



NORTHEASTERN UNIVERSITY

Boston Campus

Interdisciplinary Science and Engineering Building Project Notification Form

TRANSPORTATION APPENDIX

Submitted to

Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201

Prepared by

Northeastern University
360 Huntington Avenue
Boston, MA 02115

Mitchell L. Fischman Consulting LLC
Payette
Acentech, Inc.
Haley & Aldrich, Inc.
Howard/Stein-Hudson Associates, Inc.
Goulston and Storrs
Rowan Williams Davies & Irwin, Inc.
Soden Sustainability Consulting
Stephen Stimson Associates
Suffolk Construction Company, Inc.
Tremont Preservation Services, LLC
Vanasse Hangen Brustlin, Inc.

July 3, 2013





PRECISION
D A T A
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503
Office: 508.481.3999 Fax: 508.545.1234
Email: datarequests@pdillc.com

N/S: Ruggles Street
E/W: MBTA Bus Exit/ SW Corridor Path
City, State: Boston, MA
Client: HSH/ J. SanClemente

File Name : 123026 D redo
Site Code : 2011046
Start Date : 10/23/2012
Page No : 1

Groups Printed- Cars - Heavy Vehicles - Bicycles on Road

Start Time	Ruggles Street From North				MBTA Bus Exit From East				Ruggles Street From South				SW Corridor Path From West				Int. Total	
	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn		
07:00 AM	0	118	0	0	5	0	19	0	0	182	0	0	0	0	0	0	0	324
07:15 AM	0	153	0	0	8	0	18	0	0	210	0	0	0	0	0	0	0	389
07:30 AM	0	139	0	0	3	0	15	0	0	216	0	0	0	0	0	0	0	373
07:45 AM	0	158	0	0	8	0	20	0	0	186	0	0	0	0	0	0	0	372
Total	0	568	0	0	24	0	72	0	0	794	0	0	0	0	0	0	0	1458
08:00 AM	0	136	0	0	6	0	19	0	0	165	0	0	0	0	0	0	0	326
08:15 AM	0	103	0	0	6	0	11	0	0	204	0	0	0	0	0	0	0	324
08:30 AM	0	127	0	0	6	0	23	0	0	178	0	0	0	0	0	0	0	334
08:45 AM	0	104	0	0	6	0	13	0	0	192	0	0	0	0	0	0	0	315
Total	0	470	0	0	24	0	66	0	0	739	0	0	0	0	0	0	0	1299
Grand Total	0	1038	0	0	48	0	138	0	0	1533	0	0	0	0	0	0	0	2757
Apprch %	0	100	0	0	25.8	0	74.2	0	0	100	0	0	0	0	0	0	0	
Total %	0	37.6	0	0	1.7	0	5	0	0	55.6	0	0	0	0	0	0	0	
Cars	0	935	0	0	7	0	5	0	0	1324	0	0	0	0	0	0	0	2271
% Cars	0	90.1	0	0	14.6	0	3.6	0	0	86.4	0	0	0	0	0	0	0	82.4
Heavy Vehicles	0	94	0	0	40	0	133	0	0	193	0	0	0	0	0	0	0	460
% Heavy Vehicles	0	9.1	0	0	83.3	0	96.4	0	0	12.6	0	0	0	0	0	0	0	16.7
Bicycles on Road	0	9	0	0	1	0	0	0	0	16	0	0	0	0	0	0	0	26
% Bicycles on Road	0	0.9	0	0	2.1	0	0	0	0	1	0	0	0	0	0	0	0	0.9

Start Time	Ruggles Street From North					MBTA Bus Exit From East					Ruggles Street From South					SW Corridor Path From West					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
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	153	0	0	153	8	0	18	0	26	0	210	0	0	210	0	0	0	0	0	389
07:30 AM	0	139	0	0	139	3	0	15	0	18	0	216	0	0	216	0	0	0	0	0	373
07:45 AM	0	158	0	0	158	8	0	20	0	28	0	186	0	0	186	0	0	0	0	0	372
08:00 AM	0	136	0	0	136	6	0	19	0	25	0	165	0	0	165	0	0	0	0	0	326
Total Volume	0	586	0	0	586	25	0	72	0	97	0	777	0	0	777	0	0	0	0	0	1460
% App. Total	0	100	0	0		25.8	0	74.2	0		0	100	0	0		0	0	0	0	0	
PHF	.000	.927	.000	.000	.927	.781	.000	.900	.000	.866	.000	.899	.000	.000	.899	.000	.000	.000	.000	.000	.938
Cars	0	541	0	0	541	3	0	3	0	6	0	678	0	0	678	0	0	0	0	0	1225
% Cars	0	92.3	0	0	92.3	12.0	0	4.2	0	6.2	0	87.3	0	0	87.3	0	0	0	0	0	83.9
Heavy Vehicles	0	40	0	0	40	22	0	69	0	91	0	94	0	0	94	0	0	0	0	0	225
% Heavy Vehicles	0	6.8	0	0	6.8	88.0	0	95.8	0	93.8	0	12.1	0	0	12.1	0	0	0	0	0	15.4
Bicycles on Road	0	5	0	0	5	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	10
% Bicycles on Road	0	0.9	0	0	0.9	0	0	0	0	0	0	0.6	0	0	0.6	0	0	0	0	0	0.7



PRECISION
D A T A
INDUSTRIES, LLC

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N/S: Ruggles Street
E/W: MBTA Bus Exit/ SW Corridor Path
City, State: Boston, MA
Client: HSH/ J. SanClemente

File Name : 123026 D redo
Site Code : 2011046
Start Date : 10/23/2012
Page No : 1

Groups Printed- Bicycles in Crosswalk

Start Time	Ruggles Street From North					MBTA Bus Exit From East					Ruggles Street From South					SW Corridor Path From West					Int. Total
	Right	Thru	Left	Bikes CW	Bikes CCW	Right	Thru	Left	Bikes CW	Bikes CCW	Right	Thru	Left	Bikes CW	Bikes CCW	Right	Thru	Left	Bikes CW	Bikes CCW	
07:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	3	14	0	0	0	3	0	21
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	29	0	0	0	2	1	35
07:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	4	21	0	0	0	6	1	34
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	30	0	0	0	6	1	40
Total	0	0	0	0	0	0	0	0	0	3	0	0	0	13	94	0	0	0	17	3	130
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	42	0	0	0	10	0	53
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	5	48	0	0	0	9	2	64
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	4	45	0	0	0	12	4	65
08:45 AM	0	0	0	0	0	0	0	0	2	0	0	0	0	9	57	0	0	0	18	0	86
Total	0	0	0	0	0	0	0	0	2	0	0	0	0	19	192	0	0	0	49	6	268
Grand Total	0	0	0	0	0	0	0	0	2	3	0	0	0	32	286	0	0	0	66	9	398
Apprch %	0	0	0	0	0	0	0	0	40	60	0	0	0	10.1	89.9	0	0	0	88	12	
Total %	0	0	0	0	0	0	0	0	0.5	0.8	0	0	0	8	71.9	0	0	0	16.6	2.3	

Start Time	Ruggles Street From North						MBTA Bus Exit From East						Ruggles Street From South						SW Corridor Path From West						Int. Total
	Right	Thru	Left	Bikes CW	Bikes CCW	App. Total	Right	Thru	Left	Bikes CW	Bikes CCW	App. Total	Right	Thru	Left	Bikes CW	Bikes CCW	App. Total	Right	Thru	Left	Bikes CW	Bikes CCW	App. 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	0	0	0	0	0	1	42	43	0	0	0	10	0	10	53
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	48	53	0	0	0	9	2	11	64
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	45	49	0	0	0	12	4	16	65
08:45 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	9	57	66	0	0	0	18	0	18	86
Total Volume	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	19	192	211	0	0	0	49	6	55	268
% App. Total	0	0	0	0	0	0	0	0	0	100	0	0	0	0	0	9	91	91	0	0	0	89.1	10.9		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.528	.842	.799	.000	.000	.000	.681	.375	.764	.779



PRECISION
D A T A
INDUSTRIES, LLC

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N/S: Ruggles Street
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City, State: Boston, MA
Client: HSH/ J. SanClemente

File Name : 123026 D redo
Site Code : 2011046
Start Date : 10/23/2012
Page No : 1

Groups Printed- Pedestrians

Start Time	Ruggles Street From North					MBTA Bus Exit From East					Ruggles Street From South					SW Corridor Path From West					Int. Total
	Right	Thru	Left	Peds CW	Peds CCW	Right	Thru	Left	Peds CW	Peds CCW	Right	Thru	Left	Peds CW	Peds CCW	Right	Thru	Left	Peds CW	Peds CCW	
07:00 AM	0	0	0	0	4	0	0	0	0	4	0	0	0	2	4	0	0	0	4	4	22
07:15 AM	0	0	0	4	3	0	0	0	1	0	0	0	0	1	6	0	0	0	4	4	23
07:30 AM	0	0	0	2	6	0	0	0	0	4	0	0	0	1	3	0	0	0	3	5	24
07:45 AM	0	0	0	2	6	0	0	0	2	18	0	0	0	8	3	0	0	0	4	10	53
Total	0	0	0	8	19	0	0	0	3	26	0	0	0	12	16	0	0	0	15	23	122
08:00 AM	0	0	0	1	9	0	0	0	2	5	0	0	0	7	2	0	0	0	5	8	39
08:15 AM	0	0	0	4	5	0	0	0	3	4	0	0	0	2	5	0	0	0	6	10	39
08:30 AM	0	0	0	2	5	0	0	0	1	3	0	0	0	8	10	0	0	0	6	8	43
08:45 AM	0	0	0	2	7	0	0	0	1	7	0	0	0	4	7	0	0	0	6	14	48
Total	0	0	0	9	26	0	0	0	7	19	0	0	0	21	24	0	0	0	23	40	169
Grand Total	0	0	0	17	45	0	0	0	10	45	0	0	0	33	40	0	0	0	38	63	291
Apprch %	0	0	0	27.4	72.6	0	0	0	18.2	81.8	0	0	0	45.2	54.8	0	0	0	37.6	62.4	
Total %	0	0	0	5.8	15.5	0	0	0	3.4	15.5	0	0	0	11.3	13.7	0	0	0	13.1	21.6	

Start Time	Ruggles Street From North						MBTA Bus Exit From East						Ruggles Street From South						SW Corridor Path From West						Int. Total
	Right	Thru	Left	Peds CW	Peds CCW	App. Total	Right	Thru	Left	Peds CW	Peds CCW	App. Total	Right	Thru	Left	Peds CW	Peds CCW	App. Total	Right	Thru	Left	Peds CW	Peds CCW	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																									
Peak Hour for Entire Intersection Begins at 07:45 AM																									
07:45 AM	0	0	0	2	6	8	0	0	0	2	18	20	0	0	0	8	3	11	0	0	0	4	10	14	53
08:00 AM	0	0	0	1	9	10	0	0	0	2	5	7	0	0	0	7	2	9	0	0	0	5	8	13	39
08:15 AM	0	0	0	4	5	9	0	0	0	3	4	7	0	0	0	2	5	7	0	0	0	6	10	16	39
08:30 AM	0	0	0	2	5	7	0	0	0	1	3	4	0	0	0	8	10	18	0	0	0	6	8	14	43
Total Volume	0	0	0	9	25	34	0	0	0	8	30	38	0	0	0	25	20	45	0	0	0	21	36	57	174
% App. Total	0	0	0	26.5	73.5	0	0	0	21.1	78.9	0	0	0	55.6	44.4	0	0	0	36.8	63.2					
PHF	.000	.000	.000	.563	.694	.850	.000	.000	.000	.667	.417	.475	.000	.000	.000	.781	.500	.625	.000	.000	.000	.875	.900	.891	.821



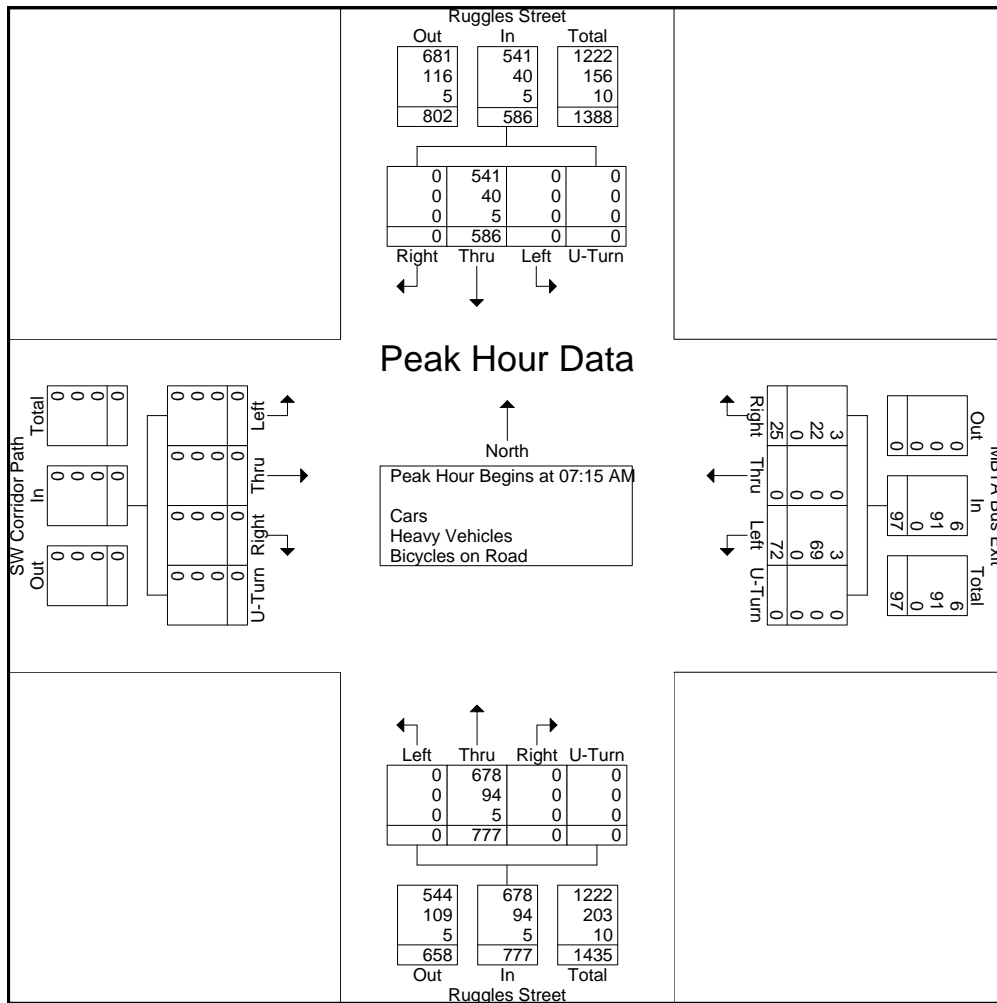
PRECISION
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Start Time	Ruggles Street From North					MBTA Bus Exit From East					Ruggles Street From South					SW Corridor Path From West					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
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	153	0	0	153	8	0	18	0	26	0	210	0	0	210	0	0	0	0	0	389
07:30 AM	0	139	0	0	139	3	0	15	0	18	0	216	0	0	216	0	0	0	0	0	373
07:45 AM	0	158	0	0	158	8	0	20	0	28	0	186	0	0	186	0	0	0	0	0	372
08:00 AM	0	136	0	0	136	6	0	19	0	25	0	165	0	0	165	0	0	0	0	0	326
Total Volume	0	586	0	0	586	25	0	72	0	97	0	777	0	0	777	0	0	0	0	0	1460
% App. Total	0	100	0	0		25.8	0	74.2	0		0	100	0	0		0	0	0	0		
PHF	.000	.927	.000	.000	.927	.781	.000	.900	.000	.866	.000	.899	.000	.000	.899	.000	.000	.000	.000	.000	.938
Cars	0	541	0	0	541	3	0	3	0	6	0	678	0	0	678	0	0	0	0	0	1225
% Cars	0	92.3	0	0	92.3	12.0	0	4.2	0	6.2	0	87.3	0	0	87.3	0	0	0	0	0	83.9
Heavy Vehicles	0	40	0	0	40	22	0	69	0	91	0	94	0	0	94	0	0	0	0	0	225
% Heavy Vehicles	0	6.8	0	0	6.8	88.0	0	95.8	0	93.8	0	12.1	0	0	12.1	0	0	0	0	0	15.4
Bicycles on Road	0	5	0	0	5	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	10
% Bicycles on Road	0	0.9	0	0	0.9	0	0	0	0	0	0	0.6	0	0	0.6	0	0	0	0	0	0.7





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Client: HSH/ J. SanClemente

File Name : 123026 DD redo
Site Code : 2011046
Start Date : 10/23/2012
Page No : 1

Groups Printed- Cars - Heavy Vehicles - Bicycles

Start Time	Ruggles Street From North				MBTA Bus Exit From East				Ruggles Street From South				SW Corridor Path From West				Int. Total
	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	
04:00 PM	0	173	0	0	8	0	14	0	1	160	0	0	0	0	0	0	356
04:15 PM	0	180	0	0	10	0	20	0	0	156	0	0	0	0	0	0	366
04:30 PM	0	188	0	0	5	0	15	0	0	137	0	0	0	0	0	0	345
04:45 PM	0	179	0	0	9	0	12	0	0	171	0	0	0	0	0	0	371
Total	0	720	0	0	32	0	61	0	1	624	0	0	0	0	0	0	1438
05:00 PM	0	170	0	0	4	0	23	0	0	156	0	0	0	0	0	0	353
05:15 PM	0	204	0	0	6	0	15	0	0	174	0	0	0	0	0	0	399
05:30 PM	0	184	0	0	5	0	17	0	0	170	0	0	0	0	0	0	376
05:45 PM	0	171	0	0	5	0	15	0	0	162	0	0	0	0	0	0	353
Total	0	729	0	0	20	0	70	0	0	662	0	0	0	0	0	0	1481
Grand Total	0	1449	0	0	52	0	131	0	1	1286	0	0	0	0	0	0	2919
Apprch %	0	100	0	0	28.4	0	71.6	0	0.1	99.9	0	0	0	0	0	0	
Total %	0	49.6	0	0	1.8	0	4.5	0	0	44.1	0	0	0	0	0	0	
Cars	0	1390	0	0	10	0	16	0	0	1143	0	0	0	0	0	0	2559
% Cars	0	95.9	0	0	19.2	0	12.2	0	0	88.9	0	0	0	0	0	0	87.7
Heavy Vehicles	0	42	0	0	42	0	114	0	1	131	0	0	0	0	0	0	330
% Heavy Vehicles	0	2.9	0	0	80.8	0	87	0	100	10.2	0	0	0	0	0	0	11.3
Bicycles	0	17	0	0	0	0	1	0	0	12	0	0	0	0	0	0	30
% Bicycles	0	1.2	0	0	0	0	0.8	0	0	0.9	0	0	0	0	0	0	1

Start Time	Ruggles Street From North					MBTA Bus Exit From East					Ruggles Street From South					SW Corridor Path From West					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	0	179	0	0	179	9	0	12	0	21	0	171	0	0	171	0	0	0	0	0	371
05:00 PM	0	170	0	0	170	4	0	23	0	27	0	156	0	0	156	0	0	0	0	0	353
05:15 PM	0	204	0	0	204	6	0	15	0	21	0	174	0	0	174	0	0	0	0	0	399
05:30 PM	0	184	0	0	184	5	0	17	0	22	0	170	0	0	170	0	0	0	0	0	376
Total Volume	0	737	0	0	737	24	0	67	0	91	0	671	0	0	671	0	0	0	0	0	1499
% App. Total	0	100	0	0		26.4	0	73.6	0		0	100	0	0		0	0	0	0	0	
PHF	.000	.903	.000	.000	.903	.667	.000	.728	.000	.843	.000	.964	.000	.000	.964	.000	.000	.000	.000	.000	.939
Cars	0	706	0	0	706	6	0	10	0	16	0	603	0	0	603	0	0	0	0	0	1325
% Cars	0	95.8	0	0	95.8	25.0	0	14.9	0	17.6	0	89.9	0	0	89.9	0	0	0	0	0	88.4
Heavy Vehicles	0	20	0	0	20	18	0	56	0	74	0	63	0	0	63	0	0	0	0	0	157
% Heavy Vehicles	0	2.7	0	0	2.7	75.0	0	83.6	0	81.3	0	9.4	0	0	9.4	0	0	0	0	0	10.5
Bicycles	0	11	0	0	11	0	0	1	0	1	0	5	0	0	5	0	0	0	0	0	17
% Bicycles	0	1.5	0	0	1.5	0	0	1.5	0	1.1	0	0.7	0	0	0.7	0	0	0	0	0	1.1



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File Name : 123026 DD redo
Site Code : 2011046
Start Date : 10/23/2012
Page No : 1

Groups Printed- Bicycles in Crosswalk

Start Time	Ruggles Street From North					MBTA Bus Exit From East					Ruggles Street From South					SW Corridor Path From West					Int. Total
	Right	Thru	Left	Bikes CW	Bikes CCW	Right	Thru	Left	Bikes CW	Bikes CCW	Right	Thru	Left	Bikes CW	Bikes CCW	Right	Thru	Left	Bikes CW	Bikes CCW	
04:00 PM	0	0	0	0	0	0	0	0	4	1	0	0	0	8	2	0	0	0	1	4	20
04:15 PM	0	0	0	0	0	0	0	0	4	4	0	0	0	17	9	0	0	0	2	5	41
04:30 PM	0	0	0	0	0	0	0	0	2	2	0	0	0	18	7	0	0	0	0	5	34
04:45 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	32	11	0	0	0	6	8	59
Total	0	0	0	0	0	0	0	0	10	9	0	0	0	75	29	0	0	0	9	22	154
05:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	36	10	0	0	0	3	7	57
05:15 PM	0	0	0	0	1	0	0	0	3	5	0	0	0	47	7	0	0	0	3	5	71
05:30 PM	0	0	0	0	3	0	0	0	1	2	0	0	0	45	10	0	0	0	3	7	71
05:45 PM	0	0	0	0	1	0	0	0	1	1	0	0	0	41	7	0	0	0	2	6	59
Total	0	0	0	0	5	0	0	0	5	9	0	0	0	169	34	0	0	0	11	25	258
Grand Total	0	0	0	0	5	0	0	0	15	18	0	0	0	244	63	0	0	0	20	47	412
Apprch %	0	0	0	0	100	0	0	0	45.5	54.5	0	0	0	79.5	20.5	0	0	0	29.9	70.1	
Total %	0	0	0	0	1.2	0	0	0	3.6	4.4	0	0	0	59.2	15.3	0	0	0	4.9	11.4	

Start Time	Ruggles Street From North						MBTA Bus Exit From East						Ruggles Street From South						SW Corridor Path From West						Int. Total
	Right	Thru	Left	Bikes CW	Bikes CCW	App. Total	Right	Thru	Left	Bikes CW	Bikes CCW	App. Total	Right	Thru	Left	Bikes CW	Bikes CCW	App. Total	Right	Thru	Left	Bikes CW	Bikes CCW	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																									
Peak Hour for Entire Intersection Begins at 04:45 PM																									
04:45 PM	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	32	11	43	0	0	0	6	8	14	59
05:00 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	36	10	46	0	0	0	3	7	10	57
05:15 PM	0	0	0	0	1	1	0	0	0	3	5	8	0	0	0	47	7	54	0	0	0	3	5	8	71
05:30 PM	0	0	0	0	3	3	0	0	0	1	2	3	0	0	0	45	10	55	0	0	0	3	7	10	71
Total Volume	0	0	0	0	4	4	0	0	0	4	10	14	0	0	0	160	38	198	0	0	0	15	27	42	258
% App. Total	0	0	0	0	100	0	0	0	28.6	71.4	0	0	0	80.8	19.2	0	0	0	35.7	64.3					
PHF	.000	.000	.000	.000	.333	.333	.000	.000	.000	.333	.500	.438	.000	.000	.000	.851	.864	.900	.000	.000	.000	.625	.844	.750	.908



PRECISION
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INDUSTRIES, LLC

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N/S: Ruggles Street
E/W: MBTA Bus Exit/ SW Corridor Path
City, State: Boston, MA
Client: HSH/ J. SanClemente

File Name : 123026 DD redo
Site Code : 2011046
Start Date : 10/23/2012
Page No : 1

Groups Printed- Pedestrians

Start Time	Ruggles Street From North					MBTA Bus Exit From East					Ruggles Street From South					SW Corridor Path From West					Int. Total
	Right	Thru	Left	Peds CW	Peds CCW	Right	Thru	Left	Peds CW	Peds CCW	Right	Thru	Left	Peds CW	Peds CCW	Right	Thru	Left	Peds CW	Peds CCW	
04:00 PM	0	0	0	19	6	0	0	0	3	6	0	0	0	2	12	0	0	0	19	9	76
04:15 PM	0	0	0	10	5	0	0	0	7	11	0	0	0	8	2	0	0	0	11	4	58
04:30 PM	0	0	0	10	2	0	0	0	5	10	0	0	0	6	5	0	0	0	18	2	58
04:45 PM	0	0	0	7	3	0	0	0	7	7	0	0	0	4	7	0	0	0	6	9	50
Total	0	0	0	46	16	0	0	0	22	34	0	0	0	20	26	0	0	0	54	24	242
05:00 PM	0	0	0	13	4	0	0	0	19	19	0	0	0	7	10	0	0	0	9	7	88
05:15 PM	0	0	0	7	3	0	0	0	6	18	0	0	0	8	4	0	0	0	7	4	57
05:30 PM	0	0	0	2	1	0	0	0	22	9	0	0	0	5	5	0	0	0	2	10	56
05:45 PM	0	0	0	2	2	0	0	0	10	5	0	0	0	6	11	0	0	0	6	3	45
Total	0	0	0	24	10	0	0	0	57	51	0	0	0	26	30	0	0	0	24	24	246
Grand Total	0	0	0	70	26	0	0	0	79	85	0	0	0	46	56	0	0	0	78	48	488
Apprch %	0	0	0	72.9	27.1	0	0	0	48.2	51.8	0	0	0	45.1	54.9	0	0	0	61.9	38.1	
Total %	0	0	0	14.3	5.3	0	0	0	16.2	17.4	0	0	0	9.4	11.5	0	0	0	16	9.8	

Start Time	Ruggles Street From North						MBTA Bus Exit From East						Ruggles Street From South						SW Corridor Path From West						Int. Total
	Right	Thru	Left	Peds CW	Peds CCW	App. Total	Right	Thru	Left	Peds CW	Peds CCW	App. Total	Right	Thru	Left	Peds CW	Peds CCW	App. Total	Right	Thru	Left	Peds CW	Peds CCW	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																									
Peak Hour for Entire Intersection Begins at 04:15 PM																									
04:15 PM	0	0	0	10	5	15	0	0	0	7	11	18	0	0	0	8	2	10	0	0	0	11	4	15	58
04:30 PM	0	0	0	10	2	12	0	0	0	5	10	15	0	0	0	6	5	11	0	0	0	18	2	20	58
04:45 PM	0	0	0	7	3	10	0	0	0	7	7	14	0	0	0	4	7	11	0	0	0	6	9	15	50
05:00 PM	0	0	0	13	4	17	0	0	0	19	19	38	0	0	0	7	10	17	0	0	0	9	7	16	88
Total Volume	0	0	0	40	14	54	0	0	0	38	47	85	0	0	0	25	24	49	0	0	0	44	22	66	254
% App. Total	0	0	0	74.1	25.9	0	0	0	44.7	55.3	0	0	0	51	49	0	0	0	66.7	33.3					
PHF	.000	.000	.000	.769	.700	.794	.000	.000	.000	.500	.618	.559	.000	.000	.000	.781	.600	.721	.000	.000	.000	.611	.611	.825	.722



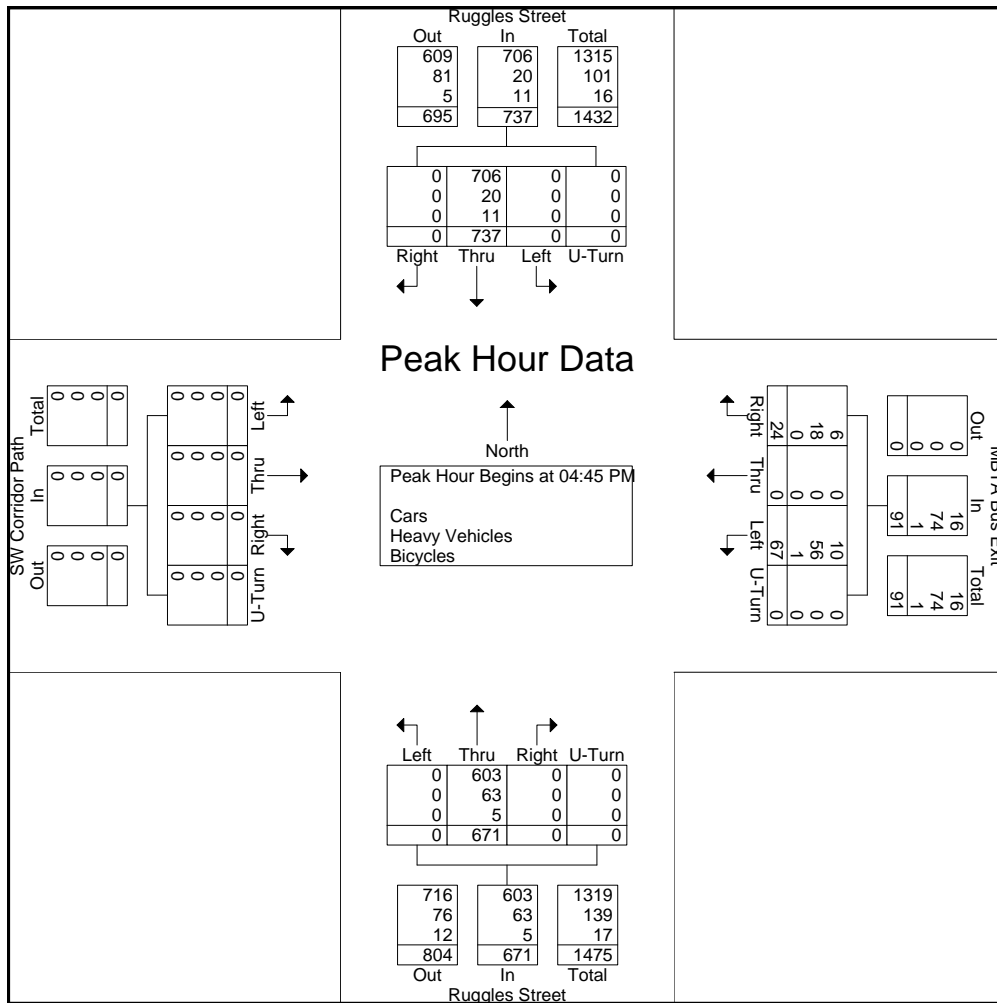
PRECISION
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N/S: Ruggles Street
E/W: MBTA Bus Exit/ SW Corridor Path
City, State: Boston, MA
Client: HSH/ J. SanClemente

File Name : 123026 DD redo
Site Code : 2011046
Start Date : 10/23/2012
Page No : 1

Start Time	Ruggles Street From North					MBTA Bus Exit From East					Ruggles Street From South					SW Corridor Path From West					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	0	179	0	0	179	9	0	12	0	21	0	171	0	0	171	0	0	0	0	0	371
05:00 PM	0	170	0	0	170	4	0	23	0	27	0	156	0	0	156	0	0	0	0	0	353
05:15 PM	0	204	0	0	204	6	0	15	0	21	0	174	0	0	174	0	0	0	0	0	399
05:30 PM	0	184	0	0	184	5	0	17	0	22	0	170	0	0	170	0	0	0	0	0	376
Total Volume	0	737	0	0	737	24	0	67	0	91	0	671	0	0	671	0	0	0	0	0	1499
% App. Total	0	100	0	0		26.4	0	73.6	0		0	100	0	0		0	0	0	0		
PHF	.000	.903	.000	.000	.903	.667	.000	.728	.000	.843	.000	.964	.000	.000	.964	.000	.000	.000	.000	.000	.939
Cars	0	706	0	0	706	6	0	10	0	16	0	603	0	0	603	0	0	0	0	0	1325
% Cars	0	95.8	0	0	95.8	25.0	0	14.9	0	17.6	0	89.9	0	0	89.9	0	0	0	0	0	88.4
Heavy Vehicles	0	20	0	0	20	18	0	56	0	74	0	63	0	0	63	0	0	0	0	0	157
% Heavy Vehicles	0	2.7	0	0	2.7	75.0	0	83.6	0	81.3	0	9.4	0	0	9.4	0	0	0	0	0	10.5
Bicycles	0	11	0	0	11	0	0	1	0	1	0	5	0	0	5	0	0	0	0	0	17
% Bicycles	0	1.5	0	0	1.5	0	0	1.5	0	1.1	0	0.7	0	0	0.7	0	0	0	0	0	1.1





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N/S: Ruggles Street/ Whittier Street
E/W: Tremont Street
City, State: Boston, MA
Client: HSH/ J. SanClemente

File Name : 123026 E
Site Code : 2011046_
Start Date : 9/25/2012
Page No : 1

Groups Printed- Cars

Start Time	Ruggles Street From North				Tremont Street From East				Whittier Street From South				Tremont Street From West				Int. Total
	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	
07:00 AM	8	0	92	0	120	147	0	1	4	8	6	0	0	247	37	0	670
07:15 AM	27	0	111	0	126	157	0	0	3	8	9	0	0	298	33	0	772
07:30 AM	23	0	145	0	142	186	0	4	4	11	5	0	0	293	30	0	843
07:45 AM	14	0	120	0	111	161	0	0	1	8	13	0	0	323	36	0	787
Total	72	0	468	0	499	651	0	5	12	35	33	0	0	1161	136	0	3072
08:00 AM	11	0	103	0	99	183	0	0	9	2	4	0	0	338	47	0	796
08:15 AM	16	0	70	0	97	145	0	3	5	3	4	0	0	325	23	0	691
08:30 AM	13	0	87	0	93	158	0	3	4	7	7	0	0	319	48	1	740
08:45 AM	11	0	87	0	115	166	0	0	3	3	11	0	0	298	48	0	742
Total	51	0	347	0	404	652	0	6	21	15	26	0	0	1280	166	1	2969
Grand Total	123	0	815	0	903	1303	0	11	33	50	59	0	0	2441	302	1	6041
Apprch %	13.1	0	86.9	0	40.7	58.8	0	0.5	23.2	35.2	41.5	0	0	89	11	0	
Total %	2	0	13.5	0	14.9	21.6	0	0.2	0.5	0.8	1	0	0	40.4	5	0	

Start Time	Ruggles Street From North					Tremont Street From East					Whittier Street From South					Tremont Street From West					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
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	27	0	111	0	138	126	157	0	0	283	3	8	9	0	20	0	298	33	0	331	772
07:30 AM	23	0	145	0	168	142	186	0	4	332	4	11	5	0	20	0	293	30	0	323	843
07:45 AM	14	0	120	0	134	111	161	0	0	272	1	8	13	0	22	0	323	36	0	359	787
08:00 AM	11	0	103	0	114	99	183	0	0	282	9					0	338	47	0	385	
Total Volume	75	0	479	0	554	478	687	0	4	1169	17	29	31	0	77	0	1252	146	0	1398	3198
% App. Total																					
PHF	.694	.000	.826	.000	.824	.842	.923	.000	.250	.880	.472	.659	.596	.000	.875	.000	.926	.777	.000	.908	.948



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N/S: Ruggles Street/ Whittier Street
E/W: Tremont Street
City, State: Boston, MA
Client: HSH/ J. SanClemente

File Name : 123026 E
Site Code : 2011046_
Start Date : 9/25/2012
Page No : 1

Groups Printed- Heavy Vehicles

Start Time	Ruggles Street From North				Tremont Street From East				Whittier Street From South				Tremont Street From West				Int. Total
	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	
07:00 AM	11	0	16	0	14	18	0	0	0	1	0	0	0	20	12	0	92
07:15 AM	16	0	10	0	8	15	0	0	0	2	0	0	0	12	16	0	79
07:30 AM	12	0	12	0	11	15	0	0	0	1	2	0	0	16	9	0	78
07:45 AM	12	0	15	0	8	16	0	0	0	0	1	0	0	11	15	0	78
Total	51	0	53	0	41	64	0	0	0	4	3	0	0	59	52	0	327
08:00 AM	10	0	10	0	7	13	0	0	2	0	0	0	0	13	13	0	68
08:15 AM	13	0	17	0	16	13	0	0	0	0	0	0	0	16	10	0	85
08:30 AM	14	0	13	0	6	12	0	0	1	0	1	0	0	20	16	0	83
08:45 AM	12	0	18	0	6	14	0	1	0	1	1	0	0	12	12	0	77
Total	49	0	58	0	35	52	0	1	3	1	2	0	0	61	51	0	313
Grand Total	100	0	111	0	76	116	0	1	3	5	5	0	0	120	103	0	640
Apprch %	47.4	0	52.6	0	39.4	60.1	0	0.5	23.1	38.5	38.5	0	0	53.8	46.2	0	
Total %	15.6	0	17.3	0	11.9	18.1	0	0.2	0.5	0.8	0.8	0	0	18.8	16.1	0	

Start Time	Ruggles Street From North					Tremont Street From East					Whittier Street From South					Tremont Street From West					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
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	11	0	16	0	27	14	18	0	0	32	0	1	0	0	1	0	20	12	0	32	92
07:15 AM	16	0	10	0	26	8	15	0	0	23	0	2	0	0	2	0	12	16	0	28	79
07:30 AM	12	0	12	0	24	11	15	0	0	26	0	1	2	0	3	0	16	9	0	25	78
07:45 AM	12	0	15	0	27	8	16	0	0	24	0	0	1	0	1	0	11	15	0	26	78
Total Volume	51	0	53	0	104	41	64	0	0	105	0	4	3	0	7	0	59	52	0	111	327
% App. Total	49	0	51	0		39	61	0	0		0	57.1	42.9	0		0	53.2	46.8	0		
PHF	.797	.000	.828	.000	.963	.732	.889	.000	.000	.820	.000	.500	.375	.000	.583	.000	.738	.813	.000	.867	.889



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File Name : 123026 E
Site Code : 2011046_
Start Date : 9/25/2012
Page No : 1

N/S: Ruggles Street/ Whittier Street
E/W: Tremont Street
City, State: Boston, MA
Client: HSH/ J. SanClemente

Groups Printed- Peds and Bikes

Start Time	Ruggles Street From North				Tremont Street From East				Whittier Street From South				Tremont Street From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
07:00 AM	0	0	0	2	0	1	0	1	0	0	0	10	0	1	0	3	18
07:15 AM	0	0	1	0	1	0	0	4	0	0	0	8	0	2	0	0	16
07:30 AM	0	0	1	3	1	0	0	1	0	0	0	3	0	2	1	1	13
07:45 AM	0	0	2	8	0	0	0	6	0	0	0	10	0	3	0	3	32
Total	0	0	4	13	2	1	0	12	0	0	0	31	0	8	1	7	79
08:00 AM	0	0	2	0	2	0	0	2	0	0	0	3	0	0	0	0	9
08:15 AM	0	0	0	1	0	0	0	6	0	0	0	11	0	3	1	0	22
08:30 AM	0	0	4	0	0	1	0	0	0	1	0	2	0	3	1	0	12
08:45 AM	0	0	3	0	0	0	0	3	0	1	0	11	0	7	0	0	25
Total	0	0	9	1	2	1	0	11	0	2	0	27	0	13	2	0	68
Grand Total	0	0	13	14	4	2	0	23	0	2	0	58	0	21	3	7	147
Apprch %	0	0	48.1	51.9	13.8	6.9	0	79.3	0	3.3	0	96.7	0	67.7	9.7	22.6	
Total %	0	0	8.8	9.5	2.7	1.4	0	15.6	0	1.4	0	39.5	0	14.3	2	4.8	

Start Time	Ruggles Street From North					Tremont Street From East					Whittier Street From South					Tremont Street From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. 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	2	2	0	1	0	1	2	0	0	0	10	10	0	1	0	3	4	18
07:15 AM	0	0	1	0	1	1	0	0	4	5	0	0	0	8	8	0	2	0	0	2	16
07:30 AM	0	0	1	3	4	1	0	0	1	2	0	0	0	3	3	0	2	1	1	4	13
07:45 AM	0	0	2	8	10	0	0	0	6	6						3				6	32
Total Volume	0	0	4	13	17	2	1	0	12	15	0	0	0	31	31	0	8	1	7	16	79
% App. Total	0	0	23.5	76.5	13.3	6.7	0	80	0	0	0	100	0	50	6.2	43.8					
PHF	.000	.000	.500	.406	.425	.500	.250	.000	.500	.625	.000	.000	.000	.775	.775	.000	.667	.250	.583	.667	.617



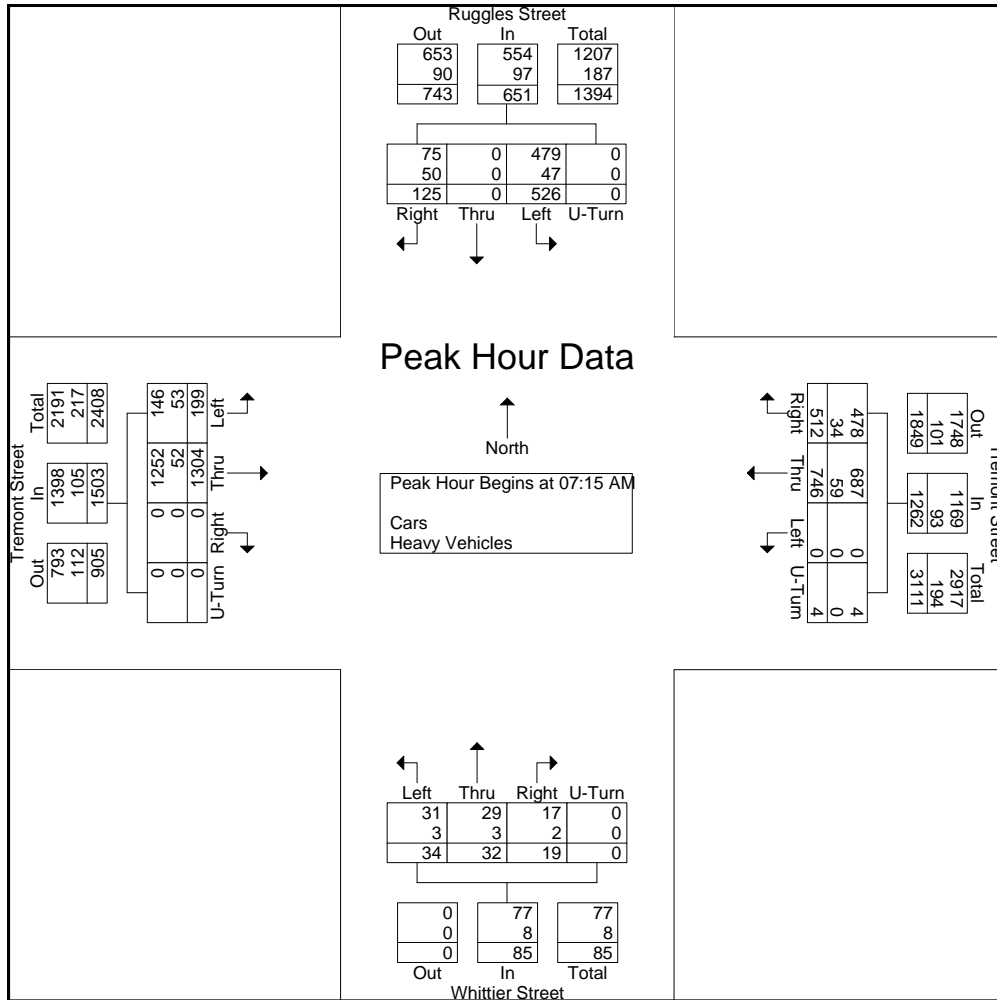
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Start Date : 9/25/2012
Page No : 1

N/S: Ruggles Street/ Whittier Street
E/W: Tremont Street
City, State: Boston, MA
Client: HSH/ J. SanClemente

Start Time	Ruggles Street From North					Tremont Street From East					Whittier Street From South					Tremont Street From West					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
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	43	0	121	0	164	134	172	0	0	306	3	10	9	0	22	0	310	49	0	359	851
07:30 AM	35	0	157	0	192	153	201	0	4	358	4	12	7	0	23	0	309	39	0	348	921
07:45 AM	26	0	135	0	161	119	177	0	0	296	1	8	14	0	23	0	334	51	0	385	865
08:00 AM	21	0	113	0	134	106	196	0	0	302	11	2	4	0	17	0	351	60	0	411	864
Total Volume	125	0	526	0	651	512	746	0	4	1262	19	32	34	0	85	0	1304	199	0	1503	3501
% App. Total	.727	.000	.838	.000	.848	.837	.928	.000	.250	.881	.432	.667	.607	.000	.924	.000	.929	.829	.000	.914	.950
PHF																					
Cars	75	0	479	0	554	478	687	0	4	1169	17	29	31	0	77	0	1252	146	0	1398	3198
% Cars	60.0	0	91.1	0	85.1	93.4	92.1	0	100	92.6	89.5	90.6	91.2	0	90.6	0	96.0	73.4	0	93.0	91.3
Heavy Vehicles																					
% Heavy Vehicles	40.0	0	8.9	0	14.9	6.6	7.9	0	0	7.4	10.5	9.4	8.8	0	9.4	0	4.0	26.6	0	7.0	8.7





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File Name : 123026 EE
Site Code : 2011046_
Start Date : 9/25/2012
Page No : 1

N/S: Ruggles Street/ Whittier Street
E/W: Tremont Street
City, State: Boston, MA
Client: HSH/ J. SanClemente

Groups Printed- Cars - Heavy Vehicles

Start Time	Ruggles Street From North				Tremont Street From East				Whittier Street From South				Tremont Street From West				Int. Total
	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	
04:00 PM	61	0	131	0	141	206	0	2	9	3	7	0	0	307	15	0	882
04:15 PM	23	0	156	0	114	195	0	0	7	1	14	0	0	282	39	0	831
04:30 PM	41	0	129	0	122	168	0	0	13	4	6	0	0	280	42	0	805
04:45 PM	34	0	143	0	147	181	0	1	6	5	10	0	0	264	30	0	821
Total	159	0	559	0	524	750	0	3	35	13	37	0	0	1133	126	0	3339
05:00 PM	33	0	126	0	99	179	0	2	9	3	5	0	0	266	58	0	780
05:15 PM	64	0	125	0	137	222	0	3	9	2	18	0	0	301	39	0	920
05:30 PM	27	0	142	0	158	200	0	1	12	9	24	0	0	262	34	0	869
05:45 PM	47	0	110	0	139	222	0	0	6	5	15	0	0	275	23	0	842
Total	171	0	503	0	533	823	0	6	36	19	62	0	0	1104	154	0	3411
Grand Total	330	0	1062	0	1057	1573	0	9	71	32	99	0	0	2237	280	0	6750
Apprch %	23.7	0	76.3	0	40.1	59.6	0	0.3	35.1	15.8	49	0	0	88.9	11.1	0	
Total %	4.9	0	15.7	0	15.7	23.3	0	0.1	1.1	0.5	1.5	0	0	33.1	4.1	0	
Cars	330	0	978	0	981	1540	0	9	67	32	98	0	0	2132	280	0	6447
% Cars	100	0	92.1	0	92.8	97.9	0	100	94.4	100	99	0	0	95.3	100	0	95.5
Heavy Vehicles	0	0	84	0	76	33	0	0	4	0	1	0	0	105	0	0	303
% Heavy Vehicles	0	0	7.9	0	7.2	2.1	0	0	5.6	0	1	0	0	4.7	0	0	4.5

Start Time	Ruggles Street From North					Tremont Street From East					Whittier Street From South					Tremont Street From West					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	33	0	126	0	159	99	179	0	2	280	9	3	5	0	17	0	266	58	0	324	780
05:15 PM	64	0	125	0	189	137	222	0	3	362	9	2	18	0	29	0	301	39	0	340	920
05:30 PM	27	0	142	0	169	158	200	0	1	359	12	9	24	0	45	0	262	34	0	296	869
05:45 PM	47	0	110	0	157	139	222	0	0	361	6	5	15	0	26	0	275	23	0	298	842
Total Volume	171	0	503	0	674	533	823	0	6	1362	36	19	62	0	117	0	1104	154	0	1258	3411
% App. Total																					
PHF	.668	.000	.886	.000	.892	.843	.927	.000	.500	.941	.750	.528	.646	.000	.650	.000	.917	.664	.000	.925	.927
Cars	171	0	468	0	639	502	812	0	6	1320	35	19	61	0	115	0	1062	154	0	1216	3290
% Cars	100	0	93.0	0	94.8	94.2	98.7	0	100	96.9	97.2	100	98.4	0	98.3	0	96.2	100	0	96.7	96.5
Heavy Vehicles	0	0	7.0	0	5.2	5.8	1.3	0	0	3.1	2.8	0	1.6	0	1.7	0	3.8	0	0	3.3	3.5
% Heavy Vehicles	0	0	7.0	0	5.2	5.8	1.3	0	0	3.1	2.8	0	1.6	0	1.7	0	3.8	0	0	3.3	3.5



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File Name : 123026 EE
Site Code : 2011046_
Start Date : 9/25/2012
Page No : 1

N/S: Ruggles Street/ Whittier Street
E/W: Tremont Street
City, State: Boston, MA
Client: HSH/ J. SanClemente

Groups Printed- Cars

Start Time	Ruggles Street From North				Tremont Street From East				Whittier Street From South				Tremont Street From West				Int. Total
	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	
04:00 PM	61	0	122	0	125	201	0	2	8	3	7	0	0	288	15	0	832
04:15 PM	23	0	141	0	101	188	0	0	7	1	14	0	0	270	39	0	784
04:30 PM	41	0	119	0	111	163	0	0	11	4	6	0	0	266	42	0	763
04:45 PM	34	0	128	0	142	176	0	1	6	5	10	0	0	246	30	0	778
Total	159	0	510	0	479	728	0	3	32	13	37	0	0	1070	126	0	3157
05:00 PM	33	0	115	0	90	173	0	2	9	3	5	0	0	257	58	0	745
05:15 PM	64	0	119	0	129	218	0	3	9	2	18	0	0	291	39	0	892
05:30 PM	27	0	132	0	152	199	0	1	11	9	23	0	0	248	34	0	836
05:45 PM	47	0	102	0	131	222	0	0	6	5	15	0	0	266	23	0	817
Total	171	0	468	0	502	812	0	6	35	19	61	0	0	1062	154	0	3290
Grand Total	330	0	978	0	981	1540	0	9	67	32	98	0	0	2132	280	0	6447
Apprch %	25.2	0	74.8	0	38.8	60.9	0	0.4	34	16.2	49.7	0	0	88.4	11.6	0	
Total %	5.1	0	15.2	0	15.2	23.9	0	0.1	1	0.5	1.5	0	0	33.1	4.3	0	

Start Time	Ruggles Street From North					Tremont Street From East					Whittier Street From South					Tremont Street From West					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	33	0	115	0	148	90	173	0	2	265	9	3	5	0	17	0	257	58	0	315	745
05:15 PM	64	0	119	0	183	129	218	0	3	350	9	2	18	0	29	0	291	39	0	330	892
05:30 PM	27	0	132	0	159	152	199	0	1	352	11	9	23	0	43	0	248	34	0	282	836
05:45 PM	47	0	102	0	149	131	222	0	0	353	6	5	15	0	0	0	266	23	0	0	0
Total Volume	171	0	468	0	639	502	812	0	6	1320	35	19	61	0	115	0	1062	154	0	1216	3290
% App. Total																					
PHF	.668	.000	.886	.000	.873	.826	.914	.000	.500	.935	.795	.528	.663	.000	.669	.000	.912	.664	.000	.921	.922



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N/S: Ruggles Street/ Whittier Street
E/W: Tremont Street
City, State: Boston, MA
Client: HSH/ J. SanClemente

Groups Printed- Heavy Vehicles

Start Time	Ruggles Street From North				Tremont Street From East				Whittier Street From South				Tremont Street From West				Int. Total
	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	
04:00 PM	0	0	9	0	16	5	0	0	1	0	0	0	0	19	0	0	50
04:15 PM	0	0	15	0	13	7	0	0	0	0	0	0	0	12	0	0	47
04:30 PM	0	0	10	0	11	5	0	0	2	0	0	0	0	14	0	0	42
04:45 PM	0	0	15	0	5	5	0	0	0	0	0	0	0	18	0	0	43
Total	0	0	49	0	45	22	0	0	3	0	0	0	0	63	0	0	182
05:00 PM	0	0	11	0	9	6	0	0	0	0	0	0	0	9	0	0	35
05:15 PM	0	0	6	0	8	4	0	0	0	0	0	0	0	10	0	0	28
05:30 PM	0	0	10	0	6	1	0	0	1	0	1	0	0	14	0	0	33
05:45 PM	0	0	8	0	8	0	0	0	0	0	0	0	0	9	0	0	25
Total	0	0	35	0	31	11	0	0	1	0	1	0	0	42	0	0	121
Grand Total	0	0	84	0	76	33	0	0	4	0	1	0	0	105	0	0	303
Apprch %	0	0	100	0	69.7	30.3	0	0	80	0	20	0	0	100	0	0	
Total %	0	0	27.7	0	25.1	10.9	0	0	1.3	0	0.3	0	0	34.7	0	0	

Start Time	Ruggles Street From North					Tremont Street From East					Whittier Street From South					Tremont Street From West					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	0	0	9	0	9	16	5	0	0	21	1	0	0	0	1	0	19	0	0	19	50
04:15 PM	0	0	15	0	15	13	7	0	0	20	0	0	0	0	0	0	12	0	0	12	47
04:30 PM	0	0	10	0	10	11	5	0	0	16	2	0	0	0	2	0	14	0	0	14	42
04:45 PM	0	0	15	0	15	5	5	0	0	10	0	0	0	0	0	0	18	0	0	18	43
Total Volume	0	0	49	0	49	45	22	0	0	67	3	0	0	0	3	0	63	0	0	63	182
% App. Total	0	0	100	0		67.2	32.8	0	0		100	0	0	0		0	100	0	0		
PHF	.000	.000	.817	.000	.817	.703	.786	.000	.000	.798	.375	.000	.000	.000	.375	.000	.829	.000	.000	.829	.910



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Page No : 1

N/S: Ruggles Street/ Whittier Street
E/W: Tremont Street
City, State: Boston, MA
Client: HSH/ J. SanClemente

Groups Printed- Peds and Bikes

Start Time	Ruggles Street From North				Tremont Street From East				Whittier Street From South				Tremont Street From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
04:00 PM	0	0	0	4	0	2	0	8	0	0	1	21	0	2	0	2	40
04:15 PM	1	0	0	0	0	0	0	1	0	0	0	12	0	1	0	4	19
04:30 PM	1	0	1	0	0	0	0	2	0	0	1	16	0	2	0	6	29
04:45 PM	1	0	3	0	0	0	0	4	0	0	0	16	0	0	0	11	35
Total	3	0	4	4	0	2	0	15	0	0	2	65	0	5	0	23	123
05:00 PM	1	0	2	0	0	1	0	8	2	0	0	11	0	2	0	4	31
05:15 PM	0	0	3	1	0	3	0	5	0	1	0	14	0	2	0	9	38
05:30 PM	1	0	3	0	0	0	0	15	0	0	0	19	0	2	0	3	43
05:45 PM	0	0	0	0	1	5	0	37	0	0	0	14	0	2	0	4	63
Total	2	0	8	1	1	9	0	65	2	1	0	58	0	8	0	20	175
Grand Total	5	0	12	5	1	11	0	80	2	1	2	123	0	13	0	43	298
Apprch %	22.7	0	54.5	22.7	1.1	12	0	87	1.6	0.8	1.6	96.1	0	23.2	0	76.8	
Total %	1.7	0	4	1.7	0.3	3.7	0	26.8	0.7	0.3	0.7	41.3	0	4.4	0	14.4	

Start Time	Ruggles Street From North					Tremont Street From East					Whittier Street From South					Tremont Street From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	1	0	2	0	3	0	1	0	8	9	2	0	0	11	13	0	2	0	4	6	31
05:15 PM	0	0	3	1	4	0	3	0	5	8	0	1	0	14	15	0	2	0	9	11	38
05:30 PM	1	0	3	0	4	0	0	0	15	15	0	0	0	19	19	0	2	0	3	5	43
05:45 PM	0	0	0	0	0	1	5	0	37	43	0	0	0	14	14	0	2	0	0	2	63
Total Volume	2	0	8	1	11	1	9	0	65	75	2	1	0	58	61	0	8	0	20	28	175
% App. Total	18.2	0	72.7	9.1		1.3	12	0	86.7		3.3	1.6	0	95.1		0	28.6	0	71.4		
PHF	.500	.000	.667	.250	.688	.250	.450	.000	.439	.436	.250	.250	.000	.763	.803	.000	1.00	.000	.556	.636	.694



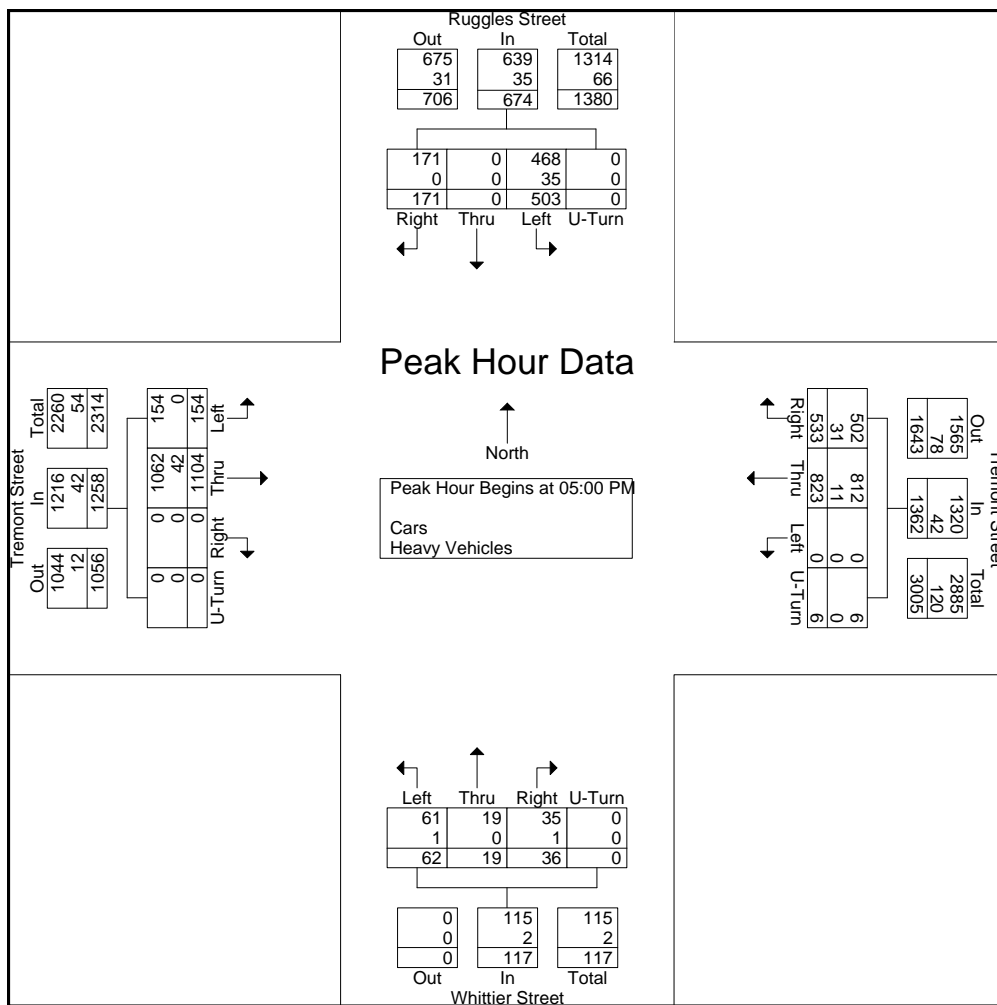
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N/S: Ruggles Street/ Whittier Street
E/W: Tremont Street
City, State: Boston, MA
Client: HSH/ J. SanClemente

Start Time	Ruggles Street From North					Tremont Street From East					Whittier Street From South					Tremont Street From West					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	33	0	126	0	159	99	179	0	2	280	9	3	5	0	17	0	266	58	0	324	780
05:15 PM	64				189	137	222		3	362							301		340	920	
05:30 PM	27	0	142	0	169	158	200	0	1	359	12	9	24	0	45	0	262	34	0	296	869
05:45 PM	47	0	110	0	157	139	222	0	0	361	6	5	15	0	26	0	275	23	0	298	842
Total Volume	171	0	503	0	674	533	823	0	6	1362	36	19	62	0	117	0	1104	154	0	1258	3411
% App. Total	.668	.000	.886	.000	.892	.843	.927	.000	.500	.941	.750	.528	.646	.000	.650	.000	.917	.664	.000	.925	.927
PHF																					
Cars	171	0	468	0	639	502	812	0	6	1320	35	19	61	0	115	0	1062	154	0	1216	3290
% Cars	100	0	93.0	0	94.8	94.2	98.7	0	100	96.9	97.2	100	98.4	0	98.3	0	96.2	100	0	96.7	96.5
Heavy Vehicles																					
% Heavy Vehicles	0	0	7.0	0	5.2	5.8	1.3	0	0	3.1	2.8	0	1.6	0	1.7	0	3.8	0	0	3.3	3.5



Accurate Counts

978-664-2565

File Name : 01410002

Site Code : 01410002

Start Date : 9/21/2011

Page No : 1

N/S Street : Tremont Street
 E/W Street: Melnea Cass Boulevard
 City/State : Boston, MA
 Weather : Clear

Groups Printed- Cars - Trucks

Start Time	Tremont St From North				Melnea Cass Blvd From East				Tremont St From South				Melnea Cass Blvd From West				Int. Total
	Left	Thru	Right	U-TR	Left	Thru	Right	U-TR	Left	Thru	Right	U-TR	Left	Thru	Right	U-TR	
07:00	8	84	6	0	174	62	8	0	62	86	209	0	1	14	36	1	751
07:15	3	70	1	0	212	47	3	0	61	98	221	0	1	20	39	0	776
07:30	5	69	2	0	206	60	18	0	88	93	229	1	3	12	40	0	826
07:45	9	79	1	0	181	50	9	0	95	150	221	0	1	11	42	0	849
Total	25	302	10	0	773	219	38	0	306	427	880	1	6	57	157	1	3202
08:00	14	76	2	0	203	43	15	0	89	139	274	0	0	12	52	0	919
08:15	11	74	4	0	180	64	7	0	89	153	192	0	0	11	33	0	818
08:30	6	98	2	0	184	86	11	0	81	145	182	0	3	21	32	0	851
08:45	6	86	1	0	195	44	8	0	82	129	206	0	1	13	19	0	790
Total	37	334	9	0	762	237	41	0	341	566	854	0	4	57	136	0	3378
09:00	3	87	1	0	144	52	8	0	71	139	210	0	0	14	23	0	752
09:15	8	77	3	0	165	33	10	0	60	128	207	0	0	7	38	0	736
09:30	6	70	4	0	218	29	9	0	54	88	197	0	1	8	34	0	718
09:45	10	64	6	0	179	40	15	0	60	99	176	0	2	18	41	0	710
Total	27	298	14	0	706	154	42	0	245	454	790	0	3	47	136	0	2916
10:00	11	65	1	0	165	39	11	0	58	110	195	0	0	8	34	0	697
10:15	3	65	1	0	189	33	8	0	39	94	188	0	1	6	31	0	658
10:30	3	49	4	0	178	17	10	0	27	87	190	0	0	12	32	0	609
10:45	3	62	0	0	192	26	13	0	20	93	176	0	1	5	17	0	608
Total	20	241	6	0	724	115	42	0	144	384	749	0	2	31	114	0	2572
11:00	10	49	6	0	198	31	13	0	38	75	194	0	1	7	29	0	651
11:15	8	72	3	0	168	33	6	0	34	92	167	0	0	14	31	0	628
11:30	9	71	1	0	133	35	11	0	35	89	193	0	1	10	34	1	623
11:45	17	64	4	0	182	30	12	0	32	92	223	0	2	15	43	1	717
Total	44	256	14	0	681	129	42	0	139	348	777	0	4	46	137	2	2619
12:00	7	76	1	0	165	25	16	0	21	102	196	0	1	17	37	0	664
12:15	13	78	1	0	177	15	7	0	39	88	204	0	1	9	43	0	675
12:30	10	81	2	0	196	21	12	0	46	106	226	0	0	10	46	0	756
12:45	16	131	4	0	181	60	14	0	44	142	194	0	0	26	38	0	850
Total	46	366	8	0	719	121	49	0	150	438	820	0	2	62	164	0	2945
13:00	9	85	1	0	180	21	8	0	39	91	194	0	2	20	38	0	688
13:15	9	53	9	0	180	23	7	0	46	79	210	0	0	15	39	0	670
13:30	5	52	3	0	185	25	6	1	32	69	192	0	3	15	42	0	630
13:45	15	63	5	0	179	20	10	0	30	112	233	0	1	22	39	0	729
Total	38	253	18	0	724	89	31	1	147	351	829	0	6	72	158	0	2717
14:00	9	66	4	0	184	25	8	0	43	91	262	0	1	15	36	0	744
14:15	10	76	2	0	182	22	12	0	49	91	257	0	2	24	28	0	755
14:30	17	63	1	0	182	27	22	0	44	91	260	1	1	17	54	0	780
14:45	14	78	0	0	167	14	11	0	41	126	223	0	1	23	54	0	752
Total	50	283	7	0	715	88	53	0	177	399	1002	1	5	79	172	0	3031
15:00	9	66	2	0	185	21	12	0	42	103	214	0	2	25	52	0	733
15:15	13	92	2	0	184	23	11	0	33	120	239	0	1	23	52	0	793
15:30	11	84	3	0	156	20	20	1	46	108	224	0	2	37	53	0	765
15:45	10	84	4	0	174	25	5	0	52	142	200	0	4	37	62	0	799
Total	43	326	11	0	699	89	48	1	173	473	877	0	9	122	219	0	3090
16:00	7	60	3	0	174	24	9	0	41	115	207	0	4	28	68	1	741
16:15	6	112	9	0	162	22	17	0	40	144	198	0	4	22	52	0	788
16:30	13	96	3	0	203	24	18	0	49	146	220	0	3	41	55	2	873
16:45	12	79	5	0	183	17	18	0	51	126	201	0	5	34	55	1	787
Total	38	347	20	0	722	87	62	0	181	531	826	0	16	125	230	4	3189
17:00	10	95	4	0	200	16	12	0	56	143	148	0	6	46	50	0	786
17:15	14	74	2	0	221	14	12	0	47	134	172	0	4	31	51	0	776

Accurate Counts

978-664-2565

N/S Street : Tremont Street
 E/W Street: Melnea Cass Boulevard
 City/State : Boston, MA
 Weather : Clear

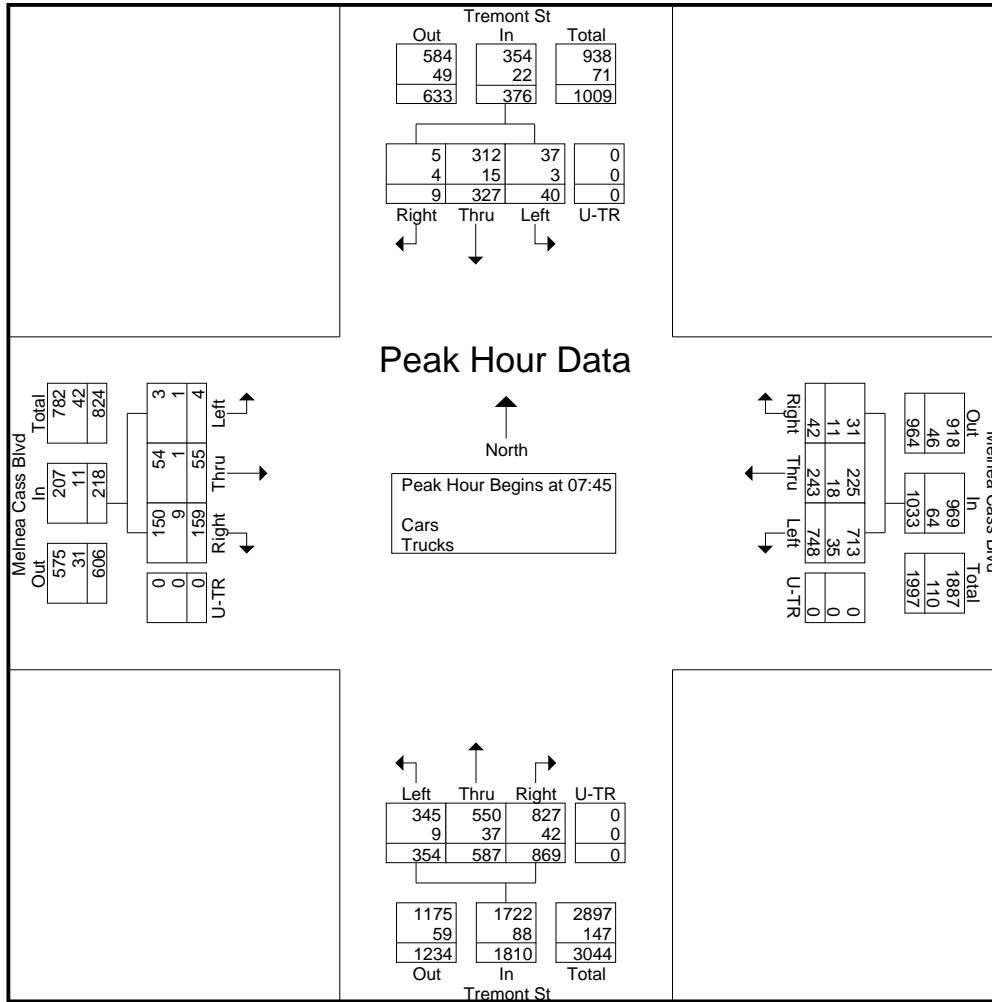
File Name : 01410002
 Site Code : 01410002
 Start Date : 9/21/2011
 Page No : 2

Groups Printed- Cars - Trucks

Start Time	Tremont St From North				Melnea Cass Blvd From East				Tremont St From South				Melnea Cass Blvd From West				Int. Total
	Left	Thru	Right	U-TR	Left	Thru	Right	U-TR	Left	Thru	Right	U-TR	Left	Thru	Right	U-TR	
17:30	6	128	1	0	226	11	13	0	61	146	223	0	6	54	56	0	931
17:45	23	101	8	0	216	22	18	0	61	119	198	0	3	57	59	0	885
Total	53	398	15	0	863	63	55	0	225	542	741	0	19	188	216	0	3378
Grand Total	421	3404	132	0	8088	1391	503	2	2228	4913	9145	2	76	886	1839	7	33037
Apprch %	10.6	86	3.3	0	81	13.9	5	0	13.7	30.2	56.1	0	2.7	31.6	65.5	0.2	
Total %	1.3	10.3	0.4	0	24.5	4.2	1.5	0	6.7	14.9	27.7	0	0.2	2.7	5.6	0	
Cars	391	3237	87	0	7848	1214	460	2	2159	4673	8797	2	71	832	1769	6	31548
% Cars	92.9	95.1	65.9	0	97	87.3	91.5	100	96.9	95.1	96.2	100	93.4	93.9	96.2	85.7	95.5
Trucks	30	167	45	0	240	177	43	0	69	240	348	0	5	54	70	1	1489
% Trucks	7.1	4.9	34.1	0	3	12.7	8.5	0	3.1	4.9	3.8	0	6.6	6.1	3.8	14.3	4.5

Start Time	Tremont St From North					Melnea Cass Blvd From East					Tremont St From South					Melnea Cass Blvd From West					Int. Total
	Left	Thru	Right	U-TR	App. Total	Left	Thru	Right	U-TR	App. Total	Left	Thru	Right	U-TR	App. Total	Left	Thru	Right	U-TR	App. Total	
Peak Hour Analysis From 07:00 to 09:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45																					
07:45	9	79	1	0	89	181	50	9	0	240	95	150	221	0	466	1	11	42	0	54	849
08:00	14	76	2	0	92	203	43	15	0	261	89	139	274	0	502	0	12	52	0	64	919
08:15	11	74	4	0	89	180	64	7	0	251	89	153	192	0	434	0	11	33	0	44	818
08:30	6	98	2	0	106	184	86	11	0	281	81	145	182	0	408	3	21	32	0	56	851
Total Volume	40	327	9	0	376	748	243	42	0	1033	354	587	869	0	1810	4	55	159	0	218	3437
% App. Total	10.6	87	2.4	0		72.4	23.5	4.1	0		19.6	32.4	48	0		1.8	25.2	72.9	0		
PHF	.714	.834	.563	.000	.887	.921	.706	.700	.000	.919	.932	.959	.793	.000	.901	.333	.655	.764	.000	.852	.935
Cars	37	312	5	0	354	713	225	31	0	969	345	550	827	0	1722	3	54	150	0	207	3252
% Cars	92.5	95.4	55.6	0	94.1	95.3	92.6	73.8	0	93.8	97.5	93.7	95.2	0	95.1	75.0	98.2	94.3	0	95.0	94.6
Trucks	3	15	4	0	22	35	18	11	0	64	9	37	42	0	88	1	1	9	0	11	185
% Trucks	7.5	4.6	44.4	0	5.9	4.7	7.4	26.2	0	6.2	2.5	6.3	4.8	0	4.9	25.0	1.8	5.7	0	5.0	5.4

N/S Street : Tremont Street
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear

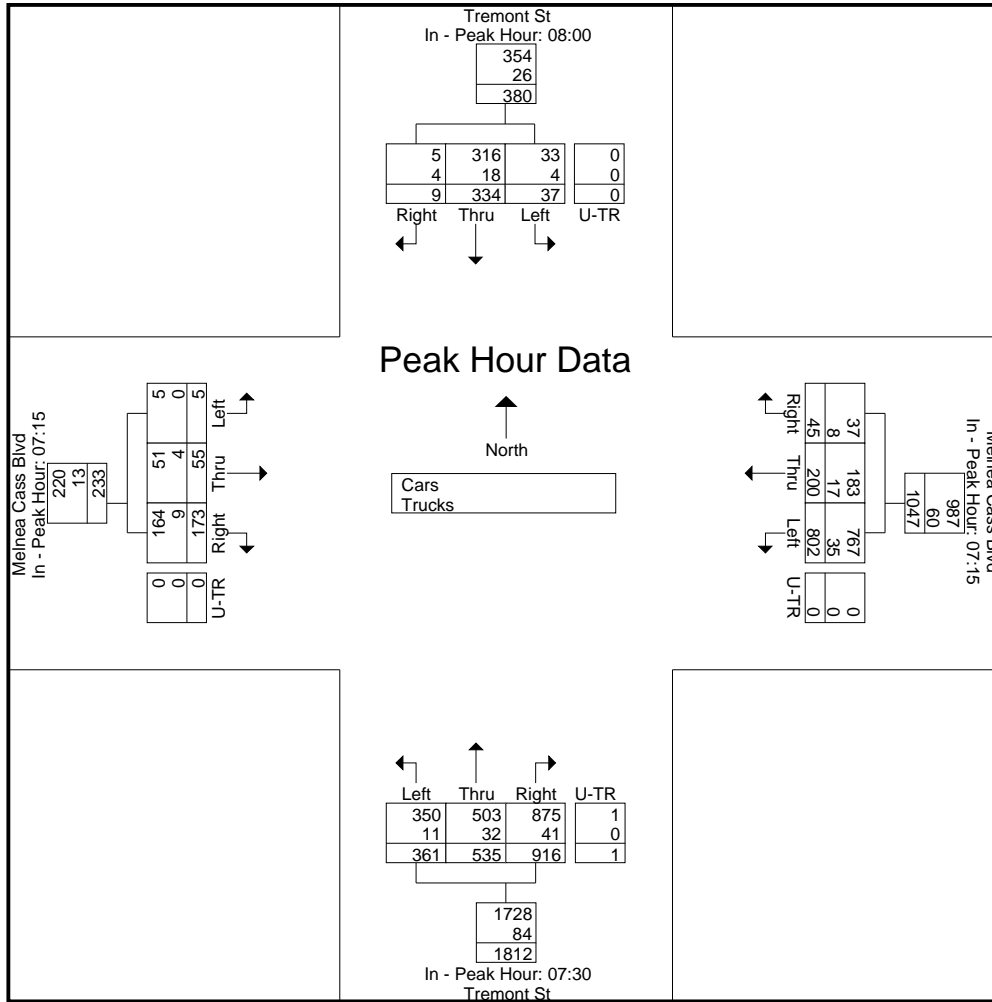


Peak Hour Analysis From 07:00 to 09:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00					07:15					07:30					07:15				
+0 mins.	14	76	2	0	92	212	47	3	0	262	88	93	229	1	411	1	20	39	0	60
+15 mins.	11	74	4	0	89	206	60	18	0	284	95	150	221	0	466	3	12	40	0	55
+30 mins.	6	98	2	0	106	181	50	9	0	240	89	139	274	0	502	1	11	42	0	54
+45 mins.	6	86	1	0	93	203	43	15	0	261	89	153	192	0	434	0	12	52	0	64
Total Volume	37	334	9	0	380	802	200	45	0	1047	361	535	916	1	1813	5	55	173	0	233
% App. Total	9.7	87.9	2.4	0		76.6	19.1	4.3	0		19.9	29.5	50.5	0.1		2.1	23.6	74.2	0	
PHF	.661	.852	.563	.000	.896	.946	.833	.625	.000	.922	.950	.874	.836	.250	.903	.417	.688	.832	.000	.910
Cars	33	316	5	0	354	767	183	37	0	987	350	503	875	1	1729	5	51	164	0	220
% Cars	89.2	94.6	55.6	0	93.2	95.6	91.5	82.2	0	94.3	97	94	95.5	100	95.4	100	92.7	94.8	0	94.4
Trucks	4	18	4	0	26	35	17	8	0	60	11	32	41	0	84	0	4	9	0	13
% Trucks	10.8	5.4	44.4	0	6.8	4.4	8.5	17.8	0	5.7	3	6	4.5	0	4.6	0	7.3	5.2	0	5.6

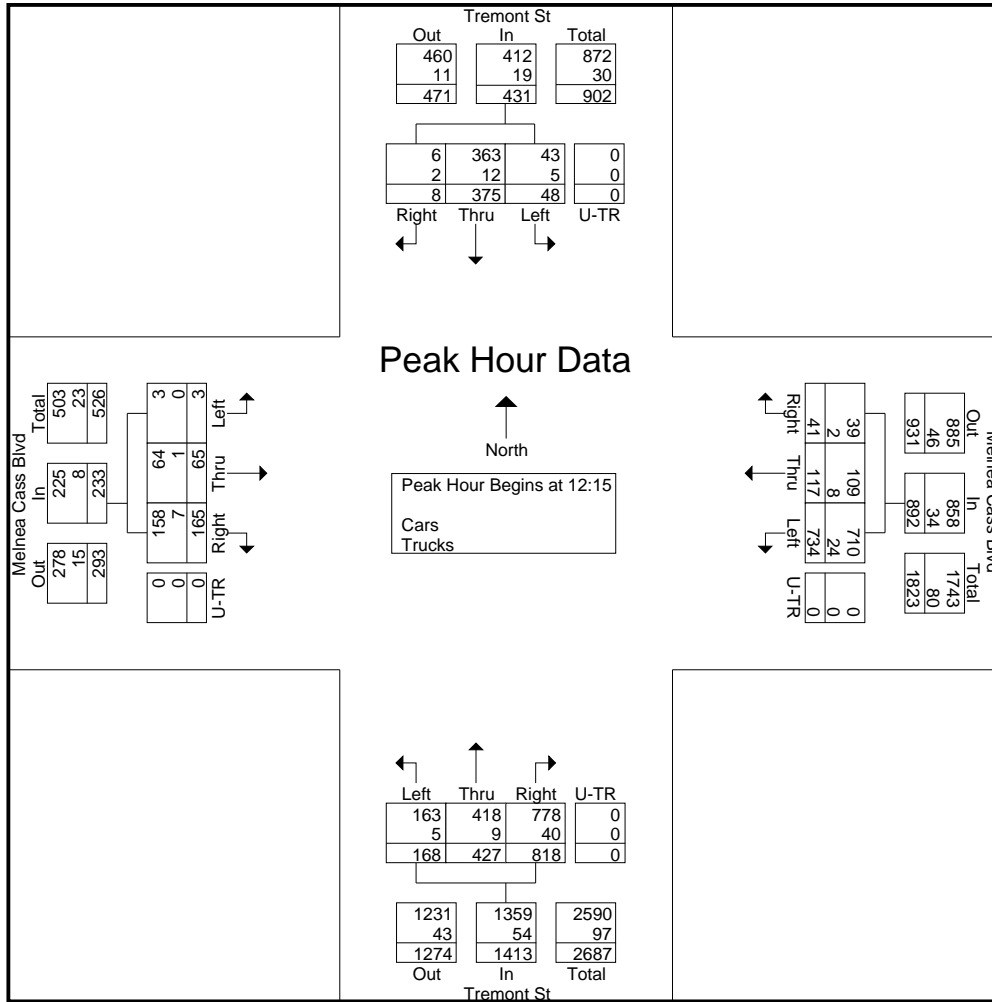
N/S Street : Tremont Street
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear



Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 12:15

12:15	13	78	1	0	92	177	15	7	0	199	39	88	204	0	331	1	9	43	0	53	675
12:30	10	81	2	0	93	196	21	12	0	229	46	106	226	0	378	0	10	46	0	56	756
12:45	16	131	4	0	151	181	60	14	0	255	44	142	194	0	380	0	26	38	0	64	850
13:00	9	85	1	0	95	180	21	8	0	209	39	91	194	0	324	2	20	38	0	60	688
Total Volume	48	375	8	0	431	734	117	41	0	892	168	427	818	0	1413	3	65	165	0	233	2969
% App. Total	11.1	87	1.9	0		82.3	13.1	4.6	0		11.9	30.2	57.9	0		1.3	27.9	70.8	0		
PHF	.750	.716	.500	.000	.714	.936	.488	.732	.000	.875	.913	.752	.905	.000	.930	.375	.625	.897	.000	.910	.873
Cars	43	363	6	0	412	710	109	39	0	858	163	418	778	0	1359	3	64	158	0	225	2854
% Cars	89.6	96.8	75.0	0	95.6	96.7	93.2	95.1	0	96.2	97.0	97.9	95.1	0	96.2	100	98.5	95.8	0	96.6	96.1
Trucks	5	12	2	0	19	24	8	2	0	34	5	9	40	0	54	0	1	7	0	8	115
% Trucks	10.4	3.2	25.0	0	4.4	3.3	6.8	4.9	0	3.8	3.0	2.1	4.9	0	3.8	0	1.5	4.2	0	3.4	3.9

N/S Street : Tremont Street
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear

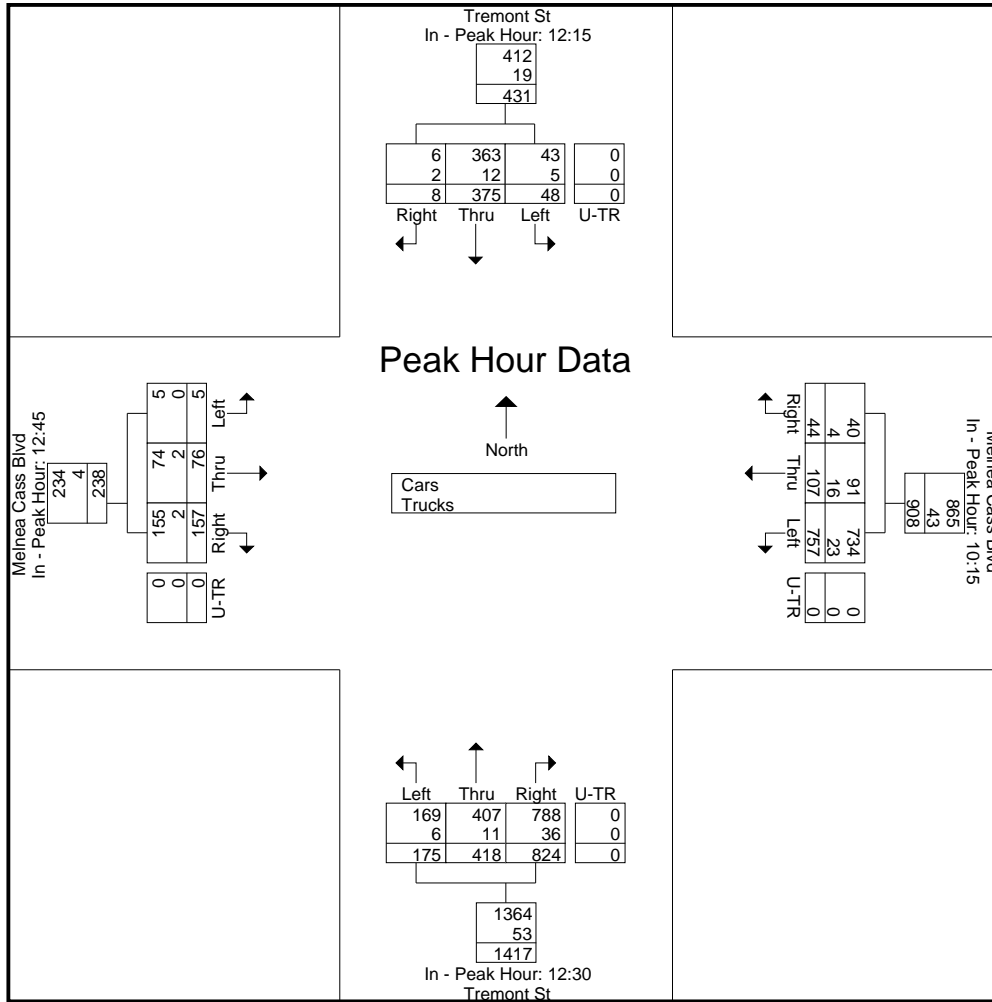


Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	12:15					10:15					12:30					12:45				
+0 mins.	13	78	1	0	92	189	33	8	0	230	46	106	226	0	378	0	26	38	0	64
+15 mins.	10	81	2	0	93	178	17	10	0	205	44	142	194	0	380	2	20	38	0	60
+30 mins.	16	131	4	0	151	192	26	13	0	231	39	91	194	0	324	0	15	39	0	54
+45 mins.	9	85	1	0	95	198	31	13	0	242	46	79	210	0	335	3	15	42	0	60
Total Volume	48	375	8	0	431	757	107	44	0	908	175	418	824	0	1417	5	76	157	0	238
% App. Total	11.1	87	1.9	0		83.4	11.8	4.8	0		12.4	29.5	58.2	0		2.1	31.9	66	0	
PHF	.750	.716	.500	.000	.714	.956	.811	.846	.000	.938	.951	.736	.912	.000	.932	.417	.731	.935	.000	.930
Cars	43	363	6	0	412	734	91	40	0	865	169	407	788	0	1364	5	74	155	0	234
% Cars	89.6	96.8	75	0	95.6	97	85	90.9	0	95.3	96.6	97.4	95.6	0	96.3	100	97.4	98.7	0	98.3
Trucks	5	12	2	0	19	23	16	4	0	43	6	11	36	0	53	0	2	2	0	4
% Trucks	10.4	3.2	25	0	4.4	3	15	9.1	0	4.7	3.4	2.6	4.4	0	3.7	0	2.6	1.3	0	1.7

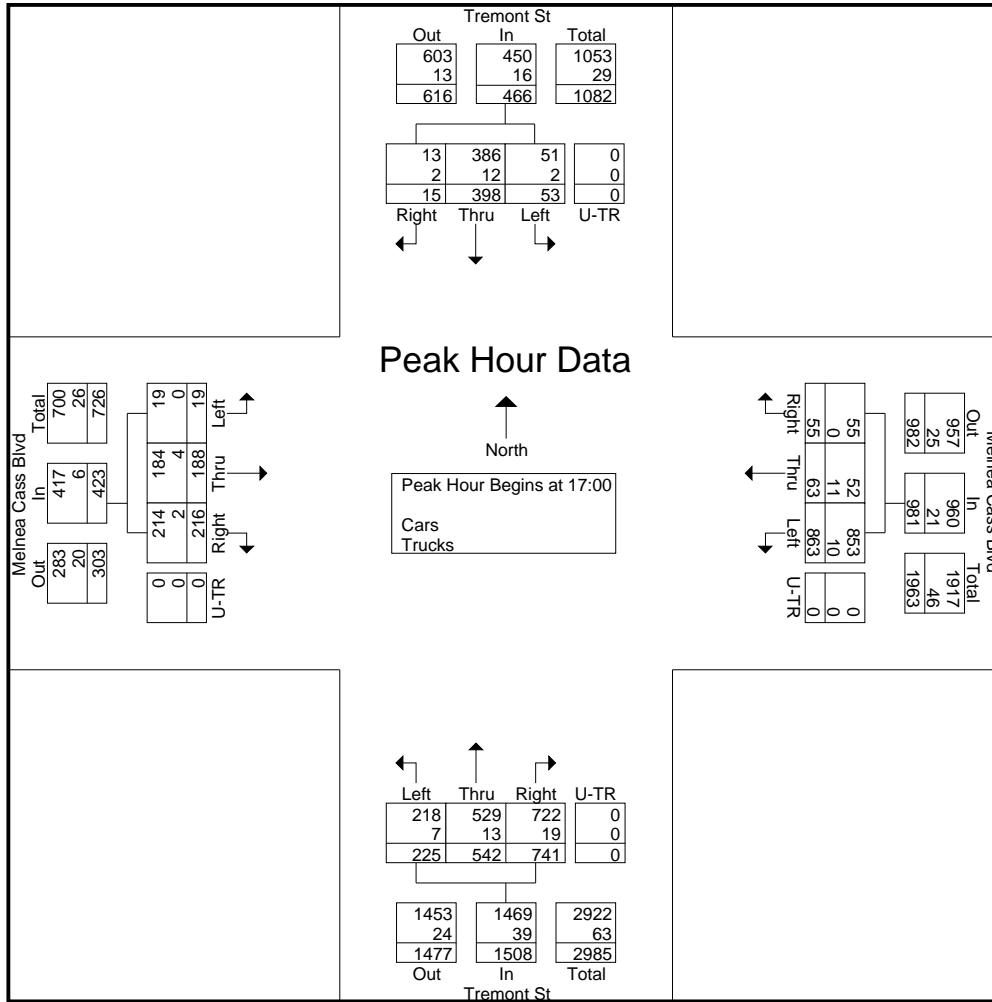
N/S Street : Tremont Street
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear



Peak Hour Analysis From 14:00 to 17:45 - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 17:00

