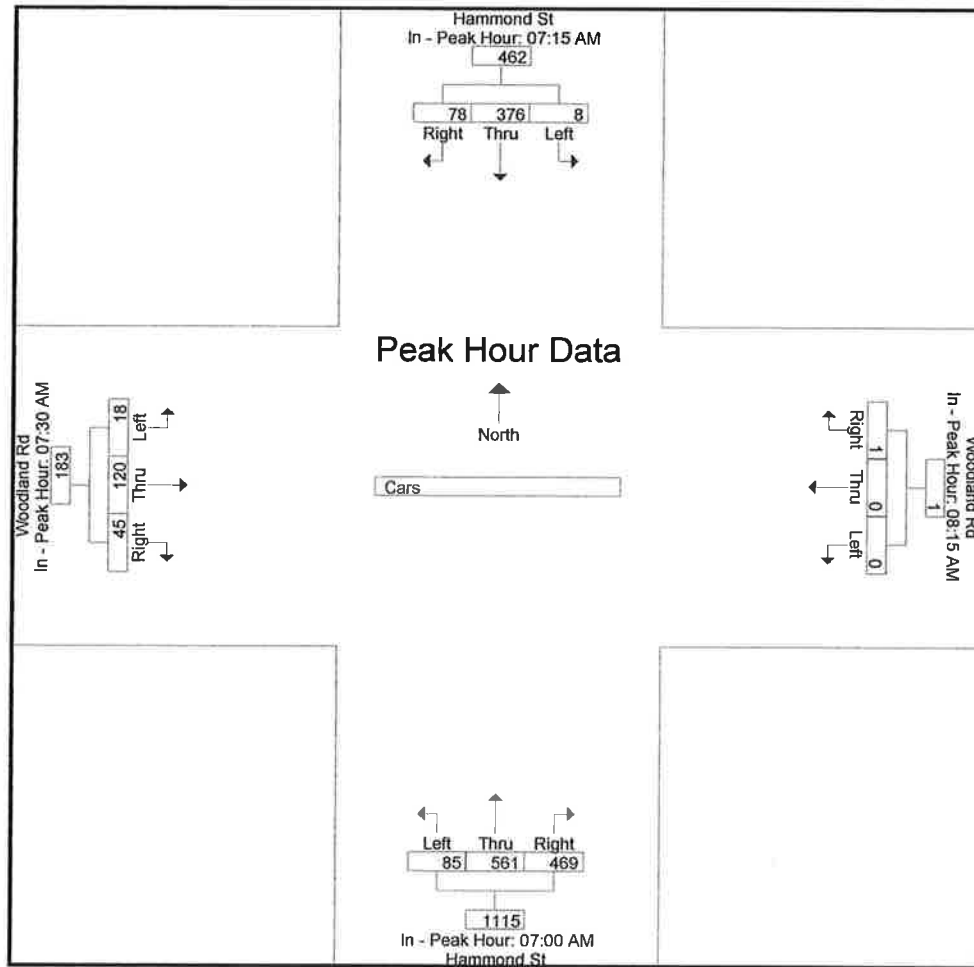
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Site Code : 73820005  
Start Date : 11/17/2016  
Page No : 6

	Hammond St From North				Woodland Rd From East				Hammond St From South				Woodland 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 09:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				08:15 AM				07:00 AM				07:30 AM			
+0 mins.	0	84	20	104	0	0	0	0	9	138	102	249	3	21	7	31
+15 mins.	4	101	18	123	0	0	0	0	12	167	122	301	8	40	23	71
+30 mins.	2	112	25	139	0	0	0	0	24	144	112	280	4	27	8	39
+45 mins.	2	79	15	96	0	0	1	1	40	112	133	285	3	32	7	42
Total Volume	8	376	78	462	0	0	1	1	85	561	469	1115	18	120	45	183
% App. Total	1.7	81.4	16.9		0	0	100		7.6	50.3	42.1		9.8	65.6	24.6	
PHF	.500	.839	.780	.831	.000	.000	.250	.250	.531	.840	.882	.926	.563	.750	.489	.644



**Accurate Counts**  
978-664-2565

N/S Street : Hammond Street  
E/W Street: Woodland Road  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N005  
Site Code : 73820005  
Start Date : 11/17/2016  
Page No : 7

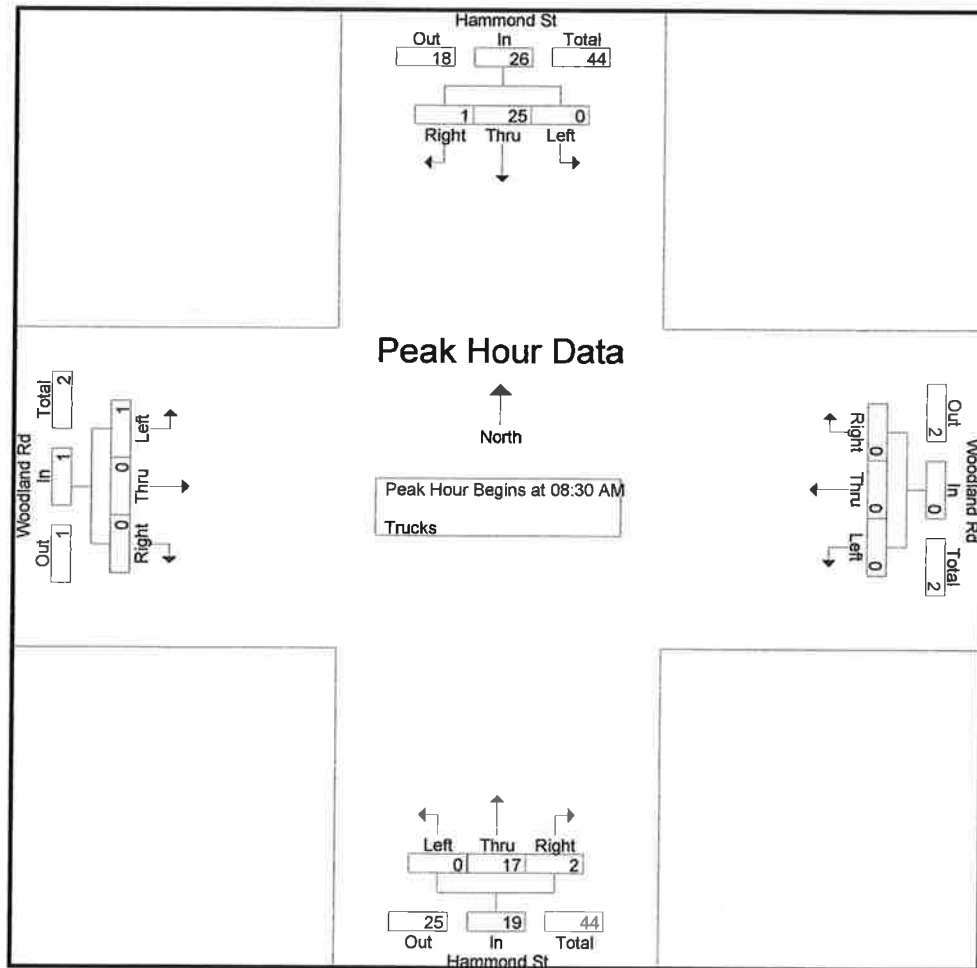
Groups Printed- Trucks

Start Time	Hammond St From North			Woodland Rd From East			Hammond St From South			Woodland Rd From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:00 AM	0	4	0	0	0	0	0	2	1	0	0	0	7
07:15 AM	0	2	0	0	0	0	0	0	7	0	0	0	9
07:30 AM	0	2	2	0	0	0	0	4	0	0	0	2	10
07:45 AM	0	3	1	0	0	0	0	2	0	0	1	0	7
Total	0	11	3	0	0	0	0	8	8	0	1	2	33
08:00 AM	0	3	0	0	0	0	0	7	0	0	0	0	10
08:15 AM	1	3	0	0	0	0	0	2	1	0	0	1	8
08:30 AM	0	5	0	0	0	0	0	4	0	1	0	0	10
08:45 AM	0	9	0	0	0	0	0	3	0	0	0	0	12
Total	1	20	0	0	0	0	0	16	1	1	0	1	40
09:00 AM	0	4	1	0	0	0	0	3	1	0	0	0	9
09:15 AM	0	7	0	0	0	0	0	7	1	0	0	0	15
Grand Total	1	42	4	0	0	0	0	34	11	1	1	3	97
Apprch %	2.1	89.4	8.5	0	0	0	0	75.6	24.4	20	20	60	
Total %	1	43.3	4.1	0	0	0	0	35.1	11.3	1	1	3.1	

N/S Street : Hammond Street  
E/W Street: Woodland Road  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N005  
Site Code : 73820005  
Start Date : 11/17/2016  
Page No : 8

	Hammond St From North				Woodland Rd From East				Hammond St From South				Woodland 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 09:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:30 AM																	
08:30 AM	0	5	0	5	0	0	0	0	0	4	0	4	1	0	0	1	10
08:45 AM	0	9	0	9	0	0	0	0	0	3	0	3	0	0	0	0	12
09:00 AM	0	4	1	5	0	0	0	0	0	3	1	4	0	0	0	0	9
09:15 AM	0	7	0	7	0	0	0	0	0	7	1	8	0	0	0	0	15
Total Volume	0	25	1	26	0	0	0	0	0	17	2	19	1	0	0	1	46
% App. Total	0	96.2	3.8		0	0	0		0	89.5	10.5		100	0	0		
PHF	.000	.694	.250	.722	.000	.000	.000	.000	.000	.607	.500	.594	.250	.000	.000	.250	.767



# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
E/W Street: Woodland Road  
City/State : Brookline, MA  
Weather : Clear

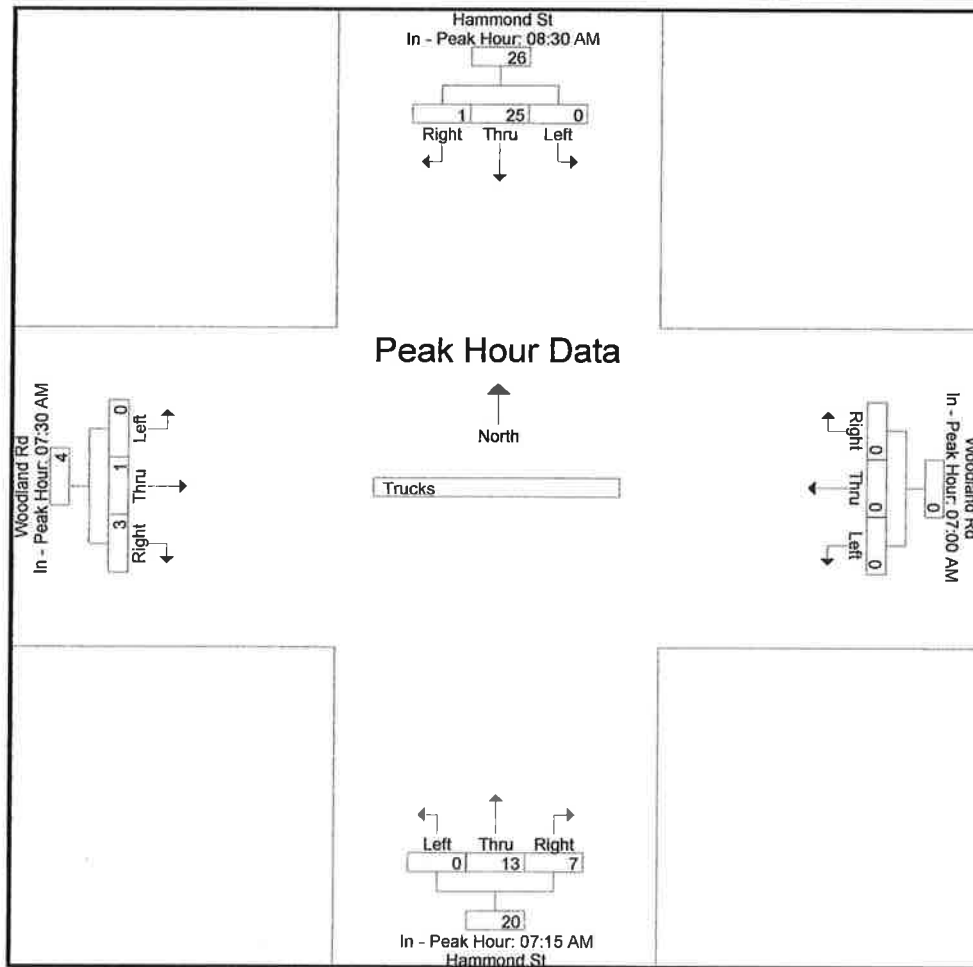
File Name : 7382N005  
Site Code : 73820005  
Start Date : 11/17/2016  
Page No : 9

	Hammond St From North				Woodland Rd From East				Hammond St From South				Woodland 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 09:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:30 AM				07:00 AM				07:15 AM				07:30 AM			
+0 mins.	0	5	0	5	0	0	0	0	0	0	7	7	0	0	2	2
+15 mins.	0	9	0	9	0	0	0	0	0	4	0	4	0	1	0	1
+30 mins.	0	4	1	5	0	0	0	0	0	2	0	2	0	0	0	0
+45 mins.	0	7	0	7	0	0	0	0	0	7	0	7	0	0	1	1
Total Volume	0	25	1	26	0	0	0	0	0	13	7	20	0	1	3	4
% App. Total	0	96.2	3.8		0	0	0		0	65	35		0	25	75	
PHF	.000	.694	.250	.722	.000	.000	.000	.000	.000	.464	.250	.714	.000	.250	.375	.500



**Accurate Counts**  
978-664-2565

N/S Street : Hammond Street  
E/W Street: Woodland Road  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N005  
Site Code : 73820005  
Start Date : 11/17/2016  
Page No : 10

Groups Printed- Bikes Peds

Start Time	Hammond St From North				Woodland Rd From East				Hammond St From South				Woodland Rd From West				Exclu. Total	Inclu. Total	Int. Total
	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	1	0	1	0	2	0	0	0	0	3	1	4
07:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	2	1	3
07:30 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	2	4
07:45 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Total	0	2	0	3	0	0	0	1	0	2	0	3	0	0	0	1	8	4	12
08:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
08:15 AM	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	3	0	3
08:30 AM	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0	2	1	3
08:45 AM	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	1	1	2
Total	0	0	0	4	0	0	0	3	0	2	0	0	0	0	0	0	7	2	9
09:00 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	2
09:15 AM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	1	2
Grand Total	0	2	0	7	0	0	0	5	0	7	0	3	0	0	0	1	16	9	25
Apprch %	0	100	0		0	0	0		0	100	0		0	0	0				
Total %	0	22.2	0		0	0	0		0	77.8	0		0	0	0		64	36	



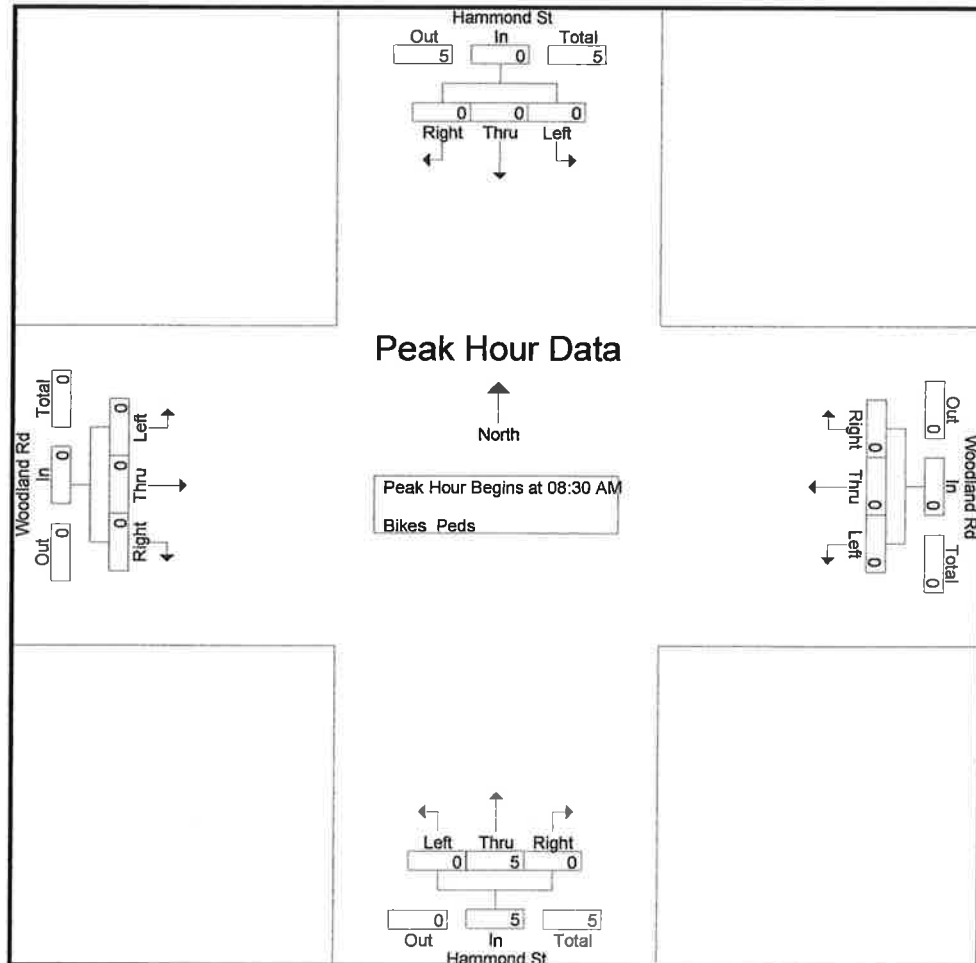
# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
 E/W Street: Woodland Road  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 7382N005  
 Site Code : 73820005  
 Start Date : 11/17/2016  
 Page No : 11

	Hammond St From North				Woodland Rd From East				Hammond St From South				Woodland 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 09:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:30 AM																	
08:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
08:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
09:00 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
09:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total Volume	0	0	0	0	0	0	0	0	0	5	0	5	0	0	0	0	5
% App. Total	0	0	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.625	.000	.625	.000	.000	.000	.000	.625



# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
 E/W Street: Woodland Road  
 City/State : Brookline, MA  
 Weather : Clear

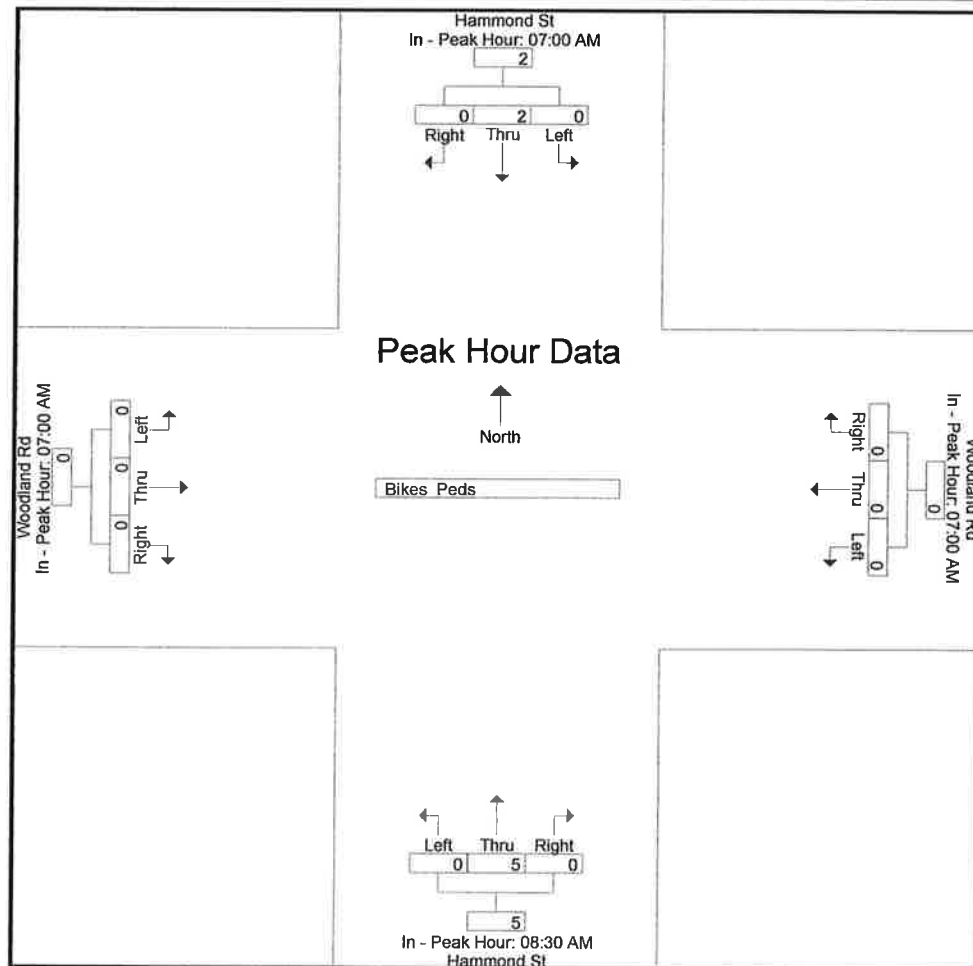
File Name : 7382N005  
 Site Code : 73820005  
 Start Date : 11/17/2016  
 Page No : 12

	Hammond St From North				Woodland Rd From East				Hammond St From South				Woodland 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 09:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				08:30 AM				07:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
+30 mins.	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
Total Volume	0	2	0	2	0	0	0	0	0	5	0	5	0	0	0	0
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0	
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.625	.000	.625	.000	.000	.000	.000



**Accurate Counts**  
978-664-2565

N/S Street : Hammond Street  
E/W Street: Woodland Road  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N005  
Site Code : 73820005  
Start Date : 11/17/2016  
Page No : 1

Groups Printed- Cars - Trucks

Start Time	Hammond St From North			Woodland Rd From East			Hammond St From South			Woodland Rd From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
02:00 PM	0	130	5	0	1	0	3	113	22	6	5	3	288
02:15 PM	0	126	5	0	0	0	4	101	33	0	8	5	282
02:30 PM	1	140	5	0	0	0	6	99	25	6	7	9	298
02:45 PM	0	139	6	0	0	0	9	128	32	4	5	6	329
Total	1	535	21	0	1	0	22	441	112	16	25	23	1197
03:00 PM	0	152	6	0	0	0	18	99	22	2	6	10	315
03:15 PM	0	170	21	0	0	0	14	134	37	7	6	27	416
03:30 PM	0	186	10	0	0	0	8	122	20	6	6	23	381
03:45 PM	0	164	12	0	0	0	9	113	16	9	11	23	357
Total	0	672	49	0	0	0	49	468	95	24	29	83	1469
04:00 PM	0	177	2	0	0	0	8	123	26	6	8	18	368
04:15 PM	1	145	4	0	0	0	3	113	28	3	7	11	315
04:30 PM	0	178	8	0	0	0	6	109	25	2	9	14	351
04:45 PM	0	194	12	0	0	0	2	100	25	6	13	18	370
Total	1	694	26	0	0	0	19	445	104	17	37	61	1404
Grand Total	2	1901	96	0	1	0	90	1354	311	57	91	167	4070
Apprch %	0.1	95.1	4.8	0	100	0	5.1	77.2	17.7	18.1	28.9	53	
Total %	0	46.7	2.4	0	0	0	2.2	33.3	7.6	1.4	2.2	4.1	
Cars	2	1873	93	0	1	0	89	1325	308	54	91	163	3999
% Cars	100	98.5	96.9	0	100	0	98.9	97.9	99	94.7	100	97.6	98.3
Trucks	0	28	3	0	0	0	1	29	3	3	0	4	71
% Trucks	0	1.5	3.1	0	0	0	1.1	2.1	1	5.3	0	2.4	1.7

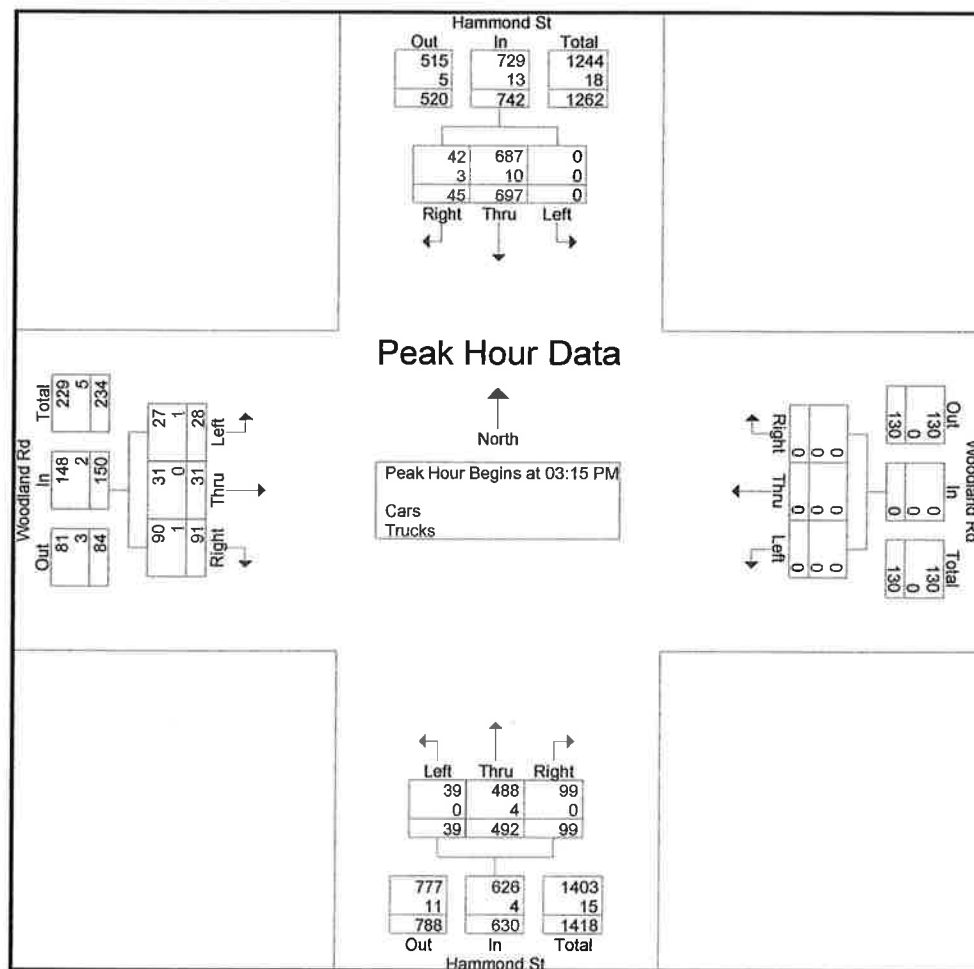
# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
 E/W Street: Woodland Road  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 7382N005  
 Site Code : 73820005  
 Start Date : 11/17/2016  
 Page No : 2

	Hammond St From North				Woodland Rd From East				Hammond St From South				Woodland 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 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:15 PM																	
03:15 PM	0	170	21	191	0	0	0	0	14	134	37	185	7	6	27	40	416
03:30 PM	0	186	10	196	0	0	0	0	8	122	20	150	6	6	23	35	381
03:45 PM	0	164	12	176	0	0	0	0	9	113	16	138	9	11	23	43	357
04:00 PM	0	177	2	179	0	0	0	0	8	123	26	157	6	8	18	32	368
Total Volume	0	697	45	742	0	0	0	0	39	492	99	630	28	31	91	150	1522
% App. Total	0	93.9	6.1		0	0	0		6.2	78.1	15.7		18.7	20.7	60.7		
PHF	.000	.937	.536	.946	.000	.000	.000	.000	.696	.918	.669	.851	.778	.705	.843	.872	.915
Cars	0	687	42	729	0	0	0	0	39	488	99	626	27	31	90	148	1503
% Cars	0	98.6	93.3	98.2	0	0	0	0	100	99.2	100	99.4	96.4	100	98.9	98.7	98.8
Trucks	0	10	3	13	0	0	0	0	0	4	0	4	1	0	1	2	19
% Trucks	0	1.4	6.7	1.8	0	0	0	0	0	0.8	0	0.6	3.6	0	1.1	1.3	1.2



N/S Street : Hammond Street  
E/W Street: Woodland Road  
City/State : Brookline, MA  
Weather : Clear

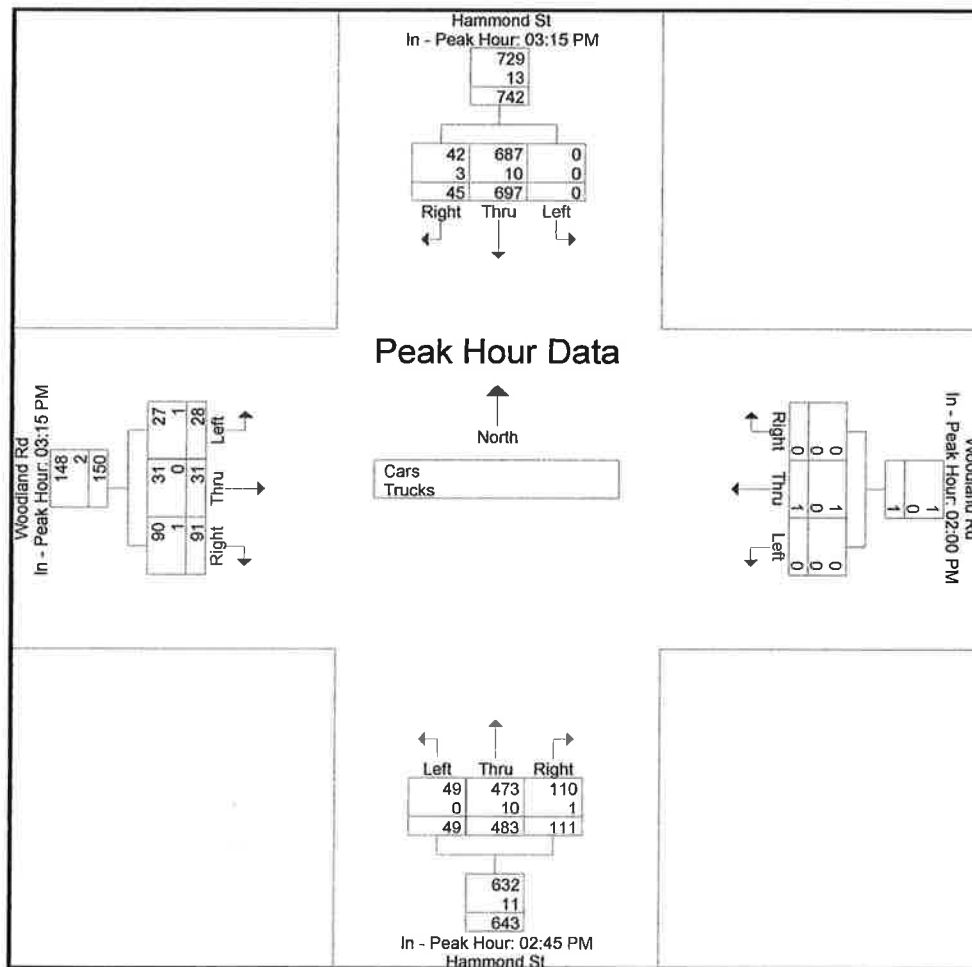
File Name : 7382N005  
Site Code : 73820005  
Start Date : 11/17/2016  
Page No : 3

	Hammond St From North				Woodland Rd From East				Hammond St From South				Woodland 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	03:15 PM				02:00 PM				02:45 PM				03:15 PM			
+0 mins.	0	170	21	191	0	1	0	1	9	128	32	169	7	6	27	40
+15 mins.	0	186	10	196	0	0	0	0	18	99	22	139	6	6	23	35
+30 mins.	0	164	12	176	0	0	0	0	14	134	37	185	9	11	23	43
+45 mins.	0	177	2	179	0	0	0	0	8	122	20	150	6	8	18	32
Total Volume	0	697	45	742	0	1	0	1	49	483	111	643	28	31	91	150
% App. Total	0	93.9	6.1		0	100	0		7.6	75.1	17.3		18.7	20.7	60.7	
PHF	.000	.937	.536	.946	.000	.250	.000	.250	.681	.901	.750	.869	.778	.705	.843	.872
Cars	0	687	42	729	0	1	0	1	49	473	110	632	27	31	90	148
% Cars	0	98.6	93.3	98.2	0	100	0	100	100	97.9	99.1	98.3	96.4	100	98.9	98.7
Trucks	0	10	3	13	0	0	0	0	0	10	1	11	1	0	1	2
% Trucks	0	1.4	6.7	1.8	0	0	0	0	0	2.1	0.9	1.7	3.6	0	1.1	1.3



**Accurate Counts**  
978-664-2565

N/S Street : Hammond Street  
E/W Street: Woodland Road  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N005  
Site Code : 73820005  
Start Date : 11/17/2016  
Page No : 4

Groups Printed- Cars

	Hammond St From North			Woodland Rd From East			Hammond St From South			Woodland Rd From West			
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
02:00 PM	0	127	5	0	1	0	3	110	20	6	5	3	280
02:15 PM	0	125	5	0	0	0	4	95	33	0	8	5	275
02:30 PM	1	133	5	0	0	0	6	94	25	5	7	9	285
02:45 PM	0	139	6	0	0	0	9	122	32	3	5	5	321
Total	1	524	21	0	1	0	22	421	110	14	25	22	1161
03:00 PM	0	150	6	0	0	0	18	96	21	2	6	10	309
03:15 PM	0	169	21	0	0	0	14	134	37	7	6	27	415
03:30 PM	0	184	9	0	0	0	8	121	20	6	6	23	377
03:45 PM	0	159	11	0	0	0	9	111	16	9	11	22	348
Total	0	662	47	0	0	0	49	462	94	24	29	82	1449
04:00 PM	0	175	1	0	0	0	8	122	26	5	8	18	363
04:15 PM	1	143	4	0	0	0	2	112	28	3	7	11	311
04:30 PM	0	177	8	0	0	0	6	108	25	2	9	12	347
04:45 PM	0	192	12	0	0	0	2	100	25	6	13	18	368
Total	1	687	25	0	0	0	18	442	104	16	37	59	1389
Grand Total	2	1873	93	0	1	0	89	1325	308	54	91	163	3999
Apprch %	0.1	95.2	4.7	0	100	0	5.2	76.9	17.9	17.5	29.5	52.9	
Total %	0.1	46.8	2.3	0	0	0	2.2	33.1	7.7	1.4	2.3	4.1	

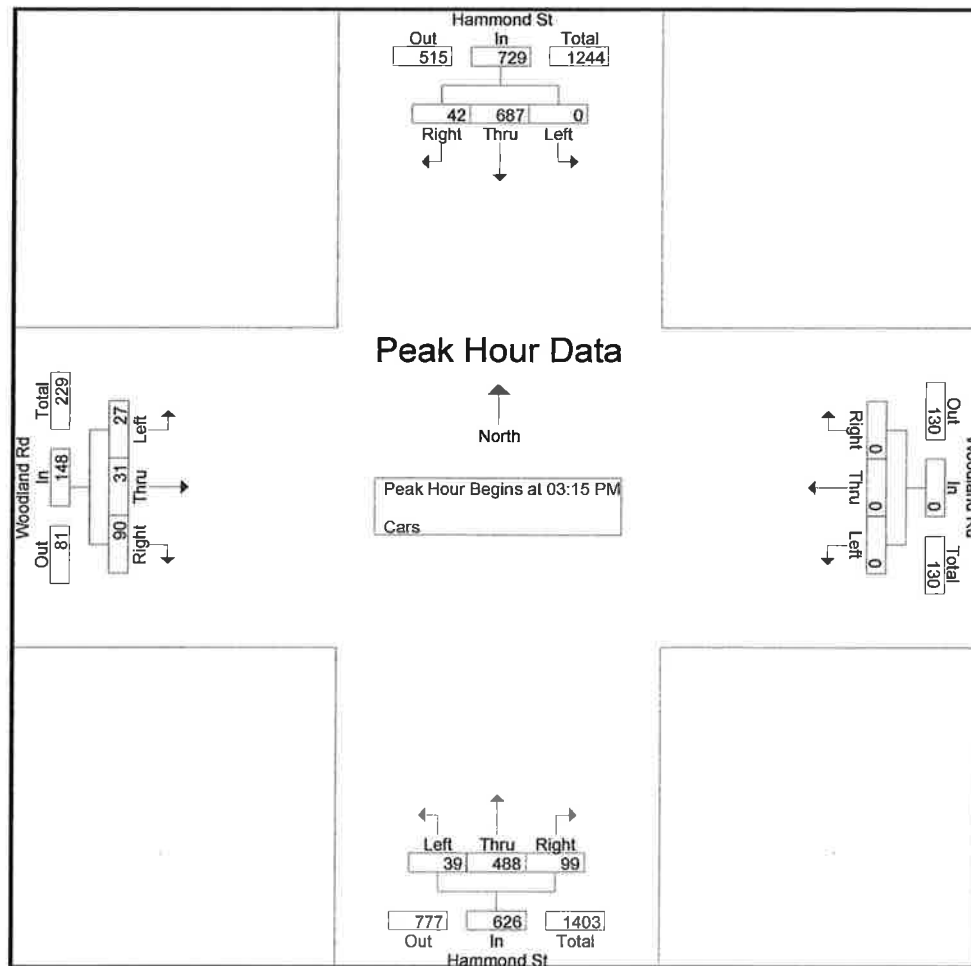
# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
 E/W Street: Woodland Road  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 7382N005  
 Site Code : 73820005  
 Start Date : 11/17/2016  
 Page No : 5

	Hammond St From North				Woodland Rd From East				Hammond St From South				Woodland 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 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:15 PM																	
03:15 PM	0	169	21	190	0	0	0	0	14	134	37	185	7	6	27	40	415
03:30 PM	0	184	9	193	0	0	0	0	8	121	20	149	6	6	23	35	377
03:45 PM	0	159	11	170	0	0	0	0	9	111	16	136	9	11	22	42	348
04:00 PM	0	175	1	176	0	0	0	0	8	122	26	156	5	8	18	31	363
Total Volume	0	687	42	729	0	0	0	0	39	488	99	626	27	31	90	148	1503
% App. Total	0	94.2	5.8		0	0	0		6.2	78	15.8		18.2	20.9	60.8		
PHF	.000	.933	.500	.944	.000	.000	.000	.000	.696	.910	.669	.846	.750	.705	.833	.881	.905



# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
 E/W Street: Woodland Road  
 City/State : Brookline, MA  
 Weather : Clear

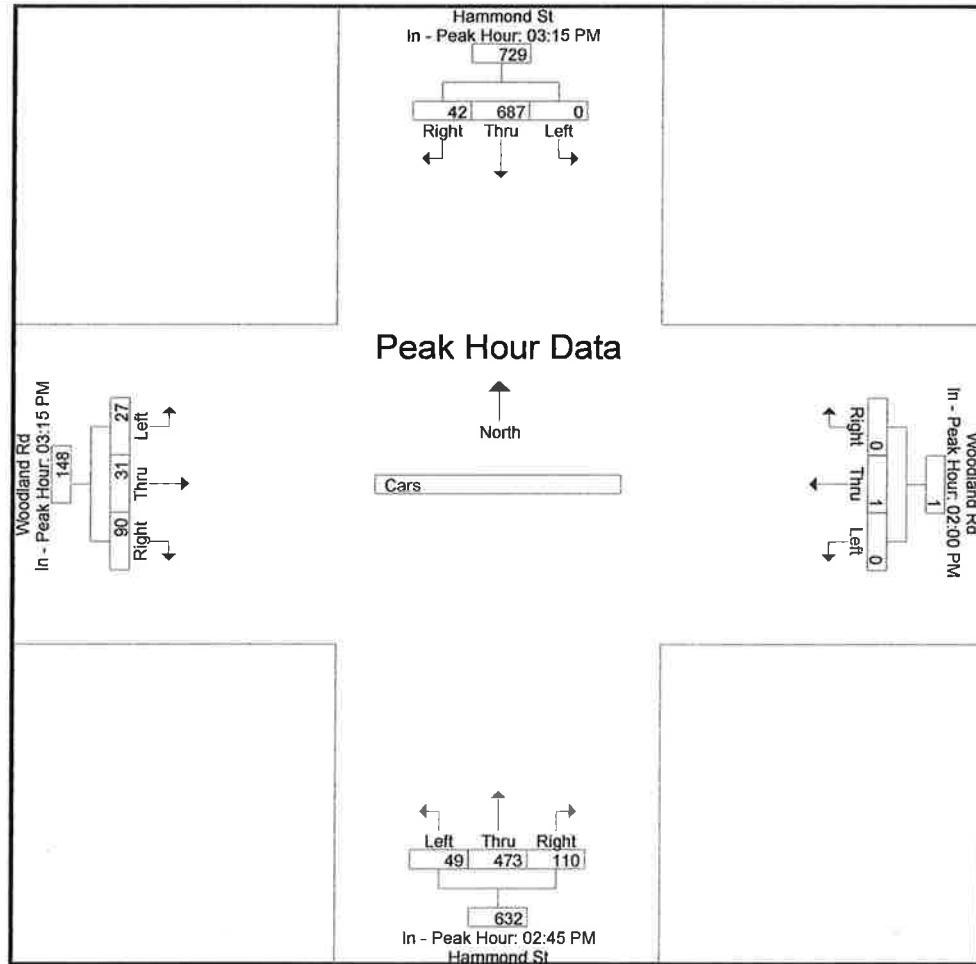
File Name : 7382N005  
 Site Code : 73820005  
 Start Date : 11/17/2016  
 Page No : 6

	Hammond St From North				Woodland Rd From East				Hammond St From South				Woodland 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	03:15 PM				02:00 PM				02:45 PM				03:15 PM				
+0 mins.	0	169	21	190	0	1	0	1	9	122	32	163	7	6	27	40	
+15 mins.	0	184	9	193	0	0	0	0	18	96	21	135	6	6	23	35	
+30 mins.	0	159	11	170	0	0	0	0	14	134	37	185	9	11	22	42	
+45 mins.	0	175	1	176	0	0	0	0	8	121	20	149	5	8	18	31	
Total Volume	0	687	42	729	0	1	0	1	49	473	110	632	27	31	90	148	
% App. Total	0	94.2	5.8		0	100	0		7.8	74.8	17.4		18.2	20.9	60.8		
PHF	.000	.933	.500	.944	.000	.250	.000	.250	.681	.882	.743	.854	.750	.705	.833	.881	





**Accurate Counts**  
978-664-2565

N/S Street : Hammond Street  
E/W Street: Woodland Road  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N005  
Site Code : 73820005  
Start Date : 11/17/2016  
Page No : 7

Groups Printed- Trucks

Start Time	Hammond St From North			Woodland Rd From East			Hammond St From South			Woodland Rd From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
02:00 PM	0	3	0	0	0	0	0	3	2	0	0	0	8
02:15 PM	0	1	0	0	0	0	0	6	0	0	0	0	7
02:30 PM	0	7	0	0	0	0	0	5	0	1	0	0	13
02:45 PM	0	0	0	0	0	0	0	6	0	1	0	1	8
Total	0	11	0	0	0	0	0	20	2	2	0	1	36
03:00 PM	0	2	0	0	0	0	0	3	1	0	0	0	6
03:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
03:30 PM	0	2	1	0	0	0	0	1	0	0	0	0	4
03:45 PM	0	5	1	0	0	0	0	2	0	0	0	1	9
Total	0	10	2	0	0	0	0	6	1	0	0	1	20
04:00 PM	0	2	1	0	0	0	0	1	0	1	0	0	5
04:15 PM	0	2	0	0	0	0	1	1	0	0	0	0	4
04:30 PM	0	1	0	0	0	0	0	1	0	0	0	2	4
04:45 PM	0	2	0	0	0	0	0	0	0	0	0	0	2
Total	0	7	1	0	0	0	1	3	0	1	0	2	15
Grand Total	0	28	3	0	0	0	1	29	3	3	0	4	71
Apprch %	0	90.3	9.7	0	0	0	3	87.9	9.1	42.9	0	57.1	
Total %	0	39.4	4.2	0	0	0	1.4	40.8	4.2	4.2	0	5.6	

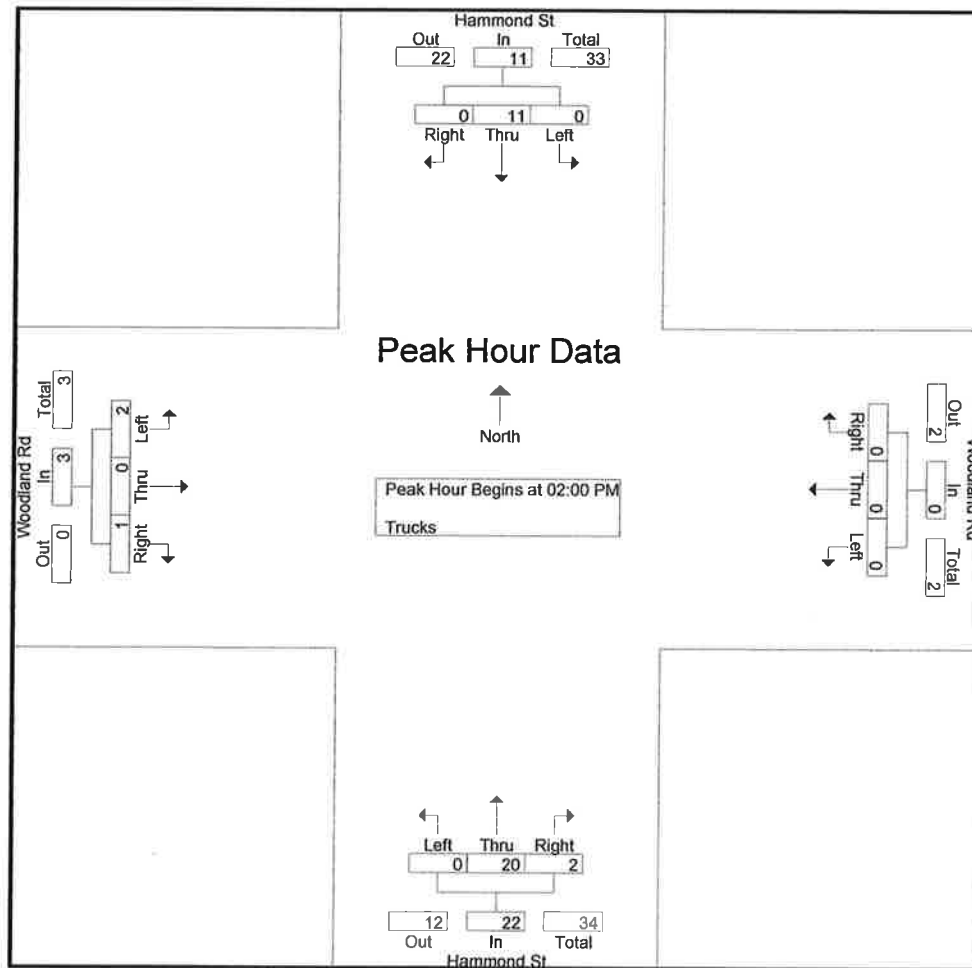
# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
 E/W Street : Woodland Road  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 7382N005  
 Site Code : 73820005  
 Start Date : 11/17/2016  
 Page No : 8

	Hammond St From North				Woodland Rd From East				Hammond St From South				Woodland 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 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 02:00 PM																	
02:00 PM	0	3	0	3	0	0	0	0	0	3	2	5	0	0	0	0	8
02:15 PM	0	1	0	1	0	0	0	0	0	6	0	6	0	0	0	0	7
02:30 PM	0	7	0	7	0	0	0	0	0	5	0	5	1	0	0	1	13
02:45 PM	0	0	0	0	0	0	0	0	0	6	0	6	1	0	1	2	8
Total Volume	0	11	0	11	0	0	0	0	0	20	2	22	2	0	1	3	36
% App. Total	0	100	0		0	0	0		0	90.9	9.1		66.7	0	33.3		
PHF	.000	.393	.000	.393	.000	.000	.000	.000	.000	.833	.250	.917	.500	.000	.250	.375	.692



# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
 E/W Street: Woodland Road  
 City/State : Brookline, MA  
 Weather : Clear

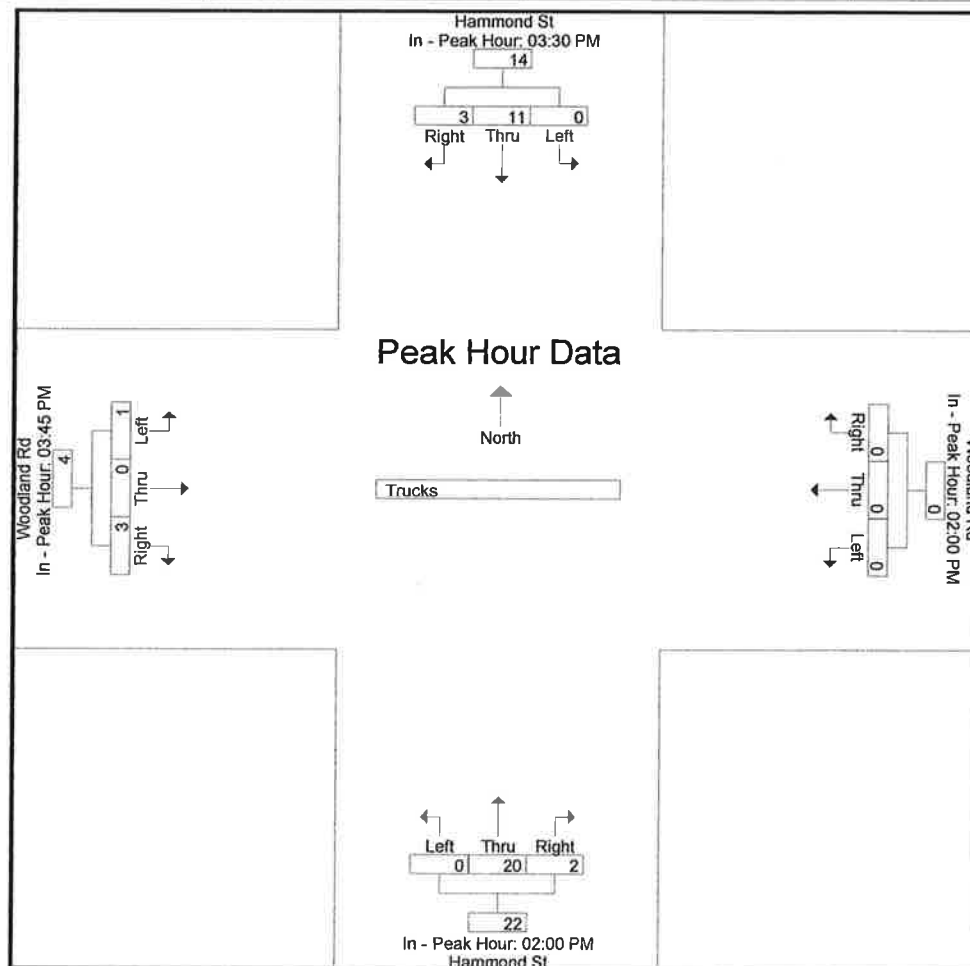
File Name : 7382N005  
 Site Code : 73820005  
 Start Date : 11/17/2016  
 Page No : 9

	Hammond St From North				Woodland Rd From East				Hammond St From South				Woodland 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	03:30 PM				02:00 PM				02:00 PM				03:45 PM				
+0 mins.	0	2	1	3	0	0	0	0	0	3	2	5	0	0	1	1	
+15 mins.	0	5	1	6	0	0	0	0	0	6	0	6	1	0	0	1	
+30 mins.	0	2	1	3	0	0	0	0	0	5	0	5	0	0	0	0	
+45 mins.	0	2	0	2	0	0	0	0	0	6	0	6	0	0	2	2	
Total Volume	0	11	3	14	0	0	0	0	0	20	2	22	1	0	3	4	
% App. Total	0	78.6	21.4		0	0	0		0	90.9	9.1		25	0	75		
PHF	.000	.550	.750	.583	.000	.000	.000	.000	.000	.833	.250	.917	.250	.000	.375	.500	



**Accurate Counts**  
978-664-2565

N/S Street : Hammond Street  
E/W Street: Woodland Road  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N005  
Site Code : 73820005  
Start Date : 11/17/2016  
Page No : 10

Groups Printed- Bikes Peds

Start Time	Hammond St From North				Woodland Rd From East				Hammond St From South				Woodland Rd From West				Exclu. Total	Inclu. Total	Int. Total
	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	1	0	0	0	1	0	0	0	0	2	0	2
02:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	2
02:30 PM	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2	0	2
02:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	2
Total	0	2	0	1	0	0	0	2	0	0	0	1	0	0	0	2	6	2	8
03:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
03:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1
03:30 PM	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	1	4	0	4
03:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Total	0	0	0	3	0	0	0	2	0	1	0	0	0	0	0	1	6	1	7
04:00 PM	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	2	8	0	8
04:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	3	0	3
04:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	8	0	0	0	0	0	0	0	0	0	0	0	4	12	1	13
Grand Total	0	3	0	12	0	0	0	4	0	1	0	1	0	0	0	7	24	4	28
Apprch %	0	100	0		0	0	0		0	100	0		0	0	0				
Total %	0	75	0		0	0	0		0	25	0		0	0	0		85.7	14.3	

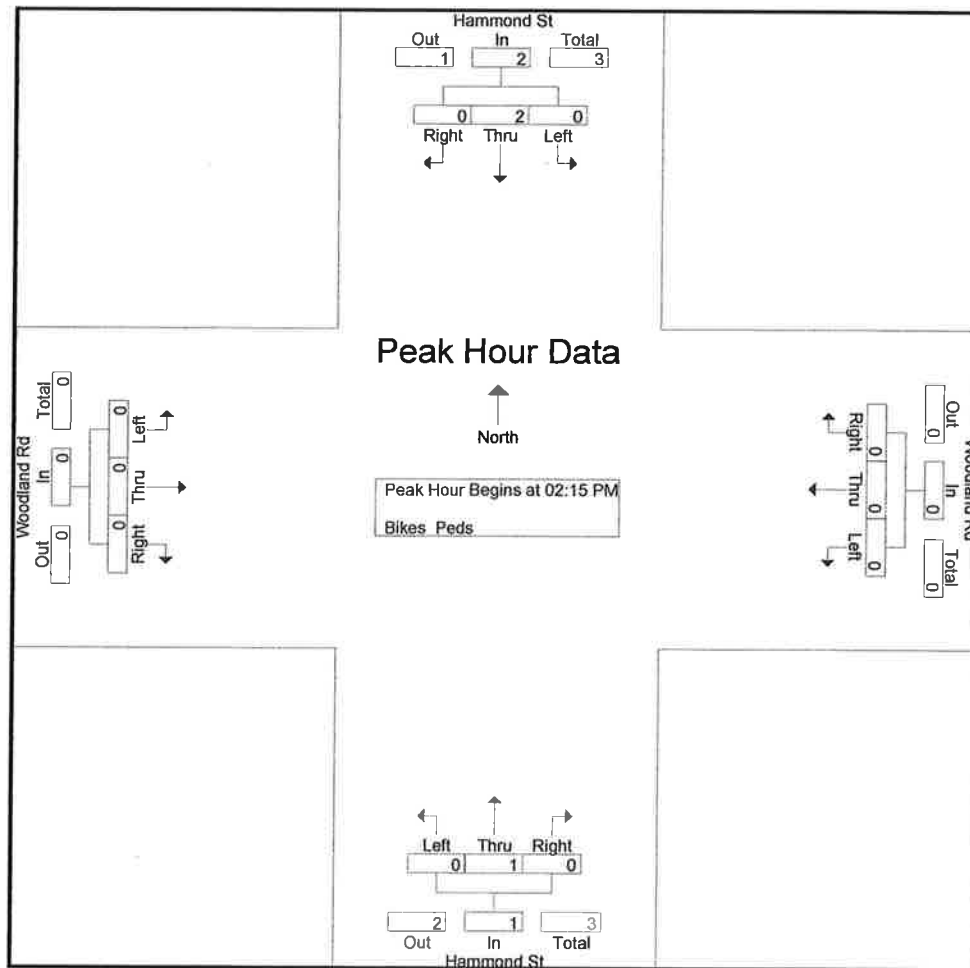
# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
 E/W Street: Woodland Road  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 7382N005  
 Site Code : 73820005  
 Start Date : 11/17/2016  
 Page No : 11

	Hammond St From North				Woodland Rd From East				Hammond St From South				Woodland 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 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 02:15 PM																	
02:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
03:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total Volume	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.750



# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
 E/W Street: Woodland Road  
 City/State : Brookline, MA  
 Weather : Clear

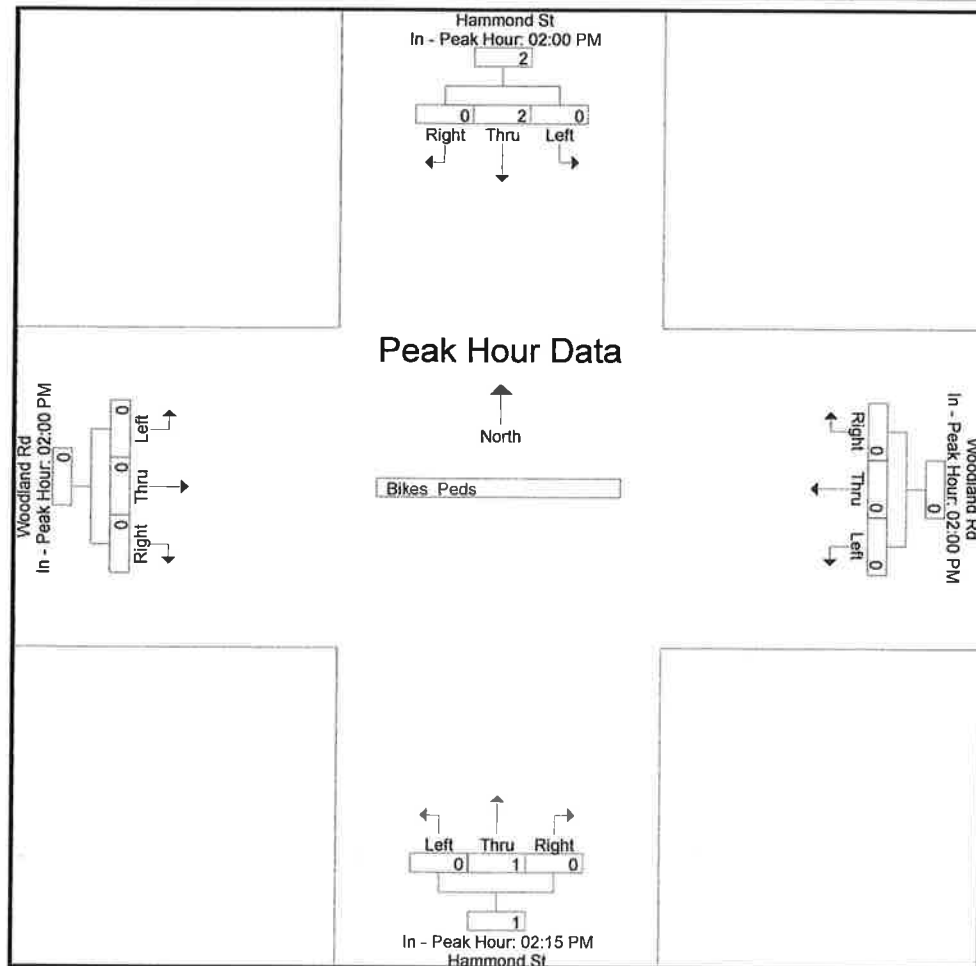
File Name : 7382N005  
 Site Code : 73820005  
 Start Date : 11/17/2016  
 Page No : 12

	Hammond St From North				Woodland Rd From East				Hammond St From South				Woodland 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:00 PM				02:00 PM				02:15 PM				02:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	1	0	1	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	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0
Total Volume	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0	
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000



**Accurate Counts**  
978-664-2565

N/S Street : Oak Street  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N006  
Site Code : 73820006  
Start Date : 11/17/2016  
Page No : 1

Groups Printed- Cars - Trucks

Start Time	Heath St From East		Oak St From South		Heath St From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
07:00 AM	3	25	0	0	31	1	60
07:15 AM	4	37	0	1	38	2	82
07:30 AM	1	54	1	4	26	0	86
07:45 AM	2	59	2	2	32	5	102
Total	10	175	3	7	127	8	330
08:00 AM	1	56	1	1	34	0	93
08:15 AM	4	61	1	1	24	1	92
08:30 AM	2	55	1	2	39	2	101
08:45 AM	3	49	3	1	34	2	92
Total	10	221	6	5	131	5	378
09:00 AM	0	48	3	1	32	1	85
09:15 AM	0	35	0	0	38	1	74
Grand Total	20	479	12	13	328	15	867
Apprch %	4	96	48	52	95.6	4.4	
Total %	2.3	55.2	1.4	1.5	37.8	1.7	
Cars	20	469	12	13	324	15	853
% Cars	100	97.9	100	100	98.8	100	98.4
Trucks	0	10	0	0	4	0	14
% Trucks	0	2.1	0	0	1.2	0	1.6

# Accurate Counts

978-664-2565

N/S Street : Oak Street  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

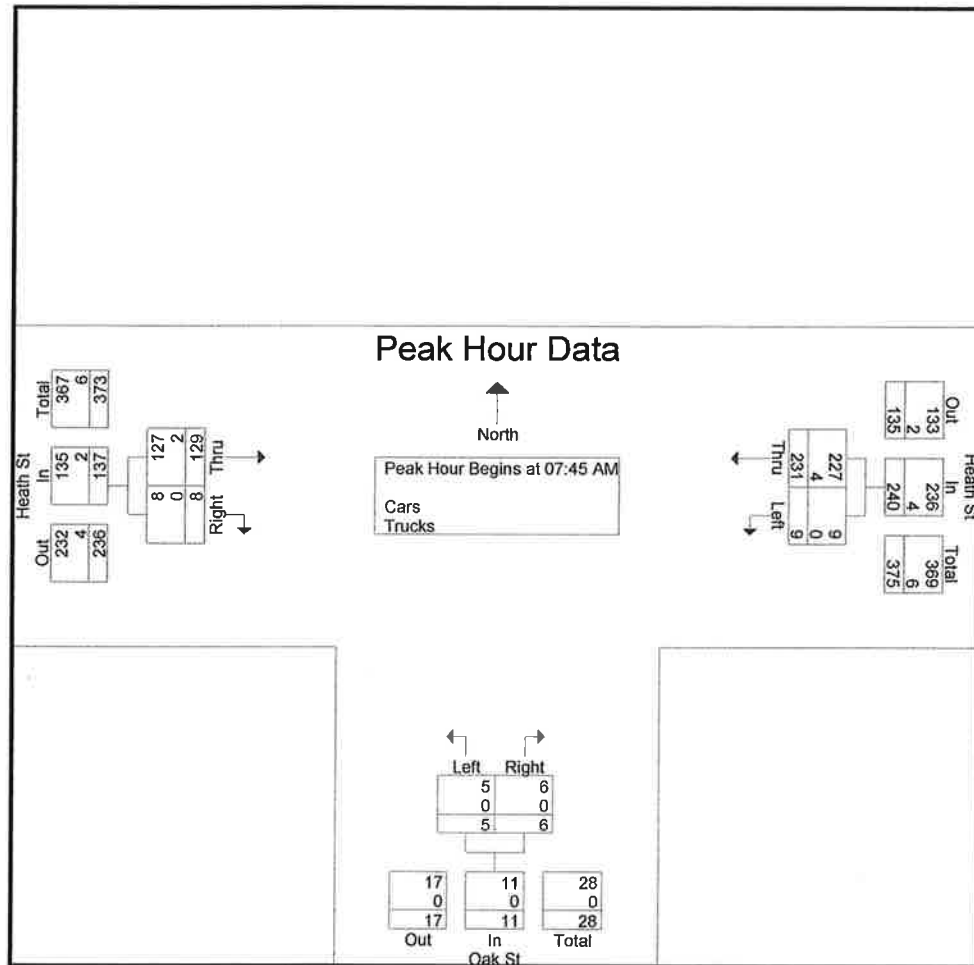
File Name : 7382N006  
 Site Code : 73820006  
 Start Date : 11/17/2016  
 Page No : 2

	Heath St From East			Oak St From South			Heath St 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 09:15 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:45 AM

07:45 AM	2	59	61	2	2	4	32	5	37	102
08:00 AM	1	56	57	1	1	2	34	0	34	93
08:15 AM	4	61	65	1	1	2	24	1	25	92
08:30 AM	2	55	57	1	2	3	39	2	41	101
Total Volume	9	231	240	5	6	11	129	8	137	388
% App. Total	3.8	96.2		45.5	54.5		94.2	5.8		
PHF	.563	.947	.923	.625	.750	.688	.827	.400	.835	.951
Cars	9	227	236	5	6	11	127	8	135	382
% Cars	100	98.3	98.3	100	100	100	98.4	100	98.5	98.5
Trucks	0	4	4	0	0	0	2	0	2	6
% Trucks	0	1.7	1.7	0	0	0	1.6	0	1.5	1.5





# Accurate Counts

978-664-2565

N/S Street : Oak Street  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

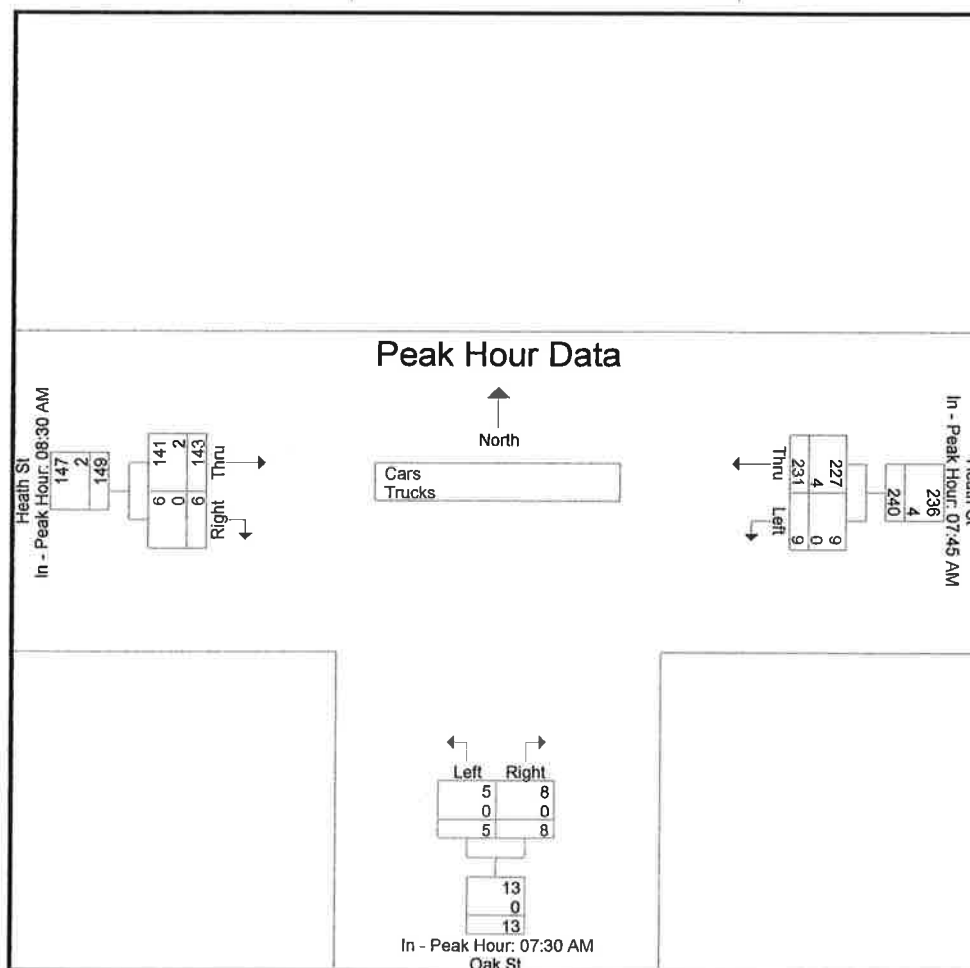
File Name : 7382N006  
 Site Code : 73820006  
 Start Date : 11/17/2016  
 Page No : 3

	Heath St From East			Oak St From South			Heath St 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 09:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:45 AM			07:30 AM			08:30 AM		
+0 mins.	2	59	61	1	4	5	39	2	41
+15 mins.	1	56	57	2	2	4	34	2	36
+30 mins.	4	61	65	1	1	2	32	1	33
+45 mins.	2	55	57	1	1	2	38	1	39
Total Volume	9	231	240	5	8	13	143	6	149
% App. Total	3.8	96.2		38.5	61.5		96	4	
PHF	.563	.947	.923	.625	.500	.650	.917	.750	.909
Cars	9	227	236	5	8	13	141	6	147
% Cars	100	98.3	98.3	100	100	100	98.6	100	98.7
Trucks	0	4	4	0	0	0	2	0	2
% Trucks	0	1.7	1.7	0	0	0	1.4	0	1.3



**Accurate Counts**  
978-664-2565

N/S Street : Oak Street  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N006  
Site Code : 73820006  
Start Date : 11/17/2016  
Page No : 4

Groups Printed- Cars

Start Time	Heath St From East		Oak St From South		Heath St From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
07:00 AM	3	25	0	0	31	1	60
07:15 AM	4	36	0	1	37	2	80
07:30 AM	1	54	1	4	26	0	86
07:45 AM	2	59	2	2	32	5	102
Total	10	174	3	7	126	8	328
08:00 AM	1	55	1	1	33	0	91
08:15 AM	4	59	1	1	24	1	90
08:30 AM	2	54	1	2	38	2	99
08:45 AM	3	46	3	1	34	2	89
Total	10	214	6	5	129	5	369
09:00 AM	0	47	3	1	32	1	84
09:15 AM	0	34	0	0	37	1	72
Grand Total	20	469	12	13	324	15	853
Apprch %	4.1	95.9	48	52	95.6	4.4	
Total %	2.3	55	1.4	1.5	38	1.8	

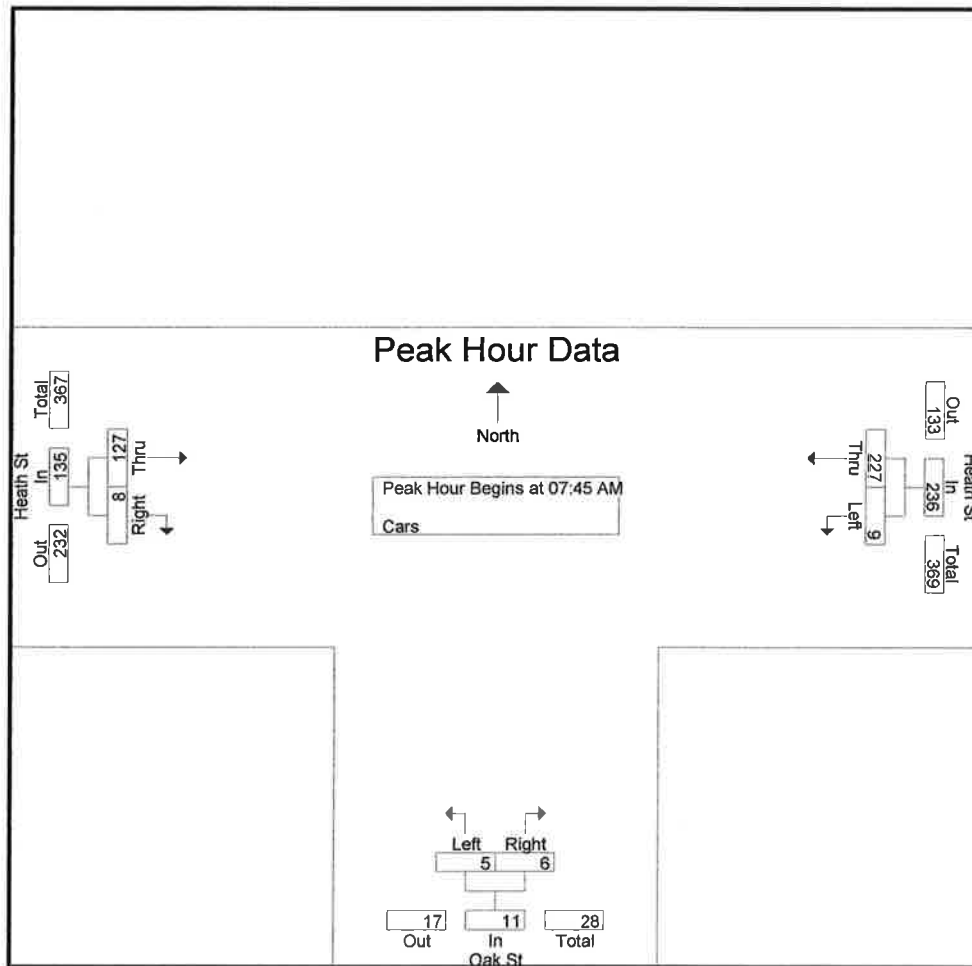
# Accurate Counts

978-664-2565

N/S Street : Oak Street  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 7382N006  
 Site Code : 73820006  
 Start Date : 11/17/2016  
 Page No : 5

	Heath St From East			Oak St From South			Heath St 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 09:15 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	2	59	61	2	2	4	32	5	37	102
08:00 AM	1	55	56	1	1	2	33	0	33	91
08:15 AM	4	59	63	1	1	2	24	1	25	90
08:30 AM	2	54	56	1	2	3	38	2	40	99
Total Volume	9	227	236	5	6	11	127	8	135	382
% App. Total	3.8	96.2		45.5	54.5		94.1	5.9		
PHF	.563	.962	.937	.625	.750	.688	.836	.400	.844	.936



# Accurate Counts

978-664-2565

N/S Street : Oak Street  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

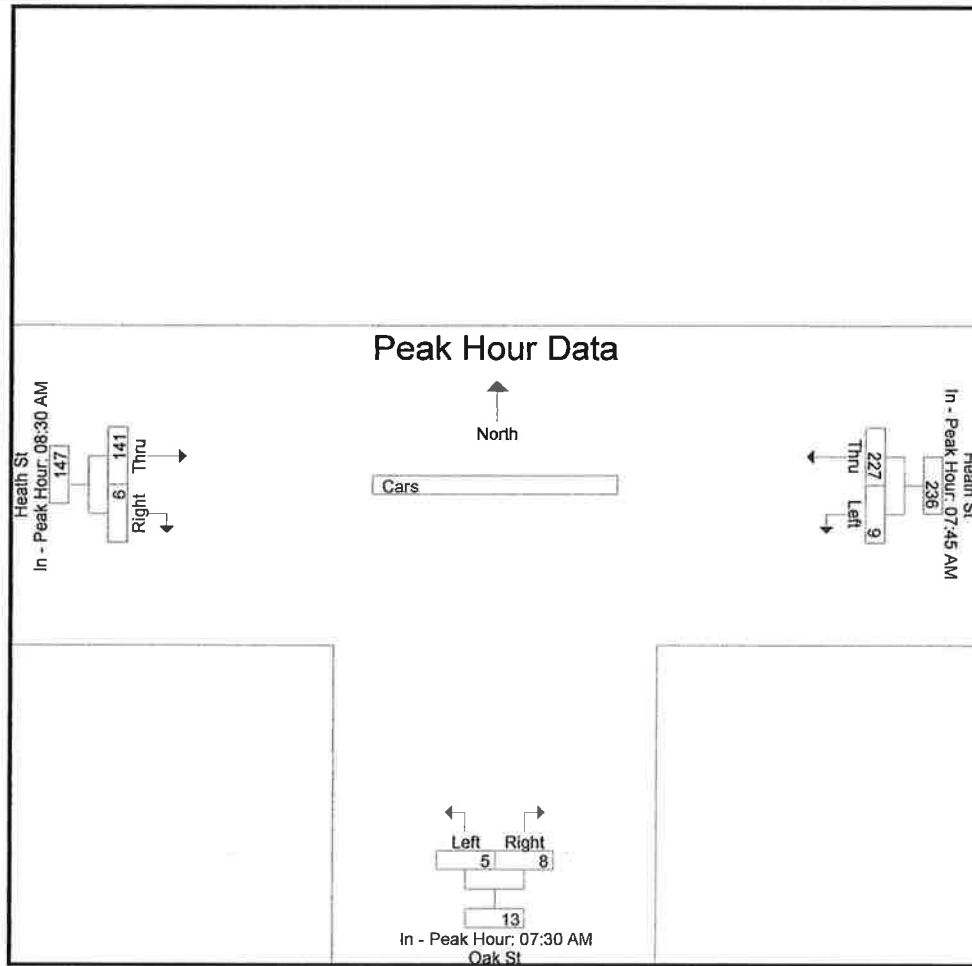
File Name : 7382N006  
 Site Code : 73820006  
 Start Date : 11/17/2016  
 Page No : 6

	Heath St From East			Oak St From South			Heath St 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 09:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:45 AM			07:30 AM			08:30 AM		
+0 mins.	2	59	61	1	4	5	38	2	40
+15 mins.	1	55	56	2	2	4	34	2	36
+30 mins.	4	59	63	1	1	2	32	1	33
+45 mins.	2	54	56	1	1	2	37	1	38
Total Volume	9	227	236	5	8	13	141	6	147
% App. Total	3.8	96.2		38.5	61.5		95.9	4.1	
PHF	.563	.962	.937	.625	.500	.650	.928	.750	.919



**Accurate Counts**  
978-664-2565

N/S Street : Oak Street  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N006  
Site Code : 73820006  
Start Date : 11/17/2016  
Page No : 7

Groups Printed- Trucks

Start Time	Heath St From East		Oak St From South		Heath St From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
07:00 AM	0	0	0	0	0	0	0
07:15 AM	0	1	0	0	1	0	2
07:30 AM	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0
Total	0	1	0	0	1	0	2
08:00 AM	0	1	0	0	1	0	2
08:15 AM	0	2	0	0	0	0	2
08:30 AM	0	1	0	0	1	0	2
08:45 AM	0	3	0	0	0	0	3
Total	0	7	0	0	2	0	9
09:00 AM	0	1	0	0	0	0	1
09:15 AM	0	1	0	0	1	0	2
Grand Total	0	10	0	0	4	0	14
Apprch %	0	100	0	0	100	0	
Total %	0	71.4	0	0	28.6	0	

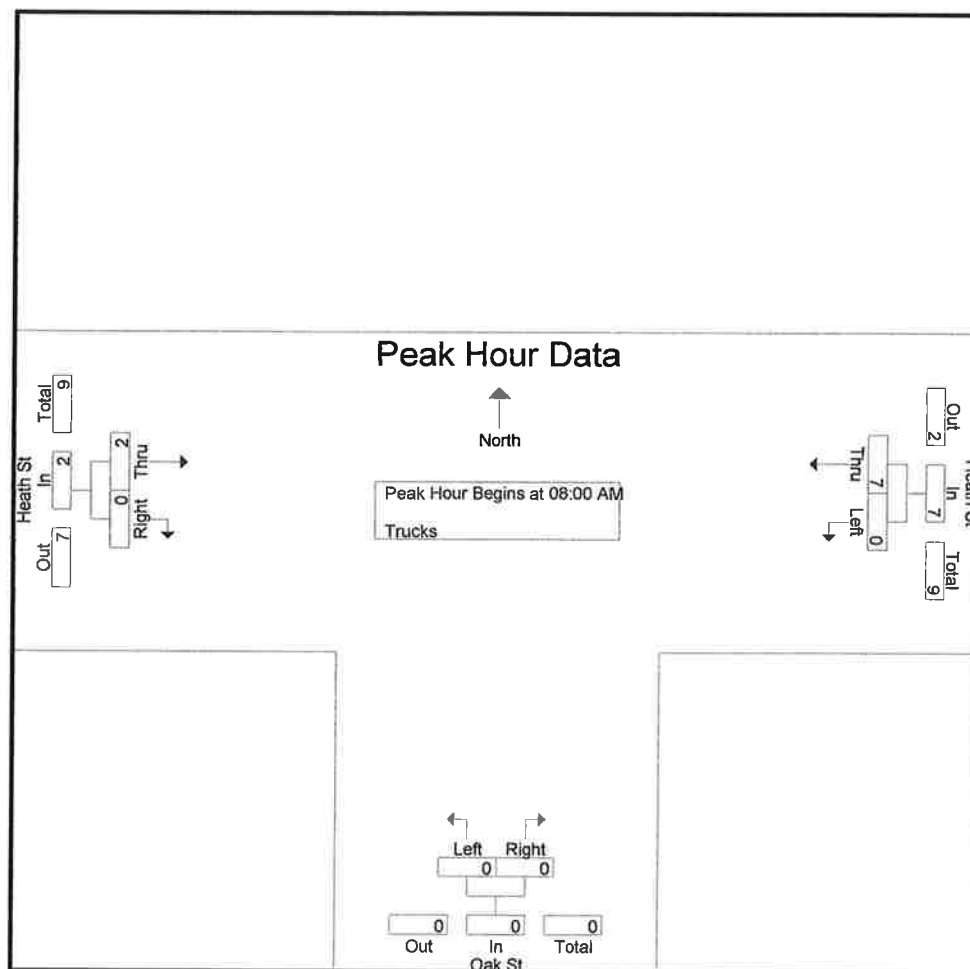
# Accurate Counts

978-664-2565

N/S Street : Oak Street  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 7382N006  
 Site Code : 73820006  
 Start Date : 11/17/2016  
 Page No : 8

	Heath St From East			Oak St From South			Heath St 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 09:15 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	0	1	1	0	0	0	1	0	1	2
08:15 AM	0	2	2	0	0	0	0	0	0	2
08:30 AM	0	1	1	0	0	0	1	0	1	2
08:45 AM	0	3	3	0	0	0	0	0	0	3
Total Volume	0	7	7	0	0	0	2	0	2	9
% App. Total	0	100		0	0		100	0		
PHF	.000	.583	.583	.000	.000	.000	.500	.000	.500	.750



**Accurate Counts**  
978-664-2565

N/S Street : Oak Street  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

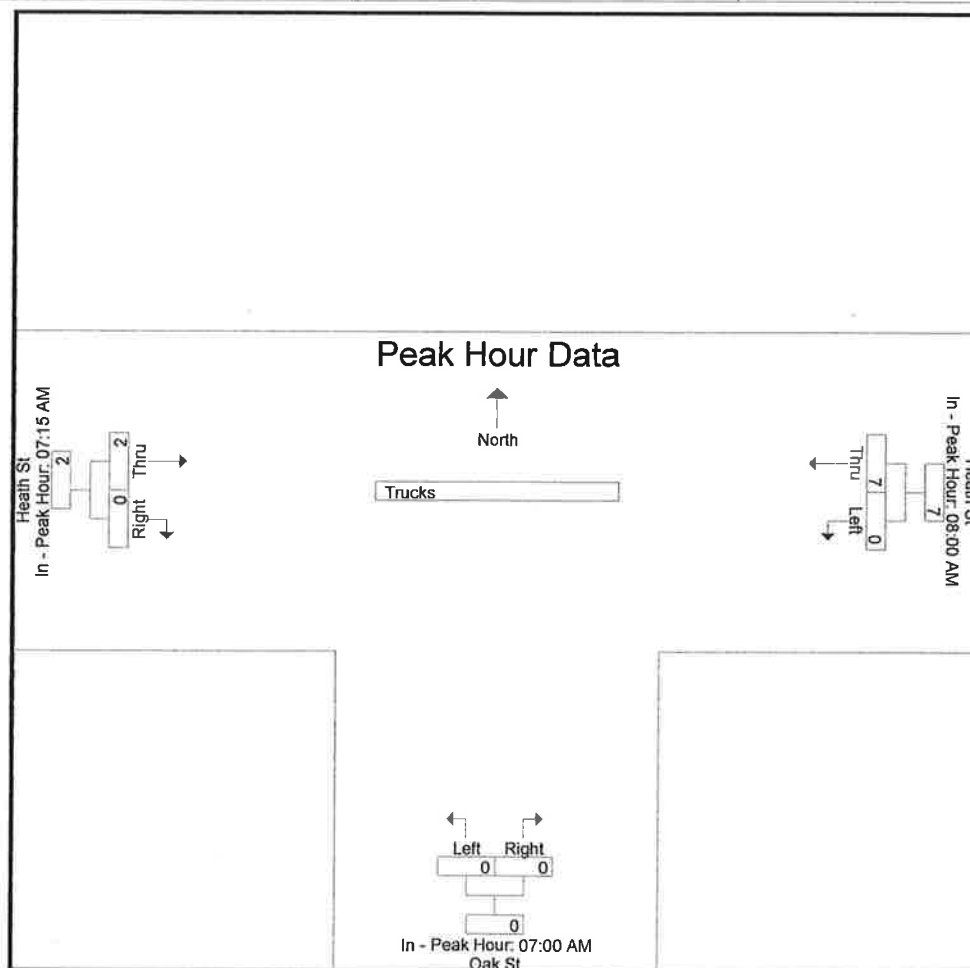
File Name : 7382N006  
Site Code : 73820006  
Start Date : 11/17/2016  
Page No : 9

	Heath St From East			Oak St From South			Heath St 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 09:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00 AM			07:00 AM			07:15 AM		
+0 mins.	0	1	1	0	0	0	1	0	1
+15 mins.	0	2	2	0	0	0	0	0	0
+30 mins.	0	1	1	0	0	0	0	0	0
+45 mins.	0	3	3	0	0	0	1	0	1
Total Volume	0	7	7	0	0	0	2	0	2
% App. Total	0	100		0	0		100	0	
PHF	.000	.583	.583	.000	.000	.000	.500	.000	.500



**Accurate Counts**  
978-664-2565

N/S Street : Oak Street  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N006  
Site Code : 73820006  
Start Date : 11/17/2016  
Page No : 10

Groups Printed- Bikes Peds												
Start Time	Heath St From East			Oak St From South			Heath St From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds			
07:00 AM	0	0	0	0	0	1	0	0	1	2	0	2
07:15 AM	0	1	2	0	0	0	0	0	0	2	1	3
07:30 AM	0	0	0	0	0	1	0	0	1	2	0	2
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	2	0	0	2	0	0	2	6	1	7
08:00 AM	0	0	0	0	0	2	0	0	0	2	0	2
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	1	1	0	1	2	1	3
08:45 AM	0	1	0	0	0	0	0	0	0	0	1	1
Total	0	1	0	0	0	3	1	0	1	4	2	6
09:00 AM	0	0	0	0	0	1	0	0	0	1	0	1
09:15 AM	0	0	0	0	0	0	0	0	1	1	0	1
Grand Total	0	2	2	0	0	6	1	0	4	12	3	15
Apprch %	0	100		0	0		100	0				
Total %	0	66.7		0	0		33.3	0		80	20	



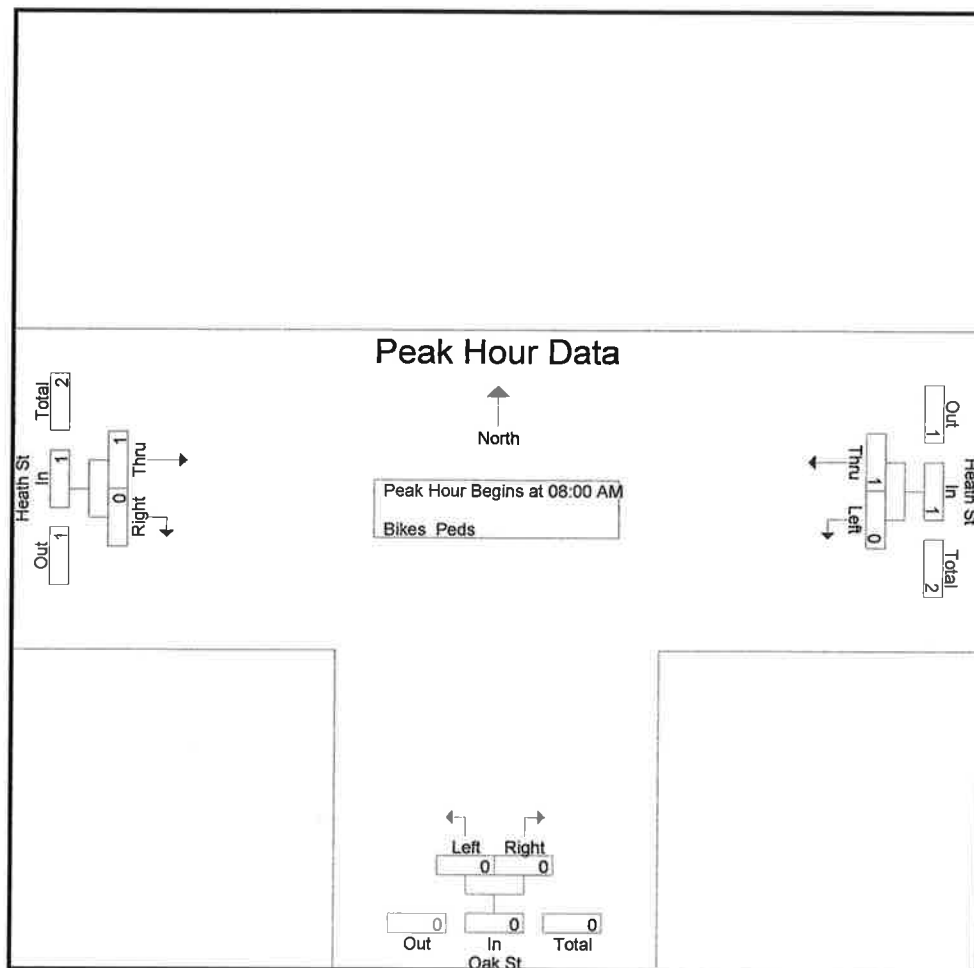
# Accurate Counts

978-664-2565

N/S Street : Oak Street  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 7382N006  
 Site Code : 73820006  
 Start Date : 11/17/2016  
 Page No : 11

	Heath St From East			Oak St From South			Heath St 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 09:15 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	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	1	0	1	1
08:45 AM	0	1	1	0	0	0	0	0	0	1
Total Volume	0	1	1	0	0	0	1	0	1	2
% App. Total	0	100		0	0		100	0		
PHF	.000	.250	.250	.000	.000	.000	.250	.000	.250	.500



# Accurate Counts

978-664-2565

N/S Street : Oak Street  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

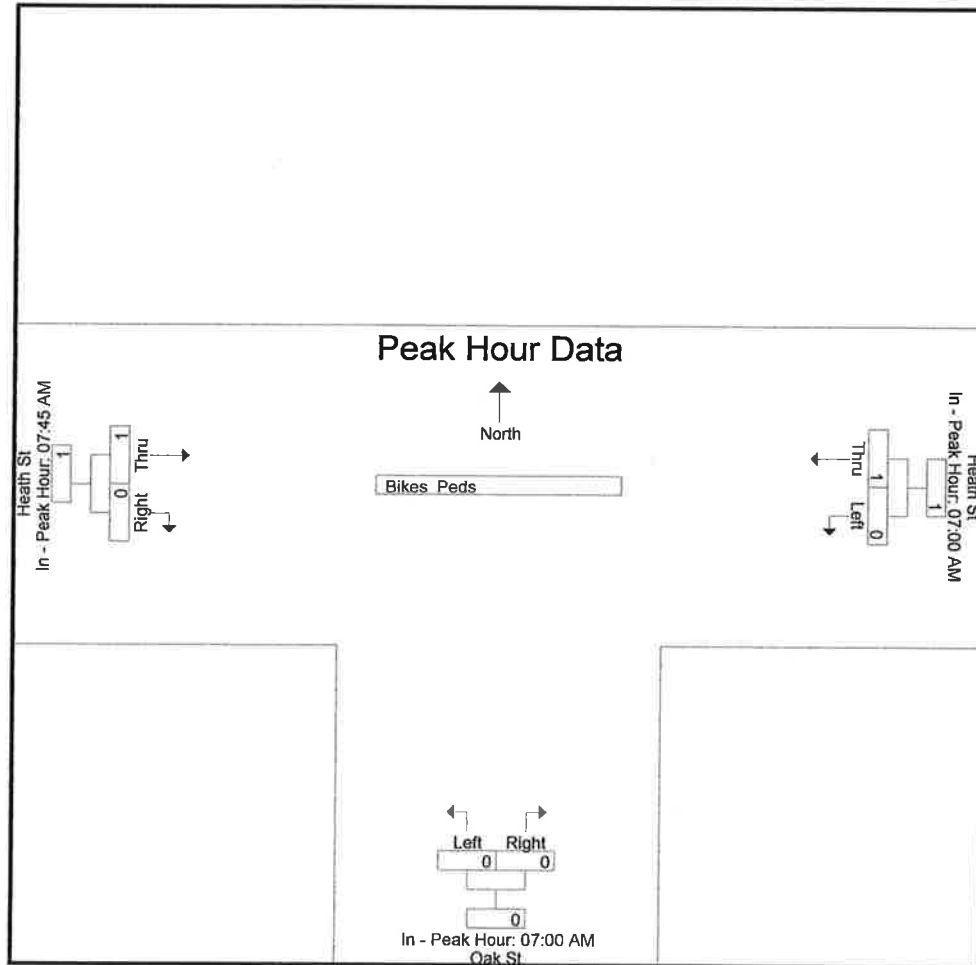
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 Site Code : 73820006  
 Start Date : 11/17/2016  
 Page No : 12

	Heath St From East			Oak St From South			Heath St 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 09:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

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



**Accurate Counts**  
978-664-2565

N/S Street : Oak Street  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N006  
Site Code : 73820006  
Start Date : 11/17/2016  
Page No : 1

Groups Printed- Cars - Trucks

Start Time	Heath St From East		Oak St From South		Heath St From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
02:00 PM	0	57	0	0	28	0	85
02:15 PM	0	44	2	0	25	0	71
02:30 PM	0	55	0	0	26	0	81
02:45 PM	1	57	0	1	30	0	89
Total	1	213	2	1	109	0	326
03:00 PM	4	70	1	0	27	0	102
03:15 PM	2	71	1	2	41	1	118
03:30 PM	1	72	2	1	35	1	112
03:45 PM	4	61	2	1	29	1	98
Total	11	274	6	4	132	3	430
04:00 PM	0	87	5	2	37	1	132
04:15 PM	2	87	2	0	37	1	129
04:30 PM	1	85	2	1	34	0	123
04:45 PM	0	107	0	0	35	0	142
Total	3	366	9	3	143	2	526
Grand Total	15	853	17	8	384	5	1282
Apprch %	1.7	98.3	68	32	98.7	1.3	
Total %	1.2	66.5	1.3	0.6	30	0.4	
Cars	15	843	17	8	383	5	1271
% Cars	100	98.8	100	100	99.7	100	99.1
Trucks	0	10	0	0	1	0	11
% Trucks	0	1.2	0	0	0.3	0	0.9

# Accurate Counts

978-664-2565

N/S Street : Oak Street  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

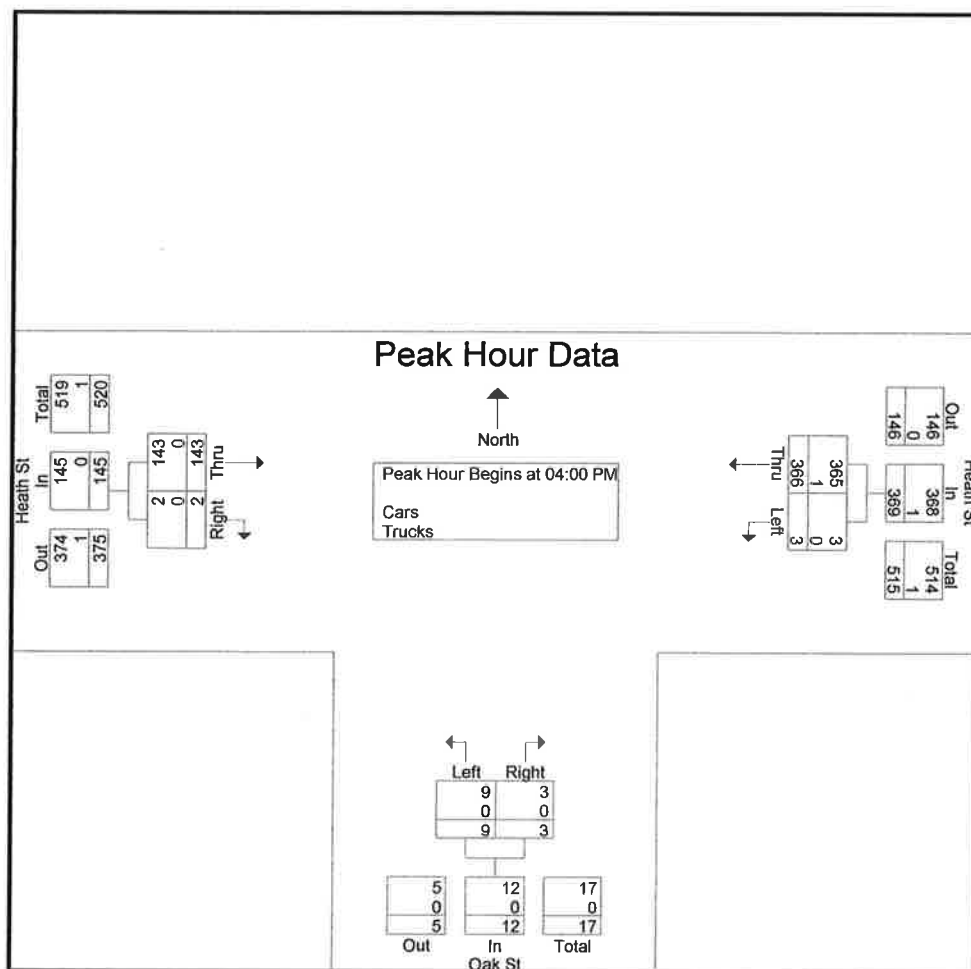
File Name : 7382N006  
Site Code : 73820006  
Start Date : 11/17/2016  
Page No : 2

	Heath St From East			Oak St From South			Heath St 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 04:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:00 PM

04:00 PM	0	87	87	5	2	7	37	1	38	132
04:15 PM	2	87	89	2	0	2	37	1	38	129
04:30 PM	1	85	86	2	1	3	34	0	34	123
04:45 PM	0	107	107	0	0	0	35	0	35	142
Total Volume	3	366	369	9	3	12	143	2	145	526
% App. Total	0.8	99.2		75	25		98.6	1.4		
PHF	.375	.855	.862	.450	.375	.429	.966	.500	.954	.926
Cars	3	365	368	9	3	12	143	2	145	525
% Cars	100	99.7	99.7	100	100	100	100	100	100	99.8
Trucks	0	1	1	0	0	0	0	0	0	1
% Trucks	0	0.3	0.3	0	0	0	0	0	0	0.2



# Accurate Counts

978-664-2565

N/S Street : Oak Street  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

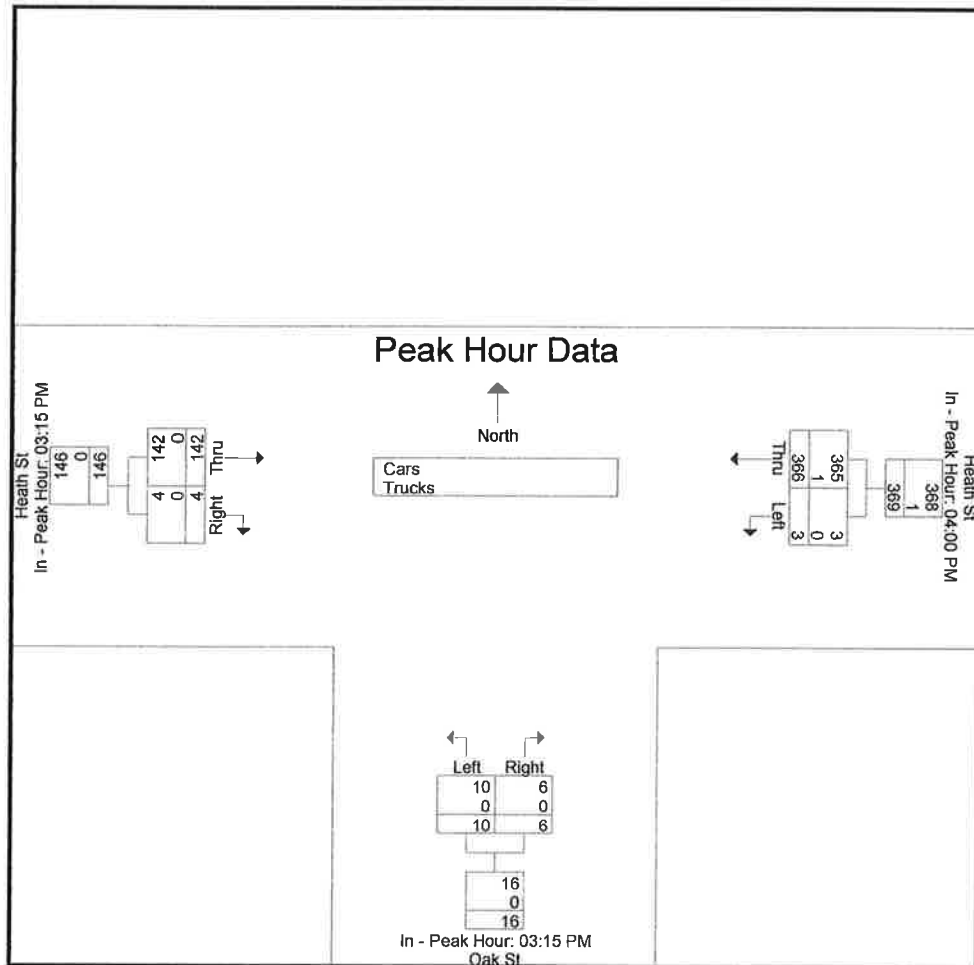
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 Site Code : 73820006  
 Start Date : 11/17/2016  
 Page No : 3

	Heath St From East			Oak St From South			Heath St 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM			03:15 PM			03:15 PM		
+0 mins.	0	87	87	1	2	3	41	1	42
+15 mins.	2	87	89	2	1	3	35	1	36
+30 mins.	1	85	86	2	1	3	29	1	30
+45 mins.	0	107	107	5	2	7	37	1	38
Total Volume	3	366	369	10	6	16	142	4	146
% App. Total	0.8	99.2		62.5	37.5		97.3	2.7	
PHF	.375	.855	.862	.500	.750	.571	.866	1.000	.869
Cars	3	365	368	10	6	16	142	4	146
% Cars	100	99.7	99.7	100	100	100	100	100	100
Trucks	0	1	1	0	0	0	0	0	0
% Trucks	0	0.3	0.3	0	0	0	0	0	0



**Accurate Counts**  
978-664-2565

N/S Street : Oak Street  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N006  
Site Code : 73820006  
Start Date : 11/17/2016  
Page No : 4

Groups Printed- Cars

Start Time	Heath St From East		Oak St From South		Heath St From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
02:00 PM	0	57	0	0	28	0	85
02:15 PM	0	43	2	0	24	0	69
02:30 PM	0	51	0	0	26	0	77
02:45 PM	1	57	0	1	30	0	89
Total	1	208	2	1	108	0	320
03:00 PM	4	70	1	0	27	0	102
03:15 PM	2	70	1	2	41	1	117
03:30 PM	1	71	2	1	35	1	111
03:45 PM	4	59	2	1	29	1	96
Total	11	270	6	4	132	3	426
04:00 PM	0	86	5	2	37	1	131
04:15 PM	2	87	2	0	37	1	129
04:30 PM	1	85	2	1	34	0	123
04:45 PM	0	107	0	0	35	0	142
Total	3	365	9	3	143	2	525
Grand Total	15	843	17	8	383	5	1271
Apprch %	1.7	98.3	68	32	98.7	1.3	
Total %	1.2	66.3	1.3	0.6	30.1	0.4	

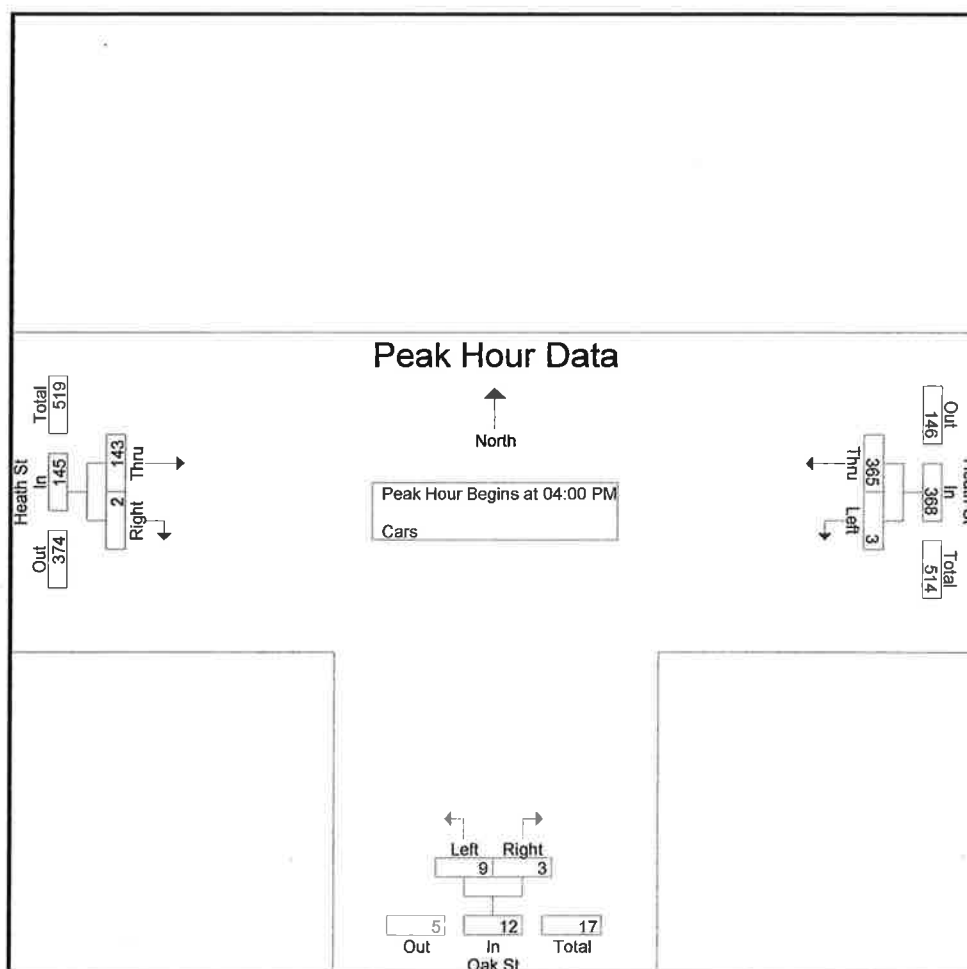
# Accurate Counts

978-664-2565

N/S Street : Oak Street  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 7382N006  
 Site Code : 73820006  
 Start Date : 11/17/2016  
 Page No : 5

	Heath St From East			Oak St From South			Heath St 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 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	0	86	86	5	2	7	37	1	38	131
04:15 PM	2	87	89	2	0	2	37	1	38	129
04:30 PM	1	85	86	2	1	3	34	0	34	123
04:45 PM	0	107	107	0	0	0	35	0	35	142
Total Volume	3	365	368	9	3	12	143	2	145	525
% App. Total	0.8	99.2		75	25		98.6	1.4		
PHF	.375	.853	.860	.450	.375	.429	.966	.500	.954	.924



# Accurate Counts

978-664-2565

N/S Street : Oak Street  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

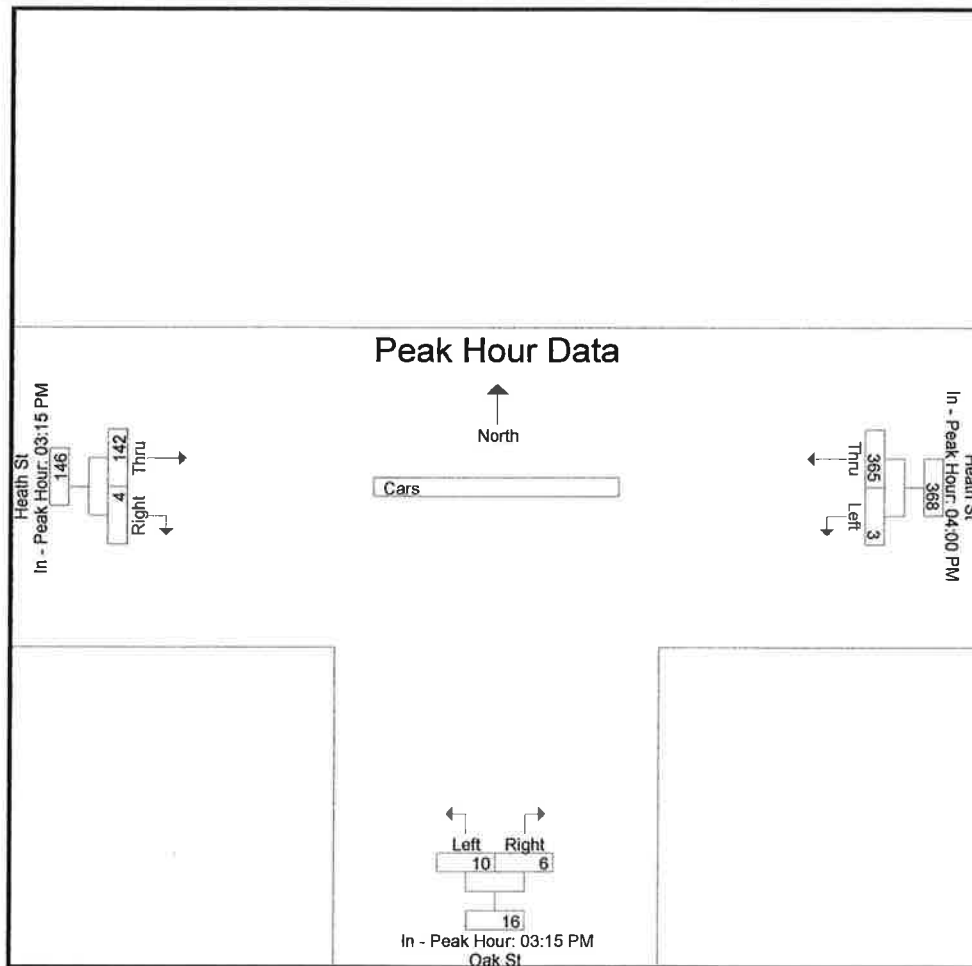
File Name : 7382N006  
 Site Code : 73820006  
 Start Date : 11/17/2016  
 Page No : 6

	Heath St From East			Oak St From South			Heath St 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM			03:15 PM			03:15 PM		
+0 mins.	0	86	86	1	2	3	41	1	42
+15 mins.	2	87	89	2	1	3	35	1	36
+30 mins.	1	85	86	2	1	3	29	1	30
+45 mins.	0	107	107	5	2	7	37	1	38
Total Volume	3	365	368	10	6	16	142	4	146
% App. Total	0.8	99.2		62.5	37.5		97.3	2.7	
PHF	.375	.853	.860	.500	.750	.571	.866	1.000	.869





**Accurate Counts**  
978-664-2565

N/S Street : Oak Street  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N006  
Site Code : 73820006  
Start Date : 11/17/2016  
Page No : 7

Groups Printed- Trucks

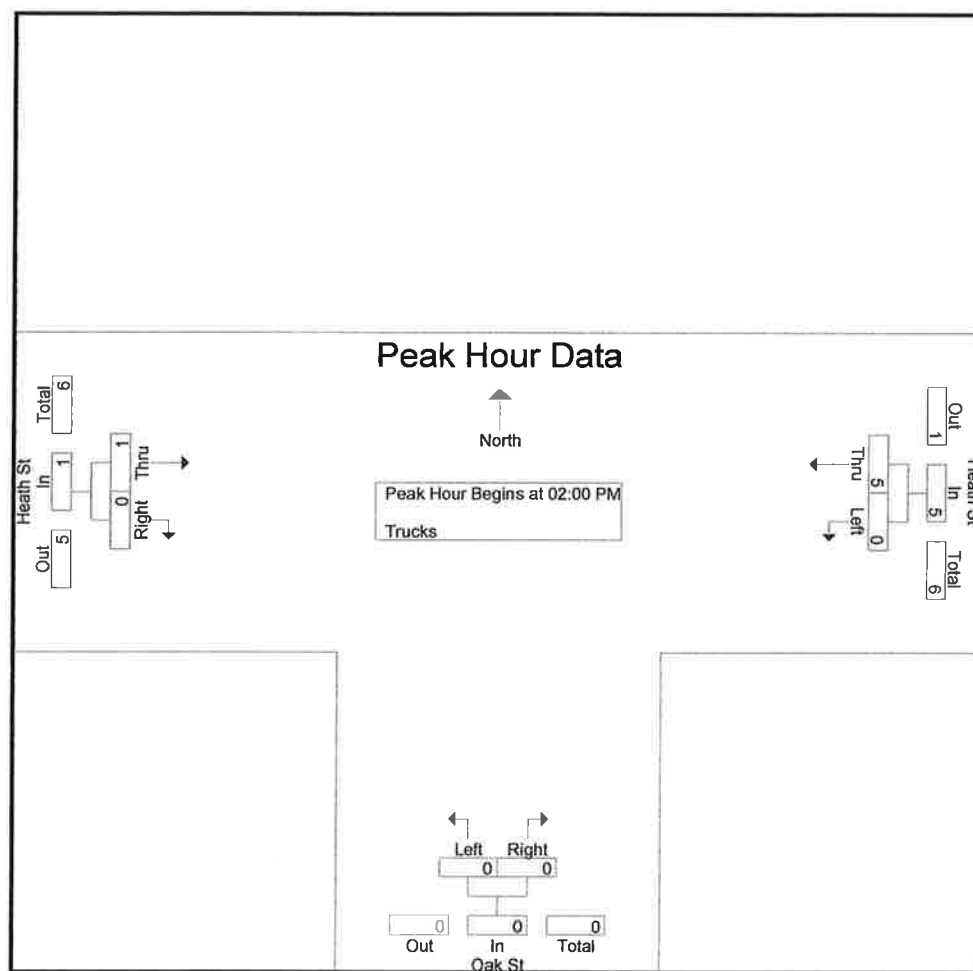
Start Time	Heath St From East		Oak St From South		Heath St From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
02:00 PM	0	0	0	0	0	0	0
02:15 PM	0	1	0	0	1	0	2
02:30 PM	0	4	0	0	0	0	4
02:45 PM	0	0	0	0	0	0	0
Total	0	5	0	0	1	0	6
03:00 PM	0	0	0	0	0	0	0
03:15 PM	0	1	0	0	0	0	1
03:30 PM	0	1	0	0	0	0	1
03:45 PM	0	2	0	0	0	0	2
Total	0	4	0	0	0	0	4
04:00 PM	0	1	0	0	0	0	1
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	1	0	0	0	0	1
Grand Total	0	10	0	0	1	0	11
Apprch %	0	100	0	0	100	0	
Total %	0	90.9	0	0	9.1	0	

**Accurate Counts**  
978-664-2565

N/S Street : Oak Street  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N006  
Site Code : 73820006  
Start Date : 11/17/2016  
Page No : 8

	Heath St From East			Oak St From South			Heath St 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 04:45 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	1	1	0	0	0	1	0	1	2
02:30 PM	0	4	4	0	0	0	0	0	0	4
02:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	5	5	0	0	0	1	0	1	6
% App. Total	0	100		0	0		100	0		
PHF	.000	.313	.313	.000	.000	.000	.250	.000	.250	.375



# Accurate Counts

978-664-2565

N/S Street : Oak Street  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

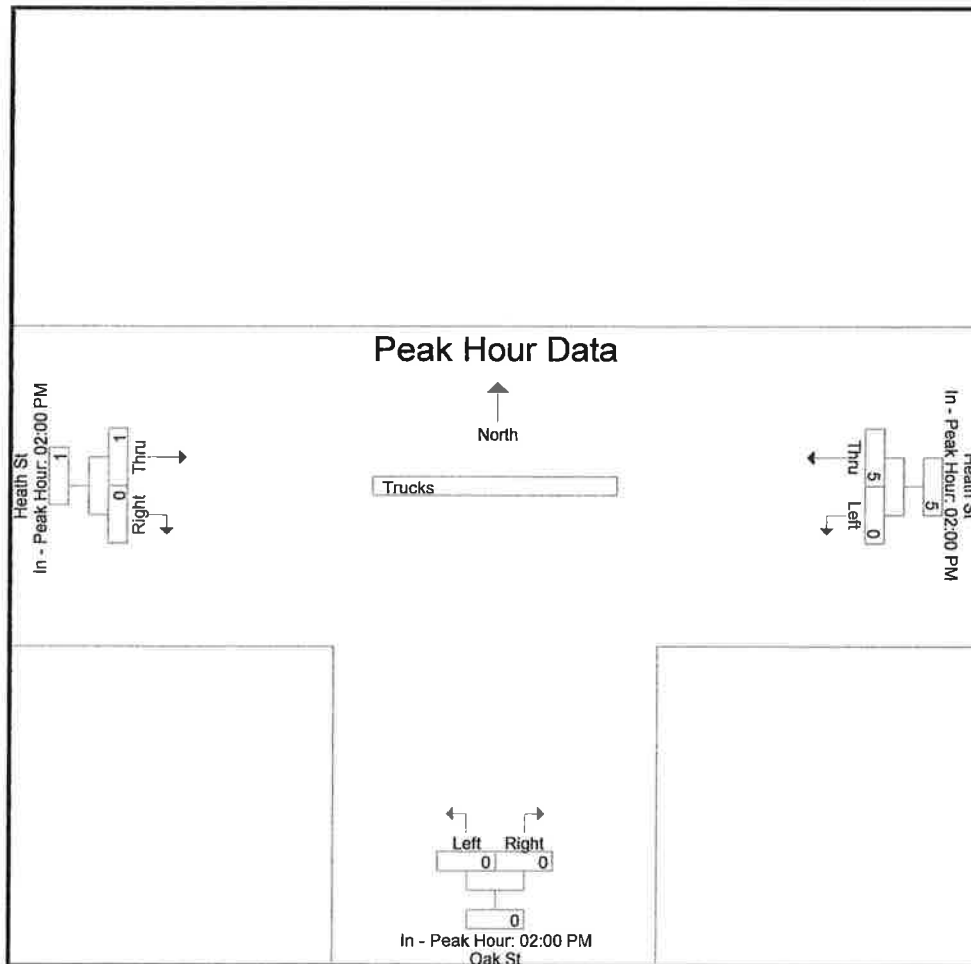
File Name : 7382N006  
 Site Code : 73820006  
 Start Date : 11/17/2016  
 Page No : 9

	Heath St From East			Oak St From South			Heath St 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 04:45 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	1	1	0	0	0	1	0	1
+30 mins.	0	4	4	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	5	5	0	0	0	1	0	1
% App. Total	0	100		0	0		100	0	
PHF	.000	.313	.313	.000	.000	.000	.250	.000	.250



**978-664-2565**

N/S Street : Oak Street  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N006  
Site Code : 73820006  
Start Date : 11/17/2016  
Page No : 10

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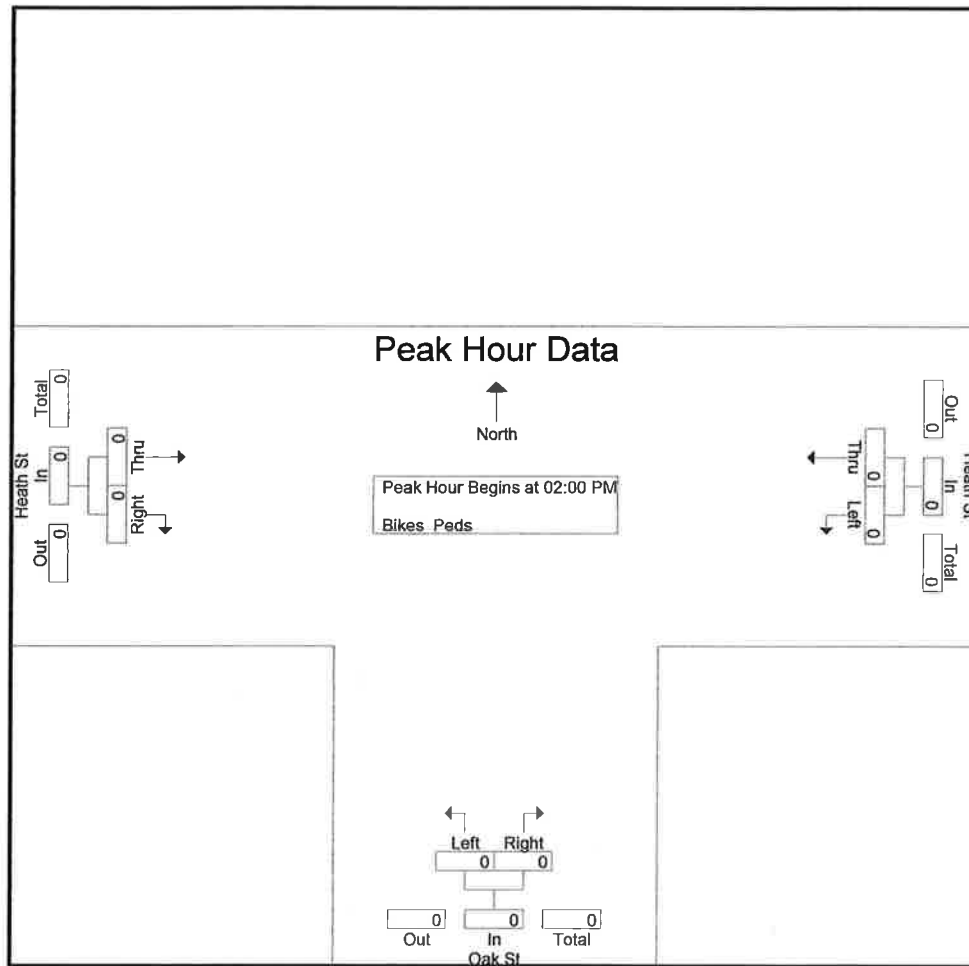
# Accurate Counts

978-664-2565

N/S Street : Oak Street  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 7382N006  
 Site Code : 73820006  
 Start Date : 11/17/2016  
 Page No : 11

	Heath St From East			Oak St From South			Heath St 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 04:45 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 : Oak Street  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

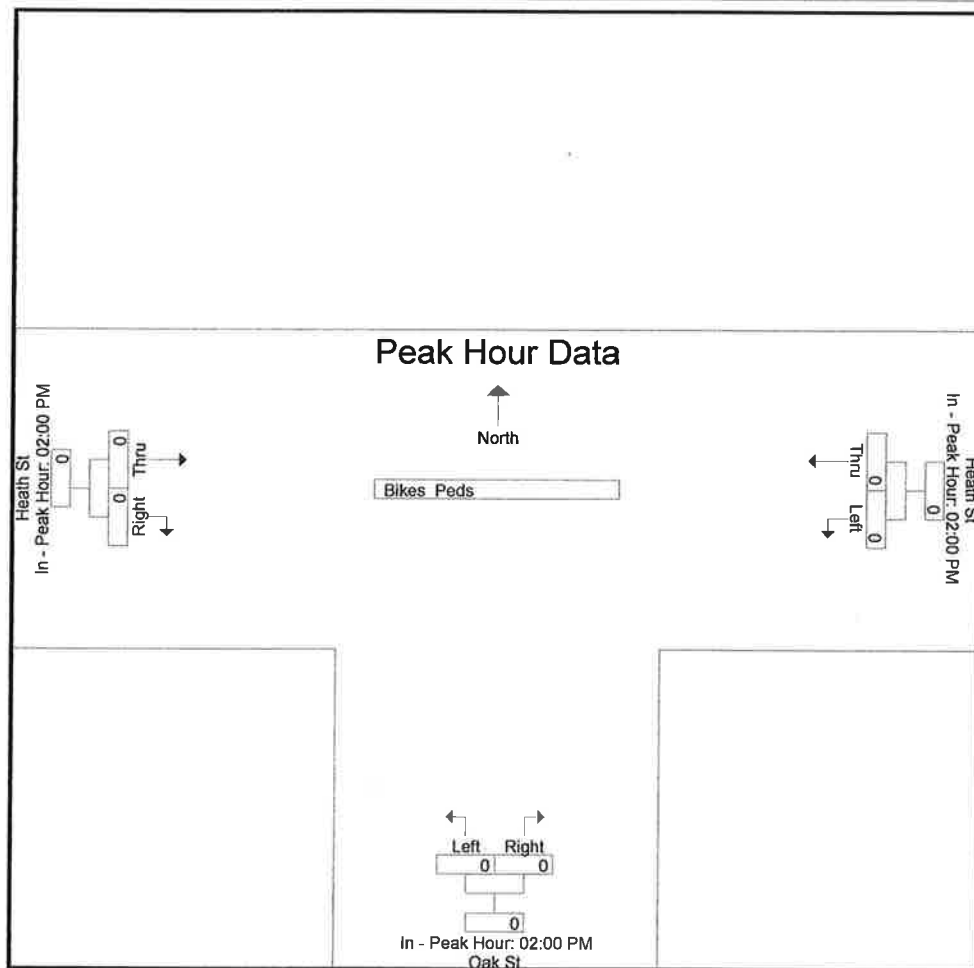
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 Site Code : 73820006  
 Start Date : 11/17/2016  
 Page No : 12

	Heath St From East			Oak St From South			Heath St 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 04:45 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 : Cary Road / Soule Rec Ctr  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N007  
Site Code : 73820007  
Start Date : 11/17/2016  
Page No : 1