17:00	10	95	4	0	109	200	16	12	0	228	56	143	148	0	347	6	46	50	0	102	786
17:15	14	74	2	0	90	221	14	12	0	247	47	134	172	0	353	4	31	51	0	86	776
17:30	6	128	1	0	135	226	11	13	0	250	61	146	223	0	430	6	54	56	0	116	931
17:45	23	101	8	0	132	216	22	18	0	256	61	119	198	0	378	3	57	59	0	119	885
Total Volume	53	398	15	0	466	863	63	55	0	981	225	542	741	0	1508	19	188	216	0	423	3378
% App. Total	11.4	85.4	3.2	0		88	6.4	5.6	0		14.9	35.9	49.1	0		4.5	44.4	51.1	0		
PHF	.576	.777	.469	.000	.863	.955	.716	.764	.000	.958	.922	.928	.831	.000	.877	.792	.825	.915	.000	.889	.907
Cars	51	386	13	0	450	853	52	55	0	960	218	529	722	0	1469	19	184	214	0	417	3296
% Cars	96.2	97.0	86.7	0	96.6	98.8	82.5	100	0	97.9	96.9	97.6	97.4	0	97.4	100	97.9	99.1	0	98.6	97.6
Trucks	2	12	2	0	16	10	11	0	0	21	7	13	19	0	39	0	4	2	0	6	82
% Trucks	3.8	3.0	13.3	0	3.4	1.2	17.5	0	0	2.1	3.1	2.4	2.6	0	2.6	0	2.1	0.9	0	1.4	2.4

N/S Street : Tremont St
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear



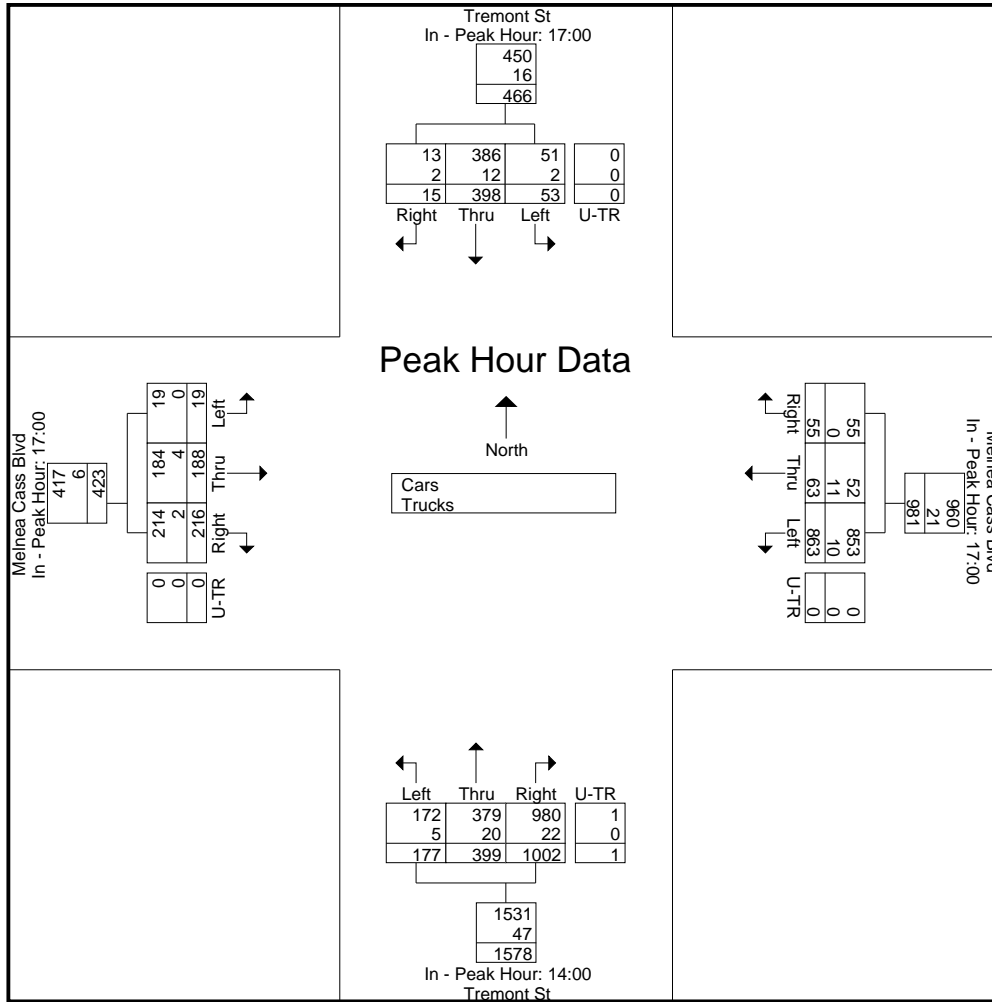
Peak Hour Analysis From 14:00 to 17:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	17:00					17:00					14:00					17:00				
+0 mins.	10	95	4	0	109	200	16	12	0	228	43	91	262	0	396	6	46	50	0	102
+15 mins.	14	74	2	0	90	221	14	12	0	247	49	91	257	0	397	4	31	51	0	86
+30 mins.	6	128	1	0	135	226	11	13	0	250	44	91	260	1	396	6	54	56	0	116
+45 mins.	23	101	8	0	132	216	22	18	0	256	41	126	223	0	390	3	57	59	0	119
Total Volume	53	398	15	0	466	863	63	55	0	981	177	399	1002	1	1579	19	188	216	0	423
% App. Total	11.4	85.4	3.2	0		88	6.4	5.6	0		11.2	25.3	63.5	0.1		4.5	44.4	51.1	0	
PHF	.576	.777	.469	.000	.863	.955	.716	.764	.000	.958	.903	.792	.956	.250	.994	.792	.825	.915	.000	.889
Cars	51	386	13	0	450	853	52	55	0	960	172	379	980	1	1532	19	184	214	0	417
% Cars	96.2	97	86.7	0	96.6	98.8	82.5	100	0	97.9	97.2	95	97.8	100	97	100	97.9	99.1	0	98.6
Trucks	2	12	2	0	16	10	11	0	0	21	5	20	22	0	47	0	4	2	0	6
% Trucks	3.8	3	13.3	0	3.4	1.2	17.5	0	0	2.1	2.8	5	2.2	0	3	0	2.1	0.9	0	1.4

N/S Street : Tremont Street
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear

File Name : 01410002
Site Code : 01410002
Start Date : 9/21/2011
Page No : 8



Accurate Counts

978-664-2565

N/S Street : Tremont Street
 E/W Street: Melnea Cass Boulevard
 City/State : Boston, MA
 Weather : Clear

File Name : 01410002
 Site Code : 01410002
 Start Date : 9/21/2011
 Page No : 1

Groups Printed- Cars

Start Time	Tremont St From North				Melnea Cass Blvd From East				Tremont St From South				Melnea Cass Blvd From West				Int. Total
	Left	Thru	Right	U-TR	Left	Thru	Right	U-TR	Left	Thru	Right	U-TR	Left	Thru	Right	U-TR	
07:00	7	73	5	0	171	54	6	0	58	82	201	0	1	13	34	1	706
07:15	2	64	0	0	203	43	3	0	58	93	216	0	1	18	36	0	737
07:30	4	65	1	0	196	54	16	0	86	88	219	1	3	11	39	0	783
07:45	9	75	0	0	178	44	6	0	91	140	212	0	1	10	39	0	805
Total	22	277	6	0	748	195	31	0	293	403	848	1	6	52	148	1	3031
08:00	14	72	0	0	190	42	12	0	86	131	261	0	0	12	50	0	870
08:15	8	71	4	0	173	58	4	0	87	144	183	0	0	11	31	0	774
08:30	6	94	1	0	172	81	9	0	81	135	171	0	2	21	30	0	803
08:45	5	79	0	0	191	42	8	0	81	121	195	0	0	10	19	0	751
Total	33	316	5	0	726	223	33	0	335	531	810	0	2	54	130	0	3198
09:00	1	83	1	0	138	48	6	0	70	134	199	0	0	11	21	0	712
09:15	8	72	1	0	159	28	6	0	59	121	195	0	0	5	37	0	691
09:30	6	62	2	0	208	28	9	0	52	83	183	0	1	6	31	0	671
09:45	9	61	5	0	174	36	15	0	60	88	161	0	1	14	39	0	663
Total	24	278	9	0	679	140	36	0	241	426	738	0	2	36	128	0	2737
10:00	11	60	1	0	160	34	11	0	57	106	184	0	0	6	32	0	662
10:15	3	58	0	0	183	28	7	0	38	89	177	0	1	5	29	0	618
10:30	3	48	2	0	173	12	8	0	27	84	185	0	0	10	32	0	584
10:45	3	62	0	0	188	23	12	0	20	88	168	0	1	4	16	0	585
Total	20	228	3	0	704	97	38	0	142	367	714	0	2	25	109	0	2449
11:00	9	45	3	0	190	28	13	0	35	70	179	0	1	6	29	0	608
11:15	6	71	3	0	163	30	6	0	34	86	157	0	0	13	31	0	600
11:30	9	70	1	0	127	31	10	0	35	85	180	0	1	10	33	1	593
11:45	17	60	3	0	177	26	12	0	31	87	217	0	2	13	41	1	687
Total	41	246	10	0	657	115	41	0	135	328	733	0	4	42	134	2	2488
12:00	6	74	1	0	159	21	16	0	21	100	190	0	1	17	36	0	642
12:15	11	73	0	0	170	14	7	0	39	86	196	0	1	9	40	0	646
12:30	10	78	1	0	189	19	11	0	44	105	216	0	0	9	43	0	725
12:45	15	130	4	0	177	58	13	0	43	139	181	0	0	26	38	0	824
Total	42	355	6	0	695	112	47	0	147	430	783	0	2	61	157	0	2837
13:00	7	82	1	0	174	18	8	0	37	88	185	0	2	20	37	0	659
13:15	9	51	8	0	179	14	7	0	45	75	206	0	0	14	39	0	647
13:30	5	51	2	0	182	17	6	1	30	62	188	0	3	14	41	0	602
13:45	13	56	1	0	174	16	10	0	30	104	227	0	1	19	37	0	688
Total	34	240	12	0	709	65	31	1	142	329	806	0	6	67	154	0	2596
14:00	8	62	3	0	181	19	8	0	42	83	254	0	0	14	32	0	706
14:15	9	72	1	0	174	19	11	0	48	88	253	0	2	23	24	0	724
14:30	16	58	0	0	175	24	20	0	41	86	255	1	1	15	53	0	745
14:45	14	74	0	0	164	10	9	0	41	122	218	0	1	21	52	0	726
Total	47	266	4	0	694	72	48	0	172	379	980	1	4	73	161	0	2901
15:00	9	65	1	0	175	18	10	0	40	95	208	0	2	22	51	0	696
15:15	10	91	1	0	178	15	11	0	32	111	237	0	0	22	52	0	760
15:30	11	79	2	0	155	17	17	1	42	103	219	0	2	34	49	0	731
15:45	10	78	1	0	169	20	5	0	49	137	192	0	4	35	59	0	759
Total	40	313	5	0	677	70	43	1	163	446	856	0	8	113	211	0	2946
16:00	7	56	3	0	165	22	8	0	38	109	202	0	4	28	67	1	710
16:15	6	108	7	0	159	16	16	0	38	136	194	0	4	22	49	0	755
16:30	13	92	2	0	202	20	15	0	48	139	215	0	3	41	53	1	844
16:45	11	76	2	0	180	15	18	0	47	121	196	0	5	34	54	1	760
Total	37	332	14	0	706	73	57	0	171	505	807	0	16	125	223	3	3069
17:00	10	90	4	0	199	12	12	0	55	139	143	0	6	45	50	0	765
17:15	13	70	1	0	218	11	12	0	46	129	168	0	4	31	50	0	753

Accurate Counts
978-664-2565

N/S Street : Tremont Street
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear

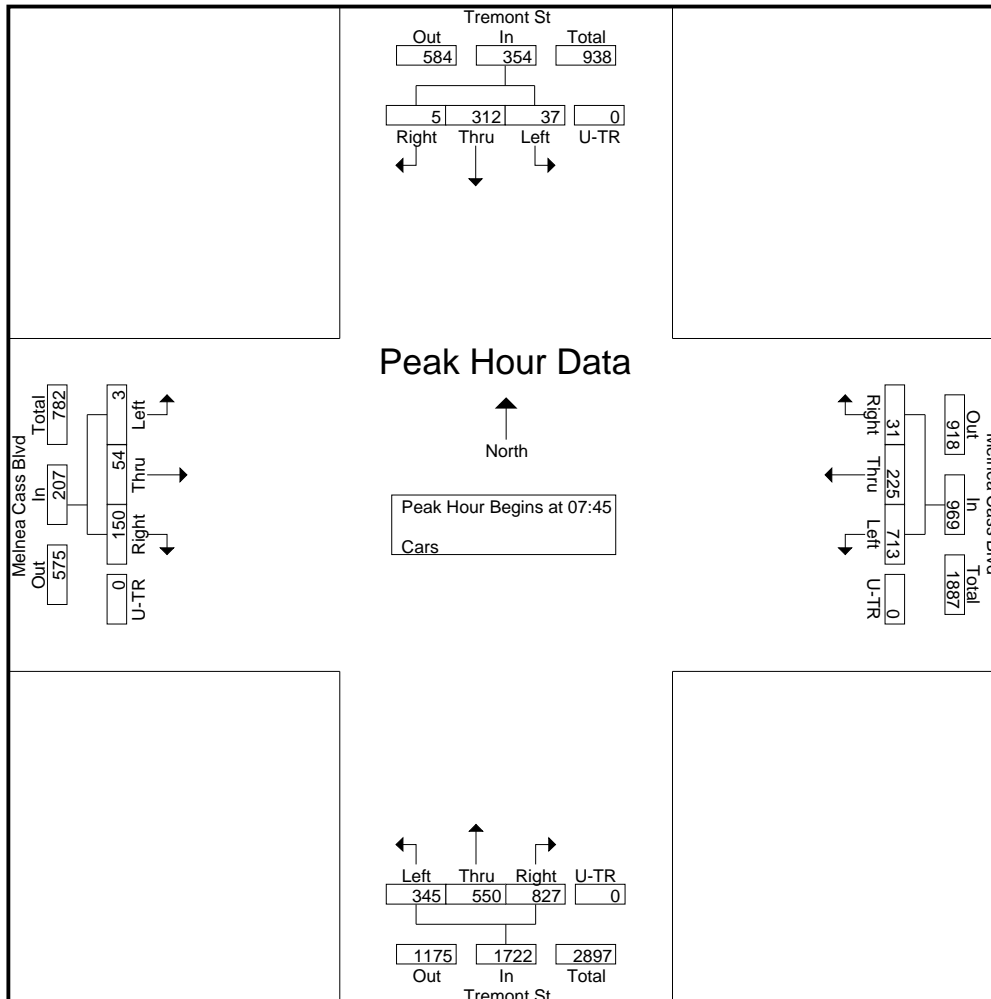
File Name : 01410002
Site Code : 01410002
Start Date : 9/21/2011
Page No : 2

Groups Printed- Cars

Start Time	Tremont St From North				Melnea Cass Blvd From East				Tremont St From South				Melnea Cass Blvd From West				Int. Total
	Left	Thru	Right	U-TR	Left	Thru	Right	U-TR	Left	Thru	Right	U-TR	Left	Thru	Right	U-TR	
17:30	6	127	1	0	223	10	13	0	58	143	218	0	6	54	56	0	915
17:45	22	99	7	0	213	19	18	0	59	118	193	0	3	54	58	0	863
Total	51	386	13	0	853	52	55	0	218	529	722	0	19	184	214	0	3296
Grand Total	391	3237	87	0	7848	1214	460	2	2159	4673	8797	2	71	832	1769	6	31548
Apprch %	10.5	87.1	2.3	0	82.4	12.7	4.8	0	13.8	29.9	56.3	0	2.7	31.1	66.1	0.2	
Total %	1.2	10.3	0.3	0	24.9	3.8	1.5	0	6.8	14.8	27.9	0	0.2	2.6	5.6	0	

Start Time	Tremont St From North					Melnea Cass Blvd From East					Tremont St From South					Melnea Cass Blvd From West					Int. Total
	Left	Thru	Right	U-TR	App. Total	Left	Thru	Right	U-TR	App. Total	Left	Thru	Right	U-TR	App. Total	Left	Thru	Right	U-TR	App. Total	
07:45	9	75	0	0	84	178	44	6	0	228	91	140	212	0	443	1	10	39	0	50	805
08:00	14	72	0	0	86	190	42	12	0	244	86	131	261	0	478	0	12	50	0	62	870
08:15	8	71	4	0	83	173	58	4	0	235	87	144	183	0	414	0	11	31	0	42	774
08:30	6	94	1	0	101	172	81	9	0	262	81	135	171	0	387	2	21	30	0	53	803
Total Volume	37	312	5	0	354	713	225	31	0	969	345	550	827	0	1722	3	54	150	0	207	3252
% App. Total	10.5	88.1	1.4	0		73.6	23.2	3.2	0		20	31.9	48	0		1.4	26.1	72.5	0		
PHF	.661	.830	.313	.000	.876	.938	.694	.646	.000	.925	.948	.955	.792	.000	.901	.375	.643	.750	.000	.835	.934

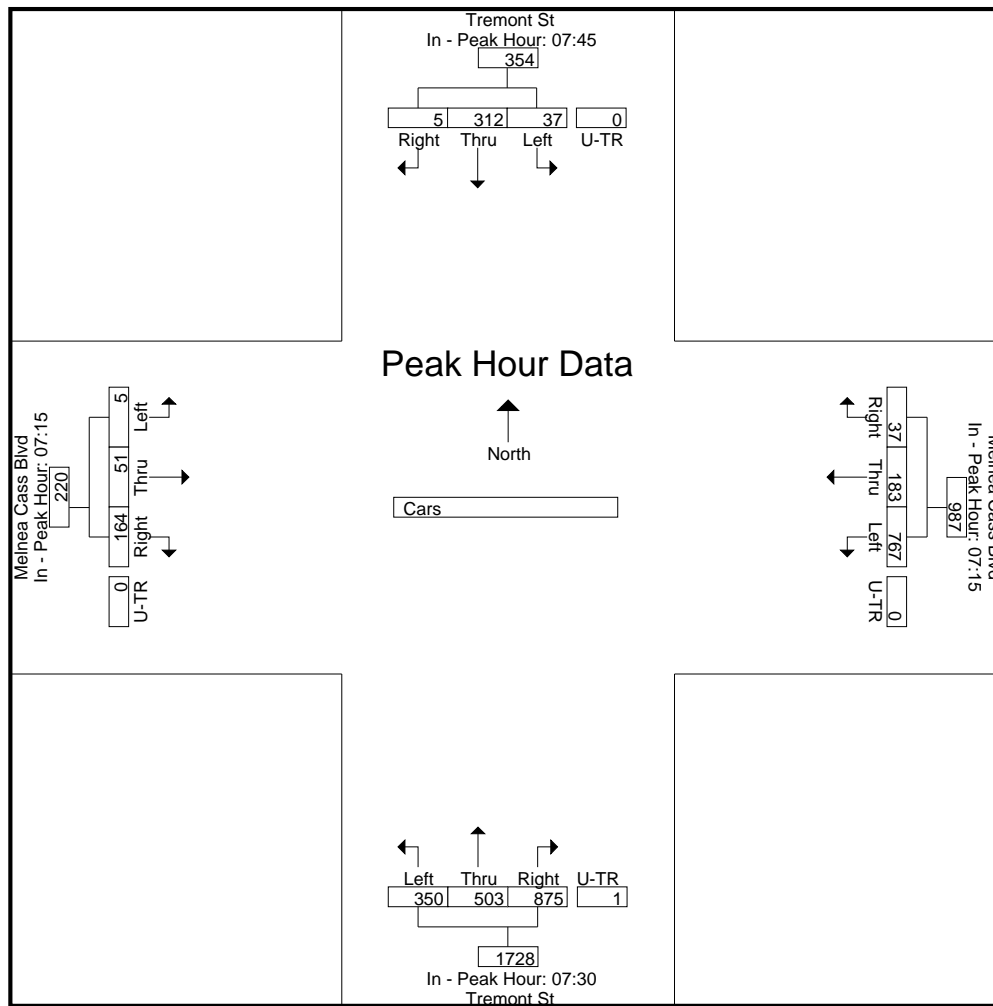
Peak Hour Analysis From 07:00 to 09:45 - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 07:45



N/S Street : Tremont Street
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear

File Name : 01410002
Site Code : 01410002
Start Date : 9/21/2011
Page No : 3

Start Time	Tremont St From North					Melnea Cass Blvd From East					Tremont St From South					Melnea Cass Blvd From West					Int. Total
	Left	Thru	Right	U-TR	App. Total	Left	Thru	Right	U-TR	App. Total	Left	Thru	Right	U-TR	App. Total	Left	Thru	Right	U-TR	App. Total	
Peak Hour Analysis From 07:00 to 09:45 - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	07:45					07:15					07:30					07:15					
+0 mins.	9	75	0	0	84	203	43	3	0	249	86	88	219	1	394	1	18	36	0	55	
+15 mins.	14	72	0	0	86	196	54	16	0	266	91	140	212	0	443	3	11	39	0	53	
+30 mins.	8	71	4	0	83	178	44	6	0	228	86	131	261	0	478	1	10	39	0	50	
+45 mins.	6	94	1	0	101	190	42	12	0	244	87	144	183	0	414	0	12	50	0	62	
Total Volume	37	312	5	0	354	767	183	37	0	987	350	503	875	1	1729	5	51	164	0	220	
% App. Total	10.5	88.1	1.4	0		77.7	18.5	3.7	0		20.2	29.1	50.6	0.1		2.3	23.2	74.5	0		
PHF	.661	.830	.313	.000	.876	.945	.847	.578	.000	.928	.962	.873	.838	.250	.904	.417	.708	.820	.000	.887	

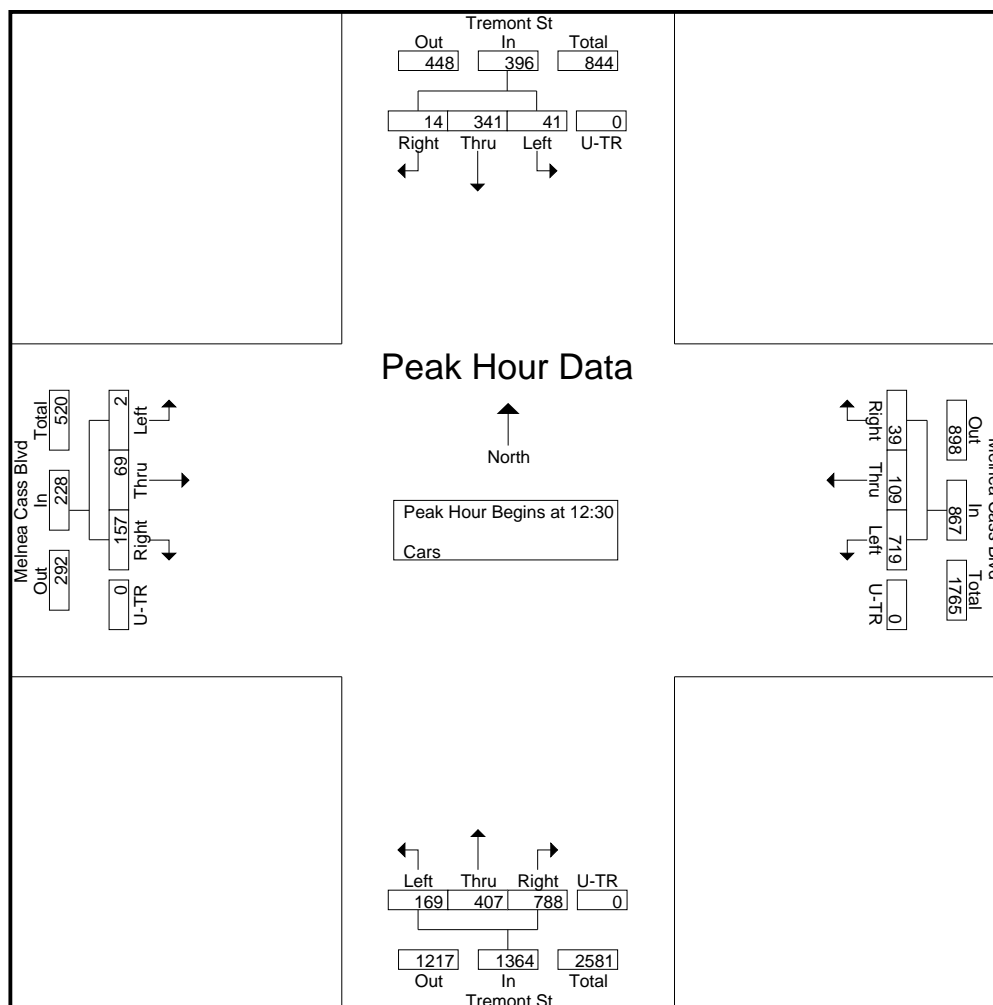


Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 12:30

12:30	10	78	1	0	89	189	19	11	0	219	44	105	216	0	365	0	9	43	0	52	725
12:45	15	130	4	0	149	177	58	13	0	248	43	139	181	0	363	0	26	38	0	64	824
13:00	7	82	1	0	90	174	18	8	0	200	37	88	185	0	310	2	20	37	0	59	659
13:15	9	51	8	0	68	179	14	7	0	200	45	75	206	0	326	0	14	39	0	53	647
Total Volume	41	341	14	0	396	719	109	39	0	867	169	407	788	0	1364	2	69	157	0	228	2855
% App. Total	10.4	86.1	3.5	0		82.9	12.6	4.5	0		12.4	29.8	57.8	0		0.9	30.3	68.9	0		
PHF	.683	.656	.438	.000	.664	.951	.470	.750	.000	.874	.939	.732	.912	.000	.934	.250	.663	.913	.000	.891	.866

N/S Street : Tremont Street
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear

File Name : 01410002
Site Code : 01410002
Start Date : 9/21/2011
Page No : 4

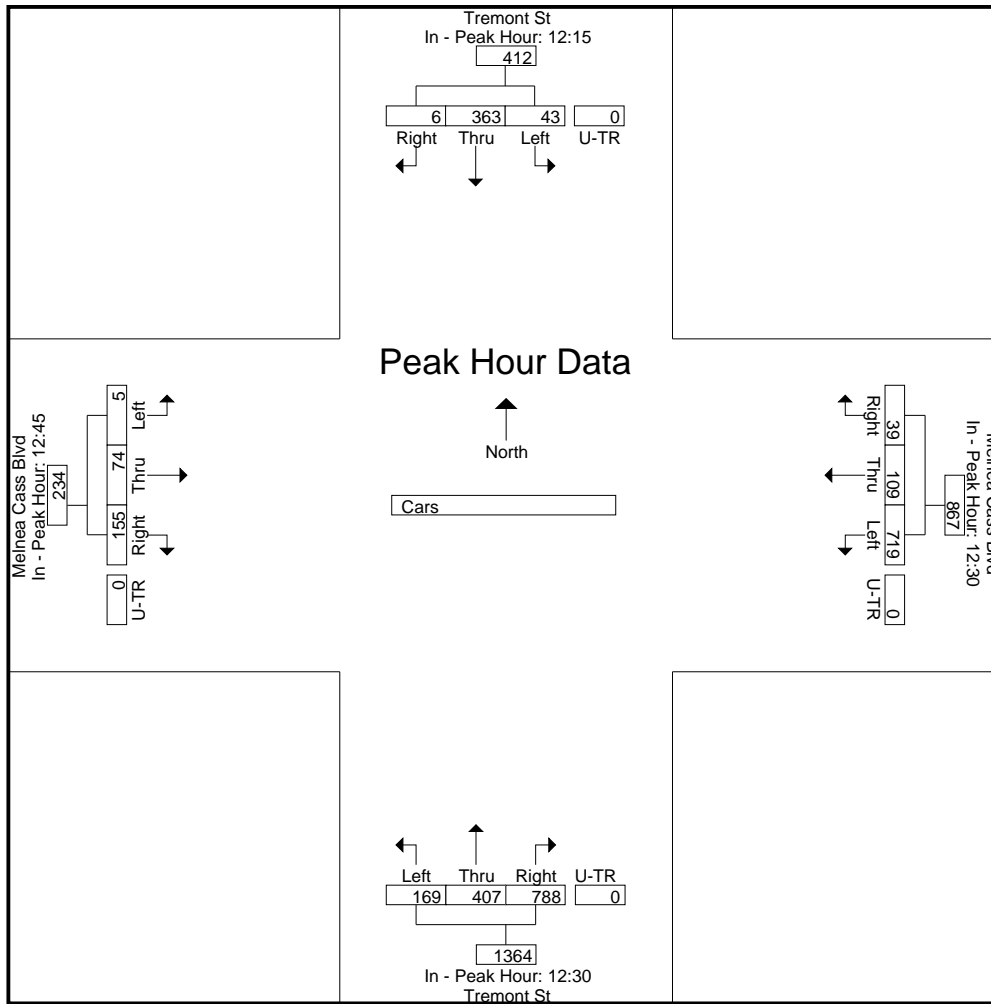


Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	12:15					12:30					12:30					12:45				
+0 mins.	11	73	0	0	84	189	19	11	0	219	44	105	216	0	365	0	26	38	0	64
+15 mins.	10	78	1	0	89	177	58	13	0	248	43	139	181	0	363	2	20	37	0	59
+30 mins.	15	130	4	0	149	174	18	8	0	200	37	88	185	0	310	0	14	39	0	53
+45 mins.	7	82	1	0	90	179	14	7	0	200	45	75	206	0	326	3	14	41	0	58
Total Volume	43	363	6	0	412	719	109	39	0	867	169	407	788	0	1364	5	74	155	0	234
% App. Total	10.4	88.1	1.5	0		82.9	12.6	4.5	0		12.4	29.8	57.8	0		2.1	31.6	66.2	0	
PHF	.717	.698	.375	.000	.691	.951	.470	.750	.000	.874	.939	.732	.912	.000	.934	.417	.712	.945	.000	.914

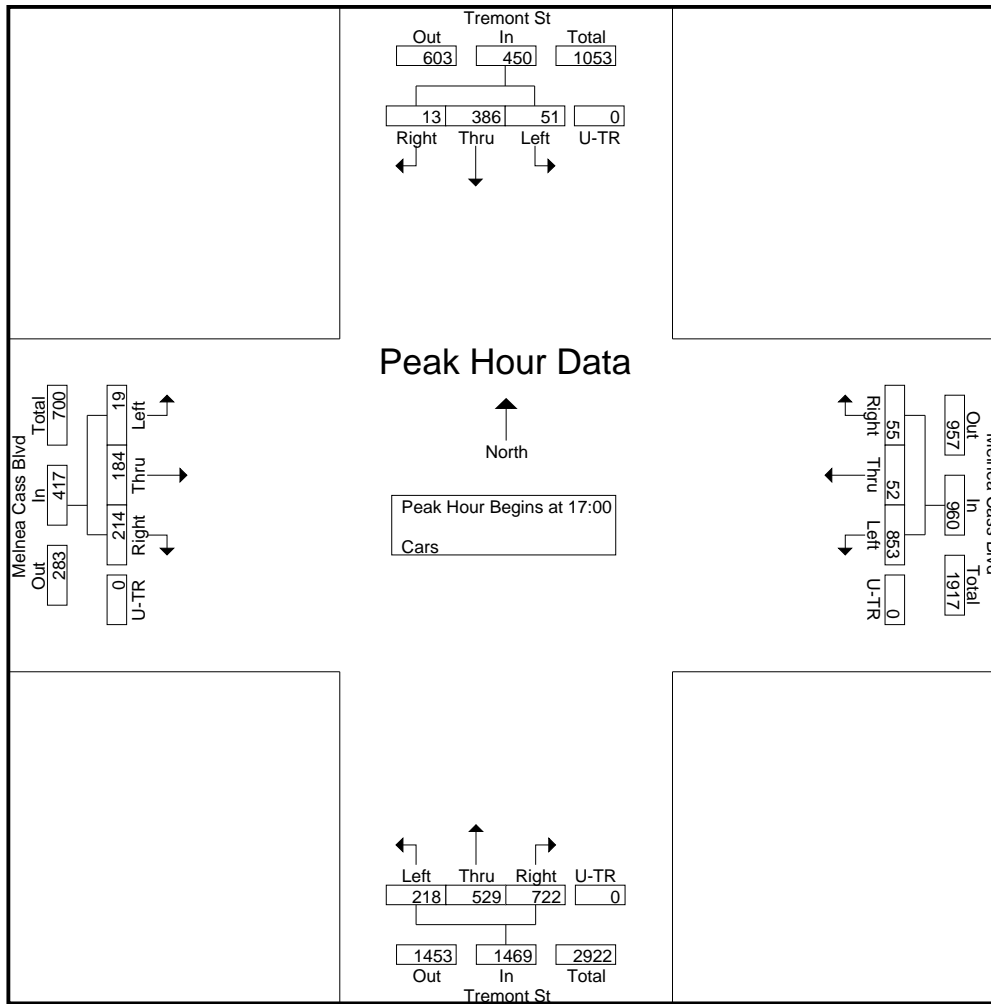
N/S Street : Tremont Street
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear



Peak Hour Analysis From 14:00 to 17:45 - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 17:00

17:00	10	90	4	0	104	199	12	12	0	223	55	139	143	0	337	6	45	50	0	101	765
17:15	13	70	1	0	84	218	11	12	0	241	46	129	168	0	343	4	31	50	0	85	753
17:30	6	127	1	0	134	223	10	13	0	246	58	143	218	0	419	6	54	56	0	116	915
17:45	22	99	7	0	128	213	19	18	0	250	59	118	193	0	370	3	54	58	0	115	863
Total Volume	51	386	13	0	450	853	52	55	0	960	218	529	722	0	1469	19	184	214	0	417	3296
% App. Total	11.3	85.8	2.9	0		88.9	5.4	5.7	0		14.8	36	49.1	0		4.6	44.1	51.3	0		
PHF	.580	.760	.464	.000	.840	.956	.684	.764	.000	.960	.924	.925	.828	.000	.876	.792	.852	.922	.000	.899	.901

N/S Street : Tremont Street
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear



Peak Hour Analysis From 14:00 to 17:45 - Peak 1 of 1

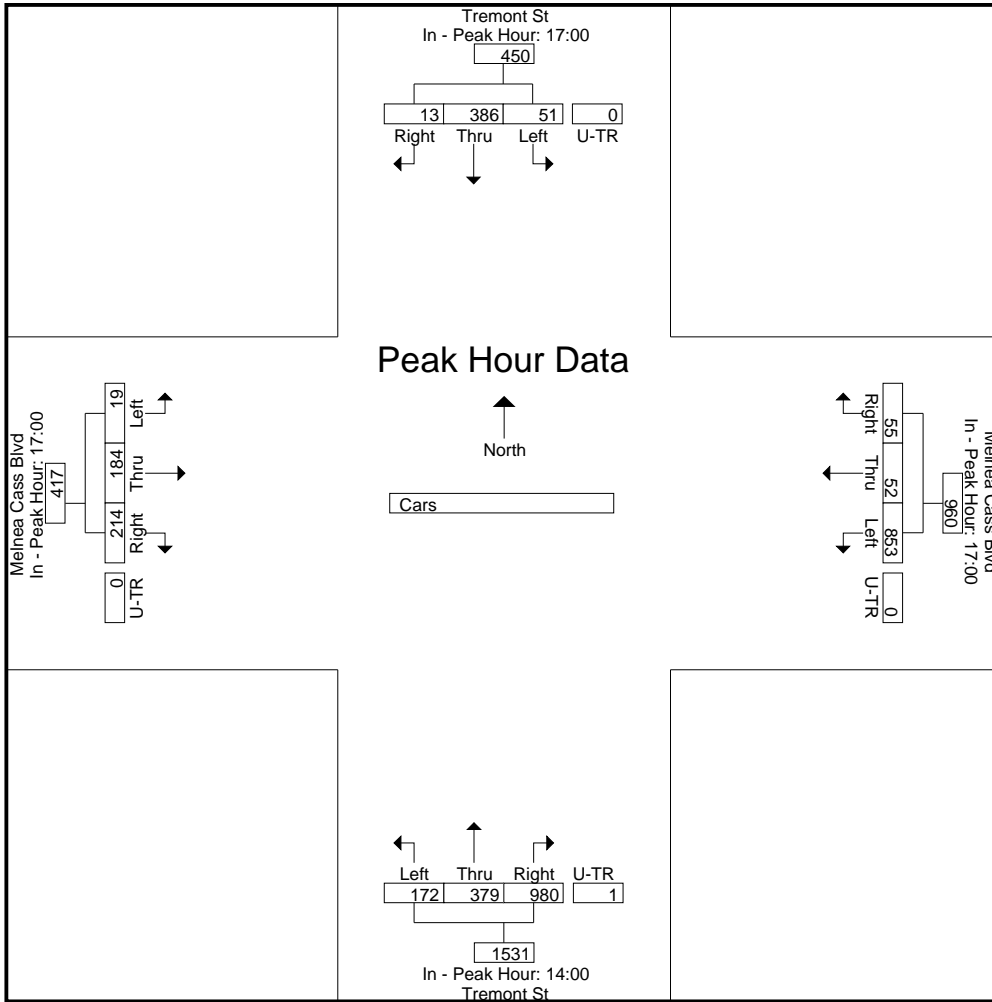
Peak Hour for Each Approach Begins at:

	17:00					17:00					14:00					17:00				
+0 mins.	10	90	4	0	104	199	12	12	0	223	42	83	254	0	379	6	45	50	0	101
+15 mins.	13	70	1	0	84	218	11	12	0	241	48	88	253	0	389	4	31	50	0	85
+30 mins.	6	127	1	0	134	223	10	13	0	246	41	86	255	1	383	6	54	56	0	116
+45 mins.	22	99	7	0	128	213	19	18	0	250	41	122	218	0	381	3	54	58	0	115
Total Volume	51	386	13	0	450	853	52	55	0	960	172	379	980	1	1532	19	184	214	0	417
% App. Total	11.3	85.8	2.9	0		88.9	5.4	5.7	0		11.2	24.7	64	0.1		4.6	44.1	51.3	0	
PHF	.580	.760	.464	.000	.840	.956	.684	.764	.000	.960	.896	.777	.961	.250	.985	.792	.852	.922	.000	.899

Accurate Counts
978-664-2565

N/S Street : Tremont Street
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear

File Name : 01410002
Site Code : 01410002
Start Date : 9/21/2011
Page No : 7



Accurate Counts

978-664-2565

N/S Street : Tremont Street
 E/W Street: Melnea Cass Boulevard
 City/State : Boston, MA
 Weather : Clear

File Name : 01410002
 Site Code : 01410002
 Start Date : 9/21/2011
 Page No : 1

Groups Printed- Trucks

Start Time	Tremont St From North				Melnea Cass Blvd From East				Tremont St From South				Melnea Cass Blvd From West				Int. Total
	Left	Thru	Right	U-TR	Left	Thru	Right	U-TR	Left	Thru	Right	U-TR	Left	Thru	Right	U-TR	
07:00	1	11	1	0	3	8	2	0	4	4	8	0	0	1	2	0	45
07:15	1	6	1	0	9	4	0	0	3	5	5	0	0	2	3	0	39
07:30	1	4	1	0	10	6	2	0	2	5	10	0	0	1	1	0	43
07:45	0	4	1	0	3	6	3	0	4	10	9	0	0	1	3	0	44
Total	3	25	4	0	25	24	7	0	13	24	32	0	0	5	9	0	171
08:00	0	4	2	0	13	1	3	0	3	8	13	0	0	0	2	0	49
08:15	3	3	0	0	7	6	3	0	2	9	9	0	0	0	2	0	44
08:30	0	4	1	0	12	5	2	0	0	10	11	0	1	0	2	0	48
08:45	1	7	1	0	4	2	0	0	1	8	11	0	1	3	0	0	39
Total	4	18	4	0	36	14	8	0	6	35	44	0	2	3	6	0	180
09:00	2	4	0	0	6	4	2	0	1	5	11	0	0	3	2	0	40
09:15	0	5	2	0	6	5	4	0	1	7	12	0	0	2	1	0	45
09:30	0	8	2	0	10	1	0	0	2	5	14	0	0	2	3	0	47
09:45	1	3	1	0	5	4	0	0	0	11	15	0	1	4	2	0	47
Total	3	20	5	0	27	14	6	0	4	28	52	0	1	11	8	0	179
10:00	0	5	0	0	5	5	0	0	1	4	11	0	0	2	2	0	35
10:15	0	7	1	0	6	5	1	0	1	5	11	0	0	1	2	0	40
10:30	0	1	2	0	5	5	2	0	0	3	5	0	0	2	0	0	25
10:45	0	0	0	0	4	3	1	0	0	5	8	0	0	1	1	0	23
Total	0	13	3	0	20	18	4	0	2	17	35	0	0	6	5	0	123
11:00	1	4	3	0	8	3	0	0	3	5	15	0	0	1	0	0	43
11:15	2	1	0	0	5	3	0	0	0	6	10	0	0	1	0	0	28
11:30	0	1	0	0	6	4	1	0	0	4	13	0	0	0	1	0	30
11:45	0	4	1	0	5	4	0	0	1	5	6	0	0	2	2	0	30
Total	3	10	4	0	24	14	1	0	4	20	44	0	0	4	3	0	131
12:00	1	2	0	0	6	4	0	0	0	2	6	0	0	0	1	0	22
12:15	2	5	1	0	7	1	0	0	0	2	8	0	0	0	3	0	29
12:30	0	3	1	0	7	2	1	0	2	1	10	0	0	1	3	0	31
12:45	1	1	0	0	4	2	1	0	1	3	13	0	0	0	0	0	26
Total	4	11	2	0	24	9	2	0	3	8	37	0	0	1	7	0	108
13:00	2	3	0	0	6	3	0	0	2	3	9	0	0	0	1	0	29
13:15	0	2	1	0	1	9	0	0	1	4	4	0	0	1	0	0	23
13:30	0	1	1	0	3	8	0	0	2	7	4	0	0	1	1	0	28
13:45	2	7	4	0	5	4	0	0	0	8	6	0	0	3	2	0	41
Total	4	13	6	0	15	24	0	0	5	22	23	0	0	5	4	0	121
14:00	1	4	1	0	3	6	0	0	1	8	8	0	1	1	4	0	38
14:15	1	4	1	0	8	3	1	0	1	3	4	0	0	1	4	0	31
14:30	1	5	1	0	7	3	2	0	3	5	5	0	0	2	1	0	35
14:45	0	4	0	0	3	4	2	0	0	4	5	0	0	2	2	0	26
Total	3	17	3	0	21	16	5	0	5	20	22	0	1	6	11	0	130
15:00	0	1	1	0	10	3	2	0	2	8	6	0	0	3	1	0	37
15:15	3	1	1	0	6	8	0	0	1	9	2	0	1	1	0	0	33
15:30	0	5	1	0	1	3	3	0	4	5	5	0	0	3	4	0	34
15:45	0	6	3	0	5	5	0	0	3	5	8	0	0	2	3	0	40
Total	3	13	6	0	22	19	5	0	10	27	21	0	1	9	8	0	144
16:00	0	4	0	0	9	2	1	0	3	6	5	0	0	0	1	0	31
16:15	0	4	2	0	3	6	1	0	2	8	4	0	0	0	3	0	33
16:30	0	4	1	0	1	4	3	0	1	7	5	0	0	0	2	1	29
16:45	1	3	3	0	3	2	0	0	4	5	5	0	0	0	1	0	27
Total	1	15	6	0	16	14	5	0	10	26	19	0	0	0	7	1	120
17:00	0	5	0	0	1	4	0	0	1	4	5	0	0	1	0	0	21
17:15	1	4	1	0	3	3	0	0	1	5	4	0	0	0	1	0	23

Accurate Counts
978-664-2565

N/S Street : Tremont Street
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear

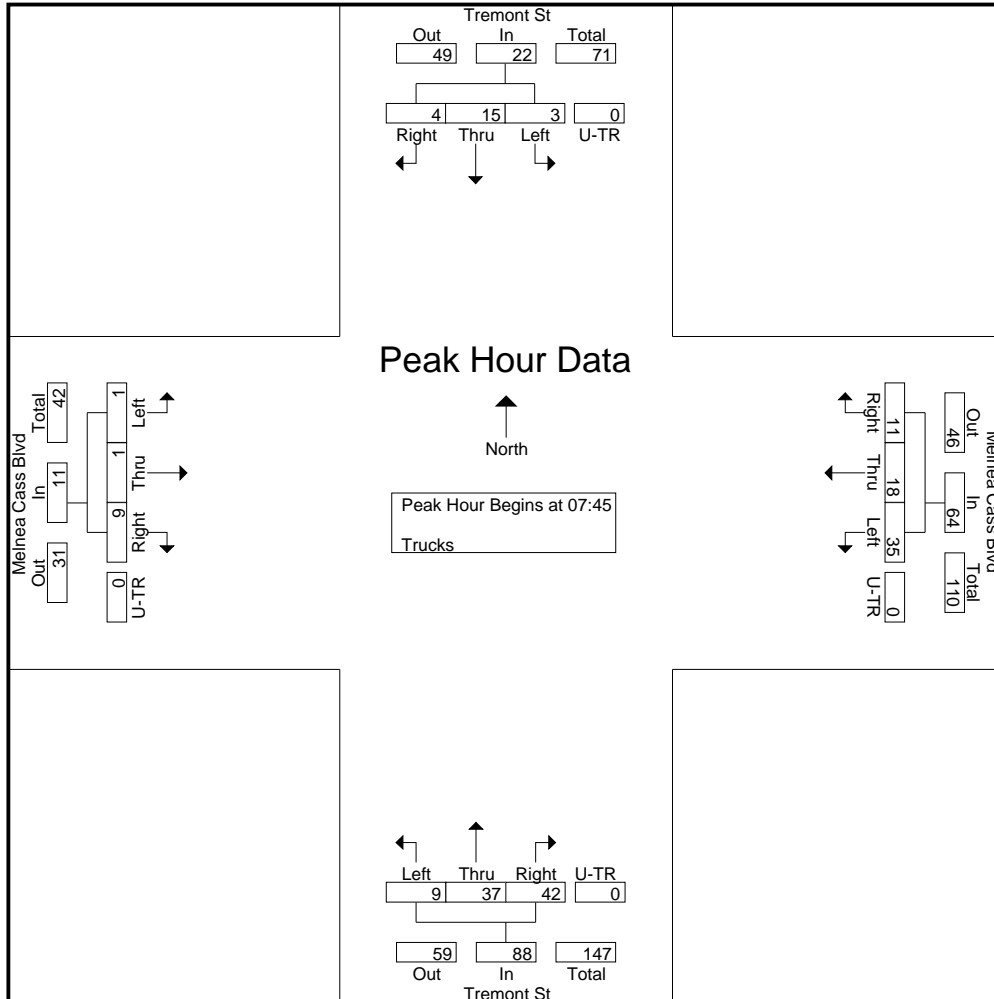
File Name : 01410002
Site Code : 01410002
Start Date : 9/21/2011
Page No : 2

Groups Printed- Trucks

Start Time	Tremont St From North				Melnea Cass Blvd From East				Tremont St From South				Melnea Cass Blvd From West				Int. Total	
	Left	Thru	Right	U-TR	Left	Thru	Right	U-TR	Left	Thru	Right	U-TR	Left	Thru	Right	U-TR		
17:30	0	1	0	0	3	1	0	0	3	3	5	0	0	0	0	0	0	16
17:45	1	2	1	0	3	3	0	0	2	1	5	0	0	3	1	0	0	22
Total	2	12	2	0	10	11	0	0	7	13	19	0	0	4	2	0	82	
Grand Total	30	167	45	0	240	177	43	0	69	240	348	0	5	54	70	1	1489	
Apprch %	12.4	69	18.6	0	52.2	38.5	9.3	0	10.5	36.5	53	0	3.8	41.5	53.8	0.8		
Total %	2	11.2	3	0	16.1	11.9	2.9	0	4.6	16.1	23.4	0	0.3	3.6	4.7	0.1		

Start Time	Tremont St From North					Melnea Cass Blvd From East					Tremont St From South					Melnea Cass Blvd From West					Int. Total
	Left	Thru	Right	U-TR	App. Total	Left	Thru	Right	U-TR	App. Total	Left	Thru	Right	U-TR	App. Total	Left	Thru	Right	U-TR	App. Total	
07:45	0	4	1	0	5	3	6	3	0	12	4	10	9	0	23	0	1	3	0	4	44
08:00	0	4	2	0	6	13	1	3	0	17	3	8	13	0	24	0	0	2	0	2	49
08:15	3	3	0	0	6	7	6	3	0	16	2	9	9	0	20	0	0	2	0	2	44
08:30	0	4	1	0	5	12	5	2	0	19	0	10	11	0	21	1	0	2	0	3	48
Total Volume	3	15	4	0	22	35	18	11	0	64	9	37	42	0	88	1	1	9	0	11	185
% App. Total	13.6	68.2	18.2	0		54.7	28.1	17.2	0		10.2	42	47.7	0		9.1	9.1	81.8	0		
PHF	.250	.938	.500	.000	.917	.673	.750	.917	.000	.842	.563	.925	.808	.000	.917	.250	.250	.750	.000	.688	.944

Peak Hour Analysis From 07:00 to 09:45 - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 07:45

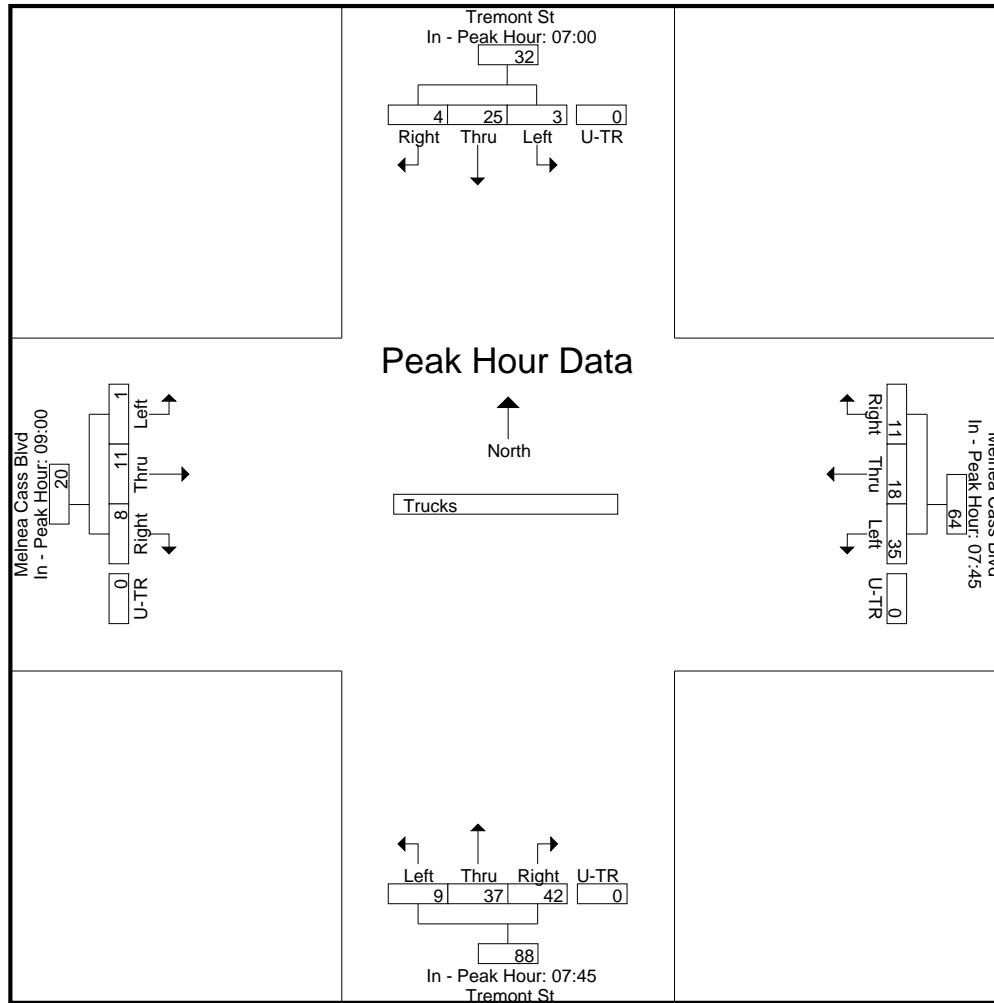


Accurate Counts
978-664-2565

N/S Street : Tremont Street
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear

File Name : 01410002
Site Code : 01410002
Start Date : 9/21/2011
Page No : 3

Start Time	Tremont St From North					Melnea Cass Blvd From East					Tremont St From South					Melnea Cass Blvd From West					Int. Total
	Left	Thru	Right	U-TR	App. Total	Left	Thru	Right	U-TR	App. Total	Left	Thru	Right	U-TR	App. Total	Left	Thru	Right	U-TR	App. Total	
Peak Hour Analysis From 07:00 to 09:45 - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	07:00					07:45					07:45					09:00					
+0 mins.	1	11	1	0	13	3	6	3	0	12	4	10	9	0	23	0	3	2	0	5	
+15 mins.	1	6	1	0	8	13	1	3	0	17	3	8	13	0	24	0	2	1	0	3	
+30 mins.	1	4	1	0	6	7	6	3	0	16	2	9	9	0	20	0	2	3	0	5	
+45 mins.	0	4	1	0	5	12	5	2	0	19	0	10	11	0	21	1	4	2	0	7	
Total Volume	3	25	4	0	32	35	18	11	0	64	9	37	42	0	88	1	11	8	0	20	
% App. Total	9.4	78.1	12.5	0		54.7	28.1	17.2	0		10.2	42	47.7	0		5	55	40	0		
PHF	.750	.568	1.000	.000	.615	.673	.750	.917	.000	.842	.563	.925	.808	.000	.917	.250	.688	.667	.000	.714	

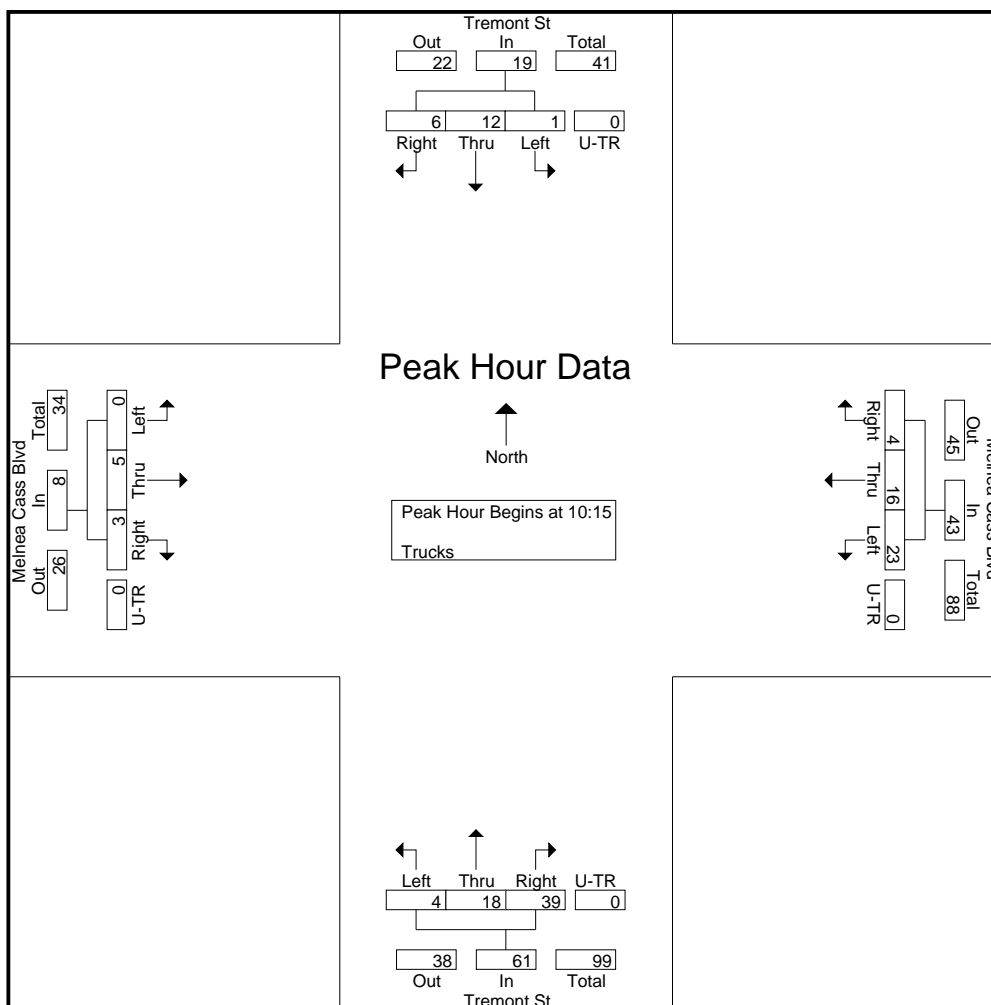


Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 10:15

10:15	0	7	1	0	8	6	5	1	0	12	1	5	11	0	17	0	1	2	0	3	40
10:30	0	1	2	0	3	5	5	2	0	12	0	3	5	0	8	0	2	0	0	2	25
10:45	0	0	0	0	0	4	3	1	0	8	0	5	8	0	13	0	1	1	0	2	23
11:00	1	4	3	0	8	8	3	0	0	11	3	5	15	0	23	0	1	0	0	1	43
Total Volume	1	12	6	0	19	23	16	4	0	43	4	18	39	0	61	0	5	3	0	8	131
% App. Total	5.3	63.2	31.6	0		53.5	37.2	9.3	0		6.6	29.5	63.9	0		0	62.5	37.5	0		
PHF	.250	.429	.500	.000	.594	.719	.800	.500	.000	.896	.333	.900	.650	.000	.663	.000	.625	.375	.000	.667	.762

N/S Street : Tremont Street
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear

File Name : 01410002
Site Code : 01410002
Start Date : 9/21/2011
Page No : 4

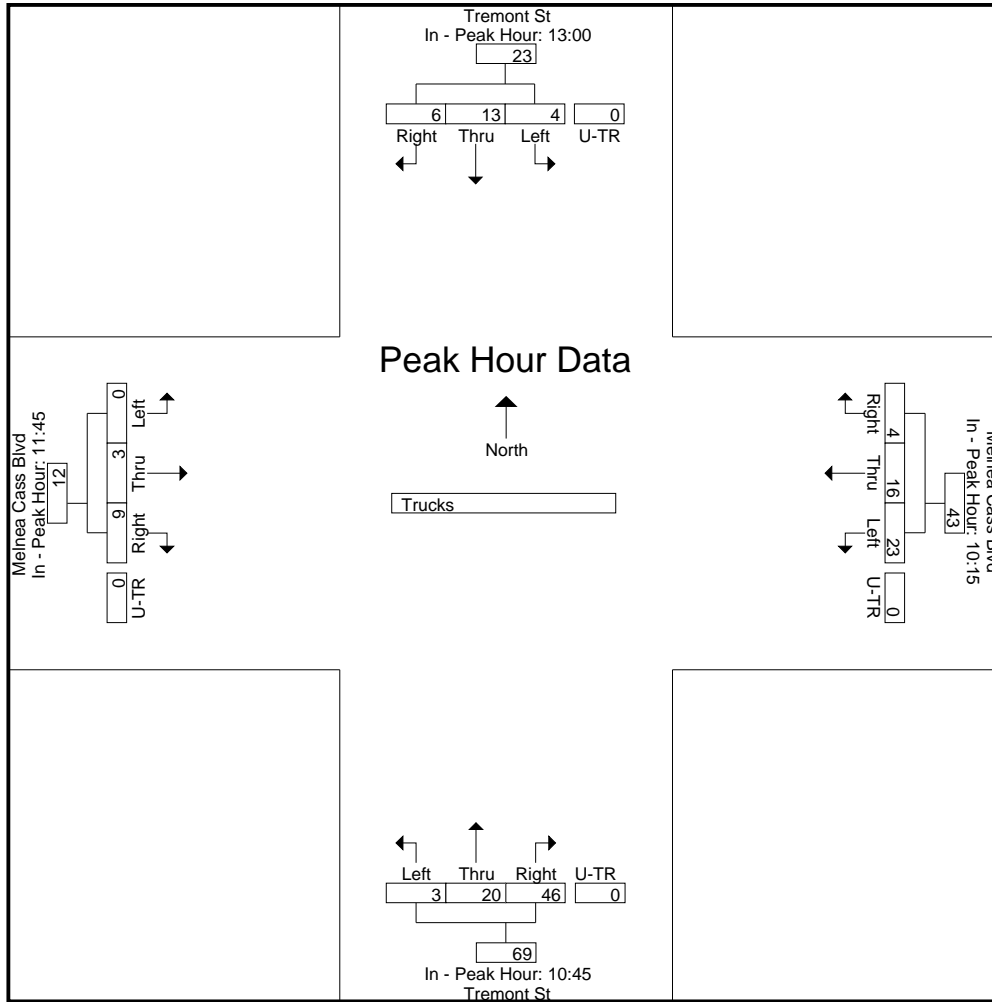


Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	13:00					10:15					10:45					11:45				
+0 mins.	2	3	0	0	5	6	5	1	0	12	0	5	8	0	13	0	2	2	0	4
+15 mins.	0	2	1	0	3	5	5	2	0	12	3	5	15	0	23	0	0	1	0	1
+30 mins.	0	1	1	0	2	4	3	1	0	8	0	6	10	0	16	0	0	3	0	3
+45 mins.	2	7	4	0	13	8	3	0	0	11	0	4	13	0	17	0	1	3	0	4
Total Volume	4	13	6	0	23	23	16	4	0	43	3	20	46	0	69	0	3	9	0	12
% App. Total	17.4	56.5	26.1	0		53.5	37.2	9.3	0		4.3	29	66.7	0		0	25	75	0	
PHF	.500	.464	.375	.000	.442	.719	.800	.500	.000	.896	.250	.833	.767	.000	.750	.000	.375	.750	.000	.750

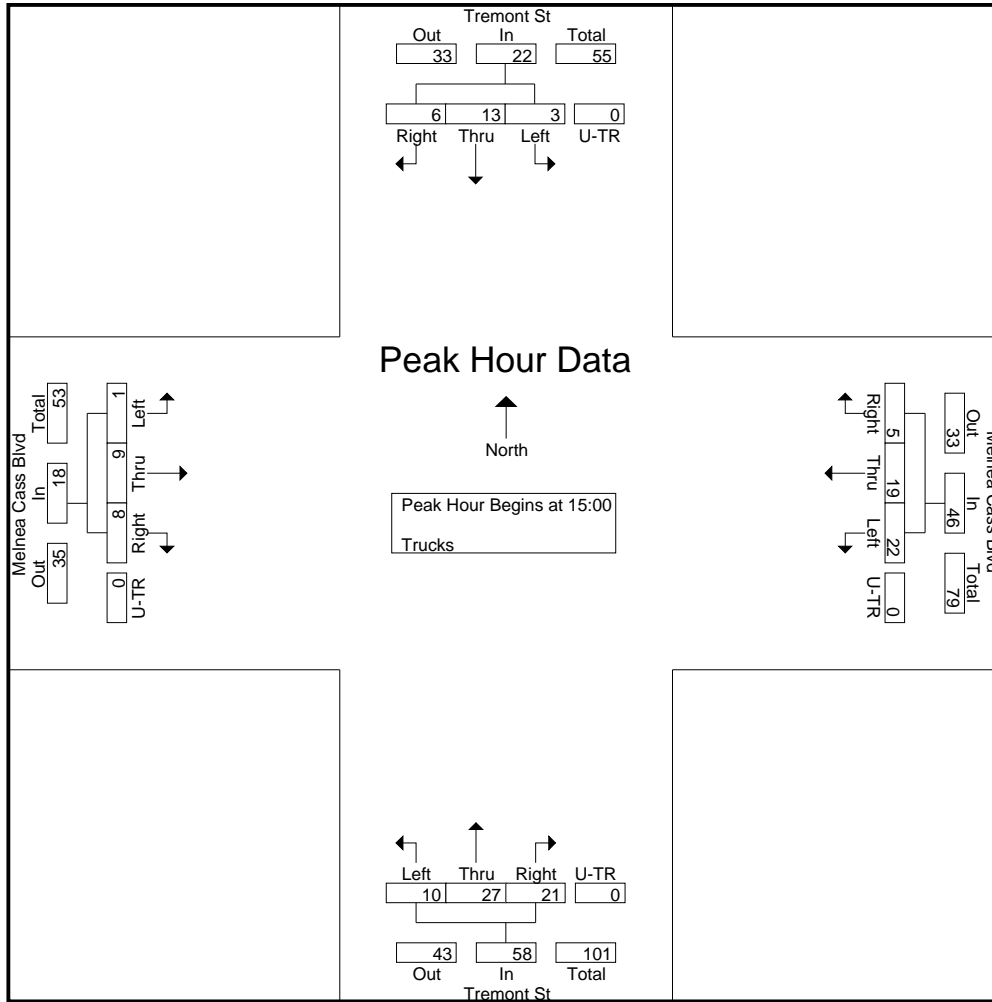
N/S Street : Tremont Street
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear



Peak Hour Analysis From 14:00 to 17:45 - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 15:00

15:00	0	1	1	0	2	10	3	2	0	15	2	8	6	0	16	0	3	1	0	4	37
15:15	3	1	1	0	5	6	8	0	0	14	1	9	2	0	12	1	1	0	0	2	33
15:30	0	5	1	0	6	1	3	3	0	7	4	5	5	0	14	0	3	4	0	7	34
15:45	0	6	3	0	9	5	5	0	0	10	3	5	8	0	16	0	2	3	0	5	40
Total Volume	3	13	6	0	22	22	19	5	0	46	10	27	21	0	58	1	9	8	0	18	144
% App. Total	13.6	59.1	27.3	0	47.8	41.3	10.9	0	0	17.2	46.6	36.2	0	0	5.6	50	44.4	0	0	0	0
PHF	.250	.542	.500	.000	.611	.550	.594	.417	.000	.767	.625	.750	.656	.000	.906	.250	.750	.500	.000	.643	.900

N/S Street : Tremont Street
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear



Peak Hour Analysis From 14:00 to 17:45 - Peak 1 of 1

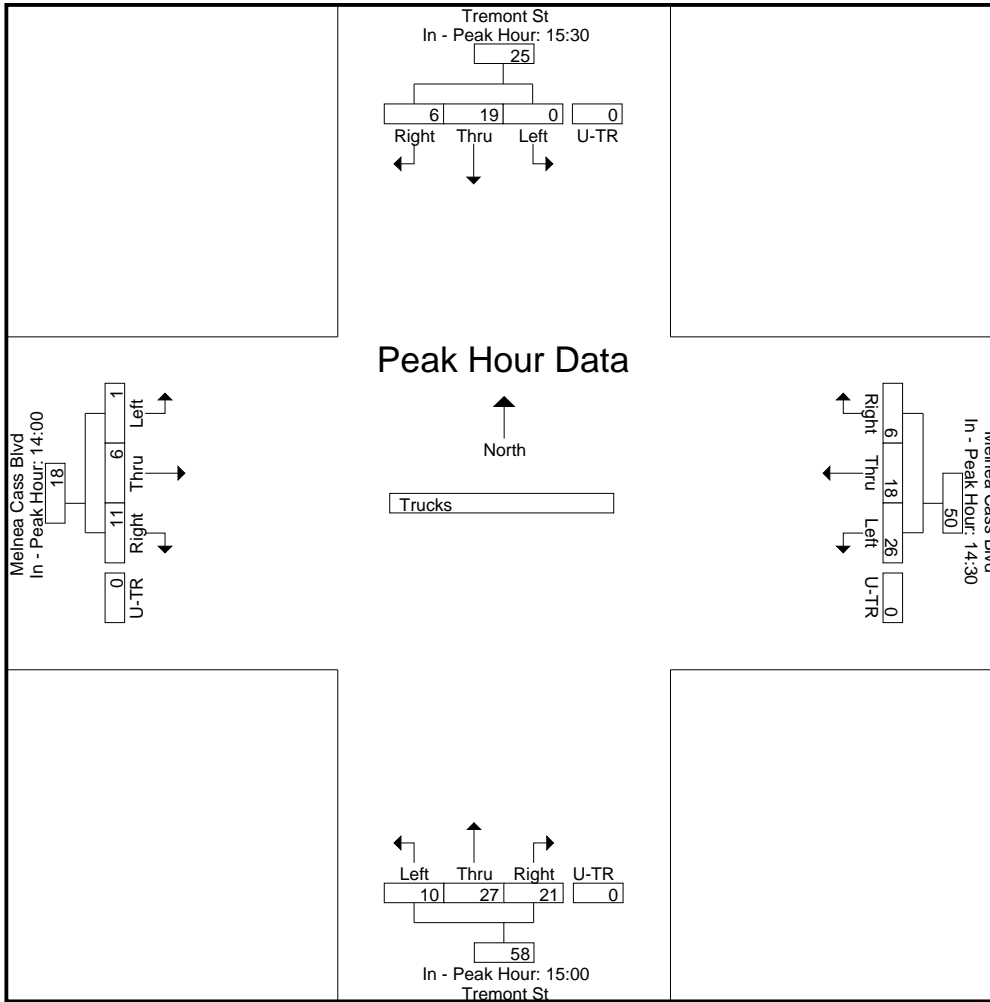
Peak Hour for Each Approach Begins at:

	15:30					14:30					15:00					14:00				
+0 mins.	0	5	1	0	6	7	3	2	0	12	2	8	6	0	16	1	1	4	0	6
+15 mins.	0	6	3	0	9	3	4	2	0	9	1	9	2	0	12	0	1	4	0	5
+30 mins.	0	4	0	0	4	10	3	2	0	15	4	5	5	0	14	0	2	1	0	3
+45 mins.	0	4	2	0	6	6	8	0	0	14	3	5	8	0	16	0	2	2	0	4
Total Volume	0	19	6	0	25	26	18	6	0	50	10	27	21	0	58	1	6	11	0	18
% App. Total	0	76	24	0		52	36	12	0		17.2	46.6	36.2	0		5.6	33.3	61.1	0	
PHF	.000	.792	.500	.000	.694	.650	.563	.750	.000	.833	.625	.750	.656	.000	.906	.250	.750	.688	.000	.750

Accurate Counts
978-664-2565

N/S Street : Tremont Street
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear

File Name : 01410002
Site Code : 01410002
Start Date : 9/21/2011
Page No : 7



Accurate Counts
978-664-2565

File Name : 01410002
Site Code : 01410002
Start Date : 9/21/2011
Page No : 1

N/S Street : Tremont Street
E/W Street : Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear

Groups Printed- Bikes Peds

Start Time	Tremont St From North				Melnea Cass Blvd From East				Tremont St From South				Melnea Cass Blvd 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	0	1	1	1	0	0	0	2	0	0	0	0	0	1	0	5	8	3	11
07:15	0	1	0	9	0	1	0	2	0	2	2	4	0	0	0	7	22	6	28
07:30	0	0	0	3	0	1	0	5	0	2	0	3	1	3	0	8	19	7	26
07:45	0	0	0	2	2	0	0	1	0	0	0	0	2	1	0	8	11	5	16
Total	0	2	1	15	2	2	0	10	0	4	2	7	3	5	0	28	60	21	81
08:00	0	0	0	4	0	0	0	7	0	0	0	3	0	1	0	3	17	1	18
08:15	0	4	0	3	0	0	0	3	0	2	2	4	0	1	1	8	18	10	28
08:30	0	0	0	3	0	0	0	4	0	0	0	2	0	2	0	6	15	2	17
08:45	0	1	0	1	0	0	0	3	0	2	0	2	0	1	0	10	16	4	20
Total	0	5	0	11	0	0	0	17	0	4	2	11	0	5	1	27	66	17	83
09:00	0	0	0	0	0	1	0	3	0	2	1	1	1	3	0	10	14	8	22
09:15	0	0	0	5	0	2	0	5	0	1	0	0	0	2	0	6	16	5	21
09:30	0	0	0	0	0	1	0	1	0	2	0	1	0	2	0	2	4	5	9
09:45	0	1	0	2	1	1	0	2	0	0	0	0	0	0	0	4	8	3	11
Total	0	1	0	7	1	5	0	11	0	5	1	2	1	7	0	22	42	21	63
10:00	0	1	0	3	0	0	0	0	0	1	0	2	0	1	0	2	7	3	10
10:15	0	1	0	3	0	1	0	1	0	0	0	3	1	1	0	5	12	4	16
10:30	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0	10	14	1	15
10:45	0	1	0	0	0	0	0	0	0	2	0	2	0	0	0	10	12	3	15
Total	0	4	0	10	0	1	0	1	0	3	0	7	1	2	0	27	45	11	56
11:00	0	0	0	1	0	0	0	2	0	2	0	0	0	0	0	7	10	2	12
11:15	0	0	0	2	0	1	0	2	0	0	0	2	0	0	0	12	18	1	19
11:30	0	0	0	4	0	3	0	0	0	2	2	3	0	0	0	5	12	7	19
11:45	0	0	0	3	0	1	0	0	0	2	0	1	0	0	0	7	11	3	14
Total	0	0	0	10	0	5	0	4	0	6	2	6	0	0	0	31	51	13	64
12:00	0	3	0	7	0	0	0	1	0	1	0	0	0	1	1	6	14	6	20
12:15	0	1	0	3	0	0	0	1	1	0	1	0	0	2	0	12	16	5	21
12:30	0	0	1	3	0	0	0	1	0	0	1	3	1	0	0	8	15	3	18
12:45	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	3	6	0	6
Total	0	4	1	14	0	0	0	5	1	1	2	3	1	3	1	29	51	14	65
13:00	0	0	0	3	0	4	0	2	0	0	0	1	0	3	0	20	26	7	33
13:15	0	0	0	4	0	0	0	9	0	0	0	1	0	0	0	15	29	0	29
13:30	0	2	0	1	0	2	0	8	0	0	0	2	0	0	0	4	15	4	19
13:45	1	2	1	3	0	4	0	3	0	0	0	1	0	2	0	9	16	10	26
Total	1	4	1	11	0	10	0	22	0	0	0	5	0	5	0	48	86	21	107
14:00	0	2	0	0	0	0	0	1	0	2	0	1	0	0	0	21	23	4	27
14:15	0	2	0	3	0	0	0	3	0	0	0	0	0	0	0	4	10	2	12
14:30	0	0	0	1	0	0	0	6	0	0	0	3	0	0	0	12	22	0	22
14:45	0	1	0	2	0	1	0	1	0	0	0	0	0	0	0	8	11	2	13
Total	0	5	0	6	0	1	0	11	0	2	0	4	0	0	0	45	66	8	74
15:00	0	1	0	4	1	2	0	1	0	0	0	0	0	2	0	13	18	6	24
15:15	0	0	0	0	1	1	0	2	0	1	0	2	0	0	0	1	5	3	8
15:30	0	0	0	2	0	0	0	5	0	1	0	3	0	1	0	5	15	2	17
15:45	0	0	0	4	0	4	0	8	0	2	1	3	9	0	0	14	29	16	45
Total	0	1	0	10	2	7	0	16	0	4	1	8	9	3	0	33	67	27	94
16:00	0	0	0	2	0	1	0	0	0	0	0	0	2	0	0	5	7	3	10
16:15	0	0	0	1	0	3	0	5	0	2	0	0	0	1	0	8	14	6	20
16:30	0	2	0	1	0	0	0	4	0	1	0	2	0	0	0	10	17	3	20
16:45	0	0	9	2	0	3	0	0	0	2	0	1	0	0	1	9	12	15	27
Total	0	2	9	6	0	7	0	9	0	5	0	3	2	1	1	32	50	27	77
17:00	0	0	0	1	0	5	0	0	0	0	0	2	0	1	0	11	14	6	20
17:15	0	1	4	7	1	3	0	6	0	0	0	5	0	0	0	14	32	9	41
17:30	0	0	0	9	0	5	0	1	0	1	0	0	0	1	1	16	26	8	34
17:45	0	6	0	4	0	1	0	13	0	1	0	0	0	1	0	9	26	9	35
Total	0	7	4	21	1	14	0	20	0	2	0	7	0	3	1	50	98	32	130

Accurate Counts
978-664-2565

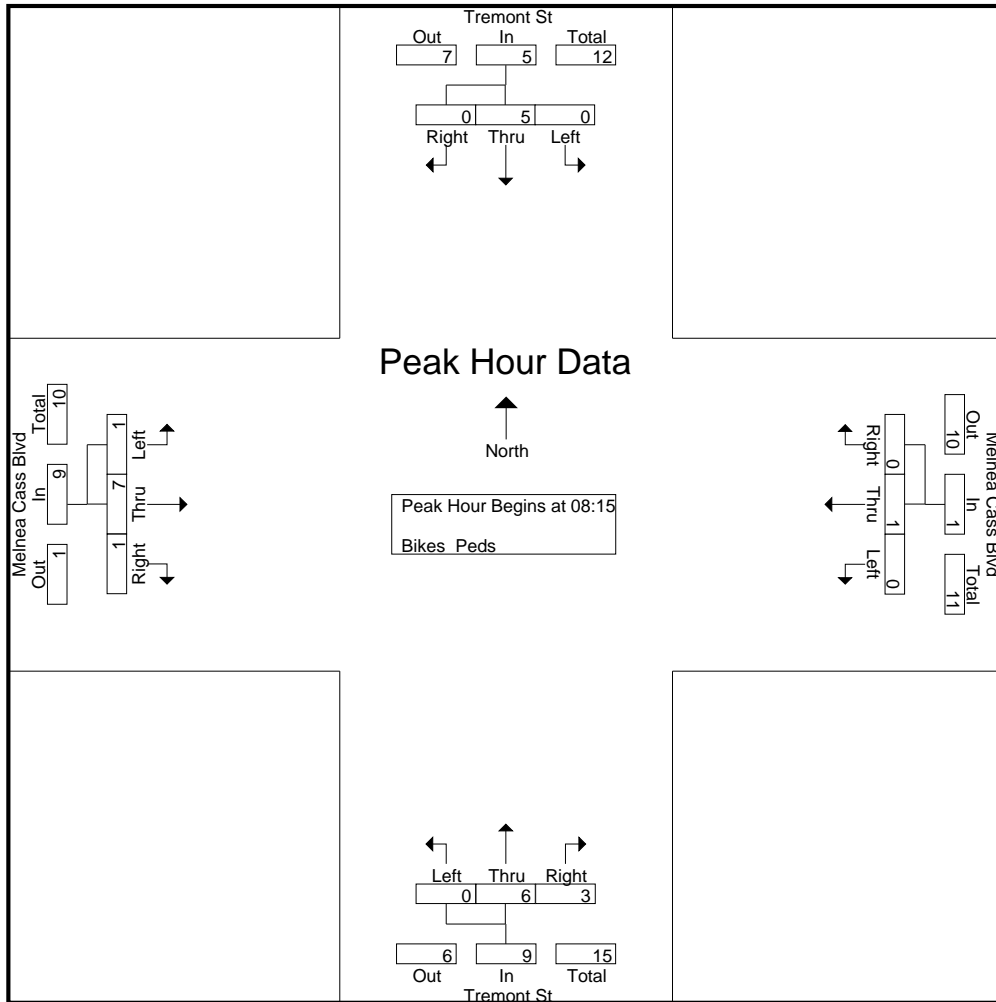
N/S Street : Tremont Street
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear

File Name : 01410002
Site Code : 01410002
Start Date : 9/21/2011
Page No : 2

Groups Printed- Bikes Peds

	Tremont St From North				Melnea Cass Blvd From East				Tremont St From South				Melnea Cass Blvd From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
Grand Total	1	35	16	121	6	52	0	126	1	36	10	63	17	34	4	372	682	212	894
Apprch %	1.9	67.3	30.8		10.3	89.7	0		2.1	76.6	21.3		30.9	61.8	7.3				
Total %	0.5	16.5	7.5		2.8	24.5	0		0.5	17	4.7		8	16	1.9		76.3	23.7	

Start Time	Tremont St From North				Melnea Cass Blvd From East				Tremont St From South				Melnea Cass Blvd From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 09:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:15																	
08:15	0	4	0	4	0	0	0	0	0	2	2	4	0	1	1	2	10
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
08:45	0	1	0	1	0	0	0	0	0	2	0	2	0	1	0	1	4
09:00	0	0	0	0	0	1	0	1	0	2	1	3	1	3	0	4	8
Total Volume	0	5	0	5	0	1	0	1	0	6	3	9	1	7	1	9	24
% App. Total	0	100	0		0	100	0		0	66.7	33.3		11.1	77.8	11.1		
PHF	.000	.313	.000	.313	.000	.250	.000	.250	.000	.750	.375	.563	.250	.583	.250	.563	.600

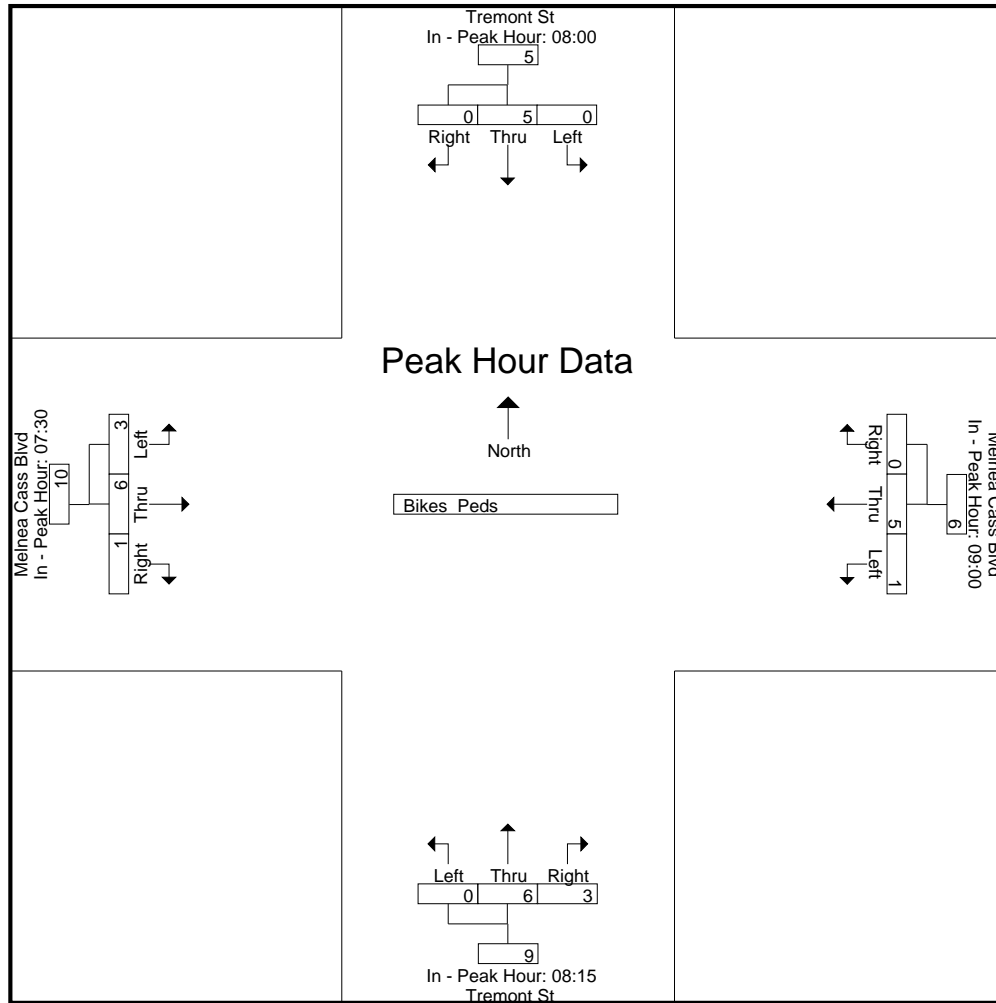


Accurate Counts
978-664-2565

N/S Street : Tremont Street
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear

File Name : 01410002
Site Code : 01410002
Start Date : 9/21/2011
Page No : 3

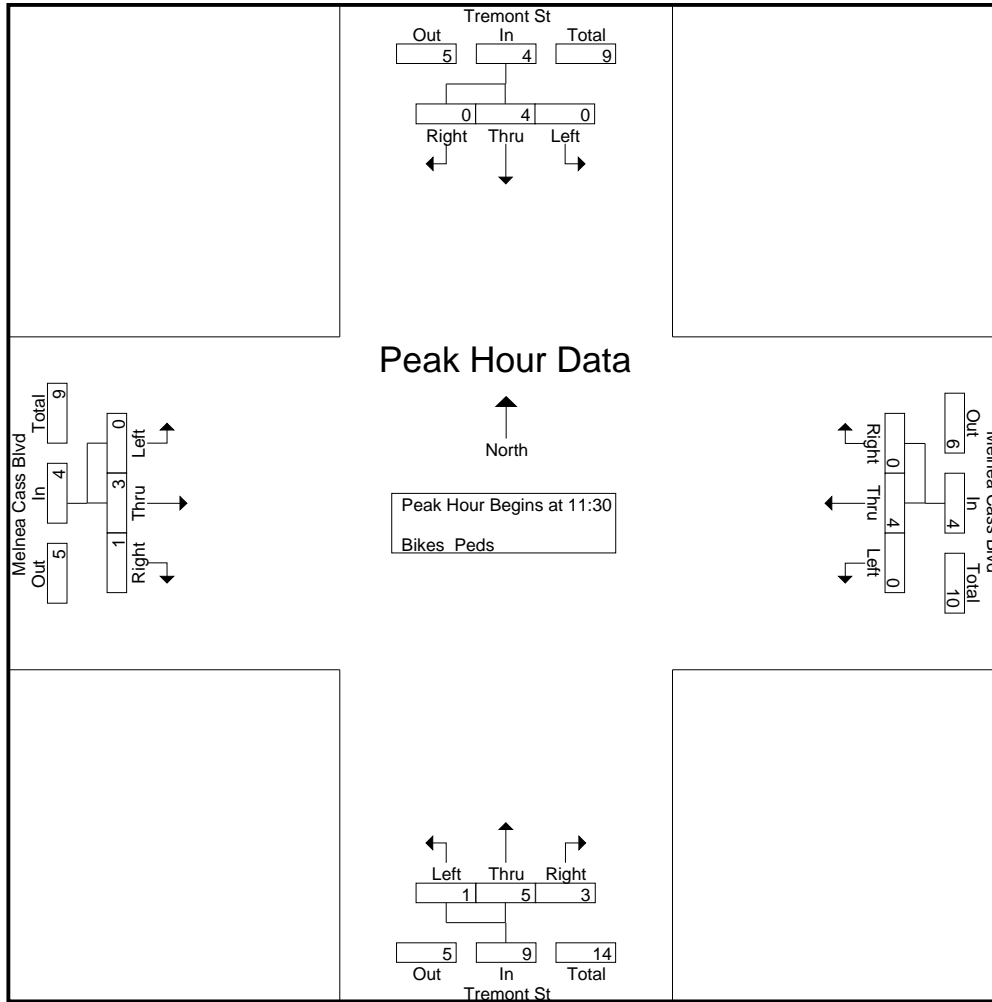
Start Time	Tremont St From North				Melnea Cass Blvd From East				Tremont St From South				Melnea Cass Blvd From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 to 09:45 - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	08:00				09:00				08:15				07:30				
+0 mins.	0	0	0	0	0	1	0	1	0	2	2	4	1	3	0	4	
+15 mins.	0	4	0	4	0	2	0	2	0	0	0	0	2	1	0	3	
+30 mins.	0	0	0	0	0	1	0	1	0	2	0	2	0	1	0	1	
+45 mins.	0	1	0	1	1	1	0	2	0	2	1	3	0	1	1	2	
Total Volume	0	5	0	5	1	5	0	6	0	6	3	9	3	6	1	10	
% App. Total	0	100	0		16.7	83.3	0		0	66.7	33.3		30	60	10		
PHF	.000	.313	.000	.313	.250	.625	.000	.750	.000	.750	.375	.563	.375	.500	.250	.625	



Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 11:30

11:30	0	0	0	0	0	3	0	3	0	2	2	4	0	0	0	0	7
11:45	0	0	0	0	0	1	0	1	0	2	0	2	0	0	0	0	3
12:00	0	3	0	3	0	0	0	0	0	1	0	1	0	1	1	2	6
12:15	0	1	0	1	0	0	0	0	1	0	1	2	0	2	0	2	5
Total Volume	0	4	0	4	0	4	0	4	1	5	3	9	0	3	1	4	21
% App. Total	0	100	0		0	100	0		11.1	55.6	33.3		0	75	25		
PHF	.000	.333	.000	.333	.000	.333	.000	.333	.250	.625	.375	.563	.000	.375	.250	.500	.750

N/S Street : Tremont Street
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear

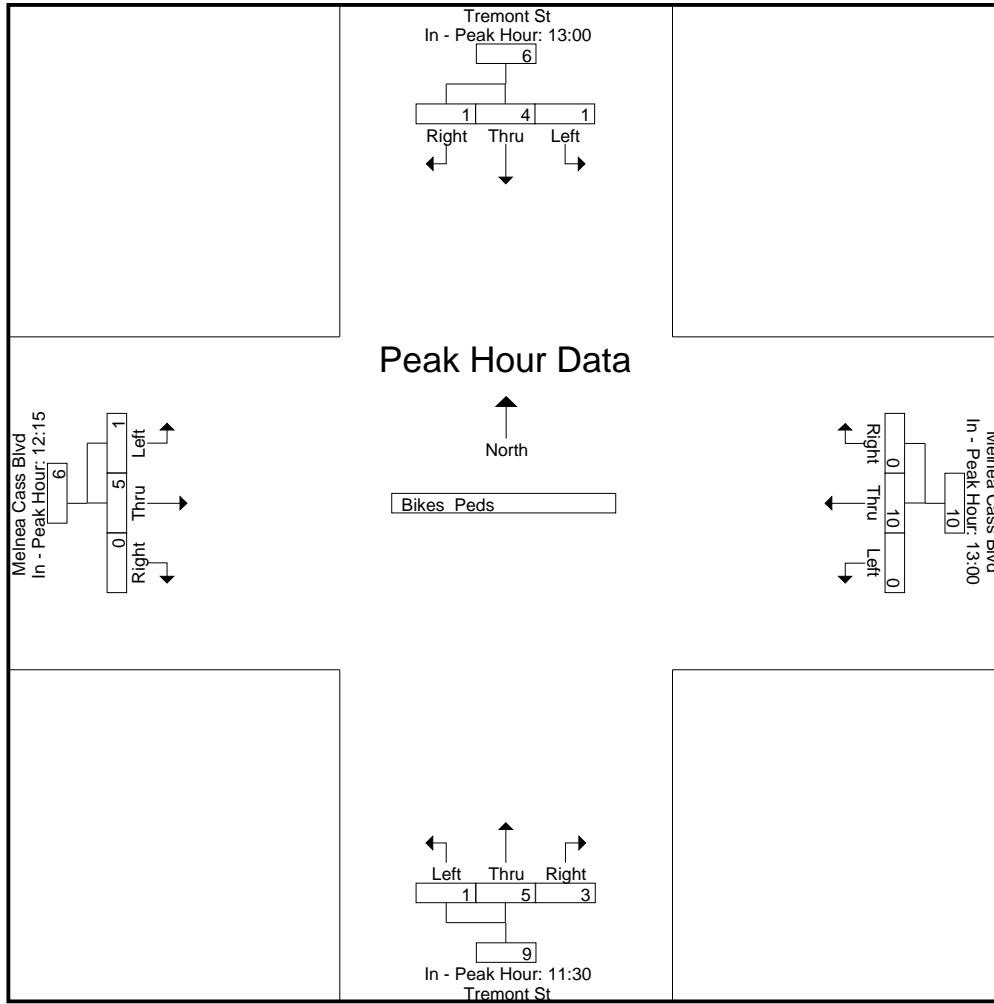


Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	13:00				13:00				11:30				12:15			
+0 mins.	0	0	0	0	0	4	0	4	0	2	2	4	0	2	0	2
+15 mins.	0	0	0	0	0	0	0	0	0	2	0	2	1	0	0	1
+30 mins.	0	2	0	2	0	2	0	2	0	1	0	1	0	0	0	0
+45 mins.	1	2	1	4	0	4	0	4	1	0	1	2	0	3	0	3
Total Volume	1	4	1	6	0	10	0	10	1	5	3	9	1	5	0	6
% App. Total	16.7	66.7	16.7		0	100	0		11.1	55.6	33.3		16.7	83.3	0	
PHF	.250	.500	.250	.375	.000	.625	.000	.625	.250	.625	.375	.563	.250	.417	.000	.500