Groups Printed- Cars - Trucks

Start Time	Cary Rd From North			Heath St From East			Soule Recreation Center From South			Heath St From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:00 AM	0	0	4	1	25	38	0	0	1	0	9	0	78
07:15 AM	0	0	1	1	39	55	0	0	0	2	10	0	108
07:30 AM	2	0	3	0	57	45	0	0	1	2	13	0	123
07:45 AM	1	0	1	0	53	64	0	0	0	0	16	1	136
Total	3	0	9	2	174	202	0	0	2	4	48	1	445
08:00 AM	0	0	1	5	48	50	1	0	0	1	22	0	128
08:15 AM	1	0	2	4	61	42	2	2	2	1	10	0	127
08:30 AM	0	0	1	1	48	62	2	1	1	1	32	0	149
08:45 AM	1	0	3	1	52	43	0	0	0	1	13	0	114
Total	2	0	7	11	209	197	5	3	3	4	77	0	518
09:00 AM	0	0	1	0	46	23	0	0	0	0	17	0	87
09:15 AM	0	0	2	0	25	36	0	0	0	1	8	0	72
Grand Total	5	0	19	13	454	458	5	3	5	9	150	1	1122
Apprch %	20.8	0	79.2	1.4	49.1	49.5	38.5	23.1	38.5	5.6	93.8	0.6	
Total %	0.4	0	1.7	1.2	40.5	40.8	0.4	0.3	0.4	0.8	13.4	0.1	
Cars	5	0	19	13	444	458	5	3	5	9	147	1	1109
% Cars	100	0	100	100	97.8	100	100	100	100	100	98	100	98.8
Trucks	0	0	0	0	10	0	0	0	0	0	3	0	13
% Trucks	0	0	0	0	2.2	0	0	0	0	0	2	0	1.2

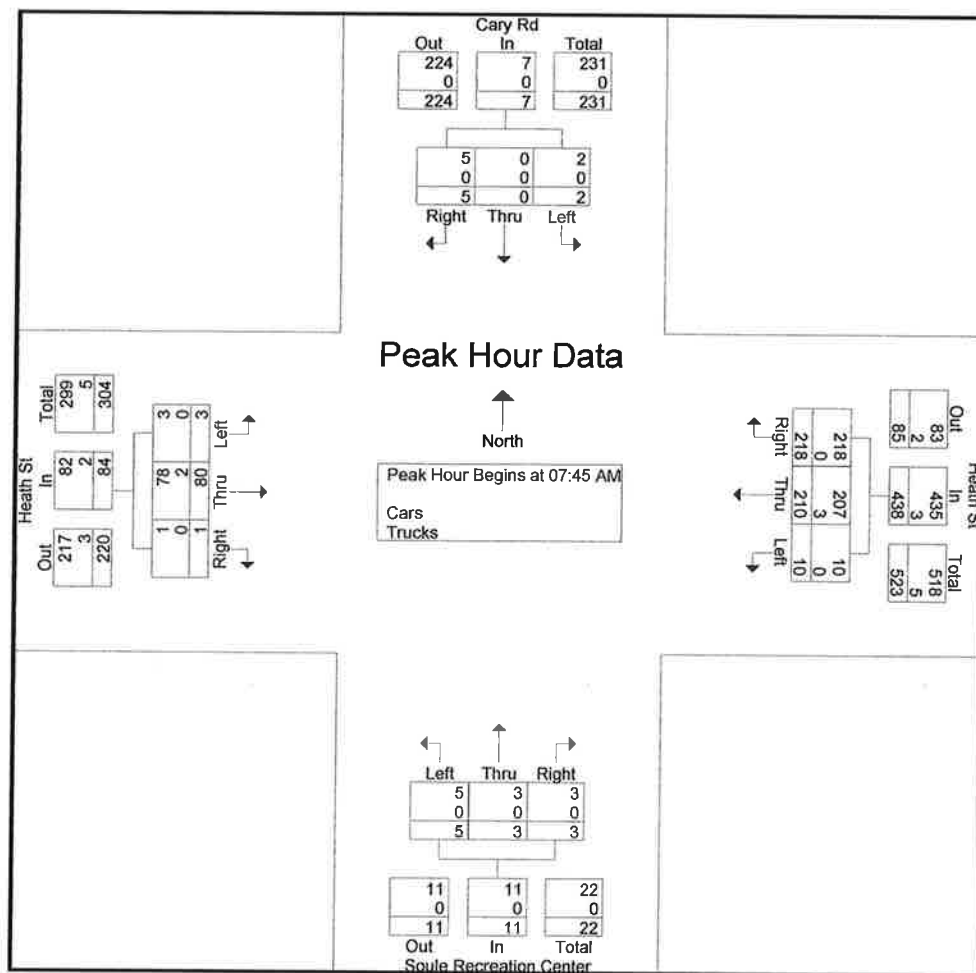
# Accurate Counts

978-664-2565

N/S Street : Cary Road / Soule Rec Ctr  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 7382N007  
 Site Code : 73820007  
 Start Date : 11/17/2016  
 Page No : 2

	Cary Rd From North				Heath St From East				Soule Recreation Center From South				Heath St 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 09:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	1	0	1	2	0	53	64	117	0	0	0	0	0	16	1	17	136
08:00 AM	0	0	1	1	5	48	50	103	1	0	0	1	1	22	0	23	128
08:15 AM	1	0	2	3	4	61	42	107	2	2	2	6	1	10	0	11	127
08:30 AM	0	0	1	1	1	48	62	111	2	1	1	4	1	32	0	33	149
Total Volume	2	0	5	7	10	210	218	438	5	3	3	11	3	80	1	84	540
% App. Total	28.6	0	71.4		2.3	47.9	49.8		45.5	27.3	27.3		3.6	95.2	1.2		
PHF	.500	.000	.625	.583	.500	.861	.852	.936	.625	.375	.375	.458	.750	.625	.250	.636	.906
Cars	2	0	5	7	10	207	218	435	5	3	3	11	3	78	1	82	535
% Cars	100	0	100	100	100	98.6	100	99.3	100	100	100	100	100	97.5	100	97.6	99.1
Trucks	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
% Trucks	0	0	0	0	0	1.4	0	0.7	0	0	0	0	0	2.5	0	2.4	0.9





# Accurate Counts

978-664-2565

N/S Street : Cary Rd / Soule Rec Ctr  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

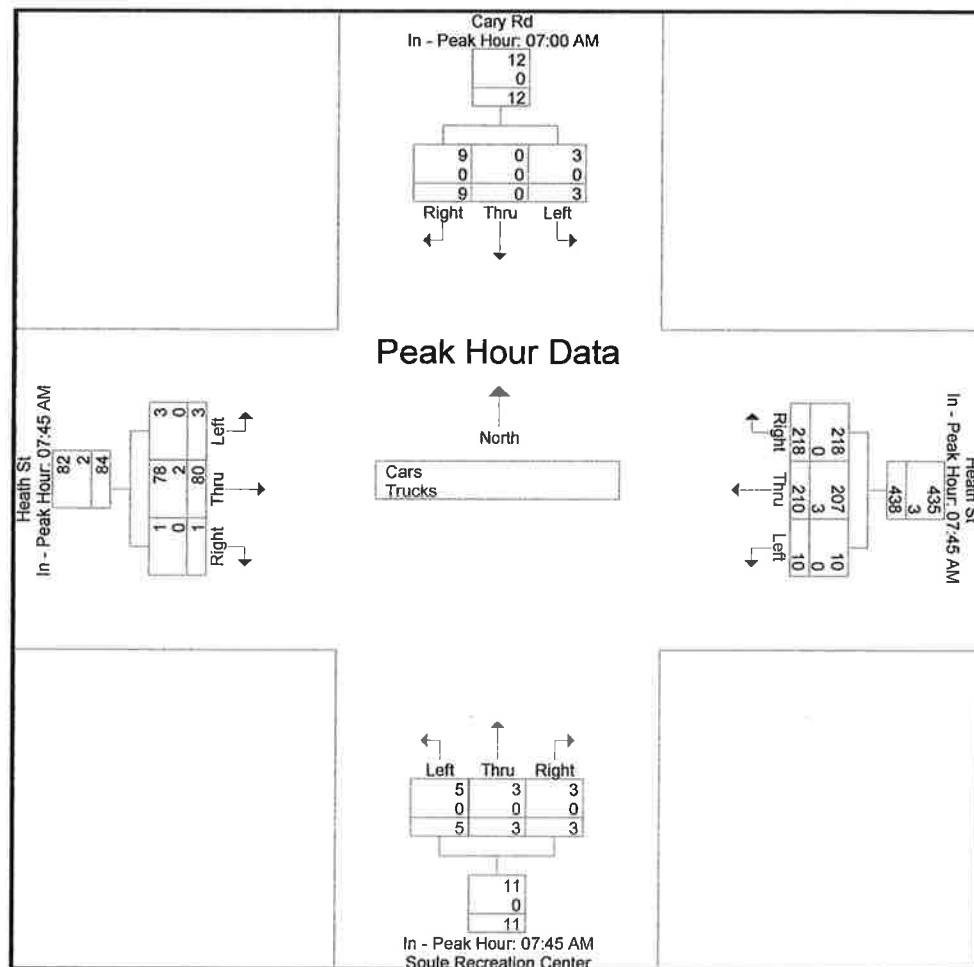
File Name : 7382N007  
 Site Code : 73820007  
 Start Date : 11/17/2016  
 Page No : 3

	Cary Rd From North				Heath St From East				Soule Recreation Center From South				Heath St 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 09:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	0	4	4	0	53	64	117	0	0	0	0	0	16	1	17	
+15 mins.	0	0	1	1	5	48	50	103	1	0	0	1	1	22	0	23	
+30 mins.	2	0	3	5	4	61	42	107	2	2	2	6	1	10	0	11	
+45 mins.	1	0	1	2	1	48	62	111	2	1	1	4	1	32	0	33	
Total Volume	3	0	9	12	10	210	218	438	5	3	3	11	3	80	1	84	
% App. Total	25	0	75		2.3	47.9	49.8		45.5	27.3	27.3		3.6	95.2	1.2		
PHF	.375	.000	.563	.600	.500	.861	.852	.936	.625	.375	.375	.458	.750	.625	.250	.636	
Cars	3	0	9	12	10	207	218	435	5	3	3	11	3	78	1	82	
% Cars	100	0	100	100	100	98.6	100	99.3	100	100	100	100	100	97.5	100	97.6	
Trucks	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	
% Trucks	0	0	0	0	0	1.4	0	0.7	0	0	0	0	0	2.5	0	2.4	



**Accurate Counts**  
978-664-2565

N/S Street : Cary Road / Soule Rec Ctr  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N007  
Site Code : 73820007  
Start Date : 11/17/2016  
Page No : 4

**Groups Printed- Cars**

Start Time	Cary Rd From North			Heath St From East			Soule Recreation Center From South			Heath St From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:00 AM	0	0	4	1	25	38	0	0	1	0	9	0	78
07:15 AM	0	0	1	1	38	55	0	0	0	2	9	0	106
07:30 AM	2	0	3	0	57	45	0	0	1	2	13	0	123
07:45 AM	1	0	1	0	53	64	0	0	0	0	16	1	136
Total	3	0	9	2	173	202	0	0	2	4	47	1	443
08:00 AM	0	0	1	5	48	50	1	0	0	1	21	0	127
08:15 AM	1	0	2	4	58	42	2	2	2	1	10	0	124
08:30 AM	0	0	1	1	48	62	2	1	1	1	31	0	148
08:45 AM	1	0	3	1	48	43	0	0	0	1	13	0	110
Total	2	0	7	11	202	197	5	3	3	4	75	0	509
09:00 AM	0	0	1	0	45	23	0	0	0	0	17	0	86
09:15 AM	0	0	2	0	24	36	0	0	0	1	8	0	71
Grand Total	5	0	19	13	444	458	5	3	5	9	147	1	1109
Apprch %	20.8	0	79.2	1.4	48.5	50.1	38.5	23.1	38.5	5.7	93.6	0.6	
Total %	0.5	0	1.7	1.2	40	41.3	0.5	0.3	0.5	0.8	13.3	0.1	

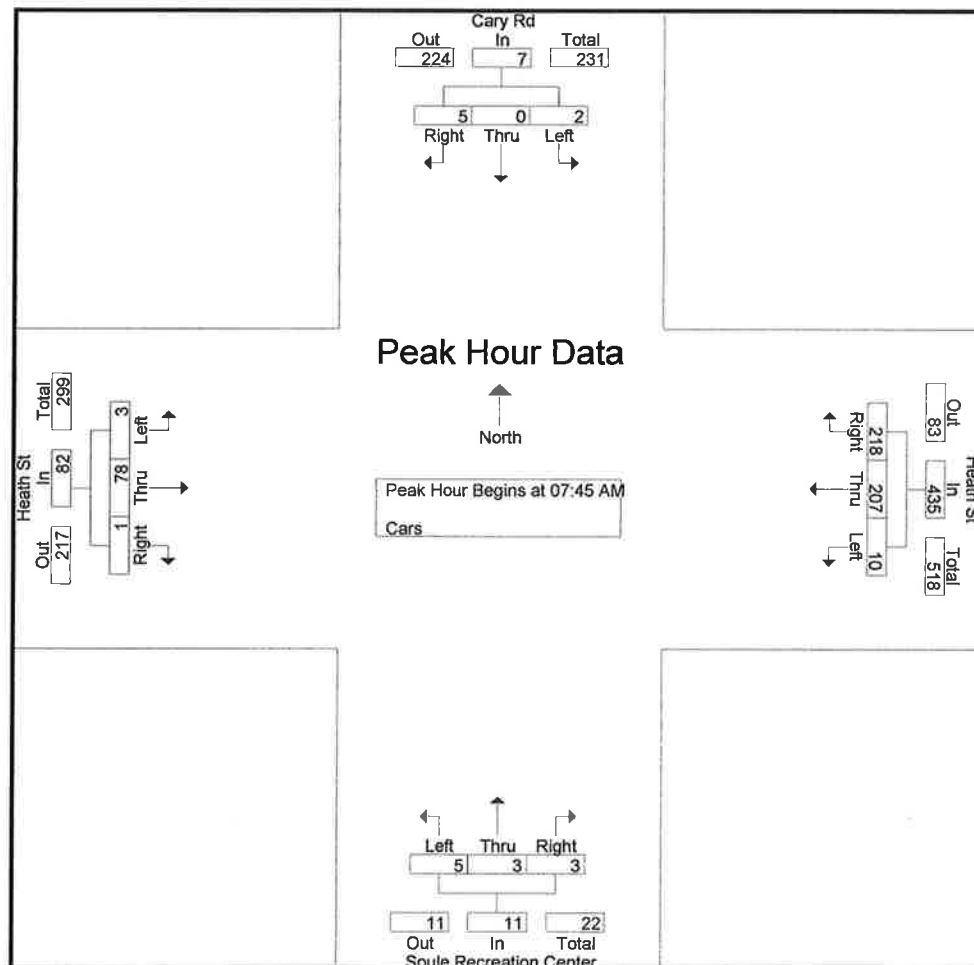
# Accurate Counts

978-664-2565

N/S Street : Cary Road / Soule Rec Ctr  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 7382N007  
 Site Code : 73820007  
 Start Date : 11/17/2016  
 Page No : 5

	Cary Rd From North				Heath St From East				Soule Recreation Center From South				Heath St 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 09:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	1	0	1	2	0	53	64	117	0	0	0	0	0	16	1	17	136
08:00 AM	0	0	1	1	5	48	50	103	1	0	0	1	1	21	0	22	127
08:15 AM	1	0	2	3	4	58	42	104	2	2	2	6	1	10	0	11	124
08:30 AM	0	0	1	1	1	48	62	111	2	1	1	4	1	31	0	32	148
Total Volume	2	0	5	7	10	207	218	435	5	3	3	11	3	78	1	82	535
% App. Total	28.6	0	71.4		2.3	47.6	50.1		45.5	27.3	27.3		3.7	95.1	1.2		
PHF	.500	.000	.625	.583	.500	.892	.852	.929	.625	.375	.375	.458	.750	.629	.250	.641	.904



# Accurate Counts

978-664-2565

N/S Street : Cary Road / Soule Rec Ctr  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

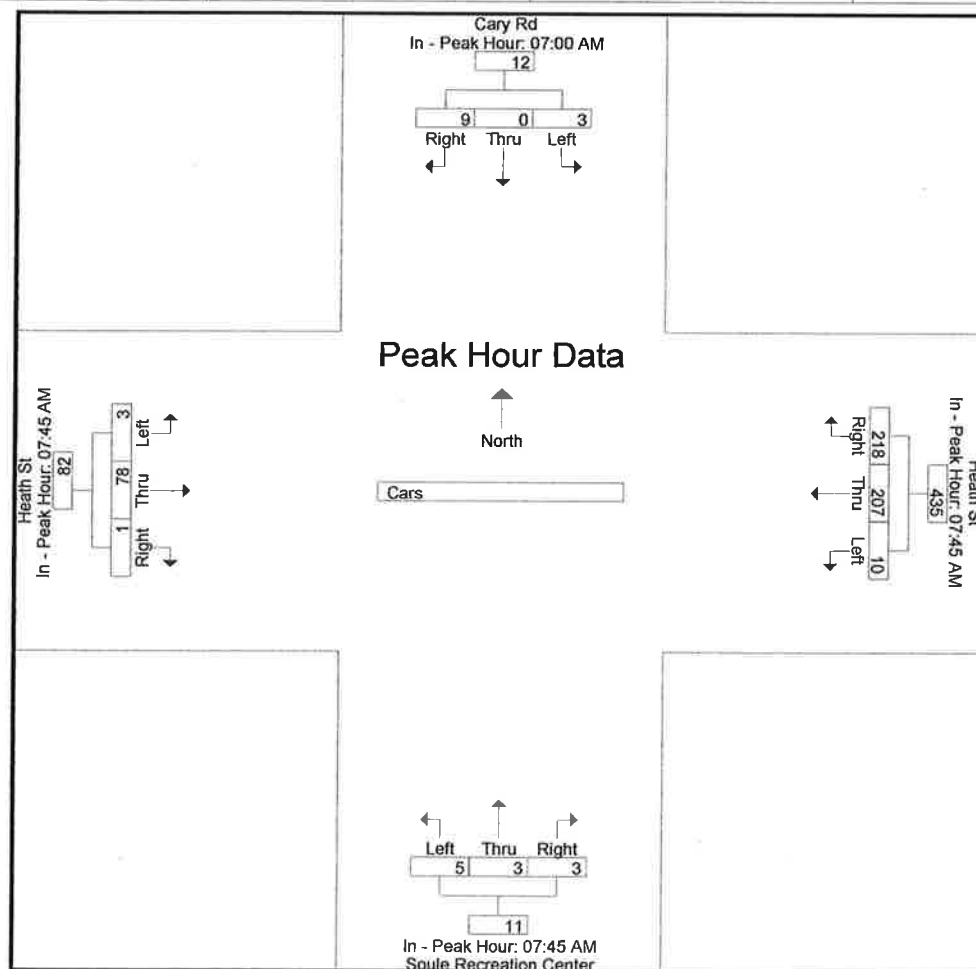
File Name : 7382N007  
 Site Code : 73820007  
 Start Date : 11/17/2016  
 Page No : 6

	Cary Rd From North				Heath St From East				Soule Recreation Center From South				Heath St 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 09:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	0	4	4	0	53	64	117	0	0	0	0	0	16	1	17	
+15 mins.	0	0	1	1	5	48	50	103	1	0	0	1	1	21	0	22	
+30 mins.	2	0	3	5	4	58	42	104	2	2	2	6	1	10	0	11	
+45 mins.	1	0	1	2	1	48	62	111	2	1	1	4	1	31	0	32	
Total Volume	3	0	9	12	10	207	218	435	5	3	3	11	3	78	1	82	
% App. Total	25	0	75		2.3	47.6	50.1		45.5	27.3	27.3		3.7	95.1	1.2		
PHF	.375	.000	.563	.600	.500	.892	.852	.929	.625	.375	.375	.458	.750	.629	.250	.641	



**Accurate Counts**  
978-664-2565

N/S Street : Cary Road / Soule Rec Ctr  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N007  
Site Code : 73820007  
Start Date : 11/17/2016  
Page No : 7

Groups Printed- Trucks

Start Time	Cary Rd From North			Heath St From East			Soule Recreation Center From South			Heath St From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	1	0	0	0	0	0	1	0	2
07:30 AM	0	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	0
Total	0	0	0	0	1	0	0	0	0	0	1	0	2
08:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
08:15 AM	0	0	0	0	3	0	0	0	0	0	0	0	3
08:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
08:45 AM	0	0	0	0	4	0	0	0	0	0	0	0	4
Total	0	0	0	0	7	0	0	0	0	0	2	0	9
09:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
09:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
Grand Total	0	0	0	0	10	0	0	0	0	0	3	0	13
Apprch %	0	0	0	0	100	0	0	0	0	0	100	0	
Total %	0	0	0	0	76.9	0	0	0	0	0	23.1	0	

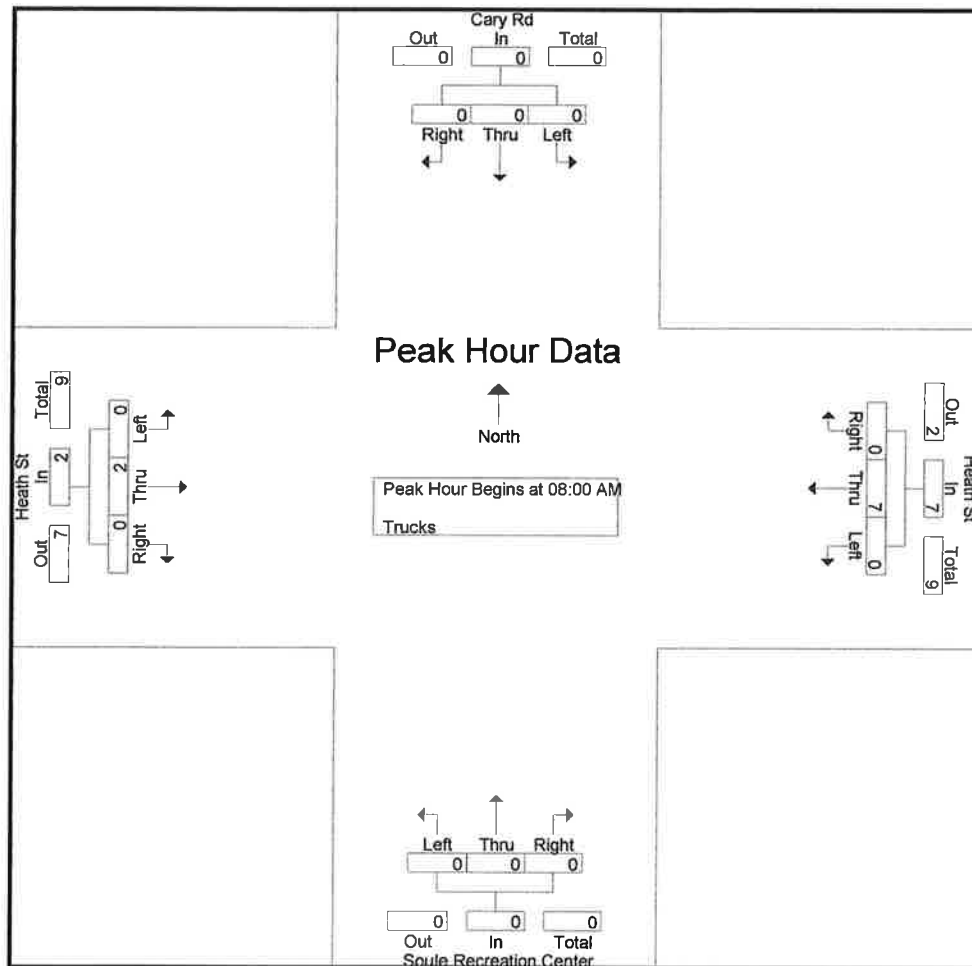
# Accurate Counts

978-664-2565

N/S Street : Cary Road / Soule Rec Ctr  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 7382N007  
 Site Code : 73820007  
 Start Date : 11/17/2016  
 Page No : 8

	Cary Rd From North				Heath St From East				Soule Recreation Center From South				Heath St 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 09:15 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	0	0	0	1	0	1	1
08:15 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	3
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:45 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	0	0	0	4
Total Volume	0	0	0	0	0	7	0	7	0	0	0	0	0	2	0	2	9
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.438	.000	.438	.000	.000	.000	.000	.000	.500	.000	.500	.563



# Accurate Counts

978-664-2565

N/S Street : Cary Road / Soule Rec Ctr  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

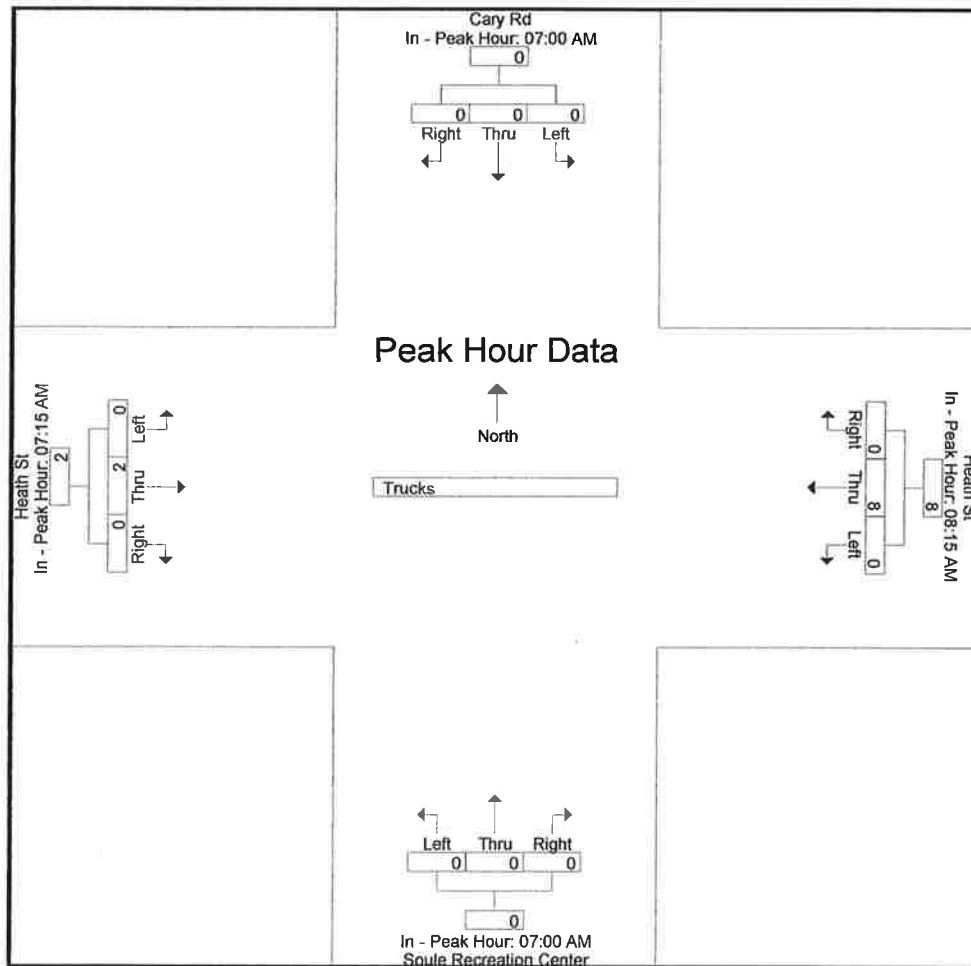
File Name : 7382N007  
 Site Code : 73820007  
 Start Date : 11/17/2016  
 Page No : 9

	Cary Rd From North				Heath St From East				Soule Recreation Center From South				Heath St 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 09:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				08:15 AM				07:00 AM				07:15 AM				
+0 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	1	0	1	
+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	4	0	4	0	0	0	0	0	0	0	0	
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	
Total Volume	0	0	0	0	0	8	0	8	0	0	0	0	0	2	0	2	
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.000	.500	.000	.500	



**Accurate Counts**  
978-664-2565

N/S Street : Cary Road / Soule Rec Ctr  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N007  
Site Code : 73820007  
Start Date : 11/17/2016  
Page No : 10

Groups Printed- Bikes Peds

Start Time	Cary Rd From North				Heath St From East				Soule Recreation Center From South				Heath St From West				Exclu. Total	Inclu. Total	Int. Total
	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	5	0	1	0	0	0	0	0	0	0	0	0	0	5	1	6
07:30 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
07:45 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
Total	0	0	0	9	0	1	0	0	0	0	0	0	0	0	0	0	9	1	10
08:00 AM	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4
08:15 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	1	1	2
08:30 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
08:45 AM	0	0	0	7	0	1	0	0	0	0	0	0	0	1	0	0	7	2	9
Total	0	0	0	13	0	1	0	0	0	0	0	0	0	2	0	0	13	3	16
09:00 AM	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6	0	6
09:15 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1	2
Grand Total	0	0	0	29	0	3	0	0	0	0	0	0	0	2	0	0	29	5	34
Apprch %	0	0	0		0	100	0		0	0	0		0	100	0				
Total %	0	0	0		0	60	0		0	0	0		0	40	0		85.3	14.7	



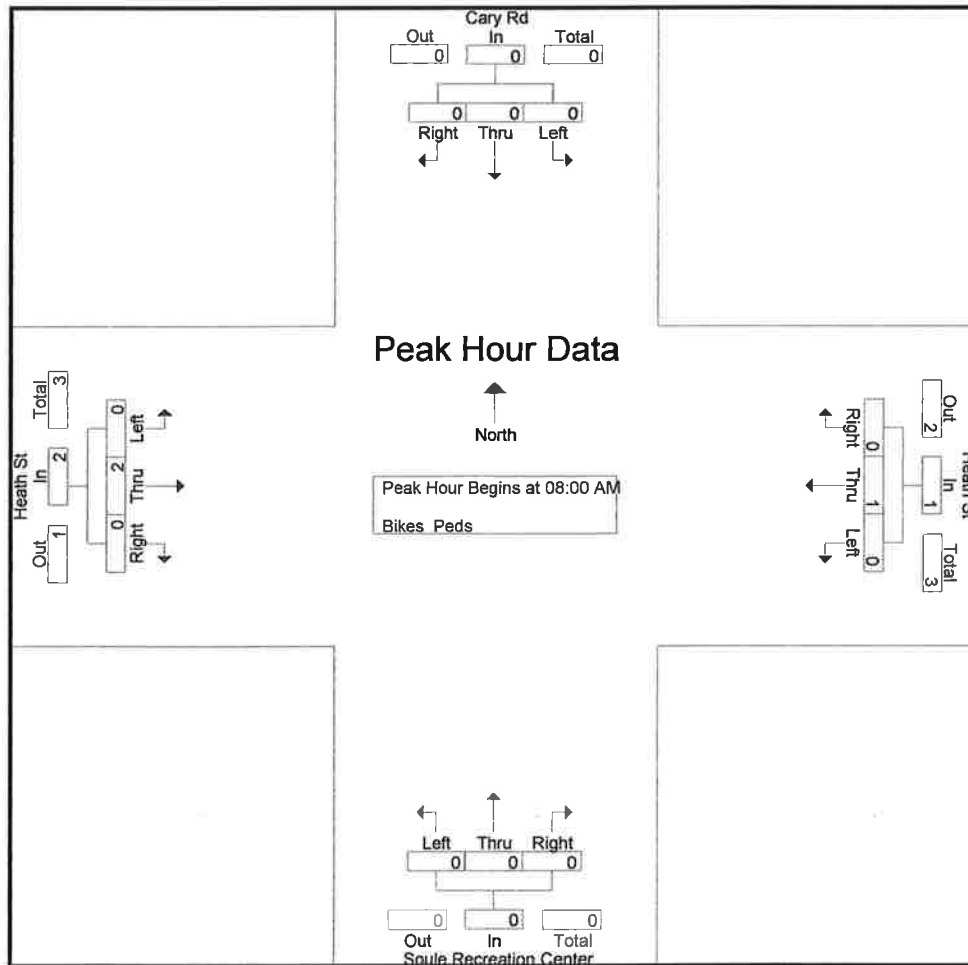
# Accurate Counts

978-664-2565

N/S Street : Cary Road / Soule Rec Ctr  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 7382N007  
 Site Code : 73820007  
 Start Date : 11/17/2016  
 Page No : 11

	Cary Rd From North				Heath St From East				Soule Recreation Center From South				Heath St 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 09:15 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	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:30 AM	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	1	0	1	0	0	0	0	0	1	0	1	2
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.500	.000	.500	.375



# Accurate Counts

978-664-2565

N/S Street : Cary Road / Soule Rec Ctr  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

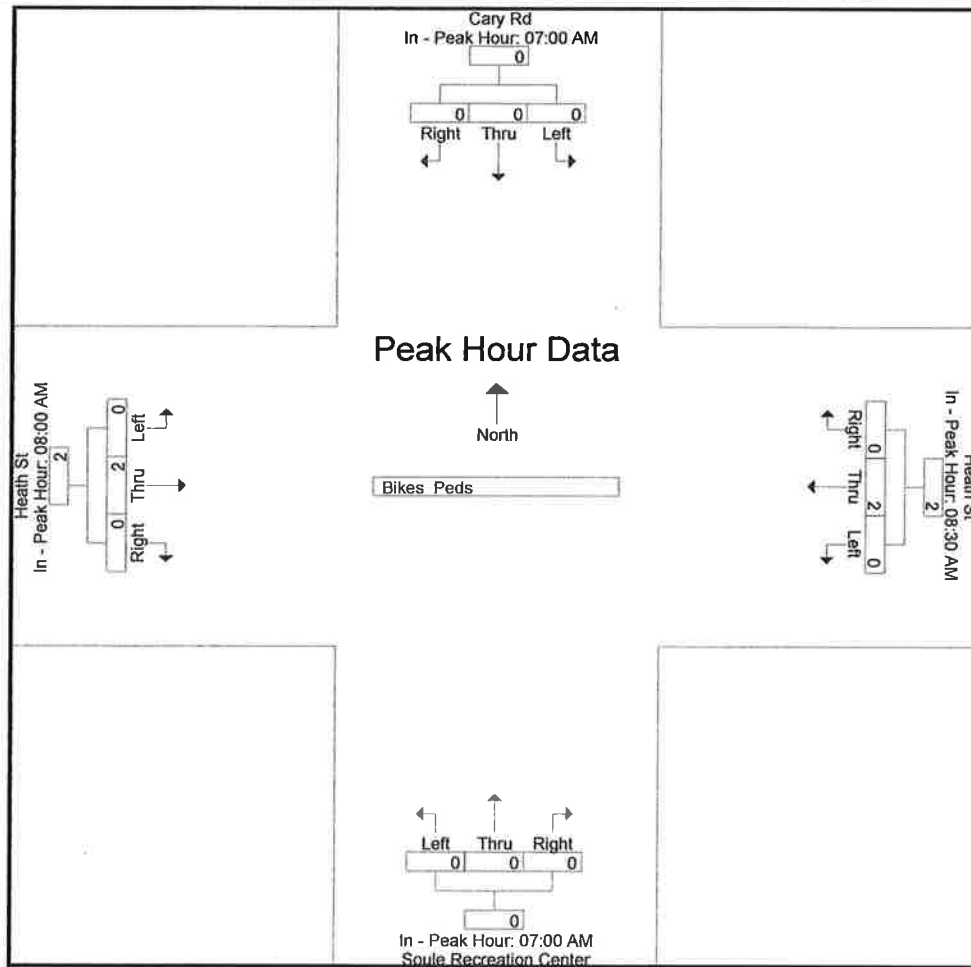
File Name : 7382N007  
 Site Code : 73820007  
 Start Date : 11/17/2016  
 Page No : 12

	Cary Rd From North				Heath St From East				Soule Recreation Center From South				Heath St 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 09:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				08:30 AM				07:00 AM				08:00 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	
Total Volume	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.000	.500	.000	.500	



**978-664-2565**

N/S Street : Cary Road / Soule Rec Ctr

**E/W Street: Heath Street**

City/State : Brookline, MA

**Weather** : Clear

File Name : 7382N007

Site Code : 73820007

Start Date : 11/17/2016

Page No : 1

Groups Printed- Cars - Trucks

	Cary Rd From North			Heath St From East			Soule Recreation Center From South			Heath St From West			Int. Total
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
02:00 PM	0	0	3	0	53	7	0	0	0	0	8	0	71
02:15 PM	0	0	3	0	42	19	0	0	0	1	17	0	82
02:30 PM	0	0	3	0	41	11	2	1	0	3	12	0	73
02:45 PM	1	0	0	1	52	12	0	0	1	0	16	0	83
Total	1	0	9	1	188	49	2	1	1	4	53	0	309
03:00 PM	1	0	3	0	68	10	0	0	0	0	8	0	90
03:15 PM	3	0	1	0	69	17	0	0	0	1	19	0	110
03:30 PM	3	0	0	1	68	5	0	0	1	1	14	0	93
03:45 PM	1	0	1	0	67	8	0	0	0	0	17	0	94
Total	8	0	5	1	272	40	0	0	1	2	58	0	387
04:00 PM	0	0	3	2	78	7	0	0	0	3	15	0	108
04:15 PM	1	0	2	0	86	7	0	1	0	1	13	0	111
04:30 PM	0	0	4	0	84	11	0	1	0	1	17	0	118
04:45 PM	1	0	2	1	96	6	0	0	0	2	19	0	127
Total	2	0	11	3	344	31	0	2	0	7	64	0	464
Grand Total	11	0	25	5	804	120	2	3	2	13	175	0	1160
Apprch %	30.6	0	69.4	0.5	86.5	12.9	28.6	42.9	28.6	6.9	93.1	0	
Total %	0.9	0	2.2	0.4	69.3	10.3	0.2	0.3	0.2	1.1	15.1	0	
Cars	10	0	25	5	796	120	2	3	2	13	174	0	1150
% Cars	90.9	0	100	100	99	100	100	100	100	100	99.4	0	99.1
Trucks	1	0	0	0	8	0	0	0	0	0	1	0	10
% Trucks	9.1	0	0	0	1	0	0	0	0	0	0.6	0	0.9

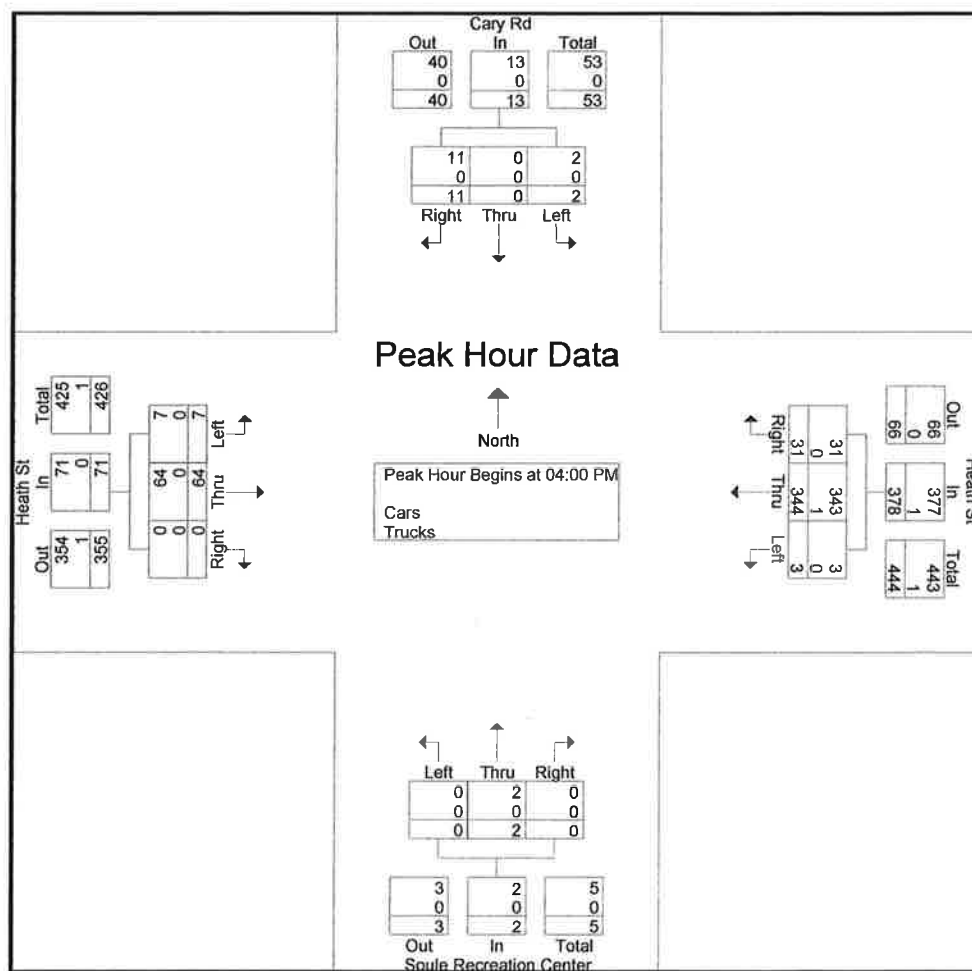
# Accurate Counts

978-664-2565

N/S Street : Cary Road / Soule Rec Ctr  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 7382N007  
 Site Code : 73820007  
 Start Date : 11/17/2016  
 Page No : 2

	Cary Rd From North				Heath St From East				Soule Recreation Center From South				Heath St 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 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	3	3	2	78	7	87	0	0	0	0	3	15	0	18	108
04:15 PM	1	0	2	3	0	86	7	93	0	1	0	1	1	13	0	14	111
04:30 PM	0	0	4	4	0	84	11	95	0	1	0	1	1	17	0	18	118
04:45 PM	1	0	2	3	1	96	6	103	0	0	0	0	2	19	0	21	127
Total Volume	2	0	11	13	3	344	31	378	0	2	0	2	7	64	0	71	464
% App. Total	15.4	0	84.6		0.8	91	8.2		0	100	0		9.9	90.1	0		
PHF	.500	.000	.688	.813	.375	.896	.705	.917	.000	.500	.000	.500	.583	.842	.000	.845	.913
Cars	2	0	11	13	3	343	31	377	0	2	0	2	7	64	0	71	463
% Cars	100	0	100	100	100	99.7	100	99.7	0	100	0	100	100	100	0	100	99.8
Trucks	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
% Trucks	0	0	0	0	0	0.3	0	0.3	0	0	0	0	0	0	0	0	0.2



# Accurate Counts

978-664-2565

N/S Street : Cary Road / Soule Rec Ctr  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

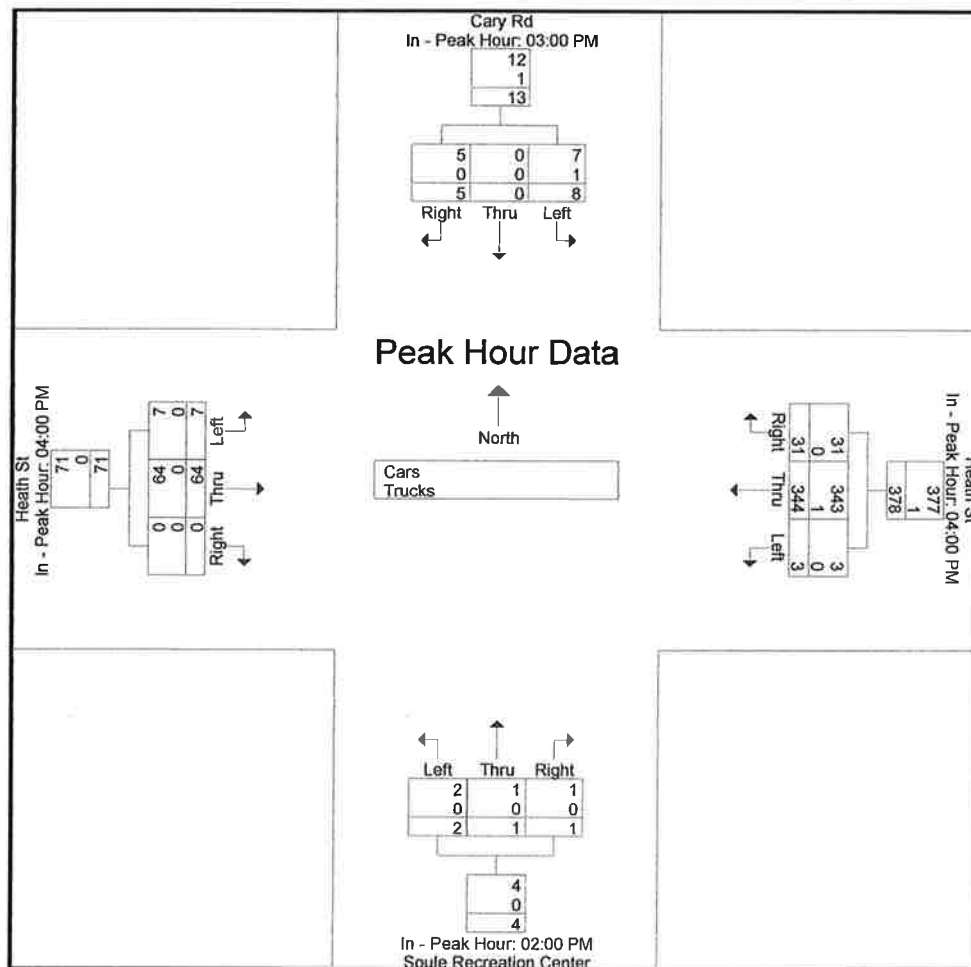
File Name : 7382N007  
 Site Code : 73820007  
 Start Date : 11/17/2016  
 Page No : 3

	Cary Rd From North				Heath St From East				Soule Recreation Center From South				Heath St 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	03:00 PM				04:00 PM				02:00 PM				04:00 PM				
+0 mins.	1	0	3	4	2	78	7	87	0	0	0	0	3	15	0	18	
+15 mins.	3	0	1	4	0	86	7	93	0	0	0	0	1	13	0	14	
+30 mins.	3	0	0	3	0	84	11	95	2	1	0	3	1	17	0	18	
+45 mins.	1	0	1	2	1	96	6	103	0	0	1	1	2	19	0	21	
Total Volume	8	0	5	13	3	344	31	378	2	1	1	4	7	64	0	71	
% App. Total	61.5	0	38.5		0.8	91	8.2		50	25	25		9.9	90.1	0		
PHF	.667	.000	.417	.813	.375	.896	.705	.917	.250	.250	.250	.333	.583	.842	.000	.845	
Cars	7	0	5	12	3	343	31	377	2	1	1	4	7	64	0	71	
% Cars	87.5	0	100	92.3	100	99.7	100	99.7	100	100	100	100	100	100	0	100	
Trucks	1	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	
% Trucks	12.5	0	0	7.7	0	0.3	0	0.3	0	0	0	0	0	0	0	0	



**Accurate Counts**  
978-664-2565

N/S Street : Cary Road / Soule Rec Ctr  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N007  
Site Code : 73820007  
Start Date : 11/17/2016  
Page No : 4

Groups Printed- Cars

Start Time	Cary Rd From North			Heath St From East			Soule Recreation Center From South			Heath St From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
02:00 PM	0	0	3	0	52	7	0	0	0	0	8	0	70
02:15 PM	0	0	3	0	42	19	0	0	0	1	16	0	81
02:30 PM	0	0	3	0	39	11	2	1	0	3	12	0	71
02:45 PM	1	0	0	1	52	12	0	0	1	0	16	0	83
Total	1	0	9	1	185	49	2	1	1	4	52	0	305
03:00 PM	1	0	3	0	68	10	0	0	0	0	8	0	90
03:15 PM	3	0	1	0	68	17	0	0	0	1	19	0	109
03:30 PM	2	0	0	1	67	5	0	0	1	1	14	0	91
03:45 PM	1	0	1	0	65	8	0	0	0	0	17	0	92
Total	7	0	5	1	268	40	0	0	1	2	58	0	382
04:00 PM	0	0	3	2	77	7	0	0	0	3	15	0	107
04:15 PM	1	0	2	0	86	7	0	1	0	1	13	0	111
04:30 PM	0	0	4	0	84	11	0	1	0	1	17	0	118
04:45 PM	1	0	2	1	96	6	0	0	0	2	19	0	127
Total	2	0	11	3	343	31	0	2	0	7	64	0	463
Grand Total	10	0	25	5	796	120	2	3	2	13	174	0	1150
Apprch %	28.6	0	71.4	0.5	86.4	13	28.6	42.9	28.6	7	93	0	
Total %	0.9	0	2.2	0.4	69.2	10.4	0.2	0.3	0.2	1.1	15.1	0	

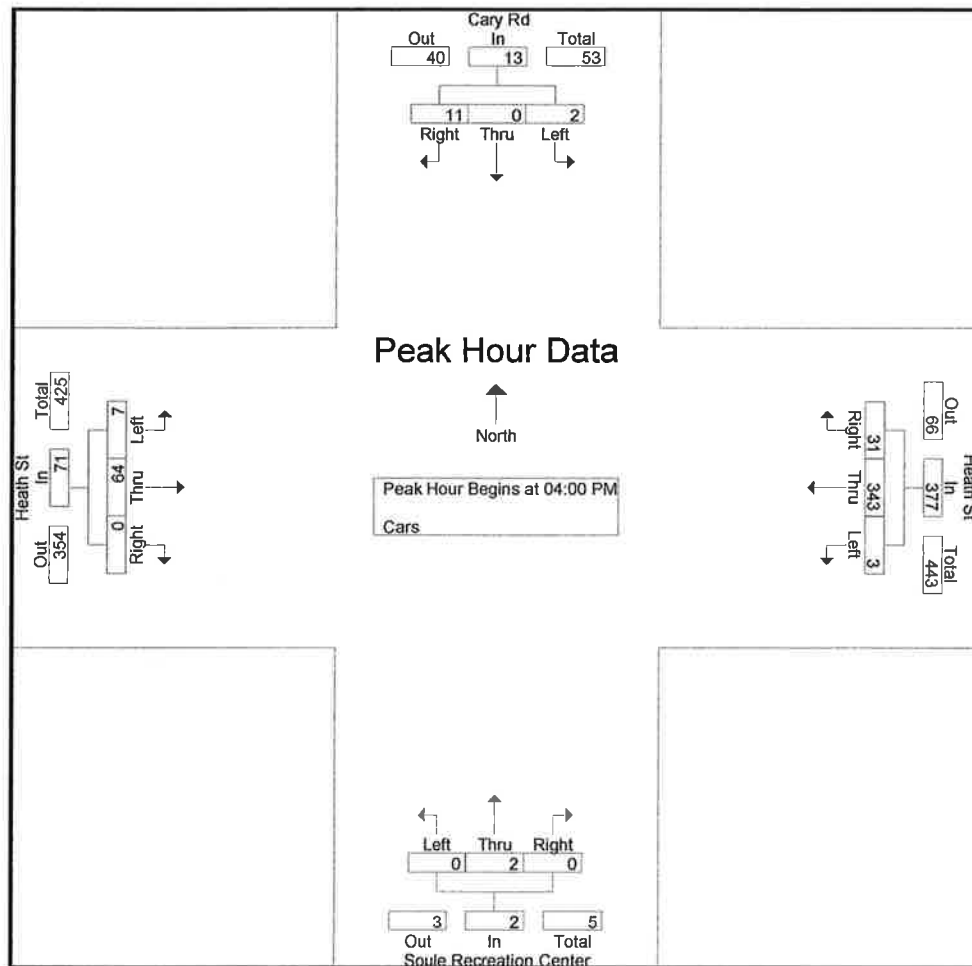
# Accurate Counts

978-664-2565

N/S Street : Cary Road / Soule Rec Ctr  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 7382N007  
 Site Code : 73820007  
 Start Date : 11/17/2016  
 Page No : 5

	Cary Rd From North				Heath St From East				Soule Recreation Center From South				Heath St 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 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	3	3	2	77	7	86	0	0	0	0	3	15	0	18	107
04:15 PM	1	0	2	3	0	86	7	93	0	1	0	1	1	13	0	14	111
04:30 PM	0	0	4	4	0	84	11	95	0	1	0	1	1	17	0	18	118
04:45 PM	1	0	2	3	1	96	6	103	0	0	0	0	2	19	0	21	127
Total Volume	2	0	11	13	3	343	31	377	0	2	0	2	7	64	0	71	463
% App. Total	15.4	0	84.6		0.8	91	8.2		0	100	0		9.9	90.1	0		
PHF	.500	.000	.688	.813	.375	.893	.705	.915	.000	.500	.000	.500	.583	.842	.000	.845	.911



# Accurate Counts

978-664-2565

N/S Street : Cary Road / Soule Rec Ctr  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

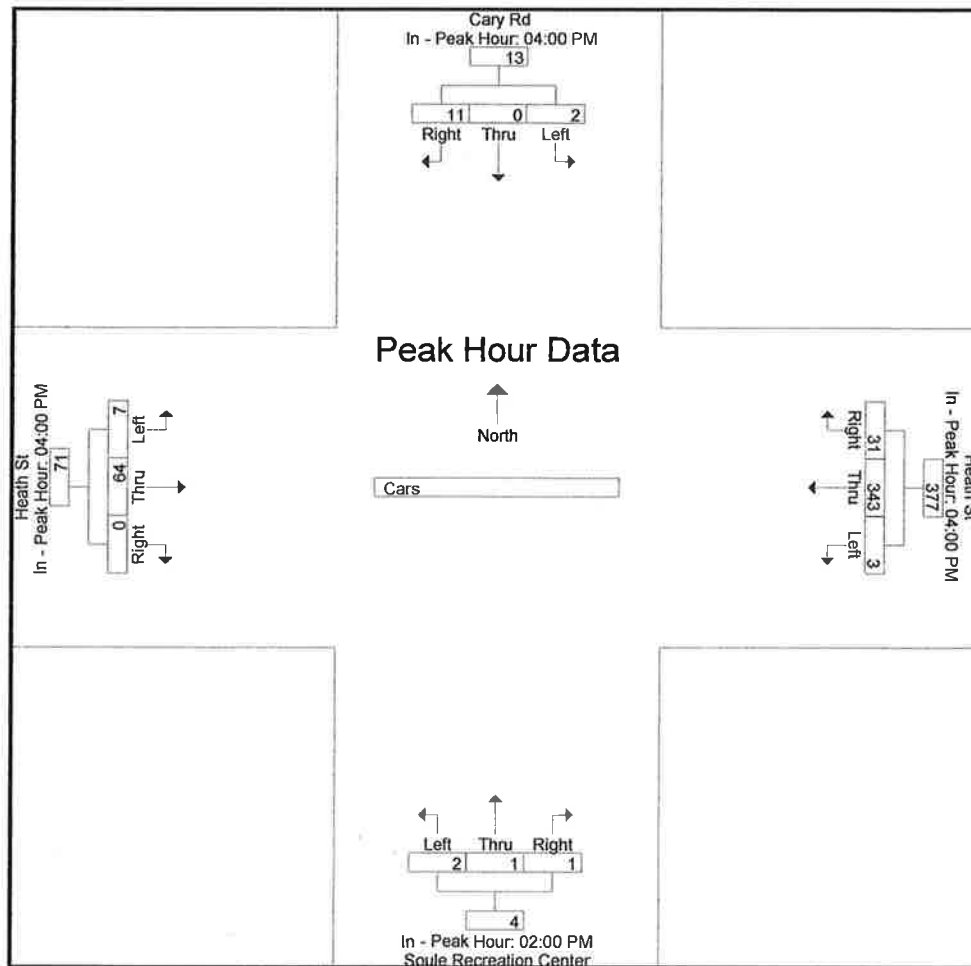
File Name : 7382N007  
 Site Code : 73820007  
 Start Date : 11/17/2016  
 Page No : 6

	Cary Rd From North				Heath St From East				Soule Recreation Center From South				Heath St 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				02:00 PM				04:00 PM				
+0 mins.	0	0	3	3	2	77	7	86	0	0	0	0	3	15	0	18	
+15 mins.	1	0	2	3	0	86	7	93	0	0	0	0	1	13	0	14	
+30 mins.	0	0	4	4	0	84	11	95	2	1	0	3	1	17	0	18	
+45 mins.	1	0	2	3	1	96	6	103	0	0	1	1	2	19	0	21	
Total Volume	2	0	11	13	3	343	31	377	2	1	1	4	7	64	0	71	
% App. Total	15.4	0	84.6		0.8	91	8.2		50	25	25		9.9	90.1	0		
PHF	.500	.000	.688	.813	.375	.893	.705	.915	.250	.250	.250	.333	.583	.842	.000	.845	





**Accurate Counts**  
978-664-2565

N/S Street : Cary Road / Soule Rec Ctr  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N007  
Site Code : 73820007  
Start Date : 11/17/2016  
Page No : 7

Groups Printed- Trucks

Start Time	Cary Rd From North			Heath St From East			Soule Recreation Center From South			Heath St From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
02:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
02:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
02:30 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	3	0	0	0	0	0	1	0	4
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
03:30 PM	1	0	0	0	1	0	0	0	0	0	0	0	2
03:45 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
Total	1	0	0	0	4	0	0	0	0	0	0	0	5
04:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
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	1	0	0	0	0	0	0	0	1
Grand Total	1	0	0	0	8	0	0	0	0	0	1	0	10
Apprch %	100	0	0	0	100	0	0	0	0	0	100	0	
Total %	10	0	0	0	80	0	0	0	0	0	10	0	

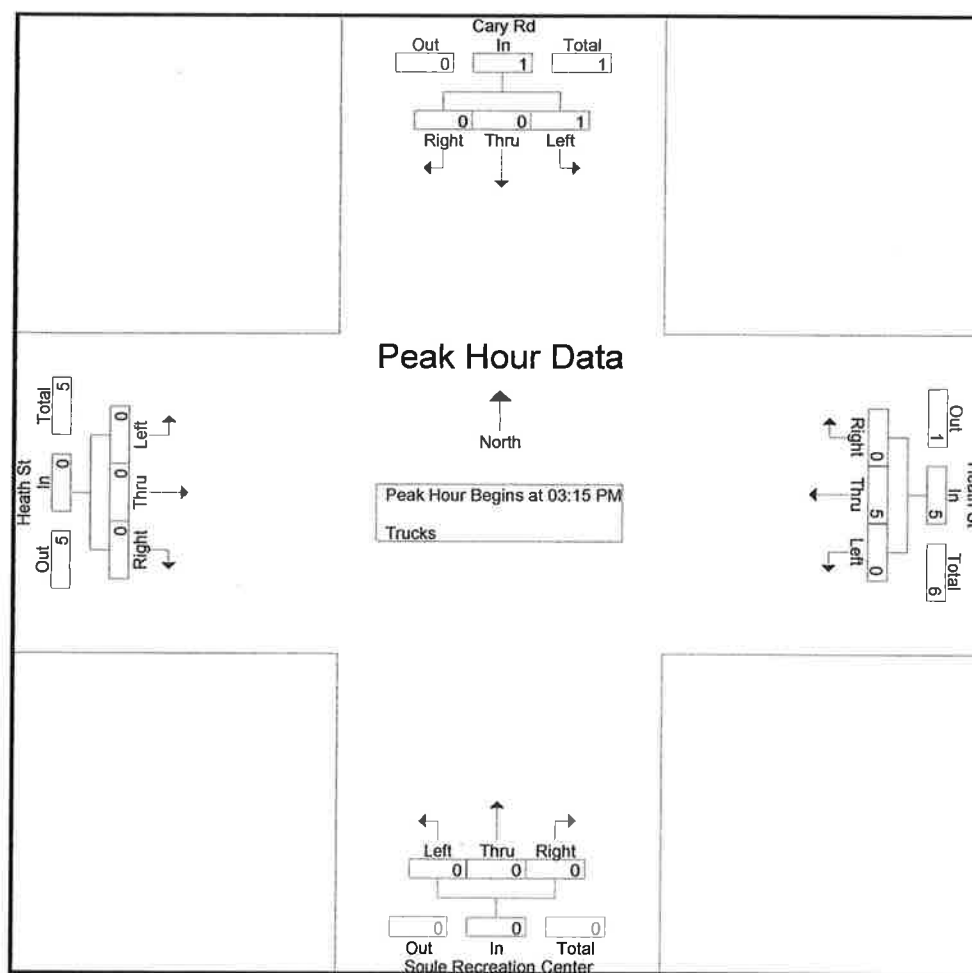
# Accurate Counts

978-664-2565

N/S Street : Cary Rd / Soule Rec Ctr  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 7382N007  
 Site Code : 73820007  
 Start Date : 11/17/2016  
 Page No : 8

	Cary Rd From North				Heath St From East				Soule Recreation Center From South				Heath St 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 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:15 PM																	
03:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
03:30 PM	1	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
03:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
04:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total Volume	1	0	0	1	0	5	0	5	0	0	0	0	0	0	0	0	6
% App. Total	100	0	0		0	100	0		0	0	0		0	0	0		
PHF	.250	.000	.000	.250	.000	.625	.000	.625	.000	.000	.000	.000	.000	.000	.000	.000	.750



# Accurate Counts

978-664-2565

N/S Street : Cary Road / Soule Rec Ctr  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

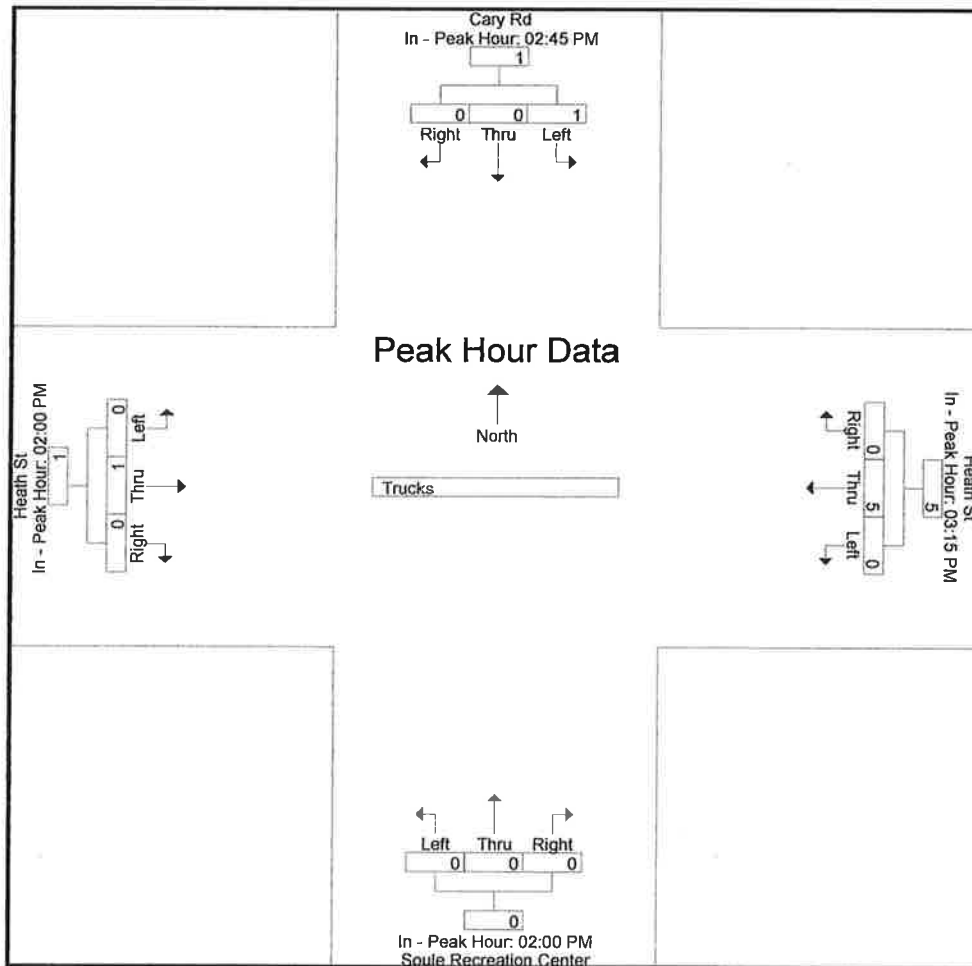
File Name : 7382N007  
 Site Code : 73820007  
 Start Date : 11/17/2016  
 Page No : 9

	Cary Rd From North				Heath St From East				Soule Recreation Center From South				Heath St 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

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



**Accurate Counts**  
978-664-2565

N/S Street : Cary Road / Soule Rec Ctr  
E/W Street: Heath Street  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N007  
Site Code : 73820007  
Start Date : 11/17/2016  
Page No : 10

Groups Printed- Bikes Peds

Start Time	Cary Rd From North				Heath St From East				Soule Recreation Center From South				Heath St From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
02:00 PM	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1	2
02:45 PM	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
Total	0	0	0	7	0	1	0	0	0	0	0	0	0	0	0	0	7	1	8
03:00 PM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
03:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1	2	1	3
03:30 PM	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
03:45 PM	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	10	0	10
Total	0	0	0	16	0	0	0	0	0	0	0	0	0	1	0	1	17	1	18
04:00 PM	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4
04:15 PM	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6	0	6
04:30 PM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
04:45 PM	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	9	0	9
Total	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	21	0	21
Grand Total	0	0	0	44	0	1	0	0	0	0	0	0	0	1	0	1	45	2	47
Apprch %	0	0	0		0	100	0		0	0	0		0	100	0				
Total %	0	0	0		0	50	0		0	0	0		0	50	0		95.7	4.3	

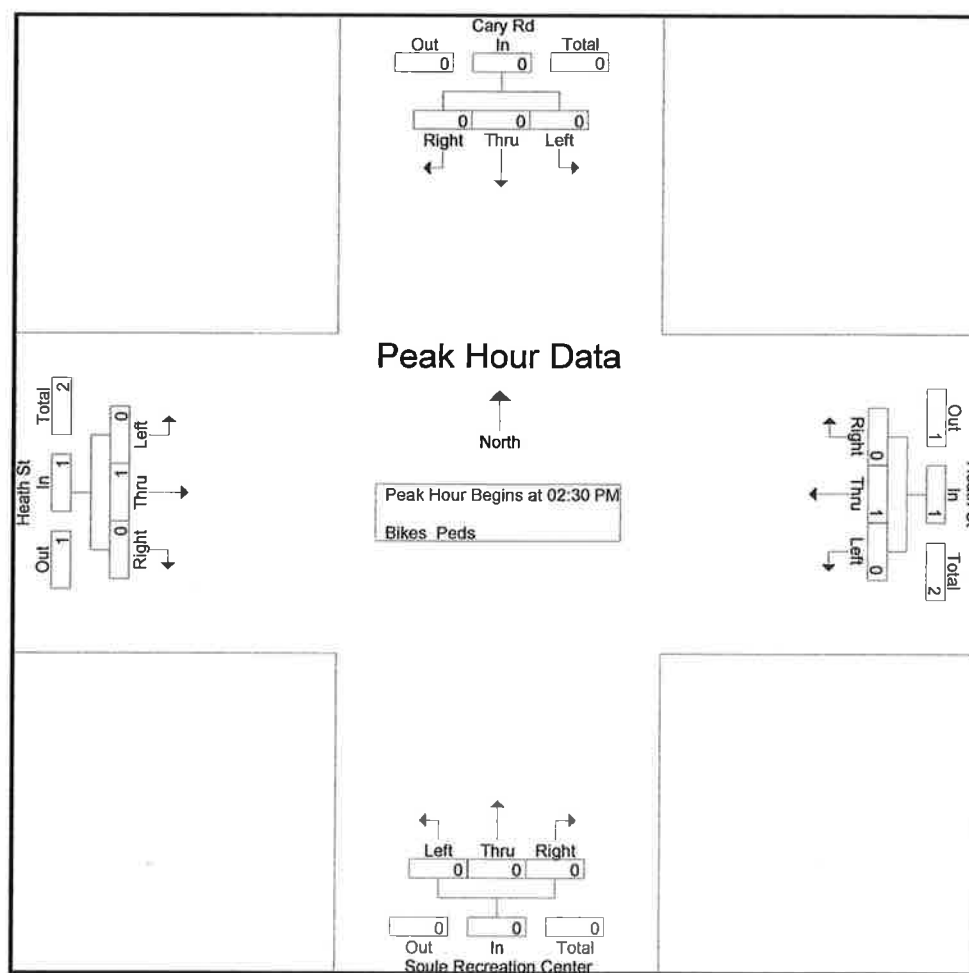
# Accurate Counts

978-664-2565

N/S Street : Cary Road / Soule Rec Ctr  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 7382N007  
 Site Code : 73820007  
 Start Date : 11/17/2016  
 Page No : 11

	Cary Rd From North				Heath St From East				Soule Recreation Center From South				Heath St 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 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 02:30 PM																	
02:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 PM	0	0	0	0	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	1	0	1	1
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.250	.000	.250	.500



# Accurate Counts

978-664-2565

N/S Street : Cary Road / Soule Rec Ctr  
 E/W Street: Heath Street  
 City/State : Brookline, MA  
 Weather : Clear

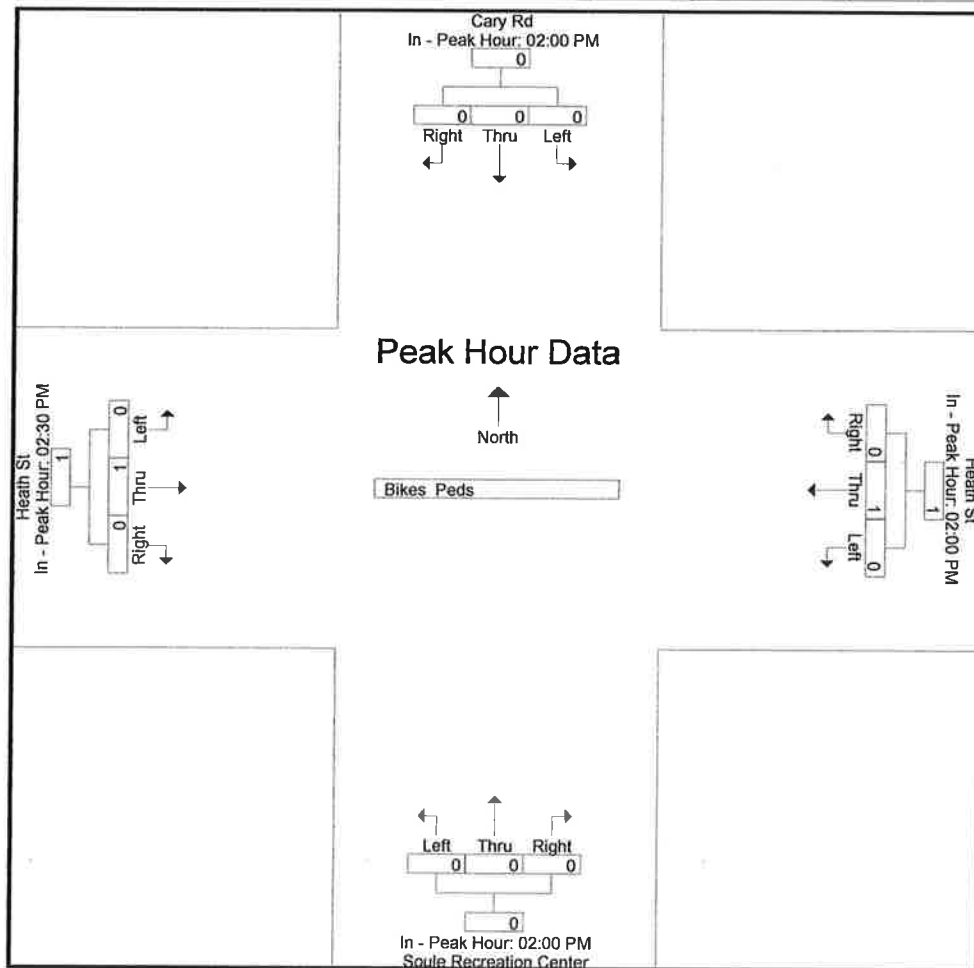
File Name : 7382N007  
 Site Code : 73820007  
 Start Date : 11/17/2016  
 Page No : 12

	Cary Rd From North				Heath St From East				Soule Recreation Center From South				Heath St 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

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



**Accurate Counts**  
978-664-2565

N/S Street : Heath Street  
E/W Street: Woodland Road  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N009  
Site Code : 73820009  
Start Date : 11/17/2016  
Page No : 1

Groups Printed- Cars - Trucks

Start Time	Heath St From East		Woodland Rd From South		Heath St From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
07:00 AM	0	21	44	67	10	0	142
07:15 AM	0	35	60	88	10	0	193
07:30 AM	0	41	61	86	16	0	204
07:45 AM	0	42	78	123	14	0	257
Total	0	139	243	364	50	0	796
08:00 AM	0	46	57	87	22	0	212
08:15 AM	0	57	52	69	14	0	192
08:30 AM	0	41	73	56	33	0	203
08:45 AM	0	40	55	66	14	0	175
Total	0	184	237	278	83	0	782
09:00 AM	0	37	30	65	17	0	149
09:15 AM	0	26	38	45	9	0	118
Grand Total	0	386	548	752	159	0	1845
Apprch %	0	100	42.2	57.8	100	0	
Total %	0	20.9	29.7	40.8	8.6	0	
Cars	0	377	546	741	156	0	1820
% Cars	0	97.7	99.6	98.5	98.1	0	98.6
Trucks	0	9	2	11	3	0	25
% Trucks	0	2.3	0.4	1.5	1.9	0	1.4

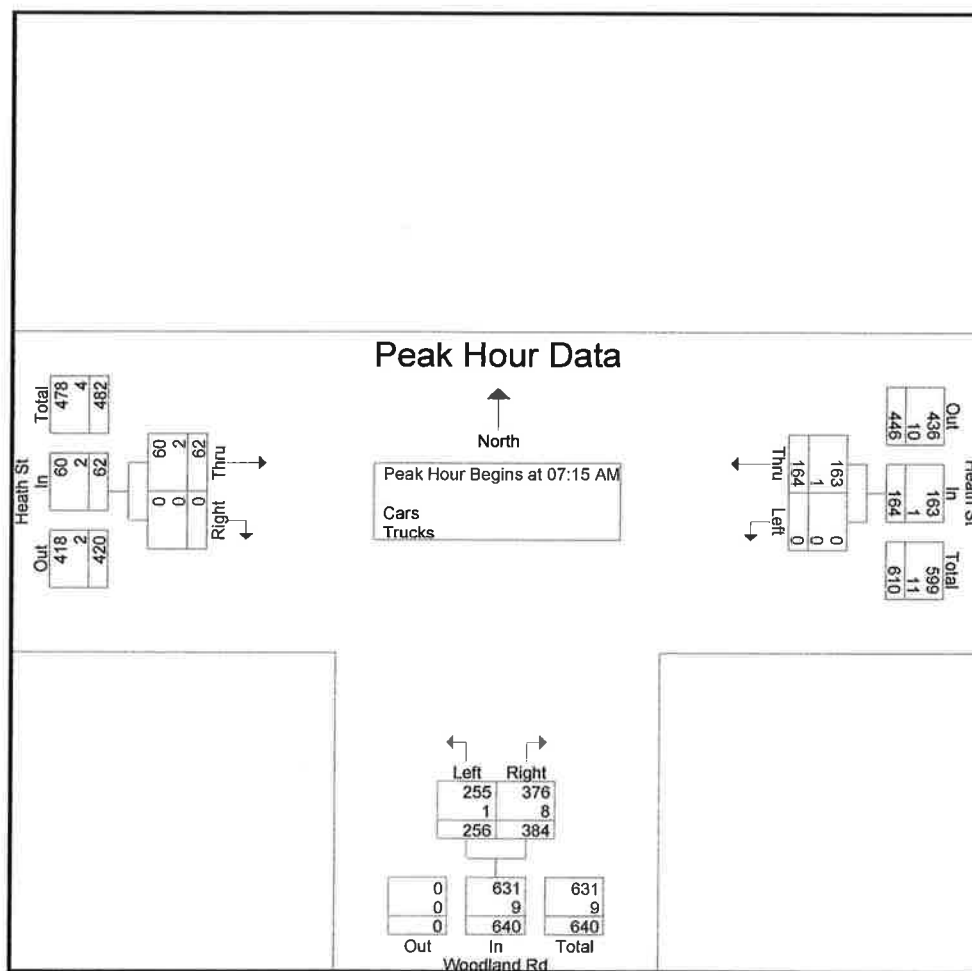
# Accurate Counts

978-664-2565

N/S Street : Heath Street  
E/W Street: Woodland Road  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N009  
Site Code : 73820009  
Start Date : 11/17/2016  
Page No : 2

	Heath St From East			Woodland Rd From South			Heath St 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 09:15 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	0	35	35	60	88	148	10	0	10	193
07:30 AM	0	41	41	61	86	147	16	0	16	204
07:45 AM	0	42	42	78	123	201	14	0	14	257
08:00 AM	0	46	46	57	87	144	22	0	22	212
Total Volume	0	164	164	256	384	640	62	0	62	866
% App. Total	0	100		40	60		100	0		
PHF	.000	.891	.891	.821	.780	.796	.705	.000	.705	.842
Cars	0	163	163	255	376	631	60	0	60	854
% Cars	0	99.4	99.4	99.6	97.9	98.6	96.8	0	96.8	98.6
Trucks	0	1	1	1	8	9	2	0	2	12
% Trucks	0	0.6	0.6	0.4	2.1	1.4	3.2	0	3.2	1.4





# Accurate Counts

978-664-2565

N/S Street : Heath Street  
 E/W Street: Woodland Road  
 City/State : Brookline, MA  
 Weather : Clear

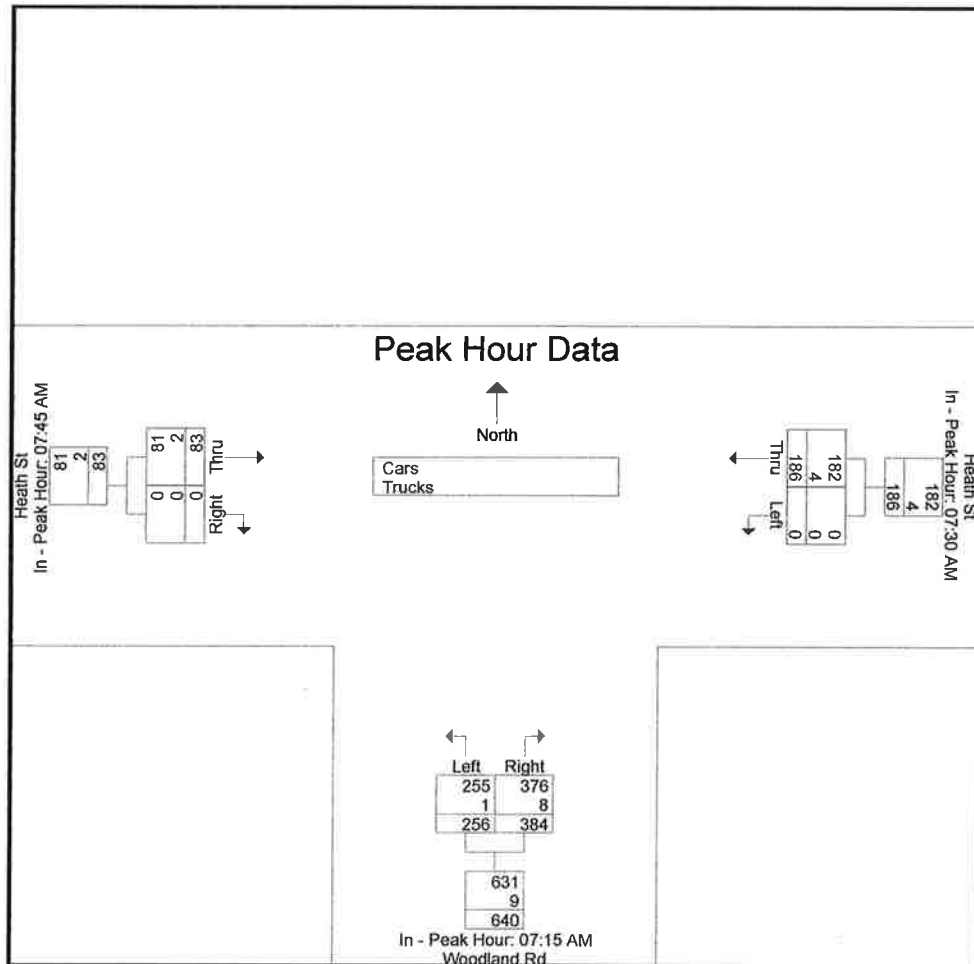
File Name : 7382N009  
 Site Code : 73820009  
 Start Date : 11/17/2016  
 Page No : 3

	Heath St From East			Woodland Rd From South			Heath St 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 09:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM			07:15 AM			07:45 AM			
+0 mins.	0	41	41	60	88	148	14	0	14	
+15 mins.	0	42	42	61	86	147	22	0	22	
+30 mins.	0	46	46	78	123	201	14	0	14	
+45 mins.	0	57	57	57	87	144	33	0	33	
Total Volume	0	186	186	256	384	640	83	0	83	
% App. Total	0	100		40	60		100	0		
PHF	.000	.816	.816	.821	.780	.796	.629	.000	.629	
Cars	0	182	182	255	376	631	81	0	81	
% Cars	0	97.8	97.8	99.6	97.9	98.6	97.6	0	97.6	
Trucks	0	4	4	1	8	9	2	0	2	
% Trucks	0	2.2	2.2	0.4	2.1	1.4	2.4	0	2.4	



**Accurate Counts**  
978-664-2565

N/S Street : Heath Street  
E/W Street: Woodland Road  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N009  
Site Code : 73820009  
Start Date : 11/17/2016  
Page No : 4

Groups Printed- Cars

Start Time	Heath St From East		Woodland Rd From South		Heath St From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
07:00 AM	0	21	44	67	10	0	142
07:15 AM	0	35	59	83	9	0	186
07:30 AM	0	41	61	85	16	0	203
07:45 AM	0	42	78	121	14	0	255
Total	0	139	242	356	49	0	786
08:00 AM	0	45	57	87	21	0	210
08:15 AM	0	54	52	68	14	0	188
08:30 AM	0	41	72	56	32	0	201
08:45 AM	0	37	55	66	14	0	172
Total	0	177	236	277	81	0	771
09:00 AM	0	36	30	63	17	0	146
09:15 AM	0	25	38	45	9	0	117
Grand Total	0	377	546	741	156	0	1820
Apprch %	0	100	42.4	57.6	100	0	
Total %	0	20.7	30	40.7	8.6	0	

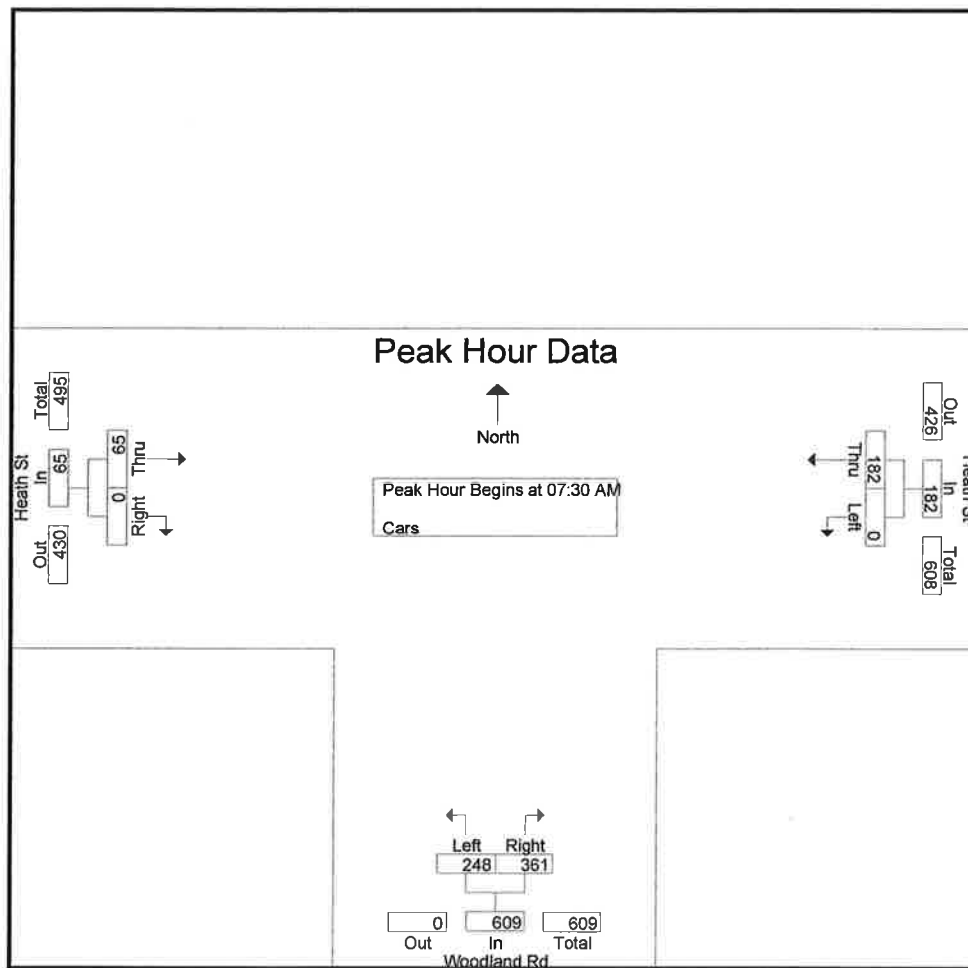
# Accurate Counts

978-664-2565

N/S Street : Heath Street  
 E/W Street: Woodland Road  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 7382N009  
 Site Code : 73820009  
 Start Date : 11/17/2016  
 Page No : 5

	Heath St From East			Woodland Rd From South			Heath St 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 09:15 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	0	41	41	61	85	146	16	0	16	203
07:45 AM	0	42	42	78	121	199	14	0	14	255
08:00 AM	0	45	45	57	87	144	21	0	21	210
08:15 AM	0	54	54	52	68	120	14	0	14	188
Total Volume	0	182	182	248	361	609	65	0	65	856
% App. Total	0	100		40.7	59.3		100	0		
PHF	.000	.843	.843	.795	.746	.765	.774	.000	.774	.839



# Accurate Counts

978-664-2565

N/S Street : Heath Street  
 E/W Street: Woodland Road  
 City/State : Brookline, MA  
 Weather : Clear

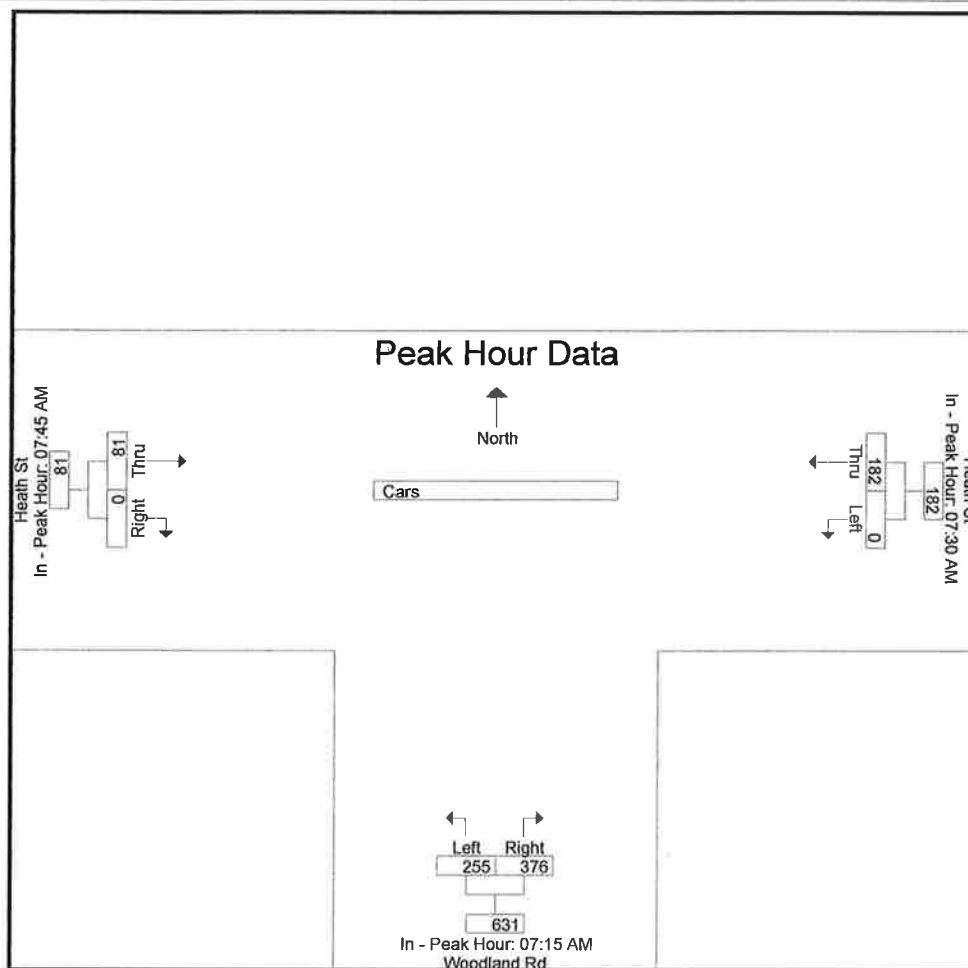
File Name : 7382N009  
 Site Code : 73820009  
 Start Date : 11/17/2016  
 Page No : 6

	Heath St From East			Woodland Rd From South			Heath St 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 09:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM			07:15 AM			07:45 AM		
+0 mins.	0	41	41	59	83	142	14	0	14
+15 mins.	0	42	42	61	85	146	21	0	21
+30 mins.	0	45	45	78	121	199	14	0	14
+45 mins.	0	54	54	57	87	144	32	0	32
Total Volume	0	182	182	255	376	631	81	0	81
% App. Total	0	100		40.4	59.6		100	0	
PHF	.000	.843	.843	.817	.777	.793	.633	.000	.633



**Accurate Counts**  
978-664-2565

N/S Street : Heath Street  
E/W Street: Woodland Road  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N009  
Site Code : 73820009  
Start Date : 11/17/2016  
Page No : 7

Groups Printed- Trucks

Start Time	Heath St From East		Woodland Rd From South		Heath St From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
07:00 AM	0	0	0	0	0	0	0
07:15 AM	0	0	1	5	1	0	7
07:30 AM	0	0	0	1	0	0	1
07:45 AM	0	0	0	2	0	0	2
Total	0	0	1	8	1	0	10
08:00 AM	0	1	0	0	1	0	2
08:15 AM	0	3	0	1	0	0	4
08:30 AM	0	0	1	0	1	0	2
08:45 AM	0	3	0	0	0	0	3
Total	0	7	1	1	2	0	11
09:00 AM	0	1	0	2	0	0	3
09:15 AM	0	1	0	0	0	0	1
Grand Total	0	9	2	11	3	0	25
Apprch %	0	100	15.4	84.6	100	0	
Total %	0	36	8	44	12	0	

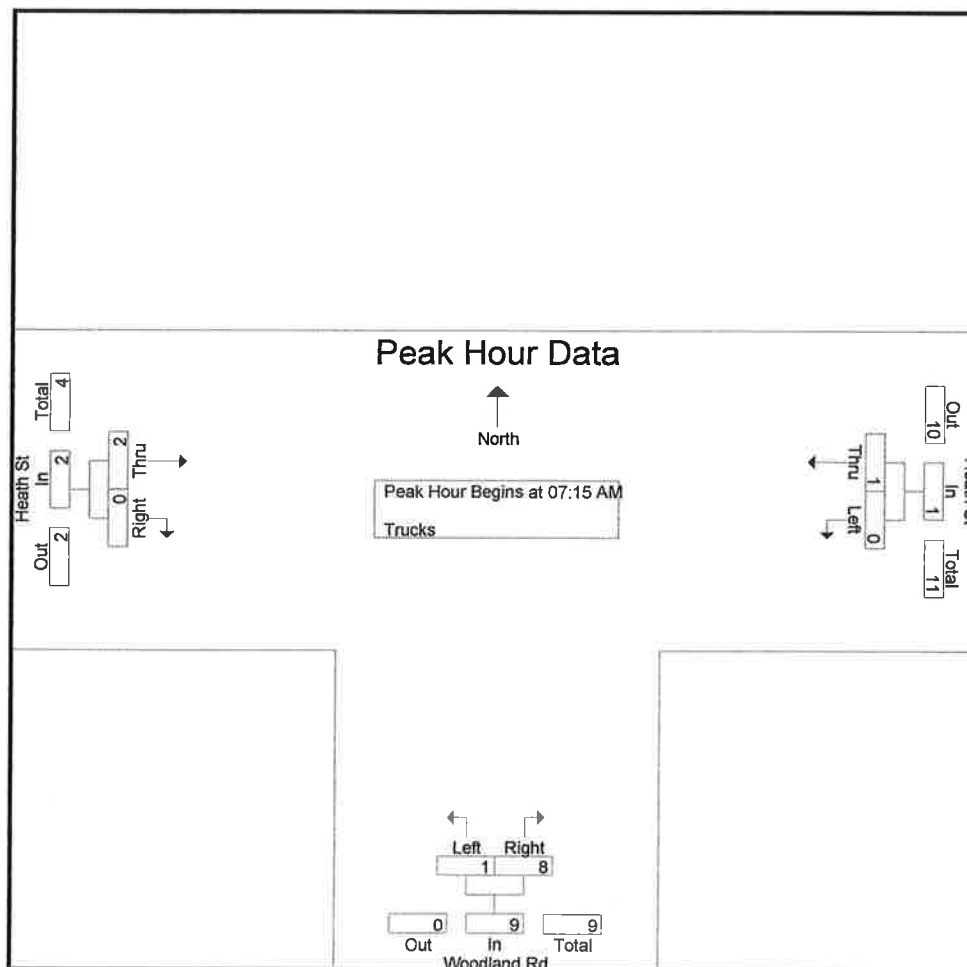
# Accurate Counts

978-664-2565

N/S Street : Heath Street  
 E/W Street: Woodland Road  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 7382N009  
 Site Code : 73820009  
 Start Date : 11/17/2016  
 Page No : 8

	Heath St From East			Woodland Rd From South			Heath St 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 09:15 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	0	0	0	1	5	6	1	0	1	7
07:30 AM	0	0	0	0	1	1	0	0	0	1
07:45 AM	0	0	0	0	2	2	0	0	0	2
08:00 AM	0	1	1	0	0	0	1	0	1	2
Total Volume	0	1	1	1	8	9	2	0	2	12
% App. Total	0	100		11.1	88.9		100	0		
PHF	.000	.250	.250	.250	.400	.375	.500	.000	.500	.429



# Accurate Counts

978-664-2565

N/S Street : Heath Street  
 E/W Street: Woodland Road  
 City/State : Brookline, MA  
 Weather : Clear

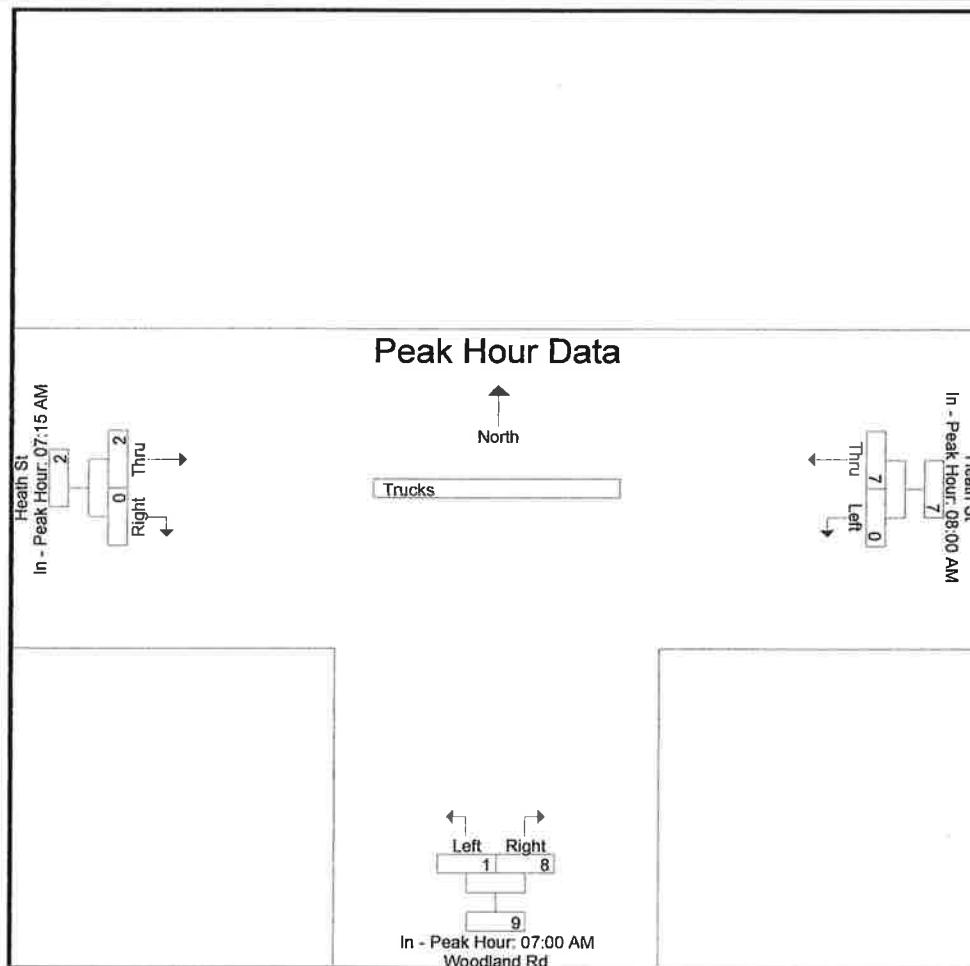
File Name : 7382N009  
 Site Code : 73820009  
 Start Date : 11/17/2016  
 Page No : 9

	Heath St From East			Woodland Rd From South			Heath St 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 09:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00 AM			07:00 AM			07:15 AM		
+0 mins.	0	1	1	0	0	0	1	0	1
+15 mins.	0	3	3	1	5	6	0	0	0
+30 mins.	0	0	0	0	1	1	0	0	0
+45 mins.	0	3	3	0	2	2	1	0	1
Total Volume	0	7	7	1	8	9	2	0	2
% App. Total	0	100		11.1	88.9		100	0	
PHF	.000	.583	.583	.250	.400	.375	.500	.000	.500



**Accurate Counts**  
978-664-2565

N/S Street : Heath Street  
E/W Street: Woodland Road  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N009  
Site Code : 73820009  
Start Date : 11/17/2016  
Page No : 10

Groups Printed- Bikes Peds

Start Time	Heath St From East			Woodland Rd From South			Heath St From West			Exclu. Total	Inclu. Total	Int. Total
	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	1	2	0	0	0	0	0	0	2	1	3
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	1	0	0	0	0	0	0	1	0	1
Total	0	1	3	0	0	0	0	0	0	3	1	4
08:00 AM	0	0	3	0	0	0	0	0	0	3	0	3
08:15 AM	0	0	1	0	0	0	1	0	0	1	1	2
08:30 AM	0	0	1	0	0	0	0	0	0	1	0	1
08:45 AM	0	1	2	0	0	0	1	0	0	2	2	4
Total	0	1	7	0	0	0	2	0	0	7	3	10
09:00 AM	0	0	7	0	0	0	0	0	0	7	0	7
09:15 AM	0	0	2	0	0	0	0	0	0	2	0	2
Grand Total	0	2	19	0	0	0	2	0	0	19	4	23
Apprch %	0	100		0	0		100	0				
Total %	0	50		0	0		50	0		82.6	17.4	



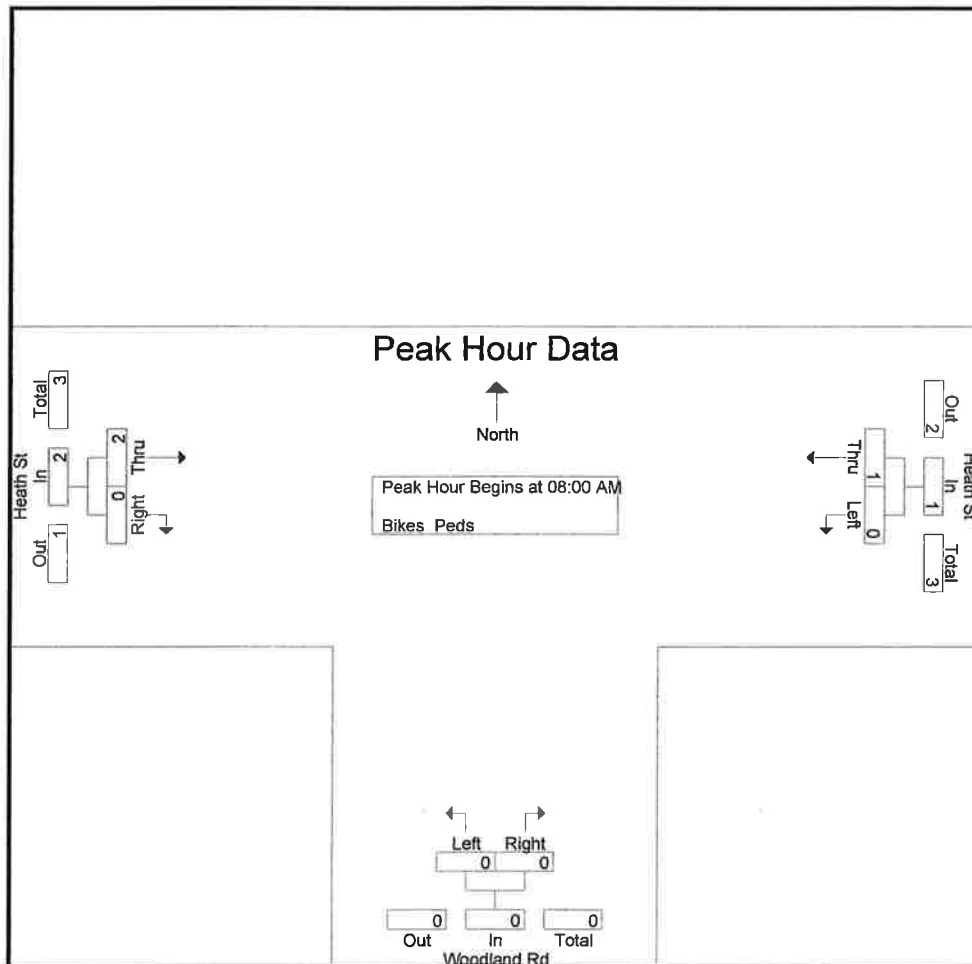
# Accurate Counts

978-664-2565

N/S Street : Heath Street  
 E/W Street: Woodland Road  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 7382N009  
 Site Code : 73820009  
 Start Date : 11/17/2016  
 Page No : 11

	Heath St From East			Woodland Rd From South			Heath St 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 09:15 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	0	0	0	0	0	0	1	0	1	1
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	1	1	0	0	0	1	0	1	2
Total Volume	0	1	1	0	0	0	2	0	2	3
% App. Total	0	100		0	0		100	0		
PHF	.000	.250	.250	.000	.000	.000	.500	.000	.500	.375



# Accurate Counts

978-664-2565

N/S Street : Heath Street  
 E/W Street: Woodland Road  
 City/State : Brookline, MA  
 Weather : Clear

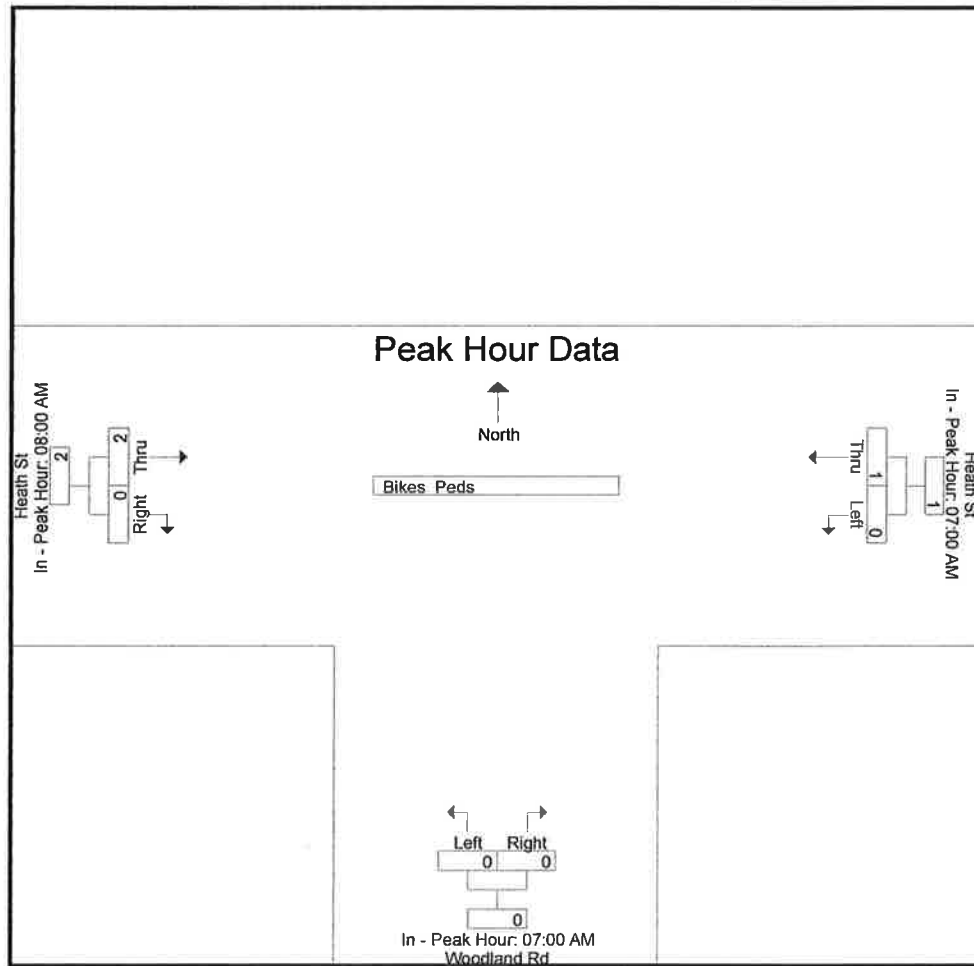
File Name : 7382N009  
 Site Code : 73820009  
 Start Date : 11/17/2016  
 Page No : 12

	Heath St From East			Woodland Rd From South			Heath St 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 09:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			08:00 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	1	1	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	1	0	1
Total Volume	0	1	1	0	0	0	2	0	2
% App. Total	0	100		0	0		100	0	
PHF	.000	.250	.250	.000	.000	.000	.500	.000	.500



**Accurate Counts**  
978-664-2565

N/S Street : Heath Street  
E/W Street: Woodland Road  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N009  
Site Code : 73820009  
Start Date : 11/17/2016  
Page No : 1

Groups Printed- Cars - Trucks

Start Time	Heath St From East		Woodland Rd From South		Heath St From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
02:00 PM	0	51	7	23	9	0	90
02:15 PM	0	40	20	22	17	0	99
02:30 PM	0	39	15	20	10	0	84
02:45 PM	0	47	19	28	19	0	113
Total	0	177	61	93	55	0	386
03:00 PM	0	59	15	20	10	0	104
03:15 PM	0	63	22	25	22	0	132
03:30 PM	0	65	8	24	19	0	116
03:45 PM	0	67	11	18	16	0	112
Total	0	254	56	87	67	0	464
04:00 PM	0	73	7	30	15	0	125
04:15 PM	0	81	12	23	15	0	131
04:30 PM	0	79	14	27	17	0	137
04:45 PM	0	94	12	26	20	0	152
Total	0	327	45	106	67	0	545
Grand Total	0	758	162	286	189	0	1395
Apprch %	0	100	36.2	63.8	100	0	
Total %	0	54.3	11.6	20.5	13.5	0	
Cars	0	749	162	282	187	0	1380
% Cars	0	98.8	100	98.6	98.9	0	98.9
Trucks	0	9	0	4	2	0	15
% Trucks	0	1.2	0	1.4	1.1	0	1.1

# Accurate Counts

978-664-2565

N/S Street : Heath Street  
 E/W Street: Woodland Road  
 City/State : Brookline, MA  
 Weather : Clear

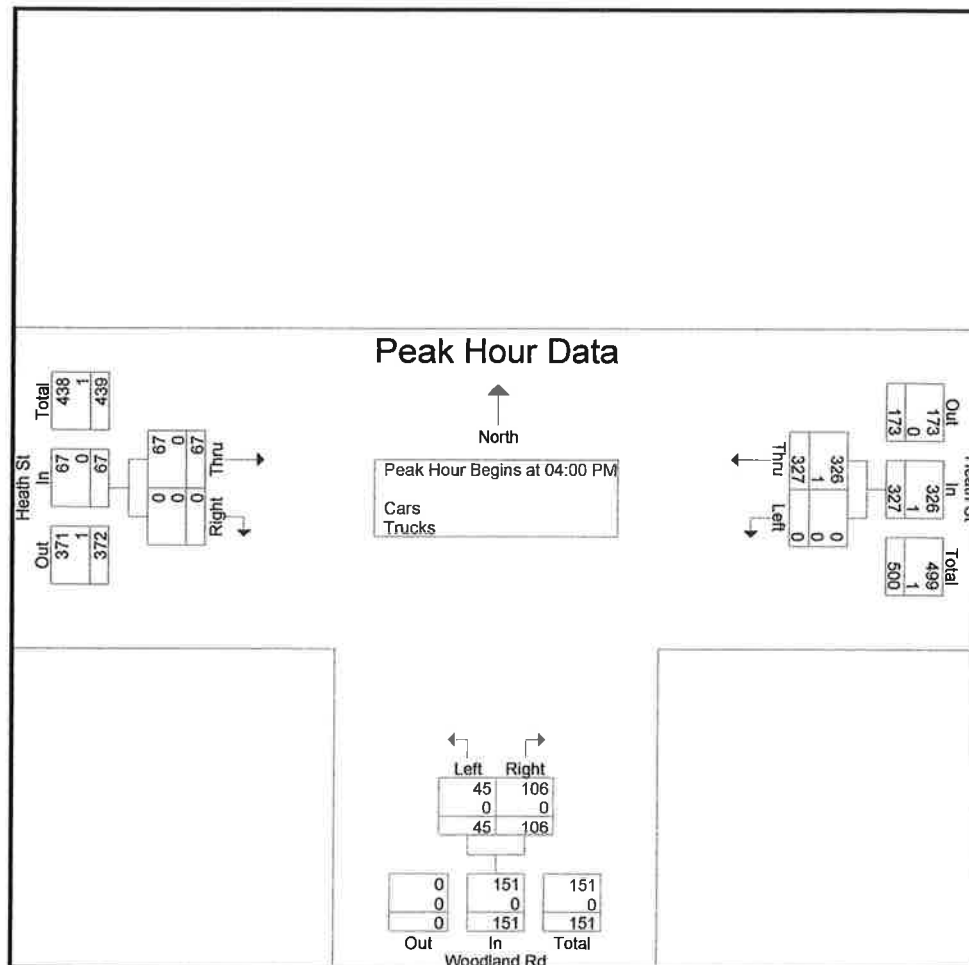
File Name : 7382N009  
 Site Code : 73820009  
 Start Date : 11/17/2016  
 Page No : 2

	Heath St From East			Woodland Rd From South			Heath St 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 04:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:00 PM

04:00 PM	0	73	73	7	30	37	15	0	15	125
04:15 PM	0	81	81	12	23	35	15	0	15	131
04:30 PM	0	79	79	14	27	41	17	0	17	137
04:45 PM	0	94	94	12	26	38	20	0	20	152
Total Volume	0	327	327	45	106	151	67	0	67	545
% App. Total	0	100		29.8	70.2		100	0		
PHF	.000	.870	.870	.804	.883	.921	.838	.000	.838	.896
Cars	0	326	326	45	106	151	67	0	67	544
% Cars	0	99.7	99.7	100	100	100	100	0	100	99.8
Trucks	0	1	1	0	0	0	0	0	0	1
% Trucks	0	0.3	0.3	0	0	0	0	0	0	0.2



# Accurate Counts

978-664-2565

N/S Street : Heath Street  
 E/W Street: Woodland Road  
 City/State : Brookline, MA  
 Weather : Clear

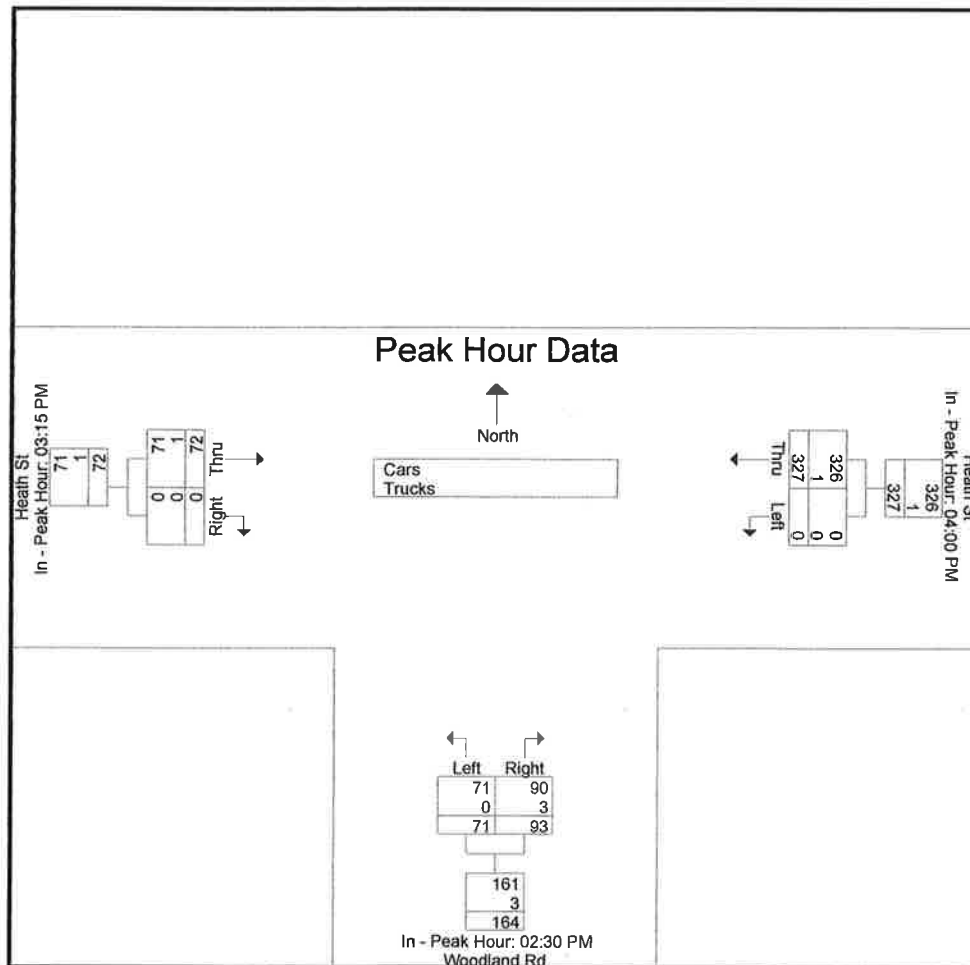
File Name : 7382N009  
 Site Code : 73820009  
 Start Date : 11/17/2016  
 Page No : 3

	Heath St From East			Woodland Rd From South			Heath St 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM			02:30 PM			03:15 PM		
+0 mins.	0	73	73	15	20	35	22	0	22
+15 mins.	0	81	81	19	28	47	19	0	19
+30 mins.	0	79	79	15	20	35	16	0	16
+45 mins.	0	94	94	22	25	47	15	0	15
Total Volume	0	327	327	71	93	164	72	0	72
% App. Total	0	100		43.3	56.7		100	0	
PHF	.000	.870	.870	.807	.830	.872	.818	.000	.818
Cars	0	326	326	71	90	161	71	0	71
% Cars	0	99.7	99.7	100	96.8	98.2	98.6	0	98.6
Trucks	0	1	1	0	3	3	1	0	1
% Trucks	0	0.3	0.3	0	3.2	1.8	1.4	0	1.4



**Accurate Counts**  
978-664-2565

N/S Street : Heath Street  
E/W Street: Woodland Road  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N009  
Site Code : 73820009  
Start Date : 11/17/2016  
Page No : 4

Groups Printed- Cars

Start Time	Heath St From East		Woodland Rd From South		Heath St From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
02:00 PM	0	50	7	22	9	0	88
02:15 PM	0	40	20	22	16	0	98
02:30 PM	0	36	15	20	10	0	81
02:45 PM	0	47	19	27	19	0	112
Total	0	173	61	91	54	0	379
03:00 PM	0	59	15	18	10	0	102
03:15 PM	0	62	22	25	22	0	131
03:30 PM	0	65	8	24	18	0	115
03:45 PM	0	64	11	18	16	0	109
Total	0	250	56	85	66	0	457
04:00 PM	0	72	7	30	15	0	124
04:15 PM	0	81	12	23	15	0	131
04:30 PM	0	79	14	27	17	0	137
04:45 PM	0	94	12	26	20	0	152
Total	0	326	45	106	67	0	544
Grand Total	0	749	162	282	187	0	1380
Apprch %	0	100	36.5	63.5	100	0	
Total %	0	54.3	11.7	20.4	13.6	0	

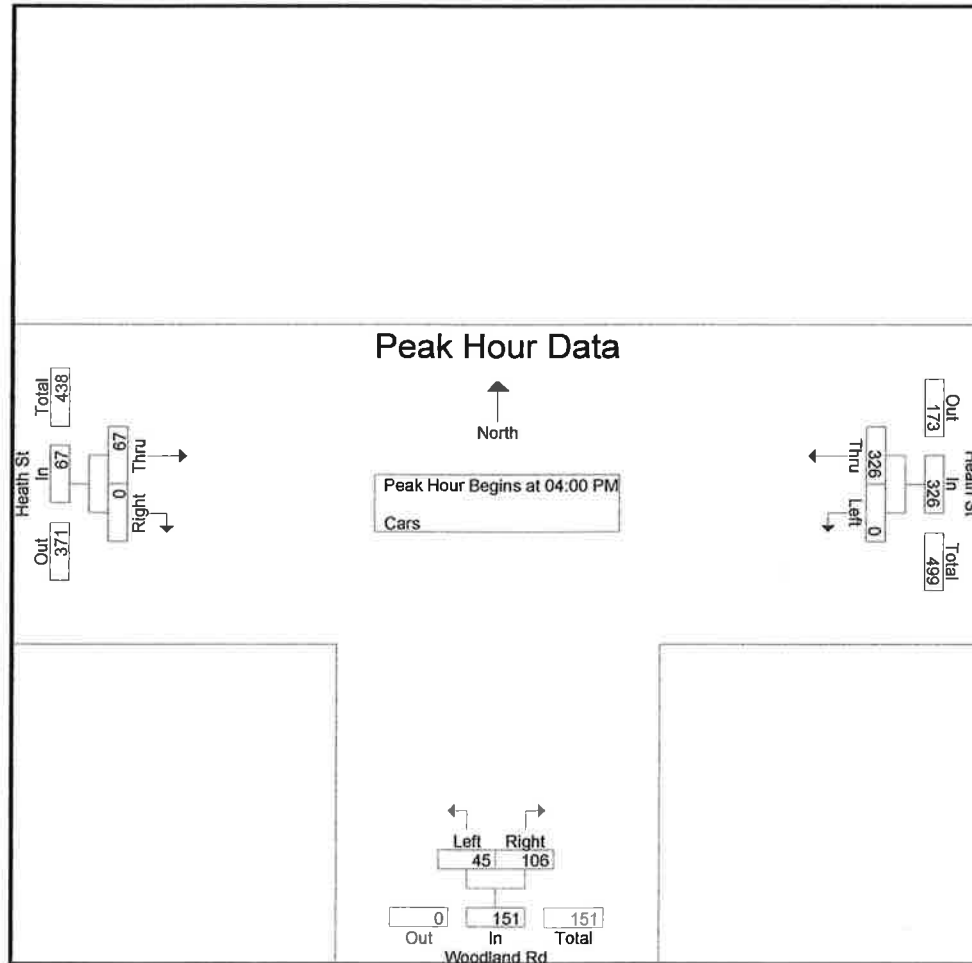
# Accurate Counts

978-664-2565

N/S Street : Heath Street  
 E/W Street: Woodland Road  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 7382N009  
 Site Code : 73820009  
 Start Date : 11/17/2016  
 Page No : 5

	Heath St From East			Woodland Rd From South			Heath St 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 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	0	72	72	7	30	37	15	0	15	124
04:15 PM	0	81	81	12	23	35	15	0	15	131
04:30 PM	0	79	79	14	27	41	17	0	17	137
04:45 PM	0	94	94	12	26	38	20	0	20	152
Total Volume	0	326	326	45	106	151	67	0	67	544
% App. Total	0	100		29.8	70.2		100	0		
PHF	.000	.867	.867	.804	.883	.921	.838	.000	.838	.895



**Accurate Counts**  
978-664-2565

N/S Street : Heath Street  
E/W Street: Woodland Road  
City/State : Brookline, MA  
Weather : Clear

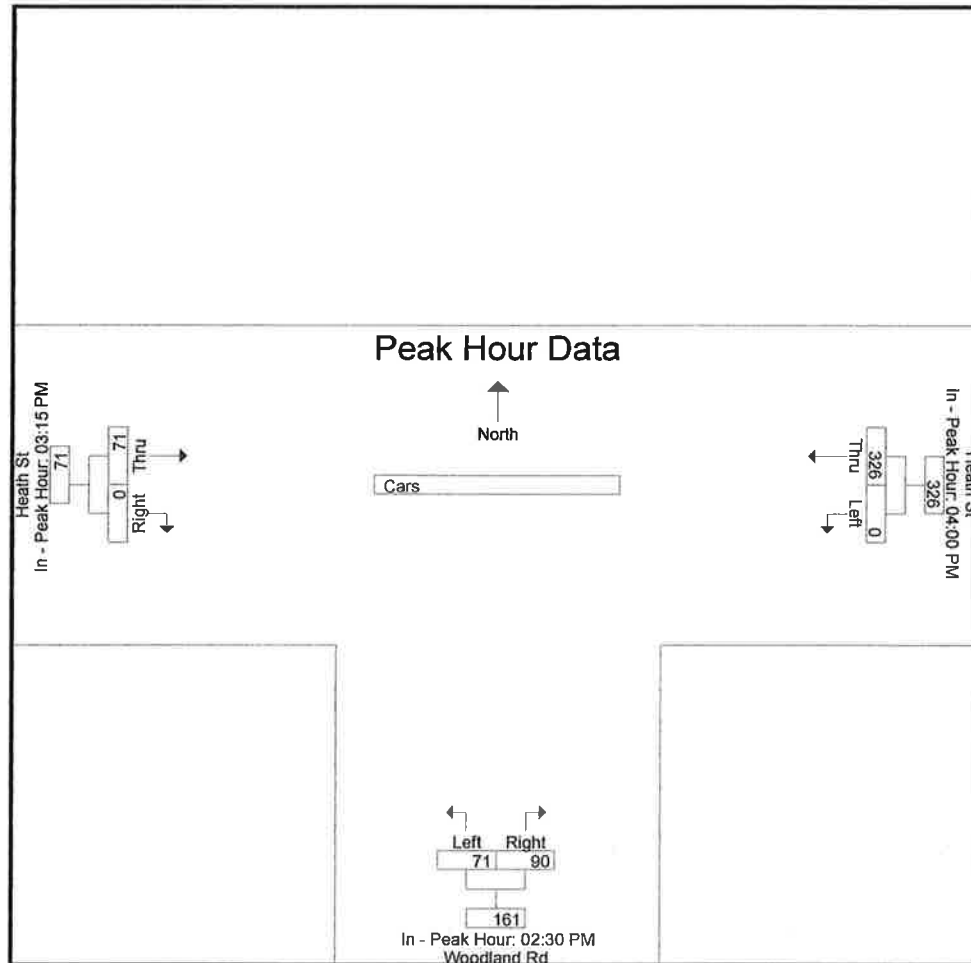
File Name : 7382N009  
Site Code : 73820009  
Start Date : 11/17/2016  
Page No : 6

	Heath St From East			Woodland Rd From South			Heath St 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM			02:30 PM			03:15 PM		
+0 mins.	0	72	72	15	20	35	22	0	22
+15 mins.	0	81	81	19	27	46	18	0	18
+30 mins.	0	79	79	15	18	33	16	0	16
+45 mins.	0	94	94	22	25	47	15	0	15
Total Volume	0	326	326	71	90	161	71	0	71
% App. Total	0	100		44.1	55.9		100	0	
PHF	.000	.867	.867	.807	.833	.856	.807	.000	.807





**Accurate Counts**  
978-664-2565

N/S Street : Heath Street  
E/W Street: Woodland Road  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N009  
Site Code : 73820009  
Start Date : 11/17/2016  
Page No : 7

Groups Printed- Trucks

Start Time	Heath St From East		Woodland Rd From South		Heath St From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
02:00 PM	0	1	0	1	0	0	2
02:15 PM	0	0	0	0	1	0	1
02:30 PM	0	3	0	0	0	0	3
02:45 PM	0	0	0	1	0	0	1
Total	0	4	0	2	1	0	7
03:00 PM	0	0	0	2	0	0	2
03:15 PM	0	1	0	0	0	0	1
03:30 PM	0	0	0	0	1	0	1
03:45 PM	0	3	0	0	0	0	3
Total	0	4	0	2	1	0	7
04:00 PM	0	1	0	0	0	0	1
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	1	0	0	0	0	1
Grand Total	0	9	0	4	2	0	15
Apprch %	0	100	0	100	100	0	
Total %	0	60	0	26.7	13.3	0	