N/S Street : Tremont Street
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear



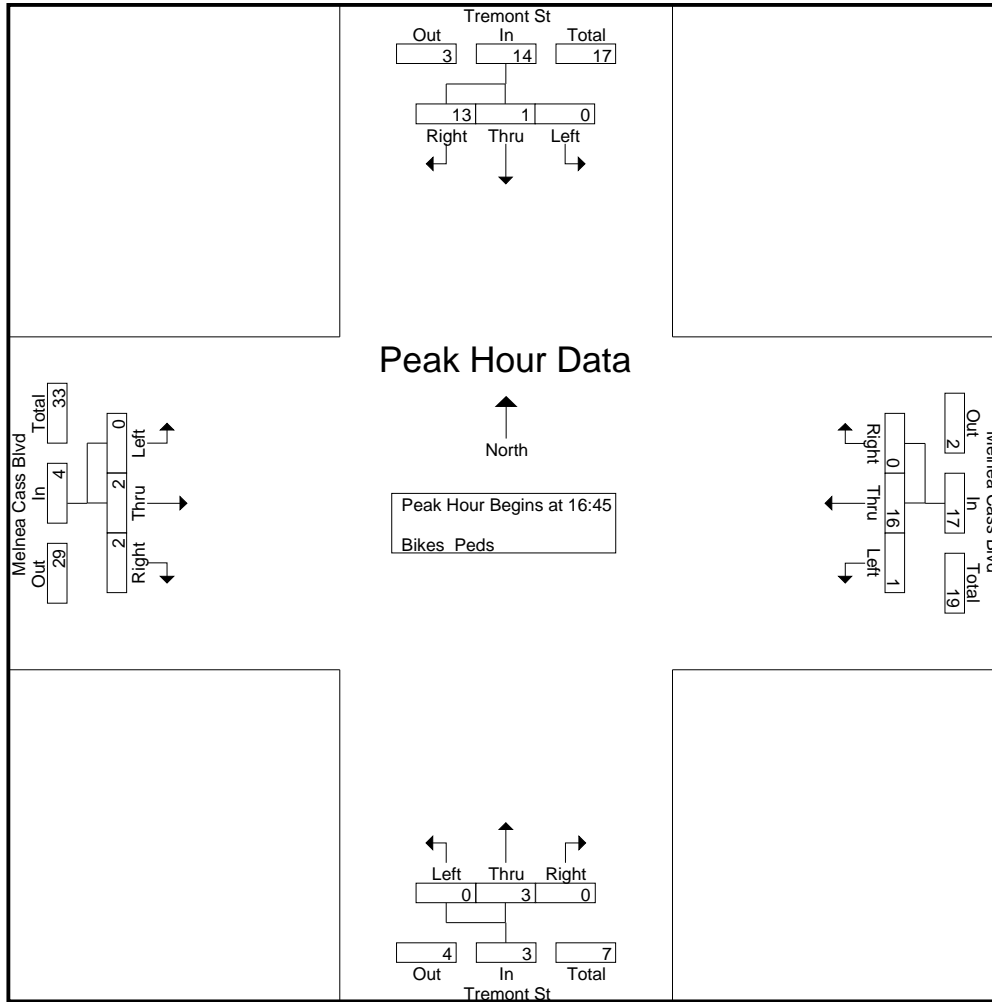
Peak Hour Analysis From 14:00 to 17:45 - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 16:45

16:45	0	0	9	9	0	3	0	3	0	2	0	2	0	0	1	1	15
17:00	0	0	0	0	0	5	0	5	0	0	0	0	0	1	0	1	6
17:15	0	1	4	5	1	3	0	4	0	0	0	0	0	0	0	0	9
17:30	0	0	0	0	0	5	0	5	0	1	0	1	0	1	1	2	8
Total Volume	0	1	13	14	1	16	0	17	0	3	0	3	0	2	2	4	38
% App. Total	0	7.1	92.9		5.9	94.1	0		0	100	0		0	50	50		
PHF	.000	.250	.361	.389	.250	.800	.000	.850	.000	.375	.000	.375	.000	.500	.500	.500	.633

Accurate Counts
978-664-2565

N/S Street : Tremont Street
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear

File Name : 01410002
Site Code : 01410002
Start Date : 9/21/2011
Page No : 6



Peak Hour Analysis From 14:00 to 17:45 - Peak 1 of 1

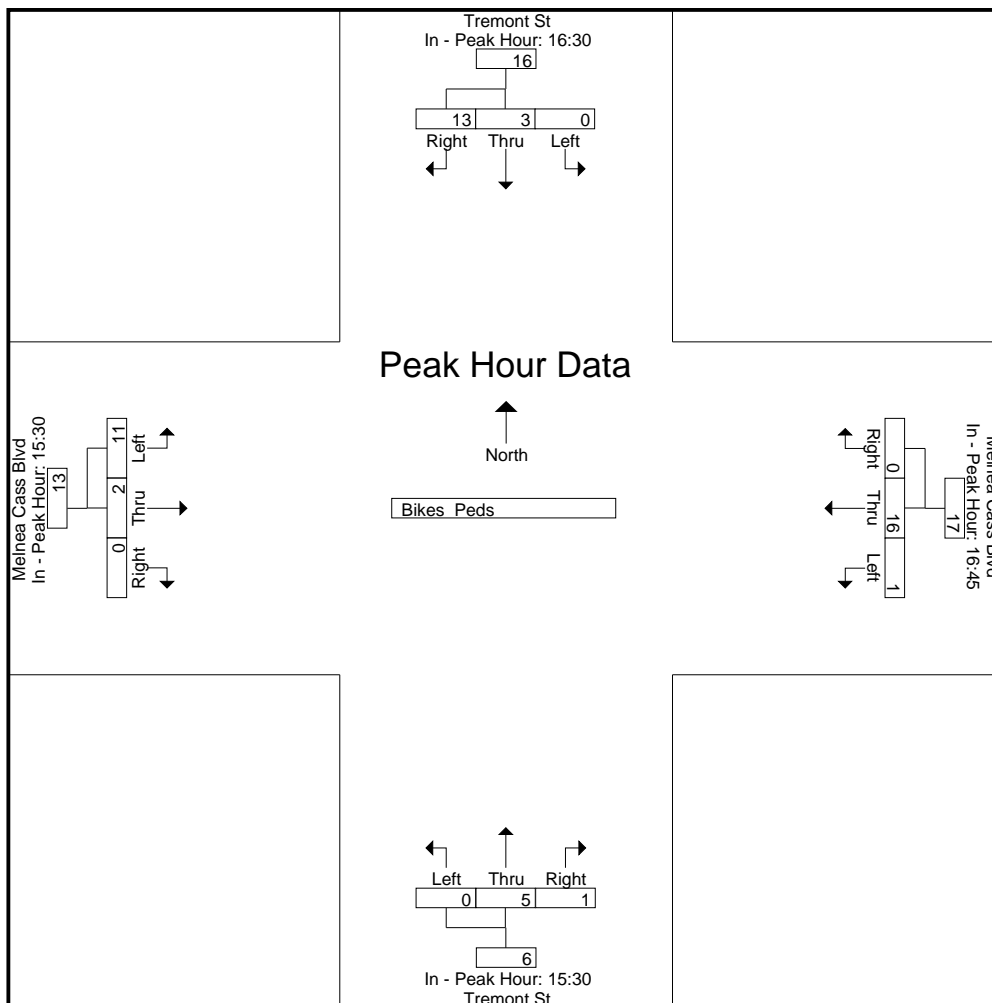
Peak Hour for Each Approach Begins at:

	16:30				16:45				15:30				15:30			
+0 mins.	0	2	0	2	0	3	0	3	0	1	0	1	0	1	0	1
+15 mins.	0	0	9	9	0	5	0	5	0	2	1	3	9	0	0	9
+30 mins.	0	0	0	0	1	3	0	4	0	0	0	0	2	0	0	2
+45 mins.	0	1	4	5	0	5	0	5	0	2	0	2	0	1	0	1
Total Volume	0	3	13	16	1	16	0	17	0	5	1	6	11	2	0	13
% App. Total	0	18.8	81.2		5.9	94.1	0		0	83.3	16.7		84.6	15.4	0	
PHF	.000	.375	.361	.444	.250	.800	.000	.850	.000	.625	.250	.500	.306	.500	.000	.361

Accurate Counts
978-664-2565

N/S Street : Tremont Street
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear

File Name : 01410002
Site Code : 01410002
Start Date : 9/21/2011
Page No : 7



Accurate Counts

978-664-2565

N/S Street : Columbus Avenue
 E/W Street: Melnea Cass Boulevard
 City/State : Boston, MA
 Weather : Clear

File Name : 01410001
 Site Code : 01410001
 Start Date : 9/21/2011
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	Columbus Ave From North				Melnea Cass Blvd From East				Columbus Ave From South				Melnea Cass Blvd From West				Int. Total
	Left	Thru	Right	U-TR	Left	Thru	Right	U-TR	Left	Thru	Right	U-TR	Left	Thru	Right	U-TR	
07:00	49	13	0	0	54	2	68	1	0	5	4	0	0	0	0	0	196
07:15	55	15	0	0	43	4	69	0	0	9	4	0	0	0	0	0	199
07:30	46	1	0	0	64	4	79	1	0	2	7	0	0	1	0	0	205
07:45	46	15	1	0	45	3	93	0	0	5	9	0	1	0	0	0	218
Total	196	44	1	0	206	13	309	2	0	21	24	0	1	1	0	0	818
08:00	60	13	0	0	50	2	80	3	0	6	4	0	0	0	0	0	218
08:15	38	15	1	0	43	4	107	2	0	3	6	0	0	0	0	0	219
08:30	46	13	1	0	44	2	125	1	0	4	7	0	0	1	0	0	244
08:45	32	9	0	0	41	0	85	1	0	2	2	0	0	0	0	0	172
Total	176	50	2	0	178	8	397	7	0	15	19	0	0	1	0	0	853
09:00	37	17	0	0	20	1	101	3	0	4	1	0	0	0	0	0	184
09:15	40	14	0	0	24	3	66	1	0	4	4	0	0	1	0	0	157
09:30	39	7	0	0	15	1	66	2	0	3	3	0	0	0	0	0	136
09:45	55	15	2	0	30	4	72	2	0	6	5	0	0	1	0	0	192
Total	171	53	2	0	89	9	305	8	0	17	13	0	0	2	0	0	669
10:00	38	11	2	0	17	3	75	3	0	6	4	0	0	0	1	0	160
10:15	36	11	0	0	13	3	60	0	0	1	3	0	0	0	0	0	127
10:30	40	6	0	0	6	2	37	1	0	4	3	0	0	0	0	0	99
10:45	20	7	0	0	16	0	32	1	0	4	3	0	0	2	0	0	85
Total	134	35	2	0	52	8	204	5	0	15	13	0	0	2	1	0	471
11:00	33	4	0	0	16	5	51	1	0	4	2	0	0	1	0	0	117
11:15	38	10	0	0	15	2	51	2	0	4	6	0	1	0	0	0	129
11:30	42	10	0	0	14	3	52	3	0	8	5	0	0	0	0	0	137
11:45	57	15	0	0	15	3	46	0	0	5	4	0	0	0	1	0	146
Total	170	39	0	0	60	13	200	6	0	21	17	0	1	1	1	0	529
12:00	50	14	0	0	8	3	36	1	0	7	5	0	0	0	0	0	124
12:15	50	4	0	0	7	2	54	2	0	1	3	0	0	0	0	0	123
12:30	52	8	0	0	18	2	38	1	0	3	5	0	2	0	0	0	129
12:45	53	11	0	0	24	3	72	2	0	6	10	0	0	0	0	0	181
Total	205	37	0	0	57	10	200	6	0	17	23	0	2	0	0	0	557
13:00	52	13	0	0	13	2	48	4	0	5	5	0	0	0	0	0	142
13:15	49	17	0	0	16	6	48	4	0	11	5	0	0	1	0	0	157
13:30	53	5	2	0	17	3	40	0	0	6	7	0	1	0	0	0	134
13:45	50	5	3	0	11	2	41	1	0	7	10	0	0	0	0	0	130
Total	204	40	5	0	57	13	177	9	0	29	27	0	1	1	0	0	563
14:00	38	17	0	1	19	3	56	2	0	9	14	0	1	2	0	0	162
14:15	43	8	2	0	12	0	52	0	0	5	11	0	1	0	0	0	134
14:30	63	14	1	1	12	4	50	6	0	8	7	0	0	1	1	0	168
14:45	68	13	0	0	14	3	35	4	0	5	9	0	0	1	0	0	152
Total	212	52	3	2	57	10	193	12	0	27	41	0	2	4	1	0	616
15:00	64	15	0	0	15	4	45	1	0	5	12	1	0	1	0	0	163
15:15	66	8	0	0	21	3	33	0	0	8	11	0	1	0	0	0	151
15:30	72	18	0	1	29	2	33	3	0	19	19	1	0	0	0	0	197
15:45	81	12	0	0	18	3	58	0	0	18	17	4	0	0	0	0	211
Total	283	53	0	1	83	12	169	4	0	50	59	6	1	1	0	0	722
16:00	63	16	1	0	13	1	57	0	0	15	20	0	0	1	0	0	187
16:15	78	21	0	0	19	4	42	4	0	11	16	0	0	0	0	0	195
16:30	97	15	1	0	15	1	60	1	0	13	12	0	0	0	0	0	215
16:45	79	10	1	0	16	3	52	1	0	26	17	0	1	0	0	0	206
Total	317	62	3	0	63	9	211	6	0	65	65	0	1	1	0	0	803
17:00	86	24	1	0	22	2	47	5	0	17	23	1	0	0	0	0	228
17:15	76	24	0	0	12	2	47	0	0	21	16	0	1	1	0	0	200
17:30	91	44	1	0	28	4	37	4	0	23	22	0	0	0	1	0	255
17:45	98	32	0	0	27	3	57	2	0	20	16	0	0	0	1	0	256
Total	351	124	2	0	89	11	188	11	0	81	77	1	1	1	2	0	939
Grand Total	2419	589	20	3	991	116	2553	76	0	358	378	7	10	15	5	0	7540
Apprch %	79.8	19.4	0.7	0.1	26.5	3.1	68.3	2	0	48.2	50.9	0.9	33.3	50	16.7	0	
Total %	32.1	7.8	0.3	0	13.1	1.5	33.9	1	0	4.7	5	0.1	0.1	0.2	0.1	0	

N/S Street : Columbus Avenue
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear

Groups Printed- Cars - Trucks

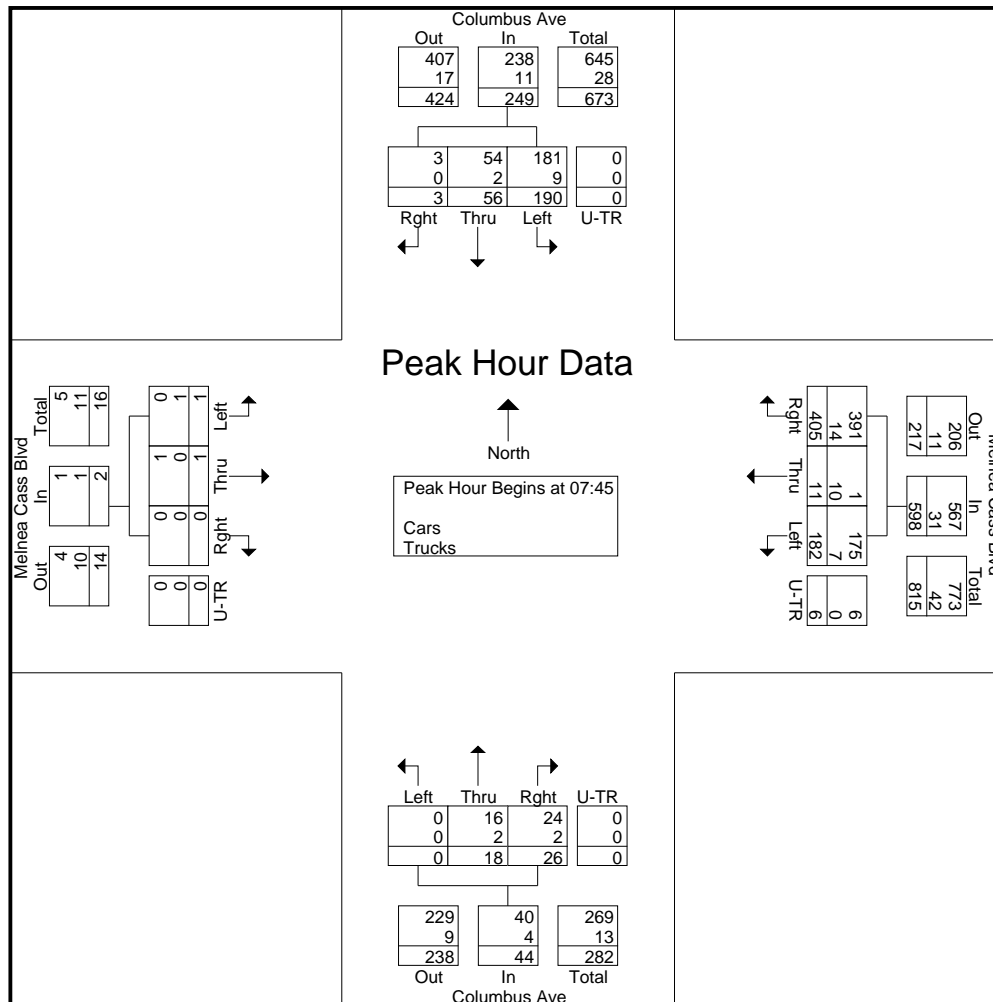
	Columbus Ave From North				Melnea Cass Blvd From East				Columbus Ave From South				Melnea Cass Blvd From West				Int. Total
	Left	Thru	Right	U-TR	Left	Thru	Right	U-TR	Left	Thru	Right	U-TR	Left	Thru	Right	U-TR	
Cars	2295	574	15	3	907	19	2448	76	0	348	372	7	9	14	5	0	7092
% Cars	94.9	97.5	75	100	91.5	16.4	95.9	100	0	97.2	98.4	100	90	93.3	100	0	94.1
Trucks	124	15	5	0	84	97	105	0	0	10	6	0	1	1	0	0	448
% Trucks	5.1	2.5	25	0	8.5	83.6	4.1	0	0	2.8	1.6	0	10	6.7	0	0	5.9

Start Time	Columbus Ave From North					Melnea Cass Blvd From East					Columbus Ave From South					Melnea Cass Blvd From West					Int. Total
	Left	Thru	Right	U-TR	App. Total	Left	Thru	Right	U-TR	App. Total	Left	Thru	Right	U-TR	App. Total	Left	Thru	Right	U-TR	App. Total	

Peak Hour Analysis From 07:00 to 09:45 - Peak 1 of 1

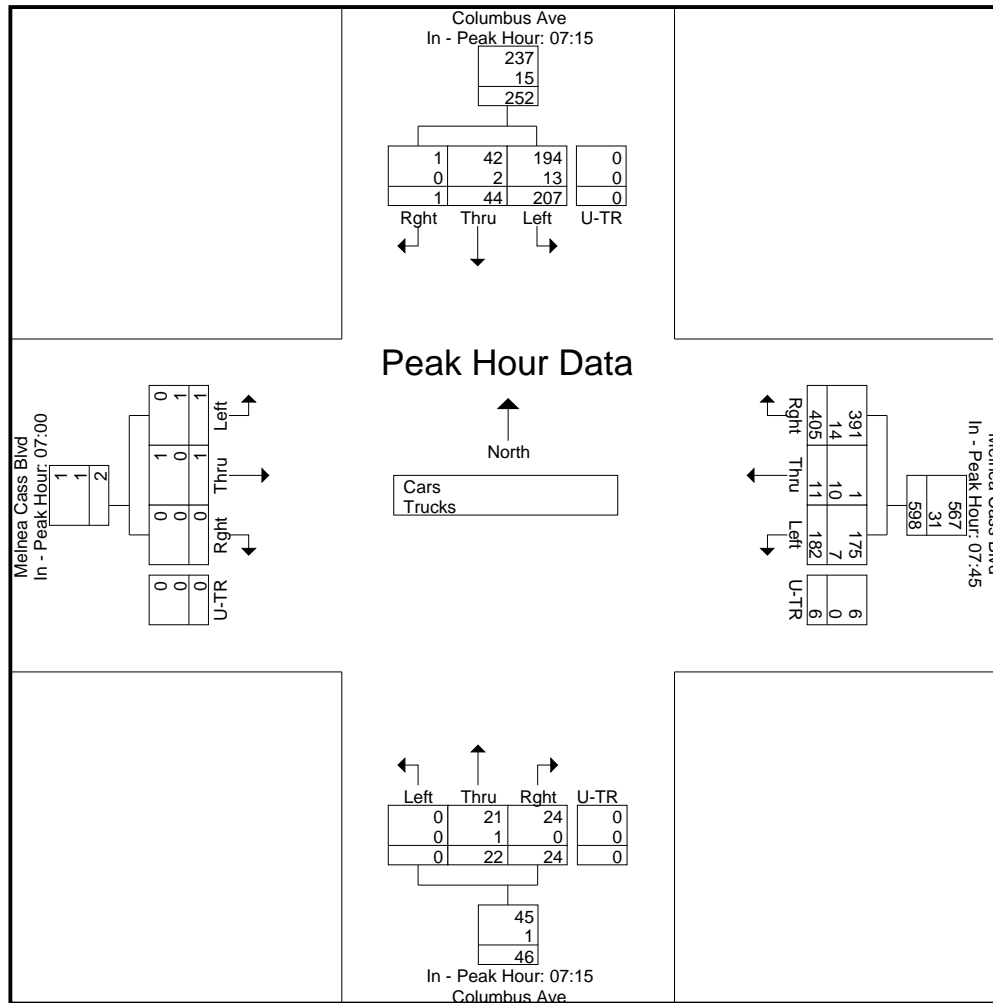
Peak Hour for Entire Intersection Begins at 07:45

07:45	46	15	1	0	62	45	3	93	0	141	0	5	9	0	14	1	0	0	0	0	1	218
08:00	60	13	0	0	73	50	2	80	3	135	0	6	4	0	10	0	0	0	0	0	0	218
08:15	38	15	1	0	54	43	4	107	2	156	0	3	6	0	9	0	0	0	0	0	0	219
08:30	46	13	1	0	60	44	2	125	1	172	0	4	7	0	11	0	1	0	0	0	1	244
Total Volume	190	56	3	0	249	182	11	405	6	604	0	18	26	0	44	1	1	0	0	0	2	899
% App. Total	.792	.933	.750	.000	.853	.910	.688	.810	.500	.878	.000	.750	.722	.000	.786	.250	.250	.000	.000	.500	.921	
PHF	.792	.933	.750	.000	.853	.910	.688	.810	.500	.878	.000	.750	.722	.000	.786	.250	.250	.000	.000	.500	.921	
Cars	181	54	3	0	238	175	1	391	6	573	0	16	24	0	40	0	1	0	0	0	1	852
% Cars	95.3	96.4	100	0	95.6	96.2	9.1	96.5	100	94.9	0	88.9	92.3	0	90.9	0	100	0	0	50.0	94.8	
Trucks	9	2	0	0	11	7	10	14	0	31	0	2	2	0	4	1	0	0	0	0	1	47
% Trucks	4.7	3.6	0	0	4.4	3.8	90.9	3.5	0	5.1	0	11.1	7.7	0	9.1	100	0	0	0	50.0	5.2	



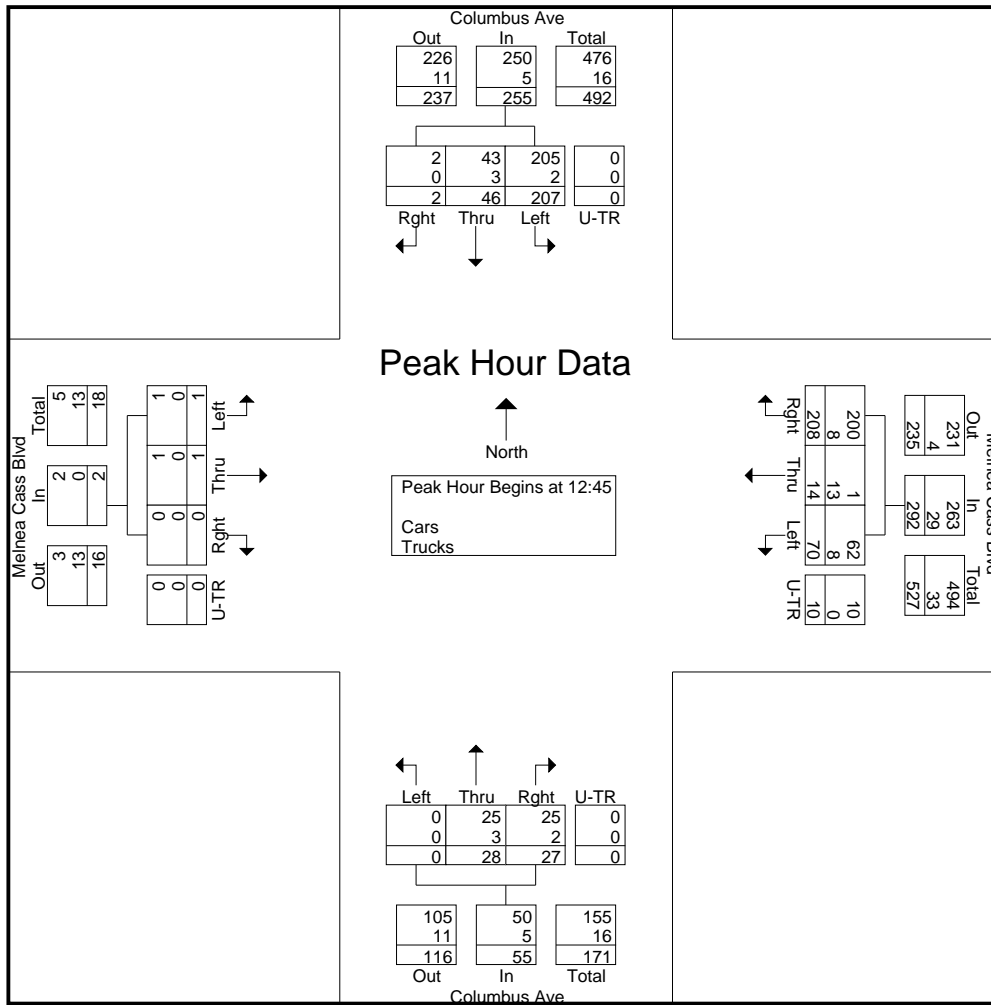
N/S Street : Columbus Avenue
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear

Start Time	Columbus Ave From North					Melnea Cass Blvd From East					Columbus Ave From South					Melnea Cass Blvd From West					Int. Total
	Left	Thru	Right	U-TR	App. Total	Left	Thru	Right	U-TR	App. Total	Left	Thru	Right	U-TR	App. Total	Left	Thru	Right	U-TR	App. Total	
Peak Hour Analysis From 07:00 to 09:45 - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	07:15					07:45					07:15					07:00					
+0 mins.	55	15	0	0	70	45	3	93	0	141	0	9	4	0	13	0	0	0	0	0	0
+15 mins.	46	1	0	0	47	50	2	80	3	135	0	2	7	0	9	0	0	0	0	0	0
+30 mins.	46	15	1	0	62	43	4	107	2	156	0	5	9	0	14	0	1	0	0	0	1
+45 mins.	60	13	0	0	73	44	2	125	1	172	0	6	4	0	10	1	0	0	0	0	1
Total Volume	207	44	1	0	252	182	11	405	6	604	0	22	24	0	46	1	1	0	0	0	2
% App. Total	.863	.733	.250	.000	.863	.910	.688	.810	.500	.878	.000	.611	.667	.000	.821	.250	.250	.000	.000	.500	
PHF	.863	.733	.250	.000	.863	.910	.688	.810	.500	.878	.000	.611	.667	.000	.821	.250	.250	.000	.000	.500	
Cars	194	42	1	0	237	175	1	391	6	573	0	21	24	0	45	0	1	0	0	0	1
% Cars	93.7	95.5	100	0	94	96.2	9.1	96.5	100	94.9	0	95.5	100	0	97.8	0	100	0	0	0	50
Trucks	13	2	0	0	15	7	10	14	0	31	0	1	0	0	1	1	0	0	0	0	1
% Trucks	6.3	4.5	0	0	6	3.8	90.9	3.5	0	5.1	0	4.5	0	0	2.2	100	0	0	0	0	50



Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:45																					
12:45	53	11	0	0	64	24	3	72	2	101	0	6	10	0	16	0	0	0	0	0	181
13:00	52	13	0	0	65	13	2	48	4	67	0	5	5	0	10	0	0	0	0	0	142
13:15	49	17	0	0	66	16	6	48	4	74	0	11	5	0	16	0	1	0	0	0	157
13:30	53	5	2	0	60	17	3	40	0	60	0	6	7	0	13	1	0	0	0	0	134
Total Volume	207	46	2	0	255	70	14	208	10	302	0	28	27	0	55	1	1	0	0	0	614
% App. Total	.976	.676	.250	.000	.966	.729	.583	.722	.625	.748	.000	.636	.675	.000	.859	.250	.250	.000	.000	.500	
PHF	.976	.676	.250	.000	.966	.729	.583	.722	.625	.748	.000	.636	.675	.000	.859	.250	.250	.000	.000	.500	.848
Cars	205	43	2	0	250	62	1	200	10	273	0	25	25	0	50	1	1	0	0	0	575
% Cars	99.0	93.5	100	0	98.0	88.6	7.1	96.2	100	90.4	0	89.3	92.6	0	90.9	100	100	0	0	100	93.6
Trucks	2	3	0	0	5	8	13	8	0	29	0	3	2	0	5	0	0	0	0	0	39
% Trucks	1.0	6.5	0	0	2.0	11.4	92.9	3.8	0	9.6	0	10.7	7.4	0	9.1	0	0	0	0	0	6.4

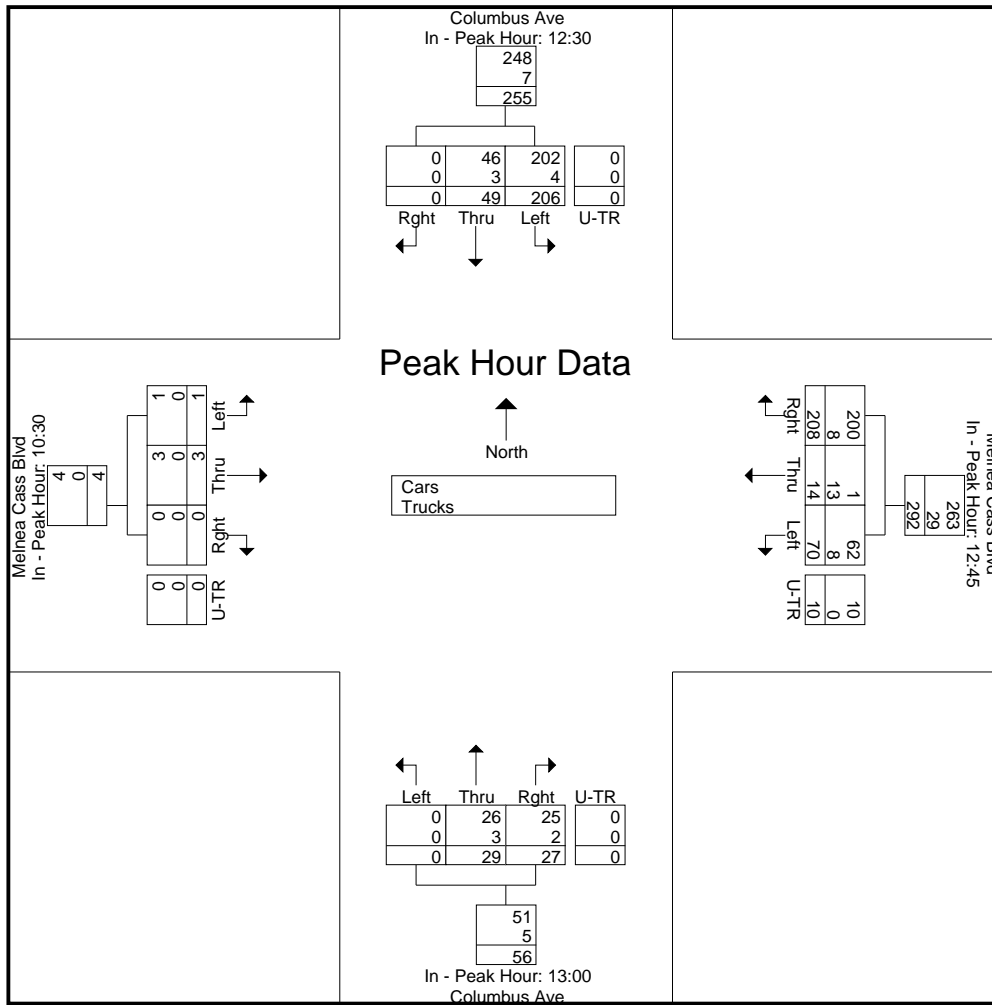
N/S Street : Columbus Avenue
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear



Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	12:30					12:45					13:00					10:30				
+0 mins.	52	8	0	0	60	24	3	72	2	101	0	5	5	0	10	0	0	0	0	0
+15 mins.	53	11	0	0	64	13	2	48	4	67	0	11	5	0	16	0	2	0	0	2
+30 mins.	52	13	0	0	65	16	6	48	4	74	0	6	7	0	13	0	1	0	0	1
+45 mins.	49	17	0	0	66	17	3	40	0	60	0	7	10	0	17	1	0	0	0	1
Total Volume	206	49	0	0	255	70	14	208	10	302	0	29	27	0	56	1	3	0	0	4
% App. Total																				
PHF	.972	.721	.000	.000	.966	.729	.583	.722	.625	.748	.000	.659	.675	.000	.824	.250	.375	.000	.000	.500
Cars	202	46	0	0	248	62	1	200	10	273	0	26	25	0	51	1	3	0	0	4
% Cars	98.1	93.9	0	0	97.3	88.6	7.1	96.2	100	90.4	0	89.7	92.6	0	91.1	100	100	0	0	100
Trucks	4	3	0	0	7	8	13	8	0	29	0	3	2	0	5	0	0	0	0	0
% Trucks	1.9	6.1	0	0	2.7	11.4	92.9	3.8	0	9.6	0	10.3	7.4	0	8.9	0	0	0	0	0

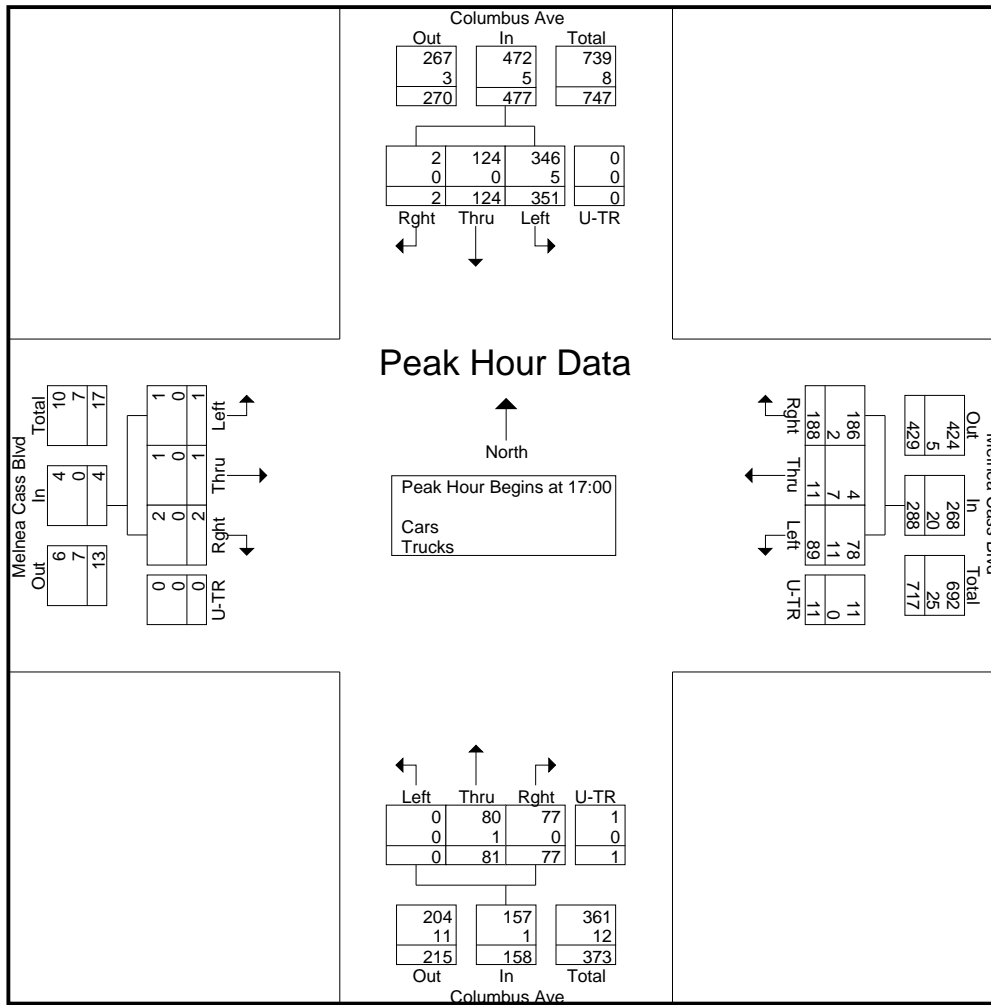
N/S Street : Columbus Avenue
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear



Peak Hour Analysis From 14:00 to 17:45 - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 17:00

17:00	86	24	1	0	111	22	2	47	5	76	0	17	23	1	41	0	0	0	0	0	228
17:15	76	24	0	0	100	12	2	47	0	61	0	21	16	0	37	1	1	0	0	2	200
17:30	91	44	1	0	136	28	4	37	4	73	0	23	22	0	45	0	0	1	0	1	255
17:45	98	32	0	0	130	27	3	57	2	89	0	20	16	0	36	0	0	1	0	1	256
Total Volume	351	124	2	0	477	89	11	188	11	299	0	81	77	1	159	1	1	2	0	4	939
% App. Total	.895	.705	.500	.000	.877	.795	.688	.825	.550	.840	.000	.880	.837	.250	.883	.250	.250	.500	.000	.500	.917
PHF	.895	.705	.500	.000	.877	.795	.688	.825	.550	.840	.000	.880	.837	.250	.883	.250	.250	.500	.000	.500	.917
Cars	346	124	2	0	472	78	4	186	11	279	0	80	77	1	158	1	1	2	0	4	913
% Cars	98.6	100	100	0	99.0	87.6	36.4	98.9	100	93.3	0	98.8	100	100	99.4	100	100	100	0	100	97.2
Trucks	5	0	0	0	5	11	7	2	0	20	0	1	0	0	1	0	0	0	0	0	26
% Trucks	1.4	0	0	0	1.0	12.4	63.6	1.1	0	6.7	0	1.2	0	0	0.6	0	0	0	0	0	2.8

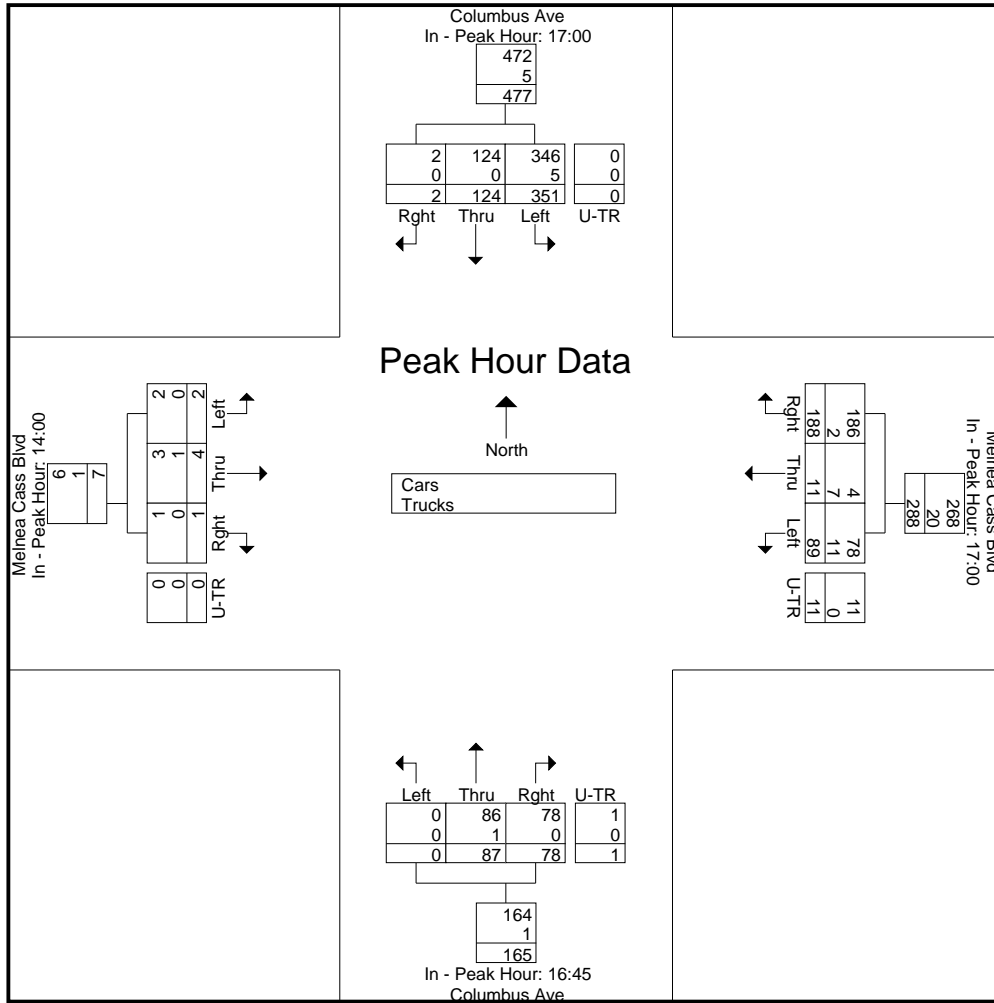
N/S Street : Columbus Avenue
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear



Peak Hour Analysis From 14:00 to 17:45 - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	17:00					17:00					16:45					14:00				
+0 mins.	86	24	1	0	111	22	2	47	5	76	0	26	17	0	43	1	2	0	0	3
+15 mins.	76	24	0	0	100	12	2	47	0	61	0	17	23	1	41	1	0	0	0	1
+30 mins.	91	44	1	0	136	28	4	37	4	73	0	21	16	0	37	0	1	1	0	2
+45 mins.	98	32	0	0	130	27	3	57	2	89	0	23	22	0	45	0	1	0	0	1
Total Volume	351	124	2	0	477	89	11	188	11	299	0	87	78	1	166	2	4	1	0	7
% App. Total																				
PHF	.895	.705	.500	.000	.877	.795	.688	.825	.550	.840	.000	.837	.848	.250	.922	.500	.500	.250	.000	.583
Cars	346	124	2	0	472	78	4	186	11	279	0	86	78	1	165	2	3	1	0	6
% Cars	98.6	100	100	0	99	87.6	36.4	98.9	100	93.3	0	98.9	100	100	99.4	100	75	100	0	85.7
Trucks	5	0	0	0	5	11	7	2	0	20	0	1	0	0	1	0	1	0	0	1
% Trucks	1.4	0	0	0	1	12.4	63.6	1.1	0	6.7	0	1.1	0	0	0.6	0	25	0	0	14.3

N/S Street : Columbus Avenue
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear



Accurate Counts

978-664-2565

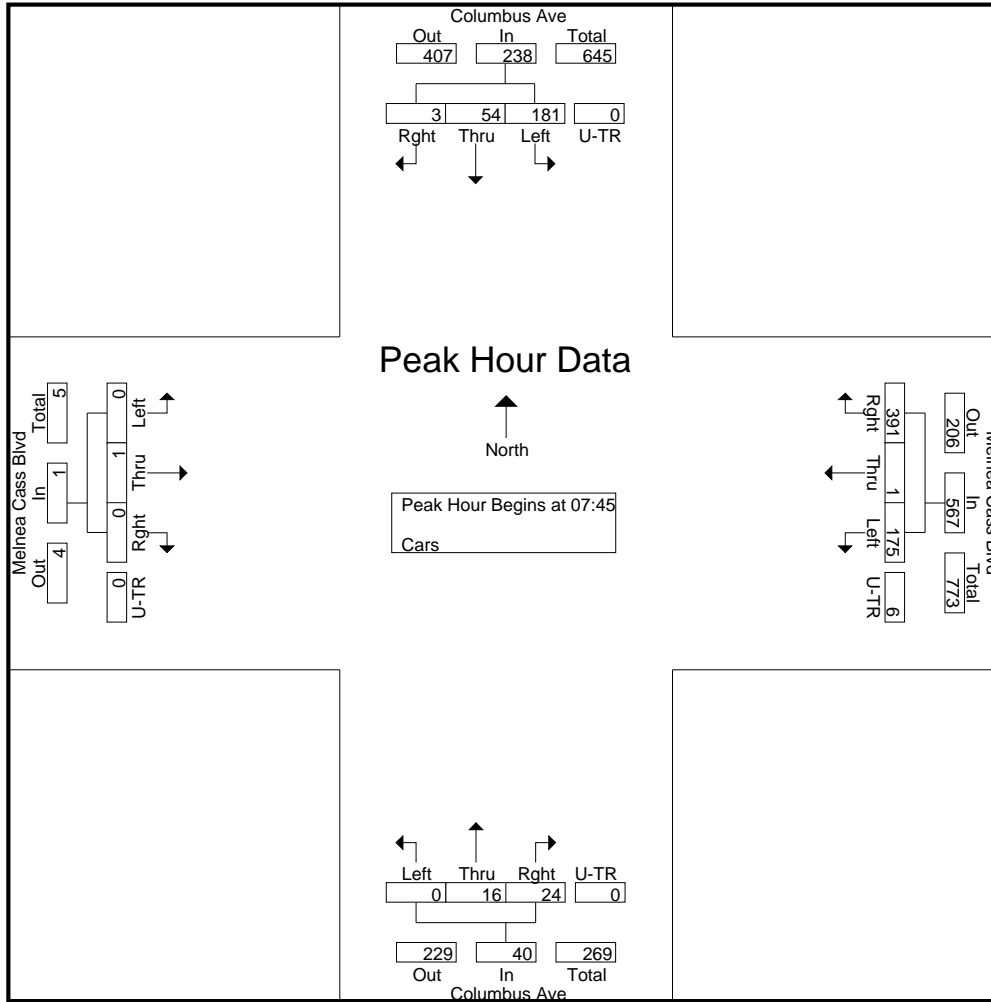
N/S Street : Columbus Avenue
 E/W Street: Melnea Cass Boulevard
 City/State : Boston, MA
 Weather : Clear

File Name : 01410001
 Site Code : 01410001
 Start Date : 9/21/2011
 Page No : 1

Groups Printed- Cars

Start Time	Columbus Ave From North				Melnea Cass Blvd From East				Columbus Ave From South				Melnea Cass Blvd From West				Int. Total
	Left	Thru	Right	U-TR	Left	Thru	Right	U-TR	Left	Thru	Right	U-TR	Left	Thru	Right	U-TR	
07:00	45	12	0	0	51	0	62	1	0	5	4	0	0	0	0	0	180
07:15	50	15	0	0	41	1	66	0	0	9	4	0	0	0	0	0	186
07:30	44	1	0	0	62	0	76	1	0	2	7	0	0	1	0	0	194
07:45	42	14	1	0	43	0	87	0	0	4	9	0	0	0	0	0	200
Total	181	42	1	0	197	1	291	2	0	20	24	0	0	1	0	0	760
08:00	58	12	0	0	47	0	79	3	0	6	4	0	0	0	0	0	209
08:15	37	15	1	0	42	1	103	2	0	3	5	0	0	0	0	0	209
08:30	44	13	1	0	43	0	122	1	0	3	6	0	0	1	0	0	234
08:45	28	8	0	0	39	0	83	1	0	2	2	0	0	0	0	0	163
Total	167	48	2	0	171	1	387	7	0	14	17	0	0	1	0	0	815
09:00	32	16	0	0	19	0	98	3	0	3	1	0	0	0	0	0	172
09:15	37	14	0	0	22	1	62	1	0	4	4	0	0	1	0	0	146
09:30	34	7	0	0	13	0	64	2	0	2	3	0	0	0	0	0	125
09:45	48	14	2	0	29	1	71	2	0	6	5	0	0	1	0	0	179
Total	151	51	2	0	83	2	295	8	0	15	13	0	0	2	0	0	622
10:00	34	11	1	0	16	1	72	3	0	6	4	0	0	0	1	0	149
10:15	33	11	0	0	12	0	57	0	0	1	3	0	0	0	0	0	117
10:30	38	6	0	0	4	0	34	1	0	4	3	0	0	0	0	0	90
10:45	19	7	0	0	14	0	31	1	0	4	2	0	0	2	0	0	80
Total	124	35	1	0	46	1	194	5	0	15	12	0	0	2	1	0	436
11:00	32	4	0	0	15	2	47	1	0	4	2	0	0	1	0	0	108
11:15	37	10	0	0	14	0	51	2	0	4	6	0	1	0	0	0	125
11:30	40	10	0	0	14	0	51	3	0	8	5	0	0	0	0	0	131
11:45	53	14	0	0	14	0	44	0	0	5	4	0	0	0	1	0	135
Total	162	38	0	0	57	2	193	6	0	21	17	0	1	1	1	0	499
12:00	48	13	0	0	8	1	34	1	0	7	5	0	0	0	0	0	117
12:15	48	3	0	0	7	0	54	2	0	1	3	0	0	0	0	0	118
12:30	49	8	0	0	17	0	36	1	0	3	5	0	2	0	0	0	121
12:45	53	11	0	0	24	0	72	2	0	6	10	0	0	0	0	0	178
Total	198	35	0	0	56	1	196	6	0	17	23	0	2	0	0	0	534
13:00	52	13	0	0	12	0	46	4	0	5	4	0	0	0	0	0	136
13:15	48	14	0	0	13	1	45	4	0	10	5	0	0	1	0	0	141
13:30	52	5	2	0	13	0	37	0	0	4	6	0	1	0	0	0	120
13:45	45	5	2	0	7	0	39	1	0	7	10	0	0	0	0	0	116
Total	197	37	4	0	45	1	167	9	0	26	25	0	1	1	0	0	513
14:00	32	17	0	1	16	0	54	2	0	9	14	0	1	2	0	0	148
14:15	38	8	0	0	10	0	49	0	0	4	11	0	1	0	0	0	121
14:30	61	14	0	1	11	1	47	6	0	8	7	0	0	0	1	0	157
14:45	64	13	0	0	12	1	35	4	0	5	9	0	0	1	0	0	144
Total	195	52	0	2	49	2	185	12	0	26	41	0	2	3	1	0	570
15:00	61	13	0	0	14	0	44	1	0	5	11	1	0	1	0	0	151
15:15	64	7	0	0	18	1	29	0	0	8	11	0	1	0	0	0	139
15:30	65	18	0	1	23	0	33	3	0	19	19	1	0	0	0	0	182
15:45	76	12	0	0	15	0	53	0	0	17	17	4	0	0	0	0	194
Total	266	50	0	1	70	1	159	4	0	49	58	6	1	1	0	0	666
16:00	61	16	1	0	11	1	54	0	0	15	20	0	0	1	0	0	180
16:15	75	21	0	0	16	2	37	4	0	11	16	0	0	0	0	0	182
16:30	95	15	1	0	14	0	56	1	0	13	12	0	0	0	0	0	207
16:45	77	10	1	0	14	0	48	1	0	26	17	0	1	0	0	0	195
Total	308	62	3	0	55	3	195	6	0	65	65	0	1	1	0	0	764
17:00	86	24	1	0	20	0	46	5	0	17	23	1	0	0	0	0	223
17:15	75	24	0	0	9	1	47	0	0	21	16	0	1	1	0	0	195
17:30	90	44	1	0	25	2	37	4	0	22	22	0	0	0	1	0	248
17:45	95	32	0	0	24	1	56	2	0	20	16	0	0	0	1	0	247
Total	346	124	2	0	78	4	186	11	0	80	77	1	1	1	2	0	913
Grand Total	2295	574	15	3	907	19	2448	76	0	348	372	7	9	14	5	0	7092
Apprch %	79.5	19.9	0.5	0.1	26.3	0.6	71	2.2	0	47.9	51.2	1	32.1	50	17.9	0	
Total %	32.4	8.1	0.2	0	12.8	0.3	34.5	1.1	0	4.9	5.2	0.1	0.1	0.2	0.1	0	

Start Time	Columbus Ave From North					Melnea Cass Blvd From East					Columbus Ave From South					Melnea Cass Blvd From West					Int. Total
	Left	Thru	Right	U-TR	App. Total	Left	Thru	Right	U-TR	App. Total	Left	Thru	Right	U-TR	App. Total	Left	Thru	Right	U-TR	App. Total	
Peak Hour Analysis From 07:00 to 09:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45																					
07:45	42	14	1	0	57	43	0	87	0	130	0	4	9	0	13	0	0	0	0	0	200
08:00	58	12	0	0	70	47	0	79	3	129	0	6	4	0	10	0	0	0	0	0	209
08:15	37	15	1	0	53	42	1	103	2	148	0	3	5	0	8	0	0	0	0	0	209
08:30	44	13	1	0	58	43	0	122	1	166	0	3	6	0	9	0	1	0	0	1	234
Total Volume	181	54	3	0	238	175	1	391	6	573	0	16	24	0	40	0	1	0	0	1	852
% App. Total																					
PHF	.780	.900	.750	.000	.850	.931	.250	.801	.500	.863	.000	.667	.667	.000	.769	.000	.250	.000	.000	.250	.910

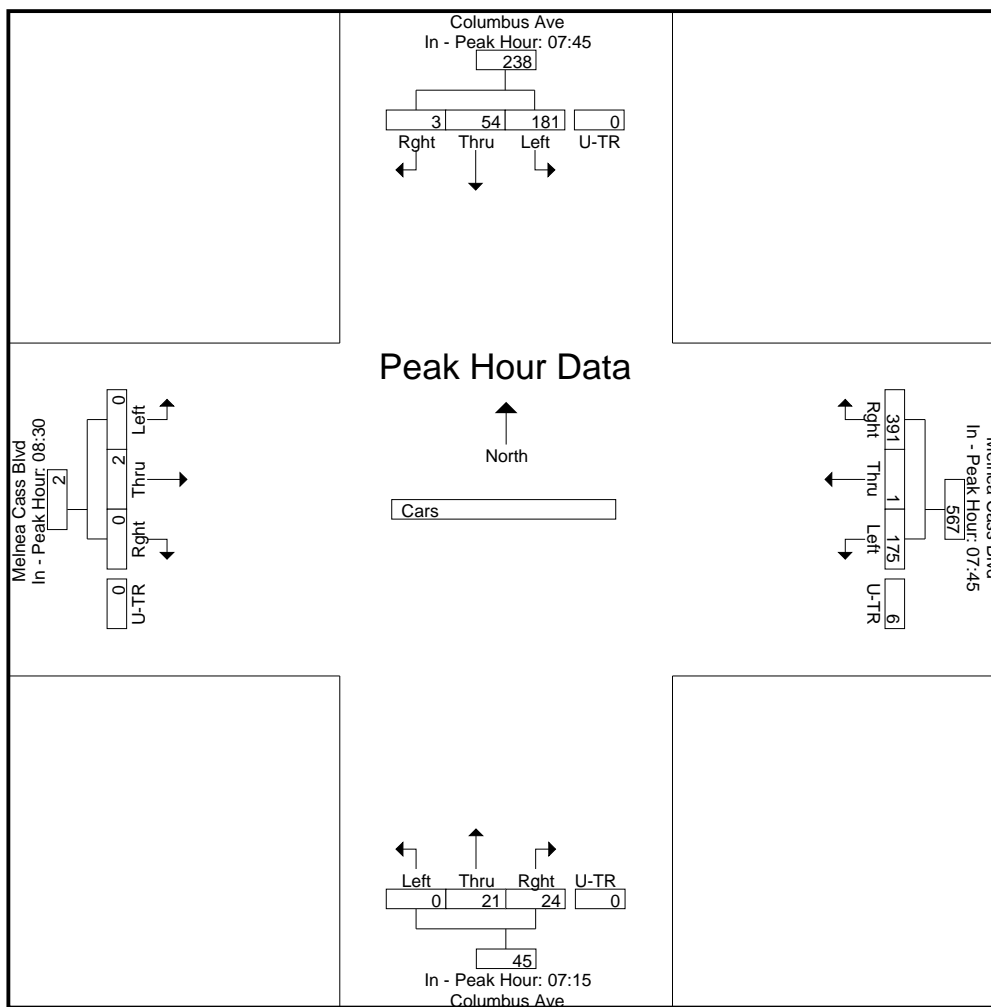


Peak Hour Analysis From 07:00 to 09:45 - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:45					07:45					07:15					08:30					
+0 mins.	42	14	1	0	57	43	0	87	0	130	0	9	4	0	13	0	1	0	0	0	1
+15 mins.	58	12	0	0	70	47	0	79	3	129	0	2	7	0	9	0	0	0	0	0	0
+30 mins.	37	15	1	0	53	42	1	103	2	148	0	4	9	0	13	0	0	0	0	0	0
+45 mins.	44	13	1	0	58	43	0	122	1	166	0	6	4	0	10	0	1	0	0	0	1
Total Volume	181	54	3	0	238	175	1	391	6	573	0	21	24	0	45	0	2	0	0	0	2
% App. Total																					
PHF	.780	.900	.750	.000	.850	.931	.250	.801	.500	.863	.000	.583	.667	.000	.865	.000	.500	.000	.000	.000	.500

N/S Street : Columbus Avenue
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear

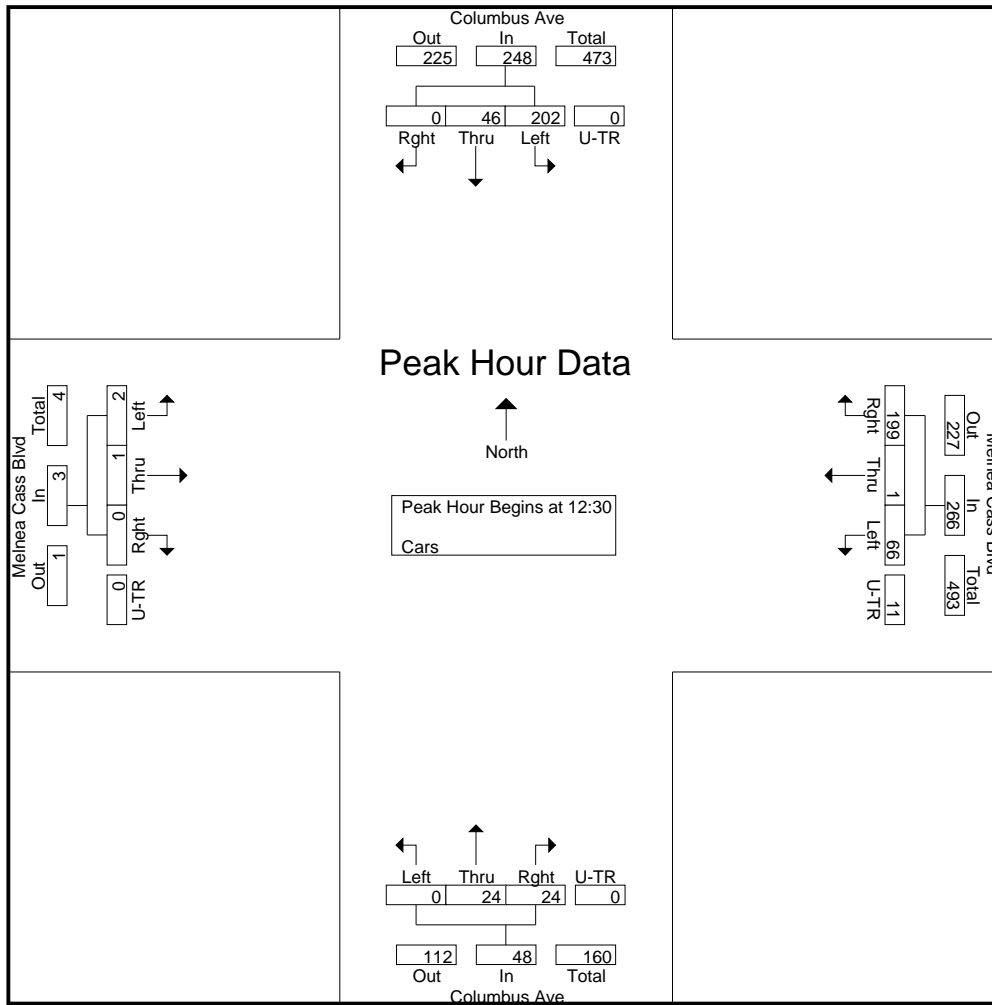
File Name : 01410001
Site Code : 01410001
Start Date : 9/21/2011
Page No : 3



Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 12:30

12:30	49	8	0	0	57	17	0	36	1	54	0	3	5	0	8	2	0	0	0	2	121	
12:45	53	11	0	0	64	24	0	72	2	98	0	6	10	0	16	0	0	0	0	0	178	
13:00	52	13	0	0	65	12	0	46	4	62	0	5	4	0	9	0	0	0	0	0	136	
13:15	48	14	0	0	62	13	1	45	4	63	0	10	5	0	15	0	1	0	0	1	141	
Total Volume	202	46	0	0	248	66	1	199	11	277	0	24	24	0	48	2	1	0	0	3	576	
% App. Total	PHF	.953	.821	.000	.000	.954	.688	.250	.691	.688	.707	.000	.600	.600	.000	.750	.250	.250	.000	.000	.375	.809

N/S Street : Columbus Avenue
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear



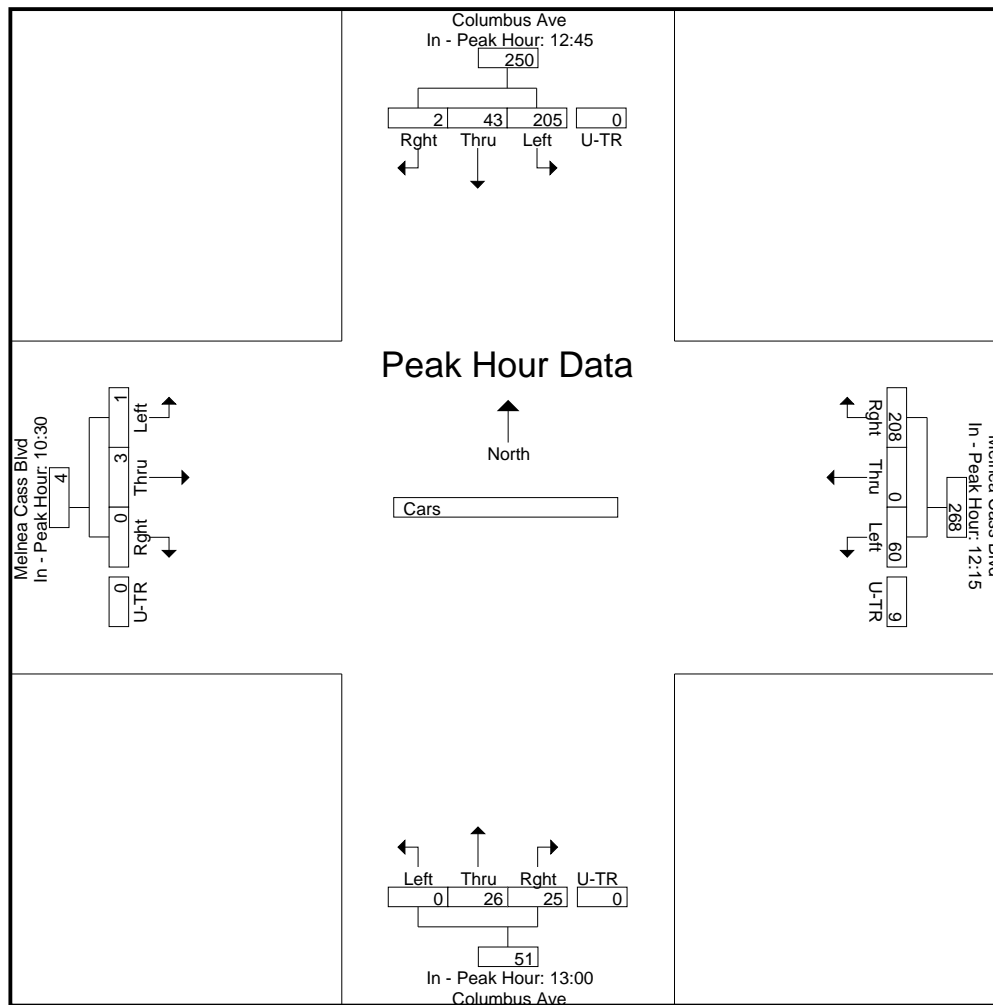
Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	12:45					12:15					13:00					10:30				
+0 mins.	53	11	0	0	64	7	0	54	2	63	0	5	4	0	9	0	0	0	0	0
+15 mins.	52	13	0	0	65	17	0	36	1	54	0	10	5	0	15	0	2	0	0	2
+30 mins.	48	14	0	0	62	24	0	72	2	98	0	4	6	0	10	0	1	0	0	1
+45 mins.	52	5	2	0	59	12	0	46	4	62	0	7	10	0	17	1	0	0	0	1
Total Volume	205	43	2	0	250	60	0	208	9	277	0	26	25	0	51	1	3	0	0	4
% App. Total																				
PHF	.967	.768	.250	.000	.962	.625	.000	.722	.563	.707	.000	.650	.625	.000	.750	.250	.375	.000	.000	.500

Accurate Counts
978-664-2565

File Name : 01410001
Site Code : 01410001
Start Date : 9/21/2011
Page No : 5

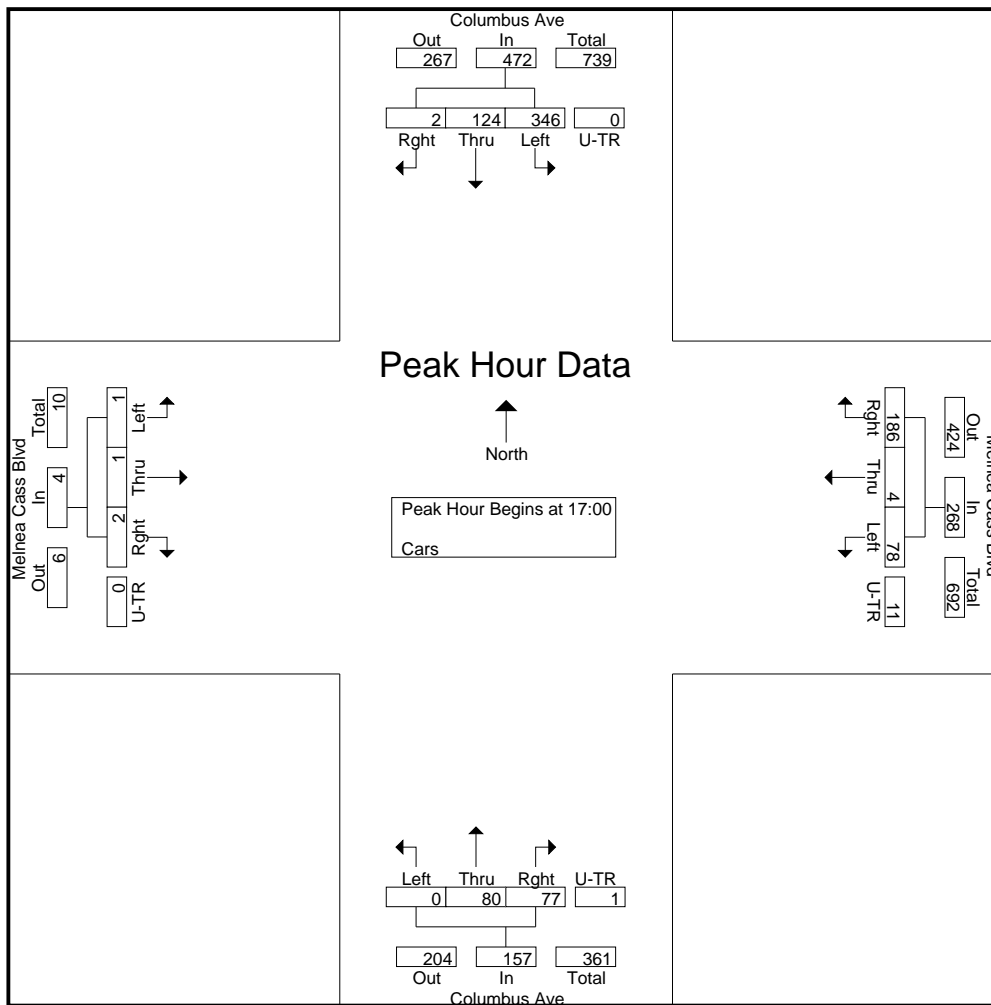
N/S Street : Columbus Avenue
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear



Peak Hour Analysis From 14:00 to 17:45 - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 17:00

17:00	86	24	1	0	111	20	0	46	5	71	0	17	23	1	41	0	0	0	0	0	223	
17:15	75	24	0	0	99	9	1	47	0	57	0	21	16	0	37	1	1	0	0	2	195	
17:30	90	44	1	0	135	25	2	37	4	68	0	22	22	0	44	0	0	1	0	1	248	
17:45	95	32	0	0	127	24	1	56	2	83	0	20	16	0	36	0	0	1	0	1	247	
Total Volume	346	124	2	0	472	78	4	186	11	279	0	80	77	1	158	1	1	2	0	4	913	
% App. Total	PHF	.911	.705	.500	.000	.874	.780	.500	.830	.550	.840	.000	.909	.837	.250	.898	.250	.250	.500	.000	.500	.920

N/S Street : Columbus Avenue
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear



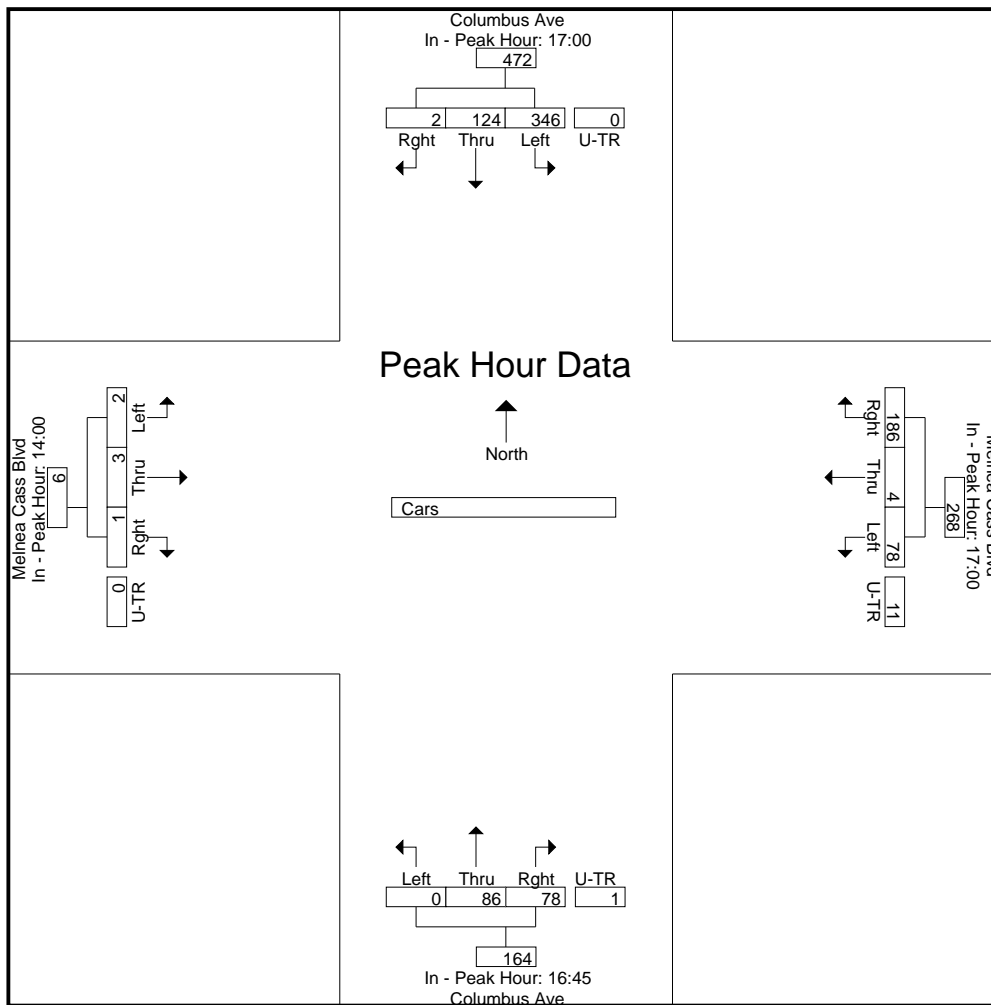
Peak Hour Analysis From 14:00 to 17:45 - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	17:00					17:00					16:45					14:00				
+0 mins.	86	24	1	0	111	20	0	46	5	71	0	26	17	0	43	1	2	0	0	3
+15 mins.	75	24	0	0	99	9	1	47	0	57	0	17	23	1	41	1	0	0	0	1
+30 mins.	90	44	1	0	135	25	2	37	4	68	0	21	16	0	37	0	0	1	0	1
+45 mins.	95	32	0	0	127	24	1	56	2	83	0	22	22	0	44	0	1	0	0	1
Total Volume	346	124	2	0	472	78	4	186	11	279	0	86	78	1	165	2	3	1	0	6
% App. Total																				
PHF	.911	.705	.500	.000	.874	.780	.500	.830	.550	.840	.000	.827	.848	.250	.938	.500	.375	.250	.000	.500

Accurate Counts
978-664-2565

N/S Street : Columbus Avenue
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear

File Name : 01410001
Site Code : 01410001
Start Date : 9/21/2011
Page No : 7



Accurate Counts

978-664-2565

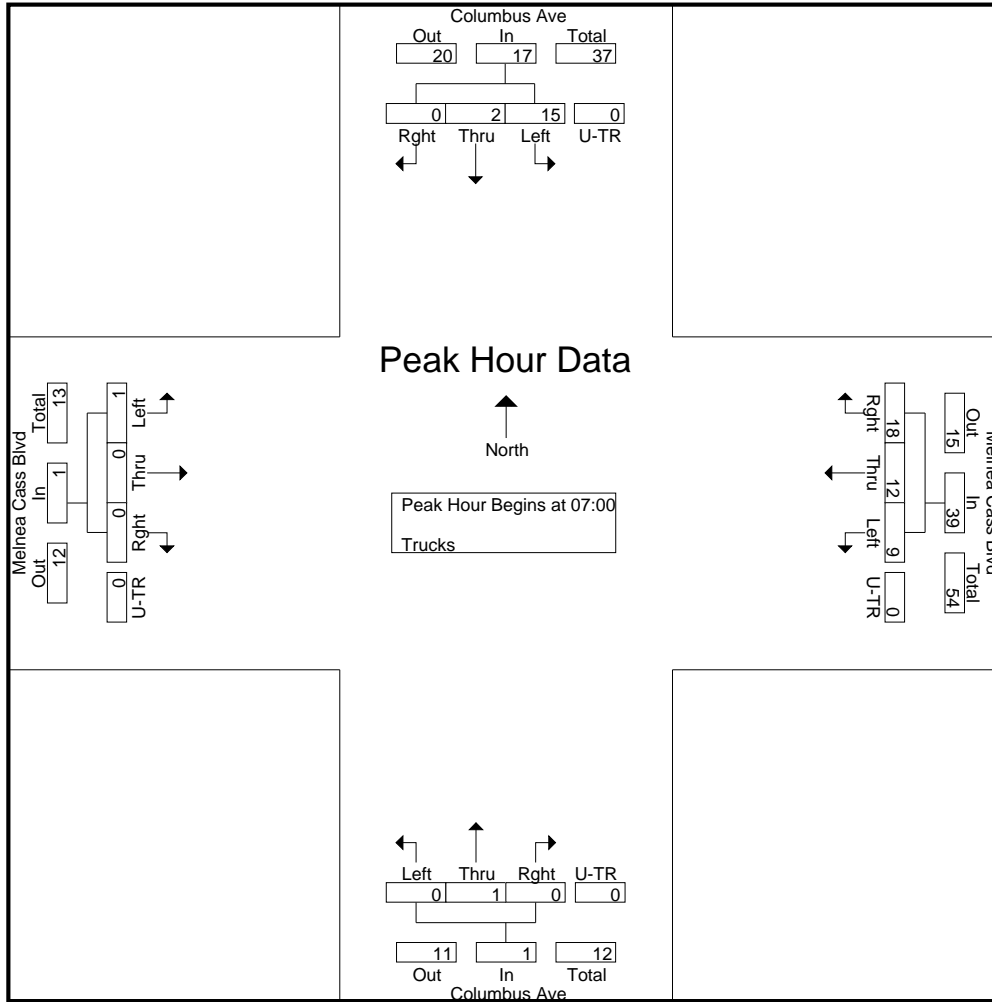
N/S Street : Columbus Avenue
 E/W Street: Melnea Cass Boulevard
 City/State : Boston, MA
 Weather : Clear

File Name : 01410001
 Site Code : 01410001
 Start Date : 9/21/2011
 Page No : 1

Groups Printed- Trucks

Start Time	Columbus Ave From North				Melnea Cass Blvd From East				Columbus Ave From South				Melnea Cass Blvd From West				Int. Total
	Left	Thru	Right	U-TR	Left	Thru	Right	U-TR	Left	Thru	Right	U-TR	Left	Thru	Right	U-TR	
07:00	4	1	0	0	3	2	6	0	0	0	0	0	0	0	0	0	16
07:15	5	0	0	0	2	3	3	0	0	0	0	0	0	0	0	0	13
07:30	2	0	0	0	2	4	3	0	0	0	0	0	0	0	0	0	11
07:45	4	1	0	0	2	3	6	0	0	1	0	0	1	0	0	0	18
Total	15	2	0	0	9	12	18	0	0	1	0	0	1	0	0	0	58
08:00	2	1	0	0	3	2	1	0	0	0	0	0	0	0	0	0	9
08:15	1	0	0	0	1	3	4	0	0	0	1	0	0	0	0	0	10
08:30	2	0	0	0	1	2	3	0	0	1	1	0	0	0	0	0	10
08:45	4	1	0	0	2	0	2	0	0	0	0	0	0	0	0	0	9
Total	9	2	0	0	7	7	10	0	0	1	2	0	0	0	0	0	38
09:00	5	1	0	0	1	1	3	0	0	1	0	0	0	0	0	0	12
09:15	3	0	0	0	2	2	4	0	0	0	0	0	0	0	0	0	11
09:30	5	0	0	0	2	1	2	0	0	1	0	0	0	0	0	0	11
09:45	7	1	0	0	1	3	1	0	0	0	0	0	0	0	0	0	13
Total	20	2	0	0	6	7	10	0	0	2	0	0	0	0	0	0	47
10:00	4	0	1	0	1	2	3	0	0	0	0	0	0	0	0	0	11
10:15	3	0	0	0	1	3	3	0	0	0	0	0	0	0	0	0	10
10:30	2	0	0	0	2	2	3	0	0	0	0	0	0	0	0	0	9
10:45	1	0	0	0	2	0	1	0	0	0	1	0	0	0	0	0	5
Total	10	0	1	0	6	7	10	0	0	0	1	0	0	0	0	0	35
11:00	1	0	0	0	1	3	4	0	0	0	0	0	0	0	0	0	9
11:15	1	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	4
11:30	2	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	6
11:45	4	1	0	0	1	3	2	0	0	0	0	0	0	0	0	0	11
Total	8	1	0	0	3	11	7	0	0	0	0	0	0	0	0	0	30
12:00	2	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	7
12:15	2	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	5
12:30	3	0	0	0	1	2	2	0	0	0	0	0	0	0	0	0	8
12:45	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
Total	7	2	0	0	1	9	4	0	0	0	0	0	0	0	0	0	23
13:00	0	0	0	0	1	2	2	0	0	0	1	0	0	0	0	0	6
13:15	1	3	0	0	3	5	3	0	0	1	0	0	0	0	0	0	16
13:30	1	0	0	0	4	3	3	0	0	2	1	0	0	0	0	0	14
13:45	5	0	1	0	4	2	2	0	0	0	0	0	0	0	0	0	14
Total	7	3	1	0	12	12	10	0	0	3	2	0	0	0	0	0	50
14:00	6	0	0	0	3	3	2	0	0	0	0	0	0	0	0	0	14
14:15	5	0	2	0	2	0	3	0	0	1	0	0	0	0	0	0	13
14:30	2	0	1	0	1	3	3	0	0	0	0	0	0	1	0	0	11
14:45	4	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	8
Total	17	0	3	0	8	8	8	0	0	1	0	0	0	1	0	0	46
15:00	3	2	0	0	1	4	1	0	0	0	1	0	0	0	0	0	12
15:15	2	1	0	0	3	2	4	0	0	0	0	0	0	0	0	0	12
15:30	7	0	0	0	6	2	0	0	0	0	0	0	0	0	0	0	15
15:45	5	0	0	0	3	3	5	0	0	1	0	0	0	0	0	0	17
Total	17	3	0	0	13	11	10	0	0	1	1	0	0	0	0	0	56
16:00	2	0	0	0	2	0	3	0	0	0	0	0	0	0	0	0	7
16:15	3	0	0	0	3	2	5	0	0	0	0	0	0	0	0	0	13
16:30	2	0	0	0	1	1	4	0	0	0	0	0	0	0	0	0	8
16:45	2	0	0	0	2	3	4	0	0	0	0	0	0	0	0	0	11
Total	9	0	0	0	8	6	16	0	0	0	0	0	0	0	0	0	39
17:00	0	0	0	0	2	2	1	0	0	0	0	0	0	0	0	0	5
17:15	1	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	5
17:30	1	0	0	0	3	2	0	0	0	1	0	0	0	0	0	0	7
17:45	3	0	0	0	3	2	1	0	0	0	0	0	0	0	0	0	9
Total	5	0	0	0	11	7	2	0	0	1	0	0	0	0	0	0	26
Grand Total	124	15	5	0	84	97	105	0	0	10	6	0	1	1	0	0	448
Apprch %	86.1	10.4	3.5	0	29.4	33.9	36.7	0	0	62.5	37.5	0	50	50	0	0	
Total %	27.7	3.3	1.1	0	18.8	21.7	23.4	0	0	2.2	1.3	0	0.2	0.2	0	0	

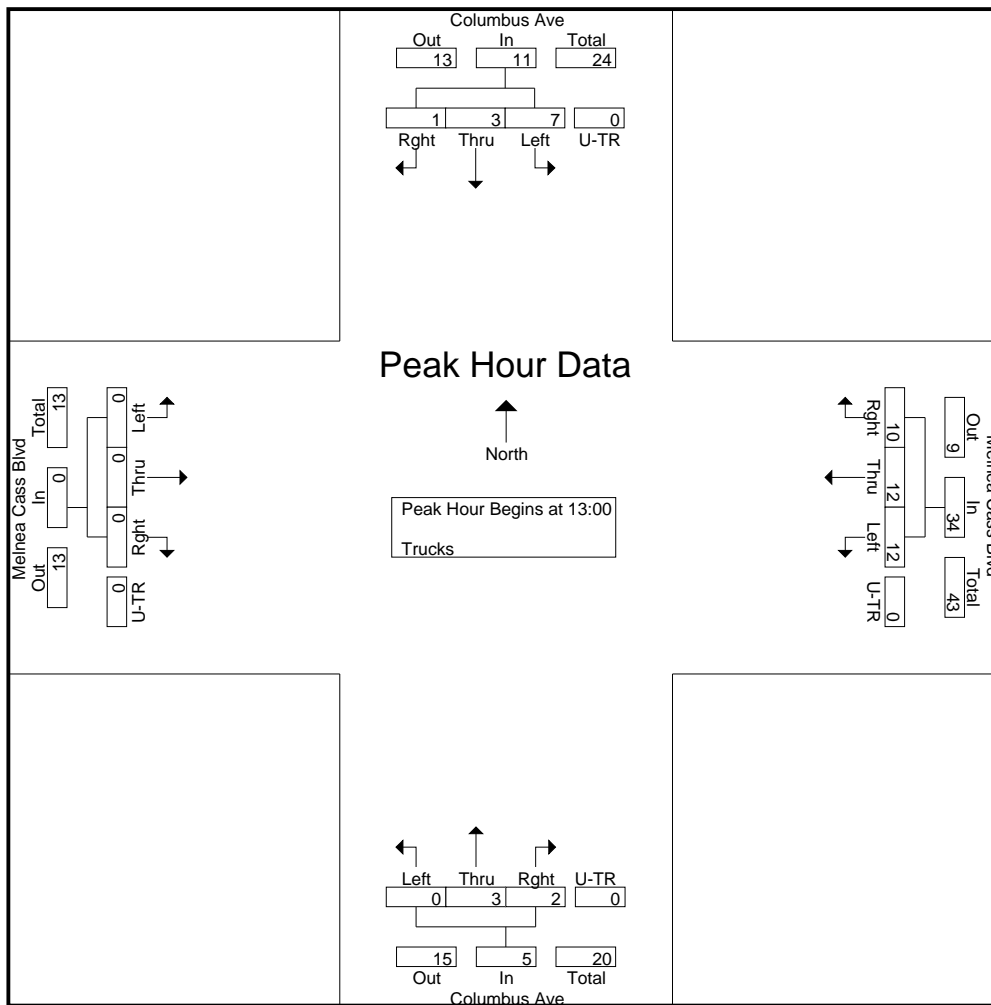
Start Time	Columbus Ave From North					Melnea Cass Blvd From East					Columbus Ave From South					Melnea Cass Blvd From West					Int. Total
	Left	Thru	Right	U-TR	App. Total	Left	Thru	Right	U-TR	App. Total	Left	Thru	Right	U-TR	App. Total	Left	Thru	Right	U-TR	App. Total	
Peak Hour Analysis From 07:00 to 09:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00																					
07:00	4	1	0	0	5	3	2	6	0	11	0	0	0	0	0	0	0	0	0	0	16
07:15	5	0	0	0	5	2	3	3	0	8	0	0	0	0	0	0	0	0	0	0	13
07:30	2	0	0	0	2	2	4	3	0	9	0	0	0	0	0	0	0	0	0	0	11
07:45	4	1	0	0	5	2	3	6	0	11	0	1	0	0	1	1	0	0	0	1	18
Total Volume	15	2	0	0	17	9	12	18	0	39	0	1	0	0	1	1	0	0	0	1	58
% App. Total																					
PHF	.750	.500	.000	.000	.850	.750	.750	.750	.000	.886	.000	.250	.000	.000	.250	.250	.000	.000	.000	.250	.806



Peak Hour Analysis From 07:00 to 09:45 - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	09:00					07:00					07:45					07:00					
+0 mins.	5	1	0	0	6	3	2	6	0	11	0	1	0	0	1	0	0	0	0	0	0
+15 mins.	3	0	0	0	3	2	3	3	0	8	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	5	0	0	0	5	2	4	3	0	9	0	0	1	0	1	0	0	0	0	0	0
+45 mins.	7	1	0	0	8	2	3	6	0	11	0	1	1	0	2	1	0	0	0	0	1
Total Volume	20	2	0	0	22	9	12	18	0	39	0	2	2	0	4	1	0	0	0	0	1
% App. Total																					
PHF	.714	.500	.000	.000	.688	.750	.750	.750	.000	.886	.000	.500	.500	.000	.500	.250	.000	.000	.000	.250	

N/S Street : Columbus Avenue
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear

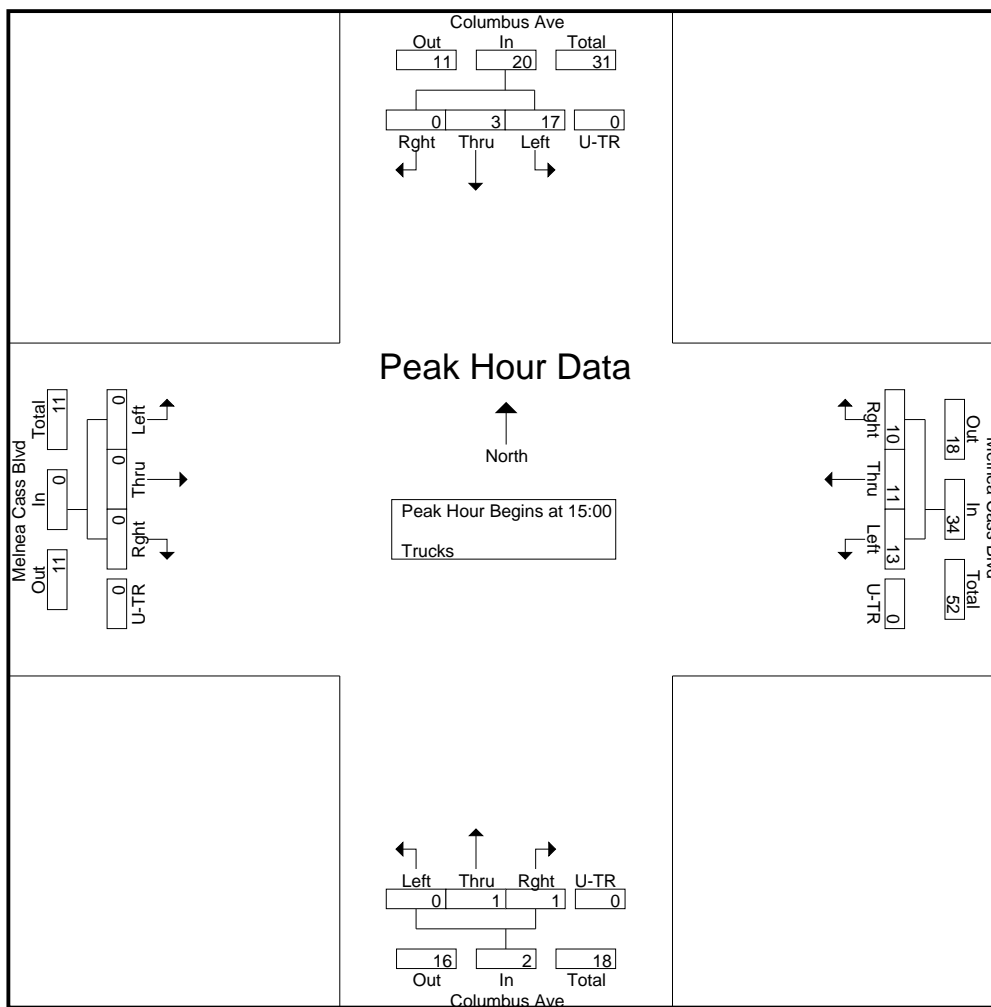


Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	11:45					13:00					12:45					10:00				
+0 mins.	4	1	0	0	5	1	2	2	0	5	0	0	0	0	0	0	0	0	0	0
+15 mins.	2	1	0	0	3	3	5	3	0	11	0	0	1	0	1	0	0	0	0	0
+30 mins.	2	1	0	0	3	4	3	3	0	10	0	1	0	0	1	0	0	0	0	0
+45 mins.	3	0	0	0	3	4	2	2	0	8	0	2	1	0	3	0	0	0	0	0
Total Volume	11	3	0	0	14	12	12	10	0	34	0	3	2	0	5	0	0	0	0	0
% App. Total																				
PHF	.688	.750	.000	.000	.700	.750	.600	.833	.000	.773	.000	.375	.500	.000	.417	.000	.000	.000	.000	.000