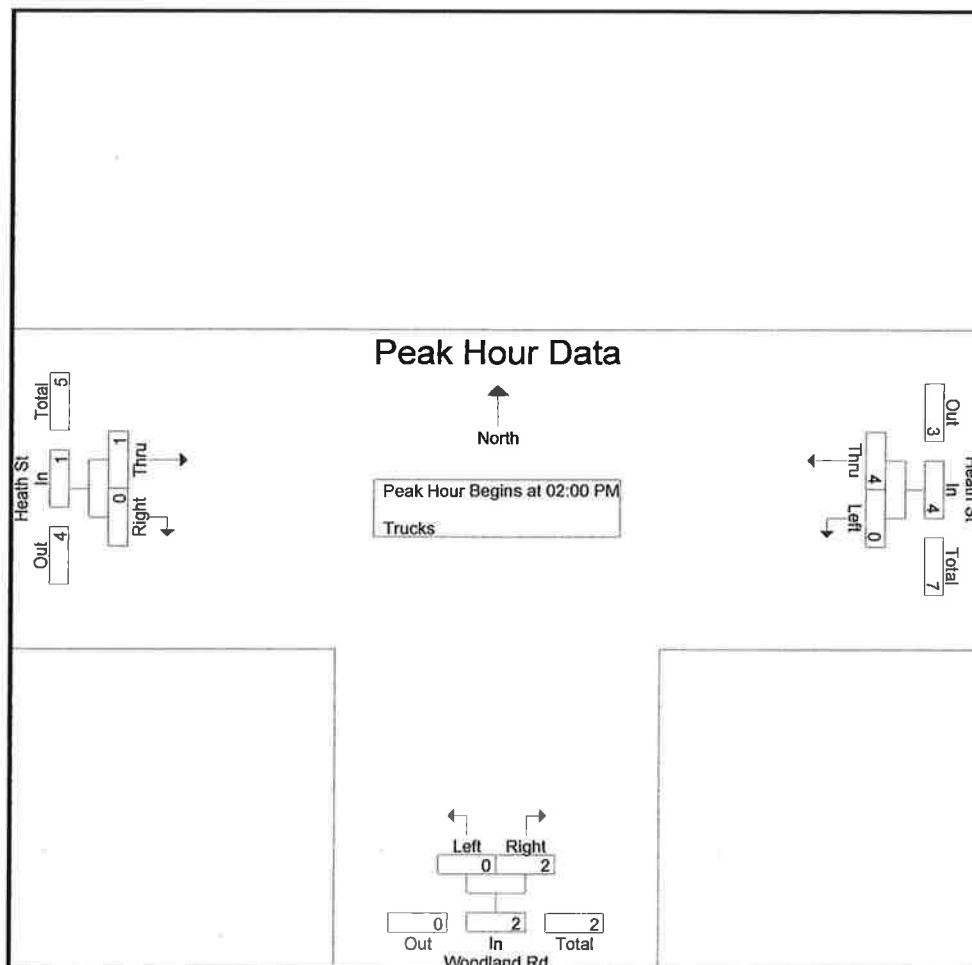
# Accurate Counts

978-664-2565

N/S Street : Heath Street  
 E/W Street: Woodland Road  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 7382N009  
 Site Code : 73820009  
 Start Date : 11/17/2016  
 Page No : 8

	Heath St From East			Woodland Rd From South			Heath St 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 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 02:00 PM										
02:00 PM	0	1	1	0	1	1	0	0	0	2
02:15 PM	0	0	0	0	0	0	1	0	1	1
02:30 PM	0	3	3	0	0	0	0	0	0	3
02:45 PM	0	0	0	0	1	1	0	0	0	1
Total Volume	0	4	4	0	2	2	1	0	1	7
% App. Total	0	100		0	100		100	0		
PHF	.000	.333	.333	.000	.500	.500	.250	.000	.250	.583



# Accurate Counts

978-664-2565

N/S Street : Heath Street  
E/W Street: Woodland Road  
City/State : Brookline, MA  
Weather : Clear

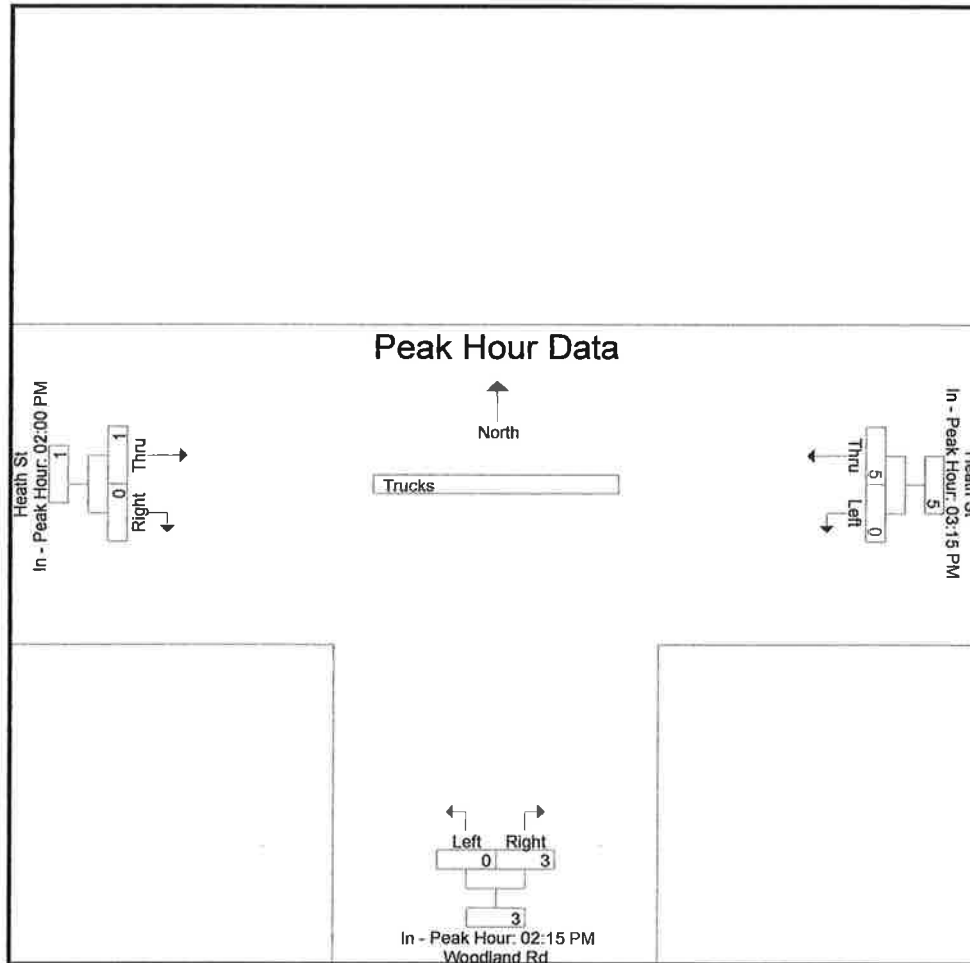
File Name : 7382N009  
Site Code : 73820009  
Start Date : 11/17/2016  
Page No : 9

	Heath St From East			Woodland Rd From South			Heath St 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	03:15 PM			02:15 PM			02:00 PM		
+0 mins.	0	1	1	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	1	0	1
+30 mins.	0	3	3	0	1	1	0	0	0
+45 mins.	0	1	1	0	2	2	0	0	0
Total Volume	0	5	5	0	3	3	1	0	1
% App. Total	0	100		0	100		100	0	
PHF	.000	.417	.417	.000	.375	.375	.250	.000	.250



# Accurate Counts

978-664-2565

N/S Street : Heath Street  
 E/W Street: Woodland Road  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 7382N009  
 Site Code : 73820009  
 Start Date : 11/17/2016  
 Page No : 10

## Groups Printed- Bikes Peds

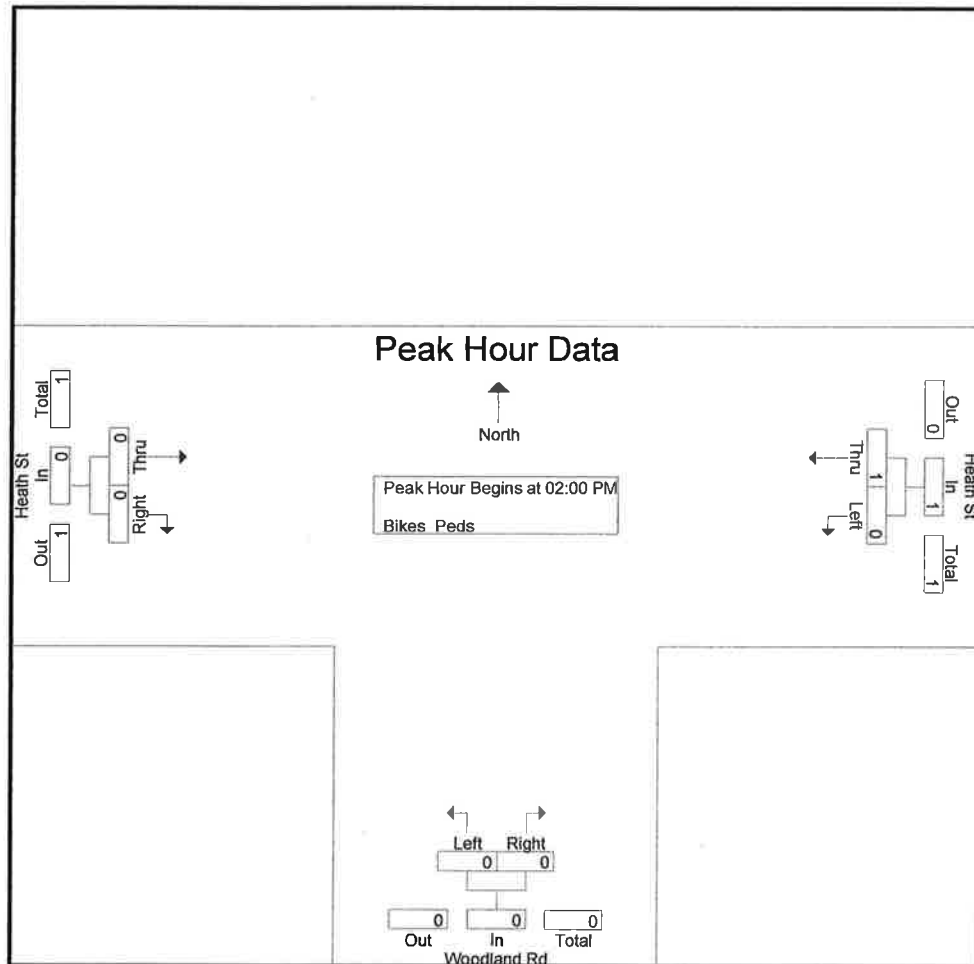
Start Time	Heath St From East			Woodland Rd From South			Heath St From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds			
02:00 PM	0	0	1	0	0	1	0	0	0	2	0	2
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	1	1	0	0	0	0	0	0	1	1	2
02:45 PM	0	0	1	0	0	0	0	0	0	1	0	1
Total	0	1	3	0	0	1	0	0	0	4	1	5
03:00 PM	0	0	2	0	0	0	0	0	0	2	0	2
03:15 PM	0	0	1	0	0	1	0	0	0	2	0	2
03:30 PM	0	0	3	0	0	0	0	0	0	3	0	3
03:45 PM	0	0	12	0	0	0	0	0	0	12	0	12
Total	0	0	18	0	0	1	0	0	0	19	0	19
04:00 PM	0	0	2	0	0	2	0	0	0	4	0	4
04:15 PM	0	0	3	0	0	0	0	0	0	3	0	3
04:30 PM	0	0	1	0	0	0	0	0	0	1	0	1
04:45 PM	0	0	1	0	0	0	0	0	0	1	0	1
Total	0	0	7	0	0	2	0	0	0	9	0	9
Grand Total	0	1	28	0	0	4	0	0	0	32	1	33
Apprch %	0	100		0	0		0	0				
Total %	0	100		0	0		0	0		97	3	

**Accurate Counts**  
978-664-2565

N/S Street : Heath Street  
E/W Street: Woodland Road  
City/State : Brookline, MA  
Weather : Clear

File Name : 7382N009  
Site Code : 73820009  
Start Date : 11/17/2016  
Page No : 11

	Heath St From East			Woodland Rd From South			Heath St 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 04:45 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	1	1	0	0	0	0	0	0	1
02:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	1	0	0	0	0	0	0	1
% App. Total	0	100		0	0		0	0		
PHF	.000	.250	.250	.000	.000	.000	.000	.000	.000	.250



# Accurate Counts

978-664-2565

N/S Street : Heath Street  
 E/W Street: Woodland Road  
 City/State : Brookline, MA  
 Weather : Clear

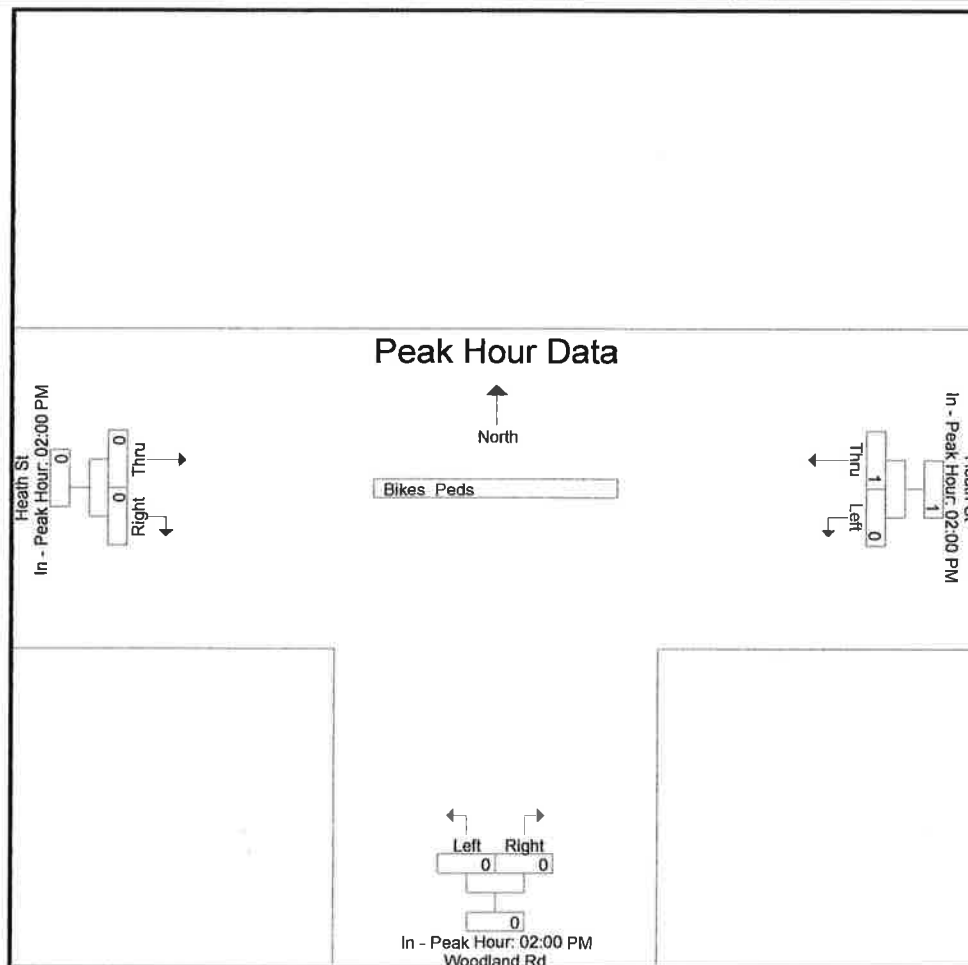
File Name : 7382N009  
 Site Code : 73820009  
 Start Date : 11/17/2016  
 Page No : 12

	Heath St From East			Woodland Rd From South			Heath St 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 04:45 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	1	1	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	1	1	0	0	0	0	0	0
% App. Total	0	100		0	0		0	0	
PHF	.000	.250	.250	.000	.000	.000	.000	.000	.000



# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
E/W Street : Horace James Circle  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820001  
Site Code : 73820001  
Start Date : 1/18/2017  
Page No : 1

## Groups Printed- Cars - Trucks

Start Time	Hammond St From North		Rotary From East		Rotary From West		Int. Total
	Left	Right	Thru	Right	Left	Thru	
07:00 AM	0	56	383	218	0	0	657
07:15 AM	0	96	420	219	0	0	735
07:30 AM	0	101	429	280	0	1	811
07:45 AM	0	118	428	313	0	0	859
Total	0	371	1660	1030	0	1	3062
08:00 AM	0	123	416	285	0	0	824
08:15 AM	0	84	422	266	0	0	772
08:30 AM	0	66	426	228	0	0	720
08:45 AM	0	98	432	222	0	0	752
Total	0	371	1696	1001	0	0	3068
Grand Total	0	742	3356	2031	0	1	6130
Apprch %	0	100	62.3	37.7	0	100	
Total %	0	12.1	54.7	33.1	0	0	
Cars	0	720	3324	2012	0	1	6057
% Cars	0	97	99	99.1	0	100	98.8
Trucks	0	22	32	19	0	0	73
% Trucks	0	3	1	0.9	0	0	1.2

# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
 E/W Street : Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

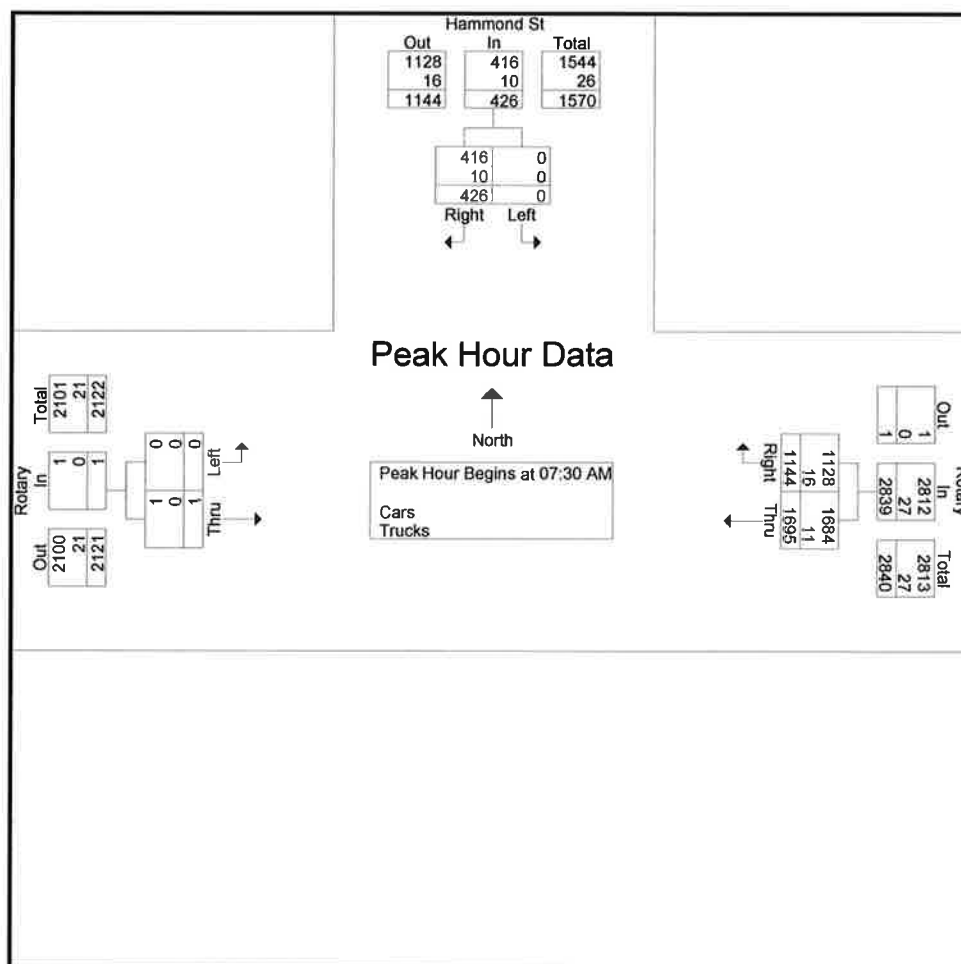
File Name : 73820001  
 Site Code : 73820001  
 Start Date : 1/18/2017  
 Page No : 2

	Hammond St From North			Rotary From East			Rotary 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 07:30 AM

07:30 AM	0	101	101	429	280	709	0	1	1	811
07:45 AM	0	118	118	428	313	741	0	0	0	859
08:00 AM	0	123	123	416	285	701	0	0	0	824
08:15 AM	0	84	84	422	266	688	0	0	0	772
Total Volume	0	426	426	1695	1144	2839	0	1	1	3266
% App. Total	0	100		59.7	40.3		0	100		
PHF	.000	.866	.866	.988	.914	.958	.000	.250	.250	.951
Cars	0	416	416	1684	1128	2812	0	1	1	3229
% Cars	0	97.7	97.7	99.4	98.6	99.0	0	100	100	98.9
Trucks	0	10	10	11	16	27	0	0	0	37
% Trucks	0	2.3	2.3	0.6	1.4	1.0	0	0	0	1.1





# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
E/W Street : Horace James Circle  
City/State : Brookline, MA  
Weather : Rain

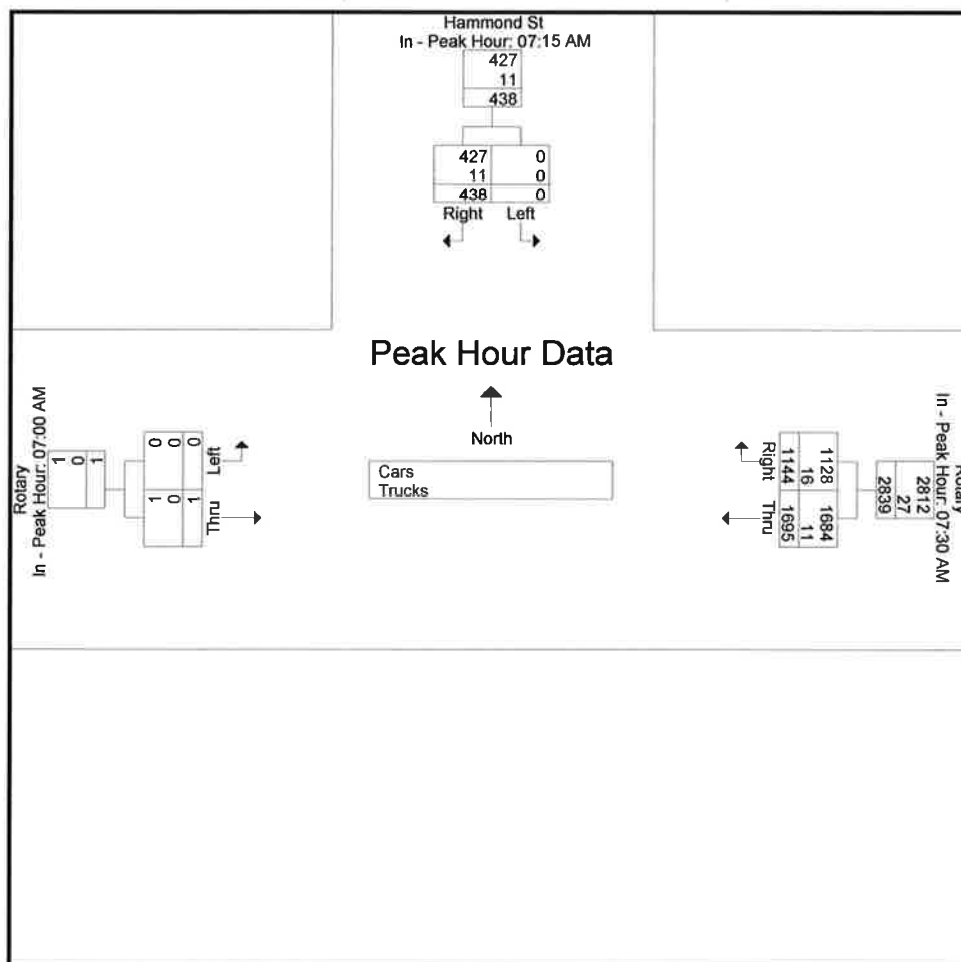
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Site Code : 73820001  
Start Date : 1/18/2017  
Page No : 3

	Hammond St From North			Rotary From East			Rotary 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:

	07:15 AM			07:30 AM			07:00 AM		
+0 mins.	0	96	96	429	280	709	0	0	0
+15 mins.	0	101	101	428	313	741	0	0	0
+30 mins.	0	118	118	416	285	701	0	1	1
+45 mins.	0	123	123	422	266	688	0	0	0
Total Volume	0	438	438	1695	1144	2839	0	1	1
% App. Total	0	100		59.7	40.3		0	100	
PHF	.000	.890	.890	.988	.914	.958	.000	.250	.250
Cars	0	427	427	1684	1128	2812	0	1	1
% Cars	0	97.5	97.5	99.4	98.6	99	0	100	100
Trucks	0	11	11	11	16	27	0	0	0
% Trucks	0	2.5	2.5	0.6	1.4	1	0	0	0



**Accurate Counts**  
978-664-2565

N/S Street : Hammond Street  
E/W Street : Horace James Circle  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820001  
Site Code : 73820001  
Start Date : 1/18/2017  
Page No : 4

Groups Printed- Cars

Start Time	Hammond St From North		Rotary From East		Rotary From West		Int. Total
	Left	Right	Thru	Right	Left	Thru	
07:00 AM	0	55	374	218	0	0	647
07:15 AM	0	92	412	219	0	0	723
07:30 AM	0	98	422	278	0	1	799
07:45 AM	0	116	425	308	0	0	849
Total	0	361	1633	1023	0	1	3018
08:00 AM	0	121	415	282	0	0	818
08:15 AM	0	81	422	260	0	0	763
08:30 AM	0	65	422	226	0	0	713
08:45 AM	0	92	432	221	0	0	745
Total	0	359	1691	989	0	0	3039
Grand Total	0	720	3324	2012	0	1	6057
Apprch %	0	100	62.3	37.7	0	100	
Total %	0	11.9	54.9	33.2	0	0	

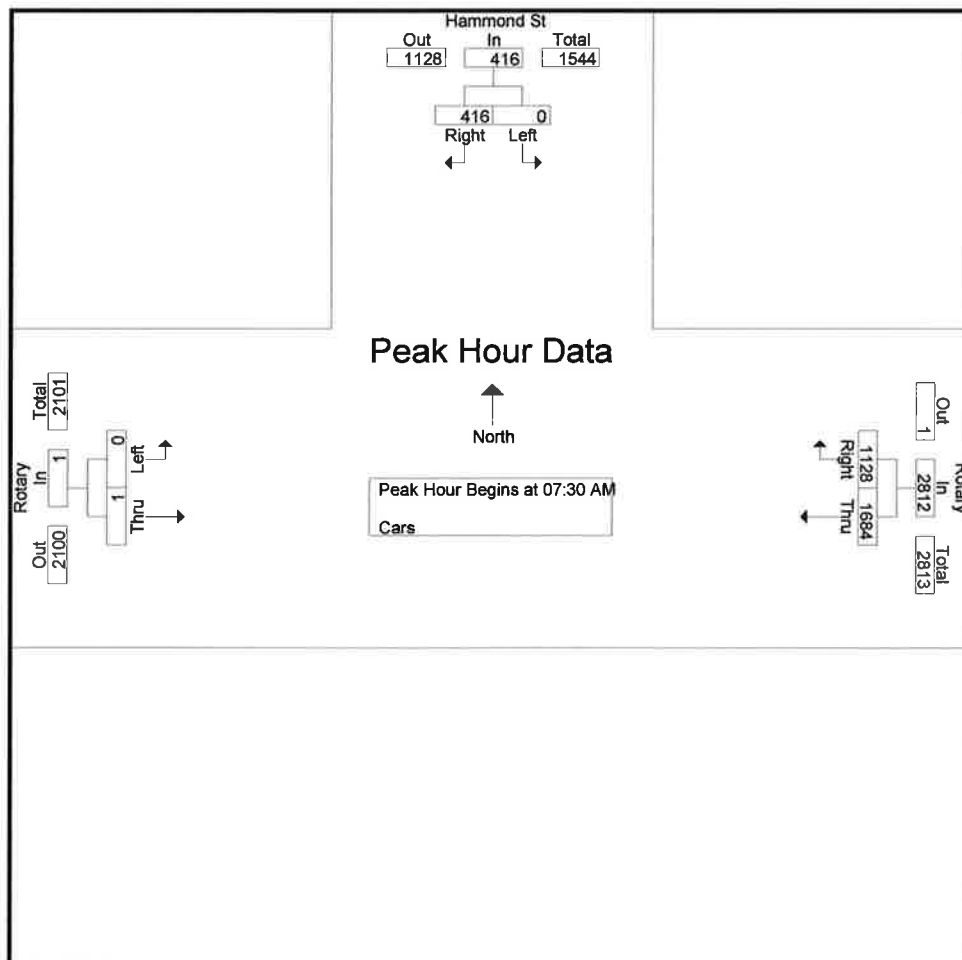
# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
 E/W Street : Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

File Name : 73820001  
 Site Code : 73820001  
 Start Date : 1/18/2017  
 Page No : 5

	Hammond St From North			Rotary From East			Rotary 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 07:30 AM										
07:30 AM	0	98	98	422	278	700	0	1	1	799
07:45 AM	0	116	116	425	308	733	0	0	0	849
08:00 AM	0	121	121	415	282	697	0	0	0	818
08:15 AM	0	81	81	422	260	682	0	0	0	763
Total Volume	0	416	416	1684	1128	2812	0	1	1	3229
% App. Total	0	100		59.9	40.1		0	100		
PHF	.000	.860	.860	.991	.916	.959	.000	.250	.250	.951



# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
 E/W Street : Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

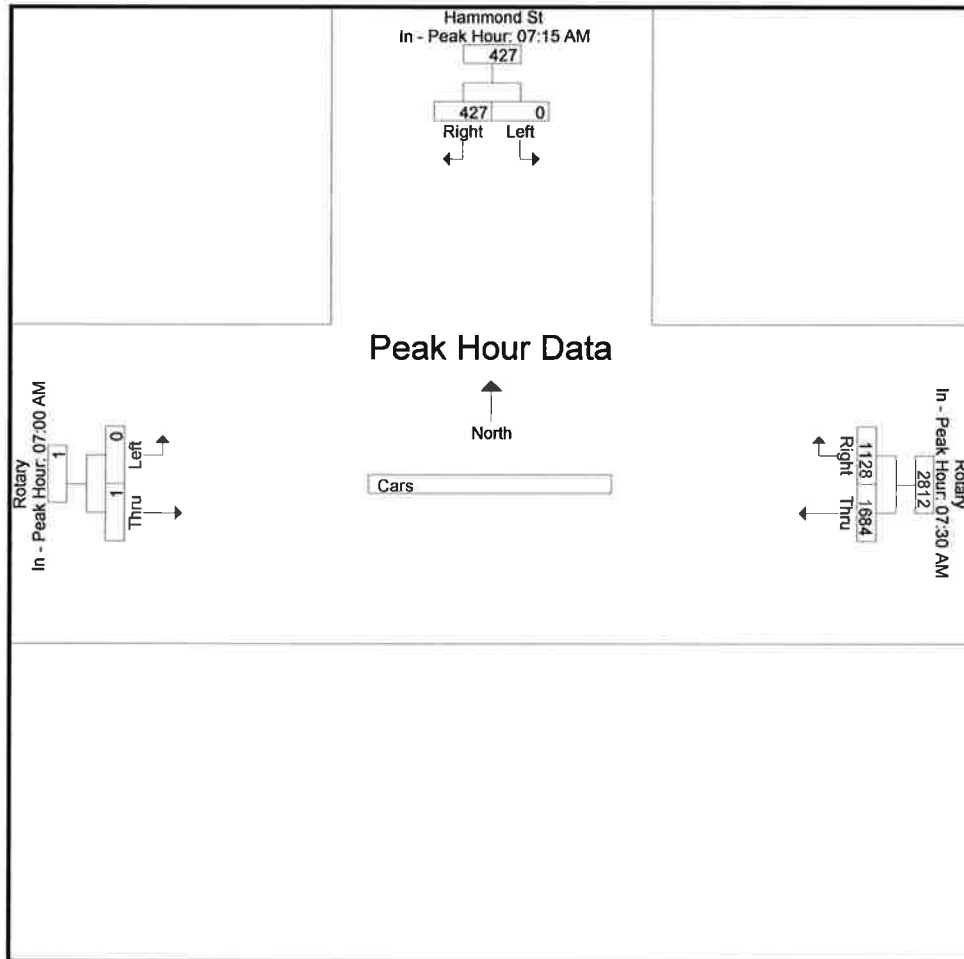
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 Site Code : 73820001  
 Start Date : 1/18/2017  
 Page No : 6

	Hammond St From North			Rotary From East			Rotary 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:

	07:15 AM			07:30 AM			07:00 AM		
+0 mins.	0	92	92	422	278	700	0	0	0
+15 mins.	0	98	98	425	308	733	0	0	0
+30 mins.	0	116	116	415	282	697	0	1	1
+45 mins.	0	121	121	422	260	682	0	0	0
Total Volume	0	427	427	1684	1128	2812	0	1	1
% App. Total	0	100		59.9	40.1		0	100	
PHF	.000	.882	.882	.991	.916	.959	.000	.250	.250



**Accurate Counts**  
978-664-2565

N/S Street : Hammond Street  
E/W Street : Horace James Circle  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820001  
Site Code : 73820001  
Start Date : 1/18/2017  
Page No : 7

Groups Printed- Trucks

Start Time	Hammond St From North		Rotary From East		Rotary From West		Int. Total
	Left	Right	Thru	Right	Left	Thru	
07:00 AM	0	1	9	0	0	0	10
07:15 AM	0	4	8	0	0	0	12
07:30 AM	0	3	7	2	0	0	12
07:45 AM	0	2	3	5	0	0	10
Total	0	10	27	7	0	0	44
08:00 AM	0	2	1	3	0	0	6
08:15 AM	0	3	0	6	0	0	9
08:30 AM	0	1	4	2	0	0	7
08:45 AM	0	6	0	1	0	0	7
Total	0	12	5	12	0	0	29
Grand Total	0	22	32	19	0	0	73
Apprch %	0	100	62.7	37.3	0	0	
Total %	0	30.1	43.8	26	0	0	

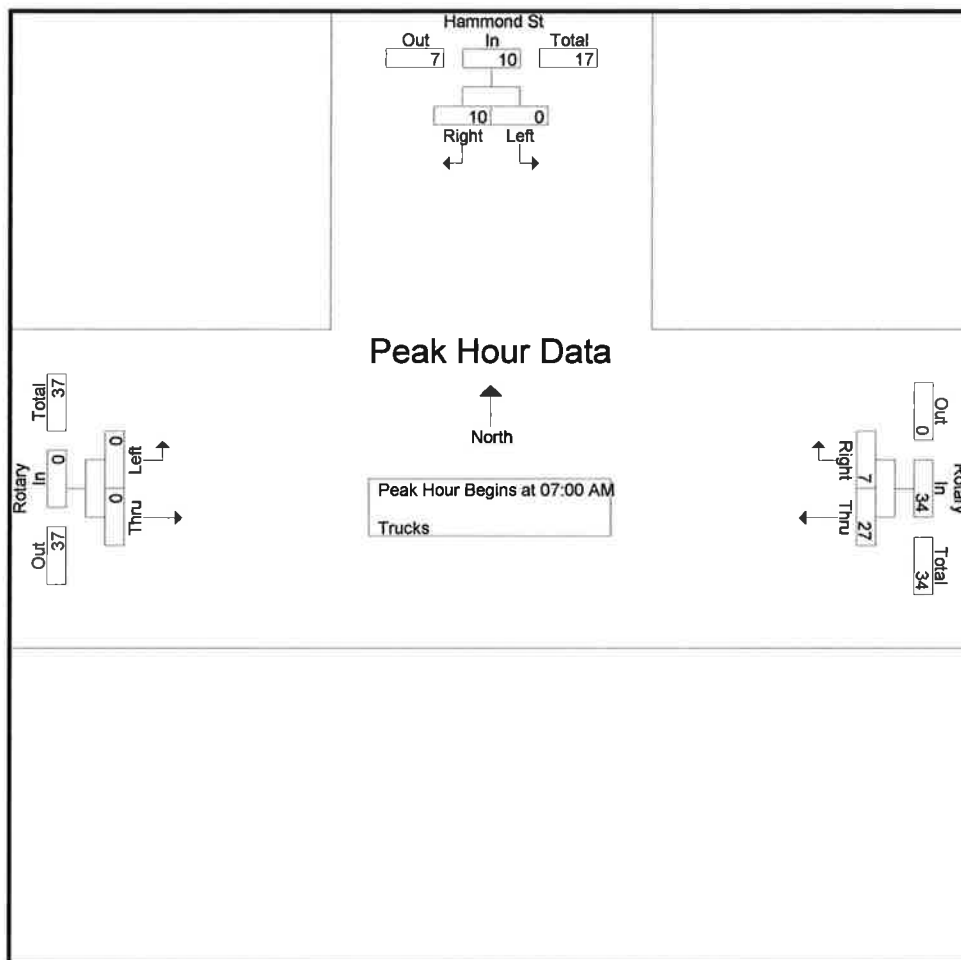
# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
 E/W Street : Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

File Name : 73820001  
 Site Code : 73820001  
 Start Date : 1/18/2017  
 Page No : 8

	Hammond St From North			Rotary From East			Rotary 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	1	1	9	0	9	0	0	0	10
07:15 AM	0	4	4	8	0	8	0	0	0	12
07:30 AM	0	3	3	7	2	9	0	0	0	12
07:45 AM	0	2	2	3	5	8	0	0	0	10
Total Volume	0	10	10	27	7	34	0	0	0	44
% App. Total	0	100		79.4	20.6		0	0		
PHF	.000	.625	.625	.750	.350	.944	.000	.000	.000	.917



**Accurate Counts**  
978-664-2565

N/S Street : Hammond Street  
E/W Street : Horace James Circle  
City/State : Brookline, MA  
Weather : Rain

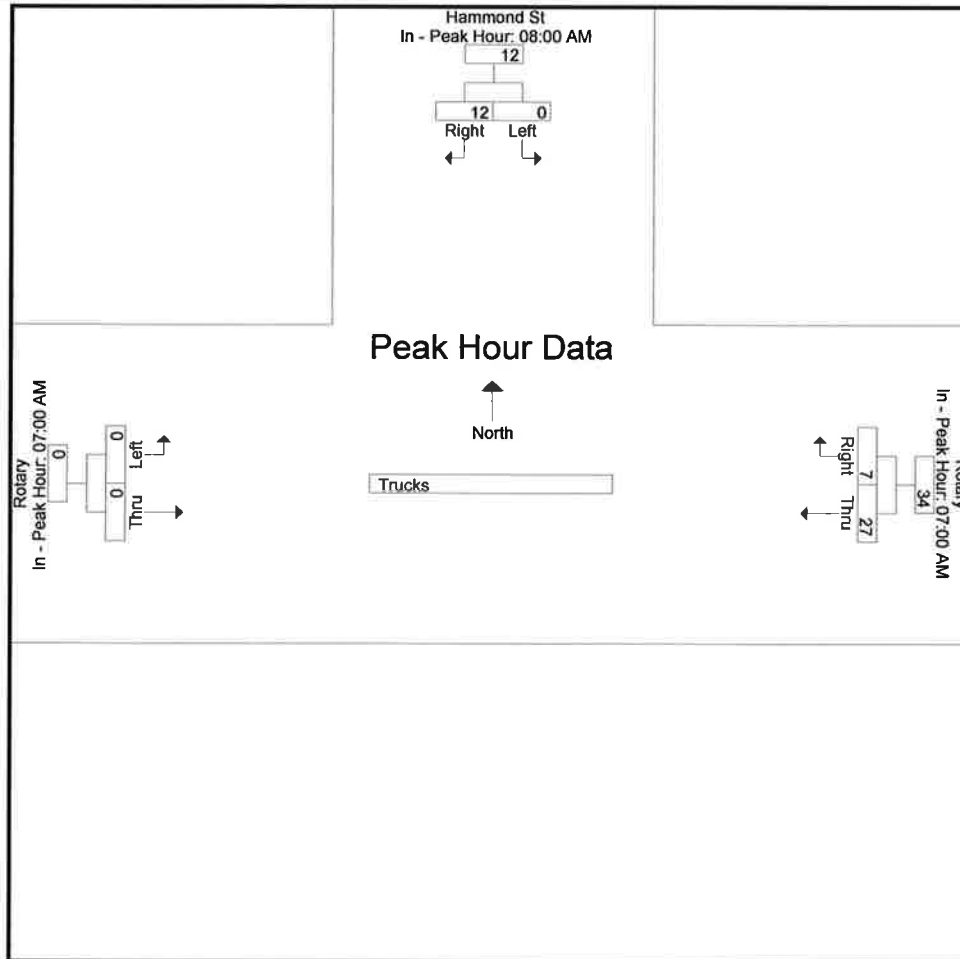
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Site Code : 73820001  
Start Date : 1/18/2017  
Page No : 9

	Hammond St From North			Rotary From East			Rotary 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:

	08:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	2	2	9	0	9	0	0	0
+15 mins.	0	3	3	8	0	8	0	0	0
+30 mins.	0	1	1	7	2	9	0	0	0
+45 mins.	0	6	6	3	5	8	0	0	0
Total Volume	0	12	12	27	7	34	0	0	0
% App. Total	0	100		79.4	20.6		0	0	
PHF	.000	.500	.500	.750	.350	.944	.000	.000	.000



**Accurate Counts**  
978-664-2565

N/S Street : Hammond Street  
E/W Street : Horace James Circle  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820001  
Site Code : 73820001  
Start Date : 1/18/2017  
Page No : 10

Groups Printed- Bikes Peds												
Start Time	Hammond St From North			Rotary From East			Rotary From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	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	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	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	1	0	0	0	0	0	0	1	1
08:45 AM	0	0	0	0	1	0	0	0	0	0	1	1
Total	0	0	0	1	1	0	0	0	0	0	2	2
Grand Total	0	0	0	1	1	0	0	0	0	0	2	2
Apprch %	0	0		50	50		0	0				
Total %	0	0		50	50		0	0		0	100	



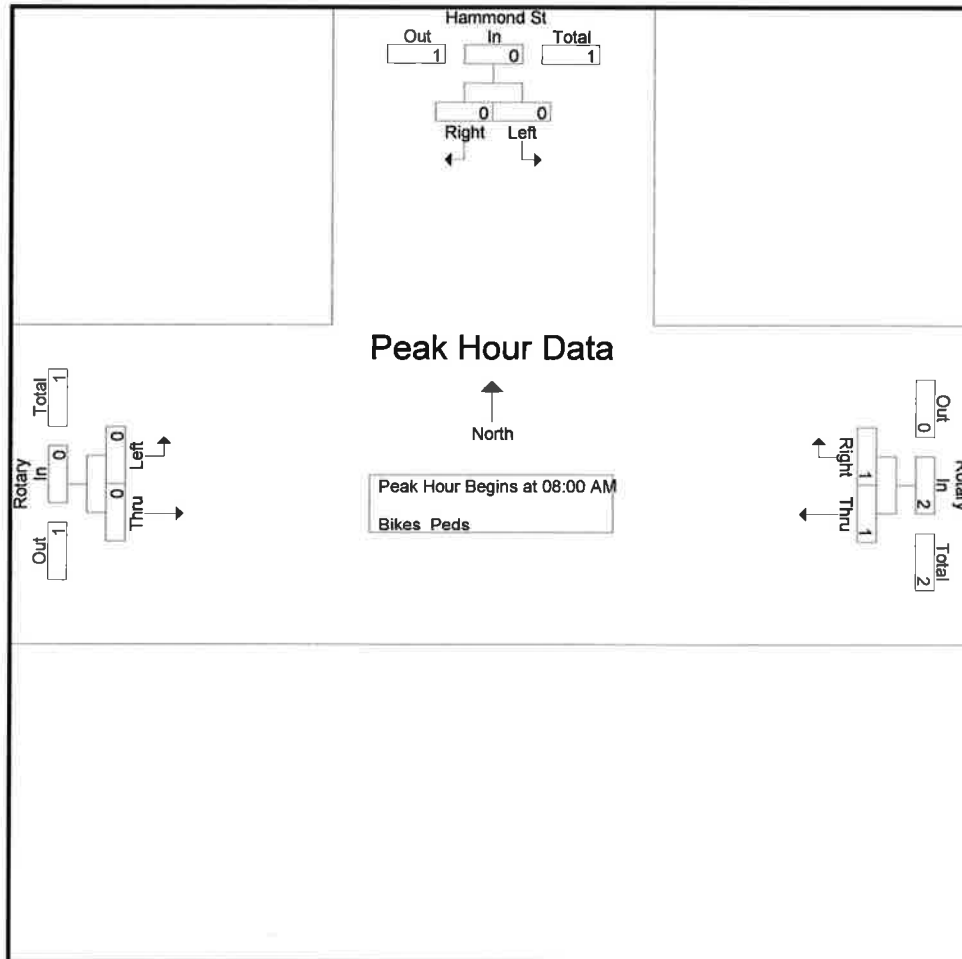
# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
 E/W Street : Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

File Name : 73820001  
 Site Code : 73820001  
 Start Date : 1/18/2017  
 Page No : 11

	Hammond St From North			Rotary From East			Rotary 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 08:00 AM										
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	1	0	1	0	0	0	1
08:45 AM	0	0	0	0	1	1	0	0	0	1
Total Volume	0	0	0	1	1	2	0	0	0	2
% App. Total	0	0		50	50		0	0		
PHF	.000	.000	.000	.250	.250	.500	.000	.000	.000	.500



# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
 E/W Street : Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

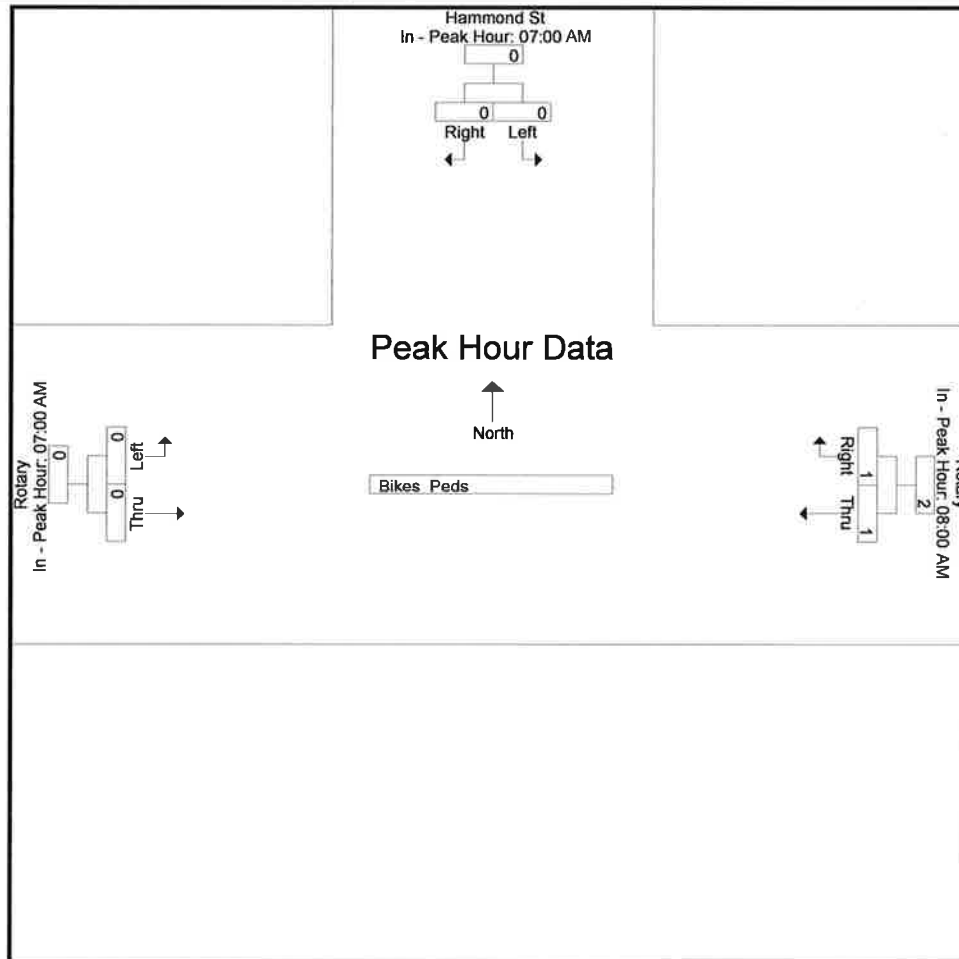
File Name : 73820001  
 Site Code : 73820001  
 Start Date : 1/18/2017  
 Page No : 12

	Hammond St From North			Rotary From East			Rotary 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			08:00 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	1	0	1	0	0	0
+45 mins.	0	0	0	0	1	1	0	0	0
Total Volume	0	0	0	1	1	2	0	0	0
% App. Total	0	0		50	50		0	0	
PHF	.000	.000	.000	.250	.250	.500	.000	.000	.000



**Accurate Counts**  
978-664-2565

N/S Street : Hammond Street  
E/W Street : Horace James Circle  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820001  
Site Code : 73820001  
Start Date : 1/18/2017  
Page No : 1

Groups Printed- Cars - Trucks

Start Time	Hammond St From North		Rotary From East		Rotary From West		Int. Total
	Left	Right	Thru	Right	Left	Thru	
02:00 PM	0	102	237	128	0	0	467
02:15 PM	0	87	253	116	0	0	456
02:30 PM	2	104	278	126	0	0	510
02:45 PM	2	130	261	120	0	0	513
Total	4	423	1029	490	0	0	1946
03:00 PM	0	196	287	108	0	0	591
03:15 PM	0	157	328	109	0	0	594
03:30 PM	0	151	297	114	0	0	562
03:45 PM	0	124	354	121	0	0	599
Total	0	628	1266	452	0	0	2346
04:00 PM	0	204	327	91	0	0	622
04:15 PM	0	187	298	131	0	0	616
04:30 PM	0	165	325	125	0	0	615
04:45 PM	0	170	363	136	0	0	669
Total	0	726	1313	483	0	0	2522
Grand Total	4	1777	3608	1425	0	0	6814
Apprch %	0.2	99.8	71.7	28.3	0	0	
Total %	0.1	26.1	52.9	20.9	0	0	
Cars	4	1753	3573	1410	0	0	6740
% Cars	100	98.6	99	98.9	0	0	98.9
Trucks	0	24	35	15	0	0	74
% Trucks	0	1.4	1	1.1	0	0	1.1

# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
 E/W Street : Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

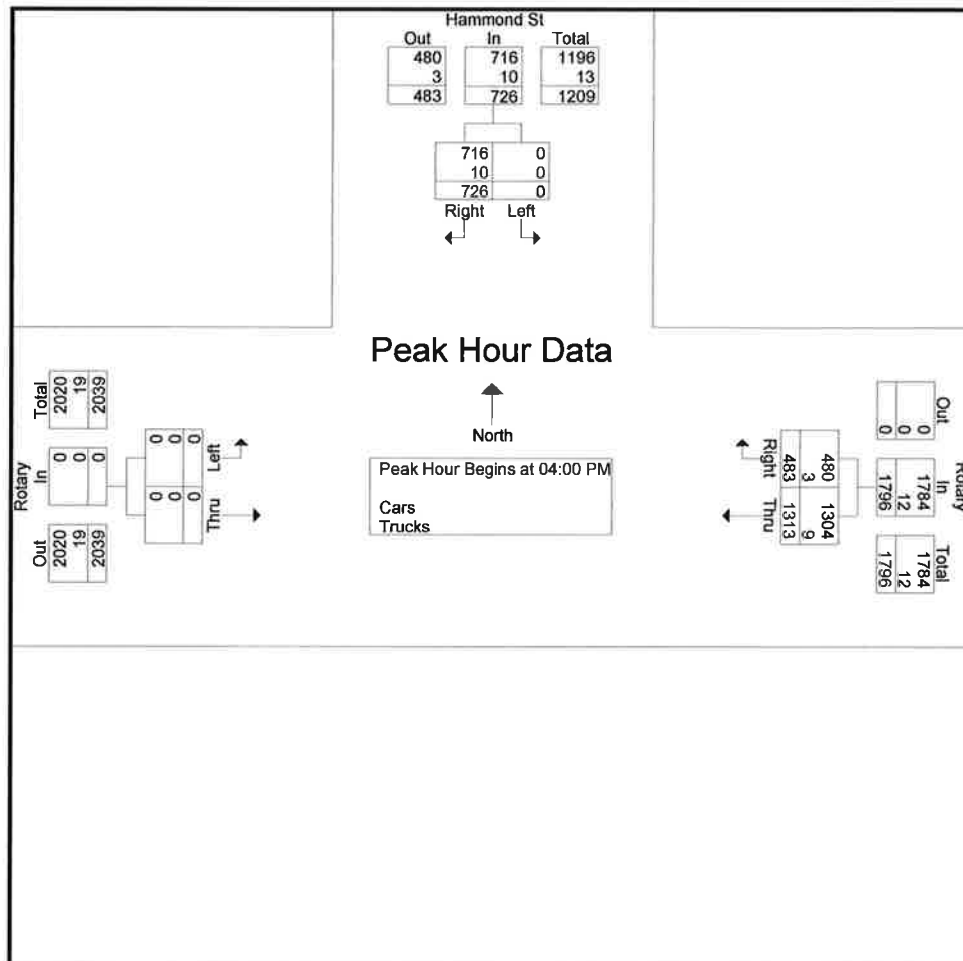
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 Site Code : 73820001  
 Start Date : 1/18/2017  
 Page No : 2

	Hammond St From North			Rotary From East			Rotary 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 04:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:00 PM

04:00 PM	0	204	204	327	91	418	0	0	0	622
04:15 PM	0	187	187	298	131	429	0	0	0	616
04:30 PM	0	165	165	325	125	450	0	0	0	615
04:45 PM	0	170	170	363	136	499	0	0	0	669
Total Volume	0	726	726	1313	483	1796	0	0	0	2522
% App. Total	0	100		73.1	26.9		0	0		
PHF	.000	.890	.890	.904	.888	.900	.000	.000	.000	.942
Cars	0	716	716	1304	480	1784	0	0	0	2500
% Cars	0	98.6	98.6	99.3	99.4	99.3	0	0	0	99.1
Trucks	0	10	10	9	3	12	0	0	0	22
% Trucks	0	1.4	1.4	0.7	0.6	0.7	0	0	0	0.9



# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
 E/W Street : Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

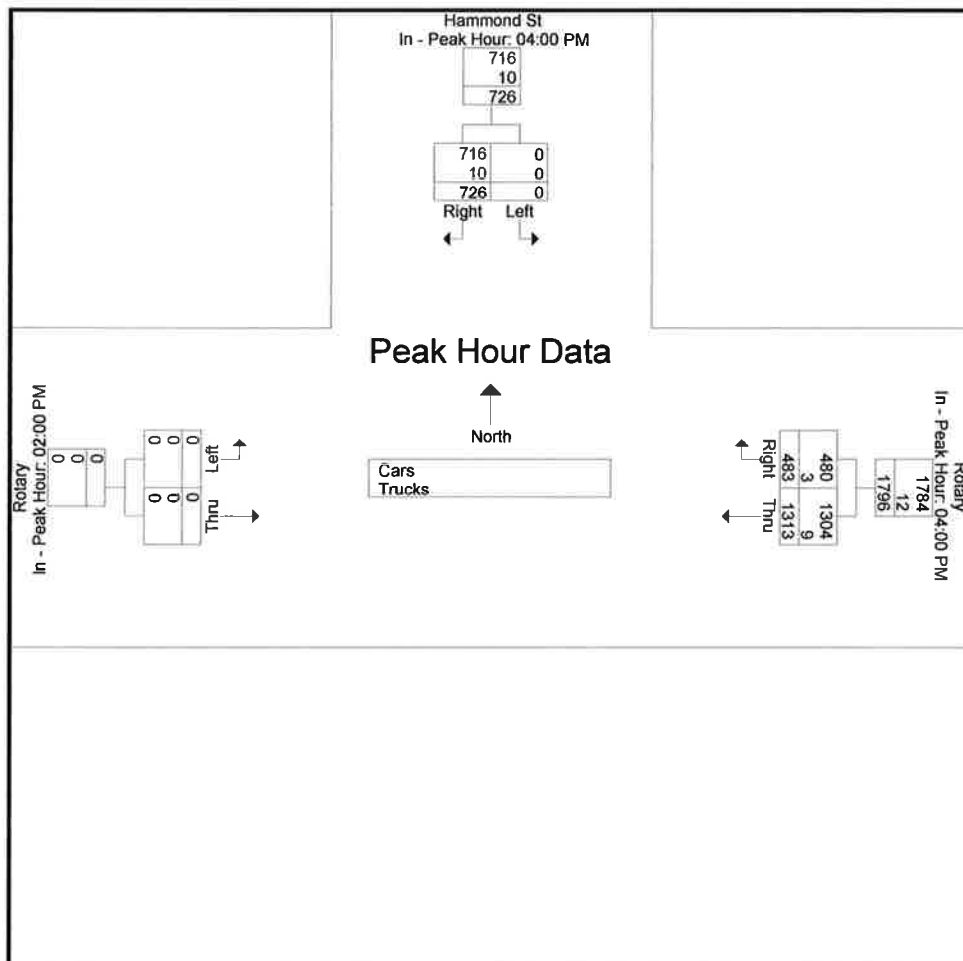
File Name : 73820001  
 Site Code : 73820001  
 Start Date : 1/18/2017  
 Page No : 3

	Hammond St From North			Rotary From East			Rotary 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM			04:00 PM			02:00 PM		
+0 mins.	0	204	204	327	91	418	0	0	0
+15 mins.	0	187	187	298	131	429	0	0	0
+30 mins.	0	165	165	325	125	450	0	0	0
+45 mins.	0	170	170	363	136	499	0	0	0
Total Volume	0	726	726	1313	483	1796	0	0	0
% App. Total	0	100		73.1	26.9		0	0	
PHF	.000	.890	.890	.904	.888	.900	.000	.000	.000
Cars	0	716	716	1304	480	1784	0	0	0
% Cars	0	98.6	98.6	99.3	99.4	99.3	0	0	0
Trucks	0	10	10	9	3	12	0	0	0
% Trucks	0	1.4	1.4	0.7	0.6	0.7	0	0	0



**Accurate Counts**  
978-664-2565

N/S Street : Hammond Street  
E/W Street : Horace James Circle  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820001  
Site Code : 73820001  
Start Date : 1/18/2017  
Page No : 4

Groups Printed- Cars

Start Time	Hammond St From North		Rotary From East		Rotary From West		Int. Total
	Left	Right	Thru	Right	Left	Thru	
02:00 PM	0	99	233	127	0	0	459
02:15 PM	0	82	251	115	0	0	448
02:30 PM	2	104	271	123	0	0	500
02:45 PM	2	129	259	116	0	0	506
Total	4	414	1014	481	0	0	1913
03:00 PM	0	196	286	107	0	0	589
03:15 PM	0	157	323	108	0	0	588
03:30 PM	0	149	295	114	0	0	558
03:45 PM	0	121	351	120	0	0	592
Total	0	623	1255	449	0	0	2327
04:00 PM	0	200	323	91	0	0	614
04:15 PM	0	183	297	131	0	0	611
04:30 PM	0	163	323	124	0	0	610
04:45 PM	0	170	361	134	0	0	665
Total	0	716	1304	480	0	0	2500
Grand Total	4	1753	3573	1410	0	0	6740
Apprch %	0.2	99.8	71.7	28.3	0	0	
Total %	0.1	26	53	20.9	0	0	

# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
 E/W Street : Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

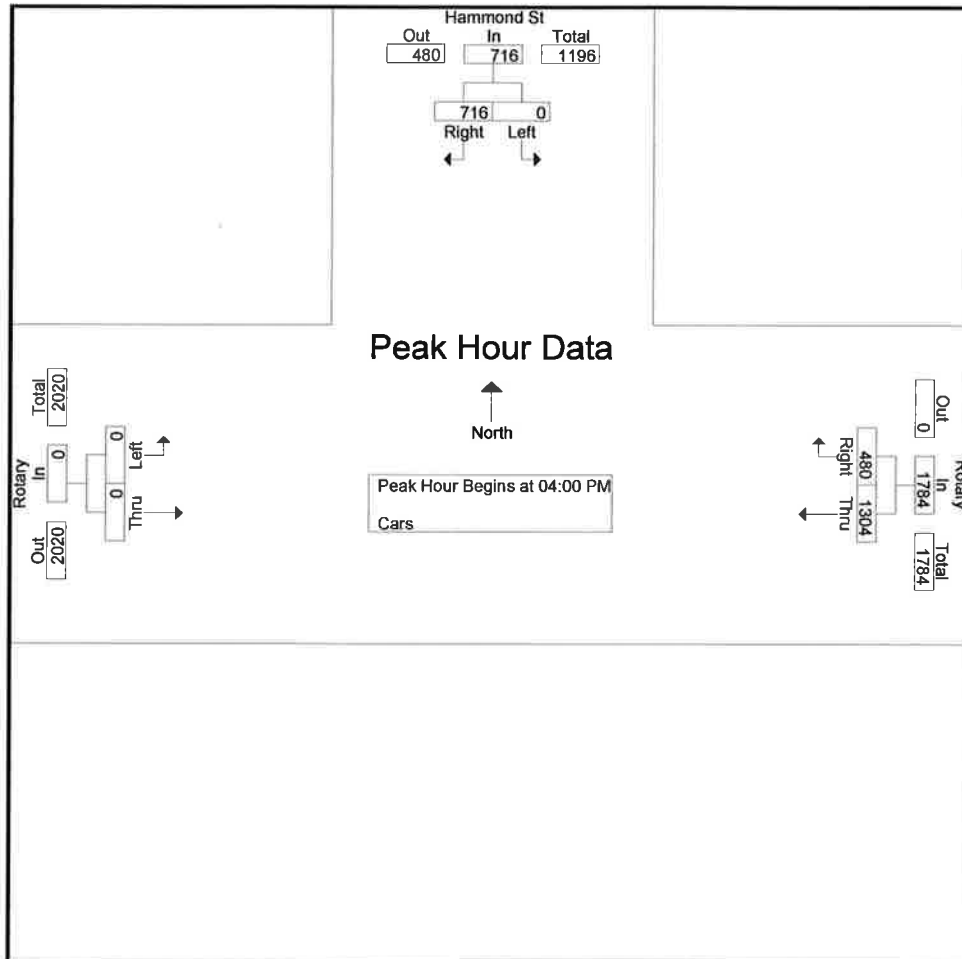
File Name : 73820001  
 Site Code : 73820001  
 Start Date : 1/18/2017  
 Page No : 5

	Hammond St From North			Rotary From East			Rotary 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 04:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:00 PM

04:00 PM	0	200	200	323	91	414	0	0	0	614
04:15 PM	0	183	183	297	131	428	0	0	0	611
04:30 PM	0	163	163	323	124	447	0	0	0	610
04:45 PM	0	170	170	361	134	495	0	0	0	665
Total Volume	0	716	716	1304	480	1784	0	0	0	2500
% App. Total	0	100		73.1	26.9		0	0		
PHF	.000	.895	.895	.903	.896	.901	.000	.000	.000	.940



# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
 E/W Street : Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

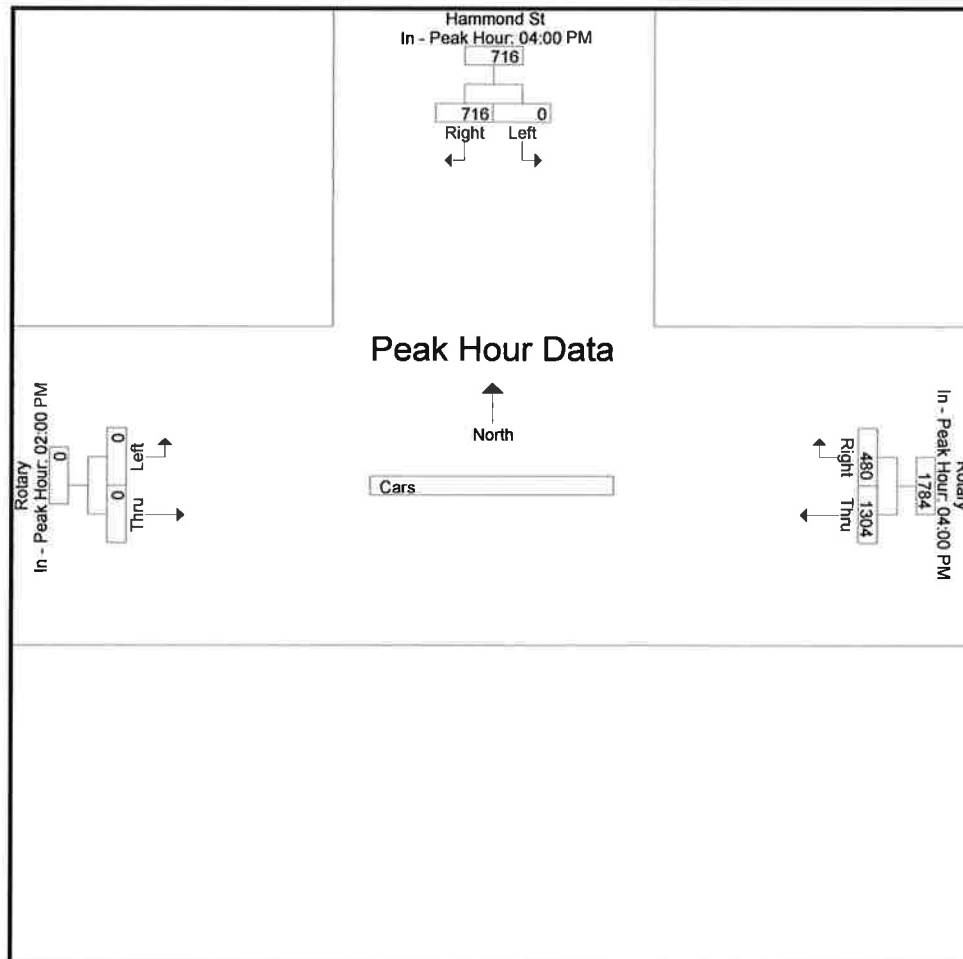
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 Site Code : 73820001  
 Start Date : 1/18/2017  
 Page No : 6

	Hammond St From North			Rotary From East			Rotary 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM			04:00 PM			02:00 PM		
+0 mins.	0	200	200	323	91	414	0	0	0
+15 mins.	0	183	183	297	131	428	0	0	0
+30 mins.	0	163	163	323	124	447	0	0	0
+45 mins.	0	170	170	361	134	495	0	0	0
Total Volume	0	716	716	1304	480	1784	0	0	0
% App. Total	0	100		73.1	26.9		0	0	
PHF	.000	.895	.895	.903	.896	.901	.000	.000	.000





**Accurate Counts**  
978-664-2565

N/S Street : Hammond Street  
E/W Street : Horace James Circle  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820001  
Site Code : 73820001  
Start Date : 1/18/2017  
Page No : 7

Groups Printed- Trucks

Start Time	Hammond St From North		Rotary From East		Rotary From West		Int. Total
	Left	Right	Thru	Right	Left	Thru	
02:00 PM	0	3	4	1	0	0	8
02:15 PM	0	5	2	1	0	0	8
02:30 PM	0	0	7	3	0	0	10
02:45 PM	0	1	2	4	0	0	7
Total	0	9	15	9	0	0	33
03:00 PM	0	0	1	1	0	0	2
03:15 PM	0	0	5	1	0	0	6
03:30 PM	0	2	2	0	0	0	4
03:45 PM	0	3	3	1	0	0	7
Total	0	5	11	3	0	0	19
04:00 PM	0	4	4	0	0	0	8
04:15 PM	0	4	1	0	0	0	5
04:30 PM	0	2	2	1	0	0	5
04:45 PM	0	0	2	2	0	0	4
Total	0	10	9	3	0	0	22
Grand Total	0	24	35	15	0	0	74
Apprch %	0	100	70	30	0	0	
Total %	0	32.4	47.3	20.3	0	0	

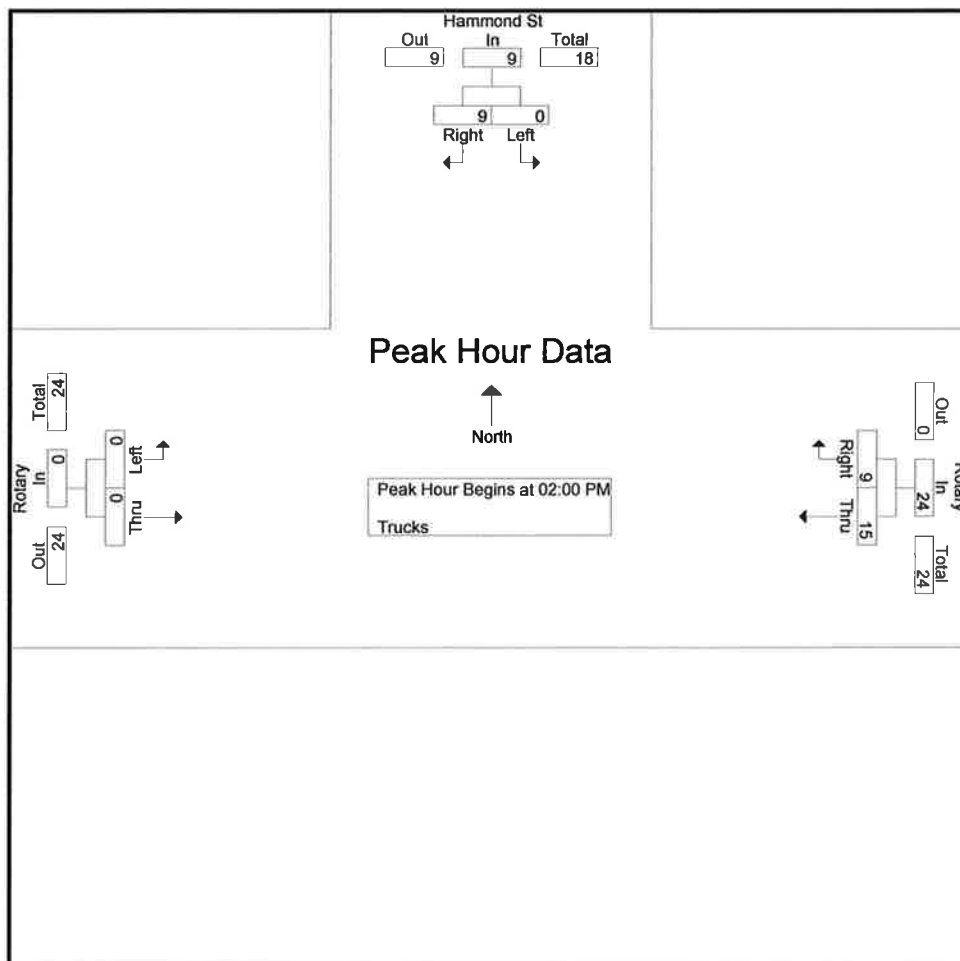
# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
 E/W Street : Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

File Name : 73820001  
 Site Code : 73820001  
 Start Date : 1/18/2017  
 Page No : 8

	Hammond St From North			Rotary From East			Rotary 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 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 02:00 PM										
02:00 PM	0	3	3	4	1	5	0	0	0	8
02:15 PM	0	5	5	2	1	3	0	0	0	8
02:30 PM	0	0	0	7	3	10	0	0	0	10
02:45 PM	0	1	1	2	4	6	0	0	0	7
Total Volume	0	9	9	15	9	24	0	0	0	33
% App. Total	0	100		62.5	37.5		0	0		
PHF	.000	.450	.450	.536	.563	.600	.000	.000	.000	.825



# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
 E/W Street : Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

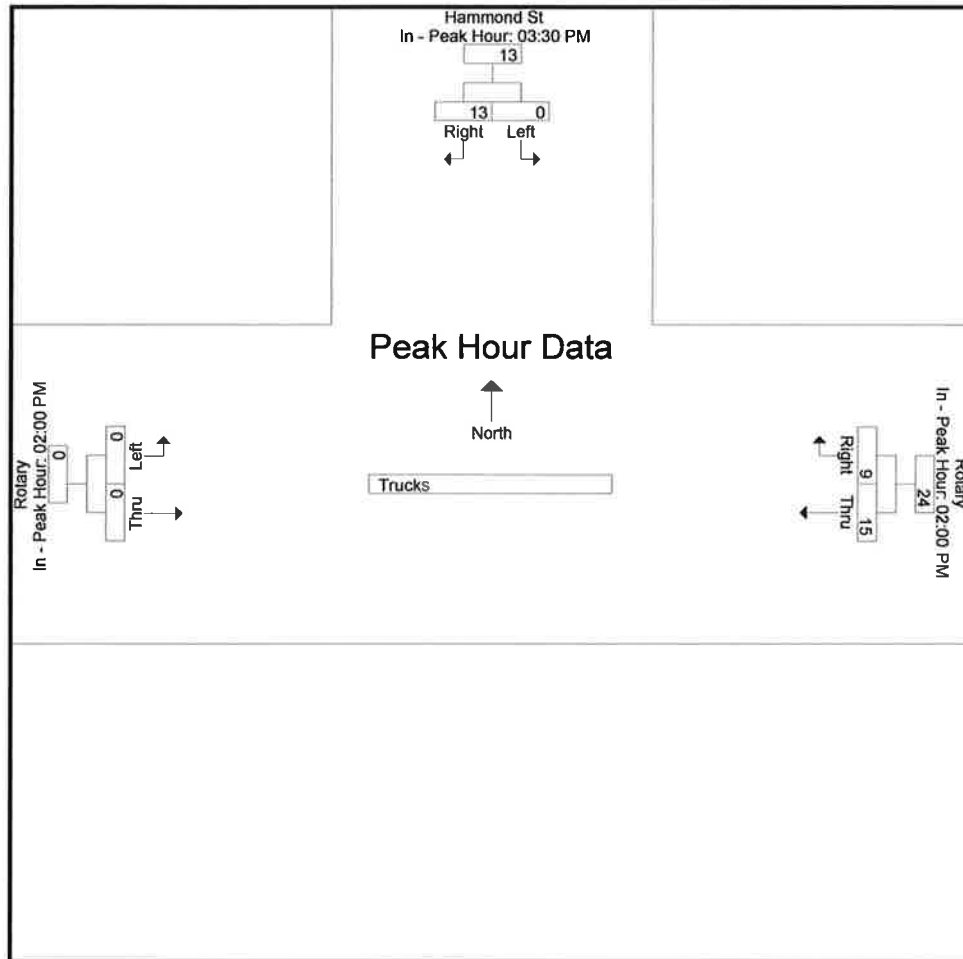
File Name : 73820001  
 Site Code : 73820001  
 Start Date : 1/18/2017  
 Page No : 9

	Hammond St From North			Rotary From East			Rotary 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	03:30 PM			02:00 PM			02:00 PM		
+0 mins.	0	2	2	4	1	5	0	0	0
+15 mins.	0	3	3	2	1	3	0	0	0
+30 mins.	0	4	4	7	3	10	0	0	0
+45 mins.	0	4	4	2	4	6	0	0	0
Total Volume	0	13	13	15	9	24	0	0	0
% App. Total	0	100		62.5	37.5		0	0	
PHF	.000	.813	.813	.536	.563	.600	.000	.000	.000



**Accurate Counts**  
978-664-2565

N/S Street : Hammond Street  
E/W Street : Horace James Circle  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820001  
Site Code : 73820001  
Start Date : 1/18/2017  
Page No : 10

Groups Printed- Bikes Peds												
Start Time	Hammond St From North			Rotary From East			Rotary From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
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	1	0	0	0	0	0	0	0	0	1	1
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	0	0	0	0	0	0	1	1
03:00 PM	0	0	0	0	1	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	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	0	0	0	0	0	1	1
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	1	0	0	0	0	0	0	0	0	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	0	0	0	0	0	0	1	1
Grand Total	0	2	0	0	1	0	0	0	0	0	3	3
Apprch %	0	100		0	100		0	0				
Total %	0	66.7		0	33.3		0	0		0	100	

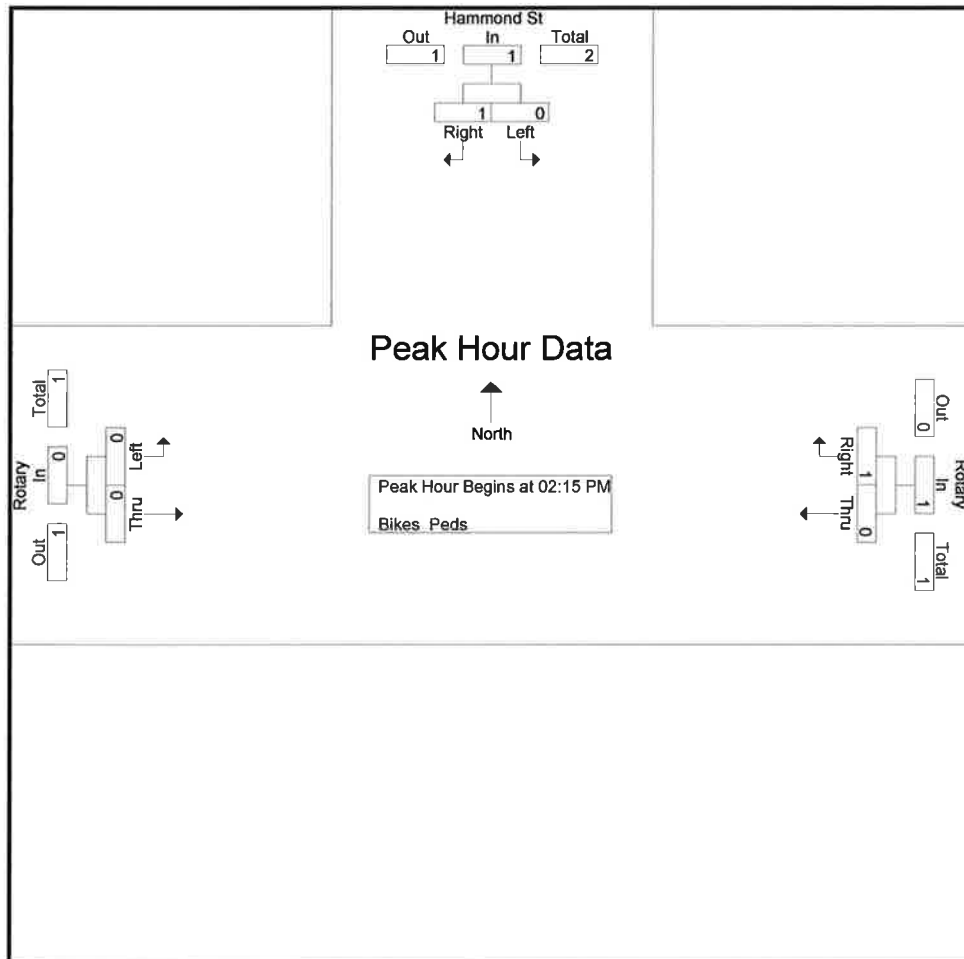
# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
 E/W Street : Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

File Name : 73820001  
 Site Code : 73820001  
 Start Date : 1/18/2017  
 Page No : 11

	Hammond St From North			Rotary From East			Rotary 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 04:45 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	1	1	0	0	0	0	0	0	1
02:45 PM	0	0	0	0	0	0	0	0	0	0
03:00 PM	0	0	0	0	1	1	0	0	0	1
Total Volume	0	1	1	0	1	1	0	0	0	2
% App. Total	0	100		0	100		0	0		
PHF	.000	.250	.250	.000	.250	.250	.000	.000	.000	.500



# Accurate Counts

978-664-2565

N/S Street : Hammond Street  
 E/W Street : Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

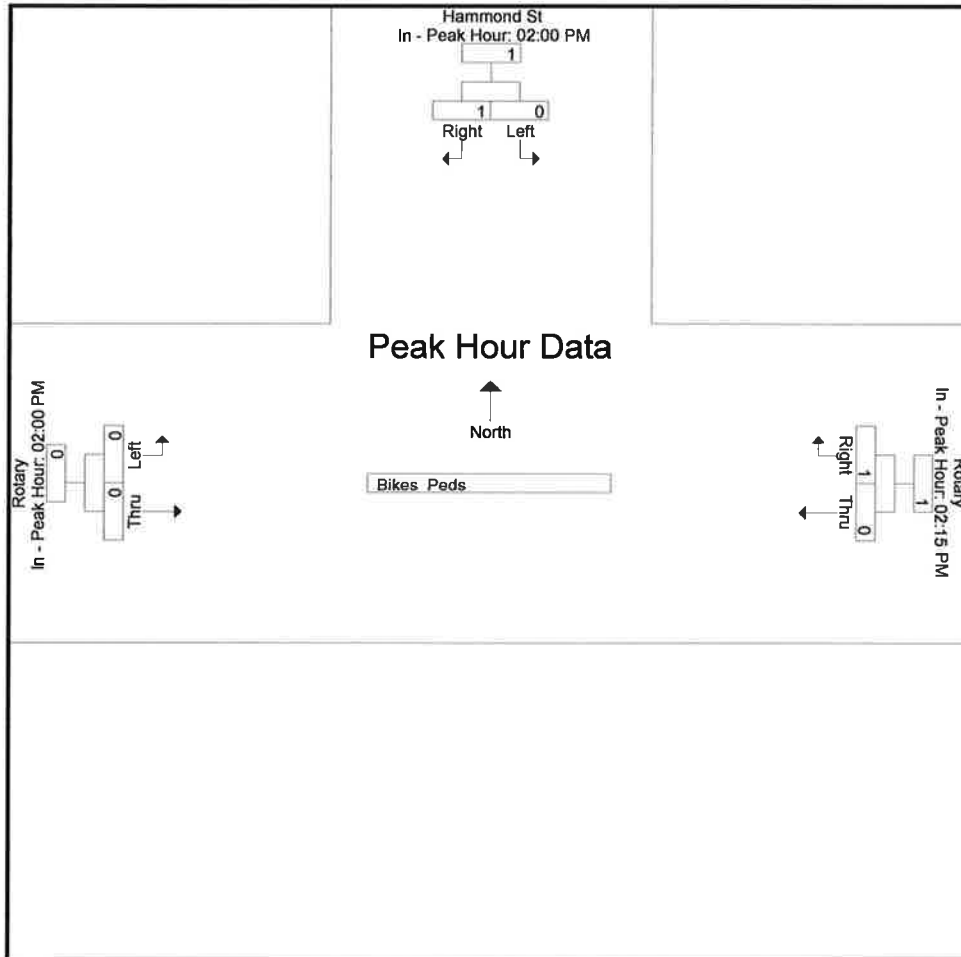
File Name : 73820001  
 Site Code : 73820001  
 Start Date : 1/18/2017  
 Page No : 12

	Hammond St From North			Rotary From East			Rotary 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 04:45 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	1	1	0	0	0	0	0	0
+45 mins.	0	0	0	0	1	1	0	0	0
Total Volume	0	1	1	0	1	1	0	0	0
% App. Total	0	100		0	100		0	0	
PHF	.000	.250	.250	.000	.250	.250	.000	.000	.000



**Accurate Counts**  
978-664-2565

N/S Street : Newton Street  
E/W Street : Horace James Circle  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820002  
Site Code : 73820002  
Start Date : 1/18/2017  
Page No : 1

Groups Printed- Cars - Trucks

Start Time	Rotary From East		Newton St From South		Rotary From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
07:00 AM	0	0	0	298	303	45	646
07:15 AM	0	0	0	335	304	75	714
07:30 AM	0	0	0	410	299	91	800
07:45 AM	0	0	0	464	277	114	855
Total	0	0	0	1507	1183	325	3015
08:00 AM	0	0	0	442	259	140	841
08:15 AM	0	0	0	403	285	94	782
08:30 AM	0	0	0	354	300	67	721
08:45 AM	0	0	0	335	319	71	725
Total	0	0	0	1534	1163	372	3069
Grand Total	0	0	0	3041	2346	697	6084
Apprch %	0	0	0	100	77.1	22.9	
Total %	0	0	0	50	38.6	11.5	
Cars	0	0	0	3011	2325	671	6007
% Cars	0	0	0	99	99.1	96.3	98.7
Trucks	0	0	0	30	21	26	77
% Trucks	0	0	0	1	0.9	3.7	1.3

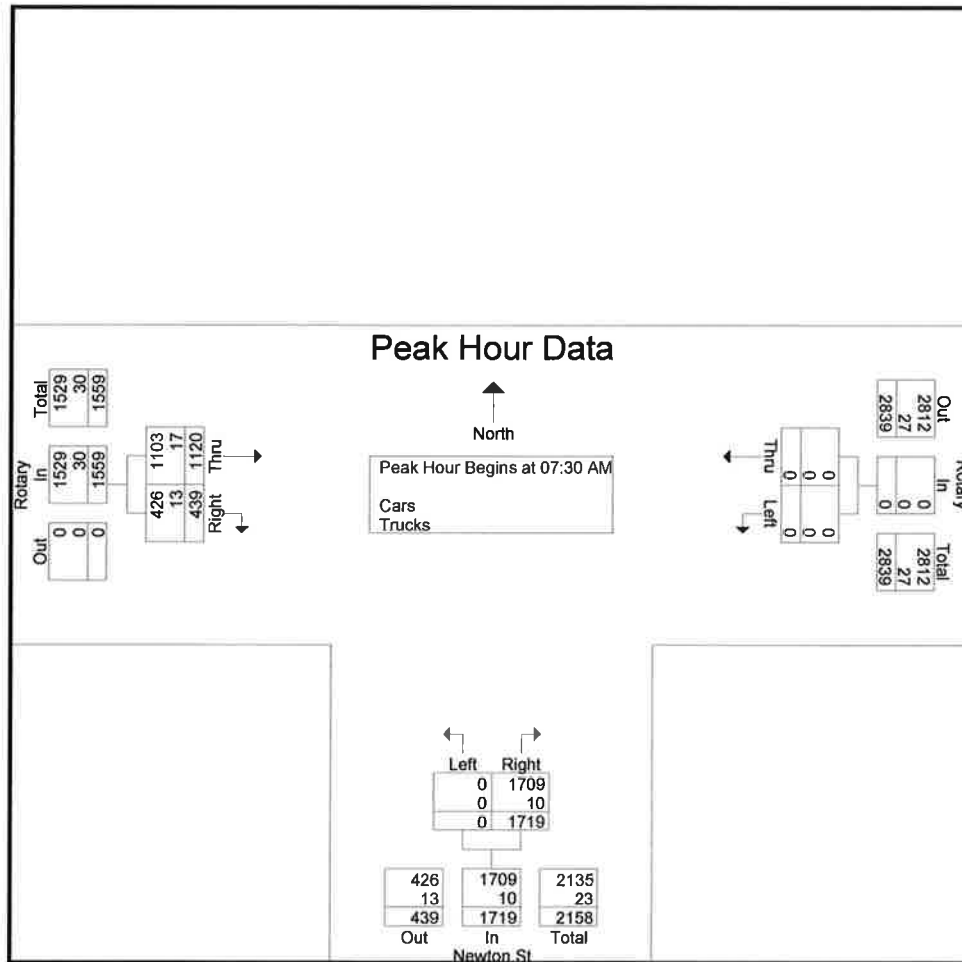
# Accurate Counts

978-664-2565

N/S Street : Newton Street  
 E/W Street : Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

File Name : 73820002  
 Site Code : 73820002  
 Start Date : 1/18/2017  
 Page No : 2

	Rotary From East			Newton St From South			Rotary 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 07:30 AM										
07:30 AM	0	0	0	0	410	410	299	91	390	800
07:45 AM	0	0	0	0	464	464	277	114	391	855
08:00 AM	0	0	0	0	442	442	259	140	399	841
08:15 AM	0	0	0	0	403	403	285	94	379	782
Total Volume	0	0	0	0	1719	1719	1120	439	1559	3278
% App. Total	0	0		0	100		71.8	28.2		
PHF	.000	.000	.000	.000	.926	.926	.936	.784	.977	.958
Cars	0	0	0	0	1709	1709	1103	426	1529	3238
% Cars	0	0	0	0	99.4	99.4	98.5	97.0	98.1	98.8
Trucks	0	0	0	0	10	10	17	13	30	40
% Trucks	0	0	0	0	0.6	0.6	1.5	3.0	1.9	1.2





# Accurate Counts

978-664-2565

N/S Street : Newton Street  
 E/W Street : Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

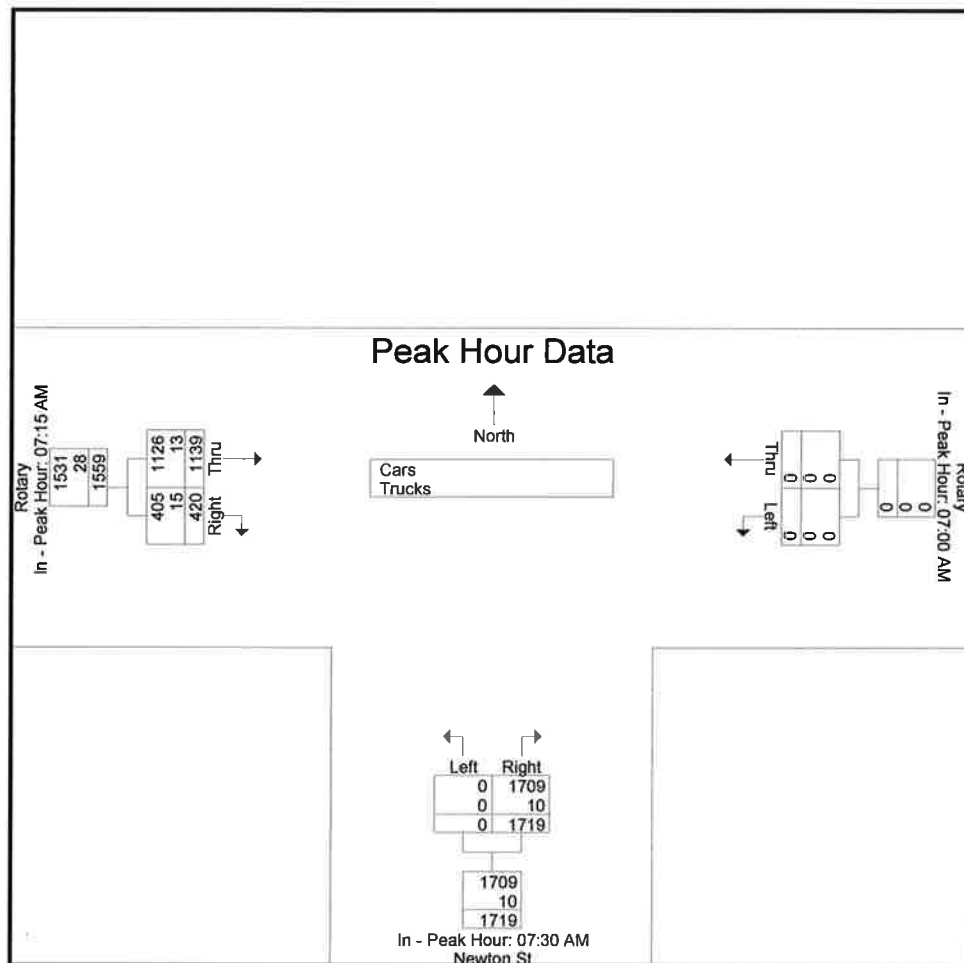
File Name : 73820002  
 Site Code : 73820002  
 Start Date : 1/18/2017  
 Page No : 3

	Rotary From East			Newton St From South			Rotary 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			07:30 AM			07:15 AM		
+0 mins.	0	0	0	0	410	410	304	75	379
+15 mins.	0	0	0	0	464	464	299	91	390
+30 mins.	0	0	0	0	442	442	277	114	391
+45 mins.	0	0	0	0	403	403	259	140	399
Total Volume	0	0	0	0	1719	1719	1139	420	1559
% App. Total	0	0		0	100		73.1	26.9	
PHF	.000	.000	.000	.000	.926	.926	.937	.750	.977
Cars	0	0	0	0	1709	1709	1126	405	1531
% Cars	0	0	0	0	99.4	99.4	98.9	96.4	98.2
Trucks	0	0	0	0	10	10	13	15	28
% Trucks	0	0	0	0	0.6	0.6	1.1	3.6	1.8



# Accurate Counts

978-664-2565

N/S Street : Newton Street  
 E/W Street : Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

File Name : 73820002  
 Site Code : 73820002  
 Start Date : 1/18/2017  
 Page No : 4

## Groups Printed- Cars

Start Time	Rotary From East		Newton St From South		Rotary From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
07:00 AM	0	0	0	289	303	40	632
07:15 AM	0	0	0	328	303	73	704
07:30 AM	0	0	0	406	294	86	786
07:45 AM	0	0	0	460	273	108	841
Total	0	0	0	1483	1173	307	2963
08:00 AM	0	0	0	441	256	138	835
08:15 AM	0	0	0	402	280	94	776
08:30 AM	0	0	0	351	297	65	713
08:45 AM	0	0	0	334	319	67	720
Total	0	0	0	1528	1152	364	3044
Grand Total	0	0	0	3011	2325	671	6007
Apprch %	0	0	0	100	77.6	22.4	
Total %	0	0	0	50.1	38.7	11.2	

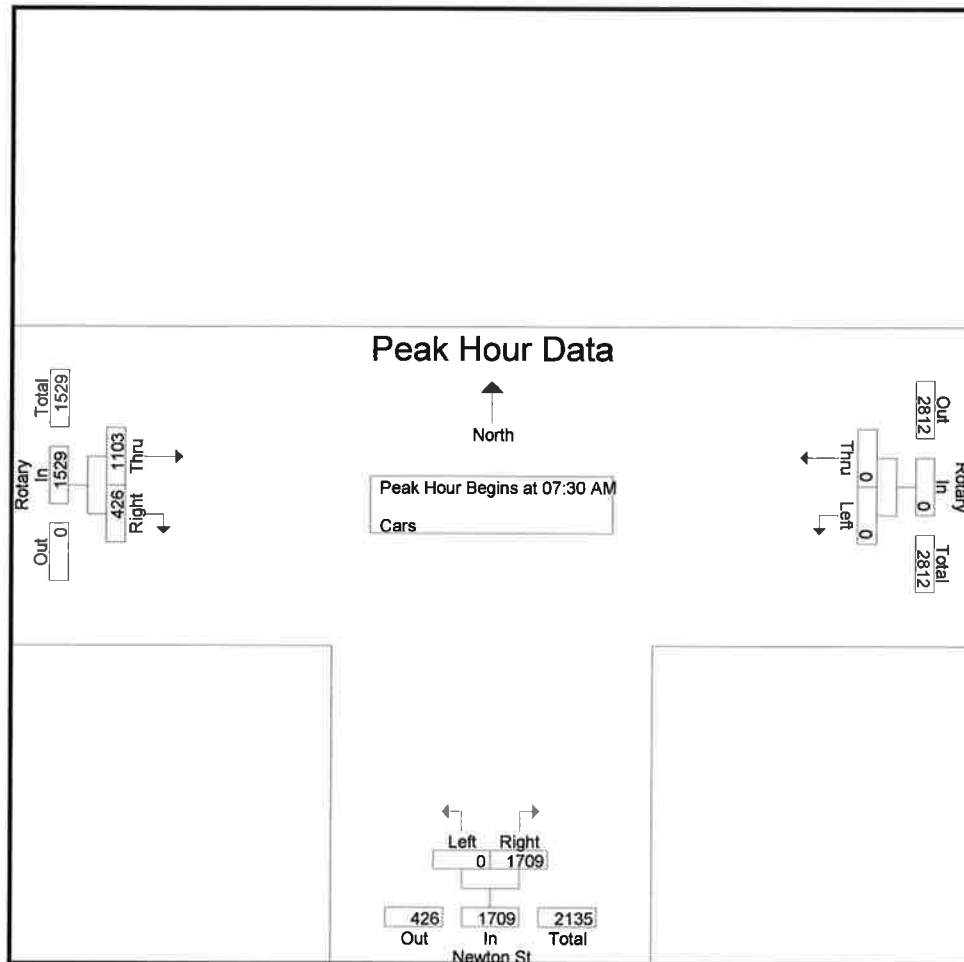
# Accurate Counts

978-664-2565

N/S Street : Newton Street  
 E/W Street : Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

File Name : 73820002  
 Site Code : 73820002  
 Start Date : 1/18/2017  
 Page No : 5

	Rotary From East			Newton St From South			Rotary 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 07:30 AM										
07:30 AM	0	0	0	0	406	406	294	86	380	786
07:45 AM	0	0	0	0	460	460	273	108	381	841
08:00 AM	0	0	0	0	441	441	256	138	394	835
08:15 AM	0	0	0	0	402	402	280	94	374	776
Total Volume	0	0	0	0	1709	1709	1103	426	1529	3238
% App. Total	0	0		0	100		72.1	27.9		
PHF	.000	.000	.000	.000	.929	.929	.938	.772	.970	.963



# Accurate Counts

978-664-2565

N/S Street : Newton Street  
 E/W Street : Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

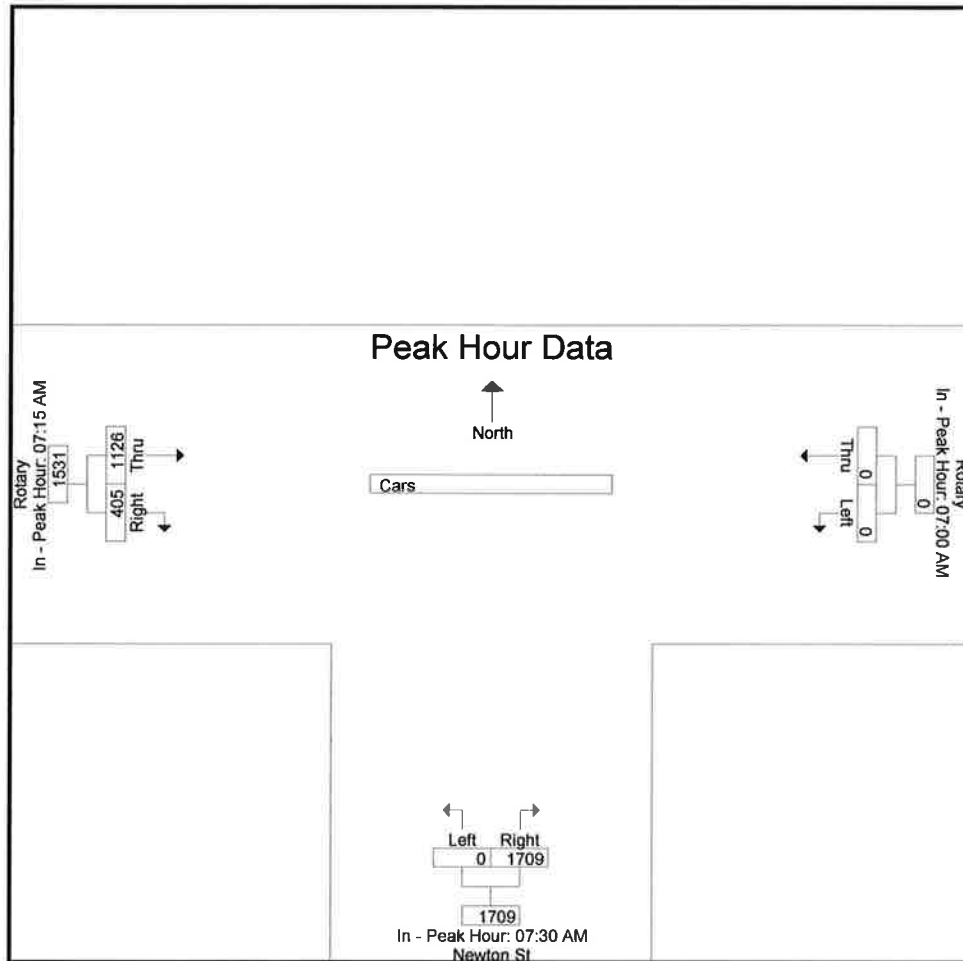
File Name : 73820002  
 Site Code : 73820002  
 Start Date : 1/18/2017  
 Page No : 6

	Rotary From East			Newton St From South			Rotary 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			07:30 AM			07:15 AM		
+0 mins.	0	0	0	0	406	406	303	73	376
+15 mins.	0	0	0	0	460	460	294	86	380
+30 mins.	0	0	0	0	441	441	273	108	381
+45 mins.	0	0	0	0	402	402	256	138	394
Total Volume	0	0	0	0	1709	1709	1126	405	1531
% App. Total	0	0		0	100		73.5	26.5	
PHF	.000	.000	.000	.000	.929	.929	.929	.734	.971



**Accurate Counts**  
978-664-2565

N/S Street : Newton Street  
E/W Street : Horace James Circle  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820002  
Site Code : 73820002  
Start Date : 1/18/2017  
Page No : 7

Groups Printed- Trucks							
Start Time	Rotary From East		Newton St From South		Rotary From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
07:00 AM	0	0	0	9	0	5	14
07:15 AM	0	0	0	7	1	2	10
07:30 AM	0	0	0	4	5	5	14
07:45 AM	0	0	0	4	4	6	14
Total	0	0	0	24	10	18	52
08:00 AM	0	0	0	1	3	2	6
08:15 AM	0	0	0	1	5	0	6
08:30 AM	0	0	0	3	3	2	8
08:45 AM	0	0	0	1	0	4	5
Total	0	0	0	6	11	8	25
Grand Total	0	0	0	30	21	26	77
Apprch %	0	0	0	100	44.7	55.3	
Total %	0	0	0	39	27.3	33.8	

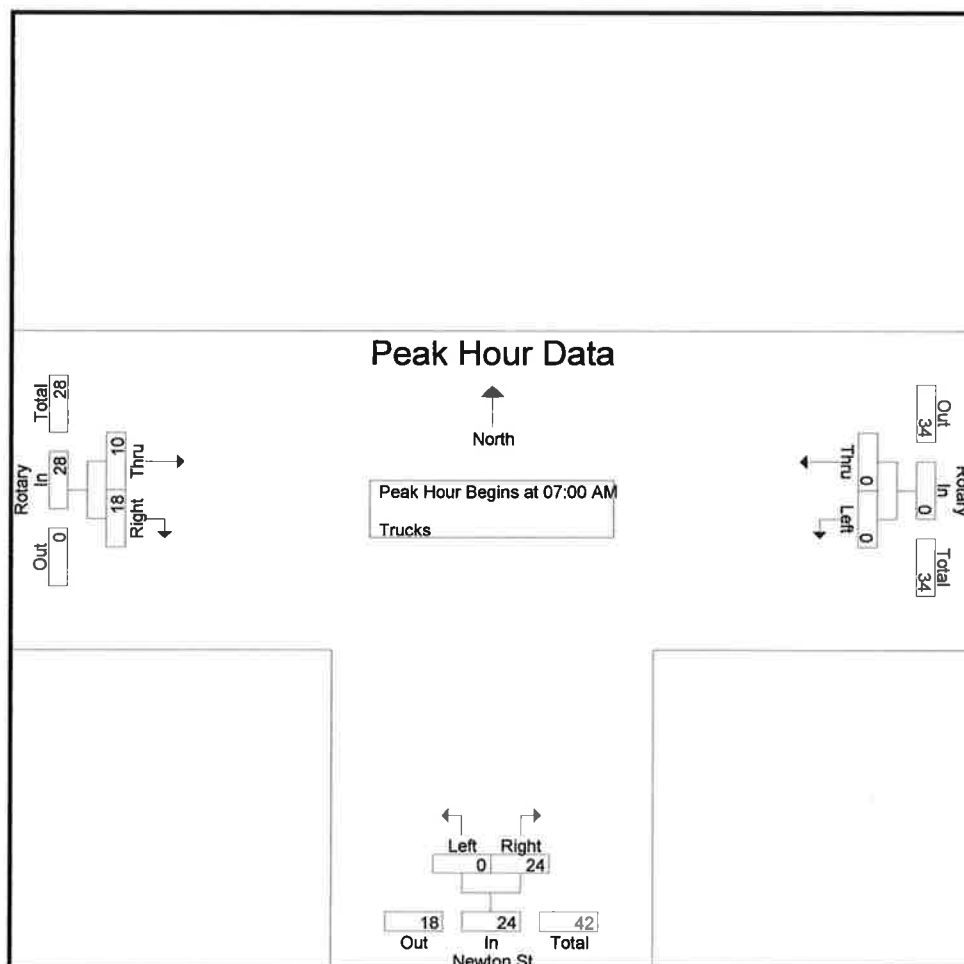
# Accurate Counts

978-664-2565

N/S Street : Newton Street  
 E/W Street : Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

File Name : 73820002  
 Site Code : 73820002  
 Start Date : 1/18/2017  
 Page No : 8

	Rotary From East			Newton St From South			Rotary 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 07:00 AM										
07:00 AM	0	0	0	0	9	9	0	5	5	14
07:15 AM	0	0	0	0	7	7	1	2	3	10
07:30 AM	0	0	0	0	4	4	5	5	10	14
07:45 AM	0	0	0	0	4	4	4	6	10	14
Total Volume	0	0	0	0	24	24	10	18	28	52
% App. Total	0	0		0	100		35.7	64.3		
PHF	.000	.000	.000	.000	.667	.667	.500	.750	.700	.929



# Accurate Counts

978-664-2565

N/S Street : Newton Street  
 E/W Street : Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

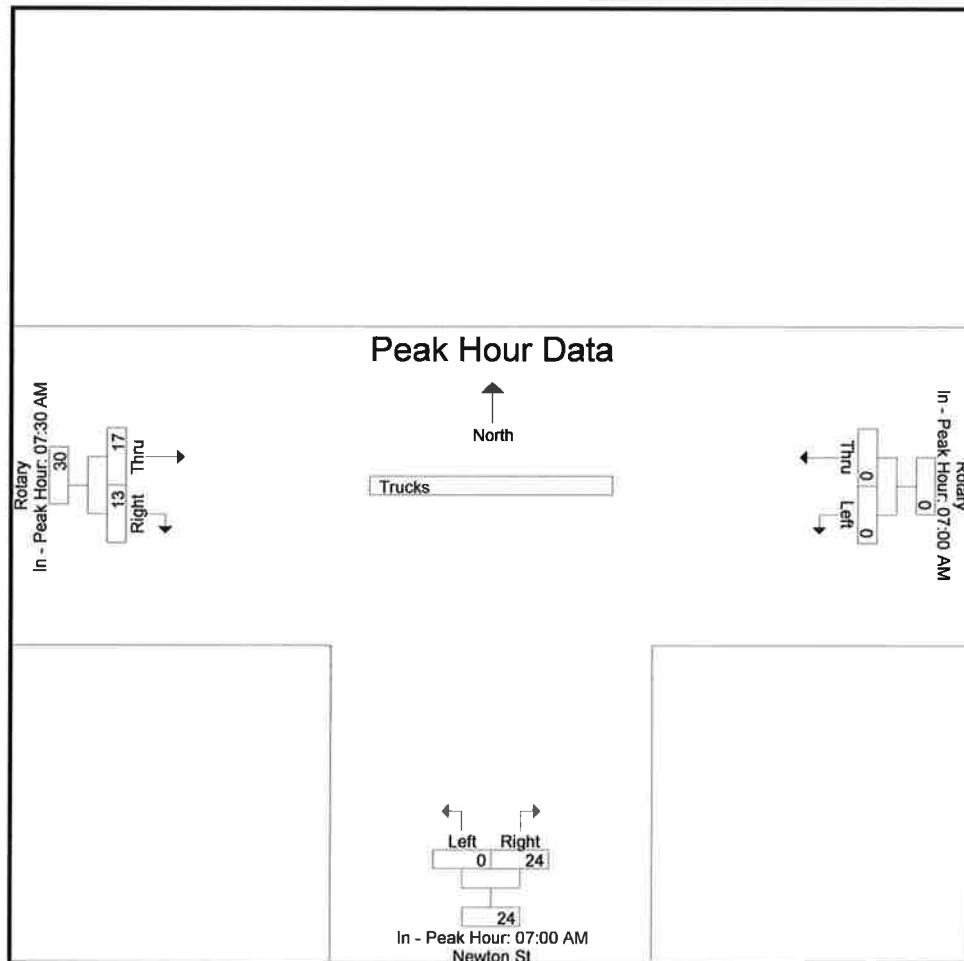
File Name : 73820002  
 Site Code : 73820002  
 Start Date : 1/18/2017  
 Page No : 9

	Rotary From East			Newton St From South			Rotary 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			07:30 AM		
+0 mins.	0	0	0	0	9	9	5	5	10
+15 mins.	0	0	0	0	7	7	4	6	10
+30 mins.	0	0	0	0	4	4	3	2	5
+45 mins.	0	0	0	0	4	4	5	0	5
Total Volume	0	0	0	0	24	24	17	13	30
% App. Total	0	0		0	100		56.7	43.3	
PHF	.000	.000	.000	.000	.667	.667	.850	.542	.750



# Accurate Counts

978-664-2565

N/S Street : Newton Street  
 E/W Street : Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

File Name : 73820002  
 Site Code : 73820002  
 Start Date : 1/18/2017  
 Page No : 10

Groups Printed- Bikes Peds												
Start Time	Rotary From East			Newton St From South			Rotary From West			Exclu. Total	Inclu. Total	Int. Total
	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	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	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	1	0	0	0	0	0	1	1
08:45 AM	0	0	0	0	1	0	0	0	0	0	1	1
Total	0	0	0	0	2	0	0	0	0	0	2	2
Grand Total	0	0	0	0	2	0	0	0	0	0	2	2
Apprch %	0	0		0	100		0	0				
Total %	0	0		0	100		0	0		0	100	



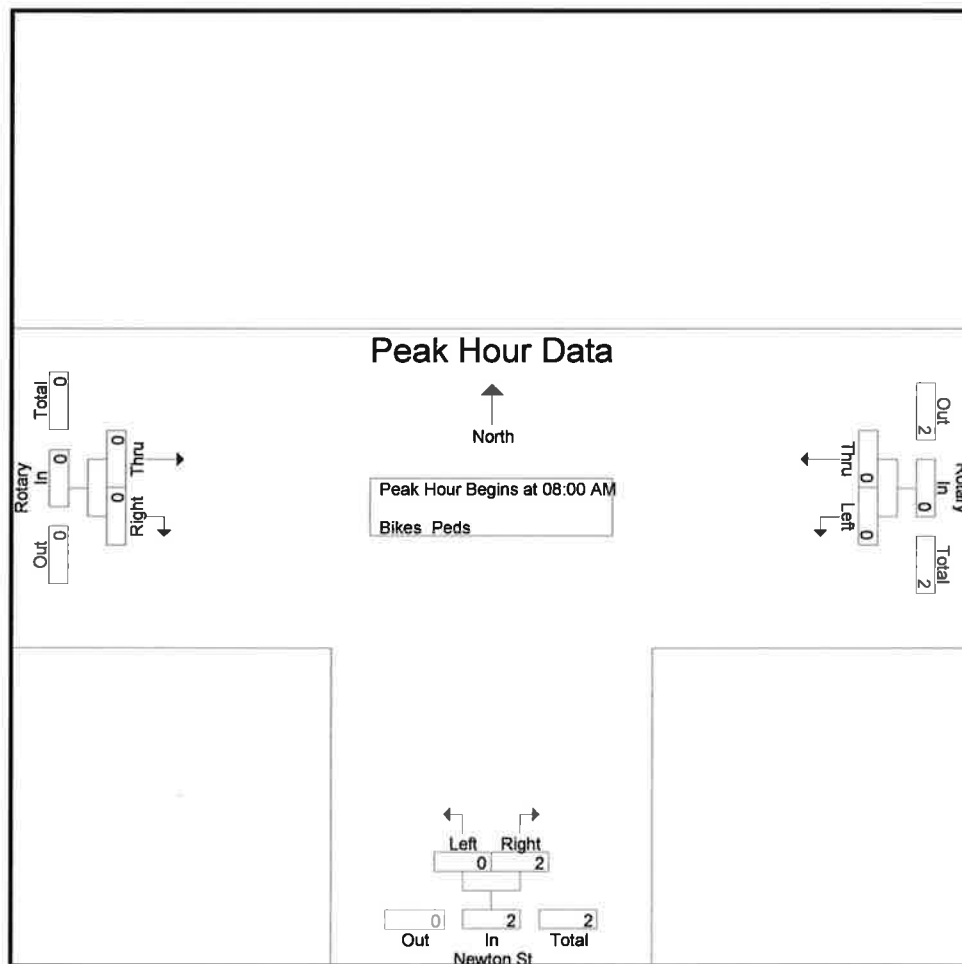
# Accurate Counts

978-664-2565

N/S Street : Newton Street  
 E/W Street : Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

File Name : 73820002  
 Site Code : 73820002  
 Start Date : 1/18/2017  
 Page No : 11

	Rotary From East			Newton St From South			Rotary 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 08:00 AM										
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	1	1	0	0	0	1
08:45 AM	0	0	0	0	1	1	0	0	0	1
Total Volume	0	0	0	0	2	2	0	0	0	2
% App. Total	0	0		0	100		0	0		
PHF	.000	.000	.000	.000	.500	.500	.000	.000	.000	.500



# Accurate Counts

978-664-2565

N/S Street : Newton Street  
 E/W Street : Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

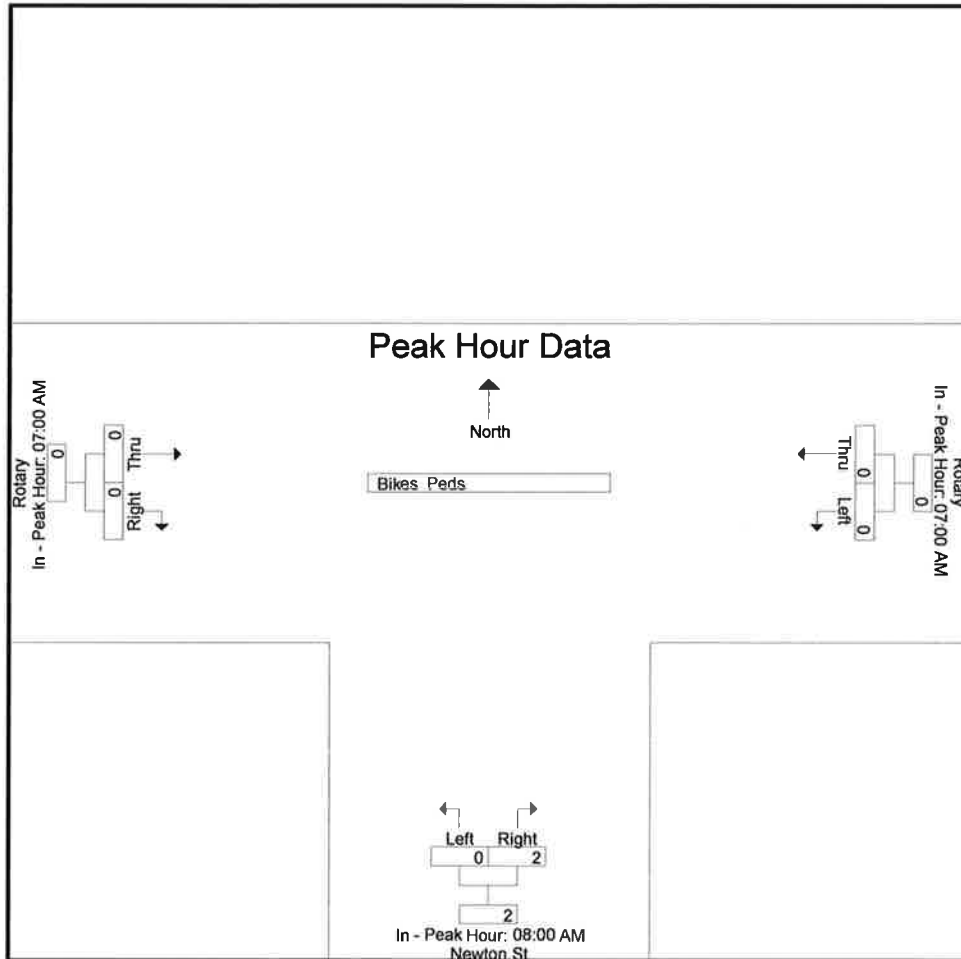
File Name : 73820002  
 Site Code : 73820002  
 Start Date : 1/18/2017  
 Page No : 12

	Rotary From East			Newton St From South			Rotary 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			08:00 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	1	1	0	0	0
+45 mins.	0	0	0	0	1	1	0	0	0
Total Volume	0	0	0	0	2	2	0	0	0
% App. Total	0	0		0	100		0	0	
PHF	.000	.000	.000	.000	.500	.500	.000	.000	.000



**Accurate Counts**  
978-664-2565

N/S Street : Newton Street  
E/W Street : Horace James Circle  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820002  
Site Code : 73820002  
Start Date : 1/18/2017  
Page No : 1

Groups Printed- Cars - Trucks

Start Time	Rotary From East		Newton St From South		Rotary From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
02:00 PM	0	0	0	229	136	149	514
02:15 PM	0	0	0	223	146	116	485
02:30 PM	0	0	0	249	155	169	573
02:45 PM	0	0	0	254	127	188	569
Total	0	0	0	955	564	622	2141
03:00 PM	0	0	0	279	117	254	650
03:15 PM	0	0	0	286	150	215	651
03:30 PM	0	0	0	255	155	178	588
03:45 PM	0	0	0	336	142	177	655
Total	0	0	0	1156	564	824	2544
04:00 PM	0	0	0	283	135	240	658
04:15 PM	0	0	0	292	138	169	599
04:30 PM	0	0	0	314	136	244	694
04:45 PM	0	0	0	352	146	235	733
Total	0	0	0	1241	555	888	2684
Grand Total	0	0	0	3352	1683	2334	7369
Apprch %	0	0	0	100	41.9	58.1	
Total %	0	0	0	45.5	22.8	31.7	
Cars	0	0	0	3312	1671	2298	7281
% Cars	0	0	0	98.8	99.3	98.5	98.8
Trucks	0	0	0	40	12	36	88
% Trucks	0	0	0	1.2	0.7	1.5	1.2

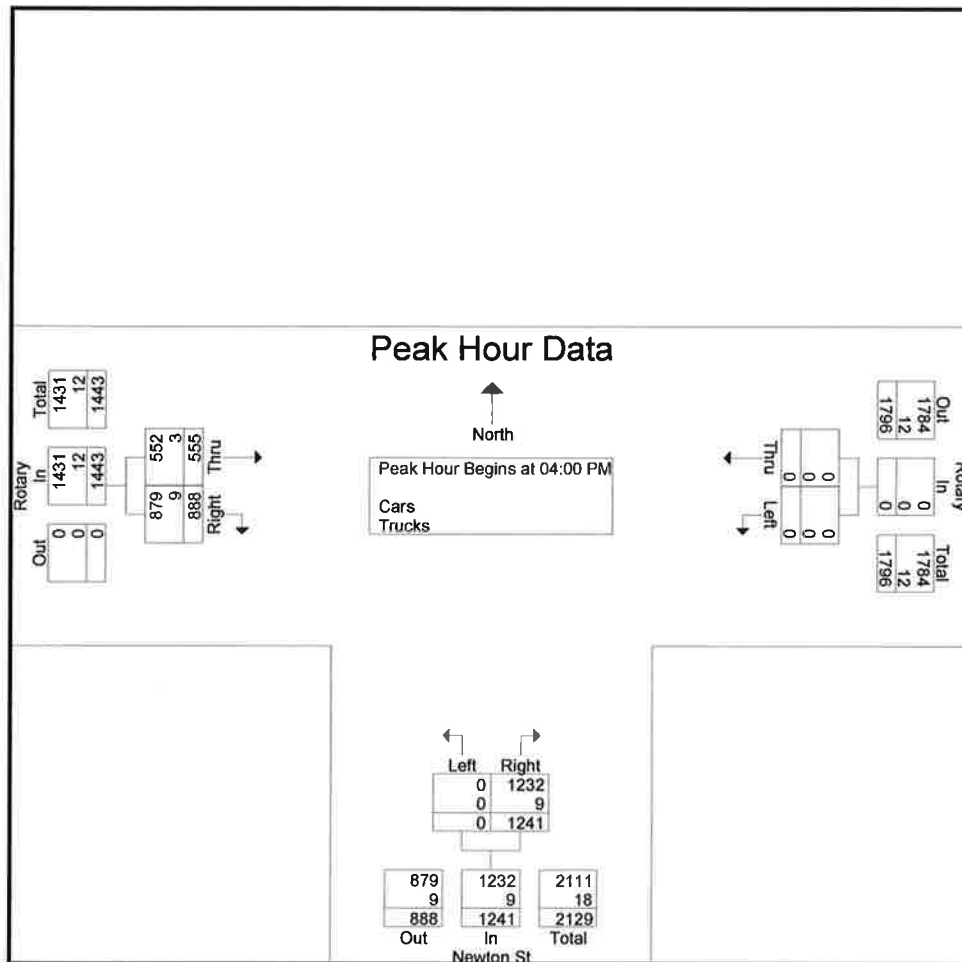
# Accurate Counts

978-664-2565

N/S Street : Newton Street  
 E/W Street : Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

File Name : 73820002  
 Site Code : 73820002  
 Start Date : 1/18/2017  
 Page No : 2

	Rotary From East			Newton St From South			Rotary 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 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	0	0	0	0	283	283	135	240	375	658
04:15 PM	0	0	0	0	292	292	138	169	307	599
04:30 PM	0	0	0	0	314	314	136	244	380	694
04:45 PM	0	0	0	0	352	352	146	235	381	733
Total Volume	0	0	0	0	1241	1241	555	888	1443	2684
% App. Total	0	0		0	100		38.5	61.5		
PHF	.000	.000	.000	.000	.881	.881	.950	.910	.947	.915
Cars	0	0	0	0	1232	1232	552	879	1431	2663
% Cars	0	0	0	0	99.3	99.3	99.5	99.0	99.2	99.2
Trucks	0	0	0	0	9	9	3	9	12	21
% Trucks	0	0	0	0	0.7	0.7	0.5	1.0	0.8	0.8



# Accurate Counts

978-664-2565

N/S Street : Newton Street  
 E/W Street : Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

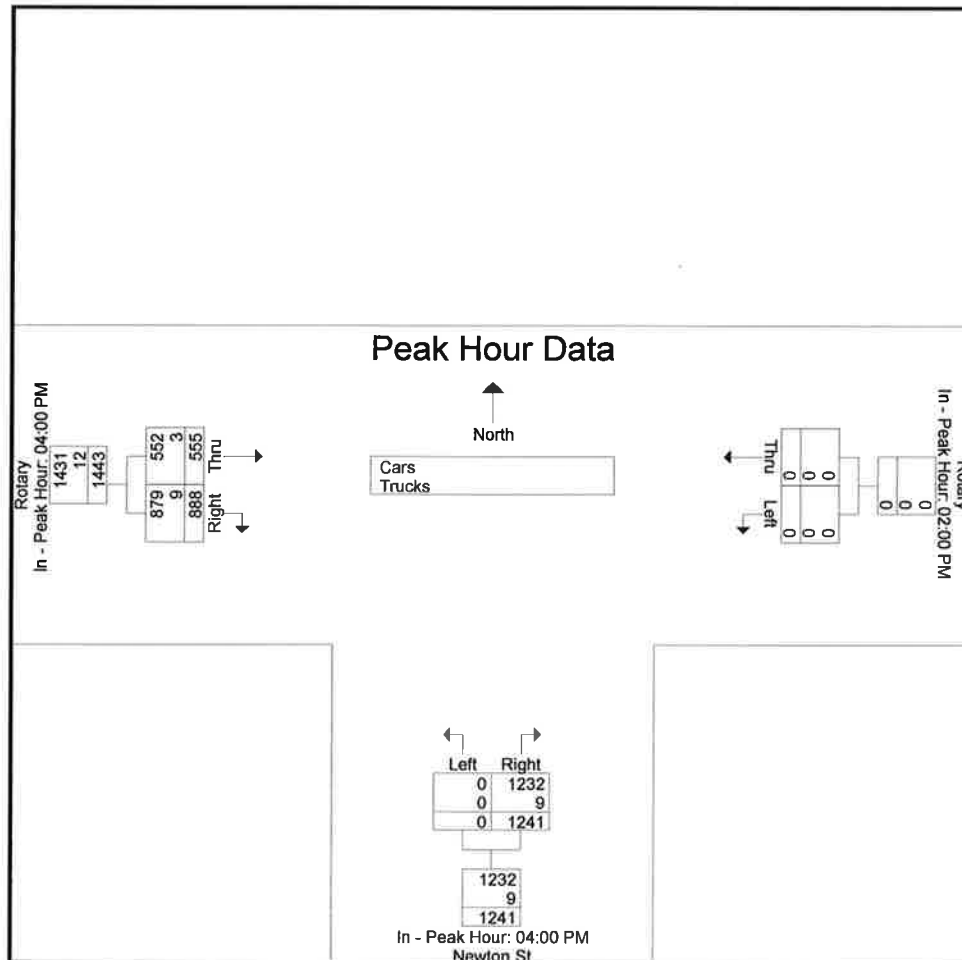
File Name : 73820002  
 Site Code : 73820002  
 Start Date : 1/18/2017  
 Page No : 3

	Rotary From East			Newton St From South			Rotary 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:00 PM			04:00 PM			04:00 PM		
+0 mins.	0	0	0	0	283	283	135	240	375
+15 mins.	0	0	0	0	292	292	138	169	307
+30 mins.	0	0	0	0	314	314	136	244	380
+45 mins.	0	0	0	0	352	352	146	235	381
Total Volume	0	0	0	0	1241	1241	555	888	1443
% App. Total	0	0		0	100		38.5	61.5	
PHF	.000	.000	.000	.000	.881	.881	.950	.910	.947
Cars	0	0	0	0	1232	1232	552	879	1431
% Cars	0	0	0	0	99.3	99.3	99.5	99	99.2
Trucks	0	0	0	0	9	9	3	9	12
% Trucks	0	0	0	0	0.7	0.7	0.5	1	0.8



**Accurate Counts**  
978-664-2565

N/S Street : Newton Street  
E/W Street : Horace James Circle  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820002  
Site Code : 73820002  
Start Date : 1/18/2017  
Page No : 4

Groups Printed- Cars

Start Time	Rotary From East		Newton St From South		Rotary From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
02:00 PM	0	0	0	225	135	143	503
02:15 PM	0	0	0	220	146	113	479
02:30 PM	0	0	0	242	152	169	563
02:45 PM	0	0	0	250	125	185	560
Total	0	0	0	937	558	610	2105
03:00 PM	0	0	0	278	115	251	644
03:15 PM	0	0	0	282	149	213	644
03:30 PM	0	0	0	254	155	172	581
03:45 PM	0	0	0	329	142	173	644
Total	0	0	0	1143	561	809	2513
04:00 PM	0	0	0	280	134	236	650
04:15 PM	0	0	0	290	138	165	593
04:30 PM	0	0	0	312	135	244	691
04:45 PM	0	0	0	350	145	234	729
Total	0	0	0	1232	552	879	2663
Grand Total	0	0	0	3312	1671	2298	7281
Apprch %	0	0	0	100	42.1	57.9	
Total %	0	0	0	45.5	23	31.6	

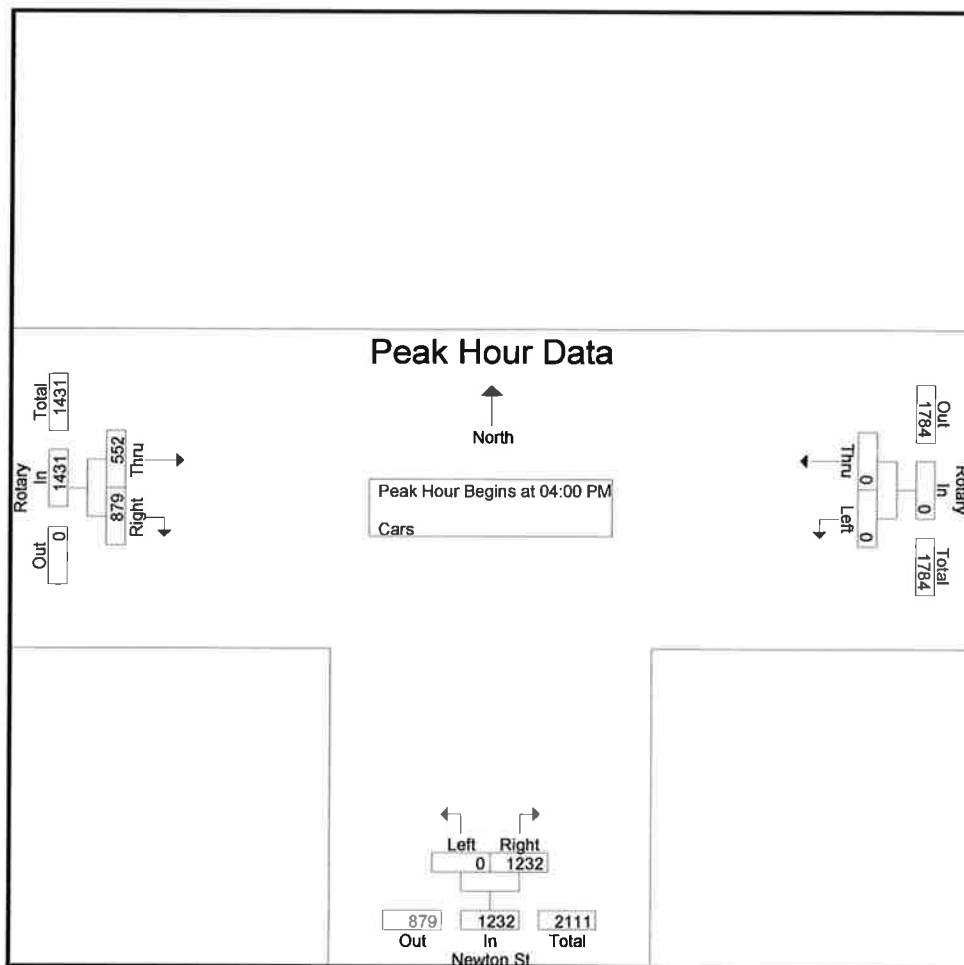
# Accurate Counts

978-664-2565

N/S Street : Newton Street  
 E/W Street : Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

File Name : 73820002  
 Site Code : 73820002  
 Start Date : 1/18/2017  
 Page No : 5

	Rotary From East			Newton St From South			Rotary 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 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	0	0	0	0	280	280	134	236	370	650
04:15 PM	0	0	0	0	290	290	138	165	303	593
04:30 PM	0	0	0	0	312	312	135	244	379	691
04:45 PM	0	0	0	0	350	350	145	234	379	729
Total Volume	0	0	0	0	1232	1232	552	879	1431	2663
% App. Total	0	0		0	100		38.6	61.4		
PHF	.000	.000	.000	.000	.880	.880	.952	.901	.944	.913



# Accurate Counts

978-664-2565

N/S Street : Newton Street  
 E/W Street : Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

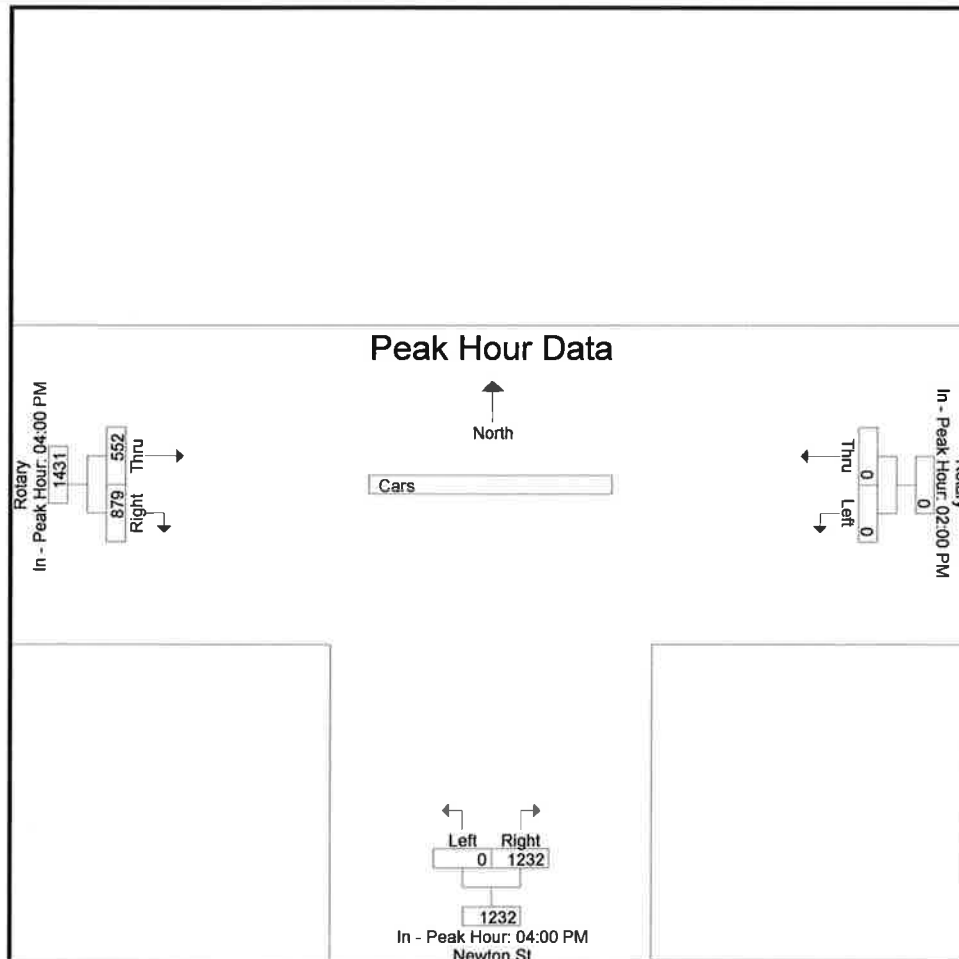
File Name : 73820002  
 Site Code : 73820002  
 Start Date : 1/18/2017  
 Page No : 6

	Rotary From East			Newton St From South			Rotary 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:00 PM			04:00 PM			04:00 PM		
+0 mins.	0	0	0	0	280	280	134	236	370
+15 mins.	0	0	0	0	290	290	138	165	303
+30 mins.	0	0	0	0	312	312	135	<b>244</b>	<b>379</b>
+45 mins.	0	0	0	0	<b>350</b>	<b>350</b>	<b>145</b>	234	379
Total Volume	0	0	0	0	1232	1232	552	879	1431
% App. Total	0	0		0	100		38.6	61.4	
PHF	.000	.000	.000	.000	.880	.880	.952	.901	.944





# Accurate Counts

978-664-2565

N/S Street : Newton Street  
 E/W Street : Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

File Name : 73820002  
 Site Code : 73820002  
 Start Date : 1/18/2017  
 Page No : 7

Groups Printed- Trucks								
Start Time	Rotary From East		Newton St From South		Rotary From West		Int. Total	
	Left	Thru	Left	Right	Thru	Right		
02:00 PM	0	0	0	4	1	6	11	
02:15 PM	0	0	0	3	0	3	6	
02:30 PM	0	0	0	7	3	0	10	
02:45 PM	0	0	0	4	2	3	9	
Total	0	0	0	18	6	12	36	
03:00 PM	0	0	0	1	2	3	6	
03:15 PM	0	0	0	4	1	2	7	
03:30 PM	0	0	0	1	0	6	7	
03:45 PM	0	0	0	7	0	4	11	
Total	0	0	0	13	3	15	31	
04:00 PM	0	0	0	3	1	4	8	
04:15 PM	0	0	0	2	0	4	6	
04:30 PM	0	0	0	2	1	0	3	
04:45 PM	0	0	0	2	1	1	4	
Total	0	0	0	9	3	9	21	
Grand Total	0	0	0	40	12	36	88	
Apprch %	0	0	0	100	25	75		
Total %	0	0	0	45.5	13.6	40.9		

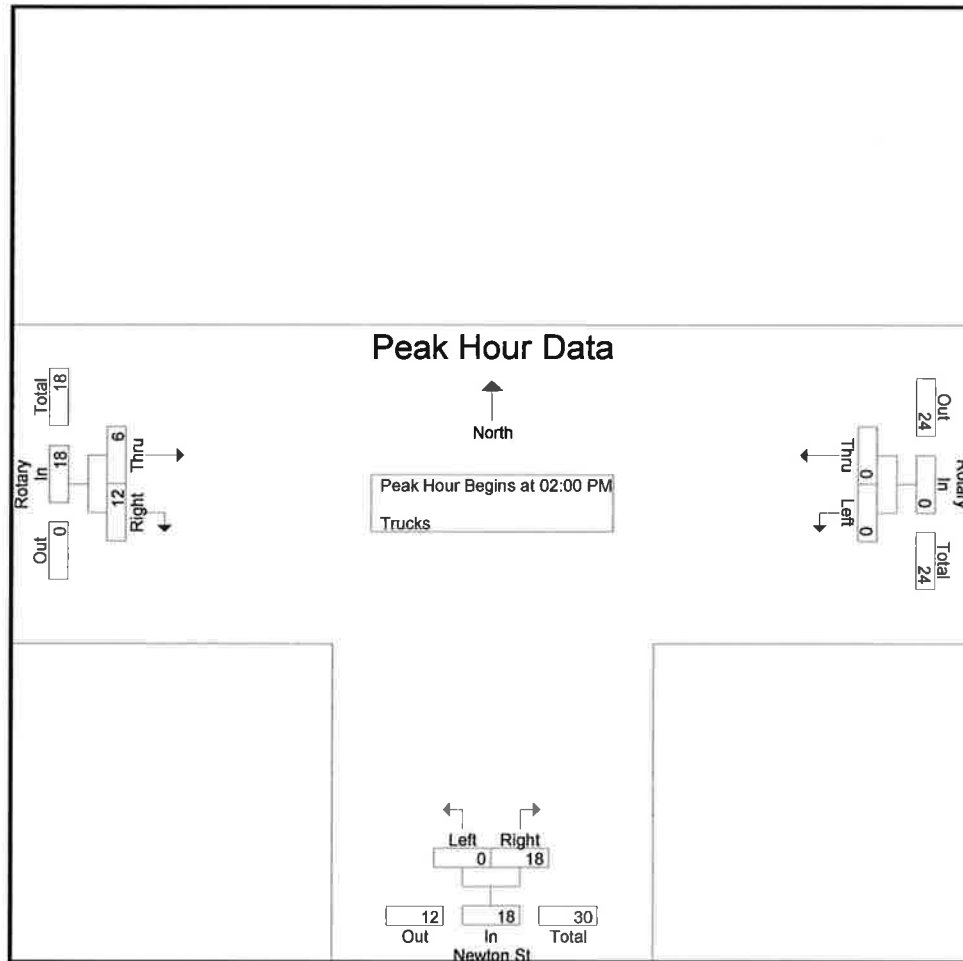
# Accurate Counts

978-664-2565

N/S Street : Newton Street  
 E/W Street : Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

File Name : 73820002  
 Site Code : 73820002  
 Start Date : 1/18/2017  
 Page No : 8

	Rotary From East			Newton St From South			Rotary 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 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 02:00 PM										
02:00 PM	0	0	0	0	4	4	1	6	7	11
02:15 PM	0	0	0	0	3	3	0	3	3	6
02:30 PM	0	0	0	0	7	7	3	0	3	10
02:45 PM	0	0	0	0	4	4	2	3	5	9
Total Volume	0	0	0	0	18	18	6	12	18	36
% App. Total	0	0		0	100		33.3	66.7		
PHF	.000	.000	.000	.000	.643	.643	.500	.500	.643	.818



**Accurate Counts**  
978-664-2565

N/S Street : Newton Street  
E/W Street : Horace James Circle  
City/State : Brookline, MA  
Weather : Rain

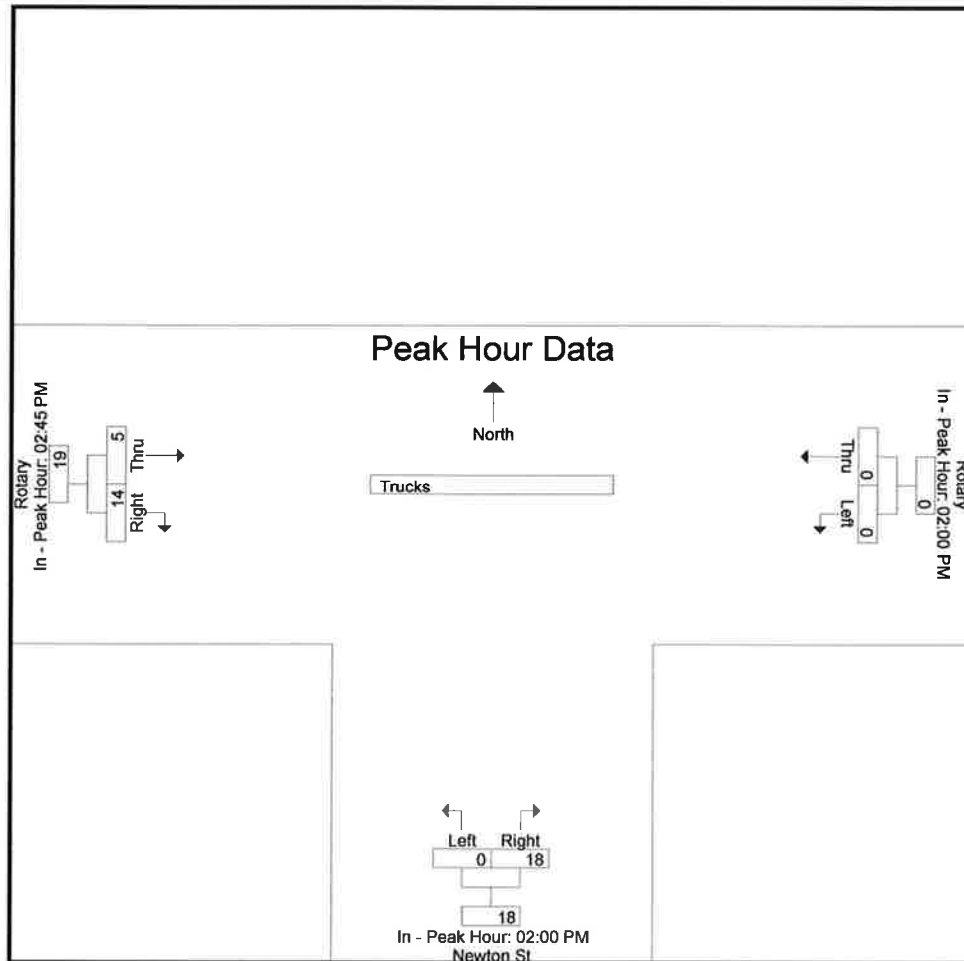
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Site Code : 73820002  
Start Date : 1/18/2017  
Page No : 9

	Rotary From East			Newton St From South			Rotary 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:00 PM			02:00 PM			02:45 PM		
+0 mins.	0	0	0	0	4	4	2	3	5
+15 mins.	0	0	0	0	3	3	2	3	5
+30 mins.	0	0	0	0	7	7	1	2	3
+45 mins.	0	0	0	0	4	4	0	6	6
Total Volume	0	0	0	0	18	18	5	14	19
% App. Total	0	0		0	100		26.3	73.7	
PHF	.000	.000	.000	.000	.643	.643	.625	.583	.792



**Accurate Counts**  
978-664-2565

N/S Street : Newton Street  
E/W Street : Horace James Circle  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820002  
Site Code : 73820002  
Start Date : 1/18/2017  
Page No : 10

Groups Printed- Bikes Peds

Start Time	Rotary From East			Newton St From South			Rotary From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds			
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	0	0	0	0	0	0	0	0	0
02:45 PM	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
03:00 PM	0	0	0	0	1	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	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	0	0	0	0	0	1	1
04:00 PM	0	0	0	0	0	0	1	0	0	0	1	1
04:15 PM	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
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
Grand Total	0	0	0	0	1	0	1	0	0	0	2	2
Apprch %	0	0		0	100		100	0				
Total %	0	0		0	50		50	0		0	100	

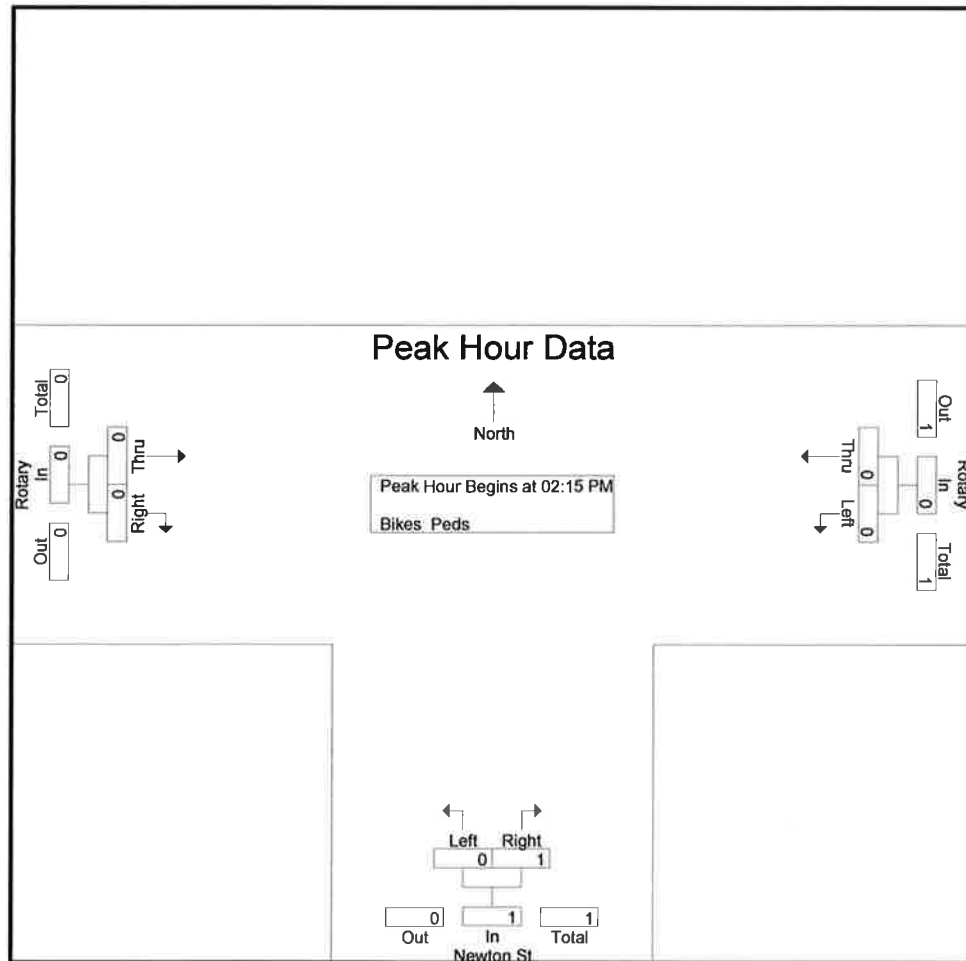
# Accurate Counts

978-664-2565

N/S Street : Newton Street  
 E/W Street : Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

File Name : 73820002  
 Site Code : 73820002  
 Start Date : 1/18/2017  
 Page No : 11

	Rotary From East			Newton St From South			Rotary 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 04:45 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	0	1	1	0	0	0	1
Total Volume	0	0	0	0	1	1	0	0	0	1
% App. Total	0	0		0	100		0	0		
PHF	.000	.000	.000	.000	.250	.250	.000	.000	.000	.250



# Accurate Counts

978-664-2565

N/S Street : Newton Street  
 E/W Street : Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

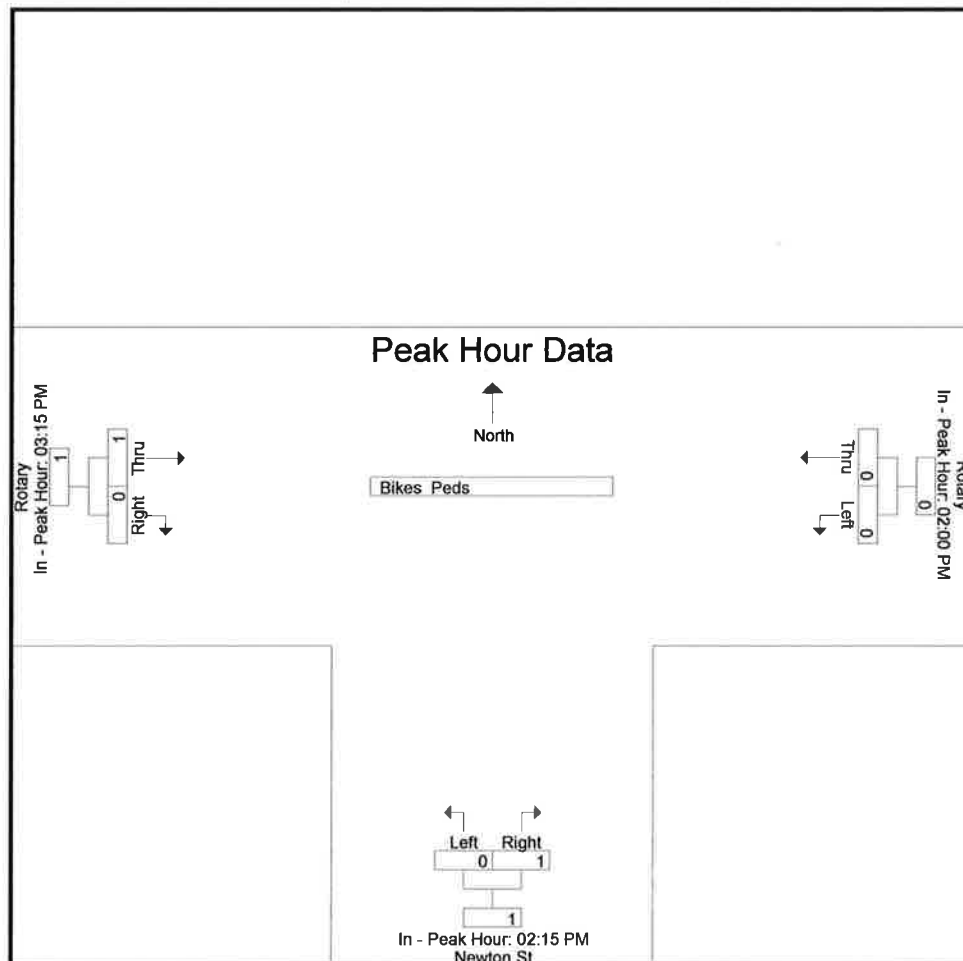
File Name : 73820002  
 Site Code : 73820002  
 Start Date : 1/18/2017  
 Page No : 12

	Rotary From East			Newton St From South			Rotary 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

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



# Accurate Counts

978-664-2565

N/S Street : Lagrange Street  
 E/W Street: Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

File Name : 73820003  
 Site Code : 73820003  
 Start Date : 1/18/2017  
 Page No : 1

## Groups Printed- Cars - Trucks

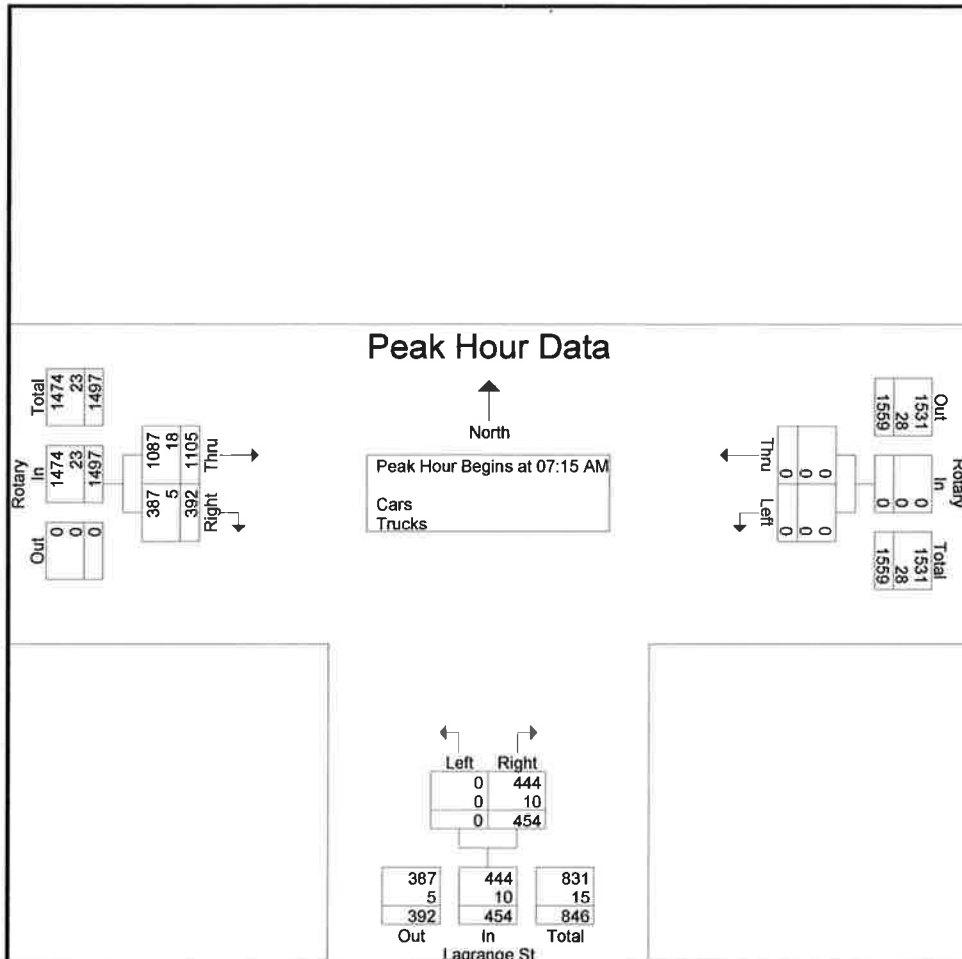
Start Time	Rotary From East		Lagrange St From South		Rotary From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
07:00 AM	0	0	0	121	227	47	395
07:15 AM	0	0	0	136	243	85	464
07:30 AM	0	0	0	110	280	105	495
07:45 AM	0	0	0	106	285	115	506
Total	0	0	0	473	1035	352	1860
08:00 AM	0	0	0	102	297	87	486
08:15 AM	0	0	0	102	274	63	439
08:30 AM	0	0	0	91	276	49	416
08:45 AM	0	0	0	109	281	61	451
Total	0	0	0	404	1128	260	1792
Grand Total	0	0	0	877	2163	612	3652
Apprch %	0	0	0	100	77.9	22.1	
Total %	0	0	0	24	59.2	16.8	
Cars	0	0	0	860	2136	599	3595
% Cars	0	0	0	98.1	98.8	97.9	98.4
Trucks	0	0	0	17	27	13	57
% Trucks	0	0	0	1.9	1.2	2.1	1.6

**Accurate Counts**  
978-664-2565

N/S Street : Lagrange Street  
E/W Street: Horace James Circle  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820003  
Site Code : 73820003  
Start Date : 1/18/2017  
Page No : 2

	Rotary From East			Lagrange St From South			Rotary 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	136	136	243	85	328	464
07:30 AM	0	0	0	0	110	110	280	105	385	495
07:45 AM	0	0	0	0	106	106	285	115	400	506
08:00 AM	0	0	0	0	102	102	297	87	384	486
Total Volume	0	0	0	0	454	454	1105	392	1497	1951
% App. Total	0	0		0	100		73.8	26.2		
PHF	.000	.000	.000	.000	.835	.835	.930	.852	.936	.964
Cars	0	0	0	0	444	444	1087	387	1474	1918
% Cars	0	0	0	0	97.8	97.8	98.4	98.7	98.5	98.3
Trucks	0	0	0	0	10	10	18	5	23	33
% Trucks	0	0	0	0	2.2	2.2	1.6	1.3	1.5	1.7





# Accurate Counts

978-664-2565

N/S Street : Lagrange Street  
 E/W Street: Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

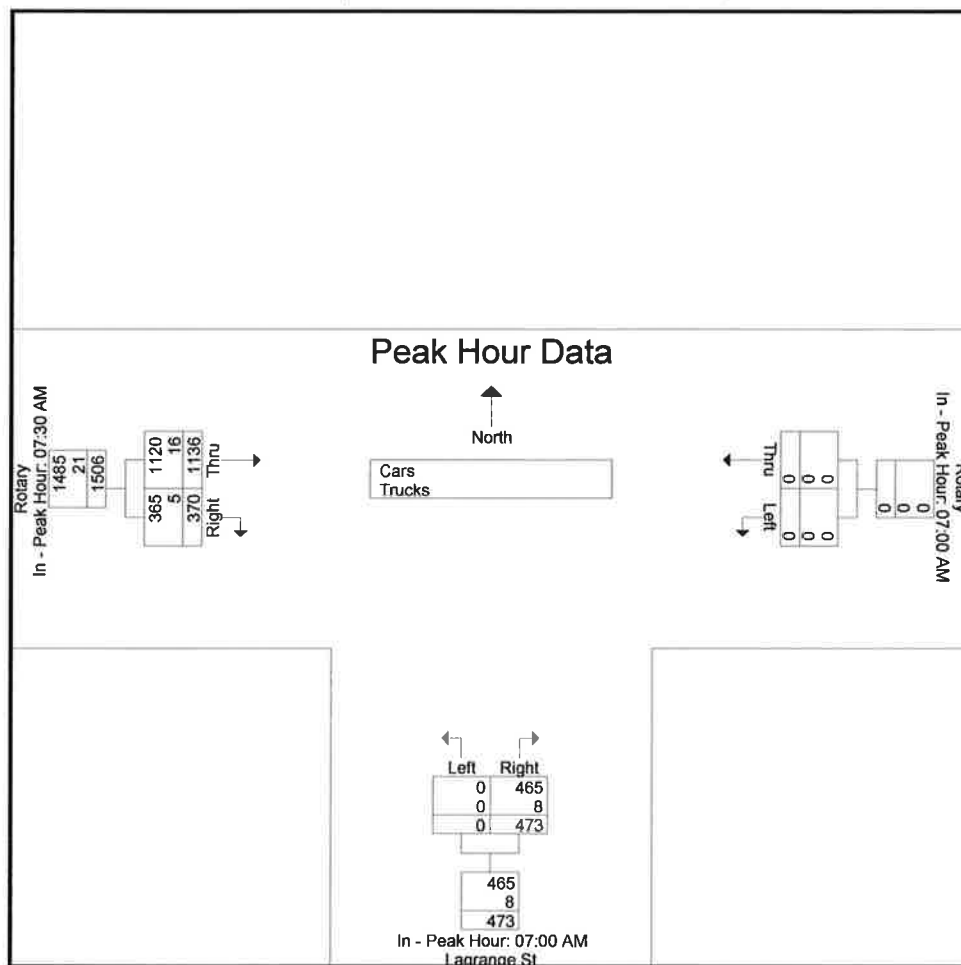
File Name : 73820003  
 Site Code : 73820003  
 Start Date : 1/18/2017  
 Page No : 3

	Rotary From East			Lagrange St From South			Rotary 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			07:30 AM		
+0 mins.	0	0	0	0	121	121	280	105	385
+15 mins.	0	0	0	0	136	136	285	115	400
+30 mins.	0	0	0	0	110	110	297	87	384
+45 mins.	0	0	0	0	106	106	274	63	337
Total Volume	0	0	0	0	473	473	1136	370	1506
% App. Total	0	0		0	100		75.4	24.6	
PHF	.000	.000	.000	.000	.869	.869	.956	.804	.941
Cars	0	0	0	0	465	465	1120	365	1485
% Cars	0	0	0	0	98.3	98.3	98.6	98.6	98.6
Trucks	0	0	0	0	8	8	16	5	21
% Trucks	0	0	0	0	1.7	1.7	1.4	1.4	1.4



# Accurate Counts

978-664-2565

N/S Street : Lagrange Street  
 E/W Street: Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

File Name : 73820003  
 Site Code : 73820003  
 Start Date : 1/18/2017  
 Page No : 4

## Groups Printed- Cars

Start Time	Rotary From East		Lagrange St From South		Rotary From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
07:00 AM	0	0	0	120	223	47	390
07:15 AM	0	0	0	135	241	82	458
07:30 AM	0	0	0	107	273	105	485
07:45 AM	0	0	0	103	278	114	495
Total	0	0	0	465	1015	348	1828
08:00 AM	0	0	0	99	295	86	480
08:15 AM	0	0	0	100	274	60	434
08:30 AM	0	0	0	87	275	46	408
08:45 AM	0	0	0	109	277	59	445
Total	0	0	0	395	1121	251	1767
Grand Total	0	0	0	860	2136	599	3595
Apprch %	0	0	0	100	78.1	21.9	
Total %	0	0	0	23.9	59.4	16.7	

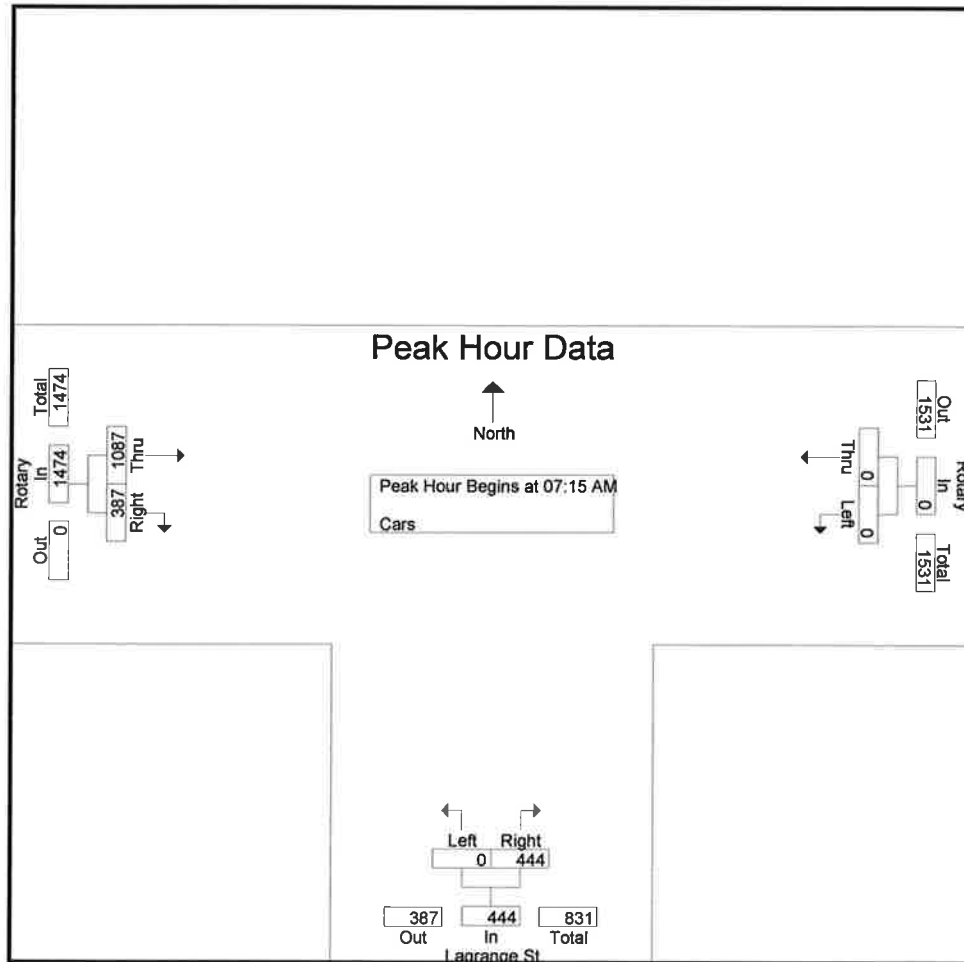
# Accurate Counts

978-664-2565

N/S Street : Lagrange Street  
 E/W Street: Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

File Name : 73820003  
 Site Code : 73820003  
 Start Date : 1/18/2017  
 Page No : 5

	Rotary From East			Lagrange St From South			Rotary 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	135	135	241	82	323	458
07:30 AM	0	0	0	0	107	107	273	105	378	485
07:45 AM	0	0	0	0	103	103	278	114	392	495
08:00 AM	0	0	0	0	99	99	295	86	381	480
Total Volume	0	0	0	0	444	444	1087	387	1474	1918
% App. Total	0	0		0	100		73.7	26.3		
PHF	.000	.000	.000	.000	.822	.822	.921	.849	.940	.969



# Accurate Counts

978-664-2565

N/S Street : Lagrange Street  
 E/W Street: Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

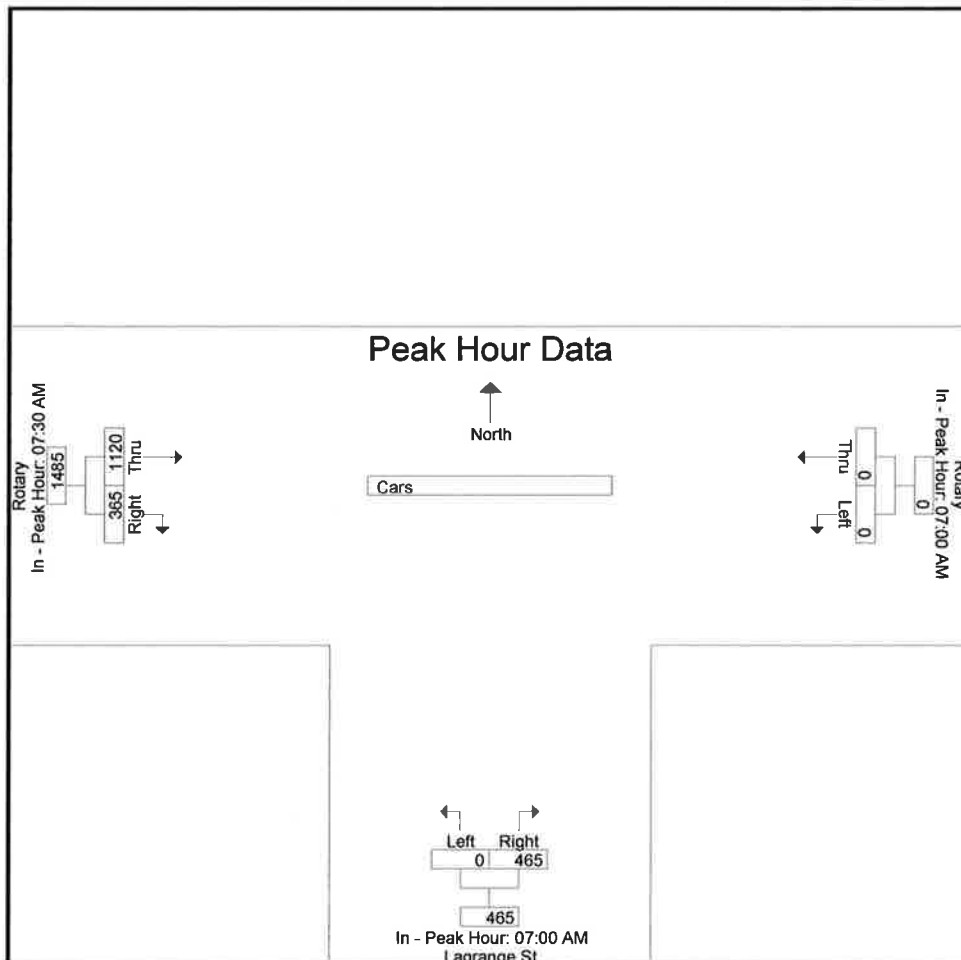
File Name : 73820003  
 Site Code : 73820003  
 Start Date : 1/18/2017  
 Page No : 6

	Rotary From East			Lagrange St From South			Rotary 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			07:30 AM		
+0 mins.	0	0	0	0	120	120	273	105	378
+15 mins.	0	0	0	0	135	135	278	114	392
+30 mins.	0	0	0	0	107	107	295	86	381
+45 mins.	0	0	0	0	103	103	274	60	334
Total Volume	0	0	0	0	465	465	1120	365	1485
% App. Total	0	0		0	100		75.4	24.6	
PHF	.000	.000	.000	.000	.861	.861	.949	.800	.947



**Accurate Counts**  
978-664-2565

N/S Street : Lagrange Street  
E/W Street: Horace James Circle  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820003  
Site Code : 73820003  
Start Date : 1/18/2017  
Page No : 7

**Groups Printed- Trucks**

Start Time	Rotary From East		Lagrange St From South		Rotary From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
07:00 AM	0	0	0	1	4	0	5
07:15 AM	0	0	0	1	2	3	6
07:30 AM	0	0	0	3	7	0	10
07:45 AM	0	0	0	3	7	1	11
Total	0	0	0	8	20	4	32
08:00 AM	0	0	0	3	2	1	6
08:15 AM	0	0	0	2	0	3	5
08:30 AM	0	0	0	4	1	3	8
08:45 AM	0	0	0	0	4	2	6
Total	0	0	0	9	7	9	25
Grand Total	0	0	0	17	27	13	57
Apprch %	0	0	0	100	67.5	32.5	
Total %	0	0	0	29.8	47.4	22.8	

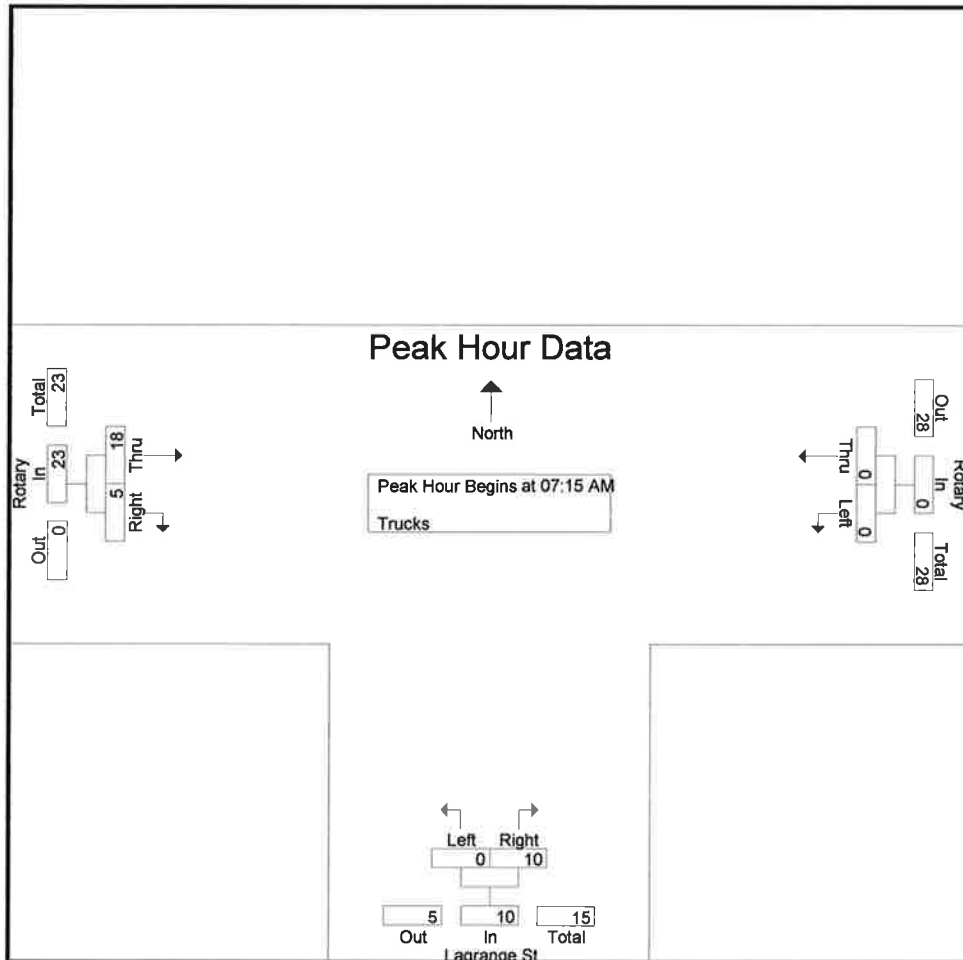
# Accurate Counts

978-664-2565

N/S Street : Lagrange Street  
 E/W Street: Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

File Name : 73820003  
 Site Code : 73820003  
 Start Date : 1/18/2017  
 Page No : 8

	Rotary From East			Lagrange St From South			Rotary 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	1	1	2	3	5	6
07:30 AM	0	0	0	0	3	3	7	0	7	10
07:45 AM	0	0	0	0	3	3	7	1	8	11
08:00 AM	0	0	0	0	3	3	2	1	3	6
Total Volume	0	0	0	0	10	10	18	5	23	33
% App. Total	0	0		0	100		78.3	21.7		
PHF	.000	.000	.000	.000	.833	.833	.643	.417	.719	.750



# Accurate Counts

978-664-2565

N/S Street : Lagrange Street  
 E/W Street: Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

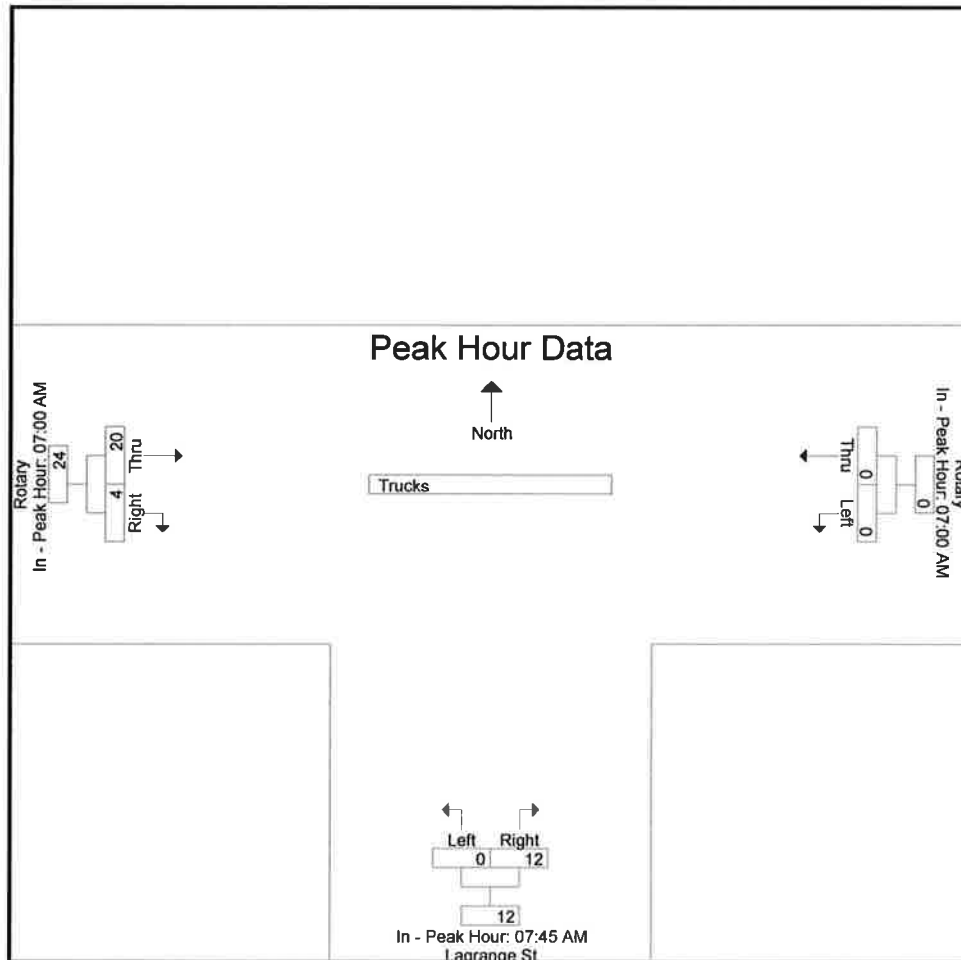
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 Site Code : 73820003  
 Start Date : 1/18/2017  
 Page No : 9

	Rotary From East			Lagrange St From South			Rotary 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			07:45 AM			07:00 AM		
+0 mins.	0	0	0	0	3	3	4	0	4
+15 mins.	0	0	0	0	3	3	2	3	5
+30 mins.	0	0	0	0	2	2	7	0	7
+45 mins.	0	0	0	0	4	4	7	1	8
Total Volume	0	0	0	0	12	12	20	4	24
% App. Total	0	0		0	100		83.3	16.7	
PHF	.000	.000	.000	.000	.750	.750	.714	.333	.750



**978-664-2565**

File Name : 73820003  
Site Code : 73820003  
Start Date : 1/18/2017  
Page No : 10



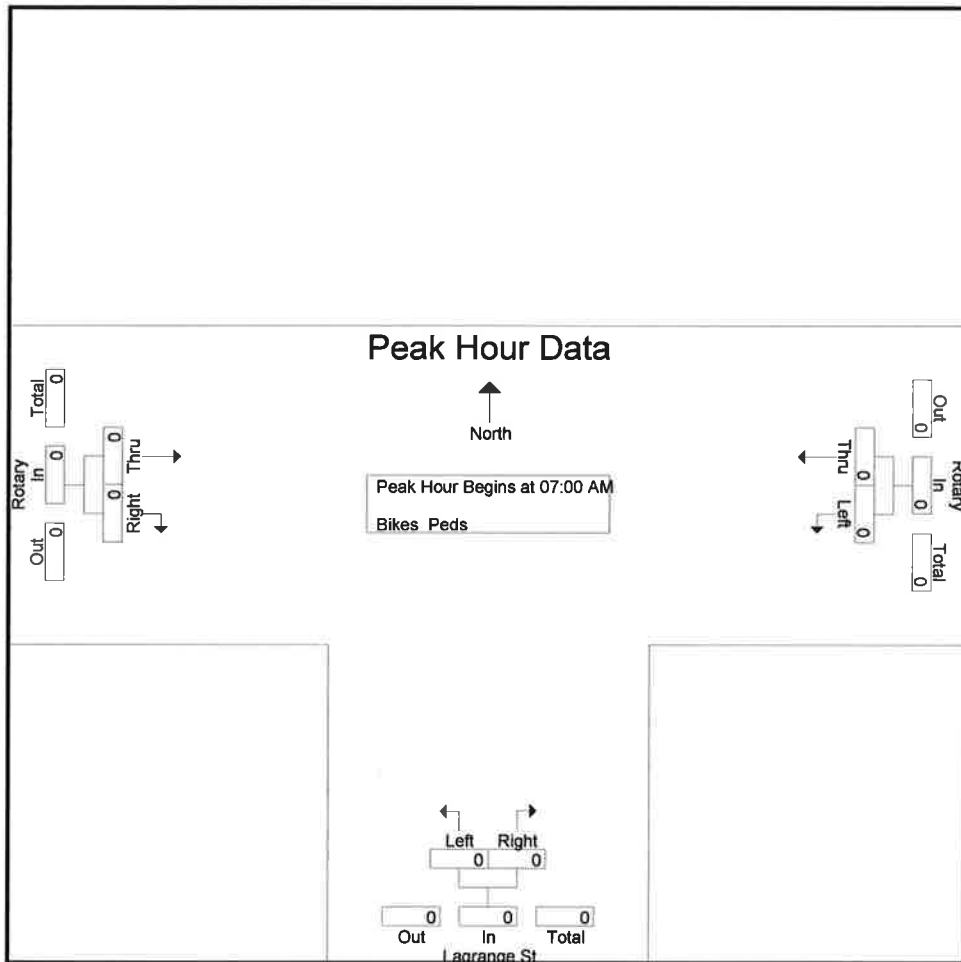
# Accurate Counts

978-664-2565

N/S Street : Lagrange Street  
 E/W Street: Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

File Name : 73820003  
 Site Code : 73820003  
 Start Date : 1/18/2017  
 Page No : 11

	Rotary From East			Lagrange St From South			Rotary 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 07:00 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 : Lagrange Street  
 E/W Street: Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

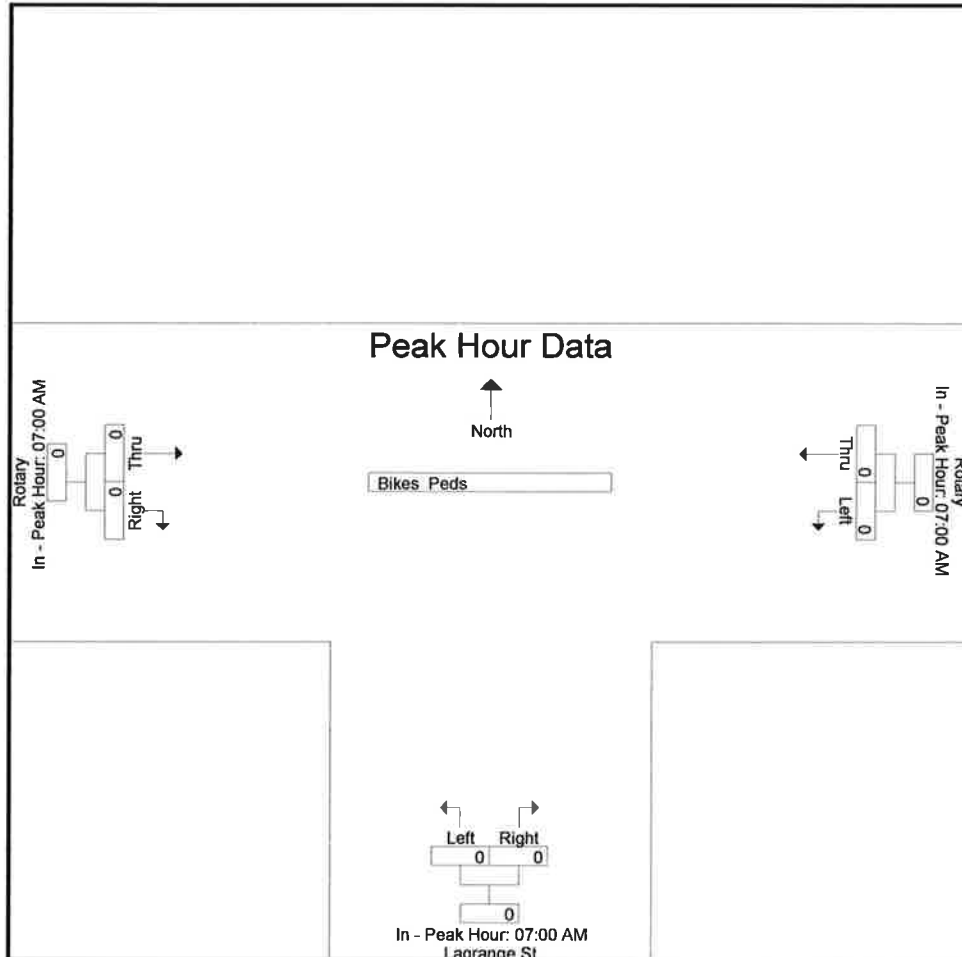
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 Site Code : 73820003  
 Start Date : 1/18/2017  
 Page No : 12

	Rotary From East			Lagrange St From South			Rotary 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 : Lagrange Street  
E/W Street: Horace James Circle  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820003  
Site Code : 73820003  
Start Date : 1/18/2017  
Page No : 1

**Groups Printed- Cars - Trucks**

Start Time	Rotary From East		Lagrange St From South		Rotary From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
02:00 PM	0	0	0	83	202	98	383
02:15 PM	0	0	0	88	174	111	373
02:30 PM	0	0	0	110	212	117	439
02:45 PM	0	0	0	82	233	140	455
Total	0	0	0	363	821	466	1650
03:00 PM	0	0	0	61	310	175	546
03:15 PM	0	0	0	92	273	180	545
03:30 PM	0	0	0	75	258	150	483
03:45 PM	0	0	0	87	232	167	486
Total	0	0	0	315	1073	672	2060
04:00 PM	0	0	0	80	295	175	550
04:15 PM	0	0	0	73	234	188	495
04:30 PM	0	0	0	83	297	198	578
04:45 PM	0	0	0	95	286	185	566
Total	0	0	0	331	1112	746	2189
Grand Total	0	0	0	1009	3006	1884	5899
Apprch %	0	0	0	100	61.5	38.5	
Total %	0	0	0	17.1	51	31.9	
Cars	0	0	0	1004	2965	1875	5844
% Cars	0	0	0	99.5	98.6	99.5	99.1
Trucks	0	0	0	5	41	9	55
% Trucks	0	0	0	0.5	1.4	0.5	0.9

# Accurate Counts

978-664-2565

N/S Street : Lgrange Street  
 E/W Street: Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

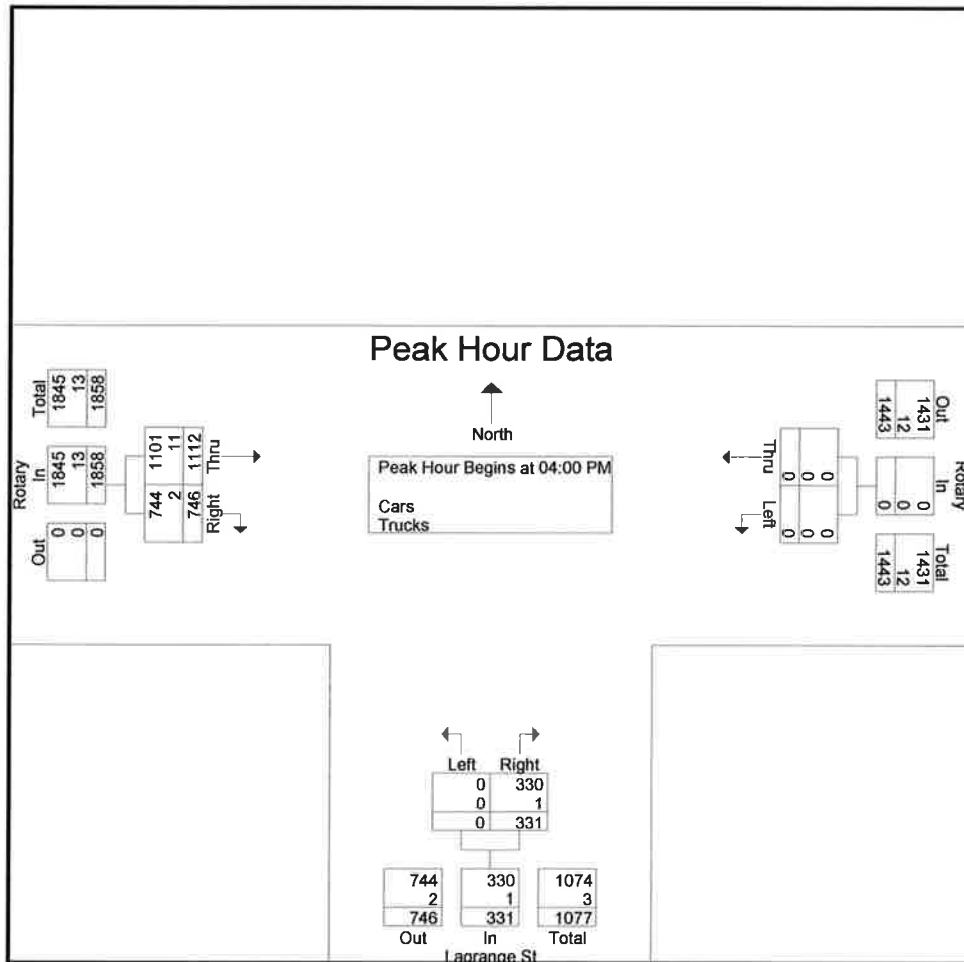
File Name : 73820003  
 Site Code : 73820003  
 Start Date : 1/18/2017  
 Page No : 2

	Rotary From East			Lgrange St From South			Rotary 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 04:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:00 PM

04:00 PM	0	0	0	0	80	80	295	175	470	550
04:15 PM	0	0	0	0	73	73	234	188	422	495
04:30 PM	0	0	0	0	83	83	297	198	495	578
04:45 PM	0	0	0	0	95	95	286	185	471	566
Total Volume	0	0	0	0	331	331	1112	746	1858	2189
% App. Total	0	0		0	100		59.8	40.2		
PHF	.000	.000	.000	.000	.871	.871	.936	.942	.938	.947
Cars	0	0	0	0	330	330	1101	744	1845	2175
% Cars	0	0	0	0	99.7	99.7	99.0	99.7	99.3	99.4
Trucks	0	0	0	0	1	1	11	2	13	14
% Trucks	0	0	0	0	0.3	0.3	1.0	0.3	0.7	0.6



# Accurate Counts

978-664-2565

N/S Street : Lagrange Street  
 E/W Street: Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

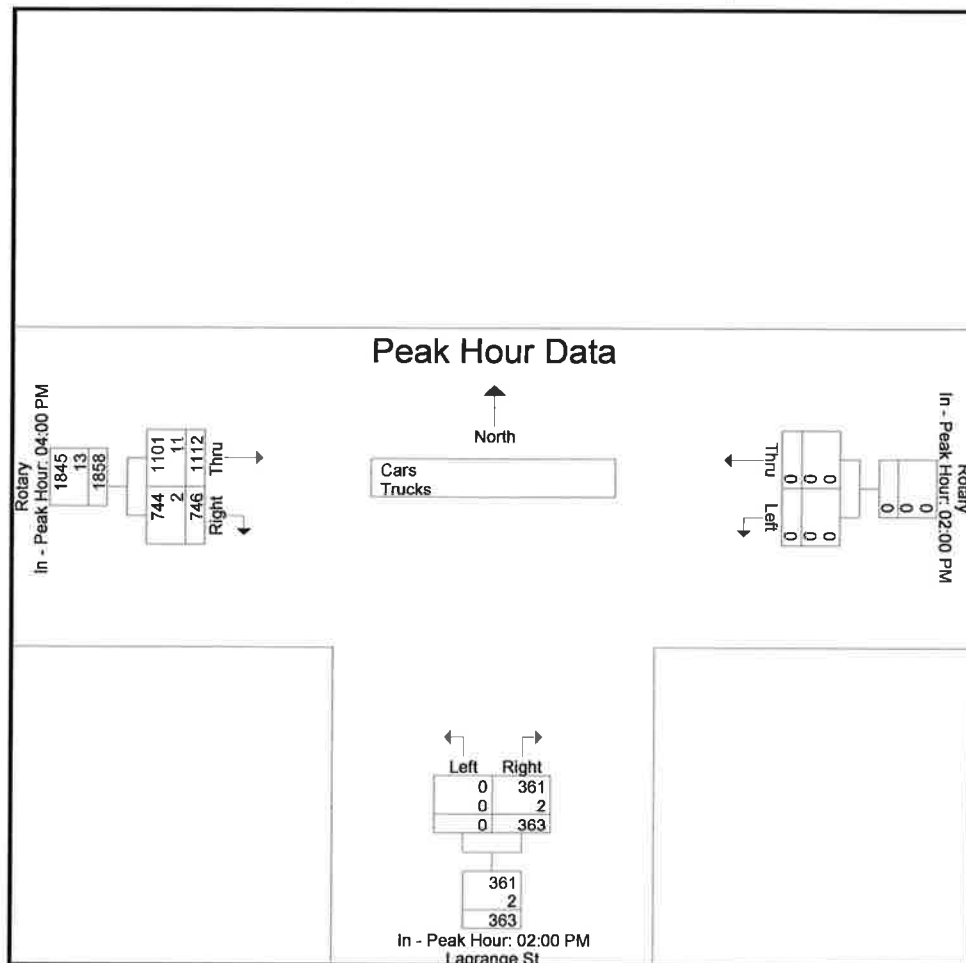
File Name : 73820003  
 Site Code : 73820003  
 Start Date : 1/18/2017  
 Page No : 3

	Rotary From East			Lagrange St From South			Rotary 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:00 PM			02:00 PM			04:00 PM		
+0 mins.	0	0	0	0	83	83	295	175	470
+15 mins.	0	0	0	0	88	88	234	188	422
+30 mins.	0	0	0	0	110	110	297	198	495
+45 mins.	0	0	0	0	82	82	286	185	471
Total Volume	0	0	0	0	363	363	1112	746	1858
% App. Total	0	0		0	100		59.8	40.2	
PHF	.000	.000	.000	.000	.825	.825	.936	.942	.938
Cars	0	0	0	0	361	361	1101	744	1845
% Cars	0	0	0	0	99.4	99.4	99	99.7	99.3
Trucks	0	0	0	0	2	2	11	2	13
% Trucks	0	0	0	0	0.6	0.6	1	0.3	0.7



**Accurate Counts**  
978-664-2565

N/S Street : Lagrange Street  
E/W Street: Horace James Circle  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820003  
Site Code : 73820003  
Start Date : 1/18/2017  
Page No : 4

Groups Printed- Cars

Start Time	Rotary From East		Lagrange St From South		Rotary From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
02:00 PM	0	0	0	82	196	97	375
02:15 PM	0	0	0	88	171	109	368
02:30 PM	0	0	0	110	211	117	438
02:45 PM	0	0	0	81	229	139	449
Total	0	0	0	361	807	462	1630
03:00 PM	0	0	0	59	307	175	541
03:15 PM	0	0	0	92	270	180	542
03:30 PM	0	0	0	75	252	148	475
03:45 PM	0	0	0	87	228	166	481
Total	0	0	0	313	1057	669	2039
04:00 PM	0	0	0	80	290	175	545
04:15 PM	0	0	0	73	230	187	490
04:30 PM	0	0	0	82	297	197	576
04:45 PM	0	0	0	95	284	185	564
Total	0	0	0	330	1101	744	2175
Grand Total	0	0	0	1004	2965	1875	5844
Apprch %	0	0	0	100	61.3	38.7	
Total %	0	0	0	17.2	50.7	32.1	

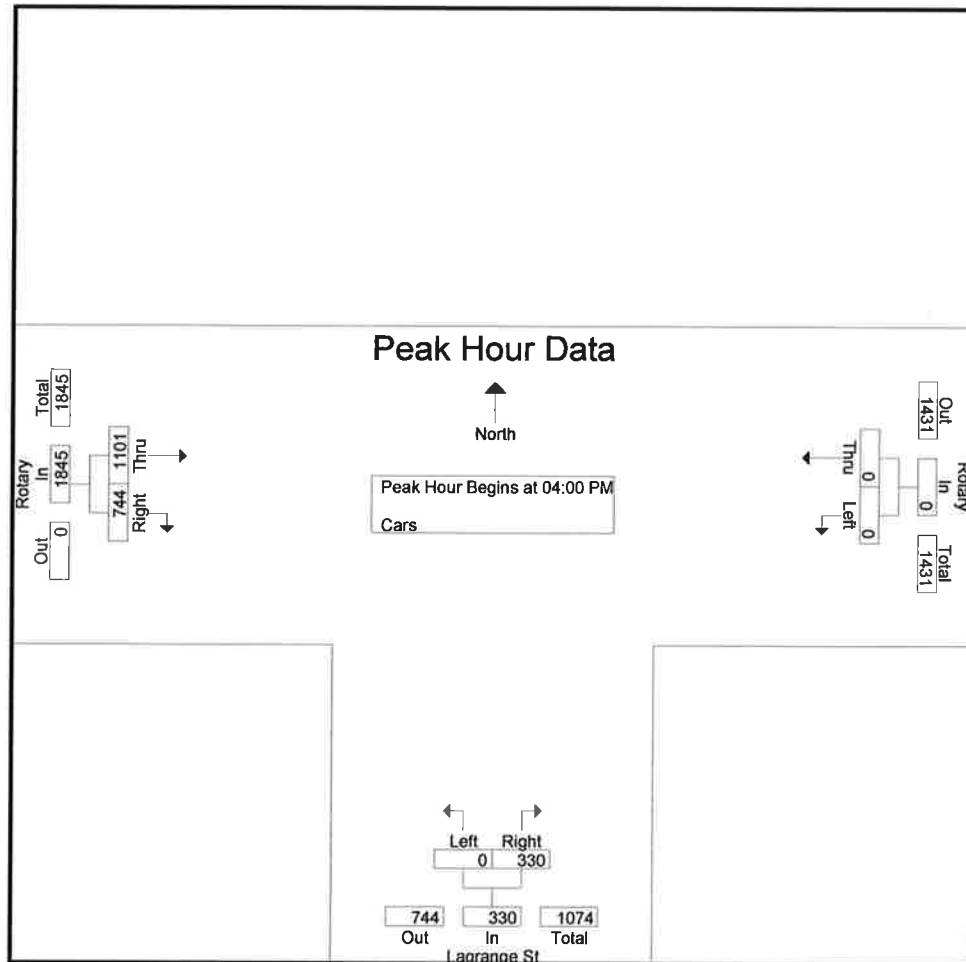
# Accurate Counts

978-664-2565

N/S Street : Lagrange Street  
 E/W Street: Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

File Name : 73820003  
 Site Code : 73820003  
 Start Date : 1/18/2017  
 Page No : 5

	Rotary From East			Lagrange St From South			Rotary 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 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	0	0	0	0	80	80	290	175	465	545
04:15 PM	0	0	0	0	73	73	230	187	417	490
04:30 PM	0	0	0	0	82	82	297	197	494	576
04:45 PM	0	0	0	0	95	95	284	185	469	564
Total Volume	0	0	0	0	330	330	1101	744	1845	2175
% App. Total	0	0		0	100		59.7	40.3		
PHF	.000	.000	.000	.000	.868	.868	.927	.944	.934	.944



# Accurate Counts

978-664-2565

N/S Street : Lagrange Street  
 E/W Street: Horace James Circle  
 City/State : Brookline, MA  
 Weather : Rain

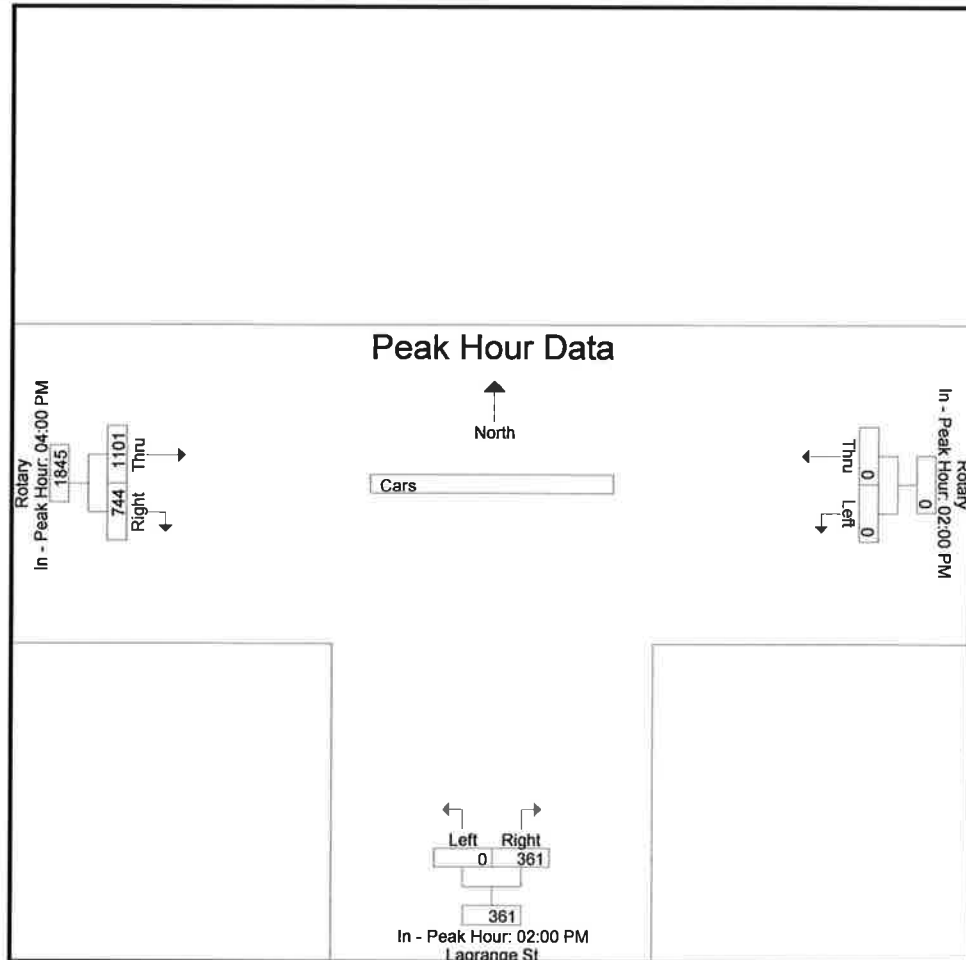
File Name : 73820003  
 Site Code : 73820003  
 Start Date : 1/18/2017  
 Page No : 6

	Rotary From East			Lagrange St From South			Rotary 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:00 PM			02:00 PM			04:00 PM		
+0 mins.	0	0	0	0	82	82	290	175	465
+15 mins.	0	0	0	0	88	88	230	187	417
+30 mins.	0	0	0	0	110	110	297	197	494
+45 mins.	0	0	0	0	81	81	284	185	469
Total Volume	0	0	0	0	361	361	1101	744	1845
% App. Total	0	0		0	100		59.7	40.3	
PHF	.000	.000	.000	.000	.820	.820	.927	.944	.934





**Accurate Counts**  
978-664-2565

N/S Street : Lagrange Street  
E/W Street: Horace James Circle  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820003  
Site Code : 73820003  
Start Date : 1/18/2017  
Page No : 7

Groups Printed- Trucks

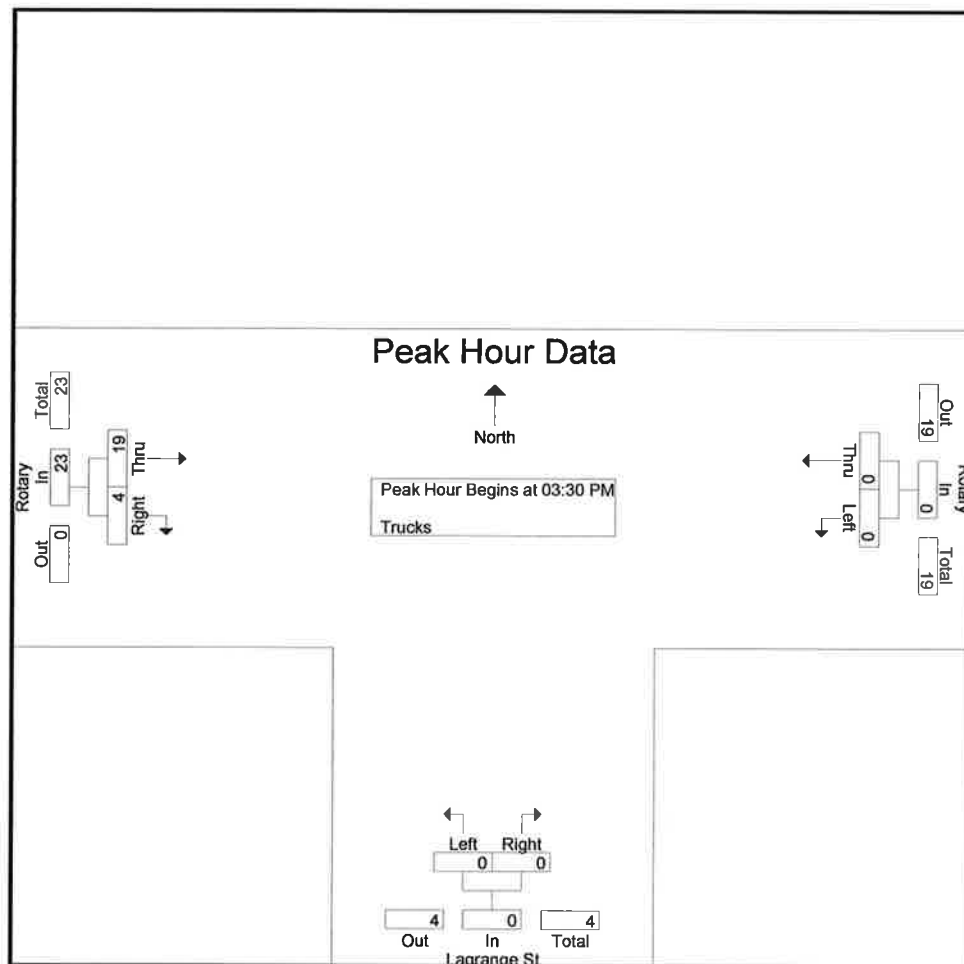
Start Time	Rotary From East		Lagrange St From South		Rotary From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
02:00 PM	0	0	0	1	6	1	8
02:15 PM	0	0	0	0	3	2	5
02:30 PM	0	0	0	0	1	0	1
02:45 PM	0	0	0	1	4	1	6
Total	0	0	0	2	14	4	20
03:00 PM	0	0	0	2	3	0	5
03:15 PM	0	0	0	0	3	0	3
03:30 PM	0	0	0	0	6	2	8
03:45 PM	0	0	0	0	4	1	5
Total	0	0	0	2	16	3	21
04:00 PM	0	0	0	0	5	0	5
04:15 PM	0	0	0	0	4	1	5
04:30 PM	0	0	0	1	0	1	2
04:45 PM	0	0	0	0	2	0	2
Total	0	0	0	1	11	2	14
Grand Total	0	0	0	5	41	9	55
Apprch %	0	0	0	100	82	18	
Total %	0	0	0	9.1	74.5	16.4	

**Accurate Counts**  
978-664-2565

N/S Street : Lagrange Street  
E/W Street: Horace James Circle  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820003  
Site Code : 73820003  
Start Date : 1/18/2017  
Page No : 8

	Rotary From East			Lagrange St From South			Rotary 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 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 03:30 PM										
03:30 PM	0	0	0	0	0	0	6	2	8	8
03:45 PM	0	0	0	0	0	0	4	1	5	5
04:00 PM	0	0	0	0	0	0	5	0	5	5
04:15 PM	0	0	0	0	0	0	4	1	5	5
Total Volume	0	0	0	0	0	0	19	4	23	23
% App. Total	0	0		0	0		82.6	17.4		
PHF	.000	.000	.000	.000	.000	.000	.792	.500	.719	.719



**Accurate Counts**  
978-664-2565

N/S Street : LAGRANGE STREET  
E/W Street: HORACE JAMES CIRCLE  
City/State : BROOKLINE, MA  
Weather : Rain

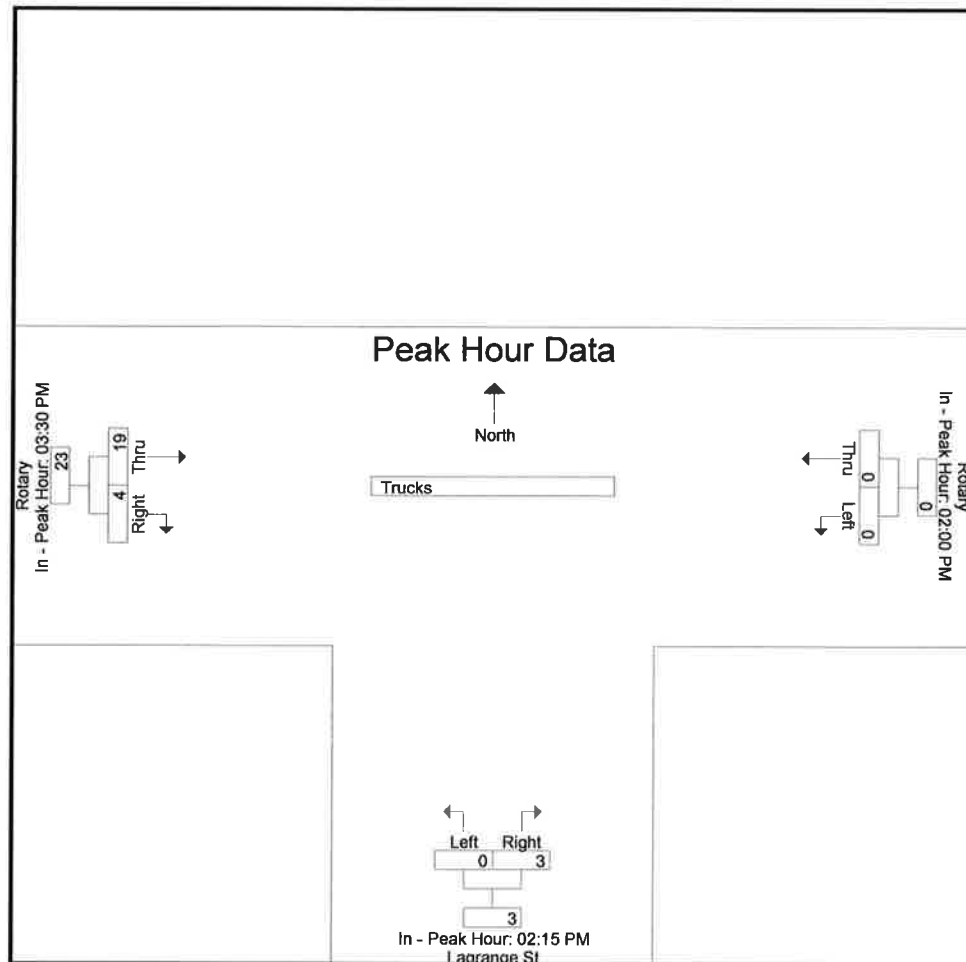
File Name : 73820003  
Site Code : 73820003  
Start Date : 1/18/2017  
Page No : 9

	Rotary From East			LAGRANGE ST From South			Rotary 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:00 PM			02:15 PM			03:30 PM		
+0 mins.	0	0	0	0	0	0	6	2	8
+15 mins.	0	0	0	0	0	0	4	1	5
+30 mins.	0	0	0	0	1	1	5	0	5
+45 mins.	0	0	0	0	2	2	4	1	5
Total Volume	0	0	0	0	3	3	19	4	23
% App. Total	0	0		0	100		82.6	17.4	
PHF	.000	.000	.000	.000	.375	.375	.792	.500	.719



**Accurate Counts**  
978-664-2565

N/S Street : Lagrange Street  
E/W Street: Horace James Circle  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820003  
Site Code : 73820003  
Start Date : 1/18/2017  
Page No : 10

Groups Printed- Bikes Peds												
Start Time	Rotary From East			Lagrange St From South			Rotary From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds			
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	0	0	0	0	0	0	0	0	0
02:45 PM	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
03:00 PM	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
03:30 PM	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
Total	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
04:15 PM	0	0	0	0	0	1	0	0	0	1	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	1	0	0	0	0	0	1	1
Total	0	0	0	0	1	1	0	0	0	1	1	2
Grand Total	0	0	0	0	1	1	0	0	0	1	1	2
Apprch %	0	0		0	100		0	0				
Total %	0	0		0	100		0	0		50	50	

**Accurate Counts**  
978-664-2565

N/S Street : Lagrange Street  
E/W Street: Horace James Circle  
City/State : Brookline, MA  
Weather : Rain

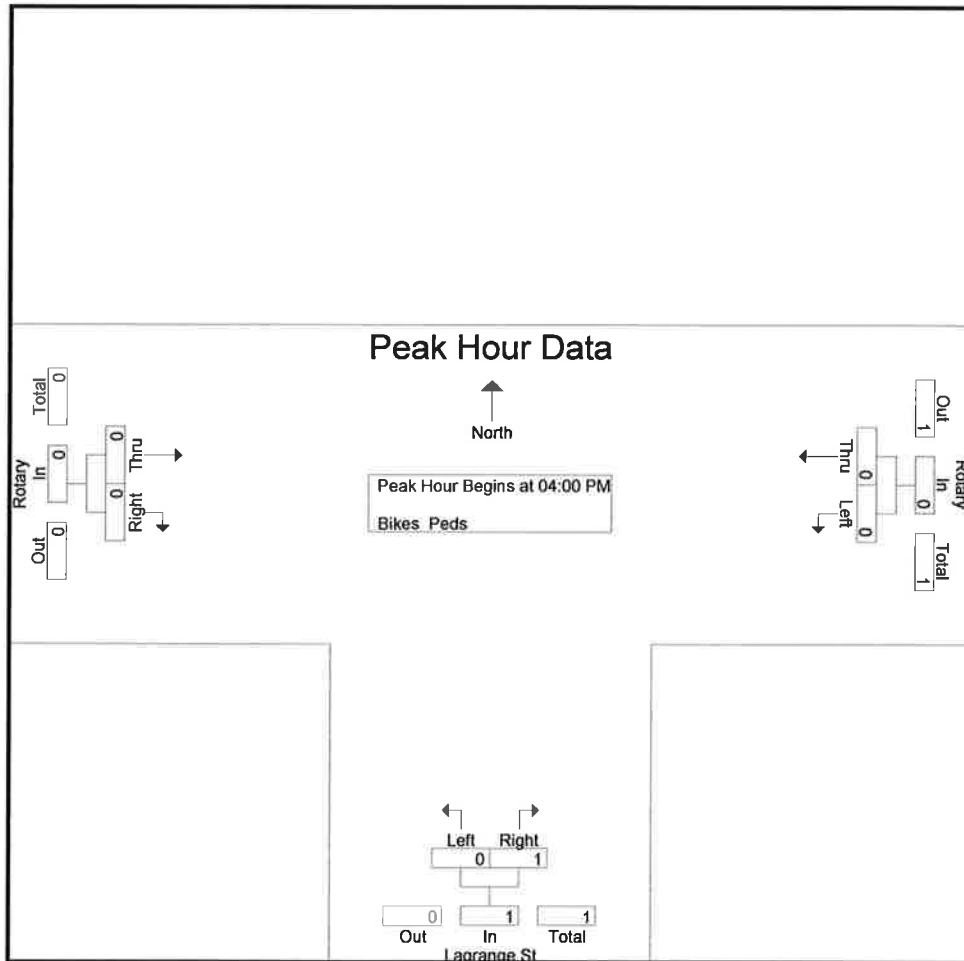
File Name : 73820003  
Site Code : 73820003  
Start Date : 1/18/2017  
Page No : 11

	Rotary From East			Lagrange St From South			Rotary 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 04:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:00 PM

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



**Accurate Counts**  
978-664-2565

N/S Street : Lagrange Street  
E/W Street: Horace James Circle  
City/State : Brookline, MA  
Weather : Rain

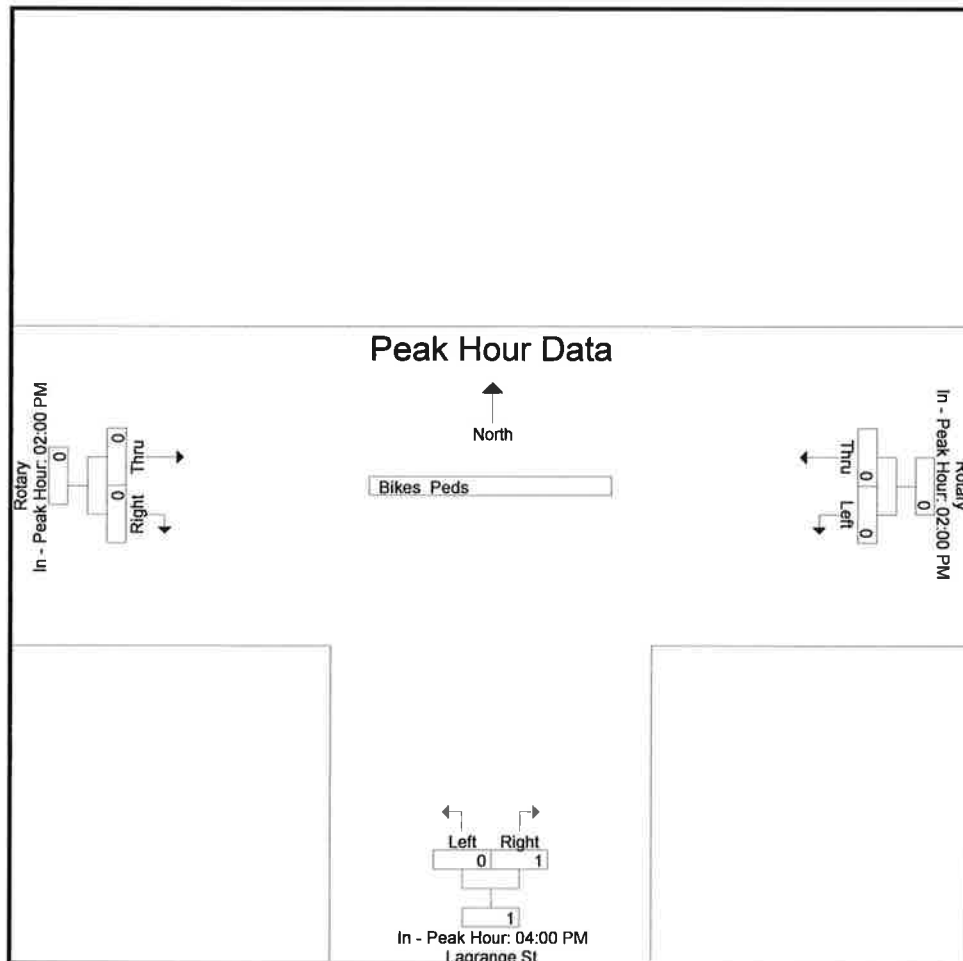
File Name : 73820003  
Site Code : 73820003  
Start Date : 1/18/2017  
Page No : 12

	Rotary From East			Lagrange St From South			Rotary 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:00 PM			04:00 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	1	1	0	0	0
Total Volume	0	0	0	0	1	1	0	0	0
% App. Total	0	0		0	100		0	0	
PHF	.000	.000	.000	.000	.250	.250	.000	.000	.000



**Accurate Counts**  
978-664-2565

N/S Street : Horace James Circle  
E/W Street : Newton Street  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820004  
Site Code : 73820004  
Start Date : 1/18/2017  
Page No : 1

Groups Printed- Cars - Trucks

Start Time	Rotary From North		Rotary From South		Newton St From West		Int. Total
	Thru	Right	Left	Thru	Left	Right	
07:00 AM	169	57	0	0	0	105	331
07:15 AM	237	86	0	0	0	91	414
07:30 AM	290	83	0	0	0	95	468
07:45 AM	313	106	0	0	0	87	506
Total	1009	332	0	0	0	378	1719
08:00 AM	290	104	0	0	0	94	488
08:15 AM	235	84	0	0	0	102	421
08:30 AM	224	94	0	0	0	101	419
08:45 AM	244	95	0	0	0	98	437
Total	993	377	0	0	0	395	1765
Grand Total	2002	709	0	0	0	773	3484
Apprch %	73.8	26.2	0	0	0	100	
Total %	57.5	20.4	0	0	0	22.2	
Cars	1973	687	0	0	0	762	3422
% Cars	98.6	96.9	0	0	0	98.6	98.2
Trucks	29	22	0	0	0	11	62
% Trucks	1.4	3.1	0	0	0	1.4	1.8

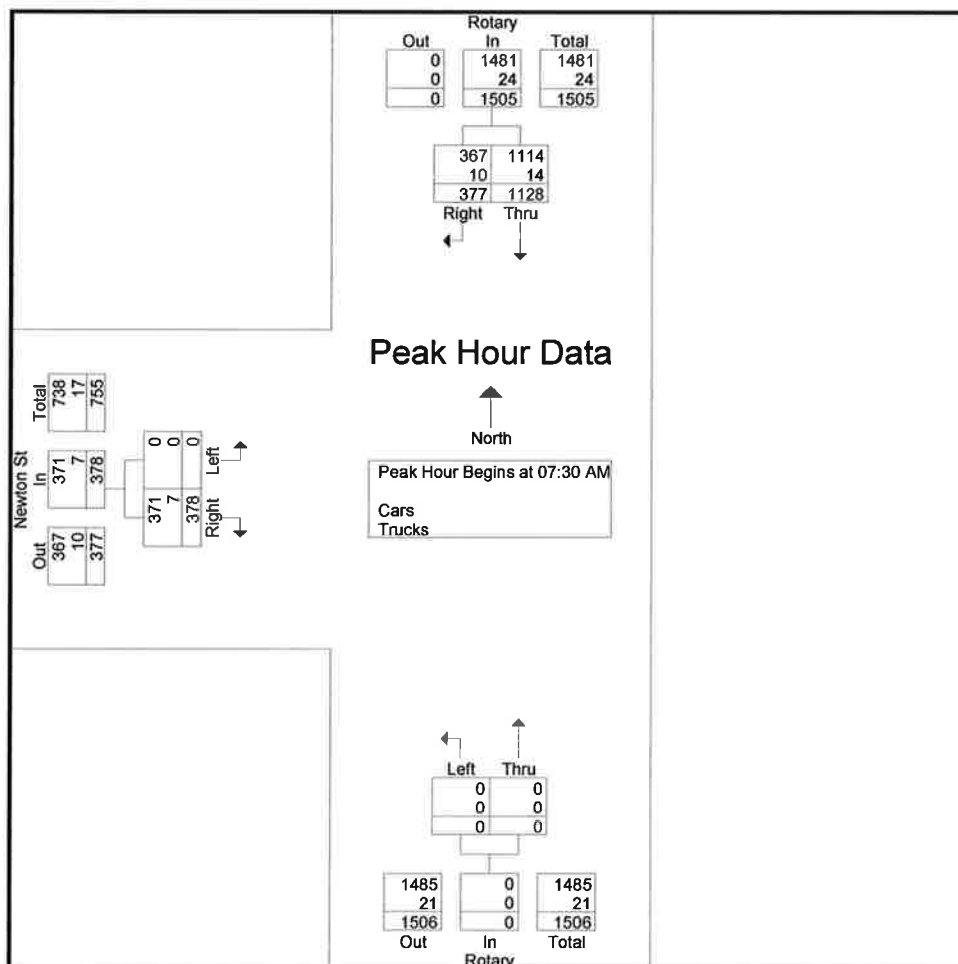
# Accurate Counts

978-664-2565

N/S Street : Horace James Circle  
 E/W Street : Newton Street  
 City/State : Brookline, MA  
 Weather : Rain

File Name : 73820004  
 Site Code : 73820004  
 Start Date : 1/18/2017  
 Page No : 2

	Rotary From North			Rotary From South			Newton St 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 07:30 AM										
07:30 AM	290	83	373	0	0	0	0	95	95	468
07:45 AM	313	106	419	0	0	0	0	87	87	506
08:00 AM	290	104	394	0	0	0	0	94	94	488
08:15 AM	235	84	319	0	0	0	0	102	102	421
Total Volume	1128	377	1505	0	0	0	0	378	378	1883
% App. Total	75	25		0	0		0	100		
PHF	.901	.889	.898	.000	.000	.000	.000	.926	.926	.930
Cars	1114	367	1481	0	0	0	0	371	371	1852
% Cars	98.8	97.3	98.4	0	0	0	0	98.1	98.1	98.4
Trucks	14	10	24	0	0	0	0	7	7	31
% Trucks	1.2	2.7	1.6	0	0	0	0	1.9	1.9	1.6





**Accurate Counts**  
978-664-2565

N/S Street : Horace James Circle  
E/W Street : Newton Street  
City/State : Brookline, MA  
Weather : Rain

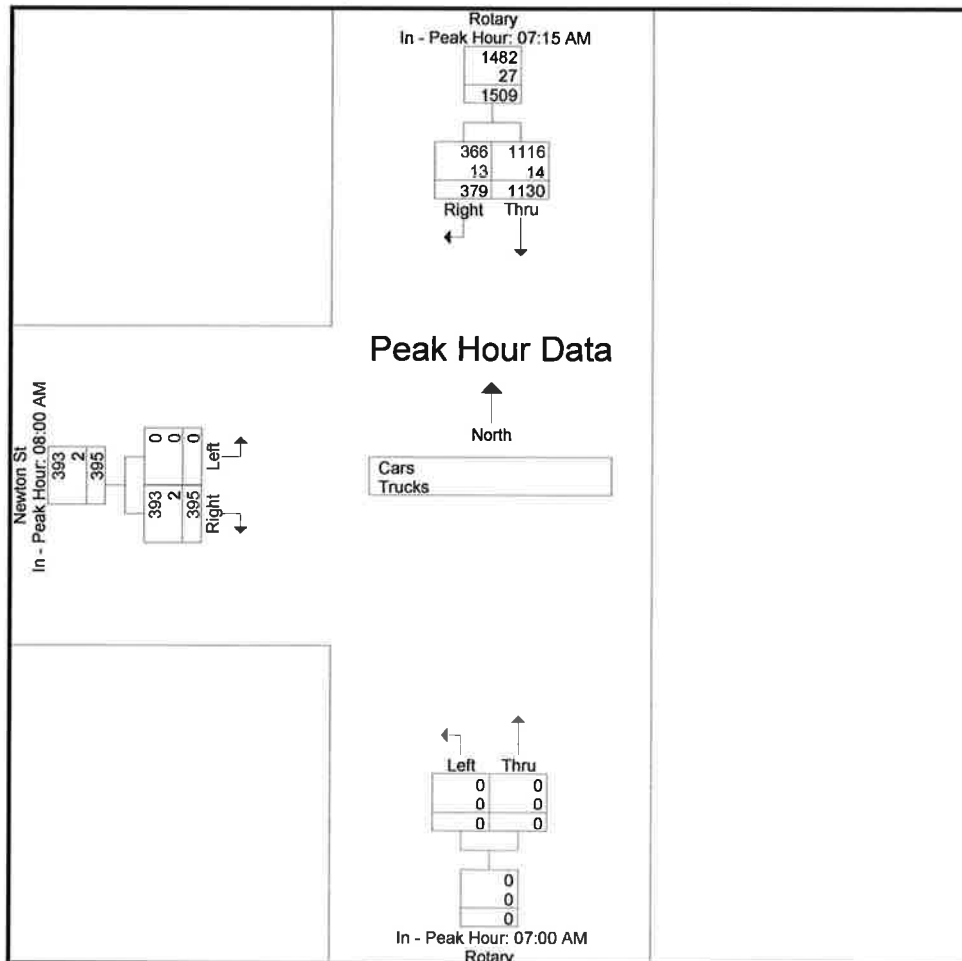
File Name : 73820004  
Site Code : 73820004  
Start Date : 1/18/2017  
Page No : 3

	Rotary From North			Rotary From South			Newton St 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			07:00 AM			08:00 AM		
+0 mins.	237	86	323	0	0	0	0	94	94
+15 mins.	290	83	373	0	0	0	0	102	102
+30 mins.	313	106	419	0	0	0	0	101	101
+45 mins.	290	104	394	0	0	0	0	98	98
Total Volume	1130	379	1509	0	0	0	0	395	395
% App. Total	74.9	25.1		0	0		0	100	
PHF	.903	.894	.900	.000	.000	.000	.000	.968	.968
Cars	1116	366	1482	0	0	0	0	393	393
% Cars	98.8	96.6	98.2	0	0	0	0	99.5	99.5
Trucks	14	13	27	0	0	0	0	2	2
% Trucks	1.2	3.4	1.8	0	0	0	0	0.5	0.5



**Accurate Counts**  
978-664-2565

N/S Street : Horace James Circle  
E/W Street : Newton Street  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820004  
Site Code : 73820004  
Start Date : 1/18/2017  
Page No : 4

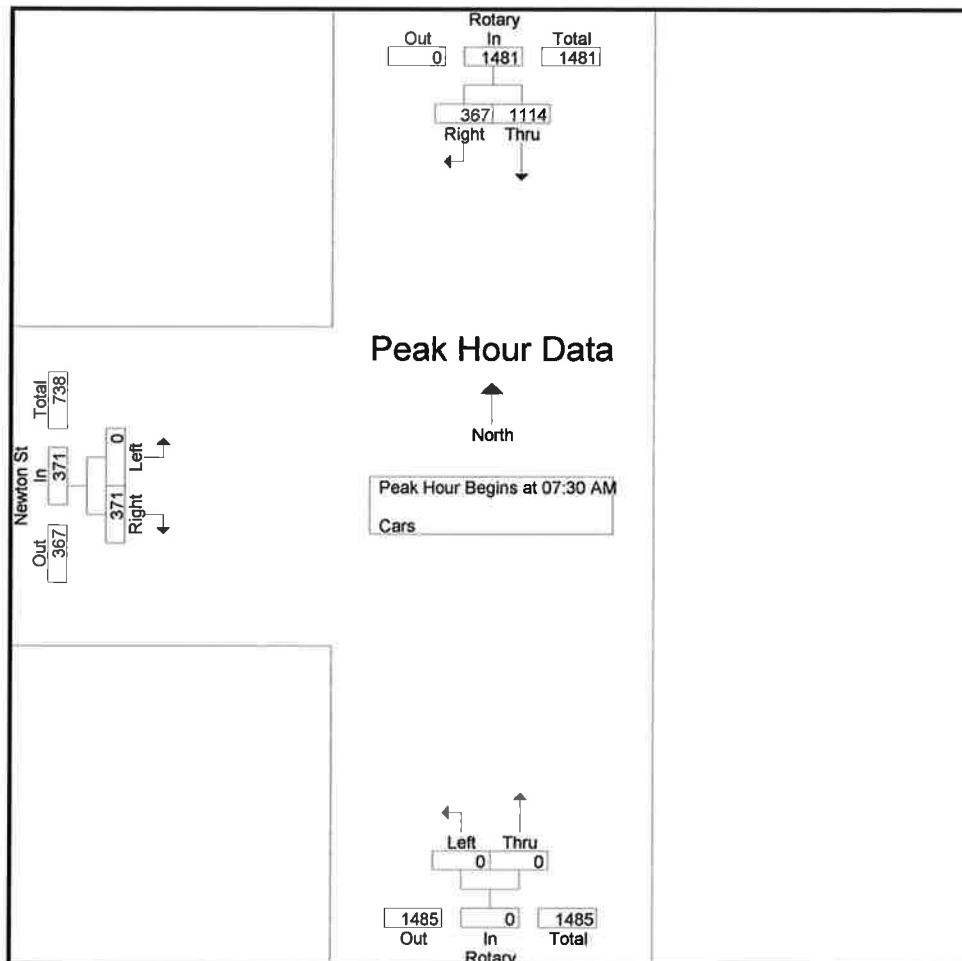
Groups Printed- Cars							
Start Time	Rotary From North		Rotary From South		Newton St From West		Int. Total
	Thru	Right	Left	Thru	Left	Right	
07:00 AM	166	53	0	0	0	104	323
07:15 AM	234	81	0	0	0	89	404
07:30 AM	285	80	0	0	0	93	458
07:45 AM	309	104	0	0	0	83	496
Total	994	318	0	0	0	369	1681
08:00 AM	288	101	0	0	0	93	482
08:15 AM	232	82	0	0	0	102	416
08:30 AM	220	93	0	0	0	101	414
08:45 AM	239	93	0	0	0	97	429
Total	979	369	0	0	0	393	1741
Grand Total	1973	687	0	0	0	762	3422
Apprch %	74.2	25.8	0	0	0	100	
Total %	57.7	20.1	0	0	0	22.3	

**Accurate Counts**  
978-664-2565

N/S Street : Horace James Circle  
E/W Street : Newton Street  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820004  
Site Code : 73820004  
Start Date : 1/18/2017  
Page No : 5

	Rotary From North			Rotary From South			Newton St 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 07:30 AM										
07:30 AM	285	80	365	0	0	0	0	93	93	458
07:45 AM	309	104	413	0	0	0	0	83	83	496
08:00 AM	288	101	389	0	0	0	0	93	93	482
08:15 AM	232	82	314	0	0	0	0	102	102	416
Total Volume	1114	367	1481	0	0	0	0	371	371	1852
% App. Total	75.2	24.8		0	0		0	100		
PHF	.901	.882	.896	.000	.000	.000	.000	.909	.909	.933



**Accurate Counts**  
978-664-2565

N/S Street : Horace James Circle  
E/W Street : Newton Street  
City/State : Brookline, MA  
Weather : Rain

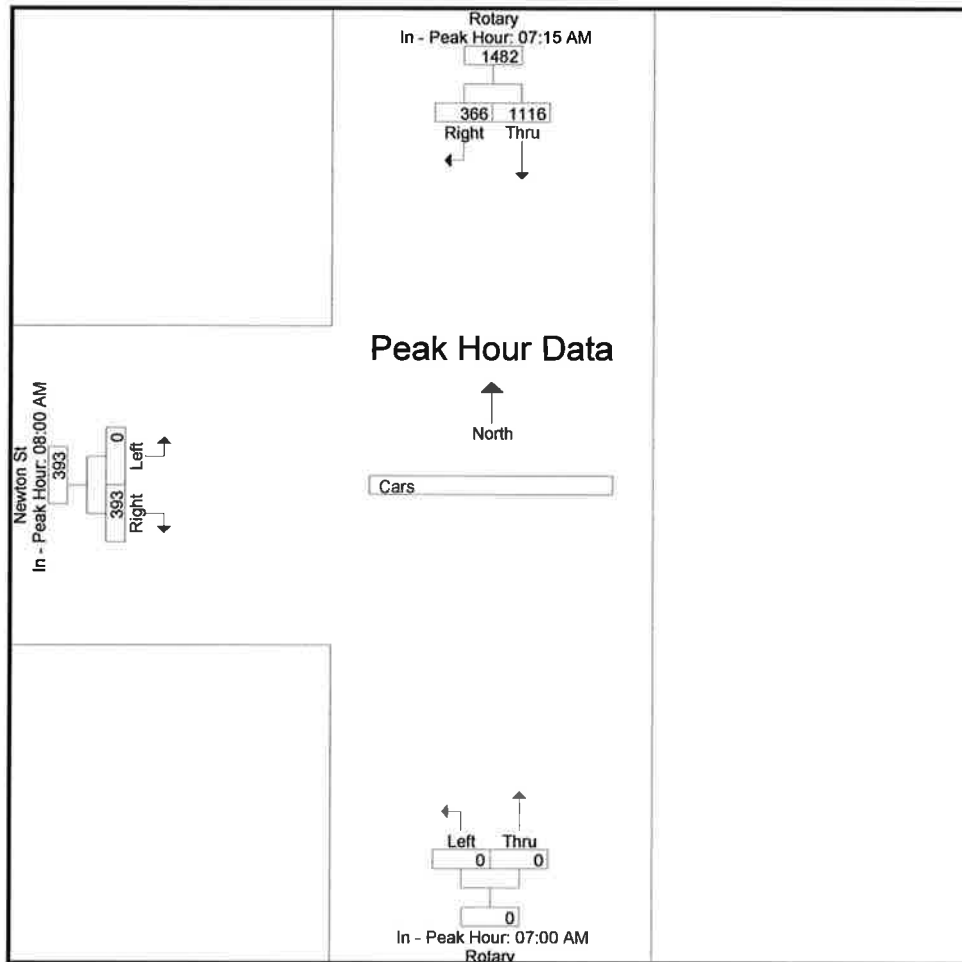
File Name : 73820004  
Site Code : 73820004  
Start Date : 1/18/2017  
Page No : 6

Start Time	Rotary From North			Rotary From South			Newton St From West			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. 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			07:00 AM			08:00 AM		
+0 mins.	234	81	315	0	0	0	0	93	93
+15 mins.	285	80	365	0	0	0	0	102	102
+30 mins.	309	104	413	0	0	0	0	101	101
+45 mins.	288	101	389	0	0	0	0	97	97
Total Volume	1116	366	1482	0	0	0	0	393	393
% App. Total	75.3	24.7		0	0		0	100	
PHF	.903	.880	.897	.000	.000	.000	.000	.963	.963



**Accurate Counts**  
978-664-2565

N/S Street : Horace James Circle  
E/W Street : Newton Street  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820004  
Site Code : 73820004  
Start Date : 1/18/2017  
Page No : 7

Groups Printed- Trucks

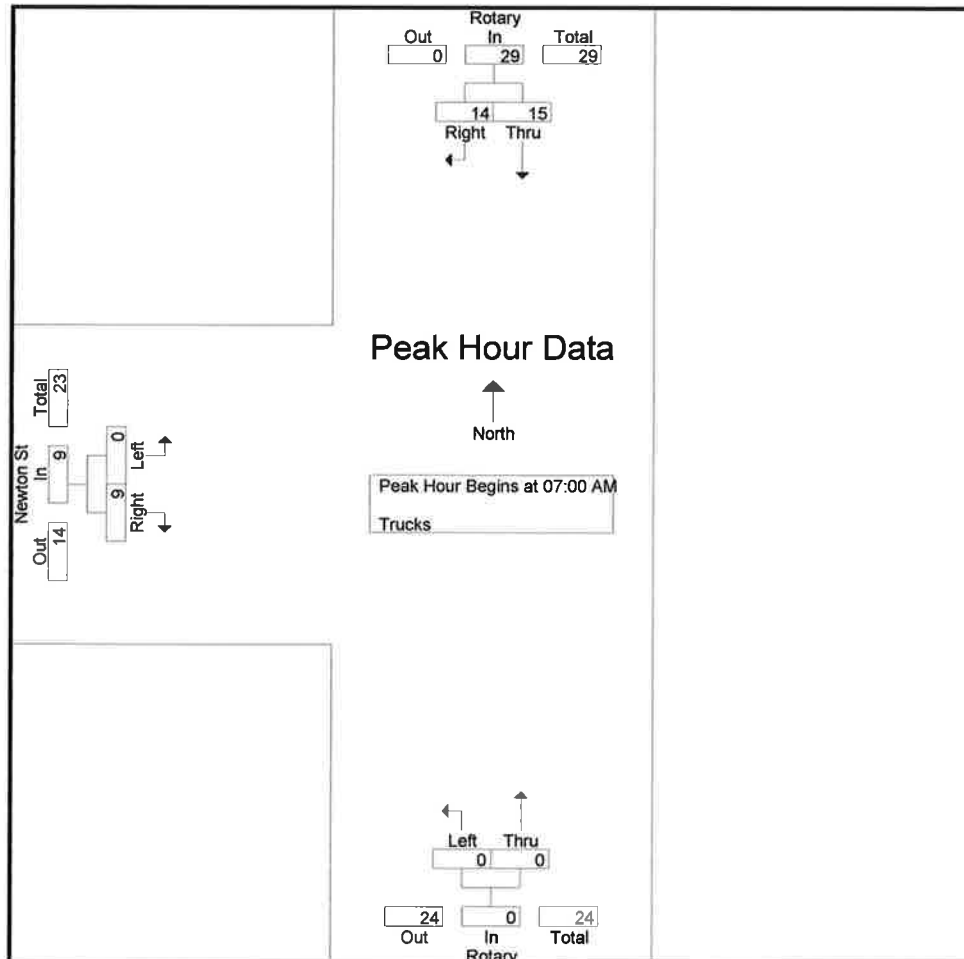
Start Time	Rotary From North		Rotary From South		Newton St From West		Int. Total
	Thru	Right	Left	Thru	Left	Right	
07:00 AM	3	4	0	0	0	1	8
07:15 AM	3	5	0	0	0	2	10
07:30 AM	5	3	0	0	0	2	10
07:45 AM	4	2	0	0	0	4	10
Total	15	14	0	0	0	9	38
08:00 AM	2	3	0	0	0	1	6
08:15 AM	3	2	0	0	0	0	5
08:30 AM	4	1	0	0	0	0	5
08:45 AM	5	2	0	0	0	1	8
Total	14	8	0	0	0	2	24
Grand Total	29	22	0	0	0	11	62
Apprch %	56.9	43.1	0	0	0	100	
Total %	46.8	35.5	0	0	0	17.7	

**Accurate Counts**  
978-664-2565

N/S Street : Horace James Circle  
E/W Street : Newton Street  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820004  
Site Code : 73820004  
Start Date : 1/18/2017  
Page No : 8

	Rotary From North			Rotary From South			Newton St 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	4	7	0	0	0	0	1	1	8
07:15 AM	3	5	8	0	0	0	0	2	2	10
07:30 AM	5	3	8	0	0	0	0	2	2	10
07:45 AM	4	2	6	0	0	0	0	4	4	10
Total Volume	15	14	29	0	0	0	0	9	9	38
% App. Total	51.7	48.3		0	0		0	100		
PHF	.750	.700	.906	.000	.000	.000	.000	.563	.563	.950



**Accurate Counts**  
978-664-2565

N/S Street : Horace James Circle  
E/W Street : Newton Street  
City/State : Brookline, MA  
Weather : Rain

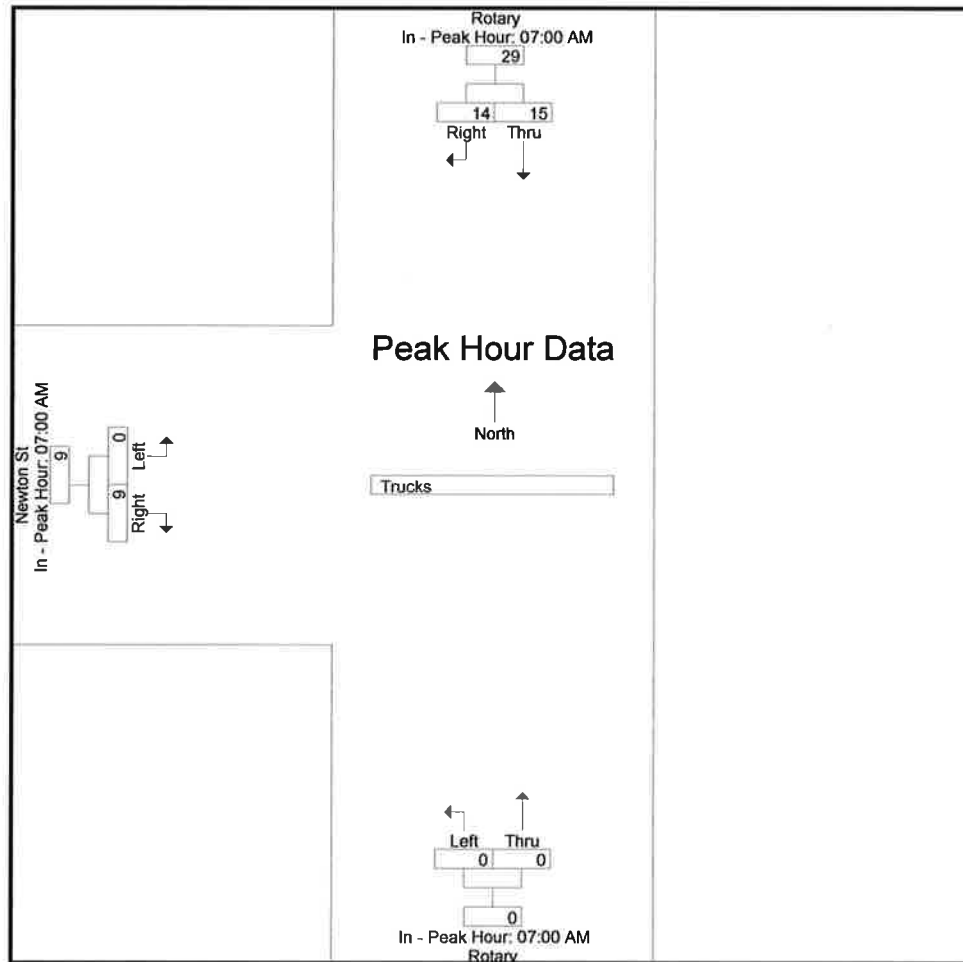
File Name : 73820004  
Site Code : 73820004  
Start Date : 1/18/2017  
Page No : 9

	Rotary From North			Rotary From South			Newton St 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	4	7	0	0	0	0	1	1
+15 mins.	3	5	8	0	0	0	0	2	2
+30 mins.	5	3	8	0	0	0	0	2	2
+45 mins.	4	2	6	0	0	0	0	4	4
Total Volume	15	14	29	0	0	0	0	9	9
% App. Total	51.7	48.3		0	0		0	100	
PHF	.750	.700	.906	.000	.000	.000	.000	.563	.563



**Accurate Counts**  
978-664-2565

N/S Street : Horace James Circle  
E/W Street : Newton Street  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820004  
Site Code : 73820004  
Start Date : 1/18/2017  
Page No : 10

Groups Printed- Bikes Peds												
Start Time	Rotary From North			Rotary From South			Newton St From West			Exclu. Total	Inclu. Total	Int. Total
	Thru	Right	Peds	Left	Thru	Peds	Left	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	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	0	0	0	0	0
08:15 AM	0	1	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
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	0	0	0	0	0	0	1	1
Grand Total	0	1	0	0	0	0	0	0	0	0	1	1
Apprch %	0	100		0	0		0	0				
Total %	0	100		0	0		0	0		0	100	

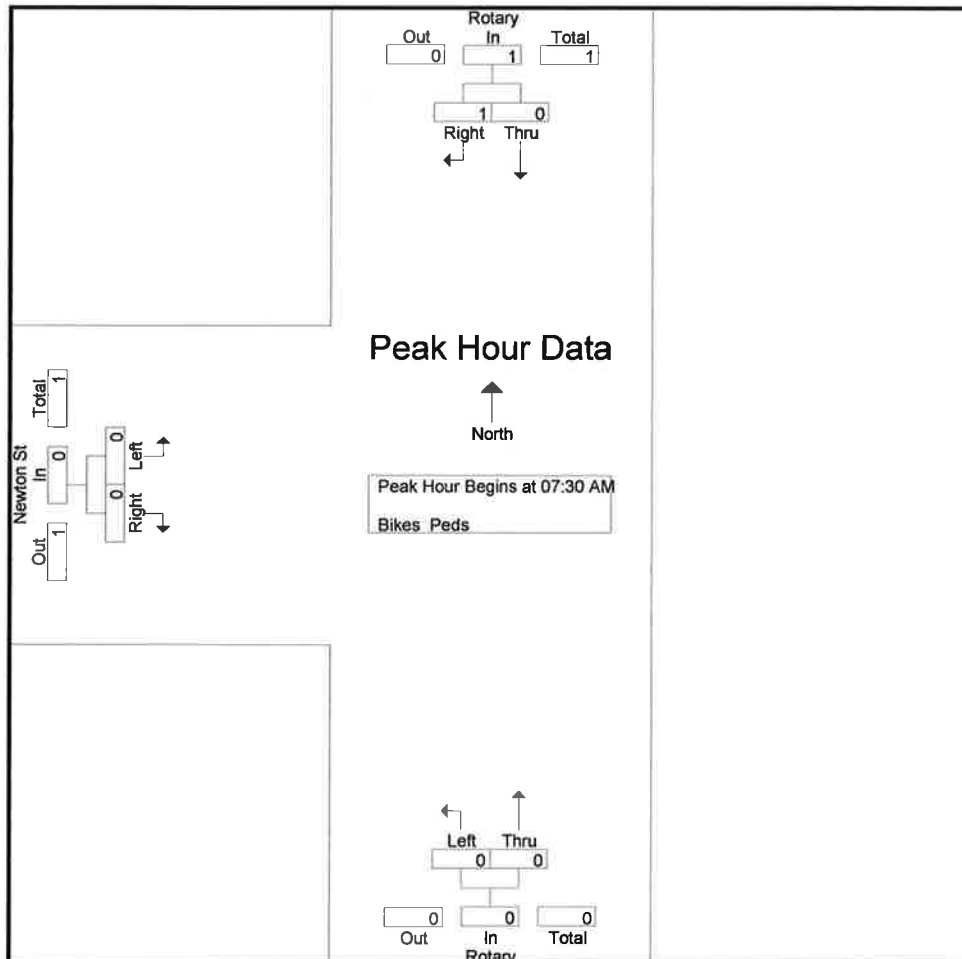


**Accurate Counts**  
978-664-2565

N/S Street : Horace James Circle  
E/W Street : Newton Street  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820004  
Site Code : 73820004  
Start Date : 1/18/2017  
Page No : 11

	Rotary From North			Rotary From South			Newton St 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 07:30 AM										
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	0	0	0
08:15 AM	0	1	1	0	0	0	0	0	0	1
Total Volume	0	1	1	0	0	0	0	0	0	1
% App. Total	0	100		0	0		0	0		
PHF	.000	.250	.250	.000	.000	.000	.000	.000	.000	.250



**Accurate Counts**  
978-664-2565

N/S Street : Horace James Circle  
E/W Street : Newton Street  
City/State : Brookline, MA  
Weather : Rain

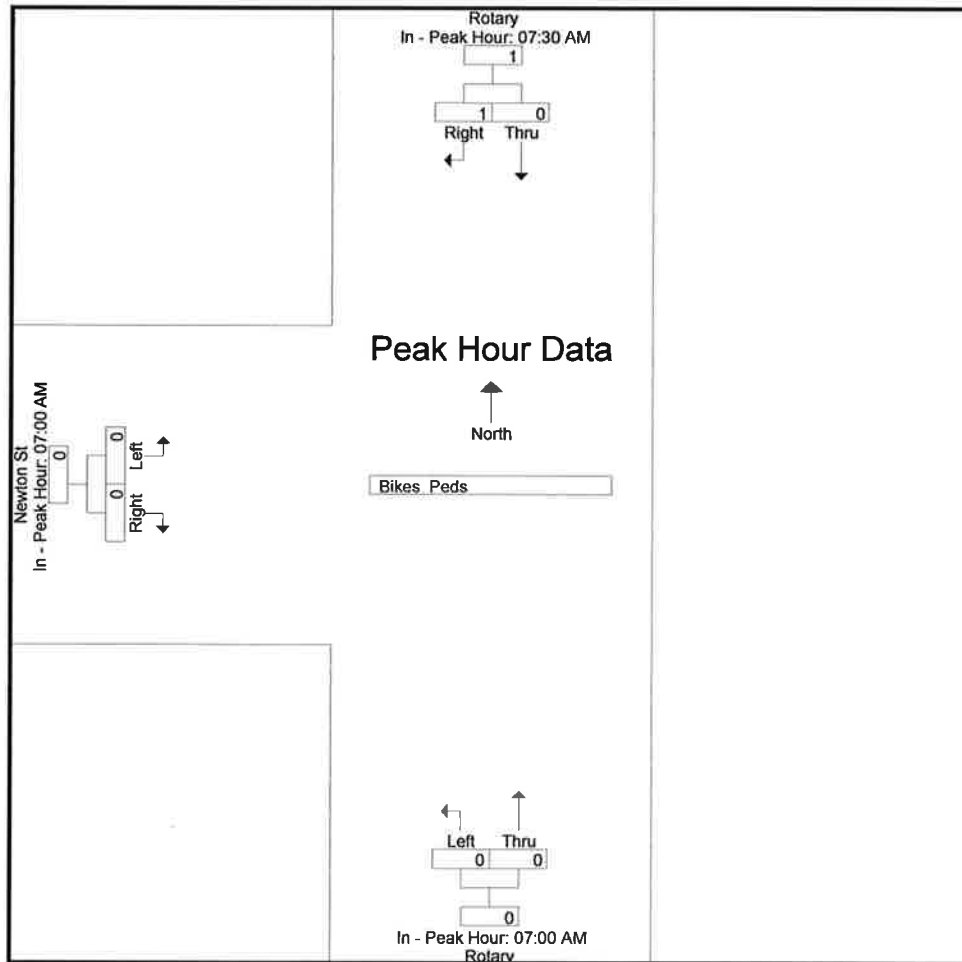
File Name : 73820004  
Site Code : 73820004  
Start Date : 1/18/2017  
Page No : 12