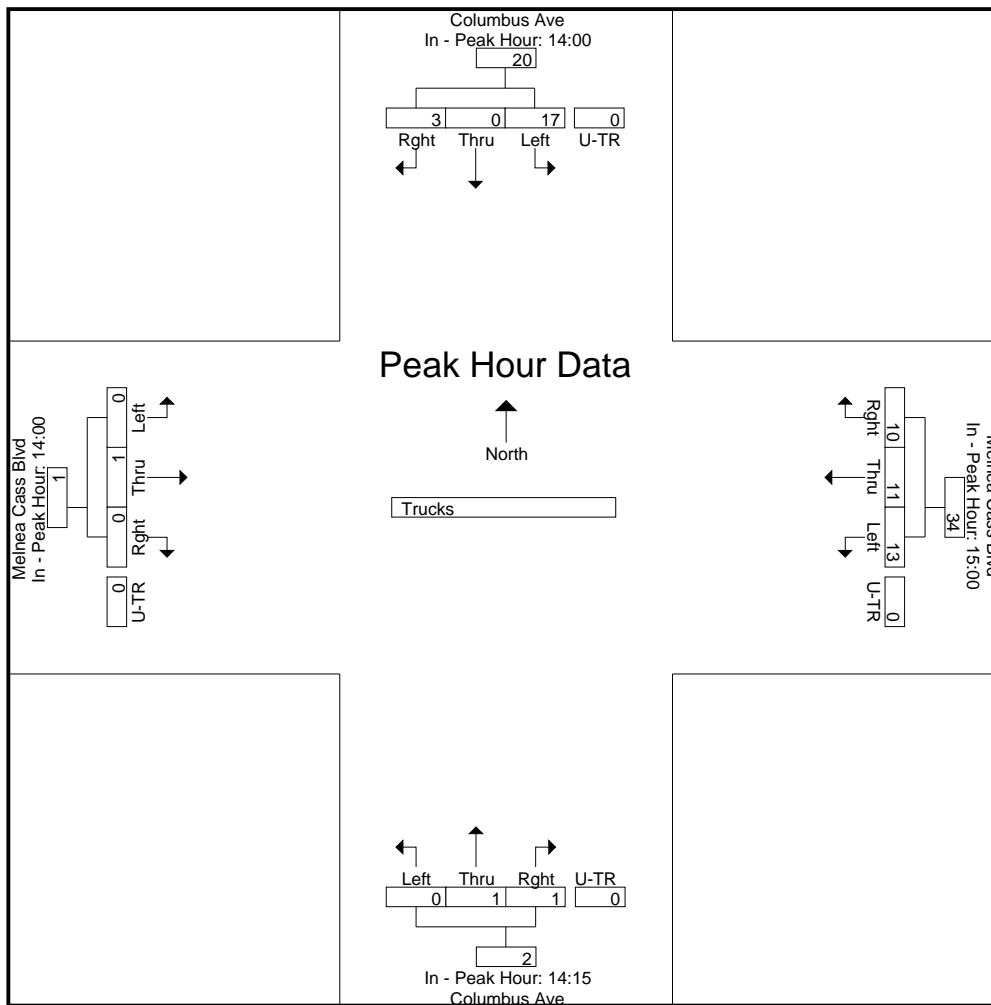
N/S Street : Columbus Avenue
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear

File Name : 01410001
Site Code : 01410001
Start Date : 9/21/2011
Page No : 6



Peak Hour Analysis From 14:00 to 17:45 - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	14:00					15:00					14:15					14:00				
+0 mins.	6	0	0	0	6	1	4	1	0	6	0	1	0	0	1	0	0	0	0	0
+15 mins.	5	0	2	0	7	3	2	4	0	9	0	0	0	0	0	0	0	0	0	0
+30 mins.	2	0	1	0	3	6	2	0	0	8	0	0	0	0	0	0	1	0	0	1
+45 mins.	4	0	0	0	4	3	3	5	0	11	0	0	1	0	1	0	0	0	0	0
Total Volume	17	0	3	0	20	13	11	10	0	34	0	1	1	0	2	0	1	0	0	1
% App. Total																				
PHF	.708	.000	.375	.000	.714	.542	.688	.500	.000	.773	.000	.250	.250	.000	.500	.000	.250	.000	.000	.250



Accurate Counts
978-664-2565

N/S Street : Columbus Avenue
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear

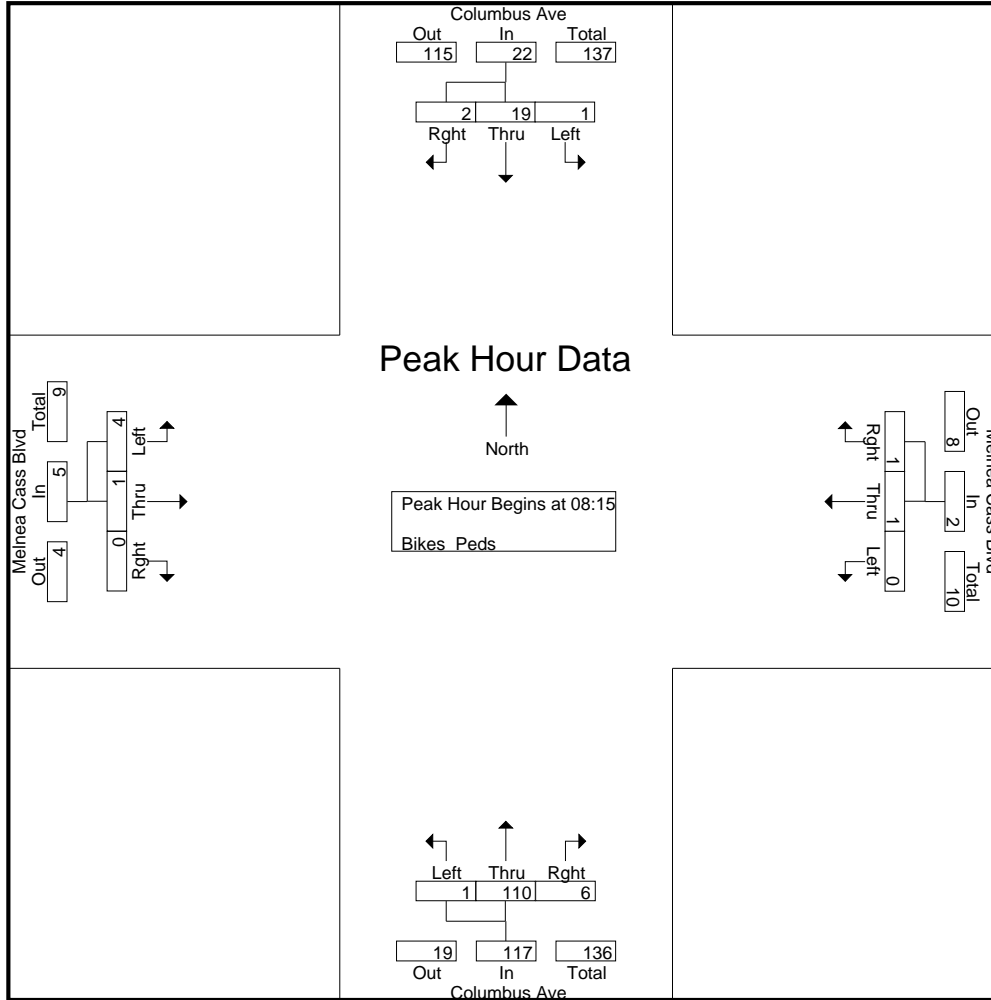
File Name : 01410001
Site Code : 01410001
Start Date : 9/21/2011
Page No : 1

Groups Printed- Bikes Peds

Start Time	Columbus Ave From North				Melnea Cass Blvd From East				Columbus Ave From South				Melnea Cass Blvd 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	0	2	0	5	1	0	0	7	0	6	1	1	0	0	1	1	14	11	25
07:15	0	3	0	9	3	0	1	13	0	13	0	11	0	0	0	7	40	20	60
07:30	0	5	0	0	2	0	0	4	0	13	1	8	1	0	0	4	16	22	38
07:45	0	2	1	5	0	0	0	10	0	13	2	5	2	0	0	11	31	20	51
Total	0	12	1	19	6	0	1	34	0	45	4	25	3	0	1	23	101	73	174
08:00	0	3	0	6	0	0	0	12	0	11	2	5	3	0	1	11	34	20	54
08:15	1	6	0	7	0	0	0	9	0	33	2	5	3	0	0	6	27	45	72
08:30	0	5	1	12	0	0	1	15	0	27	0	8	0	0	0	3	38	34	72
08:45	0	6	0	6	0	0	0	11	1	34	2	9	1	0	0	5	31	44	75
Total	1	20	1	31	0	0	1	47	1	105	6	27	7	0	1	25	130	143	273
09:00	0	2	1	0	0	1	0	35	0	16	2	17	0	1	0	3	55	23	78
09:15	0	4	1	8	2	0	0	13	0	12	2	4	1	0	0	1	26	22	48
09:30	0	3	0	5	0	0	1	13	0	17	1	2	1	0	0	3	23	23	46
09:45	0	1	0	5	0	0	4	9	0	12	0	0	1	0	0	2	16	18	34
Total	0	10	2	18	2	1	5	70	0	57	5	23	3	1	0	9	120	86	206
10:00	0	4	0	5	1	0	0	11	0	7	1	4	0	0	0	2	22	13	35
10:15	0	5	0	14	0	0	1	31	0	9	3	8	0	0	0	5	58	18	76
10:30	0	2	0	5	1	0	2	26	0	4	1	2	1	0	0	8	41	11	52
10:45	0	3	0	2	0	0	1	15	0	2	0	0	1	0	0	1	18	7	25
Total	0	14	0	26	2	0	4	83	0	22	5	14	2	0	0	16	139	49	188
11:00	0	5	0	4	1	0	0	14	0	3	1	5	0	0	0	5	28	10	38
11:15	0	3	1	5	1	0	0	20	0	4	0	4	1	0	0	9	38	10	48
11:30	1	8	0	12	2	2	0	28	0	8	0	4	0	0	0	16	60	21	81
11:45	0	3	0	8	0	1	0	30	0	4	0	3	1	0	0	17	58	9	67
Total	1	19	1	29	4	3	0	92	0	19	1	16	2	0	0	47	184	50	234
12:00	0	2	0	7	0	0	0	27	0	6	0	5	0	1	0	17	56	9	65
12:15	0	2	0	4	1	0	0	17	0	1	1	3	0	1	1	3	27	7	34
12:30	0	1	0	15	1	0	0	27	0	9	1	3	0	0	1	7	52	13	65
12:45	0	2	0	5	1	0	0	10	0	4	0	3	0	0	0	10	28	7	35
Total	0	7	0	31	3	0	0	81	0	20	2	14	0	2	2	37	163	36	199
13:00	0	1	0	9	2	0	0	15	0	2	0	3	1	2	0	5	32	8	40
13:15	0	7	0	10	1	1	1	18	0	4	0	8	0	1	1	1	37	16	53
13:30	0	2	0	4	0	1	2	8	0	5	0	5	1	0	0	0	17	11	28
13:45	1	2	3	4	4	0	0	12	0	8	0	2	0	0	0	0	18	18	36
Total	1	12	3	27	7	2	3	53	0	19	0	18	2	3	1	6	104	53	157
14:00	2	7	0	10	1	0	1	11	0	0	0	2	1	0	0	3	26	12	38
14:15	0	3	0	16	0	0	0	8	0	3	0	1	2	1	0	2	27	9	36
14:30	1	5	1	8	0	0	0	24	1	6	0	13	0	1	2	0	45	17	62
14:45	0	7	0	1	1	0	1	27	0	7	1	4	2	0	1	0	32	20	52
Total	3	22	1	35	2	0	2	70	1	16	1	20	5	2	3	5	130	58	188
15:00	0	3	0	7	0	3	0	19	0	1	0	3	1	0	0	2	31	8	39
15:15	0	3	0	3	1	0	1	12	0	5	0	2	0	0	0	0	17	10	27
15:30	0	9	1	10	5	2	1	11	0	2	0	7	1	1	0	0	28	22	50
15:45	0	5	0	2	0	1	0	10	1	8	8	5	0	0	0	0	17	23	40
Total	0	20	1	22	6	6	2	52	1	16	8	17	2	1	0	2	93	63	156
16:00	0	11	0	5	1	0	1	15	2	5	1	3	0	1	0	4	27	22	49
16:15	2	12	1	12	2	1	3	15	0	14	3	6	4	1	0	0	33	43	76
16:30	0	14	0	2	1	0	0	8	0	5	0	3	0	0	0	0	13	20	33
16:45	1	7	1	6	13	0	0	18	0	4	0	2	0	0	0	0	26	26	52
Total	3	44	2	25	17	1	4	56	2	28	4	14	4	2	0	4	99	111	210
17:00	1	18	0	2	8	0	2	5	0	3	0	6	1	1	0	0	13	34	47
17:15	1	25	0	2	2	2	0	3	1	8	1	3	1	0	1	2	10	42	52
17:30	0	29	0	5	2	0	0	13	0	8	1	0	0	0	0	0	18	40	58
17:45	0	13	0	4	2	0	0	10	0	4	1	3	0	0	0	0	17	20	37
Total	2	85	0	13	14	2	2	31	1	23	3	12	2	1	1	2	58	136	194
Grand Total	11	265	12	276	63	15	24	669	6	370	39	200	32	12	9	176	1321	858	2179
Apprch %	3.8	92	4.2		61.8	14.7	23.5		1.4	89.2	9.4		60.4	22.6	17		60.6	39.4	
Total %	1.3	30.9	1.4		7.3	1.7	2.8		0.7	43.1	4.5		3.7	1.4	1		60.6	39.4	

Start Time	Columbus Ave From North				Melnea Cass Blvd From East				Columbus Ave From South				Melnea Cass Blvd From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
08:15	1	6	0	7	0	0	0	0	0	33	2	35	3	0	0	3	45
08:30	0	5	1	6	0	0	1	1	0	27	0	27	0	0	0	0	34
08:45	0	6	0	6	0	0	0	0	1	34	2	37	1	0	0	1	44
09:00	0	2	1	3	0	1	0	1	0	16	2	18	0	1	0	1	23
Total Volume	1	19	2	22	0	1	1	2	1	110	6	117	4	1	0	5	146
% App. Total	4.5	86.4	9.1		0	50	50		0.9	94	5.1		80	20	0		
PHF	.250	.792	.500	.786	.000	.250	.250	.500	.250	.809	.750	.791	.333	.250	.000	.417	.811

Peak Hour Analysis From 07:00 to 09:45 - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 08:15

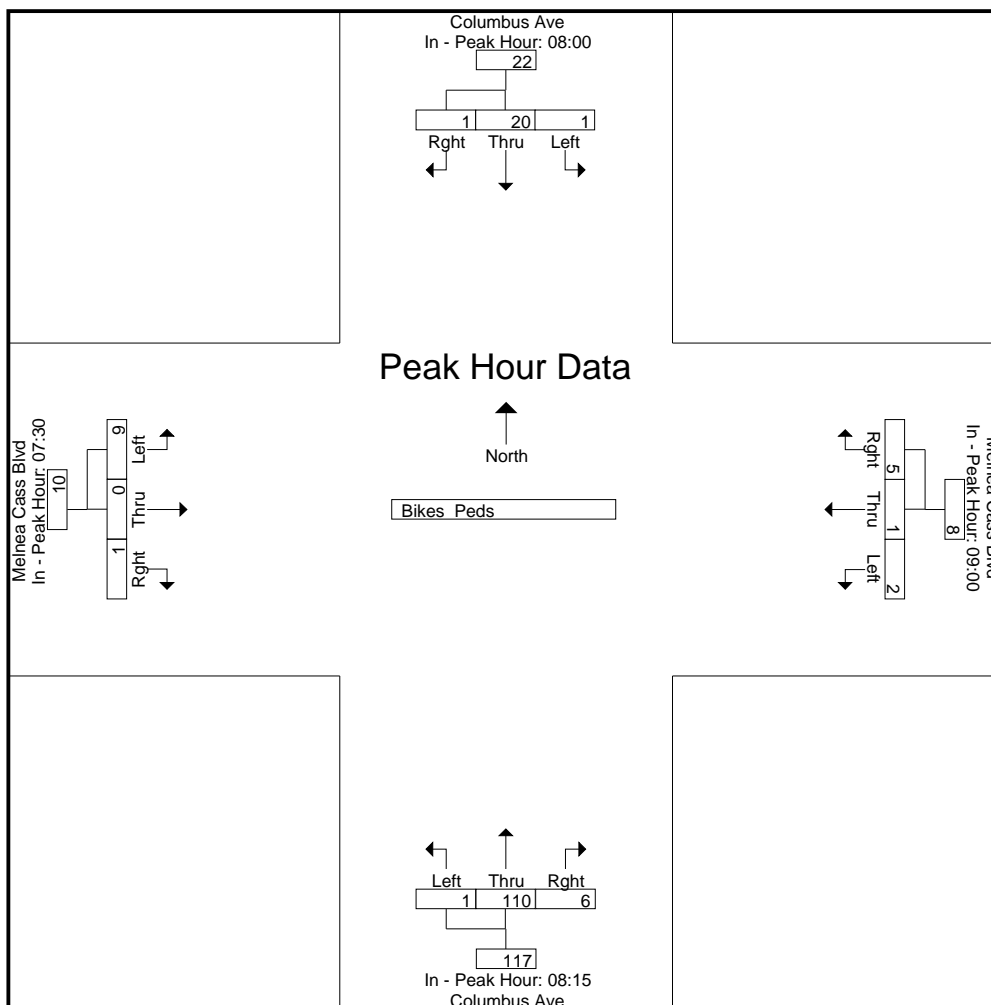


Peak Hour Analysis From 07:00 to 09:45 - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00				09:00				08:15				07:30			
+0 mins.	0	3	0	3	0	1	0	1	0	33	2	35	1	0	0	1
+15 mins.	1	6	0	7	2	0	0	2	0	27	0	27	2	0	0	2
+30 mins.	0	5	1	6	0	0	1	1	1	34	2	37	3	0	1	4
+45 mins.	0	6	0	6	0	0	4	4	0	16	2	18	3	0	0	3
Total Volume	1	20	1	22	2	1	5	8	1	110	6	117	9	0	1	10
% App. Total	4.5	90.9	4.5		25	12.5	62.5		0.9	94	5.1		90	0	10	
PHF	.250	.833	.250	.786	.250	.250	.313	.500	.250	.809	.750	.791	.750	.000	.250	.625

N/S Street : Columbus Avenue
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear

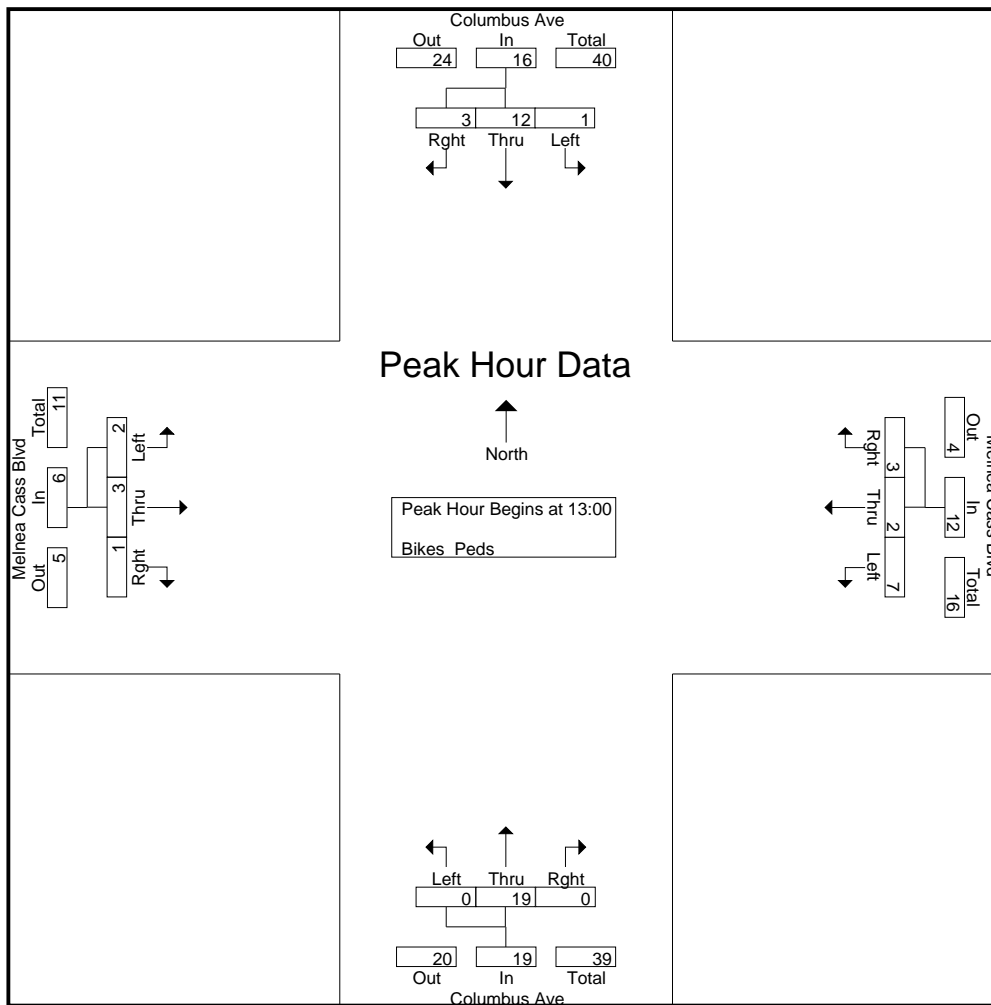
File Name : 01410001
Site Code : 01410001
Start Date : 9/21/2011
Page No : 3



Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 13:00

13:00	0	1	0	1	2	0	0	2	0	2	0	2	1	2	0	3	8
13:15	0	7	0	7	1	1	1	3	0	4	0	4	0	1	1	2	16
13:30	0	2	0	2	0	1	2	3	0	5	0	5	1	0	0	1	11
13:45	1	2	3	6	4	0	0	4	0	8	0	8	0	0	0	0	18
Total Volume	1	12	3	16	7	2	3	12	0	19	0	19	2	3	1	6	53
% App. Total	6.2	75	18.8		58.3	16.7	25		0	100	0		33.3	50	16.7		
PHF	.250	.429	.250	.571	.438	.500	.375	.750	.000	.594	.000	.594	.500	.375	.250	.500	.736

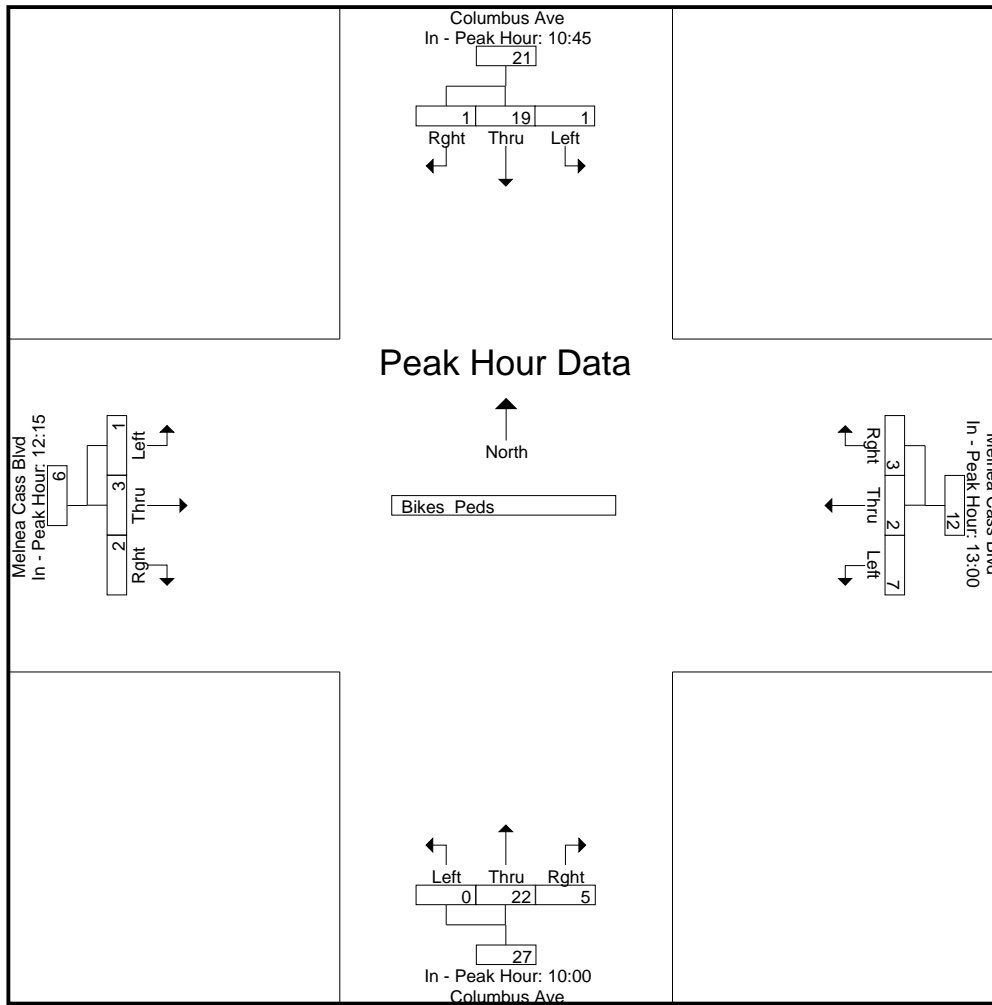
N/S Street : Columbus Avenue
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear



Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	10:45				13:00				10:00				12:15			
+0 mins.	0	3	0	3	2	0	0	2	0	7	1	8	0	1	1	2
+15 mins.	0	5	0	5	1	1	1	3	0	9	3	12	0	0	1	1
+30 mins.	0	3	1	4	0	1	2	3	0	4	1	5	0	0	0	0
+45 mins.	1	8	0	9	4	0	0	4	0	2	0	2	1	2	0	3
Total Volume	1	19	1	21	7	2	3	12	0	22	5	27	1	3	2	6
% App. Total	4.8	90.5	4.8		58.3	16.7	25		0	81.5	18.5		16.7	50	33.3	
PHF	.250	.594	.250	.583	.438	.500	.375	.750	.000	.611	.417	.563	.250	.375	.500	.500

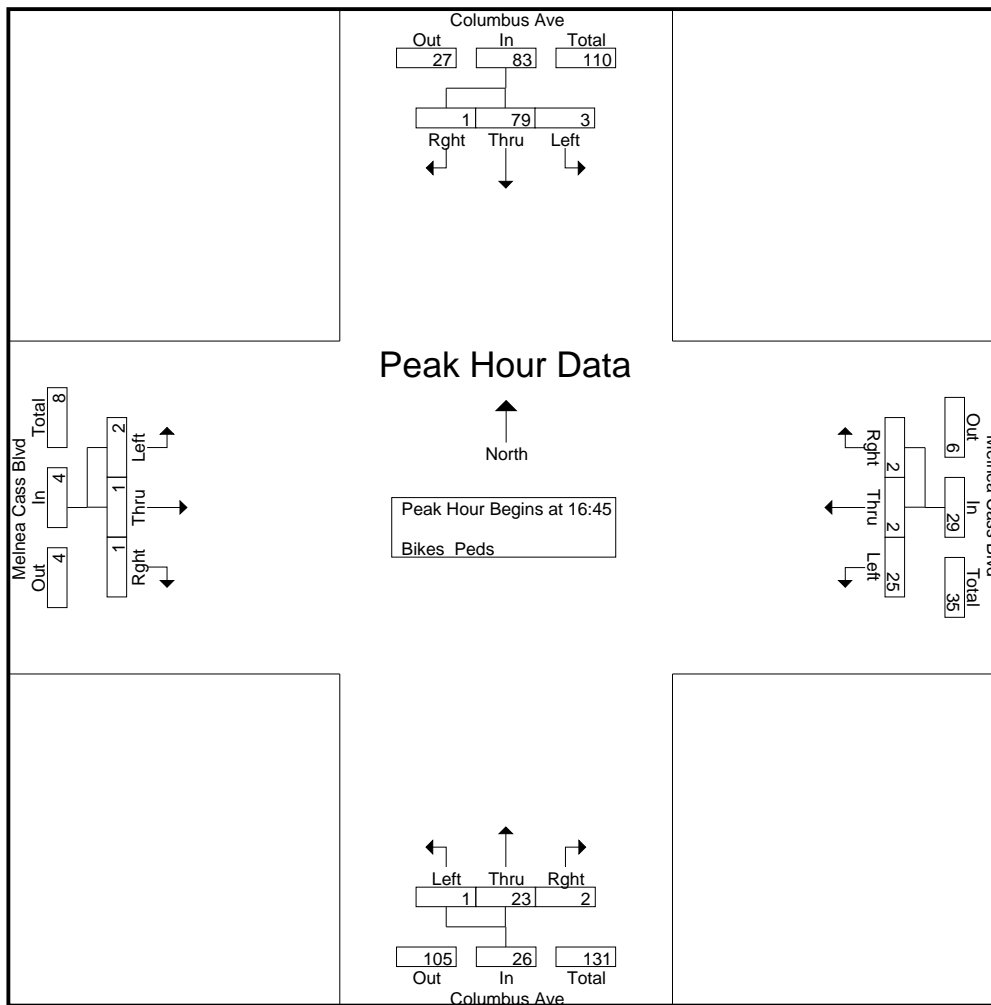
N/S Street : Columbus Avenue
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear



Peak Hour Analysis From 14:00 to 17:45 - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 16:45

16:45	1	7	1	9	13	0	0	13	0	4	0	4	0	0	0	0	26
17:00	1	18	0	19	8	0	2	10	0	3	0	3	1	1	0	2	34
17:15	1	25	0	26	2	2	0	4	1	8	1	10	1	0	1	2	42
17:30	0	29	0	29	2	0	0	2	0	8	1	9	0	0	0	0	40
Total Volume	3	79	1	83	25	2	2	29	1	23	2	26	2	1	1	4	142
% App. Total	3.6	95.2	1.2		86.2	6.9	6.9		3.8	88.5	7.7		50	25	25		
PHF	.750	.681	.250	.716	.481	.250	.250	.558	.250	.719	.500	.650	.500	.250	.250	.500	.845

N/S Street : Columbus Avenue
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear



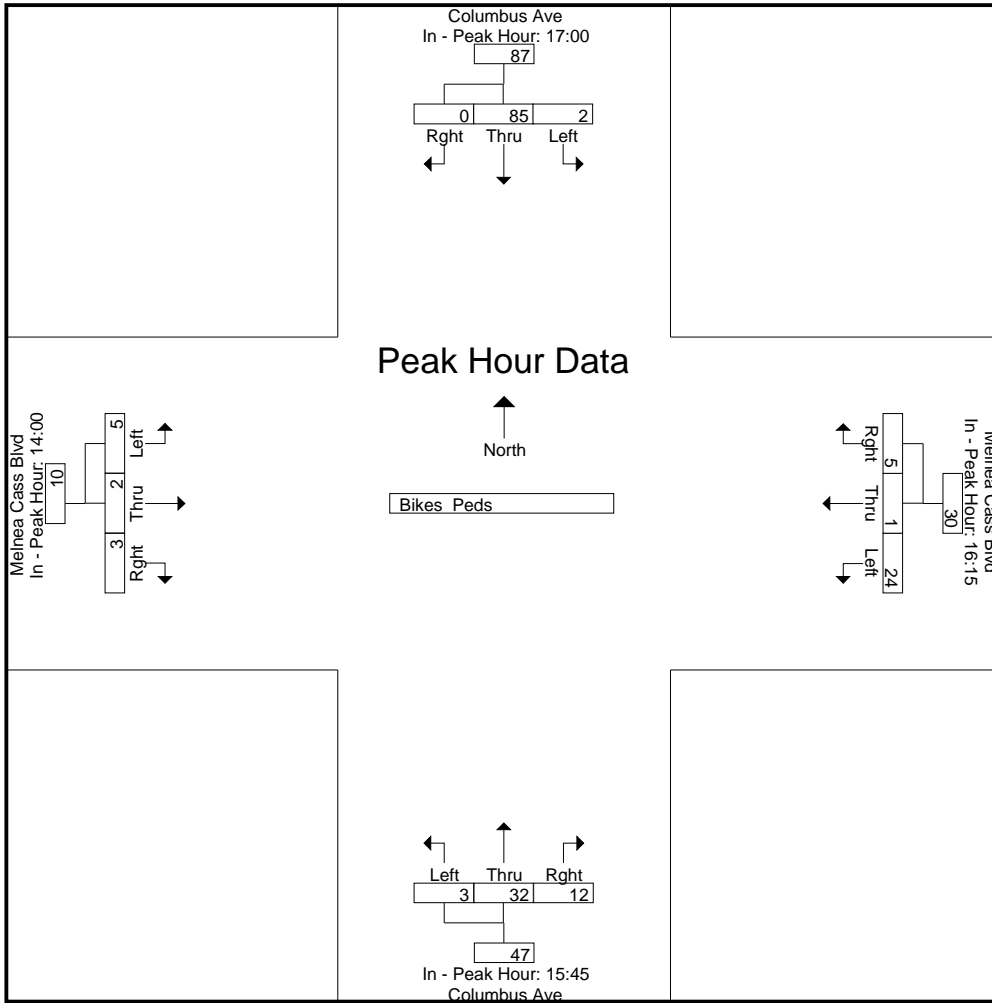
Peak Hour Analysis From 14:00 to 17:45 - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	17:00				16:15				15:45				14:00			
+0 mins.	1	18	0	19	2	1	3	6	1	8	8	17	1	0	0	1
+15 mins.	1	25	0	26	1	0	0	1	2	5	1	8	2	1	0	3
+30 mins.	0	29	0	29	13	0	0	13	0	14	3	17	0	1	2	3
+45 mins.	0	13	0	13	8	0	2	10	0	5	0	5	2	0	1	3
Total Volume	2	85	0	87	24	1	5	30	3	32	12	47	5	2	3	10
% App. Total	2.3	97.7	0		80	3.3	16.7		6.4	68.1	25.5		50	20	30	
PHF	.500	.733	.000	.750	.462	.250	.417	.577	.375	.571	.375	.691	.625	.500	.375	.833

Accurate Counts
978-664-2565

N/S Street : Columbus Avenue
E/W Street: Melnea Cass Boulevard
City/State : Boston, MA
Weather : Clear

File Name : 01410001
Site Code : 01410001
Start Date : 9/21/2011
Page No : 7





PRECISION
D A T A
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503
Office: 508.481.3999 Fax: 508.545.1234
Email: datarequests@pdillc.com

File Name : 123026 K
Site Code : 2011046_
Start Date : 9/25/2012
Page No : 1

N/S: Massachusetts Avenue
E/W: Columbus Avenue
City, State: Boston, MA
Client: HSH/ J. SanClemente

Groups Printed- Cars - Heavy Vehicles

Start Time	Massachusetts Avenue From North				Columbus Avenue From East				Massachusetts Avenue From South				Columbus Avenue From West				Int. Total
	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	
07:00 AM	30	153	15	0	22	31	23	0	19	164	8	1	3	27	56	0	552
07:15 AM	39	163	11	0	22	32	24	0	14	197	13	1	9	27	62	0	614
07:30 AM	41	169	14	0	15	24	27	0	18	197	11	1	9	47	71	0	644
07:45 AM	49	168	9	0	29	35	26	0	23	196	9	0	14	52	58	0	668
Total	159	653	49	0	88	122	100	0	74	754	41	3	35	153	247	0	2478
08:00 AM	44	145	18	1	14	40	34	0	20	185	8	0	7	38	75	0	629
08:15 AM	36	162	9	0	16	31	31	0	33	175	7	3	3	41	52	0	599
08:30 AM	42	161	8	0	13	49	22	0	28	210	8	3	4	51	41	0	640
08:45 AM	38	136	5	0	19	31	21	0	27	188	4	0	5	44	52	0	570
Total	160	604	40	1	62	151	108	0	108	758	27	6	19	174	220	0	2438
Grand Total	319	1257	89	1	150	273	208	0	182	1512	68	9	54	327	467	0	4916
Apprch %	19.1	75.5	5.3	0.1	23.8	43.3	33	0	10.3	85.4	3.8	0.5	6.4	38.6	55.1	0	
Total %	6.5	25.6	1.8	0	3.1	5.6	4.2	0	3.7	30.8	1.4	0.2	1.1	6.7	9.5	0	
Cars	307	1147	77	1	140	253	192	0	161	1340	66	9	52	309	453	0	4507
% Cars	96.2	91.2	86.5	100	93.3	92.7	92.3	0	88.5	88.6	97.1	100	96.3	94.5	97	0	91.7
Heavy Vehicles	12	110	12	0	10	20	16	0	21	172	2	0	2	18	14	0	409
% Heavy Vehicles	3.8	8.8	13.5	0	6.7	7.3	7.7	0	11.5	11.4	2.9	0	3.7	5.5	3	0	8.3

Start Time	Massachusetts Avenue From North					Columbus Avenue From East					Massachusetts Avenue From South					Columbus Avenue From West					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
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	39	163	11	0	213	22	32	24	0	78	14	197	13	1	225	9	27	62	0	98	614
07:30 AM	41	169	14	0	224	15	24	27	0	66	18	197	11	1	227	9	47	71	0	127	644
07:45 AM	49	168	9	0	226	29	35	26	0	90	23	196	9	0	228	14	52	58	0	124	668
08:00 AM	44	145	18	1	208	14	40	34	0	88	20	185	8	0	213	7	38	75	0	120	629
Total Volume	173	645	52	1	871	80	131	111	0	322	75	775	41	2	893	39	164	266	0	469	2555
% App. Total	19.9	74.1	6	0.1		24.8	40.7	34.5	0		8.4	86.8	4.6	0.2		8.3	35	56.7	0		
PHF	.883	.954	.722	.250	.963	.690	.819	.816	.000	.894	.815	.984	.788	.500	.979	.696	.788	.887	.000	.923	.956
Cars	169	600	44	1	814	76	125	102	0	303	67	692	40	2	801	39	152	258	0	449	2367
% Cars	97.7	93.0	84.6	100	93.5	95.0	95.4	91.9	0	94.1	89.3	89.3	97.6	100	89.7	100	92.7	97.0	0	95.7	92.6
Heavy Vehicles	4	45	8	0	57	4	6	9	0	19	8	83	1	0	92	0	12	8	0	20	188
% Heavy Vehicles	2.3	7.0	15.4	0	6.5	5.0	4.6	8.1	0	5.9	10.7	10.7	2.4	0	10.3	0	7.3	3.0	0	4.3	7.4



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N/S: Massachusetts Avenue
E/W: Columbus Avenue
City, State: Boston, MA
Client: HSH/ J. SanClemente

File Name : 123026 K
Site Code : 2011046_
Start Date : 9/25/2012
Page No : 1

Groups Printed- Cars

Start Time	Massachusetts Avenue From North				Columbus Avenue From East				Massachusetts Avenue From South				Columbus Avenue From West				Int. Total
	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	
07:00 AM	28	135	12	0	21	28	21	0	17	132	8	1	2	26	53	0	484
07:15 AM	39	149	10	0	21	31	24	0	13	179	13	1	9	23	60	0	572
07:30 AM	40	160	9	0	13	23	26	0	15	175	10	1	9	43	69	0	593
07:45 AM	46	158	9	0	29	33	23	0	19	172	9	0	14	48	58	0	618
Total	153	602	40	0	84	115	94	0	64	658	40	3	34	140	240	0	2267
08:00 AM	44	133	16	1	13	38	29	0	20	166	8	0	7	38	71	0	584
08:15 AM	35	144	9	0	15	28	30	0	31	161	7	3	3	41	51	0	558
08:30 AM	38	146	8	0	12	45	21	0	24	190	7	3	4	49	41	0	588
08:45 AM	37	122	4	0	16	27	18	0	22	165	4	0	4	41	50	0	510
Total	154	545	37	1	56	138	98	0	97	682	26	6	18	169	213	0	2240
Grand Total	307	1147	77	1	140	253	192	0	161	1340	66	9	52	309	453	0	4507
Apprch %	20	74.9	5	0.1	23.9	43.2	32.8	0	10.2	85	4.2	0.6	6.4	38	55.7	0	
Total %	6.8	25.4	1.7	0	3.1	5.6	4.3	0	3.6	29.7	1.5	0.2	1.2	6.9	10.1	0	

Start Time	Massachusetts Avenue From North					Columbus Avenue From East					Massachusetts Avenue From South					Columbus Avenue From West					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
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	39	149	10	0	198	21	31	24	0	76	13	179	13	1	206	9	23	60	0	92	572
07:30 AM	40	160	9	0	209	13	23	26	0	62	15	175	10	1	201	9	43	69	0	121	
07:45 AM	46	158	9	0	213	29	33	23	0	85	19	172	9	0	200	14	48	58	0	120	618
08:00 AM	44	133	16	1	194	13	38	29	0	80	20	166	8	0	194	7	38	71	0	116	584
Total Volume	169	600	44	1	814	76	125	102	0	303	67	692	40	2	801	39	152	258	0	449	2367
% App. Total	20.8	73.7	5.4	0.1		25.1	41.3	33.7	0		8.4	86.4	5	0.2		8.7	33.9	57.5	0		
PHF	.918	.938	.688	.250	.955	.655	.822	.879	.000	.891	.838	.966	.769	.500	.972	.696	.792	.908	.000	.928	.958



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File Name : 123026 K
Site Code : 2011046_
Start Date : 9/25/2012
Page No : 1

N/S: Massachusetts Avenue
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City, State: Boston, MA
Client: HSH/ J. SanClemente

Groups Printed- Heavy Vehicles

Start Time	Massachusetts Avenue From North				Columbus Avenue From East				Massachusetts Avenue From South				Columbus Avenue From West				Int. Total
	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	
07:00 AM	2	18	3	0	1	3	2	0	2	32	0	0	1	1	3	0	68
07:15 AM	0	14	1	0	1	1	0	0	1	18	0	0	0	4	2	0	42
07:30 AM	1	9	5	0	2	1	1	0	3	22	1	0	0	4	2	0	51
07:45 AM	3	10	0	0	0	2	3	0	4	24	0	0	0	4	0	0	50
Total	6	51	9	0	4	7	6	0	10	96	1	0	1	13	7	0	211
08:00 AM	0	12	2	0	1	2	5	0	0	19	0	0	0	0	4	0	45
08:15 AM	1	18	0	0	1	3	1	0	2	14	0	0	0	0	1	0	41
08:30 AM	4	15	0	0	1	4	1	0	4	20	1	0	0	2	0	0	52
08:45 AM	1	14	1	0	3	4	3	0	5	23	0	0	1	3	2	0	60
Total	6	59	3	0	6	13	10	0	11	76	1	0	1	5	7	0	198
Grand Total	12	110	12	0	10	20	16	0	21	172	2	0	2	18	14	0	409
Apprch %	9	82.1	9	0	21.7	43.5	34.8	0	10.8	88.2	1	0	5.9	52.9	41.2	0	
Total %	2.9	26.9	2.9	0	2.4	4.9	3.9	0	5.1	42.1	0.5	0	0.5	4.4	3.4	0	

Start Time	Massachusetts Avenue From North					Columbus Avenue From East					Massachusetts Avenue From South					Columbus Avenue From West					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
07:00 AM	2	18	3	0	23	1	3	2	0	6	2	32	0	0	34	1	1	3	0	5	68
07:15 AM	0	14	1	0	15	1	1	0	0	2	1	18	0	0	19	0	4	2	0	6	42
07:30 AM	1	9	5	0	15	2	1	1	0	4	3	22	1	0	26	0	4	2	0	6	51
07:45 AM	3	10	0	0	13	0	2	3	0	5	4	24	0	0	28	0	4	0	0	4	50
Total Volume	6	51	9	0	66	4	7	6	0	17	10	96	1	0	107	1	13	7	0	21	211
% App. Total	9.1	77.3	13.6	0		23.5	41.2	35.3	0		9.3	89.7	0.9	0		4.8	61.9	33.3	0		
PHF	.500	.708	.450	.000	.717	.500	.583	.500	.000	.708	.625	.750	.250	.000	.787	.250	.813	.583	.000	.875	.776

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



PRECISION
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File Name : 123026 K
Site Code : 2011046_
Start Date : 9/25/2012
Page No : 1

N/S: Massachusetts Avenue
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Client: HSH/ J. SanClemente

Groups Printed- Peds and Bikes

Start Time	Massachusetts Avenue From North				Columbus Avenue From East				Massachusetts Avenue From South				Columbus Avenue From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
07:00 AM	2	2	0	12	2	0	0	22	0	7	1	10	1	5	4	19	87
07:15 AM	2	9	0	20	1	5	0	31	1	8	0	14	0	11	8	22	132
07:30 AM	1	10	1	14	1	3	1	38	0	10	1	24	0	15	7	32	158
07:45 AM	1	13	4	22	2	3	1	39	0	9	2	24	0	32	6	41	199
Total	6	34	5	68	6	11	2	130	1	34	4	72	1	63	25	114	576
08:00 AM	0	9	3	28	1	2	0	35	0	6	0	9	0	18	1	45	157
08:15 AM	0	5	1	38	0	2	1	40	0	9	0	19	1	36	4	53	209
08:30 AM	0	6	2	30	0	1	0	46	0	9	0	30	4	36	1	44	209
08:45 AM	0	10	0	38	0	2	0	51	1	12	0	27	0	48	3	43	235
Total	0	30	6	134	1	7	1	172	1	36	0	85	5	138	9	185	810
Grand Total	6	64	11	202	7	18	3	302	2	70	4	157	6	201	34	299	1386
Apprch %	2.1	22.6	3.9	71.4	2.1	5.5	0.9	91.5	0.9	30	1.7	67.4	1.1	37.2	6.3	55.4	
Total %	0.4	4.6	0.8	14.6	0.5	1.3	0.2	21.8	0.1	5.1	0.3	11.3	0.4	14.5	2.5	21.6	

Start Time	Massachusetts Avenue From North					Columbus Avenue From East					Massachusetts Avenue From South					Columbus Avenue From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. 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	9	3	28	40	1	2	0	35	38	0	6	0	9	15	0	18	1	45	64	157
08:15 AM	0	5	1	38	44	0	2	1	40	43	0	9	0	19	28	1	36	4	53	94	209
08:30 AM	0	6	2	30	38	0	1	0	46	47	0	9	0	30	39	4	36	1	44	85	209
08:45 AM	0	10	0	38	48	0	2	0	51	53	1	12	0	27	40	0	48				235
Total Volume	0	30	6	134	170	1	7	1	172	181	1	36	0	85	122	5	138	9	185	337	810
% App. Total	0	17.6	3.5	78.8		0.6	3.9	0.6	95		0.8	29.5	0	69.7		1.5	40.9	2.7	54.9		
PHF	.000	.750	.500	.882	.885	.250	.875	.250	.843	.854	.250	.750	.000	.708	.763	.313	.719	.563	.873	.896	.862



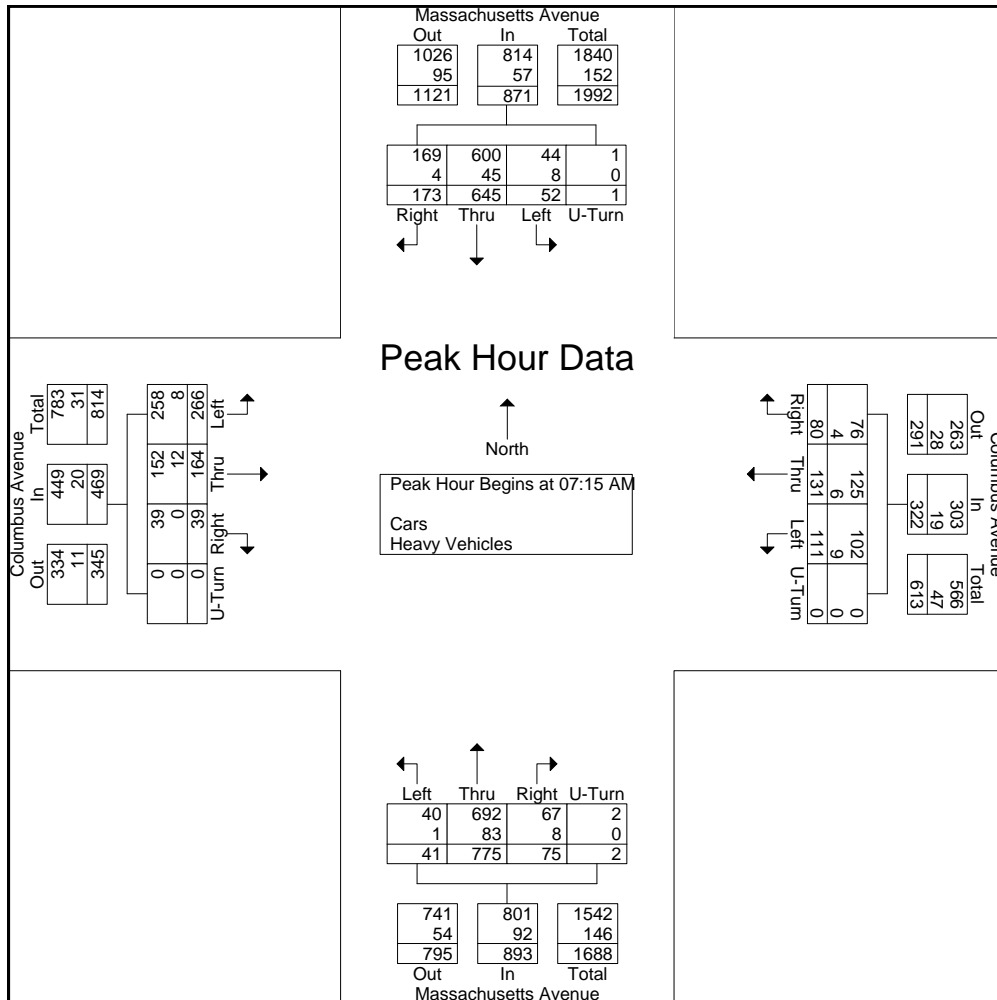
PRECISION
D A T A
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503
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Email: datarequests@pdillc.com

File Name : 123026 K
Site Code : 2011046_
Start Date : 9/25/2012
Page No : 1

N/S: Massachusetts Avenue
E/W: Columbus Avenue
City, State: Boston, MA
Client: HSH/ J. SanClemente

Start Time	Massachusetts Avenue From North					Columbus Avenue From East					Massachusetts Avenue From South					Columbus Avenue From West					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
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	39	163	11	0	213	22	32	24	0	78	14	197	13	1	225	9	27	62	0	98	614
07:30 AM	41	169	14	0	224	15	24	27	0	66	18	197	11	1	227	9	47	71	0	127	644
07:45 AM	49	168	9	0	226	29	35	26	0	90	23	196	9	0	228	14	52	58	0	124	668
08:00 AM	44	145	18	1	208	14	40	34	0	88	20	185	8	0	213	7	38	75	0	120	629
Total Volume	173	645	52	1	871	80	131	111	0	322	75	775	41	2	893	39	164	266	0	469	2555
% App. Total	19.9	74.1	6	0.1		24.8	40.7	34.5	0		8.4	86.8	4.6	0.2		8.3	35	56.7	0		
PHF	.883	.954	.722	.250	.963	.690	.819	.816	.000	.894	.815	.984	.788	.500	.979	.696	.788	.887	.000	.923	.956
Cars	169	600	44	1	814	76	125	102	0	303	67	692	40	2	801	39	152	258	0	449	2367
% Cars	97.7	93.0	84.6	100	93.5	95.0	95.4	91.9	0	94.1	89.3	89.3	97.6	100	89.7	100	92.7	97.0	0	95.7	92.6
Heavy Vehicles	4	45	8	0	57	4	6	9	0	19	8	83	1	0	92	0	12	8	0	20	188
% Heavy Vehicles	2.3	7.0	15.4	0	6.5	5.0	4.6	8.1	0	5.9	10.7	10.7	2.4	0	10.3	0	7.3	3.0	0	4.3	7.4





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N/S: Massachusetts Avenue
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Groups Printed- Cars - Heavy Vehicles

Start Time	Massachusetts Avenue From North				Columbus Avenue From East				Massachusetts Avenue From South				Columbus Avenue From West				Int. Total
	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	
04:00 PM	43	195	24	0	21	51	24	0	22	169	9	3	19	35	38	0	653
04:15 PM	60	198	15	0	17	37	22	0	16	188	7	1	14	33	58	0	666
04:30 PM	51	204	18	0	14	50	20	0	23	178	8	1	15	45	69	0	696
04:45 PM	41	208	23	0	16	46	28	0	17	164	13	3	12	48	71	0	690
Total	195	805	80	0	68	184	94	0	78	699	37	8	60	161	236	0	2705
05:00 PM	55	186	12	0	15	53	42	0	23	203	7	2	5	47	66	0	716
05:15 PM	47	208	6	0	16	55	28	0	20	182	11	1	18	51	53	0	696
05:30 PM	57	179	22	0	15	60	42	0	21	216	8	2	16	50	57	0	745
05:45 PM	52	190	16	0	17	49	33	0	20	189	10	2	13	42	52	0	685
Total	211	763	56	0	63	217	145	0	84	790	36	7	52	190	228	0	2842
Grand Total	406	1568	136	0	131	401	239	0	162	1489	73	15	112	351	464	0	5547
Apprch %	19.2	74.3	6.4	0	17	52	31	0	9.3	85.6	4.2	0.9	12.1	37.9	50.1	0	
Total %	7.3	28.3	2.5	0	2.4	7.2	4.3	0	2.9	26.8	1.3	0.3	2	6.3	8.4	0	
Cars	400	1490	131	0	127	393	223	0	156	1431	72	15	111	343	462	0	5354
% Cars	98.5	95	96.3	0	96.9	98	93.3	0	96.3	96.1	98.6	100	99.1	97.7	99.6	0	96.5
Heavy Vehicles	6	78	5	0	4	8	16	0	6	58	1	0	1	8	2	0	193
% Heavy Vehicles	1.5	5	3.7	0	3.1	2	6.7	0	3.7	3.9	1.4	0	0.9	2.3	0.4	0	3.5

Start Time	Massachusetts Avenue From North					Columbus Avenue From East					Massachusetts Avenue From South					Columbus Avenue From West					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	41	208	23	0	272	16	46	28	0	90	17	164	13	3	197	12	48	71	0	131	690
05:00 PM	55	186	12	0	253	15	53	42	0	110	23	203	7	2	235	5	47	66	0	118	716
05:15 PM	47	208	6	0	261	16	55	28	0	99	20	182	11	1	214	18	51	53	0	122	696
05:30 PM	57	179	22	0	258	15	60	42	0	117	21	216	8	2	247	16	50	57	0	123	745
Total Volume	200	781	63	0	1044	62	214	140	0	416	81	765	39	8	893	51	196	247	0	494	2847
% App. Total	19.2	74.8	6	0		14.9	51.4	33.7	0		9.1	85.7	4.4	0.9		10.3	39.7	50	0		
PHF	.877	.939	.685	.000	.960	.969	.892	.833	.000	.889	.880	.885	.750	.667	.904	.708	.961	.870	.000	.943	.955
Cars	199	743	62	0	1004	60	209	132	0	401	79	734	39	8	860	50	195	246	0	491	2756
% Cars	99.5	95.1	98.4	0	96.2	96.8	97.7	94.3	0	96.4	97.5	95.9	100	100	96.3	98.0	99.5	99.6	0	99.4	96.8
Heavy Vehicles	1	38	1	0	40	2	5	8	0	15	2	31	0	0	33	1	1	1	0	3	91
% Heavy Vehicles	0.5	4.9	1.6	0	3.8	3.2	2.3	5.7	0	3.6	2.5	4.1	0	0	3.7	2.0	0.5	0.4	0	0.6	3.2



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Groups Printed- Cars

Start Time	Massachusetts Avenue From North				Columbus Avenue From East				Massachusetts Avenue From South				Columbus Avenue From West				Int. Total
	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	
04:00 PM	42	184	22	0	21	50	20	0	21	162	8	3	19	30	37	0	619
04:15 PM	58	186	14	0	16	36	21	0	16	178	7	1	14	32	58	0	637
04:30 PM	49	195	17	0	14	50	17	0	21	174	8	1	15	45	69	0	675
04:45 PM	41	198	23	0	15	45	26	0	16	154	13	3	11	48	71	0	664
Total	190	763	76	0	66	181	84	0	74	668	36	8	59	155	235	0	2595
05:00 PM	54	179	11	0	15	52	40	0	23	194	7	2	5	46	66	0	694
05:15 PM	47	197	6	0	15	54	27	0	19	175	11	1	18	51	53	0	674
05:30 PM	57	169	22	0	15	58	39	0	21	211	8	2	16	50	56	0	724
05:45 PM	52	182	16	0	16	48	33	0	19	183	10	2	13	41	52	0	667
Total	210	727	55	0	61	212	139	0	82	763	36	7	52	188	227	0	2759
Grand Total	400	1490	131	0	127	393	223	0	156	1431	72	15	111	343	462	0	5354
Apprch %	19.8	73.7	6.5	0	17.1	52.9	30	0	9.3	85.5	4.3	0.9	12.1	37.4	50.4	0	
Total %	7.5	27.8	2.4	0	2.4	7.3	4.2	0	2.9	26.7	1.3	0.3	2.1	6.4	8.6	0	

Start Time	Massachusetts Avenue From North					Columbus Avenue From East					Massachusetts Avenue From South					Columbus Avenue From West					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	54	179	11	0	244	15	52	40	0	107	23	194	7	2	226	5	46	66	0	117	694
05:15 PM	47	197	6	0	250	15	54	27	0	96	19	175	11			18	51			122	
05:30 PM	57	169	22	0	248	15	58	39	0	112	21	211	8	2	242	16	50	56	0	122	724
05:45 PM	52	182	16	0	250	16	48	33	0	97	19	183	10	2	214	13	41	52	0	106	667
Total Volume	210	727	55	0	992	61	212	139	0	412	82	763	36	7	888	52	188	227	0	467	2759
% App. Total	21.2	73.3	5.5	0		14.8	51.5	33.7	0		9.2	85.9	4.1	0.8		11.1	40.3	48.6	0		
PHF	.921	.923	.625	.000	.992	.953	.914	.869	.000	.920	.891	.904	.818	.875	.917	.722	.922	.860	.000	.957	.953



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File Name : 123026 KK
Site Code : 2011046_
Start Date : 9/25/2012
Page No : 1

N/S: Massachusetts Avenue
E/W: Columbus Avenue
City, State: Boston, MA
Client: HSH/ J. SanClemente

Groups Printed- Heavy Vehicles

Start Time	Massachusetts Avenue From North				Columbus Avenue From East				Massachusetts Avenue From South				Columbus Avenue From West				Int. Total
	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	
04:00 PM	1	11	2	0	0	1	4	0	1	7	1	0	0	5	1	0	34
04:15 PM	2	12	1	0	1	1	1	0	0	10	0	0	0	1	0	0	29
04:30 PM	2	9	1	0	0	0	3	0	2	4	0	0	0	0	0	0	21
04:45 PM	0	10	0	0	1	1	2	0	1	10	0	0	1	0	0	0	26
Total	5	42	4	0	2	3	10	0	4	31	1	0	1	6	1	0	110
05:00 PM	1	7	1	0	0	1	2	0	0	9	0	0	0	1	0	0	22
05:15 PM	0	11	0	0	1	1	1	0	1	7	0	0	0	0	0	0	22
05:30 PM	0	10	0	0	0	2	3	0	0	5	0	0	0	0	1	0	21
05:45 PM	0	8	0	0	1	1	0	0	1	6	0	0	0	1	0	0	18
Total	1	36	1	0	2	5	6	0	2	27	0	0	0	2	1	0	83
Grand Total	6	78	5	0	4	8	16	0	6	58	1	0	1	8	2	0	193
Apprch %	6.7	87.6	5.6	0	14.3	28.6	57.1	0	9.2	89.2	1.5	0	9.1	72.7	18.2	0	
Total %	3.1	40.4	2.6	0	2.1	4.1	8.3	0	3.1	30.1	0.5	0	0.5	4.1	1	0	

Start Time	Massachusetts Avenue From North					Columbus Avenue From East					Massachusetts Avenue From South					Columbus Avenue From West					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	1	11	2	0	14	0	1	4	0	5	1	7	1	0	9	0	5	1	0	6	34
04:15 PM	2	12	1	0	15	1	1	1	0	3	0	10	0	0	10	0	1	0	0	1	29
04:30 PM	2	9	1	0	12	0	0	3	0	3	2	4	0	0	6	0	0	0	0	0	21
04:45 PM	0	10	0	0	10	1	1	2	0	4	1	10	0	0	11	1	0	0	0	1	26
Total Volume	5	42	4	0	51	2	3	10	0	15	4	31	1	0	36	1	6	1	0	8	110
% App. Total	9.8	82.4	7.8	0		13.3	20	66.7	0		11.1	86.1	2.8	0		12.5	75	12.5	0		
PHF	.625	.875	.500	.000	.850	.500	.750	.625	.000	.750	.500	.775	.250	.000	.818	.250	.300	.250	.000	.333	.809



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N/S: Massachusetts Avenue
E/W: Columbus Avenue
City, State: Boston, MA
Client: HSH/ J. SanClemente

File Name : 123026 KK
Site Code : 2011046_
Start Date : 9/25/2012
Page No : 1

Groups Printed- Peds and Bikes

Start Time	Massachusetts Avenue From North				Columbus Avenue From East				Massachusetts Avenue From South				Columbus Avenue From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
04:00 PM	0	3	5	21	0	8	0	33	0	11	1	8	0	3	2	43	138
04:15 PM	0	5	0	38	0	6	0	50	0	9	1	19	0	7	3	54	192
04:30 PM	0	8	0	33	0	9	1	47	0	12	0	16	0	8	1	53	188
04:45 PM	0	10	0	25	0	4	0	39	0	13	4	18	0	6	4	32	155
Total	0	26	5	117	0	27	1	169	0	45	6	61	0	24	10	182	673
05:00 PM	3	9	1	26	2	23	0	35	0	23	2	17	1	6	0	46	194
05:15 PM	2	17	1	48	0	31	2	72	0	25	2	35	0	8	3	81	327
05:30 PM	2	11	1	31	1	32	0	58	0	24	3	20	1	6	3	81	274
05:45 PM	2	7	2	45	2	27	3	43	0	8	1	20	0	7	9	78	254
Total	9	44	5	150	5	113	5	208	0	80	8	92	2	27	15	286	1049
Grand Total	9	70	10	267	5	140	6	377	0	125	14	153	2	51	25	468	1722
Apprch %	2.5	19.7	2.8	75	0.9	26.5	1.1	71.4	0	42.8	4.8	52.4	0.4	9.3	4.6	85.7	
Total %	0.5	4.1	0.6	15.5	0.3	8.1	0.3	21.9	0	7.3	0.8	8.9	0.1	3	1.5	27.2	

Start Time	Massachusetts Avenue From North					Columbus Avenue From East					Massachusetts Avenue From South					Columbus Avenue From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	3	9	1	26	39	2	23	0	35	60	0	23	2	17	42	1	6	0	46	53	194
05:15 PM	2	17	1	48	68	0	31	2	72	105	0	25	2	35	62	0	8	3	81	92	327
05:30 PM	2	11	1	31	45	1	32	0	58	91	0	24	3	20	47	1	6	3	81	91	274
05:45 PM	2	7	2	45	56	2	27	3	43	75	0	8	1	20	29	0	7	9	78	94	254
Total Volume	9	44	5	150	208	5	113	5	208	331	0	80	8	92	180	2	27	15	286	330	1049
% App. Total	4.3	21.2	2.4	72.1		1.5	34.1	1.5	62.8		0	44.4	4.4	51.1		0.6	8.2	4.5	86.7		
PHF	.750	.647	.625	.781	.765	.625	.883	.417	.722	.788	.000	.800	.667	.657	.726	.500	.844	.417	.883	.878	.802



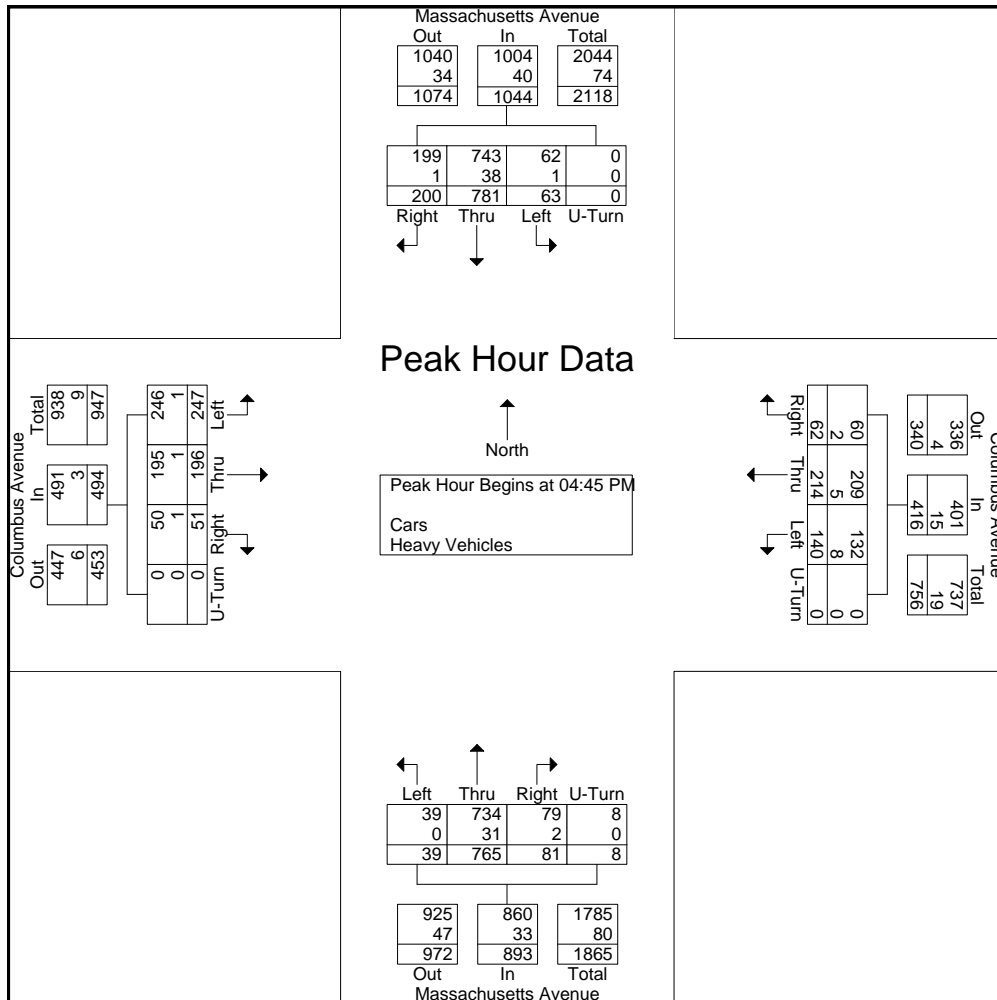
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City, State: Boston, MA
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File Name : 123026 KK
Site Code : 2011046_
Start Date : 9/25/2012
Page No : 1

Start Time	Massachusetts Avenue From North					Columbus Avenue From East					Massachusetts Avenue From South					Columbus Avenue From West					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	41	208	23	0	272	16	46	28	0	90	17	164	13	3	197	12	48	71	0	131	690
05:00 PM	55	186	12	0	253	15	53	42	0	110	23	203	7	2	235	5	47	66	0	118	716
05:15 PM	47	208	6	0	261	16	55	28	0	99	20	182	11	1	214	18	51	53	0	122	696
05:30 PM	57	179	22	0	258	15	60	42	0	117	21	216	8	2	247	16	50	57	0	123	745
Total Volume	200	781	63	0	1044	62	214	140	0	416	81	765	39	8	893	51	196	247	0	494	2847
% App. Total	19.2	74.8	6	0		14.9	51.4	33.7	0		9.1	85.7	4.4	0.9		10.3	39.7	50	0		
PHF	.877	.939	.685	.000	.960	.969	.892	.833	.000	.889	.880	.885	.750	.667	.904	.708	.961	.870	.000	.943	.955
Cars	199	743	62	0	1004	60	209	132	0	401	79	734	39	8	860	50	195	246	0	491	2756
% Cars	99.5	95.1	98.4	0	96.2	96.8	97.7	94.3	0	96.4	97.5	95.9	100	100	96.3	98.0	99.5	99.6	0	99.4	96.8
Heavy Vehicles	1	38	1	0	40	2	5	8	0	15	2	31	0	0	33	1	1	1	0	3	91
% Heavy Vehicles	0.5	4.9	1.6	0	3.8	3.2	2.3	5.7	0	3.6	2.5	4.1	0	0	3.7	2.0	0.5	0.4	0	0.6	3.2





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File Name : 123026 C
Site Code : 2011046_
Start Date : 9/25/2012
Page No : 1

N/S: Ruggles Street
E: MBTA Bus Entrance
City, State: Boston, MA
Client: HSH/ J. SanClemente

Groups Printed- Cars - Heavy Vehicles

Start Time	Ruggles Street From North			MBTA Bus Entrance From East			Ruggles Street From South			Int. Total
	Thru	Left	U-Turn	Right	Left	U-Turn	Right	Thru	U-Turn	
07:00 AM	105	9	0	0	0	0	11	190	1	316
07:15 AM	160	4	0	0	0	0	11	182	0	357
07:30 AM	170	4	0	0	0	0	11	198	1	384
07:45 AM	147	7	0	0	0	0	16	178	0	348
Total	582	24	0	0	0	0	49	748	2	1405
08:00 AM	130	4	0	0	0	0	12	149	0	295
08:15 AM	99	6	0	0	0	0	11	153	0	269
08:30 AM	122	6	0	0	0	0	17	162	0	307
08:45 AM	105	5	0	0	0	0	10	186	0	306
Total	456	21	0	0	0	0	50	650	0	1177
Grand Total	1038	45	0	0	0	0	99	1398	2	2582
Apprch %	95.8	4.2	0	0	0	0	6.6	93.3	0.1	
Total %	40.2	1.7	0	0	0	0	3.8	54.1	0.1	
Cars	959	5	0	0	0	0	11	1279	2	2256
% Cars	92.4	11.1	0	0	0	0	11.1	91.5	100	87.4
Heavy Vehicles	79	40	0	0	0	0	88	119	0	326
% Heavy Vehicles	7.6	88.9	0	0	0	0	88.9	8.5	0	12.6

Start Time	Ruggles Street From North				MBTA Bus Entrance From East				Ruggles Street From South				Int. Total
	Thru	Left	U-Turn	App. Total	Right	Left	U-Turn	App. Total	Right	Thru	U-Turn	App. 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	105	9	0	114	0	0	0	0	11	190	1	202	316
07:15 AM	160	4	0	164	0	0	0	0	11	182	0	193	357
07:30 AM	170	4	0	174	0	0	0	0	11	198	1	210	384
07:45 AM	147	7	0	154	0	0	0	0	16	178	0	194	348
Total Volume	582	24	0	606	0	0	0	0	49	748	2	799	1405
% App. Total	96	4	0		0	0	0		6.1	93.6	0.3		
PHF	.856	.667	.000	.871	.000	.000	.000	.000	.766	.944	.500	.951	.915
Cars	546	3	0	549	0	0	0	0	5	688	2	695	1244
% Cars	93.8	12.5	0	90.6	0	0	0	0	10.2	92.0	100	87.0	88.5
Heavy Vehicles	36	21	0	57	0	0	0	0	44	60	0	104	161
% Heavy Vehicles	6.2	87.5	0	9.4	0	0	0	0	89.8	8.0	0	13.0	11.5



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Start Date : 9/25/2012
Page No : 1

N/S: Ruggles Street
E: MBTA Bus Entrance
City, State: Boston, MA
Client: HSH/ J. SanClemente

Groups Printed- Cars

Start Time	Ruggles Street From North			MBTA Bus Entrance From East			Ruggles Street From South			Int. Total
	Thru	Left	U-Turn	Right	Left	U-Turn	Right	Thru	U-Turn	
07:00 AM	94	1	0	0	0	0	1	172	1	269
07:15 AM	150	1	0	0	0	0	1	165	0	317
07:30 AM	165	0	0	0	0	0	1	185	1	352
07:45 AM	137	1	0	0	0	0	2	166	0	306
Total	546	3	0	0	0	0	5	688	2	1244
08:00 AM	123	0	0	0	0	0	1	135	0	259
08:15 AM	87	1	0	0	0	0	1	132	0	221
08:30 AM	113	1	0	0	0	0	3	151	0	268
08:45 AM	90	0	0	0	0	0	1	173	0	264
Total	413	2	0	0	0	0	6	591	0	1012
Grand Total	959	5	0	0	0	0	11	1279	2	2256
Apprch %	99.5	0.5	0	0	0	0	0.9	99	0.2	
Total %	42.5	0.2	0	0	0	0	0.5	56.7	0.1	

Start Time	Ruggles Street From North				MBTA Bus Entrance From East				Ruggles Street From South				Int. Total
	Thru	Left	U-Turn	App. Total	Right	Left	U-Turn	App. Total	Right	Thru	U-Turn	App. 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	94	1	0	95	0	0	0	0	1	172	1	174	269
07:15 AM	150	1	0	151	0	0	0	0	1	165	0	166	317
07:30 AM	165	0	0	165	0	0	0	0	1	185	1	187	352
07:45 AM	137	1	0	138	0	0	0	0	2	166	0	168	306
Total Volume	546	3	0	549	0	0	0	0	5	688	2	695	1244
% App. Total	99.5	0.5	0		0	0	0		0.7	99	0.3		
PHF	.827	.750	.000	.832	.000	.000	.000	.000	.625	.930	.500	.929	.884



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N/S: Ruggles Street
E: MBTA Bus Entrance
City, State: Boston, MA
Client: HSH/ J. SanClemente

Groups Printed- Heavy Vehicles

Start Time	Ruggles Street From North			MBTA Bus Entrance From East			Ruggles Street From South			Int. Total
	Thru	Left	U-Turn	Right	Left	U-Turn	Right	Thru	U-Turn	
07:00 AM	11	8	0	0	0	0	10	18	0	47
07:15 AM	10	3	0	0	0	0	10	17	0	40
07:30 AM	5	4	0	0	0	0	10	13	0	32
07:45 AM	10	6	0	0	0	0	14	12	0	42
Total	36	21	0	0	0	0	44	60	0	161
08:00 AM	7	4	0	0	0	0	11	14	0	36
08:15 AM	12	5	0	0	0	0	10	21	0	48
08:30 AM	9	5	0	0	0	0	14	11	0	39
08:45 AM	15	5	0	0	0	0	9	13	0	42
Total	43	19	0	0	0	0	44	59	0	165
Grand Total	79	40	0	0	0	0	88	119	0	326
Apprch %	66.4	33.6	0	0	0	0	42.5	57.5	0	
Total %	24.2	12.3	0	0	0	0	27	36.5	0	

Start Time	Ruggles Street From North				MBTA Bus Entrance From East				Ruggles Street From South				Int. Total
	Thru	Left	U-Turn	App. Total	Right	Left	U-Turn	App. Total	Right	Thru	U-Turn	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:45 AM													
07:45 AM	10	6	0	16	0	0	0	0	14	12	0	26	42
08:00 AM	7	4	0	11	0	0	0	0	11	14	0	25	36
08:15 AM	12	5	0	17	0	0	0	0	10	21	0	31	48
08:30 AM	9	5	0	14	0	0	0	0	14	11	0	25	39
Total Volume	38	20	0	58	0	0	0	0	49	58	0	107	165
% App. Total	65.5	34.5	0		0	0	0		45.8	54.2	0		
PHF	.792	.833	.000	.853	.000	.000	.000	.000	.875	.690	.000	.863	.859



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N/S: Ruggles Street
E: MBTA Bus Entrance
City, State: Boston, MA
Client: HSH/ J. SanClemente

Groups Printed- Peds and Bikes

Start Time	Ruggles Street From North			MBTA Bus Entrance From East			Ruggles Street From South			Int. Total
	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	
07:00 AM	0	0	16	0	0	3	0	4	3	26
07:15 AM	3	0	18	0	0	12	0	8	2	43
07:30 AM	4	0	15	0	0	21	0	8	1	49
07:45 AM	8	0	13	0	0	20	0	10	3	54
Total	15	0	62	0	0	56	0	30	9	172
08:00 AM	4	0	14	0	0	19	0	10	2	49
08:15 AM	0	0	16	0	0	33	1	15	1	66
08:30 AM	6	0	8	0	0	25	0	14	5	58
08:45 AM	5	1	13	1	0	19	0	22	2	63
Total	15	1	51	1	0	96	1	61	10	236
Grand Total	30	1	113	1	0	152	1	91	19	408
Apprch %	20.8	0.7	78.5	0.7	0	99.3	0.9	82	17.1	
Total %	7.4	0.2	27.7	0.2	0	37.3	0.2	22.3	4.7	

Start Time	Ruggles Street From North				MBTA Bus Entrance From East				Ruggles Street From South				Int. Total
	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. 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	4	0	14	18	0	0	19	19	0	10	2	12	49
08:15 AM	0	0	16	16	0	0	33	33	1	15	1	17	66
08:30 AM	6	0	8	14	0	0	25	25	0	14	5	19	58
08:45 AM	5	1	13	19	1	0	19	19	0	22	2	24	63
Total Volume	15	1	51	67	1	0	96	97	1	61	10	72	236
% App. Total	22.4	1.5	76.1		1	0	99		1.4	84.7	13.9		
PHF	.625	.250	.797	.882	.250	.000	.727	.735	.250	.693	.500	.750	.894



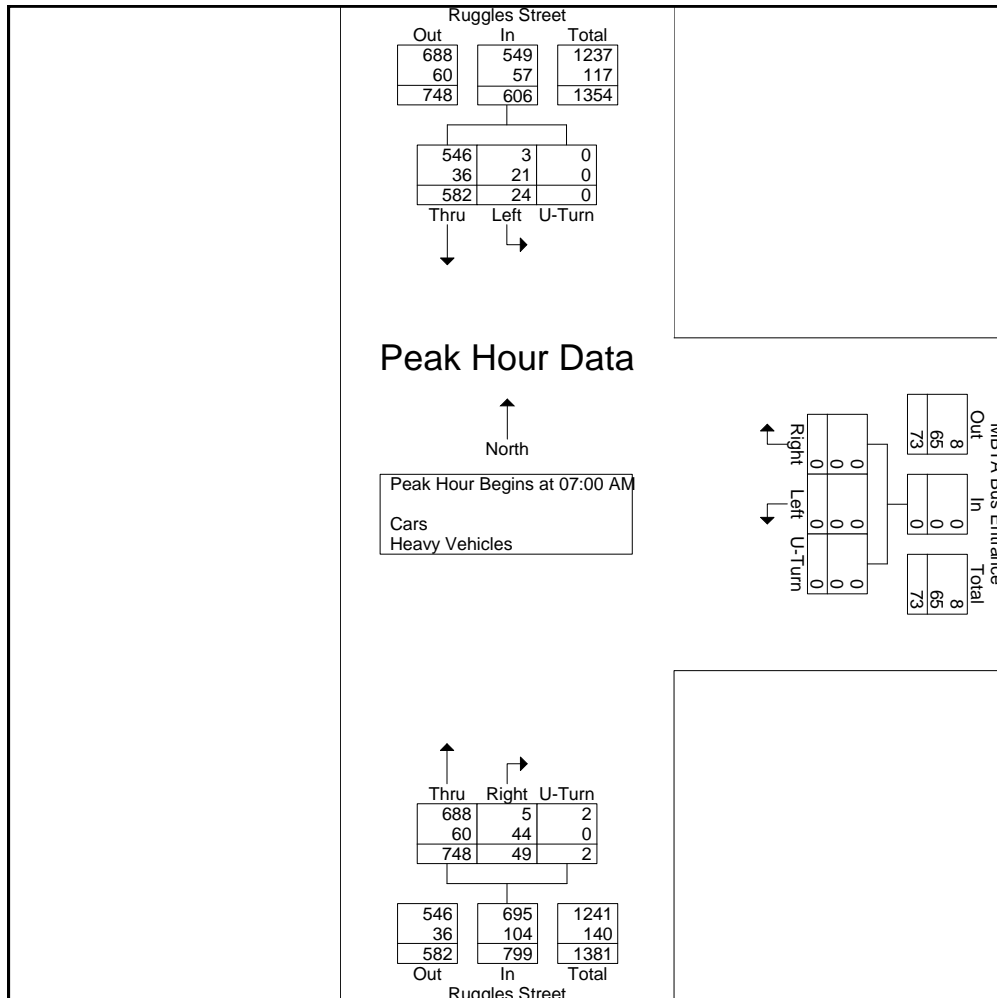
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File Name : 123026 C
Site Code : 2011046_
Start Date : 9/25/2012
Page No : 1

N/S: Ruggles Street
E: MBTA Bus Entrance
City, State: Boston, MA
Client: HSH/ J. SanClemente

Start Time	Ruggles Street From North				MBTA Bus Entrance From East				Ruggles Street From South				Int. Total
	Thru	Left	U-Turn	App. Total	Right	Left	U-Turn	App. Total	Right	Thru	U-Turn	App. 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	105	9	0	114	0	0	0	0	11	190	1	202	316
07:15 AM	160	4	0	164	0	0	0	0	11	182	0	193	357
07:30 AM	170	4	0	174	0	0	0	0	11	198	1	210	384
07:45 AM	147	7	0	154	0	0	0	0	16	178	0	194	348
Total Volume	582	24	0	606	0	0	0	0	49	748	2	799	1405
% App. Total	96	4	0		0	0	0		6.1	93.6	0.3		
PHF	.856	.667	.000	.871	.000	.000	.000	.000	.766	.944	.500	.951	.915
Cars	546	3	0	549	0	0	0	0	5	688	2	695	1244
% Cars	93.8	12.5	0	90.6	0	0	0	0	10.2	92.0	100	87.0	88.5
Heavy Vehicles	36	21	0	57	0	0	0	0	44	60	0	104	161
% Heavy Vehicles	6.2	87.5	0	9.4	0	0	0	0	89.8	8.0	0	13.0	11.5





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Start Date : 9/25/2012
Page No : 1

N/S: Ruggles Street
E: MBTA Bus Entrance
City, State: Boston, MA
Client: HSH/ J. SanClemente

Groups Printed- Cars - Heavy Vehicles

Start Time	Ruggles Street From North			MBTA Bus Entrance From East			Ruggles Street From South			Int. Total
	Thru	Left	U-Turn	Right	Left	U-Turn	Right	Thru	U-Turn	
04:00 PM	192	6	0	0	0	0	11	158	0	367
04:15 PM	170	4	0	0	0	0	12	150	0	336
04:30 PM	165	4	0	0	0	0	3	175	0	347
04:45 PM	172	6	0	0	0	0	9	184	0	371
Total	699	20	0	0	0	0	35	667	0	1421
05:00 PM	165	2	0	0	0	0	10	169	0	346
05:15 PM	181	4	0	0	0	0	8	179	0	372
05:30 PM	161	5	0	0	0	0	9	198	0	373
05:45 PM	166	2	1	0	0	0	11	166	0	346
Total	673	13	1	0	0	0	38	712	0	1437
Grand Total	1372	33	1	0	0	0	73	1379	0	2858
Apprch %	97.6	2.3	0.1	0	0	0	5	95	0	
Total %	48	1.2	0	0	0	0	2.6	48.3	0	
Cars	1309	7	1	0	0	0	17	1281	0	2615
% Cars	95.4	21.2	100	0	0	0	23.3	92.9	0	91.5
Heavy Vehicles	63	26	0	0	0	0	56	98	0	243
% Heavy Vehicles	4.6	78.8	0	0	0	0	76.7	7.1	0	8.5

Start Time	Ruggles Street From North				MBTA Bus Entrance From East				Ruggles Street From South				Int. Total
	Thru	Left	U-Turn	App. Total	Right	Left	U-Turn	App. Total	Right	Thru	U-Turn	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:45 PM													
04:45 PM	172	6	0	178	0	0	0	0	9	184	0	193	371
05:00 PM	165	2	0	167	0	0	0	0	10	169	0	179	346
05:15 PM	181	4	0	185	0	0	0	0	8	179	0	187	372
05:30 PM	161	5	0	166	0	0	0	0	9	198	0	207	373
Total Volume	679	17	0	696	0	0	0	0	36	730	0	766	1462
% App. Total	97.6	2.4	0		0	0	0		4.7	95.3	0		
PHF	.938	.708	.000	.941	.000	.000	.000	.000	.900	.922	.000	.925	.980
Cars	650	4	0	654	0	0	0	0	7	692	0	699	1353
% Cars	95.7	23.5	0	94.0	0	0	0	0	19.4	94.8	0	91.3	92.5
Heavy Vehicles	29	13	0	42	0	0	0	0	29	38	0	67	109
% Heavy Vehicles	4.3	76.5	0	6.0	0	0	0	0	80.6	5.2	0	8.7	7.5



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File Name : 123026 CC
Site Code : 2011046_
Start Date : 9/25/2012
Page No : 1

N/S: Ruggles Street
E: MBTA Bus Entrance
City, State: Boston, MA
Client: HSH/ J. SanClemente

Groups Printed- Cars

Start Time	Ruggles Street From North			MBTA Bus Entrance From East			Ruggles Street From South			Int. Total
	Thru	Left	U-Turn	Right	Left	U-Turn	Right	Thru	U-Turn	
04:00 PM	185	2	0	0	0	0	6	140	0	333
04:15 PM	158	1	0	0	0	0	4	133	0	296
04:30 PM	158	0	0	0	0	0	0	160	0	318
04:45 PM	162	1	0	0	0	0	2	174	0	339
Total	663	4	0	0	0	0	12	607	0	1286
05:00 PM	154	1	0	0	0	0	1	156	0	312
05:15 PM	177	2	0	0	0	0	2	170	0	351
05:30 PM	157	0	0	0	0	0	2	192	0	351
05:45 PM	158	0	1	0	0	0	0	156	0	315
Total	646	3	1	0	0	0	5	674	0	1329
Grand Total	1309	7	1	0	0	0	17	1281	0	2615
Apprch %	99.4	0.5	0.1	0	0	0	1.3	98.7	0	
Total %	50.1	0.3	0	0	0	0	0.7	49	0	

Start Time	Ruggles Street From North				MBTA Bus Entrance From East				Ruggles Street From South				Int. Total
	Thru	Left	U-Turn	App. Total	Right	Left	U-Turn	App. Total	Right	Thru	U-Turn	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:45 PM													
04:45 PM	162	1	0	163	0	0	0	0	2	174	0	176	339
05:00 PM	154	1	0	155	0	0	0	0	1	156	0	157	312
05:15 PM	177	2	0	179	0	0	0	0	2	170	0	172	351
05:30 PM	157	0	0	157	0	0	0	0	2	192	0	194	351
Total Volume	650	4	0	654	0	0	0	0	7	692	0	699	1353
% App. Total	99.4	0.6	0		0	0	0		1	99	0		
PHF	.918	.500	.000	.913	.000	.000	.000	.000	.875	.901	.000	.901	.964



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Site Code : 2011046_
Start Date : 9/25/2012
Page No : 1

N/S: Ruggles Street
E: MBTA Bus Entrance
City, State: Boston, MA
Client: HSH/ J. SanClemente

Groups Printed- Heavy Vehicles

Start Time	Ruggles Street From North			MBTA Bus Entrance From East			Ruggles Street From South			Int. Total
	Thru	Left	U-Turn	Right	Left	U-Turn	Right	Thru	U-Turn	
04:00 PM	7	4	0	0	0	0	5	18	0	34
04:15 PM	12	3	0	0	0	0	8	17	0	40
04:30 PM	7	4	0	0	0	0	3	15	0	29
04:45 PM	10	5	0	0	0	0	7	10	0	32
Total	36	16	0	0	0	0	23	60	0	135
05:00 PM	11	1	0	0	0	0	9	13	0	34
05:15 PM	4	2	0	0	0	0	6	9	0	21
05:30 PM	4	5	0	0	0	0	7	6	0	22
05:45 PM	8	2	0	0	0	0	11	10	0	31
Total	27	10	0	0	0	0	33	38	0	108
Grand Total	63	26	0	0	0	0	56	98	0	243
Apprch %	70.8	29.2	0	0	0	0	36.4	63.6	0	
Total %	25.9	10.7	0	0	0	0	23	40.3	0	

Start Time	Ruggles Street From North				MBTA Bus Entrance From East				Ruggles Street From South				Int. Total
	Thru	Left	U-Turn	App. Total	Right	Left	U-Turn	App. Total	Right	Thru	U-Turn	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:00 PM													
04:00 PM	7	4	0	11	0	0	0	0	5	18	0	23	34
04:15 PM	12	3	0	15	0	0	0	0	8	17	0	25	40
04:30 PM	7	4	0	11	0	0	0	0	3	15	0	18	29
04:45 PM	10	5	0	15	0	0	0	0	7	10	0	17	32
Total Volume	36	16	0	52	0	0	0	0	23	60	0	83	135
% App. Total	69.2	30.8	0		0	0	0		27.7	72.3	0		
PHF	.750	.800	.000	.867	.000	.000	.000	.000	.719	.833	.000	.830	.844



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N/S: Ruggles Street
E: MBTA Bus Entrance
City, State: Boston, MA
Client: HSH/ J. SanClemente

Groups Printed- Peds and Bikes

Start Time	Ruggles Street From North			MBTA Bus Entrance From East			Ruggles Street From South			Int. Total
	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	
04:00 PM	0	0	20	4	0	29	0	6	7	66
04:15 PM	2	1	17	2	0	21	0	6	2	51
04:30 PM	4	0	15	4	0	27	0	5	2	57
04:45 PM	3	0	13	4	0	97	0	5	8	130
Total	9	1	65	14	0	174	0	22	19	304
05:00 PM	5	0	17	0	0	31	0	3	1	57
05:15 PM	5	0	10	0	0	50	0	6	8	79
05:30 PM	6	0	8	0	0	27	0	6	8	55
05:45 PM	6	0	22	0	0	24	0	13	5	70
Total	22	0	57	0	0	132	0	28	22	261
Grand Total	31	1	122	14	0	306	0	50	41	565
Apprch %	20.1	0.6	79.2	4.4	0	95.6	0	54.9	45.1	
Total %	5.5	0.2	21.6	2.5	0	54.2	0	8.8	7.3	

Start Time	Ruggles Street From North				MBTA Bus Entrance From East				Ruggles Street From South				Int. Total
	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:30 PM													
04:30 PM	4	0	15	19	4	0	27	31	0	5	2	7	57
04:45 PM	3	0	13	16	4	0	97	101	0	5	8	13	130
05:00 PM	5	0	17	22	0	0	31	31	0	3	1	4	57
05:15 PM	5	0	10	15	0	0	50	50	0	6	8	14	79
Total Volume	17	0	55	72	8	0	205	213	0	19	19	38	323
% App. Total	23.6	0	76.4		3.8	0	96.2		0	50	50		
PHF	.850	.000	.809	.818	.500	.000	.528	.527	.000	.792	.594	.679	.621



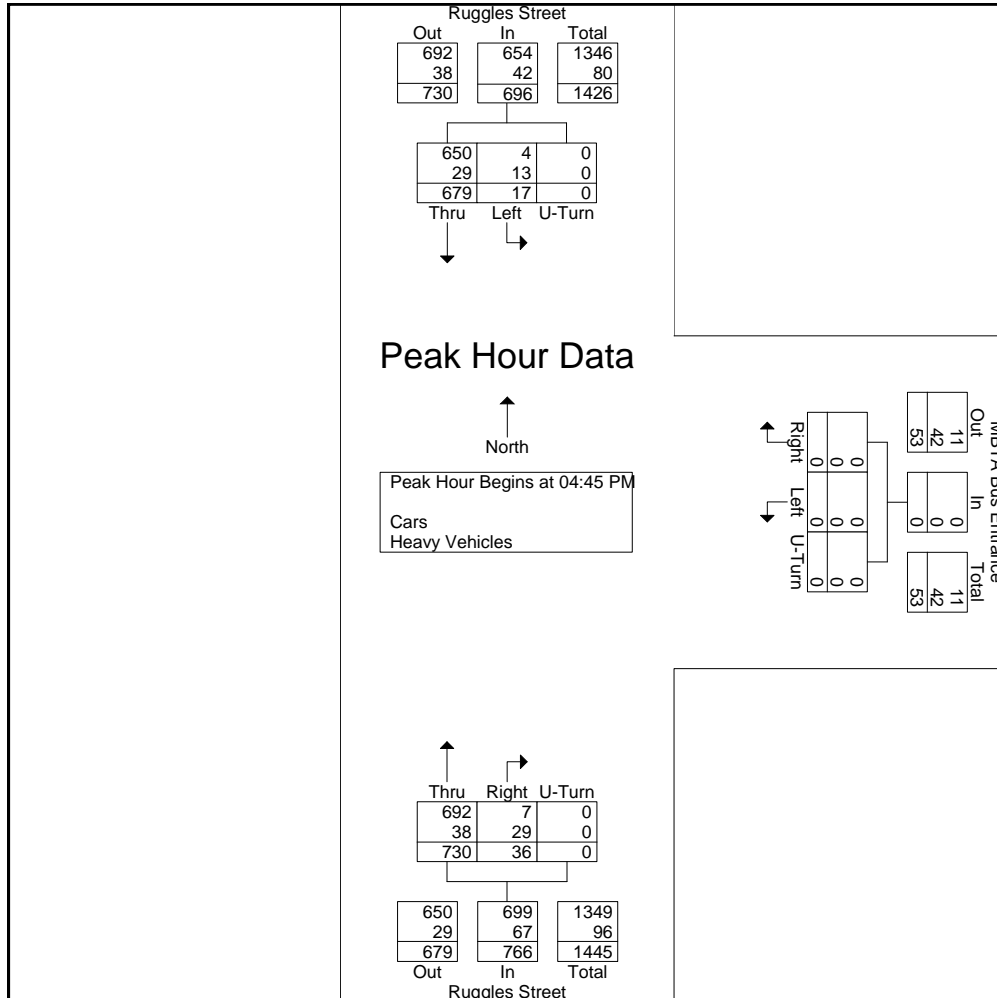
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Page No : 1

N/S: Ruggles Street
E: MBTA Bus Entrance
City, State: Boston, MA
Client: HSH/ J. SanClemente

Start Time	Ruggles Street From North				MBTA Bus Entrance From East				Ruggles Street From South				Int. Total
	Thru	Left	U-Turn	App. Total	Right	Left	U-Turn	App. Total	Right	Thru	U-Turn	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:45 PM													
04:45 PM	172	6	0	178	0	0	0	0	9	184	0	193	371
05:00 PM	165	2	0	167	0	0	0	0	10	169	0	179	346
05:15 PM	181	4	0	185	0	0	0	0	8	179	0	187	372
05:30 PM	161	5	0	166	0	0	0	0	9	198	0	207	373
Total Volume	679	17	0	696	0	0	0	0	36	730	0	766	1462
% App. Total	97.6	2.4	0		0	0	0		4.7	95.3	0		
PHF	.938	.708	.000	.941	.000	.000	.000	.000	.900	.922	.000	.925	.980
Cars	650	4	0	654	0	0	0	0	7	692	0	699	1353
% Cars	95.7	23.5	0	94.0	0	0	0	0	19.4	94.8	0	91.3	92.5
Heavy Vehicles	29	13	0	42	0	0	0	0	29	38	0	67	109
% Heavy Vehicles	4.3	76.5	0	6.0	0	0	0	0	80.6	5.2	0	8.7	7.5



Accurate Counts
978-664-2565

N/S Street : Saint Cyprians Place
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046003
Site Code : 11046003
Start Date : 5/13/2013
Page No : 1

Groups Printed- Cars - Trucks

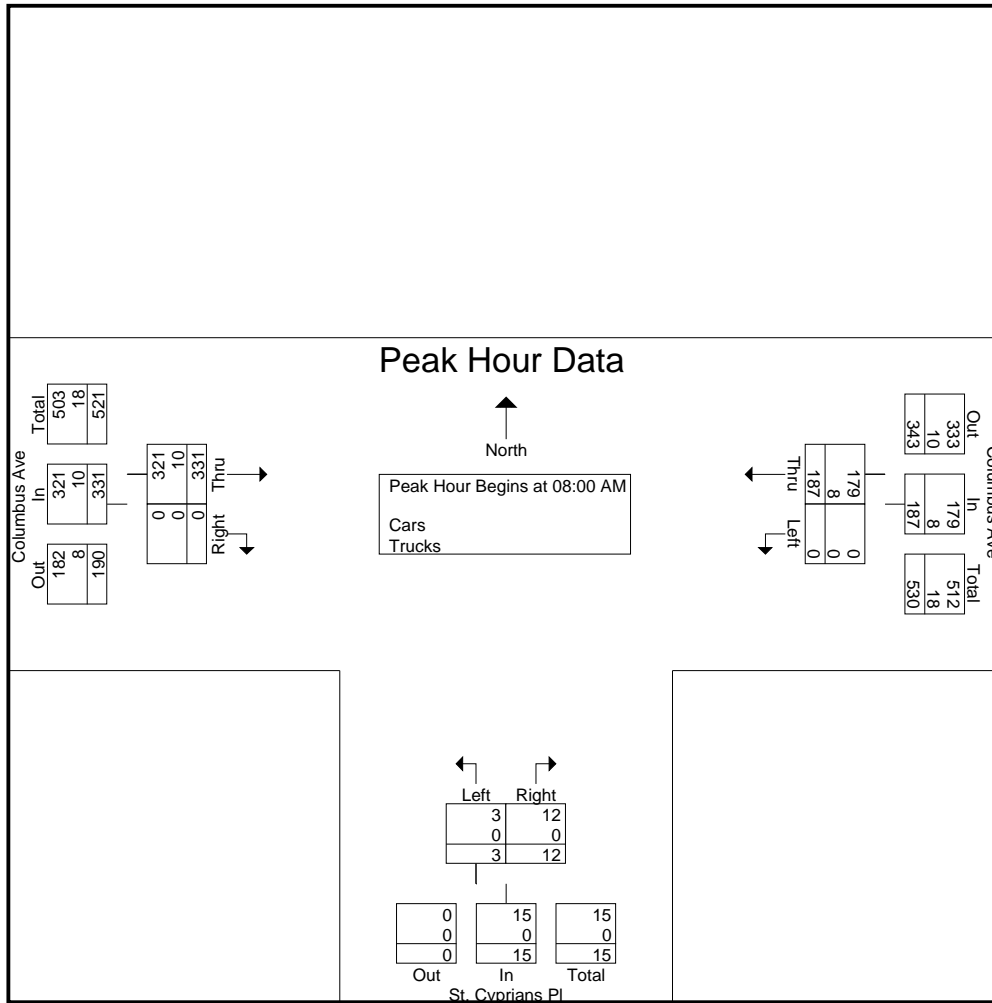
Start Time	Columbus Ave From East		St, Cyprians Pl From South		Columbus Ave From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
07:00 AM	0	37	0	6	63	0	106
07:15 AM	0	31	2	2	62	0	97
07:30 AM	0	40	0	4	78	0	122
07:45 AM	0	47	1	2	102	0	152
Total	0	155	3	14	305	0	477
08:00 AM	0	44	1	0	73	0	118
08:15 AM	0	47	1	2	81	0	131
08:30 AM	0	47	0	3	79	0	129
08:45 AM	0	49	1	7	98	0	155
Total	0	187	3	12	331	0	533
Grand Total	0	342	6	26	636	0	1010
Apprch %	0	100	18.8	81.2	100	0	
Total %	0	33.9	0.6	2.6	63	0	
Cars	0	328	6	26	608	0	968
% Cars	0	95.9	100	100	95.6	0	95.8
Trucks	0	14	0	0	28	0	42
% Trucks	0	4.1	0	0	4.4	0	4.2

Start Time	Columbus Ave From East			St, Cyprians Pl From South			Columbus Ave From West			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. 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	44	44	1	0	1	73	0	73	118
08:15 AM	0	47	47	1	2	3	81	0	81	131
08:30 AM	0	47	47	0	3	3	79	0	79	129
08:45 AM	0	49	49	1	7	8	98	0	98	155
Total Volume	0	187	187	3	12	15	331	0	331	533
% App. Total	0	100		20	80		100	0		
PHF	.000	.954	.954	.750	.429	.469	.844	.000	.844	.860
Cars	0	179	179	3	12	15	321	0	321	515
% Cars	0	95.7	95.7	100	100	100	97.0	0	97.0	96.6
Trucks	0	8	8	0	0	0	10	0	10	18
% Trucks	0	4.3	4.3	0	0	0	3.0	0	3.0	3.4

Accurate Counts
978-664-2565

N/S Street : Saint Cyprians Place
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046003
Site Code : 11046003
Start Date : 5/13/2013
Page No : 2



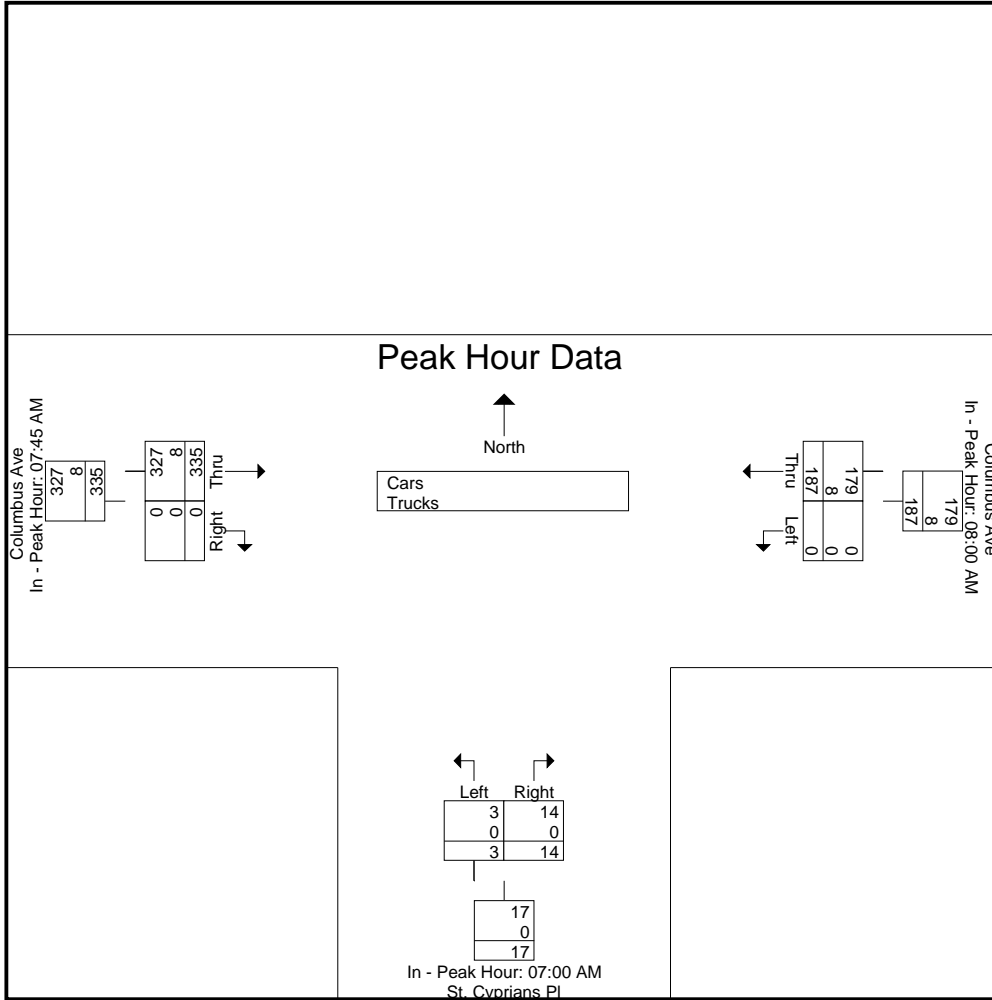
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM			07:00 AM			07:45 AM		
+0 mins.	0	44	44	0	6	6	0	102	
+15 mins.	0	47	47	2	2	4	73	73	
+30 mins.	0	47	47	0	4	4	81	81	
+45 mins.	0	49	49	1	2	3	79	79	
Total Volume	0	187	187	3	14	17	335	335	
% App. Total	0	100	100	17.6	82.4	100	100	100	
PHF	.000	.954	.954	.375	.583	.708	.821	.821	
Cars	0	179	179	3	14	17	327	327	
% Cars	0	95.7	95.7	100	100	100	97.6	97.6	
Trucks	0	8	8	0	0	0	8	8	
% Trucks	0	4.3	4.3	0	0	0	2.4	2.4	

Accurate Counts
978-664-2565

N/S Street : Saint Cyprians Place
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046003
Site Code : 11046003
Start Date : 5/13/2013
Page No : 3



Accurate Counts
978-664-2565

N/S Street : Saint Cyprians Place
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046003
Site Code : 11046003
Start Date : 5/13/2013
Page No : 1

Groups Printed- Cars

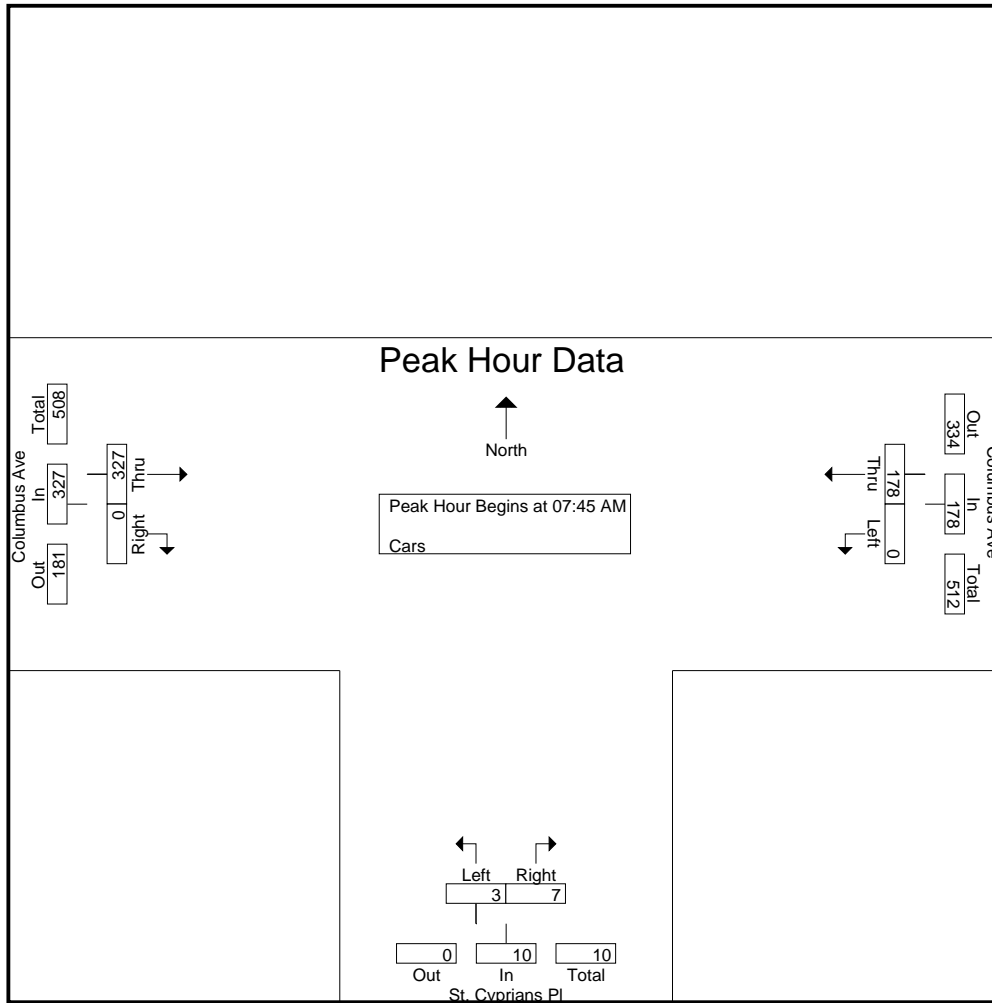
Start Time	Columbus Ave From East		St, Cyprians Pl From South		Columbus Ave From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
07:00 AM	0	36	0	6	53	0	95
07:15 AM	0	31	2	2	59	0	94
07:30 AM	0	36	0	4	76	0	116
07:45 AM	0	46	1	2	99	0	148
Total	0	149	3	14	287	0	453
08:00 AM	0	42	1	0	73	0	116
08:15 AM	0	46	1	2	76	0	125
08:30 AM	0	44	0	3	79	0	126
08:45 AM	0	47	1	7	93	0	148
Total	0	179	3	12	321	0	515
Grand Total	0	328	6	26	608	0	968
Apprch %	0	100	18.8	81.2	100	0	
Total %	0	33.9	0.6	2.7	62.8	0	

Start Time	Columbus Ave From East			St, Cyprians Pl From South			Columbus Ave From West			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	0	46	46	1	2	3	99	0	99	148
08:00 AM	0	42	42	1	0	1	73	0	73	116
08:15 AM	0	46	46	1	2	3	76	0	76	125
08:30 AM	0	44	44	0	3	3	79	0	79	126
Total Volume	0	178	178	3	7	10	327	0	327	515
% App. Total	0	100		30	70		100	0		
PHF	.000	.967	.967	.750	.583	.833	.826	.000	.826	.870

Accurate Counts
978-664-2565

N/S Street : Saint Cyprians Place
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046003
Site Code : 11046003
Start Date : 5/13/2013
Page No : 2



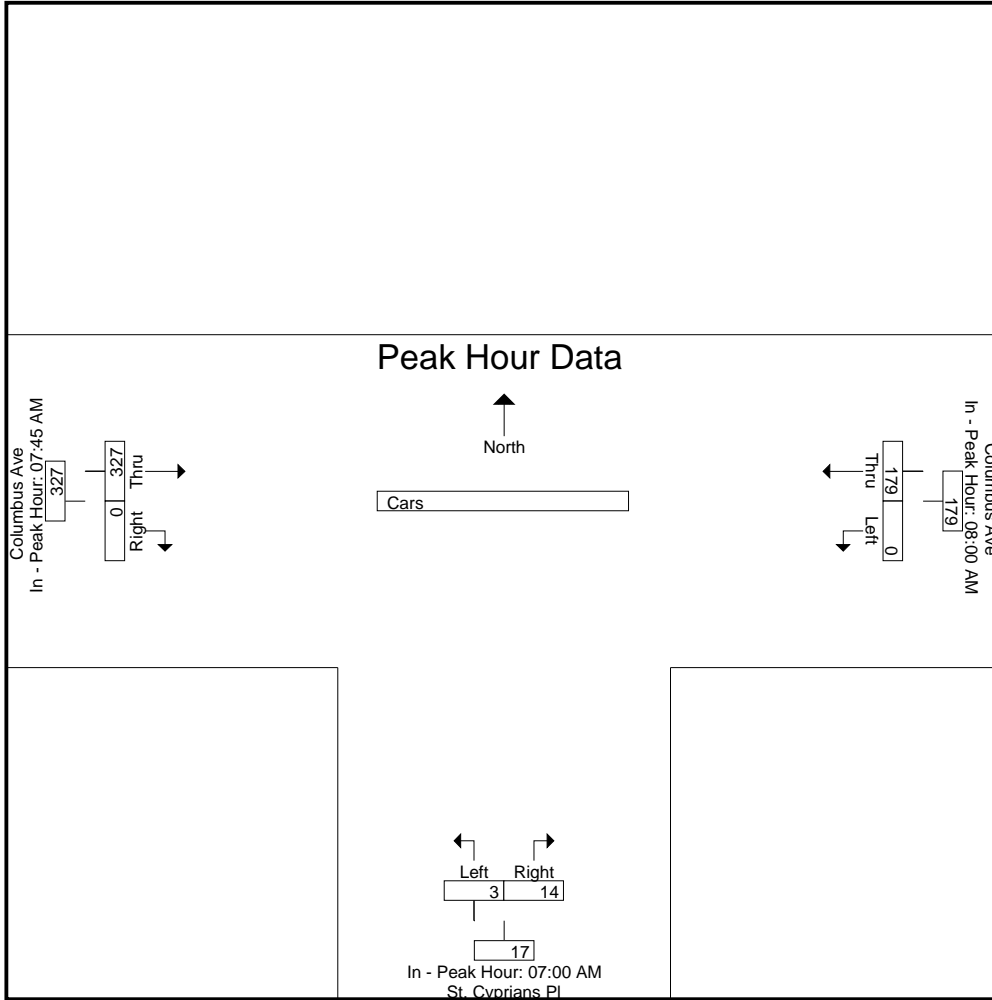
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM		07:00 AM			07:45 AM		
+0 mins.	0	42	42	0	6	6	0	99
+15 mins.	0	46	46	2	2	4	73	73
+30 mins.	0	44	44	0	4	4	76	76
+45 mins.	0	47	47	1	2	3	79	79
Total Volume	0	179	179	3	14	17	327	327
% App. Total	0	100		17.6	82.4		100	
PHF	.000	.952	.952	.375	.583	.708	.826	.826

Accurate Counts
978-664-2565

N/S Street : Saint Cyprians Place
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046003
Site Code : 11046003
Start Date : 5/13/2013
Page No : 3



Accurate Counts
978-664-2565

N/S Street : Saint Cyprians Place
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046003
Site Code : 11046003
Start Date : 5/13/2013
Page No : 1

Groups Printed- Trucks

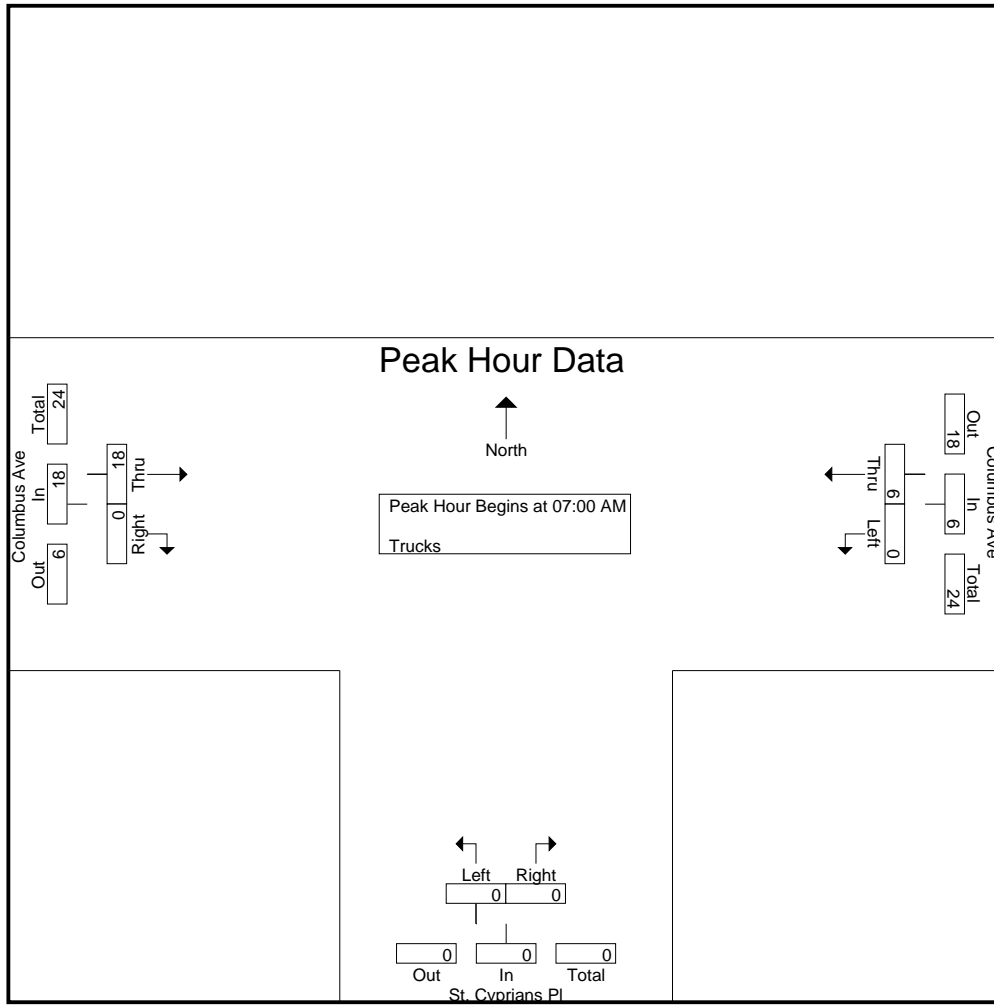
Start Time	Columbus Ave From East		St, Cyprians Pl From South		Columbus Ave From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
07:00 AM	0	1	0	0	10	0	11
07:15 AM	0	0	0	0	3	0	3
07:30 AM	0	4	0	0	2	0	6
07:45 AM	0	1	0	0	3	0	4
Total	0	6	0	0	18	0	24
08:00 AM	0	2	0	0	0	0	2
08:15 AM	0	1	0	0	5	0	6
08:30 AM	0	3	0	0	0	0	3
08:45 AM	0	2	0	0	5	0	7
Total	0	8	0	0	10	0	18
Grand Total	0	14	0	0	28	0	42
Apprch %	0	100	0	0	100	0	
Total %	0	33.3	0	0	66.7	0	

Start Time	Columbus Ave From East			St, Cyprians Pl From South			Columbus Ave From West			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. 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	0	0	0	10	0	10	11
07:15 AM	0	0	0	0	0	0	3	0	3	3
07:30 AM	0	4	4	0	0	0	2	0	2	6
07:45 AM	0	1	1	0	0	0	3	0	3	4
Total Volume	0	6	6	0	0	0	18	0	18	24
% App. Total	0	100		0	0		100	0		
PHF	.000	.375	.375	.000	.000	.000	.450	.000	.450	.545

Accurate Counts
978-664-2565

N/S Street : Saint Cyprians Place
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046003
Site Code : 11046003
Start Date : 5/13/2013
Page No : 2



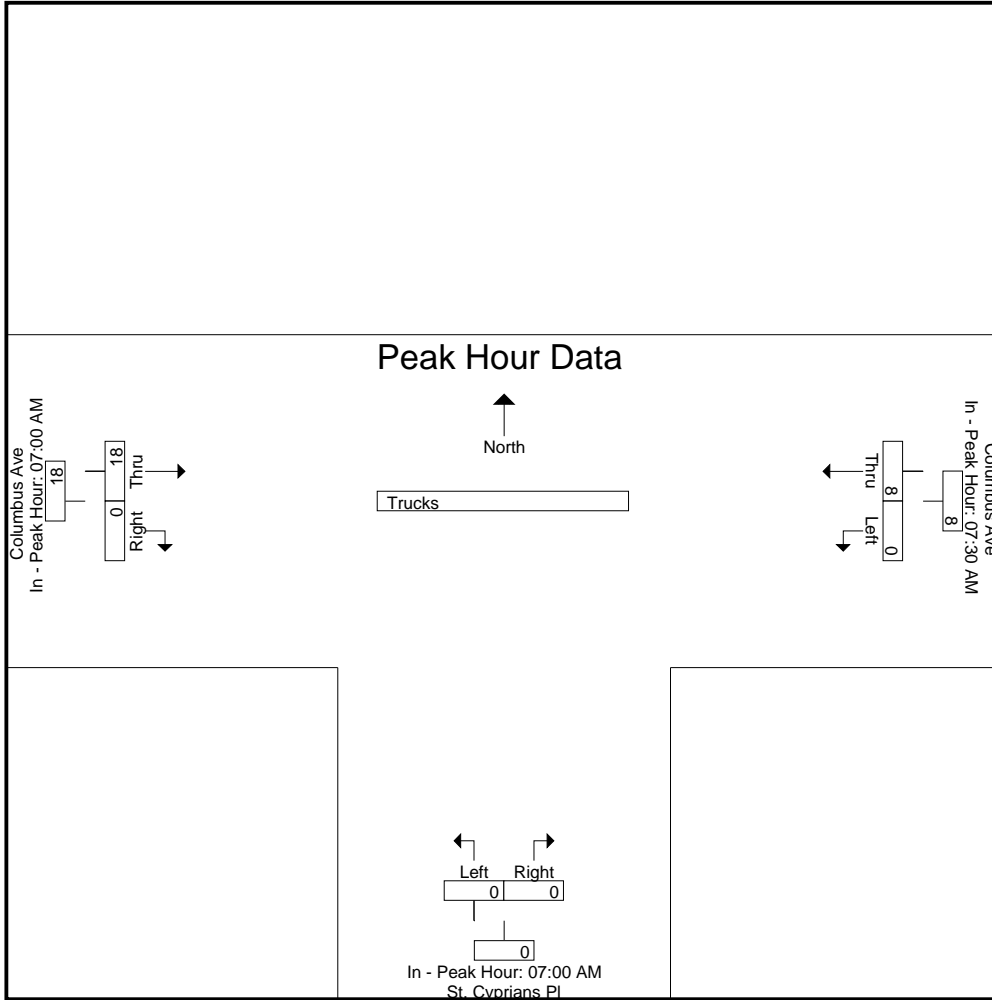
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM			07:00 AM			07:00 AM		
+0 mins.	0	4	4	0	0	0	10	0	10
+15 mins.	0	1	1	0	0	0	3	0	3
+30 mins.	0	2	2	0	0	0	2	0	2
+45 mins.	0	1	1	0	0	0	3	0	3
Total Volume	0	8	8	0	0	0	18	0	18
% App. Total	0	100		0	0		100	0	
PHF	.000	.500	.500	.000	.000	.000	.450	.000	.450

Accurate Counts
978-664-2565

N/S Street : Saint Cyprians Place
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046003
Site Code : 11046003
Start Date : 5/13/2013
Page No : 3



Accurate Counts

978-664-2565

N/S Street : Saint Cyprians Place
 E/W Street: Columbus Avenue
 City/State : Boston, MA
 Weather : Clear

File Name : 11046003
 Site Code : 11046003
 Start Date : 5/13/2013
 Page No : 1

Groups Printed- Bikes Peds

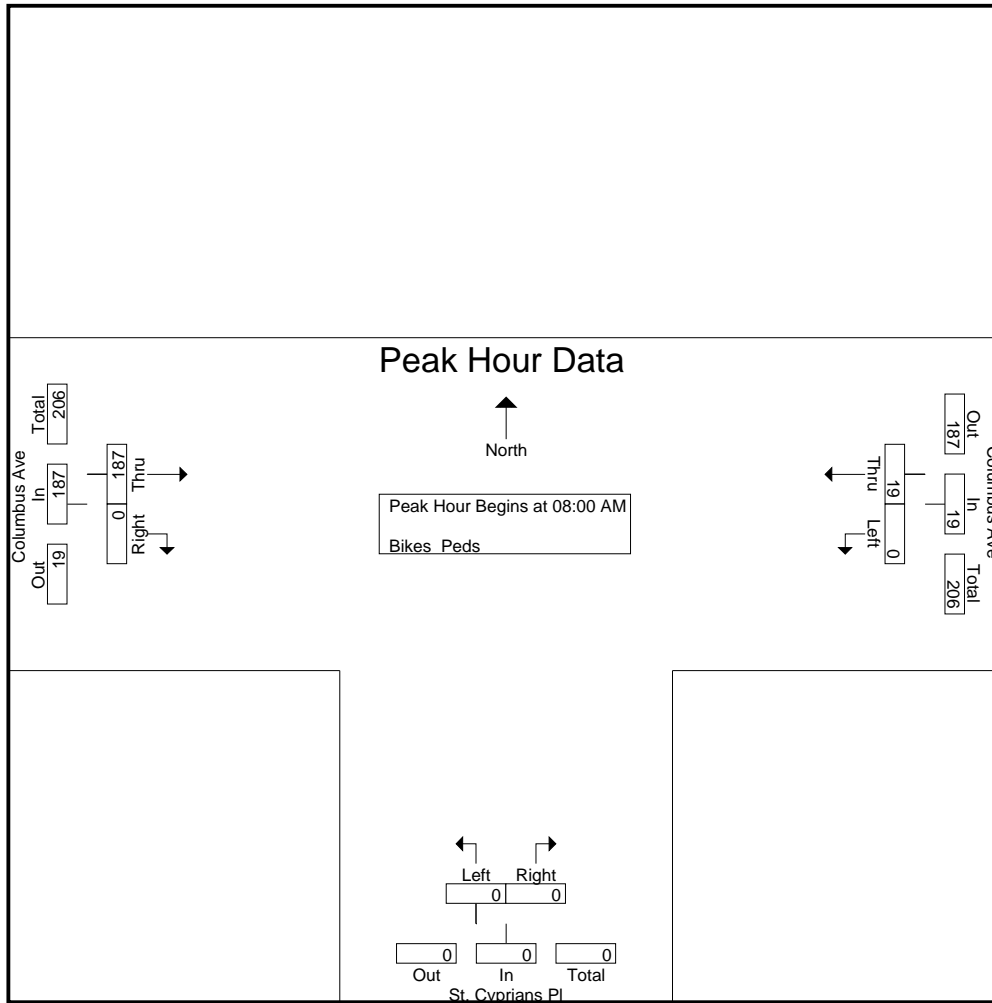
Start Time	Columbus Ave From East			St, Cyprians Pl From South			Columbus Ave From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds			
07:00 AM	0	3	4	0	0	5	14	0	1	10	17	27
07:15 AM	0	3	0	0	0	1	18	0	2	3	21	24
07:30 AM	0	4	7	0	0	4	23	0	1	12	27	39
07:45 AM	0	6	11	0	0	6	36	0	0	17	42	59
Total	0	16	22	0	0	16	91	0	4	42	107	149
08:00 AM	0	3	3	0	0	8	30	0	2	13	33	46
08:15 AM	0	9	13	0	0	4	43	0	1	18	52	70
08:30 AM	0	2	14	0	0	6	46	0	5	25	48	73
08:45 AM	0	5	6	0	0	7	68	0	2	15	73	88
Total	0	19	36	0	0	25	187	0	10	71	206	277
Grand Total	0	35	58	0	0	41	278	0	14	113	313	426
Apprch %	0	100		0	0		100	0				
Total %	0	11.2		0	0		88.8	0		26.5	73.5	

Start Time	Columbus Ave From East			St, Cyprians Pl From South			Columbus Ave From West			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. 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	3	3	0	0	0	30	0	30	33
08:15 AM	0	9	9	0	0	0	43	0	43	52
08:30 AM	0	2	2	0	0	0	46	0	46	48
08:45 AM	0	5	5	0	0	0	68	0	68	73
Total Volume	0	19	19	0	0	0	187	0	187	206
% App. Total	0	100		0	0		100	0		
PHF	.000	.528	.528	.000	.000	.000	.688	.000	.688	.705

Accurate Counts
978-664-2565

N/S Street : Saint Cyprians Place
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046003
Site Code : 11046003
Start Date : 5/13/2013
Page No : 2



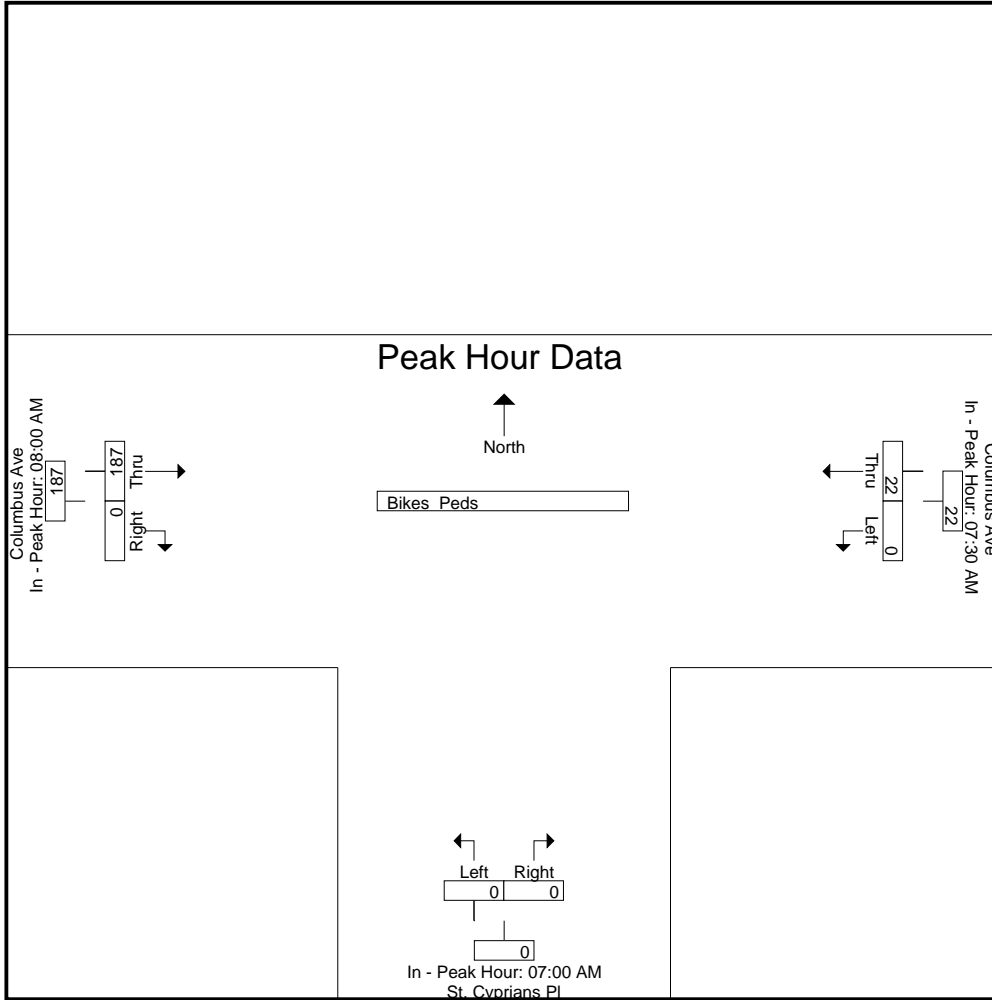
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM			07:00 AM			08:00 AM		
+0 mins.	0	4	4	0	0	0	30	0	30
+15 mins.	0	6	6	0	0	0	43	0	43
+30 mins.	0	3	3	0	0	0	46	0	46
+45 mins.	0	9	9	0	0	0	68	0	68
Total Volume	0	22	22	0	0	0	187	0	187
% App. Total	0	100		0	0		100	0	
PHF	.000	.611	.611	.000	.000	.000	.688	.000	.688

Accurate Counts
978-664-2565

N/S Street : Saint Cyprians Place
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046003
Site Code : 11046003
Start Date : 5/13/2013
Page No : 3



Accurate Counts
978-664-2565

N/S Street : Saint Cyprians Place
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046003
Site Code : 11046003
Start Date : 5/13/2013
Page No : 1

Groups Printed- Cars - Trucks

Start Time	Columbus Ave From East		St, Cyprians Pl From South		Columbus Ave From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
04:00 PM	0	79	0	3	43	0	125
04:15 PM	0	95	3	6	50	0	154
04:30 PM	0	76	2	7	46	0	131
04:45 PM	0	68	1	4	60	0	133
Total	0	318	6	20	199	0	543
05:00 PM	0	94	2	5	42	0	143
05:15 PM	0	85	2	7	69	0	163
05:30 PM	0	84	7	4	39	0	134
05:45 PM	0	65	3	2	48	0	118
Total	0	328	14	18	198	0	558
Grand Total	0	646	20	38	397	0	1101
Apprch %	0	100	34.5	65.5	100	0	
Total %	0	58.7	1.8	3.5	36.1	0	
Cars	0	638	20	37	393	0	1088
% Cars	0	98.8	100	97.4	99	0	98.8
Trucks	0	8	0	1	4	0	13
% Trucks	0	1.2	0	2.6	1	0	1.2

Start Time	Columbus Ave From East			St, Cyprians Pl From South			Columbus Ave From West			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:45 PM	0	68	68	1	4	5	60	0	60	133
05:00 PM	0	94	94	2	5	7	42	0	42	143
05:15 PM	0	85	85	2	7	9	69	0	69	163
05:30 PM	0	84	84	7	4	11	39	0	39	134
Total Volume	0	331	331	12	20	32	210	0	210	573
% App. Total	0	100		37.5	62.5		100	0		
PHF	.000	.880	.880	.429	.714	.727	.761	.000	.761	.879
Cars	0	329	329	12	19	31	209	0	209	569
% Cars	0	99.4	99.4	100	95.0	96.9	99.5	0	99.5	99.3
Trucks	0	2	2	0	1	1	1	0	1	4
% Trucks	0	0.6	0.6	0	5.0	3.1	0.5	0	0.5	0.7

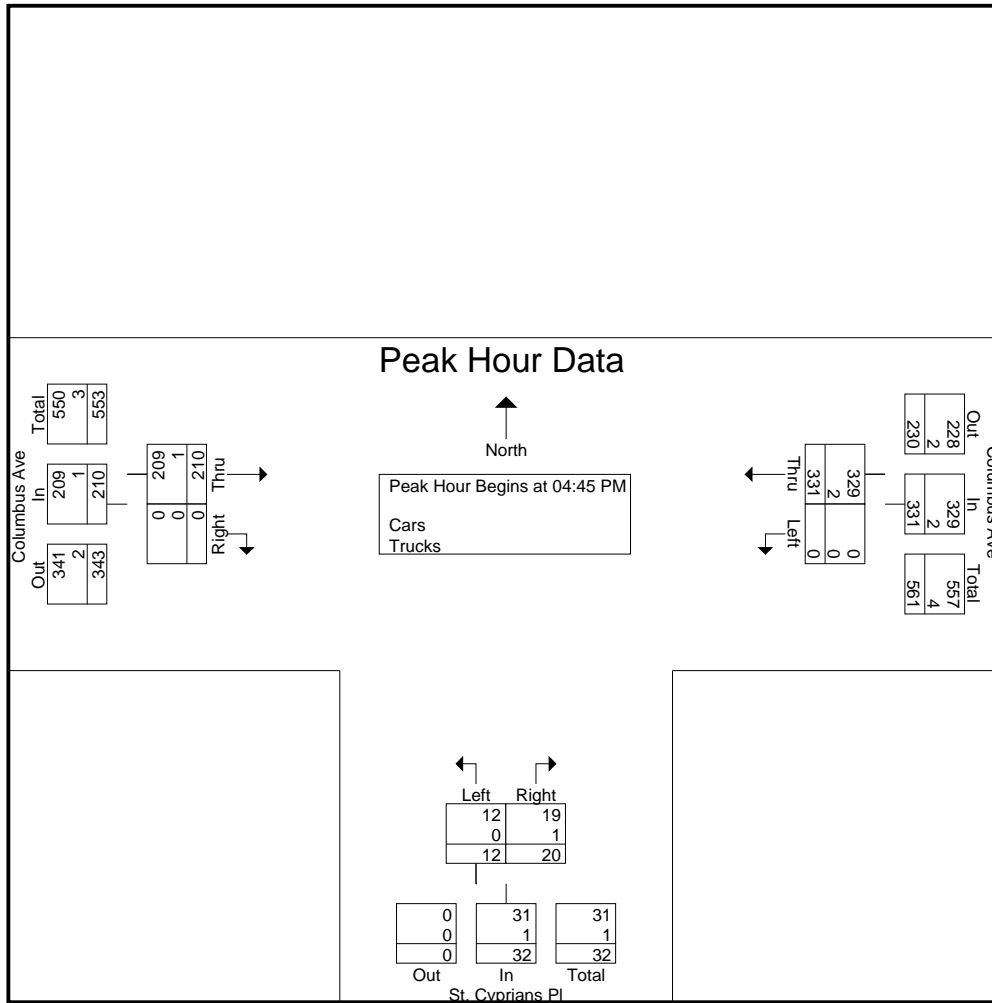
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:45 PM

Accurate Counts
978-664-2565

N/S Street : Saint Cyprians Place
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046003
Site Code : 11046003
Start Date : 5/13/2013
Page No : 2



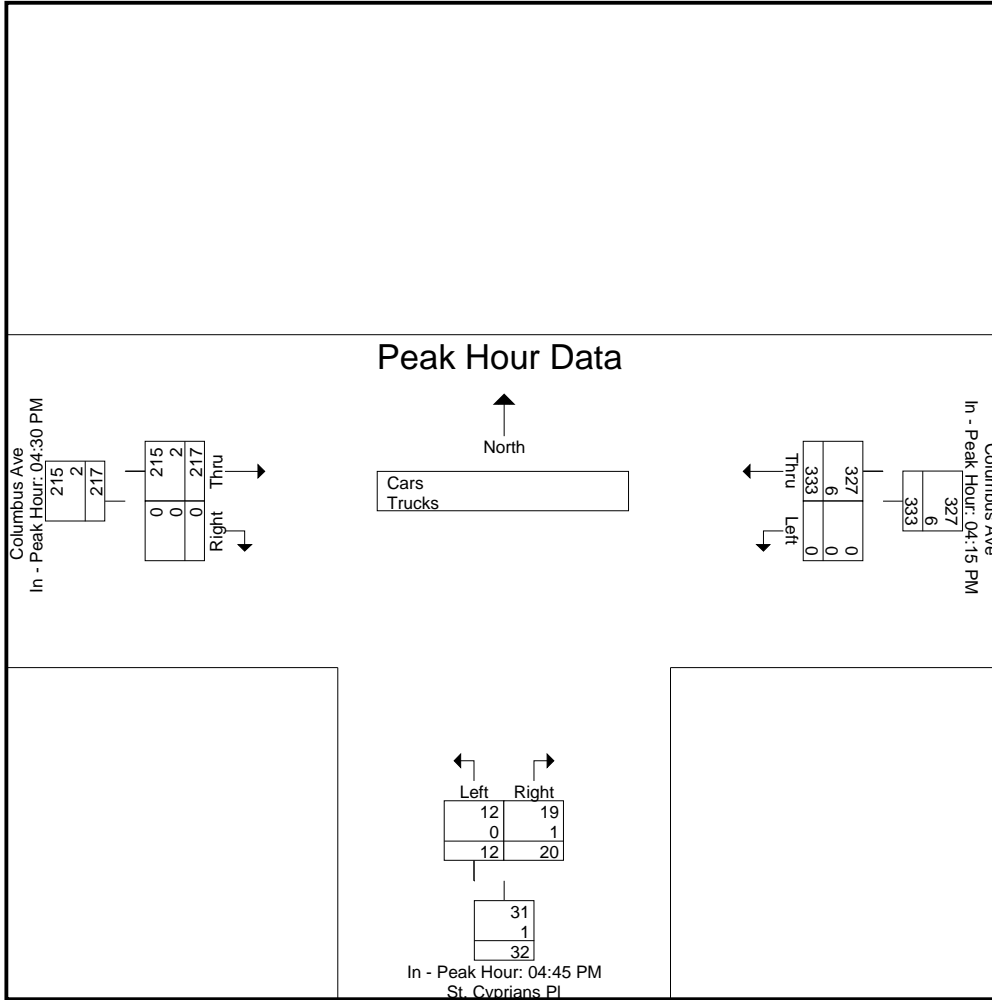
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM			04:45 PM			04:30 PM		
+0 mins.	0	95	95	1	4	5	46	0	46
+15 mins.	0	76	76	2	5	7	60	0	60
+30 mins.	0	68	68	2	7	9	42	0	42
+45 mins.	0	94	94	7	4	11	69	0	69
Total Volume	0	333	333	12	20	32	217	0	217
% App. Total	0	100	100	37.5	62.5	100	100	0	100
PHF	.000	.876	.876	.429	.714	.727	.786	.000	.786
Cars	0	327	327	12	19	31	215	0	215
% Cars	0	98.2	98.2	100	95	96.9	99.1	0	99.1
Trucks	0	6	6	0	1	1	2	0	2
% Trucks	0	1.8	1.8	0	5	3.1	0.9	0	0.9

Accurate Counts
978-664-2565

N/S Street : Saint Cyprians Place
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046003
Site Code : 11046003
Start Date : 5/13/2013
Page No : 3



Accurate Counts
978-664-2565

N/S Street : Saint Cyprians Place
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046003
Site Code : 11046003
Start Date : 5/13/2013
Page No : 1

Groups Printed- Cars

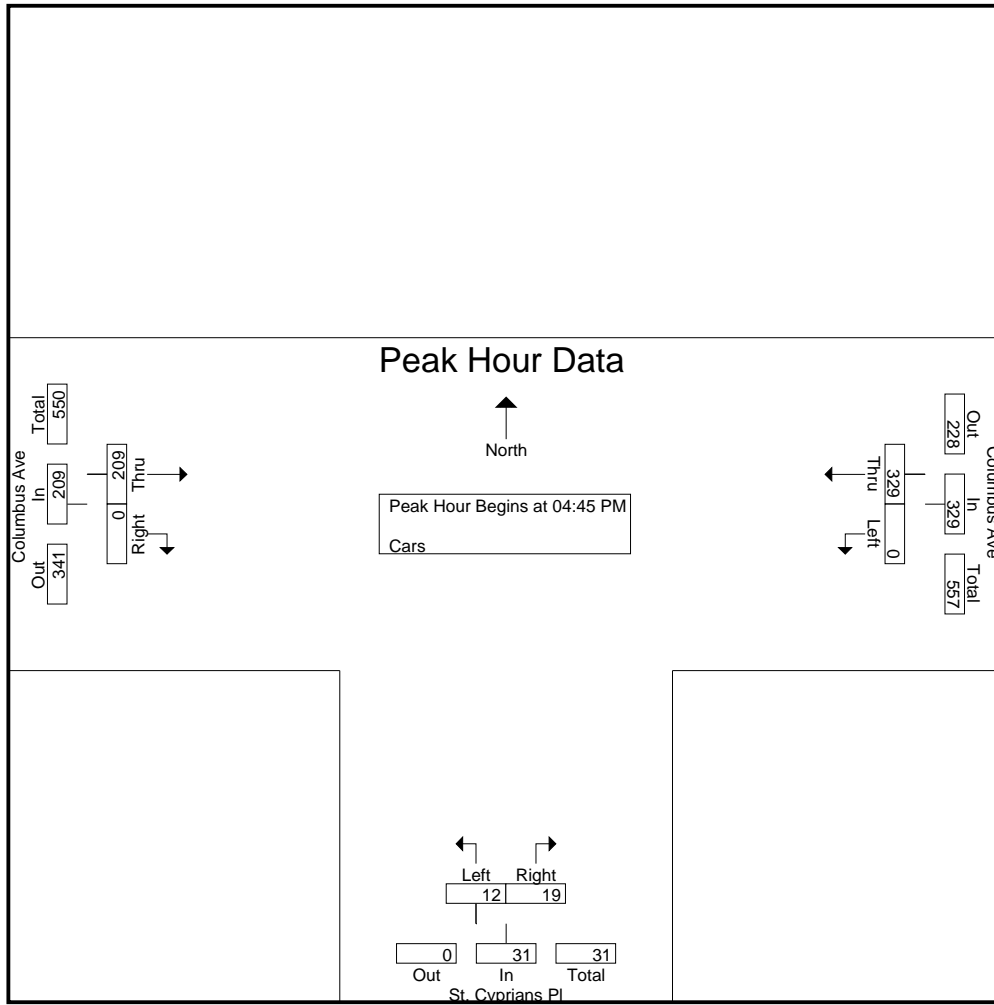
Start Time	Columbus Ave From East		St, Cyprians Pl From South		Columbus Ave From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
04:00 PM	0	79	0	3	41	0	123
04:15 PM	0	92	3	6	50	0	151
04:30 PM	0	73	2	7	45	0	127
04:45 PM	0	68	1	4	60	0	133
Total	0	312	6	20	196	0	534
05:00 PM	0	94	2	4	41	0	141
05:15 PM	0	84	2	7	69	0	162
05:30 PM	0	83	7	4	39	0	133
05:45 PM	0	65	3	2	48	0	118
Total	0	326	14	17	197	0	554
Grand Total	0	638	20	37	393	0	1088
Apprch %	0	100	35.1	64.9	100	0	
Total %	0	58.6	1.8	3.4	36.1	0	

Start Time	Columbus Ave From East			St, Cyprians Pl From South			Columbus Ave From West			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	0	68	68	1	4	5	60	0	60	133
05:00 PM	0	94	94	2	4	6	41	0	41	141
05:15 PM	0	84	84	2	7	9	69	0	69	162
05:30 PM	0	83	83	7	4	11	39	0	39	133
Total Volume	0	329	329	12	19	31	209	0	209	569
% App. Total	0	100		38.7	61.3		100	0		
PHF	.000	.875	.875	.429	.679	.705	.757	.000	.757	.878

Accurate Counts
978-664-2565

File Name : 11046003
Site Code : 11046003
Start Date : 5/13/2013
Page No : 2

N/S Street : Saint Cyprians Place
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear



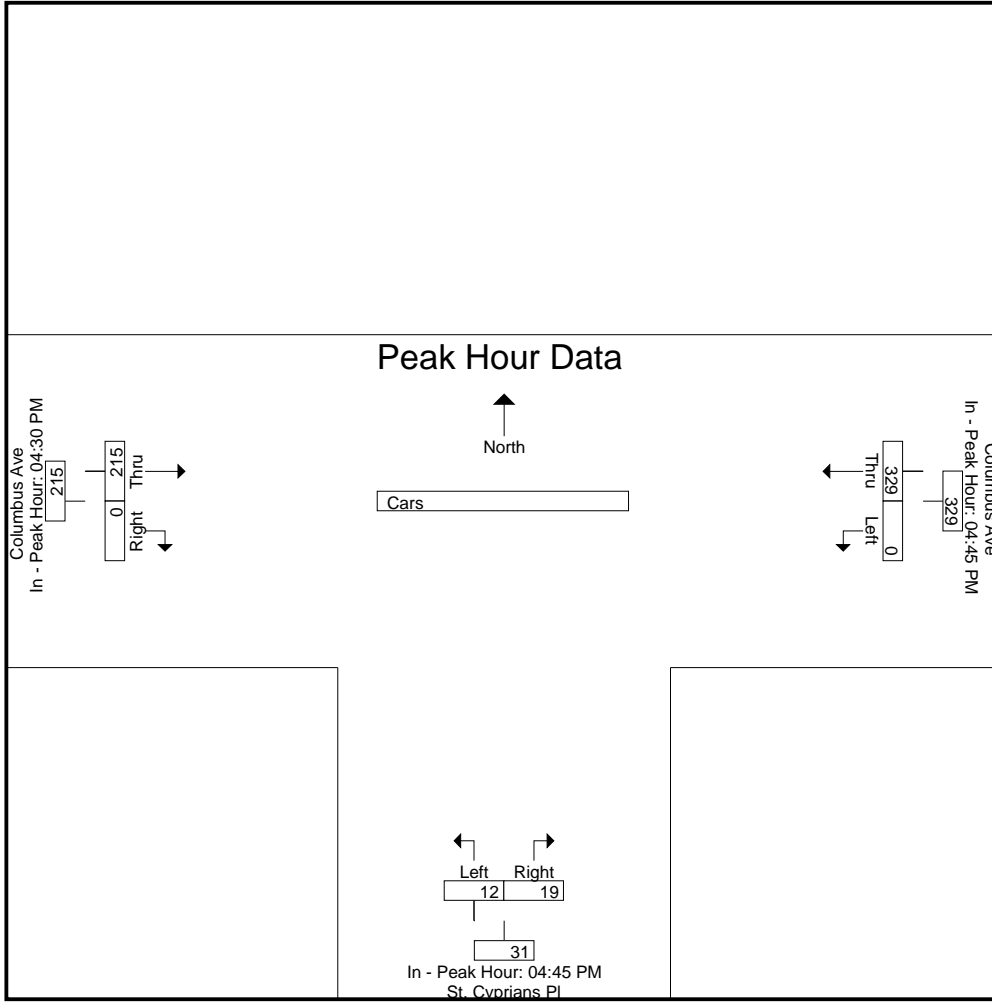
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM			04:45 PM			04:30 PM		
+0 mins.	0	68	68	1	4	5	45	0	45
+15 mins.	0	94	94	2	4	6	60	0	60
+30 mins.	0	84	84	2	7	9	41	0	41
+45 mins.	0	83	83	7	4	11	69	0	69
Total Volume	0	329	329	12	19	31	215	0	215
% App. Total	0	100		38.7	61.3		100	0	
PHF	.000	.875	.875	.429	.679	.705	.779	.000	.779

Accurate Counts
978-664-2565

N/S Street : Saint Cyprians Place
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046003
Site Code : 11046003
Start Date : 5/13/2013
Page No : 3



Accurate Counts
978-664-2565

N/S Street : Saint Cyprians Place
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046003
Site Code : 11046003
Start Date : 5/13/2013
Page No : 1

Groups Printed- Trucks

Start Time	Columbus Ave From East		St, Cyprians Pl From South		Columbus Ave From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
04:00 PM	0	0	0	0	2	0	2
04:15 PM	0	3	0	0	0	0	3
04:30 PM	0	3	0	0	1	0	4
04:45 PM	0	0	0	0	0	0	0
Total	0	6	0	0	3	0	9
05:00 PM	0	0	0	1	1	0	2
05:15 PM	0	1	0	0	0	0	1
05:30 PM	0	1	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0
Total	0	2	0	1	1	0	4
Grand Total	0	8	0	1	4	0	13
Apprch %	0	100	0	100	100	0	
Total %	0	61.5	0	7.7	30.8	0	

Start Time	Columbus Ave From East			St, Cyprians Pl From South			Columbus Ave From West			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	2	0	2	2
04:15 PM	0	3	3	0	0	0	0	0	0	3
04:30 PM	0	3	3	0	0	0	1	0	1	4
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	6	6	0	0	0	3	0	3	9
% App. Total	0	100		0	0		100	0		
PHF	.000	.500	.500	.000	.000	.000	.375	.000	.375	.563

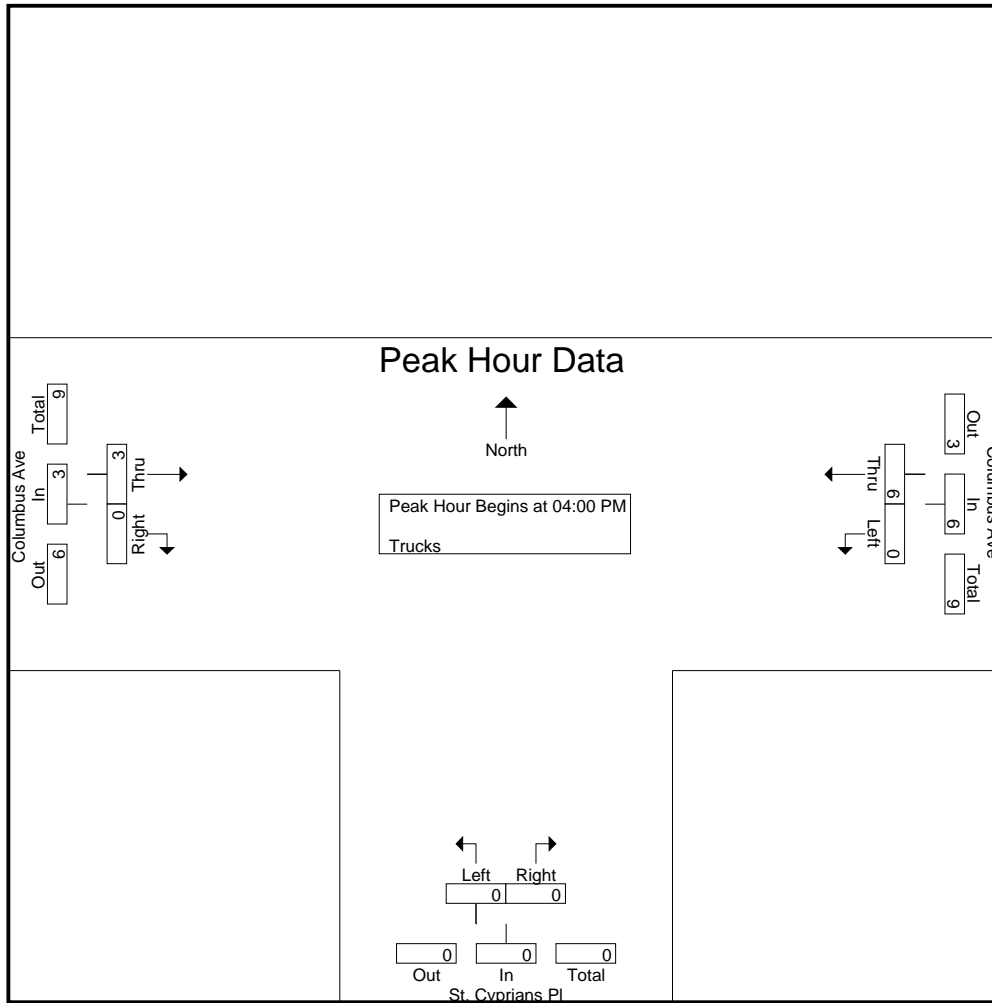
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:00 PM

Accurate Counts
978-664-2565

N/S Street : Saint Cyprians Place
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046003
Site Code : 11046003
Start Date : 5/13/2013
Page No : 2



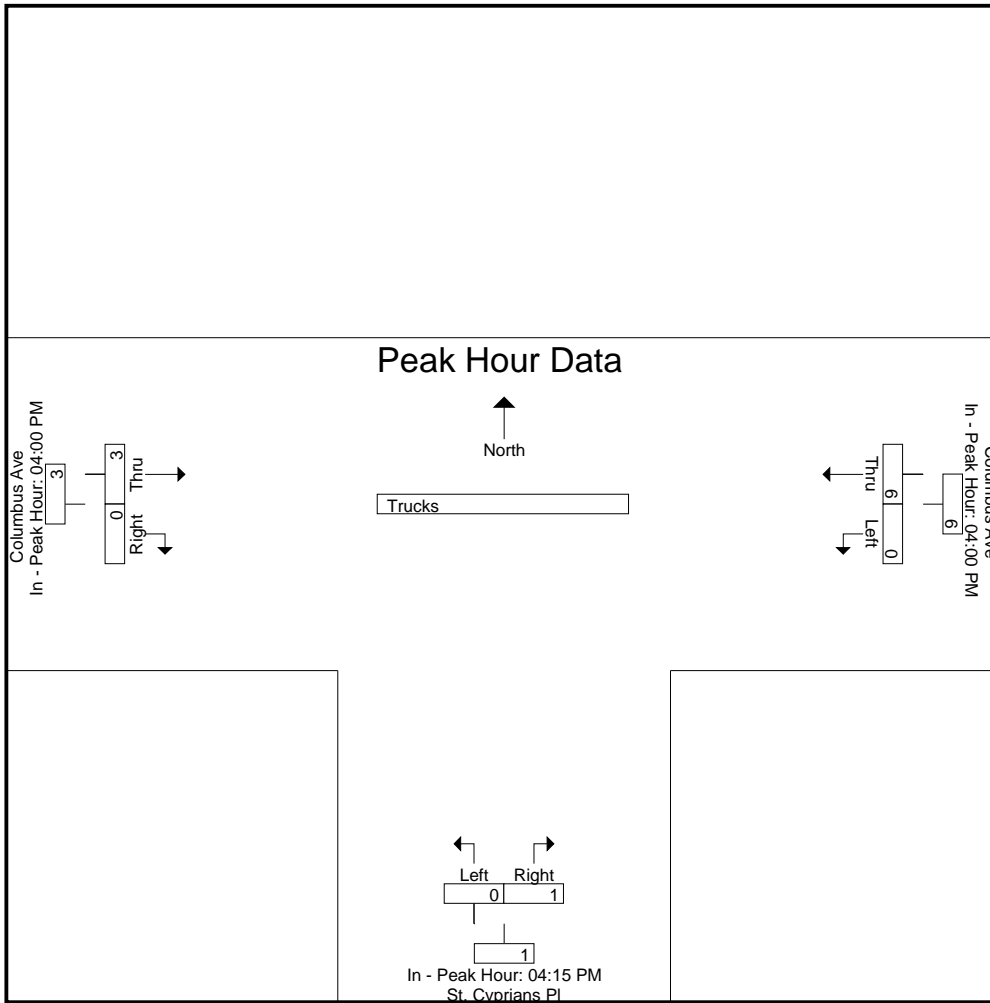
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM			04:15 PM			04:00 PM		
+0 mins.	0	0	0	0	0	0	2	0	2
+15 mins.	0	3	3	0	0	0	0	0	0
+30 mins.	0	3	3	0	0	0	1	0	1
+45 mins.	0	0	0	0	1	1	0	0	0
Total Volume	0	6	6	0	1	1	3	0	3
% App. Total	0	100		0	100		100	0	
PHF	.000	.500	.500	.000	.250	.250	.375	.000	.375

Accurate Counts
978-664-2565

N/S Street : Saint Cyprians Place
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046003
Site Code : 11046003
Start Date : 5/13/2013
Page No : 3



Accurate Counts

978-664-2565

N/S Street : Saint Cyprians Place
 E/W Street: Columbus Avenue
 City/State : Boston, MA
 Weather : Clear

File Name : 11046003
 Site Code : 11046003
 Start Date : 5/13/2013
 Page No : 1

Groups Printed- Bikes Peds

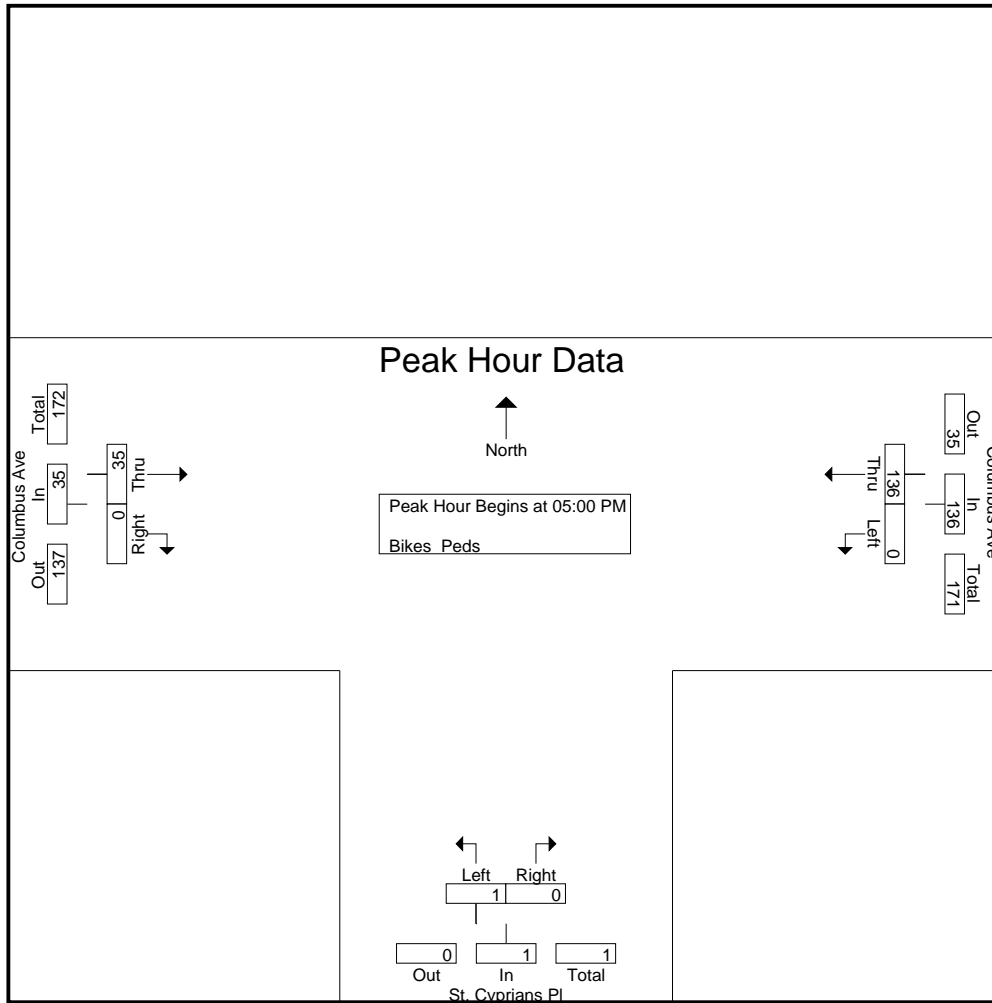
Start Time	Columbus Ave From East			St, Cyprians Pl From South			Columbus Ave From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds			
04:00 PM	0	12	10	0	0	13	7	0	6	29	19	48
04:15 PM	0	16	2	0	0	13	2	0	11	26	18	44
04:30 PM	0	13	6	0	0	14	4	0	2	22	17	39
04:45 PM	0	20	3	0	0	14	5	0	4	21	25	46
Total	0	61	21	0	0	54	18	0	23	98	79	177
05:00 PM	0	22	4	0	0	19	9	0	3	26	31	57
05:15 PM	0	28	3	1	0	7	11	0	1	11	40	51
05:30 PM	0	48	7	0	0	8	9	0	1	16	57	73
05:45 PM	0	38	9	0	0	13	6	0	3	25	44	69
Total	0	136	23	1	0	47	35	0	8	78	172	250
Grand Total	0	197	44	1	0	101	53	0	31	176	251	427
Apprch %	0	100		100	0		100	0				
Total %	0	78.5		0.4	0		21.1	0		41.2	58.8	

Start Time	Columbus Ave From East			St, Cyprians Pl From South			Columbus Ave From West			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	0	22	22	0	0	0	9	0	9	31
05:15 PM	0	28	28	1	0	1	11	0	11	40
05:30 PM	0	48	48	0	0	0	9	0	9	57
05:45 PM	0	38	38	0	0	0	6	0	6	44
Total Volume	0	136	136	1	0	1	35	0	35	172
% App. Total	0	100		100	0		100	0		
PHF	.000	.708	.708	.250	.000	.250	.795	.000	.795	.754

Accurate Counts
978-664-2565

N/S Street : Saint Cyprians Place
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046003
Site Code : 11046003
Start Date : 5/13/2013
Page No : 2



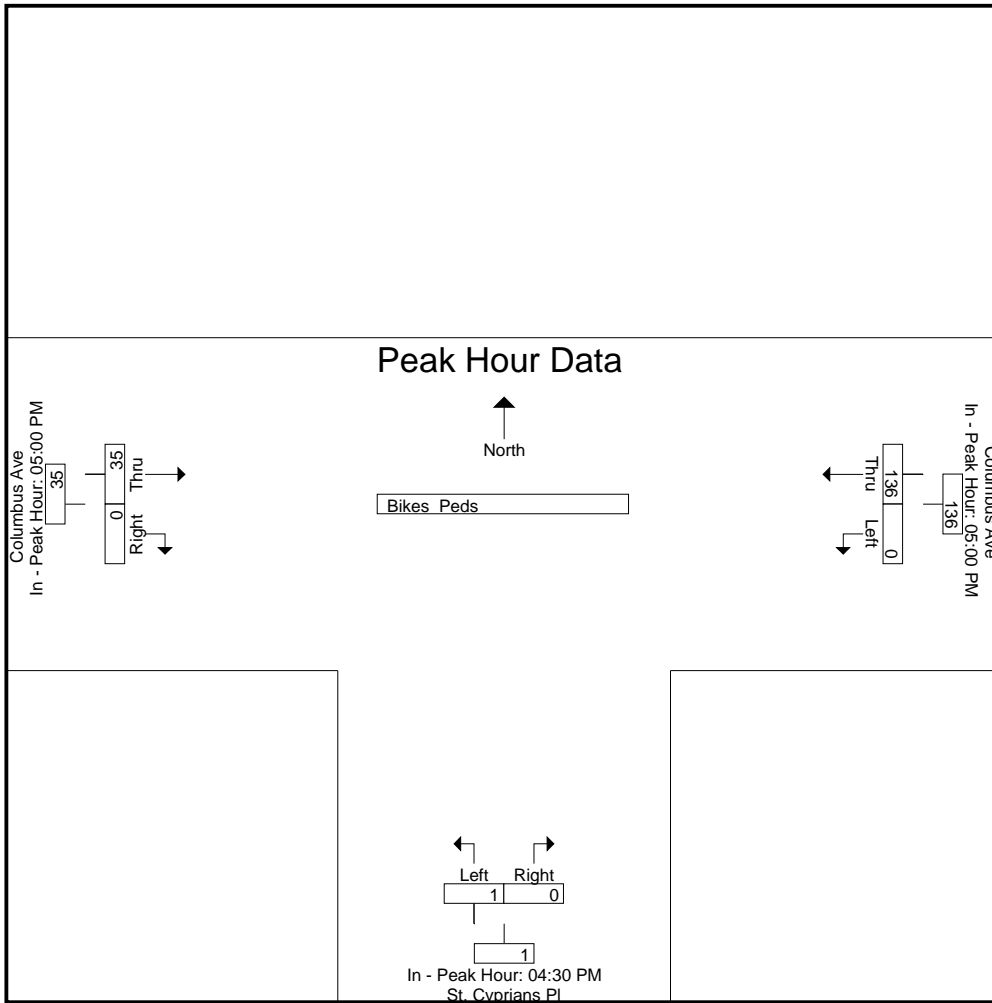
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM		04:30 PM			05:00 PM			
+0 mins.	0	22	22	0	0	0	9	0	9
+15 mins.	0	28	28	0	0	0	11	0	11
+30 mins.	0	48	48	0	0	0	9	0	9
+45 mins.	0	38	38	1	0	1	6	0	6
Total Volume	0	136	136	1	0	1	35	0	35
% App. Total	0	100		100	0		100	0	
PHF	.000	.708	.708	.250	.000	.250	.795	.000	.795

Accurate Counts
978-664-2565

N/S Street : Saint Cyprians Place
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046003
Site Code : 11046003
Start Date : 5/13/2013
Page No : 3





PRECISION
D A T A
INDUSTRIES, LLC

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File Name : 123026 G
Site Code : 2011046_
Start Date : 9/25/2012
Page No : 1

N/S: Columbus Ave Lot/ Cunard Street
E/W: Columbus Avenue
City, State: Boston, MA
Client: HSH/ J. SanClemente

Groups Printed- Cars - Heavy Vehicles

Start Time	Columbus Ave Lot From North				Columbus Avenue From East				Cunard Street From South				Columbus Avenue From West				Int. Total
	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	
07:00 AM	4	0	6	0	4	45	0	0	0	0	0	0	4	67	2	1	133
07:15 AM	4	0	5	0	3	53	2	0	0	0	0	0	6	52	5	0	130
07:30 AM	5	0	5	0	10	36	3	0	0	0	0	0	3	77	5	0	144
07:45 AM	0	0	8	0	14	60	3	0	0	0	0	0	2	90	9	0	186
Total	13	0	24	0	31	194	8	0	0	0	0	0	15	286	21	1	593
08:00 AM	2	0	2	0	8	53	1	0	0	0	0	0	2	66	17	0	151
08:15 AM	3	2	2	0	6	42	0	0	0	0	0	0	3	76	17	0	151
08:30 AM	2	0	2	0	7	61	3	1	0	0	0	0	6	71	15	0	168
08:45 AM	2	0	1	0	10	51	3	0	0	0	0	0	2	73	7	0	149
Total	9	2	7	0	31	207	7	1	0	0	0	0	13	286	56	0	619
Grand Total	22	2	31	0	62	401	15	1	0	0	0	0	28	572	77	1	1212
Apprch %	40	3.6	56.4	0	12.9	83.7	3.1	0.2	0	0	0	0	4.1	84.4	11.4	0.1	
Total %	1.8	0.2	2.6	0	5.1	33.1	1.2	0.1	0	0	0	0	2.3	47.2	6.4	0.1	
Cars	20	2	31	0	61	375	14	1	0	0	0	0	25	549	76	1	1155
% Cars	90.9	100	100	0	98.4	93.5	93.3	100	0	0	0	0	89.3	96	98.7	100	95.3
Heavy Vehicles	2	0	0	0	1	26	1	0	0	0	0	0	3	23	1	0	57
% Heavy Vehicles	9.1	0	0	0	1.6	6.5	6.7	0	0	0	0	0	10.7	4	1.3	0	4.7

Start Time	Columbus Ave Lot From North					Columbus Avenue From East					Cunard Street From South					Columbus Avenue From West					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	0	8	0	8	14	60	3	0	77	0	0	0	0	0	2	90	9	0	101	186
08:00 AM	2	0	2	0	4	8	53	1	0	62	0	0	0	0	0	2	66	17	0	85	151
08:15 AM	3	2	2	0	7	6	42	0	0	48	0	0	0	0	0	3	76	17	0	96	151
08:30 AM	2	0	2	0	4	7	61	1	1	72	0	0	0	0	0	6	71	15	0	92	168
Total Volume	7	2	14	0	23	35	216	7	1	259	0	0	0	0	0	13	303	58	0	374	656
% App. Total	30.4	8.7	60.9	0		13.5	83.4	2.7	0.4		0	0	0	0		3.5	81	15.5	0		
PHF	.583	.250	.438	.000	.719	.625	.885	.583	.250	.841	.000	.000	.000	.000	.000	.542	.842	.853	.000	.926	.882
Cars	5	2	14	0	21	34	205	6	1	246	0	0	0	0	0	10	296	57	0	363	630
% Cars	71.4	100	100	0	91.3	97.1	94.9	85.7	100	95.0	0	0	0	0	0	76.9	97.7	98.3	0	97.1	96.0
Heavy Vehicles	2	0	0	0	2	1	11	1	0	13	0	0	0	0	0	3	7	1	0	11	26
% Heavy Vehicles	28.6	0	0	0	8.7	2.9	5.1	14.3	0	5.0	0	0	0	0	0	23.1	2.3	1.7	0	2.9	4.0



PRECISION
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File Name : 123026 G
Site Code : 2011046_
Start Date : 9/25/2012
Page No : 1

N/S: Columbus Ave Lot/ Cunard Street
E/W: Columbus Avenue
City, State: Boston, MA
Client: HSH/ J. SanClemente

Groups Printed- Cars

Start Time	Columbus Ave Lot From North				Columbus Avenue From East				Cunard Street From South				Columbus Avenue From West				Int. Total
	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	
07:00 AM	4	0	6	0	4	42	0	0	0	0	0	0	4	62	2	1	125
07:15 AM	4	0	5	0	3	51	2	0	0	0	0	0	6	49	5	0	125
07:30 AM	5	0	5	0	10	33	3	0	0	0	0	0	3	72	5	0	136
07:45 AM	0	0	8	0	14	57	3	0	0	0	0	0	1	89	9	0	181
Total	13	0	24	0	31	183	8	0	0	0	0	0	14	272	21	1	567
08:00 AM	2	0	2	0	7	52	0	0	0	0	0	0	2	63	17	0	145
08:15 AM	2	2	2	0	6	39	0	0	0	0	0	0	3	74	16	0	144
08:30 AM	1	0	2	0	7	57	3	1	0	0	0	0	4	70	15	0	160
08:45 AM	2	0	1	0	10	44	3	0	0	0	0	0	2	70	7	0	139
Total	7	2	7	0	30	192	6	1	0	0	0	0	11	277	55	0	588
Grand Total	20	2	31	0	61	375	14	1	0	0	0	0	25	549	76	1	1155
Apprch %	37.7	3.8	58.5	0	13.5	83.1	3.1	0.2	0	0	0	0	3.8	84.3	11.7	0.2	
Total %	1.7	0.2	2.7	0	5.3	32.5	1.2	0.1	0	0	0	0	2.2	47.5	6.6	0.1	

Start Time	Columbus Ave Lot From North					Columbus Avenue From East					Cunard Street From South					Columbus Avenue From West					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	0	8	0	8	14	57	3	0	74	0	0	0	0	0	1	89	9	0	99	181
08:00 AM	2	0	2	0	4	7	52	0	0	59	0	0	0	0	0	2	63	17	0	82	145
08:15 AM	2	2	2	0	6	6	39	0	0	45	0	0	0	0	0	3	74	16	0	93	144
08:30 AM	1	0	2	0	3	7	57	3	1	68	0	0	0	0	0	4	70	15	0	89	160
Total Volume	5	2	14	0	21	34	205	6	1	246	0	0	0	0	0	10	296	57	0	363	630
% App. Total	23.8	9.5	66.7	0		13.8	83.3	2.4	0.4		0	0	0	0		2.8	81.5	15.7	0		
PHF	.625	.250	.438	.000	.656	.607	.899	.500	.250	.831	.000	.000	.000	.000	.000	.625	.831	.838	.000	.917	.870



PRECISION
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N/S: Columbus Ave Lot/ Cunard Street
E/W: Columbus Avenue
City, State: Boston, MA
Client: HSH/ J. SanClemente

File Name : 123026 G
Site Code : 2011046_
Start Date : 9/25/2012
Page No : 1

Groups Printed- Heavy Vehicles

Start Time	Columbus Ave Lot From North				Columbus Avenue From East				Cunard Street From South				Columbus Avenue From West				Int. Total
	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	
07:00 AM	0	0	0	0	0	3	0	0	0	0	0	0	0	5	0	0	8
07:15 AM	0	0	0	0	0	2	0	0	0	0	0	0	0	3	0	0	5
07:30 AM	0	0	0	0	0	3	0	0	0	0	0	0	0	5	0	0	8
07:45 AM	0	0	0	0	0	3	0	0	0	0	0	0	1	1	0	0	5
Total	0	0	0	0	0	11	0	0	0	0	0	0	1	14	0	0	26
08:00 AM	0	0	0	0	1	1	1	0	0	0	0	0	0	3	0	0	6
08:15 AM	1	0	0	0	0	3	0	0	0	0	0	0	0	2	1	0	7
08:30 AM	1	0	0	0	0	4	0	0	0	0	0	0	2	1	0	0	8
08:45 AM	0	0	0	0	0	7	0	0	0	0	0	0	0	3	0	0	10
Total	2	0	0	0	1	15	1	0	0	0	0	0	2	9	1	0	31
Grand Total	2	0	0	0	1	26	1	0	0	0	0	0	3	23	1	0	57
Apprch %	100	0	0	0	3.6	92.9	3.6	0	0	0	0	0	11.1	85.2	3.7	0	
Total %	3.5	0	0	0	1.8	45.6	1.8	0	0	0	0	0	5.3	40.4	1.8	0	

Start Time	Columbus Ave Lot From North					Columbus Avenue From East					Cunard Street From South					Columbus Avenue From West					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
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	1	1	1	0	3	0	0	0	0	0	0	3	0	0	3	6
08:15 AM	1	0	0	0	1	0	3	0	0	3	0	0	0	0	0	0	2	1	0	3	7
08:30 AM	1	0	0	0	1	0	4	0	0	4	0	0	0	0	0	2	1	0	0	3	8
08:45 AM	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	3	0	0	3	10
Total Volume	2	0	0	0	2	1	15	1	0	17	0	0	0	0	0	2	9	1	0	12	31
% App. Total	100	0	0	0		5.9	88.2	5.9	0		0	0	0	0		16.7	75	8.3	0		
PHF	.500	.000	.000	.000	.500	.250	.536	.250	.000	.607	.000	.000	.000	.000	.000	.250	.750	.250	.000	1.00	.775



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N/S: Columbus Ave Lot/ Cunard Street
E/W: Columbus Avenue
City, State: Boston, MA
Client: HSH/ J. SanClemente

File Name : 123026 G
Site Code : 2011046_
Start Date : 9/25/2012
Page No : 1

Groups Printed- Peds and Bikes

Start Time	Columbus Ave Lot From North				Columbus Avenue From East				Cunard Street From South				Columbus Avenue From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
07:00 AM	0	0	0	19	0	5	0	4	0	0	0	7	0	7	0	1	43
07:15 AM	0	0	0	17	0	8	0	5	0	0	0	8	0	22	0	6	66
07:30 AM	0	0	0	25	0	4	0	8	0	0	0	14	1	30	0	3	85
07:45 AM	0	0	0	64	0	9	0	15	0	0	0	20	0	35	0	4	147
Total	0	0	0	125	0	26	0	32	0	0	0	49	1	94	0	14	341
08:00 AM	0	0	0	22	0	8	0	8	0	0	0	13	0	37	0	3	91
08:15 AM	0	0	0	26	0	6	0	5	0	0	0	11	0	47	0	4	99
08:30 AM	0	0	0	22	0	12	0	8	0	0	0	12	0	50	0	4	108
08:45 AM	0	0	0	23	0	6	0	6	0	0	0	19	0	56	0	1	111
Total	0	0	0	93	0	32	0	27	0	0	0	55	0	190	0	12	409
Grand Total	0	0	0	218	0	58	0	59	0	0	0	104	1	284	0	26	750
Apprch %	0	0	0	100	0	49.6	0	50.4	0	0	0	100	0.3	91.3	0	8.4	
Total %	0	0	0	29.1	0	7.7	0	7.9	0	0	0	13.9	0.1	37.9	0	3.5	

Start Time	Columbus Ave Lot From North					Columbus Avenue From East					Cunard Street From South					Columbus Avenue From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	0	0	64	64	0	9	0	15	24	0	0	0	20	20	0	35	0	4	39	147
08:00 AM	0	0	0	22	22	0	8	0	8	16	0	0	0	13	13	0	37	0	3	40	91
08:15 AM	0	0	0	26	26	0	6	0	5	11	0	0	0	11	11	0	47	0	4	51	99
08:30 AM	0	0	0	22	22	0	12	0	8	20	0	0	0	12	12	0	50	0	4	54	108
Total Volume	0	0	0	134	134	0	35	0	36	71	0	0	0	56	56	0	169	0	15	184	445
% App. Total	0	0	0	100		0	49.3	0	50.7		0	0	0	100		0	91.8	0	8.2		
PHF	.000	.000	.000	.523	.523	.000	.729	.000	.600	.740	.000	.000	.000	.700	.700	.000	.845	.000	.938	.852	.757



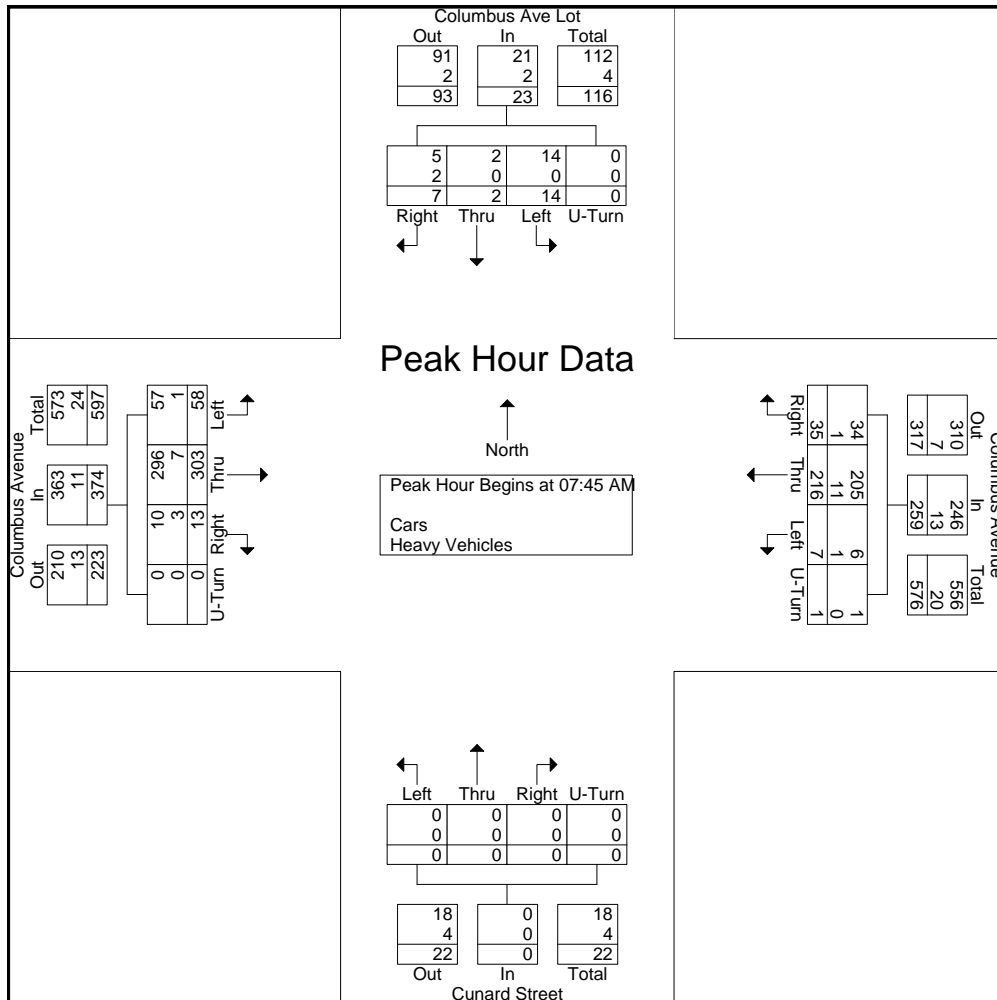
PRECISION
D A T A
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File Name : 123026 G
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Start Date : 9/25/2012
Page No : 1