	Rotary From North			Rotary From South			Newton St 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:

	07:30 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	1	1	0	0	0	0	0	0
Total Volume	0	1	1	0	0	0	0	0	0
% App. Total	0	100		0	0		0	0	
PHF	.000	.250	.250	.000	.000	.000	.000	.000	.000



**Accurate Counts**  
978-664-2565

N/S Street : Horace James Circle  
E/W Street : Newton Street  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820004  
Site Code : 73820004  
Start Date : 1/18/2017  
Page No : 1

Groups Printed- Cars - Trucks

Start Time	Rotary From North		Rotary From South		Newton St From West		Int. Total
	Thru	Right	Left	Thru	Left	Right	
02:00 PM	254	141	0	0	0	46	441
02:15 PM	235	131	0	0	0	50	416
02:30 PM	275	151	0	0	0	54	480
02:45 PM	308	182	0	0	0	65	555
Total	1072	605	0	0	0	215	1892
03:00 PM	422	159	0	0	0	63	644
03:15 PM	390	165	0	0	0	63	618
03:30 PM	328	177	0	0	0	80	585
03:45 PM	331	200	0	0	0	68	599
Total	1471	701	0	0	0	274	2446
04:00 PM	414	163	0	0	0	56	633
04:15 PM	362	186	0	0	0	60	608
04:30 PM	424	164	0	0	0	71	659
04:45 PM	412	152	0	0	0	59	623
Total	1612	665	0	0	0	246	2523
Grand Total	4155	1971	0	0	0	735	6861
Apprch %	67.8	32.2	0	0	0	100	
Total %	60.6	28.7	0	0	0	10.7	
Cars	4117	1945	0	0	0	723	6785
% Cars	99.1	98.7	0	0	0	98.4	98.9
Trucks	38	26	0	0	0	12	76
% Trucks	0.9	1.3	0	0	0	1.6	1.1

**Accurate Counts**  
978-664-2565

N/S Street : Horace James Circle  
E/W Street : Newton Street  
City/State : Brookline, MA  
Weather : Rain

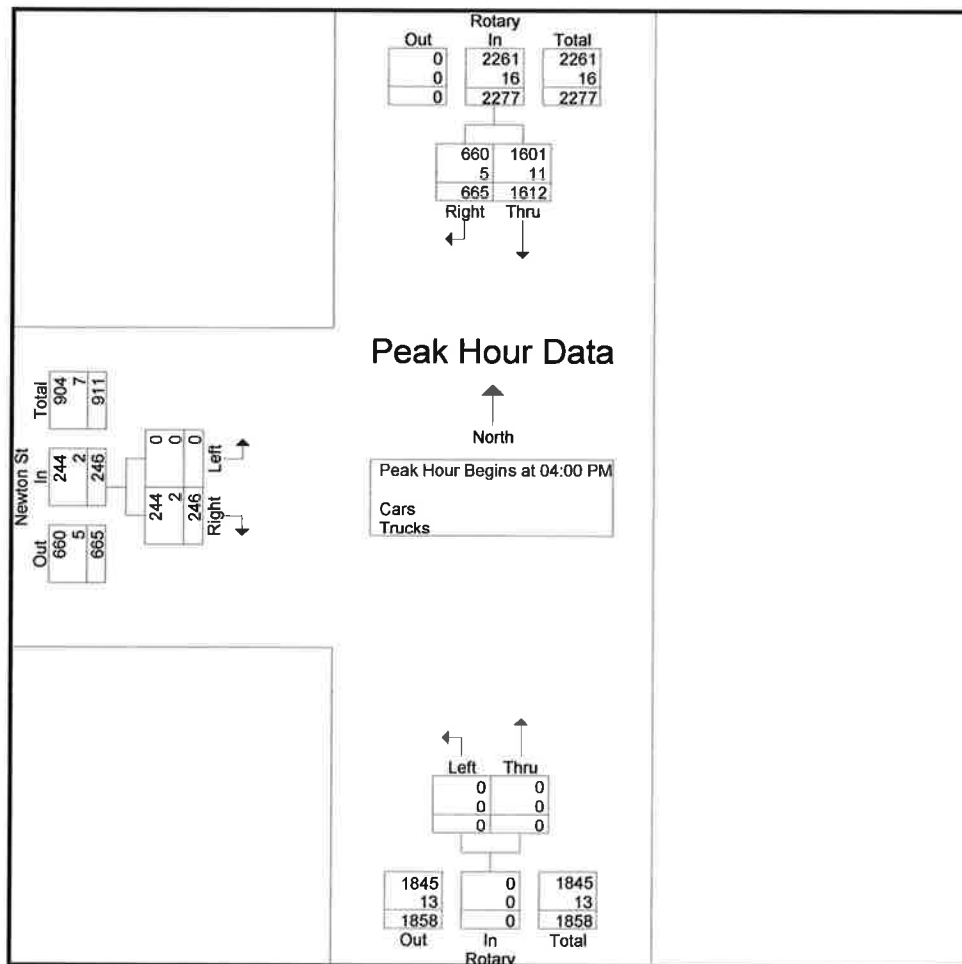
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Site Code : 73820004  
Start Date : 1/18/2017  
Page No : 2

Start Time	Rotary From North			Rotary From South			Newton St From West			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	

Peak Hour Analysis From 02:00 PM to 04:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:00 PM

04:00 PM	414	163	577	0	0	0	0	56	56	633
04:15 PM	362	<b>186</b>	548	0	0	0	0	60	60	608
04:30 PM	<b>424</b>	164	<b>588</b>	0	0	0	0	<b>71</b>	<b>71</b>	<b>659</b>
04:45 PM	412	152	564	0	0	0	0	59	59	623
Total Volume	1612	665	2277	0	0	0	0	246	246	2523
% App. Total	70.8	29.2		0	0		0	100		
PHF	.950	.894	.968	.000	.000	.000	.000	.866	.866	.957
Cars	1601	660	2261	0	0	0	0	244	244	2505
% Cars	99.3	99.2	99.3	0	0	0	0	99.2	99.2	99.3
Trucks	11	5	16	0	0	0	0	2	2	18
% Trucks	0.7	0.8	0.7	0	0	0	0	0.8	0.8	0.7



**Accurate Counts**  
978-664-2565

N/S Street : Horace James Circle  
E/W Street : Newton Street  
City/State : Brookline, MA  
Weather : Rain

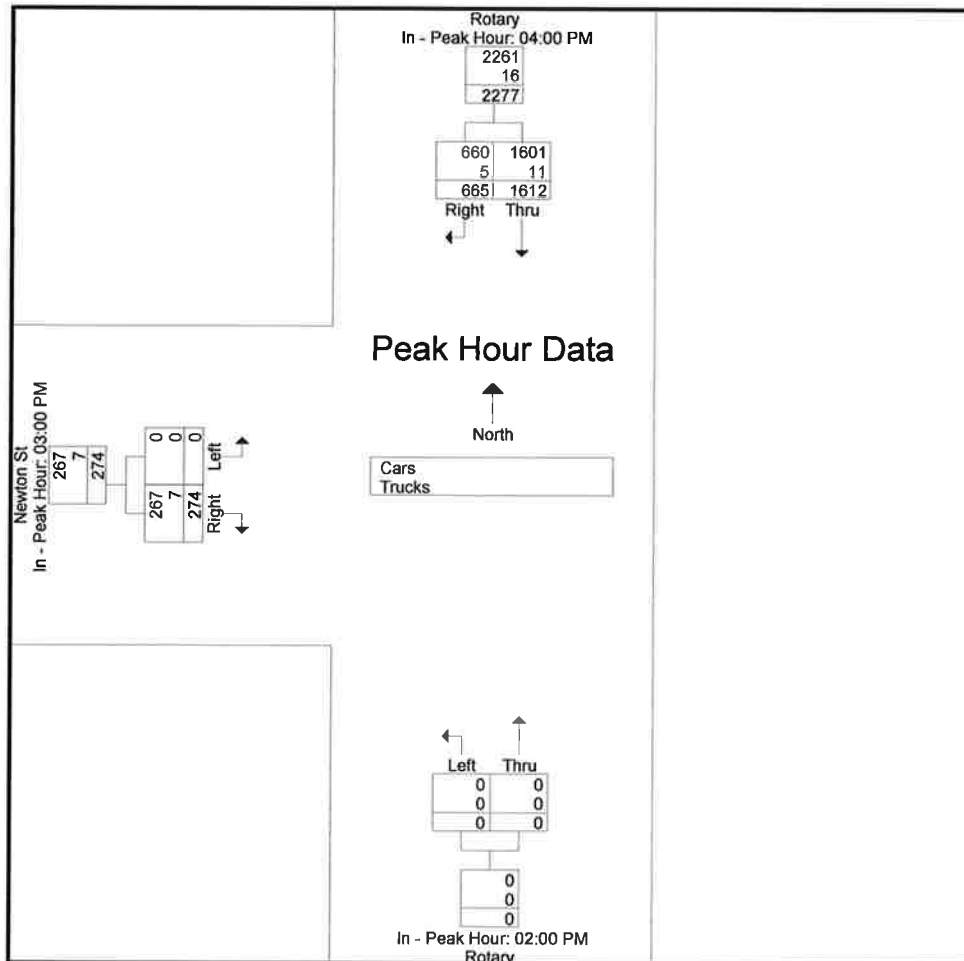
File Name : 73820004  
Site Code : 73820004  
Start Date : 1/18/2017  
Page No : 3

	Rotary From North			Rotary From South			Newton St 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM			02:00 PM			03:00 PM		
+0 mins.	414	163	577	0	0	0	0	63	63
+15 mins.	362	186	548	0	0	0	0	63	63
+30 mins.	424	164	588	0	0	0	0	80	80
+45 mins.	412	152	564	0	0	0	0	68	68
Total Volume	1612	665	2277	0	0	0	0	274	274
% App. Total	70.8	29.2		0	0		0	100	
PHF	.950	.894	.968	.000	.000	.000	.000	.856	.856
Cars	1601	660	2261	0	0	0	0	267	267
% Cars	99.3	99.2	99.3	0	0	0	0	97.4	97.4
Trucks	11	5	16	0	0	0	0	7	7
% Trucks	0.7	0.8	0.7	0	0	0	0	2.6	2.6



**Accurate Counts**  
978-664-2565

N/S Street : Horace James Circle  
E/W Street : Newton Street  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820004  
Site Code : 73820004  
Start Date : 1/18/2017  
Page No : 4

Groups Printed- Cars

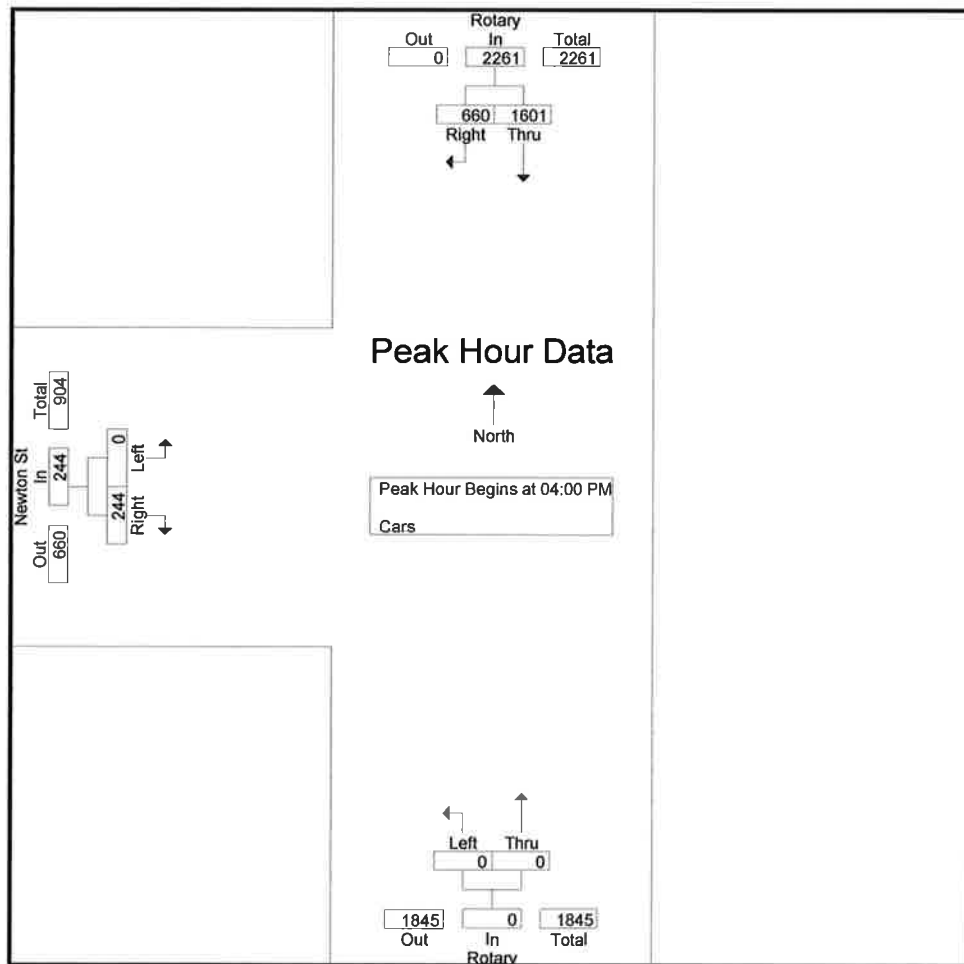
Start Time	Rotary From North		Rotary From South		Newton St From West		Int. Total
	Thru	Right	Left	Thru	Left	Right	
02:00 PM	248	139	0	0	0	45	432
02:15 PM	231	127	0	0	0	49	407
02:30 PM	275	147	0	0	0	53	475
02:45 PM	303	179	0	0	0	65	547
Total	1057	592	0	0	0	212	1861
03:00 PM	420	158	0	0	0	62	640
03:15 PM	388	163	0	0	0	62	613
03:30 PM	325	174	0	0	0	75	574
03:45 PM	326	198	0	0	0	68	592
Total	1459	693	0	0	0	267	2419
04:00 PM	410	160	0	0	0	55	625
04:15 PM	357	184	0	0	0	60	601
04:30 PM	423	164	0	0	0	71	658
04:45 PM	411	152	0	0	0	58	621
Total	1601	660	0	0	0	244	2505
Grand Total	4117	1945	0	0	0	723	6785
Apprch %	67.9	32.1	0	0	0	100	
Total %	60.7	28.7	0	0	0	10.7	

**Accurate Counts**  
978-664-2565

N/S Street : Horace James Circle  
E/W Street : Newton Street  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820004  
Site Code : 73820004  
Start Date : 1/18/2017  
Page No : 5

	Rotary From North			Rotary From South			Newton St 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 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	410	160	570	0	0	0	0	55	55	625
04:15 PM	357	184	541	0	0	0	0	60	60	601
04:30 PM	423	164	587	0	0	0	0	71	71	658
04:45 PM	411	152	563	0	0	0	0	58	58	621
Total Volume	1601	660	2261	0	0	0	0	244	244	2505
% App. Total	70.8	29.2		0	0		0	100		
PHF	.946	.897	.963	.000	.000	.000	.000	.859	.859	.952



**Accurate Counts**  
978-664-2565

N/S Street : Horace James Circle  
E/W Street : Newton Street  
City/State : Brookline, MA  
Weather : Rain

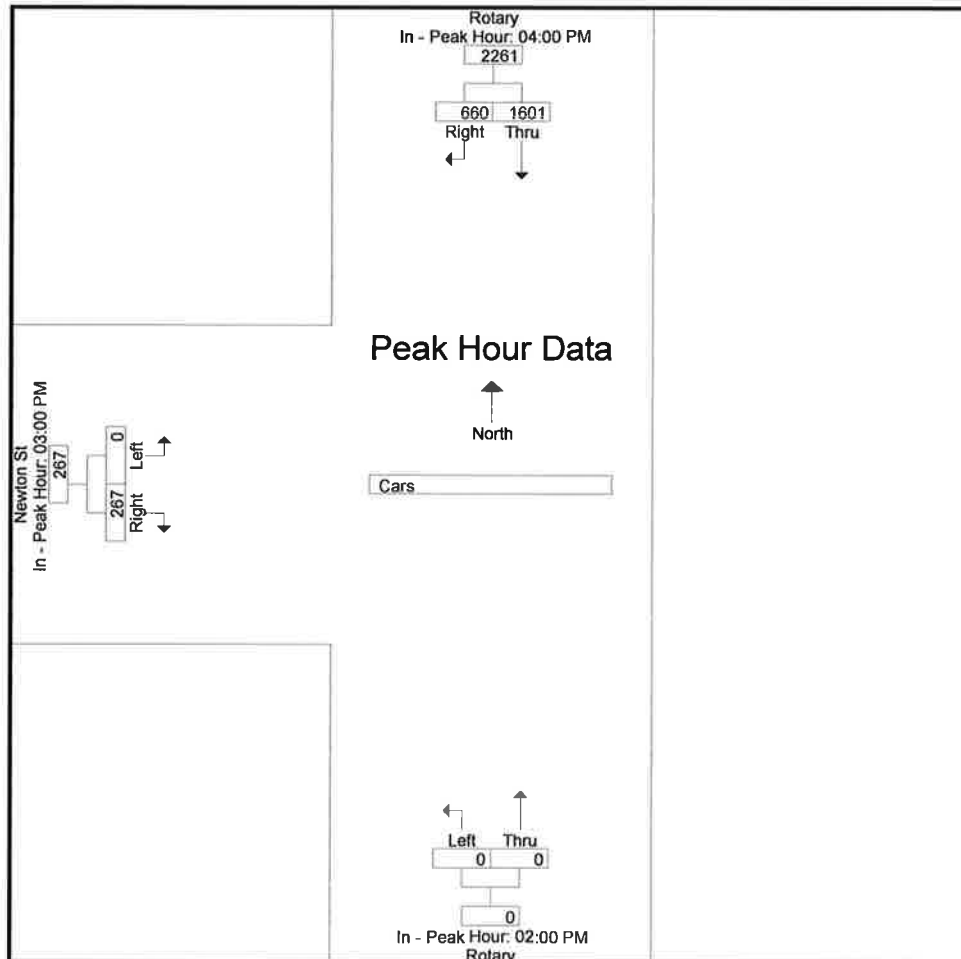
File Name : 73820004  
Site Code : 73820004  
Start Date : 1/18/2017  
Page No : 6

	Rotary From North			Rotary From South			Newton St 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM			02:00 PM			03:00 PM		
+0 mins.	410	160	570	0	0	0	0	62	62
+15 mins.	357	184	541	0	0	0	0	62	62
+30 mins.	423	164	587	0	0	0	0	75	75
+45 mins.	411	152	563	0	0	0	0	68	68
Total Volume	1601	660	2261	0	0	0	0	267	267
% App. Total	70.8	29.2		0	0		0	100	
PHF	.946	.897	.963	.000	.000	.000	.000	.890	.890





**Accurate Counts**  
978-664-2565

N/S Street : Horace James Circle  
E/W Street : Newton Street  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820004  
Site Code : 73820004  
Start Date : 1/18/2017  
Page No : 7

Groups Printed- Trucks

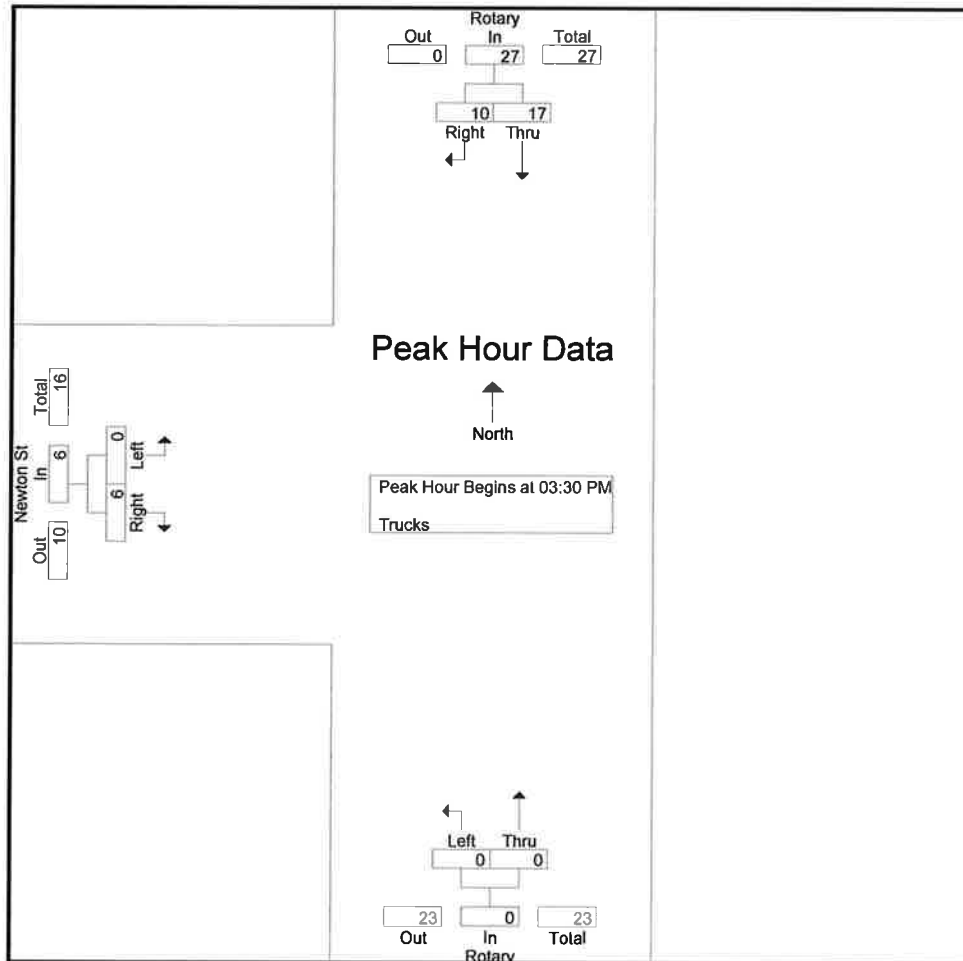
Start Time	Rotary From North		Rotary From South		Newton St From West		Int. Total
	Thru	Right	Left	Thru	Left	Right	
02:00 PM	6	2	0	0	0	1	9
02:15 PM	4	4	0	0	0	1	9
02:30 PM	0	4	0	0	0	1	5
02:45 PM	5	3	0	0	0	0	8
Total	15	13	0	0	0	3	31
03:00 PM	2	1	0	0	0	1	4
03:15 PM	2	2	0	0	0	1	5
03:30 PM	3	3	0	0	0	5	11
03:45 PM	5	2	0	0	0	0	7
Total	12	8	0	0	0	7	27
04:00 PM	4	3	0	0	0	1	8
04:15 PM	5	2	0	0	0	0	7
04:30 PM	1	0	0	0	0	0	1
04:45 PM	1	0	0	0	0	1	2
Total	11	5	0	0	0	2	18
Grand Total	38	26	0	0	0	12	76
Apprch %	59.4	40.6	0	0	0	100	
Total %	50	34.2	0	0	0	15.8	

**Accurate Counts**  
978-664-2565

N/S Street : Horace James Circle  
E/W Street : Newton Street  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820004  
Site Code : 73820004  
Start Date : 1/18/2017  
Page No : 8

	Rotary From North			Rotary From South			Newton St 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 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 03:30 PM										
03:30 PM	3	3	6	0	0	0	0	5	5	11
03:45 PM	5	2	7	0	0	0	0	0	0	7
04:00 PM	4	3	7	0	0	0	0	1	1	8
04:15 PM	5	2	7	0	0	0	0	0	0	7
Total Volume	17	10	27	0	0	0	0	6	6	33
% App. Total	63	37		0	0		0	100		
PHF	.850	.833	.964	.000	.000	.000	.000	.300	.300	.750



**Accurate Counts**  
978-664-2565

N/S Street : Horace James Circle  
E/W Street : Newton Street  
City/State : Brookline, MA  
Weather : Rain

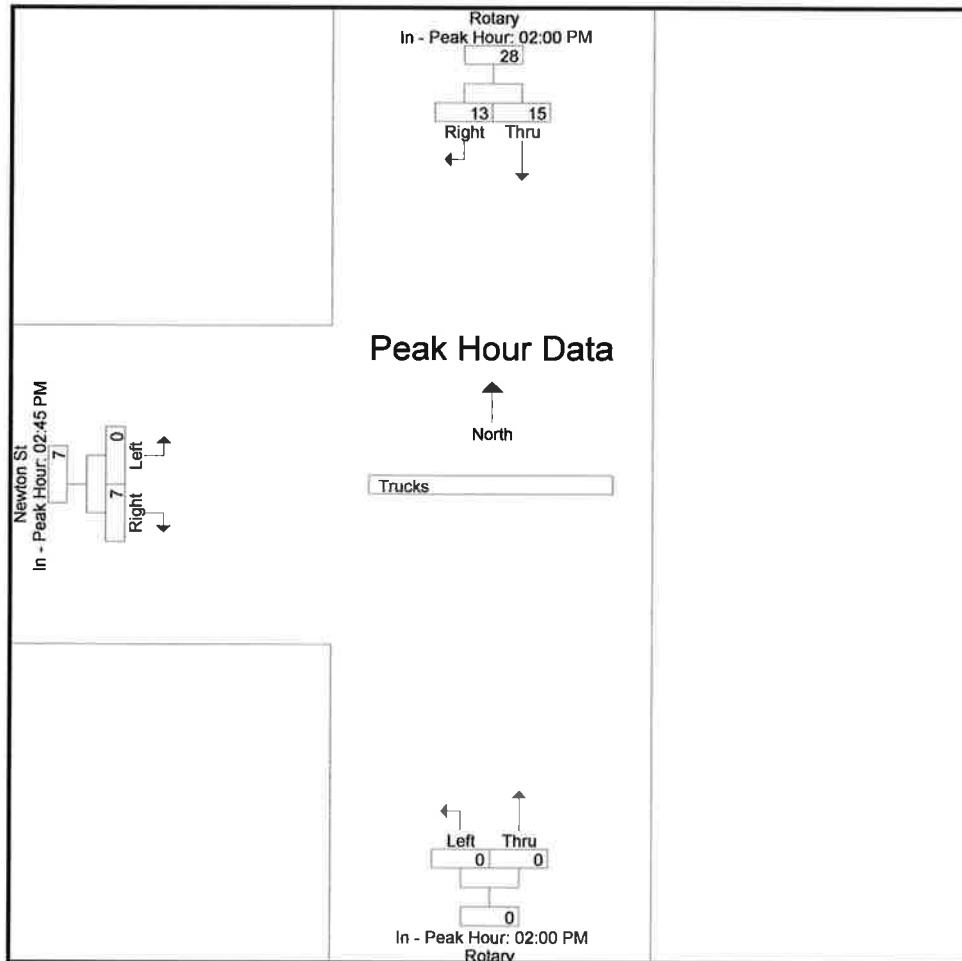
File Name : 73820004  
Site Code : 73820004  
Start Date : 1/18/2017  
Page No : 9

	Rotary From North			Rotary From South			Newton St 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:00 PM			02:00 PM			02:45 PM		
+0 mins.	6	2	8	0	0	0	0	0	0
+15 mins.	4	4	8	0	0	0	0	1	1
+30 mins.	0	4	4	0	0	0	0	1	1
+45 mins.	5	3	8	0	0	0	0	5	5
Total Volume	15	13	28	0	0	0	0	7	7
% App. Total	53.6	46.4		0	0		0	100	
PHF	.625	.813	.875	.000	.000	.000	.000	.350	.350



**Accurate Counts**  
978-664-2565

N/S Street : Horace James Circle  
E/W Street : Newton Street  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820004  
Site Code : 73820004  
Start Date : 1/18/2017  
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Groups Printed- Bikes Peds

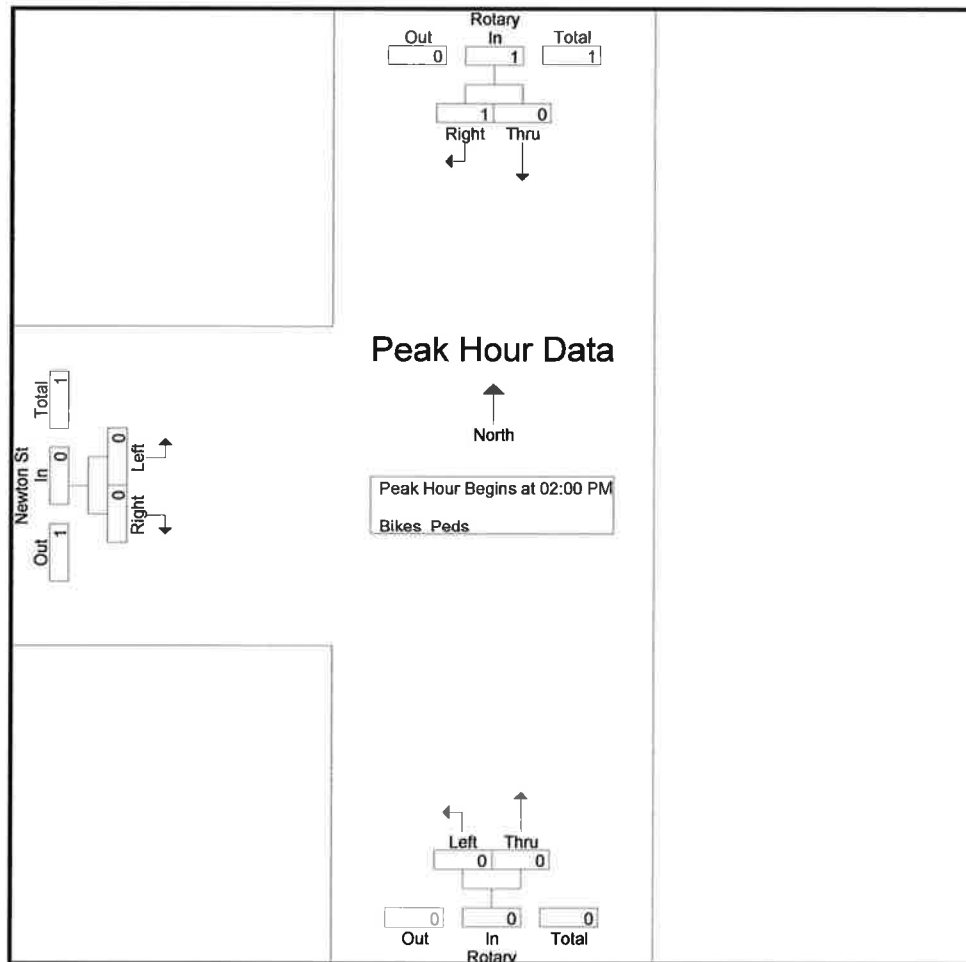
Start Time	Rotary From North			Rotary From South			Newton St From West			Exclu. Total	Inclu. Total	Int. Total
	Thru	Right	Peds	Left	Thru	Peds	Left	Right	Peds			
02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	1	0	0	0	0	0	0	0	0	1	1
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	0	0	0	0	0	0	1	1
03:00 PM	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
03:30 PM	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
Total	0	0	0	0	0	0	0	0	0	0	0	0
04:00 PM	0	0	0	0	0	0	0	1	0	0	1	1
04:15 PM	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
04:45 PM	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	1	0	0	0	0	0	1	0	0	2	2
Apprch %	0	100		0	0		0	100				
Total %	0	50		0	0		0	50		0	100	

**Accurate Counts**  
978-664-2565

N/S Street : Horace James Circle  
E/W Street : Newton Street  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820004  
Site Code : 73820004  
Start Date : 1/18/2017  
Page No : 11

	Rotary From North			Rotary From South			Newton St 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 04:45 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	1	1	0	0	0	0	0	0	1
02:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	1	0	0	0	0	0	0	1
% App. Total	0	100		0	0		0	0		
PHF	.000	.250	.250	.000	.000	.000	.000	.000	.000	.250



**Accurate Counts**  
978-664-2565

N/S Street : Horace James Circle  
E/W Street : Newton Street  
City/State : Brookline, MA  
Weather : Rain

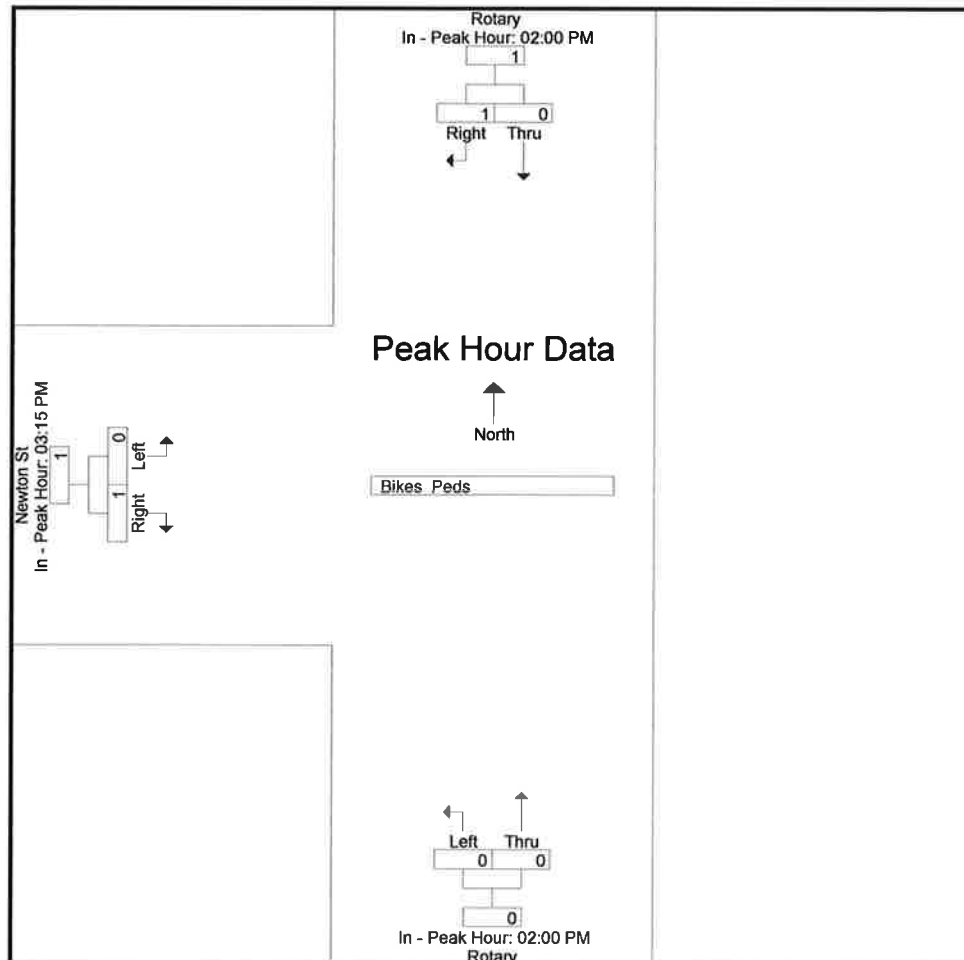
File Name : 73820004  
Site Code : 73820004  
Start Date : 1/18/2017  
Page No : 12

	Rotary From North			Rotary From South			Newton St 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

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



**Accurate Counts**  
978-664-2565

N/S Street : Horace James Circle  
E/W Street : Hammond Pond Parkway  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820005  
Site Code : 73820005  
Start Date : 1/18/2017  
Page No : 1

Groups Printed- Cars - Trucks

Start Time	Rotary From North		Rotary From South		Hammond Pond Parkway From West		Int. Total
	Thru	Right	Left	Thru	Left	Right	
07:00 AM	67	372	0	0	0	159	598
07:15 AM	125	391	0	0	0	198	714
07:30 AM	130	400	0	0	0	243	773
07:45 AM	161	385	0	0	0	258	804
Total	483	1548	0	0	0	858	2889
08:00 AM	137	402	0	0	0	257	796
08:15 AM	105	401	0	0	0	214	720
08:30 AM	122	370	0	0	0	196	688
08:45 AM	145	385	0	0	0	194	724
Total	509	1558	0	0	0	861	2928
Grand Total	992	3106	0	0	0	1719	5817
Apprch %	24.2	75.8	0	0	0	100	
Total %	17.1	53.4	0	0	0	29.6	
Cars	958	3086	0	0	0	1702	5746
% Cars	96.6	99.4	0	0	0	99	98.8
Trucks	34	20	0	0	0	17	71
% Trucks	3.4	0.6	0	0	0	1	1.2

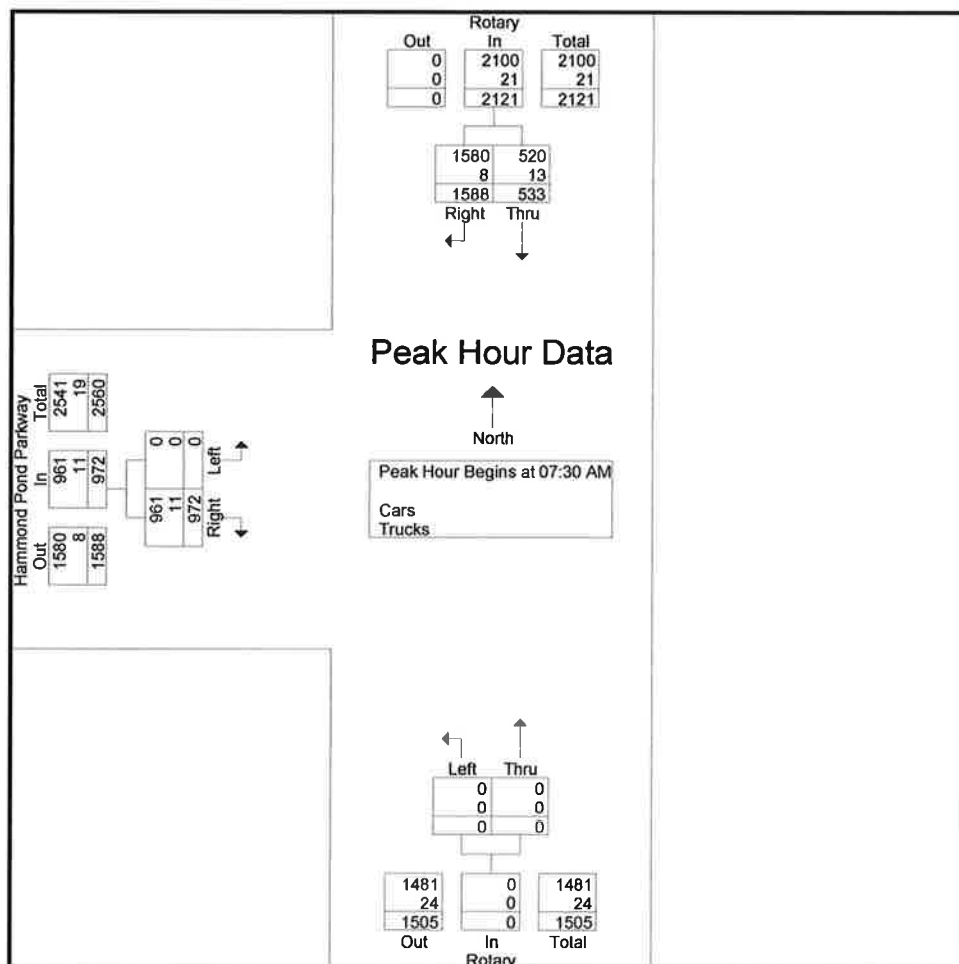
# Accurate Counts

978-664-2565

N/S Street : Horace James Circle  
 E/W Street : Hammond Pond Parkway  
 City/State : Brookline, MA  
 Weather : Rain

File Name : 73820005  
 Site Code : 73820005  
 Start Date : 1/18/2017  
 Page No : 2

	Rotary From North			Rotary From South			Hammond Pond Parkway 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 07:30 AM										
07:30 AM	130	400	530	0	0	0	0	243	243	773
07:45 AM	161	385	546	0	0	0	0	258	258	804
08:00 AM	137	402	539	0	0	0	0	257	257	796
08:15 AM	105	401	506	0	0	0	0	214	214	720
Total Volume	533	1588	2121	0	0	0	0	972	972	3093
% App. Total	25.1	74.9		0	0		0	100		
PHF	.828	.988	.971	.000	.000	.000	.000	.942	.942	.962
Cars	520	1580	2100	0	0	0	0	961	961	3061
% Cars	97.6	99.5	99.0	0	0	0	0	98.9	98.9	99.0
Trucks	13	8	21	0	0	0	0	11	11	32
% Trucks	2.4	0.5	1.0	0	0	0	0	1.1	1.1	1.0





**Accurate Counts**  
978-664-2565

N/S Street : Horace James Circle  
E/W Street : Hammond Pond Parkway  
City/State : Brookline, MA  
Weather : Rain

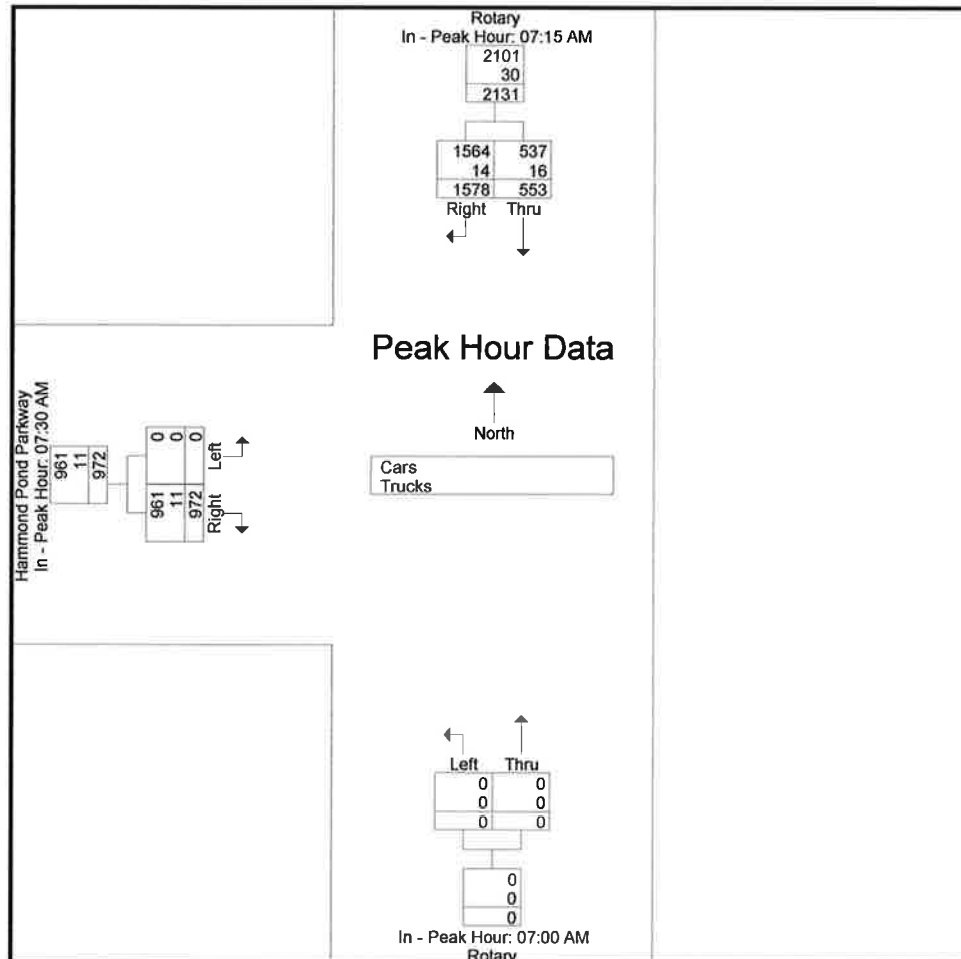
File Name : 73820005  
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	Rotary From North			Rotary From South			Hammond Pond Parkway From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total

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			07:00 AM			07:30 AM		
+0 mins.	125	391	516	0	0	0	0	243	243
+15 mins.	130	400	530	0	0	0	0	<b>258</b>	<b>258</b>
+30 mins.	<b>161</b>	385	<b>546</b>	0	0	0	0	257	257
+45 mins.	137	<b>402</b>	539	0	0	0	0	214	214
Total Volume	553	1578	2131	0	0	0	0	972	972
% App. Total	26	74		0	0		0	100	
PHF	.859	.981	.976	.000	.000	.000	.000	.942	.942
Cars	537	1564	2101	0	0	0	0	961	961
% Cars	97.1	99.1	98.6	0	0	0	0	98.9	98.9
Trucks	16	14	30	0	0	0	0	11	11
% Trucks	2.9	0.9	1.4	0	0	0	0	1.1	1.1



**Accurate Counts**  
978-664-2565

N/S Street : Horace James Circle  
E/W Street : Hammond Pond Parkway  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820005  
Site Code : 73820005  
Start Date : 1/18/2017  
Page No : 4

Groups Printed- Cars

Start Time	Rotary From North		Rotary From South		Hammond Pond Parkway From West		Int. Total
	Thru	Right	Left	Thru	Left	Right	
07:00 AM	61	368	0	0	0	158	587
07:15 AM	119	385	0	0	0	196	700
07:30 AM	124	396	0	0	0	241	761
07:45 AM	158	383	0	0	0	255	796
Total	462	1532	0	0	0	850	2844
08:00 AM	136	400	0	0	0	253	789
08:15 AM	102	401	0	0	0	212	715
08:30 AM	119	368	0	0	0	194	681
08:45 AM	139	385	0	0	0	193	717
Total	496	1554	0	0	0	852	2902
Grand Total	958	3086	0	0	0	1702	5746
Apprch %	23.7	76.3	0	0	0	100	
Total %	16.7	53.7	0	0	0	29.6	

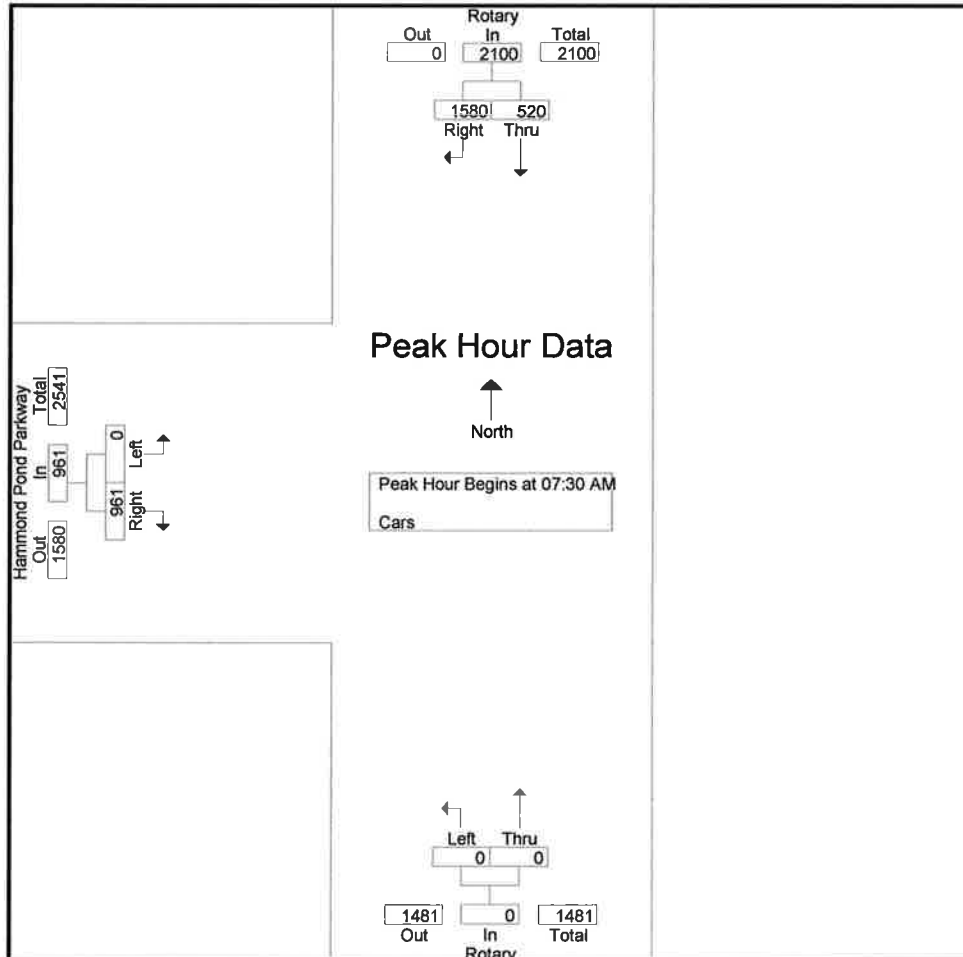
# Accurate Counts

978-664-2565

N/S Street : Horace James Circle  
 E/W Street : Hammond Pond Parkway  
 City/State : Brookline, MA  
 Weather : Rain

File Name : 73820005  
 Site Code : 73820005  
 Start Date : 1/18/2017  
 Page No : 5

	Rotary From North			Rotary From South			Hammond Pond Parkway 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 07:30 AM										
07:30 AM	124	396	520	0	0	0	0	241	241	761
07:45 AM	158	383	541	0	0	0	0	255	255	796
08:00 AM	136	400	536	0	0	0	0	253	253	789
08:15 AM	102	401	503	0	0	0	0	212	212	715
Total Volume	520	1580	2100	0	0	0	0	961	961	3061
% App. Total	24.8	75.2		0	0		0	100		
PHF	.823	.985	.970	.000	.000	.000	.000	.942	.942	.961



**Accurate Counts**  
978-664-2565

N/S Street : Horace James Circle  
E/W Street : Hammond Pond Parkway  
City/State : Brookline, MA  
Weather : Rain

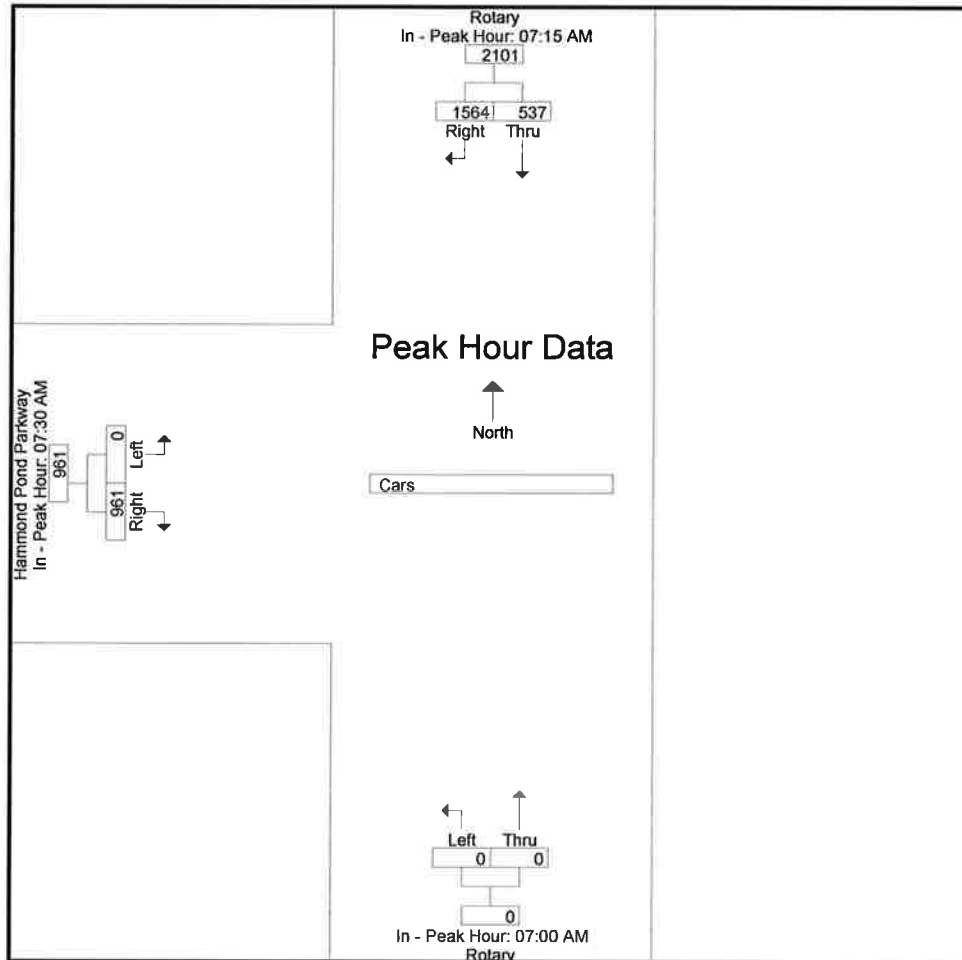
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Site Code : 73820005  
Start Date : 1/18/2017  
Page No : 6

	Rotary From North			Rotary From South			Hammond Pond Parkway 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			07:00 AM			07:30 AM		
+0 mins.	119	385	504	0	0	0	0	241	241
+15 mins.	124	396	520	0	0	0	0	<b>255</b>	<b>255</b>
+30 mins.	<b>158</b>	383	<b>541</b>	0	0	0	0	253	253
+45 mins.	136	<b>400</b>	536	0	0	0	0	212	212
Total Volume	537	1564	2101	0	0	0	0	961	961
% App. Total	25.6	74.4		0	0		0	100	
PHF	.850	.978	.971	.000	.000	.000	.000	.942	.942



**Accurate Counts**  
978-664-2565

N/S Street : Horace James Circle  
E/W Street : Hammond Pond Parkway  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820005  
Site Code : 73820005  
Start Date : 1/18/2017  
Page No : 7

Groups Printed- Trucks

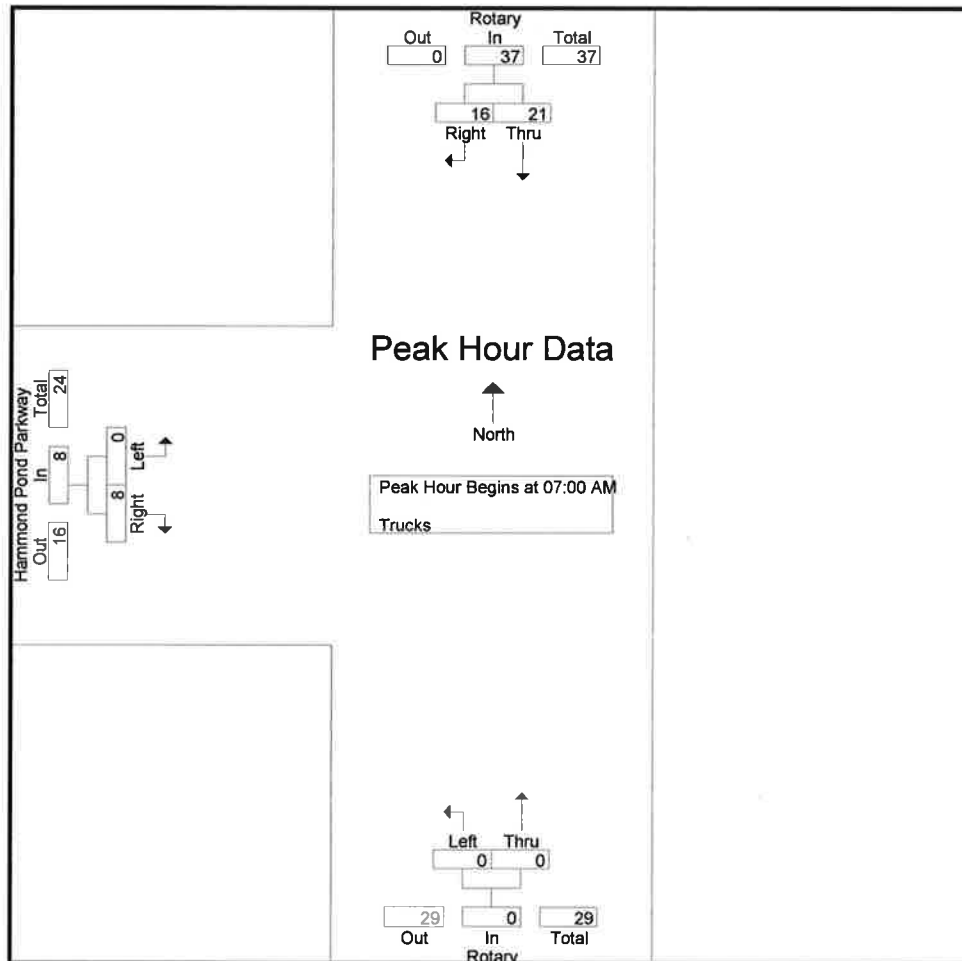
Start Time	Rotary From North		Rotary From South		Hammond Pond Parkway From West		Int. Total
	Thru	Right	Left	Thru	Left	Right	
07:00 AM	6	4	0	0	0	1	11
07:15 AM	6	6	0	0	0	2	14
07:30 AM	6	4	0	0	0	2	12
07:45 AM	3	2	0	0	0	3	8
Total	21	16	0	0	0	8	45
08:00 AM	1	2	0	0	0	4	7
08:15 AM	3	0	0	0	0	2	5
08:30 AM	3	2	0	0	0	2	7
08:45 AM	6	0	0	0	0	1	7
Total	13	4	0	0	0	9	26
Grand Total	34	20	0	0	0	17	71
Apprch %	63	37	0	0	0	100	
Total %	47.9	28.2	0	0	0	23.9	

**Accurate Counts**  
978-664-2565

N/S Street : Horace James Circle  
E/W Street : Hammond Pond Parkway  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820005  
Site Code : 73820005  
Start Date : 1/18/2017  
Page No : 8

	Rotary From North			Rotary From South			Hammond Pond Parkway 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	6	4	10	0	0	0	0	1	1	11
07:15 AM	6	6	12	0	0	0	0	2	2	14
07:30 AM	6	4	10	0	0	0	0	2	2	12
07:45 AM	3	2	5	0	0	0	0	3	3	8
Total Volume	21	16	37	0	0	0	0	8	8	45
% App. Total	56.8	43.2		0	0		0	100		
PHF	.875	.667	.771	.000	.000	.000	.000	.667	.667	.804



**Accurate Counts**  
978-664-2565

N/S Street : Horace James Circle  
E/W Street : Hammond Pond Parkway  
City/State : Brookline, MA  
Weather : Rain

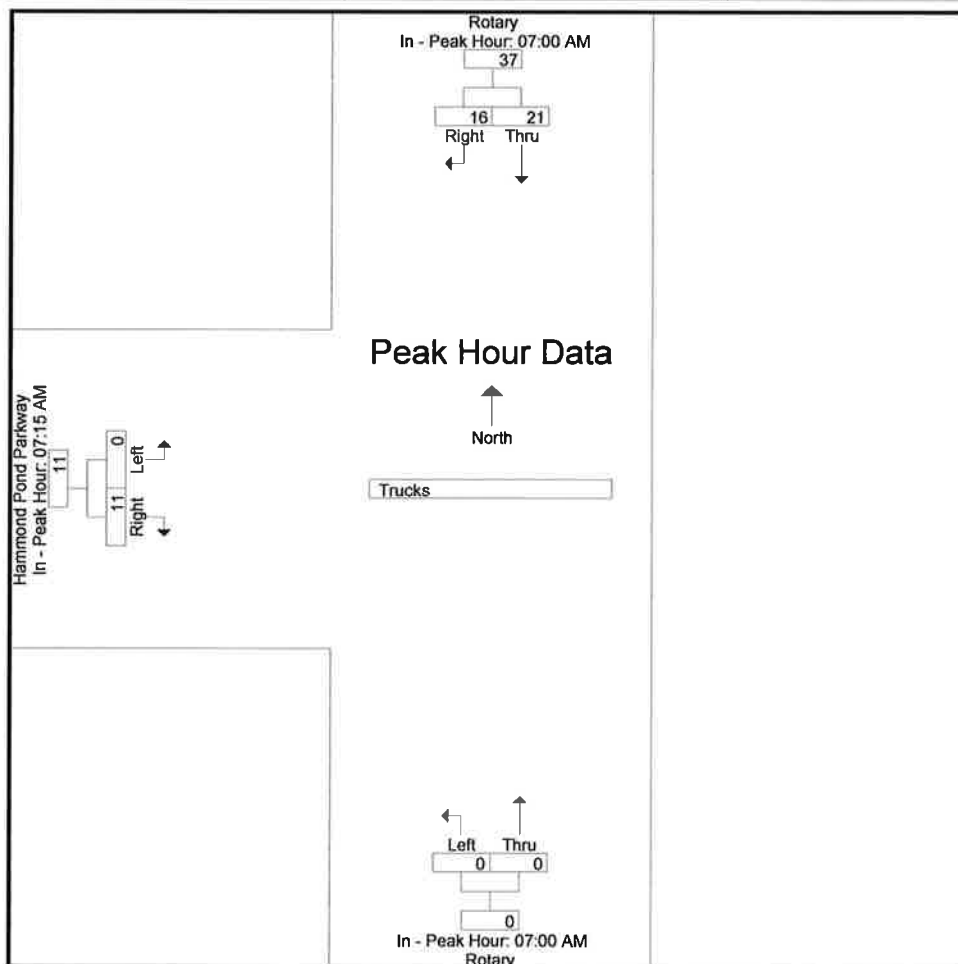
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Start Date : 1/18/2017  
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	Rotary From North			Rotary From South			Hammond Pond Parkway From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total

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			07:15 AM		
+0 mins.	6	4	10	0	0	0	0	2	2
+15 mins.	6	6	12	0	0	0	0	2	2
+30 mins.	6	4	10	0	0	0	0	3	3
+45 mins.	3	2	5	0	0	0	0	4	4
Total Volume	21	16	37	0	0	0	0	11	11
% App. Total	56.8	43.2		0	0		0	100	
PHF	.875	.667	.771	.000	.000	.000	.000	.688	.688



**978-664-2565**

File Name : 73820005  
Site Code : 73820005  
Start Date : 1/18/2017  
Page No : 10

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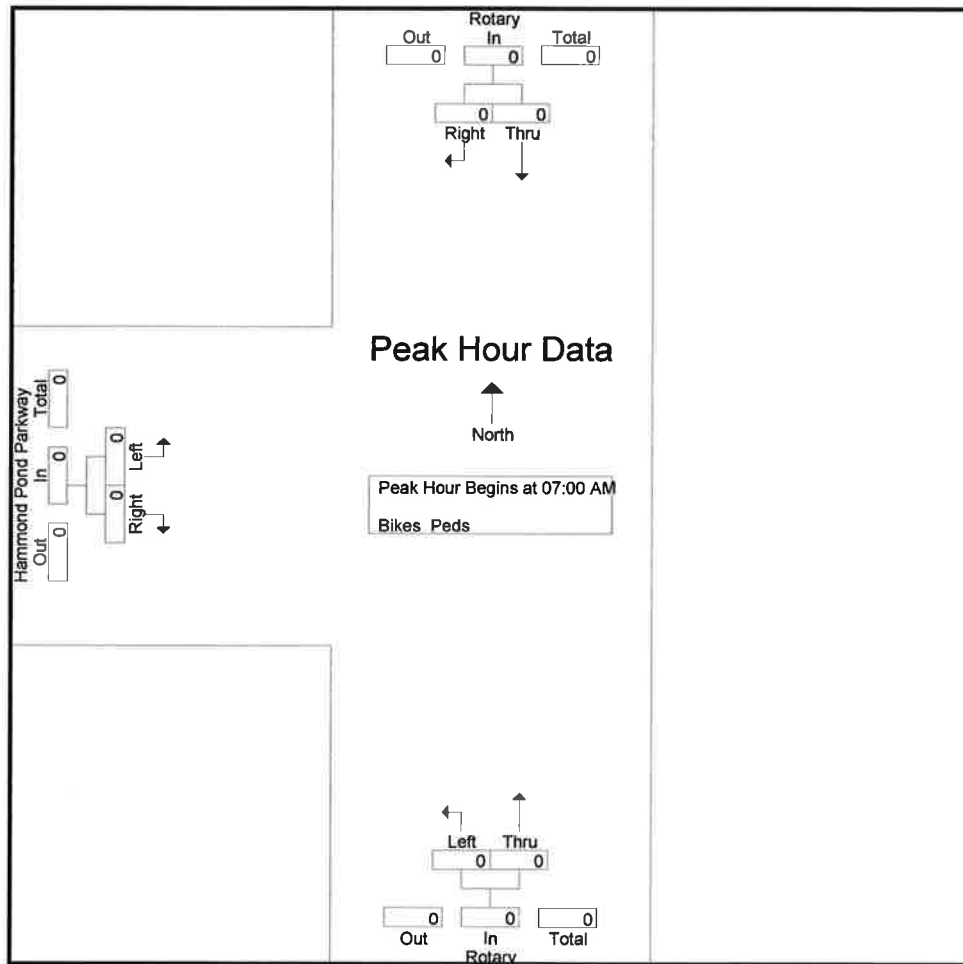


**Accurate Counts**  
978-664-2565

N/S Street : Horace James Circle  
E/W Street : Hammond Pond Parkway  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820005  
Site Code : 73820005  
Start Date : 1/18/2017  
Page No : 11

	Rotary From North			Rotary From South			Hammond Pond Parkway 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	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 : Horace James Circle  
E/W Street : Hammond Pond Parkway  
City/State : Brookline, MA  
Weather : Rain

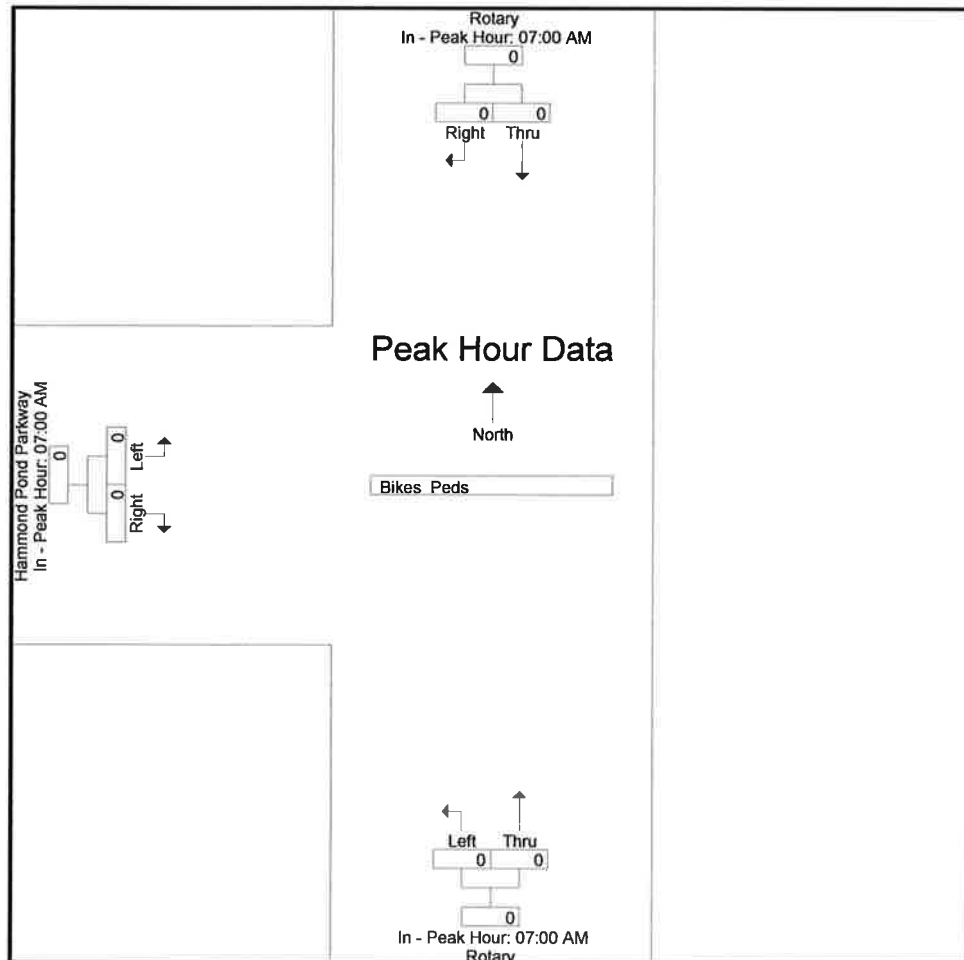
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Start Date : 1/18/2017  
Page No : 12

	Rotary From North			Rotary From South			Hammond Pond Parkway 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.	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 : Horace James Circle  
E/W Street : Hammond Pond Parkway  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820005  
Site Code : 73820005  
Start Date : 1/18/2017  
Page No : 1

Groups Printed- Cars - Trucks

Start Time	Rotary From North		Rotary From South		Hammond Pond Parkway From West		Int. Total
	Thru	Right	Left	Thru	Left	Right	
02:00 PM	141	198	0	0	0	254	593
02:15 PM	154	186	0	0	0	212	552
02:30 PM	162	220	0	0	0	262	644
02:45 PM	204	187	0	0	0	286	677
Total	661	791	0	0	0	1014	2466
03:00 PM	272	211	0	0	0	309	792
03:15 PM	255	230	0	0	0	300	785
03:30 PM	247	201	0	0	0	258	706
03:45 PM	247	231	0	0	0	284	762
Total	1021	873	0	0	0	1151	3045
04:00 PM	300	231	0	0	0	277	808
04:15 PM	285	200	0	0	0	263	748
04:30 PM	311	179	0	0	0	277	767
04:45 PM	321	212	0	0	0	243	776
Total	1217	822	0	0	0	1060	3099
Grand Total	2899	2486	0	0	0	3225	8610
Apprch %	53.8	46.2	0	0	0	100	
Total %	33.7	28.9	0	0	0	37.5	
Cars	2860	2466	0	0	0	3202	8528
% Cars	98.7	99.2	0	0	0	99.3	99
Trucks	39	20	0	0	0	23	82
% Trucks	1.3	0.8	0	0	0	0.7	1

# Accurate Counts

978-664-2565

N/S Street : Horace James Circle  
 E/W Street : Hammond Pond Parkway  
 City/State : Brookline, MA  
 Weather : Rain

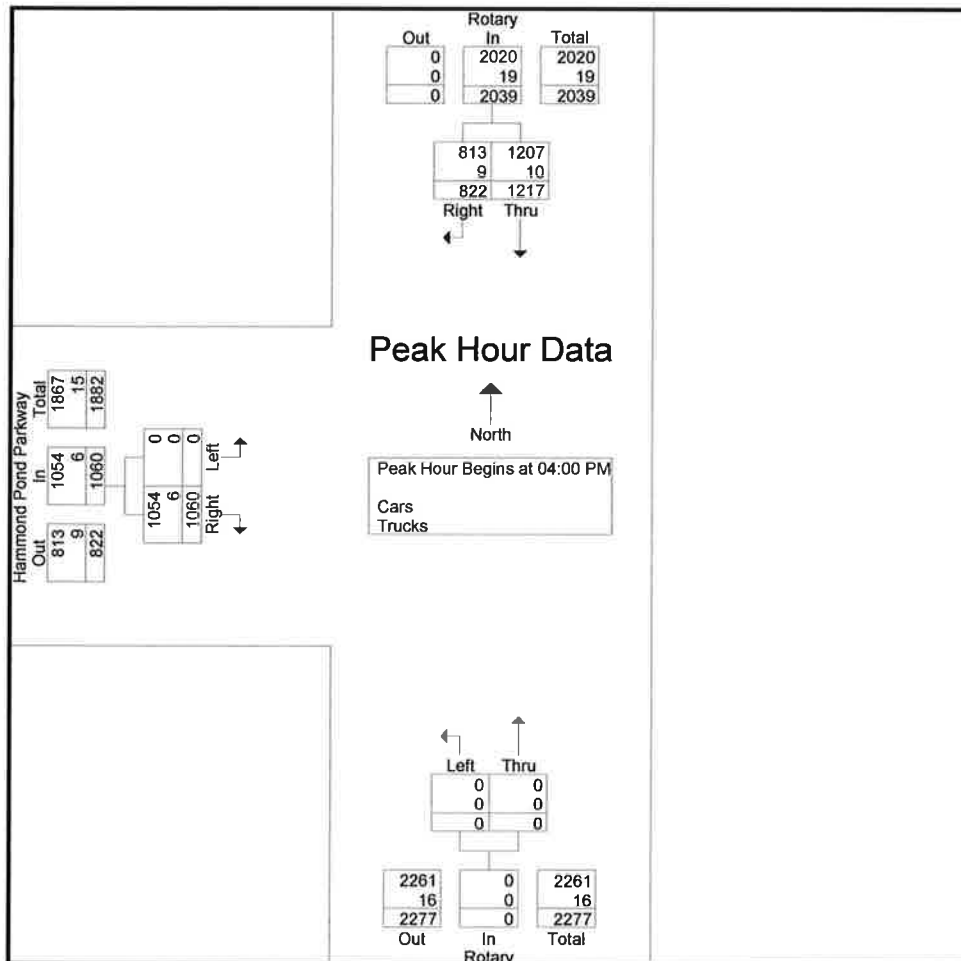
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 Site Code : 73820005  
 Start Date : 1/18/2017  
 Page No : 2

	Rotary From North			Rotary From South			Hammond Pond Parkway 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 04:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:00 PM

04:00 PM	300	231	531	0	0	0	0	277	277	808
04:15 PM	285	200	485	0	0	0	0	263	263	748
04:30 PM	311	179	490	0	0	0	0	277	277	767
04:45 PM	321	212	533	0	0	0	0	243	243	776
Total Volume	1217	822	2039	0	0	0	0	1060	1060	3099
% App. Total	59.7	40.3		0	0		0	100		
PHF	.948	.890	.956	.000	.000	.000	.000	.957	.957	.959
Cars	1207	813	2020	0	0	0	0	1054	1054	3074
% Cars	99.2	98.9	99.1	0	0	0	0	99.4	99.4	99.2
Trucks	10	9	19	0	0	0	0	6	6	25
% Trucks	0.8	1.1	0.9	0	0	0	0	0.6	0.6	0.8



**Accurate Counts**  
978-664-2565

N/S Street : Horace James Circle  
E/W Street : Hammond Pond Parkway  
City/State : Brookline, MA  
Weather : Rain

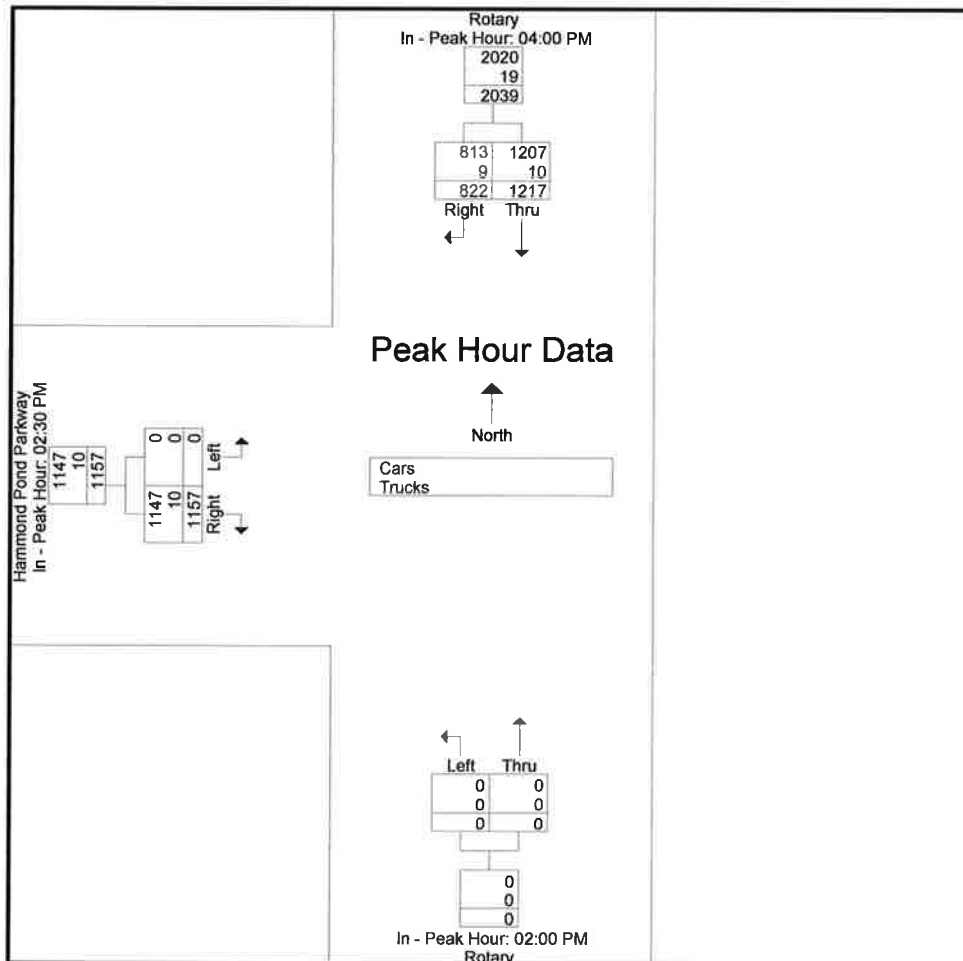
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Site Code : 73820005  
Start Date : 1/18/2017  
Page No : 3

	Rotary From North			Rotary From South			Hammond Pond Parkway 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM			02:00 PM			02:30 PM		
+0 mins.	300	231	531	0	0	0	0	262	262
+15 mins.	285	200	485	0	0	0	0	286	286
+30 mins.	311	179	490	0	0	0	0	309	309
+45 mins.	321	212	533	0	0	0	0	300	300
Total Volume	1217	822	2039	0	0	0	0	1157	1157
% App. Total	59.7	40.3		0	0		0	100	
PHF	.948	.890	.956	.000	.000	.000	.000	.936	.936
Cars	1207	813	2020	0	0	0	0	1147	1147
% Cars	99.2	98.9	99.1	0	0	0	0	99.1	99.1
Trucks	10	9	19	0	0	0	0	10	10
% Trucks	0.8	1.1	0.9	0	0	0	0	0.9	0.9



**Accurate Counts**  
978-664-2565

N/S Street : Horace James Circle  
E/W Street : Hammond Pond Parkway  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820005  
Site Code : 73820005  
Start Date : 1/18/2017  
Page No : 4

Groups Printed- Cars

Start Time	Rotary From North		Rotary From South		Hammond Pond Parkway From West		Int. Total
	Thru	Right	Left	Thru	Left	Right	
02:00 PM	135	197	0	0	0	252	584
02:15 PM	147	186	0	0	0	211	544
02:30 PM	160	215	0	0	0	262	637
02:45 PM	202	186	0	0	0	280	668
Total	644	784	0	0	0	1005	2433
03:00 PM	271	211	0	0	0	307	789
03:15 PM	253	227	0	0	0	298	778
03:30 PM	243	201	0	0	0	256	700
03:45 PM	242	230	0	0	0	282	754
Total	1009	869	0	0	0	1143	3021
04:00 PM	295	228	0	0	0	275	798
04:15 PM	281	199	0	0	0	260	740
04:30 PM	310	176	0	0	0	277	763
04:45 PM	321	210	0	0	0	242	773
Total	1207	813	0	0	0	1054	3074
Grand Total	2860	2466	0	0	0	3202	8528
Apprch %	53.7	46.3	0	0	0	100	
Total %	33.5	28.9	0	0	0	37.5	

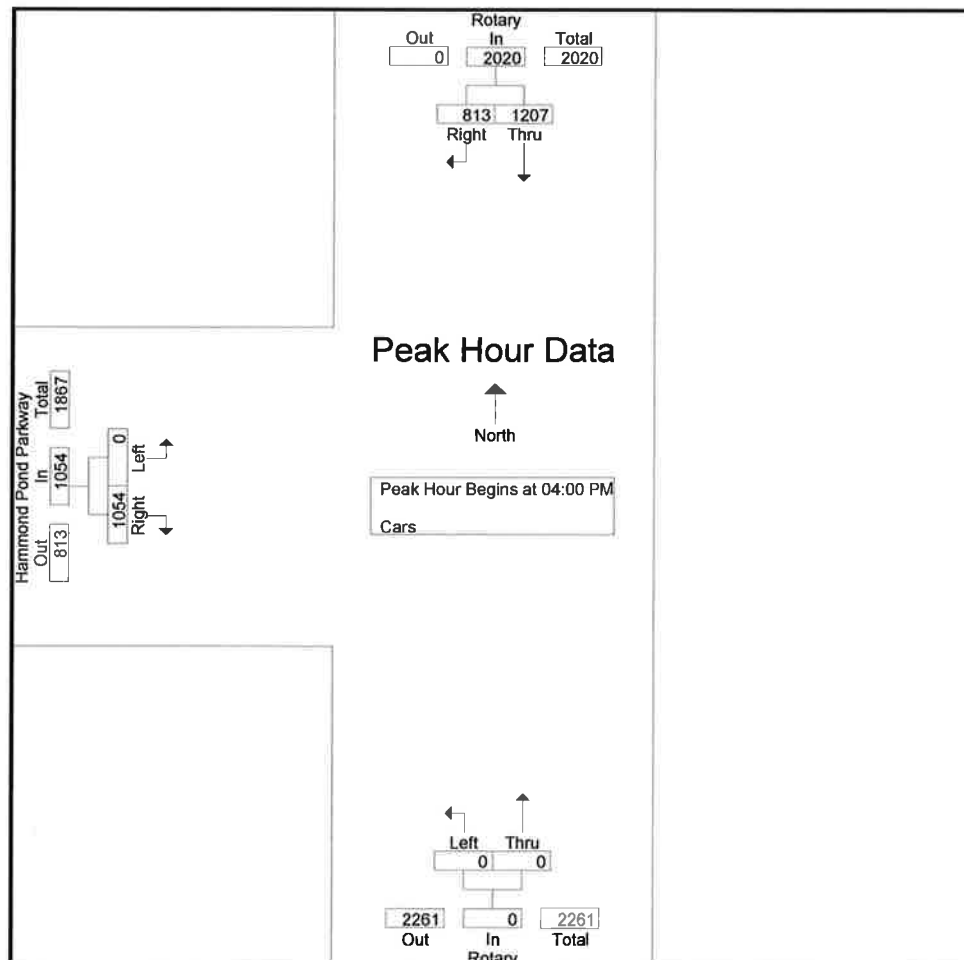
# Accurate Counts

978-664-2565

N/S Street : Horace James Circle  
 E/W Street : Hammond Pond Parkway  
 City/State : Brookline, MA  
 Weather : Rain

File Name : 73820005  
 Site Code : 73820005  
 Start Date : 1/18/2017  
 Page No : 5

	Rotary From North			Rotary From South			Hammond Pond Parkway 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 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	295	228	523	0	0	0	0	275	275	798
04:15 PM	281	199	480	0	0	0	0	260	260	740
04:30 PM	310	176	486	0	0	0	0	277	277	763
04:45 PM	321	210	531	0	0	0	0	242	242	773
Total Volume	1207	813	2020	0	0	0	0	1054	1054	3074
% App. Total	59.8	40.2		0	0		0	100		
PHF	.940	.891	.951	.000	.000	.000	.000	.951	.951	.963



**Accurate Counts**  
978-664-2565

N/S Street : Horace James Circle  
E/W Street : Hammond Pond Parkway  
City/State : Brookline, MA  
Weather : Rain

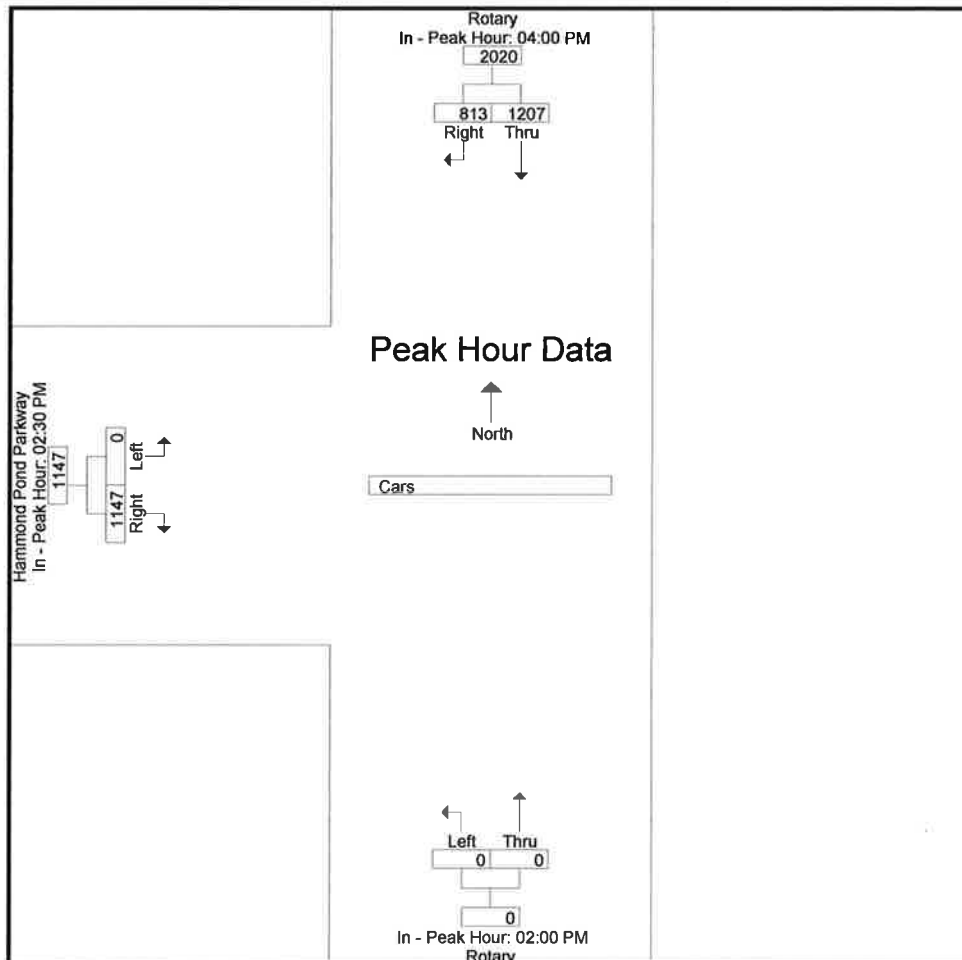
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Start Date : 1/18/2017  
Page No : 6

	Rotary From North			Rotary From South			Hammond Pond Parkway 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM			02:00 PM			02:30 PM		
+0 mins.	295	228	523	0	0	0	0	262	262
+15 mins.	281	199	480	0	0	0	0	280	280
+30 mins.	310	176	486	0	0	0	0	307	307
+45 mins.	321	210	531	0	0	0	0	298	298
Total Volume	1207	813	2020	0	0	0	0	1147	1147
% App. Total	59.8	40.2		0	0		0	100	
PHF	.940	.891	.951	.000	.000	.000	.000	.934	.934





**Accurate Counts**  
978-664-2565

N/S Street : Horace James Circle  
E/W Street : Hammond Pond Parkway  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820005  
Site Code : 73820005  
Start Date : 1/18/2017  
Page No : 7

Groups Printed- Trucks

Start Time	Rotary From North		Rotary From South		Hammond Pond Parkway From West		Int. Total
	Thru	Right	Left	Thru	Left	Right	
02:00 PM	6	1	0	0	0	2	9
02:15 PM	7	0	0	0	0	1	8
02:30 PM	2	5	0	0	0	0	7
02:45 PM	2	1	0	0	0	6	9
Total	17	7	0	0	0	9	33
03:00 PM	1	0	0	0	0	2	3
03:15 PM	2	3	0	0	0	2	7
03:30 PM	4	0	0	0	0	2	6
03:45 PM	5	1	0	0	0	2	8
Total	12	4	0	0	0	8	24
04:00 PM	5	3	0	0	0	2	10
04:15 PM	4	1	0	0	0	3	8
04:30 PM	1	3	0	0	0	0	4
04:45 PM	0	2	0	0	0	1	3
Total	10	9	0	0	0	6	25
Grand Total	39	20	0	0	0	23	82
Apprch %	66.1	33.9	0	0	0	100	
Total %	47.6	24.4	0	0	0	28	

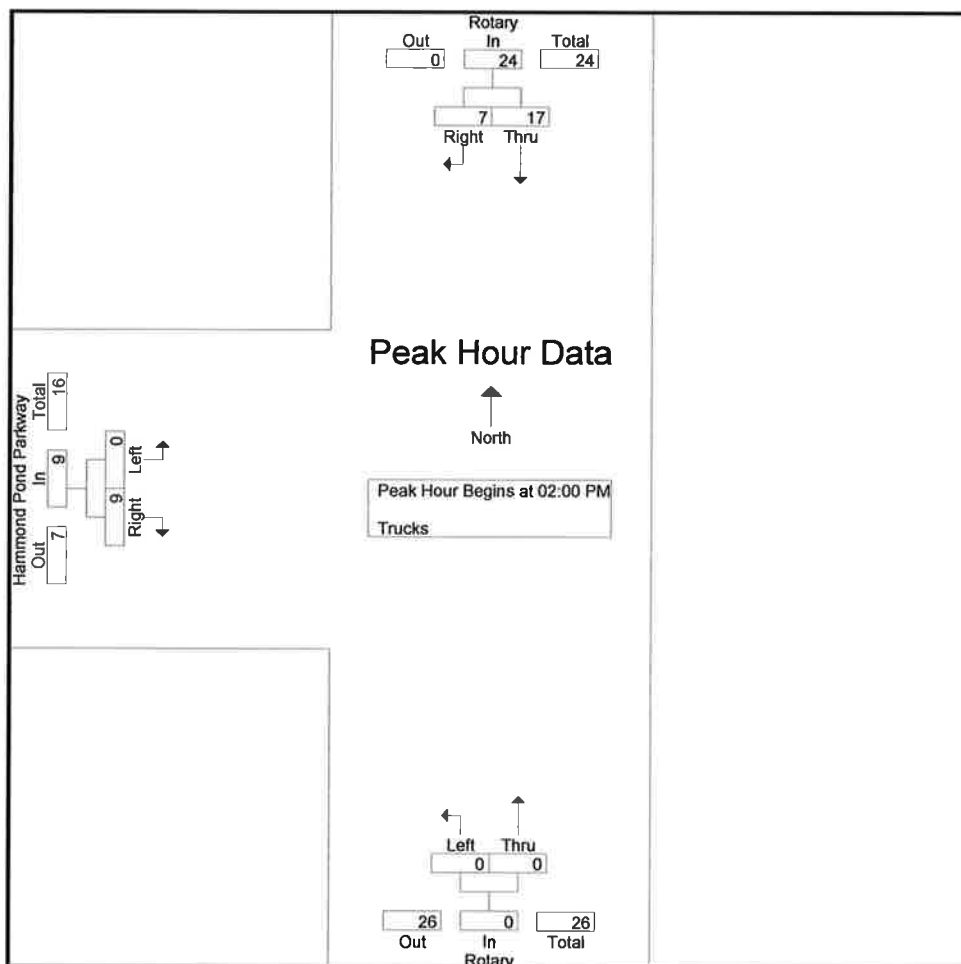
# Accurate Counts

978-664-2565

N/S Street : Horace James Circle  
 E/W Street : Hammond Pond Parkway  
 City/State : Brookline, MA  
 Weather : Rain

File Name : 73820005  
 Site Code : 73820005  
 Start Date : 1/18/2017  
 Page No : 8

	Rotary From North			Rotary From South			Hammond Pond Parkway 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 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 02:00 PM										
02:00 PM	6	1	7	0	0	0	0	2	2	9
02:15 PM	7	0	7	0	0	0	0	1	1	8
02:30 PM	2	5	7	0	0	0	0	0	0	7
02:45 PM	2	1	3	0	0	0	0	6	6	9
Total Volume	17	7	24	0	0	0	0	9	9	33
% App. Total	70.8	29.2		0	0		0	100		
PHF	.607	.350	.857	.000	.000	.000	.000	.375	.375	.917



**Accurate Counts**  
978-664-2565

N/S Street : Horace James Circle  
E/W Street : Hammond Pond Parkway  
City/State : Brookline, MA  
Weather : Rain

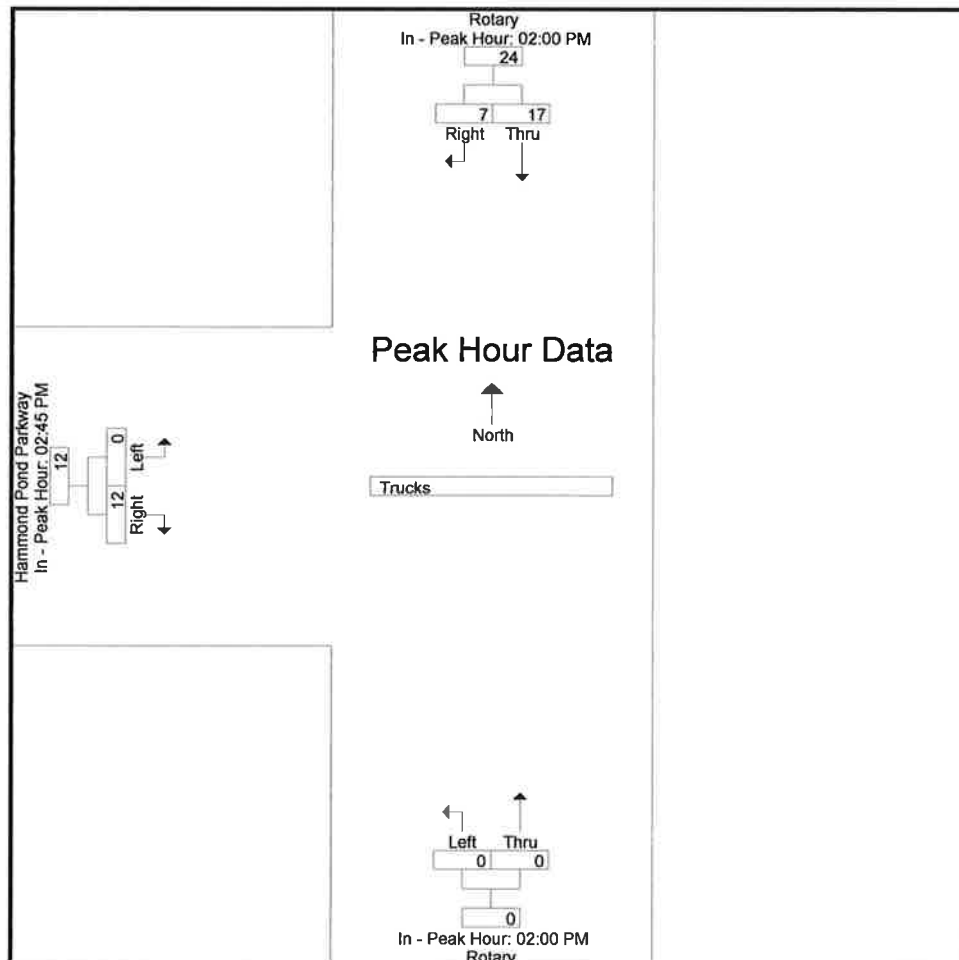
File Name : 73820005  
Site Code : 73820005  
Start Date : 1/18/2017  
Page No : 9

	Rotary From North			Rotary From South			Hammond Pond Parkway 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 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:00 PM			02:00 PM			02:45 PM		
+0 mins.	6	1	7	0	0	0	0	6	6
+15 mins.	7	0	7	0	0	0	0	2	2
+30 mins.	2	5	7	0	0	0	0	2	2
+45 mins.	2	1	3	0	0	0	0	2	2
Total Volume	17	7	24	0	0	0	0	12	12
% App. Total	70.8	29.2		0	0		0	100	
PHF	.607	.350	.857	.000	.000	.000	.000	.500	.500



**978-664-2565**

File Name : 73820005  
Site Code : 73820005  
Start Date : 1/18/2017  
Page No : 10

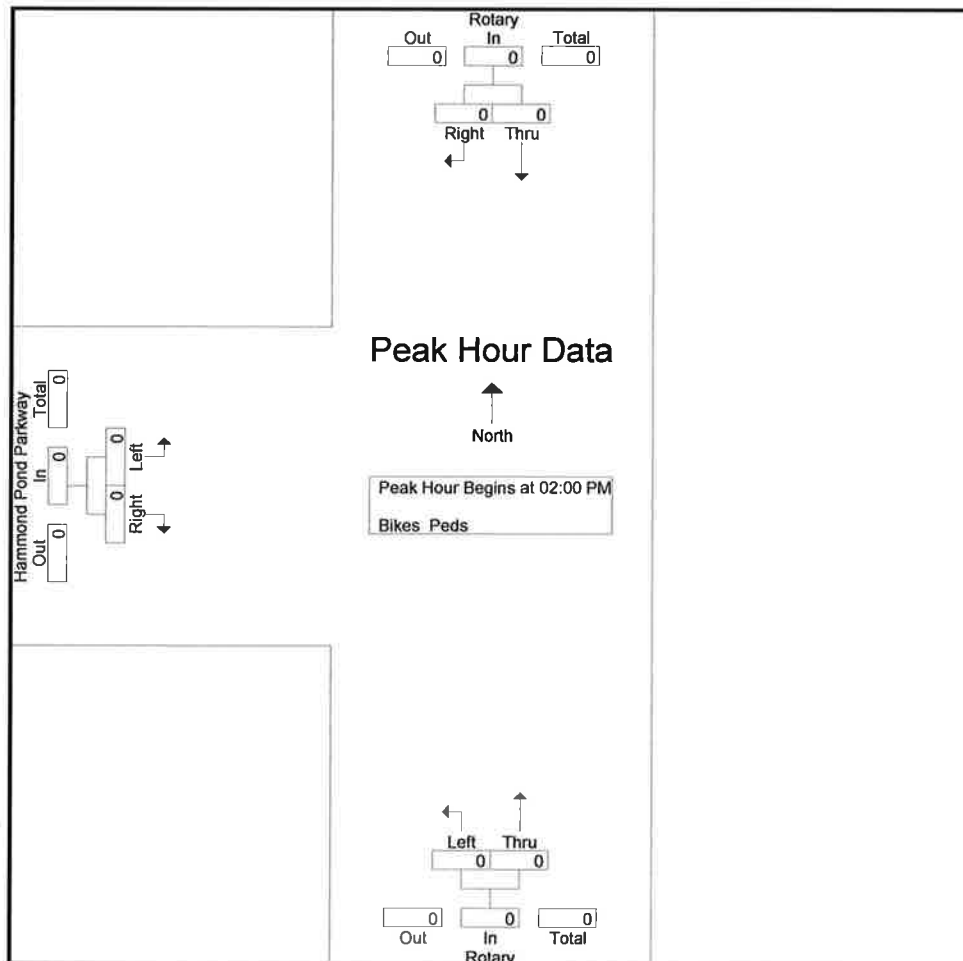
[illegible]

**Accurate Counts**  
978-664-2565

N/S Street : Horace James Circle  
E/W Street : Hammond Pond Parkway  
City/State : Brookline, MA  
Weather : Rain

File Name : 73820005  
Site Code : 73820005  
Start Date : 1/18/2017  
Page No : 11

	Rotary From North			Rotary From South			Hammond Pond Parkway 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 04:45 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 : Horace James Circle  
E/W Street : Hammond Pond Parkway  
City/State : Brookline, MA  
Weather : Rain

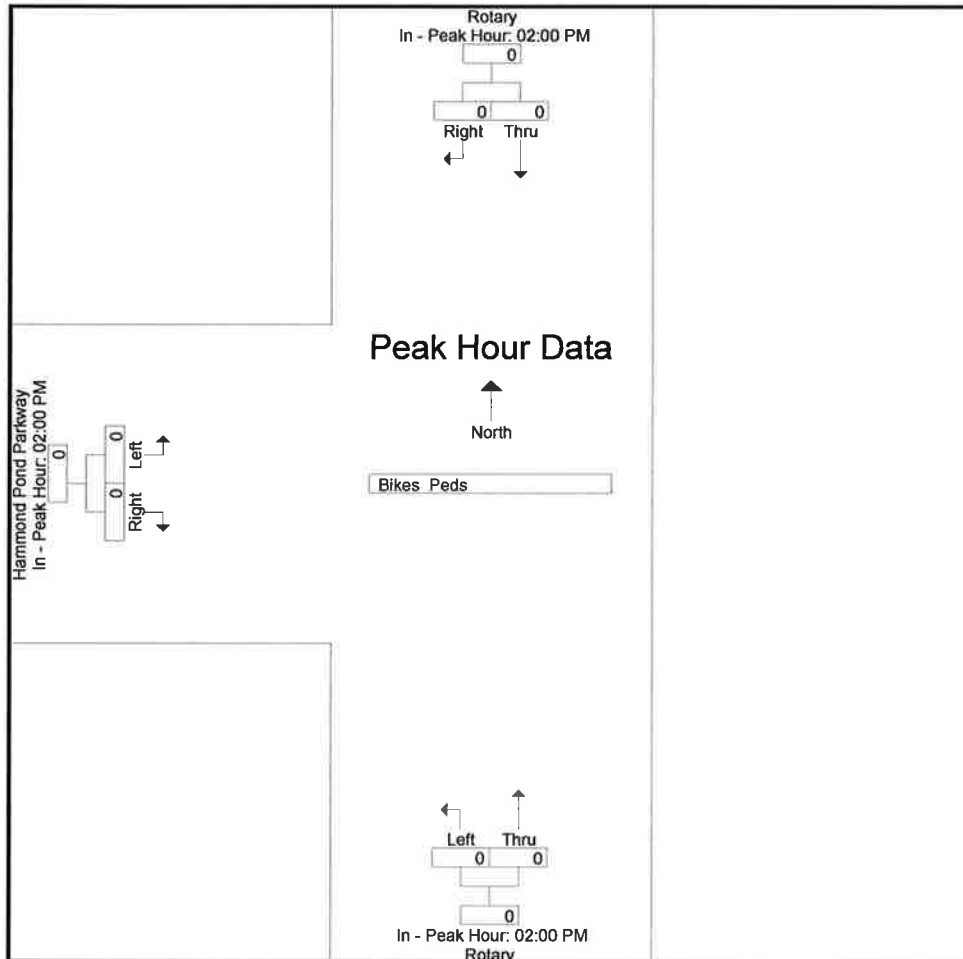
File Name : 73820005  
Site Code : 73820005  
Start Date : 1/18/2017  
Page No : 12

	Rotary From North			Rotary From South			Hammond Pond Parkway 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 04:45 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	



## AUTOMATIC TRAFFIC RECORDER COUNTS





# Vanasse & Associates

Page 1

Vanasse & Associates  
Location: Beverly Rd  
Location: SE of Baker School  
City: Brookline, MA

35 New England Business Center Dr, Suite 140  
Andover, MA 01810

Site Code: 00738204

Start Time	07-Dec-16 Wed	Westbound		Hour Totals		Eastbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		*	*			*	*				
12:15		*	*			*	*				
12:30		*	*			*	*				
12:45		*	*	0	0	*	*	0	0	0	0
01:00		*	*			*	*				
01:15		*	*			*	*				
01:30		*	*			*	*				
01:45		*	9	0	9	*	8	0	8	0	17
02:00		*	28			*	19				
02:15		*	17			*	26				
02:30		*	17			*	29				
02:45		*	9	0	71	*	21	0	95	0	166
03:00		*	8			*	23				
03:15		*	13			*	21				
03:30		*	15			*	22				
03:45		*	13	0	49	*	17	0	83	0	132
04:00		*	11			*	23				
04:15		*	12			*	19				
04:30		*	19			*	24				
04:45		*	11	0	53	*	23	0	89	0	142
05:00		*	16			*	19				
05:15		*	28			*	21				
05:30		*	29			*	48				
05:45		*	15	0	88	*	37	0	125	0	213
06:00		*	9			*	28				
06:15		*	4			*	15				
06:30		*	10			*	21				
06:45		*	13	0	36	*	19	0	83	0	119
07:00		*	7			*	9				
07:15		*	6			*	12				
07:30		*	3			*	8				
07:45		*	7	0	23	*	14	0	43	0	66
08:00		*	7			*	18				
08:15		*	2			*	10				
08:30		*	1			*	6				
08:45		*	3	0	13	*	2	0	36	0	49
09:00		*	2			*	8				
09:15		*	2			*	9				
09:30		*	1			*	3				
09:45		*	2	0	7	*	7	0	27	0	34
10:00		*	1			*	5				
10:15		*	1			*	3				
10:30		*	1			*	1				
10:45		*	0	0	3	*	3	0	12	0	15
11:00		*	0			*	1				
11:15		*	1			*	0				
11:30		*	2			*	1				
11:45		*	0	0	3	*	0	0	2	0	5
Total		0	355			0	603			0	958
Percent		0.0%	100.0%			0.0%	100.0%			0.0%	100.0%

# Vanasse & Associates

Vanasse & Associates  
Location: Beverly Rd  
Location: SE of Baker School  
City: Brookline, MA

35 New England Business Center Dr, Suite 140  
Andover, MA 01810

Site Code: 00738204

Start Time	08-Dec-16 Thu	Westbound		Hour Totals		Eastbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		0	3			1	10				
12:15		0	4			0	10				
12:30		1	12			2	9				
12:45		0	10	1	29	0	18	3	47	4	76
01:00		0	6			0	8				
01:15		1	6			0	11				
01:30		0	11			0	8				
01:45		0	10	1	33	0	11	0	38	1	71
02:00		1	22			0	10				
02:15		0	26			0	8				
02:30		0	18			0	45				
02:45		0	15	1	81	0	31	0	94	1	175
03:00		0	9			0	27				
03:15		0	15			0	18				
03:30		0	13			0	29				
03:45		0	13	0	50	0	27	0	101	0	151
04:00		0	12			0	16				
04:15		0	14			0	18				
04:30		0	15			0	14				
04:45		0	12	0	53	0	16	0	64	0	117
05:00		1	15			2	27				
05:15		3	30			0	21				
05:30		0	16			0	39				
05:45		0	26	4	87	2	45	4	132	8	219
06:00		2	10			1	33				
06:15		5	10			4	23				
06:30		5	5			8	26				
06:45		7	7	19	32	8	15	21	97	40	129
07:00		8	5			8	15				
07:15		25	13			14	6				
07:30		35	7			48	16				
07:45		76	3	144	28	72	10	142	47	286	75
08:00		8	2			39	13				
08:15		7	4			14	12				
08:30		8	4			13	3				
08:45		3	8	26	18	9	5	75	33	101	51
09:00		9	5			8	13				
09:15		6	5			7	10				
09:30		2	2			8	5				
09:45		3	1	20	13	10	8	33	36	53	49
10:00		6	2			5	1				
10:15		13	1			11	3				
10:30		8	1			10	2				
10:45		8	1	35	5	10	1	36	7	71	12
11:00		7	0			11	2				
11:15		8	0			8	1				
11:30		7	0			10	1				
11:45		9	3	31	3	9	2	38	6	69	9
Total		282	432			352	702			634	1134
Percent		39.5%	60.5%			33.4%	66.6%			35.9%	64.1%

35 New England Business Center Dr, Suite 140  
Andover, MA 01810

Site Code: 00738204

Start Time	09-Dec-16 Fri	Westbound		Hour Totals		Eastbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		0	*			0	*				
12:15		1	*			0	*				
12:30		1	*			0	*				
12:45		0	*	2	0	0	*	0	0	2	0
01:00		0	*			1	*				
01:15		0	*			1	*				
01:30		0	*			0	*				
01:45		0	*	0	0	0	*	2	0	2	0
02:00		0	*			0	*				
02:15		0	*			0	*				
02:30		0	*			0	*				
02:45		0	*	0	0	0	*	0	0	0	0
03:00		0	*			0	*				
03:15		0	*			0	*				
03:30		0	*			0	*				
03:45		0	*	0	0	0	*	0	0	0	0
04:00		0	*			0	*				
04:15		0	*			0	*				
04:30		0	*			0	*				
04:45		1	*	1	0	0	*	0	0	1	0
05:00		0	*			0	*				
05:15		1	*			0	*				
05:30		2	*			1	*				
05:45		0	*	3	0	3	*	4	0	7	0
06:00		0	*			2	*				
06:15		5	*			7	*				
06:30		4	*			2	*				
06:45		6	*	15	0	9	*	20	0	35	0
07:00		14	*			6	*				
07:15		17	*			10	*				
07:30		35	*			41	*				
07:45		63	*	129	0	64	*	121	0	250	0
08:00		13	*			28	*				
08:15		11	*			11	*				
08:30		9	*			28	*				
08:45		4	*	37	0	13	*	80	0	117	0
09:00		9	*			16	*				
09:15		4	*			9	*				
09:30		9	*			9	*				
09:45		15	*	37	0	18	*	52	0	89	0
10:00		7	*			9	*				
10:15		6	*			9	*				
10:30		9	*			7	*				
10:45		7	*	29	0	14	*	39	0	68	0
11:00		14	*			10	*				
11:15		12	*			10	*				
11:30		6	*			7	*				
11:45		*	*	32	0	*	*	27	0	59	0
Total		285	0			345	0			630	0
Percent		100.0%	0.0%			100.0%	0.0%			100.0%	0.0%
Grand Total		567	787			697	1305			1264	2092
Percent		41.9%	58.1%			34.8%	65.2%			37.7%	62.3%

# Vannase & Associates

Vannase & Associates  
Location: Beverly Rd  
Location: NW of Baker School  
City: Brookline, MA

35 New England Business Center Dr, Suite 140  
Andover, MA 01810

Site Code: 00738205

Start Time	07-Dec-16 Wed	Westbound		Hour Totals		Eastbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		*	*			*	*				
12:15		*	*			*	*				
12:30		*	*			*	*				
12:45		*	*	0	0	*	*	0	0	0	0
01:00		*	*			*	*				
01:15		*	*			*	*				
01:30		*	*			*	*				
01:45		*	*	0	0	*	*	0	0	0	0
02:00		*	27			*	23				
02:15		*	10			*	33				
02:30		*	34			*	17				
02:45		*	23	0	94	*	17	0	90	0	184
03:00		*	12			*	16				
03:15		*	14			*	10				
03:30		*	21			*	21				
03:45		*	23	0	70	*	18	0	65	0	135
04:00		*	15			*	14				
04:15		*	10			*	18				
04:30		*	20			*	25				
04:45		*	17	0	62	*	27	0	84	0	146
05:00		*	17			*	11				
05:15		*	13			*	26				
05:30		*	20			*	32				
05:45		*	15	0	65	*	19	0	88	0	153
06:00		*	21			*	22				
06:15		*	9			*	19				
06:30		*	11			*	15				
06:45		*	9	0	50	*	20	0	76	0	126
07:00		*	4			*	12				
07:15		*	8			*	14				
07:30		*	6			*	6				
07:45		*	5	0	23	*	16	0	48	0	71
08:00		*	12			*	14				
08:15		*	3			*	11				
08:30		*	3			*	8				
08:45		*	2	0	20	*	3	0	36	0	56
09:00		*	3			*	8				
09:15		*	3			*	9				
09:30		*	1			*	5				
09:45		*	1	0	8	*	10	0	32	0	40
10:00		*	2			*	4				
10:15		*	0			*	2				
10:30		*	1			*	3				
10:45		*	0	0	3	*	2	0	11	0	14
11:00		*	0			*	0				
11:15		*	1			*	0				
11:30		*	1			*	1				
11:45		*	0	0	2	*	0	0	1	0	3
Total		0	397			0	531			0	928
Percent		0.0%	100.0%			0.0%	100.0%			0.0%	100.0%

# Vanasse & Associates

Vannase & Associates  
Location: Beverly Rd  
Location: NW of Baker School  
City: Brookline, MA

35 New England Business Center Dr, Suite 140  
Andover, MA 01810

Site Code: 00738205

Start Time	08-Dec-16 Thu	Westbound		Hour Totals		Eastbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		0	7			1	13				
12:15		0	6			0	8				
12:30		0	5			2	22				
12:45		0	12	0	30	0	20	3	63	3	93
01:00		0	6			0	11				
01:15		1	6			0	13				
01:30		0	7			0	9				
01:45		1	9	2	28	1	17	1	50	3	78
02:00		1	7			0	4				
02:15		0	17			0	22				
02:30		0	24			0	24				
02:45		0	23	1	71	0	21	0	71	1	142
03:00		0	15			0	18				
03:15		0	19			0	14				
03:30		0	32			0	13				
03:45		0	20	0	86	0	19	0	64	0	150
04:00		0	18			0	15				
04:15		0	24			0	14				
04:30		0	18			0	9				
04:45		0	14	0	74	0	19	0	57	0	131
05:00		1	9			2	19				
05:15		4	12			0	18				
05:30		0	16			0	41				
05:45		1	15	6	52	2	24	4	102	10	154
06:00		1	22			2	24				
06:15		7	13			5	23				
06:30		4	9			10	25				
06:45		4	8	16	52	20	23	37	95	53	147
07:00		5	3			21	18				
07:15		12	9			33	3				
07:30		14	10			64	8				
07:45		22	5	53	27	77	12	195	41	248	68
08:00		24	3			35	12				
08:15		10	1			22	13				
08:30		12	4			21	7				
08:45		6	6	52	14	14	9	92	41	144	55
09:00		11	6			10	10				
09:15		6	9			10	15				
09:30		5	2			8	7				
09:45		5	2	27	19	9	8	37	40	64	59
10:00		7	1			7	2				
10:15		13	0			11	4				
10:30		9	1			11	2				
10:45		10	2	39	4	7	3	36	11	75	15
11:00		10	1			12	3				
11:15		9	0			10	1				
11:30		10	0			15	1				
11:45		5	4	34	5	10	2	47	7	81	12
Total		230	462			452	642			682	1104
Percent		33.2%	66.8%			41.3%	58.7%			38.2%	61.8%

35 New England Business Center Dr, Suite 140  
Andover, MA 01810

Site Code: 00738205

Start Time	09-Dec-16 Fri	Westbound		Hour Totals		Eastbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		0	*			0	*				
12:15		1	*			0	*				
12:30		1	*			0	*				
12:45		0	*	2	0	0	*	0	0	2	0
01:00		0	*			0	*				
01:15		0	*			1	*				
01:30		0	*			0	*				
01:45		0	*	0	0	0	*	1	0	1	0
02:00		0	*			0	*				
02:15		0	*			0	*				
02:30		0	*			0	*				
02:45		0	*	0	0	0	*	0	0	0	0
03:00		0	*			0	*				
03:15		0	*			0	*				
03:30		0	*			0	*				
03:45		0	*	0	0	0	*	0	0	0	0
04:00		0	*			0	*				
04:15		0	*			0	*				
04:30		0	*			0	*				
04:45		1	*	1	0	0	*	0	0	1	0
05:00		0	*			0	*				
05:15		1	*			0	*				
05:30		2	*			2	*				
05:45		2	*	5	0	2	*	4	0	9	0
06:00		0	*			4	*				
06:15		6	*			9	*				
06:30		2	*			4	*				
06:45		6	*	14	0	17	*	34	0	48	0
07:00		8	*			16	*				
07:15		8	*			21	*				
07:30		17	*			69	*				
07:45		17	*	50	0	62	*	168	0	218	0
08:00		12	*			36	*				
08:15		17	*			14	*				
08:30		12	*			18	*				
08:45		14	*	55	0	9	*	77	0	132	0
09:00		9	*			13	*				
09:15		12	*			14	*				
09:30		11	*			9	*				
09:45		13	*	45	0	23	*	59	0	104	0
10:00		12	*			11	*				
10:15		11	*			5	*				
10:30		5	*			5	*				
10:45		9	*	37	0	17	*	38	0	75	0
11:00		13	*			9	*				
11:15		13	*			9	*				
11:30		8	*			12	*				
11:45		*	*	*	*	*	*	*	*	*	*
Total		243	0			411	0			590	0
Percent		100.0%	0.0%			100.0%	0.0%			100.0%	0.0%
Grand Total		473	859			863	1173			1272	2032
Percent		35.5%	64.5%			42.4%	57.6%			38.5%	61.5%

## SEASONAL ADJUSTMENTS

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**Table 2.1: MassDOT Highway Division - Statewide Traffic Data Collection: 2013  
Adjustment Factors**



2013 Weekday Seasonal Factors Factor Group	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Group 2: Rural Major Collector, R5, R6 & R0	1.12	1.12	1.07	0.99	0.91	0.90	0.86	0.86	0.92	0.93	1.01	1.05
Group 4: I-95 Interstate	1.02	1.00	1.00	0.96	0.92	0.89	0.85	0.85	0.93	0.96	1.01	1.03
Group 6: Urban Arterials, Collectors, & Rural Arterials, U2, U3, U5, U6, R2, R3	1.03	1.01	0.96	0.92	0.91	0.90	0.92	0.92	0.93	0.92	0.97	0.97

3% below  
average

3% above  
average



**SPEEDS**

---

[illegible]



# **Vanasse & Associates** 35 New England Business Center Dr, Suite 140 Andover, MA 01810

Vanasse & Associates  
 Location: Heath Street  
 Location: E of Soule Rear Dwy  
 City: Brookline, MA

Site Code: 00738201

## Westbound

Start Time	15	16	21	26	31	36	41	46	51	56	61	66	71	76	Total	Pace Speed	Number in Pace
11/23/16	0	1	0	3	4	0	0	0	0	0	0	0	0	0	8	26-35	7
01:00	0	0	0	2	0	0	1	0	0	0	0	0	0	0	3	20-29	2
02:00	0	1	0	2	0	2	0	0	0	0	0	0	0	0	5	19-28	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2	14-23	1
05:00	0	0	4	9	1	0	0	0	0	0	0	0	0	0	14	21-30	13
06:00	1	1	20	44	18	4	0	0	0	0	0	0	0	0	88	21-30	64
07:00	2	4	55	122	32	1	0	0	0	0	0	0	0	0	216	21-30	177
08:00	0	8	92	135	27	3	0	0	0	0	0	0	0	0	265	21-30	227
09:00	3	4	36	90	22	2	0	0	0	0	0	0	0	0	157	21-30	126
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	6	19	208	407	105	12	1	0	0	0	0	0	0	0	758		
Percent	0.8%	2.5%	27.4%	53.7%	13.9%	1.6%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	09:00	08:00	08:00	08:00	07:00	06:00	01:00										
Vol.	3	8	92	135	32	4	1								08:00		
PM Peak															265		
Vol.																	

Total	166	213	1648	3644	1109	95	8	0	0	0	0	0	0	0	6884
Percent	2.4%	3.1%	23.9%	52.9%	16.1%	1.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
15th Percentile :					21 MPH										
50th Percentile :					26 MPH										
85th Percentile :					30 MPH										
95th Percentile :					33 MPH										

## Stats

10 MPH Pace Speed : 21-30 MPH  
 Number in Pace : 5292  
 Percent in Pace : 76.9%  
 Number of Vehicles > 55 MPH : 0  
 Percent of Vehicles > 55 MPH : 0.0%  
 Mean Speed(Average) : 27 MPH

# **Vanasse & Associates** 35 New England Business Center Dr, Suite 140 Andover, MA 01810

Vanasse & Associates  
Location: Heath Street  
City: Brookline, MA

Site Code: 00738201

Eastbound																		
Start Time	15	16	21	26	31	36	41	46	51	56	61	66	71	76	Total	Pace Speed	Number in Pace	
11/21/16	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
13:00	1	0	8	24	14	4	0	0	0	0	0	0	0	0	51	26-35	38	
14:00	0	1	9	26	14	1	0	0	0	0	0	0	0	0	51	26-35	40	
15:00	0	1	7	21	10	3	0	0	0	0	0	0	0	0	42	26-35	31	
16:00	0	2	10	22	11	0	1	0	0	0	0	0	0	0	46	24-33	33	
17:00	0	3	10	24	9	0	0	0	0	0	0	0	0	0	46	21-30	34	
18:00	0	3	14	17	10	1	0	0	0	0	0	0	0	0	45	21-30	31	
19:00	0	0	6	8	8	2	0	0	0	0	0	0	0	0	24	26-35	16	
20:00	0	1	5	15	9	1	0	0	0	0	0	0	0	0	31	26-35	24	
21:00	0	0	5	3	2	0	1	0	0	0	0	0	0	0	11	21-30	8	
22:00	0	0	0	3	3	0	0	0	0	0	0	0	0	0	6	26-35	6	
23:00	0	0	1	5	4	0	0	0	0	0	0	0	0	0	10	26-35	9	
Total	1	11	75	168	94	12	2	0	0	0	0	0	0	0	363			
Percent	0.3%	3.0%	20.7%	46.3%	25.9%	3.3%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%				
AM Peak																		
Vol.																		
PM Peak	13:00	17:00	18:00	14:00	13:00	13:00	16:00											13:00
Vol.	1	3	14	26	14	4	1											51



# **Vanasse & Associates** 35 New England Business Center Dr, Suite 140 Andover, MA 01810

Vanasse & Associates  
Location: Heath Street  
Location: E of Soule Rear Dwy  
City: Brookline, MA

Site Code: 00738201

## Eastbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
11/23/16	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	20-29	2
01:00	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3	26-35	3
02:00	0	0	0	1	1	0	1	0	0	0	0	0	0	0	3	24-33	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	19-28	1
05:00	0	1	1	2	1	0	0	0	0	0	0	0	0	0	5	26-35	3
06:00	0	1	4	5	3	2	0	0	0	0	0	0	0	0	15	21-30	9
07:00	0	0	15	21	7	4	0	0	0	0	0	0	0	0	47	21-30	36
08:00	0	5	21	28	5	0	0	0	0	0	0	0	0	0	59	21-30	49
09:00	1	1	6	18	10	1	0	0	0	0	0	0	0	0	37	26-35	28
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	1	8	47	78	30	7	1	0	0	0	0	0	0	0	172		
Percent	0.6%	4.7%	27.3%	45.3%	17.4%	4.1%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	09:00	08:00	08:00	08:00	09:00	07:00	02:00								08:00		
Vol.	1	5	21	28	10	4	1								59		
PM Peak																	
Vol																	

Total	26	65	290	608	321	42	3																								
Percent	1.9%	4.8%	21.4%	44.9%	23.7%	3.1%	0.2%																								

15th Percentile : 21 MPH  
50th Percentile : 27 MPH  
85th Percentile : 32 MPH  
95th Percentile : 34 MPH

## Stats

10 MPH Pace Speed : 26-35 MPH  
Number in Pace : 929  
Percent in Pace : 68.6%  
Number of Vehicles > 55 MPH : 0  
Percent of Vehicles > 55 MPH : 0.0%  
Mean Speed(Average) : 28 MPH



**Job**  
**Location**  
**Calculated By:**  
**Checked By:**

**Brookline, MA**  
**S of Heath St**  
**S.R.F.**

**Job #** 7382  
**Date** 1/27/2017

**Street:** Woodland Road  
**Direction:** Northbound

**Speed Limit:** 25  
**Time of Day** 8:45 a.m.  
**Observations** 50

Speed	# of Observation	CUM. # Of OBS	% OF TOTAL OBS	CUM %
55				
54				
53				
52				
51				
50				
49				
48				
47				
46				
45				
44				
43				
42				
41	1	1	2	100
40	1	2	2	98
39	0	2	0	96
38	0	2	0	96
37	0	2	0	96
36	1	3	2	96
35	1	4	2	94
34	3	7	6	92
33	6	13	12	86
32	4	17	8	74
31	8	25	16	66
30	5	30	10	50
29	6	36	12	40
28	4	40	8	28
27	3	43	6	20
26	5	48	10	14
25	1	49	2	4
24	1	50	2	2
23				
22				
21				
20				

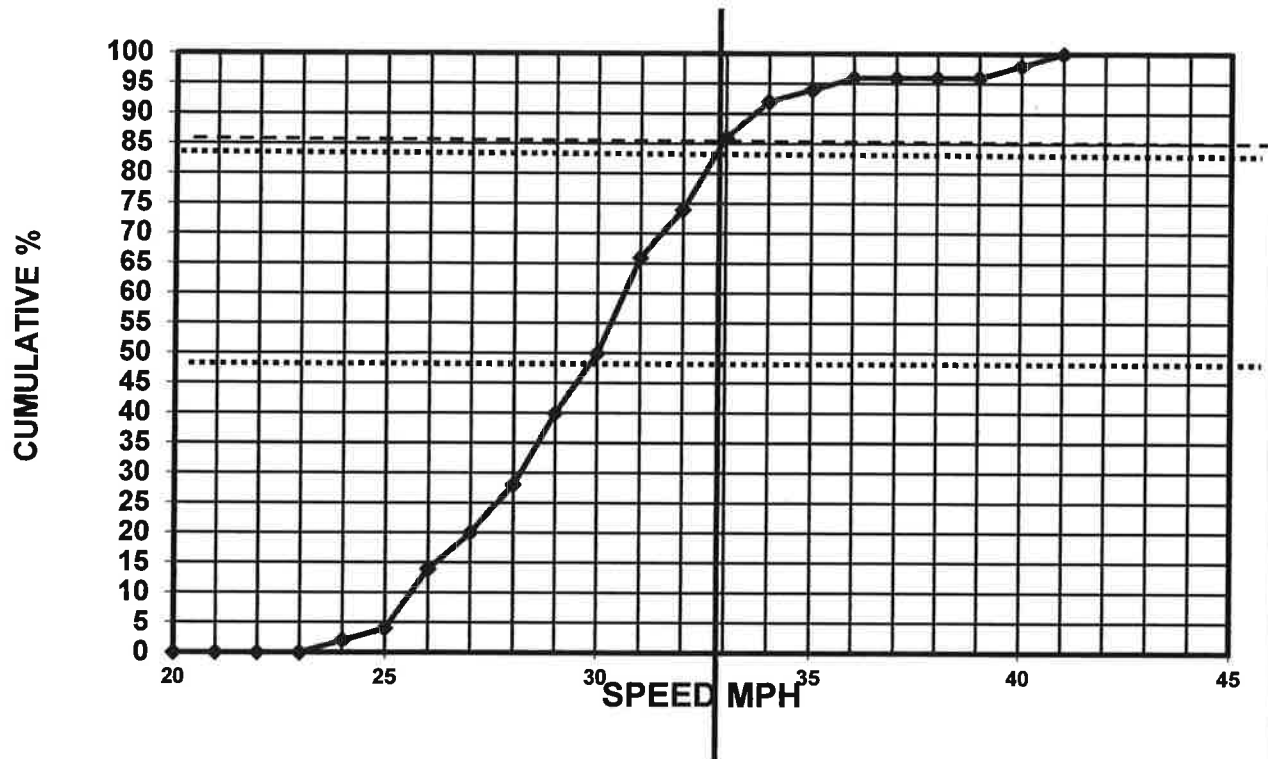
**Average:** 30.48  
**Comments:** 85% = 32.9 m.p.h.