N/S: Columbus Ave Lot/ Cunard Street
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City, State: Boston, MA
Client: HSH/ J. SanClemente

Start Time	Columbus Ave Lot From North					Columbus Avenue From East					Cunard Street From South					Columbus Avenue From West					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	0	8	0	8	14	60	3	0	77	0	0	0	0	0	2	90	9	0	101	186
08:00 AM	2	0	2	0	4	8	53	1	0	62	0	0	0	0	0	2	66	17	0	85	151
08:15 AM	3	2	2	0	7	6	42	0	0	48	0	0	0	0	0	3	76	17	0	96	151
08:30 AM	2	0	2	0	4	7	61	1	1	72	0	0	0	0	0	6	71	15	0	92	168
Total Volume	7	2	14	0	23	35	216	7	1	259	0	0	0	0	0	13	303	58	0	374	656
% App. Total	30.4	8.7	60.9	0		13.5	83.4	2.7	0.4		0	0	0	0		3.5	81	15.5	0		
PHF	.583	.250	.438	.000	.719	.625	.885	.583	.250	.841	.000	.000	.000	.000	.000	.542	.842	.853	.000	.926	.882
Cars	5	2	14	0	21	34	205	6	1	246	0	0	0	0	0	10	296	57	0	363	630
% Cars	71.4	100	100	0	91.3	97.1	94.9	85.7	100	95.0	0	0	0	0	0	76.9	97.7	98.3	0	97.1	96.0
Heavy Vehicles	2	0	0	0	2	1	11	1	0	13	0	0	0	0	0	3	7	1	0	11	26
% Heavy Vehicles	28.6	0	0	0	8.7	2.9	5.1	14.3	0	5.0	0	0	0	0	0	23.1	2.3	1.7	0	2.9	4.0





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Client: HSH/ J. SanClemente

File Name : 123026 GG
Site Code : 2011046_
Start Date : 9/25/2012
Page No : 1

Groups Printed- Cars - Heavy Vehicles

Start Time	Columbus Ave Lot From North				Columbus Avenue From East				Cunard Street From South				Columbus Avenue From West				Int. Total
	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	
04:00 PM	14	0	19	0	8	69	1	2	0	0	0	0	7	42	9	0	171
04:15 PM	21	1	17	0	9	56	3	1	0	0	0	0	8	60	6	0	182
04:30 PM	33	0	32	0	13	66	6	1	0	0	0	0	2	69	11	0	233
04:45 PM	23	0	24	0	18	69	6	1	0	0	1	0	0	66	7	0	215
Total	91	1	92	0	48	260	16	5	0	0	1	0	17	237	33	0	801
05:00 PM	24	3	30	0	11	68	6	0	0	0	0	0	5	59	8	0	214
05:15 PM	31	4	41	0	14	88	5	0	0	0	0	0	4	60	11	0	258
05:30 PM	22	1	25	0	24	69	1	0	0	0	0	0	1	59	12	0	214
05:45 PM	14	0	19	0	13	69	4	0	0	0	0	0	5	47	7	0	178
Total	91	8	115	0	62	294	16	0	0	0	0	0	15	225	38	0	864
Grand Total	182	9	207	0	110	554	32	5	0	0	1	0	32	462	71	0	1665
Apprch %	45.7	2.3	52	0	15.7	79	4.6	0.7	0	0	100	0	5.7	81.8	12.6	0	
Total %	10.9	0.5	12.4	0	6.6	33.3	1.9	0.3	0	0	0.1	0	1.9	27.7	4.3	0	
Cars	182	9	207	0	110	541	30	5	0	0	1	0	32	452	71	0	1640
% Cars	100	100	100	0	100	97.7	93.8	100	0	0	100	0	100	97.8	100	0	98.5
Heavy Vehicles	0	0	0	0	0	13	2	0	0	0	0	0	0	10	0	0	25
% Heavy Vehicles	0	0	0	0	0	2.3	6.2	0	0	0	0	0	0	2.2	0	0	1.5

Start Time	Columbus Ave Lot From North					Columbus Avenue From East					Cunard Street From South					Columbus Avenue From West					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	33	0	32	0	65	13	66	6	1	86	0	0	0	0	0	2	69	11	0	82	233
04:45 PM	23	0	24	0	47	18	69	6	1	94	0	0	1	0	1	0	66	7	0	73	215
05:00 PM	24	3	30	0	57	11	68	6	0	85	0	0	0	0	0	5	59	8	0	72	214
05:15 PM	31	4	41	0	76	14	88	5	0	107	0	0	0	0	0	4	60	11	0	75	258
Total Volume	111	7	127	0	245	56	291	23	2	372	0	0	1	0	1	11	254	37	0	302	920
% App. Total	45.3	2.9	51.8	0		15.1	78.2	6.2	0.5		0	0	100	0		3.6	84.1	12.3	0		
PHF	.841	.438	.774	.000	.806	.778	.827	.958	.500	.869	.000	.000	.250	.000	.250	.550	.920	.841	.000	.921	.891
Cars	111	7	127	0	245	56	287	21	2	366	0	0	1	0	1	11	250	37	0	298	910
% Cars	100	100	100	0	100	100	98.6	91.3	100	98.4	0	0	100	0	100	100	98.4	100	0	98.7	98.9
Heavy Vehicles	0	0	0	0	0	0	4	2	0	6	0	0	0	0	0	0	4	0	0	4	10
% Heavy Vehicles	0	0	0	0	0	0	1.4	8.7	0	1.6	0	0	0	0	0	0	1.6	0	0	1.3	1.1



PRECISION
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INDUSTRIES, LLC

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N/S: Columbus Ave Lot/ Cunard Street
E/W: Columbus Avenue
City, State: Boston, MA
Client: HSH/ J. SanClemente

File Name : 123026 GG
Site Code : 2011046_
Start Date : 9/25/2012
Page No : 1

Groups Printed- Cars

Start Time	Columbus Ave Lot From North				Columbus Avenue From East				Cunard Street From South				Columbus Avenue From West				Int. Total
	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	
04:00 PM	14	0	19	0	8	67	1	2	0	0	0	0	7	41	9	0	168
04:15 PM	21	1	17	0	9	52	3	1	0	0	0	0	8	58	6	0	176
04:30 PM	33	0	32	0	13	64	6	1	0	0	0	0	2	68	11	0	230
04:45 PM	23	0	24	0	18	68	5	1	0	0	1	0	0	65	7	0	212
Total	91	1	92	0	48	251	15	5	0	0	1	0	17	232	33	0	786
05:00 PM	24	3	30	0	11	67	6	0	0	0	0	0	5	58	8	0	212
05:15 PM	31	4	41	0	14	88	4	0	0	0	0	0	4	59	11	0	256
05:30 PM	22	1	25	0	24	67	1	0	0	0	0	0	1	57	12	0	210
05:45 PM	14	0	19	0	13	68	4	0	0	0	0	0	5	46	7	0	176
Total	91	8	115	0	62	290	15	0	0	0	0	0	15	220	38	0	854
Grand Total	182	9	207	0	110	541	30	5	0	0	1	0	32	452	71	0	1640
Apprch %	45.7	2.3	52	0	16	78.9	4.4	0.7	0	0	100	0	5.8	81.4	12.8	0	
Total %	11.1	0.5	12.6	0	6.7	33	1.8	0.3	0	0	0.1	0	2	27.6	4.3	0	

Start Time	Columbus Ave Lot From North					Columbus Avenue From East					Cunard Street From South					Columbus Avenue From West					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	33	0	32	0	65	13	64	6	1	84	0	0	0	0	0	2	68	11	0	81	230
04:45 PM	23	0	24	0	47	18	68	5	1	92	0	0	1	0	1	0	65	7	0	72	212
05:00 PM	24	3	30	0	57	11	67	6	0	84	0	0	0	0	0	5	58	8	0	71	212
05:15 PM	31	4	41	0	76	14	88	4	0	106	0	0	0	0	0	0	0	0	0	0	256
Total Volume	111	7	127	0	245	56	287	21	2	366	0	0	1	0	1	11	250	37	0	298	910
% App. Total	45.3	2.9	51.8	0		15.3	78.4	5.7	0.5		0	0	100	0		3.7	83.9	12.4	0		
PHF	.841	.438	.774	.000	.806	.778	.815	.875	.500	.863	.000	.000	.250	.000	.250	.550	.919	.841	.000	.920	.889



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N/S: Columbus Ave Lot/ Cunard Street
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City, State: Boston, MA
Client: HSH/ J. SanClemente

File Name : 123026 GG
Site Code : 2011046_
Start Date : 9/25/2012
Page No : 1

Groups Printed- Heavy Vehicles

Start Time	Columbus Ave Lot From North				Columbus Avenue From East				Cunard Street From South				Columbus Avenue From West				Int. Total
	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	
04:00 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0	0	3
04:15 PM	0	0	0	0	0	4	0	0	0	0	0	0	0	2	0	0	6
04:30 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0	0	3
04:45 PM	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	3
Total	0	0	0	0	0	9	1	0	0	0	0	0	0	5	0	0	15
05:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2
05:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	2
05:30 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0	0	4
05:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2
Total	0	0	0	0	0	4	1	0	0	0	0	0	0	5	0	0	10
Grand Total	0	0	0	0	0	13	2	0	0	0	0	0	0	10	0	0	25
Apprch %	0	0	0	0	0	86.7	13.3	0	0	0	0	0	0	100	0	0	
Total %	0	0	0	0	0	52	8	0	0	0	0	0	0	40	0	0	

Start Time	Columbus Ave Lot From North					Columbus Avenue From East					Cunard Street From South					Columbus Avenue From West					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	3
04:15 PM	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	2	0	0	2	6
04:30 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	3
04:45 PM	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	1	0	0	1	3
Total Volume	0	0	0	0	0	0	9	1	0	10	0	0	0	0	0	0	5	0	0	5	15
% App. Total	0	0	0	0	0	0	90	10	0	0	0	0	0	0	0	0	100	0	0	0	
PHF	.000	.000	.000	.000	.000	.000	.563	.250	.000	.625	.000	.000	.000	.000	.000	.000	.625	.000	.000	.625	.625



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N/S: Columbus Ave Lot/ Cunard Street
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City, State: Boston, MA
Client: HSH/ J. SanClemente

File Name : 123026 GG
Site Code : 2011046_
Start Date : 9/25/2012
Page No : 1

Groups Printed- Peds and Bikes

Start Time	Columbus Ave Lot From North				Columbus Avenue From East				Cunard Street From South				Columbus Avenue From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
04:00 PM	0	0	0	41	0	21	0	12	0	0	0	19	0	7	0	6	106
04:15 PM	0	0	1	34	0	15	0	11	1	0	0	44	0	9	0	5	120
04:30 PM	0	0	0	29	0	16	0	12	0	0	0	45	0	10	0	7	119
04:45 PM	1	0	1	53	0	24	0	23	0	0	0	49	0	8	0	0	159
Total	1	0	2	157	0	76	0	58	1	0	0	157	0	34	0	18	504
05:00 PM	0	0	0	50	0	41	0	17	0	0	3	55	0	5	0	4	175
05:15 PM	0	0	0	62	0	43	0	14	0	0	0	58	0	17	0	12	206
05:30 PM	0	0	0	43	1	44	0	12	0	0	0	60	0	18	0	8	186
05:45 PM	1	0	0	55	0	38	1	19	0	0	0	59	1	11	1	7	193
Total	1	0	0	210	1	166	1	62	0	0	3	232	1	51	1	31	760
Grand Total	2	0	2	367	1	242	1	120	1	0	3	389	1	85	1	49	1264
Apprch %	0.5	0	0.5	98.9	0.3	66.5	0.3	33	0.3	0	0.8	99	0.7	62.5	0.7	36	
Total %	0.2	0	0.2	29	0.1	19.1	0.1	9.5	0.1	0	0.2	30.8	0.1	6.7	0.1	3.9	

Start Time	Columbus Ave Lot From North					Columbus Avenue From East					Cunard Street From South					Columbus Avenue From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	0	0	50	50	0	41	0	17	58	0	0	3	55	58	0	5	0	4	9	175
05:15 PM	0	0	0	62	62	0	43	0	14	57	0	0	0	58	58	0	17	0	12	29	206
05:30 PM	0	0	0	43	43	1	44	0	12	57	0	0	0	60	60	0	18	0	8	26	186
05:45 PM	1	0	0	55	56	0	38	1	19	58	0	0	0	59	59	1	11	1	7	20	193
Total Volume	1	0	0	210	211	1	166	1	62	230	0	0	3	232	235	1	51	1	31	84	760
% App. Total	0.5	0	0	99.5		0.4	72.2	0.4	27		0	0	1.3	98.7		1.2	60.7	1.2	36.9		
PHF	.250	.000	.000	.847	.851	.250	.943	.250	.816	.991	.000	.000	.250	.967	.979	.250	.708	.250	.646	.724	.922



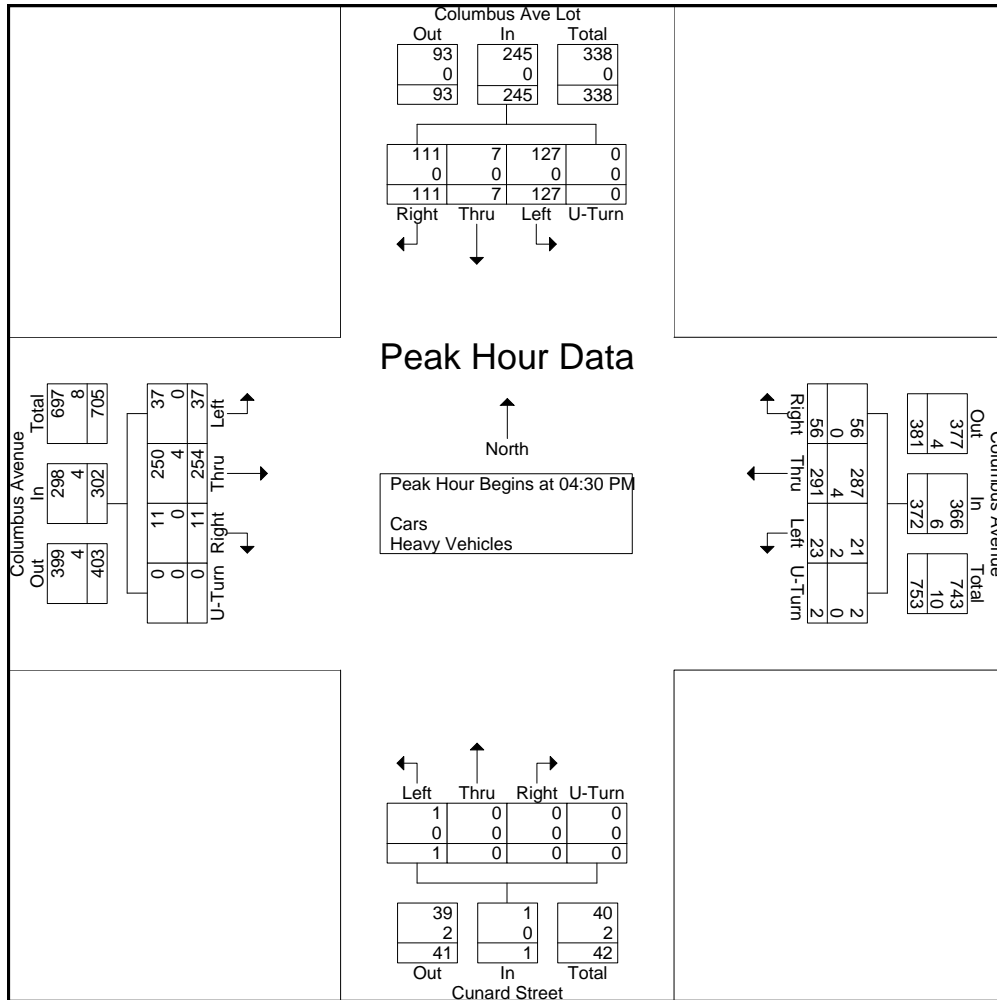
PRECISION
D A T A
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N/S: Columbus Ave Lot/ Cunard Street
E/W: Columbus Avenue
City, State: Boston, MA
Client: HSH/ J. SanClemente

File Name : 123026 GG
Site Code : 2011046_
Start Date : 9/25/2012
Page No : 1

Start Time	Columbus Ave Lot From North					Columbus Avenue From East					Cunard Street From South					Columbus Avenue From West					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	33	0	32	0	65	13	66	6	1	86	0	0	0	0	0	2	69	11	0	82	233
04:45 PM	23	0	24	0	47	18	69	6	1	94	0	0	1	0	1	0	66	7	0	73	215
05:00 PM	24	3	30	0	57	11	68	6	0	85	0	0	0	0	0	5	59	8	0	72	214
05:15 PM	31	4	41		76	14	88			107											258
Total Volume	111	7	127	0	245	56	291	23	2	372	0	0	1	0	1	11	254	37	0	302	920
% App. Total	45.3	2.9	51.8	0		15.1	78.2	6.2	0.5		0	0	100	0		3.6	84.1	12.3	0		92.0
PHF	.841	.438	.774	.000	.806	.778	.827	.958	.500	.869	.000	.000	.250	.000	.250	.550	.920	.841	.000	.921	.891
Cars	111	7	127	0	245	56	287	21	2	366	0	0	1	0	1	11	250	37	0	298	910
% Cars	100	100	100	0	100	100	98.6	91.3	100	98.4	0	0	100	0	100	100	98.4	100	0	98.7	98.9
Heavy Vehicles	0	0	0	0	0	0	4	2	0	6	0	0	0	0	0	0	4	0	0	4	10
% Heavy Vehicles	0	0	0	0	0	0	1.4	8.7	0	1.6	0	0	0	0	0	0	1.6	0	0	1.3	1.1



Accurate Counts
978-664-2565

N/S Street : Coventry Street
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046002
Site Code : 11046002
Start Date : 5/13/2013
Page No : 1

Groups Printed- Cars - Trucks

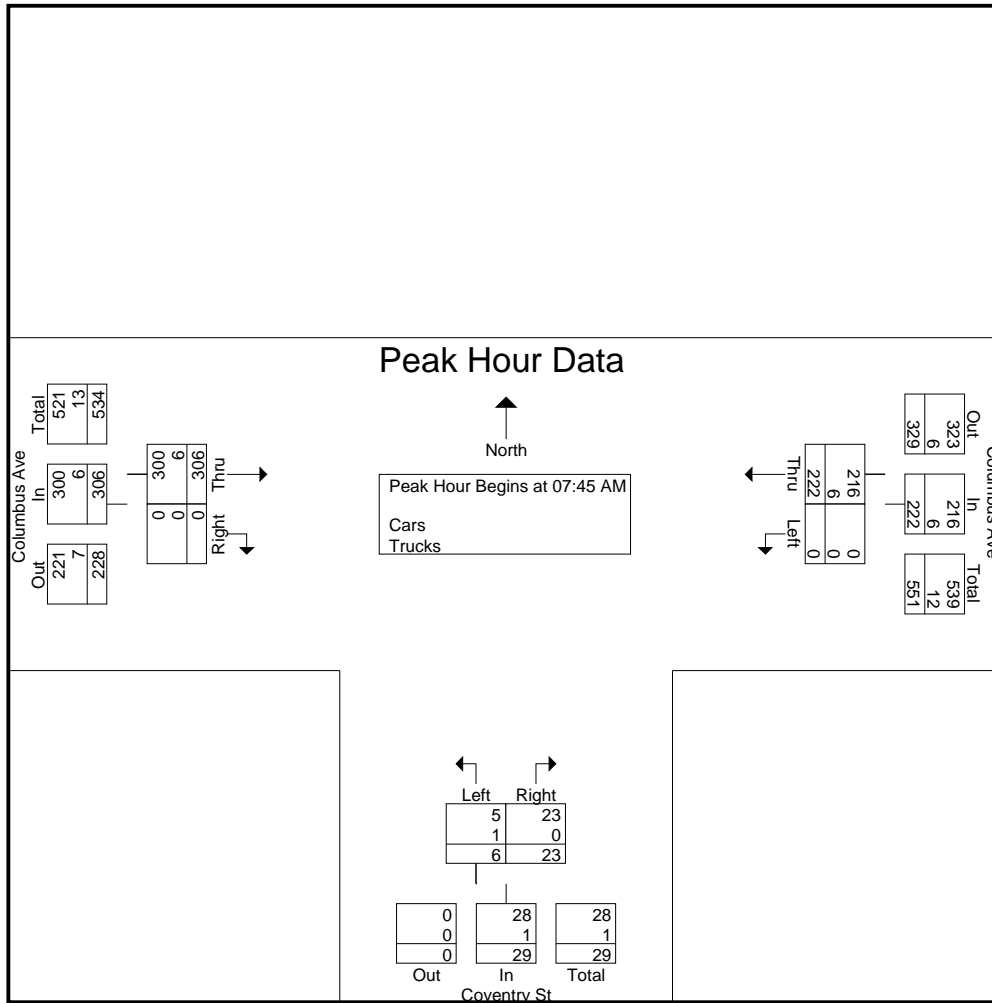
Start Time	Columbus Ave From East		Coventry St From South		Columbus Ave From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
07:00 AM	0	45	1	2	60	0	108
07:15 AM	0	32	1	3	68	0	104
07:30 AM	0	44	2	5	66	0	117
07:45 AM	0	54	2	9	89	0	154
Total	0	175	6	19	283	0	483
08:00 AM	0	58	0	4	70	0	132
08:15 AM	0	44	1	6	69	0	120
08:30 AM	0	66	3	4	78	0	151
08:45 AM	0	58	1	10	83	0	152
Total	0	226	5	24	300	0	555
Grand Total	0	401	11	43	583	0	1038
Apprch %	0	100	20.4	79.6	100	0	
Total %	0	38.6	1.1	4.1	56.2	0	
Cars	0	390	9	41	564	0	1004
% Cars	0	97.3	81.8	95.3	96.7	0	96.7
Trucks	0	11	2	2	19	0	34
% Trucks	0	2.7	18.2	4.7	3.3	0	3.3

Start Time	Columbus Ave From East			Coventry St From South			Columbus Ave From West			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	0	54	54	2	9	11	89	0	89	154
08:00 AM	0	58	58	0	4	4	70	0	70	132
08:15 AM	0	44	44	1	6	7	69	0	69	120
08:30 AM	0	66	66	3	4	7	78	0	78	151
Total Volume	0	222	222	6	23	29	306	0	306	557
% App. Total	0	100		20.7	79.3		100	0		
PHF	.000	.841	.841	.500	.639	.659	.860	.000	.860	.904
Cars	0	216	216	5	23	28	300	0	300	544
% Cars	0	97.3	97.3	83.3	100	96.6	98.0	0	98.0	97.7
Trucks	0	6	6	1	0	1	6	0	6	13
% Trucks	0	2.7	2.7	16.7	0	3.4	2.0	0	2.0	2.3

Accurate Counts
978-664-2565

N/S Street : Coventry Street
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046002
Site Code : 11046002
Start Date : 5/13/2013
Page No : 2



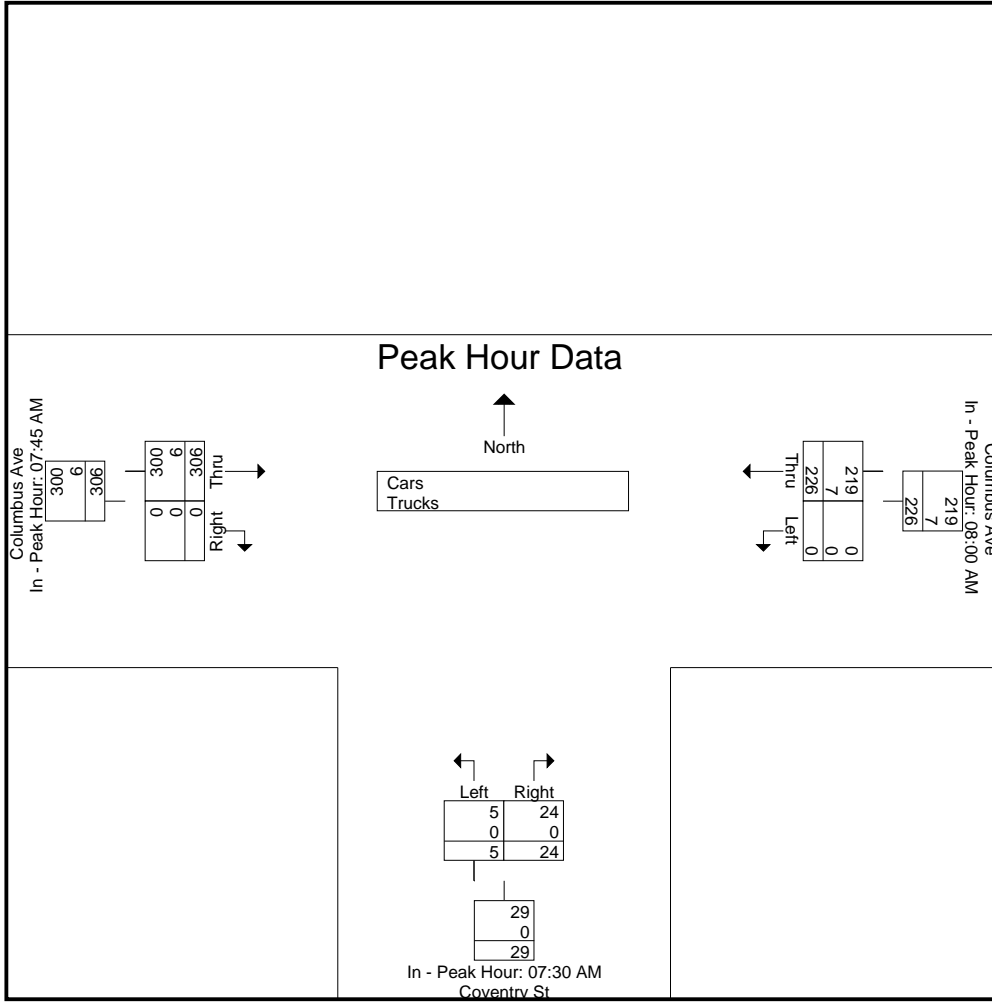
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM			07:30 AM			07:45 AM		
+0 mins.	0	58	58	2	5	7	89	0	89
+15 mins.	0	44	44	2	9	11	70	0	70
+30 mins.	0	66	66	0	4	4	69	0	69
+45 mins.	0	58	58	1	6	7	78	0	78
Total Volume	0	226	226	5	24	29	306	0	306
% App. Total	0	100		17.2	82.8		100	0	
PHF	.000	.856	.856	.625	.667	.659	.860	.000	.860
Cars	0	219	219	5	24	29	300	0	300
% Cars	0	96.9	96.9	100	100	100	98	0	98
Trucks	0	7	7	0	0	0	6	0	6
% Trucks	0	3.1	3.1	0	0	0	2	0	2

Accurate Counts
978-664-2565

N/S Street : Coventry Street
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046002
Site Code : 11046002
Start Date : 5/13/2013
Page No : 3



Accurate Counts

978-664-2565

N/S Street : Coventry Street
 E/W Street: Columbus Avenue
 City/State : Boston, MA
 Weather : Clear

File Name : 11046002
 Site Code : 11046002
 Start Date : 5/13/2013
 Page No : 1

Groups Printed- Cars

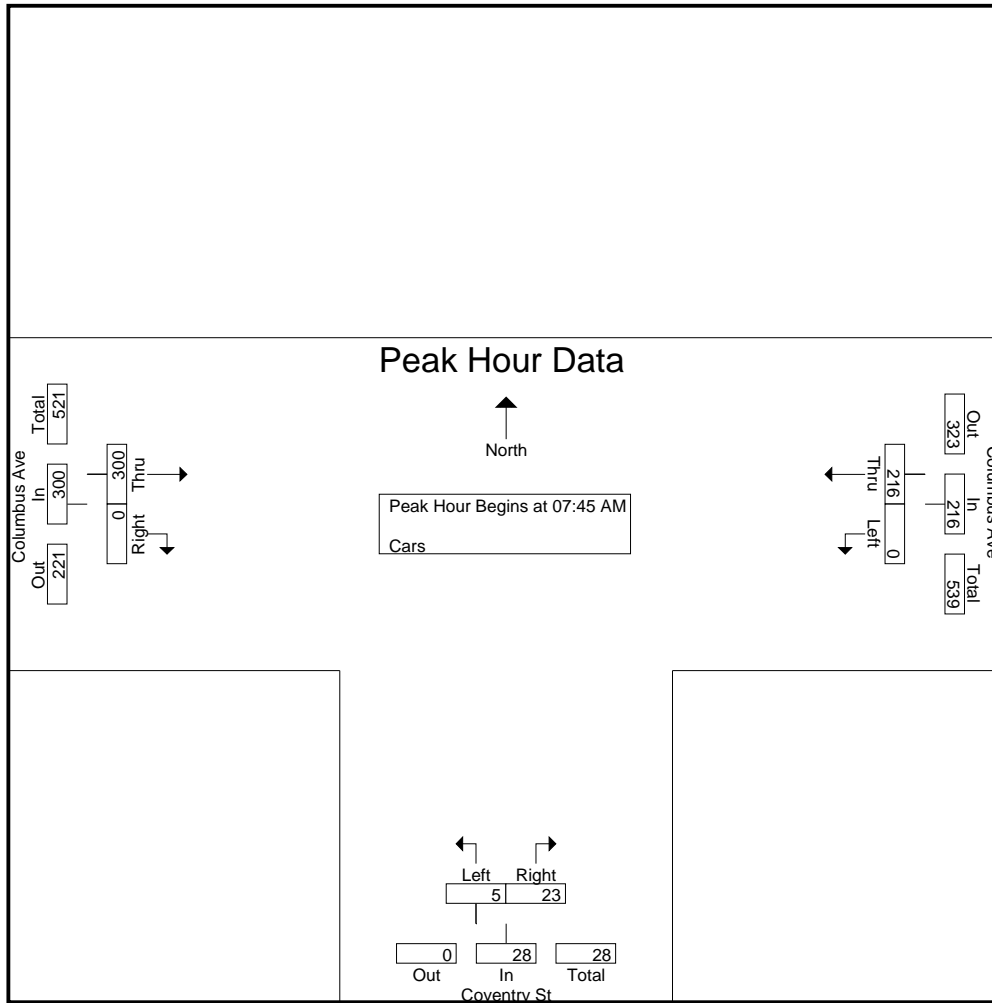
Start Time	Columbus Ave From East		Coventry St From South		Columbus Ave From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
07:00 AM	0	44	1	1	54	0	100
07:15 AM	0	32	1	3	66	0	102
07:30 AM	0	41	2	5	62	0	110
07:45 AM	0	54	2	9	88	0	153
Total	0	171	6	18	270	0	465
08:00 AM	0	55	0	4	69	0	128
08:15 AM	0	43	1	6	65	0	115
08:30 AM	0	64	2	4	78	0	148
08:45 AM	0	57	0	9	82	0	148
Total	0	219	3	23	294	0	539
Grand Total	0	390	9	41	564	0	1004
Apprch %	0	100	18	82	100	0	
Total %	0	38.8	0.9	4.1	56.2	0	

Start Time	Columbus Ave From East			Coventry St From South			Columbus Ave From West			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	0	54	54	2	9	11	88	0	88	153
08:00 AM	0	55	55	0	4	4	69	0	69	128
08:15 AM	0	43	43	1	6	7	65	0	65	115
08:30 AM	0	64	64	2	4	6	78	0	78	148
Total Volume	0	216	216	5	23	28	300	0	300	544
% App. Total	0	100		17.9	82.1		100	0		
PHF	.000	.844	.844	.625	.639	.636	.852	.000	.852	.889

Accurate Counts
978-664-2565

N/S Street : Coventry Street
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046002
Site Code : 11046002
Start Date : 5/13/2013
Page No : 2



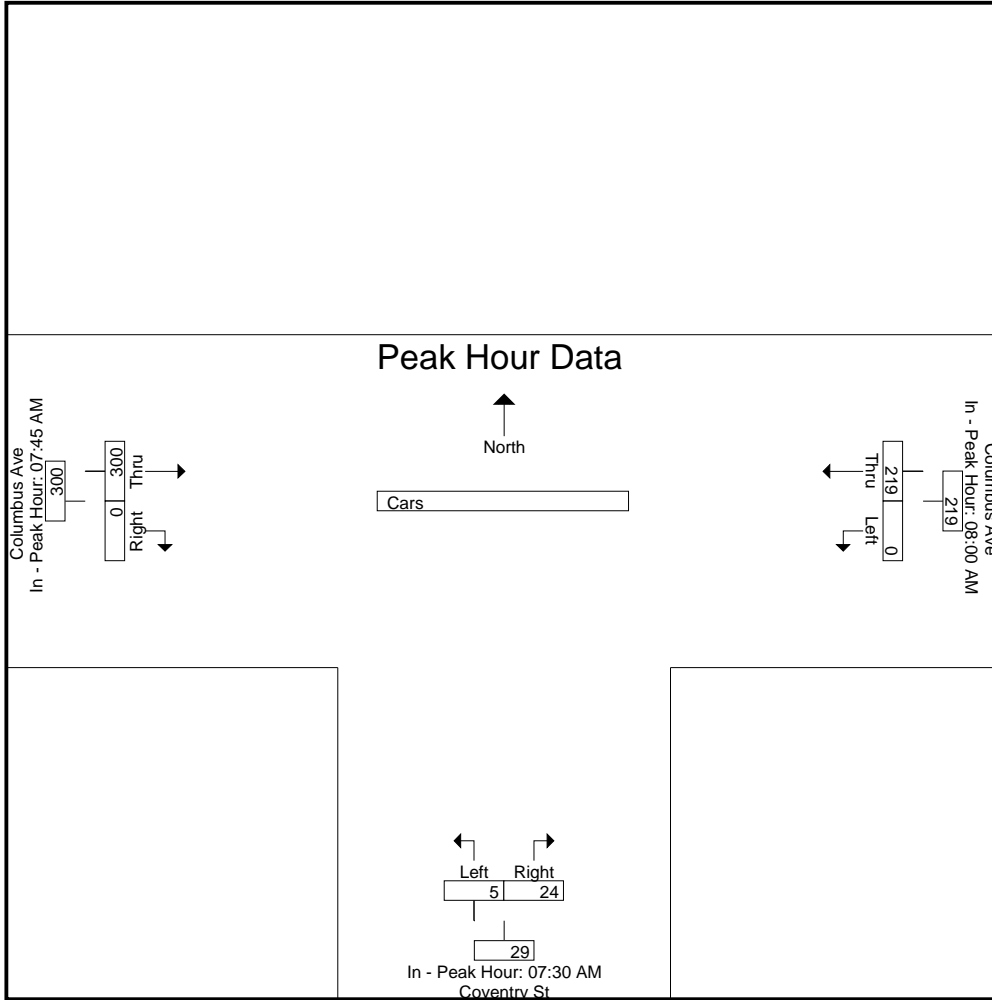
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM			07:30 AM			07:45 AM		
+0 mins.	0	55	55	2	5	7	88	0	88
+15 mins.	0	43	43	2	9	11	69	0	69
+30 mins.	0	64	64	0	4	4	65	0	65
+45 mins.	0	57	57	1	6	7	78	0	78
Total Volume	0	219	219	5	24	29	300	0	300
% App. Total	0	100		17.2	82.8		100	0	
PHF	.000	.855	.855	.625	.667	.659	.852	.000	.852

Accurate Counts
978-664-2565

N/S Street : Coventry Street
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046002
Site Code : 11046002
Start Date : 5/13/2013
Page No : 3



Accurate Counts
978-664-2565

N/S Street : Coventry Street
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046002
Site Code : 11046002
Start Date : 5/13/2013
Page No : 1

Groups Printed- Trucks

Start Time	Columbus Ave From East		Coventry St From South		Columbus Ave From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
07:00 AM	0	1	0	1	6	0	8
07:15 AM	0	0	0	0	2	0	2
07:30 AM	0	3	0	0	4	0	7
07:45 AM	0	0	0	0	1	0	1
Total	0	4	0	1	13	0	18
08:00 AM	0	3	0	0	1	0	4
08:15 AM	0	1	0	0	4	0	5
08:30 AM	0	2	1	0	0	0	3
08:45 AM	0	1	1	1	1	0	4
Total	0	7	2	1	6	0	16
Grand Total	0	11	2	2	19	0	34
Apprch %	0	100	50	50	100	0	
Total %	0	32.4	5.9	5.9	55.9	0	

Start Time	Columbus Ave From East			Coventry St From South			Columbus Ave From West			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	1	1	0	1	1	6	0	6	8
07:15 AM	0	0	0	0	0	0	2	0	2	2
07:30 AM	0	3	3	0	0	0	4	0	4	7
07:45 AM	0	0	0	0	0	0	1	0	1	1
Total Volume	0	4	4	0	1	1	13	0	13	18
% App. Total	0	100		0	100		100	0		
PHF	.000	.333	.333	.000	.250	.250	.542	.000	.542	.563

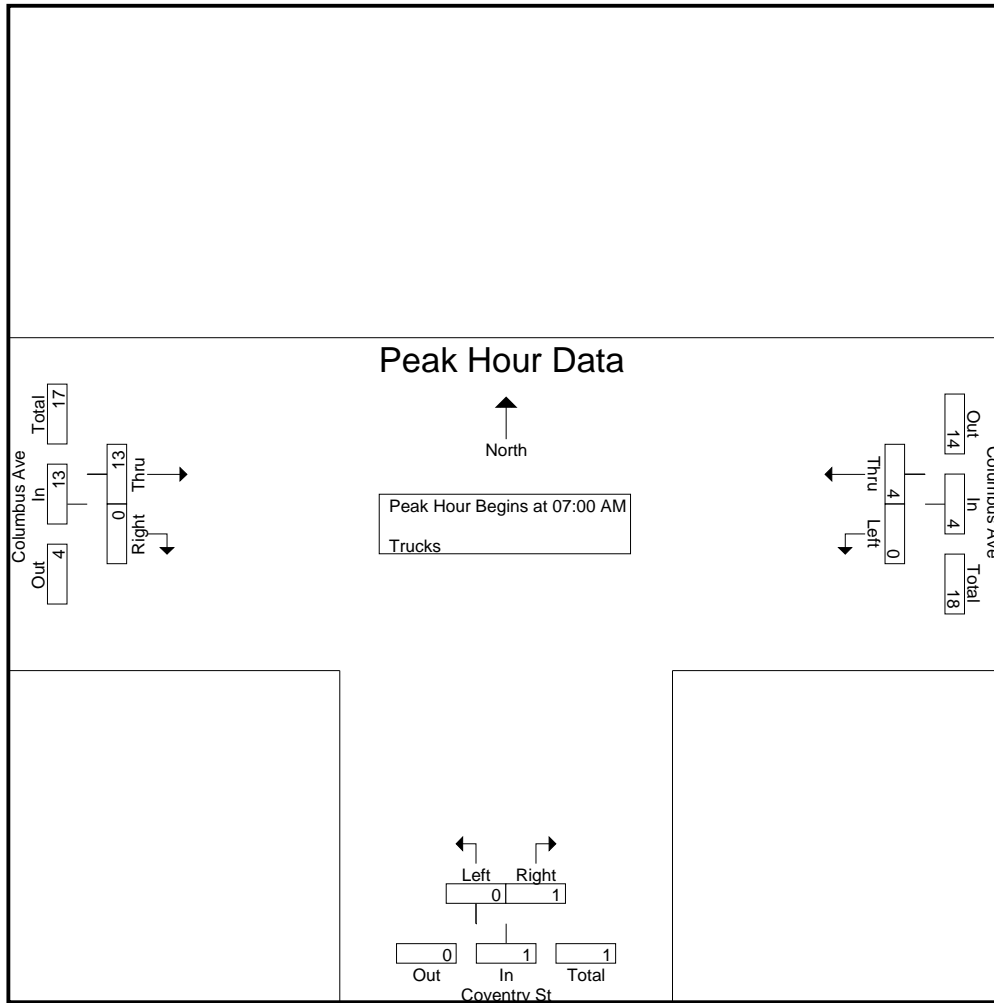
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:00 AM

Accurate Counts
978-664-2565

N/S Street : Coventry Street
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046002
Site Code : 11046002
Start Date : 5/13/2013
Page No : 2



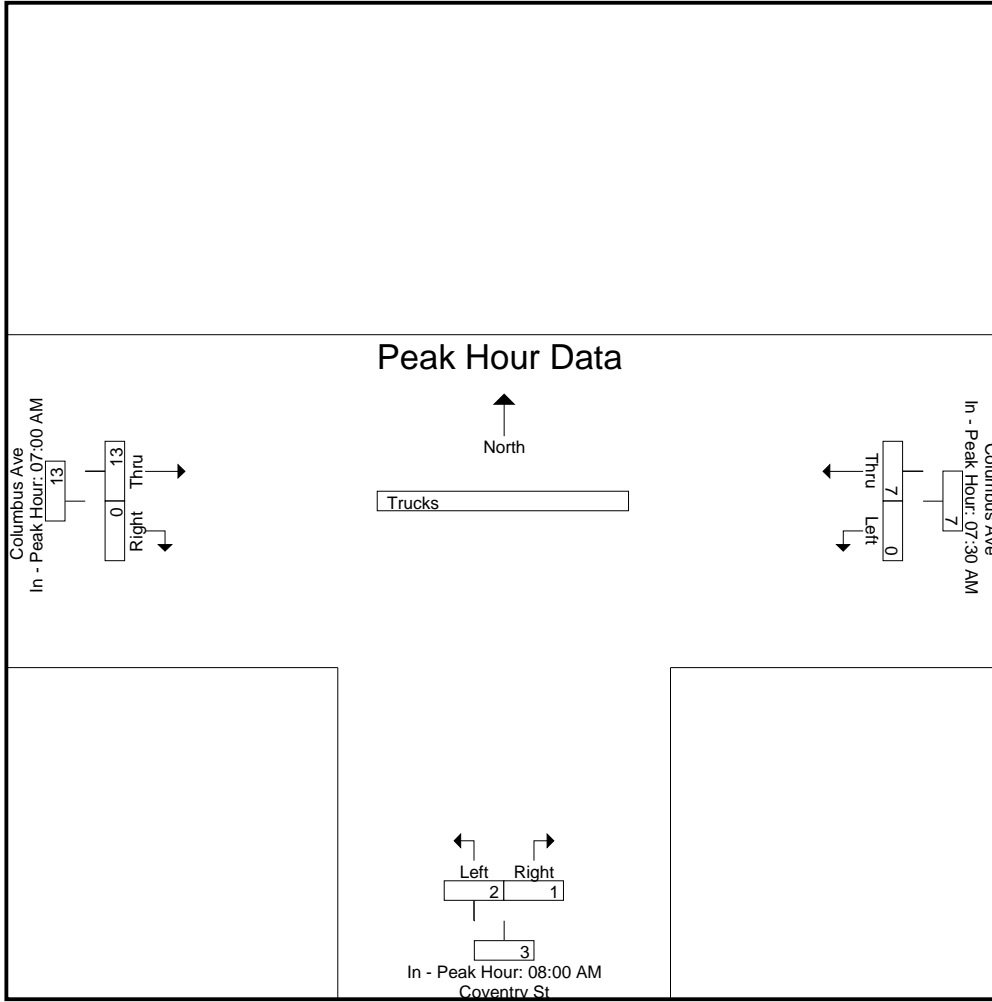
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM			08:00 AM			07:00 AM		
+0 mins.	0	3	3	0	0	0	6	0	6
+15 mins.	0	0	0	0	0	0	2	0	2
+30 mins.	0	3	3	1	0	1	4	0	4
+45 mins.	0	1	1	1	1	2	1	0	1
Total Volume	0	7	7	2	1	3	13	0	13
% App. Total	0	100		66.7	33.3		100	0	
PHF	.000	.583	.583	.500	.250	.375	.542	.000	.542

Accurate Counts
978-664-2565

N/S Street : Coventry Street
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046002
Site Code : 11046002
Start Date : 5/13/2013
Page No : 3



Accurate Counts

978-664-2565

N/S Street : Coventry Street
 E/W Street: Columbus Avenue
 City/State : Boston, MA
 Weather : Clear

File Name : 11046002
 Site Code : 11046002
 Start Date : 5/13/2013
 Page No : 1

Groups Printed- Bikes Peds

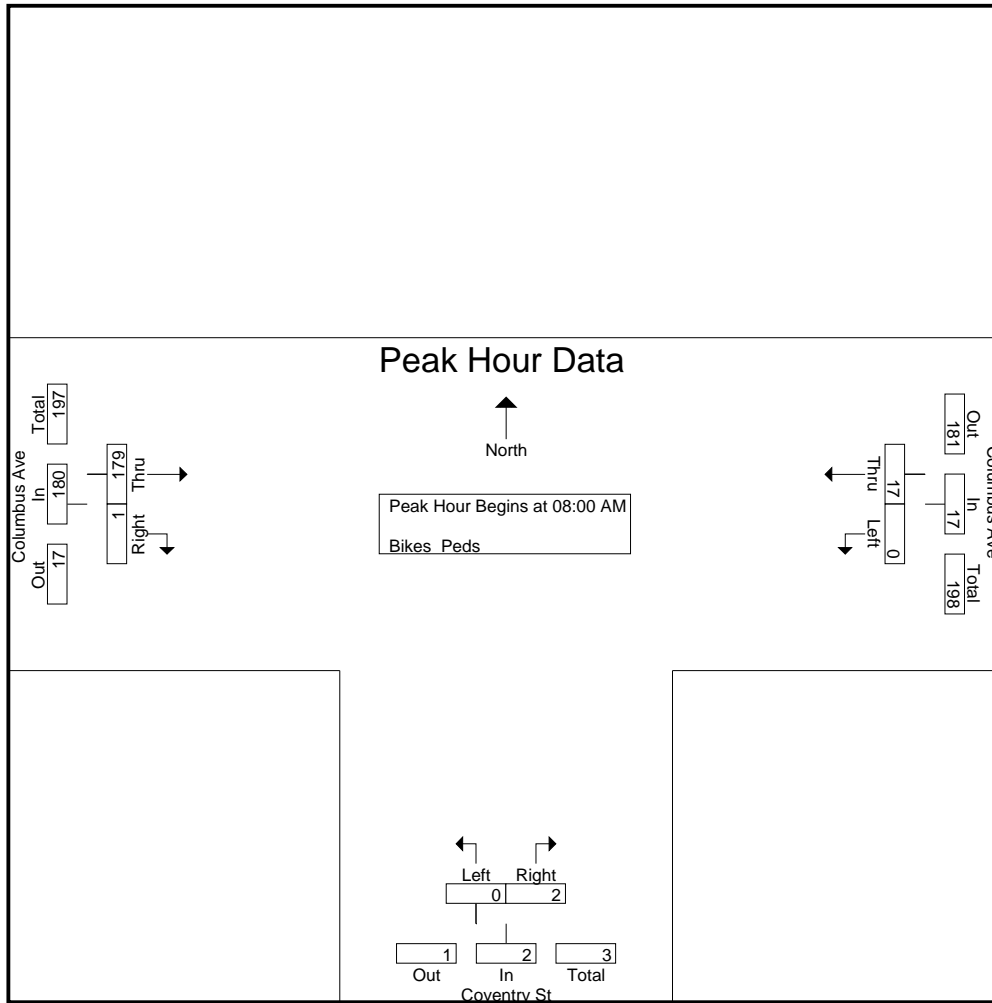
Start Time	Columbus Ave From East			Coventry St From South			Columbus Ave From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds			
07:00 AM	0	3	1	0	0	2	12	0	0	3	15	18
07:15 AM	0	4	1	0	0	1	18	0	2	4	22	26
07:30 AM	0	4	4	0	1	7	22	0	1	12	27	39
07:45 AM	1	5	3	0	0	6	36	1	0	9	43	52
Total	1	16	9	0	1	16	88	1	3	28	107	135
08:00 AM	0	3	8	0	0	5	32	0	2	15	35	50
08:15 AM	0	9	5	0	0	4	42	0	1	10	51	61
08:30 AM	0	2	3	0	0	10	43	0	1	14	45	59
08:45 AM	0	3	2	0	2	7	62	1	0	9	68	77
Total	0	17	18	0	2	26	179	1	4	48	199	247
Grand Total	1	33	27	0	3	42	267	2	7	76	306	382
Apprch %	2.9	97.1		0	100		99.3	0.7				
Total %	0.3	10.8		0	1		87.3	0.7		19.9	80.1	

Start Time	Columbus Ave From East			Coventry St From South			Columbus Ave From West			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. 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	3	3	0	0	0	32	0	32	35
08:15 AM	0	9	9	0	0	0	42	0	42	51
08:30 AM	0	2	2	0	0	0	43	0	43	45
08:45 AM	0	3	3	0	2	2	62	1	63	68
Total Volume	0	17	17	0	2	2	179	1	180	199
% App. Total	0	100		0	100		99.4	0.6		
PHF	.000	.472	.472	.000	.250	.250	.722	.250	.714	.732

Accurate Counts
978-664-2565

N/S Street : Coventry Street
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046002
Site Code : 11046002
Start Date : 5/13/2013
Page No : 2



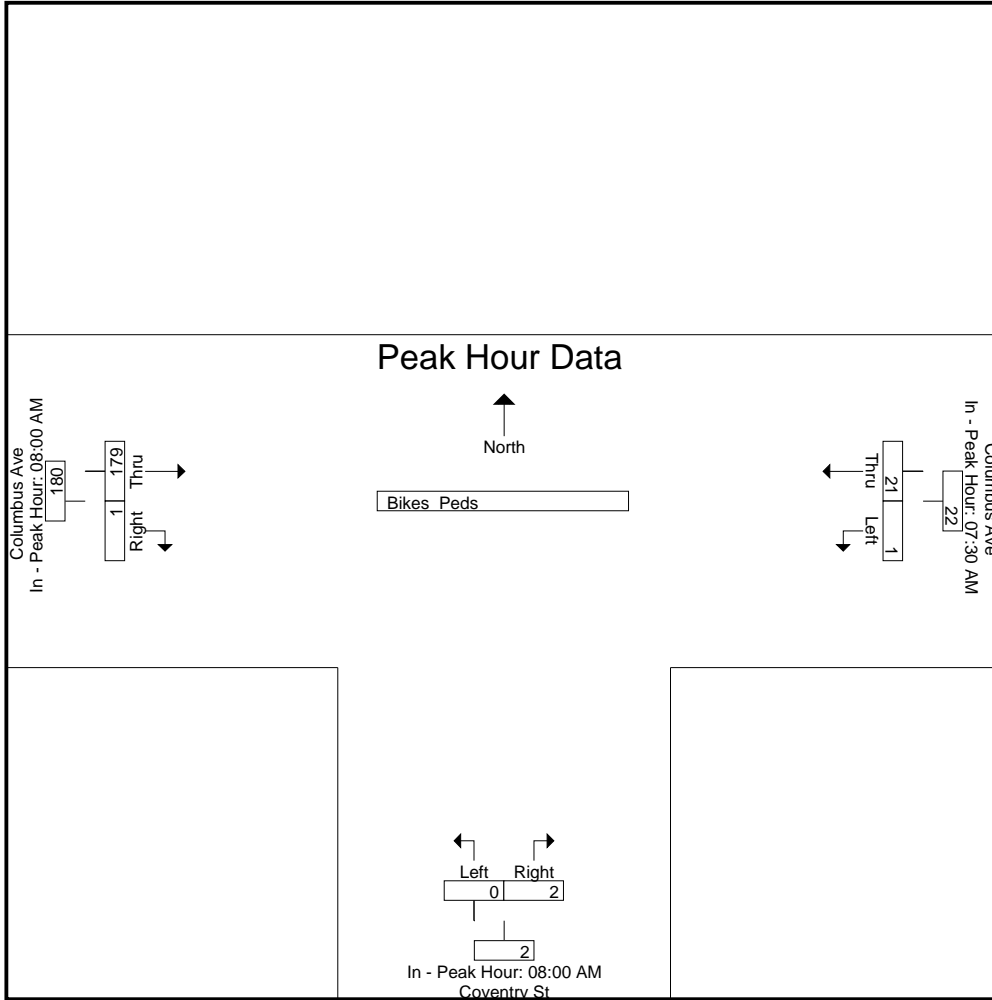
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM			08:00 AM			08:00 AM		
+0 mins.	0	4	4	0	0	0	32	0	32
+15 mins.	1	5	6	0	0	0	42	0	42
+30 mins.	0	3	3	0	0	0	43	0	43
+45 mins.	0	9	9	0	2	2	62	1	63
Total Volume	1	21	22	0	2	2	179	1	180
% App. Total	4.5	95.5		0	100		99.4	0.6	
PHF	.250	.583	.611	.000	.250	.250	.722	.250	.714

Accurate Counts
978-664-2565

N/S Street : Coventry Street
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046002
Site Code : 11046002
Start Date : 5/13/2013
Page No : 3



Accurate Counts
978-664-2565

N/S Street : Coventry Street
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046002
Site Code : 11046002
Start Date : 5/13/2013
Page No : 1

Groups Printed- Cars - Trucks

Start Time	Columbus Ave From East		Coventry St From South		Columbus Ave From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
04:00 PM	0	74	3	10	60	0	147
04:15 PM	0	67	2	8	62	0	139
04:30 PM	0	60	1	6	61	0	128
04:45 PM	0	63	4	6	77	0	150
Total	0	264	10	30	260	0	564
05:00 PM	0	83	2	2	89	0	176
05:15 PM	0	101	8	4	87	0	200
05:30 PM	0	76	1	3	57	0	137
05:45 PM	0	54	2	5	47	0	108
Total	0	314	13	14	280	0	621
Grand Total	0	578	23	44	540	0	1185
Apprch %	0	100	34.3	65.7	100	0	
Total %	0	48.8	1.9	3.7	45.6	0	
Cars	0	572	23	43	537	0	1175
% Cars	0	99	100	97.7	99.4	0	99.2
Trucks	0	6	0	1	3	0	10
% Trucks	0	1	0	2.3	0.6	0	0.8

Start Time	Columbus Ave From East			Coventry St From South			Columbus Ave From West			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:45 PM	0	63	63	4	6	10	77	0	77	150
05:00 PM	0	83	83	2	2	4	89	0	89	176
05:15 PM	0	101	101	8	4	12	87	0	87	200
05:30 PM	0	76	76	1	3	4	57	0	57	137
Total Volume	0	323	323	15	15	30	310	0	310	663
% App. Total	0	100		50	50		100	0		
PHF	.000	.800	.800	.469	.625	.625	.871	.000	.871	.829
Cars	0	321	321	15	15	30	309	0	309	660
% Cars	0	99.4	99.4	100	100	100	99.7	0	99.7	99.5
Trucks	0	2	2	0	0	0	1	0	1	3
% Trucks	0	0.6	0.6	0	0	0	0.3	0	0.3	0.5

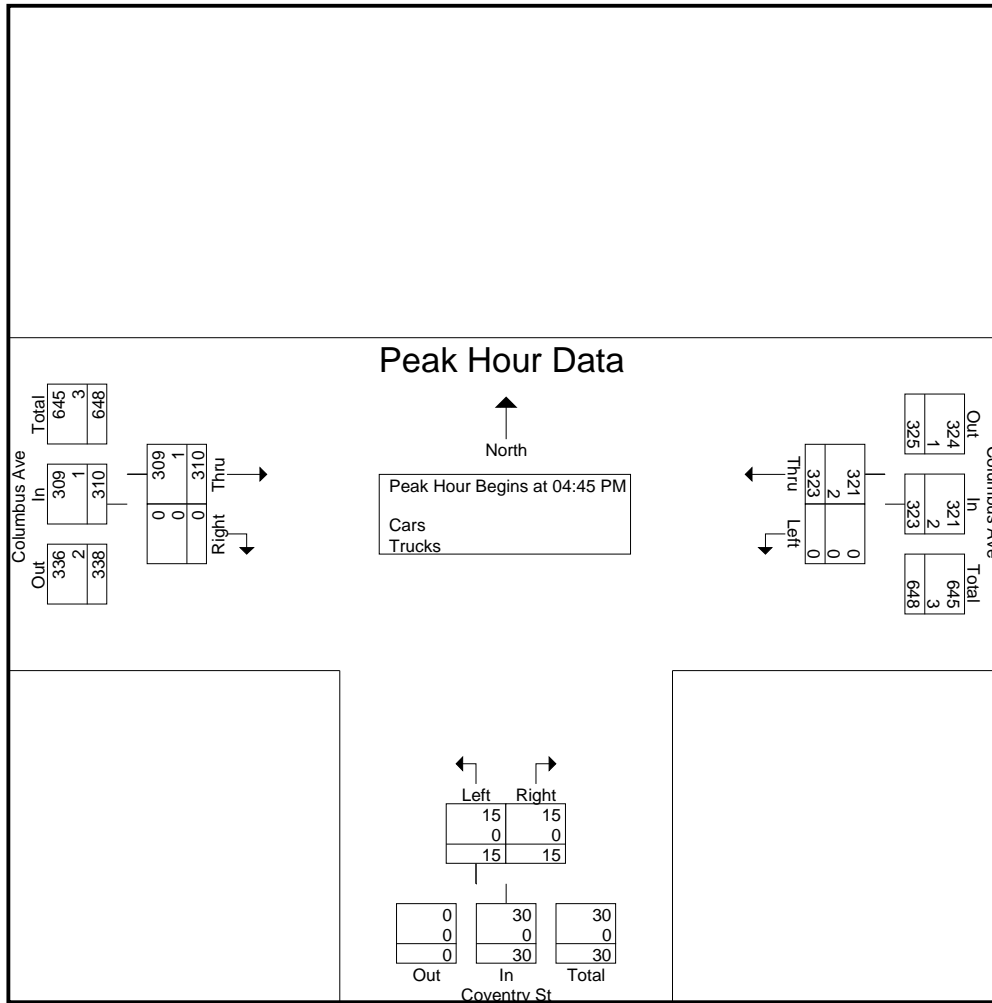
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:45 PM

Accurate Counts
978-664-2565

N/S Street : Coventry Street
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046002
Site Code : 11046002
Start Date : 5/13/2013
Page No : 2



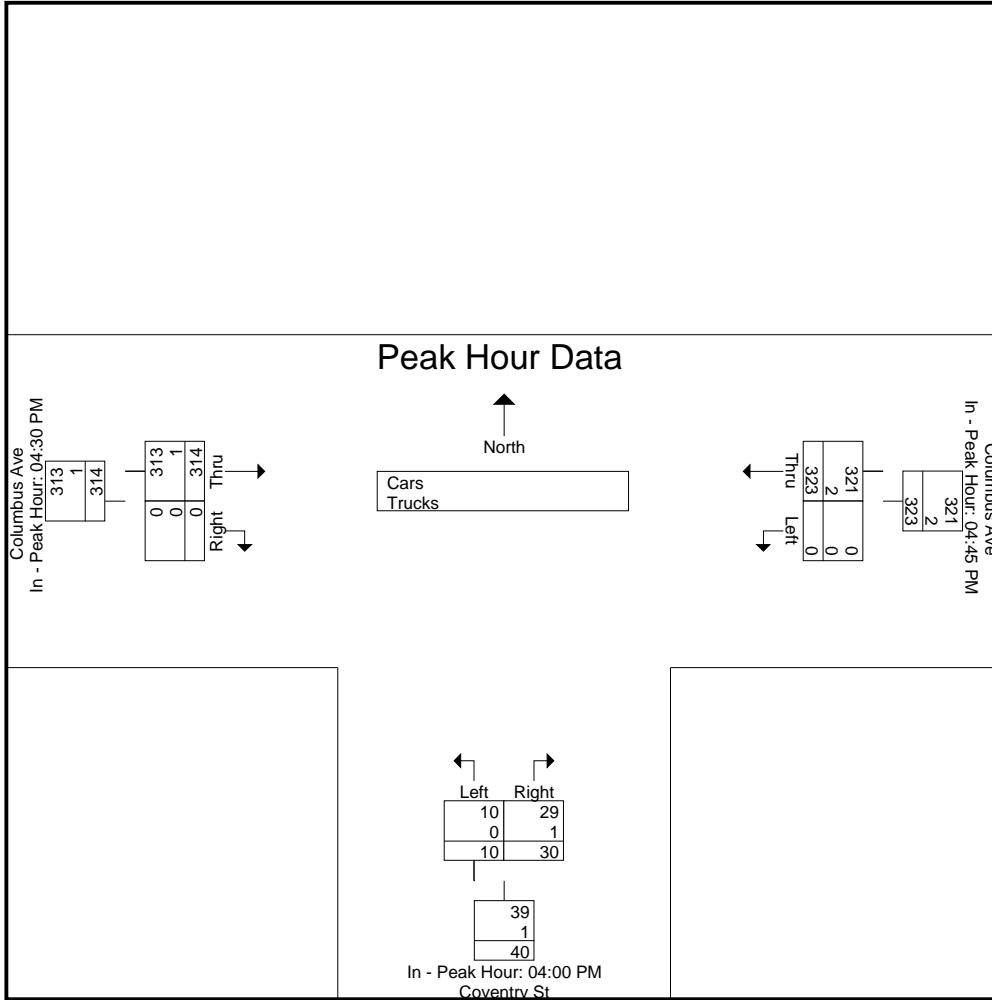
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM			04:00 PM			04:30 PM		
+0 mins.	0	63	63	3	10	13	61	0	61
+15 mins.	0	83	83	2	8	10	77	0	77
+30 mins.	0	101	101	1	6	7	89	0	89
+45 mins.	0	76	76	4	6	10	87	0	87
Total Volume	0	323	323	10	30	40	314	0	314
% App. Total	0	100	100	25	75	75	100	0	100
PHF	.000	.800	.800	.625	.750	.769	.882	.000	.882
Cars	0	321	321	10	29	39	313	0	313
% Cars	0	99.4	99.4	100	96.7	97.5	99.7	0	99.7
Trucks	0	2	2	0	1	1	1	0	1
% Trucks	0	0.6	0.6	0	3.3	2.5	0.3	0	0.3

Accurate Counts
978-664-2565

N/S Street : Coventry Street
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046002
Site Code : 11046002
Start Date : 5/13/2013
Page No : 3



Accurate Counts
978-664-2565

N/S Street : Coventry Street
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046002
Site Code : 11046002
Start Date : 5/13/2013
Page No : 1

Groups Printed- Cars

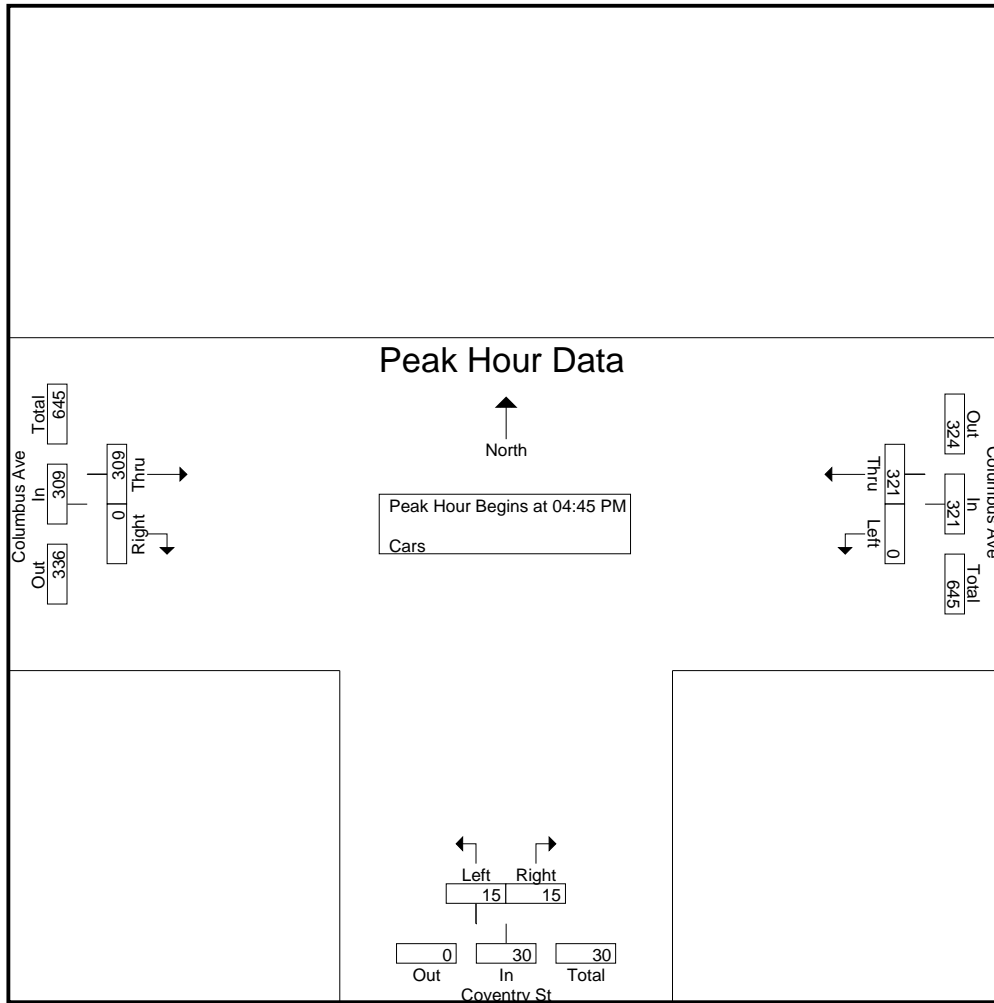
Start Time	Columbus Ave From East		Coventry St From South		Columbus Ave From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
04:00 PM	0	74	3	10	58	0	145
04:15 PM	0	65	2	7	62	0	136
04:30 PM	0	58	1	6	61	0	126
04:45 PM	0	63	4	6	76	0	149
Total	0	260	10	29	257	0	556
05:00 PM	0	83	2	2	89	0	176
05:15 PM	0	100	8	4	87	0	199
05:30 PM	0	75	1	3	57	0	136
05:45 PM	0	54	2	5	47	0	108
Total	0	312	13	14	280	0	619
Grand Total	0	572	23	43	537	0	1175
Apprch %	0	100	34.8	65.2	100	0	
Total %	0	48.7	2	3.7	45.7	0	

Start Time	Columbus Ave From East			Coventry St From South			Columbus Ave From West			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	0	63	63	4	6	10	76	0	76	149
05:00 PM	0	83	83	2	2	4	89	0	89	176
05:15 PM	0	100	100	8	4	12	87	0	87	199
05:30 PM	0	75	75	1	3	4	57	0	57	136
Total Volume	0	321	321	15	15	30	309	0	309	660
% App. Total	0	100		50	50		100	0		
PHF	.000	.803	.803	.469	.625	.625	.868	.000	.868	.829

Accurate Counts
978-664-2565

N/S Street : Coventry Street
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046002
Site Code : 11046002
Start Date : 5/13/2013
Page No : 2



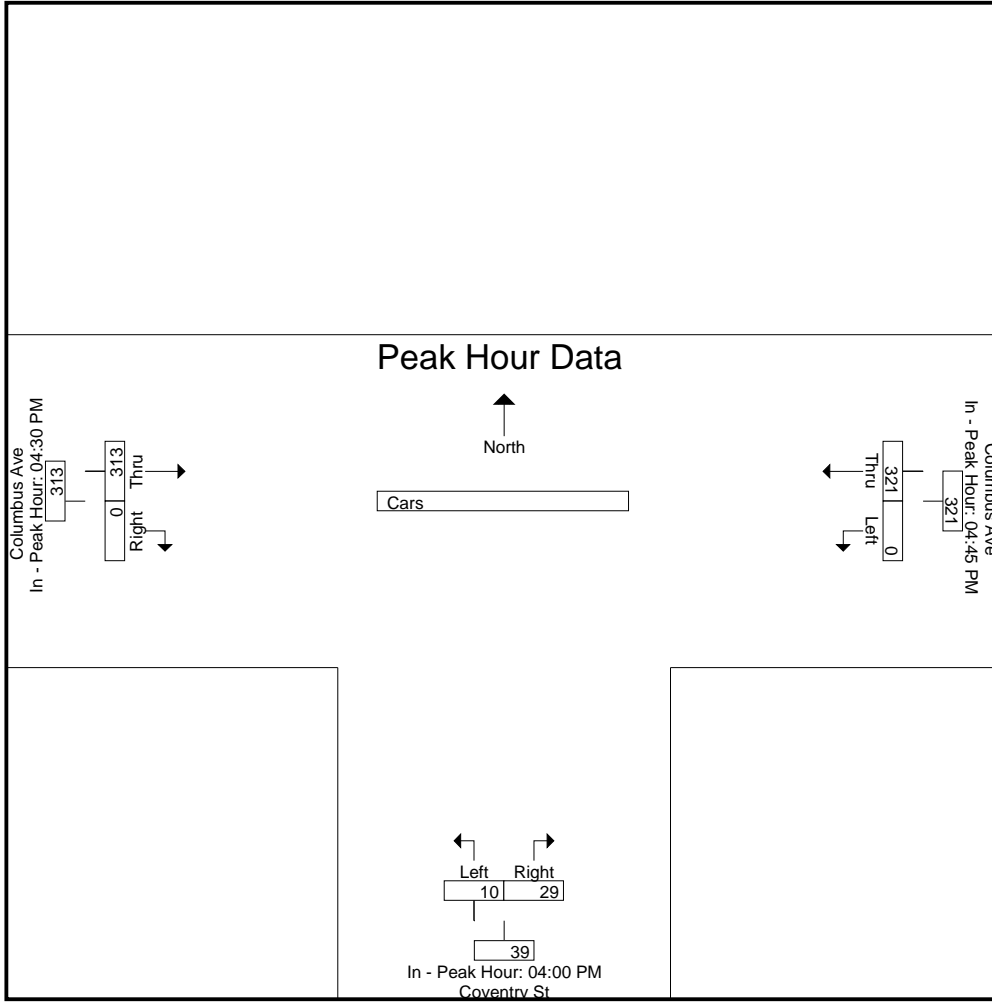
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM			04:00 PM			04:30 PM		
+0 mins.	0	63	63	3	10	13	61	0	61
+15 mins.	0	83	83	2	7	9	76	0	76
+30 mins.	0	100	100	1	6	7	89	0	89
+45 mins.	0	75	75	4	6	10	87	0	87
Total Volume	0	321	321	10	29	39	313	0	313
% App. Total	0	100		25.6	74.4		100	0	
PHF	.000	.803	.803	.625	.725	.750	.879	.000	.879

Accurate Counts
978-664-2565

N/S Street : Coventry Street
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046002
Site Code : 11046002
Start Date : 5/13/2013
Page No : 3



Accurate Counts
978-664-2565

N/S Street : Coventry Street
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046002
Site Code : 11046002
Start Date : 5/13/2013
Page No : 1

Groups Printed- Trucks

Start Time	Columbus Ave From East		Coventry St From South		Columbus Ave From West		Int. Total
	Left	Thru	Left	Right	Thru	Right	
04:00 PM	0	0	0	0	2	0	2
04:15 PM	0	2	0	1	0	0	3
04:30 PM	0	2	0	0	0	0	2
04:45 PM	0	0	0	0	1	0	1
Total	0	4	0	1	3	0	8
05:00 PM	0	0	0	0	0	0	0
05:15 PM	0	1	0	0	0	0	1
05:30 PM	0	1	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0
Total	0	2	0	0	0	0	2
Grand Total	0	6	0	1	3	0	10
Apprch %	0	100	0	100	100	0	
Total %	0	60	0	10	30	0	

Start Time	Columbus Ave From East			Coventry St From South			Columbus Ave From West			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	2	0	2	2
04:15 PM	0	2	2	0	1	1	0	0	0	3
04:30 PM	0	2	2	0	0	0	0	0	0	2
04:45 PM	0	0	0	0	0	0	1	0	1	1
Total Volume	0	4	4	0	1	1	3	0	3	8
% App. Total	0	100		0	100		100	0		
PHF	.000	.500	.500	.000	.250	.250	.375	.000	.375	.667

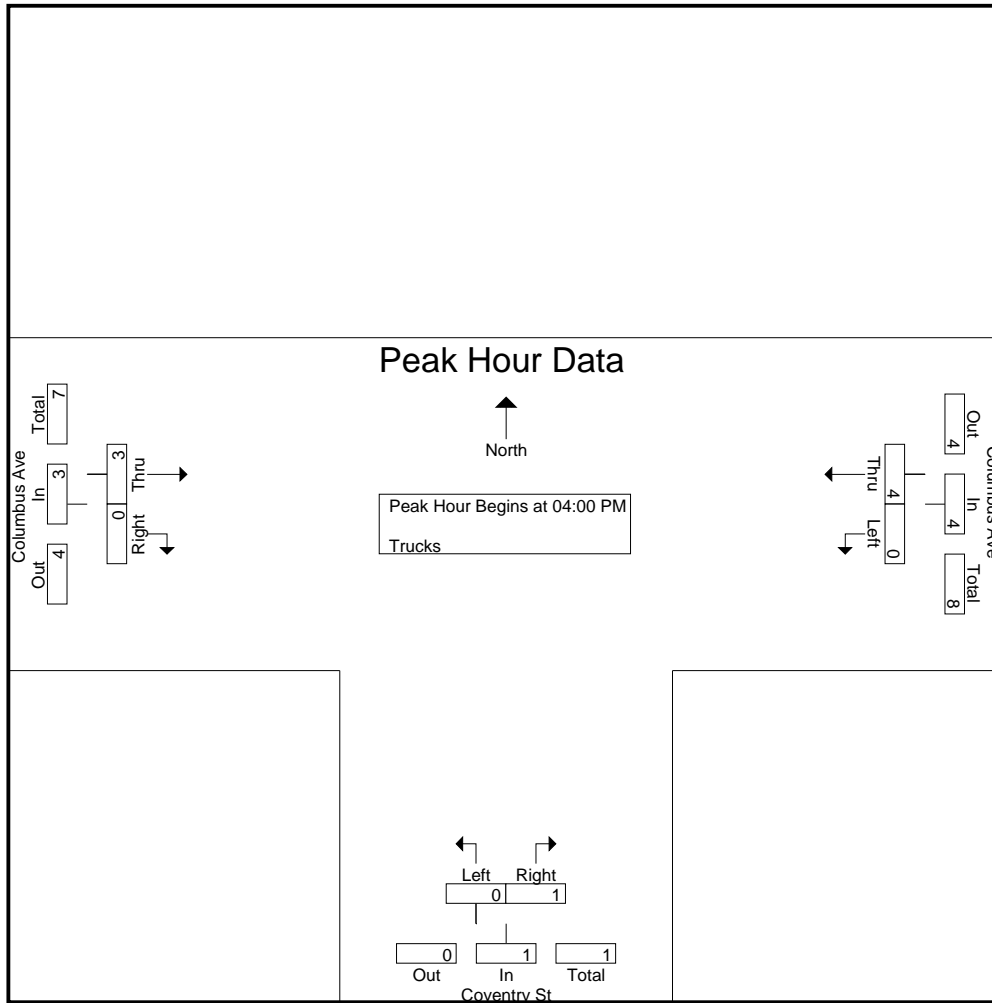
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:00 PM

Accurate Counts
978-664-2565

N/S Street : Coventry Street
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046002
Site Code : 11046002
Start Date : 5/13/2013
Page No : 2



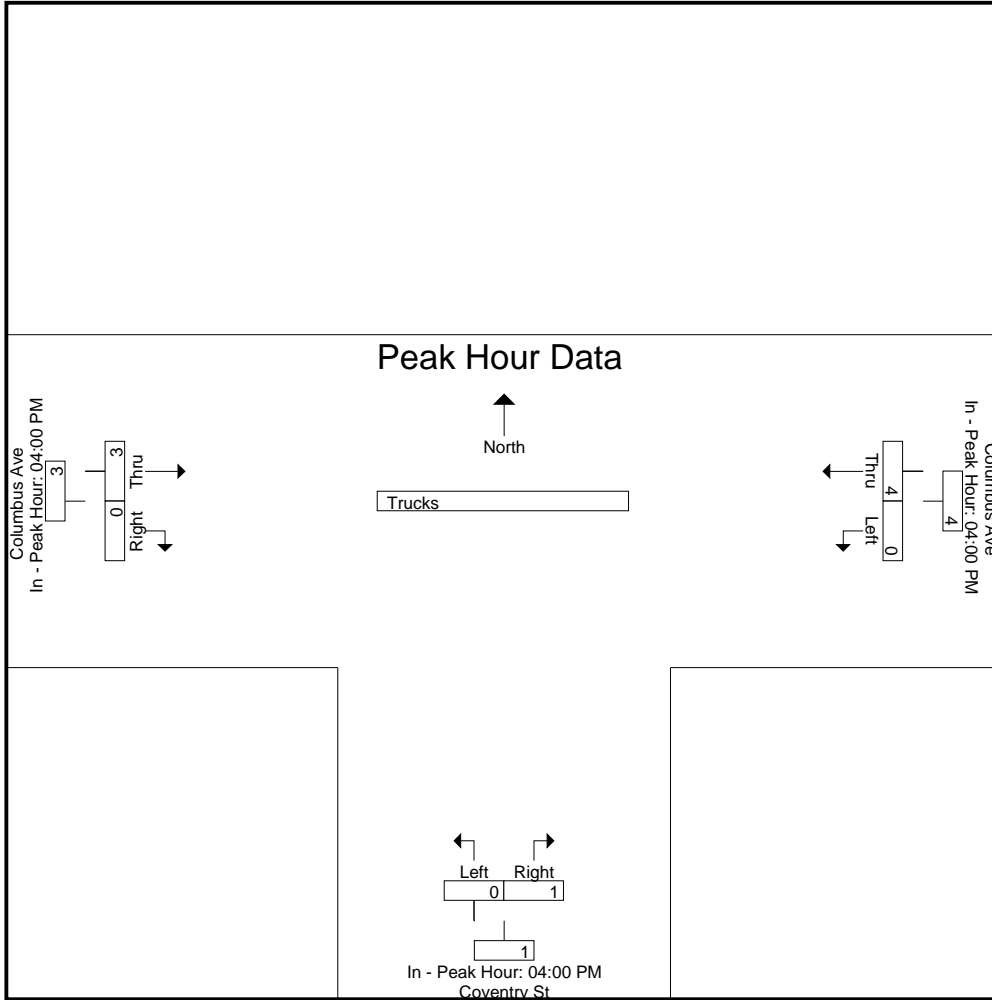
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	0	0	0	0	0	0	2	0	2
+15 mins.	0	2	2	0	1	1	0	0	0
+30 mins.	0	2	2	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	1	0	1
Total Volume	0	4	4	0	1	1	3	0	3
% App. Total	0	100		0	100		100	0	
PHF	.000	.500	.500	.000	.250	.250	.375	.000	.375

Accurate Counts
978-664-2565

N/S Street : Coventry Street
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046002
Site Code : 11046002
Start Date : 5/13/2013
Page No : 3



Accurate Counts

978-664-2565

N/S Street : Coventry Street
 E/W Street: Columbus Avenue
 City/State : Boston, MA
 Weather : Clear

File Name : 11046002
 Site Code : 11046002
 Start Date : 5/13/2013
 Page No : 1

Groups Printed- Bikes Peds

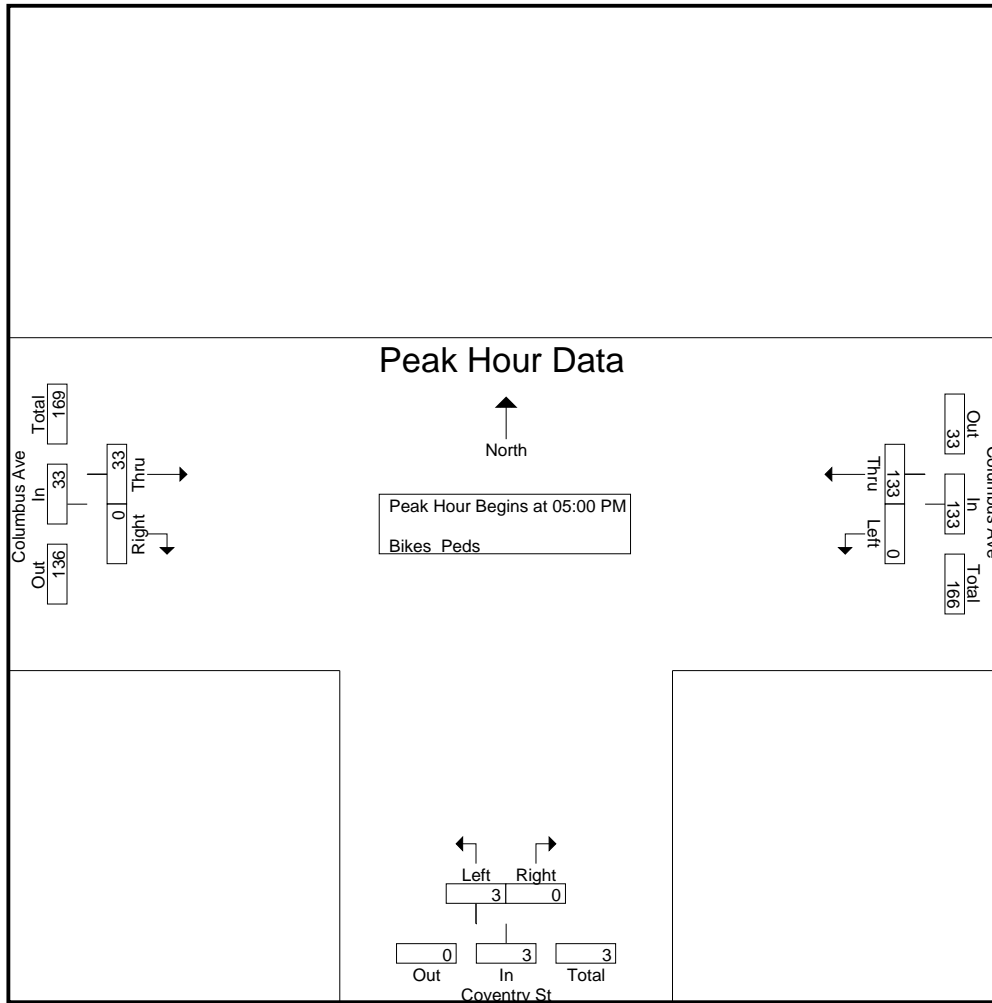
Start Time	Columbus Ave From East			Coventry St From South			Columbus Ave From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds			
04:00 PM	0	10	5	0	0	20	8	0	0	25	18	43
04:15 PM	0	14	4	0	1	12	3	0	0	16	18	34
04:30 PM	0	16	7	0	0	17	3	0	1	25	19	44
04:45 PM	0	17	6	0	0	18	6	0	1	25	23	48
Total	0	57	22	0	1	67	20	0	2	91	78	169
05:00 PM	0	18	11	3	0	33	10	0	4	48	31	79
05:15 PM	0	32	4	0	0	7	8	0	1	12	40	52
05:30 PM	0	47	14	0	0	22	8	0	1	37	55	92
05:45 PM	0	36	9	0	0	16	7	0	0	25	43	68
Total	0	133	38	3	0	78	33	0	6	122	169	291
Grand Total	0	190	60	3	1	145	53	0	8	213	247	460
Apprch %	0	100		75	25		100	0				
Total %	0	76.9		1.2	0.4		21.5	0		46.3	53.7	

Start Time	Columbus Ave From East			Coventry St From South			Columbus Ave From West			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	0	18	18	3	0	3	10	0	10	31
05:15 PM	0	32	32	0	0	0	8	0	8	40
05:30 PM	0	47	47	0	0	0	8	0	8	55
05:45 PM	0	36	36	0	0	0	7	0	7	43
Total Volume	0	133	133	3	0	3	33	0	33	169
% App. Total	0	100		100	0		100	0		
PHF	.000	.707	.707	.250	.000	.250	.825	.000	.825	.768

Accurate Counts
978-664-2565

N/S Street : Coventry Street
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

File Name : 11046002
Site Code : 11046002
Start Date : 5/13/2013
Page No : 2



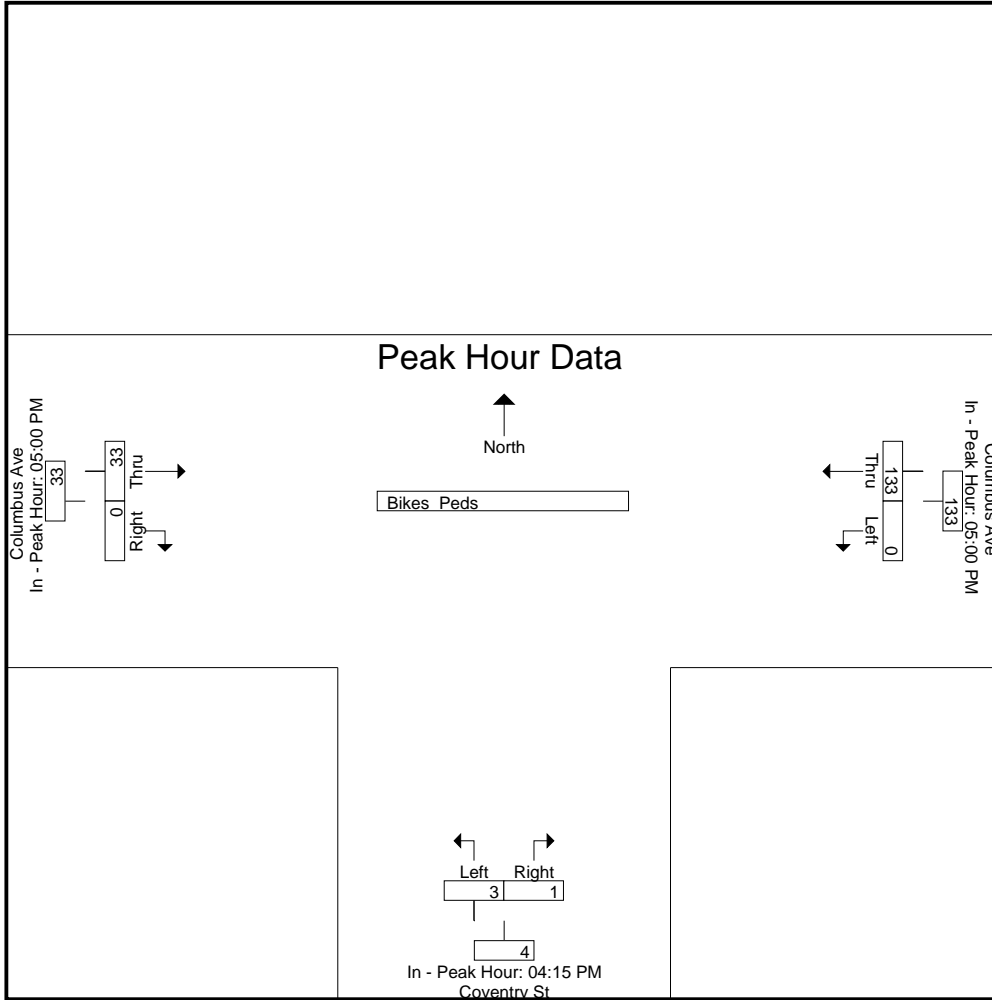
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM		04:15 PM			05:00 PM			
+0 mins.	0	18	18	0	1	1	0	10	
+15 mins.	0	32	32	0	0	0	8	8	
+30 mins.	0	47	47	0	0	0	8	8	
+45 mins.	0	36	36	3	0	3	7	7	
Total Volume	0	133	133	3	1	4	33	33	
% App. Total	0	100		75	25		100	0	
PHF	.000	.707	.707	.250	.250	.333	.825	.000	.825

Accurate Counts
978-664-2565

N/S Street : Coventry Street
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Clear

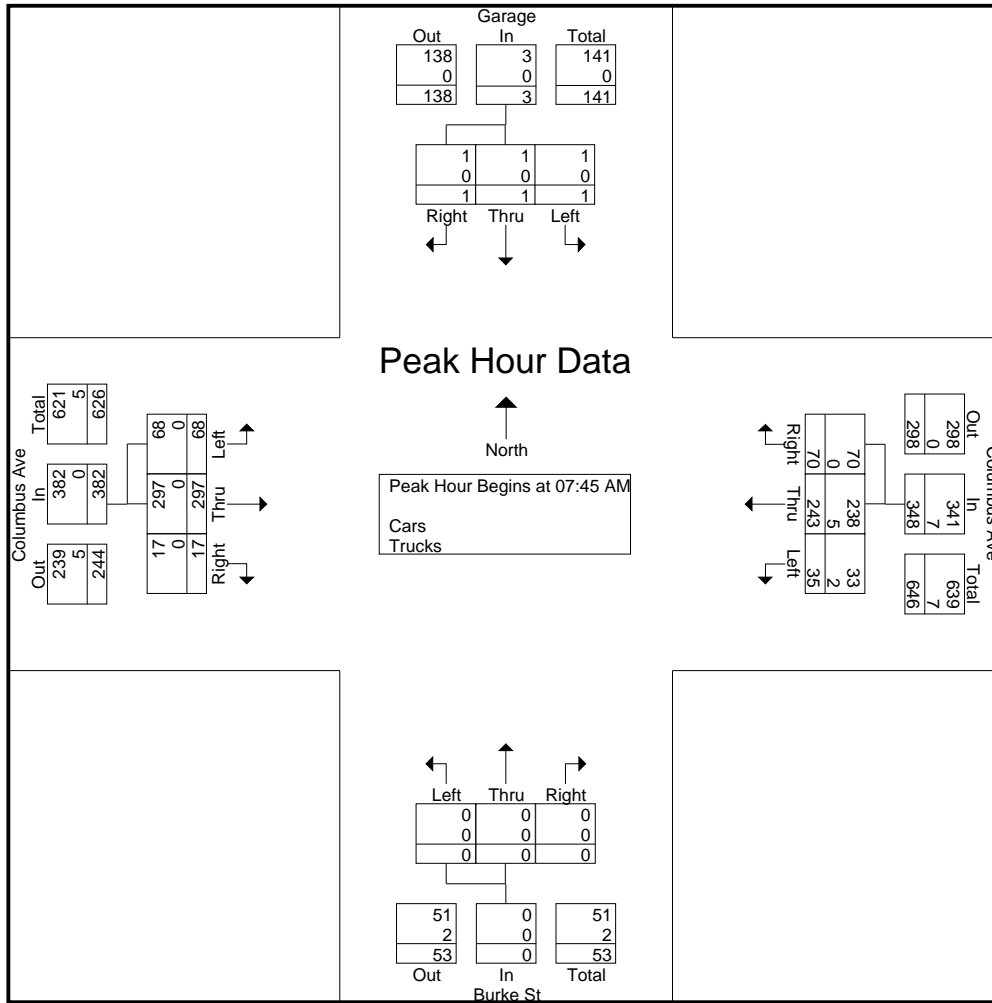
File Name : 11046002
Site Code : 11046002
Start Date : 5/13/2013
Page No : 3