**Street:** Woodland Road  
**Direction:** Northbound

**Job #** 7382  
**Date** 1/27/2017

### SPEED GRAPH



## TRANSIT INFORMATION

---



**Massachusetts Bay  
Transportation Authority**

# Green Line Schedule

Weekday	First Trip	Rush Hour	Midday	Evening	Late Night	Last Trip	Last Trip (Friday)
<b>"B"</b>							
LV Boston College	5:01AM	7 Mins.	8 Mins.	8 Mins.	9 Mins.	12:10AM	1:30AM
LV Park Street	5:39AM	7 Mins.	8 Mins.	8 Mins.	9 Mins.	<sup>w</sup> 12:52AM	w 2:10AM
<b>"C"</b>							
LV Cleveland Circle	* 5:01AM	6 Mins.	8 Mins.	7 Mins.	9 Mins.	12:10AM	1:10AM
LV North Station	5:55AM	6 Mins.	8 Mins.	7 Mins.	9 Mins.	<sup>w</sup> 12:46AM	w 1:46AM
<b>"D"</b>							
LV Riverside	4:56AM	7 Mins.	8 Mins.	8 Mins.	10 Mins.	12:05AM	1:05AM
LV Park Street	5:36AM	7 Mins.	8 Mins.	8 Mins.	10 Mins.	<sup>w</sup> 12:49AM	w 1:49AM
<b>"E"</b>							
LV Lechmere	5:01AM	6 Mins.	7 Mins.	9 Mins.	9 Mins.	12:30AM	1:59AM
LV Heath Street	5:30AM	6 Mins.	7 Mins.	9 Mins.	9 Mins.	<sup>w</sup> 12:45AM	w 2:04AM
Saturday	First Trip	A.M. Peak	P.M. Peak	Evening	Late Night	Last Trip	
<b>"B"</b>							
LV Boston College	<sup>†</sup> 4:45AM	7 Mins.	7 Mins.	7 Mins.	11 Mins.	1:30AM	
LV Park Street	5:33AM	7 Mins.	7 Mins.	7 Mins.	11 Mins.	<sup>w</sup> 2:10AM	
<b>"C"</b>							
LV Cleveland Circle	<sup>†</sup> 4:50AM	10 Mins.	8 Mins.	8 Mins.	10 Mins.	1:10AM	
LV North Station	5:30AM	10 Mins.	8 Mins.	8 Mins.	10 Mins.	<sup>w</sup> 1:46AM	
<b>"D"</b>							
LV Riverside	4:55AM	10 Mins.	8 Mins.	10 Mins.	10 Mins.	1:05AM	
LV Park Street	5:39AM	10 Mins.	8 Mins.	10 Mins.	10 Mins.	<sup>w</sup> 1:49AM	
<b>"E"</b>							
LV Lechmere	5:01AM	10 Mins.	9 Mins.	10 Mins.	10 Mins.	1:59AM	

**LV Heath Street** 5:30AM 10 Mins. 9 Mins. 10 Mins. 10 Mins. 2:04AM

**Sunday****First  
Trip****A.M.  
Peak****P.M.  
Peak****Evening****Late  
Night****Last Trip****"B"****LV Boston  
College****†**  
5:20AM

10 Mins. 9 Mins.

7 Mins.

10 Mins. 12:10AM

**LV Park Street** 6:06AM

10 Mins. 9 Mins.

7 Mins.

10 Mins. <sup>w</sup>  
12:48AM**"C"****LV Cleveland  
Circle****‡**  
5:30AM

10 Mins. 10 Mins.

10 Mins.

10 Mins. 12:10AM

**LV North  
Station**

6:06AM

10 Mins. 10 Mins.

10 Mins.

10 Mins. <sup>w</sup>  
12:48AM**"D"****LV Riverside**

5:25AM

10 Mins. 10 Mins.

10 Mins.

10 Mins. 12:00AM

**LV Park Street** 6:09AM

10 Mins. 10 Mins.

10 Mins.

10 Mins. <sup>w</sup>  
12:45AM**"E"****LV Lechmere**

5:35AM

12 Mins. 12 Mins.

12 Mins.

12 Mins. 12:30AM

**LV Heath Street** 6:15AM

12 Mins. 12 Mins.

12 Mins.

12 Mins. <sup>w</sup>  
12:47AM

## Notes

\* - The first 2 "C" Line AM inbound trips run through to Lechmere Station on Weekdays.

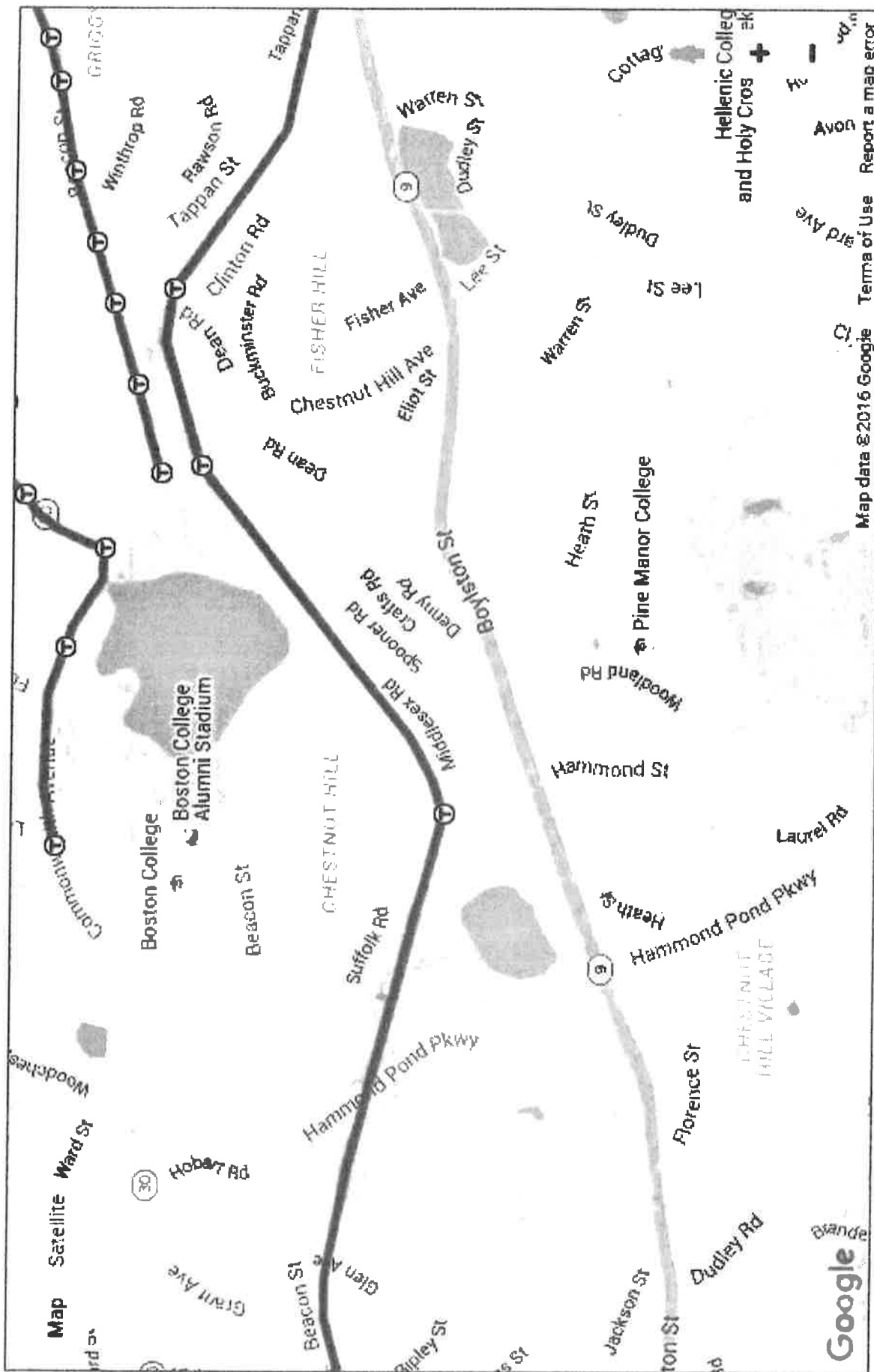
† - The first "B" Line AM inbound trips run through to Lechmere Station on Saturday and Sunday.

‡ - The second "C" Line AM inbound trips run through to Lechmere Station on Saturday and Sunday.

w - Last trips wait for connecting trains in Downtown area. Departure times are approximate.

## Schedule Periods

- Rush Hour AM: approx. 6:30AM - 9:00AM
- Midday: approx. 9:00AM - 3:30PM
- Rush Hour PM: approx. 3:30PM - 6:30PM
- Evening: approx. 6:30PM - 8:00PM
- Late Night: approx. 8:00PM - Close



Map data ©2016 Google

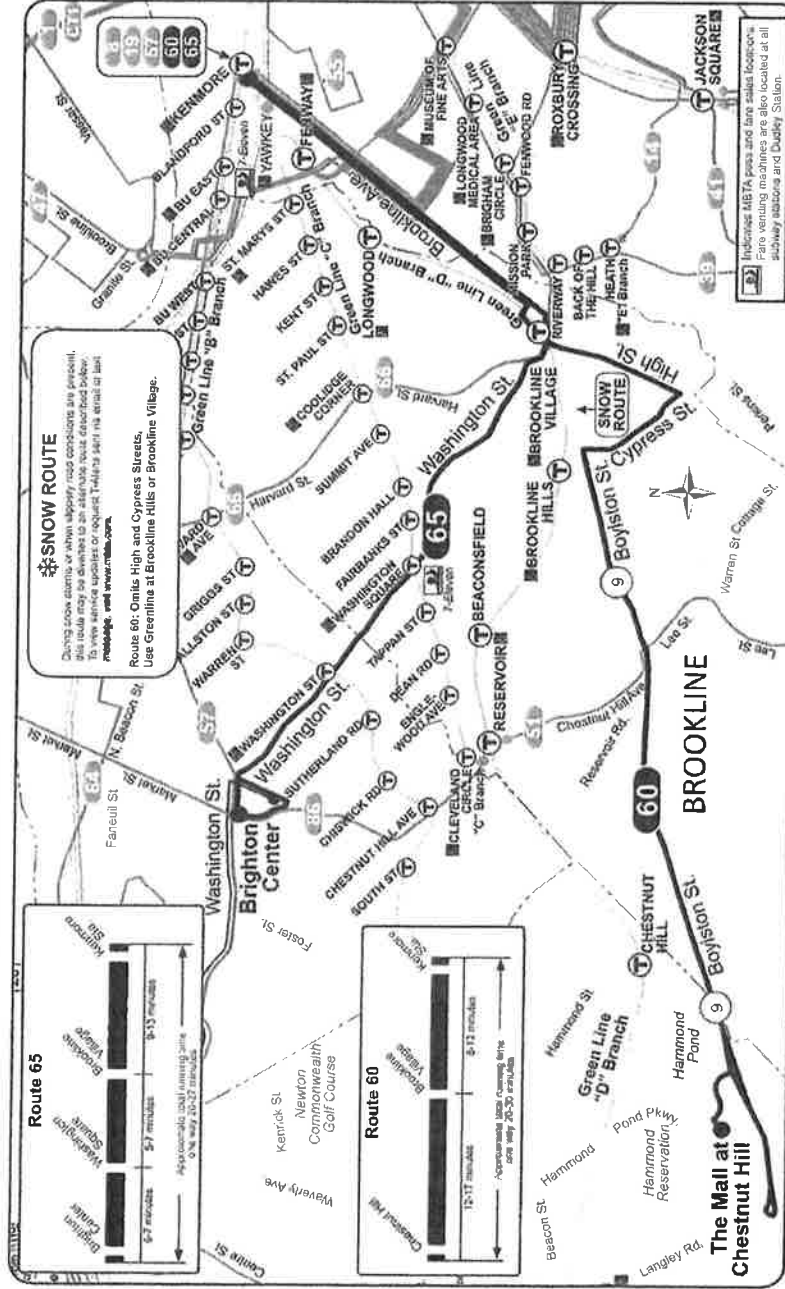
Terms of Use

Report a map error

# 65 Weekday Route 60 Chestnut Hill-Kenmore Station

Inbound				Outbound			
Leave Brighton Center	Arrive Brookline Village	Arrive Kenmore Station	Leave Kenmore Station	Arrive Brookline Village	Arrive Kenmore Station	Leave Kenmore Station	Arrive Brighton Center
6:20A	6:35A	6:45A	6:50A	6:27A	6:42A	6:52A	7:07A
6:42	6:57	7:07	7:12	6:49	7:04	7:14	7:29
7:06	7:21	7:31	7:36	7:13	7:28	7:38	7:53
7:30	7:45	7:55	8:00	7:37	7:52	8:02	8:17
7:54	8:09	8:19	8:24	8:01	8:16	8:26	8:41
8:18	8:33	8:43	8:48	8:25	8:40	8:50	9:05
8:42	8:57	9:07	9:12	8:49	9:04	9:14	9:29
9:06	9:21	9:31	9:36	9:13	9:28	9:38	9:53
9:30	9:45	9:55	10:00	9:37	9:52	10:02	10:17
10:04	10:19	10:29	10:34	10:01	10:16	10:26	10:41
10:28	10:43	10:53	10:58	10:25	10:40	10:50	11:05
10:52	11:07	11:17	11:22	10:49	11:04	11:14	11:29
11:24	11:39	11:49	11:54	11:13	11:28	11:38	11:53
11:58	12:13	12:23	12:28	11:37	11:52	12:02	12:17
12:02	12:17	12:27	12:32	12:01	12:16	12:26	12:41
12:26	12:41	12:51	12:56	12:25	12:40	12:50	13:05
12:50	13:05	13:15	13:20	12:49	13:04	13:14	13:29
13:24	13:39	13:49	13:54	13:13	13:28	13:38	13:53
13:58	14:13	14:23	14:28	13:37	13:52	14:02	14:17
14:22	14:37	14:47	14:52	14:01	14:16	14:26	14:41
14:46	15:01	15:11	15:16	14:25	14:40	14:50	15:05
15:20	15:35	15:45	15:50	14:49	15:04	15:14	15:29
15:54	16:09	16:19	16:24	15:13	15:28	15:38	15:53
16:28	16:43	16:53	16:58	15:37	15:52	16:02	16:17
16:42	16:57	17:07	17:12	16:01	16:16	16:26	16:41
17:16	17:31	17:41	17:46	16:25	16:40	16:50	17:05
17:40	17:55	18:05	18:10	16:49	17:04	17:14	17:29
18:04	18:19	18:29	18:34	17:13	17:28	17:38	17:53
18:38	18:53	19:03	19:08	17:37	17:52	18:02	18:17
19:02	19:17	19:27	19:32	18:01	18:16	18:26	18:41
19:36	19:51	19:61	19:66	18:25	18:40	18:50	19:05
19:60	19:75	19:85	19:90	18:49	19:04	19:14	19:29
19:94	20:09	20:19	20:24	19:13	19:28	19:38	19:53
20:18	20:33	20:43	20:48	19:37	19:52	20:02	20:17
20:42	20:57	21:07	21:12	20:01	20:16	20:26	20:41
20:56	21:11	21:21	21:26	20:25	20:40	20:50	21:05
21:20	21:35	21:45	21:50	20:49	21:04	21:14	21:29
21:44	21:59	22:09	22:14	21:13	21:28	21:38	21:53
21:58	22:13	22:23	22:28	21:37	21:52	22:02	22:17
22:02	22:17	22:27	22:32	22:01	22:16	22:26	22:41
22:36	22:51	23:01	23:06	22:25	22:40	22:50	23:05
23:00	23:15	23:25	23:30	22:49	23:04	23:14	23:29
23:24	23:39	23:49	23:54	23:13	23:28	23:38	23:53
23:58	24:13	24:23	24:28	23:37	23:52	24:02	24:17
24:22	24:37	24:47	24:52	24:01	24:16	24:26	24:41
24:46	25:01	25:11	25:16	24:25	24:40	24:50	25:05
25:20	25:35	25:45	25:50	24:49	25:04	25:14	25:29
25:54	26:09	26:19	26:24	25:13	25:28	25:38	25:53
26:28	26:43	26:53	26:58	25:37	25:52	26:02	26:17
26:42	26:57	27:07	27:12	26:01	26:16	26:26	26:41
27:16	27:31	27:41	27:46	26:25	26:40	26:50	27:05
27:40	27:55	28:05	28:10	26:49	27:04	27:14	27:29
28:04	28:19	28:29	28:34	27:13	27:28	27:38	27:53
28:38	28:53	29:03	29:08	27:37	27:52	28:02	28:17
29:02	29:17	29:27	29:32	28:01	28:16	28:26	28:41
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29:60	29:75	29:85	29:90	28:49	29:04	29:14	29:29
29:94	30:09	30:19	30:24	29:13	29:28	29:38	29:53
30:18	30:33	30:43	30:48	29:37	29:52	30:02	30:17
30:42	30:57	31:07	31:12	30:01	30:16	30:26	30:41
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31:44	31:59	32:09	32:14	31:13	31:28	31:38	31:53
31:58	32:13	32:23	32:28	31:37	31:52	32:02	32:17
32:02	32:17	32:27	32:32	32:01	32:16	32:26	32:41
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33:00	33:15	33:25	33:30	32:49	33:04	33:14	33:29
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33:58	34:13	34:23	34:28	33:37	33:52	34:02	34:17
34:22	34:37	34:47	34:52	34:01	34:16	34:26	34:41
34:46	35:01	35:11	35:16	34:25	34:40	34:50	35:05
35:20	35:35	35:45	35:50	34:49	35:04	35:14	35:29
35:54	36:09	36:19	36:24	35:13	35:28	35:38	35:53
36:28	36:43	36:53	36:58	35:37	35:52	36:02	36:17
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39:02	39:17	39:27	39:32	38:01	38:16	38:26	38:41
39:36	39:51	39:61	39:66	38:25	38:40	38:50	39:05
39:60	39:75	39:85	39:90	38:49	39:04	39:14	39:29
39:94	40:09	40:19	40:24	39:13	39:28	39:38	39:53
40:18	40:33	40:43	40:48	39:37	39:52	40:02	40:17
40:42	40:57	41:07	41:12	40:01	40:16	40:26	40:41
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41:20	41:35	41:45	41:50	40:49	41:04	41:14	41:29
41:44	41:59	42:09	42:14	41:13	41:28	41:38	41:53
41:58	42:13	42:23	42:28	41:37	41:52	42:02	42:17
42:02	42:17	42:27	42:32	42:01	42:16	42:26	42:41
42:36	42:51	43:01	43:06	42:25	42:40	42:50	43:05
43:00	43:15	43:25	43:30	42:49	43:04	43:14	43:29
43:24	43:39	43:49	43:54	43:13	43:28	43:38	43:53
43:58	44:13	44:23	44:28	43:37	43:52	44:02	44:17
44:22	44:37	44:47	44:52	44:01	44:16	44:26	44:41
44:46	45:01	45:11	45:16	44:25	44:40	44:50	45:05
45:20	45:35	45:45	45:50	44:49	45:04	45:14	45:29
45:54	46:09	46:19	46:24	45:13	45:28	45:38	45:53
46:28	46:43	46:53	46:58	45:37	45:52	46:02	46:17
46:42	46:57	47:07	47:12	46:01	46:16	46:26	46:41
47:16	47:31	47:41	47:46	46:25	46:40	46:50	47:05
47:40	47:55	48:05	48:10	46:49	47:04	47:14	47:29
48:04	48:19	48:29	48:34	47:13	47:28	47:38	47:53
48:38	48:53	49:03	49:08	47:37	47:52	48:02	48:17
49:02	49:17	49:27	49:32	48:01	48:16	48:26	48:41
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49:60	49:75	49:85	49:90	48:49	49:04	49:14	49:29
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50:42	50:57	51:07	51:12	50:01	50:16	50:26	50:41
50:56	51:11	51:21	51:26	50:25	50:40	50:50	51:05
51:20	51:35	51:45	51:50	50:49	51:04	51:14	51:29
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53:00	53:15	53:25	53:30	52:49	53:04	53:14	53:29
53:24	53:39	53:49	53:54	53:13	53:28	53:38	53:53
53:58	54:13	54:23	54:28	53:37	53:52	54:02	54:17
54:22	54:37	54:47	54:52	54:01	54:16	54:26	54:41
54:46	55:01	55:11	55:16	54:25	54:40	54:50	55:05
55:20	55:35	55:45	55:50	54:49	55:04	55:14	55:29
55:54	56:09	56:19	56:24	55:13	55:28	55:38	55:53
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57:40	57:55	58:05	58:10	56:49	57:04	57:14	57:29
58:04	58:19	58:29	58:34	57:13	57:28	57:38	57:53
58:38	58:53	59:03	59:08	57:37	57:52	58:02	58:17
59:02	59:17	59:27	59:32	58:01	58:16	58:26	58:41
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60:18	60:33	60:43	60:48	59:37	59:52	60:02	60:17
60:42	60:57	61:07	61:12	60:01	60:16	60:26	60:41
60:56	61:11	61:21	61:26	60:25	60:40	60:50	61:05
61:20	61:35	61:45	61:50	60:49	61:04	61:14	61:29
61:44	61:59	62:09	62:14	61:13	61:28	61:38	61:53
61:58	62:13	62:23	62:28	61:37	61:52	62:02	62:17
62:02	62:17	62:27	62:32	62:01	62:16	62:26	62:41
62:36	62:51	63:01	63:06	62:25	62:40	62:50	63:05
63:00	63:15	63:25	63:30				

# Route 60 Chestnut Hill - Kenmore Station Route 65 Brighton Center - Kenmore Station



## 60•65

Winter December 26, 2015 - March 18, 2016

60 Chestnut Hill-Kenmore Station

65 Brighton Center-Kenmore Station

**Serving**

- The Mall at Chestnut Hill
- St. Elizabeth's Medical Center
- Brookline Village
- Longwood Medical Area
- Beth Israel Deaconess Medical Center
- Fenway Park
- Green Line

Massachusetts Bay Transportation Authority **mbta**

Information 617-222-3200 • 1-800-392-6100  
(TTY) 617-222-5146 • [www.mbta.com](http://www.mbta.com)

## CRASH DATA

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## CRASH RATE WORKSHEET

CITY/TOWN : Brookline COUNT DATE : 2016

DISTRICT : 6 UNSIGNALIZED : ☒ Yes SIGNALIZED : ☐

**MHD USE ONLY**

Source #

~ INTERSECTION DATA ~

MAJOR STREET : Hammond Pond Parkway

MINOR STREET(S) : Hammond Street

Newton Street (West)

LeGrange Street

Newton Street (South)

ST #

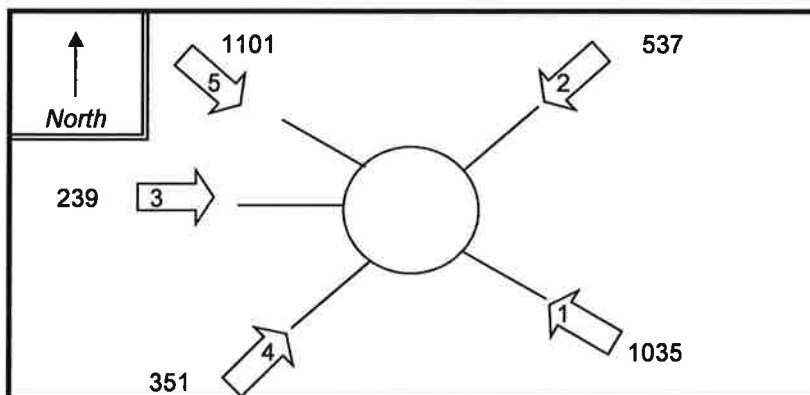
ST #

ST #

ST #

ST #

**INTERSECTION  
DIAGRAM  
(Label Approaches)**



**INTERSECTION**

REF #

**Peak Hour Volumes**

APPROACH :	1	2	3	4	5	Total Entering Vehicles
DIRECTION :	NB	SB	EB	NEB	SEB	
VOLUMES (AM/PM) :	1,035	537	239	351	1,101	3,263

" K " FACTOR :  APPROACH ADT :  ADT = TOTAL VOL/"K" FACT.

TOTAL # OF ACCIDENTS :  # OF YEARS :  AVERAGE # OF ACCIDENTS ( A ) :

**CRASH RATE CALCULATION :**  RATE =  $\frac{(A * 1,000,000)}{(ADT * 365)}$

Comments : Crash rate is significant if > 0.58 crashes per mev for an unsignalized intersection  
and > 0.76 crashes per mev for a signalized intersection for MassDOT District 6.



## CRASH RATE WORKSHEET

CITY/TOWN : Brookline COUNT DATE : 2016  
DISTRICT : 6 UNSIGNALIZED : ☐ SIGNALIZED : ☒ Yes

**MHD USE ONLY**

Source #

~ INTERSECTION DATA ~

MAJOR STREET : Boylston Street  
MINOR STREET(S) : Hammond Street

ST #

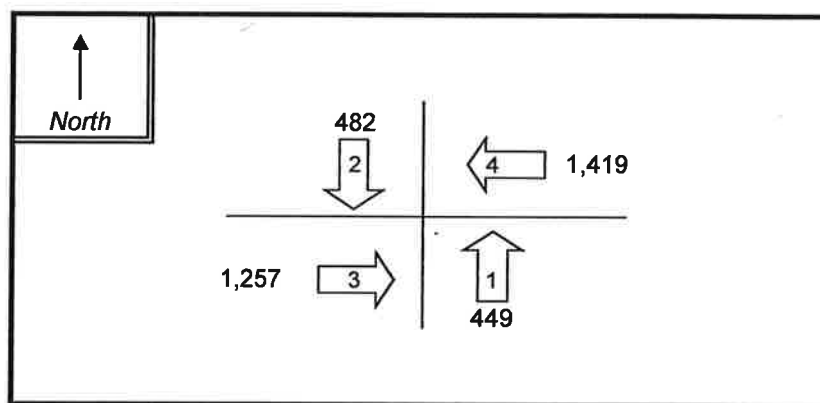
ST #

ST #

ST #

ST #

**INTERSECTION  
DIAGRAM  
(Label Approaches)**



INTERSECTION

REF #

**Peak Hour Volumes**

APPROACH :	1	2	3	4	5	Total Entering Vehicles
DIRECTION :	NB	SB	EB	WB		
VOLUMES (AM/PM) :	449	482	1,257	1,419		3,607

" K " FACTOR :  APPROACH ADT :  ADT = TOTAL VOL/"K" FACT.

TOTAL # OF ACCIDENTS :  # OF YEARS :  AVERAGE # OF ACCIDENTS ( A ) :

CRASH RATE CALCULATION :  RATE =  $\frac{(A * 1,000,000)}{(ADT * 365)}$

Comments : Crash rate is significant if > 0.58 crashes per mev for an unsignalized intersection  
and > 0.76 crashes per mev for a signalized intersection for MassDOT District 6.



## CRASH RATE WORKSHEET

CITY/TOWN : Brookline COUNT DATE : 2016  
DISTRICT : 6 UNSIGNALIZED : ☐ SIGNALIZED : ☒ Yes

**MHD USE ONLY**

Source #

~ INTERSECTION DATA ~

MAJOR STREET : Hammond Street  
MINOR STREET(S) : Heath Street

ST #

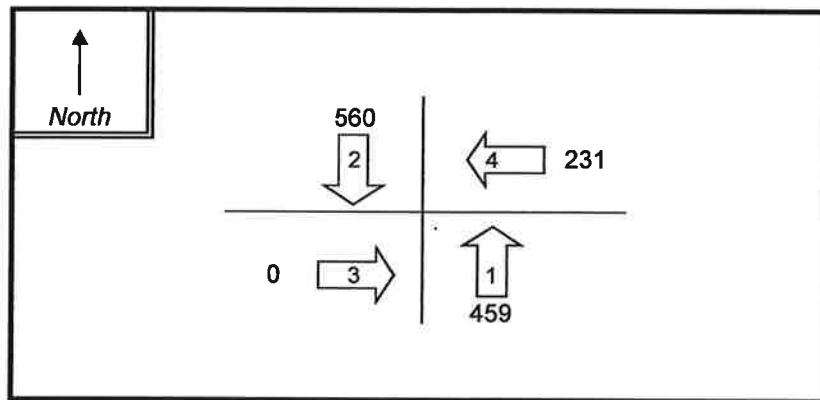
ST #

ST #

ST #

ST #

**INTERSECTION  
DIAGRAM**  
(Label Approaches)



INTERSECTION

REF #

**Peak Hour Volumes**

APPROACH :	1	2	3	4	5	Total Entering Vehicles
DIRECTION :	NB	SB	EB	WB		
VOLUMES (AM/PM) :	459	560	0	231		1,250

"K" FACTOR :  APPROACH ADT :  ADT = TOTAL VOL/"K" FACT.

TOTAL # OF ACCIDENTS :  # OF YEARS :  AVERAGE # OF ACCIDENTS ( A ) :

CRASH RATE CALCULATION :  RATE =  $\frac{(A * 1,000,000)}{(ADT * 365)}$

Comments : Crash rate is significant if > 0.58 crashes per mev for an unsignalized intersection  
and >0.76 crashes per mev for a signalized intersection for MassDOT District 6.



## CRASH RATE WORKSHEET

CITY/TOWN : Brookline COUNT DATE : 2016  
DISTRICT : 6 UNSIGNALIZED : ☒ Yes SIGNALIZED : ☐

**MHD USE ONLY**

Source #

~ INTERSECTION DATA ~

MAJOR STREET : Heath Street

ST #

MINOR STREET(S) : Dunster Street

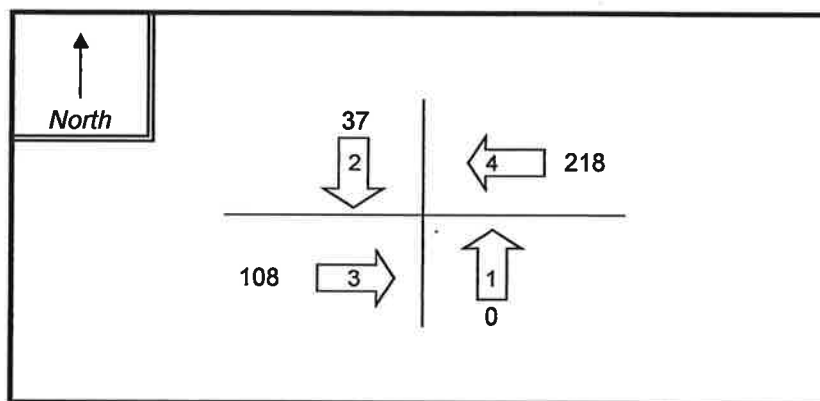
ST #

ST #

ST #

ST #

**INTERSECTION  
DIAGRAM**  
(Label Approaches)



**INTERSECTION**

REF #

**Peak Hour Volumes**

APPROACH :	1	2	3	4	5	Total Entering Vehicles
DIRECTION :	NB	SB	EB	WB		
VOLUMES (AM/PM) :	0	37	108	218		363

" K " FACTOR :  APPROACH ADT :  ADT = TOTAL VOL/"K" FACT.

TOTAL # OF ACCIDENTS :  # OF YEARS :  AVERAGE # OF ACCIDENTS ( A ) :

**CRASH RATE CALCULATION :**  RATE =  $\frac{(A * 1,000,000)}{(ADT * 365)}$

Comments : Crash rate is significant if > 0.58 crashes per mev for an unsignalized intersection  
and > 0.76 crashes per mev for a signalized intersection for MassDOT District 6.



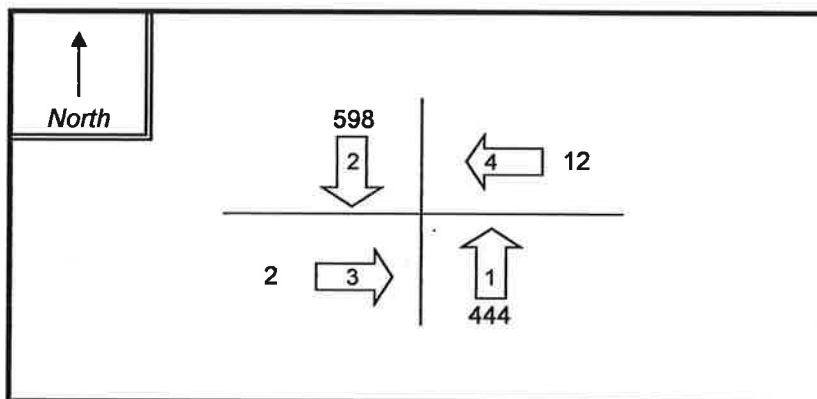
## CRASH RATE WORKSHEET

CITY/TOWN : Brookline COUNT DATE : 2016DISTRICT : 6 UNSIGNALIZED : ☒ Yes SIGNALIZED : ☐**MHD USE ONLY**Source # 

~ INTERSECTION DATA ~

MAJOR STREET : Hammond StreetST # MINOR STREET(S) : Soule Rec DrivewayST # ST # ST # ST # 

**INTERSECTION  
DIAGRAM**  
(Label Approaches)



INTERSECTION

REF # 

**Peak Hour Volumes**

APPROACH :	1	2	3	4	5	Total Entering Vehicles
DIRECTION :	NB	SB	EB	WB		
VOLUMES (AM/PM) :	444	598	2	12		1,056

" K " FACTOR :  APPROACH ADT :  ADT = TOTAL VOL/"K" FACT.TOTAL # OF ACCIDENTS :  # OF YEARS :  AVERAGE # OF ACCIDENTS ( A ) : CRASH RATE CALCULATION :  RATE = 
$$\frac{(A * 1,000,000)}{(ADT * 365)}$$

Comments : Crash rate is significant if > 0.58 crashes per mev for an unsignalized intersection  
and > 0.76 crashes per mev for a signalized intersection for MassDOT District 6.



## CRASH RATE WORKSHEET

CITY/TOWN : Brookline COUNT DATE : 2016  
DISTRICT : 6 UNSIGNALIZED : ☒ Yes SIGNALIZED : ☐

**MHD USE ONLY**

Source #

~ INTERSECTION DATA ~

MAJOR STREET : Hammond Street  
MINOR STREET(S) : Woodland Road

ST #

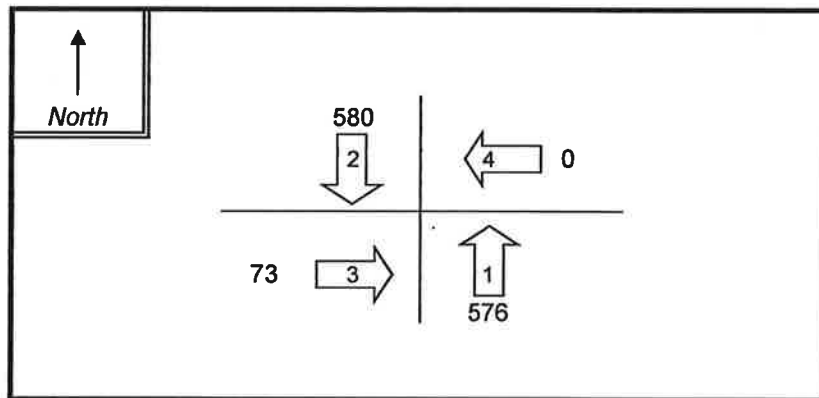
ST #

ST #

ST #

ST #

**INTERSECTION  
DIAGRAM**  
(Label Approaches)



INTERSECTION  
REF #

**Peak Hour Volumes**

APPROACH :	1	2	3	4	5	Total Entering Vehicles
DIRECTION :	NB	SB	EB	WB		
VOLUMES (AM/PM) :	576	580	73	0		1,229

"K" FACTOR :  APPROACH ADT :  ADT = TOTAL VOL/"K" FACT.

TOTAL # OF  
ACCIDENTS :  # OF  
YEARS :  AVERAGE # OF  
ACCIDENTS ( A ) :

CRASH RATE CALCULATION :  RATE =  $\frac{(A * 1,000,000)}{(ADT * 365)}$

Comments : Crash rate is significant if > 0.58 crashes per mev for an unsignalized intersection  
and > 0.76 crashes per mev for a signalized intersection for MassDOT District 6.

Crash Number	Crash Date	Crash Time	Crash Hour	City/Town	Crash Severity	Manner of Collision	Locality	Road Surface	Ambient Light	Weather Condition	Street Number	Roadway
3613807	9/16/2013	5:30 PM	05:00PM to 05:59PM	BROOKLINE	Non-fatal injury	Head-on Angle	BROOKLINE	Dry	Daylight	Clear		WOODLAND ROAD / HAMMOND STREET
3805486	1/14/2014	9:30 AM	09:00AM to 09:59AM	BROOKLINE	Non-fatal injury	Angle	BROOKLINE	Wet	Daylight	Cloudy/Rain		HAMMOND STREET / WOODLAND RD
4074981	11/10/2014	12:00 AM	12:00AM to 12:59AM	BROOKLINE	Property damage only (none injured)	Angle	BROOKLINE	Dry	Daylight	Clear		HAMMOND STREET / WOODLAND ROAD
4075019	12/11/2014	6:28 PM	06:00PM to 06:59PM	BROOKLINE	Non-fatal injury	Angle	BROOKLINE	Wet	Dark - lighted roadway	Clear		HAMMOND ST / WOODLAND RD
3023330	1/13/2012	5:10 PM	05:00PM to 05:59PM	BROOKLINE	Property damage only (none injured)	Angle	BROOKLINE	Dry	Dark - lighted roadway	Clear		WOODLAND ROAD / HAMMOND STREET
3023432	1/12/2012	4:56 PM	04:00PM to 04:59PM	BROOKLINE	Property damage only (none injured)	Single vehicle crash	BROOKLINE	Dry	Dark - lighted roadway	Clear		HAMMOND STREET / WOODLAND ROAD
3831445	4/10/2014	5:00 PM	05:00PM to 05:59PM	BROOKLINE	Property damage only (none injured)	Angle	BROOKLINE	Dry	Daylight	Clear	794	HAMMOND ST
3266366	7/21/2012	3:15 AM	03:00AM to 03:59AM	BROOKLINE	Property damage only (none injured)	Single vehicle crash	BROOKLINE	Dry	Dark - lighted roadway	Clear	795	HAMMOND STREET
3348834	12/8/2012	11:23 AM	11:00AM to 11:59AM	BROOKLINE	Property damage only (none injured)	Not reported	BROOKLINE	Wet	Daylight	Rain		HAMMOND STREET / WOODLAND ROAD
4074888	7/23/2014	3:25 PM	03:00PM to 03:59PM	BROOKLINE	Non-fatal injury	Single vehicle crash	BROOKLINE	Dry	Daylight	Clear		HAMMOND ST / WOODLAND RD
SELECT (Crash Number), (Crash Date), (Crash Time), (Crash Hour), (City/Town), (Crash Severity), (Manner of Collision), (Locality), (Road Surface), (Ambient Light), (Weather Condition), (Street Number), (Roadway), (X), (Y) FROM (TBL_CRASH_REPORT_VIEW) WHERE (((City/Town) = 'BROOKLINE') AND ((Crash Date) >= '2010-01-01' AND (Crash Date) <= '2014-12-31'))												

This query was also restricted by a map filter.

Crash Number	Crash Date	Crash Time	Crash Hour	City/Town	Crash Severity	Manner of Collision	Locality	Road Surface	Ambient Light	Weather Condition	Street Number	Roadway
4074823	2/26/2014	8:17 AM	08:00AM to 08:59AM	BROOKLINE	Non-fatal injury	Angle	BROOKLINE	Dry	Daylight	Clear	652	HAMMOND ST
4075014	12/9/2014	1:00 PM	01:00PM to 01:59PM	BROOKLINE	Property damage only (none injured)	Single vehicle crash	BROOKLINE	Wet	Daylight	Rain	650	HAMMOND ST

SELECT [Crash Number], [Crash Date], [Crash Time], [Crash Hour], [City/Town], [Crash Severity], [Manner of Collision], [Locality], [Road Surface], [Ambient Light], [Weather Condition], [Street Number], [Roadway], [X], [Y] FROM [TBL\_CRASH\_REPORT\_VIEW] WHERE ((([City/Town] = 'BROOKLINE') AND ([Crash Date] >= '2010-01-01' AND [Crash Date] <= '2014-12-31')))

This query was also restricted by a map filter.



Crash Number	Crash Date	Crash Time	Crash Hour	City/Town	Crash Severity	Manner of Collision	Locality	Road Surface	Ambient Light	Weather Condition	Street Number	Roadway
3403216	3/22/2013	8:13 PM	08:00PM to 08:59PM	BROOKLINE	Non-fatal injury	Angle	BROOKLINE	Dry	Dark - lighted roadway	Clear		BOYLSTON STREET Rte 9 E / HAMMOND STREET
2789198	4/16/2011	11:10 PM	11:00PM to 11:59PM	BROOKLINE	Non-fatal injury	Rear-end	BROOKLINE	Wet	Dark - lighted roadway	Rain		BOYLSTON STREET Rte 9 E / HAMMOND STREET
2789970	1/29/2011	9:40 PM	09:00PM to 09:59PM	BROOKLINE	Property damage only (none injured)	Rear-end	BROOKLINE	Wet	Dark - lighted roadway	Clear	1192	BOYLSTON STREET
3345833	9/26/2012	4:00 PM	04:00PM to 04:59PM	BROOKLINE	Property damage only (none injured)	Rear-end	BROOKLINE	Dry	Daylight	Cloudy		BOYLSTON STREET Rte 9 E / HAMMOND STREET
3348879	11/19/2012	12:37 AM	12:00AM to 12:59AM	BROOKLINE	Non-fatal injury	Rear-end	BROOKLINE	Dry	Daylight	Clear		BOYLSTON STREET Rte 9 E / HAMMOND STREET
3348888	11/13/2012	9:35 PM	09:00PM to 09:59PM	BROOKLINE	Property damage only (none injured)	Rear-end	BROOKLINE	Dry	Dark - lighted roadway	Cloudy		BOYLSTON STREET Rte 9 W / HAMMOND STREET
3620570	8/14/2013	9:53 PM	09:00PM to 09:59PM	BROOKLINE	Non-fatal injury	Angle	BROOKLINE	Dry	Dark - lighted roadway	Clear		BOYLSTON STREET Rte 9 W / HAMMOND STREET
3766330	7/31/2012	9:05 PM	09:00PM to 09:59PM	BROOKLINE	Non-fatal injury	Single vehicle crash	BROOKLINE	Wet	Dark - lighted roadway	Rain		HAMMOND STREET / BOYLSTON STREET
3345772	10/31/2012	12:30 AM	12:00AM to 12:59AM	BROOKLINE	Non-fatal injury	Rear-end	BROOKLINE	Dry	Daylight	Clear		BOYLSTON STREET / HAMMOND STREET Rte 9 W
3831436	4/11/2014	9:05 PM	09:00PM to 09:59PM	BROOKLINE	Property damage only (none injured)	Angle	BROOKLINE	Dry	Dark - lighted roadway	Cloudy		BOYLSTON ST Rte 9 W / HAMMOND ST Rte 9 W
3887529	6/24/2014	12:00 PM	12:00PM to 12:59PM	BROOKLINE	Property damage only (none injured)	Sideswipe, same direction	BROOKLINE	Dry	Daylight	Clear		HAMMOND STREET / BOYLSTON STREET Rte 9 E
2783067	10/1/2011	10:45 AM	10:00AM to 10:59AM	BROOKLINE	Property damage only (none injured)	Rear-end	BROOKLINE	Dry	Daylight	Cloudy		BOYLSTON STREET / HAMMOND STREET
2789609	5/12/2011	10:55 AM	10:00AM to 10:59AM	BROOKLINE	Non-fatal injury	Rear-end	BROOKLINE	Dry	Daylight	Cloudy		BOYLSTON STREET Rte 9
2578192	1/11/2010	6:14 AM	06:00AM to 06:59AM	BROOKLINE	Not Reported	Angle	BROOKLINE	Dry	Dark - lighted roadway	Clear		BOYLSTON STREET Rte 9 E / HAMMOND STREET
2778896	9/22/2011	7:15 PM	07:00PM to 07:59PM	BROOKLINE	Non-fatal injury	Rear-end	BROOKLINE	Dry	Dark - lighted roadway	Cloudy		BOYLSTON STREET / HAMMOND STREET
2790973	2/4/2011	1:55 PM	01:00PM to 01:59PM	BROOKLINE	Non-fatal injury	Rear-end	BROOKLINE	Dry	Daylight	Clear	616	HAMMOND STREET
2799230	10/25/2011	1:09 PM	01:00PM to 01:59PM	BROOKLINE	Property damage only (none injured)	Sideswipe, same direction	BROOKLINE	Dry	Daylight	Clear		BOYLSTON STREET / HAMMOND STREET
3182735	4/3/2012	4:35 PM	04:00PM to 04:59PM	BROOKLINE	Property damage only (none injured)	Single vehicle crash	BROOKLINE	Dry	Daylight	Clear	1180	BOYLSTON STREET
3613803	9/11/2013	3:00 PM	03:00PM to 03:59PM	BROOKLINE	Property damage only (none injured)	Angle	BROOKLINE	Dry	Daylight	Clear		BOYLSTON STREET Rte 9 W / HAMMOND STREET
3805483	1/14/2014	5:48 PM	05:00PM to 05:59PM	BROOKLINE	Property damage only (none injured)	Angle	BROOKLINE	Wet	Dark - lighted roadway	Reported but invalid		HAMMOND ST / BOYLSTON ST
SELECT [Crash Number], [Crash Date], [Crash Time], [Crash Hour], [City/Town], [Crash Severity], [Manner of collision], [Locality], [Road Surface], [Ambient Light], [Weather Condition], [Street Number], [Roadway], [X], [Y] FROM [TBL_CRASH_REPORT_VIEW] WHERE ((([City/Town] = 'BROOKLINE') AND ([Crash Date] >= '2010-01-01' AND [Crash Date] <= '2014-12-31'))												

This query was also restricted by a map filter.

Crash Number	Crash Date	Crash Time	Crash Hour	City/Town	Crash Severity	Manner of Collision	Locality	Road Surface	Ambient Light	Weather Condition	Street Number	Roadway
35-50861	7/29/2013	6:00 PM	06:00PM to 06:59PM	BROOKLINE	Property damage only (none injured)	Sideswipe, opposite direction	BROOKLINE	Dry	Daylight	Clear		HEATH STREET
27-50831	5/12/2013	1:45 PM	01:00PM to 01:59PM	BROOKLINE	Not Reported	Sideswipe, same direction	BROOKLINE	Not reported	Daylight	Cloudy	625	HAMMOND STREET
28-48630	10/29/2011	11:30 AM	11:00AM to 11:59AM	BROOKLINE	Property damage only (none injured)	Single vehicle crash	BROOKLINE	Wet	Daylight	Cloudy/Rain		HAMMOND STREET / HEATH STREET

SELECT [Crash Number], [Crash Date], [Crash Time], [Crash Hour], [City/Town], [Crash Severity], [Manner of Collision], [Locality], [Road Surface], [Ambient Light], [Weather Condition], [Street Number], [Roadway], [X], [Y] FROM [TBL\_CRASH\_REPORT\_VIEW] WHERE ((([City/Town] = 'BROOKLINE') AND ([Crash Date] >= '2010-01-01' AND [Crash Date] <= '2014-12-31')))

This query was also restricted by a map filter.

Crash Number	Crash Date	Crash Time	Crash Year	City/Town	Crash Severity	Minister of Collision	Locality	Road Surface	Ambient Light	Weather Condition	Street Number	Roadway
3991386	4/13/2013	6:15 AM	06:00AM to 06:59AM	BROOKLINE	Property damage only (none injured)	Single vehicle crash	BROOKLINE	Wet	Dawn	Rain		HORACE JAMES CIRCLE / WEST ROXBURY PARKWAY
3765570	7/11/2013	4:05 PM	04:00PM to 04:59PM	BROOKLINE	Property damage only (none injured)	Rear-end	BROOKLINE	Dry	Dawnlight	Clear		LAGRANGE STREET / HORACE JAMES CIRCLE
3613735	12/17/2013	10:00 AM	10:00AM to 10:59AM	BROOKLINE	Non-fatal injury	Rear-end	BROOKLINE	Dry	Dawnlight	Clear		HORACE JAMES CIRCLE
3657994	13/4/2013	4:47 PM	04:00PM to 04:59PM	BROOKLINE	Property damage only (none injured)	Angle	BROOKLINE	Dry	Dawnlight	Clear		HORACE JAMES CIRCLE / NEWTON STREET / HAMMOND POND PARKWAY
2366486	10/27/2010	1:40 PM	01:00PM to 01:59PM	BROOKLINE	Property damage only (none injured)	Side-swipe, same direction	BROOKLINE	Dry	Dawnlight	Cloudy		HORACE JAMES CIRCLE
2655318	10/22/2010	4:22 PM	04:00PM to 04:59PM	BROOKLINE	Property damage only (none injured)	Side-swipe, same direction	BROOKLINE	Wet	Dawnlight	Rain		HAMMOND POND PARKWAY / HORACE JAMES CIRCLE
2727911	5/7/2011	4:13 PM	04:00PM to 04:59PM	BROOKLINE	Property damage only (none injured)	Side-swipe, same direction	BROOKLINE	Wet	Dawnlight	Cloudy		HAMMOND POND PARKWAY / HORACE JAMES CIRCLE
2869631	1/7/2012	3:45 AM	03:00AM to 03:59AM	BROOKLINE	Property damage only (none injured)	Single vehicle crash	BROOKLINE	Wet	Dark - lighted roadway	Snow		HAMMOND POND PARKWAY / HORACE JAMES CIRCLE
2732493	2/24/2013	2:42 PM	02:00PM to 02:59PM	BROOKLINE	Property damage only (none injured)	Rear-end	BROOKLINE	Dry	Dawnlight	Cloudy		WEST ROXBURY PARKWAY
3402937	4/26/2013	12:00 PM	12:00PM to 12:59PM	BROOKLINE	Property damage only (none injured)	Angle	BROOKLINE	Dry	Dawnlight	Clear	32	HAMMOND POND PARKWAY
3403886	5/3/2013	4:51 PM	04:00PM to 04:59PM	BROOKLINE	Non-fatal injury	Angle	BROOKLINE	Dry	Dawnlight	Clear		HORACE JAMES CIRCLE / NEWTON STREET / HAMMOND POND PARKWAY / HORACE JAMES CIRCLE
2791967	8/22/2011	8:30 PM	08:00PM to 08:59PM	BROOKLINE	Non-fatal injury	Rear-end	BROOKLINE	Dry	Dark - lighted roadway	Clear		HAMMOND POND PARKWAY / NEWTON STREET / HAMMOND POND PARKWAY
2791976	4/10/2011	1:45 PM	01:00PM to 01:59PM	BROOKLINE	Property damage only (none injured)	Side-swipe, same direction	BROOKLINE	Dry	Dawnlight	Clear		HAMMOND POND PARKWAY / HORACE JAMES CIRCLE
2791977	8/21/2011	4:55 PM	04:00PM to 04:59PM	BROOKLINE	Non-fatal injury	Rear-end	BROOKLINE	Wet	Dawnlight	Rain		HORACE JAMES CIRCLE / NEWTON STREET / LAGRANGE STREET
9608053	9/12/2010	7:00 PM	07:00PM to 07:59PM	BROOKLINE	Property damage only (none injured)	Angle	BROOKLINE	Wet	Dawnlight	Cloudy		LAGRANGE STREET
3307123	10/27/2012	5:24 PM	05:00PM to 05:59PM	BROOKLINE	Property damage only (none injured)	Side-swipe, same direction	BROOKLINE	Dry	Dawnlight	Cloudy		HORACE JAMES CIRCLE
3668550	11/21/2013	7:20 AM	07:00AM to 07:59AM	BROOKLINE	Property damage only (none injured)	Angle	BROOKLINE	Dry	Dawnlight	Clear		HAMMOND POND PARKWAY
3748365	3/15/2014	9:27 AM	09:00AM to 09:59AM	BROOKLINE	Property damage only (none injured)	Side-swipe, same direction	BROOKLINE	Dry	Dawnlight	Clear		HAMMOND POND PARKWAY Res UNKNOWN
3922791	8/7/2014	2:11 PM	02:00PM to 02:59PM	BROOKLINE	Non-fatal injury	Side-swipe, same direction	BROOKLINE	Dry	Dawnlight	Clear		HAMMOND POND PARKWAY Res UNKNOWN
3991772	12/18/2014	7:48 AM	07:00AM to 07:59AM	BROOKLINE	Non-fatal injury	Rear-end	BROOKLINE	Wet	Dawnlight	Cloudy/rain		HAMMOND POND PARKWAY Res UNKNOWN
4070463	9/28/2014	12:50 PM	12:00PM to 12:59PM	BROOKLINE	Non-fatal injury	Angle	BROOKLINE	Dry	Dawnlight	Clear		NEWTON ST / LAGRANGE ST / HORACE JAMES ROTARY
4070463	10/14/2014	5:54 PM	05:00PM to 05:59PM	BROOKLINE	Property damage only (none injured)	Angle	BROOKLINE	Dry	Dawnlight	Clear		HORACE JAMES CIRCLE / NEWTON STREET
4070466	11/12/2014	5:30 PM	05:00PM to 05:59PM	BROOKLINE	Property damage only (none injured)	Angle	BROOKLINE	Wet	Dark - lighted roadway	Rain		NEWTON ST / HORACE JAMES CIRCLE
4070522	12/14/2014	1:58 PM	01:00PM to 01:59PM	BROOKLINE	Property damage only (none injured)	Side-swipe, same direction	BROOKLINE	Dry	Dawnlight	Clear		HORACE JAMES CIRCLE
2647281	9/7/2010	5:20 PM	05:00PM to 05:59PM	BROOKLINE	Non-fatal injury	Single vehicle crash	BROOKLINE	Wet	Dawnlight	Rain		HORACE JAMES CIRCLE
2622306	7/01/2010	7:11 PM	07:00PM to 07:59PM	BROOKLINE	Property damage only (none injured)	Angle	BROOKLINE	Dry	Dawnlight	Cloudy		LAGRANGE STREET / HORACE JAMES CIRCLE
2655564	10/14/2010	2:59 PM	02:00PM to 02:59PM	BROOKLINE	Property damage only (none injured)	Single vehicle crash	BROOKLINE	Dry	Dark - lighted roadway	Cloudy		HAMMOND POND PARKWAY
2704809	3/8/2011	9:35 PM	09:00PM to 09:59PM	BROOKLINE	Non-fatal injury	Angle	BROOKLINE	Dry	Dawnlight	Clear		HORACE JAMES CIRCLE
2802985	7/11/2010	9:10 AM	09:00AM to 09:59AM	BROOKLINE	Property damage only (none injured)	Angle	BROOKLINE	Dry	Dawnlight	Clear		HORACE JAMES CIRCLE
2820992	7/13/2010	9:10 AM	09:00AM to 09:59AM	BROOKLINE	Property damage only (none injured)	Angle	BROOKLINE	Dry	Dawnlight	Not Reported		HAMMOND POND PARKWAY
3440932	4/17/2013	2:40 PM	02:00PM to 02:59PM	BROOKLINE	Property damage only (none injured)	Rear-end	BROOKLINE	Dry	Dawnlight	Clear		HORACE JAMES CIRCLE / HAMMOND STREET / WEST ROXBURY PARKWAY
2790985	7/18/2013	6:30 PM	06:00PM to 06:59PM	BROOKLINE	Property damage only (none injured)	Angle	BROOKLINE	Dry	Dawnlight	Clear		LAGRANGE STREET / NEWTON STREET / HAMMOND POND PARKWAY
3422522	3/13/2013	7:05 PM	07:00PM to 07:59PM	BROOKLINE	Non-fatal injury	Side-swipe, same direction	BROOKLINE	Dry	Dawnlight	Clear		HORACE JAMES CIRCLE
3847253	6/6/2014	5:46 PM	05:00PM to 05:59PM	BROOKLINE	Non-fatal injury	Angle	BROOKLINE	Dry	Dawnlight	Clear		HAMMOND POND PARKWAY Res UNKNOWN
3846130	5/29/2014	3:15 PM	03:00PM to 03:59PM	BROOKLINE	Property damage only (none injured)	Side-swipe, same direction	BROOKLINE	Dry	Dawnlight	Clear		HORACE JAMES CIRCLE / HAMMOND STREET / HAMMOND POND PARKWAY
3972016	10/23/2014	9:23 PM	09:00PM to 09:59PM	BROOKLINE	Property damage only (none injured)	Rear-end	BROOKLINE	Dry	Dawnlight	Cloudy		HAMMOND POND PARKWAY Res UNKNOWN
2647211	9/29/2010	9:49 AM	09:00AM to 09:59AM	BROOKLINE	Property damage only (none injured)	Side-swipe, same direction	BROOKLINE	Dry	Dawnlight	Clear		HAMMOND POND PARKWAY
2647197	8/26/2010	6:31 PM	06:00PM to 06:59PM	BROOKLINE	Property damage only (none injured)	Side-swipe, same direction	BROOKLINE	Dry	Dark	Clear		HORACE JAMES CIRCLE
2641999	9/12/2010	10:49 AM	10:00AM to 10:59AM	BROOKLINE	Property damage only (none injured)	Rear-end	BROOKLINE	Dry	Dawnlight	Clear		HORACE JAMES CIRCLE
2629276	9/12/2010	8:28 AM	08:00AM to 08:59AM	BROOKLINE	Non-fatal injury	Side-swipe, same direction	BROOKLINE	Dry	Dawnlight	Clear		HAMMOND POND PARKWAY
2772603	9/12/2010	3:40 PM	03:00PM to 03:59PM	BROOKLINE	Non-fatal injury	Rear-end	BROOKLINE	Dry	Dawnlight	Clear		HAMMOND POND PARKWAY
3920276	4/7/2012	10:35 PM	10:00PM to 10:59PM	BROOKLINE	Property damage only (none injured)	Single vehicle crash	BROOKLINE	Dry	Dark - lighted roadway	Cloudy		HORACE JAMES CIRCLE
2735841	6/9/2011	5:25 PM	05:00PM to 05:59PM	BROOKLINE	Property damage only (none injured)	Side-swipe, opposite direction	BROOKLINE	Dry	Dawnlight	Clear		HORACE JAMES CIRCLE
2785144	4/24/2011	8:38 AM	08:00AM to 08:59AM	BROOKLINE	Property damage only (none injured)	Angle	BROOKLINE	Wet	Dawnlight	Clear		HORACE JAMES CIRCLE
2788146	4/22/2011	6:45 PM	06:00PM to 06:59PM	BROOKLINE	Property damage only (none injured)	Rear-end	BROOKLINE	Dry	Dawnlight	Clear		HAMMOND POND PARKWAY / HORACE JAMES CIRCLE
3788064	12/16/2013	8:29 AM	08:00AM to 08:59AM	BROOKLINE	Property damage only (none injured)	Side-swipe, same direction	BROOKLINE	Dry	Dawnlight	Clear		HAMMOND POND PARKWAY Res UNKNOWN
3498565	4/29/2012	8:11 AM	08:00AM to 08:59AM	BROOKLINE	Property damage only (none injured)	Angle	BROOKLINE	Dry	Dawnlight	Cloudy		HAMMOND POND PARKWAY
3600422	9/12/2013	5:45 PM	05:00PM to 05:59PM	BROOKLINE	Property damage only (none injured)	Angle	BROOKLINE	Not reported	Dawnlight	Clear		HORACE JAMES CIRCLE Res UNKNOWN
3600398	2/7/2014	5:58 PM	05:00PM to 05:59PM	BROOKLINE	Property damage only (none injured)	Rear-end	BROOKLINE	Dry	Dark - lighted roadway	Clear		HORACE JAMES CIRCLE
3804001	2/17/2014	11:25 AM	11:00AM to 11:59AM	BROOKLINE	Property damage only (none injured)	Angle	BROOKLINE	Dry	Dawnlight	Clear		NEWTON STREET / LAGRANGE STREET / HAMMOND POND PARKWAY
3748721	9/18/2014	2:00 PM	02:00PM to 02:59PM	BROOKLINE	Non-fatal injury	Rear-end	BROOKLINE	Snow	Dawnlight	Snow		HORACE JAMES CIRCLE
3966095	9/18/2014	6:30 PM	06:00PM to 06:59PM	BROOKLINE	Property damage only (none injured)	Side-swipe, same direction	BROOKLINE	Dry	Dawnlight	Clear		HORACE JAMES CIRCLE

SELECT (Crash Number), (Crash Date), (Crash Time), (Crash Year), (City/Town), (Crash Severity), (Minister of Collision), (Locality), (Road Surface), (Ambient Light), (Weather Condition), (Street Number), (Roadway), [X], [Y] FROM (TBL\_CRASH\_REPORT\_VIEW) WHERE (((City/Town) = 'BROOKLINE') AND (Crash Date) >= '2010-01-01' AND (Crash Date) <= '2014-12-31'))

See query text also restricted by a map filter.

Date: 2010-01-01 AND [Crash Date] <= 2009-12-31

Crash Number	Crash Date	Crash Time	Crash Hour	City/Town	Crash Severity	Manner of Collision	Locality	Road Surface	Ambient Light	Weather Condition	Street Number	Roadway
4074815	1/7/2014	1:27 PM	01:00PM to 01:59PM	BROOKLINE	Property damage only (none injured)	Single vehicle crash	BROOKLINE	Ice	Daylight	Snow/Blowing sand, snow		HEATH ST / DUNSTER RD

SELECT [Crash Number], [Crash Date], [Crash Time], [Crash Hour], [City/Town], [Crash Severity], [Manner of Collision], [Locality], [Road Surface], [Ambient Light], [Weather Condition], [Street Number], [Roadway], [X], [Y] FROM [TBL\_CRASH\_REPORT\_VIEW] WHERE ((([City/Town] = 'BROOKLINE') AND ([Crash Date] >= '2010-01-01' AND [Crash Date] <= '2014-12-31')))

This query was also restricted by a map filter.

# Vanasse & Associates

Vanasse & Associates  
Location: Heath Street  
Location: E of Soule Rear Dwy  
City: Brookline, MA

35 New England Business Center Dr, Suite 140  
Andover, MA 01810

Site Code: 00738201

Start Time	21-Nov-16 Mon	Westbound		Hour Totals		Eastbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		*	*			*	*				
12:15		*	*			*	*				
12:30		*	*			*	*				
12:45		*	37	0	37	*	12	0	12	0	49
01:00		*	42			*	17				
01:15		*	52			*	16				
01:30		*	51			*	9				
01:45		*	40	0	185	*	9	0	51	0	236
02:00		*	59			*	8				
02:15		*	38			*	15				
02:30		*	59			*	14				
02:45		*	64	0	220	*	14	0	51	0	271
03:00		*	79			*	4				
03:15		*	93			*	16				
03:30		*	109			*	11				
03:45		*	96	0	377	*	11	0	42	0	419
04:00		*	131			*	11				
04:15		*	105			*	16				
04:30		*	88			*	9				
04:45		*	90	0	414	*	10	0	46	0	460
05:00		*	106			*	11				
05:15		*	90			*	10				
05:30		*	85			*	10				
05:45		*	86	0	367	*	15	0	46	0	413
06:00		*	73			*	14				
06:15		*	62			*	10				
06:30		*	57			*	14				
06:45		*	43	0	235	*	7	0	45	0	280
07:00		*	42			*	11				
07:15		*	29			*	5				
07:30		*	26			*	2				
07:45		*	24	0	121	*	6	0	24	0	145
08:00		*	27			*	17				
08:15		*	17			*	5				
08:30		*	14			*	4				
08:45		*	21	0	79	*	5	0	31	0	110
09:00		*	14			*	3				
09:15		*	11			*	3				
09:30		*	14			*	5				
09:45		*	9	0	48	*	0	0	11	0	59
10:00		*	6			*	4				
10:15		*	13			*	0				
10:30		*	7			*	2				
10:45		*	8	0	34	*	0	0	6	0	40
11:00		*	9			*	5				
11:15		*	10			*	2				
11:30		*	5			*	3				
11:45		*	4	0	28	*	0	0	10	0	38
Total		0	2145			0	375			0	2520
Percent		0.0%	100.0%			0.0%	100.0%			0.0%	100.0%

# Vanasse & Associates

Page 2

Vanasse & Associates  
Location: Heath Street  
Location: E of Soule Rear Dwy  
City: Brookline, MA

35 New England Business Center Dr, Suite 140  
Andover, MA 01810

Site Code: 00738201

Start Time	22-Nov-16 Tue	Westbound		Hour Totals		Eastbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		1	60			1	20				
12:15		1	48			0	18				
12:30		0	55			0	16				
12:45		2	60	4	223	1	16	2	70	6	293
01:00		3	61			1	19				
01:15		0	46			0	8				
01:30		0	46			0	13				
01:45		3	42	6	195	0	14	1	54	7	249
02:00		0	50			0	13				
02:15		1	65			0	13				
02:30		0	61			0	14				
02:45		0	68	1	244	0	13	0	53	1	297
03:00		2	87			1	19				
03:15		0	96			0	15				
03:30		0	97			0	16				
03:45		1	119	3	399	0	20	1	70	4	469
04:00		1	61			0	9				
04:15		0	100			0	19				
04:30		3	83			2	11				
04:45		0	85	4	329	0	16	2	55	6	384
05:00		0	105			1	11				
05:15		4	115			0	15				
05:30		5	108			2	11				
05:45		9	69	18	397	2	5	5	42	23	439
06:00		12	78			5	12				
06:15		16	81			4	4				
06:30		33	60			11	19				
06:45		59	63	120	282	8	13	28	48	148	330
07:00		72	53			13	9				
07:15		76	42			14	12				
07:30		111	39			10	7				
07:45		109	29	368	163	12	4	49	32	417	195
08:00		111	24			14	11				
08:15		120	22			22	6				
08:30		109	17			13	10				
08:45		101	25	441	88	29	6	78	33	519	121
09:00		75	23			13	4				
09:15		57	18			12	6				
09:30		75	12			13	5				
09:45		58	12	265	65	13	5	51	20	316	85
10:00		49	7			14	6				
10:15		42	8			10	1				
10:30		39	11			14	3				
10:45		51	6	181	32	14	1	52	11	233	43
11:00		41	7			19	1				
11:15		45	2			11	2				
11:30		46	5			9	4				
11:45		42	2	174	16	16	1	55	8	229	24
Total		1585	2433			324	496			1909	2929
Percent		39.4%	60.6%			39.5%	60.5%			39.5%	60.5%

11/22/2016 :

2:15-3:15 pm  
(school pm peak)

= 340 vehicles

AADT= 4838

K-Factor= 7.0%

35 New England Business Center Dr, Suite 140  
Andover, MA 01810

Site Code: 00738201

Start Time	23-Nov-16		Westbound		Hour Totals		Eastbound		Hour Totals		Combined Totals	
	Wed		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00			2	*			0	*				
12:15			2	*			1	*				
12:30			0	*			1	*				
12:45			4	*	8	0	0	*	2	0	10	0
01:00			0	*			1	*				
01:15			1	*			1	*				
01:30			1	*			1	*				
01:45			1	*	3	0	0	*	3	0	6	0
02:00			1	*			2	*				
02:15			1	*			0	*				
02:30			2	*			0	*				
02:45			1	*	5	0	1	*	3	0	8	0
03:00			0	*			0	*				
03:15			0	*			0	*				
03:30			0	*			0	*				
03:45			0	*	0	0	0	*	0	0	0	0
04:00			0	*			0	*				
04:15			0	*			0	*				
04:30			1	*			0	*				
04:45			1	*	2	0	1	*	1	0	3	0
05:00			2	*			0	*				
05:15			2	*			0	*				
05:30			2	*			1	*				
05:45			8	*	14	0	4	*	5	0	19	0
06:00			12	*			1	*				
06:15			16	*			2	*				
06:30			28	*			6	*				
06:45			32	*	88	0	6	*	15	0	103	0
07:00			41	*			7	*				
07:15			49	*			11	*				
07:30			68	*			7	*				
07:45			58	*	216	0	22	*	47	0	263	0
08:00			80	*			16	*				
08:15			74	*			14	*				
08:30			57	*			15	*				
08:45			54	*	265	0	14	*	59	0	324	0
09:00			41	*			8	*				
09:15			48	*			8	*				
09:30			40	*			5	*				
09:45			28	*	157	0	16	*	37	0	194	0
10:00			9	*			1	*				
10:15			*	*	*	*	*	*	*	*	*	*
10:30			*	*	*	*	*	*	*	*	*	*
10:45			*	*	*	*	*	*	*	*	*	*
11:00			*	*	*	*	*	*	*	*	*	*
11:15			*	*	*	*	*	*	*	*	*	*
11:30			*	*	*	*	*	*	*	*	*	*
11:45			*	*	*	*	*	*	*	*	*	*
Total			767	0			173	0			930	0
Percent			100.0%	0.0%			100.0%	0.0%			100.0%	0.0%
Grand Total			2352	4578			497	871			2839	5449
Percent			33.9%	66.1%			36.3%	63.7%			34.3%	65.7%
ADT			ADT 4,456	AADT 4,456								

## BACKGROUND DEVELOPMENT

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**massDOT** **MS2**  
Transportation Data Management System

Home | TMC | SCL | STCL | PMS | TRAC | ASNA | PMSC | PERS | MCTV | MCTV

Login | Logout | Logout All | Email This | Print Labels OFF

Loc: 1000 | 10000

Record: 1 of 1 | Go to Record: 10

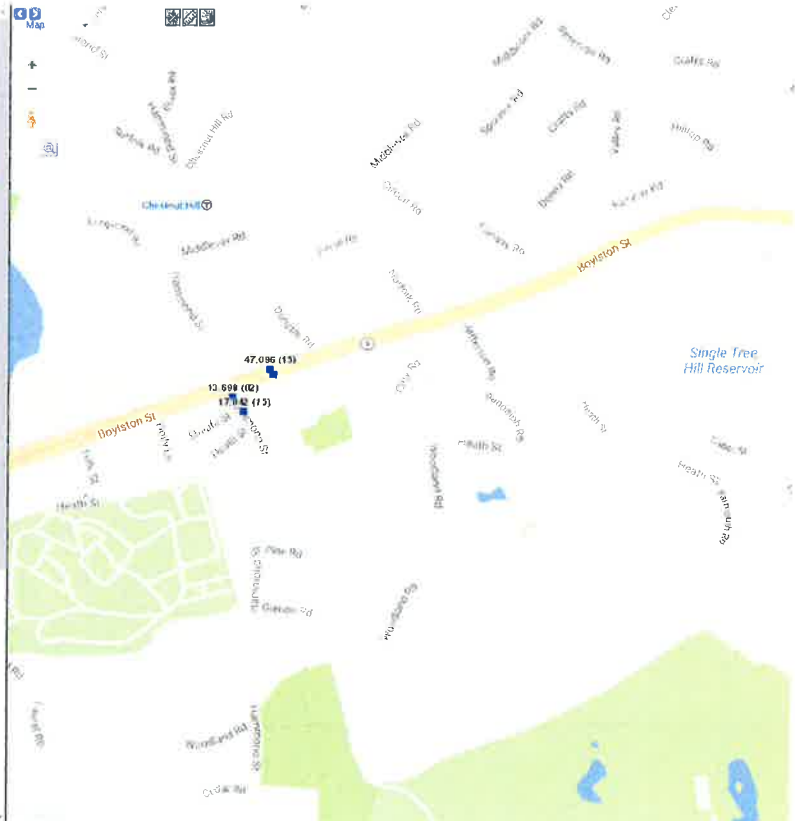
Location ID: 1000  
Type: SPOT  
On HRS: 45.587  
LBS ID: 1000  
SF Group: U3  
AF Group: U3  
GP Group: U3  
Class Dist Grp:   
VMT Group:   
QC Group: Default  
First Class: (3) Other Principal Arterial  
Located On: BOYLSTON STREET  
Loc On Alias: EAST OF HANBOND ST

Misc Detail:   
STATION DATA  
Directions:   
AADT:   
Year: 2015, 2014, 2013, 2012, 2011  
AADT: 47,096, 46,584, 44,599, 43,817, 43,443  
Dir: 30, 7, 10, 7, 7  
%: 63, 15, 59, 54, 54  
PA: 45.587 (97%), 1.489 (3%)  
BC: 1.489 (3%)  
Sec: Grown from 2014, Grown from 2013

Travel Demand Model  
Model: 2015, 2014, 2013, 2012, 2011  
AADT: 47,096, 46,584, 44,599, 43,817, 43,443  
Dir: 30, 7, 10, 7, 7  
%: 63, 15, 59, 54, 54  
PA: 45.587 (97%), 1.489 (3%)  
BC: 1.489 (3%)  
Sec: Grown from 2014, Grown from 2013

VOLUME COUNT  
Date: Wed 3/20/2011, Tue 3/22/2011, Tue 3/15/2011, Mon 3/13/2011, Tue 3/14/2011, Wed 3/15/2011, Mon 3/20/2011  
Dir: 30, 7, 10, 7, 7  
%: 63, 15, 59, 54, 54  
PA: 45.587 (97%), 1.489 (3%)  
BC: 1.489 (3%)  
Sec: Grown from 2014, Grown from 2013

VOLUME TREND  
Year: 2015, 2014, 2013, 2012, 2011  
AADT: 47,096, 46,584, 44,599, 43,817, 43,443  
Dir: 30, 7, 10, 7, 7  
%: 63, 15, 59, 54, 54  
PA: 45.587 (97%), 1.489 (3%)  
BC: 1.489 (3%)  
Sec: Grown from 2014, Grown from 2013



**massDOT** **MS2**  
Transportation Data Management System

Home | TMC | SCL | STCL | PMS | TRAC | ASNA | PMSC | PERS | MCTV | MCTV

Login | Logout | Logout All | Email This | Print Labels OFF

Loc: 1000 | 10000

Record: 1 of 1 | Go to Record: 10

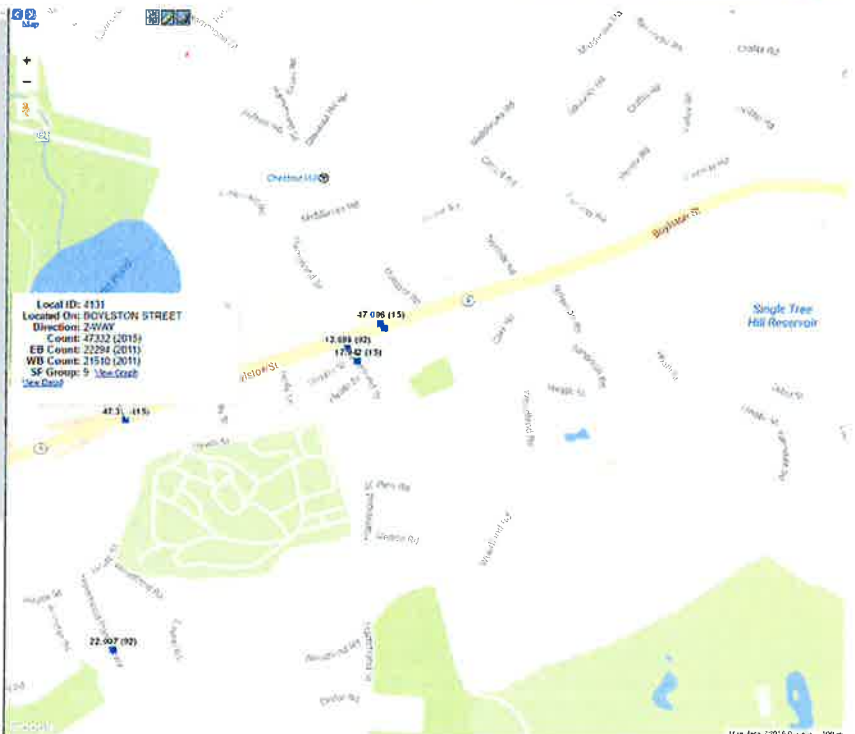
Location ID: 1000  
Type: SPOT  
On HRS: 45.587  
LBS ID: 1000  
SF Group: U3  
AF Group: U3  
GP Group: U3  
Class Dist Grp:   
VMT Group:   
QC Group: Default  
First Class: (3) Other Principal Arterial  
Located On: BOYLSTON STREET  
Loc On Alias: EAST OF HANBOND ST

Misc Detail:   
STATION DATA  
Directions:   
AADT:   
Year: 2015, 2014, 2013, 2012, 2011  
AADT: 47,332, 46,817, 44,379, 44,032, 43,884  
Dir: 30, 7, 10, 7, 7  
%: 63, 15, 59, 54, 54  
PA: 46.163 (97%), 1.649 (3%)  
BC: 1.649 (3%)  
Sec: Grown from 2014, Grown from 2013

Travel Demand Model  
Model: 2015, 2014, 2013, 2012, 2011  
AADT: 47,332, 46,817, 44,379, 44,032, 43,884  
Dir: 30, 7, 10, 7, 7  
%: 63, 15, 59, 54, 54  
PA: 46.163 (97%), 1.649 (3%)  
BC: 1.649 (3%)  
Sec: Grown from 2014, Grown from 2013

VOLUME COUNT  
Date: Wed 3/20/2011, Tue 3/22/2011, Tue 3/15/2011, Mon 3/13/2011, Tue 3/14/2011, Wed 3/15/2011, Mon 3/20/2011  
Dir: 30, 7, 10, 7, 7  
%: 63, 15, 59, 54, 54  
PA: 46.163 (97%), 1.649 (3%)  
BC: 1.649 (3%)  
Sec: Grown from 2014, Grown from 2013

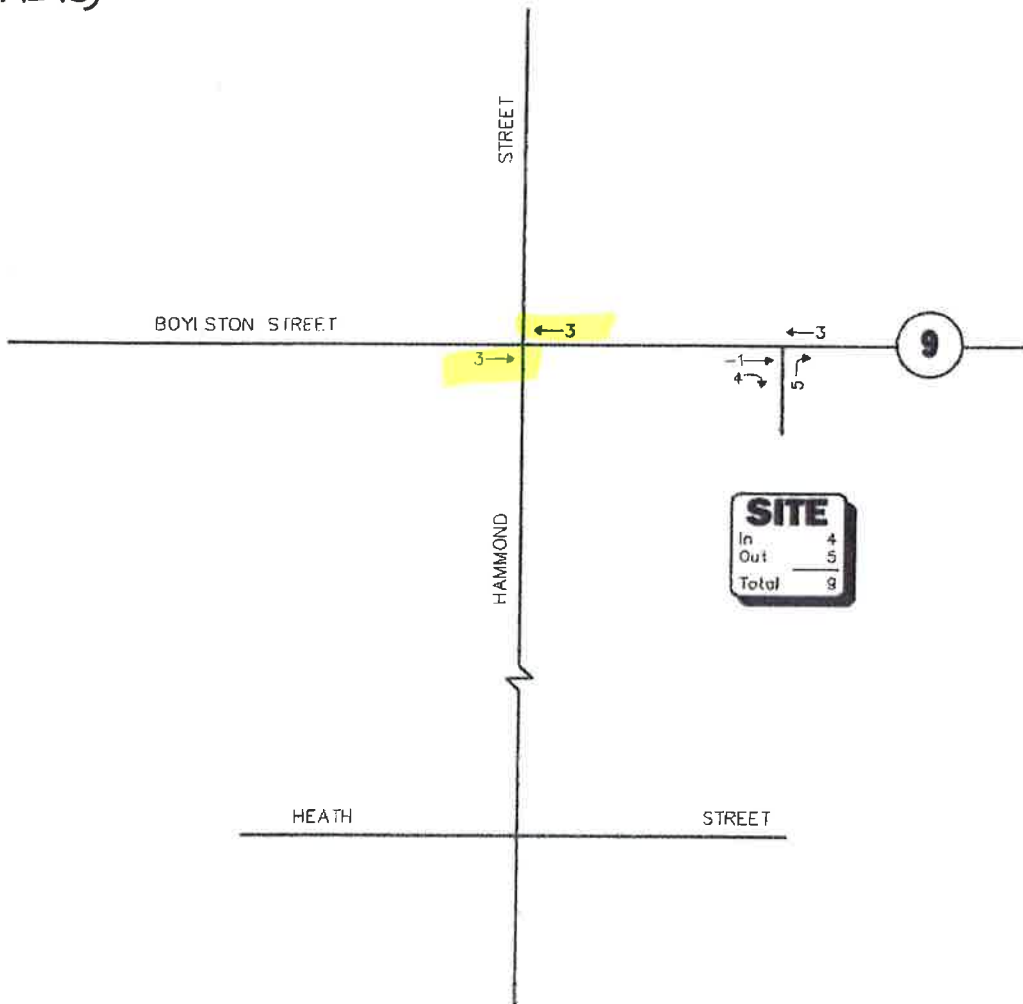
VOLUME TREND  
Year: 2015, 2014, 2013, 2012, 2011  
AADT: 47,332, 46,817, 44,379, 44,032, 43,884  
Dir: 30, 7, 10, 7, 7  
%: 63, 15, 59, 54, 54  
PA: 46.163 (97%), 1.649 (3%)  
BC: 1.649 (3%)  
Sec: Grown from 2014, Grown from 2013



$$\frac{47096 - 46584}{46584} = 1.0\% \text{ growth}$$

1180 Boylston Street  
Background  
Development  
(#7276)

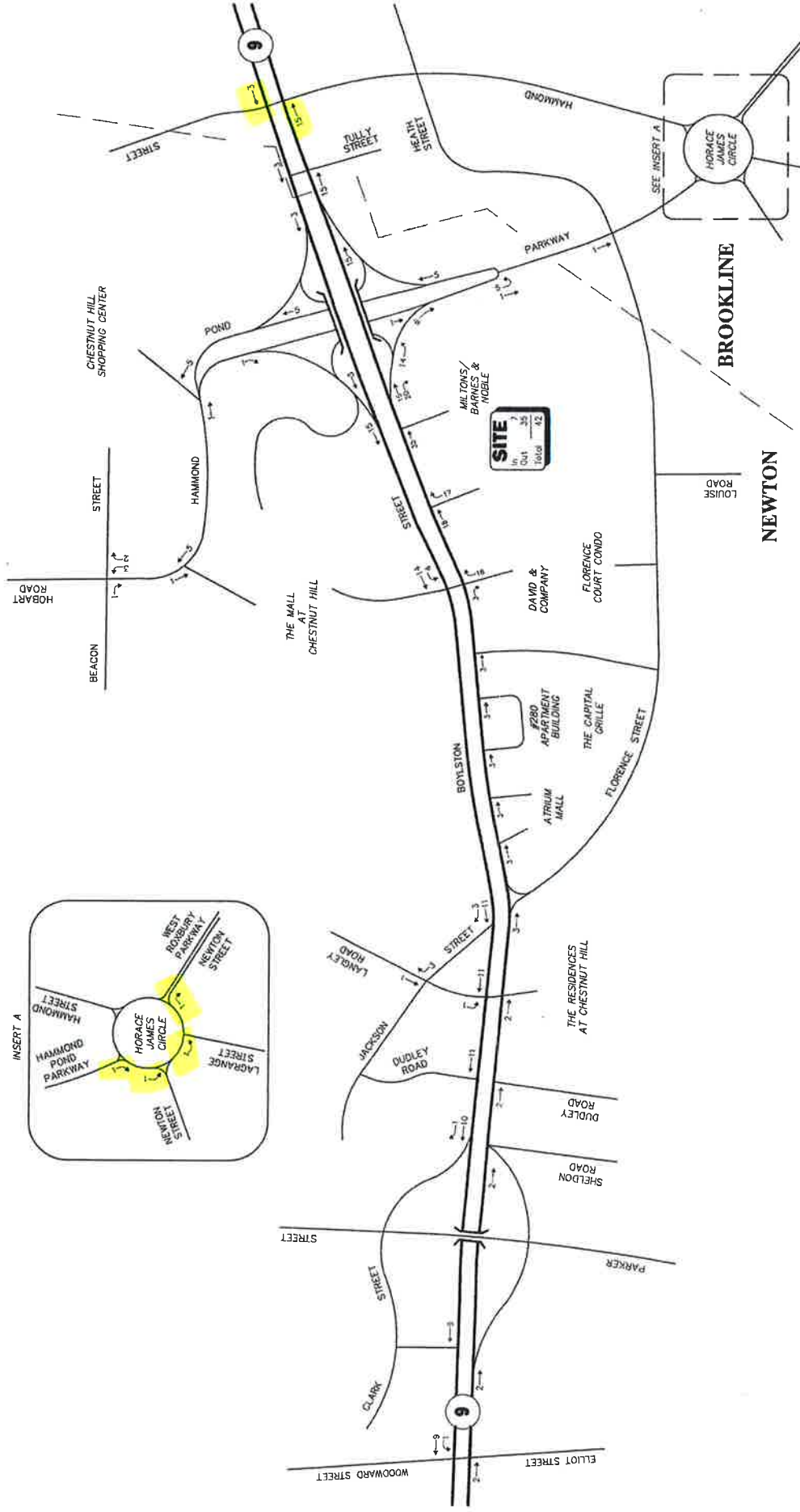
→ 45 age restricted apartments  
+ 7000 SF retail





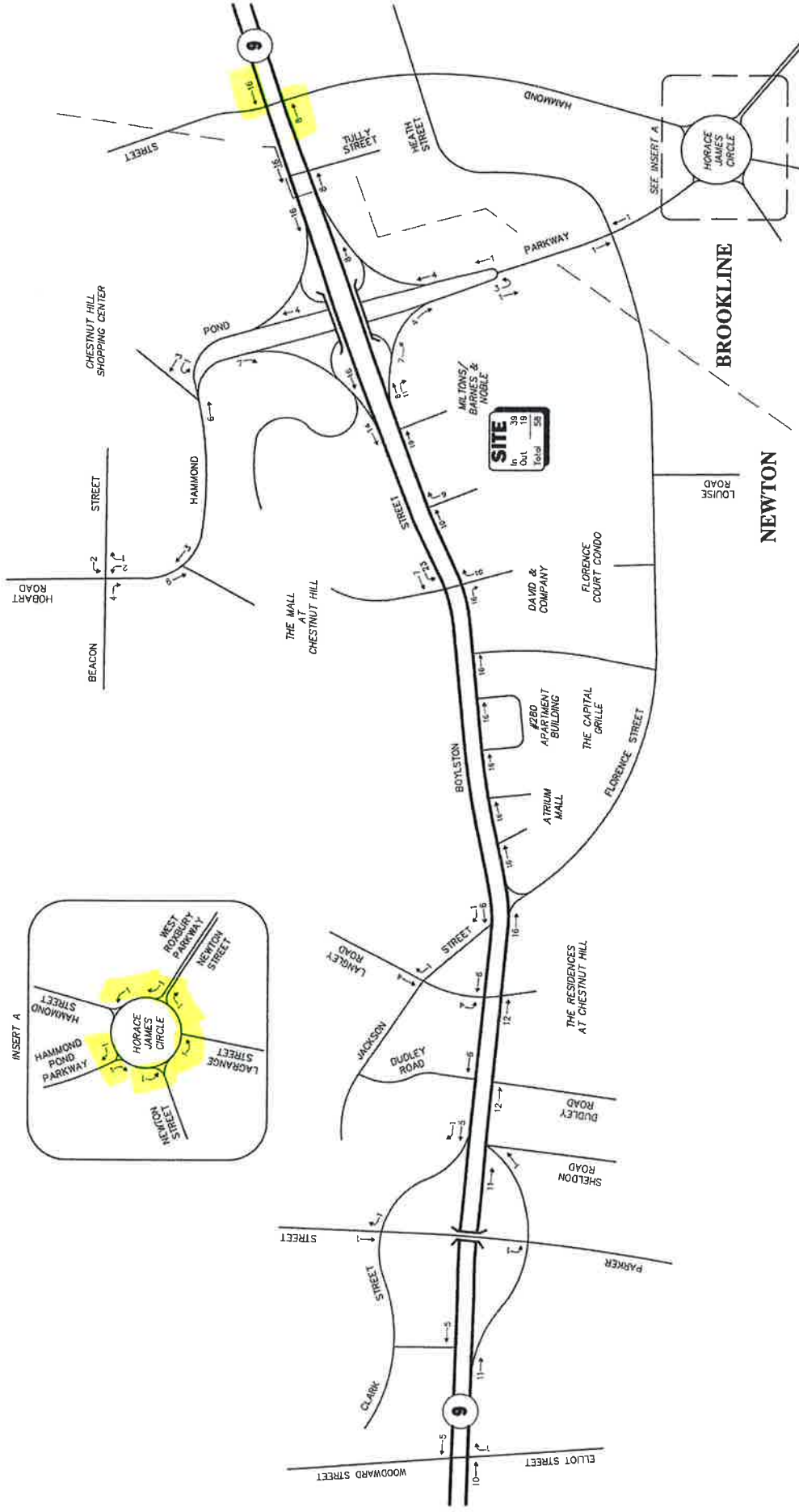
# Chestnut Hill Square Residential Phase - Background Development (#5706)

a1 Residential units



# Chestnut Hill Residential Phase - Background Development

91 residential units

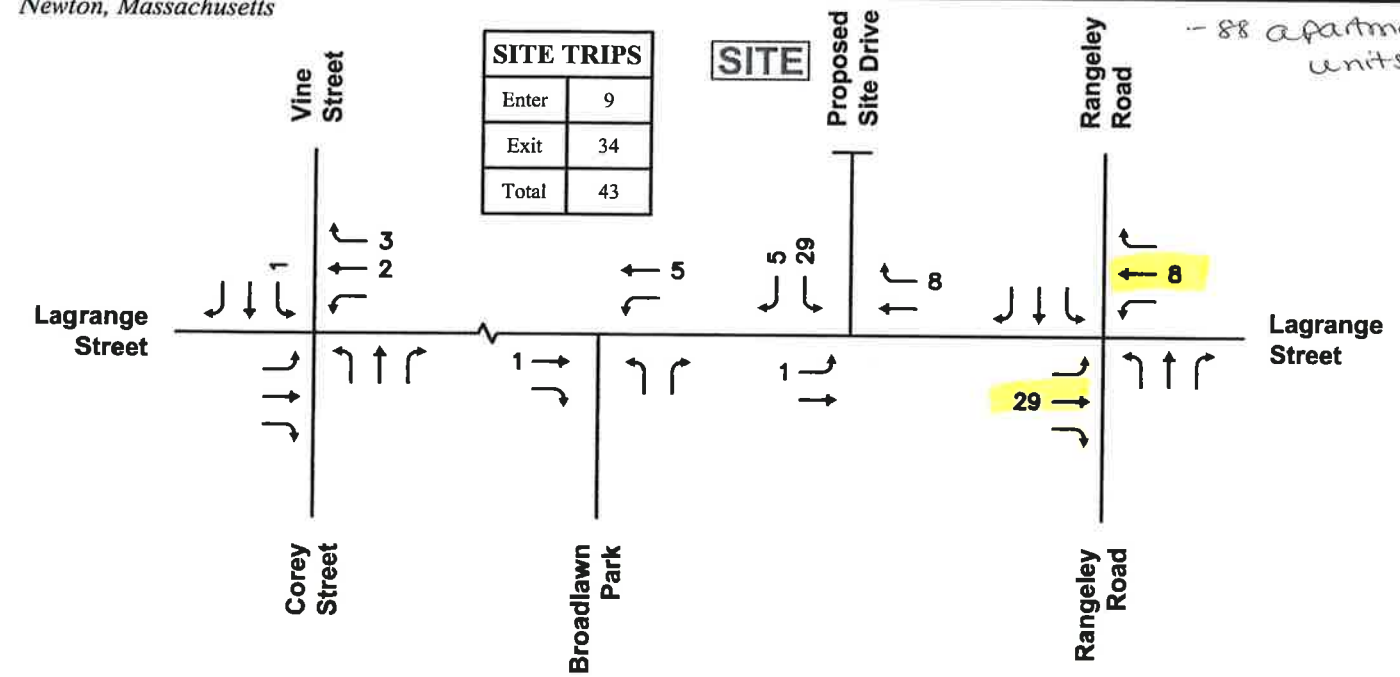




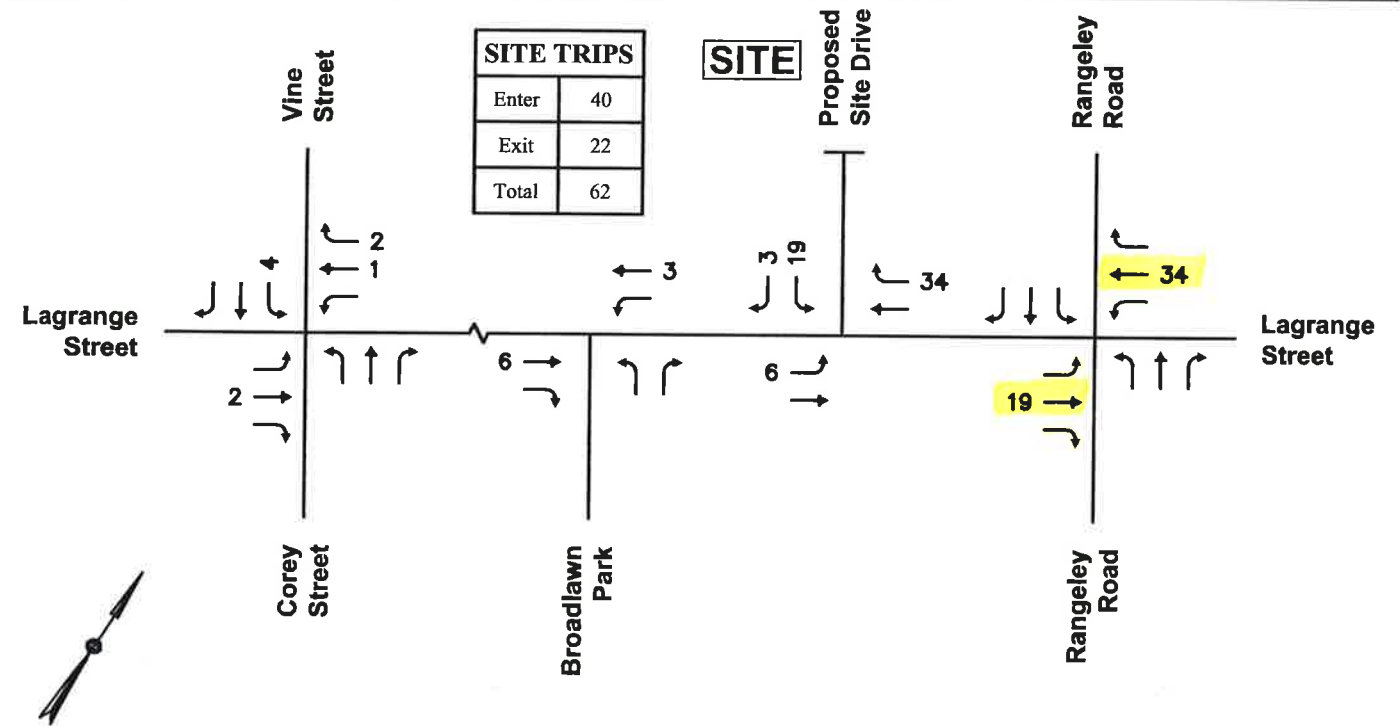
# Kessler Woods Background Development

Traffic Impact Assessment  
Newton, Massachusetts

- 88 apartment units



Weekday Morning Peak Hour



Weekday Evening Peak Hour



North

Scale: Not to Scale

**MDM** TRANSPORTATION CONSULTANTS, INC.  
Planners & Engineers

Figure 6

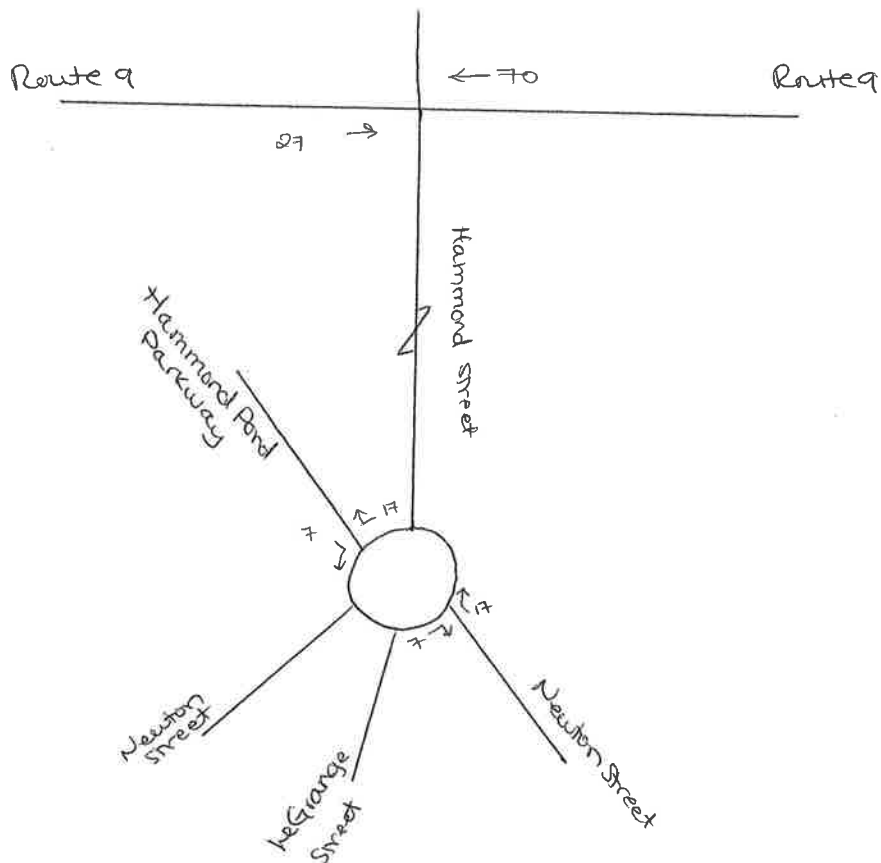
Site-Generated Trips



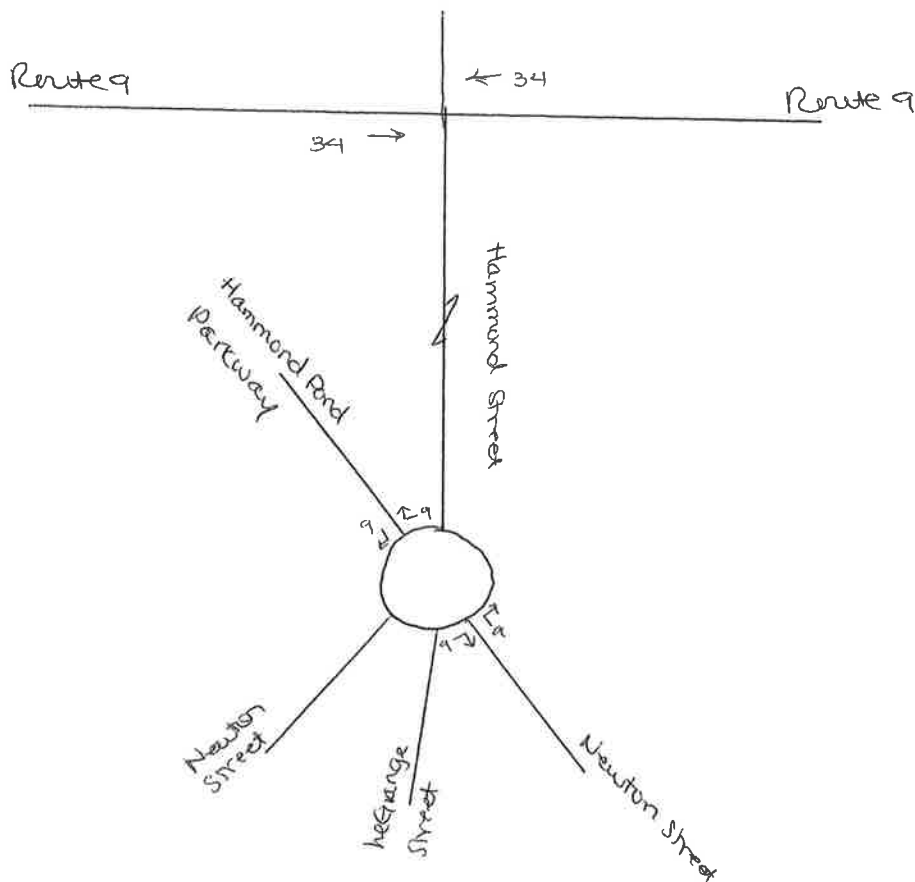
Vanasse & Associates, Inc.  
Transportation Engineers & Planners

10 New England Business Center Drive  
Suite 314  
Andover, MA 01810-1066  
Office 978-474-8800  
Fax 978-688-6508

## Former Atrium Mall Building Background Development



WEEKDAY MORNING



WEEKDAY EVENING

## VEHICLE OCCUPANCY RATIO



## Calculations

10 New England Business Center Drive  
Suite 314  
Andover, MA 01810-1066  
Office 978-474-8800  
Fax 978-688-6508

Job: Brookline  
Location: Baker School  
Title: AM DROP OFFS  
Calculated by: SRF

Job Number: 7382  
Date: 1/12/17  
Sheet 1 of 1  
Checked by: \_\_\_\_\_

7:35		
1	2	
1	1	
3	2	
1	2	
2	1	
1	2	
1	2	
2	1	
1	3	
2	1	} 71 children 49 vehicles
2	2	
1	1	
1	1	
2	2	
1	1	
1	1	
1	3	
1	1	
7:48		8:00
2	2	
1	2	
1	1	
1	1	
1	1	
1	2	
1	1	
2	2	
2	1	
1	1	
1	1	
1	1	
2	1	

# of Kids per car

$$\frac{71}{49} = 1.45 \text{ VOR}$$

Job: BROOKLINE  
Location: Baker School  
Title: PM Pick-up Count  
Calculated by: SRF

Job Number: 7382  
Date: 1/12/17  
Sheet 1 of 1  
Checked by: \_\_\_\_\_

Time	# of kids per car
2:15	1
2:30	1
	1
	2
	1
	1
	1
	2
	1
	2
	1
	2
	1
	1
	4
	2
	2
	1
2:45	1
	1
	2
	2
	1
	2
	1
	2

} 40 children  
27 vehicles

$\frac{40}{27} = 1.48 \text{ VOR}$

## TRIP GENERATION

---

## **PROJECT-GENERATED TRAFFIC**

Design year (2024 Build) traffic volumes for the study area roadways were determined by estimating Project-generated traffic volumes and assigning these volumes on the study roadways. The following describes the methodology used to establish the traffic characteristics of the Project. As proposed, the Project will entail the construction of an 800-student elementary school. Teacher and staff levels are estimated at 125.

In order to develop the traffic characteristics of the Project, trip-generation statistics published by the ITE<sup>3</sup> for similar land uses as those proposed were used. ITE Land Use Code (LUC) 520, *Elementary School*, with the independent variable of "Number of Students" equal to 800. It should be noted that the trip-generation statistics published by the ITE for the aforementioned land uses reflect the common modes of transportation for schools and include buses, vans/carpools, as well as students that may walk or bicycle to school. Table 5 summarizes the anticipated characteristics of the Project based upon Industry Standards.

**Table 5**  
**BALDWIN ELEMENTARY SCHOOL**  
**TRIP GENERATION SUMMARY<sup>a</sup>**

Time Period/Direction	Vehicle Trips <sup>a</sup>
	Elementary School (800 Students) <sup>a</sup>
<i>Average Weekday Daily:</i>	
Entering	516
<u>Exiting</u>	<u>516</u>
Total	1,032
<i>Weekday Morning Peak Hour:</i>	
Entering	198
<u>Exiting</u>	<u>162</u>
Total	360
<i>Weekday Afternoon Peak Hour:</i>	
Entering	101
<u>Exiting</u>	<u>123</u>
Total	224

<sup>a</sup>Based on ITE LUC 520, *Elementary School*.

<sup>3</sup>Ibid 2.

# Land Use: 520

## Elementary School

### Description

Elementary schools typically serve students attending kindergarten through the fifth or sixth grade. Elementary schools are usually centrally located in residential communities in order to facilitate student access and have no student drivers. This land use consists of schools where bus service is usually provided to students living beyond a specified distance from the school. Both public and private elementary schools are included in this land use. Middle school/junior high school (Land Use 522), high school (Land Use 530), private school (K-8) (Land Use 534) and private school (K-12) (Land Use 536) are related uses.

### Additional Data

Average weekday transit trip ends—

Elementary school students generally used school buses more than regular transit and were dropped off and picked up more than high school students, who were apt to walk longer distances, ride bicycles, or, in some cases, drive to school. The percentage of students at the sites who were transported to school via bus varied considerably. Some sites experienced higher than average trip rates because many students did not utilize the available school bus service. Due to the varied transit and school bus usage at these sites, it is desirable that future studies report additional detail on the percentage of students who were bused to school and the percentage that were dropped off and picked up.

The elementary schools surveyed exhibited significant variations in terms of facilities provided. Because the ratio of floor space to student population varied widely among the schools surveyed, the number of students may be a more reliable independent variable on which to establish trip generation rates.

Peak hours of the generator—

The weekday A.M. peak hour of the generator typically coincided with the peak hour of the adjacent street traffic; therefore, only one A.M. peak hour, which represents both the peak hour of the generator and the peak hour of the adjacent street traffic, is displayed. The weekday P.M. peak hour varied between 2:00 p.m. and 4:00 p.m.

The sites were surveyed between the mid-1970s and the 2000s throughout the United States and Canada.

***Many of the studies included in this land use did not indicate if the sites surveyed were public, private, or charter schools. To assist in the future analysis of this land use, it is important that this information be collected and included in trip generation data submissions.***

### Source Numbers

7, 32, 86, 186, 383, 390, 395, 444, 533, 536, 572, 579, 583, 609, 611, 612, 613, 632, 707

**Institute of Transportation Engineers (ITE)**  
**Trip Generation, 9th Edition**  
**Land Use Code (LUC) 520 - Elementary School**

★ didn't use  
because  
trip generation  
estimates are too low

Average Vehicle Trips Ends vs: Students  
Independent Variable (X): 800

**AVERAGE WEEKDAY DAILY**

$$T = 1.29 * (X)$$

$$T = 1.29 * 800$$

$$T = 1032.00$$

$$T = 1,032 \text{ vehicle trips}$$

with 50% ( 516 vph) entering and 50% ( 516 vph) exiting.

**WEEKDAY MORNING PEAK HOUR**

$$T = 0.45 * (X)$$

$$T = 0.45 * 800$$

$$T = 360.00$$

$$T = 360 \text{ vehicle trips}$$

with 55% ( 198 vph) entering and 45% ( 162 vph) exiting.

**WEEKDAY EVENING PEAK HOUR OF GENERATOR**

$$T = 0.28 * (X)$$

$$T = 0.28 * 800$$

$$T = 224.00$$

$$T = 224 \text{ vehicle trips}$$

with 45% ( 101 vph) entering and 55% ( 123 vph) exiting.

62 % PM/AM

{ 45 % enter  
55 % exit

**WEEKDAY EVENING PEAK HOUR OF ADJACENT STREET TRAFFIC**

$$T = 0.15 * (X)$$

$$T = 0.15 * 800$$

$$T = 120.00$$

$$T = 120 \text{ vehicle trips}$$

with 49% ( 59 vph) entering and 51% ( 61 vph) exiting.

### **Baldwin Traffic Study Assumptions**

**800 students**

Pierce has 855 students and 134 staff, including itinerants, 107 FTE

**Baldwin projected staff =  $800/855 \times 134 = 125$  staff, including itinerants (100 FTE)**

**50 students walk**

**Attendance Rate: 96%, 4% absent**

**METCO: 25 students - 1 bus**

**Materials Fee: 15 kids – Car**

**New Hancock Village: 130**

**Expected hours**

- **Mon-Thurs: 8:00 AM- 2:30 PM**
- **Fri: 8:00 AM - 1:40 PM**

# Accurate Counts

978-664-2565

N/S Street : Beverly Road  
 E/W Street: Parking Lot  
 City/State : Brookline, MA  
 Weather : Clear

File Name : 73820003  
 Site Code : 73820003  
 Start Date : 6/9/2016  
 Page No : 1

STAFF ASSUMPTIONS : Counts from Baker  
 WEEKDAY MORNING School teacher lot

## Groups Printed- Cars - Trucks

Start Time	Beverly Rd From North		Beverly Rd From South		Parking Lot From West		Int. Total
	Thru	Right	Left	Thru	Left	Right	
07:00 AM	11	8	5	6	0	0	30
07:15 AM	12	7	7	10	0	0	36
07:30 AM	35	11	11	15	0	2	74
07:45 AM	78	7	4	69	1	0	159
Total	136	33	27	100	1	2	299
08:00 AM	28	2	4	15	2	4	55
08:15 AM	16	2	1	9	0	1	29
08:30 AM	18	1	0	17	1	1	38
08:45 AM	33	1	0	18	0	0	52
Total	95	6	5	59	3	6	174
Grand Total	231	39	32	159	4	8	473
Apprch %	85.6	14.4	16.8	83.2	33.3	66.7	
Total %	48.8	8.2	6.8	33.6	0.8	1.7	
Cars	228	39	32	158	4	8	469
% Cars	98.7	100	100	99.4	100	100	99.2
Trucks	3	0	0	1	0	0	4
% Trucks	1.3	0	0	0.6	0	0	0.8

7:00 - 8:00 AM = 60 entering trips

13 trips occur before 7:15 AM = 22%

125 staff \* 0.78 = 97.5. Say 98 staff trips after 7:15 AM

AM	IN	98
	OUT	0
	total	98
PM	IN	0
	OUT	0
	total	0



Overall, the above ITE estimates appear low and may not be reflective of actual Brookline conditions. As such, an alternative approach was developed based upon the following assumption provided to VAI.

- 800 Students
- 4% Daily absenteeism
- 15 Students carpool with staff
- 25 students bus with METCO
- 50 students walk
- 200 students bus
- Student car occupancy of 1.45 student/car

800 Students. Assume 4% Absent (32 students)  
 $800 - 32 = 768$  students  
 $768 - 15$  (Materials Fee) - 25 (METCO) - 50 (walk) = 678 Students  
 678 students  
 - 200 students bus w/ 25 students per bus  
 $678 - 200 = 478$   
 $478 \div 1.45 = 330$  students and 9 buses

Afternoon traffic volumes were estimated based upon the reduced traffic percentage from the ITE data.

A summary of expected vehicle trip generation is summarized in Table 6 based upon the above assumptions.

**Table 6  
TRIP GENERATION SUMMARY**

Time Period	Staff	Buses	Drop-off/ Pick-up	Total Trips
<i>Weekday Morning Peak Hour:</i>				
Entering	98	9	330	437
Exiting	0	9	330	339
Total	98	18	660	776
<i>Weekday Afternoon Peak Hour:</i>				
Entering	0	9	207	216
Exiting	0	9	256	265
Total	0	18	463	481

PM assume 62% of morning volume leaves.  
 $776 * 0.62 = 481$   
 45/55 enter/exit ratio

As can be seen in Table 6, the Project is expected to generate approximately 776 vehicle trips (437 vehicles entering and 339 exiting) expected during the weekday morning peak-hour. During the weekday afternoon peak hour the Project is expected to generate approximately 481 vehicle trips (216 vehicles entering and 265 exiting). The above estimates were utilized for analysis purposes in assessing the overall impacts.

Alternative Trip Generation scenarios were developed but were not included as part of the detailed analysis. Trip generation estimates were provided for the following three alternate scenarios.

1. 800-student school – only METCO – 25 students bused
2. 600-student school – only METCO – 25 students bused
3. 600-student school – METCO – 25 students bused plus 150 additional bused students

These trip estimates are provided in Tables 7-9.

800 students. Assume 4% absent (32 students)

$$800 - 32 \text{ Absent} = 768$$

$$768 - 15(\text{Material Fee}) - 25(\text{METCO}) - 50(\text{walk}) = 678 \text{ students}$$

$$678 \div 1.45 = 468 \text{ students} \div 1 \text{ bus}$$

↑  
VoR

**Table 7**

**TRIP GENERATION SUMMARY: ALTERNATE SCENARIO #1**  
**800 STUDENTS/25 BUSED : only METCO - No additional bus**

Time Period	Staff	Buses	Drop-off/ Pick-up	Total Trips
<i>Weekday Morning</i>			50/50	
<i>Peak Hour:</i>				
Entering	98	1	468	567
Exiting	0	1	468	469
Total	98	2	936	1,036
<i>Weekday Afternoon</i>			45/55	
<i>Peak Hour:</i>				
Entering	0	1	288	289
Exiting	0	1	352	353
Total	0	2	640	642

$$\frac{\text{PM peak} = 224}{\text{AM peak} = 360} = 0.62$$

From ITE

↓  
PM Assume 62%  
of morning volume  
leaves.

$$1036 * 0.62 = 642$$

ratio enter/exit  
= 45% / 55%

From ITE weekday PM

**Table 8**

**TRIP GENERATION SUMMARY: ALTERNATE SCENARIO #2**

**600 STUDENTS/25 BUSED : only METCO - No additional bus**

Time Period	Staff	Buses	Drop-off/ Pick-up	Total Trips
<i>Weekday Morning</i>			50/50	
<i>Peak Hour:</i>				
Entering	74	1	335	410
Exiting	0	1	335	336
Total	74	2	670	746
<i>Weekday Afternoon</i>			45/55	
<i>Peak Hour:</i>				
Entering	0	1	214	208
Exiting	0	1	261	254
Total	0	2	475	462

$$746 * 0.62 = 462$$

@ 45/55 ratio

600 students. Assume 4% absent (24 students)

$$600 - 24 = 576 \text{ students}$$

$$576 - 15(\text{Material fee}) - 25(\text{METCO}) - 50(\text{walk}) = 486 \text{ students}$$

$$486 \div 1.45 = 335 \text{ students} \div 1 \text{ bus}$$

↑  
VoR

600 students. Assume 4% absent (24 students)  
 600 - 24 = 576 students  
 576 - 15 (Material Fee) - 25 (METCO) - 50 (work) = 486 students

**Table 9**  
**TRIP GENERATION SUMMARY: ALTERNATE SCENARIO #2**  
**600 STUDENTS/150 BUSED**

★ Assume 150  
 bus @ 25  
 students per  
 bus.

$$486 - 150 = 336$$

$$336 \div 1.45 = 232$$

↑ students  
 7 buses  
 VOR

Time Period	Staff	Buses	Drop-off/ Pick-up	Total Trips
<i>Weekday Morning</i>				
<i>Peak Hour:</i>				
Entering	74	7	232	313
Exiting	0	7	232	239
Total	74	14	464	552
<i>Weekday Afternoon</i>				
<i>Peak Hour:</i>				
Entering	0	7	147	154
Exiting	0	7	181	188
Total	0	14	328	342

$$552 \times 0.62 = 342$$

@ 45/55 ratio

As shown, at 800 students and no busing in the morning peak hour traffic generation increases to 1,036 vehicle trips (567 entering/469 exiting). Overall, this emphasizes that busing is an important element to reducing the overall impacts. In addition, the 600-student alternatives show the small school reduced traffic generation.

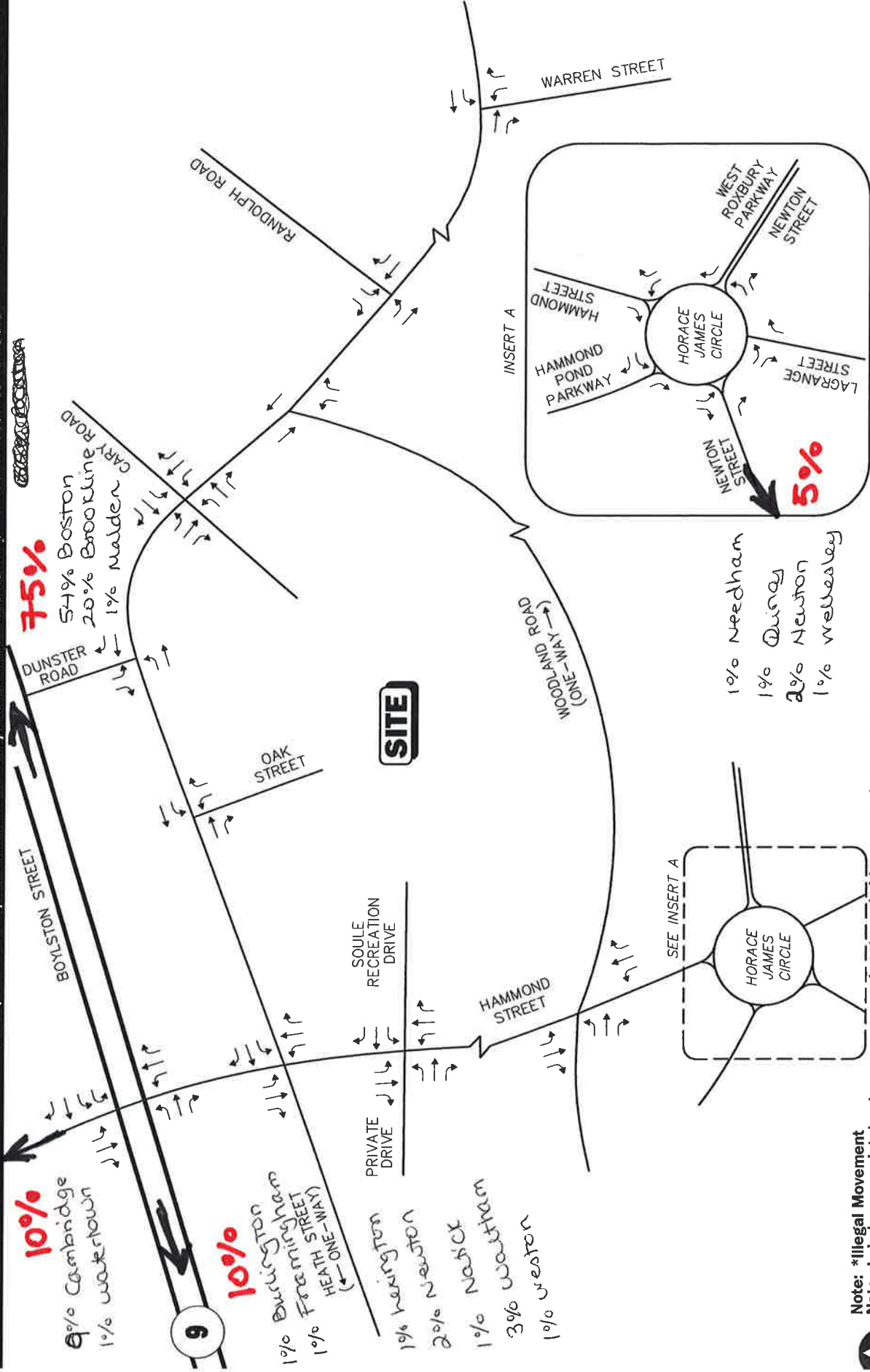
### TRIP DISTRIBUTION AND ASSIGNMENT

Separate trip distributions were developed for staff and students. The directional distribution of the site-generated trips to the proposed development by the staff was determined based on a review of origin to workplace data for Brookline. The directional distribution for the drop-offs and pick-ups was based on existing travel patterns at the study area intersections, directional data provided by the architect and it was further assumed that 30 percent of parents dropping-off students would be traveling on to work. The weekday morning trip distribution for staff is depicted on Figure 16 and the drop-off (morning) and pick-up (afternoon) patterns are depicted in Figures 17 and 18. The weekday morning and weekday afternoon peak-hour traffic volumes expected to be generated by the school are shown on Figures 19 and 20.

### FUTURE TRAFFIC VOLUMES – BUILD CONDITION

The 2024 Build condition networks consist of the 2024 No-Build traffic volumes with the anticipated site-generated traffic added to them. The 2024 Build weekday morning and weekday afternoon traffic-volume networks are graphically depicted on Figures 21 and 22.

A summary of peak-hour projected traffic-volume increases external to the study area that is the subject of this assessment is shown in Table 10. These volumes are based on the expected increases from the project.



Note: \*Illegal Movement

Note: Imbalances exist due to numerous curb cuts and side streets that are not shown.

Not To Scale

Figure -

**Vanasse & Associates, Inc.**  
Transportation Engineers & Planners

\* Based on Journey to work

- Trip Distribution
- Parents drop-off students
- go to work (30%)

off students  
and going to work  
(30%)

Number	Residence			Workplace			
	State	County	MCD	State	County	MCD	
18	Massachusetts	Norfolk County	Brookline town	Florida	Alachua County		0%
9	Massachusetts	Norfolk County	Brookline town	Florida	Orange County		0%
14	Massachusetts	Norfolk County	Brookline town	Illinois	Cook County		0%
14	Massachusetts	Norfolk County	Brookline town	Maine	Somerset County	Cambridge town	0%
14	Massachusetts	Norfolk County	Brookline town	Massachusetts	Barnstable County	Sandwich town	0%
17	Massachusetts	Norfolk County	Brookline town	Massachusetts	Barnstable County	Yarmouth town	0%
11	Massachusetts	Norfolk County	Brookline town	Massachusetts	Berkshire County	Pittsfield city	0%
11	Massachusetts	Norfolk County	Brookline town	Massachusetts	Bristol County	Mansfield town	0%
35	Massachusetts	Norfolk County	Brookline town	Massachusetts	Essex County	Andover town	0%
43	Massachusetts	Norfolk County	Brookline town	Massachusetts	Essex County	Beverly city	0%
56	Massachusetts	Norfolk County	Brookline town	Massachusetts	Essex County	Danvers town	0%
17	Massachusetts	Norfolk County	Brookline town	Massachusetts	Essex County	Gloucester city	0%
9	Massachusetts	Norfolk County	Brookline town	Massachusetts	Essex County	Haverhill city	0%
18	Massachusetts	Norfolk County	Brookline town	Massachusetts	Essex County	Lawrence city	0%
15	Massachusetts	Norfolk County	Brookline town	Massachusetts	Essex County	Lynn city	0%
10	Massachusetts	Norfolk County	Brookline town	Massachusetts	Essex County	Lynnfield town	0%
15	Massachusetts	Norfolk County	Brookline town	Massachusetts	Essex County	Methuen Town city	0%
12	Massachusetts	Norfolk County	Brookline town	Massachusetts	Essex County	North Andover town	0%
47	Massachusetts	Norfolk County	Brookline town	Massachusetts	Essex County	Salem city	0%
44	Massachusetts	Norfolk County	Brookline town	Massachusetts	Middlesex County	Acton town	0%
55	Massachusetts	Norfolk County	Brookline town	Massachusetts	Middlesex County	Arlington town	0%
20	Massachusetts	Norfolk County	Brookline town	Massachusetts	Middlesex County	Bedford town	0%
33	Massachusetts	Norfolk County	Brookline town	Massachusetts	Middlesex County	Belmont town	0%
53	Massachusetts	Norfolk County	Brookline town	Massachusetts	Middlesex County	Billerica town	0%
273	Massachusetts	Norfolk County	Brookline town	Massachusetts	Middlesex County	Burlington town	1%
2,252	Massachusetts	Norfolk County	Brookline town	Massachusetts	Middlesex County	Cambridge city	7% → 8%
52	Massachusetts	Norfolk County	Brookline town	Massachusetts	Middlesex County	Chelmsford town	0%
82	Massachusetts	Norfolk County	Brookline town	Massachusetts	Middlesex County	Concord town	0%
37	Massachusetts	Norfolk County	Brookline town	Massachusetts	Middlesex County	Everett city	0%
250	Massachusetts	Norfolk County	Brookline town	Massachusetts	Middlesex County	Framingham town	1%
22	Massachusetts	Norfolk County	Brookline town	Massachusetts	Middlesex County	Hopkinton town	0%
12	Massachusetts	Norfolk County	Brookline town	Massachusetts	Middlesex County	Hudson town	0%
185	Massachusetts	Norfolk County	Brookline town	Massachusetts	Middlesex County	Lexington town	1%
39	Massachusetts	Norfolk County	Brookline town	Massachusetts	Middlesex County	Lowell city	0%
290	Massachusetts	Norfolk County	Brookline town	Massachusetts	Middlesex County	Malden city	1%
125	Massachusetts	Norfolk County	Brookline town	Massachusetts	Middlesex County	Marlborough city	0%
14	Massachusetts	Norfolk County	Brookline town	Massachusetts	Middlesex County	Maynard town	0%
115	Massachusetts	Norfolk County	Brookline town	Massachusetts	Middlesex County	Medford city	0%
23	Massachusetts	Norfolk County	Brookline town	Massachusetts	Middlesex County	Melrose city	0%
239	Massachusetts	Norfolk County	Brookline town	Massachusetts	Middlesex County	Natick town	1%
1,091	Massachusetts	Norfolk County	Brookline town	Massachusetts	Middlesex County	Newton city	3% → 4%
23	Massachusetts	Norfolk County	Brookline town	Massachusetts	Middlesex County	Reading town	0%
113	Massachusetts	Norfolk County	Brookline town	Massachusetts	Middlesex County	Somerville city	0%
20	Massachusetts	Norfolk County	Brookline town	Massachusetts	Middlesex County	Stoneham town	0%
45	Massachusetts	Norfolk County	Brookline town	Massachusetts	Middlesex County	Sudbury town	0%
12	Massachusetts	Norfolk County	Brookline town	Massachusetts	Middlesex County	Tewksbury town	0%
38	Massachusetts	Norfolk County	Brookline town	Massachusetts	Middlesex County	Wakefield town	0%
609	Massachusetts	Norfolk County	Brookline town	Massachusetts	Middlesex County	Waltham city	2% → 3%
325	Massachusetts	Norfolk County	Brookline town	Massachusetts	Middlesex County	Watertown Town city	1%
24	Massachusetts	Norfolk County	Brookline town	Massachusetts	Middlesex County	Wayland town	0%
15	Massachusetts	Norfolk County	Brookline town	Massachusetts	Middlesex County	Westford town	0%



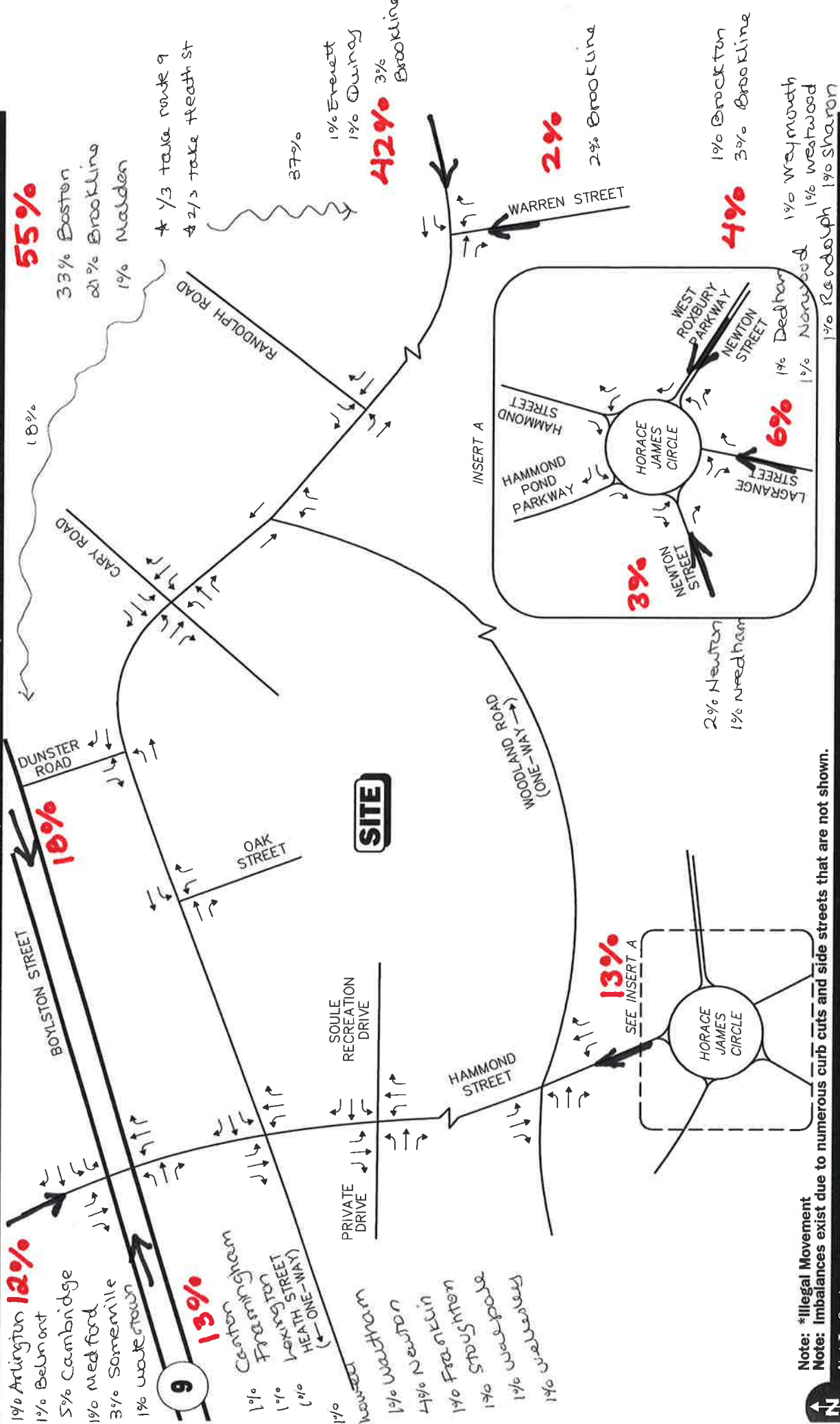
167	Massachusetts	Norfolk County	Brookline town	Massachusetts	Middlesex County	Weston town	1%
102	Massachusetts	Norfolk County	Brookline town	Massachusetts	Middlesex County	Wilmington town	0%
14	Massachusetts	Norfolk County	Brookline town	Massachusetts	Middlesex County	Winchester town	0%
108	Massachusetts	Norfolk County	Brookline town	Massachusetts	Middlesex County	Woburn city	0%
11	Massachusetts	Norfolk County	Brookline town	Massachusetts	Norfolk County	Bellingham town	0%
129	Massachusetts	Norfolk County	Brookline town	Massachusetts	Norfolk County	Braintree Town city	0%
5,844	Massachusetts	Norfolk County	Brookline town	Massachusetts	Norfolk County	Brookline town	18% → 20%
195	Massachusetts	Norfolk County	Brookline town	Massachusetts	Norfolk County	Canton town	1%
14	Massachusetts	Norfolk County	Brookline town	Massachusetts	Norfolk County	Cohasset town	0%
47	Massachusetts	Norfolk County	Brookline town	Massachusetts	Norfolk County	Dedham town	0%
52	Massachusetts	Norfolk County	Brookline town	Massachusetts	Norfolk County	Foxborough town	0%
53	Massachusetts	Norfolk County	Brookline town	Massachusetts	Norfolk County	Franklin Town city	0%
110	Massachusetts	Norfolk County	Brookline town	Massachusetts	Norfolk County	Milton town	0%
266	Massachusetts	Norfolk County	Brookline town	Massachusetts	Norfolk County	Needham town	1%
23	Massachusetts	Norfolk County	Brookline town	Massachusetts	Norfolk County	Norfolk town	0%
92	Massachusetts	Norfolk County	Brookline town	Massachusetts	Norfolk County	Norwood town	0%
181	Massachusetts	Norfolk County	Brookline town	Massachusetts	Norfolk County	Quincy city	1%
12	Massachusetts	Norfolk County	Brookline town	Massachusetts	Norfolk County	Randolph town	0%
11	Massachusetts	Norfolk County	Brookline town	Massachusetts	Norfolk County	Stoughton town	0%
69	Massachusetts	Norfolk County	Brookline town	Massachusetts	Norfolk County	Walpole town	0%
342	Massachusetts	Norfolk County	Brookline town	Massachusetts	Norfolk County	Wellesley town	1%
91	Massachusetts	Norfolk County	Brookline town	Massachusetts	Norfolk County	Westwood town	0%
112	Massachusetts	Norfolk County	Brookline town	Massachusetts	Norfolk County	Weymouth Town city	0%
23	Massachusetts	Norfolk County	Brookline town	Massachusetts	Norfolk County	Wrentham town	0%
12	Massachusetts	Norfolk County	Brookline town	Massachusetts	Plymouth County	Abington town	0%
10	Massachusetts	Norfolk County	Brookline town	Massachusetts	Plymouth County	Bridgewater town	0%
96	Massachusetts	Norfolk County	Brookline town	Massachusetts	Plymouth County	Brockton city	0%
11	Massachusetts	Norfolk County	Brookline town	Massachusetts	Plymouth County	Hanover town	0%
78	Massachusetts	Norfolk County	Brookline town	Massachusetts	Plymouth County	Hingham town	0%
17	Massachusetts	Norfolk County	Brookline town	Massachusetts	Plymouth County	Kingston town	0%
16	Massachusetts	Norfolk County	Brookline town	Massachusetts	Plymouth County	Marshfield town	0%
9	Massachusetts	Norfolk County	Brookline town	Massachusetts	Plymouth County	Middleborough town	0%
12	Massachusetts	Norfolk County	Brookline town	Massachusetts	Plymouth County	Pembroke town	0%
18	Massachusetts	Norfolk County	Brookline town	Massachusetts	Plymouth County	Plymouth town	0%
10	Massachusetts	Norfolk County	Brookline town	Massachusetts	Plymouth County	Rockland town	0%
15,596	Massachusetts	Norfolk County	Brookline town	Massachusetts	Suffolk County	Boston city	49% → 51%
48	Massachusetts	Norfolk County	Brookline town	Massachusetts	Suffolk County	Chelsea city	0%
18	Massachusetts	Norfolk County	Brookline town	Massachusetts	Suffolk County	Revere city	0%
69	Massachusetts	Norfolk County	Brookline town	Massachusetts	Suffolk County	Winthrop Town city	0%
13	Massachusetts	Norfolk County	Brookline town	Massachusetts	Worcester County	Bolton town	0%
51	Massachusetts	Norfolk County	Brookline town	Massachusetts	Worcester County	Boylston town	0%
13	Massachusetts	Norfolk County	Brookline town	Massachusetts	Worcester County	Holden town	0%
15	Massachusetts	Norfolk County	Brookline town	Massachusetts	Worcester County	Leominster city	0%
12	Massachusetts	Norfolk County	Brookline town	Massachusetts	Worcester County	Lunenburg town	0%
11	Massachusetts	Norfolk County	Brookline town	Massachusetts	Worcester County	Milford town	0%
66	Massachusetts	Norfolk County	Brookline town	Massachusetts	Worcester County	Southborough town	0%
68	Massachusetts	Norfolk County	Brookline town	Massachusetts	Worcester County	Westborough town	0%
35	Massachusetts	Norfolk County	Brookline town	Massachusetts	Worcester County	Worcester city	0%
14	Massachusetts	Norfolk County	Brookline town	Michigan	Oakland County		0%
33	Massachusetts	Norfolk County	Brookline town	New Hampshire	Hillsborough County	Bedford town	0%
9	Massachusetts	Norfolk County	Brookline town	New Hampshire	Hillsborough County	Hudson town	0%
13	Massachusetts	Norfolk County	Brookline town	New Hampshire	Hillsborough County	Manchester city	0%
14	Massachusetts	Norfolk County	Brookline town	New Hampshire	Hillsborough County	Merrimack town	0%
8	Massachusetts	Norfolk County	Brookline town	New Hampshire	Merrimack County	Concord city	0%

29	Massachusetts	Norfolk County	Brookline town	New Hampshire	Rockingham County	Exeter town	0%
12	Massachusetts	Norfolk County	Brookline town	New Hampshire	Rockingham County	Portsmouth city	0%
53	Massachusetts	Norfolk County	Brookline town	New Hampshire	Rockingham County	Salem town	0%
14	Massachusetts	Norfolk County	Brookline town	New Jersey	Camden County		0%
7	Massachusetts	Norfolk County	Brookline town	New Jersey	Essex County		0%
15	Massachusetts	Norfolk County	Brookline town	New Jersey	Mercer County		0%
12	Massachusetts	Norfolk County	Brookline town	New York	Erie County		0%
114	Massachusetts	Norfolk County	Brookline town	New York	New York County		0%
12	Massachusetts	Norfolk County	Brookline town	New York	Westchester County		0%
11	Massachusetts	Norfolk County	Brookline town	North Carolina	Guilford County		0%
14	Massachusetts	Norfolk County	Brookline town	Pennsylvania	Philadelphia County		0%
40	Massachusetts	Norfolk County	Brookline town	Rhode Island	Newport County	Middletown town	0%
10	Massachusetts	Norfolk County	Brookline town	Rhode Island	Newport County	Portsmouth town	0%
43	Massachusetts	Norfolk County	Brookline town	Rhode Island	Providence County	North Smithfield town	0%
10	Massachusetts	Norfolk County	Brookline town	Rhode Island	Providence County	Pawtucket city	0%
60	Massachusetts	Norfolk County	Brookline town	Rhode Island	Providence County	Providence city	0%
14	Massachusetts	Norfolk County	Brookline town	Utah	Salt Lake County		0%
13	Massachusetts	Norfolk County	Brookline town	Vermont	Chittenden County	South Burlington city	0%
17	Massachusetts	Norfolk County	Brookline town	Virginia	Prince William County		0%

90% → 100%

31,878

1% Arlington **12%**  
1% Belmont  
5% Cambridge  
1% Medford  
3% Somerville  
1% Watertown



**Note:** \*Illegal Movement

**Note:** Imbalances exist due to numerous curb cuts and side streets that are not shown.

**Not To Scale**

**Vanasse & Associates, Inc.**  
Transportation Engineers & Planners

\* Based on  
Prevalence to work \*

- Trip Distribution
- Staff

**Figure -**



Residence			Work Place				
State Name	County Name	Minor Civil Division Name	State Name	County Name	Minor Civil Division Name	Workers in Commuting Flow	Percent
Massachusetts	Bristol County	Attleboro city	Massachusetts	Norfolk County	Brookline town	71	0%
Massachusetts	Bristol County	Easton town	Massachusetts	Norfolk County	Brookline town	31	0%
Massachusetts	Bristol County	Easton town	Massachusetts	Norfolk County	Brookline town	18	0%
Massachusetts	Bristol County	Mansfield town	Massachusetts	Norfolk County	Brookline town	46	0%
Massachusetts	Bristol County	Mansfield town	Massachusetts	Norfolk County	Brookline town	16	0%
Massachusetts	Bristol County	New Bedford city	Massachusetts	Norfolk County	Brookline town	39	0%
Massachusetts	Bristol County	New Bedford city	Massachusetts	Norfolk County	Brookline town	7	0%
Massachusetts	Bristol County	New Bedford city	Massachusetts	Norfolk County	Brookline town	12	0%
Massachusetts	Essex County	Andover town	Massachusetts	Norfolk County	Brookline town	32	0%
Massachusetts	Essex County	Haverhill city	Massachusetts	Norfolk County	Brookline town	25	0%
Massachusetts	Essex County	Lynn city	Massachusetts	Norfolk County	Brookline town	68	0%
Massachusetts	Essex County	Lynn city	Massachusetts	Norfolk County	Brookline town	31	0%
Massachusetts	Essex County	Marblehead town	Massachusetts	Norfolk County	Brookline town	33	0%
Massachusetts	Essex County	Newburyport city	Massachusetts	Norfolk County	Brookline town	20	0%
Massachusetts	Essex County	Newburyport city	Massachusetts	Norfolk County	Brookline town	5	0%
Massachusetts	Essex County	Peabody city	Massachusetts	Norfolk County	Brookline town	51	0%
Massachusetts	Essex County	Peabody city	Massachusetts	Norfolk County	Brookline town	10	0%
Massachusetts	Essex County	Swampscott town	Massachusetts	Norfolk County	Brookline town	53	0%
Massachusetts	Essex County	Swampscott town	Massachusetts	Norfolk County	Brookline town	39	0%
Massachusetts	Middlesex County	Arlington town	Massachusetts	Norfolk County	Brookline town	200	1%
Massachusetts	Middlesex County	Arlington town	Massachusetts	Norfolk County	Brookline town	16	0%
Massachusetts	Middlesex County	Arlington town	Massachusetts	Norfolk County	Brookline town	15	0%
Massachusetts	Middlesex County	Ashland town	Massachusetts	Norfolk County	Brookline town	95	0%
Massachusetts	Middlesex County	Ashland town	Massachusetts	Norfolk County	Brookline town	17	0%
Massachusetts	Middlesex County	Ashland town	Massachusetts	Norfolk County	Brookline town	11	0%
Massachusetts	Middlesex County	Belmont town	Massachusetts	Norfolk County	Brookline town	114	1%
Massachusetts	Middlesex County	Belmont town	Massachusetts	Norfolk County	Brookline town	19	0%
Massachusetts	Middlesex County	Belmont town	Massachusetts	Norfolk County	Brookline town	16	0%
Massachusetts	Middlesex County	Belmont town	Massachusetts	Norfolk County	Brookline town	12	0%
Massachusetts	Middlesex County	Billerica town	Massachusetts	Norfolk County	Brookline town	21	0%
Massachusetts	Middlesex County	Billerica town	Massachusetts	Norfolk County	Brookline town	17	0%
Massachusetts	Middlesex County	Burlington town	Massachusetts	Norfolk County	Brookline town	78	0%
Massachusetts	Middlesex County	Cambridge city	Massachusetts	Norfolk County	Brookline town	406	2%
Massachusetts	Middlesex County	Cambridge city	Massachusetts	Norfolk County	Brookline town	26	0%
Massachusetts	Middlesex County	Cambridge city	Massachusetts	Norfolk County	Brookline town	156	1%
Massachusetts	Middlesex County	Cambridge city	Massachusetts	Norfolk County	Brookline town	147	1%
Massachusetts	Middlesex County	Chelmsford town	Massachusetts	Norfolk County	Brookline town	32	0%
Massachusetts	Middlesex County	Chelmsford town	Massachusetts	Norfolk County	Brookline town	9	0%
Massachusetts	Middlesex County	Everett city	Massachusetts	Norfolk County	Brookline town	121	1%
Massachusetts	Middlesex County	Everett city	Massachusetts	Norfolk County	Brookline town	98	0%
Massachusetts	Middlesex County	Framingham town	Massachusetts	Norfolk County	Brookline town	251	1%
Massachusetts	Middlesex County	Framingham town	Massachusetts	Norfolk County	Brookline town	30	0%
Massachusetts	Middlesex County	Holliston town	Massachusetts	Norfolk County	Brookline town	23	0%
Massachusetts	Middlesex County	Holliston town	Massachusetts	Norfolk County	Brookline town	7	0%
Massachusetts	Middlesex County	Lexington town	Massachusetts	Norfolk County	Brookline town	103	1%
Massachusetts	Middlesex County	Lowell city	Massachusetts	Norfolk County	Brookline town	112	1%
Massachusetts	Middlesex County	Malden city	Massachusetts	Norfolk County	Brookline town	85	0%
Massachusetts	Middlesex County	Malden city	Massachusetts	Norfolk County	Brookline town	197	1%
Massachusetts	Middlesex County	Malden city	Massachusetts	Norfolk County	Brookline town	28	0%
Massachusetts	Middlesex County	Medford city	Massachusetts	Norfolk County	Brookline town	301	1%
Massachusetts	Middlesex County	Medford city	Massachusetts	Norfolk County	Brookline town	63	0%
Massachusetts	Middlesex County	Medford city	Massachusetts	Norfolk County	Brookline town	22	0%
Massachusetts	Middlesex County	Melrose city	Massachusetts	Norfolk County	Brookline town	44	0%
Massachusetts	Middlesex County	Melrose city	Massachusetts	Norfolk County	Brookline town	8	0%
Massachusetts	Middlesex County	Melrose city	Massachusetts	Norfolk County	Brookline town	15	0%
Massachusetts	Middlesex County	Natick town	Massachusetts	Norfolk County	Brookline town	81	0%
Massachusetts	Middlesex County	Natick town	Massachusetts	Norfolk County	Brookline town	11	0%
Massachusetts	Middlesex County	Newton city	Massachusetts	Norfolk County	Brookline town	755	4% → 5%

★ RESIDENCE TO WORK DATA ★

Brookline destination

= For staff distribution.

Massachusetts	Middlesex County	Newton city	Massachusetts	Norfolk County	Brookline town	100	0%
Massachusetts	Middlesex County	Newton city	Massachusetts	Norfolk County	Brookline town	93	0%
Massachusetts	Middlesex County	Newton city	Massachusetts	Norfolk County	Brookline town	45	0%
Massachusetts	Middlesex County	Somerville city	Massachusetts	Norfolk County	Brookline town	166	1%
Massachusetts	Middlesex County	Somerville city	Massachusetts	Norfolk County	Brookline town	90	0%
Massachusetts	Middlesex County	Somerville city	Massachusetts	Norfolk County	Brookline town	176	1%
Massachusetts	Middlesex County	Somerville city	Massachusetts	Norfolk County	Brookline town	14	0%
Massachusetts	Middlesex County	Stoneham town	Massachusetts	Norfolk County	Brookline town	50	0%
Massachusetts	Middlesex County	Stoneham town	Massachusetts	Norfolk County	Brookline town	7	0%
Massachusetts	Middlesex County	Townsend town	New Hampshire	Hillsborough County	Brookline town	56	0%
Massachusetts	Middlesex County	Wakefield town	Massachusetts	Norfolk County	Brookline town	28	0%
Massachusetts	Middlesex County	Wakefield town	Massachusetts	Norfolk County	Brookline town	9	0%
Massachusetts	Middlesex County	Waltham city	Massachusetts	Norfolk County	Brookline town	148	1%
Massachusetts	Middlesex County	Waltham city	Massachusetts	Norfolk County	Brookline town	61	0%
Massachusetts	Middlesex County	Waltham city	Massachusetts	Norfolk County	Brookline town	10	0%
Massachusetts	Middlesex County	Waltham city	Massachusetts	Norfolk County	Brookline town	24	0%
Massachusetts	Middlesex County	Watertown Town city	Massachusetts	Norfolk County	Brookline town	167	1%
Massachusetts	Middlesex County	Watertown Town city	Massachusetts	Norfolk County	Brookline town	71	0%
Massachusetts	Middlesex County	Wayland town	Massachusetts	Norfolk County	Brookline town	49	0%
Massachusetts	Middlesex County	Wayland town	Massachusetts	Norfolk County	Brookline town	9	0%
Massachusetts	Middlesex County	Wilmington town	Massachusetts	Norfolk County	Brookline town	56	0%
Massachusetts	Middlesex County	Winchester town	Massachusetts	Norfolk County	Brookline town	35	0%
Massachusetts	Middlesex County	Winchester town	Massachusetts	Norfolk County	Brookline town	16	0%
Massachusetts	Middlesex County	Winchester town	Massachusetts	Norfolk County	Brookline town	12	0%
Massachusetts	Middlesex County	Woburn city	Massachusetts	Norfolk County	Brookline town	28	0%
Massachusetts	Middlesex County	Woburn city	Massachusetts	Norfolk County	Brookline town	11	0%
Massachusetts	Norfolk County	Braintree Town city	Massachusetts	Norfolk County	Brookline town	46	0%
Massachusetts	Norfolk County	Braintree Town city	Massachusetts	Norfolk County	Brookline town	12	0%
Massachusetts	Norfolk County	Brookline town	Massachusetts	Norfolk County	Brookline town	1,165	6%
Massachusetts	Norfolk County	Brookline town	Massachusetts	Norfolk County	Brookline town	119	1%
Massachusetts	Norfolk County	Brookline town	Massachusetts	Norfolk County	Brookline town	116	1%
Massachusetts	Norfolk County	Brookline town	Massachusetts	Norfolk County	Brookline town	3,856	19%
Massachusetts	Norfolk County	Canton town	Massachusetts	Norfolk County	Brookline town	118	1%
Massachusetts	Norfolk County	Canton town	Massachusetts	Norfolk County	Brookline town	20	0%
Massachusetts	Norfolk County	Canton town	Massachusetts	Norfolk County	Brookline town	18	0%
Massachusetts	Norfolk County	Dedham town	Massachusetts	Norfolk County	Brookline town	260	1%
Massachusetts	Norfolk County	Dedham town	Massachusetts	Norfolk County	Brookline town	20	0%
Massachusetts	Norfolk County	Dedham town	Massachusetts	Norfolk County	Brookline town	17	0%
Massachusetts	Norfolk County	Dover town	Massachusetts	Norfolk County	Brookline town	57	0%
Massachusetts	Norfolk County	Foxborough town	Massachusetts	Norfolk County	Brookline town	58	0%
Massachusetts	Norfolk County	Franklin Town city	Massachusetts	Norfolk County	Brookline town	108	1%
Massachusetts	Norfolk County	Franklin Town city	Massachusetts	Norfolk County	Brookline town	16	0%
Massachusetts	Norfolk County	Medfield town	Massachusetts	Norfolk County	Brookline town	93	0%
Massachusetts	Norfolk County	Medway town	Massachusetts	Norfolk County	Brookline town	40	0%
Massachusetts	Norfolk County	Medway town	Massachusetts	Norfolk County	Brookline town	9	0%
Massachusetts	Norfolk County	Milton town	Massachusetts	Norfolk County	Brookline town	60	0%
Massachusetts	Norfolk County	Milton town	Massachusetts	Norfolk County	Brookline town	8	0%
Massachusetts	Norfolk County	Needham town	Massachusetts	Norfolk County	Brookline town	168	1%
Massachusetts	Norfolk County	Needham town	Massachusetts	Norfolk County	Brookline town	11	0%
Massachusetts	Norfolk County	Needham town	Massachusetts	Norfolk County	Brookline town	15	0%
Massachusetts	Norfolk County	Norwood town	Massachusetts	Norfolk County	Brookline town	206	1%
Massachusetts	Norfolk County	Norwood town	Massachusetts	Norfolk County	Brookline town	57	0%
Massachusetts	Norfolk County	Quincy city	Massachusetts	Norfolk County	Brookline town	190	1%
Massachusetts	Norfolk County	Quincy city	Massachusetts	Norfolk County	Brookline town	45	0%
Massachusetts	Norfolk County	Quincy city	Massachusetts	Norfolk County	Brookline town	50	0%
Massachusetts	Norfolk County	Randolph town	Massachusetts	Norfolk County	Brookline town	112	1%
Massachusetts	Norfolk County	Randolph town	Massachusetts	Norfolk County	Brookline town	40	0%
Massachusetts	Norfolk County	Sharon town	Massachusetts	Norfolk County	Brookline town	158	1%
Massachusetts	Norfolk County	Stoughton town	Massachusetts	Norfolk County	Brookline town	115	1%
Massachusetts	Norfolk County	Stoughton town	Massachusetts	Norfolk County	Brookline town	12	0%
Massachusetts	Norfolk County	Stoughton town	Massachusetts	Norfolk County	Brookline town	10	0%
Massachusetts	Norfolk County	Walpole town	Massachusetts	Norfolk County	Brookline town	115	1%
Massachusetts	Norfolk County	Wellesley town	Massachusetts	Norfolk County	Brookline town	114	1%

2% → 3

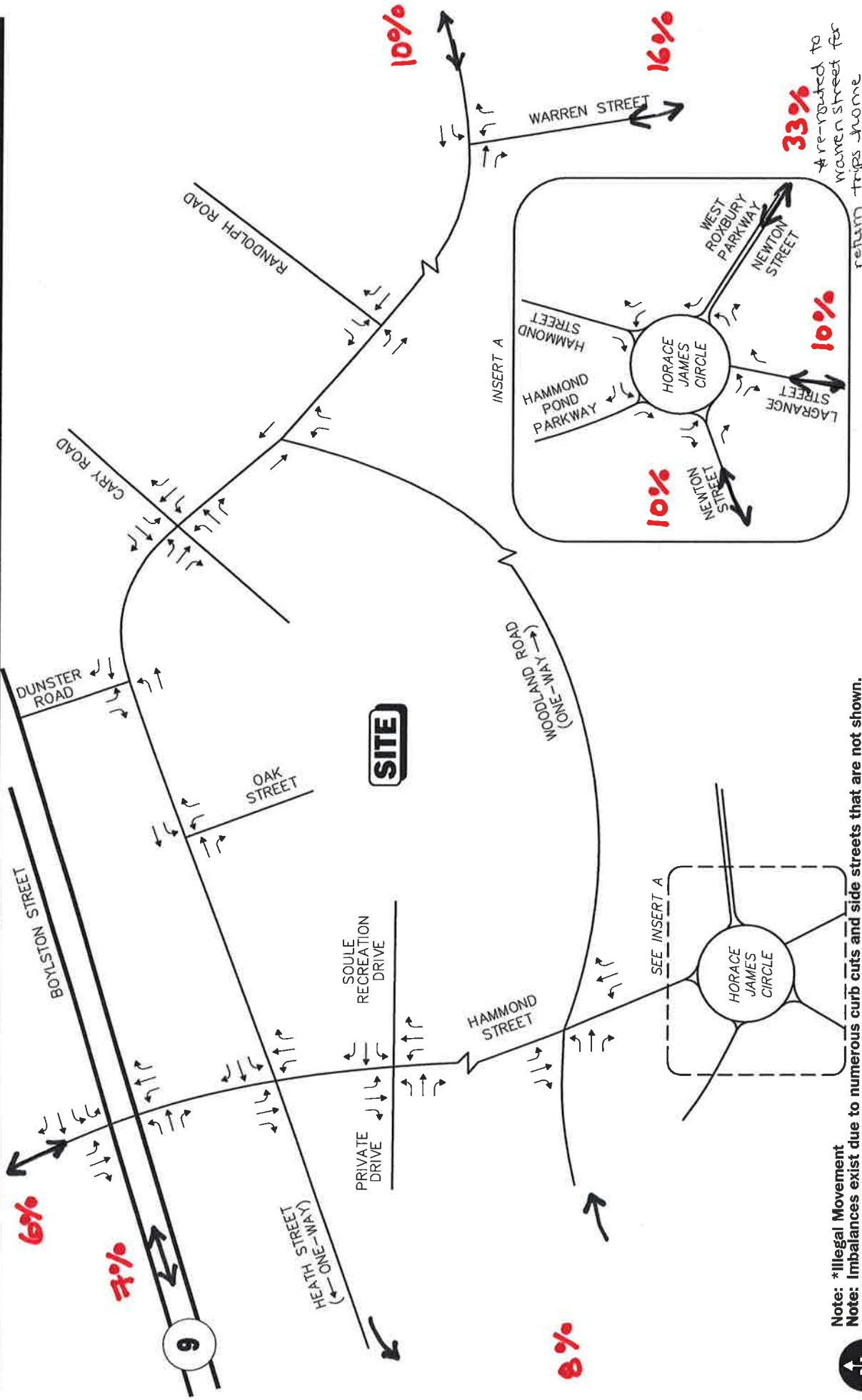
27%  
100% → 3

Massachusetts	Norfolk County	Wellesley town	Massachusetts	Norfolk County	Brookline town	22	0%
Massachusetts	Norfolk County	Wellesley town	Massachusetts	Norfolk County	Brookline town	6	0%
Massachusetts	Norfolk County	Wellesley town	Massachusetts	Norfolk County	Brookline town	37	0%
Massachusetts	Norfolk County	Westwood town	Massachusetts	Norfolk County	Brookline town	110	1%
Massachusetts	Norfolk County	Weymouth Town city	Massachusetts	Norfolk County	Brookline town	167	1%
Massachusetts	Norfolk County	Weymouth Town city	Massachusetts	Norfolk County	Brookline town	21	0%
Massachusetts	Norfolk County	Wrentham town	Massachusetts	Norfolk County	Brookline town	69	0%
Massachusetts	Plymouth County	Brockton city	Massachusetts	Norfolk County	Brookline town	125	1%
Massachusetts	Plymouth County	Brockton city	Massachusetts	Norfolk County	Brookline town	17	0%
Massachusetts	Plymouth County	Marshfield town	Massachusetts	Norfolk County	Brookline town	39	0%
Massachusetts	Plymouth County	Rockland town	Massachusetts	Norfolk County	Brookline town	26	0%
Massachusetts	Plymouth County	Rockland town	Massachusetts	Norfolk County	Brookline town	18	0%
Massachusetts	Plymouth County	Rockland town	Massachusetts	Norfolk County	Brookline town	11	0%
Massachusetts	Plymouth County	Scituate town	Massachusetts	Norfolk County	Brookline town	37	0%
Massachusetts	Suffolk County	Boston city	Massachusetts	Norfolk County	Brookline town	2,940	14%
Massachusetts	Suffolk County	Boston city	Massachusetts	Norfolk County	Brookline town	474	2%
Massachusetts	Suffolk County	Boston city	Massachusetts	Norfolk County	Brookline town	1,579	8%
Massachusetts	Suffolk County	Boston city	Massachusetts	Norfolk County	Brookline town	1,046	5%
Massachusetts	Suffolk County	Revere city	Massachusetts	Norfolk County	Brookline town	30	0%
Massachusetts	Suffolk County	Revere city	Massachusetts	Norfolk County	Brookline town	23	0%
Massachusetts	Suffolk County	Revere city	Massachusetts	Norfolk County	Brookline town	23	0%
Massachusetts	Suffolk County	Revere city	Massachusetts	Norfolk County	Brookline town	23	0%
Massachusetts	Suffolk County	Winthrop Town city	Massachusetts	Norfolk County	Brookline town	19	0%
Massachusetts	Suffolk County	Winthrop Town city	Massachusetts	Norfolk County	Brookline town	5	0%
Massachusetts	Worcester County	Grafton town	Massachusetts	Norfolk County	Brookline town	53	0%
Massachusetts	Worcester County	Harvard town	Massachusetts	Norfolk County	Brookline town	32	0%
Massachusetts	Worcester County	Westborough town	Massachusetts	Norfolk County	Brookline town	29	0%

29% → 3

20,492





Note: \*Illegal Movement

Note: Imbalances exist due to numerous curb cuts and side streets that are not shown.

Not To Scale

Figure -

**VAI** Vanasse & Associates, Inc.  
Transportation Engineers & Planners

- % Student
- assumption
- trip distribution

## CAPACITY ANALYSIS





















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Boylston Street (Route 9) at Hammond Street  
Hammond Street at Heath Street  
Hammond Street at Soule Recreation Drive and Private Drive  
Hammond Street at Woodland Road  
Heath Street at Oak Street  
Heath Street at Dunster Road  
Boylston Street (Route 9) at Dunster Road  
Heath Street at Cary Road  
Heath Street at Soule Recreation Drive/Site Drive  
Heath Street at Woodland Road  
Heath Street at Randolph Road  
Heath Street at Warren Street  
James Horace Circle

Boylston Street (Route 9) at Hammond Street





















HCM 2010 Signalized Intersection Summary  
3: Hammond Street & Boylston Street

2016 AM Baseline  
1/31/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	122	1087	34	220	1291	43	113	355	73	124	238	124
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	184.5	184.0	190.0	182.7	186.3	190.0	190.0	190.8	190.0	190.0	187.5	182.7
Adj Flow Rate, veh/h	136	1208	38	232	1359	45	118	370	76	139	267	139
Adj No. of Lanes	1	2	0	1	2	1	0	2	0	0	2	1
Peak Hour Factor	0.90	0.90	0.90	0.95	0.95	0.95	0.96	0.96	0.96	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	4	2	0	1	1	1	2	2	4
Cap, veh/h	190	1287	40	221	1383	883	149	489	105	193	399	423
Arrive On Green	0.11	0.37	0.35	0.13	0.39	0.38	0.18	0.20	0.18	0.15	0.16	0.16
Sat Flow, veh/h	1757	3460	109	1740	3539	1615	739	2427	520	1174	2425	1553
Grp Volume(v), veh/h	136	610	636	232	1359	45	299	0	265	215	191	139
Grp Sat Flow(s),veh/h/ln	1757	1748	1821	1740	1770	1615	1871	0	1816	1817	1782	1553
Q Serve(g_s), s	8.9	39.8	39.9	15.0	44.9	1.5	18.0	0.0	16.2	13.3	11.9	8.5
Cycle Q Clear(g_c), s	8.9	39.8	39.9	15.0	44.9	1.5	18.0	0.0	16.2	13.3	11.9	8.5
Prop In Lane	1.00		0.06	1.00		1.00	0.39		0.29	0.65		1.00
Lane Grp Cap(c), veh/h	190	650	677	221	1383	883	377	0	366	299	293	423
V/C Ratio(X)	0.72	0.94	0.94	1.05	0.98	0.05	0.79	0.00	0.73	0.72	0.65	0.33
Avail Cap(c_a), veh/h	223	650	677	221	1383	883	443	0	430	415	407	522
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.49	0.00	0.49	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.0	35.8	35.9	51.6	35.6	12.5	45.3	0.0	44.4	47.5	46.2	34.4
Incr Delay (d2), s/veh	8.7	23.0	22.5	74.8	20.4	0.1	4.2	0.0	2.5	3.7	2.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	23.3	24.2	11.8	25.8	1.0	9.8	0.0	8.4	7.0	6.0	3.7
LnGrp Delay(d),s/veh	59.7	58.8	58.4	126.4	56.1	12.6	49.5	0.0	46.9	51.2	48.7	34.8
LnGrp LOS	E	E	E	F	E	B	D		D	D	D	C
Approach Vol, veh/h	1382				1636				564			
Approach Delay, s/veh	58.7				64.9				48.3			
Approach LOS	E				E				D			
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.8	61.9		27.8	19.0	59.7		23.5				
Change Period (Y+Rc), s	6.0	7.0		6.0	6.0	7.0		6.0				
Max Green Setting (Gmax), s	13.0	41.0		26.0	13.0	41.0		25.0				
Max Q Clear Time (g_c+I1), s	10.9	46.9		20.0	17.0	41.9		15.3				
Green Ext Time (p_c), s	0.1	0.0		1.8	0.0	0.0		2.1				
Intersection Summary												
HCM 2010 Ctrl Delay	58.1											
HCM 2010 LOS	E											

Lanes, Volumes, Timings  
3: Hammond Street & Boylston Street













2016 AM Baseline  
1/31/2017

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	122	1087	34	220	1291	43	113	355	73	124	238	124
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	12	11	12	12	12	13	12	12	10	11
Storage Length (ft)	220		0	330		150	0		0	0		100
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1694	3478	0	1678	3539	1615	0	3494	0	0	3269	1501
Flt Permitted	0.950			0.950				0.990			0.983	
Satd. Flow (perm)	1694	3478	0	1678	3539	1615	0	3494	0	0	3269	1501
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3				76		12				139
Link Speed (mph)		40			45			25			25	
Link Distance (ft)		710			770			351			593	
Travel Time (s)		12.1			11.7			9.6			16.2	
Peak Hour Factor	0.90	0.90	0.90	0.95	0.95	0.95	0.96	0.96	0.96	0.89	0.89	0.89
Heavy Vehicles (%)	3%	3%	12%	4%	2%	0%	5%	1%	14%	0%	2%	4%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	136	1246	0	232	1359	45	0	564	0	0	406	139
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA		Split	NA	pm+ov
Protected Phases	1	6		5	2	8	4	4		8	8	1
Permitted Phases						2						8
Detector Phase	1	6		5	2	8	4	4		8	8	1
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	10.0	60.0		10.0	60.0	30.0	30.0	30.0		30.0	30.0	10.0
Total Split (s)	19.0	48.0		19.0	48.0	31.0	32.0	32.0		31.0	31.0	19.0
Total Split (%)	14.6%	36.9%		14.6%	36.9%	23.8%	24.6%	24.6%		23.8%	23.8%	14.6%
Maximum Green (s)	13.0	41.0		13.0	41.0	25.0	26.0	26.0		25.0	25.0	13.0
Yellow Time (s)	4.0	4.0		4.0	4.0	3.0	3.0	3.0		3.0	3.0	4.0
All-Red Time (s)	2.0	3.0		2.0	3.0	3.0	3.0	3.0		3.0	3.0	2.0
Lost Time Adjust (s)	-2.0	-3.0		-2.0	-3.0	-2.0		-2.0			-2.0	-2.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag							Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	C-Max		None	C-Max	Ped	Ped	Ped		Ped	Ped	None
Walk Time (s)		20.0			20.0	5.0	5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		20.0			20.0	18.0	19.0	19.0		18.0	18.0	
Pedestrian Calls (#/hr)		10			10	3	8	8		3	3	
Act Effct Green (s)	15.1	44.0		17.1	46.0	71.7		27.2			25.7	44.7
Actuated g/C Ratio	0.12	0.34		0.13	0.35	0.55		0.21			0.20	0.34
v/c Ratio	0.69	1.06		1.05	1.08	0.05		0.76			0.63	0.23
Control Delay	73.9	84.0		128.7	91.7	0.5		16.7			52.6	5.5
Queue Delay	0.0	0.0		0.0	0.0	0.0		1.1			0.0	0.0
Total Delay	73.9	84.0		128.7	91.7	0.5		17.8			52.6	5.5
LOS	E	F		F	F	A		B			D	A
Approach Delay		83.0			94.5			17.8			40.6	
Approach LOS		F			F			B			D	



Lanes, Volumes, Timings  
3: Hammond Street & Boylston Street







2016 AM Baseline  
1/31/2017

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	110	~604		~214	~700	0		52			167	0
Queue Length 95th (ft)	#202	#746		#405	#839	4		102			217	43
Internal Link Dist (ft)		630			690			271			513	
Turn Bay Length (ft)	220			330		150						100
Base Capacity (vph)	204	1179		220	1253	940		761			678	613
Starvation Cap Reductn	0	0		0	0	0		62			0	0
Spillback Cap Reductn	0	0		0	0	0		0			0	0
Storage Cap Reductn	0	0		0	0	0		0			0	0
Reduced v/c Ratio	0.67	1.06		1.05	1.08	0.05		0.81			0.60	0.23

Intersection Summary





















Area Type: Other  
 Cycle Length: 130  
 Actuated Cycle Length: 130  
 Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow, Master Intersection  
 Natural Cycle: 140  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 1.08  
 Intersection Signal Delay: 73.1  
 Intersection Capacity Utilization 82.3%  
 Analysis Period (min) 15  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 3: Hammond Street & Boylston Street

 ø1	 ø2 (R)	 ø4	 ø8
19 s	48 s	32 s	31 s
 ø5	 ø6 (R)		
19 s	48 s		





















HCM 2010 Signalized Intersection Summary  
3: Hammond Street & Boylston Street

2016 PM Baseline  
1/31/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	118	1070	69	234	1126	59	160	199	90	122	260	100
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	190.0	186.4	190.0	184.5	186.3	190.0	190.0	191.6	190.0	190.0	187.5	190.0
Adj Flow Rate, veh/h	128	1163	75	275	1325	69	176	219	99	137	292	112
Adj No. of Lanes	1	2	0	1	2	1	0	2	0	0	2	1
Peak Hour Factor	0.92	0.92	0.92	0.85	0.85	0.85	0.91	0.91	0.91	0.89	0.89	0.89
Percent Heavy Veh, %	0	2	2	3	2	0	1	1	1	1	1	0
Cap, veh/h	172	1077	69	327	1449	924	232	304	142	188	429	416
Arrive On Green	0.10	0.32	0.29	0.19	0.41	0.40	0.17	0.19	0.17	0.15	0.17	0.16
Sat Flow, veh/h	1810	3378	218	1757	3539	1615	1244	1631	762	1096	2506	1615
Grp Volume(v), veh/h	128	609	629	275	1325	69	262	0	232	228	201	112
Grp Sat Flow(s),veh/h/ln	1810	1771	1825	1757	1770	1615	1854	0	1782	1820	1781	1615
Q Serve(g_s), s	8.0	37.0	37.0	17.5	41.0	2.2	15.6	0.0	14.2	13.8	12.3	6.4
Cycle Q Clear(g_c), s	8.0	37.0	37.0	17.5	41.0	2.2	15.6	0.0	14.2	13.8	12.3	6.4
Prop In Lane	1.00		0.12	1.00		1.00	0.67		0.43	0.60		1.00
Lane Grp Cap(c), veh/h	172	564	582	327	1449	924	346	0	332	312	305	416
V/C Ratio(X)	0.74	1.08	1.08	0.84	0.91	0.07	0.76	0.00	0.70	0.73	0.66	0.27
Avail Cap(c_a), veh/h	343	564	582	333	1449	924	447	0	430	423	414	515
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.55	0.00	0.55	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.2	39.6	39.7	45.6	32.4	11.1	45.4	0.0	44.6	46.2	45.0	34.4
Incr Delay (d2), s/veh	6.2	61.1	61.2	17.2	10.4	0.2	3.1	0.0	1.9	4.1	2.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	27.6	28.5	10.0	22.2	1.4	8.3	0.0	7.1	7.3	6.3	2.9
LnGrp Delay(d),s/veh	57.4	100.7	100.9	62.8	42.8	11.3	48.5	0.0	46.5	50.3	47.4	34.7
LnGrp LOS	E	F	F	E	D	B	D		D	D	D	C
Approach Vol, veh/h	1366			1669			494			541		
Approach Delay, s/veh	96.7			44.8			47.6			46.0		
Approach LOS	F			D			D			D		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.0	65.4		25.6	25.6	54.9		23.9				
Change Period (Y+Rc), s	5.0	7.0		6.0	6.0	7.0		6.0				
Max Green Setting (Gmax), s	21.0	34.0		26.0	20.0	34.0		25.0				
Max Q Clear Time (g_c+I1), s	10.0	43.0		17.6	19.5	39.0		15.8				
Green Ext Time (p_c), s	0.2	0.0		2.0	0.0	0.0		2.1				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			62.7									
HCM 2010 LOS			E									













Lanes, Volumes, Timings  
3: Hammond Street & Boylston Street

2016 PM Baseline  
1/31/2017

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	118	1070	69	234	1126	59	160	199	90	122	260	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	12	11	12	12	12	13	12	12	10	11
Storage Length (ft)	220		0	330		150	0		0	0		100
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1745	3509	0	1694	3539	1615	0	3446	0	0	3272	1561
Flt Permitted	0.950			0.950				0.982			0.984	
Satd. Flow (perm)	1745	3509	0	1694	3539	1615	0	3446	0	0	3272	1561
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5				76		22				112
Link Speed (mph)		40			45			25			25	
Link Distance (ft)		710			770			351			593	
Travel Time (s)		12.1			11.7			9.6			16.2	
Peak Hour Factor	0.92	0.92	0.92	0.85	0.85	0.85	0.91	0.91	0.91	0.89	0.89	0.89
Heavy Vehicles (%)	0%	2%	1%	3%	2%	0%	3%	1%	8%	2%	1%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	128	1238	0	275	1325	69	0	494	0	0	429	112
Number of Detectors	1	2		1	2	1	1	2		1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	20
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA		Split	NA	pm+ov
Protected Phases	1	6		5	2	8	4	4		8	8	1
Permitted Phases						2						8
Detector Phase	1	6		5	2	8	4	4		8	8	1
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	10.0	60.0		10.0	60.0	29.0	30.0	30.0		29.0	29.0	10.0
Total Split (s)	26.0	41.0		26.0	41.0	31.0	32.0	32.0		31.0	31.0	26.0
Total Split (%)	20.0%	31.5%		20.0%	31.5%	23.8%	24.6%	24.6%		23.8%	23.8%	20.0%
Yellow Time (s)	3.0	4.0		4.0	4.0	3.0	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	2.0	3.0		2.0	3.0	3.0	3.0	3.0		3.0	3.0	2.0
Lost Time Adjust (s)	-1.0	-3.0		-2.0	-3.0	-2.0		-2.0			-2.0	-1.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag							Lead

Lanes, Volumes, Timings  
3: Hammond Street & Boylston Street







2016 PM Baseline  
1/31/2017

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							Yes
Recall Mode	None	C-Max		None	C-Max	None	None	None		None	None	None
Act Effct Green (s)	15.8	40.4		24.8	49.4	73.4		24.8			23.9	43.7
Actuated g/C Ratio	0.12	0.31		0.19	0.38	0.56		0.19			0.18	0.34
v/c Ratio	0.61	1.13		0.85	0.99	0.07		0.73			0.71	0.19
Control Delay	65.6	112.4		74.9	61.7	1.7		18.0			56.5	5.1
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.4			0.0	0.0
Total Delay	65.6	112.4		74.9	61.7	1.7		18.5			56.5	5.1
LOS	E	F		E	E	A		B			E	A
Approach Delay		108.0			61.4			18.5			45.9	
Approach LOS		F			E			B			D	
Queue Length 50th (ft)	104	~680		223	~627	0		48			178	0
Queue Length 95th (ft)	164	#822		#372	#811	9		114			230	37
Internal Link Dist (ft)		630			690			271			513	
Turn Bay Length (ft)	220			330		150						100
Base Capacity (vph)	295	1093		323	1345	980		759			679	668
Starvation Cap Reductn	0	0		0	0	0		53			0	0
Spillback Cap Reductn	0	0		0	0	0		0			0	0
Storage Cap Reductn	0	0		0	0	0		0			0	0
Reduced v/c Ratio	0.43	1.13		0.85	0.99	0.07		0.70			0.63	0.17

Intersection Summary





















Area Type: Other  
 Cycle Length: 130  
 Actuated Cycle Length: 130  
 Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow, Master Intersection  
 Natural Cycle: 140  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 1.13  
 Intersection Signal Delay: 69.8  
 Intersection Capacity Utilization 81.8%  
 Analysis Period (min) 15  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 3: Hammond Street & Boylston Street

 Ø1	 Ø2 (R)	 Ø4	 Ø8
26 s	41 s	32 s	31 s
 Ø5	 Ø6 (R)		
26 s	41 s		

HCM 2010 Signalized Intersection Summary  
3: Hammond Street & Boylston Street





















2024 No-Build Weekday Morning  
2/1/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	132	1221	37	241	1473	46	122	388	83	134	260	134
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	184.5	184.0	190.0	182.7	186.3	190.0	190.0	190.7	190.0	190.0	187.5	182.7
Adj Flow Rate, veh/h	147	1357	41	254	1551	48	127	404	86	151	292	151
Adj No. of Lanes	1	2	0	1	2	1	0	2	0	0	2	1
Peak Hour Factor	0.90	0.90	0.90	0.95	0.95	0.95	0.96	0.96	0.96	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	4	2	0	1	1	1	2	2	4
Cap, veh/h	199	1251	38	214	1312	865	153	511	114	202	420	445
Arrive On Green	0.11	0.36	0.34	0.12	0.37	0.36	0.19	0.21	0.19	0.16	0.17	0.17
Sat Flow, veh/h	1757	3465	105	1740	3539	1615	726	2419	538	1169	2429	1553
Grp Volume(v), veh/h	147	684	714	254	1551	48	327	0	290	235	208	151
Grp Sat Flow(s),veh/h/ln	1757	1748	1821	1740	1770	1615	1870	0	1812	1817	1782	1553
Q Serve(g_s), s	9.9	44.0	44.0	15.0	45.2	1.7	20.4	0.0	18.3	15.0	13.3	9.4
Cycle Q Clear(g_c), s	9.9	44.0	44.0	15.0	45.2	1.7	20.4	0.0	18.3	15.0	13.3	9.4
Prop In Lane	1.00		0.06	1.00		1.00	0.39		0.30	0.64		1.00
Lane Grp Cap(c), veh/h	199	631	658	214	1312	865	395	0	383	314	308	445
V/C Ratio(X)	0.74	1.08	1.09	1.19	1.18	0.06	0.83	0.00	0.76	0.75	0.68	0.34
Avail Cap(c_a), veh/h	216	631	658	214	1312	865	430	0	416	403	395	520
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.39	0.00	0.39	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.3	38.9	39.0	53.4	38.3	13.5	46.3	0.0	45.4	48.5	47.2	34.4
Incr Delay (d2), s/veh	11.5	60.5	60.5	120.7	89.9	0.1	5.1	0.0	2.9	5.6	3.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	31.7	33.0	14.3	38.3	1.1	11.1	0.0	9.5	8.0	6.9	4.1
LnGrp Delay(d),s/veh	63.8	99.4	99.6	174.1	128.2	13.7	51.4	0.0	48.3	54.0	50.3	34.8
LnGrp LOS	E	F	F	F	F	B	D		D	D	D	C
Approach Vol, veh/h	1545				1853			617			594	
Approach Delay, s/veh	96.1				131.5			49.9			47.8	
Approach LOS	F				F			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.8	57.3		29.8	19.0	56.2		25.1				
Change Period (Y+Rc), s	6.0	7.0		6.0	6.0	7.0		6.0				
Max Green Setting (Gmax), s	13.0	41.0		26.0	13.0	41.0		25.0				
Max Q Clear Time (g_c+I1), s	11.9	47.2		22.4	17.0	46.0		17.0				
Green Ext Time (p_c), s	0.0	0.0		1.3	0.0	0.0		2.1				
Intersection Summary												
HCM 2010 Ctrl Delay	97.9											
HCM 2010 LOS	F											

Lanes, Volumes, Timings  
3: Hammond Street & Boylston Street













2024 No-Build Weekday Morning

2/1/2017

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	132	1221	37	241	1473	46	122	388	83	134	260	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	12	11	12	12	12	13	12	12	10	11
Storage Length (ft)	220		0	330		150	0		0	0		100
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1694	3482	0	1678	3539	1615	0	3489	0	0	3269	1501
Flt Permitted	0.950			0.950				0.990			0.983	
Satd. Flow (perm)	1694	3482	0	1678	3539	1615	0	3489	0	0	3269	1501
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2				76		13				139
Link Speed (mph)		40			45			25			25	
Link Distance (ft)		710			770			351			593	
Travel Time (s)		12.1			11.7			9.6			16.2	
Peak Hour Factor	0.90	0.90	0.90	0.95	0.95	0.95	0.96	0.96	0.96	0.89	0.89	0.89
Heavy Vehicles (%)	3%	3%	12%	4%	2%	0%	5%	1%	14%	0%	2%	4%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	147	1398	0	254	1551	48	0	617	0	0	443	151
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA		Split	NA	pm+ov
Protected Phases	1	6		5	2	8	4	4		8	8	1
Permitted Phases						2						8
Detector Phase	1	6		5	2	8	4	4		8	8	1
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	10.0	60.0		10.0	60.0	30.0	30.0	30.0		30.0	30.0	10.0
Total Split (s)	19.0	48.0		19.0	48.0	31.0	32.0	32.0		31.0	31.0	19.0
Total Split (%)	14.6%	36.9%		14.6%	36.9%	23.8%	24.6%	24.6%		23.8%	23.8%	14.6%
Maximum Green (s)	13.0	41.0		13.0	41.0	25.0	26.0	26.0		25.0	25.0	13.0
Yellow Time (s)	4.0	4.0		4.0	4.0	3.0	3.0	3.0		3.0	3.0	4.0
All-Red Time (s)	2.0	3.0		2.0	3.0	3.0	3.0	3.0		3.0	3.0	2.0
Lost Time Adjust (s)	-2.0	-3.0		-2.0	-3.0	-2.0		-2.0			-2.0	-2.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag							Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	C-Max		None	C-Max	Ped	Ped	Ped		Ped	Ped	None
Walk Time (s)		20.0			20.0	5.0	5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		20.0			20.0	18.0	19.0	19.0		18.0	18.0	
Pedestrian Calls (#/hr)		10			10	3	8	8		3	3	
Act Effct Green (s)	15.2	44.0		16.5	45.3	71.2		27.6			25.9	45.1
Actuated g/C Ratio	0.12	0.34		0.13	0.35	0.55		0.21			0.20	0.35
v/c Ratio	0.74	1.19		1.20	1.26	0.05		0.82			0.68	0.25
Control Delay	78.1	130.8		172.9	159.7	0.7		20.6			54.1	6.8
Queue Delay	0.0	0.0		0.0	0.0	0.0		2.3			0.0	0.0
Total Delay	78.1	130.8		172.9	159.7	0.7		22.9			54.1	6.8
LOS	E	F		F	F	A		C			D	A
Approach Delay		125.8			157.4			22.9			42.0	
Approach LOS		F			F			C			D	

Lanes, Volumes, Timings  
3: Hammond Street & Boylston Street

2024 No-Build Weekday Morning  
2/1/2017

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	120	~747		~259	~877	0		56			184	7
Queue Length 95th (ft)	#226	#889		#449	#1017	4		m106			237	52
Internal Link Dist (ft)		630			690			271			513	
Turn Bay Length (ft)	220			330		150						100
Base Capacity (vph)	203	1179		212	1232	931		761			678	615
Starvation Cap Reductn	0	0		0	0	0		62			0	0
Spillback Cap Reductn	0	0		0	0	0		0			0	0
Storage Cap Reductn	0	0		0	0	0		0			0	0
Reduced v/c Ratio	0.72	1.19		1.20	1.26	0.05		0.88			0.65	0.25

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow, Master Intersection

Natural Cycle: 140

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.26

Intersection Signal Delay: 113.9

Intersection LOS: F

Intersection Capacity Utilization 89.6%

ICU Level of Service E

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.







Queue shown is maximum after two cycles.

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

Queue shown is maximum after two cycles.

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





















Splits and Phases: 3: Hammond Street & Boylston Street

 ø1	 ø2 (R)	 ø4	 ø8
19 s	48 s	32 s	31 s
 ø5	 ø6 (R)		
19 s	48 s		

# HCM 2010 Signalized Intersection Summary

## 3: Hammond Street & Boylston Street





















2024 No-Build Weekday Evening  
2/1/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	128	1205	75	263	1275	65	65	218	100	132	289	108
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	190.0	186.4	190.0	184.5	186.3	190.0	190.0	191.5	190.0	190.0	187.5	190.0
Adj Flow Rate, veh/h	139	1310	82	309	1500	76	71	240	110	148	325	121
Adj No. of Lanes	1	2	0	1	2	1	0	2	0	0	2	1
Peak Hour Factor	0.92	0.92	0.92	0.85	0.85	0.85	0.91	0.91	0.91	0.89	0.89	0.89
Percent Heavy Veh, %	0	2	2	3	2	0	1	1	1	1	1	0
Cap, veh/h	184	1087	68	335	1451	945	98	340	163	198	465	447
Arrive On Green	0.10	0.32	0.29	0.19	0.41	0.40	0.15	0.17	0.15	0.17	0.18	0.18
Sat Flow, veh/h	1810	3386	212	1757	3539	1615	592	2052	983	1075	2528	1615
Grp Volume(v), veh/h	139	684	708	309	1500	76	226	0	195	251	222	121
Grp Sat Flow(s),veh/h/ln	1810	1771	1826	1757	1770	1615	1886	0	1742	1822	1782	1615
Q Serve(g_s), s	8.6	37.0	37.0	19.9	47.3	2.4	13.1	0.0	12.2	15.1	13.4	6.8
Cycle Q Clear(g_c), s	8.6	37.0	37.0	19.9	47.3	2.4	13.1	0.0	12.2	15.1	13.4	6.8
Prop In Lane	1.00		0.12	1.00		1.00	0.31		0.56	0.59		1.00
Lane Grp Cap(c), veh/h	184	568	586	335	1451	945	312	0	289	335	327	447
V/C Ratio(X)	0.76	1.20	1.21	0.92	1.03	0.08	0.72	0.00	0.68	0.75	0.68	0.27
Avail Cap(c_a), veh/h	345	568	586	335	1451	945	458	0	423	427	417	528
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.48	0.00	0.48	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.4	39.1	39.3	45.8	34.0	10.4	45.9	0.0	45.7	45.1	43.9	32.6
Incr Delay (d2), s/veh	6.2	107.5	108.9	30.0	32.7	0.2	1.6	0.0	1.3	5.4	3.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	35.0	36.3	12.4	29.6	1.6	7.0	0.0	6.0	8.1	6.9	3.0
LnGrp Delay(d),s/veh	56.6	146.7	148.3	75.8	66.7	10.6	47.5	0.0	47.1	50.5	46.9	32.9
LnGrp LOS	E	F	F	E	F	B	D		D	D	D	C
Approach Vol, veh/h	1531				1885			421			594	
Approach Delay, s/veh	139.2				65.9			47.3			45.6	
Approach LOS	F				E			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.7	66.0		23.1	26.0	55.7		25.2				
Change Period (Y+Rc), s	5.0	7.0		6.0	6.0	7.0		6.0				
Max Green Setting (Gmax), s	21.0	34.0		26.0	20.0	34.0		25.0				
Max Q Clear Time (g_c+I1), s	10.6	49.3		15.1	21.9	39.0		17.1				
Green Ext Time (p_c), s	0.2	0.0		2.0	0.0	0.0		2.1				
Intersection Summary												
HCM 2010 Ctrl Delay	86.8											
HCM 2010 LOS	F											















Lanes, Volumes, Timings  
3: Hammond Street & Boylston Street

2024 No-Build Weekday Evening  
2/1/2017

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	128	1205	75	263	1275	65	65	218	100	132	289	108
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	12	11	12	12	12	13	12	12	10	11
Storage Length (ft)	220		0	330		150	0		0	0		100
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1745	3509	0	1694	3539	1615	0	3447	0	0	3276	1561
Flt Permitted	0.950			0.950				0.992			0.985	
Satd. Flow (perm)	1745	3509	0	1694	3539	1615	0	3447	0	0	3276	1561
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5				76		35				114
Link Speed (mph)		40			45			25			25	
Link Distance (ft)		710			770			351			593	
Travel Time (s)		12.1			11.7			9.6			16.2	
Peak Hour Factor	0.92	0.92	0.92	0.85	0.85	0.85	0.91	0.91	0.91	0.89	0.89	0.89
Heavy Vehicles (%)	0%	2%	1%	3%	2%	0%	3%	1%	8%	2%	1%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	139	1392	0	309	1500	76	0	421	0	0	473	121
Number of Detectors	1	2		1	2	1	1	2		1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA		Split	NA	pm+ov
Protected Phases	1	6		5	2	8	4	4		8	8	1
Permitted Phases						2						8
Detector Phase	1	6		5	2	8	4	4		8	8	1
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	10.0	60.0		10.0	60.0	29.0	30.0	30.0		29.0	29.0	10.0
Total Split (s)	26.0	41.0		26.0	41.0	31.0	32.0	32.0		31.0	31.0	26.0
Total Split (%)	20.0%	31.5%		20.0%	31.5%	23.8%	24.6%	24.6%		23.8%	23.8%	20.0%
Yellow Time (s)	3.0	4.0		4.0	4.0	3.0	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	2.0	3.0		2.0	3.0	3.0	3.0	3.0		3.0	3.0	2.0
Lost Time Adjust (s)	-1.0	-3.0		-2.0	-3.0	-2.0		-2.0			-2.0	-1.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag							Lead

Lanes, Volumes, Timings  
3: Hammond Street & Boylston Street

2024 No-Build Weekday Evening  
2/1/2017







												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							Yes
Recall Mode	None	C-Max		None	C-Max	None	None	None		None	None	None
Act Effect Green (s)	16.5	37.5		28.6	49.6	75.2		22.2			25.6	46.2
Actuated g/C Ratio	0.13	0.29		0.22	0.38	0.58		0.17			0.20	0.36
v/c Ratio	0.63	1.37		0.83	1.11	0.08		0.68			0.73	0.19
Control Delay	65.9	209.9		68.6	98.8	2.0		24.3			56.0	5.6
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.2			0.0	0.0
Total Delay	65.9	209.9		68.6	98.8	2.0		24.5			56.0	5.6
LOS	E	F		E	F	A		C			E	A
Approach Delay		196.8			89.9			24.5			45.7	
Approach LOS		F			F			C			D	
Queue Length 50th (ft)	113	~824		251	~770	0		64			196	4
Queue Length 95th (ft)	176	#966		#435	#973	11		m101			253	40
Internal Link Dist (ft)		630			690			271			513	
Turn Bay Length (ft)	220			330		150						100
Base Capacity (vph)	295	1015		373	1350	989		769			695	688
Starvation Cap Reductn	0	0		0	0	0		46			0	0
Spillback Cap Reductn	0	0		0	0	0		0			0	0
Storage Cap Reductn	0	0		0	0	0		0			0	0
Reduced v/c Ratio	0.47	1.37		0.83	1.11	0.08		0.58			0.68	0.18

Intersection Summary

Area Type: Other  
Cycle Length: 130  
Actuated Cycle Length: 130  
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow, Master Intersection  
Natural Cycle: 150  
Control Type: Actuated-Coordinated  
Maximum v/c Ratio: 1.37  
Intersection Signal Delay: 114.7  
Intersection Capacity Utilization 86.5%  
Analysis Period (min) 15  
Intersection LOS: F  
ICU Level of Service E






















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

Splits and Phases: 3: Hammond Street & Boylston Street

 Ø1	 Ø2 (R)	 Ø4	 Ø8
26 s	41 s	32 s	31 s
 Ø5	 Ø6 (R)		
26 s	41 s		

HCM 2010 Signalized Intersection Summary  
3: Hammond Street & Boylston Street





















2024 Build Weekday Morning  
2/2/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	132	1221	73	259	1473	46	148	411	83	134	292	134
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	184.5	183.6	190.0	182.7	186.3	190.0	190.0	190.7	190.0	190.0	187.4	182.7
Adj Flow Rate, veh/h	147	1357	81	273	1551	48	159	442	89	158	344	158
Adj No. of Lanes	1	2	0	1	2	1	0	2	0	0	2	1
Peak Hour Factor	0.90	0.90	0.90	0.95	0.95	0.95	0.93	0.93	0.93	0.85	0.85	0.85
Percent Heavy Veh, %	3	3	3	4	2	0	1	1	1	2	2	4
Cap, veh/h	165	1259	75	269	1546	975	153	447	94	188	437	416
Arrive On Green	0.09	0.38	0.36	0.15	0.44	0.43	0.17	0.19	0.17	0.16	0.17	0.17
Sat Flow, veh/h	1757	3345	199	1740	3539	1615	812	2375	499	1081	2519	1553
Grp Volume(v), veh/h	147	706	732	273	1551	48	365	0	325	266	236	158
Grp Sat Flow(s),veh/h/ln	1757	1744	1800	1740	1770	1615	1867	0	1819	1820	1781	1553
Q Serve(g_s), s	12.3	56.0	56.0	23.0	65.0	1.8	28.0	0.0	26.3	21.1	18.8	12.3
Cycle Q Clear(g_c), s	12.3	56.0	56.0	23.0	65.0	1.8	28.0	0.0	26.3	21.1	18.8	12.3
Prop In Lane	1.00		0.11	1.00		1.00	0.44		0.27	0.59		1.00
Lane Grp Cap(c), veh/h	165	656	677	269	1546	975	351	0	342	316	309	416
V/C Ratio(X)	0.89	1.08	1.08	1.02	1.00	0.05	1.04	0.00	0.95	0.84	0.76	0.38
Avail Cap(c_a), veh/h	165	656	677	269	1546	975	351	0	342	330	323	428
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.65	0.00	0.65	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.7	46.4	46.6	62.9	41.9	12.1	60.9	0.0	60.0	60.1	58.6	44.4
Incr Delay (d2), s/veh	40.1	57.3	58.4	58.9	23.7	0.1	49.6	0.0	26.9	17.0	9.9	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	37.2	38.7	15.4	36.6	1.2	19.2	0.0	15.7	12.1	10.1	5.4
LnGrp Delay(d),s/veh	106.8	103.7	105.0	121.9	65.6	12.1	110.4	0.0	86.8	77.1	68.5	45.0
LnGrp LOS	F	F	F	F	F	B	F		F	E	E	D
Approach Vol, veh/h	1585				1872				690			
Approach Delay, s/veh	104.6				72.5				99.3			
Approach LOS	F				E				F			
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	18.0	70.2		32.0	27.0	61.2		29.8				
Change Period (Y+Rc), s	6.0	7.0		6.0	6.0	7.0		6.0				
Max Green Setting (Gmax), s	12.0	62.0		26.0	21.0	53.0		25.0				
Max Q Clear Time (g_c+I1), s	14.3	67.0		30.0	25.0	58.0		23.1				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.7				
Intersection Summary												
HCM 2010 Ctrl Delay	86.1											
HCM 2010 LOS	F											

Lanes, Volumes, Timings  
3: Hammond Street & Boylston Street













2024 Build Weekday Morning

2/2/2017

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	132	1221	73	259	1473	46	148	411	83	134	292	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	12	11	12	12	12	13	12	12	10	11
Storage Length (ft)	220		0	330		150	0		0	0		100
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1694	3460	0	1678	3539	1615	0	3493	0	0	3274	1501
Fit Permitted	0.950			0.950				0.989			0.985	
Satd. Flow (perm)	1694	3460	0	1678	3539	1615	0	3493	0	0	3274	1501
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5				65		10				116
Link Speed (mph)		40			45			25			25	
Link Distance (ft)		710			770			351			593	
Travel Time (s)		12.1			11.7			9.6			16.2	
Peak Hour Factor	0.90	0.90	0.90	0.95	0.95	0.95	0.93	0.93	0.93	0.85	0.85	0.85
Heavy Vehicles (%)	3%	3%	12%	4%	2%	0%	5%	1%	14%	0%	2%	4%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	147	1438	0	273	1551	48	0	690	0	0	502	158
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA		Split	NA	pm+ov
Protected Phases	1	6		5	2	8	4	4		8	8	1
Permitted Phases						2						8
Detector Phase	1	6		5	2	8	4	4		8	8	1
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	10.0	60.0		10.0	60.0	30.0	30.0	30.0		30.0	30.0	10.0
Total Split (s)	18.0	60.0		27.0	69.0	31.0	32.0	32.0		31.0	31.0	18.0
Total Split (%)	12.0%	40.0%		18.0%	46.0%	20.7%	21.3%	21.3%		20.7%	20.7%	12.0%
Maximum Green (s)	12.0	53.0		21.0	62.0	25.0	26.0	26.0		25.0	25.0	12.0
Yellow Time (s)	4.0	4.0		4.0	4.0	3.0	3.0	3.0		3.0	3.0	4.0
All-Red Time (s)	2.0	3.0		2.0	3.0	3.0	3.0	3.0		3.0	3.0	2.0
Lost Time Adjust (s)	-2.0	-3.0		-2.0	-3.0	-2.0		-2.0			-2.0	-2.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag							Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	C-Max		None	C-Max	Ped	Ped	Ped		Ped	Ped	None
Walk Time (s)		20.0			20.0	5.0	5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		20.0			20.0	18.0	19.0	19.0		18.0	18.0	
Pedestrian Calls (#/hr)		10			10	3	8	8		3	3	
Act Effct Green (s)	14.4	56.0		23.4	65.0	91.6		28.0			26.6	45.0
Actuated g/C Ratio	0.10	0.37		0.16	0.43	0.61		0.19			0.18	0.30
v/c Ratio	0.91	1.11		1.05	1.01	0.05		1.05			0.87	0.30
Control Delay	115.3	104.6		127.2	67.8	0.8		89.6			75.7	13.7
Queue Delay	0.0	0.0		19.6	0.0	0.0		21.0			0.0	0.0
Total Delay	115.3	104.6		146.8	67.8	0.8		110.6			75.7	13.7
LOS	F	F		F	E	A		F			E	B
Approach Delay		105.6			77.6			110.6			60.9	
Approach LOS		F			E			F			E	

Lanes, Volumes, Timings  
3: Hammond Street & Boylston Street

2024 Build Weekday Morning  
2/2/2017

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	145	~844		~293	~813	0		~382			253	30
Queue Length 95th (ft)	#288	#987		#479	#975	6		#498			302	78
Internal Link Dist (ft)		630			690			271			513	
Turn Bay Length (ft)	220			330		150						100
Base Capacity (vph)	162	1294		261	1533	1015		660			589	531
Starvation Cap Reductn	0	0		0	0	0		61			0	0
Spillback Cap Reductn	0	0		23	0	0		0			0	0
Storage Cap Reductn	0	0		0	0	0		0			0	0
Reduced v/c Ratio	0.91	1.11		1.15	1.01	0.05		1.15			0.85	0.30

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow, Master Intersection

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.11

Intersection Signal Delay: 89.2

Intersection LOS: F

Intersection Capacity Utilization 94.0%

ICU Level of Service F

Analysis Period (min) 15







~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

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





















Queue shown is maximum after two cycles.

Splits and Phases: 3: Hammond Street & Boylston Street

 p1	 p2 (R)	 p4	 p8
18 s	69 s	32 s	31 s
 p5	 p6 (R)		
27 s	60 s		






















HCM 2010 Signalized Intersection Summary  
3: Hammond Street & Boylston Street

2024 Build Weekday Evening  
2/1/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	128	1205	92	287	1275	65	83	233	101	132	303	108
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	190.0	186.4	190.0	184.5	186.3	190.0	190.0	191.7	190.0	190.0	187.6	190.0
Adj Flow Rate, veh/h	139	1310	100	342	1518	77	89	251	109	147	337	120
Adj No. of Lanes	1	2	0	1	2	1	0	2	0	0	2	1
Peak Hour Factor	0.92	0.92	0.92	0.84	0.84	0.84	0.93	0.93	0.93	0.90	0.90	0.90
Percent Heavy Veh, %	0	2	2	3	2	0	1	1	1	1	1	0
Cap, veh/h	152	1216	93	333	1662	1026	113	327	148	180	441	403
Arrive On Green	0.08	0.36	0.34	0.19	0.47	0.46	0.15	0.16	0.15	0.16	0.17	0.17
Sat Flow, veh/h	1810	3336	254	1757	3539	1615	696	2022	918	1044	2561	1615
Grp Volume(v), veh/h	139	694	716	342	1518	77	241	0	208	257	227	120
Grp Sat Flow(s),veh/h/ln	1810	1771	1819	1757	1770	1615	1882	0	1755	1823	1782	1615
Q Serve(g_s), s	10.9	52.0	52.0	27.0	56.8	2.6	17.6	0.0	16.1	19.4	17.3	8.6
Cycle Q Clear(g_c), s	10.9	52.0	52.0	27.0	56.8	2.6	17.6	0.0	16.1	19.4	17.3	8.6
Prop In Lane	1.00		0.14	1.00		1.00	0.37		0.52	0.57		1.00
Lane Grp Cap(c), veh/h	152	646	663	333	1662	1026	304	0	284	314	307	403
V/C Ratio(X)	0.91	1.07	1.08	1.03	0.91	0.08	0.79	0.00	0.73	0.82	0.74	0.30
Avail Cap(c_a), veh/h	152	646	663	333	1662	1026	369	0	344	345	337	430
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.87	0.00	0.87	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.8	45.3	45.5	57.8	35.1	10.0	57.8	0.0	57.4	57.4	56.0	43.4
Incr Delay (d2), s/veh	48.1	57.2	58.5	56.9	9.2	0.1	8.1	0.0	5.5	13.2	7.7	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.5	35.5	36.8	18.3	29.7	1.8	9.9	0.0	8.3	10.9	9.2	3.9
LnGrp Delay(d),s/veh	112.9	102.5	104.1	114.7	44.3	10.1	66.0	0.0	62.9	70.6	63.7	43.8
LnGrp LOS	F	F	F	F	D	B	E		E	E	E	D
Approach Vol, veh/h	1549				1937			449			604	
Approach Delay, s/veh	104.2				55.4			64.6			62.7	
Approach LOS	F				E			E			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.0	78.3		27.1	31.0	63.3		28.6				
Change Period (Y+Rc), s	5.0	7.0		6.0	6.0	7.0		6.0				
Max Green Setting (Gmax), s	11.0	64.0		26.0	25.0	49.0		25.0				
Max Q Clear Time (g_c+I1), s	12.9	58.8		19.6	29.0	54.0		21.4				
Green Ext Time (p_c), s	0.0	4.9		1.5	0.0	0.0		1.2				
Intersection Summary												
HCM 2010 Ctrl Delay	73.9											
HCM 2010 LOS	E											













Lanes, Volumes, Timings  
3: Hammond Street & Boylston Street

2024 Build Weekday Evening  
2/1/2017

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	128	1205	92	287	1275	65	83	233	101	132	303	108
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	12	11	12	12	12	13	12	12	10	11
Storage Length (ft)	220		0	330		150	0		0	0		100
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1745	3503	0	1694	3539	1615	0	3453	0	0	3276	1561
Flt Permitted	0.950			0.950				0.990			0.985	
Satd. Flow (perm)	1745	3503	0	1694	3539	1615	0	3453	0	0	3276	1561
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6				58		25				116
Link Speed (mph)		40			45			25			25	
Link Distance (ft)		710			770			351			593	
Travel Time (s)		12.1			11.7			9.6			16.2	
Peak Hour Factor	0.92	0.92	0.92	0.84	0.84	0.84	0.93	0.93	0.93	0.90	0.90	0.90
Heavy Vehicles (%)	0%	2%	1%	3%	2%	0%	3%	1%	8%	2%	1%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	139	1410	0	342	1518	77	0	449	0	0	484	120
Number of Detectors	1	2		1	2	1	1	2		1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	20
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA		Split	NA	pm+ov
Protected Phases	1	6		5	2	8	4	4		8	8	1
Permitted Phases						2						8
Detector Phase	1	6		5	2	8	4	4		8	8	1
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	10.0	60.0		10.0	60.0	29.0	30.0	30.0		29.0	29.0	10.0
Total Split (s)	16.0	56.0		31.0	71.0	31.0	32.0	32.0		31.0	31.0	16.0
Total Split (%)	10.7%	37.3%		20.7%	47.3%	20.7%	21.3%	21.3%		20.7%	20.7%	10.7%
Yellow Time (s)	3.0	4.0		4.0	4.0	3.0	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	2.0	3.0		2.0	3.0	3.0	3.0	3.0		3.0	3.0	2.0
Lost Time Adjust (s)	-1.0	-3.0		-2.0	-3.0	-2.0		-2.0		-2.0	-2.0	-1.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag							Lead

Lanes, Volumes, Timings  
3: Hammond Street & Boylston Street

2024 Build Weekday Evening  
2/1/2017

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							Yes
Recall Mode	None	C-Max		None	C-Max	None	None	None		None	None	None
Act Effct Green (s)	14.0	52.0		30.1	68.1	94.8		25.2			26.7	44.8
Actuated g/C Ratio	0.09	0.35		0.20	0.45	0.63		0.17			0.18	0.30
v/c Ratio	0.86	1.16		1.01	0.95	0.07		0.75			0.83	0.22
Control Delay	106.5	123.8		109.4	52.3	2.2		54.0			72.3	8.1
Queue Delay	0.0	0.0		0.0	0.0	0.0		1.0			0.0	0.0
Total Delay	106.5	123.8		109.4	52.3	2.2		55.1			72.3	8.1
LOS	F	F		F	D	A		E			E	A
Approach Delay		122.3			60.4			55.1			59.5	
Approach LOS		F			E			E			E	
Queue Length 50th (ft)	139	~855		~385	748	4		174			240	3
Queue Length 95th (ft)	#286	#998		#526	766	14		239			#314	52
Internal Link Dist (ft)		630			690			271			513	
Turn Bay Length (ft)	220			330		150						100
Base Capacity (vph)	162	1218		339	1605	1049		664			599	547
Starvation Cap Reductn	0	0		0	0	0		69			0	0
Spillback Cap Reductn	0	0		0	0	0		0			0	0
Storage Cap Reductn	0	0		0	0	0		0			0	0
Reduced v/c Ratio	0.86	1.16		1.01	0.95	0.07		0.75			0.81	0.22

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow, Master Intersection

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.16

Intersection Signal Delay: 80.9

Intersection LOS: F

Intersection Capacity Utilization 89.8%

ICU Level of Service E

Analysis Period (min) 15








~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

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

Queue shown is maximum after two cycles.

Splits and Phases: 3: Hammond Street & Boylston Street
















				
ø1	ø2 (R)		ø4	ø8
16 s	71 s		32 s	31 s
				
ø5	ø6 (R)			
31 s	56 s			



Hammond Street at Heath Street

HCM 2010 Signalized Intersection Summary  
6: Hammond Street & Heath Street
















2016 AM Baseline  
1/31/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	84	23	87	13	454	91	46	416	26
Number				7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				190.0	189.2	190.0	190.0	185.2	190.0	190.0	183.1	190.0
Adj Flow Rate, veh/h				99	27	102	15	516	103	54	489	31
Adj No. of Lanes				0	1	0	0	2	0	0	2	0
Peak Hour Factor				0.85	0.85	0.85	0.88	0.88	0.88	0.85	0.85	0.85
Percent Heavy Veh, %				0	0	0	3	3	3	3	3	3
Cap, veh/h				120	33	124	40	653	128	60	1200	76
Arrive On Green				0.14	0.16	0.14	0.21	0.23	0.21	0.75	0.77	0.77
Sat Flow, veh/h				746	204	769	39	2805	551	2	1551	98
Grp Volume(v), veh/h				228	0	0	337	0	297	54	0	520
Grp Sat Flow(s),veh/h/ln				1719	0	0	1808	0	1588	2	0	1649
Q Serve(g_s), s				15.8	0.0	0.0	9.3	0.0	21.7	9.3	0.0	12.8
Cycle Q Clear(g_c), s				15.8	0.0	0.0	22.1	0.0	21.7	9.3	0.0	12.8
Prop In Lane				0.43		0.45	0.04		0.35	1.00		0.06
Lane Grp Cap(c), veh/h				277	0	0	407	0	370	0	0	1276
V/C Ratio(X)				0.82	0.00	0.00	0.83	0.00	0.80	0.00	0.00	0.41
Avail Cap(c_a), veh/h				378	0	0	442	0	401	0	0	1276
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	1.00	0.00	1.00	0.53	0.00	0.53
Uniform Delay (d), s/veh				50.7	0.0	0.0	44.6	0.0	44.9	0.0	0.0	4.6
Incr Delay (d2), s/veh				10.1	0.0	0.0	11.6	0.0	10.4	0.0	0.0	0.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				8.3	0.0	0.0	12.7	0.0	10.6	0.0	0.0	6.0
LnGrp Delay(d),s/veh				60.8	0.0	0.0	56.2	0.0	55.4	0.0	0.0	5.1
LnGrp LOS				E			E		E			A
Approach Vol, veh/h					228			634			574	
Approach Delay, s/veh					60.8			55.8			4.6	
Approach LOS					E			E			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		106.2		23.8		106.2						
Change Period (Y+Rc), s		7.0		6.0		*7						
Max Green Setting (Gmax), s		92.0		25.0		*28						
Max Q Clear Time (g_c+l1), s		14.8		17.8		24.1						
Green Ext Time (p_c), s		5.0		0.0		1.5						
Intersection Summary												
HCM 2010 Ctrl Delay				36.1								
HCM 2010 LOS				D								
Notes												
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.												

Lanes, Volumes, Timings  
6: Hammond Street & Heath Street













2016 AM Baseline

1/31/2017

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	84	23	87	13	454	91	46	416	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	11	12
Satd. Flow (prot)	0	0	0	0	1741	0	0	3431	0	0	3320	0
Flt Permitted					0.979			0.931			0.896	
Satd. Flow (perm)	0	0	0	0	1741	0	0	3197	0	0	2990	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					28			16			12	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		250			324			214			351	
Travel Time (s)		6.8			8.8			5.8			9.6	
Peak Hour Factor	0.92	0.92	0.92	0.85	0.85	0.85	0.88	0.88	0.88	0.85	0.85	0.85
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	3%	1%	4%	3%	15%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	228	0	0	634	0	0	574	0
Turn Type				Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases					4			6		5	2	
Permitted Phases				4			6			2		
Detector Phase				4	4		6	6		5	2	
Switch Phase												
Minimum Initial (s)				4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)				26.0	26.0		23.0	23.0		11.0	23.0	
Total Split (s)				31.0	31.0		35.0	35.0		64.0	99.0	
Total Split (%)				23.8%	23.8%		26.9%	26.9%		49.2%	76.2%	
Maximum Green (s)				25.0	25.0		28.0	28.0		57.0	92.0	
Yellow Time (s)				3.0	3.0		4.0	4.0		4.0	4.0	
All-Red Time (s)				3.0	3.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)					-2.0			-3.0			-3.0	
Total Lost Time (s)					4.0			4.0			4.0	
Lead/Lag							Lead	Lead		Lag		
Lead-Lag Optimize?							Yes	Yes		Yes		
Vehicle Extension (s)				3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode				None	None		None	None		C-Max	C-Max	
Walk Time (s)				7.0	7.0		5.0	5.0			5.0	
Flash Dont Walk (s)				13.0	13.0		5.0	5.0			11.0	
Pedestrian Calls (#/hr)				10	10		2	2			6	
Act Effct Green (s)					21.8			31.5			100.2	
Actuated g/C Ratio					0.17			0.24			0.77	
v/c Ratio					0.73			0.81			0.23	
Control Delay					57.9			54.1			0.9	
Queue Delay					0.0			0.1			0.3	
Total Delay					57.9			54.2			1.2	
LOS					E			D			A	
Approach Delay					57.9			54.2			1.2	
Approach LOS					E			D			A	
Queue Length 50th (ft)					161			251			11	
Queue Length 95th (ft)					225			325			m14	
Internal Link Dist (ft)		170			244			134			271	

Lanes, Volumes, Timings  
6: Hammond Street & Heath Street





2016 AM Baseline  
1/31/2017

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)												
Base Capacity (vph)					383			802			2472	
Starvation Cap Reductn					0			0			1209	
Spillback Cap Reductn					0			7			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.60			0.80			0.45	

Intersection Summary
















Area Type: Other  
 Cycle Length: 130  
 Actuated Cycle Length: 130  
 Offset: 92 (71%), Referenced to phase 2:SBTL and 5:SBL, Start of Yellow  
 Natural Cycle: 60  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.81  
 Intersection Signal Delay: 33.6  
 Intersection LOS: C  
 Intersection Capacity Utilization 50.7%  
 ICU Level of Service A  
 Analysis Period (min) 15  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Hammond Street & Heath Street

 ø2 (R)												 ø4
99 s												31 s
 ø6				 ø5 (R)								
35 s				64 s								

HCM 2010 Signalized Intersection Summary  
6: Hammond Street & Heath Street
















2016 PM Baseline  
1/31/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	118	26	87	11	366	82	32	496	32
Number				7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				190.0	185.7	190.0	190.0	183.8	190.0	190.0	185.1	190.0
Adj Flow Rate, veh/h				146	32	107	14	452	101	34	522	34
Adj No. of Lanes				0	1	0	0	2	0	0	2	0
Peak Hour Factor				0.81	0.81	0.81	0.81	0.81	0.81	0.95	0.95	0.95
Percent Heavy Veh, %				0	4	0	4	4	4	3	3	3
Cap, veh/h				170	37	125	38	592	130	61	1155	75
Arrive On Green				0.18	0.20	0.18	0.21	0.23	0.21	0.71	0.74	0.74
Sat Flow, veh/h				871	191	638	31	2564	562	2	1565	102
Grp Volume(v), veh/h				285	0	0	284	0	283	34	0	556
Grp Sat Flow(s),veh/h/ln				1701	0	0	1583	0	1574	2	0	1666
Q Serve(g_s), s				19.6	0.0	0.0	5.5	0.0	20.4	9.7	0.0	15.8
Cycle Q Clear(g_c), s				19.6	0.0	0.0	21.3	0.0	20.4	9.7	0.0	15.8
Prop In Lane				0.51		0.38	0.05		0.36	1.00		0.06
Lane Grp Cap(c), veh/h				333	0	0	357	0	363	0	0	1230
V/C Ratio(X)				0.86	0.00	0.00	0.80	0.00	0.78	0.00	0.00	0.45
Avail Cap(c_a), veh/h				465	0	0	403	0	405	0	0	1230
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	1.00	0.00	1.00	0.55	0.00	0.55
Uniform Delay (d), s/veh				47.8	0.0	0.0	43.2	0.0	44.0	0.0	0.0	6.2
Incr Delay (d2), s/veh				10.9	0.0	0.0	9.5	0.0	8.5	0.0	0.0	0.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				10.2	0.0	0.0	10.4	0.0	9.7	0.0	0.0	7.3
LnGrp Delay(d),s/veh				58.6	0.0	0.0	52.8	0.0	52.5	0.0	0.0	6.9
LnGrp LOS				E			D		D			A
Approach Vol, veh/h					285			567			590	
Approach Delay, s/veh					58.6			52.7			6.5	
Approach LOS					E			D			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		102.4		27.6		102.4						
Change Period (Y+Rc), s		7.0		6.0		*7						
Max Green Setting (Gmax), s		86.0		31.0		*28						
Max Q Clear Time (g_c+I1), s		17.8		21.6		23.3						
Green Ext Time (p_c), s		5.1		0.0		1.5						
Intersection Summary												
HCM 2010 Ctrl Delay				34.9								
HCM 2010 LOS				C								
Notes												
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.												

Lanes, Volumes, Timings  
6: Hammond Street & Heath Street













2016 PM Baseline

1/31/2017

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	118	26	87	11	366	82	32	496	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	11	12
Satd. Flow (prot)	0	0	0	0	1718	0	0	3395	0	0	3359	0
Flt Permitted					0.975			0.930			0.945	
Satd. Flow (perm)	0	0	0	0	1718	0	0	3160	0	0	3184	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					22			19			11	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		250			324			214			351	
Travel Time (s)		6.8			8.8			5.8			9.6	
Peak Hour Factor	0.92	0.92	0.92	0.81	0.81	0.81	0.81	0.81	0.81	0.95	0.95	0.95
Heavy Vehicles (%)	0%	0%	0%	0%	4%	5%	0%	4%	1%	0%	3%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	285	0	0	567	0	0	590	0
Number of Detectors				1	2		1	2		1	2	
Detector Template				Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)				20	100		20	100		20	100	
Trailing Detector (ft)				0	0		0	0		0	0	
Detector 1 Position(ft)				0	0		0	0		0	0	
Detector 1 Size(ft)				20	6		20	6		20	6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases					4			6		5	2	
Permitted Phases				4			6			2		
Detector Phase				4	4		6	6		5	2	
Switch Phase												
Minimum Initial (s)				4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)				26.0	26.0		23.0	23.0		11.0	23.0	
Total Split (s)				37.0	37.0		35.0	35.0		58.0	93.0	
Total Split (%)				28.5%	28.5%		26.9%	26.9%		44.6%	71.5%	
Yellow Time (s)				3.0	3.0		4.0	4.0		4.0	4.0	
All-Red Time (s)				3.0	3.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)					-2.0			-3.0			-3.0	
Total Lost Time (s)					4.0			4.0			4.0	
Lead/Lag							Lead	Lead		Lag		
Lead-Lag Optimize?							Yes	Yes		Yes		
Recall Mode				None	None		None	None		C-Max	C-Max	
Act Effct Green (s)					26.7			29.7			95.3	

Lanes, Volumes, Timings  
6: Hammond Street & Heath Street

2016 PM Baseline  
1/31/2017

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio					0.21			0.23			0.73	
v/c Ratio					0.77			0.77			0.24	
Control Delay					58.5			52.8			5.0	
Queue Delay					0.0			0.0			0.4	
Total Delay					58.5			52.8			5.4	
LOS					E			D			A	
Approach Delay					58.5			52.8			5.4	
Approach LOS					E			D			A	
Queue Length 50th (ft)					211			225			33	
Queue Length 95th (ft)					258			256			m83	
Internal Link Dist (ft)		170			244			134			271	
Turn Bay Length (ft)												
Base Capacity (vph)					452			780			2419	
Starvation Cap Reductn					0			0			1210	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.63			0.73			0.49	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 90 (69%), Referenced to phase 2:SBTL and 5:SBL, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.77

Intersection Signal Delay: 34.5

Intersection LOS: C





Intersection Capacity Utilization 51.9%

ICU Level of Service A

Analysis Period (min) 15
















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

Splits and Phases: 6: Hammond Street & Heath Street

 ø2 (R)	 ø4
93 s	37 s
 ø6	 ø5 (R)
35 s	58 s

HCM 2010 Signalized Intersection Summary  
6: Hammond Street & Heath Street

2024 No-Build Weekday Morning  
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













												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	91	25	94	14	500	99	49	454	29
Number				7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				190.0	189.1	190.0	190.0	185.2	190.0	190.0	183.1	190.0
Adj Flow Rate, veh/h				107	29	111	16	568	112	58	534	34
Adj No. of Lanes				0	1	0	0	2	0	0	2	0
Peak Hour Factor				0.85	0.85	0.85	0.88	0.88	0.88	0.85	0.85	0.85
Percent Heavy Veh, %				0	0	0	3	3	3	3	3	3
Cap, veh/h				128	35	133	39	678	132	59	1185	75
Arrive On Green				0.16	0.17	0.16	0.22	0.25	0.22	0.74	0.76	0.76
Sat Flow, veh/h				744	202	772	35	2723	529	2	1551	99
Grp Volume(v), veh/h				247	0	0	359	0	337	58	0	568
Grp Sat Flow(s),veh/h/ln				1718	0	0	1696	0	1592	2	0	1649
Q Serve(g_s), s				17.4	0.0	0.0	10.5	0.0	25.1	10.5	0.0	15.4
Cycle Q Clear(g_c), s				17.4	0.0	0.0	25.9	0.0	25.1	10.5	0.0	15.4
Prop In Lane				0.43		0.45	0.04		0.33	1.00		0.06
Lane Grp Cap(c), veh/h				295	0	0	412	0	396	0	0	1260
V/C Ratio(X)				0.84	0.00	0.00	0.87	0.00	0.85	0.00	0.00	0.45
Avail Cap(c_a), veh/h				373	0	0	412	0	397	0	0	1260
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	1.00	0.00	1.00	0.38	0.00	0.38
Uniform Delay (d), s/veh				50.7	0.0	0.0	44.6	0.0	45.0	0.0	0.0	5.3
Incr Delay (d2), s/veh				12.6	0.0	0.0	18.1	0.0	15.9	0.0	0.0	0.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				9.3	0.0	0.0	14.5	0.0	12.8	0.0	0.0	7.1
LnGrp Delay(d),s/veh				63.3	0.0	0.0	62.7	0.0	60.8	0.0	0.0	5.7
LnGrp LOS				E			E		E			A
Approach Vol, veh/h					247			696			626	
Approach Delay, s/veh					63.3			61.8			5.2	
Approach LOS					E			E			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		104.7		25.3		104.7						
Change Period (Y+Rc), s		7.0		6.0		* 7						
Max Green Setting (Gmax), s		92.0		25.0		* 28						
Max Q Clear Time (g_c+l1), s		17.4		19.4		27.9						
Green Ext Time (p_c), s		5.6		0.0		0.0						
Intersection Summary												
HCM 2010 Ctrl Delay				39.5								
HCM 2010 LOS				D								
Notes												
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.												



Lanes, Volumes, Timings  
6: Hammond Street & Heath Street













2024 No-Build Weekday Morning

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	91	25	94	14	500	99	49	454	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	11	12
Satd. Flow (prot)	0	0	0	0	1739	0	0	3430	0	0	3320	0
Flt Permitted					0.979			0.929			0.846	
Satd. Flow (perm)	0	0	0	0	1739	0	0	3190	0	0	2823	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					29			16			12	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		250			324			214			351	
Travel Time (s)		6.8			8.8			5.8			9.6	
Peak Hour Factor	0.92	0.92	0.92	0.85	0.85	0.85	0.88	0.88	0.88	0.85	0.85	0.85
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	3%	1%	4%	3%	15%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	247	0	0	696	0	0	626	0
Turn Type				Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases					4			6		5	2	
Permitted Phases				4			6			2		
Detector Phase				4	4		6	6		5	2	
Switch Phase												
Minimum Initial (s)				4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)				26.0	26.0		23.0	23.0		11.0	23.0	
Total Split (s)				31.0	31.0		35.0	35.0		64.0	99.0	
Total Split (%)				23.8%	23.8%		26.9%	26.9%		49.2%	76.2%	
Maximum Green (s)				25.0	25.0		28.0	28.0		57.0	92.0	
Yellow Time (s)				3.0	3.0		4.0	4.0		4.0	4.0	
All-Red Time (s)				3.0	3.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)					-2.0			-3.0			-3.0	
Total Lost Time (s)					4.0			4.0			4.0	
Lead/Lag							Lead	Lead		Lag		
Lead-Lag Optimize?							Yes	Yes		Yes		
Vehicle Extension (s)				3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode				None	None		None	None		C-Max	C-Max	
Walk Time (s)				7.0	7.0		5.0	5.0			5.0	
Flash Dont Walk (s)				13.0	13.0		5.0	5.0			11.0	
Pedestrian Calls (#/hr)				10	10		2	2			6	
Act Effct Green (s)					22.8			32.5			99.2	
Actuated g/C Ratio					0.18			0.25			0.76	
v/c Ratio					0.75			0.86			0.26	
Control Delay					59.1			57.3			0.9	
Queue Delay					0.0			1.1			0.3	
Total Delay					59.1			58.4			1.3	
LOS					E			E			A	
Approach Delay					59.1			58.4			1.3	
Approach LOS					E			E			A	
Queue Length 50th (ft)					176			284			12	
Queue Length 95th (ft)					245			#387			m14	
Internal Link Dist (ft)		170			244			134			271	

Lanes, Volumes, Timings  
6: Hammond Street & Heath Street





2024 No-Build Weekday Morning  
2/1/2017

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)												
Base Capacity (vph)					384			811			2397	
Starvation Cap Reductn					0			0			1138	
Spillback Cap Reductn					0			26			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.64			0.89			0.50	

Intersection Summary
















Area Type: Other  
 Cycle Length: 130  
 Actuated Cycle Length: 130  
 Offset: 92 (71%), Referenced to phase 2:SBTL and 5:SBL, Start of Yellow  
 Natural Cycle: 60  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.86  
 Intersection Signal Delay: 35.7  
 Intersection LOS: D  
 Intersection Capacity Utilization 54.4%  
 ICU Level of Service A  
 Analysis Period (min) 15  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Hammond Street & Heath Street

 Ø2 (R)	 Ø4
99 s	31 s
 Ø6	 Ø5 (R)
35 s	64 s

HCM 2010 Signalized Intersection Summary  
6: Hammond Street & Heath Street
















2024 No-Build Weekday Evening  
2/1/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	128	28	94	12	402	89	35	556	35
Number				7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				190.0	185.7	190.0	190.0	183.8	190.0	190.0	185.1	190.0
Adj Flow Rate, veh/h				158	35	116	15	496	110	37	585	37
Adj No. of Lanes				0	1	0	0	2	0	0	2	0
Peak Hour Factor				0.81	0.81	0.81	0.81	0.81	0.81	0.95	0.95	0.95
Percent Heavy Veh, %				0	4	0	4	4	4	3	3	3
Cap, veh/h				182	40	133	37	610	133	60	1138	72
Arrive On Green				0.19	0.21	0.19	0.23	0.25	0.23	0.70	0.73	0.73
Sat Flow, veh/h				870	193	638	24	2436	530	2	1568	99
Grp Volume(v), veh/h				309	0	0	293	0	328	37	0	622
Grp Sat Flow(s),veh/h/ln				1701	0	0	1411	0	1579	2	0	1667
Q Serve(g_s), s				21.6	0.0	0.0	5.4	0.0	24.1	11.3	0.0	20.0
Cycle Q Clear(g_c), s				21.6	0.0	0.0	25.4	0.0	24.1	11.3	0.0	20.0
Prop In Lane				0.51		0.38	0.05		0.34	1.00		0.06
Lane Grp Cap(c), veh/h				355	0	0	349	0	395	0	0	1210
V/C Ratio(X)				0.87	0.00	0.00	0.84	0.00	0.83	0.00	0.00	0.51
Avail Cap(c_a), veh/h				458	0	0	354	0	399	0	0	1210
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	1.00	0.00	1.00	0.55	0.00	0.55
Uniform Delay (d), s/veh				47.8	0.0	0.0	42.6	0.0	44.0	0.0	0.0	7.3
Incr Delay (d2), s/veh				13.5	0.0	0.0	16.0	0.0	13.6	0.0	0.0	0.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				11.5	0.0	0.0	11.5	0.0	12.0	0.0	0.0	9.4
LnGrp Delay(d),s/veh				61.3	0.0	0.0	58.6	0.0	57.5	0.0	0.0	8.2
LnGrp LOS				E			E		E			A
Approach Vol, veh/h				309			621			659		
Approach Delay, s/veh				61.3			58.0			7.7		
Approach LOS				E			E			A		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		100.4		29.6		100.4						
Change Period (Y+Rc), s		7.0		6.0		* 7						
Max Green Setting (Gmax), s		86.0		31.0		* 28						
Max Q Clear Time (g_c+I1), s		22.0		23.6		27.4						
Green Ext Time (p_c), s		6.0		0.0		0.2						
Intersection Summary												
HCM 2010 Ctrl Delay			37.8									
HCM 2010 LOS			D									
Notes												
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.												

Lanes, Volumes, Timings  
6: Hammond Street & Heath Street













2024 No-Build Weekday Evening

2/1/2017

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	128	28	94	12	402	89	35	556	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	11	12
Satd. Flow (prot)	0	0	0	0	1718	0	0	3395	0	0	3362	0
Flt Permitted					0.975			0.927			0.936	
Satd. Flow (perm)	0	0	0	0	1718	0	0	3150	0	0	3156	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					22			18			10	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		250			324			214			351	
Travel Time (s)		6.8			8.8			5.8			9.6	
Peak Hour Factor	0.92	0.92	0.92	0.81	0.81	0.81	0.81	0.81	0.81	0.95	0.95	0.95
Heavy Vehicles (%)	0%	0%	0%	0%	4%	5%	0%	4%	1%	0%	3%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	309	0	0	621	0	0	659	0
Number of Detectors				1	2		1	2		1	2	
Detector Template				Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)				20	100		20	100		20	100	
Trailing Detector (ft)				0	0		0	0		0	0	
Detector 1 Position(ft)				0	0		0	0		0	0	
Detector 1 Size(ft)				20	6		20	6		20	6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases					4			6		5	2	
Permitted Phases				4			6			2		
Detector Phase				4	4		6	6		5	2	
Switch Phase												
Minimum Initial (s)				4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)				26.0	26.0		23.0	23.0		11.0	23.0	
Total Split (s)				37.0	37.0		35.0	35.0		58.0	93.0	
Total Split (%)				28.5%	28.5%		26.9%	26.9%		44.6%	71.5%	
Yellow Time (s)				3.0	3.0		4.0	4.0		4.0	4.0	
All-Red Time (s)				3.0	3.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)					-2.0			-3.0			-3.0	
Total Lost Time (s)					4.0			4.0			4.0	
Lead/Lag							Lead	Lead		Lag		
Lead-Lag Optimize?							Yes	Yes		Yes		
Recall Mode				None	None		None	None		C-Max	C-Max	
Act Effct Green (s)					28.1			31.1			93.9	

Lanes, Volumes, Timings  
6: Hammond Street & Heath Street





2024 No-Build Weekday Evening  
2/1/2017

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio					0.22			0.24			0.72	
v/c Ratio					0.80			0.81			0.28	
Control Delay					59.8			54.6			5.3	
Queue Delay					0.0			0.0			0.4	
Total Delay					59.8			54.6			5.7	
LOS					E			D			A	
Approach Delay					59.8			54.6			5.7	
Approach LOS					E			D			A	
Queue Length 50th (ft)					230			244			39	
Queue Length 95th (ft)					282			285			m92	
Internal Link Dist (ft)		170			244			134			271	
Turn Bay Length (ft)												
Base Capacity (vph)					452			784			2375	
Starvation Cap Reductn					0			0			1126	
Spillback Cap Reductn					0			0			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.68			0.79			0.53	

Intersection Summary
















Area Type: Other  
Cycle Length: 130  
Actuated Cycle Length: 130  
Offset: 90 (69%), Referenced to phase 2:SBTL and 5:SBL, Start of Yellow  
Natural Cycle: 60  
Control Type: Actuated-Coordinated  
Maximum v/c Ratio: 0.81  
Intersection Signal Delay: 35.3  
Intersection LOS: D  
Intersection Capacity Utilization 56.1%  
ICU Level of Service B  
Analysis Period (min) 15  
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Hammond Street & Heath Street

 Ø2 (R)	 Ø4
93 s	37 s
 Ø6	 Ø5 (R)
35 s	58 s
















HCM 2010 Signalized Intersection Summary  
6: Hammond Street & Heath Street

2024 Build Weekday Morning  
2/1/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	155	45	142	14	501	99	135	455	29
Number				7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				190.0	189.2	190.0	190.0	185.2	190.0	190.0	183.1	190.0
Adj Flow Rate, veh/h				254	74	233	16	569	112	159	535	34
Adj No. of Lanes				0	1	0	0	2	0	0	2	0
Peak Hour Factor				0.61	0.61	0.61	0.88	0.88	0.88	0.85	0.85	0.85
Percent Heavy Veh, %				0	0	0	3	3	3	3	3	3
Cap, veh/h				286	83	263	70	1460	282	109	800	51
Arrive On Green				0.34	0.37	0.34	0.47	0.52	0.47	0.47	0.52	0.52
Sat Flow, veh/h				782	228	717	28	2830	547	5	1551	99
Grp Volume(v), veh/h				561	0	0	372	0	325	159	0	569
Grp Sat Flow(s),veh/h/ln				1727	0	0	1817	0	1588	5	0	1649
Q Serve(g_s), s				20.8	0.0	0.0	0.0	0.0	8.7	20.8	0.0	17.3
Cycle Q Clear(g_c), s				20.8	0.0	0.0	8.5	0.0	8.7	20.8	0.0	17.3
Prop In Lane				0.45		0.42	0.04		0.34	1.00		0.06
Lane Grp Cap(c), veh/h				632	0	0	913	0	820	0	0	851
V/C Ratio(X)				0.89	0.00	0.00	0.41	0.00	0.40	0.00	0.00	0.67
Avail Cap(c_a), veh/h				814	0	0	913	0	820	0	0	851
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	1.00	0.00	1.00	0.25	0.00	0.25
Uniform Delay (d), s/veh				21.0	0.0	0.0	10.0	0.0	10.4	0.0	0.0	12.1
Incr Delay (d2), s/veh				9.7	0.0	0.0	0.3	0.0	0.3	0.0	0.0	1.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				11.6	0.0	0.0	4.7	0.0	3.8	0.0	0.0	8.0
LnGrp Delay(d),s/veh				30.7	0.0	0.0	10.3	0.0	10.7	0.0	0.0	13.2
LnGrp LOS				C			B		B			B
Approach Vol, veh/h					561			697			728	
Approach Delay, s/veh					30.7			10.5			10.3	
Approach LOS					C			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		46.2		28.8		46.2						
Change Period (Y+Rc), s		7.0		6.0		7.0						
Max Green Setting (Gmax), s		32.0		30.0		20.0						
Max Q Clear Time (g_c+l1), s		22.8		22.8		10.7						
Green Ext Time (p_c), s		6.2		0.0		6.2						
Intersection Summary												
HCM 2010 Ctrl Delay				16.1								
HCM 2010 LOS				B								













Lanes, Volumes, Timings  
6: Hammond Street & Heath Street

2024 Build Weekday Morning  
2/1/2017

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	155	45	142	14	501	99	135	455	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	11	12
Satd. Flow (prot)	0	0	0	0	1747	0	0	3430	0	0	3302	0
Flt Permitted					0.978			0.927			0.561	
Satd. Flow (perm)	0	0	0	0	1747	0	0	3183	0	0	1873	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					59			30			9	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		250			324			214			351	
Travel Time (s)		6.8			8.8			5.8			9.6	
Peak Hour Factor	0.92	0.92	0.92	0.61	0.61	0.61	0.88	0.88	0.88	0.85	0.85	0.85
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	3%	1%	4%	3%	15%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	561	0	0	697	0	0	728	0
Turn Type				Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases					4			6		5	2	
Permitted Phases				4			6			2		
Detector Phase				4	4		6	6		5	2	
Switch Phase												
Minimum Initial (s)				4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)				26.0	26.0		23.0	23.0		11.0	23.0	
Total Split (s)				36.0	36.0		27.0	27.0		12.0	39.0	
Total Split (%)				48.0%	48.0%		36.0%	36.0%		16.0%	52.0%	
Maximum Green (s)				30.0	30.0		20.0	20.0		5.0	32.0	
Yellow Time (s)				3.0	3.0		4.0	4.0		4.0	4.0	
All-Red Time (s)				3.0	3.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)					-2.0			-3.0			-3.0	
Total Lost Time (s)					4.0			4.0			4.0	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Vehicle Extension (s)				3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode				None	None		None	None		C-Max	C-Max	
Walk Time (s)				7.0	7.0		5.0	5.0			5.0	
Flash Dont Walk (s)				13.0	13.0		5.0	5.0			11.0	
Pedestrian Calls (#/hr)				10	10		2	2			6	
Act Effct Green (s)					28.2			23.0			38.8	
Actuated g/C Ratio					0.38			0.31			0.52	
v/c Ratio					0.81			0.70			0.61	
Control Delay					28.2			26.4			17.8	
Queue Delay					1.2			9.3			0.7	
Total Delay					29.5			35.7			18.5	
LOS					C			D			B	
Approach Delay					29.5			35.7			18.5	
Approach LOS					C			D			B	
Queue Length 50th (ft)					197			142			192	
Queue Length 95th (ft)					159			195			m198	
Internal Link Dist (ft)		170			244			134			271	

Lanes, Volumes, Timings  
6: Hammond Street & Heath Street





2024 Build Weekday Morning  
2/1/2017

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Bay Length (ft)												
Base Capacity (vph)					779			996			1198	
Starvation Cap Reductn					0			0			199	
Spillback Cap Reductn					78			267			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.80			0.96			0.73	

Intersection Summary

Area Type: Other  
 Cycle Length: 75  
 Actuated Cycle Length: 75  
 Offset: 72 (96%), Referenced to phase 2:SBTL and 5:SBL, Start of Yellow  
 Natural Cycle: 60  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.81  
 Intersection Signal Delay: 27.6  
 Intersection LOS: C  
 Intersection Capacity Utilization 64.5%  
 ICU Level of Service C  
 Analysis Period (min) 15  
 m Volume for 95th percentile queue is metered by upstream signal.
