Accurate Counts
978-664-2565

N/S Street : Garage / Burke Street
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Cloudy

File Name : 11046001
Site Code : 11046001
Start Date : 4/10/2013
Page No : 2



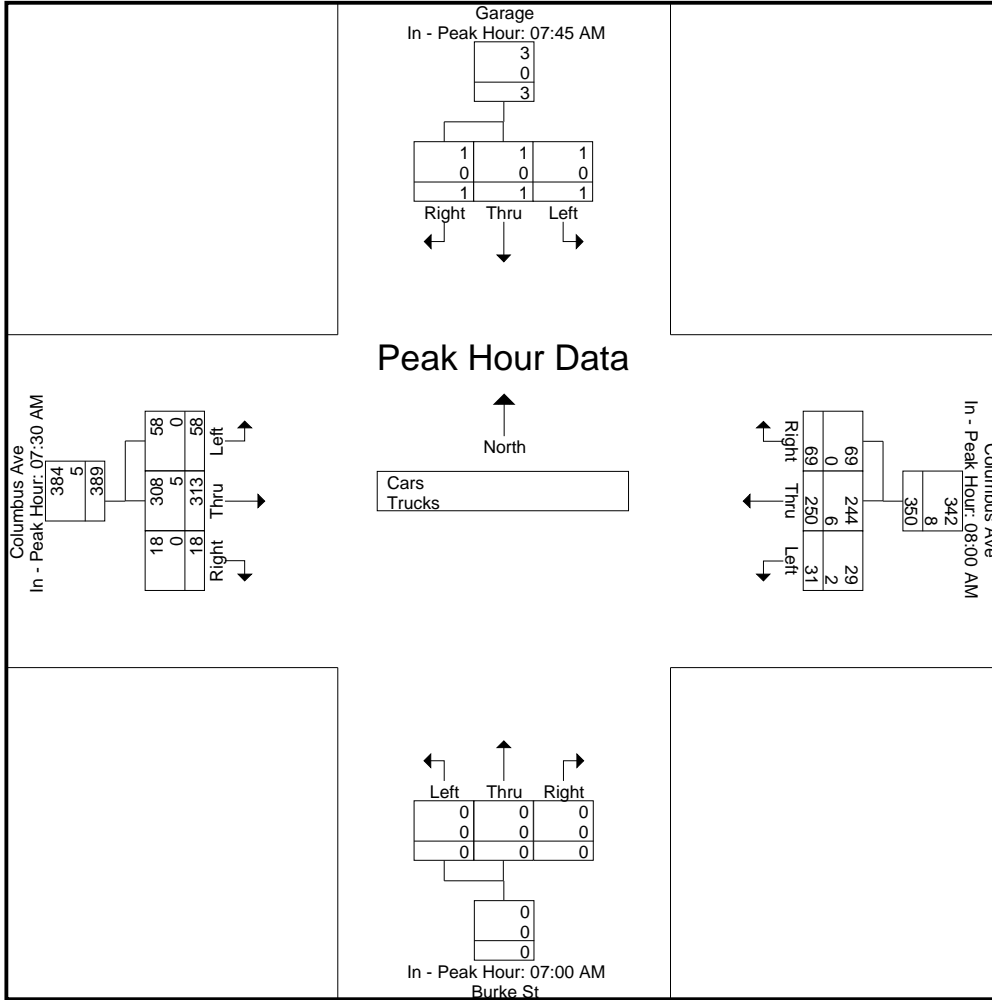
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				08:00 AM				07:00 AM				07:30 AM			
+0 mins.	0	1	0	1	12	69	15	96	0	0	0	0	8	85	5	98
+15 mins.	0	0	0	0	7	46	14	67	0	0	0	0	10	87	6	103
+30 mins.	1	0	0	1	6	67	19	92	0	0	0	0	16	77	1	94
+45 mins.	0	0	1	1	6	68	21	95	0	0	0	0	24	64	6	94
Total Volume	1	1	1	3	31	250	69	350	0	0	0	0	58	313	18	389
% App. Total	33.3	33.3	33.3		8.9	71.4	19.7		0	0	0	0	14.9	80.5	4.6	
PHF	.250	.250	.250	.750	.646	.906	.821	.911	.000	.000	.000	.000	.604	.899	.750	.944
Cars	1	1	1	3	29	244	69	342	0	0	0	0	58	308	18	384
% Cars	100	100	100	100	93.5	97.6	100	97.7	0	0	0	0	100	98.4	100	98.7
Trucks	0	0	0	0	2	6	0	8	0	0	0	0	0	5	0	5
% Trucks	0	0	0	0	6.5	2.4	0	2.3	0	0	0	0	0	1.6	0	1.3

Accurate Counts
978-664-2565

N/S Street : Garage / Burke Street
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Cloudy

File Name : 11046001
Site Code : 11046001
Start Date : 4/10/2013
Page No : 3



Accurate Counts

978-664-2565

N/S Street : Garage / Burke Street
 E/W Street: Columbus Avenue
 City/State : Boston, MA
 Weather : Cloudy

File Name : 11046001
 Site Code : 11046001
 Start Date : 4/10/2013
 Page No : 1

Groups Printed- Cars

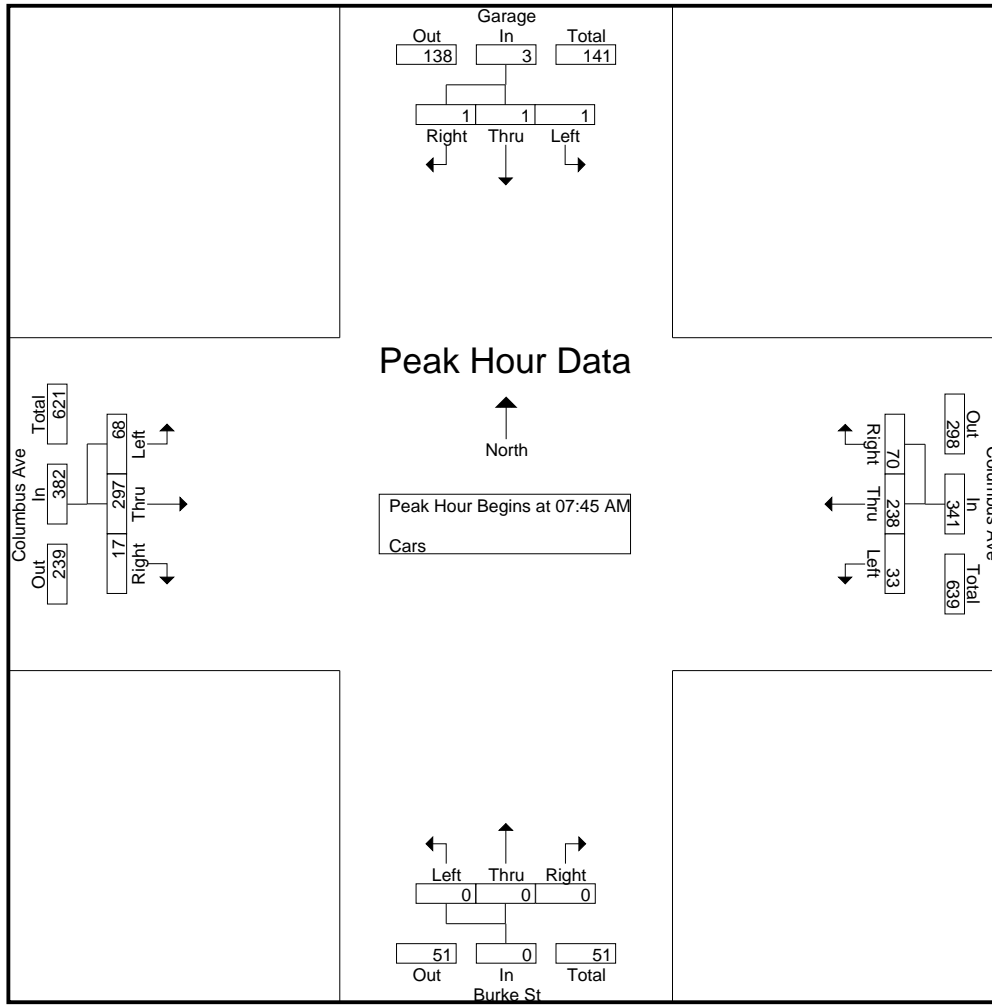
Start Time	Garage From North			Columbus Ave From East			Burke St From South			Columbus Ave From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:00 AM	1	0	0	3	51	11	0	0	0	8	60	1	135
07:15 AM	0	0	0	6	43	6	0	0	0	4	61	4	124
07:30 AM	0	0	0	2	60	11	0	0	0	8	80	5	166
07:45 AM	0	1	0	10	60	22	0	0	0	10	87	6	196
Total	1	1	0	21	214	50	0	0	0	30	288	16	621
08:00 AM	0	0	0	12	68	15	0	0	0	16	77	1	189
08:15 AM	1	0	0	7	45	14	0	0	0	24	64	6	161
08:30 AM	0	0	1	4	65	19	0	0	0	18	69	4	180
08:45 AM	0	0	0	6	66	21	0	0	0	17	56	7	173
Total	1	0	1	29	244	69	0	0	0	75	266	18	703
Grand Total	2	1	1	50	458	119	0	0	0	105	554	34	1324
Apprch %	50	25	25	8	73	19	0	0	0	15.2	79.9	4.9	
Total %	0.2	0.1	0.1	3.8	34.6	9	0	0	0	7.9	41.8	2.6	

Start Time	Garage From North				Columbus Ave From East				Burke St From South				Columbus Ave From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	1	0	1	10	60	22	92	0	0	0	0	10	87	6	103	196
08:00 AM	0	0	0	0	12	68	15	95	0	0	0	0	16	77	1	94	189
08:15 AM	1	0	0	1	7	45	14	66	0	0	0	0	24	64	6	94	161
08:30 AM	0	0	1	1	4	65	19	88	0	0	0	0	18	69	4	91	180
Total Volume	1	1	1	3	33	238	70	341	0	0	0	0	68	297	17	382	726
% App. Total	33.3	33.3	33.3		9.7	69.8	20.5		0	0	0		17.8	77.7	4.5		
PHF	.250	.250	.250	.750	.688	.875	.795	.897	.000	.000	.000	.000	.708	.853	.708	.927	.926

Accurate Counts
978-664-2565

N/S Street : Garage / Burke Street
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Cloudy

File Name : 11046001
Site Code : 11046001
Start Date : 4/10/2013
Page No : 2



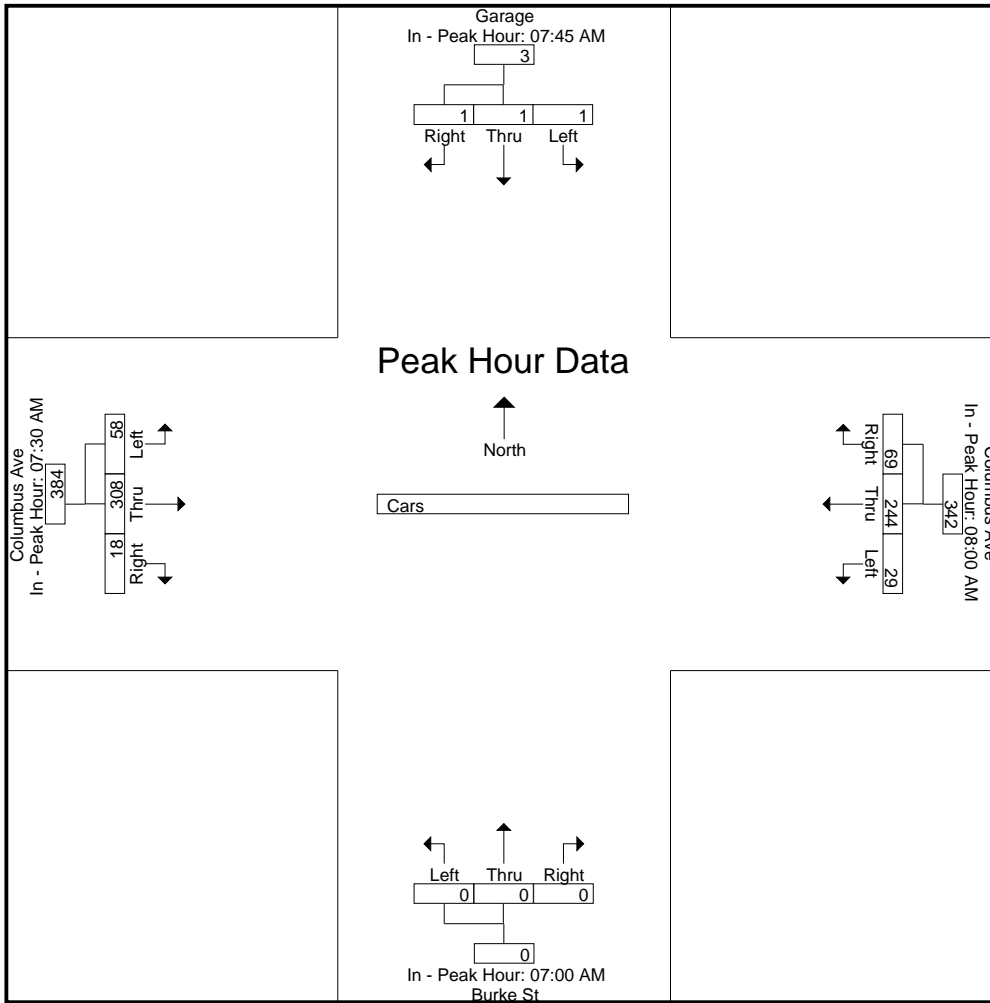
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				08:00 AM				07:00 AM				07:30 AM			
+0 mins.	0	1	0	1	12	68	15	95	0	0	0	0	8	80	5	93
+15 mins.	0	0	0	0	7	45	14	66	0	0	0	0	10	87	6	103
+30 mins.	1	0	0	1	4	65	19	88	0	0	0	0	16	77	1	94
+45 mins.	0	0	1	1	6	66	21	93	0	0	0	0	24	64	6	94
Total Volume	1	1	1	3	29	244	69	342	0	0	0	0	58	308	18	384
% App. Total	33.3	33.3	33.3		8.5	71.3	20.2		0	0	0		15.1	80.2	4.7	
PHF	.250	.250	.250	.750	.604	.897	.821	.900	.000	.000	.000	.000	.604	.885	.750	.932

Accurate Counts
978-664-2565

N/S Street : Garage / Burke Street
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Cloudy

File Name : 11046001
Site Code : 11046001
Start Date : 4/10/2013
Page No : 3



Accurate Counts

978-664-2565

N/S Street : Garage / Burke Street
 E/W Street: Columbus Avenue
 City/State : Boston, MA
 Weather : Cloudy

File Name : 11046001
 Site Code : 11046001
 Start Date : 4/10/2013
 Page No : 1

Groups Printed- Trucks

Start Time	Garage From North			Columbus Ave From East			Burke St From South			Columbus Ave 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	3	0	3
07:15 AM	0	0	0	0	2	0	0	0	0	0	5	0	7
07:30 AM	0	0	0	0	1	0	0	0	0	0	5	0	6
07:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
Total	0	0	0	0	4	0	0	0	0	0	13	0	17
08:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
08:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
08:30 AM	0	0	0	2	2	0	0	0	0	0	0	0	4
08:45 AM	0	0	0	0	2	0	0	0	0	0	2	0	4
Total	0	0	0	2	6	0	0	0	0	0	2	0	10
Grand Total	0	0	0	2	10	0	0	0	0	0	15	0	27
Apprch %	0	0	0	16.7	83.3	0	0	0	0	0	100	0	
Total %	0	0	0	7.4	37	0	0	0	0	0	55.6	0	

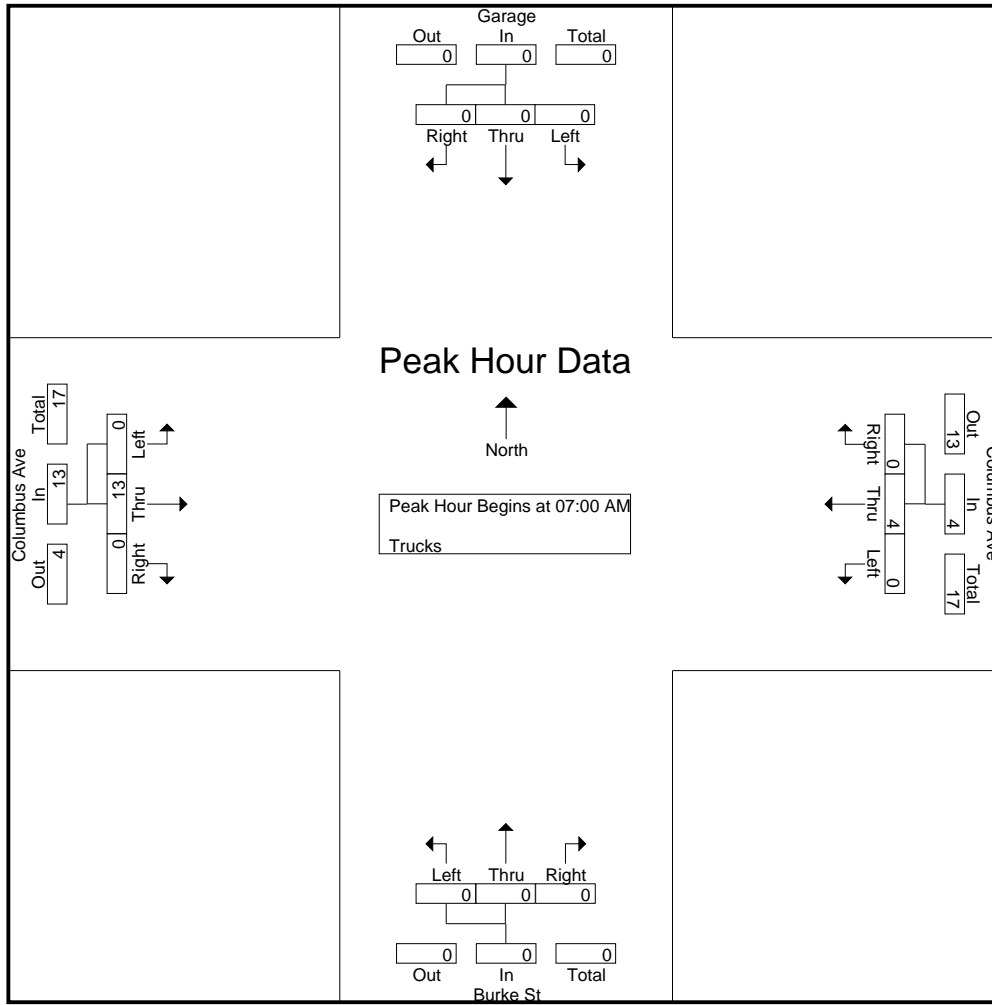
Start Time	Garage From North				Columbus Ave From East				Burke St From South				Columbus Ave From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
07:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	5	0	5
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	5	0	5
07:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	4	0	4	0	0	0	0	0	0	13	0	13
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	0	100	0	0
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.000	.000	.650	.000	.650

Accurate Counts

978-664-2565

N/S Street : Garage / Burke Street
 E/W Street: Columbus Avenue
 City/State : Boston, MA
 Weather : Cloudy

File Name : 11046001
 Site Code : 11046001
 Start Date : 4/10/2013
 Page No : 2



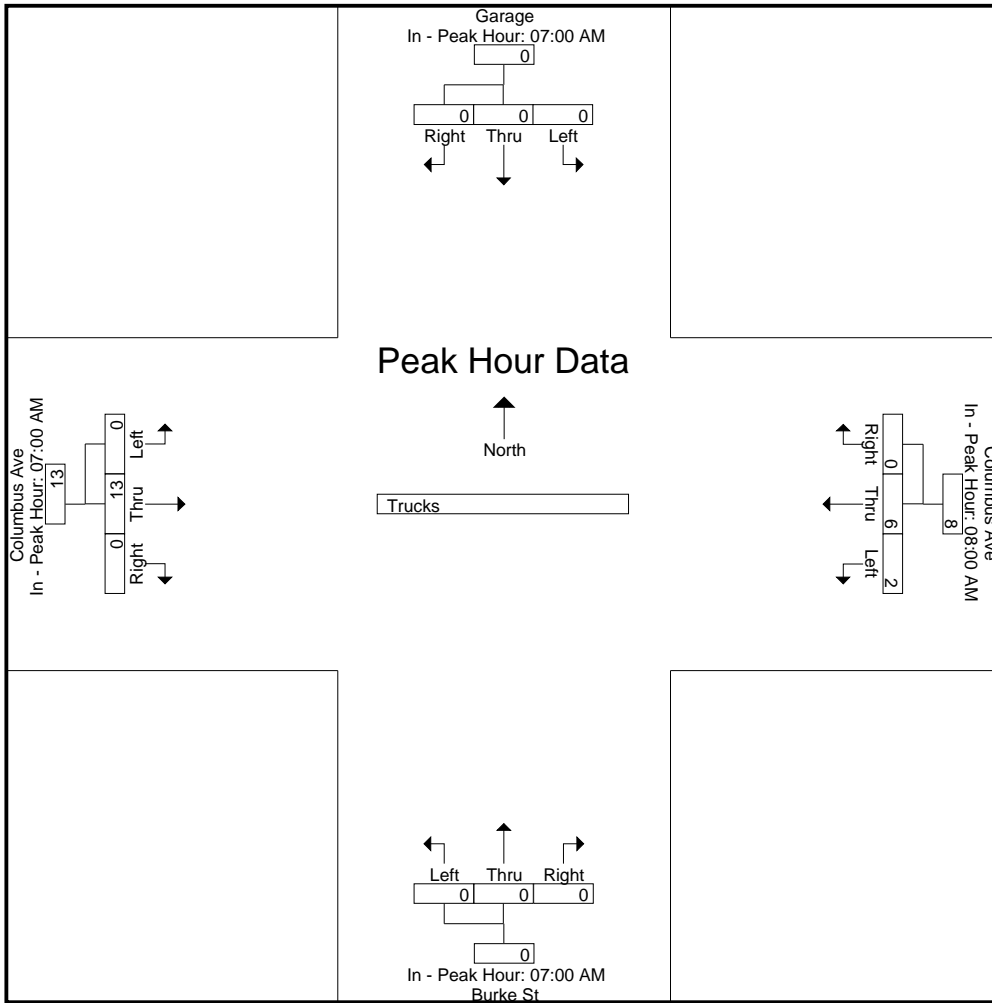
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:00 AM				08:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	5	0	5
+30 mins.	0	0	0	0	2	2	0	4	0	0	0	0	0	5	0	5
+45 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	2	6	0	8	0	0	0	0	0	13	0	13
% App. Total	0	0	0	0	25	75	0	0	0	0	0	0	0	100	0	0
PHF	.000	.000	.000	.000	.250	.750	.000	.500	.000	.000	.000	.000	.000	.650	.000	.650

Accurate Counts
978-664-2565

N/S Street : Garage / Burke Street
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Cloudy

File Name : 11046001
Site Code : 11046001
Start Date : 4/10/2013
Page No : 3



Accurate Counts
978-664-2565

N/S Street : Garage / Burke Street
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Cloudy

File Name : 11046001
Site Code : 11046001
Start Date : 4/10/2013
Page No : 1

Groups Printed- Bikes Peds

Start Time	Garage From North				Columbus Ave From East				Burke St From South				Columbus Ave 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	12	0	4	0	2	0	0	0	12	0	5	1	5	31	10	41
07:15 AM	0	0	1	13	1	2	0	2	0	0	0	19	0	8	1	7	41	13	54
07:30 AM	0	0	0	25	0	4	0	1	0	0	0	10	0	17	0	10	46	21	67
07:45 AM	0	0	0	42	0	1	1	1	0	0	0	18	0	23	0	19	80	25	105
Total	0	0	1	92	1	11	1	6	0	0	0	59	0	53	2	41	198	69	267
08:00 AM	1	0	0	36	0	3	1	2	0	0	0	34	0	18	0	17	89	23	112
08:15 AM	0	0	0	6	0	2	0	2	0	0	0	23	0	29	0	21	52	31	83
08:30 AM	0	0	0	18	0	3	0	3	0	0	0	35	1	30	2	21	77	36	113
08:45 AM	0	1	0	21	0	5	0	2	0	0	0	35	0	35	0	24	82	41	123
Total	1	1	0	81	0	13	1	9	0	0	0	127	1	112	2	83	300	131	431
Grand Total	1	1	1	173	1	24	2	15	0	0	0	186	1	165	4	124	498	200	698
Apprch %	33.3	33.3	33.3		3.7	88.9	7.4		0	0	0		0.6	97.1	2.4				
Total %	0.5	0.5	0.5		0.5	12	1		0	0	0		0.5	82.5	2		71.3	28.7	

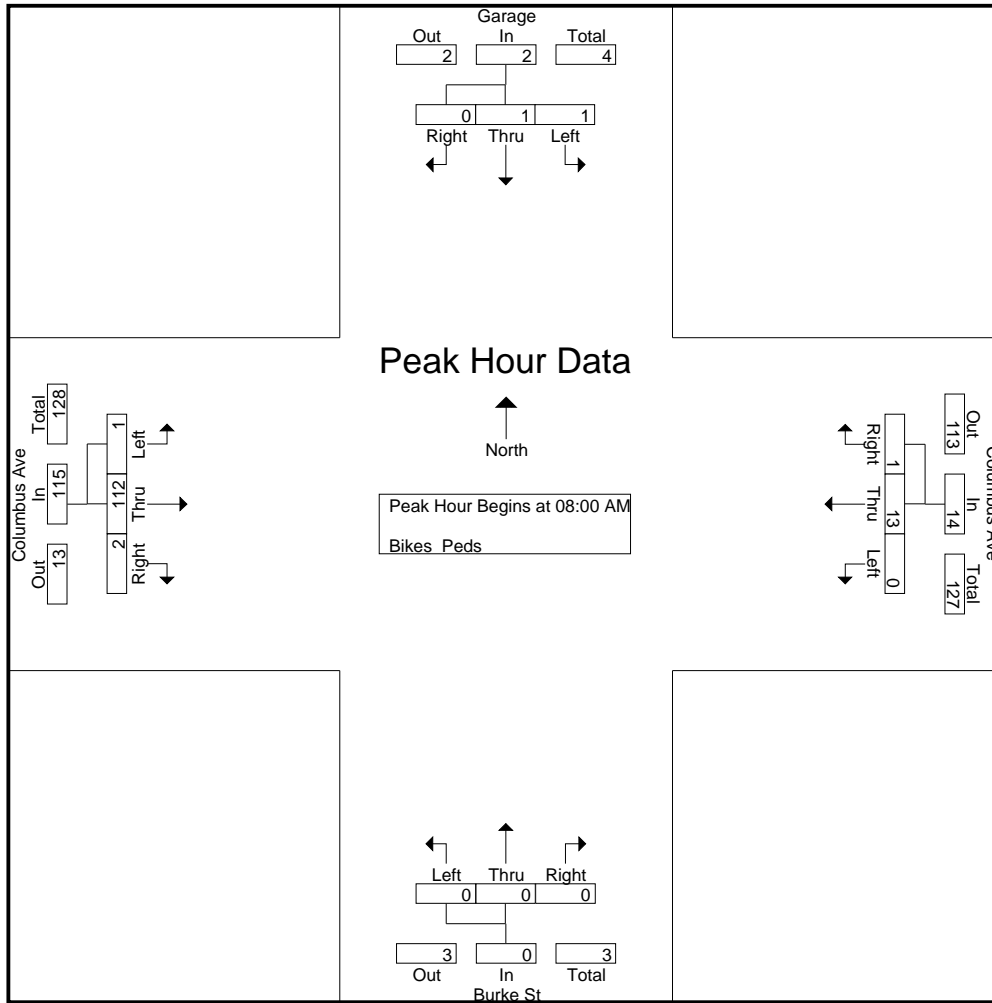
Start Time	Garage From North				Columbus Ave From East				Burke St From South				Columbus Ave From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	1	0	0	1	0	3	1	4	0	0	0	0	0	18	0	18	23
08:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	29	0	29	31
08:30 AM	0	0	0	0	0	3	0	3	0	0	0	0	1	30	2	33	36
08:45 AM	0	1	0	1	0	5	0	5	0	0	0	0	0	35	0	35	41
Total Volume	1	1	0	2	0	13	1	14	0	0	0	0	1	112	2	115	131
% App. Total	50	50	0		0	92.9	7.1		0	0	0		0.9	97.4	1.7		
PHF	.250	.250	.000	.500	.000	.650	.250	.700	.000	.000	.000	.000	.250	.800	.250	.821	.799

Accurate Counts

978-664-2565

N/S Street : Garage / Burke Street
 E/W Street: Columbus Avenue
 City/State : Boston, MA
 Weather : Cloudy

File Name : 11046001
 Site Code : 11046001
 Start Date : 4/10/2013
 Page No : 2



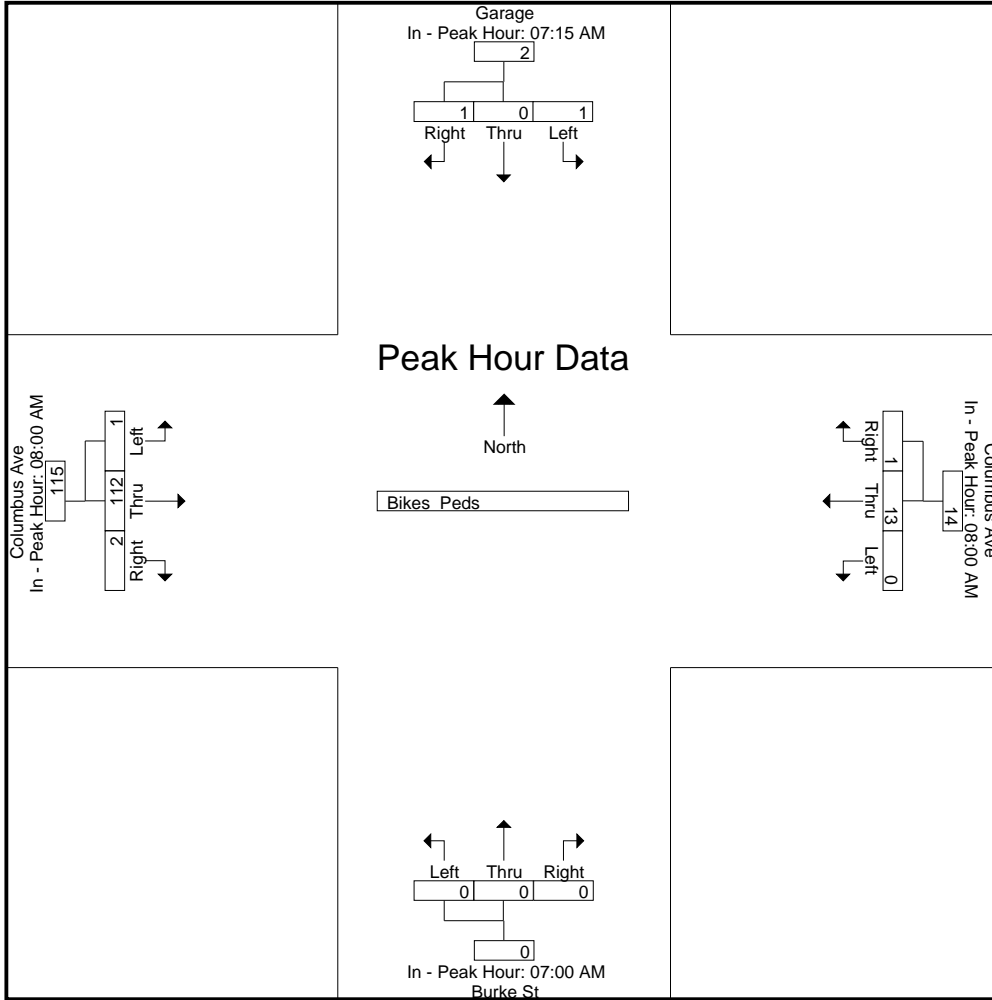
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				08:00 AM				07:00 AM				08:00 AM			
+0 mins.	0	0	1	1	0	3	1	4	0	0	0	0	0	18	0	18
+15 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	29	0	29
+30 mins.	0	0	0	0	0	3	0	3	0	0	0	0	1	30	2	33
+45 mins.	1	0	0	1	0	5	0	5	0	0	0	0	0	35	0	35
Total Volume	1	0	1	2	0	13	1	14	0	0	0	0	1	112	2	115
% App. Total	50	0	50		0	92.9	7.1		0	0	0		0.9	97.4	1.7	
PHF	.250	.000	.250	.500	.000	.650	.250	.700	.000	.000	.000	.000	.250	.800	.250	.821

Accurate Counts
978-664-2565

N/S Street : Garage / Burke Street
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Cloudy

File Name : 11046001
Site Code : 11046001
Start Date : 4/10/2013
Page No : 3



Accurate Counts
978-664-2565

N/S Street : Garage / Burke Street
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Cloudy

File Name : 11046001
Site Code : 11046001
Start Date : 4/10/2013
Page No : 1

Groups Printed- Cars - Trucks

Start Time	Garage From North			Columbus Ave From East			Burke St From South			Columbus Ave From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
04:00 PM	0	0	1	2	79	5	0	0	0	1	93	3	184
04:15 PM	0	0	1	4	83	7	0	0	0	2	89	4	190
04:30 PM	0	0	1	2	84	5	0	0	0	2	106	3	203
04:45 PM	0	0	1	5	91	4	0	0	0	8	108	5	222
Total	0	0	4	13	337	21	0	0	0	13	396	15	799
05:00 PM	0	0	0	3	93	6	0	0	0	4	106	3	215
05:15 PM	0	0	0	4	110	3	0	0	0	7	76	3	203
05:30 PM	0	0	0	5	65	3	0	0	0	0	71	8	152
05:45 PM	0	0	0	1	83	4	0	0	0	1	71	5	165
Total	0	0	0	13	351	16	0	0	0	12	324	19	735
Grand Total	0	0	4	26	688	37	0	0	0	25	720	34	1534
Apprch %	0	0	100	3.5	91.6	4.9	0	0	0	3.2	92.4	4.4	
Total %	0	0	0.3	1.7	44.9	2.4	0	0	0	1.6	46.9	2.2	
Cars	0	0	4	26	678	37	0	0	0	25	715	34	1519
% Cars	0	0	100	100	98.5	100	0	0	0	100	99.3	100	99
Trucks	0	0	0	0	10	0	0	0	0	0	5	0	15
% Trucks	0	0	0	0	1.5	0	0	0	0	0	0.7	0	1

Start Time	Garage From North				Columbus Ave From East				Burke St From South				Columbus Ave From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:30 PM

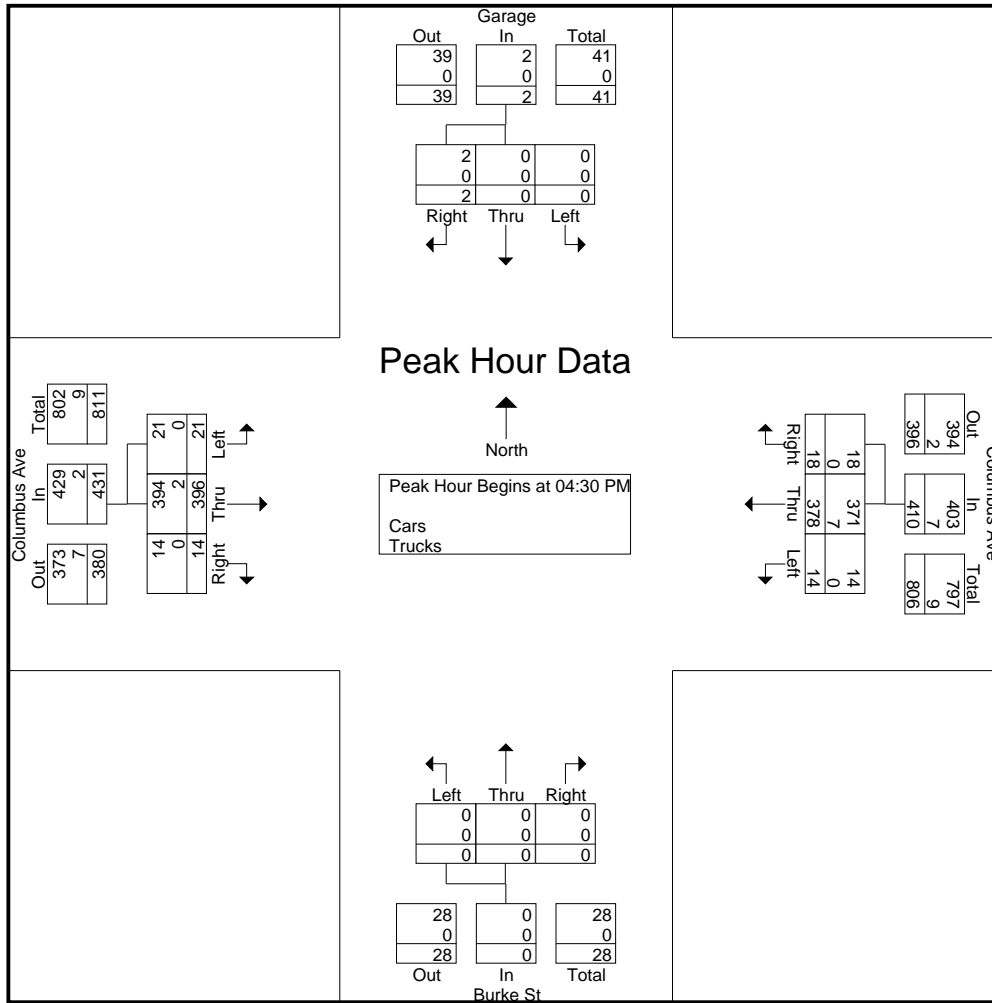
04:30 PM	0	0	1	1	2	84	5	91	0	0	0	0	2	106	3	111	203
04:45 PM	0	0	1	1	5	91	4	100	0	0	0	0	8	108	5	121	222
05:00 PM	0	0	0	0	3	93	6	102	0	0	0	0	4	106	3	113	215
05:15 PM	0	0	0	0	4	110	3	117	0	0	0	0	7	76	3	86	203
Total Volume	0	0	2	2	14	378	18	410	0	0	0	0	21	396	14	431	843
% App. Total	0	0	100	100	3.4	92.2	4.4		0	0	0		4.9	91.9	3.2		
PHF	.000	.000	.500	.500	.700	.859	.750	.876	.000	.000	.000	.000	.656	.917	.700	.890	.949
Cars	0	0	2	2	14	371	18	403	0	0	0	0	21	394	14	429	834
% Cars	0	0	100	100	100	98.1	100	98.3	0	0	0	0	100	99.5	100	99.5	98.9
Trucks	0	0	0	0	0	7	0	7	0	0	0	0	0	2	0	2	9
% Trucks	0	0	0	0	0	1.9	0	1.7	0	0	0	0	0	0.5	0	0.5	1.1

Accurate Counts

978-664-2565

N/S Street : Garage / Burke Street
 E/W Street: Columbus Avenue
 City/State : Boston, MA
 Weather : Cloudy

File Name : 11046001
 Site Code : 11046001
 Start Date : 4/10/2013
 Page No : 2



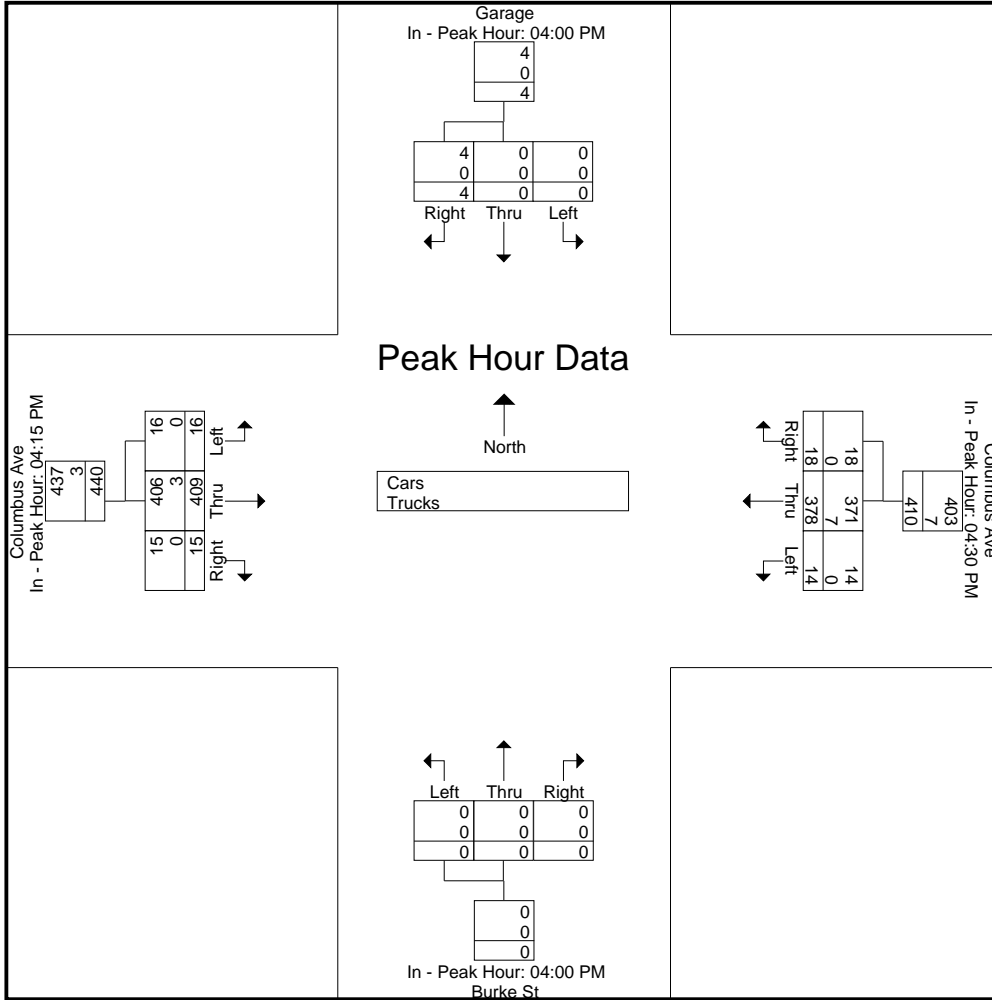
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:00 PM				04:30 PM				04:00 PM				04:15 PM			
+0 mins.	0	0	1	1	2	84	5	91	0	0	0	0	2	89	4	95
+15 mins.	0	0	1	1	5	91	4	100	0	0	0	0	2	106	3	111
+30 mins.	0	0	1	1	3	93	6	102	0	0	0	0	8	108	5	121
+45 mins.	0	0	1	1	4	110	3	117	0	0	0	0	4	106	3	113
Total Volume	0	0	4	4	14	378	18	410	0	0	0	0	16	409	15	440
% App. Total	0	0	100	100	3.4	92.2	4.4	98.3	0	0	0	0	3.6	93	3.4	99.3
PHF	.000	.000	1.000	1.000	.700	.859	.750	.876	.000	.000	.000	.000	.500	.947	.750	.909
Cars	0	0	4	4	14	371	18	403	0	0	0	0	16	406	15	437
% Cars	0	0	100	100	100	98.1	100	98.3	0	0	0	0	100	99.3	100	99.3
Trucks	0	0	0	0	0	7	0	7	0	0	0	0	0	3	0	3
% Trucks	0	0	0	0	0	1.9	0	1.7	0	0	0	0	0	0.7	0	0.7

Accurate Counts
978-664-2565

N/S Street : Garage / Burke Street
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Cloudy

File Name : 11046001
Site Code : 11046001
Start Date : 4/10/2013
Page No : 3



Accurate Counts
978-664-2565

N/S Street : Garage / Burke Street
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Cloudy

File Name : 11046001
Site Code : 11046001
Start Date : 4/10/2013
Page No : 1

Groups Printed- Cars

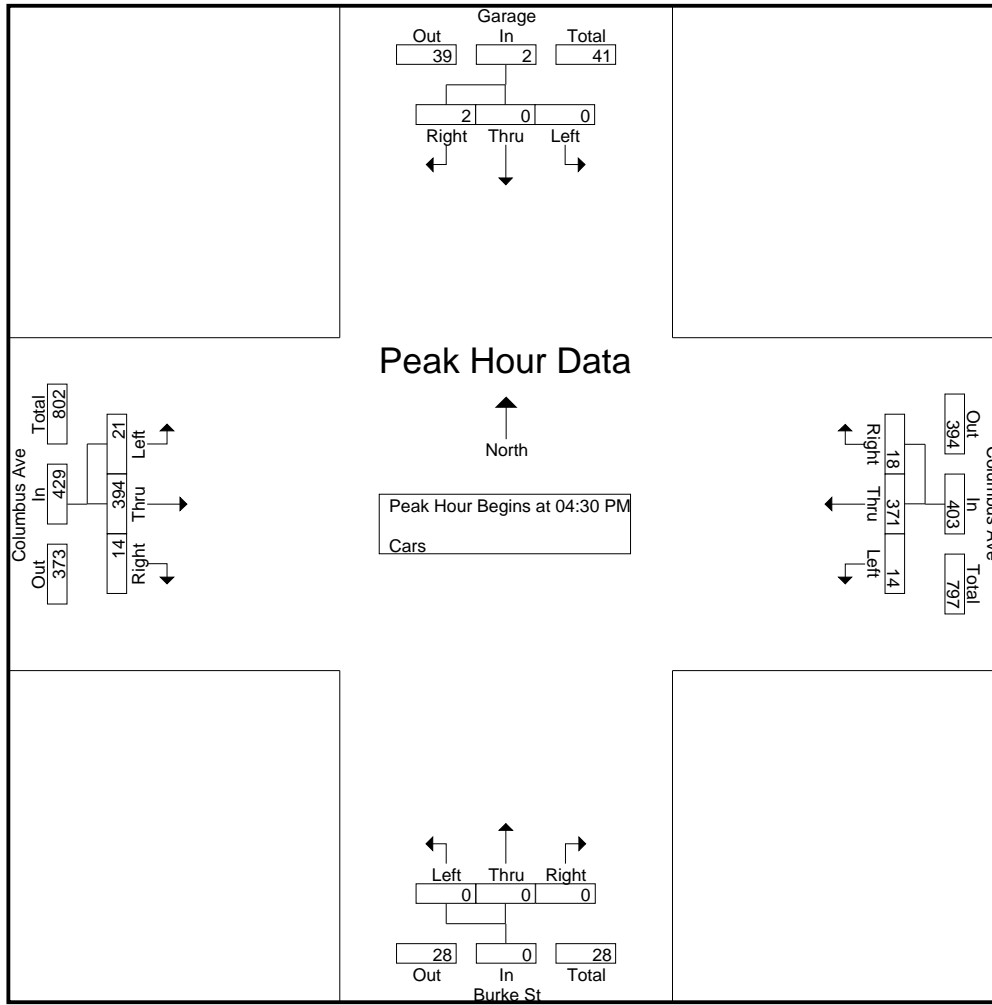
Start Time	Garage From North			Columbus Ave From East			Burke St From South			Columbus Ave From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
04:00 PM	0	0	1	2	78	5	0	0	0	1	92	3	182
04:15 PM	0	0	1	4	83	7	0	0	0	2	88	4	189
04:30 PM	0	0	1	2	80	5	0	0	0	2	104	3	197
04:45 PM	0	0	1	5	90	4	0	0	0	8	108	5	221
Total	0	0	4	13	331	21	0	0	0	13	392	15	789
05:00 PM	0	0	0	3	91	6	0	0	0	4	106	3	213
05:15 PM	0	0	0	4	110	3	0	0	0	7	76	3	203
05:30 PM	0	0	0	5	63	3	0	0	0	0	71	8	150
05:45 PM	0	0	0	1	83	4	0	0	0	1	70	5	164
Total	0	0	0	13	347	16	0	0	0	12	323	19	730
Grand Total	0	0	4	26	678	37	0	0	0	25	715	34	1519
Apprch %	0	0	100	3.5	91.5	5	0	0	0	3.2	92.4	4.4	
Total %	0	0	0.3	1.7	44.6	2.4	0	0	0	1.6	47.1	2.2	

Start Time	Garage From North				Columbus Ave From East				Burke St From South				Columbus Ave From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	1	1	2	80	5	87	0	0	0	0	2	104	3	109	197
04:45 PM	0	0	1	1	5	90	4	99	0	0	0	0	8	108	5	121	221
05:00 PM	0	0	0	0	3	91	6	100	0	0	0	0	4	106	3	113	213
05:15 PM	0	0	0	0	4	110	3	117	0	0	0	0	7	76	3	86	203
Total Volume	0	0	2	2	14	371	18	403	0	0	0	0	21	394	14	429	834
% App. Total	0	0	100		3.5	92.1	4.5		0	0	0		4.9	91.8	3.3		
PHF	.000	.000	.500	.500	.700	.843	.750	.861	.000	.000	.000	.000	.656	.912	.700	.886	.943

Accurate Counts
978-664-2565

N/S Street : Garage / Burke Street
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Cloudy

File Name : 11046001
Site Code : 11046001
Start Date : 4/10/2013
Page No : 2



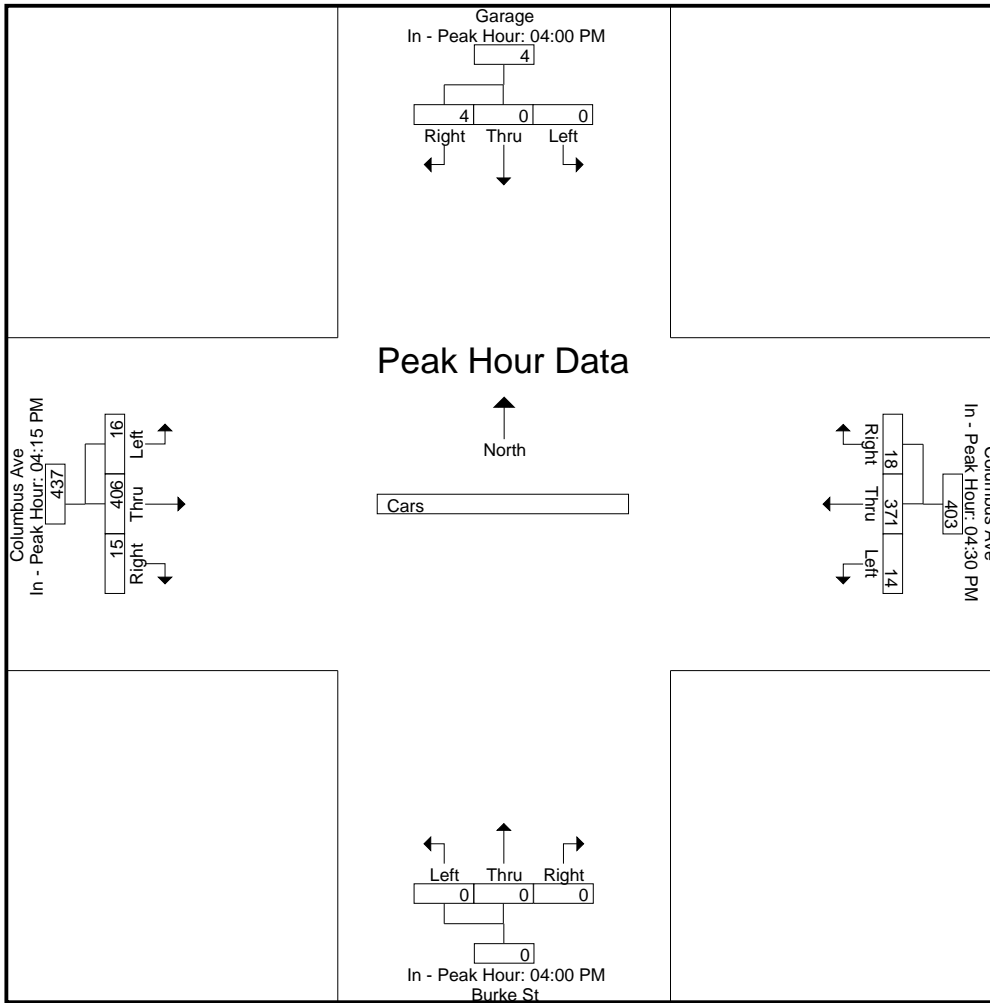
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:30 PM				04:00 PM				04:15 PM			
+0 mins.	0	0	1	1	2	80	5	87	0	0	0	0	2	88	4	94
+15 mins.	0	0	1	1	5	90	4	99	0	0	0	0	2	104	3	109
+30 mins.	0	0	1	1	3	91	6	100	0	0	0	0	8	108	5	121
+45 mins.	0	0	1	1	4	110	3	117	0	0	0	0	4	106	3	113
Total Volume	0	0	4	4	14	371	18	403	0	0	0	0	16	406	15	437
% App. Total	0	0	100		3.5	92.1	4.5		0	0	0		3.7	92.9	3.4	
PHF	.000	.000	1.000	1.000	.700	.843	.750	.861	.000	.000	.000	.000	.500	.940	.750	.903

Accurate Counts
978-664-2565

N/S Street : Garage / Burke Street
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Cloudy

File Name : 11046001
Site Code : 11046001
Start Date : 4/10/2013
Page No : 3



Accurate Counts
978-664-2565

N/S Street : Garage / Burke Street
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Cloudy

File Name : 11046001
Site Code : 11046001
Start Date : 4/10/2013
Page No : 1

Groups Printed- Trucks

Start Time	Garage From North			Columbus Ave From East			Burke St From South			Columbus Ave From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
04:00 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
04:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
04:30 PM	0	0	0	0	4	0	0	0	0	0	2	0	6
04:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
Total	0	0	0	0	6	0	0	0	0	0	4	0	10
05:00 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
05:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
Total	0	0	0	0	4	0	0	0	0	0	1	0	5
Grand Total	0	0	0	0	10	0	0	0	0	0	5	0	15
Apprch %	0	0	0	0	100	0	0	0	0	0	100	0	
Total %	0	0	0	0	66.7	0	0	0	0	0	33.3	0	

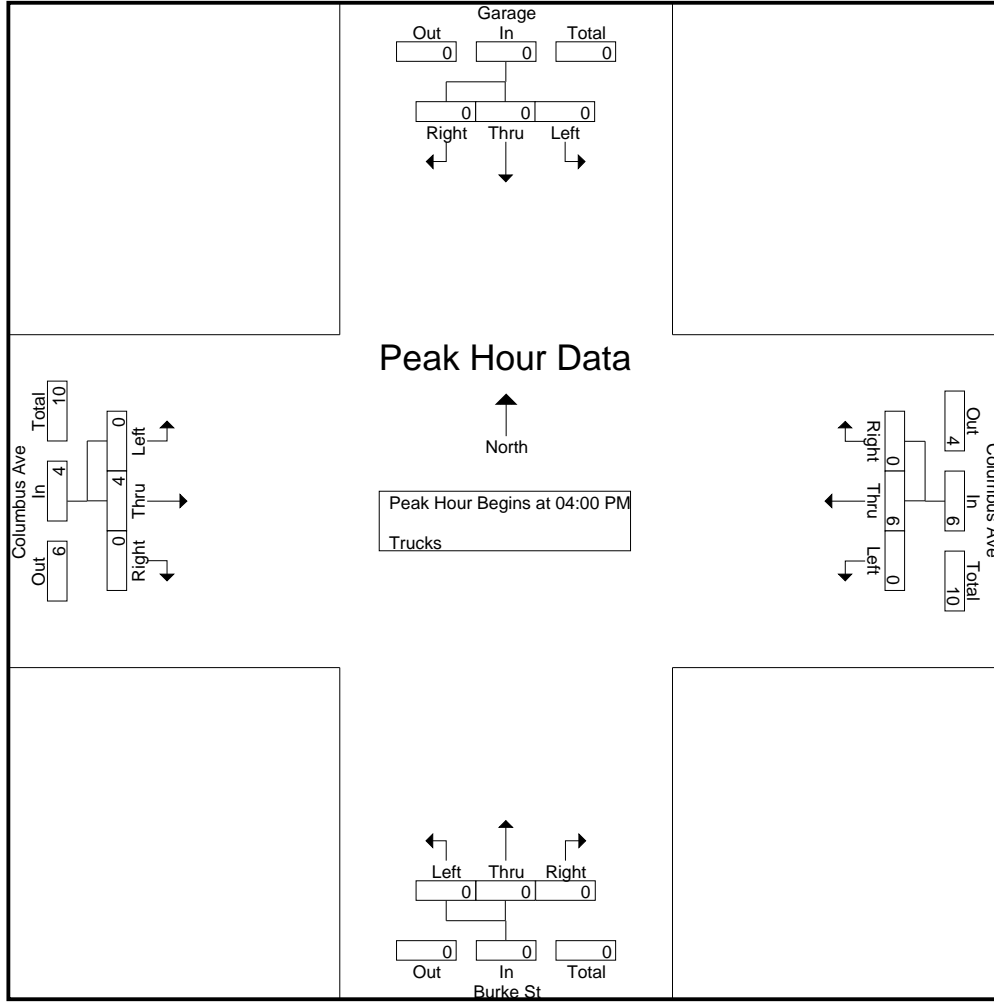
Start Time	Garage From North				Columbus Ave From East				Burke St From South				Columbus Ave From West				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 04:00 PM																		
04:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	0	1	2
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
04:30 PM	0	0	0	0	0	4	0	4	0	0	0	0	0	0	2	0	2	6
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	0	6	0	6	0	0	0	0	0	0	4	0	4	10
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	0	100	0	0	
PHF	.000	.000	.000	.000	.000	.375	.000	.375	.000	.000	.000	.000	.000	.500	.000	.500	.417	

Accurate Counts

978-664-2565

N/S Street : Garage / Burke Street
 E/W Street: Columbus Avenue
 City/State : Boston, MA
 Weather : Cloudy

File Name : 11046001
 Site Code : 11046001
 Start Date : 4/10/2013
 Page No : 2



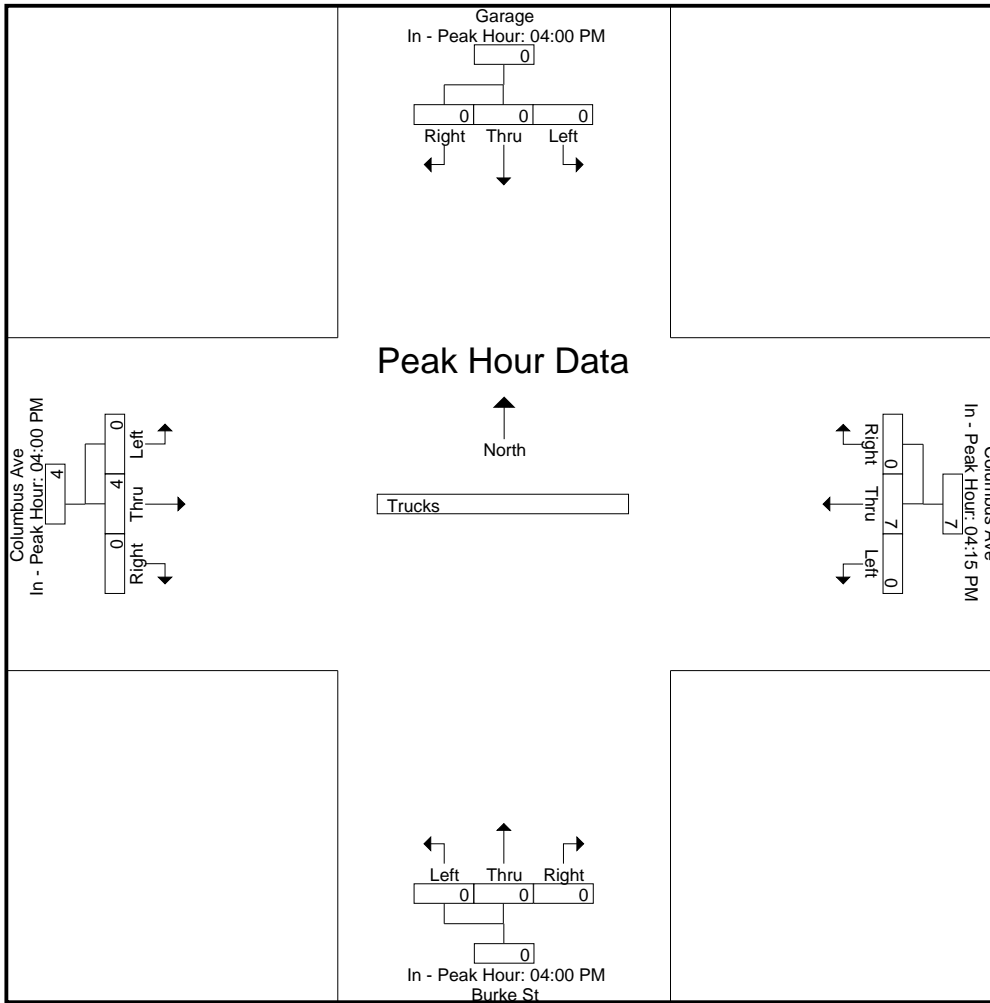
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:00 PM				04:15 PM				04:00 PM				04:00 PM			
+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	4	0	4	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2
+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	0	4	0	4
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	100	0	0
PHF	.000	.000	.000	.000	.000	.438	.000	.438	.000	.000	.000	.000	.000	.500	.000	.500

Accurate Counts
978-664-2565

N/S Street : Garage / Burke Street
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Cloudy

File Name : 11046001
Site Code : 11046001
Start Date : 4/10/2013
Page No : 3



Accurate Counts
978-664-2565

N/S Street : Garage / Burke Street
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Cloudy

File Name : 11046001
Site Code : 11046001
Start Date : 4/10/2013
Page No : 1

Groups Printed- Bikes Peds

Start Time	Garage From North				Columbus Ave From East				Burke St From South				Columbus Ave From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
04:00 PM	1	0	0	27	0	8	1	8	0	0	0	41	0	4	0	33	109	14	123
04:15 PM	1	0	0	36	0	10	1	6	0	0	0	32	0	5	0	25	99	17	116
04:30 PM	0	0	1	32	0	6	0	7	0	0	0	35	0	8	0	43	117	15	132
04:45 PM	1	0	0	25	0	16	0	5	0	0	0	39	0	7	0	38	107	24	131
Total	3	0	1	120	0	40	2	26	0	0	0	147	0	24	0	139	432	70	502
05:00 PM	1	0	0	27	0	25	1	12	0	0	0	34	0	9	0	39	112	36	148
05:15 PM	0	0	0	32	0	31	0	8	0	0	0	43	0	7	0	28	111	38	149
05:30 PM	0	0	0	35	0	21	0	8	0	0	0	26	0	2	0	16	85	23	108
05:45 PM	2	0	0	9	0	21	0	7	0	0	0	22	0	7	0	20	58	30	88
Total	3	0	0	103	0	98	1	35	0	0	0	125	0	25	0	103	366	127	493
Grand Total	6	0	1	223	0	138	3	61	0	0	0	272	0	49	0	242	798	197	995
Apprch %	85.7	0	14.3		0	97.9	2.1		0	0	0		0	100	0				
Total %	3	0	0.5		0	70.1	1.5		0	0	0		0	24.9	0		80.2	19.8	

Start Time	Garage From North				Columbus Ave From East				Burke St From South				Columbus Ave From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
05:00 PM	1	0	0	1	0	25	1	26	0	0	0	0	0	9	0	9	36
05:15 PM	0	0	0	0	0	31	0	31	0	0	0	0	0	7	0	7	38
05:30 PM	0	0	0	0	0	21	0	21	0	0	0	0	0	2	0	2	23
05:45 PM	2	0	0	2	0	21	0	21	0	0	0	0	0	7	0	7	30
Total Volume	3	0	0	3	0	98	1	99	0	0	0	0	0	25	0	25	127
% App. Total	100	0	0		0	99	1		0	0	0		0	100	0		
PHF	.375	.000	.000	.375	.000	.790	.250	.798	.000	.000	.000	.000	.000	.694	.000	.694	.836

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

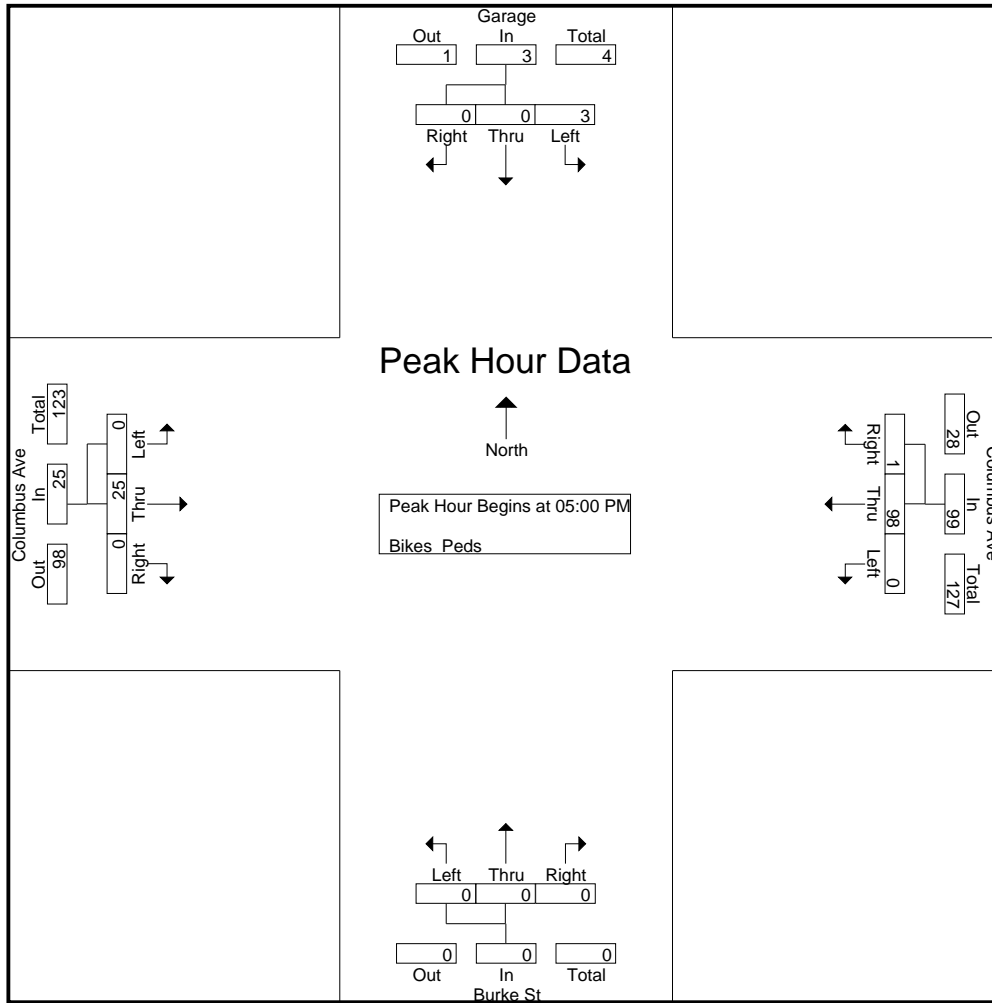
Peak Hour for Entire Intersection Begins at 05:00 PM

Accurate Counts

978-664-2565

N/S Street : Garage / Burke Street
 E/W Street: Columbus Avenue
 City/State : Boston, MA
 Weather : Cloudy

File Name : 11046001
 Site Code : 11046001
 Start Date : 4/10/2013
 Page No : 2



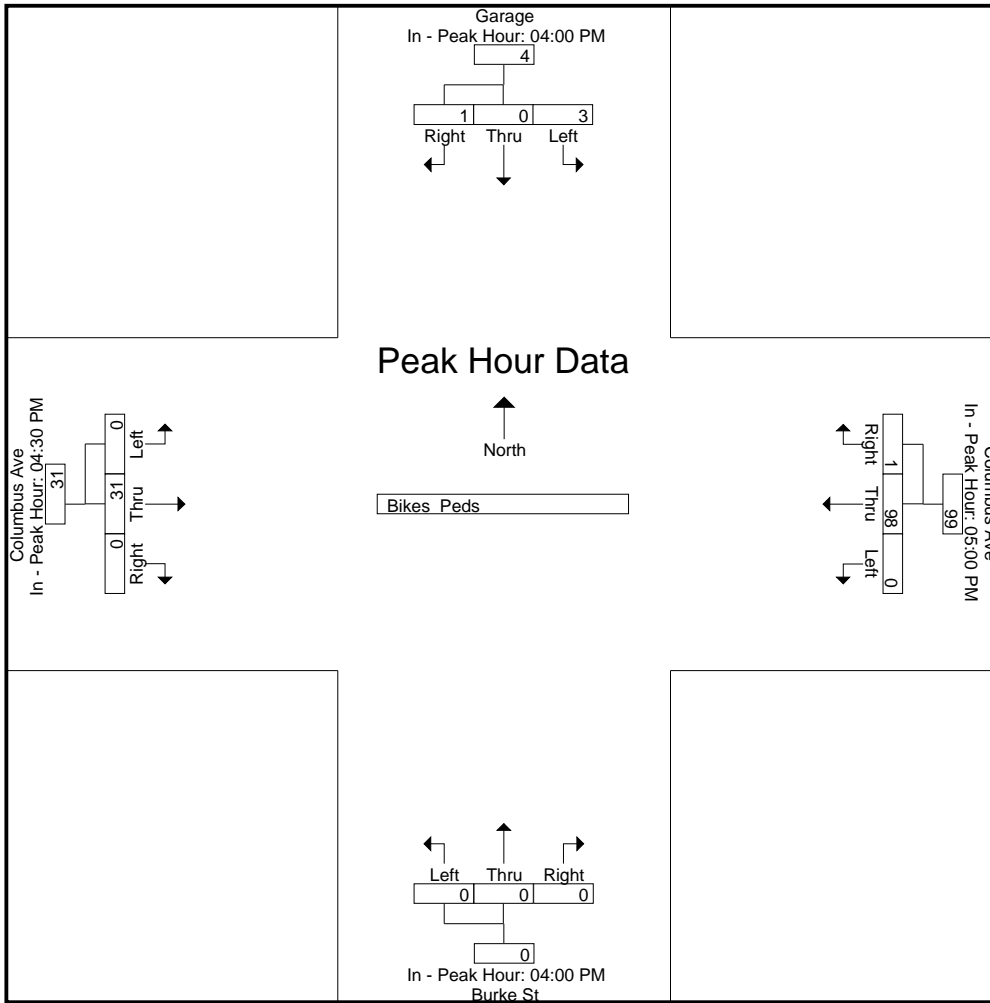
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:00 PM				05:00 PM				04:00 PM				04:30 PM			
+0 mins.	1	0	0	1	0	25	1	26	0	0	0	0	0	8	0	8
+15 mins.	1	0	0	1	0	31	0	31	0	0	0	0	0	7	0	7
+30 mins.	0	0	1	1	0	21	0	21	0	0	0	0	0	9	0	9
+45 mins.	1	0	0	1	0	21	0	21	0	0	0	0	0	7	0	7
Total Volume	3	0	1	4	0	98	1	99	0	0	0	0	0	31	0	31
% App. Total	75	0	25		0	99	1		0	0	0	0	0	100	0	
PHF	.750	.000	.250	1.000	.000	.790	.250	.798	.000	.000	.000	.000	.000	.861	.000	.861

Accurate Counts
978-664-2565

N/S Street : Garage / Burke Street
E/W Street: Columbus Avenue
City/State : Boston, MA
Weather : Cloudy

File Name : 11046001
Site Code : 11046001
Start Date : 4/10/2013
Page No : 3





PRECISION
D A T A
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503
Office: 508.481.3999 Fax: 508.545.1234
Email: datarequests@pdillc.com

File Name : 123026 I
Site Code : 2011046_
Start Date : 9/25/2012
Page No : 1

N/S: Camden Street
E/W: Columbus Avenue
City, State: Boston, MA
Client: HSH/ J. SanClemente

Groups Printed- Cars - Heavy Vehicles

Start Time	Camden Street From North				Columbus Avenue From East				Camden Street From South				Columbus Avenue From West				Int. Total
	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	
07:00 AM	1	1	3	0	1	61	3	0	2	1	2	0	1	65	0	0	141
07:15 AM	2	1	2	0	1	72	2	1	8	1	0	0	3	60	0	0	153
07:30 AM	1	0	1	0	0	75	1	0	6	0	0	0	0	84	1	0	169
07:45 AM	0	0	0	0	1	92	1	0	5	0	0	0	0	91	2	0	192
Total	4	2	6	0	3	300	7	1	21	2	2	0	4	300	3	0	655
08:00 AM	0	0	0	0	0	80	8	1	8	0	0	0	4	76	0	0	177
08:15 AM	0	0	1	0	1	74	0	0	4	0	1	0	1	72	0	0	154
08:30 AM	0	1	1	0	0	93	5	0	2	0	1	0	6	60	2	0	171
08:45 AM	1	1	1	0	0	69	1	0	6	1	1	0	4	67	3	0	155
Total	1	2	3	0	1	316	14	1	20	1	3	0	15	275	5	0	657
Grand Total	5	4	9	0	4	616	21	2	41	3	5	0	19	575	8	0	1312
Apprch %	27.8	22.2	50	0	0.6	95.8	3.3	0.3	83.7	6.1	10.2	0	3.2	95.5	1.3	0	
Total %	0.4	0.3	0.7	0	0.3	47	1.6	0.2	3.1	0.2	0.4	0	1.4	43.8	0.6	0	
Cars	4	3	9	0	4	586	21	2	40	3	5	0	17	550	8	0	1252
% Cars	80	75	100	0	100	95.1	100	100	97.6	100	100	0	89.5	95.7	100	0	95.4
Heavy Vehicles	1	1	0	0	0	30	0	0	1	0	0	0	2	25	0	0	60
% Heavy Vehicles	20	25	0	0	0	4.9	0	0	2.4	0	0	0	10.5	4.3	0	0	4.6

Start Time	Camden Street From North					Columbus Avenue From East					Camden Street From South					Columbus Avenue From West					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	0	0	0	0	1	92	1	0	94	5	0	0	0	5	0	91	2	0	93	192
08:00 AM	0	0	0	0	0	0	80	8	1	89	8	0	0	0	8	4	76	0	0	80	177
08:15 AM	0	0	1	0	0	0	93	5	0	98	2	0	1	0	3	6	60	2	0	68	171
08:30 AM	0	1	1	0	2	0	93	5	0	98	2	0	1	0	3	6	60	2	0	68	171
Total Volume	0	1	2	0	3	2	339	14	1	356	19	0	2	0	21	11	299	4	0	314	694
% App. Total	0	33.3	66.7	0	0	0.6	95.2	3.9	0.3	90.5	0	9.5	0	0	0	3.5	95.2	1.3	0	0	
PHF	.000	.250	.500	.000	.375	.500	.911	.438	.250	.908	.594	.000	.500	.000	.656	.458	.821	.500	.000	.844	.904
Cars	0	1	2	0	3	2	321	14	1	338	18	0	2	0	20	10	291	4	0	305	666
% Cars	0	100	100	0	100	100	94.7	100	100	94.9	94.7	0	100	0	95.2	90.9	97.3	100	0	97.1	96.0
Heavy Vehicles	0	0	0	0	0	0	18	0	0	18	1	0	0	0	1	1	8	0	0	9	28
% Heavy Vehicles	0	0	0	0	0	0	5.3	0	0	5.1	5.3	0	0	0	4.8	9.1	2.7	0	0	2.9	4.0



PRECISION
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Office: 508.481.3999 Fax: 508.545.1234
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File Name : 123026 I
Site Code : 2011046_
Start Date : 9/25/2012
Page No : 1

N/S: Camden Street
E/W: Columbus Avenue
City, State: Boston, MA
Client: HSH/ J. SanClemente

Groups Printed- Cars

Start Time	Camden Street From North				Columbus Avenue From East				Camden Street From South				Columbus Avenue From West				Int. Total
	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	
07:00 AM	0	1	3	0	1	57	3	0	2	1	2	0	1	61	0	0	132
07:15 AM	2	1	2	0	1	71	2	1	8	1	0	0	3	56	0	0	148
07:30 AM	1	0	1	0	0	73	1	0	6	0	0	0	0	78	1	0	161
07:45 AM	0	0	0	0	1	87	1	0	5	0	0	0	0	88	2	0	184
Total	3	2	6	0	3	288	7	1	21	2	2	0	4	283	3	0	625
08:00 AM	0	0	0	0	0	78	8	1	7	0	0	0	4	73	0	0	171
08:15 AM	0	0	1	0	1	71	0	0	4	0	1	0	1	71	0	0	150
08:30 AM	0	1	1	0	0	85	5	0	2	0	1	0	5	59	2	0	161
08:45 AM	1	0	1	0	0	64	1	0	6	1	1	0	3	64	3	0	145
Total	1	1	3	0	1	298	14	1	19	1	3	0	13	267	5	0	627
Grand Total	4	3	9	0	4	586	21	2	40	3	5	0	17	550	8	0	1252
Apprch %	25	18.8	56.2	0	0.7	95.6	3.4	0.3	83.3	6.2	10.4	0	3	95.7	1.4	0	
Total %	0.3	0.2	0.7	0	0.3	46.8	1.7	0.2	3.2	0.2	0.4	0	1.4	43.9	0.6	0	

Start Time	Camden Street From North					Columbus Avenue From East					Camden Street From South					Columbus Avenue From West					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
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	1	0	1	0	2	0	73	1	0	74	6	0	0	0	6	0	78	1	0	79	161
07:45 AM	0	0	0	0	0	1	87			89	7	0	0	0	7		88	2	0	90	184
08:00 AM	0	0	0	0	0	0	78	8	1	87	7	0	0	0	7	4	73	0	0	77	171
08:15 AM	0	0	1	0	1	1	71	0	0	72	4	0	1								
Total Volume	1	0	2	0	3	2	309	10	1	322	22	0	1	0	23	5	310	3	0	318	666
% App. Total	33.3	0	66.7	0		0.6	96	3.1	0.3		95.7	0	4.3	0		1.6	97.5	0.9	0		
PHF	.250	.000	.500	.000	.375	.500	.888	.313	.250	.904	.786	.000	.250	.000	.821	.313	.881	.375	.000	.883	.905



PRECISION
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File Name : 123026 I
Site Code : 2011046_
Start Date : 9/25/2012
Page No : 1

N/S: Camden Street
E/W: Columbus Avenue
City, State: Boston, MA
Client: HSH/ J. SanClemente

Groups Printed- Heavy Vehicles

Start Time	Camden Street From North				Columbus Avenue From East				Camden Street From South				Columbus Avenue From West				Int. Total
	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	
07:00 AM	1	0	0	0	0	4	0	0	0	0	0	0	0	4	0	0	9
07:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	4	0	0	5
07:30 AM	0	0	0	0	0	2	0	0	0	0	0	0	0	6	0	0	8
07:45 AM	0	0	0	0	0	5	0	0	0	0	0	0	0	3	0	0	8
Total	1	0	0	0	0	12	0	0	0	0	0	0	0	17	0	0	30
08:00 AM	0	0	0	0	0	2	0	0	0	1	0	0	0	0	3	0	6
08:15 AM	0	0	0	0	0	3	0	0	0	0	0	0	0	1	0	0	4
08:30 AM	0	0	0	0	0	8	0	0	0	0	0	0	0	1	1	0	10
08:45 AM	0	1	0	0	0	5	0	0	0	0	0	0	0	1	3	0	10
Total	0	1	0	0	0	18	0	0	0	1	0	0	0	2	8	0	30
Grand Total	1	1	0	0	0	30	0	0	0	1	0	0	0	2	25	0	60
Apprch %	50	50	0	0	0	100	0	0	0	100	0	0	0	7.4	92.6	0	0
Total %	1.7	1.7	0	0	0	50	0	0	0	1.7	0	0	0	3.3	41.7	0	0

Start Time	Camden Street From North					Columbus Avenue From East					Camden Street From South					Columbus Avenue From West					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
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	1	0	0	0	1	0	4	0	0	4	0	0	0	0	0	0	4	0	0	4	9
07:15 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	5
07:30 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	6	0	0	6	8
07:45 AM	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	3	0	0	3	8
Total Volume	1	0	0	0	1	0	12	0	0	12	0	0	0	0	0	0	17	0	0	17	30
% App. Total	100	0	0	0		0	100	0	0		0	0	0	0		0	100	0	0		
PHF	.250	.000	.000	.000	.250	.000	.600	.000	.000	.600	.000	.000	.000	.000	.000	.000	.708	.000	.000	.708	.833



PRECISION
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INDUSTRIES, LLC

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File Name : 123026 I
Site Code : 2011046_
Start Date : 9/25/2012
Page No : 1

N/S: Camden Street
E/W: Columbus Avenue
City, State: Boston, MA
Client: HSH/ J. SanClemente

Groups Printed- Peds and Bikes

Start Time	Camden Street From North				Columbus Avenue From East				Camden Street From South				Columbus Avenue From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
07:00 AM	0	0	0	4	0	4	0	9	0	0	0	8	0	11	0	5	41
07:15 AM	0	0	0	6	0	7	0	11	0	0	0	8	0	21	2	4	59
07:30 AM	0	0	0	5	0	5	0	11	0	1	0	23	0	22	3	11	81
07:45 AM	1	0	2	7	0	8	0	16	0	0	0	16	0	48	1	12	111
Total	1	0	2	22	0	24	0	47	0	1	0	55	0	102	6	32	292
08:00 AM	0	0	0	9	0	6	0	12	0	0	0	19	0	28	0	13	87
08:15 AM	0	0	0	9	0	7	0	14	0	0	0	11	0	54	0	8	103
08:30 AM	0	0	0	9	0	12	0	15	0	0	0	18	0	45	1	12	112
08:45 AM	0	0	0	13	0	6	1	14	0	0	0	13	0	62	1	10	120
Total	0	0	0	40	0	31	1	55	0	0	0	61	0	189	2	43	422
Grand Total	1	0	2	62	0	55	1	102	0	1	0	116	0	291	8	75	714
Apprch %	1.5	0	3.1	95.4	0	34.8	0.6	64.6	0	0.9	0	99.1	0	77.8	2.1	20.1	
Total %	0.1	0	0.3	8.7	0	7.7	0.1	14.3	0	0.1	0	16.2	0	40.8	1.1	10.5	

Start Time	Camden Street From North					Columbus Avenue From East					Camden Street From South					Columbus Avenue From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. 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	9	9	0	6	0	12	18	0	0	0	19	19	0	28	0	13	41	87
08:15 AM	0	0	0	9	9	0	7	0	14	21	0	0	0	11	11	0	54	0	8	62	103
08:30 AM	0	0	0	9	9	0	12	0	15	27	0	0	0	13	13	0	1	12	58	112	
08:45 AM	0	0	0	13	13	0	6	1	14	21	0	0	0	13	13	0	62	1	10	73	120
Total Volume	0	0	0	40	40	0	31	1	55	87	0	0	0	61	61	0	189	2	43	234	422
% App. Total	0	0	0	100		0	35.6	1.1	63.2		0	0	0	100		0	80.8	0.9	18.4		
PHF	.000	.000	.000	.769	.769	.000	.646	.250	.917	.806	.000	.000	.000	.803	.803	.000	.762	.500	.827	.801	.879



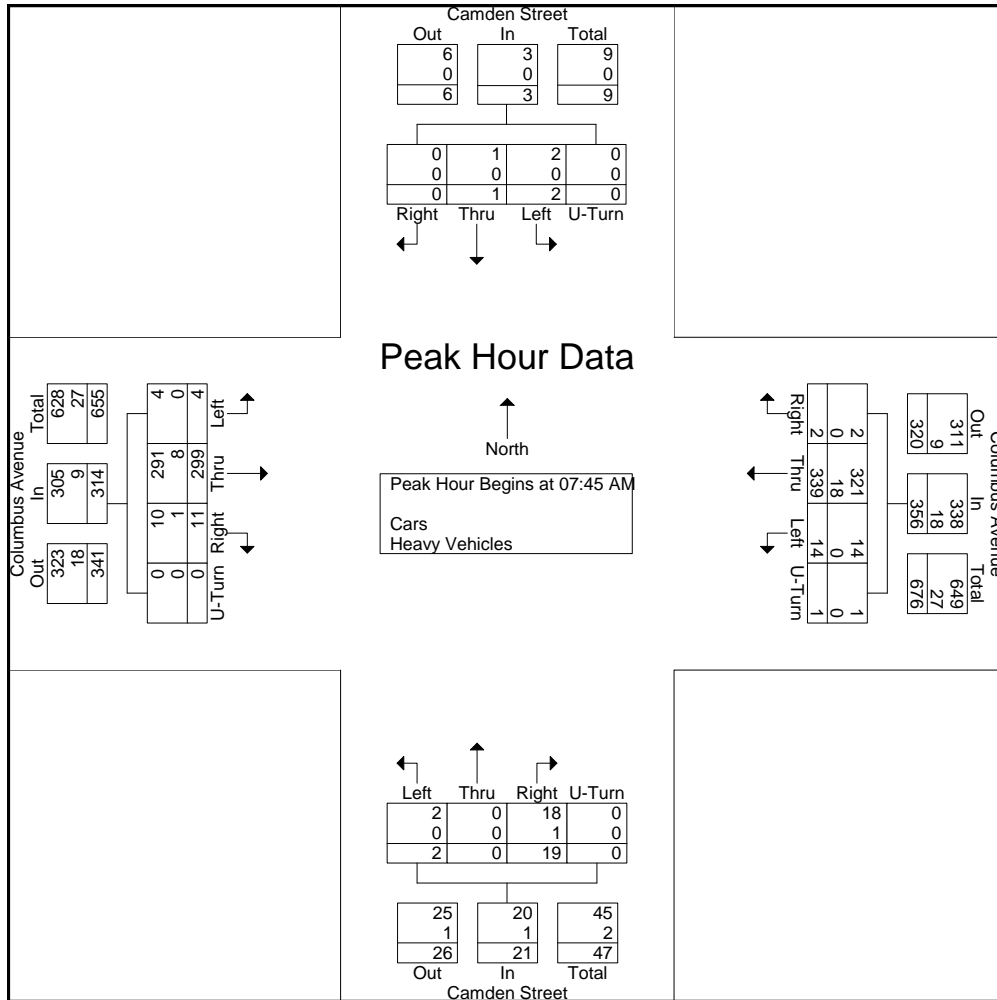
PRECISION
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File Name : 123026 I
Site Code : 2011046_
Start Date : 9/25/2012
Page No : 1

N/S: Camden Street
E/W: Columbus Avenue
City, State: Boston, MA
Client: HSH/ J. SanClemente

Start Time	Camden Street From North					Columbus Avenue From East					Camden Street From South					Columbus Avenue From West					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	0	0	0	0	1	92	1	0	94	5	0	0	0	5	0	91	2	0	93	192
08:00 AM	0	0	0	0	0	0	80	8	1	89	8	0	0	0	8	4	76	0	0	80	177
08:15 AM	0	0	1	0	0	0	93	5	0	98	2	0	1	0	3	6	60	2	0	68	171
08:30 AM	0	1	1	0	2	0	93	5	0	98	2	0	1	0	3	6	60	2	0	68	171
Total Volume	0	1	2	0	3	2	339	14	1	356	19	0	2	0	21	11	299	4	0	314	694
% App. Total	0	33.3	66.7	0	0	0.6	95.2	3.9	0.3	0	90.5	0	9.5	0	0	3.5	95.2	1.3	0	0	0
PHF	.000	.250	.500	.000	.375	.500	.911	.438	.250	.908	.594	.000	.500	.000	.656	.458	.821	.500	.000	.844	.904
Cars	0	1	2	0	3	2	321	14	1	338	18	0	2	0	20	10	291	4	0	305	666
% Cars	0	100	100	0	100	100	94.7	100	100	94.9	94.7	0	100	0	95.2	90.9	97.3	100	0	97.1	96.0
Heavy Vehicles	0	0	0	0	0	0	18	0	0	18	1	0	0	0	1	1	8	0	0	9	28
% Heavy Vehicles	0	0	0	0	0	0	5.3	0	0	5.1	5.3	0	0	0	4.8	9.1	2.7	0	0	2.9	4.0





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Page No : 1

N/S: Camden Street
E/W: Columbus Avenue
City, State: Boston, MA
Client: HSH/ J. SanClemente

Groups Printed- Cars - Heavy Vehicles

Start Time	Camden Street From North				Columbus Avenue From East				Camden Street From South				Columbus Avenue From West				Int. Total
	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	
04:00 PM	0	4	1	0	0	91	3	0	5	0	1	0	2	59	0	0	166
04:15 PM	0	2	3	0	1	93	11	0	3	0	2	0	1	86	1	1	204
04:30 PM	1	2	3	0	1	95	10	0	2	0	1	0	3	96	0	0	214
04:45 PM	2	1	3	0	0	108	8	0	3	0	1	0	8	99	4	3	240
Total	3	9	10	0	2	387	32	0	13	0	5	0	14	340	5	4	824
05:00 PM	2	1	0	0	1	96	13	0	4	0	5	0	4	86	1	2	215
05:15 PM	0	1	3	0	1	102	7	0	3	1	2	0	4	107	2	0	233
05:30 PM	1	0	3	0	4	111	11	0	3	1	1	0	5	91	0	0	231
05:45 PM	1	4	5	0	1	90	11	1	2	0	1	0	0	77	4	0	197
Total	4	6	11	0	7	399	42	1	12	2	9	0	13	361	7	2	876
Grand Total	7	15	21	0	9	786	74	1	25	2	14	0	27	701	12	6	1700
Apprch %	16.3	34.9	48.8	0	1	90.3	8.5	0.1	61	4.9	34.1	0	3.6	94	1.6	0.8	
Total %	0.4	0.9	1.2	0	0.5	46.2	4.4	0.1	1.5	0.1	0.8	0	1.6	41.2	0.7	0.4	
Cars	7	14	21	0	9	769	72	1	23	2	14	0	27	693	12	6	1670
% Cars	100	93.3	100	0	100	97.8	97.3	100	92	100	100	0	100	98.9	100	100	98.2
Heavy Vehicles	0	1	0	0	0	17	2	0	2	0	0	0	0	8	0	0	30
% Heavy Vehicles	0	6.7	0	0	0	2.2	2.7	0	8	0	0	0	0	1.1	0	0	1.8

Start Time	Camden Street From North					Columbus Avenue From East					Camden Street From South					Columbus Avenue From West					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	2	1	3	0	6	0	108	8	0	116	3	0	1	0	4	8	99	4	3	114	240
05:00 PM	2	1	0	0	3	1	96	13	0	110	4	0	5	0	9	4	86	1	2	93	215
05:15 PM	0	1	3	0	4	1	102	7	0	110	3	1	2	0	6	4	107				
05:30 PM	1	0	3	0	4	4	111	11	0	126	3	1	1	0	5	5	91	0	0	96	231
Total Volume	5	3	9	0	17	6	417	39	0	462	13	2	9	0	24	21	383	7	5	416	919
% App. Total	29.4	17.6	52.9	0		1.3	90.3	8.4	0		54.2	8.3	37.5	0		5	92.1	1.7	1.2		
PHF	.625	.750	.750	.000	.708	.375	.939	.750	.000	.917	.813	.500	.450	.000	.667	.656	.895	.438	.417	.912	.957
Cars	5	3	9	0	17	6	411	38	0	455	13	2	9	0	24	21	381	7	5	414	910
% Cars	100	100	100	0	100	100	98.6	97.4	0	98.5	100	100	100	0	100	100	99.5	100	100	99.5	99.0
Heavy Vehicles	0	0	0	0	0	0	6	1	0	7	0	0	0	0	0	0	2	0	0	2	9
% Heavy Vehicles	0	0	0	0	0	0	1.4	2.6	0	1.5	0	0	0	0	0	0	0.5	0	0	0.5	1.0