Splits and Phases: 6: Hammond Street & Heath Street

 ø2 (R)	 ø4
39 s	36 s
 ø5 (R)	 ø6
12 s	27 s



HCM 2010 Signalized Intersection Summary  
6: Hammond Street & Heath Street
















2024 Build Weekday Evening  
2/1/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	186	48	125	12	405	89	90	556	35
Number				7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				190.0	185.8	190.0	190.0	183.8	190.0	190.0	185.5	190.0
Adj Flow Rate, veh/h				221	57	149	15	500	110	95	585	37
Adj No. of Lanes				0	1	0	0	2	0	0	2	0
Peak Hour Factor				0.84	0.84	0.84	0.81	0.81	0.81	0.95	0.95	0.95
Percent Heavy Veh, %				0	4	0	4	4	4	3	3	3
Cap, veh/h				259	67	175	70	1631	351	104	932	59
Arrive On Green				0.27	0.29	0.27	0.55	0.59	0.55	0.55	0.59	0.59
Sat Flow, veh/h				884	228	596	28	2749	592	4	1571	99
Grp Volume(v), veh/h				427	0	0	334	0	291	95	0	622
Grp Sat Flow(s),veh/h/ln				1708	0	0	1801	0	1568	4	0	1671
Q Serve(g_s), s				16.8	0.0	0.0	0.0	0.0	6.8	12.7	0.0	17.1
Cycle Q Clear(g_c), s				16.8	0.0	0.0	6.5	0.0	6.8	12.7	0.0	17.1
Prop In Lane				0.52		0.35	0.04		0.38	1.00		0.06
Lane Grp Cap(c), veh/h				501	0	0	1045	0	931	0	0	991
V/C Ratio(X)				0.85	0.00	0.00	0.32	0.00	0.31	0.00	0.00	0.63
Avail Cap(c_a), veh/h				603	0	0	1045	0	931	0	0	991
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	1.00	0.00	1.00	0.31	0.00	0.31
Uniform Delay (d), s/veh				24.4	0.0	0.0	7.2	0.0	7.5	0.0	0.0	9.3
Incr Delay (d2), s/veh				9.7	0.0	0.0	0.2	0.0	0.2	0.0	0.0	0.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				9.2	0.0	0.0	3.6	0.0	3.0	0.0	0.0	8.0
LnGrp Delay(d),s/veh				34.1	0.0	0.0	7.4	0.0	7.7	0.0	0.0	10.3
LnGrp LOS				C			A		A			B
Approach Vol, veh/h					427			625			717	
Approach Delay, s/veh					34.1			7.5			8.9	
Approach LOS					C			A			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		50.2		24.8		50.2						
Change Period (Y+Rc), s		7.0		6.0		7.0						
Max Green Setting (Gmax), s		39.0		23.0		27.0						
Max Q Clear Time (g_c+l1), s		19.1		18.8		8.8						
Green Ext Time (p_c), s		9.8		0.0		9.3						
Intersection Summary												
HCM 2010 Ctrl Delay				14.5								
HCM 2010 LOS				B								

Lanes, Volumes, Timings  
6: Hammond Street & Heath Street













2024 Build Weekday Evening

2/1/2017

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	186	48	125	12	405	89	90	556	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	11	12
Satd. Flow (prot)	0	0	0	0	1726	0	0	3398	0	0	3355	0
Flt Permitted					0.975			0.930			0.759	
Satd. Flow (perm)	0	0	0	0	1726	0	0	3163	0	0	2565	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					39			40			12	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		250			324			214			351	
Travel Time (s)		6.8			8.8			5.8			9.6	
Peak Hour Factor	0.92	0.92	0.92	0.84	0.84	0.84	0.81	0.81	0.81	0.95	0.95	0.95
Heavy Vehicles (%)	0%	0%	0%	0%	4%	5%	0%	4%	1%	0%	3%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	427	0	0	625	0	0	717	0
Number of Detectors				1	2		1	2		1	2	
Detector Template				Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)				20	100		20	100		20	100	
Trailing Detector (ft)				0	0		0	0		0	0	
Detector 1 Position(ft)				0	0		0	0		0	0	
Detector 1 Size(ft)				20	6		20	6		20	6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases					4			6		5	2	
Permitted Phases				4			6			2		
Detector Phase				4	4		6	6		5	2	
Switch Phase												
Minimum Initial (s)				4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)				26.0	26.0		23.0	23.0		11.0	23.0	
Total Split (s)				29.0	29.0		34.0	34.0		12.0	46.0	
Total Split (%)				38.7%	38.7%		45.3%	45.3%		16.0%	61.3%	
Yellow Time (s)				3.0	3.0		4.0	4.0		4.0	4.0	
All-Red Time (s)				3.0	3.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)					-2.0			-3.0			-3.0	
Total Lost Time (s)					4.0			4.0			4.0	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?												
Recall Mode				None	None		None	None		C-Max	C-Max	
Act Efect Green (s)					22.3			30.0			44.7	

Lanes, Volumes, Timings  
6: Hammond Street & Heath Street





2024 Build Weekday Evening  
2/1/2017

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio					0.30			0.40			0.60	
v/c Ratio					0.79			0.48			0.44	
Control Delay					33.0			17.1			7.2	
Queue Delay					0.0			0.0			0.6	
Total Delay					33.0			17.2			7.8	
LOS					C			B			A	
Approach Delay					33.0			17.2			7.8	
Approach LOS					C			B			A	
Queue Length 50th (ft)					158			103			165	
Queue Length 95th (ft)					232			128			m149	
Internal Link Dist (ft)		170			244			134			271	
Turn Bay Length (ft)												
Base Capacity (vph)					601			1289			1644	
Starvation Cap Reductn					0			0			509	
Spillback Cap Reductn					0			40			0	
Storage Cap Reductn					0			0			0	
Reduced v/c Ratio					0.71			0.50			0.63	

Intersection Summary

Area Type: Other  
Cycle Length: 75  
Actuated Cycle Length: 75  
Offset: 70 (93%), Referenced to phase 2:SBTL and 5:SBL, Start of Yellow  
Natural Cycle: 60  
Control Type: Actuated-Coordinated  
Maximum v/c Ratio: 0.79  
Intersection Signal Delay: 17.2  
Intersection LOS: B  
Intersection Capacity Utilization 63.9%  
ICU Level of Service B  
Analysis Period (min) 15  
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Hammond Street & Heath Street

 $\phi 2$ (R)	 $\phi 4$
46 s	29 s
 $\phi 5$ (R)	 $\phi 6$
12 s	34 s

Hammond Street at Soule Recreation Drive and Private Drive

**Intersection**

Int Delay, s/veh 0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	1	0	0	7	0	6	2	531	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	25	25	25	46	46	46	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0	0	2	0
Mvmt Flow	4	0	0	15	0	13	2	603	17

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	941	1260	303	948	1252	310	606	0	0
Stage 1	635	635	-	616	616	-	-	-	-
Stage 2	306	625	-	332	636	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-
Pot Cap-1 Maneuver	221	172	699	218	174	692	982	-	-
Stage 1	438	476	-	450	485	-	-	-	-
Stage 2	684	480	-	661	475	-	-	-	-
Platoon blocked, %									
Mov Cap-1 Maneuver	213	168	699	214	169	692	982	-	-
Mov Cap-2 Maneuver	213	168	-	214	169	-	-	-	-
Stage 1	437	465	-	449	484	-	-	-	-
Stage 2	669	479	-	646	464	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	22.2	17.6	
HCM LOS	C	C	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	982	-	-	213	314	970	-	-
HCM Lane V/C Ratio	0.002	-	-	0.019	0.09	0.015	-	-
HCM Control Delay (s)	8.7	0	-	22.2	17.6	8.8	0.1	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

**Intersection**

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	12	483	2
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	80	80	80
Heavy Vehicles, %	0	2	0
Mvmt Flow	15	604	2

Major/Minor	Major2		
Conflicting Flow All	620	0	0
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	970	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	970	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach SB

HCM Control Delay, s

HCM LOS

Minor Lane/Major Mvmt

Intersection									
Int Delay, s/veh	0.2								
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	1	0	1	3	0	9	0	440	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	50	50	50	75	75	75	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0	0	4	0
Mvmt Flow	2	0	2	4	0	12	0	518	5
Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	927	1190	323	865	1188	261	646	0	0
Stage 1	668	668	-	520	520	-	-	-	-
Stage 2	259	522	-	345	668	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-
Pot Cap-1 Maneuver	226	189	679	251	190	744	949	-	-
Stage 1	419	459	-	512	535	-	-	-	-
Stage 2	729	534	-	649	459	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	220	186	679	247	187	744	949	-	-
Mov Cap-2 Maneuver	220	186	-	247	187	-	-	-	-
Stage 1	419	452	-	512	535	-	-	-	-
Stage 2	717	534	-	637	452	-	-	-	-
Approach	EB			WB			NB		
HCM Control Delay, s	16			12.5					
HCM LOS	C			B					
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR	
Capacity (veh/h)	949	-	-	332	495	1055	-	-	
HCM Lane V/C Ratio	-	-	-	0.012	0.032	0.01	-	-	
HCM Control Delay (s)	0	-	-	16	12.5	8.4	0.1	-	
HCM Lane LOS	A	-	-	C	B	A	A	-	
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-	

**Intersection**

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	10	587	1
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	91	91	91
Heavy Vehicles, %	0	1	0
Mvmt Flow	11	645	1

Major/Minor	Major2		
Conflicting Flow All	522	0	0
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	1055	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1055	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

**Approach** SB

HCM Control Delay, s

HCM LOS

**Minor Lane/Major Mvmt**



Intersection

Int Delay, s/veh 0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	1	0	0	7	0	6	2	583	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	25	25	25	46	46	46	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0	0	2	0
Mvmt Flow	4	0	0	15	0	13	2	662	17

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	1026	1374	331	1035	1367	340	661	0	0
Stage 1	690	690	-	676	676	-	-	-	-
Stage 2	336	684	-	359	691	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-
Pot Cap-1 Maneuver	192	147	671	189	148	662	937	-	-
Stage 1	406	449	-	414	456	-	-	-	-
Stage 2	657	452	-	637	449	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	184	143	671	185	144	662	937	-	-
Mov Cap-2 Maneuver	184	143	-	185	144	-	-	-	-
Stage 1	405	437	-	413	455	-	-	-	-
Stage 2	642	451	-	620	437	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	25	19.5	
HCM LOS	D	C	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	937	-	-	184	277	922	-	-
HCM Lane V/C Ratio	0.002	-	-	0.022	0.102	0.016	-	-
HCM Control Delay (s)	8.9	0	-	25	19.5	9	0.1	-
HCM Lane LOS	A	A	-	D	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

**Intersection**

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	12	527	2
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	80	80	80
Heavy Vehicles, %	0	2	0
Mvmt Flow	15	659	2

Major/Minor	Major2		
Conflicting Flow All	680	0	0
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	922	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	922	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

**Approach** SB

HCM Control Delay, s

HCM LOS

**Minor Lane/Major Mvmt**

Intersection

Int Delay, s/veh 0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	1	0	1	3	0	9	0	482	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	50	50	50	75	75	75	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0	0	4	0
Mvmt Flow	2	0	2	4	0	12	0	567	5

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	1025	1313	360	950	1311	286	720	0	0
Stage 1	741	741	-	569	569	-	-	-	-
Stage 2	284	572	-	381	742	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-
Pot Cap-1 Maneuver	192	160	642	218	160	717	891	-	-
Stage 1	379	426	-	479	509	-	-	-	-
Stage 2	705	508	-	619	425	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	186	157	642	214	157	717	891	-	-
Mov Cap-2 Maneuver	186	157	-	214	157	-	-	-	-
Stage 1	379	418	-	479	509	-	-	-	-
Stage 2	693	508	-	606	417	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	17.7	13.3	
HCM LOS	C	B	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	891	-	-	288	452	1011	-	-
HCM Lane V/C Ratio	-	-	-	0.014	0.035	0.011	-	-
HCM Control Delay (s)	0	-	-	17.7	13.3	8.6	0.1	-
HCM Lane LOS	A	-	-	C	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

**Intersection**

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	10	654	1
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	91	91	91
Heavy Vehicles, %	0	1	0
Mvmt Flow	11	719	1

Major/Minor	Major2		
Conflicting Flow All	572	0	0
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	1011	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1011	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	SB
HCM Control Delay, s	
HCM LOS	

Minor Lane/Major Mvmt
-----------------------

Intersection

Int Delay, s/veh 0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	1	0	0	8	0	7	2	583	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	25	25	25	46	46	46	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0	0	2	0
Mvmt Flow	4	0	0	17	0	15	2	662	17

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	1191	1539	402	1129	1532	340	804	0	0
Stage 1	855	855	-	676	676	-	-	-	-
Stage 2	336	684	-	453	856	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-
Pot Cap-1 Maneuver	145	117	604	161	118	662	829	-	-
Stage 1	323	378	-	414	456	-	-	-	-
Stage 2	657	452	-	561	377	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	136	111	604	154	112	662	829	-	-
Mov Cap-2 Maneuver	136	111	-	154	112	-	-	-	-
Stage 1	322	359	-	412	454	-	-	-	-
Stage 2	639	450	-	532	358	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	32.3	22.3	
HCM LOS	D	C	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	829	-	-	136	240	922	-	-
HCM Lane V/C Ratio	0.003	-	-	0.029	0.136	0.028	-	-
HCM Control Delay (s)	9.4	0	-	32.3	22.3	9	0.2	-
HCM Lane LOS	A	A	-	D	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

**Intersection**

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	19	585	2
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	73	73	73
Heavy Vehicles, %	0	2	0
Mvmt Flow	26	801	3

Major/Minor	Major2		
Conflicting Flow All	680	0	0
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	922	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	922	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

**Approach** SB

HCM Control Delay, s

HCM LOS

**Minor Lane/Major Mvmt**

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	1	0	1	4	0	12	0	482	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	50	50	50	75	75	75	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0	0	4	0
Mvmt Flow	2	0	2	5	0	16	0	567	5

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	1048	1336	371	962	1334	286	742	0	0
Stage 1	764	764	-	569	569	-	-	-	-
Stage 2	284	572	-	393	765	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-
Pot Cap-1 Maneuver	185	155	632	213	155	717	874	-	-
Stage 1	367	416	-	479	509	-	-	-	-
Stage 2	705	508	-	609	415	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	178	152	632	209	152	717	874	-	-
Mov Cap-2 Maneuver	178	152	-	209	152	-	-	-	-
Stage 1	367	408	-	479	509	-	-	-	-
Stage 2	689	508	-	596	407	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	18.1	13.5	
HCM LOS	C	B	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	874	-	-	278	446	1011	-	-
HCM Lane V/C Ratio	-	-	-	0.014	0.048	0.011	-	-
HCM Control Delay (s)	0	-	-	18.1	13.5	8.6	0.1	-
HCM Lane LOS	A	-	-	C	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

**Intersection**

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	11	711	1
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	96	96	96
Heavy Vehicles, %	0	1	0
Mvmt Flow	11	741	1

Major/Minor	Major2		
Conflicting Flow All	572	0	0
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	1011	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	1011	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

**Approach** SB

HCM Control Delay, s

HCM LOS

**Minor Lane/Major Mvmt**



Hammond Street at Woodland Road

Intersection

Int Delay, s/veh 28.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	18	106	43	0	0	0	93	549	482
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	58	58	58	92	92	92	91	91	91
Heavy Vehicles, %	0	1	5	0	0	0	0	2	2
Mvmt Flow	31	183	74	0	0	0	102	603	530

Major/Minor	Minor2			Major1		
Conflicting Flow All	1039	1870	281	563	0	0
Stage 1	533	533	-	-	-	-
Stage 2	506	1337	-	-	-	-
Critical Hdwy	6.8	6.52	7	4.1	-	-
Critical Hdwy Stg 1	5.8	5.52	-	-	-	-
Critical Hdwy Stg 2	5.8	5.52	-	-	-	-
Follow-up Hdwy	3.5	4.01	3.35	2.2	-	-
Pot Cap-1 Maneuver	230	~ 72	707	1019	-	-
Stage 1	558	526	-	-	-	-
Stage 2	576	222	-	-	-	-
Platoon blocked, %					-	-
Mov Cap-1 Maneuver	152	0	707	1019	-	-
Mov Cap-2 Maneuver	152	0	-	-	-	-
Stage 1	545	0	-	-	-	-
Stage 2	391	0	-	-	-	-

Approach	EB	NB
HCM Control Delay, s	205.5	
HCM LOS	F	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	1019	-	-	152	707	624	-	-
HCM Lane V/C Ratio	0.1	-	-	1.407	0.105	0.015	-	-
HCM Control Delay (s)	8.9	1.1	-	273	10.7	10.9	0.1	-
HCM Lane LOS	A	A	-	F	B	B	A	-
HCM 95th %tile Q(veh)	0	-	-	14	0	0	-	-

Notes

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

Intersection

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	8	386	81
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	83	83	83
Heavy Vehicles, %	0	3	4
Mvmt Flow	10	465	98

Major/Minor	Major2		
Conflicting Flow All	1133	0	0
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	624	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	624	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach SB

HCM Control Delay, s

HCM LOS

Minor Lane/Major Mvmt

Intersection

Int Delay, s/veh 1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	12	31	30	0	0	0	37	427	112
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	77	77	77	92	92	92	85	85	85
Heavy Vehicles, %	17	0	3	0	0	0	0	5	1
Mvmt Flow	16	40	39	0	0	0	44	502	132

Major/Minor	Minor2			Major1		
Conflicting Flow All	958	1341	315	629	0	0
Stage 1	620	620	-	-	-	-
Stage 2	338	721	-	-	-	-
Critical Hdwy	7.14	6.5	6.96	4.1	-	-
Critical Hdwy Stg 1	6.14	5.5	-	-	-	-
Critical Hdwy Stg 2	6.14	5.5	-	-	-	-
Follow-up Hdwy	3.67	4	3.33	2.2	-	-
Pot Cap-1 Maneuver	230	154	678	963	-	-
Stage 1	460	483	-	-	-	-
Stage 2	652	435	-	-	-	-
Platoon blocked, %					-	-
Mov Cap-1 Maneuver	213	0	678	963	-	-
Mov Cap-2 Maneuver	213	0	-	-	-	-
Stage 1	459	0	-	-	-	-
Stage 2	605	0	-	-	-	-

Approach	EB	NB
HCM Control Delay, s	20.7	
HCM LOS	C	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	963	-	-	213	678	959	-	-
HCM Lane V/C Ratio	0.045	-	-	0.262	0.057	0.001	-	-
HCM Control Delay (s)	8.9	0.3	-	27.8	10.6	8.8	0	-
HCM Lane LOS	A	A	-	D	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1	0	0	-	-

Intersection

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	1	557	22
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	92	92	92
Heavy Vehicles, %	0	2	0
Mvmt Flow	1	605	24

Major/Minor	Major2		
Conflicting Flow All	634	0	0
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	959	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	959	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach SB

HCM Control Delay, s

HCM LOS

Minor Lane/Major Mvmt

Intersection	
Int Delay, s/veh	66.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	19	115	46	0	0	0	101	603	528
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	58	58	58	92	92	92	91	91	91
Heavy Vehicles, %	0	1	5	0	0	0	0	2	2
Mvmt Flow	33	198	79	0	0	0	111	663	580

Major/Minor	Minor2			Major1		
Conflicting Flow All	1136	2048	307	614	0	0
Stage 1	583	583	-	-	-	-
Stage 2	553	1465	-	-	-	-
Critical Hdwy	6.8	6.52	7	4.1	-	-
Critical Hdwy Stg 1	5.8	5.52	-	-	-	-
Critical Hdwy Stg 2	5.8	5.52	-	-	-	-
Follow-up Hdwy	3.5	4.01	3.35	2.2	-	-
Pot Cap-1 Maneuver	199	~ 56	680	975	-	-
Stage 1	527	499	-	-	-	-
Stage 2	546	~ 193	-	-	-	-
Platoon blocked, %					-	-
Mov Cap-1 Maneuver	103	0	680	975	-	-
Mov Cap-2 Maneuver	103	0	-	-	-	-
Stage 1	511	0	-	-	-	-
Stage 2	292	0	-	-	-	-

Approach	EB	NB
HCM Control Delay, s	\$ 491.5	
HCM LOS	F	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	975	-	-	103	680	567	-	-
HCM Lane V/C Ratio	0.114	-	-	2.243	0.117	0.019	-	-
HCM Control Delay (s)	9.2	1.6	-	\$ 656.5	11	11.5	0.2	-
HCM Lane LOS	A	A	-	F	B	B	A	-
HCM 95th %tile Q(veh)	0	-	-	20	0	0	-	-

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

**Intersection**

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	9	422	88
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	83	83	83
Heavy Vehicles, %	0	3	4
Mvmt Flow	11	508	106

Major/Minor	Major2		
Conflicting Flow All	1243	0	0
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	567	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	567	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

**Approach** SB

HCM Control Delay, s

HCM LOS

**Minor Lane/Major Mvmt**

HCM 2010 TWSC  
12: Hammond Street & Woodland Road

1/31/2017

Intersection

Int Delay, s/veh 1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	13	34	32	0	0	0	40	468	125
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	77	77	77	92	92	92	85	85	85
Heavy Vehicles, %	17	0	3	0	0	0	0	5	1
Mvmt Flow	17	44	42	0	0	0	47	551	147

Major/Minor	Minor2			Major1		
Conflicting Flow All	1060	1483	351	702	0	0
Stage 1	691	691	-	-	-	-
Stage 2	369	792	-	-	-	-
Critical Hdwy	7.14	6.5	6.96	4.1	-	-
Critical Hdwy Stg 1	6.14	5.5	-	-	-	-
Critical Hdwy Stg 2	6.14	5.5	-	-	-	-
Follow-up Hdwy	3.67	4	3.33	2.2	-	-
Pot Cap-1 Maneuver	196	126	642	905	-	-
Stage 1	421	449	-	-	-	-
Stage 2	627	404	-	-	-	-
Platoon blocked, %					-	-
Mov Cap-1 Maneuver	179	0	642	905	-	-
Mov Cap-2 Maneuver	179	0	-	-	-	-
Stage 1	420	0	-	-	-	-
Stage 2	572	0	-	-	-	-

Approach	EB	NB
HCM Control Delay, s	25.4	
HCM LOS	D	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	905	-	-	179	642	908	-	-
HCM Lane V/C Ratio	0.052	-	-	0.341	0.065	0.001	-	-
HCM Control Delay (s)	9.2	0.3	-	35.2	11	9	0	-
HCM Lane LOS	A	A	-	E	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1	0	0	-	-



Intersection

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	1	622	24
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	92	92	92
Heavy Vehicles, %	0	2	0
Mvmt Flow	1	676	26

Major/Minor	Major2		
Conflicting Flow All	698	0	0
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	908	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	908	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	SB
HCM Control Delay, s	
HCM LOS	

Minor Lane/Major Mvmt
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Intersection

Int Delay, s/veh 52.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	19	141	46	0	0	0	101	603	725
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	56	56	56	92	92	92	85	85	85
Heavy Vehicles, %	0	1	5	0	0	0	0	2	2
Mvmt Flow	34	252	82	0	0	0	119	709	853

Major/Minor	Minor2			Major1		
Conflicting Flow All	1317	2525	379	757	0	0
Stage 1	725	725	-	-	-	-
Stage 2	592	1800	-	-	-	-
Critical Hdwy	6.8	6.52	7	4.1	-	-
Critical Hdwy Stg 1	5.8	5.52	-	-	-	-
Critical Hdwy Stg 2	5.8	5.52	-	-	-	-
Follow-up Hdwy	3.5	4.01	3.35	2.2	-	-
Pot Cap-1 Maneuver	152	~ 28	610	863	-	-
Stage 1	446	431	-	-	-	-
Stage 2	521	~ 132	-	-	-	-
Platoon blocked, %					-	-
Mov Cap-1 Maneuver	144	0	610	863	-	-
Mov Cap-2 Maneuver	144	0	-	-	-	-
Stage 1	422	0	-	-	-	-
Stage 2	521	0	-	-	-	-

Approach	EB	NB
HCM Control Delay, s	\$ 405.4	
HCM LOS	F	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	863	-	-	144	610	429	-	-
HCM Lane V/C Ratio	0.138	-	-	1.984	0.135	0.031	-	-
HCM Control Delay (s)	9.8	3.7	-	\$ 518.5	11.8	13.7	0.4	-
HCM Lane LOS	A	A	-	F	B	B	A	-
HCM 95th %tile Q(veh)	0	-	-	22	0	0	-	-

Notes

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

Intersection

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	10	480	88
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	75	75	75
Heavy Vehicles, %	0	3	4
Mvmt Flow	13	640	117

Major/Minor	Major2		
Conflicting Flow All	1562	0	0
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	429	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	429	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach SB

HCM Control Delay, s  
HCM LOS

Minor Lane/Major Mvmt

HCM 2010 TWSC  
12: Hammond Street & Woodland Road

2/2/2017

Intersection

Int Delay, s/veh 2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	13	46	32	0	0	0	40	468	206
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	92	92	92	87	87	87
Heavy Vehicles, %	17	0	3	0	0	0	0	5	1
Mvmt Flow	16	58	40	0	0	0	46	538	237

Major/Minor	Minor2			Major1		
Conflicting Flow All	1093	1599	370	740	0	0
Stage 1	732	732	-	-	-	-
Stage 2	361	867	-	-	-	-
Critical Hdwy	7.14	6.5	6.96	4.1	-	-
Critical Hdwy Stg 1	6.14	5.5	-	-	-	-
Critical Hdwy Stg 2	6.14	5.5	-	-	-	-
Follow-up Hdwy	3.67	4	3.33	2.2	-	-
Pot Cap-1 Maneuver	186	107	624	876	-	-
Stage 1	399	430	-	-	-	-
Stage 2	633	373	-	-	-	-
Platoon blocked, %					-	-
Mov Cap-1 Maneuver	167	0	624	876	-	-
Mov Cap-2 Maneuver	167	0	-	-	-	-
Stage 1	397	0	-	-	-	-
Stage 2	572	0	-	-	-	-

Approach	EB	NB
HCM Control Delay, s	31.6	
HCM LOS	D	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	876	-	-	167	624	850	-	-
HCM Lane V/C Ratio	0.052	-	-	0.442	0.064	0.002	-	-
HCM Control Delay (s)	9.3	0.4	-	42.6	11.2	9.2	0	-
HCM Lane LOS	A	A	-	E	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	2	0	0	-	-

Intersection

Int Delay, s/veh

Movement	SBL	SBT	SBR
Vol, veh/h	2	679	24
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	95	95	95
Heavy Vehicles, %	0	2	0
Mvmt Flow	2	715	25

Major/Minor	Major2		
Conflicting Flow All	775	0	0
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	850	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	850	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach SB

HCM Control Delay, s

HCM LOS

Minor Lane/Major Mvmt


















Hammond Street at Woodland Road (Signalized)

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# HCM 2010 Signalized Intersection Summary


















## 12: Hammond Street & Woodland Road

1/31/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	19	115	46	0	0	0	101	603	528	0	431	88
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	190.0	186.4	190.0				190.0	186.3	186.3	0.0	184.2	190.0
Adj Flow Rate, veh/h	33	198	79				111	663	580	0	519	106
Adj No. of Lanes	0	1	0				1	1	1	0	1	0
Peak Hour Factor	0.58	0.58	0.58				0.91	0.91	0.91	0.83	0.83	0.83
Percent Heavy Veh, %	0	1	0				0	2	2	0	3	3
Cap, veh/h	38	230	92				508	1212	1030	0	966	197
Arrive On Green	0.20	0.20	0.20				0.65	0.65	0.65	0.00	0.65	0.65
Sat Flow, veh/h	189	1134	452				813	1863	1583	0	1485	303
Grp Volume(v), veh/h	310	0	0				111	663	580	0	0	625
Grp Sat Flow(s),veh/h/ln	1775	0	0				813	1863	1583	0	0	1788
Q Serve(g_s), s	9.2	0.0	0.0				4.6	10.6	11.1	0.0	0.0	10.3
Cycle Q Clear(g_c), s	9.2	0.0	0.0				14.9	10.6	11.1	0.0	0.0	10.3
Prop In Lane	0.11		0.25				1.00		1.00	0.00		0.17
Lane Grp Cap(c), veh/h	361	0	0				508	1212	1030	0	0	1163
V/C Ratio(X)	0.86	0.00	0.00				0.22	0.55	0.56	0.00	0.00	0.54
Avail Cap(c_a), veh/h	1006	0	0				885	2078	1766	0	0	1994
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	21.0	0.0	0.0				9.1	5.2	5.3	0.0	0.0	5.1
Incr Delay (d2), s/veh	6.0	0.0	0.0				0.2	0.4	0.5	0.0	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	0.0	0.0				1.0	5.5	4.8	0.0	0.0	5.0
LnGrp Delay(d),s/veh	27.0	0.0	0.0				9.4	5.6	5.8	0.0	0.0	5.5
LnGrp LOS	C						A	A	A			A
Approach Vol, veh/h		310						1354			625	
Approach Delay, s/veh		27.0						6.0			5.5	
Approach LOS		C						A			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		39.6		15.1		39.6						
Change Period (Y+Rc), s		4.0		4.0		4.0						
Max Green Setting (Gmax), s		61.0		31.0		61.0						
Max Q Clear Time (g_c+l1), s		16.9		11.2		12.3						
Green Ext Time (p_c), s		18.7		0.0		19.3						
Intersection Summary												
HCM 2010 Ctrl Delay			8.7									
HCM 2010 LOS			A									

Lanes, Volumes, Timings  
12: Hammond Street & Woodland Road

1/31/2017













												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	19	115	46	0	0	0	101	603	528	0	431	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		50	0		0	100		150	0		0
Storage Lanes	0		0	0		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1792	0	0	0	0	1805	1863	1583	0	1799	0
Flt Permitted		0.995					0.316					
Satd. Flow (perm)	0	1792	0	0	0	0	600	1863	1583	0	1799	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		18							480		19	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		563			697			512			764	
Travel Time (s)		12.8			15.8			11.6			17.4	
Peak Hour Factor	0.58	0.58	0.58	0.92	0.92	0.92	0.91	0.91	0.91	0.83	0.83	0.83
Heavy Vehicles (%)	0%	1%	5%	0%	0%	0%	0%	2%	2%	0%	3%	4%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	310	0	0	0	0	111	663	580	0	625	0
Turn Type	Perm	NA					Perm	NA	Perm		NA	
Protected Phases		4						2			6	
Permitted Phases	4						2		2			
Detector Phase	4	4					2	2	2		6	
Switch Phase												
Minimum Initial (s)	4.0	4.0					4.0	4.0	4.0		4.0	
Minimum Split (s)	20.0	20.0					20.0	20.0	20.0		20.0	
Total Split (s)	35.0	35.0					65.0	65.0	65.0		65.0	
Total Split (%)	35.0%	35.0%					65.0%	65.0%	65.0%		65.0%	
Maximum Green (s)	31.0	31.0					61.0	61.0	61.0		61.0	
Yellow Time (s)	3.5	3.5					3.5	3.5	3.5		3.5	
All-Red Time (s)	0.5	0.5					0.5	0.5	0.5		0.5	
Lost Time Adjust (s)		0.0					0.0	0.0	0.0		0.0	
Total Lost Time (s)		4.0					4.0	4.0	4.0		4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0					3.0	3.0	3.0		3.0	
Recall Mode	None	None					Min	Min	Min		Min	
Walk Time (s)	5.0	5.0					5.0	5.0	5.0		5.0	
Flash Dont Walk (s)	11.0	11.0					11.0	11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0					0	0	0		0	
Act Effct Green (s)		16.3					34.3	34.3	34.3		34.3	
Actuated g/C Ratio		0.27					0.58	0.58	0.58		0.58	
v/c Ratio		0.62					0.32	0.62	0.52		0.60	
Control Delay		26.1					10.2	11.5	3.3		10.9	
Queue Delay		0.0					0.0	0.0	0.0		0.0	
Total Delay		26.1					10.2	11.5	3.3		10.9	
LOS		C					B	B	A		B	
Approach Delay		26.1						7.9			10.9	
Approach LOS		C						A			B	
Queue Length 50th (ft)		80					16	121	13		108	



# Lanes, Volumes, Timings

## 12: Hammond Street & Woodland Road

1/31/2017

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)		134					60	314	65		248	
Internal Link Dist (ft)		483			617			432			684	
Turn Bay Length (ft)							100		150			
Base Capacity (vph)		1050					544	1690	1481		1634	
Starvation Cap Reductn		0					0	0	0		0	
Spillback Cap Reductn		0					0	0	0		0	
Storage Cap Reductn		0					0	0	0		0	
Reduced v/c Ratio		0.30					0.20	0.39	0.39		0.38	

### Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 59.5

Natural Cycle: 50

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.62

Intersection Signal Delay: 11.2




Intersection LOS: B

Intersection Capacity Utilization 53.5%

ICU Level of Service A

Analysis Period (min) 15


















Splits and Phases: 12: Hammond Street & Woodland Road

 p2	 p4
65 s	35 s
 p6	
65 s	

# HCM 2010 Signalized Intersection Summary

## 12: Hammond Street & Woodland Road


















1/31/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	13	34	32	0	0	0	40	468	125	0	623	24
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	190.0	185.4	190.0				190.0	186.3	186.3	0.0	184.4	190.0
Adj Flow Rate, veh/h	17	44	42				47	551	147	0	677	26
Adj No. of Lanes	0	1	0				1	1	1	0	1	0
Peak Hour Factor	0.77	0.77	0.77				0.85	0.85	0.85	0.92	0.92	0.92
Percent Heavy Veh, %	0	1	0				0	2	2	0	3	3
Cap, veh/h	21	54	51				589	1286	1093	0	1218	47
Arrive On Green	0.07	0.07	0.07				0.69	0.69	0.69	0.00	0.69	0.69
Sat Flow, veh/h	283	733	700				756	1863	1583	0	1764	68
Grp Volume(v), veh/h	103	0	0				47	551	147	0	0	703
Grp Sat Flow(s), veh/h/ln	1717	0	0				756	1863	1583	0	0	1832
Q Serve(g_s), s	2.0	0.0	0.0				1.1	4.4	1.1	0.0	0.0	6.5
Cycle Q Clear(g_c), s	2.0	0.0	0.0				7.7	4.4	1.1	0.0	0.0	6.5
Prop In Lane	0.17		0.41				1.00		1.00	0.00		0.04
Lane Grp Cap(c), veh/h	126	0	0				589	1286	1093	0	0	1265
V/C Ratio(X)	0.82	0.00	0.00				0.08	0.43	0.13	0.00	0.00	0.56
Avail Cap(c_a), veh/h	1571	0	0				1428	3354	2851	0	0	3299
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	15.5	0.0	0.0				4.6	2.3	1.8	0.0	0.0	2.6
Incr Delay (d2), s/veh	12.1	0.0	0.0				0.1	0.2	0.1	0.0	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	0.0				0.2	2.2	0.5	0.0	0.0	3.3
LnGrp Delay(d),s/veh	27.6	0.0	0.0				4.6	2.5	1.8	0.0	0.0	3.0
LnGrp LOS	C						A	A	A			A
Approach Vol, veh/h		103						745			703	
Approach Delay, s/veh		27.6						2.5			3.0	
Approach LOS		C						A			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		27.4		6.5		27.4						
Change Period (Y+Rc), s		4.0		4.0		4.0						
Max Green Setting (Gmax), s		61.0		31.0		61.0						
Max Q Clear Time (g_c+I1), s		9.7		4.0		8.5						
Green Ext Time (p_c), s		13.7		0.0		13.8						
Intersection Summary												
HCM 2010 Ctrl Delay			4.4									
HCM 2010 LOS			A									

# Lanes, Volumes, Timings

## 12: Hammond Street & Woodland Road













1/31/2017

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	13	34	32	0	0	0	40	468	125	0	623	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		50	0		0	100		150	0		0
Storage Lanes	0		0	0		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1738	0	0	0	0	1805	1863	1583	0	1835	0
Flt Permitted		0.992					0.333					
Satd. Flow (perm)	0	1738	0	0	0	0	633	1863	1583	0	1835	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		36							147		4	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		563			697			512			764	
Travel Time (s)		12.8			15.8			11.6			17.4	
Peak Hour Factor	0.77	0.77	0.77	0.92	0.92	0.92	0.85	0.85	0.85	0.92	0.92	0.92
Heavy Vehicles (%)	0%	1%	5%	0%	0%	0%	0%	2%	2%	0%	3%	4%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	103	0	0	0	0	47	551	147	0	703	0
Turn Type	Perm	NA					Perm	NA	Perm		NA	
Protected Phases		4						2			6	
Permitted Phases	4						2		2			
Detector Phase	4	4					2	2	2		6	
Switch Phase												
Minimum Initial (s)	4.0	4.0					4.0	4.0	4.0		4.0	
Minimum Split (s)	20.0	20.0					20.0	20.0	20.0		20.0	
Total Split (s)	35.0	35.0					65.0	65.0	65.0		65.0	
Total Split (%)	35.0%	35.0%					65.0%	65.0%	65.0%		65.0%	
Maximum Green (s)	31.0	31.0					61.0	61.0	61.0		61.0	
Yellow Time (s)	3.5	3.5					3.5	3.5	3.5		3.5	
All-Red Time (s)	0.5	0.5					0.5	0.5	0.5		0.5	
Lost Time Adjust (s)		0.0					0.0	0.0	0.0		0.0	
Total Lost Time (s)		4.0					4.0	4.0	4.0		4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0					3.0	3.0	3.0		3.0	
Recall Mode	None	None					Min	Min	Min		Min	
Walk Time (s)	5.0	5.0					5.0	5.0	5.0		5.0	
Flash Dont Walk (s)	11.0	11.0					11.0	11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0					0	0	0		0	
Act Effct Green (s)		8.1					32.8	32.8	32.8		32.8	
Actuated g/C Ratio		0.18					0.73	0.73	0.73		0.73	
v/c Ratio		0.30					0.10	0.41	0.12		0.53	
Control Delay		15.3					4.0	5.0	1.1		6.2	
Queue Delay		0.0					0.0	0.0	0.0		0.0	
Total Delay		15.3					4.0	5.0	1.1		6.2	
LOS		B					A	A	A		A	
Approach Delay		15.3						4.2			6.2	
Approach LOS		B						A			A	
Queue Length 50th (ft)		17					3	53	0		77	

# Lanes, Volumes, Timings

## 12: Hammond Street & Woodland Road

1/31/2017

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SEL	SBT	SBR
Queue Length 95th (ft)		41					14	113	12		184	
Internal Link Dist (ft)		483			617			432			684	
Turn Bay Length (ft)							100		150			
Base Capacity (vph)		1239					633	1863	1583		1835	
Starvation Cap Reductn		0					0	0	0		0	
Spillback Cap Reductn		0					0	0	0		0	
Storage Cap Reductn		0					0	0	0		0	
Reduced v/c Ratio		0.08					0.07	0.30	0.09		0.38	

### Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 45

Natural Cycle: 50

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.53

Intersection Signal Delay: 5.9




Intersection LOS: A

Intersection Capacity Utilization 45.4%

ICU Level of Service A

Analysis Period (min) 15


















### Splits and Phases: 12: Hammond Street & Woodland Road

	
65 s	35 s
	
65 s	

# HCM 2010 Signalized Intersection Summary

## 12: Hammond Street & Woodland Road


















1/31/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	19	141	46	0	0	0	101	603	725	0	490	88
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	190.0	186.6	190.0				190.0	186.3	186.3	0.0	184.2	190.0
Adj Flow Rate, veh/h	34	252	82				119	709	853	0	653	117
Adj No. of Lanes	0	1	0				1	1	1	0	1	0
Peak Hour Factor	0.56	0.56	0.56				0.85	0.85	0.85	0.75	0.75	0.75
Percent Heavy Veh, %	0	1	0				0	2	2	0	3	3
Cap, veh/h	37	277	90				393	1249	1062	0	1020	183
Arrive On Green	0.23	0.23	0.23				0.67	0.67	0.67	0.00	0.67	0.67
Sat Flow, veh/h	165	1224	398				710	1863	1583	0	1521	273
Grp Volume(v), veh/h	368	0	0				119	709	853	0	0	770
Grp Sat Flow(s),veh/h/ln	1788	0	0				710	1863	1583	0	0	1794
Q Serve(g_s), s	15.5	0.0	0.0				9.0	15.7	29.8	0.0	0.0	19.2
Cycle Q Clear(g_c), s	15.5	0.0	0.0				28.2	15.7	29.8	0.0	0.0	19.2
Prop In Lane	0.09		0.22				1.00		1.00	0.00		0.15
Lane Grp Cap(c), veh/h	405	0	0				393	1249	1062	0	0	1203
V/C Ratio(X)	0.91	0.00	0.00				0.30	0.57	0.80	0.00	0.00	0.64
Avail Cap(c_a), veh/h	716	0	0				476	1467	1247	0	0	1413
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	29.2	0.0	0.0				15.5	6.8	9.1	0.0	0.0	7.4
Incr Delay (d2), s/veh	8.8	0.0	0.0				0.4	0.4	3.4	0.0	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	0.0	0.0				1.8	8.0	13.8	0.0	0.0	9.7
LnGrp Delay(d),s/veh	38.0	0.0	0.0				15.9	7.2	12.5	0.0	0.0	8.1
LnGrp LOS	D						B	A	B			A
Approach Vol, veh/h		368						1681			770	
Approach Delay, s/veh		38.0						10.5			8.1	
Approach LOS		D						B			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		55.9		21.5		55.9						
Change Period (Y+Rc), s		4.0		4.0		4.0						
Max Green Setting (Gmax), s		61.0		31.0		61.0						
Max Q Clear Time (g_c+I1), s		31.8		17.5		21.2						
Green Ext Time (p_c), s		20.1		0.0		24.6						
Intersection Summary												
HCM 2010 Ctrl Delay			13.4									
HCM 2010 LOS			B									

# Lanes, Volumes, Timings

## 12: Hammond Street & Woodland Road













1/31/2017

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	19	141	46	0	0	0	101	603	725	0	490	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		50	0		0	100		150	0		0
Storage Lanes	0		0	0		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1801	0	0	0	0	1805	1863	1583	0	1803	0
Flt Permitted		0.995					0.225					
Satd. Flow (perm)	0	1801	0	0	0	0	428	1863	1583	0	1803	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15							382		17	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		563			697			512			764	
Travel Time (s)		12.8			15.8			11.6			17.4	
Peak Hour Factor	0.56	0.56	0.56	0.92	0.92	0.92	0.85	0.85	0.85	0.75	0.75	0.75
Heavy Vehicles (%)	0%	1%	5%	0%	0%	0%	0%	2%	2%	0%	3%	4%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	368	0	0	0	0	119	709	853	0	770	0
Turn Type	Perm	NA					Perm	NA	Perm		NA	
Protected Phases		4						2			6	
Permitted Phases	4						2		2			
Detector Phase	4	4					2	2	2		6	
Switch Phase												
Minimum Initial (s)	4.0	4.0					4.0	4.0	4.0		4.0	
Minimum Split (s)	20.0	20.0					20.0	20.0	20.0		20.0	
Total Split (s)	35.0	35.0					65.0	65.0	65.0		65.0	
Total Split (%)	35.0%	35.0%					65.0%	65.0%	65.0%		65.0%	
Maximum Green (s)	31.0	31.0					61.0	61.0	61.0		61.0	
Yellow Time (s)	3.5	3.5					3.5	3.5	3.5		3.5	
All-Red Time (s)	0.5	0.5					0.5	0.5	0.5		0.5	
Lost Time Adjust (s)		0.0					0.0	0.0	0.0		0.0	
Total Lost Time (s)		4.0					4.0	4.0	4.0		4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0					3.0	3.0	3.0		3.0	
Recall Mode	None	None					Min	Min	Min		Min	
Walk Time (s)	5.0	5.0					5.0	5.0	5.0		5.0	
Flash Dont Walk (s)	11.0	11.0					11.0	11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0					0	0	0		0	
Act Effct Green (s)		20.3					43.0	43.0	43.0		43.0	
Actuated g/C Ratio		0.28					0.59	0.59	0.59		0.59	
v/c Ratio		0.71					0.47	0.64	0.78		0.71	
Control Delay		33.5					16.6	13.1	11.9		14.9	
Queue Delay		0.0					0.0	0.0	0.0		0.0	
Total Delay		33.5					16.6	13.1	11.9		14.9	
LOS		C					B	B	B		B	
Approach Delay		33.5						12.8			14.9	
Approach LOS		C						B			B	
Queue Length 50th (ft)		138					25	175	122		199	

# Lanes, Volumes, Timings

## 12: Hammond Street & Woodland Road

1/31/2017

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)		157					81	340	308		309	
Internal Link Dist (ft)		483			617			432			684	
Turn Bay Length (ft)							100		150			
Base Capacity (vph)		876					351	1529	1368		1483	
Starvation Cap Reductn		0					0	0	0		0	
Spillback Cap Reductn		0					0	0	0		0	
Storage Cap Reductn		0					0	0	0		0	
Reduced v/c Ratio		0.42					0.34	0.46	0.62		0.52	

### Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 72.3

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 16.1




Intersection LOS: B

Intersection Capacity Utilization 62.8%

ICU Level of Service B

Analysis Period (min) 15


















### Splits and Phases: 12: Hammond Street & Woodland Road

 p2	 p4
65 s	35 s
 p6	
65 s	

# HCM 2010 Signalized Intersection Summary

## 12: Hammond Street & Woodland Road

2/2/2017


















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	13	46	32	0	0	0	40	468	206	0	681	24
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	190.0	185.8	190.0				190.0	186.3	186.3	0.0	184.4	190.0
Adj Flow Rate, veh/h	16	58	40				46	538	237	0	717	25
Adj No. of Lanes	0	1	0				1	1	1	0	1	0
Peak Hour Factor	0.80	0.80	0.80				0.87	0.87	0.87	0.95	0.95	0.95
Percent Heavy Veh, %	0	1	0				0	2	2	0	3	3
Cap, veh/h	20	72	50				558	1304	1109	0	1240	43
Arrive On Green	0.08	0.08	0.08				0.70	0.70	0.70	0.00	0.70	0.70
Sat Flow, veh/h	244	884	610				729	1863	1583	0	1771	62
Grp Volume(v), veh/h	114	0	0				46	538	237	0	0	742
Grp Sat Flow(s), veh/h/ln	1738	0	0				729	1863	1583	0	0	1833
Q Serve(g_s), s	2.4	0.0	0.0				1.2	4.5	1.9	0.0	0.0	7.5
Cycle Q Clear(g_c), s	2.4	0.0	0.0				8.7	4.5	1.9	0.0	0.0	7.5
Prop In Lane	0.14		0.35				1.00		1.00	0.00		0.03
Lane Grp Cap(c), veh/h	142	0	0				558	1304	1109	0	0	1284
V/C Ratio(X)	0.80	0.00	0.00				0.08	0.41	0.21	0.00	0.00	0.58
Avail Cap(c_a), veh/h	1469	0	0				1260	3098	2633	0	0	3048
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	16.6	0.0	0.0				5.0	2.3	1.9	0.0	0.0	2.8
Incr Delay (d2), s/veh	10.0	0.0	0.0				0.1	0.2	0.1	0.0	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	0.0				0.3	2.3	0.8	0.0	0.0	3.7
LnGrp Delay(d),s/veh	26.5	0.0	0.0				5.0	2.5	2.0	0.0	0.0	3.2
LnGrp LOS	C						A	A	A			A
Approach Vol, veh/h		114						821			742	
Approach Delay, s/veh		26.5						2.5			3.2	
Approach LOS		C						A			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		29.7		7.0		29.7						
Change Period (Y+Rc), s		4.0		4.0		4.0						
Max Green Setting (Gmax), s		61.0		31.0		61.0						
Max Q Clear Time (g_c+l1), s		10.7		4.4		9.5						
Green Ext Time (p_c), s		15.0		0.0		15.0						
Intersection Summary												
HCM 2010 Ctrl Delay			4.4									
HCM 2010 LOS			A									



# Lanes, Volumes, Timings













## 12: Hammond Street & Woodland Road

2/2/2017

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	13	46	32	0	0	0	40	468	206	0	681	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		50	0		0	100		150	0		0
Storage Lanes	0		0	0		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1758	0	0	0	0	1805	1863	1583	0	1835	0
Flt Permitted		0.993					0.307					
Satd. Flow (perm)	0	1758	0	0	0	0	583	1863	1583	0	1835	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		28							237		3	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		563			697			512			764	
Travel Time (s)		12.8			15.8			11.6			17.4	
Peak Hour Factor	0.80	0.80	0.80	0.92	0.92	0.92	0.87	0.87	0.87	0.95	0.95	0.95
Heavy Vehicles (%)	0%	1%	5%	0%	0%	0%	0%	2%	2%	0%	3%	4%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	114	0	0	0	0	46	538	237	0	742	0
Turn Type	Perm	NA					Perm	NA	Perm		NA	
Protected Phases		4						2			6	
Permitted Phases	4						2		2			
Detector Phase	4	4					2	2	2		6	
Switch Phase												
Minimum Initial (s)	4.0	4.0					4.0	4.0	4.0		4.0	
Minimum Split (s)	20.0	20.0					20.0	20.0	20.0		20.0	
Total Split (s)	35.0	35.0					65.0	65.0	65.0		65.0	
Total Split (%)	35.0%	35.0%					65.0%	65.0%	65.0%		65.0%	
Maximum Green (s)	31.0	31.0					61.0	61.0	61.0		61.0	
Yellow Time (s)	3.5	3.5					3.5	3.5	3.5		3.5	
All-Red Time (s)	0.5	0.5					0.5	0.5	0.5		0.5	
Lost Time Adjust (s)		0.0					0.0	0.0	0.0		0.0	
Total Lost Time (s)		4.0					4.0	4.0	4.0		4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0					3.0	3.0	3.0		3.0	
Recall Mode	None	None					Min	Min	Min		Min	
Walk Time (s)	5.0	5.0					5.0	5.0	5.0		5.0	
Flash Dont Walk (s)	11.0	11.0					11.0	11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0					0	0	0		0	
Act Effct Green (s)		8.7					33.8	33.8	33.8		33.8	
Actuated g/C Ratio		0.19					0.73	0.73	0.73		0.73	
v/c Ratio		0.32					0.11	0.40	0.20		0.56	
Control Delay		17.3					4.4	5.2	1.1		6.9	
Queue Delay		0.0					0.0	0.0	0.0		0.0	
Total Delay		17.3					4.4	5.2	1.1		6.9	
LOS		B					A	A	A		A	
Approach Delay		17.3						4.0			6.9	
Approach LOS		B						A			A	
Queue Length 50th (ft)		22					4	55	0		91	

# Lanes, Volumes, Timings 12: Hammond Street & Woodland Road

2/2/2017

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)		53					15	122	16		216	
Internal Link Dist (ft)		483			617			432			684	
Turn Bay Length (ft)							100		150			
Base Capacity (vph)		1218					583	1863	1583		1835	
Starvation Cap Reductn		0					0	0	0		0	
Spillback Cap Reductn		0					0	0	0		0	
Storage Cap Reductn		0					0	0	0		0	
Reduced v/c Ratio		0.09					0.08	0.29	0.15		0.40	

## Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 46.6

Natural Cycle: 55

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.56

Intersection Signal Delay: 6.2




Intersection LOS: A

Intersection Capacity Utilization 49.1%

ICU Level of Service A

Analysis Period (min) 15

## Splits and Phases: 12: Hammond Street & Woodland Road

 ø2	 ø4
65 s	35 s
 ø6	
65 s	

Heath Street at Oak Street

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Intersection	
Int Delay, s/veh	0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	130	7	8	206	4	8
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	86	86	88	88	60	60
Heavy Vehicles, %	2	0	0	1	0	0
Mvmt Flow	151	8	9	234	7	13

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	159	0	407	155
Stage 1	-	-	-	-	155	-
Stage 2	-	-	-	-	252	-
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	-	-	1433	-	604	896
Stage 1	-	-	-	-	878	-
Stage 2	-	-	-	-	795	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1433	-	600	896
Mov Cap-2 Maneuver	-	-	-	-	600	-
Stage 1	-	-	-	-	878	-
Stage 2	-	-	-	-	789	-

Approach	EB	WB	NB
HCM Control Delay, s		0.3	9.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	769	-	-	1433	-
HCM Lane V/C Ratio	0.026	-	-	0.006	-
HCM Control Delay (s)	9.8	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	108	0	5	226	3	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	90	90	78	78	50	50
Heavy Vehicles, %	1	0	0	2	0	0
Mvmt Flow	120	0	6	290	6	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	120	0	423	120
Stage 1	-	-	-	-	120	-
Stage 2	-	-	-	-	303	-
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	-	-	1480	-	591	937
Stage 1	-	-	-	-	910	-
Stage 2	-	-	-	-	754	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1480	-	588	937
Mov Cap-2 Maneuver	-	-	-	-	588	-
Stage 1	-	-	-	-	910	-
Stage 2	-	-	-	-	750	-

Approach	EB	WB	NB
HCM Control Delay, s		0.2	10.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	648	-	-	1480	-
HCM Lane V/C Ratio	0.012	-	-	0.004	-
HCM Control Delay (s)	10.6	-	-	7.4	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection

Int Delay, s/veh 0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	141	7	8	223	4	8
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	86	86	88	88	60	60
Heavy Vehicles, %	2	0	0	1	0	0
Mvmt Flow	164	8	9	253	7	13

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	172	0	440	168
Stage 1	-	-	-	-	168	-
Stage 2	-	-	-	-	272	-
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	-	-	1417	-	578	881
Stage 1	-	-	-	-	867	-
Stage 2	-	-	-	-	778	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1417	-	574	881
Mov Cap-2 Maneuver	-	-	-	-	574	-
Stage 1	-	-	-	-	867	-
Stage 2	-	-	-	-	773	-

Approach	EB	WB	NB
HCM Control Delay, s		0.3	9.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	748	-	-	1417	-
HCM Lane V/C Ratio	0.027	-	-	0.006	-
HCM Control Delay (s)	9.9	-	-	7.6	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	117	0	5	245	3	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	90	90	78	78	50	50
Heavy Vehicles, %	1	0	0	2	0	0
Mvmt Flow	130	0	6	314	6	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	130	0	457	130
Stage 1	-	-	-	-	130	-
Stage 2	-	-	-	-	327	-
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	-	-	1468	-	565	925
Stage 1	-	-	-	-	901	-
Stage 2	-	-	-	-	735	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1468	-	562	925
Mov Cap-2 Maneuver	-	-	-	-	562	-
Stage 1	-	-	-	-	901	-
Stage 2	-	-	-	-	731	-

Approach	EB	WB	NB
HCM Control Delay, s		0.1	10.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	623	-	-	1468	-
HCM Lane V/C Ratio	0.013	-	-	0.004	-
HCM Control Delay (s)	10.9	-	-	7.5	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	227	7	8	355	4	8
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	68	68	63	63	60	60
Heavy Vehicles, %	2	0	0	1	0	0
Mvmt Flow	334	10	13	563	7	13

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	344	0	928	339
Stage 1	-	-	-	-	339	-
Stage 2	-	-	-	-	589	-
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	-	-	1226	-	300	708
Stage 1	-	-	-	-	726	-
Stage 2	-	-	-	-	558	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1226	-	296	708
Mov Cap-2 Maneuver	-	-	-	-	296	-
Stage 1	-	-	-	-	726	-
Stage 2	-	-	-	-	550	-

Approach	EB	WB	NB
HCM Control Delay, s		0.2	12.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	484	-	-	1226	-
HCM Lane V/C Ratio	0.041	-	-	0.01	-
HCM Control Delay (s)	12.8	-	-	8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-



Intersection

Int Delay, s/veh 0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	172	0	5	354	3	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	87	87	94	94	50	50
Heavy Vehicles, %	1	0	0	2	0	0
Mvmt Flow	198	0	5	377	6	2

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	198	585
Stage 1	-	-	198
Stage 2	-	-	387
Critical Hdwy	-	4.1	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	-	2.2	3.5
Pot Cap-1 Maneuver	-	1387	477
Stage 1	-	-	840
Stage 2	-	-	691
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1387	475
Mov Cap-2 Maneuver	-	-	475
Stage 1	-	-	840
Stage 2	-	-	688

Approach	EB	WB	NB
HCM Control Delay, s		0.1	11.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	534	-	-	1387	-
HCM Lane V/C Ratio	0.015	-	-	0.004	-
HCM Control Delay (s)	11.8	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Heath Street at Dunster Road

Intersection						
Int Delay, s/veh	2.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	90	45	210	7	15	7
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	84	84	89	89	61	61
Heavy Vehicles, %	0	4	1	0	0	0
Mvmt Flow	107	54	236	8	25	11
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	244	0	-	0	508	240
Stage 1	-	-	-	-	240	-
Stage 2	-	-	-	-	268	-
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	1334	-	-	-	528	804
Stage 1	-	-	-	-	805	-
Stage 2	-	-	-	-	782	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1334	-	-	-	484	804
Mov Cap-2 Maneuver	-	-	-	-	484	-
Stage 1	-	-	-	-	805	-
Stage 2	-	-	-	-	717	-
Approach	EB		WB		SB	
HCM Control Delay, s	5.3				12	
HCM LOS					B	
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1334	-	-	-	554	
HCM Lane V/C Ratio	0.08	-	-	-	0.065	
HCM Control Delay (s)	7.9	0	-	-	12	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0	-	-	-	0	

Intersection						
Int Delay, s/veh	2.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	74	34	214	4	21	16
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	79	79	79	79
Heavy Vehicles, %	0	3	2	0	0	6
Mvmt Flow	82	38	271	5	27	20
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	276	0	475	273	-	-
Stage 1	-	-	-	273	-	-
Stage 2	-	-	-	202	-	-
Critical Hdwy	4.1	-	-	6.4	6.26	-
Critical Hdwy Stg 1	-	-	-	5.4	-	-
Critical Hdwy Stg 2	-	-	-	5.4	-	-
Follow-up Hdwy	2.2	-	-	3.5	3.354	-
Pot Cap-1 Maneuver	1299	-	-	552	756	-
Stage 1	-	-	-	778	-	-
Stage 2	-	-	-	837	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1299	-	-	517	756	-
Mov Cap-2 Maneuver	-	-	-	517	-	-
Stage 1	-	-	-	778	-	-
Stage 2	-	-	-	783	-	-
Approach	EB	WB	SB			
HCM Control Delay, s	5.5		11.5			
HCM LOS			B			
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1299	-	-	-	599	
HCM Lane V/C Ratio	0.063	-	-	-	0.078	
HCM Control Delay (s)	8	0	-	-	11.5	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0	-	-	-	0	

Intersection

Int Delay, s/veh 3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	97	49	227	8	16	8
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	84	84	89	89	61	61
Heavy Vehicles, %	0	4	1	0	0	0
Mvmt Flow	115	58	255	9	26	13

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	264	0	549
Stage 1	-	-	260
Stage 2	-	-	289
Critical Hdwy	4.1	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.2	-	3.5
Pot Cap-1 Maneuver	1312	-	500
Stage 1	-	-	788
Stage 2	-	-	765
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1312	-	455
Mov Cap-2 Maneuver	-	-	455
Stage 1	-	-	788
Stage 2	-	-	695

Approach	EB	WB	SB
HCM Control Delay, s	5.3		12.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1312	-	-	-	529
HCM Lane V/C Ratio	0.088	-	-	-	0.074
HCM Control Delay (s)	8	0	-	-	12.4
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	80	37	232	4	23	17
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	79	79	79	79
Heavy Vehicles, %	0	3	2	0	0	6
Mvmt Flow	89	41	294	5	29	22

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	299	0	515
Stage 1	-	-	296
Stage 2	-	-	219
Critical Hdwy	4.1	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.2	-	3.5
Pot Cap-1 Maneuver	1274	-	523
Stage 1	-	-	759
Stage 2	-	-	822
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1274	-	486
Mov Cap-2 Maneuver	-	-	486
Stage 1	-	-	759
Stage 2	-	-	764

Approach	EB	WB	SB
HCM Control Delay, s	5.5	-	12
HCM LOS	-	-	B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1274	-	-	-	567
HCM Lane V/C Ratio	0.07	-	-	-	0.089
HCM Control Delay (s)	8	0	-	-	12
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	97	135	368	86	15	8
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	65	65	58	58	61	61
Heavy Vehicles, %	0	4	1	0	0	0
Mvmt Flow	149	208	634	148	25	13

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	783	0	1215
Stage 1	-	-	709
Stage 2	-	-	506
Critical Hdwy	4.1	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.2	-	3.5
Pot Cap-1 Maneuver	844	-	202
Stage 1	-	-	491
Stage 2	-	-	610
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	844	-	162
Mov Cap-2 Maneuver	-	-	162
Stage 1	-	-	491
Stage 2	-	-	488

Approach	EB	WB	SB
HCM Control Delay, s	4.3		26.2
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	844	-	-	-	207
HCM Lane V/C Ratio	0.177	-	-	-	0.182
HCM Control Delay (s)	10.2	0	-	-	26.2
HCM Lane LOS	B	A	-	-	D
HCM 95th %tile Q(veh)	1	-	-	-	1

Intersection

Int Delay, s/veh 2.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	80	83	341	4	23	17
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	93	93	88	88	79	79
Heavy Vehicles, %	0	3	2	0	0	6
Mvmt Flow	86	89	388	5	29	22

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	392	0	651
Stage 1	-	-	390
Stage 2	-	-	261
Critical Hdwy	4.1	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.2	-	3.5
Pot Cap-1 Maneuver	1178	-	436
Stage 1	-	-	689
Stage 2	-	-	787
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1178	-	402
Mov Cap-2 Maneuver	-	-	402
Stage 1	-	-	689
Stage 2	-	-	726

Approach	EB	WB	SB
HCM Control Delay, s	4.1		13.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1178	-	-	-	480
HCM Lane V/C Ratio	0.073	-	-	-	0.105
HCM Control Delay (s)	8.3	0	-	-	13.4
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0



Boylston Street (Route 9) at Dunster Road

Intersection	
Int Delay, s/veh	1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	1267	22	0	0	0	97
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	92	92	84	84
Heavy Vehicles, %	3	0	0	0	0	0
Mvmt Flow	1408	24	0	0	0	115

Major/Minor	Major1	Minor1
Conflicting Flow All	0	0
Stage 1	-	-
Stage 2	-	-
Critical Hdwy	-	-
Critical Hdwy Stg 1	-	-
Critical Hdwy Stg 2	-	-
Follow-up Hdwy	-	-
Pot Cap-1 Maneuver	-	-
Stage 1	-	-
Stage 2	-	-
Platoon blocked, %	-	-
Mov Cap-1 Maneuver	-	-
Mov Cap-2 Maneuver	-	-
Stage 1	-	-
Stage 2	-	-

Approach	EB	NB
HCM Control Delay, s		18.7
HCM LOS		C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR
Capacity (veh/h)	378	-	-
HCM Lane V/C Ratio	0.305	-	-
HCM Control Delay (s)	18.7	-	-
HCM Lane LOS	C	-	-
HCM 95th %tile Q(veh)	1	-	-

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	1246	37	0	0	0	78
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	90	90
Heavy Vehicles, %	2	0	0	0	0	0
Mvmt Flow	1354	40	0	0	0	87

Major/Minor	Major1	Minor1
Conflicting Flow All	0	0
Stage 1	-	-
Stage 2	-	-
Critical Hdwy	-	-
Critical Hdwy Stg 1	-	-
Critical Hdwy Stg 2	-	-
Follow-up Hdwy	-	-
Pot Cap-1 Maneuver	-	-
Stage 1	-	-
Stage 2	-	-
Platoon blocked, %	-	-
Mov Cap-1 Maneuver	-	-
Mov Cap-2 Maneuver	-	-
Stage 1	-	-
Stage 2	-	-

Approach	EB	NB
HCM Control Delay, s		16.9
HCM LOS		C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR
Capacity (veh/h)	389	-	-
HCM Lane V/C Ratio	0.223	-	-
HCM Control Delay (s)	16.9	-	-
HCM Lane LOS	C	-	-
HCM 95th %tile Q(veh)	1	-	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	1419	24	0	0	0	105
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	92	92	84	84
Heavy Vehicles, %	3	0	0	0	0	0
Mvmt Flow	1577	27	0	0	0	125

Major/Minor	Major1	Minor1
Conflicting Flow All	0	0
Stage 1	-	-
Stage 2	-	-
Critical Hdwy	-	-
Critical Hdwy Stg 1	-	-
Critical Hdwy Stg 2	-	-
Follow-up Hdwy	-	-
Pot Cap-1 Maneuver	-	-
Stage 1	-	-
Stage 2	-	-
Platoon blocked, %	-	-
Mov Cap-1 Maneuver	-	-
Mov Cap-2 Maneuver	-	-
Stage 1	-	-
Stage 2	-	-

Approach	EB	NB
HCM Control Delay, s		22.2
HCM LOS		C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR
Capacity (veh/h)	332	-	-
HCM Lane V/C Ratio	0.377	-	-
HCM Control Delay (s)	22.2	-	-
HCM Lane LOS	C	-	-
HCM 95th %tile Q(veh)	2	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	1398	40	0	0	0	84
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	90	90
Heavy Vehicles, %	2	0	0	0	0	0
Mvmt Flow	1520	43	0	0	0	93

Major/Minor	Major1		Minor1	
Conflicting Flow All	0	0	1541	781
Stage 1	-	-	1541	-
Stage 2	-	-	0	-
Critical Hdwy	-	-	7.5	6.9
Critical Hdwy Stg 1	-	-	6.5	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	-	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	80	342
Stage 1	-	-	123	-
Stage 2	-	-	-	-
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	-	-	80	342
Mov Cap-2 Maneuver	-	-	80	-
Stage 1	-	-	123	-
Stage 2	-	-	-	-

Approach	EB	NB
HCM Control Delay, s		19.4
HCM LOS		C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR
Capacity (veh/h)	342	-	-
HCM Lane V/C Ratio	0.273	-	-
HCM Control Delay (s)	19.4	-	-
HCM Lane LOS	C	-	-
HCM 95th %tile Q(veh)	1	-	-

Intersection	
Int Delay, s/veh	12.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	1420	23	0	0	0	183
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	92	92	58	58
Heavy Vehicles, %	3	0	0	0	0	0
Mvmt Flow	1578	26	0	0	0	316

Major/Minor	Major1	Minor1
Conflicting Flow All	0	0
Stage 1	-	-
Stage 2	-	-
Critical Hdwy	-	-
Critical Hdwy Stg 1	-	-
Critical Hdwy Stg 2	-	-
Follow-up Hdwy	-	-
Pot Cap-1 Maneuver	-	-
Stage 1	-	-
Stage 2	-	-
Platoon blocked, %	-	-
Mov Cap-1 Maneuver	-	-
Mov Cap-2 Maneuver	-	-
Stage 1	-	-
Stage 2	-	-

Approach	EB	NB
HCM Control Delay, s		73.7
HCM LOS		F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR
Capacity (veh/h)	332	-	-
HCM Lane V/C Ratio	0.95	-	-
HCM Control Delay (s)	73.7	-	-
HCM Lane LOS	F	-	-
HCM 95th %tile Q(veh)	10	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	1399	40	0	0	0	84
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	90	90
Heavy Vehicles, %	2	0	0	0	0	0
Mvmt Flow	1521	43	0	0	0	93

Major/Minor	Major1	Minor1
Conflicting Flow All	0	0
Stage 1	-	-
Stage 2	-	-
Critical Hdwy	-	-
Critical Hdwy Stg 1	-	-
Critical Hdwy Stg 2	-	-
Follow-up Hdwy	-	-
Pot Cap-1 Maneuver	-	-
Stage 1	-	-
Stage 2	-	-
Platoon blocked, %	-	-
Mov Cap-1 Maneuver	-	-
Mov Cap-2 Maneuver	-	-
Stage 1	-	-
Stage 2	-	-

Approach	EB	NB
HCM Control Delay, s		19.4
HCM LOS		C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR
Capacity (veh/h)	342	-	-
HCM Lane V/C Ratio	0.273	-	-
HCM Control Delay (s)	19.4	-	-
HCM Lane LOS	C	-	-
HCM 95th %tile Q(veh)	1	-	-

Heath Street at Cary Road

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HCM 2010 TWSC  
19: Heath Street & Cary Road

2/2/2017

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	5	64	200	217	3	6
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	89	89	45	45
Heavy Vehicles, %	0	3	1	0	0	0
Mvmt Flow	7	88	225	244	7	13

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	469	0	448
Stage 1	-	-	347
Stage 2	-	-	101
Critical Hdwy	4.1	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.2	-	3.5
Pot Cap-1 Maneuver	1103	-	572
Stage 1	-	-	720
Stage 2	-	-	928
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1103	-	568
Mov Cap-2 Maneuver	-	-	568
Stage 1	-	-	720
Stage 2	-	-	922

Approach	EB	WB	SB
HCM Control Delay, s	0.6		10.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1103	-	-	-	650
HCM Lane V/C Ratio	0.006	-	-	-	0.031
HCM Control Delay (s)	8.3	0	-	-	10.7
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

HCM 2010 TWSC  
19: Heath Street & Cary Road

2/2/2017

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	4	55	205	53	2	9
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	79	79	82	82	69	69
Heavy Vehicles, %	0	1	1	0	0	0
Mvmt Flow	5	70	250	65	3	13

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	315	0	362
Stage 1	-	-	282
Stage 2	-	-	80
Critical Hdwy	4.1	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.2	-	3.5
Pot Cap-1 Maneuver	1257	-	641
Stage 1	-	-	770
Stage 2	-	-	948
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1257	-	638
Mov Cap-2 Maneuver	-	-	638
Stage 1	-	-	770
Stage 2	-	-	944

Approach	EB	WB	SB
HCM Control Delay, s	0.5		10
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1257	-	-	-	736
HCM Lane V/C Ratio	0.004	-	-	-	0.022
HCM Control Delay (s)	7.9	0	-	-	10
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection

Int Delay, s/veh 0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	5	69	216	240	3	6
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	89	89	45	45
Heavy Vehicles, %	0	3	1	0	0	0
Mvmt Flow	7	95	243	270	7	13

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	512	0	486
Stage 1	-	-	378
Stage 2	-	-	108
Critical Hdwy	4.1	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.2	-	3.5
Pot Cap-1 Maneuver	1064	-	544
Stage 1	-	-	697
Stage 2	-	-	921
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1064	-	540
Mov Cap-2 Maneuver	-	-	540
Stage 1	-	-	697
Stage 2	-	-	915

Approach	EB	WB	SB
HCM Control Delay, s	0.6		11
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1064	-	-	-	622
HCM Lane V/C Ratio	0.006	-	-	-	0.032
HCM Control Delay (s)	8.4	0	-	-	11
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	4	60	222	59	2	10
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	79	79	82	82	69	69
Heavy Vehicles, %	0	1	1	0	0	0
Mvmt Flow	5	76	271	72	3	14

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	343	0	393
Stage 1	-	-	307
Stage 2	-	-	86
Critical Hdwy	4.1	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.2	-	3.5
Pot Cap-1 Maneuver	1227	-	615
Stage 1	-	-	751
Stage 2	-	-	942
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1227	-	613
Mov Cap-2 Maneuver	-	-	613
Stage 1	-	-	751
Stage 2	-	-	938

Approach	EB	WB	SB
HCM Control Delay, s	0.5		10.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1227	-	-	-	714
HCM Lane V/C Ratio	0.004	-	-	-	0.024
HCM Control Delay (s)	7.9	0	-	-	10.2
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	5	154	435	240	3	6
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	62	62	65	65	45	45
Heavy Vehicles, %	0	3	1	0	0	0
Mvmt Flow	8	248	669	369	7	13

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	1038	0	1119
Stage 1	-	-	854
Stage 2	-	-	265
Critical Hdwy	4.1	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.2	-	3.5
Pot Cap-1 Maneuver	678	-	231
Stage 1	-	-	421
Stage 2	-	-	784
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	678	-	228
Mov Cap-2 Maneuver	-	-	228
Stage 1	-	-	421
Stage 2	-	-	773

Approach	EB	WB	SB
HCM Control Delay, s	0.3		17.8
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	678	-	-	-	302
HCM Lane V/C Ratio	0.012	-	-	-	0.066
HCM Control Delay (s)	10.4	0	-	-	17.8
HCM Lane LOS	B	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	4	106	331	58	2	10
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	69	69	82	82	69	69
Heavy Vehicles, %	0	1	1	0	0	0
Mvmt Flow	6	154	404	71	3	14

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	474	0	604
Stage 1	-	-	439
Stage 2	-	-	165
Critical Hdwy	4.1	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.2	-	3.5
Pot Cap-1 Maneuver	1099	-	465
Stage 1	-	-	654
Stage 2	-	-	869
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1099	-	462
Mov Cap-2 Maneuver	-	-	462
Stage 1	-	-	654
Stage 2	-	-	864

Approach	EB	WB	SB
HCM Control Delay, s	0.3		11.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1099	-	-	-	588
HCM Lane V/C Ratio	0.005	-	-	-	0.03
HCM Control Delay (s)	8.3	0	-	-	11.3
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Heath Street at Soule Recreation Drive/Site Drive

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Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	66	1	6	416	1	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	73	73	89	89	50	50
Heavy Vehicles, %	3	0	0	1	0	0
Mvmt Flow	90	1	7	467	2	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	92	0	572	91
Stage 1	-	-	-	-	91	-
Stage 2	-	-	-	-	481	-
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	-	-	1515	-	485	972
Stage 1	-	-	-	-	938	-
Stage 2	-	-	-	-	626	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1515	-	482	972
Mov Cap-2 Maneuver	-	-	-	-	482	-
Stage 1	-	-	-	-	938	-
Stage 2	-	-	-	-	622	-

Approach	EB	WB	NB
HCM Control Delay, s		0.1	10.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	644	-	-	1515	-
HCM Lane V/C Ratio	0.006	-	-	0.004	-
HCM Control Delay (s)	10.6	-	-	7.4	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-



Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	57	0	1	255	3	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	79	79	82	82	50	50
Heavy Vehicles, %	1	0	0	1	0	0
Mvmt Flow	72	0	1	311	6	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	72	0	385	72
Stage 1	-	-	-	-	72	-
Stage 2	-	-	-	-	313	-
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	-	-	1541	-	622	996
Stage 1	-	-	-	-	956	-
Stage 2	-	-	-	-	746	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1541	-	621	996
Mov Cap-2 Maneuver	-	-	-	-	621	-
Stage 1	-	-	-	-	956	-
Stage 2	-	-	-	-	745	-

Approach	EB	WB	NB
HCM Control Delay, s		0	10.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	686	-	-	1541	-
HCM Lane V/C Ratio	0.012	-	-	0.001	-
HCM Control Delay (s)	10.3	-	-	7.3	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	71	1	6	455	1	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	73	73	89	89	50	50
Heavy Vehicles, %	3	0	0	1	0	0
Mvmt Flow	97	1	7	511	2	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	99	0	623	98
Stage 1	-	-	-	-	98	-
Stage 2	-	-	-	-	525	-
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	-	-	1507	-	453	963
Stage 1	-	-	-	-	931	-
Stage 2	-	-	-	-	598	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1507	-	450	963
Mov Cap-2 Maneuver	-	-	-	-	450	-
Stage 1	-	-	-	-	931	-
Stage 2	-	-	-	-	594	-

Approach	EB	WB	NB
HCM Control Delay, s		0.1	10.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	613	-	-	1507	-
HCM Lane V/C Ratio	0.007	-	-	0.004	-
HCM Control Delay (s)	10.9	-	-	7.4	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection							
Int Delay, s/veh	0.2						
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Vol, veh/h	62	0	1	278	3	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	79	79	82	82	50	50	
Heavy Vehicles, %	1	0	0	1	0	0	
Mvmt Flow	78	0	1	339	6	2	
Major/Minor	Major1		Major2		Minor1		
Conflicting Flow All	0	0	78	0	419	78	
Stage 1	-	-	-	-	78	-	
Stage 2	-	-	-	-	341	-	
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	-	-	1533	-	595	988	
Stage 1	-	-	-	-	950	-	
Stage 2	-	-	-	-	725	-	
Platoon blocked, %	-	-	-	-	-	-	
Mov Cap-1 Maneuver	-	-	1533	-	594	988	
Mov Cap-2 Maneuver	-	-	-	-	594	-	
Stage 1	-	-	-	-	950	-	
Stage 2	-	-	-	-	724	-	
Approach	EB		WB		NB		
HCM Control Delay, s			0		10.5		
HCM LOS					B		
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT		
Capacity (veh/h)	660	-	-	1533	-		
HCM Lane V/C Ratio	0.012	-	-	0.001	-		
HCM Control Delay (s)	10.5	-	-	7.4	0		
HCM Lane LOS	B	-	-	A	A		
HCM 95th %tile Q(veh)	0	-	-	0	-		

Intersection	
Int Delay, s/veh	231.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	71	86	128	470	205	134
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	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	62	62	74	74	42	42
Heavy Vehicles, %	3	0	0	1	0	0
Mvmt Flow	115	139	173	635	488	319

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	253	0	1165	184
Stage 1	-	-	-	-	184	-
Stage 2	-	-	-	-	981	-
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	-	-	1324	-	~ 217	864
Stage 1	-	-	-	-	852	-
Stage 2	-	-	-	-	~ 366	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1324	-	~ 173	864
Mov Cap-2 Maneuver	-	-	-	-	~ 173	-
Stage 1	-	-	-	-	852	-
Stage 2	-	-	-	-	~ 292	-

Approach	EB	WB	NB
HCM Control Delay, s		1.7	\$ 534.6
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	173	864	-	-	1324	-
HCM Lane V/C Ratio	2.821	0.369	-	-	0.131	-
HCM Control Delay (s)	\$ 876.5	11.6	-	-	8.1	0
HCM Lane LOS	F	B	-	-	A	A
HCM 95th %tile Q(veh)	44	2	-	-	0	-

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

Intersection	
Int Delay, s/veh	7.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	62	46	68	279	110	155
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	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	69	69	92	92	53	53
Heavy Vehicles, %	1	0	0	1	0	0
Mvmt Flow	90	67	74	303	208	292

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	157	0	574	123
Stage 1	-	-	-	-	123	-
Stage 2	-	-	-	-	451	-
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	-	-	1435	-	484	933
Stage 1	-	-	-	-	907	-
Stage 2	-	-	-	-	646	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1435	-	454	933
Mov Cap-2 Maneuver	-	-	-	-	454	-
Stage 1	-	-	-	-	907	-
Stage 2	-	-	-	-	606	-

Approach	EB	WB	NB
HCM Control Delay, s		1.5	14.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	454	933	-	-	1435	-
HCM Lane V/C Ratio	0.457	0.313	-	-	0.052	-
HCM Control Delay (s)	19.4	10.6	-	-	7.6	0
HCM Lane LOS	C	B	-	-	A	A
HCM 95th %tile Q(veh)	2	1	-	-	0	-

Heath Street at Woodland Road

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Intersection	
Int Delay, s/veh	9.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	67	0	0	166	256	384
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	40	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	71	71	89	89	80	80
Heavy Vehicles, %	3	0	0	1	0	2
Mvmt Flow	94	0	0	187	320	480

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	94	281
Stage 1	-	-	94
Stage 2	-	-	187
Critical Hdwy	-	4.1	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	-	2.2	3.5
Pot Cap-1 Maneuver	-	1513	713
Stage 1	-	-	935
Stage 2	-	-	850
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1513	713
Mov Cap-2 Maneuver	-	-	713
Stage 1	-	-	935
Stage 2	-	-	850

Approach	EB	WB	NB
HCM Control Delay, s			13.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	713	963	-	-	1513	-
HCM Lane V/C Ratio	0.449	0.498	-	-	-	-
HCM Control Delay (s)	14.1	12.4	-	-	0	-
HCM Lane LOS	B	B	-	-	A	-
HCM 95th %tile Q(veh)	2	3	-	-	0	-

Intersection

Int Delay, s/veh 3.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	58	0	0	187	69	90
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	40	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	74	74	78	78	83	83
Heavy Vehicles, %	1	0	0	2	0	3
Mvmt Flow	39	0	0	240	83	108

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	39	279
Stage 1	-	-	39
Stage 2	-	-	240
Critical Hdwy	-	4.1	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	-	2.2	3.5
Pot Cap-1 Maneuver	-	1584	715
Stage 1	-	-	989
Stage 2	-	-	805
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1584	715
Mov Cap-2 Maneuver	-	-	715
Stage 1	-	-	989
Stage 2	-	-	805

Approach	EB	WB	NB
HCM Control Delay, s			9.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	715	1030	-	-	1584	-
HCM Lane V/C Ratio	0.116	0.105	-	-	-	-
HCM Control Delay (s)	10.7	8.9	-	-	0	-
HCM Lane LOS	B	A	-	-	A	-
HCM 95th %tile Q(veh)	0	0	-	-	0	-



Intersection	
Int Delay, s/veh	10.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	72	0	0	180	281	419
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	40	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	71	71	89	89	80	80
Heavy Vehicles, %	3	0	0	1	0	2
Mvmt Flow	101	0	0	202	351	524

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	101	0	303	101
Stage 1	-	-	-	-	101	-
Stage 2	-	-	-	-	202	-
Critical Hdwy	-	-	4.1	-	6.4	6.22
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.318
Pot Cap-1 Maneuver	-	-	1504	-	693	954
Stage 1	-	-	-	-	928	-
Stage 2	-	-	-	-	837	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1504	-	693	954
Mov Cap-2 Maneuver	-	-	-	-	693	-
Stage 1	-	-	-	-	928	-
Stage 2	-	-	-	-	837	-

Approach	EB	WB	NB
HCM Control Delay, s			14.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	693	954	-	-	1504	-
HCM Lane V/C Ratio	0.507	0.549	-	-	-	-
HCM Control Delay (s)	15.4	13.3	-	-	0	-
HCM Lane LOS	C	B	-	-	A	-
HCM 95th %tile Q(veh)	3	3	-	-	0	-

Intersection	
Int Delay, s/veh	4.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	63	0	0	202	77	99
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	40	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	74	74	78	78	83	83
Heavy Vehicles, %	1	0	0	2	0	3
Mvmt Flow	43	0	0	259	93	119

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	43	302
Stage 1	-	-	43
Stage 2	-	-	259
Critical Hdwy	-	4.1	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	-	2.2	3.5
Pot Cap-1 Maneuver	-	1579	694
Stage 1	-	-	985
Stage 2	-	-	789
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1579	694
Mov Cap-2 Maneuver	-	-	694
Stage 1	-	-	985
Stage 2	-	-	789

Approach	EB	WB	NB
HCM Control Delay, s			9.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	694	1025	-	-	1579	-
HCM Lane V/C Ratio	0.134	0.116	-	-	-	-
HCM Control Delay (s)	11	9	-	-	0	-
HCM Lane LOS	B	A	-	-	A	-
HCM 95th %tile Q(veh)	0	0	-	-	0	-

Intersection	
Int Delay, s/veh	34.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	205	0	0	308	290	420
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	40	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	53	53	67	67	78	78
Heavy Vehicles, %	3	0	0	1	0	2
Mvmt Flow	387	0	0	460	372	538

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	387	0	847	387
Stage 1	-	-	-	-	387	-
Stage 2	-	-	-	-	460	-
Critical Hdwy	-	-	4.1	-	6.4	6.22
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.318
Pot Cap-1 Maneuver	-	-	1183	-	~ 335	661
Stage 1	-	-	-	-	691	-
Stage 2	-	-	-	-	640	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1183	-	~ 335	661
Mov Cap-2 Maneuver	-	-	-	-	~ 335	-
Stage 1	-	-	-	-	691	-
Stage 2	-	-	-	-	640	-

Approach	EB	WB	NB
HCM Control Delay, s			65.8
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	335	661	-	-	1183	-
HCM Lane V/C Ratio	1.11	0.815	-	-	-	-
HCM Control Delay (s)	117.8	29.9	-	-	0	-
HCM Lane LOS	F	D	-	-	A	-
HCM 95th %tile Q(veh)	14	8	-	-	0	-

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

Intersection	
Int Delay, s/veh	3.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	217	0	0	270	77	100
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	40	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	60	60	91	91	83	83
Heavy Vehicles, %	1	0	0	2	0	3
Mvmt Flow	181	0	0	297	93	120

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	181	0	478	181
Stage 1	-	-	-	-	181	-
Stage 2	-	-	-	-	297	-
Critical Hdwy	-	-	4.1	-	6.4	6.23
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.327
Pot Cap-1 Maneuver	-	-	1407	-	550	859
Stage 1	-	-	-	-	855	-
Stage 2	-	-	-	-	758	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1407	-	550	859
Mov Cap-2 Maneuver	-	-	-	-	550	-
Stage 1	-	-	-	-	855	-
Stage 2	-	-	-	-	758	-

Approach	EB	WB	NB
HCM Control Delay, s			11.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	550	859	-	-	1407	-
HCM Lane V/C Ratio	0.169	0.14	-	-	-	-
HCM Control Delay (s)	12.9	9.9	-	-	0	-
HCM Lane LOS	B	A	-	-	A	-
HCM 95th %tile Q(veh)	1	0	-	-	0	-

Heath Street at Randolph Road

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Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	101	350	164	13	7	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	80	80	92	92	56	56
Heavy Vehicles, %	2	2	0	0	0	50
Mvmt Flow	126	438	178	14	12	4

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	192	0	875
Stage 1	-	-	185
Stage 2	-	-	690
Critical Hdwy	4.12	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.218	-	3.5
Pot Cap-1 Maneuver	1381	-	322
Stage 1	-	-	852
Stage 2	-	-	502
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1381	-	283
Mov Cap-2 Maneuver	-	-	283
Stage 1	-	-	852
Stage 2	-	-	441

Approach	EB	WB	SB
HCM Control Delay, s	1.8		16.5
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1381	-	-	-	328
HCM Lane V/C Ratio	0.091	-	-	-	0.049
HCM Control Delay (s)	7.9	0	-	-	16.5
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	26	122	186	12	7	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	80	80	76	76	67	67
Heavy Vehicles, %	8	2	1	0	0	0
Mvmt Flow	32	152	245	16	10	1

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	261	0	471
Stage 1	-	-	253
Stage 2	-	-	218
Critical Hdwy	4.18	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.272	-	3.5
Pot Cap-1 Maneuver	1269	-	555
Stage 1	-	-	794
Stage 2	-	-	823
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1269	-	539
Mov Cap-2 Maneuver	-	-	539
Stage 1	-	-	794
Stage 2	-	-	800

Approach	EB	WB	SB
HCM Control Delay, s	1.4		11.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1269	-	-	-	561
HCM Lane V/C Ratio	0.026	-	-	-	0.021
HCM Control Delay (s)	7.9	0	-	-	11.6
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection

Int Delay, s/veh 1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	109	382	178	114	8	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	80	80	92	92	56	56
Heavy Vehicles, %	2	2	0	0	0	50
Mvmt Flow	136	478	193	124	14	4

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	317	0	1005
Stage 1	-	-	255
Stage 2	-	-	750
Critical Hdwy	4.12	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.218	-	3.5
Pot Cap-1 Maneuver	1243	-	270
Stage 1	-	-	792
Stage 2	-	-	470
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1243	-	230
Mov Cap-2 Maneuver	-	-	230
Stage 1	-	-	792
Stage 2	-	-	400

Approach	EB	WB	SB
HCM Control Delay, s	1.8		19.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1243	-	-	-	265
HCM Lane V/C Ratio	0.11	-	-	-	0.067
HCM Control Delay (s)	8.3	0	-	-	19.6
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0



Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	28	134	201	13	8	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	80	80	76	76	67	67
Heavy Vehicles, %	8	2	1	0	0	0
Mvmt Flow	35	168	264	17	12	1
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	282	0	-	0	511	273
Stage 1	-	-	-	-	273	-
Stage 2	-	-	-	-	238	-
Critical Hdwy	4.18	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.272	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1247	-	-	-	526	771
Stage 1	-	-	-	-	778	-
Stage 2	-	-	-	-	806	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1247	-	-	-	510	771
Mov Cap-2 Maneuver	-	-	-	-	510	-
Stage 1	-	-	-	-	778	-
Stage 2	-	-	-	-	781	-
Approach	EB	WB	SB			
HCM Control Delay, s	1.4				12	
HCM LOS					B	
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1247	-	-	-	530	
HCM Lane V/C Ratio	0.028	-	-	-	0.025	
HCM Control Delay (s)	8	0	-	-	12	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0	-	-	-	0	

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	109	516	306	114	8	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	66	66	68	68	56	56
Heavy Vehicles, %	2	2	0	0	0	50
Mvmt Flow	165	782	450	168	14	4

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	618	0	1646
Stage 1	-	-	534
Stage 2	-	-	1112
Critical Hdwy	4.12	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.218	-	3.5
Pot Cap-1 Maneuver	962	-	111
Stage 1	-	-	592
Stage 2	-	-	317
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	962	-	77
Mov Cap-2 Maneuver	-	-	77
Stage 1	-	-	592
Stage 2	-	-	221

Approach	EB	WB	SB
HCM Control Delay, s	1.7		53.3
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	962	-	-	-	92
HCM Lane V/C Ratio	0.172	-	-	-	0.194
HCM Control Delay (s)	9.5	0	-	-	53.3
HCM Lane LOS	A	A	-	-	F
HCM 95th %tile Q(veh)	1	-	-	-	1

Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	28	289	269	13	8	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	68	68	88	88	67	67
Heavy Vehicles, %	8	2	1	0	0	0
Mvmt Flow	41	425	306	15	12	1
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	320	0	-	0	820	313
Stage 1	-	-	-	-	313	-
Stage 2	-	-	-	-	507	-
Critical Hdwy	4.18	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.272	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1207	-	-	-	347	732
Stage 1	-	-	-	-	746	-
Stage 2	-	-	-	-	609	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1207	-	-	-	332	732
Mov Cap-2 Maneuver	-	-	-	-	332	-
Stage 1	-	-	-	-	746	-
Stage 2	-	-	-	-	582	-
Approach	EB	WB	SB			
HCM Control Delay, s	0.7		15.6			
HCM LOS			C			
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1207	-	-	-	353	
HCM Lane V/C Ratio	0.034	-	-	-	0.038	
HCM Control Delay (s)	8.1	0	-	-	15.6	
HCM Lane LOS	A	A	-	-	C	
HCM 95th %tile Q(veh)	0	-	-	-	0	

Heath Street at Warren Street

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Intersection

Int Delay, s/veh 4.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	222	99	31	133	81	64
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	85	85	81	81	73	73
Heavy Vehicles, %	2	1	0	2	0	2
Mvmt Flow	261	116	38	164	111	88

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	378	0	560	319
Stage 1	-	-	-	-	319	-
Stage 2	-	-	-	-	241	-
Critical Hdwy	-	-	4.1	-	6.4	6.22
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.318
Pot Cap-1 Maneuver	-	-	1192	-	493	722
Stage 1	-	-	-	-	741	-
Stage 2	-	-	-	-	804	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1192	-	476	722
Mov Cap-2 Maneuver	-	-	-	-	476	-
Stage 1	-	-	-	-	741	-
Stage 2	-	-	-	-	776	-

Approach	EB	WB	NB
HCM Control Delay, s		1.5	14.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	560	-	-	1192	-
HCM Lane V/C Ratio	0.355	-	-	0.032	-
HCM Control Delay (s)	14.9	-	-	8.1	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	2	-	-	0	-

Intersection

Int Delay, s/veh 2.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	58	48	25	135	28	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	89	89	71	71
Heavy Vehicles, %	2	0	8	0	4	8
Mvmt Flow	64	53	28	152	39	17

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	116	298
Stage 1	-	-	90
Stage 2	-	-	208
Critical Hdwy	-	4.18	6.44
Critical Hdwy Stg 1	-	-	5.44
Critical Hdwy Stg 2	-	-	5.44
Follow-up Hdwy	-	2.272	3.536
Pot Cap-1 Maneuver	-	1436	689
Stage 1	-	-	928
Stage 2	-	-	822
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1436	675
Mov Cap-2 Maneuver	-	-	675
Stage 1	-	-	928
Stage 2	-	-	805

Approach	EB	WB	NB
HCM Control Delay, s		1.2	10.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	739	-	-	1436	-
HCM Lane V/C Ratio	0.076	-	-	0.02	-
HCM Control Delay (s)	10.3	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection

Int Delay, s/veh 4.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	243	107	35	144	88	69
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	85	85	81	81	73	73
Heavy Vehicles, %	2	1	0	2	0	2
Mvmt Flow	286	126	43	178	121	95

Major/Minor	Major1	Major2	Minor1	
Conflicting Flow All	0	0	412	0
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	-	-	1158	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	-	-	1158	-
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s		1.6	16.6
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	524	-	-	1158	-
HCM Lane V/C Ratio	0.41	-	-	0.037	-
HCM Control Delay (s)	16.6	-	-	8.2	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	2	-	-	0	-

Intersection						
Int Delay, s/veh	2.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	65	52	27	146	30	13
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	89	89	71	71
Heavy Vehicles, %	2	0	8	0	4	8
Mvmt Flow	71	57	30	164	42	18
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	129	0	325	100
Stage 1	-	-	-	-	100	-
Stage 2	-	-	-	-	225	-
Critical Hdwy	-	-	4.18	-	6.44	6.28
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	-	-	2.272	-	3.536	3.372
Pot Cap-1 Maneuver	-	-	1420	-	665	939
Stage 1	-	-	-	-	919	-
Stage 2	-	-	-	-	808	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1420	-	650	939
Mov Cap-2 Maneuver	-	-	-	-	650	-
Stage 1	-	-	-	-	919	-
Stage 2	-	-	-	-	789	-
Approach	EB		WB		NB	
HCM Control Delay, s			1.2		10.5	
HCM LOS					B	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	717	-	-	1420	-	
HCM Lane V/C Ratio	0.084	-	-	0.021	-	
HCM Control Delay (s)	10.5	-	-	7.6	0	
HCM Lane LOS	B	-	-	A	A	
HCM 95th %tile Q(veh)	0	-	-	0	-	



Intersection	
Int Delay, s/veh	25.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	270	214	35	217	143	69
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	65	65	75	75	63	63
Heavy Vehicles, %	2	1	0	2	0	2
Mvmt Flow	415	329	47	289	227	110

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	745	0	963	580
Stage 1	-	-	-	-	580	-
Stage 2	-	-	-	-	383	-
Critical Hdwy	-	-	4.1	-	6.4	6.22
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.318
Pot Cap-1 Maneuver	-	-	872	-	286	514
Stage 1	-	-	-	-	564	-
Stage 2	-	-	-	-	694	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	872	-	268	514
Mov Cap-2 Maneuver	-	-	-	-	268	-
Stage 1	-	-	-	-	564	-
Stage 2	-	-	-	-	650	-

Approach	EB	WB	NB
HCM Control Delay, s		1.3	105.1
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	317	-	-	872	-
HCM Lane V/C Ratio	1.062	-	-	0.054	-
HCM Control Delay (s)	105.1	-	-	9.4	0
HCM Lane LOS	F	-	-	A	A
HCM 95th %tile Q(veh)	13	-	-	0	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	91	181	27	191	53	13
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	67	67	96	96	88	88
Heavy Vehicles, %	2	0	8	0	4	8
Mvmt Flow	136	270	28	199	60	15

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	406	0	526	271
Stage 1	-	-	-	-	271	-
Stage 2	-	-	-	-	255	-
Critical Hdwy	-	-	4.18	-	6.44	6.28
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	-	-	2.272	-	3.536	3.372
Pot Cap-1 Maneuver	-	-	1121	-	509	753
Stage 1	-	-	-	-	770	-
Stage 2	-	-	-	-	783	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1121	-	495	753
Mov Cap-2 Maneuver	-	-	-	-	495	-
Stage 1	-	-	-	-	770	-
Stage 2	-	-	-	-	761	-

Approach	EB	WB	NB
HCM Control Delay, s		1	12.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	531	-	-	1121	-
HCM Lane V/C Ratio	0.141	-	-	0.025	-
HCM Control Delay (s)	12.9	-	-	8.3	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

**James Horace Circle**

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# MOVEMENT SUMMARY

 **Site: Existing AM**

New Site  
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate per veh	Average Speed mph
<b>South: Lagrange Street</b>											
3b	L3	1	2.0	1.384	214.5	LOS F	57.2	1453.2	1.00	3.88	8.5
3a	L1	73	2.0	1.384	214.5	LOS F	57.2	1453.2	1.00	3.88	8.4
18a	R1	482	2.0	1.384	214.5	LOS F	57.2	1453.2	1.00	3.88	8.4
18b	R3	2	2.0	1.384	214.5	LOS F	57.2	1453.2	1.00	3.88	8.2
Approach		558	2.0	1.384	214.5	LOS F	57.2	1453.2	1.00	3.88	8.4
<b>SouthEast: Newton Street (South)</b>											
3bx	L3	1	1.0	1.305	171.8	LOS F	63.0	1587.8	1.00	4.19	10.1
3x	L2	11	1.0	1.305	171.8	LOS F	63.0	1587.8	1.00	4.19	10.1
8x	T1	1501	1.0	1.305	171.2	LOS F	65.4	1647.2	1.00	4.26	9.7
18x	R2	399	1.0	0.250	0.0	LOS A	0.0	0.0	0.00	0.00	34.8
Approach		1912	1.0	1.305	135.5	LOS F	65.4	1647.2	0.79	3.37	11.3
<b>NorthEast: Hammond Street</b>											
1x	L2	148	3.0	0.366	15.7	LOS C	1.1	28.7	0.73	0.78	25.0
1ax	L1	84	3.0	0.828	41.5	LOS E	4.4	113.4	0.89	1.20	19.9
6x	T1	162	3.0	0.828	41.5	LOS E	4.4	113.4	0.89	1.20	19.8
16x	R2	112	3.0	0.828	41.5	LOS E	4.4	113.4	0.89	1.20	19.2
Approach		507	3.0	0.828	33.9	LOS D	4.4	113.4	0.84	1.07	21.0
<b>NorthWest: Hammond Pond Parkway</b>											
7x	L2	102	1.0	0.554	12.5	LOS B	2.7	68.6	0.56	0.61	26.8
4x	T1	352	1.0	0.554	12.5	LOS B	2.7	68.6	0.56	0.61	26.0
14ax	R1	352	1.0	0.724	18.4	LOS C	4.9	122.7	0.68	0.78	24.4
14x	R2	254	1.0	0.724	18.4	LOS C	4.9	122.7	0.68	0.78	23.8
Approach		1059	1.0	0.724	15.9	LOS C	4.9	122.7	0.63	0.71	25.0
<b>SouthWest: Newton Street (West)</b>											
5x	L2	99	3.0	0.729	26.8	LOS D	3.5	90.8	0.79	0.93	26.2
2x	T1	284	3.0	0.729	26.8	LOS D	3.5	90.8	0.79	0.93	25.6
12x	R2	5	3.0	0.014	7.4	LOS A	0.0	0.9	0.55	0.52	31.1
12bx	R3	2	3.0	0.014	7.4	LOS A	0.0	0.9	0.55	0.52	30.6
Approach		390	3.0	0.729	26.4	LOS D	3.5	90.8	0.78	0.92	25.9
All Vehicles		4426	1.5	1.384	95.6	LOS F	65.4	1647.2	0.78	2.32	14.0

Level of Service (LOS) Method: Delay & v/c (HCM 2010).

Roundabout LOS Method: Same as Sign Control.

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

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

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

Roundabout Capacity Model: US HCM 2010.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

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

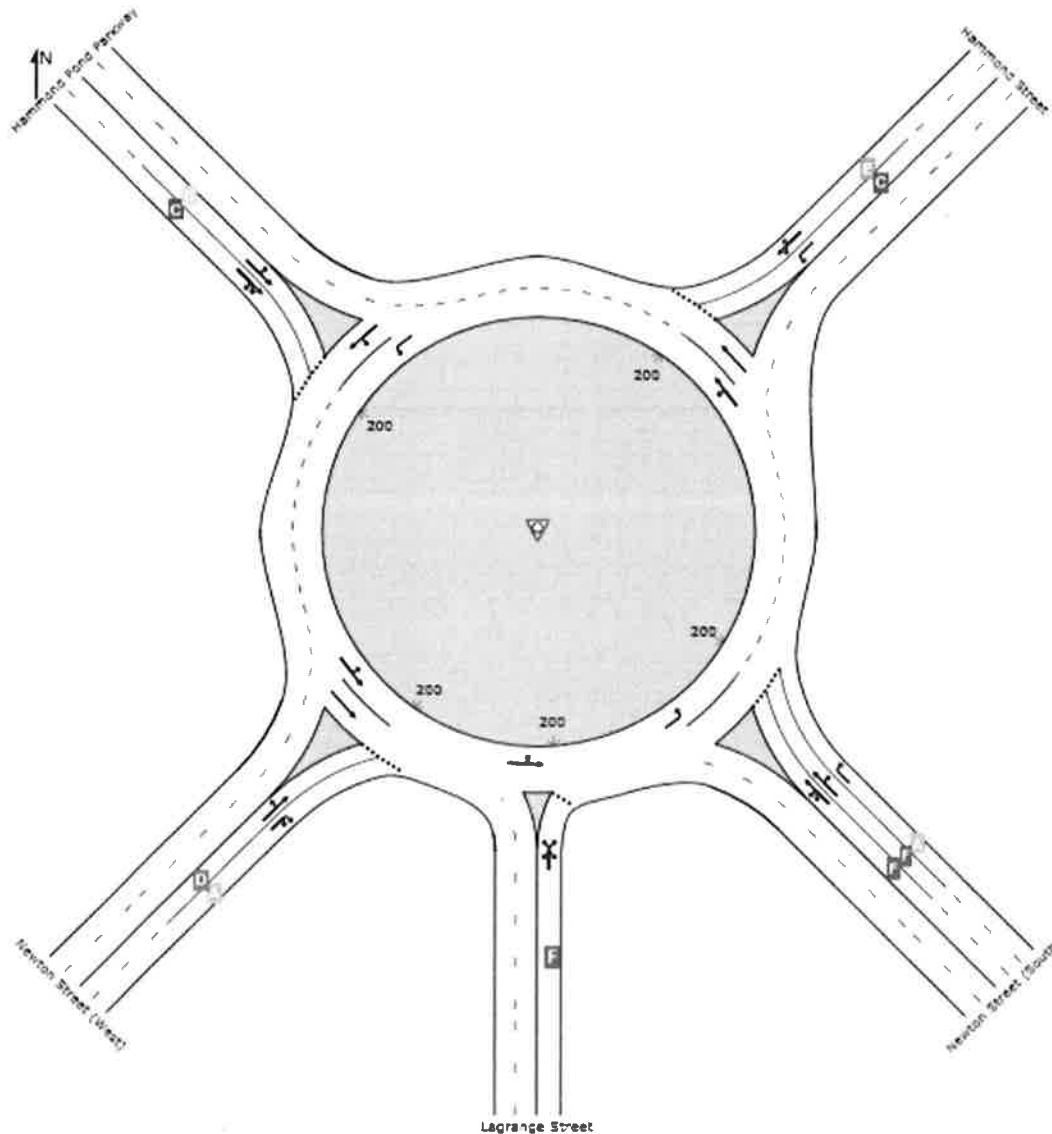
# LEVEL OF SERVICE

 Site: Existing AM

New Site  
Roundabout

## All Movement Classes

	South	Southeast	Northeast	Northwest	Southwest	Intersection
LOS	F	F	D	C	D	F



Level of Service (LOS) Method: Delay & v/c (HCM 2010).

Roundabout LOS Method: Same as Sign Control.

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

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

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

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

# MOVEMENT SUMMARY

 Site: Existing PM

New Site  
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance ft	Prop. Queued	Effective Stop Rate per veh	Average Speed mph
<b>South: Lagrange Street</b>											
3b	L3	14	1.0	1.144	122.4	LOS F	27.1	681.9	1.00	2.55	12.8
3a	L1	178	1.0	1.144	122.4	LOS F	27.1	681.9	1.00	2.55	12.6
18a	R1	254	1.0	1.144	122.4	LOS F	27.1	681.9	1.00	2.55	12.4
18b	R3	4	1.0	1.144	122.4	LOS F	27.1	681.9	1.00	2.55	12.2
Approach		450	1.0	1.144	122.4	LOS F	27.1	681.9	1.00	2.55	12.5
<b>SouthEast: Newton Street (South)</b>											
3bx	L3	4	2.0	0.672	18.1	LOS C	3.8	96.0	0.69	0.77	28.1
3x	L2	244	2.0	0.672	18.1	LOS C	3.8	96.0	0.69	0.77	27.5
8x	T1	726	2.0	0.672	17.8	LOS C	3.8	96.0	0.67	0.75	25.4
18x	R2	163	2.0	0.103	0.0	LOS A	0.0	0.0	0.00	0.00	34.9
Approach		1137	2.0	0.672	15.3	LOS C	3.8	96.0	0.58	0.65	26.9
<b>NorthEast: Hammond Street</b>											
1x	L2	108	1.0	0.236	11.5	LOS B	0.7	16.7	0.65	0.66	26.2
1ax	L1	297	1.0	1.461	241.5	LOS F	77.3	1949.2	1.00	6.26	7.5
6x	T1	409	1.0	1.461	241.5	LOS F	77.3	1949.2	1.00	6.26	7.5
16x	R2	2	1.0	1.461	241.5	LOS F	77.3	1949.2	1.00	6.26	7.4
Approach		815	1.0	1.461	211.1	LOS F	77.3	1949.2	0.95	5.52	8.3
<b>NorthWest: Hammond Pond Parkway</b>											
7x	L2	17	1.0	1.069	83.3	LOS F	24.3	611.2	1.00	2.68	15.0
4x	T1	686	1.0	1.069	83.1	LOS F	24.6	620.2	1.00	2.68	14.7
14ax	R1	415	1.0	1.069	81.9	LOS F	24.6	620.2	1.00	2.71	14.6
14x	R2	162	1.0	1.069	81.9	LOS F	24.6	620.2	1.00	2.71	14.4
Approach		1280	1.0	1.069	82.6	LOS F	24.6	620.2	1.00	2.69	14.6
<b>SouthWest: Newton Street (West)</b>											
5x	L2	31	1.0	0.398	15.9	LOS C	1.2	31.1	0.73	0.77	30.0
2x	T1	138	1.0	0.398	15.9	LOS C	1.2	31.1	0.73	0.77	29.2
12x	R2	97	1.0	0.249	13.3	LOS B	0.7	17.6	0.71	0.72	28.8
12bx	R3	2	1.0	0.249	13.3	LOS B	0.7	17.6	0.71	0.72	28.4
Approach		269	1.0	0.398	15.0	LOS B	1.2	31.1	0.72	0.75	29.1
All Vehicles		3951	1.3	1.461	89.7	LOS F	77.3	1949.2	0.85	2.54	14.4

Level of Service (LOS) Method: Delay & v/c (HCM 2010).

Roundabout LOS Method: Same as Sign Control.

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

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

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

Roundabout Capacity Model: US HCM 2010.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

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

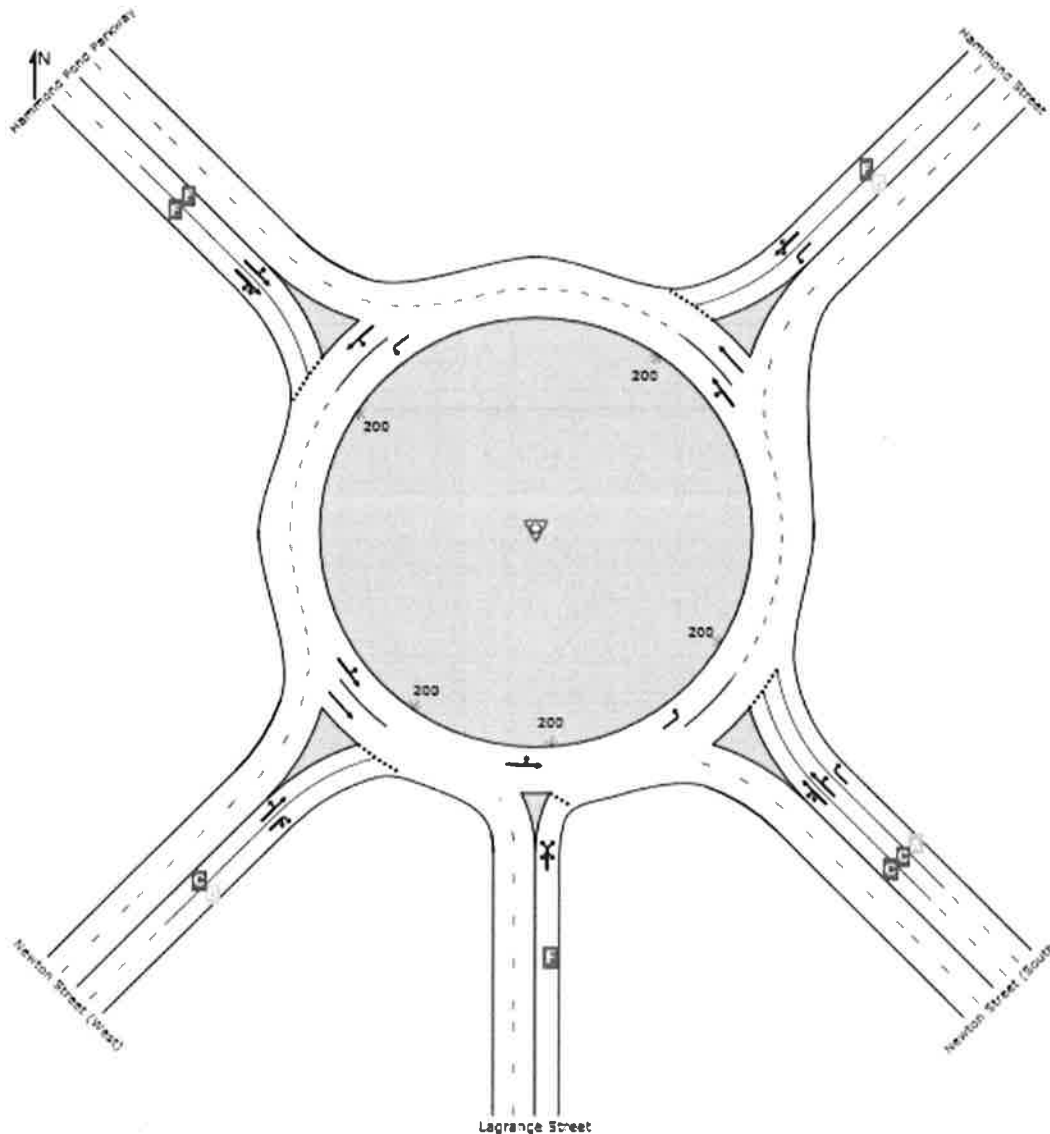
# LEVEL OF SERVICE

 **Site: Existing PM**

New Site  
Roundabout

## All Movement Classes

	South	Southeast	Northeast	Northwest	Southwest	Intersection
LOS	F	C	F	F	B	F



Level of Service (LOS) Method: Delay & v/c (HCM 2010).

Roundabout LOS Method: Same as Sign Control.

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

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

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

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

# MOVEMENT SUMMARY

 Site: No-Build AM

New Site  
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate per veh	Average Speed mph
South: Lagrange Street											
3b	L3	1	2.0	1.707	354.9	LOS F	91.0	2311.4	1.00	4.94	5.6
3a	L1	104	2.0	1.707	354.9	LOS F	91.0	2311.4	1.00	4.94	5.6
18a	R1	521	2.0	1.707	354.9	LOS F	91.0	2311.4	1.00	4.94	5.6
18b	R3	7	2.0	1.707	354.9	LOS F	91.0	2311.4	1.00	4.94	5.5
Approach		633	2.0	1.707	354.9	LOS F	91.0	2311.4	1.00	4.94	5.6
SouthEast: Newton Street (South)											
3bx	L3	1	1.0	1.418	219.0	LOS F	82.7	2083.8	1.00	4.94	8.4
3x	L2	11	1.0	1.418	219.0	LOS F	82.7	2083.8	1.00	4.94	8.4
8x	T1	1625	1.0	1.418	218.4	LOS F	86.0	2167.1	1.00	5.03	8.1
18x	R2	431	1.0	0.271	0.0	LOS A	0.0	0.0	0.00	0.00	34.8
Approach		2069	1.0	1.418	172.9	LOS F	86.0	2167.1	0.79	3.98	9.6
NorthEast: Hammond Street											
1x	L2	161	3.0	0.399	16.7	LOS C	1.3	32.2	0.74	0.80	24.8
1ax	L1	93	3.0	0.898	52.3	LOS F	5.9	151.6	0.92	1.39	18.2
6x	T1	175	3.0	0.898	52.3	LOS F	5.9	151.6	0.92	1.39	18.1
16x	R2	118	3.0	0.898	52.3	LOS F	5.9	151.6	0.92	1.39	17.6
Approach		547	3.0	0.898	41.9	LOS E	5.9	151.6	0.87	1.22	19.6
NorthWest: Hammond Pond Parkway											
7x	L2	114	1.0	0.620	14.7	LOS B	3.4	86.1	0.62	0.69	26.2
4x	T1	381	1.0	0.620	14.7	LOS B	3.4	86.1	0.62	0.69	25.4
14ax	R1	383	1.0	0.802	23.7	LOS C	6.5	163.6	0.78	0.94	23.1
14x	R2	271	1.0	0.802	23.7	LOS C	6.5	163.6	0.78	0.94	22.6
Approach		1148	1.0	0.802	19.8	LOS C	6.5	163.6	0.71	0.83	24.0
SouthWest: Newton Street (West)											
5x	L2	104	3.0	0.838	39.0	LOS E	5.0	126.8	0.87	1.11	23.1
2x	T1	307	3.0	0.838	39.0	LOS E	5.0	126.8	0.87	1.11	22.7
12x	R2	5	3.0	0.016	8.0	LOS A	0.0	1.0	0.58	0.56	30.9
12bx	R3	2	3.0	0.016	8.0	LOS A	0.0	1.0	0.58	0.56	30.4
Approach		419	3.0	0.838	38.5	LOS E	5.0	126.8	0.86	1.10	22.9
All Vehicles		4816	1.5	1.707	133.8	LOS F	91.0	2311.4	0.81	2.79	11.4

Level of Service (LOS) Method: Delay & v/c (HCM 2010).

Roundabout LOS Method: Same as Sign Control.

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

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

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

Roundabout Capacity Model: US HCM 2010.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

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



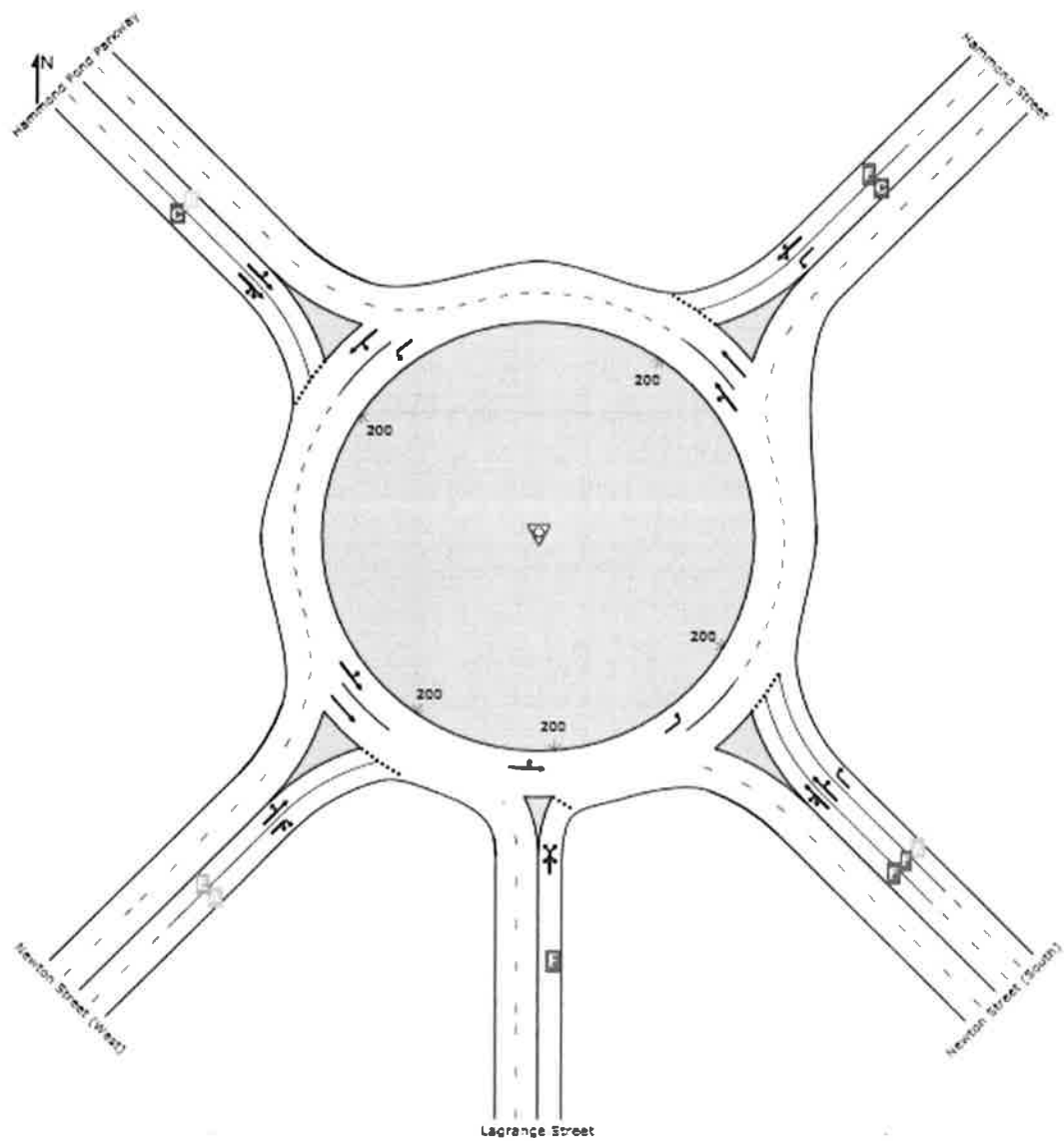
# LEVEL OF SERVICE

 Site: No-Build AM

New Site  
Roundabout

## All Movement Classes

	South	Southeast	Northeast	Northwest	Southwest	Intersection
LOS	F	F	E	C	E	F



Level of Service (LOS) Method: Delay & v/c (HCM 2010).  
Roundabout LOS Method: Same as Sign Control.  
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.  
LOS F will result if v/c > irrespective of lane delay value (does not apply for approaches and intersection).  
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 2010).  
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

# MOVEMENT SUMMARY

 Site: No-Build PM

New Site  
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate per veh	Average Speed mph
<b>South: Lagrange Street</b>											
3b	L3	14	1.0	1.316	188.3	LOS F	46.5	1172.0	1.00	3.45	9.4
3a	L1	208	1.0	1.316	188.3	LOS F	46.5	1172.0	1.00	3.45	9.3
18a	R1	281	1.0	1.316	188.3	LOS F	46.5	1172.0	1.00	3.45	9.2
18b	R3	4	1.0	1.316	188.3	LOS F	46.5	1172.0	1.00	3.45	9.1
Approach		506	1.0	1.316	188.3	LOS F	46.5	1172.0	1.00	3.45	9.3
<b>SouthEast: Newton Street (South)</b>											
3bx	L3	5	2.0	0.727	20.9	LOS C	4.6	116.5	0.73	0.84	27.2
3x	L2	263	2.0	0.727	20.9	LOS C	4.6	116.5	0.73	0.84	26.6
8x	T1	786	2.0	0.727	20.6	LOS C	4.6	116.5	0.72	0.82	24.7
18x	R2	177	2.0	0.112	0.0	LOS A	0.0	0.0	0.00	0.00	34.9
Approach		1231	2.0	0.727	17.7	LOS C	4.6	116.5	0.62	0.71	26.2
<b>NorthEast: Hammond Street</b>											
1x	L2	117	1.0	0.272	12.9	LOS B	0.8	19.9	0.69	0.71	25.8
1ax	L1	347	1.0	1.717	353.3	LOS F	110.2	2776.6	1.00	7.64	5.5
6x	T1	436	1.0	1.717	353.3	LOS F	110.2	2776.6	1.00	7.64	5.5
16x	R2	2	1.0	1.717	353.3	LOS F	110.2	2776.6	1.00	7.64	5.5
Approach		902	1.0	1.717	309.2	LOS F	110.2	2776.6	0.96	6.74	6.2
<b>NorthWest: Hammond Pond Parkway</b>											
7x	L2	19	1.0	1.172	118.7	LOS F	41.2	1039.4	1.00	3.85	12.2
4x	T1	749	1.0	1.172	118.5	LOS F	42.4	1069.7	1.00	3.86	12.1
14ax	R1	462	1.0	1.172	117.4	LOS F	42.4	1069.7	1.00	3.94	11.9
14x	R2	174	1.0	1.172	117.4	LOS F	42.4	1069.7	1.00	3.94	11.8
Approach		1403	1.0	1.172	118.0	LOS F	42.4	1069.7	1.00	3.89	12.0
<b>SouthWest: Newton Street (West)</b>											
5x	L2	34	1.0	0.432	16.9	LOS C	1.4	34.9	0.74	0.80	29.6
2x	T1	149	1.0	0.432	16.9	LOS C	1.4	34.9	0.74	0.80	28.8
12x	R2	102	1.0	0.264	13.7	LOS B	0.8	19.0	0.71	0.73	28.7
12bx	R3	2	1.0	0.264	13.7	LOS B	0.8	19.0	0.71	0.73	28.3
Approach		288	1.0	0.432	15.8	LOS C	1.4	34.9	0.73	0.77	28.9
All Vehicles		4330	1.3	1.717	130.7	LOS F	110.2	2776.6	0.87	3.32	11.5

Level of Service (LOS) Method: Delay & v/c (HCM 2010).

Roundabout LOS Method: Same as Sign Control.

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

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

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

Roundabout Capacity Model: US HCM 2010.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

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

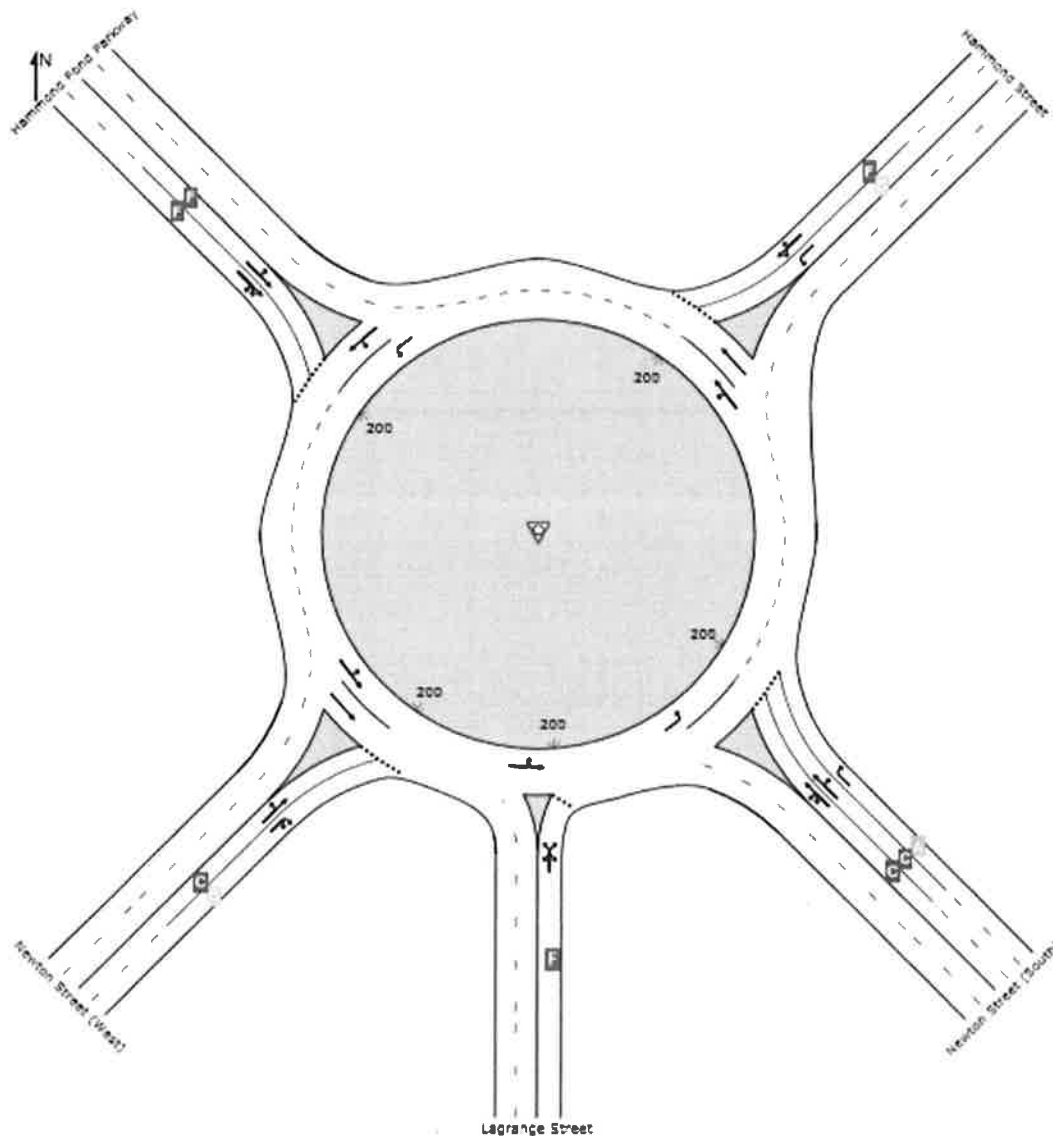
# LEVEL OF SERVICE

 Site: No-Build PM

New Site  
Roundabout

## All Movement Classes

	South	Southeast	Northeast	Northwest	Southwest	Intersection
LOS	F	C	F	F	C	F



Level of Service (LOS) Method: Delay & v/c (HCM 2010).

Roundabout LOS Method: Same as Sign Control.

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

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

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

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

# MOVEMENT SUMMARY

 **Site: Build AM**

New Site  
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance ft	Prop. Queued	Effective Stop Rate per veh	Average Speed mph
<b>South: Lagrange Street</b>											
3b	L3	1	2.0	1.852	420.2	LOS F	101.3	2573.4	1.00	5.16	4.9
3a	L1	98	2.0	1.852	420.2	LOS F	101.3	2573.4	1.00	5.16	4.8
18a	R1	536	2.0	1.852	420.2	LOS F	101.3	2573.4	1.00	5.16	4.8
18b	R3	7	2.0	1.852	420.2	LOS F	101.3	2573.4	1.00	5.16	4.8
Approach		642	2.0	1.852	420.2	LOS F	101.3	2573.4	1.00	5.16	4.8
<b>SouthEast: Newton Street (South)</b>											
3bx	L3	1	1.0	1.528	266.6	LOS F	100.6	2534.1	1.00	5.54	7.2
3x	L2	12	1.0	1.528	266.6	LOS F	100.6	2534.1	1.00	5.54	7.2
8x	T1	1721	1.0	1.528	266.0	LOS F	104.8	2641.4	1.00	5.65	7.0
18x	R2	602	1.0	0.378	0.1	LOS A	0.0	0.0	0.00	0.00	34.8
Approach		2337	1.0	1.528	197.5	LOS F	104.8	2641.4	0.74	4.19	8.7
<b>NorthEast: Hammond Street</b>											
1x	L2	180	3.0	0.440	17.7	LOS C	1.4	36.9	0.74	0.82	24.6
1ax	L1	129	3.0	1.104	104.8	LOS F	22.2	568.0	1.00	2.94	13.0
6x	T1	227	3.0	1.104	104.8	LOS F	22.2	568.0	1.00	2.94	12.9
16x	R2	128	3.0	1.104	104.8	LOS F	22.2	568.0	1.00	2.94	12.7
Approach		665	3.0	1.104	81.1	LOS F	22.2	568.0	0.93	2.36	14.9
<b>NorthWest: Hammond Pond Parkway</b>											
7x	L2	114	1.0	0.657	16.7	LOS C	3.8	94.6	0.67	0.77	25.6
4x	T1	381	1.0	0.657	16.7	LOS C	3.8	94.6	0.67	0.77	24.9
14ax	R1	383	1.0	0.845	28.7	LOS D	7.4	187.6	0.84	1.07	22.0
14x	R2	271	1.0	0.845	28.7	LOS D	7.4	187.6	0.84	1.07	21.5
Approach		1148	1.0	0.845	23.5	LOS C	7.4	187.6	0.77	0.94	23.1
<b>SouthWest: Newton Street (West)</b>											
5x	L2	106	3.0	0.962	61.8	LOS F	9.2	235.5	0.95	1.51	19.0
2x	T1	352	3.0	0.962	61.8	LOS F	9.2	235.5	0.95	1.51	18.7
12x	R2	5	3.0	0.016	8.2	LOS A	0.0	1.0	0.60	0.59	30.7
12bx	R3	2	3.0	0.016	8.2	LOS A	0.0	1.0	0.60	0.59	30.3
Approach		465	3.0	0.962	60.9	LOS F	9.2	235.5	0.95	1.50	18.9
All Vehicles		5257	1.6	1.852	159.9	LOS F	104.8	2641.4	0.82	3.13	10.1

Level of Service (LOS) Method: Delay & v/c (HCM 2010).

Roundabout LOS Method: Same as Sign Control.

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

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

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

Roundabout Capacity Model: US HCM 2010.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

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

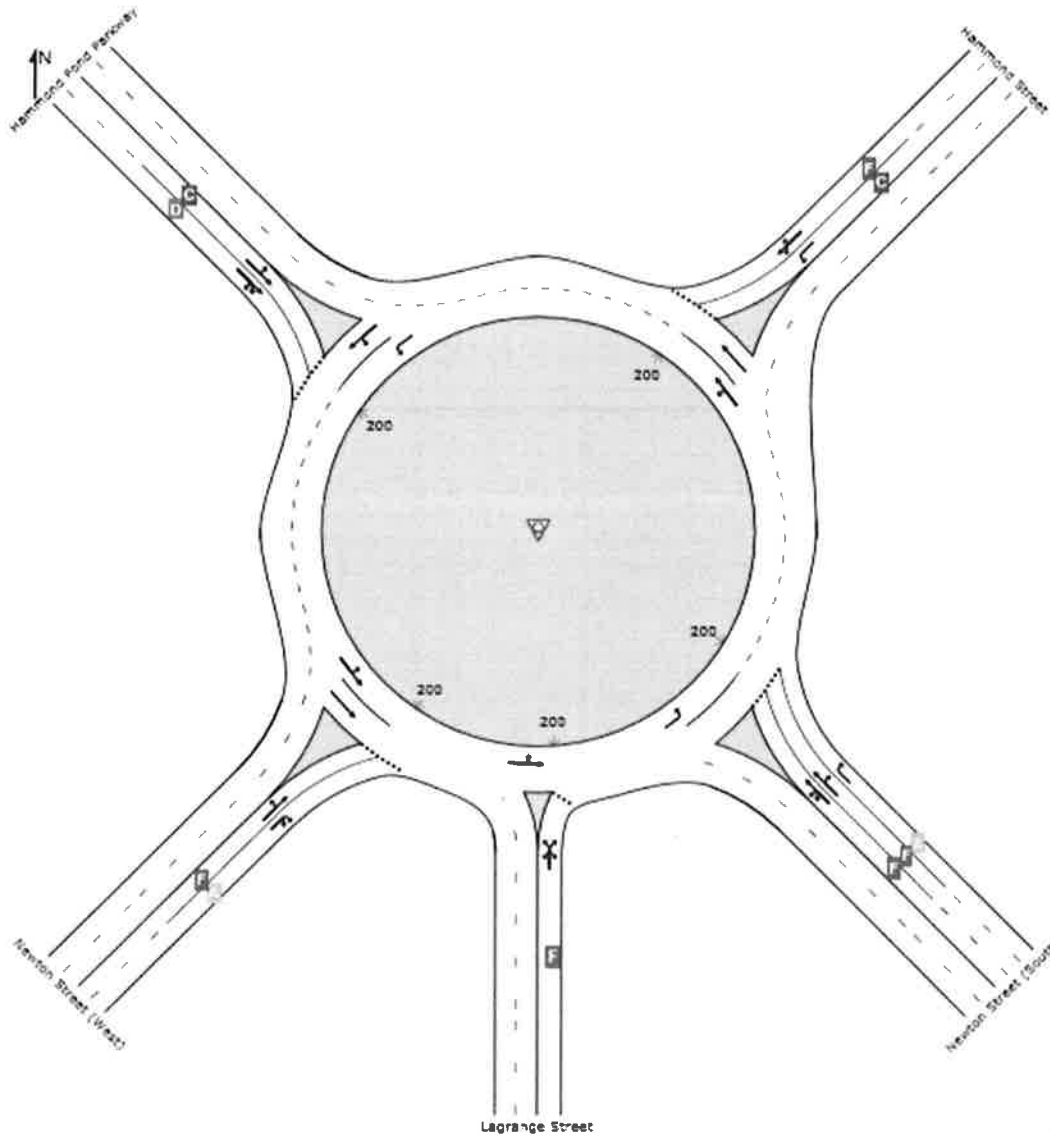
# LEVEL OF SERVICE

 Site: Build AM

New Site  
Roundabout

## All Movement Classes

	South	Southeast	Northeast	Northwest	Southwest	Intersection
LOS	F	F	F	C	F	F



Level of Service (LOS) Method: Delay & v/c (HCM 2010).

Roundabout LOS Method: Same as Sign Control.

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

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

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

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

# MOVEMENT SUMMARY

 Site: Build PM

New Site  
Roundabout

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	Queue Distance ft	Prop. Queued	Effective Stop Rate per veh	Average Speed mph
South: Lagrange Street											
3b	L3	14	1.0	1.422	232.3	LOS F	58.4	1471.5	1.00	3.92	8.0
3a	L1	213	1.0	1.422	232.3	LOS F	58.4	1471.5	1.00	3.92	7.9
18a	R1	307	1.0	1.422	232.3	LOS F	58.4	1471.5	1.00	3.92	7.9
18b	R3	4	1.0	1.422	232.3	LOS F	58.4	1471.5	1.00	3.92	7.8
Approach		538	1.0	1.422	232.3	LOS F	58.4	1471.5	1.00	3.92	7.9
SouthEast: Newton Street (South)											
3bx	L3	5	2.0	0.726	21.0	LOS C	4.5	115.2	0.73	0.84	27.2
3x	L2	260	2.0	0.726	21.0	LOS C	4.5	115.2	0.73	0.84	26.6
8x	T1	777	2.0	0.726	20.6	LOS C	4.5	115.2	0.72	0.82	24.7
18x	R2	227	2.0	0.144	0.0	LOS A	0.0	0.0	0.00	0.00	34.8
Approach		1270	2.0	0.726	17.0	LOS C	4.5	115.2	0.59	0.68	26.4
NorthEast: Hammond Street											
1x	L2	117	1.0	0.269	12.6	LOS B	0.8	19.6	0.68	0.70	25.9
1ax	L1	364	1.0	1.756	369.9	LOS F	117.5	2960.7	1.00	7.90	5.3
6x	T1	449	1.0	1.756	369.9	LOS F	117.5	2960.7	1.00	7.90	5.3
16x	R2	1	1.0	1.756	369.9	LOS F	117.5	2960.7	1.00	7.90	5.3
Approach		931	1.0	1.756	325.0	LOS F	117.5	2960.7	0.96	6.99	5.9
NorthWest: Hammond Pond Parkway											
7x	L2	19	1.0	1.175	119.9	LOS F	41.7	1050.5	1.00	3.88	12.2
4x	T1	749	1.0	1.175	119.8	LOS F	42.9	1081.6	1.00	3.89	12.0
14ax	R1	462	1.0	1.175	118.7	LOS F	42.9	1081.6	1.00	3.97	11.9
14x	R2	174	1.0	1.175	118.7	LOS F	42.9	1081.6	1.00	3.97	11.7
Approach		1403	1.0	1.175	119.3	LOS F	42.9	1081.6	1.00	3.93	11.9
SouthWest: Newton Street (West)											
5x	L2	33	1.0	0.478	18.4	LOS C	1.6	40.2	0.76	0.82	29.1
2x	T1	169	1.0	0.478	18.4	LOS C	1.6	40.2	0.76	0.82	28.4
12x	R2	101	1.0	0.262	13.6	LOS B	0.7	18.8	0.71	0.73	28.7
12bx	R3	2	1.0	0.262	13.6	LOS B	0.7	18.8	0.71	0.73	28.3
Approach		306	1.0	0.478	16.8	LOS C	1.6	40.2	0.74	0.79	28.5
All Vehicles		4448	1.3	1.756	139.8	LOS F	117.5	2960.7	0.86	3.43	11.1

Level of Service (LOS) Method: Delay & v/c (HCM 2010).

Roundabout LOS Method: Same as Sign Control.

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

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

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

Roundabout Capacity Model: US HCM 2010.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

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

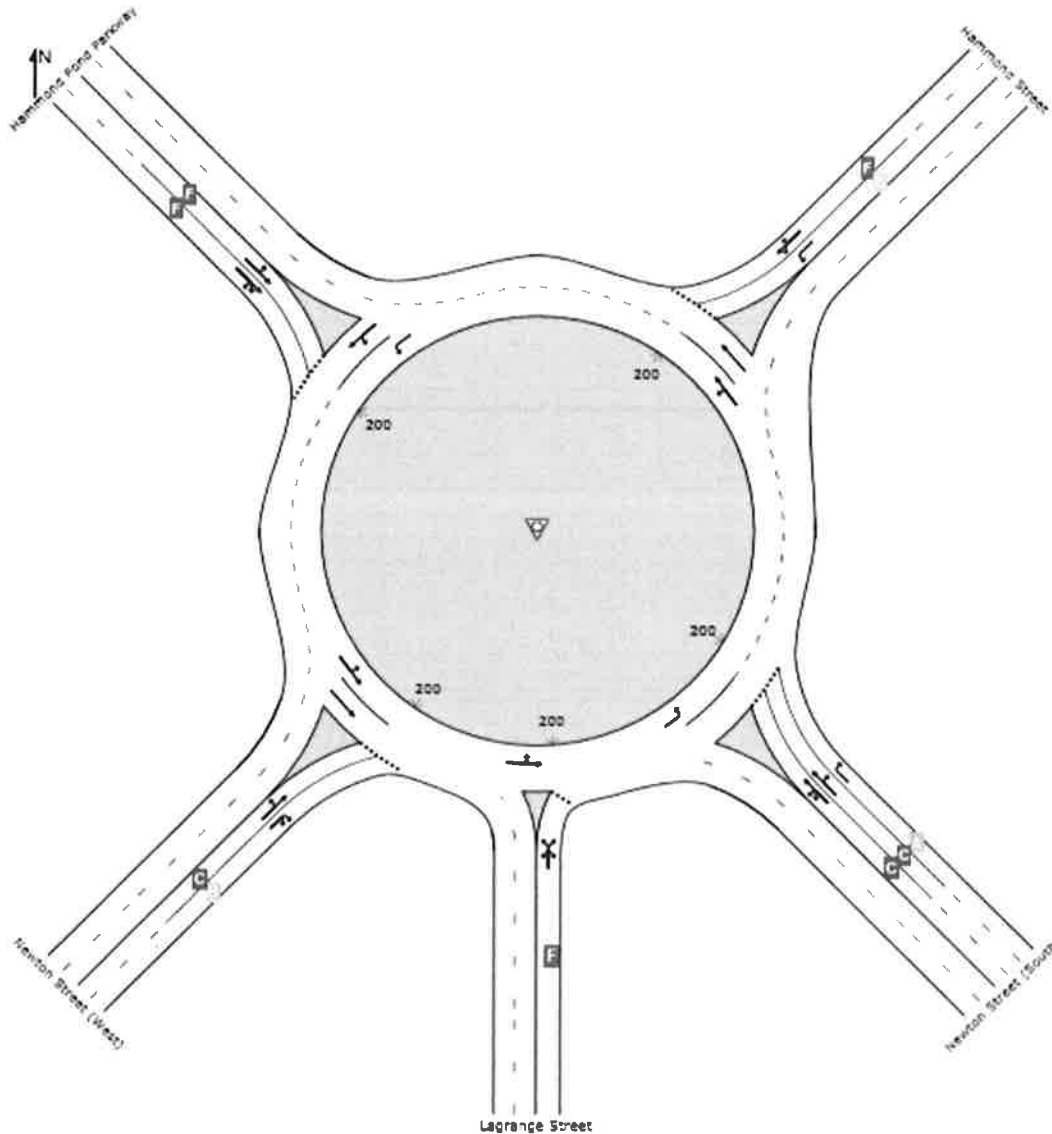
# LEVEL OF SERVICE

 Site: Build PM

New Site  
Roundabout

## All Movement Classes

	South	Southeast	Northeast	Northwest	Southwest	Intersection
LOS	F	C	F	F	C	F



Level of Service (LOS) Method: Delay & v/c (HCM 2010).

Roundabout LOS Method: Same as Sign Control.

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

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

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

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.