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Page No : 1

N/S: Camden Street
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City, State: Boston, MA
Client: HSH/ J. SanClemente

Groups Printed- Cars

Start Time	Camden Street From North				Columbus Avenue From East				Camden Street From South				Columbus Avenue From West				Int. Total
	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	
04:00 PM	0	4	1	0	0	89	2	0	3	0	1	0	2	57	0	0	159
04:15 PM	0	1	3	0	1	88	11	0	3	0	2	0	1	84	1	1	196
04:30 PM	1	2	3	0	1	92	10	0	2	0	1	0	3	95	0	0	210
04:45 PM	2	1	3	0	0	106	8	0	3	0	1	0	8	99	4	3	238
Total	3	8	10	0	2	375	31	0	11	0	5	0	14	335	5	4	803
05:00 PM	2	1	0	0	1	94	12	0	4	0	5	0	4	85	1	2	211
05:15 PM	0	1	3	0	1	102	7	0	3	1	2	0	4	107	2	0	233
05:30 PM	1	0	3	0	4	109	11	0	3	1	1	0	5	90	0	0	228
05:45 PM	1	4	5	0	1	89	11	1	2	0	1	0	0	76	4	0	195
Total	4	6	11	0	7	394	41	1	12	2	9	0	13	358	7	2	867
Grand Total	7	14	21	0	9	769	72	1	23	2	14	0	27	693	12	6	1670
Apprch %	16.7	33.3	50	0	1.1	90.4	8.5	0.1	59	5.1	35.9	0	3.7	93.9	1.6	0.8	
Total %	0.4	0.8	1.3	0	0.5	46	4.3	0.1	1.4	0.1	0.8	0	1.6	41.5	0.7	0.4	

Start Time	Camden Street From North					Columbus Avenue From East					Camden Street From South					Columbus Avenue From West					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	2	1	3	0	6	0	106	8	0	114	3	0	1	0	4	8	99	4	3	114	238
05:00 PM	2	1	0	0	3	1	94	12	0	107	4	0	5	0	9	4	85	1	2	92	211
05:15 PM	0	1	3	0	4	1	102	7	0	110	3	1	2	0	6	4	107				
05:30 PM	1	0	3	0	4	4	109	11	0	124	3	1	1	0	5	5	90	0	0	95	228
Total Volume	5	3	9	0	17	6	411	38	0	455	13	2	9	0	24	21	381	7	5	414	910
% App. Total	29.4	17.6	52.9	0		1.3	90.3	8.4	0		54.2	8.3	37.5	0		5.1	92	1.7	1.2		
PHF	.625	.750	.750	.000	.708	.375	.943	.792	.000	.917	.813	.500	.450	.000	.667	.656	.890	.438	.417	.908	.956



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Groups Printed- Heavy Vehicles

Start Time	Camden Street From North				Columbus Avenue From East				Camden Street From South				Columbus Avenue From West				Int. Total
	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	
04:00 PM	0	0	0	0	0	2	1	0	2	0	0	0	0	2	0	0	7
04:15 PM	0	1	0	0	0	5	0	0	0	0	0	0	0	2	0	0	8
04:30 PM	0	0	0	0	0	3	0	0	0	0	0	0	0	1	0	0	4
04:45 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
Total	0	1	0	0	0	12	1	0	2	0	0	0	0	5	0	0	21
05:00 PM	0	0	0	0	0	2	1	0	0	0	0	0	0	1	0	0	4
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0	0	3
05:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2
Total	0	0	0	0	0	5	1	0	0	0	0	0	0	3	0	0	9
Grand Total	0	1	0	0	0	17	2	0	2	0	0	0	0	8	0	0	30
Apprch %	0	100	0	0	0	89.5	10.5	0	100	0	0	0	0	100	0	0	
Total %	0	3.3	0	0	0	56.7	6.7	0	6.7	0	0	0	0	26.7	0	0	

Start Time	Camden Street From North					Columbus Avenue From East					Camden Street From South					Columbus Avenue From West					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	0	0	0	0	0	0	2	1	0	3	2	0	0	0	2	0	2	0	0	2	7
04:15 PM	0	1	0	0	1	0	5	0	0	5	0	0	0	0	0	0	2	0	0	2	8
04:30 PM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	4
04:45 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	2
Total Volume	0	1	0	0	1	0	12	1	0	13	2	0	0	0	2	0	5	0	0	5	21
% App. Total	0	100	0	0		0	92.3	7.7	0		100	0	0	0		0	100	0	0		
PHF	.000	.250	.000	.000	.250	.000	.600	.250	.000	.650	.250	.000	.000	.000	.250	.000	.625	.000	.000	.625	.656



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Groups Printed- Peds and Bikes

Start Time	Camden Street From North				Columbus Avenue From East				Camden Street From South				Columbus Avenue From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
04:00 PM	2	0	0	5	2	20	0	11	0	0	1	16	1	4	0	8	70
04:15 PM	0	0	0	5	0	14	0	27	0	3	0	18	1	11	0	11	90
04:30 PM	0	0	0	18	0	18	0	32	0	0	0	31	0	10	0	23	132
04:45 PM	0	0	0	6	0	25	0	24	0	1	0	28	1	8	0	12	105
Total	2	0	0	34	2	77	0	94	0	4	1	93	3	33	0	54	397
05:00 PM	1	1	0	22	0	36	0	27	0	0	0	24	0	9	1	23	144
05:15 PM	0	0	0	20	1	47	0	29	0	0	1	38	0	14	1	18	169
05:30 PM	0	0	0	30	0	43	0	32	0	0	0	23	1	12	4	24	169
05:45 PM	1	0	0	21	0	37	1	30	0	0	0	32	0	15	1	18	156
Total	2	1	0	93	1	163	1	118	0	0	1	117	1	50	7	83	638
Grand Total	4	1	0	127	3	240	1	212	0	4	2	210	4	83	7	137	1035
Apprch %	3	0.8	0	96.2	0.7	52.6	0.2	46.5	0	1.9	0.9	97.2	1.7	35.9	3	59.3	
Total %	0.4	0.1	0	12.3	0.3	23.2	0.1	20.5	0	0.4	0.2	20.3	0.4	8	0.7	13.2	

Start Time	Camden Street From North					Columbus Avenue From East					Camden Street From South					Columbus Avenue From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	1	1	0	22	24	0	36	0	27	63	0	0	0	24	24	0	9	1	23	33	144
05:15 PM	0	0	0	20	20	1	47	0	29	77	0	0	1	38	39	0	14	1	18	33	169
05:30 PM	0	0	0	30	30	0	43	0	32	75	0	0	0	23	23	1	12	4	24	41	169
05:45 PM	1	0	0	21	22	0	37	1	30	68	0	0	0	32	32	0	15	1	18	34	156
Total Volume	2	1	0	93	96	1	163	1	118	283	0	0	1	117	118	1	50	7	83	141	638
% App. Total	2.1	1	0	96.9		0.4	57.6	0.4	41.7		0	0	0.8	99.2		0.7	35.5	5	58.9		
PHF	.500	.250	.000	.775	.800	.250	.867	.250	.922	.919	.000	.000	.250	.770	.756	.250	.833	.438	.865	.860	.944



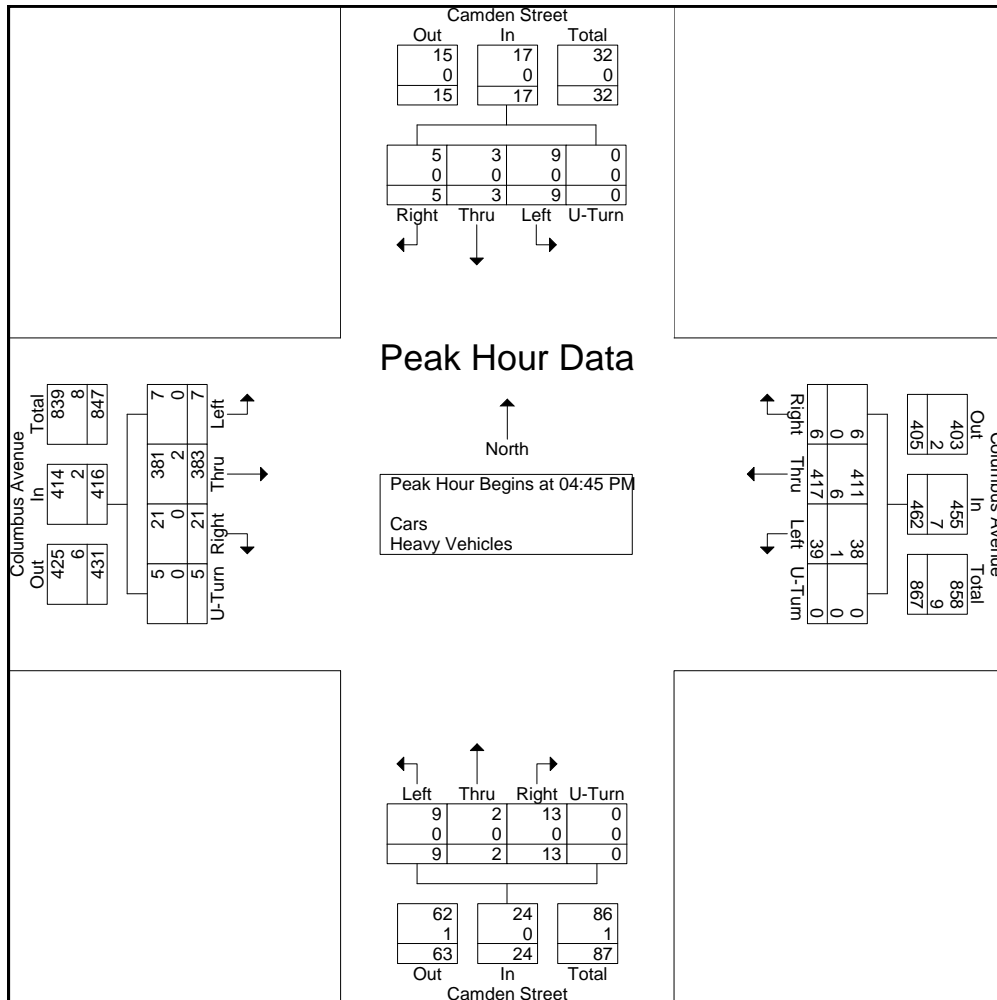
PRECISION
D A T A
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503
Office: 508.481.3999 Fax: 508.545.1234
Email: datarequests@pdillc.com

File Name : 123026 II
Site Code : 2011046_
Start Date : 9/25/2012
Page No : 1

N/S: Camden Street
E/W: Columbus Avenue
City, State: Boston, MA
Client: HSH/ J. SanClemente

Start Time	Camden Street From North					Columbus Avenue From East					Camden Street From South					Columbus Avenue From West					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	2	1	3	0	6	0	108	8	0	116	3	0	1	0	4	8	99	4	3	114	240
05:00 PM	2	1	0	0	3	1	96	13	0	110	4	0	5	0	9	4	86	1	2	93	215
05:15 PM	0	1	3	0	4	1	102	7	0	110	3	1	2	0	6	4	107				
05:30 PM	1	0	3	0	4	4	111	11	0	126	3	1	1	0	5	5	91	0	0	96	231
Total Volume	5	3	9	0	17	6	417	39	0	462	13	2	9	0	24	21	383	7	5	416	919
% App. Total	29.4	17.6	52.9	0		1.3	90.3	8.4	0		54.2	8.3	37.5	0		5	92.1	1.7	1.2		
PHF	.625	.750	.750	.000	.708	.375	.939	.750	.000	.917	.813	.500	.450	.000	.667	.656	.895	.438	.417	.912	.957
Cars	5	3	9	0	17	6	411	38	0	455	13	2	9	0	24	21	381	7	5	414	910
% Cars	100	100	100	0	100	100	98.6	97.4	0	98.5	100	100	100	0	100	100	99.5	100	100	99.5	99.0
Heavy Vehicles	0	0	0	0	0	0	6	1	0	7	0	0	0	0	0	0	2	0	0	2	9
% Heavy Vehicles	0	0	0	0	0	0	1.4	2.6	0	1.5	0	0	0	0	0	0	0.5	0	0	0.5	1.0

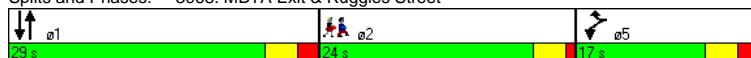


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø2
Lane Configurations	↖	↗	↕	↖	↗	↕	↕
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	13	12	12	11	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50	50				
Trailing Detector (ft)	0	0	0				
Turning Speed (mph)	15	9		9	15		
Satd. Flow (prot)	939	876	1578	0	0	2935	
Flt Permitted	0.950						
Satd. Flow (perm)	939	876	1578	0	0	2935	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)		32					
Link Speed (mph)	30		25			30	
Link Distance (ft)	232		340			229	
Travel Time (s)	5.3		9.3			5.2	
Volume (vph)	72	25	787	0	0	592	
Confl. Bikes (#/hr)				5			
Peak Hour Factor	0.90	0.78	0.91	0.25	0.84	0.93	
Heavy Vehicles (%)	96%	88%	12%	0%	0%	7%	
Adj. Flow (vph)	80	32	865	0	0	637	
Lane Group Flow (vph)	80	32	865	0	0	637	
Turn Type	Prot						
Protected Phases	5	5	1			1	2
Permitted Phases							
Detector Phases	5	5	1			1	
Minimum Initial (s)	8.0	8.0	8.0			8.0	7.0
Minimum Split (s)	13.0	13.0	13.0			13.0	24.0
Total Split (s)	17.0	17.0	29.0	0.0	0.0	29.0	24.0
Total Split (%)	24.3%	24.3%	41.4%	0.0%	0.0%	41.4%	34%
Maximum Green (s)	12.0	12.0	24.0			24.0	20.0
Yellow Time (s)	3.0	3.0	3.0			3.0	3.0
All-Red Time (s)	2.0	2.0	2.0			2.0	1.0
Lead/Lag							
Lead-Lag Optimize?							
Vehicle Extension (s)	2.0	2.0	2.0			2.0	2.0
Recall Mode	None	None	C-Max			C-Max	None
Walk Time (s)							7.0
Flash Dont Walk (s)							13.0
Pedestrian Calls (#/hr)							10
Act Effect Green (s)	11.0	11.0	49.6			49.6	
Actuated g/C Ratio	0.16	0.16	0.71			0.71	
v/c Ratio	0.54	0.19	0.77			0.31	
Control Delay	40.8	12.5	18.4			14.6	
Queue Delay	0.0	2.1	173.2			0.0	
Total Delay	40.8	14.6	191.7			14.6	
LOS	D	B	F			B	
Approach Delay	33.3		191.7			14.6	
Approach LOS	C		F			B	
Queue Length 50th (ft)	32	0	210			91	
Queue Length 95th (ft)	72	17m#	1352			m183	
Internal Link Dist (ft)	152		260			149	
Turn Bay Length (ft)							
Base Capacity (vph)	174	189	1118			2079	
Starvation Cap Reductn	0	0	122			0	
Spillback Cap Reductn	0	92	492			133	
Storage Cap Reductn	0	0	0			0	
Reduced v/c Ratio	0.46	0.33	1.38			0.33	

Intersection Summary

Area Type: CBD
 Cycle Length: 70
 Actuated Cycle Length: 70
 Offset: 1 (1%), Referenced to phase 1:NBSB, Start of Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.77
 Intersection Signal Delay: 110.8 Intersection LOS: F
 Intersection Capacity Utilization 59.4% ICU Level of Service B
 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: 3068: MBTA Exit & Ruggles Street

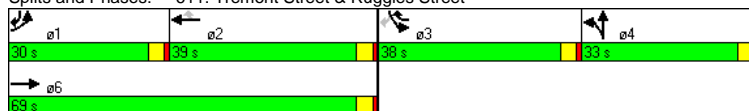


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗↗↗		↖	↗↗	↗	↖	↖	↖	↗↗		↗
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	11	12	11	11	12	12	12	12
Storage Length (ft)	200		0	0		0	0		0	0		0
Storage Lanes	1		0	0		1	1		0	2		1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50			50	50	50	50		50		50
Trailing Detector (ft)	0	0			0	0	0	0		0		0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Satd. Flow (prot)	1555	4424	0	0	3049	1371	1570	1504	0	3090	0	1439
Flt Permitted	0.950						0.950			0.950		
Satd. Flow (perm)	1529	4424	0	0	3049	1264	1556	1504	0	3009	0	1418
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)								20				151
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		911			298			632			340	
Travel Time (s)		20.7			6.8			14.4			7.7	
Volume (vph)	202	1339	0	0	805	553	34	32	19	536	0	128
Confl. Peds. (#/hr)	11		24	24		11	4		13	13		4
Confl. Bikes (#/hr)			7									
Peak Hour Factor	0.94	0.96	0.92	0.92	0.89	0.89	0.76	0.85	0.69	0.82	0.92	0.85
Heavy Vehicles (%)	1%	2%	0%	0%	3%	6%	0%	2%	0%	2%	0%	1%
Adj. Flow (vph)	215	1395	0	0	904	621	45	38	28	654	0	151
Lane Group Flow (vph)	215	1395	0	0	904	621	45	66	0	654	0	151
Turn Type	Prot				pm+ov	Split				Prot		custom
Protected Phases	1	6			2	3	4	4		3		1
Permitted Phases						2						3
Detector Phases	1	6			2	3	4	4		3		1
Minimum Initial (s)	8.0	16.0			16.0	9.0	8.0	8.0		9.0		8.0
Minimum Split (s)	12.0	20.0			20.0	13.0	23.0	23.0		13.0		12.0
Total Split (s)	30.0	69.0	0.0	0.0	39.0	38.0	33.0	33.0	0.0	38.0	0.0	30.0
Total Split (%)	21.4%	49.3%	0.0%	0.0%	27.9%	27.1%	23.6%	23.6%	0.0%	27.1%	0.0%	21.4%
Maximum Green (s)	26.0	65.0			35.0	34.0	29.0	29.0		34.0		26.0
Yellow Time (s)	3.0	3.0			3.0	3.0	3.0	3.0		3.0		3.0
All-Red Time (s)	1.0	1.0			1.0	1.0	1.0	1.0		1.0		1.0
Lead/Lag	Lead				Lag	Lead	Lag	Lag		Lead		Lead
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0			2.0	2.0	2.0	2.0		2.0		2.0
Recall Mode	None	C-Max			C-Max	None	None	None		None		None
Walk Time (s)		8.0			8.0		8.0	8.0				
Flash Dont Walk (s)		6.0			5.0		11.0	11.0				
Pedestrian Calls (#/hr)		12			14		5	5				
Act Effct Green (s)	22.1	87.0			61.0	93.6	10.8	10.8		32.6		54.7
Actuated g/C Ratio	0.16	0.62			0.44	0.67	0.08	0.08		0.23		0.39
v/c Ratio	0.88	0.51			0.68	0.71	0.37	0.49		0.91		0.23
Control Delay	90.0	16.8			35.8	19.9	68.6	55.6		52.2		7.5
Queue Delay	0.0	0.0			1.8	1.3	0.0	0.0		15.1		0.0
Total Delay	90.0	16.8			37.5	21.1	68.6	55.6		67.3		7.5
LOS	F	B			D	C	E	E		E		A
Approach Delay		26.6			30.9			60.9				
Approach LOS		C			C			E				
Queue Length 50th (ft)	191	250			356	300	40	41		323		44
Queue Length 95th (ft)	#300	353			#536	570	65	80		212		22
Internal Link Dist (ft)		831			218			552			260	
Turn Bay Length (ft)	200											
Base Capacity (vph)	289	2751			1328	884	325	327		750		685
Starvation Cap Reductn	0	0			256	3	0	0		97		0
Spillback Cap Reductn	0	82			0	108	0	1		0		0
Storage Cap Reductn	0	0			0	0	0	0		0		0
Reduced v/c Ratio	0.74	0.52			0.84	0.80	0.14	0.20		1.00		0.22

Intersection Summary

Area Type: CBD
 Cycle Length: 140
 Actuated Cycle Length: 140
 Offset: 96 (69%), Referenced to phase 2:WBT and 6:EBT, Start of Green
 Natural Cycle: 100
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.91
 Intersection Signal Delay: 35.0 Intersection LOS: C
 Intersection Capacity Utilization 71.5% ICU Level of Service C
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 611: Tremont Street & Ruggles Street





Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↕↕	↕		↕↕		↕	↕↕			↕	↕
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Lane Width (ft)	12	10	10	16	11	16	12	14	14	13	12	11	13
Storage Length (ft)			0	0	0		0	325		0	0		0
Storage Lanes			0	1	0		0	1		0	0		1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	50	50	50		50	50		50	50	50
Trailing Detector (ft)	0	0	0	0	0	0		0	0		0	0	0
Turning Speed (mph)	9	15		9	15		9	15		9	15		9
Satd. Flow (prot)	0	0	2536	1404	0	3080	0	1344	2658	0	0	1417	1268
Flt Permitted			0.631			0.658		0.950	0.970			0.996	
Satd. Flow (perm)	0	0	1622	1380	0	2036	0	1325	2635	0	0	1416	1227
Right Turn on Red				No			Yes			No			Yes
Satd. Flow (RTOR)						2							195
Link Speed (mph)			30			30			30			30	
Link Distance (ft)			471			2258			635			349	
Travel Time (s)			10.7			51.3			14.4			7.9	
Volume (vph)	1	346	480	945	31	294	6	848	221	48	5	55	176
Confl. Peds. (#/hr)		26		15	15		26	10		16	16		10
Confl. Bikes (#/hr)				1			4			2			5
Peak Hour Factor	0.90	0.90	0.90	0.90	0.89	0.89	0.89	0.92	0.92	0.92	0.85	0.85	0.85
Heavy Vehicles (%)	0%	3%	6%	5%	8%	5%	44%	5%	7%	26%	25%	2%	6%
Adj. Flow (vph)	1	384	533	1050	35	330	7	922	240	52	6	65	207
Lane Group Flow (vph)	0	0	918	1050	0	372	0	461	753	0	0	71	207
Turn Type	D.P+P	D.P+P		Free	Perm			Split			Split		Perm
Protected Phases	7	7	1 7			1		6	6		5	5	
Permitted Phases	1	1		Free	1								5
Detector Phases	7	1 7	1 7		1	1		6	6		5	5	5
Minimum Initial (s)	4.0	4.0			10.0	10.0		10.0	10.0		8.0	8.0	8.0
Minimum Split (s)	9.0	9.0			26.0	26.0		22.0	22.0		24.0	24.0	24.0
Total Split (s)	17.0	17.0	46.0	0.0	29.0	29.0	0.0	29.0	29.0	0.0	25.0	25.0	25.0
Total Split (%)	17.0%	17.0%	46.0%	0.0%	29.0%	29.0%	0.0%	29.0%	29.0%	0.0%	25.0%	25.0%	25.0%
Maximum Green (s)	13.0	13.0			25.0	25.0		25.0	25.0		21.0	21.0	21.0
Yellow Time (s)	3.0	3.0			3.0	3.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	1.0			1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lead/Lag								Lag	Lag		Lead	Lead	Lead
Lead-Lag Optimize?													
Vehicle Extension (s)	2.0	2.0			2.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	Max	Max			C-Max	C-Max		None	None		None	None	None
Walk Time (s)					7.0	7.0					7.0	7.0	7.0
Flash Dont Walk (s)					15.0	15.0					13.0	13.0	13.0
Pedestrian Calls (#/hr)					0	0					5	5	5
Act Effect Green (s)			45.5	100.0		32.5		25.0	25.0			13.5	13.5
Actuated g/C Ratio			0.46	1.00		0.32		0.25	0.25			0.14	0.14
v/c Ratio			1.07	0.76		0.56		1.37	1.31dl			0.37	0.62
Control Delay			77.1	4.0		31.0		217.2	113.2			30.4	19.7
Queue Delay			0.0	0.0		0.0		0.0	0.0			0.0	0.0
Total Delay			77.1	4.0		31.0		217.2	113.2			30.4	19.7
LOS			E	A		C		F	F			C	B
Approach Delay			38.1			31.0			152.7			22.4	
Approach LOS			D			C			F			C	
Queue Length 50th (ft)			-251	0		117		-429	-308			40	58
Queue Length 95th (ft)			#510	0		173		#641	#432			m91	m152
Internal Link Dist (ft)			391			2178			555			269	
Turn Bay Length (ft)								325					
Base Capacity (vph)			857	1380		664		336	665			298	412
Starvation Cap Reductn			0	0		0		0	0			0	0
Spillback Cap Reductn			0	0		0		0	0			0	0
Storage Cap Reductn			0	0		0		0	0			0	0
Reduced v/c Ratio			1.07	0.76		0.56		1.37	1.13			0.24	0.50

Intersection Summary

Area Type: CBD
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 48 (48%), Referenced to phase 1:EBWB, Start of Green
 Natural Cycle: 145
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.37
 Intersection Signal Delay: 72.6 Intersection LOS: E
 Intersection Capacity Utilization 105.0% ICU Level of Service G
 Analysis Period (min) 15
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.
 dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 3098: Tremont Street & Melnea Cass Boulevard

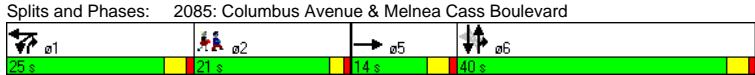




Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR	ø2
Lane Configurations		↕			↕				↕	↕		↕		
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Lane Width (ft)	12	12	12	12	11	12	12	12	14	14	12	16	12	
Storage Length (ft)	0		25	0		0		0		0	0		0	
Storage Lanes	0		0	0		0		0		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	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50		50	50	50	50	50	50		
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0		
Turning Speed (mph)	15		9	15		9	9	15		9	15		9	
Satd. Flow (prot)	0	2184	0	0	1344	0	0	0	1429	1334	0	1128	0	
Flt Permitted					0.955				0.736			0.931		
Satd. Flow (perm)	0	2184	0	0	1279	0	0	0	1060	1334	0	1067	0	
Right Turn on Red			Yes			Yes				Yes			Yes	
Satd. Flow (RTOR)		30								398				
Link Speed (mph)		30			30				30			30		
Link Distance (ft)		421			197				349			337		
Travel Time (s)		9.6			4.5				7.9			7.7		
Volume (vph)	0	23	24	207	12	1	4	206	13	350	1	1	0	
Confl. Peds. (#/hr)	33		39	39		33		29		20	20		29	
Confl. Bikes (#/hr)			50			13								
Peak Hour Factor	0.79	0.79	0.79	0.85	0.85	0.85	0.88	0.88	0.88	0.88	0.50	0.50	0.50	
Heavy Vehicles (%)	0%	11%	8%	5%	4%	0%	0%	4%	91%	4%	100%	0%	0%	
Adj. Flow (vph)	0	29	30	244	14	1	5	234	15	398	2	2	0	
Lane Group Flow (vph)	0	59	0	0	259	0	0	0	254	398	0	4	0	
Turn Type				Split		Perm	Perm			pt+ov	Perm			
Protected Phases		5		1	1				6	1 6		6		2
Permitted Phases						6	6				6			
Detector Phases		5		1	1		6	6	6	6		6		
Minimum Initial (s)		10.0		10.0	10.0		8.0	8.0	8.0		8.0	8.0		8.0
Minimum Split (s)		14.0		15.0	15.0		14.0	14.0	14.0		14.0	14.0		21.0
Total Split (s)	0.0	14.0	0.0	25.0	25.0	0.0	40.0	40.0	40.0	65.0	40.0	40.0	0.0	21.0
Total Split (%)	0.0%	14.0%	0.0%	25.0%	25.0%	0.0%	40.0%	40.0%	40.0%	65.0%	40.0%	40.0%	0.0%	21%
Maximum Green (s)		10.0		21.0	21.0		36.0	36.0	36.0		36.0	36.0		18.0
Yellow Time (s)		3.0		3.0	3.0		3.0	3.0	3.0		3.0	3.0		2.0
All-Red Time (s)		1.0		1.0	1.0		1.0	1.0	1.0		1.0	1.0		1.0
Lead/Lag		Lead		Lead	Lead		Lag	Lag	Lag		Lag	Lag		Lag
Lead-Lag Optimize?														
Vehicle Extension (s)		2.0		2.0	2.0		2.0	2.0	2.0		2.0	2.0		2.0
Recall Mode		None		C-Max	C-Max		None	None	None		None	None		None
Walk Time (s)														7.0
Flash Dont Walk (s)														11.0
Pedestrian Calls (#/hr)														5
Act Effct Green (s)		10.0			47.8				28.8	81.4		28.8		
Actuated g/C Ratio		0.10			0.48				0.29	0.81		0.29		
v/c Ratio		0.24			0.40				0.83	0.34		0.01		
Control Delay		27.1			23.4				37.0	0.5		21.5		
Queue Delay		0.0			0.0				0.1	1.0		0.0		
Total Delay		27.1			23.4				37.1	1.5		21.5		
LOS		C			C				D	A		C		
Approach Delay		27.1			23.4				15.3			21.5		
Approach LOS		C			C				B			C		
Queue Length 50th (ft)		8			88				136	0		2		
Queue Length 95th (ft)		24			m#253				m104	m8		5		
Internal Link Dist (ft)		341			117				269			257		
Turn Bay Length (ft)														
Base Capacity (vph)		245			643				382	1160		384		
Starvation Cap Reductn		0			0				3	501		0		
Spillback Cap Reductn		0			0				0	0		0		
Storage Cap Reductn		0			0				0	0		0		
Reduced v/c Ratio		0.24			0.40				0.67	0.60		0.01		

Intersection Summary

Area Type: CBD
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 45 (45%), Referenced to phase 1:WBTL, Start of Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.83
 Intersection Signal Delay: 18.2 Intersection LOS: B
 Intersection Capacity Utilization 61.6% ICU Level of Service B
 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.

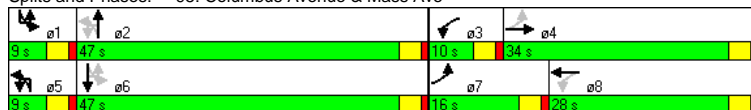


	↖	→	↘	↙	←	↖	↘	↙	↘	↖	↘	↙	↘	↙	↘
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	
Lane Configurations	↖	↖↗		↖	↖			↖	↖↗			↖	↖↗		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	10	11	12	11	12	12	12	10	11	12	12	10	11	12	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50		50	50		50	50	50		50	50	50		
Trailing Detector (ft)	0	0		0	0		0	0	0		0	0	0		
Turning Speed (mph)	15		9	15		9	9	15		9	9	15		9	
Satd. Flow (prot)	1472	2791	0	1454	1434	0	0	1489	2756	0	0	1326	2723	0	
Flt Permitted	0.279			0.589				0.162				0.160			
Satd. Flow (perm)	411	2791	0	846	1434	0	0	245	2756	0	0	219	2723	0	
Right Turn on Red			No			No				Yes				Yes	
Satd. Flow (RTOR)									13				47		
Link Speed (mph)		30			30				30				30		
Link Distance (ft)		628			795				630				892		
Travel Time (s)		14.3			18.1				14.3				20.3		
Volume (vph)	302	164	39	111	131	90	2	41	881	75	1	59	726	195	
Confl. Peds. (#/hr)	84		71	71		84		140		143		143		140	
Confl. Bikes (#/hr)			76			13				33				41	
Peak Hour Factor	0.89	0.79	0.70	0.82	0.82	0.69	0.50	0.79	0.98	0.82	0.25	0.72	0.95	0.88	
Heavy Vehicles (%)	3%	7%	0%	8%	5%	5%	0%	2%	11%	11%	0%	15%	7%	2%	
Adj. Flow (vph)	339	208	56	135	160	130	4	52	899	91	4	82	764	222	
Lane Group Flow (vph)	339	264	0	135	290	0	0	56	990	0	0	86	986	0	
Turn Type	pm+pt			pm+pt			pm+pt	pm+pt			pm+pt	pm+pt			
Protected Phases	7	4		3	8		5	5	2		1	1	6		
Permitted Phases	4			8			2	2			6	6			
Detector Phases	7	4		3	8		5	5	2		1	1	6		
Minimum Initial (s)	6.0	8.0		6.0	8.0		5.0	5.0	1.0		5.0	5.0	1.0		
Minimum Split (s)	10.0	28.0		10.0	28.0		9.0	9.0	44.0		9.0	9.0	47.0		
Total Split (s)	16.0	34.0	0.0	10.0	28.0	0.0	9.0	9.0	47.0	0.0	9.0	9.0	47.0	0.0	
Total Split (%)	16.0%	34.0%	0.0%	10.0%	28.0%	0.0%	9.0%	9.0%	47.0%	0.0%	9.0%	9.0%	47.0%	0.0%	
Maximum Green (s)	12.0	30.0		6.0	24.0		5.0	5.0	43.0		5.0	5.0	43.0		
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0		
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag		Lead	Lag	Lag		
Lead-Lag Optimize?															
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0		2.0	2.0	2.0		
Recall Mode	None	None		None	None		None	None	C-Max		None	None	C-Max		
Walk Time (s)		7.0			7.0				25.0				25.0		
Flash Dont Walk (s)		17.0			17.0				15.0				15.0		
Pedestrian Calls (#/hr)		0			0				5				0		
Act Effct Green (s)	38.2	28.2		28.2	22.2			50.6	46.6			50.6	46.6		
Actuated g/C Ratio	0.38	0.28		0.28	0.22			0.51	0.47			0.51	0.47		
v/c Ratio	1.19	0.34		0.49	0.91			0.30	0.77			0.52	0.76		
Control Delay	142.0	29.5		29.6	71.1			15.8	20.7			20.2	11.3		
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0			0.0	0.0		
Total Delay	142.0	29.5		29.6	71.1			15.8	20.7			20.2	11.3		
LOS	F	C		C	E			B	C			C	B		
Approach Delay		92.7			57.9				20.4				12.0		
Approach LOS		F			E				C				B		
Queue Length 50th (ft)	~177	65		56	177			14	142			10	55		
Queue Length 95th (ft)	m#353	m86		90	#272			m22	192			m19	145		
Internal Link Dist (ft)		548			715				550				812		
Turn Bay Length (ft)															
Base Capacity (vph)	284	837		275	344			186	1292			166	1295		
Starvation Cap Reductn	0	0		0	0			0	0			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	1.19	0.32		0.49	0.84			0.30	0.77			0.52	0.76		

Intersection Summary

Area Type: CBD
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 3 (3%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 95
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.19
Intersection Signal Delay: 36.5 Intersection LOS: D
Intersection Capacity Utilization 89.2% 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: 95: Columbus Avenue & Mass Ave



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Yield		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	0	761	49	24	590
Peak Hour Factor	0.25	0.25	0.94	0.77	0.67	0.86
Hourly flow rate (vph)	0	0	810	64	36	686
Pedestrians	56		9			62
Lane Width (ft)	0.0		13.0			11.0
Walking Speed (ft/s)	4.0		4.0			4.0
Percent Blockage	0		1			5
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)	229			208		
pX, platoon unblocked	0.65	0.54			0.54	
vC, conflicting volume	1321	959			929	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	696	925			870	
tC, single (s)	6.8	6.9			5.9	
tC, 2 stage (s)						
tF (s)	3.5	3.3			3.1	
p0 queue free %	100	100			84	
cM capacity (veh/h)	204	142			219	
Direction, Lane #	NB 1	SB 1	SB 2			
Volume Total	873	265	457			
Volume Left	0	36	0			
Volume Right	64	0	0			
cSH	1700	219	1700			
Volume to Capacity	0.51	0.16	0.27			
Queue Length 95th (ft)	0	14	0			
Control Delay (s)	0.0	7.4	0.0			
Lane LOS		A				
Approach Delay (s)	0.0	2.7				
Approach LOS						
Intersection Summary						
Average Delay			1.2			
Intersection Capacity Utilization			66.8%	ICU Level of Service	C	
Analysis Period (min)			15			

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↑	↑
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	374	0	0	216	4	8
Peak Hour Factor	0.98	0.25	0.25	0.82	0.75	0.58
Hourly flow rate (vph)	382	0	0	263	5	14
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None		
Median storage (veh)						
Upstream signal (ft)	197					
pX, platoon unblocked						
vC, conflicting volume			382	645	382	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			382	645	382	
tC, single (s)			4.1	6.4	6.2	
tC, 2 stage (s)						
tF (s)			2.2	3.5	3.3	
p0 queue free %			100	99	98	
cM capacity (veh/h)			1188	440	670	
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	382	263	19			
Volume Left	0	0	5			
Volume Right	0	0	14			
cSH	1700	1700	585			
Volume to Capacity	0.22	0.15	0.03			
Queue Length 95th (ft)	0	0	3			
Control Delay (s)	0.0	0.0	11.4			
Lane LOS			B			
Approach Delay (s)	0.0	0.0	11.4			
Approach LOS			B			
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			31.9%	ICU Level of Service	A	
Analysis Period (min)			15			



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↕			↕			↕			↕			
Sign Control	Free			Free			Stop			Stop			
Grade	0%			0%			0%			0%			
Volume (veh/h)	58	321	13	1	7	209	35	0	0	0	14	2	7
Peak Hour Factor	0.85	0.84	0.54	0.25	0.58	0.89	0.63	0.25	0.25	0.25	0.44	0.25	0.58
Hourly flow rate (vph)	68	382	24	0	12	235	56	0	0	0	32	8	12
Pedestrians	15			36			56			134			
Lane Width (ft)	11.0			11.0			0.0			16.0			
Walking Speed (ft/s)	4.0			4.0			4.0			4.0			
Percent Blockage	1			3			0			15			
Right turn flare (veh)													
Median type							None			None			
Median storage (veh)													
Upstream signal (ft)	373												
pX, platoon unblocked				0.00									
vC, conflicting volume	424			0	462			904	1035	486	987	1019	412
vC1, stage 1 conf vol													
vC2, stage 2 conf vol													
vCu, unblocked vol	424			0	462			904	1035	486	987	1019	412
tC, single (s)	4.1			0.0	4.2			7.1	6.5	6.2	7.1	6.5	6.5
tC, 2 stage (s)													
tF (s)	2.2			0.0	2.3			3.5	4.0	3.3	3.5	4.0	3.6
p0 queue free %	93			0	99			100	100	100	80	96	98
cM capacity (veh/h)	966			0	1039			202	183	569	157	187	493

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	474	302	52
Volume Left	68	12	32
Volume Right	24	56	12
cSH	966	1039	192
Volume to Capacity	0.07	0.01	0.27
Queue Length 95th (ft)	6	1	26
Control Delay (s)	2.0	0.5	30.5
Lane LOS	A	A	D
Approach Delay (s)	2.0	0.5	30.5
Approach LOS	D		

Intersection Summary			
Average Delay			3.2
Intersection Capacity Utilization	59.8%	ICU Level of Service	B
Analysis Period (min)			15

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↘	↙
Sign Control	Free			Free	Stop	Stop
Grade	0%			0%	0%	0%
Volume (veh/h)	335	0	0	245	7	26
Peak Hour Factor	0.86	0.25	0.25	0.84	0.50	0.64
Hourly flow rate (vph)	390	0	0	292	14	41
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None		
Median storage (veh)						
Upstream signal (ft)	546					
pX, platoon unblocked						
vC, conflicting volume			390	681	390	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			390	681	390	
tC, single (s)			4.1	6.6	6.2	
tC, 2 stage (s)						
tF (s)			2.2	3.7	3.3	
p0 queue free %			100	96	94	
cM capacity (veh/h)			1180	394	663	
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	390	292	55			
Volume Left	0	0	14			
Volume Right	0	0	41			
cSH	1700	1700	564			
Volume to Capacity	0.23	0.17	0.10			
Queue Length 95th (ft)	0	0	8			
Control Delay (s)	0.0	0.0	12.1			
Lane LOS			B			
Approach Delay (s)	0.0	0.0	12.1			
Approach LOS			B			
Intersection Summary						
Average Delay			0.9			
Intersection Capacity Utilization			29.6%	ICU Level of Service	A	
Analysis Period (min)			15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔				↔							
Sign Control	Free				Free				Stop		Stop	
Grade	0%				0%				0%		0%	
Volume (veh/h)	68	275	17	35	245	70	0	0	0	0	0	0
Peak Hour Factor	0.71	0.85	0.71	0.73	0.88	0.80	0.25	0.25	0.25	0.25	0.25	0.25
Hourly flow rate (vph)	96	324	24	48	278	88	0	0	0	0	0	0
Pedestrians	85				7				133		117	
Lane Width (ft)	11.0				10.0				0.0		0.0	
Walking Speed (ft/s)	4.0				4.0				4.0		4.0	
Percent Blockage	6				0				0		0	
Right turn flare (veh)												
Median type							None				None	
Median storage (veh)												
Upstream signal (ft)	737											
pX, platoon unblocked												
vC, conflicting volume	483			480			1163	1239	476	1069	1207	524
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	483			480			1163	1239	476	1069	1207	524
tC, single (s)	4.1			4.2			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.3			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	91			95			100	100	100	100	100	100
cM capacity (veh/h)	1090			1061			146	154	591	180	161	521

Direction, Lane #	EB 1	WB 1
Volume Total	443	414
Volume Left	96	48
Volume Right	24	88
cSH	1090	1061
Volume to Capacity	0.09	0.05
Queue Length 95th (ft)	7	4
Control Delay (s)	2.6	1.4
Lane LOS	A	A
Approach Delay (s)	2.6	1.4
Approach LOS		

Intersection Summary		
Average Delay	2.0	
Intersection Capacity Utilization	39.6%	ICU Level of Service A
Analysis Period (min)	15	



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	↕			↕			↕			↕				
Sign Control	Free			Free			Stop			Stop				
Grade	0%			0%			0%			0%				
Volume (veh/h)	4	299	11	1	14	339	2	2	0	19	2	1	0	
Peak Hour Factor	0.50	0.82	0.46	0.25	0.44	0.91	0.50	0.50	0.25	0.60	0.50	0.25	0.25	
Hourly flow rate (vph)	8	365	24	0	32	373	4	4	0	32	4	4	0	
Pedestrians	45			57			64			34				
Lane Width (ft)	11.0			10.0			16.0			13.0				
Walking Speed (ft/s)	4.0			4.0			4.0			4.0				
Percent Blockage	3			4			7			3				
Right turn flare (veh)														
Median type							None			None				
Median storage (veh)														
Upstream signal (ft)	628													
pX, platoon unblocked				0.00										
vC, conflicting volume	411			0	453			942	931	498	953	941	454	
vC1, stage 1 conf vol														
vC2, stage 2 conf vol														
vCu, unblocked vol	411			0	453			942	931	498	953	941	454	
tC, single (s)	4.1			0.0	4.1			7.1	6.5	6.2	7.1	6.5	6.2	
tC, 2 stage (s)														
tF (s)	2.2			0.0	2.2			3.5	4.0	3.3	3.5	4.0	3.3	
p0 queue free %	99			0	97			98	100	94	98	98	100	
cM capacity (veh/h)	1124			0	1039			195	233	505	189	230	571	

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	397	408	36	8
Volume Left	8	32	4	4
Volume Right	24	4	32	0
cSH	1124	1039	429	207
Volume to Capacity	0.01	0.03	0.08	0.04
Queue Length 95th (ft)	1	2	7	3
Control Delay (s)	0.2	1.0	14.2	23.1
Lane LOS	A	A	B	C
Approach Delay (s)	0.2	1.0	14.2	23.1
Approach LOS			B	C

Intersection Summary			
Average Delay			1.4
Intersection Capacity Utilization	48.7%	ICU Level of Service	A
Analysis Period (min)			15

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø2
Lane Configurations							
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	16	16	13	12	12	11	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50	50				
Trailing Detector (ft)	0	0	0				
Turning Speed (mph)	15	9		9	15		
Satd. Flow (prot)	995	941	1621	0	0	3049	
Flt Permitted	0.950						
Satd. Flow (perm)	995	941	1621	0	0	3049	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)		36					
Link Speed (mph)	30		30			30	
Link Distance (ft)	219		341			206	
Travel Time (s)	5.0		7.8			4.7	
Volume (vph)	66	24	742	0	0	726	
Confl. Bikes (#/hr)				5			
Peak Hour Factor	0.72	0.67	0.97	0.25	0.25	0.90	
Heavy Vehicles (%)	85%	75%	9%	0%	0%	3%	
Lane Group Flow (vph)	92	36	765	0	0	807	
Turn Type		Prot					
Protected Phases	5	5	1			1	2
Permitted Phases							
Detector Phases	5	5	1			1	
Minimum Initial (s)	8.0	8.0	8.0			8.0	20.0
Minimum Split (s)	13.0	13.0	13.0			13.0	24.0
Total Split (s)	15.0	15.0	31.0	0.0	0.0	31.0	24.0
Total Split (%)	21.4%	21.4%	44.3%	0.0%	0.0%	44.3%	34%
Maximum Green (s)	10.0	10.0	26.0			26.0	20.0
Yellow Time (s)	3.0	3.0	3.0			3.0	3.5
All-Red Time (s)	2.0	2.0	2.0			2.0	0.5
Lead/Lag							
Lead-Lag Optimize?							
Vehicle Extension (s)	2.0	2.0	2.0			2.0	2.0
Recall Mode	None	None	C-Max			C-Max	None
Walk Time (s)							7.0
Flash Dont Walk (s)							13.0
Pedestrian Calls (#/hr)							10
Act Effect Green (s)	11.4	11.4	49.2			49.2	
Actuated g/C Ratio	0.16	0.16	0.70			0.70	
v/c Ratio	0.57	0.20	0.67			0.38	
Control Delay	42.4	12.2	16.8			7.9	
Queue Delay	0.0	0.0	0.7			0.1	
Total Delay	42.4	12.2	17.5			8.0	
LOS	D	B	B			A	
Approach Delay	33.9		17.5			8.0	
Approach LOS	C		B			A	
Queue Length 50th (ft)	36	0	315			54	
Queue Length 95th (ft)	64	14m#1110				190	
Internal Link Dist (ft)	139		261			126	
Turn Bay Length (ft)							
Base Capacity (vph)	172	192	1139			2142	
Starvation Cap Reductn	0	0	126			0	
Spillback Cap Reductn	0	0	0			267	
Storage Cap Reductn	0	0	0			0	
Reduced v/c Ratio	0.53	0.19	0.76			0.43	

Intersection Summary

Area Type: CBD
 Cycle Length: 70
 Actuated Cycle Length: 70
 Offset: 25 (36%), Referenced to phase 1:NBSB, Start of Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.67
 Intersection Signal Delay: 14.2 Intersection LOS: B
 Intersection Capacity Utilization 56.7% ICU Level of Service B
 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: 3068: MBTA Exit & Ruggles Street

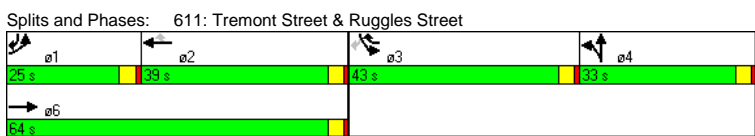




Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔↔↔		↔	↔↔	↔	↔	↔	↔	↔↔		↔
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	11	12	11	11	12	12	12	12
Storage Length (ft)	200		0	0		0	0		0	0		0
Storage Lanes	1		0	0		1	1		0	2		1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50			50	50	50	50		50		50
Trailing Detector (ft)	0	0			0	0	0	0		0		0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Satd. Flow (prot)	1570	4468	0	0	3110	1454	1570	1323	0	3120	0	1454
Flt Permitted	0.950						0.950			0.950		
Satd. Flow (perm)	1568	4468	0	0	3110	1408	1501	1323	0	2724	0	1415
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)								26				251
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		975			274			591			341	
Travel Time (s)		22.2			6.2			13.4			7.8	
Volume (vph)	154	1174	0	0	842	568	62	20	36	591	0	201
Confl. Peds. (#/hr)	1		58	58		1	20		65	65		20
Confl. Bikes (#/hr)			8			9						1
Peak Hour Factor	0.85	0.93	0.92	0.92	0.96	0.93	0.57	0.72	0.59	0.89	0.82	0.80
Heavy Vehicles (%)	0%	1%	0%	0%	1%	0%	0%	1%	0%	1%	0%	0%
Lane Group Flow (vph)	181	1262	0	0	877	611	109	89	0	664	0	251
Turn Type	Prot				pm+ov		Split			Prot		custom
Protected Phases	1	6			2	3	4	4		3		1
Permitted Phases						2						3
Detector Phases	1	6			2	3	4	4		3		1
Minimum Initial (s)	8.0	16.0			16.0	9.0	8.0	8.0		9.0		8.0
Minimum Split (s)	12.0	20.0			20.0	13.0	23.0	23.0		13.0		12.0
Total Split (s)	25.0	64.0	0.0	0.0	39.0	43.0	33.0	33.0	0.0	43.0	0.0	25.0
Total Split (%)	17.9%	45.7%	0.0%	0.0%	27.9%	30.7%	23.6%	23.6%	0.0%	30.7%	0.0%	17.9%
Maximum Green (s)	21.0	60.0			35.0	39.0	29.0	29.0		39.0		21.0
Yellow Time (s)	3.0	3.0			3.0	3.0	3.0	3.0		3.0		3.0
All-Red Time (s)	1.0	1.0			1.0	1.0	1.0	1.0		1.0		1.0
Lead/Lag	Lead				Lag	Lead	Lag	Lag		Lead		Lead
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0			2.0	2.0	2.0	2.0		2.0		2.0
Recall Mode	None	C-Max			C-Max	None	None	None		None		None
Walk Time (s)		8.0			8.0		8.0	8.0				
Flash Dont Walk (s)		6.0			5.0		11.0	11.0				
Pedestrian Calls (#/hr)		4			4		17	17				
Act Effect Green (s)	18.7	80.0			57.3	91.1	14.2	14.2		33.8		52.5
Actuated g/C Ratio	0.13	0.57			0.41	0.65	0.10	0.10		0.24		0.38
v/c Ratio	0.86	0.49			0.69	0.66	0.69	0.56		0.88		0.36
Control Delay	93.4	20.2			40.1	18.9	81.0	54.9		60.7		4.2
Queue Delay	93.9	0.1			95.3	4.2	0.0	0.1		4.5		0.2
Total Delay	187.3	20.2			135.4	23.1	81.0	54.9		65.2		4.4
LOS	F	C			F	C	F	D		E		A
Approach Delay		41.2			89.3			69.3				
Approach LOS		D			F			E				
Queue Length 50th (ft)	161	244			355	297	98	55		300		6
Queue Length 95th (ft)	#248	335			#514	481	96	82		330		50
Internal Link Dist (ft)		895			194			511			261	
Turn Bay Length (ft)	200											
Base Capacity (vph)	236	2552			1272	981	325	295		869		713
Starvation Cap Reductn	0	0			544	285	0	0		140		110
Spillback Cap Reductn	83	212			0	0	0	8		56		0
Storage Cap Reductn	0	0			0	0	0	0		0		0
Reduced v/c Ratio	1.18	0.54			1.20	0.88	0.34	0.31		0.91		0.42

Intersection Summary

Area Type: CBD
 Cycle Length: 140
 Actuated Cycle Length: 140
 Offset: 56 (40%), Referenced to phase 2:WBT and 6:EBT, Start of Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.88
 Intersection Signal Delay: 61.9 Intersection LOS: E
 Intersection Capacity Utilization 73.5% ICU Level of Service D
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.



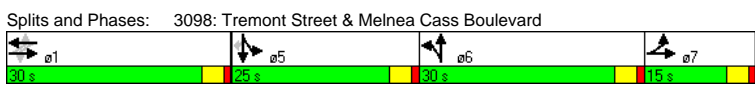


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕	↕		↕↕		↕	↕↕			↕	↕
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Lane Width (ft)	12	10	16	11	16	12	14	14	13	12	11	13
Storage Length (ft)	0		0	0		0	350		0	0		0
Storage Lanes	0		1	0		0	1		0	0		1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	50
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Satd. Flow (prot)	0	2615	1431	0	3142	0	1397	2725	0	0	1447	1331
Flt Permitted		0.578			0.580		0.950	0.963			0.996	
Satd. Flow (perm)	0	1522	1405	0	1832	0	1387	2709	0	0	1445	1297
Right Turn on Red			No			Yes			No			Yes
Satd. Flow (RTOR)					3							219
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		502			2251			626			342	
Travel Time (s)		11.4			51.2			14.2			7.8	
Volume (vph)	225	542	810	58	398	15	875	66	58	19	211	206
Confl. Peds. (#/hr)	50		20	20		50	7		21	21		7
Confl. Bikes (#/hr)			2			7			14			3
Peak Hour Factor	0.88	0.88	0.88	0.86	0.86	0.86	0.96	0.96	0.96	0.89	0.89	0.89
Heavy Vehicles (%)	3%	2%	3%	4%	3%	13%	1%	18%	0%	0%	2%	1%
Lane Group Flow (vph)	0	872	920	0	547	0	456	584	0	0	258	231
Turn Type	D,P+P		Free	Perm			Split			Split		Perm
Protected Phases	7	17			1		6	6		5	5	
Permitted Phases	1		Free	1								5
Detector Phases	17	17		1	1		6	6		5	5	5
Minimum Initial (s)	4.0			10.0	10.0		10.0	10.0		8.0	8.0	8.0
Minimum Split (s)	8.0			26.0	26.0		20.0	20.0		24.0	24.0	24.0
Total Split (s)	15.0	45.0	0.0	30.0	30.0	0.0	30.0	30.0	0.0	25.0	25.0	25.0
Total Split (%)	15.0%	45.0%	0.0%	30.0%	30.0%	0.0%	30.0%	30.0%	0.0%	25.0%	25.0%	25.0%
Maximum Green (s)	11.0			26.0	26.0		26.0	26.0		21.0	21.0	21.0
Yellow Time (s)	3.0			3.0	3.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0			1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lead/Lag							Lag	Lag		Lead	Lead	Lead
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0			2.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	Max			C-Max	C-Max		None	None		None	None	None
Walk Time (s)				7.0	7.0					7.0	7.0	7.0
Flash Dont Walk (s)				15.0	15.0					13.0	13.0	13.0
Pedestrian Calls (#/hr)				0	0					5	5	5
Act Effct Green (s)		38.3	100.0		27.3		26.0	26.0			19.7	19.7
Actuated g/C Ratio		0.38	1.00		0.27		0.26	0.26			0.20	0.20
v/c Ratio		1.24	0.65		1.09		1.26	1.20dl			0.91	0.54
Control Delay		146.8	2.4		97.0		169.4	46.1			57.5	6.2
Queue Delay		0.0	0.0		0.0		0.0	0.0			0.0	0.8
Total Delay		146.8	2.4		97.0		169.4	46.1			57.5	7.0
LOS		F	A		F		F	D			E	A
Approach Delay		72.7			97.0			100.1			33.6	
Approach LOS		E			F			F			C	
Queue Length 50th (ft)		~346	0		~217		~402	192			147	16
Queue Length 95th (ft)		#478	0		#305		#613	#283			m#279	m31
Internal Link Dist (ft)		422			2171			546			262	
Turn Bay Length (ft)							350					
Base Capacity (vph)		704	1405		503		363	709			304	445
Starvation Cap Reductn		0	0		0		0	0			0	63
Spillback Cap Reductn		0	0		0		0	0			0	0
Storage Cap Reductn		0	0		0		0	0			0	0
Reduced v/c Ratio		1.24	0.65		1.09		1.26	0.82			0.85	0.60

Intersection Summary

Area Type: CBD
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 36 (36%), Referenced to phase 1:EBWB, Start of Green
 Natural Cycle: 130
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.26
 Intersection Signal Delay: 78.6 Intersection LOS: E
 Intersection Capacity Utilization 103.9% ICU Level of Service G
 Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.
 dl Defacto Left Lane. Recode with 1 though lane as a left lane.

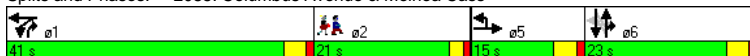




Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR	ø2
Lane Configurations			↕			↕				↕	↕		↕		
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Lane Width (ft)	12	12	12	12	12	11	12	12	12	12	14	14	12	16	12
Storage Length (ft)			0	25	0		0			0		0	0		0
Storage Lanes			0	0	0		0			0		1	0		0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50		50	50		50	50	50	50	50	50		50
Trailing Detector (ft)	0	0	0		0	0		0	0	0	0	0	0		0
Turning Speed (mph)	9	15		9	15		9	9	15		9	15		9	
Satd. Flow (prot)	0	0	2508	0	0	1415	0	0	0	1350	1373	0	1555	0	
Flt Permitted						0.965				0.741			0.956		
Satd. Flow (perm)	0	0	2508	0	0	1395	0	0	0	940	1373	0	1487	0	
Right Turn on Red				Yes			Yes				Yes			Yes	
Satd. Flow (RTOR)			93								230			4	
Link Speed (mph)			30			30				30			30		
Link Distance (ft)			383			219				342			245		
Travel Time (s)			8.7			5.0				7.8			5.6		
Volume (vph)	1	0	81	82	340	124	2	13	89	11	193	1	1	2	
Confl. Peds. (#/hr)		2		31	31		2	31	12		23	23		12	
Confl. Bikes (#/hr)				23				85			2			1	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.84	0.84	0.84	0.84	0.50	0.50	0.50	
Heavy Vehicles (%)	0%	1%	0%	0%	1%	0%	0%	0%	12%	64%	1%	0%	0%	0%	
Lane Group Flow (vph)	0	0	186	0	0	529	0	0	0	134	230	0	8	0	
Turn Type	Split				Split		Perm	Perm		pt+ov	Perm				
Protected Phases	5		5		1	1				6	1 6		6	2	
Permitted Phases								6	6			6			
Detector Phases	5		5		1	1		6	6	6	6	6	6		
Minimum Initial (s)	10.0		10.0		10.0	10.0		8.0	8.0	8.0		8.0	8.0		8.0
Minimum Split (s)	14.0		14.0		15.0	15.0		14.0	14.0	14.0		14.0	14.0		21.0
Total Split (s)	15.0	0.0	15.0	0.0	41.0	41.0	0.0	23.0	23.0	23.0	64.0	23.0	23.0	0.0	21.0
Total Split (%)	15.0%	0.0%	15.0%	0.0%	41.0%	41.0%	0.0%	23.0%	23.0%	23.0%	64.0%	23.0%	23.0%	0.0%	21%
Maximum Green (s)	11.0		11.0		37.0	37.0		19.0	19.0	19.0		19.0	19.0		18.0
Yellow Time (s)	3.0		3.0		3.0	3.0		3.0	3.0	3.0		3.0	3.0		2.0
All-Red Time (s)	1.0		1.0		1.0	1.0		1.0	1.0	1.0		1.0	1.0		1.0
Lead/Lag	Lead		Lead		Lead	Lead		Lag	Lag	Lag		Lag	Lag		Lag
Lead-Lag Optimize?															
Vehicle Extension (s)	2.0		2.0		2.0	2.0		2.0	2.0	2.0		2.0	2.0		2.0
Recall Mode	None		None		C-Max	C-Max		None	None	None		None	None		None
Walk Time (s)															7.0
Flash Dont Walk (s)															11.0
Pedestrian Calls (#/hr)															15
Act Effct Green (s)			10.2			57.4				16.2	77.6		16.2		
Actuated g/C Ratio			0.10			0.57				0.16	0.78		0.16		
v/c Ratio			0.55			0.65				0.88	0.21		0.03		
Control Delay			28.1			23.3				48.6	0.2		26.2		
Queue Delay			0.0			0.0				0.0	0.7		0.0		
Total Delay			28.1			23.3				48.6	0.8		26.2		
LOS			C			C				D	A		C		
Approach Delay			28.1			23.3				18.4			26.3		
Approach LOS			C			C				B			C		
Queue Length 50th (ft)			29			211				65	0		2		
Queue Length 95th (ft)			62			m#502				m61	m0		7		
Internal Link Dist (ft)			303			139				262			165		
Turn Bay Length (ft)															
Base Capacity (vph)			359			812				179	1117		286		
Starvation Cap Reductn			0			0				0	593		0		
Spillback Cap Reductn			0			0				0	0		0		
Storage Cap Reductn			0			0				0	0		0		
Reduced v/c Ratio			0.52			0.65				0.75	0.44		0.03		

Intersection Summary
 Area Type: CBD
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 47 (47%), Referenced to phase 1:WBTL, Start of Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.88
 Intersection Signal Delay: 22.5 Intersection LOS: C
 Intersection Capacity Utilization 67.6% ICU Level of Service C
 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: 2085: Columbus Avenue & Melnea Cass

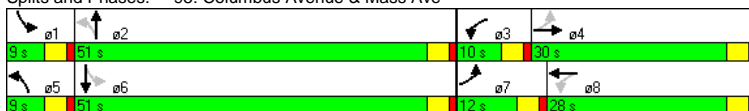


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	11	12	11	12	12	10	11	12	10	11	12
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Satd. Flow (prot)	1516	2872	0	1481	1534	0	1516	2931	0	1486	2706	0
Flt Permitted	0.270			0.570			0.115			0.170		
Satd. Flow (perm)	398	2872	0	821	1534	0	176	2931	0	258	2706	0
Right Turn on Red			No			No			Yes			Yes
Satd. Flow (RTOR)								14			47	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		626			513			635			882	
Travel Time (s)		14.2			11.7			14.4			20.0	
Volume (vph)	267	196	51	140	214	67	39	828	81	71	877	225
Confl. Peds. (#/hr)	130		90	90		130	240		204	204		240
Confl. Bikes (#/hr)			26			90			85			47
Peak Hour Factor	0.87	0.96	0.71	0.83	0.89	0.97	0.75	0.89	0.88	0.68	0.94	0.88
Heavy Vehicles (%)	0%	1%	2%	6%	2%	3%	0%	4%	2%	2%	5%	1%
Lane Group Flow (vph)	307	276	0	169	309	0	52	1022	0	104	1189	0
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phases	7	4		3	8		5	2		1	6	
Minimum Initial (s)	6.0	8.0		6.0	8.0		5.0	29.0		5.0	29.0	
Minimum Split (s)	10.0	28.0		10.0	28.0		9.0	44.0		9.0	44.0	
Total Split (s)	12.0	30.0	0.0	10.0	28.0	0.0	9.0	51.0	0.0	9.0	51.0	0.0
Total Split (%)	12.0%	30.0%	0.0%	10.0%	28.0%	0.0%	9.0%	51.0%	0.0%	9.0%	51.0%	0.0%
Maximum Green (s)	8.0	26.0		6.0	24.0		5.0	47.0		5.0	47.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)		7.0			7.0			25.0			25.0	
Flash Dont Walk (s)		17.0			17.0			15.0			15.0	
Pedestrian Calls (#/hr)		5			5			5			5	
Act Effct Green (s)	32.1	24.1		28.1	22.1		53.9	48.9		54.7	50.7	
Actuated g/C Ratio	0.32	0.24		0.28	0.22		0.54	0.49		0.55	0.51	
v/c Ratio	1.41	0.40		0.62	0.91		0.32	0.71		0.51	0.85	
Control Delay	237.1	33.5		37.6	69.1		14.4	12.7		17.2	14.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	237.1	33.5		37.6	69.1		14.4	12.7		17.2	14.5	
LOS	F	C		D	E		B	B		B	B	
Approach Delay		140.7			57.9			12.7			14.7	
Approach LOS		F			E			B			B	
Queue Length 50th (ft)	~190	73		77	188		9	109		13	74	
Queue Length 95th (ft)	#343	110		120	#327		m14	139		m19	#484	
Internal Link Dist (ft)		546			433			555			802	
Turn Bay Length (ft)												
Base Capacity (vph)	217	747		271	368		162	1439		203	1394	
Starvation Cap Reductn	0	0		0	0		0	0		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	1.41	0.37		0.62	0.84		0.32	0.71		0.51	0.85	

Intersection Summary

Area Type: CBD
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
 Natural Cycle: 105
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.41
 Intersection Signal Delay: 41.5 Intersection LOS: D
 Intersection Capacity Utilization 90.5% 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: 95: Columbus Avenue & Mass Ave



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Yield		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	0	730	36	17	726
Peak Hour Factor	0.92	0.92	0.92	0.90	0.71	0.94
Hourly flow rate (vph)	0	0	793	40	24	772
Pedestrians	205		25			48
Lane Width (ft)	0.0		13.0			11.0
Walking Speed (ft/s)	4.0		4.0			4.0
Percent Blockage	0		2			4
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)			206			234
pX, platoon unblocked	0.66	0.66			0.66	
vC, conflicting volume	1478	1066			1038	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1722	1101			1058	
tC, single (s)	6.8	6.9			5.6	
tC, 2 stage (s)						
tF (s)	3.5	3.3			3.0	
p0 queue free %	100	100			90	
cM capacity (veh/h)	46	132			231	
Direction, Lane #	NB 1	SB 1	SB 2			
Volume Total	833	281	515			
Volume Left	0	24	0			
Volume Right	40	0	0			
cSH	1700	231	1700			
Volume to Capacity	0.49	0.10	0.30			
Queue Length 95th (ft)	0	9	0			
Control Delay (s)	0.0	4.4	0.0			
Lane LOS		A				
Approach Delay (s)	0.0	1.6				
Approach LOS						
Intersection Summary						
Average Delay			0.8			
Intersection Capacity Utilization			63.5%	ICU Level of Service	B	
Analysis Period (min)			15			

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↓	↓
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	275	0	0	466	8	26
Peak Hour Factor	0.79	0.25	0.25	0.86	0.88	0.82
Hourly flow rate (vph)	348	0	0	542	9	32
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None		
Median storage (veh)						
Upstream signal (ft)	219					
pX, platoon unblocked			0.96		0.96	0.96
vC, conflicting volume			348		890	348
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			321		885	321
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		97	95
cM capacity (veh/h)			1201		305	687
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	348	542	41			
Volume Left	0	0	9			
Volume Right	0	0	32			
cSH	1700	1700	537			
Volume to Capacity	0.20	0.32	0.08			
Queue Length 95th (ft)	0	0	6			
Control Delay (s)	0.0	0.0	12.3			
Lane LOS			B			
Approach Delay (s)	0.0	0.0	12.3			
Approach LOS			B			
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utilization			37.3%		ICU Level of Service	A
Analysis Period (min)			15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↕				↕						↕	
Sign Control	Free				Free						Stop	
Grade	0%				0%						0%	
Volume (veh/h)	37	253	11	23	335	56	0	0	0	127	7	111
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	40	275	12	25	364	61	0	0	0	138	8	121
Pedestrians	23				66				207		94	
Lane Width (ft)	11.0				11.0				0.0		16.0	
Walking Speed (ft/s)	4.0				4.0				4.0		4.0	
Percent Blockage	2				5				0		10	
Right turn flare (veh)												
Median type							None			None		
Median storage (veh)												
Upstream signal (ft)	384											
pX, platoon unblocked												
vC, conflicting volume	519			494			1160	1137	554	966	1113	512
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	519			494			1160	1137	554	966	1113	512
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	96			98			100	100	100	21	96	76
cM capacity (veh/h)	938			1070			108	169	505	174	175	495
Direction, Lane #	EB 1	WB 1	SB 1									
Volume Total	327	450	266									
Volume Left	40	25	138									
Volume Right	12	61	121									
cSH	938	1070	247									
Volume to Capacity	0.04	0.02	1.08									
Queue Length 95th (ft)	3	2	283									
Control Delay (s)	1.5	0.7	123.8									
Lane LOS	A	A	F									
Approach Delay (s)	1.5	0.7	123.8									
Approach LOS			F									
Intersection Summary												
Average Delay			32.4									
Intersection Capacity Utilization			60.0%	ICU Level of Service	B							
Analysis Period (min)			15									

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↘	↙
Sign Control	Free			Free	Stop	Stop
Grade	0%			0%	0%	0%
Volume (veh/h)	382	0	0	419	17	20
Peak Hour Factor	0.88	0.25	0.25	0.76	0.47	0.75
Hourly flow rate (vph)	434	0	0	551	36	27
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None		
Median storage (veh)						
Upstream signal (ft)	573					
pX, platoon unblocked						
vC, conflicting volume			434	985	434	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			434	985	434	
tC, single (s)			4.1	6.4	6.2	
tC, 2 stage (s)						
tF (s)			2.2	3.5	3.3	
p0 queue free %			100	87	96	
cM capacity (veh/h)			1136	277	626	
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	434	551	63			
Volume Left	0	0	36			
Volume Right	0	0	27			
cSH	1700	1700	363			
Volume to Capacity	0.26	0.32	0.17			
Queue Length 95th (ft)	0	0	15			
Control Delay (s)	0.0	0.0	17.0			
Lane LOS			C			
Approach Delay (s)	0.0	0.0	17.0			
Approach LOS			C			
Intersection Summary						
Average Delay			1.0			
Intersection Capacity Utilization		34.5%		ICU Level of Service	A	
Analysis Period (min)		15				



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↕				↕							
Sign Control	Free				Free				Stop		Stop	
Grade	0%				0%				0%		0%	
Volume (veh/h)	21	367	14	14	387	18	0	0	0	0	0	0
Peak Hour Factor	0.66	0.92	0.70	0.70	0.86	0.75	0.25	0.25	0.50	0.25	0.25	0.25
Hourly flow rate (vph)	32	399	20	20	450	24	0	0	0	0	0	0
Pedestrians	155				47				272		215	
Lane Width (ft)	11.0				10.0				0.0		0.0	
Walking Speed (ft/s)	4.0				4.0				4.0		4.0	
Percent Blockage	12				3				0		0	
Right turn flare (veh)												
Median type							None				None	
Median storage (veh)												
Upstream signal (ft)	740											
pX, platoon unblocked												
vC, conflicting volume	689			691			1402	1474	728	1237	1472	832
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	689			691			1402	1474	728	1237	1472	832
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97			98			100	100	100	100	100	100
cM capacity (veh/h)	915			913			100	121	413	143	121	328

Direction, Lane #	EB 1	WB 1
Volume Total	451	494
Volume Left	32	20
Volume Right	20	24
cSH	915	913
Volume to Capacity	0.03	0.02
Queue Length 95th (ft)	3	2
Control Delay (s)	1.0	0.6
Lane LOS	A	A
Approach Delay (s)	1.0	0.6
Approach LOS		

Intersection Summary		
Average Delay		0.8
Intersection Capacity Utilization	35.9%	ICU Level of Service A
Analysis Period (min)		15



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↕				↕				↕		↕	
Sign Control	Free				Free				Stop		Stop	
Grade	0%				0%				0%		0%	
Volume (veh/h)	7	383	21	39	417	6	9	2	13	9	3	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	8	416	23	42	453	7	10	2	14	10	3	5
Pedestrians	77				226				113		78	
Lane Width (ft)	11.0				10.0				16.0		13.0	
Walking Speed (ft/s)	4.0				4.0				4.0		4.0	
Percent Blockage	6				16				13		7	
Right turn flare (veh)												
Median type							Raised				Raised	
Median storage (veh)							1				1	
Upstream signal (ft)			626									
pX, platoon unblocked	0.92						0.92	0.92		0.92	0.92	0.92
vC, conflicting volume	538			552			1181	1178	767	1303	1187	612
vC1, stage 1 conf vol							556	556		619	619	
vC2, stage 2 conf vol							625	623		684	567	
vCu, unblocked vol	498			552			1197	1194	767	1330	1203	578
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			95			96	99	95	95	99	99
cM capacity (veh/h)	912			890			235	251	297	192	242	415

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	447	502	26	18
Volume Left	8	42	10	10
Volume Right	23	7	14	5
cSH	912	890	266	238
Volume to Capacity	0.01	0.05	0.10	0.08
Queue Length 95th (ft)	1	4	8	6
Control Delay (s)	0.3	1.3	20.0	21.4
Lane LOS	A	A	C	C
Approach Delay (s)	0.3	1.3	20.0	21.4
Approach LOS			C	C

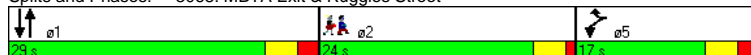
Intersection Summary			
Average Delay		1.7	
Intersection Capacity Utilization	69.4%		ICU Level of Service C
Analysis Period (min)		15	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø2
Lane Configurations							
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	16	16	13	12	12	11	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50	50				
Trailing Detector (ft)	0	0	0				
Turning Speed (mph)	15	9		9	15		
Satd. Flow (prot)	939	876	1578	0	0	2935	
Flt Permitted	0.950						
Satd. Flow (perm)	939	876	1578	0	0	2935	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)		27					
Link Speed (mph)	30		25			30	
Link Distance (ft)	232		340			229	
Travel Time (s)	5.3		9.3			5.2	
Volume (vph)	72	25	883	0	0	660	
Confl. Bikes (#/hr)				5			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	96%	88%	12%	0%	0%	7%	
Lane Group Flow (vph)	78	27	960	0	0	717	
Turn Type		Prot					
Protected Phases	5	5	1			1	2
Permitted Phases							
Detector Phases	5	5	1			1	
Minimum Initial (s)	8.0	8.0	8.0			8.0	7.0
Minimum Split (s)	13.0	13.0	13.0			13.0	24.0
Total Split (s)	17.0	17.0	29.0	0.0	0.0	29.0	24.0
Total Split (%)	24.3%	24.3%	41.4%	0.0%	0.0%	41.4%	34%
Maximum Green (s)	12.0	12.0	24.0			24.0	20.0
Yellow Time (s)	3.0	3.0	3.0			3.0	3.0
All-Red Time (s)	2.0	2.0	2.0			2.0	1.0
Lead/Lag							
Lead-Lag Optimize?							
Vehicle Extension (s)	2.0	2.0	2.0			2.0	2.0
Recall Mode	None	None	C-Max			C-Max	None
Walk Time (s)							7.0
Flash Dont Walk (s)							13.0
Pedestrian Calls (#/hr)							10
Act Effect Green (s)	11.0	11.0	49.6			49.6	
Actuated g/C Ratio	0.16	0.16	0.71			0.71	
v/c Ratio	0.53	0.17	0.86			0.34	
Control Delay	40.3	12.9	21.0			6.1	
Queue Delay	0.0	0.0	5.8			0.0	
Total Delay	40.3	12.9	26.8			6.1	
LOS	D	B	C			A	
Approach Delay	33.3		26.8			6.1	
Approach LOS	C		C			A	
Queue Length 50th (ft)	31	0	253			29	
Queue Length 95th (ft)	70	20m#1526				122	
Internal Link Dist (ft)	152		260			149	
Turn Bay Length (ft)							
Base Capacity (vph)	174	185	1119			2081	
Starvation Cap Reductn	0	0	118			0	
Spillback Cap Reductn	0	0	0			0	
Storage Cap Reductn	0	0	0			0	
Reduced v/c Ratio	0.45	0.15	0.96			0.34	

Intersection Summary

Area Type: CBD
 Cycle Length: 70
 Actuated Cycle Length: 70
 Offset: 1 (1%), Referenced to phase 1:NBSB, Start of Green
 Natural Cycle: 100
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.86
 Intersection Signal Delay: 18.8 Intersection LOS: B
 Intersection Capacity Utilization 65.0% ICU Level of Service C
 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: 3068: MBTA Exit & Ruggles Street



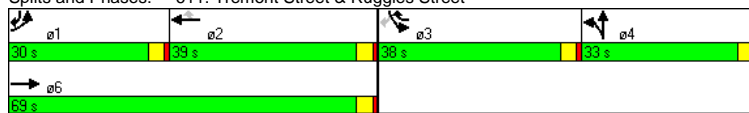


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↘	↖	↗	↘	↖	↗	↘	↖	↗	↘
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	11	12	11	11	12	12	12	12
Storage Length (ft)	200		0	0		0	0		0	0		0
Storage Lanes	1		0	0		1	1		0	2		1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50			50	50	50	50		50		50
Trailing Detector (ft)	0	0			0	0	0	0		0		0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Satd. Flow (prot)	1555	4424	0	0	3049	1371	1570	1511	0	3090	0	1439
Flt Permitted	0.950						0.950			0.950		
Satd. Flow (perm)	1529	4424	0	0	3049	1264	1556	1511	0	3009	0	1418
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)								18				166
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		911			298			632			340	
Travel Time (s)		20.7			6.8			14.4			7.7	
Volume (vph)	217	1435	0	0	835	630	35	36	24	572	0	153
Confl. Peds. (#/hr)	11		24	24			11	4		13	13	4
Confl. Bikes (#/hr)			7									
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	2%	0%	0%	3%	6%	0%	2%	0%	2%	0%	1%
Lane Group Flow (vph)	236	1560	0	0	908	685	38	65	0	622	0	166
Turn Type	Prot				pm+ov		Split			Prot		custom
Protected Phases	1	6			2	3	4	4		3		1
Permitted Phases						2						3
Detector Phases	1	6			2	3	4	4		3		1
Minimum Initial (s)	8.0	16.0			16.0	9.0	8.0	8.0		9.0		8.0
Minimum Split (s)	12.0	20.0			20.0	13.0	23.0	23.0		13.0		12.0
Total Split (s)	30.0	69.0	0.0	0.0	39.0	38.0	33.0	33.0	0.0	38.0	0.0	30.0
Total Split (%)	21.4%	49.3%	0.0%	0.0%	27.9%	27.1%	23.6%	23.6%	0.0%	27.1%	0.0%	21.4%
Maximum Green (s)	26.0	65.0			35.0	34.0	29.0	29.0		34.0		26.0
Yellow Time (s)	3.0	3.0			3.0	3.0	3.0	3.0		3.0		3.0
All-Red Time (s)	1.0	1.0			1.0	1.0	1.0	1.0		1.0		1.0
Lead/Lag	Lead				Lag	Lead	Lag	Lag		Lead		Lead
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0			2.0	2.0	2.0	2.0		2.0		2.0
Recall Mode	None	C-Max			C-Max	None	None	None		None		None
Walk Time (s)		8.0			8.0		8.0	8.0				
Flash Dont Walk (s)		6.0			5.0		11.0	11.0				
Pedestrian Calls (#/hr)		12			14		5	5				
Act Effect Green (s)	23.5	85.6			58.1	92.1	10.8	10.8		34.0		57.5
Actuated g/C Ratio	0.17	0.61			0.42	0.66	0.08	0.08		0.24		0.41
v/c Ratio	0.90	0.58			0.72	0.80	0.31	0.49		0.83		0.24
Control Delay	92.0	18.4			38.0	24.9	66.3	56.8		53.9		7.1
Queue Delay	0.0	0.0			2.8	1.2	0.0	0.0		7.8		0.1
Total Delay	92.0	18.4			40.8	26.1	66.3	56.8		61.7		7.2
LOS	F	B			D	C	E	E		E		A
Approach Delay		28.1			34.5			60.3				
Approach LOS		C			C			E				
Queue Length 50th (ft)	209	297			371	385	34	42		251		7
Queue Length 95th (ft)	#347	414			#550	#840	67	87		263		67
Internal Link Dist (ft)		831			218			552		260		
Turn Bay Length (ft)	200											
Base Capacity (vph)	289	2706			1266	858	325	327		750		706
Starvation Cap Reductn	0	0			244	0	0	0		98		88
Spillback Cap Reductn	0	59			0	53	0	1		0		0
Storage Cap Reductn	0	0			0	0	0	0		0		0
Reduced v/c Ratio	0.82	0.59			0.89	0.85	0.12	0.20		0.95		0.27

Intersection Summary

Area Type: CBD
 Cycle Length: 140
 Actuated Cycle Length: 140
 Offset: 96 (69%), Referenced to phase 2:WBT and 6:EBT, Start of Green
 Natural Cycle: 100
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.90
 Intersection Signal Delay: 35.3 Intersection LOS: D
 Intersection Capacity Utilization 77.7% ICU Level of Service D
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 611: Tremont Street & Ruggles Street



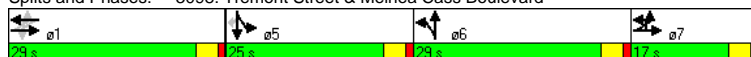


Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↕↕	↕↕		↕↕		↕↕	↕↕			↕↕	↕↕
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Lane Width (ft)	12	10	10	16	11	16	12	14	14	13	12	11	13
Storage Length (ft)			0	0			0	325			0	0	0
Storage Lanes			0	1	0		0	1			0	0	1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	50	50	50		50	50		50	50	50
Trailing Detector (ft)	0	0	0	0	0	0		0	0		0	0	0
Turning Speed (mph)	9	15		9	15		9	15		9	15		9
Satd. Flow (prot)	0	0	2538	1404	0	3086	0	1344	2654	0	0	1420	1268
Flt Permitted			0.612			0.647		0.950	0.970			0.996	
Satd. Flow (perm)	0	0	1574	1380	0	2004	0	1325	2631	0	0	1419	1227
Right Turn on Red				No			Yes			No			Yes
Satd. Flow (RTOR)						2							182
Link Speed (mph)			30			30			30			30	
Link Distance (ft)			471			2258			635			349	
Travel Time (s)			10.7			51.3			14.4			7.9	
Volume (vph)	1	355	515	1034	32	341	6	911	227	52	5	56	180
Confl. Peds. (#/hr)		26		15	15			26	10		16	16	10
Confl. Bikes (#/hr)				1				4			2		5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	3%	6%	5%	8%	5%	44%	5%	7%	26%	25%	2%	6%
Lane Group Flow (vph)	0	0	947	1124	0	413	0	495	799	0	0	66	196
Turn Type	D.P+P	D.P+P		Free	Perm			Split			Split		Perm
Protected Phases	7	7	17			1		6	6		5	5	
Permitted Phases	1	1		Free	1								5
Detector Phases	7	17	17		1	1		6	6		5	5	5
Minimum Initial (s)	4.0	4.0			10.0	10.0		10.0	10.0		8.0	8.0	8.0
Minimum Split (s)	9.0	9.0			26.0	26.0		22.0	22.0		24.0	24.0	24.0
Total Split (s)	17.0	17.0	46.0	0.0	29.0	29.0	0.0	29.0	29.0	0.0	25.0	25.0	25.0
Total Split (%)	17.0%	17.0%	46.0%	0.0%	29.0%	29.0%	0.0%	29.0%	29.0%	0.0%	25.0%	25.0%	25.0%
Maximum Green (s)	13.0	13.0			25.0	25.0		25.0	25.0		21.0	21.0	21.0
Yellow Time (s)	3.0	3.0			3.0	3.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	1.0			1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lead/Lag								Lag	Lag		Lead	Lead	Lead
Lead-Lag Optimize?													
Vehicle Extension (s)	2.0	2.0			2.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	Max	Max			C-Max	C-Max		None	None		None	None	None
Walk Time (s)					7.0	7.0					7.0	7.0	7.0
Flash Dont Walk (s)					15.0	15.0					13.0	13.0	13.0
Pedestrian Calls (#/hr)					0	0					5	5	5
Act Effect Green (s)			45.7	100.0		32.7		25.0	25.0			13.3	13.3
Actuated g/C Ratio			0.46	1.00		0.33		0.25	0.25			0.13	0.13
v/c Ratio			1.12	0.81		0.63		1.47	1.41dl			0.35	0.61
Control Delay			94.9	5.4		34.0		258.9	139.9			29.4	19.9
Queue Delay			0.0	0.0		0.0		0.0	0.0			0.0	0.0
Total Delay			94.9	5.4		34.0		258.9	139.9			29.4	19.9
LOS			F	A		C		F	F			C	B
Approach Delay			46.3			34.0			185.4			22.3	
Approach LOS			D			C			F			C	
Queue Length 50th (ft)			~279	0		129		~479	~342			37	52
Queue Length 95th (ft)			#536	0		#214		#697	#467			m90	m158
Internal Link Dist (ft)			391			2178			555			269	
Turn Bay Length (ft)								325					
Base Capacity (vph)			845	1380		657		336	664			298	401
Starvation Cap Reductn			0	0		0		0	0			0	0
Spillback Cap Reductn			0	0		0		0	0			0	0
Storage Cap Reductn			0	0		0		0	0			0	0
Reduced v/c Ratio			1.12	0.81		0.63		1.47	1.20			0.22	0.49

Intersection Summary

Area Type: CBD
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 48 (48%), Referenced to phase 1:EBWB, Start of Green
 Natural Cycle: 145
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.47
 Intersection Signal Delay: 88.1 Intersection LOS: F
 Intersection Capacity Utilization 108.9% ICU Level of Service G
 Analysis Period (min) 15
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.
 dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 3098: Tremont Street & Melnea Cass Boulevard

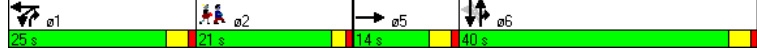


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR	ø2
Lane Configurations		↕↕			↕↕				↕↕	↕↕		↕↕		
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Lane Width (ft)	12	12	12	12	11	12	12	12	14	14	12	16	12	
Storage Length (ft)	0		25	0		0		0		0	0		0	
Storage Lanes	0		0	0		0		0		1	0		0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50		50	50		50	50	50	50	50	50	50	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0	0	
Turning Speed (mph)	15		9	15		9	9	15		9	15		9	
Satd. Flow (prot)	0	2184	0	0	1344	0	0	0	1432	1334	0	1128	0	
Flt Permitted					0.955				0.737			0.944		
Satd. Flow (perm)	0	2184	0	0	1279	0	0	0	1063	1334	0	1081	0	
Right Turn on Red			Yes			Yes				Yes			Yes	
Satd. Flow (RTOR)		27								390				
Link Speed (mph)		30			30				30			30		
Link Distance (ft)		421			197				349			337		
Travel Time (s)		9.6			4.5				7.9			7.7		
Volume (vph)	0	24	25	212	12	1	4	211	13	359	1	1	0	
Confl. Peds. (#/hr)	33		39	39		33		29		20	20		29	
Confl. Bikes (#/hr)			50			13								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	0%	11%	8%	5%	4%	0%	0%	4%	91%	4%	100%	0%	0%	
Lane Group Flow (vph)	0	53	0	0	244	0	0	0	247	390	0	2	0	
Turn Type				Split			Perm	Perm		pt+ov	Perm			
Protected Phases		5		1	1				6	1 6		6		2
Permitted Phases							6	6			6			
Detector Phases		5		1	1		6	6	6	6	6	6		
Minimum Initial (s)		10.0		10.0	10.0		8.0	8.0	8.0		8.0	8.0		8.0
Minimum Split (s)		14.0		15.0	15.0		14.0	14.0	14.0		14.0	14.0		21.0
Total Split (s)	0.0	14.0	0.0	25.0	25.0	0.0	40.0	40.0	40.0	65.0	40.0	40.0	0.0	21.0
Total Split (%)	0.0%	14.0%	0.0%	25.0%	25.0%	0.0%	40.0%	40.0%	40.0%	65.0%	40.0%	40.0%	0.0%	21%
Maximum Green (s)		10.0		21.0	21.0		36.0	36.0	36.0		36.0	36.0		18.0
Yellow Time (s)		3.0		3.0	3.0		3.0	3.0	3.0		3.0	3.0		2.0
All-Red Time (s)		1.0		1.0	1.0		1.0	1.0	1.0		1.0	1.0		1.0
Lead/Lag		Lead		Lead	Lead		Lag	Lag	Lag		Lag	Lag		Lag
Lead-Lag Optimize?														
Vehicle Extension (s)		2.0		2.0	2.0		2.0	2.0	2.0		2.0	2.0		2.0
Recall Mode		None		C-Max	C-Max		None	None	None		None	None		None
Walk Time (s)														7.0
Flash Dont Walk (s)														11.0
Pedestrian Calls (#/hr)														5
Act Effct Green (s)		10.0			48.2				28.4	81.4		28.4		
Actuated g/C Ratio		0.10			0.48				0.28	0.81		0.28		
v/c Ratio		0.22			0.38				0.82	0.34		0.01		
Control Delay		26.9			22.5				36.6	0.5		21.0		
Queue Delay		0.0			0.0				0.1	1.1		0.0		
Total Delay		26.9			22.5				36.7	1.5		21.0		
LOS		C			C				D	A		C		
Approach Delay		26.9			22.5				15.2			21.0		
Approach LOS		C			C				B			C		
Queue Length 50th (ft)		7			75				134	0		1		
Queue Length 95th (ft)		27			m#223				m88	m5		6		
Internal Link Dist (ft)		341			117				269			257		
Turn Bay Length (ft)														
Base Capacity (vph)		243			648				383	1158		389		
Starvation Cap Reductn		0			0				4	517		0		
Spillback Cap Reductn		0			0				0	0		0		
Storage Cap Reductn		0			0				0	0		0		
Reduced v/c Ratio		0.22			0.38				0.65	0.61		0.01		

Intersection Summary

Area Type: CBD
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 45 (45%), Referenced to phase 1:WBTL, Start of Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.82
 Intersection Signal Delay: 17.8 Intersection LOS: B
 Intersection Capacity Utilization 62.3% ICU Level of Service B
 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: 2085: Columbus Avenue & Melnea Cass Boulevard



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations	↖ ↗	↖ ↗		↖ ↗	↖ ↗			↖ ↗	↖ ↗			↖ ↗	↖ ↗	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	11	12	11	12	12	12	10	11	12	12	10	11	12
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50		50	50	50		50	50	50	
Trailing Detector (ft)	0	0		0	0		0	0	0		0	0	0	
Turning Speed (mph)	15		9	15		9	9	15		9	9	15		9
Satd. Flow (prot)	1472	2805	0	1454	1452	0	0	1488	2767	0	0	1321	2748	0
Flt Permitted	0.346			0.611				0.123				0.123		
Satd. Flow (perm)	506	2805	0	875	1452	0	0	187	2767	0	0	168	2748	0
Right Turn on Red			No			No				Yes				Yes
Satd. Flow (RTOR)									11				38	
Link Speed (mph)		30			30				30				30	
Link Distance (ft)		628			795				630				892	
Travel Time (s)		14.3			18.1				14.3				20.3	
Volume (vph)	310	168	40	114	134	92	2	42	929	77	1	60	807	200
Confl. Peds. (#/hr)	84		71	71		84		140		143		143		140
Confl. Bikes (#/hr)			76			13				33				41
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	7%	0%	8%	5%	5%	0%	2%	11%	11%	0%	15%	7%	2%
Lane Group Flow (vph)	337	226	0	124	246	0	0	48	1094	0	0	66	1094	0
Turn Type	pm+pt			pm+pt			pm+pt	pm+pt			pm+pt	pm+pt		
Protected Phases	7	4		3	8		5	5	2		1	1	6	
Permitted Phases	4			8			2	2			6	6		
Detector Phases	7	4		3	8		5	5	2		1	1	6	
Minimum Initial (s)	6.0	8.0		6.0	8.0		5.0	5.0	1.0		5.0	5.0	1.0	
Minimum Split (s)	10.0	28.0		10.0	28.0		9.0	9.0	44.0		9.0	9.0	47.0	
Total Split (s)	16.0	34.0	0.0	10.0	28.0	0.0	9.0	9.0	47.0	0.0	9.0	9.0	47.0	0.0
Total Split (%)	16.0%	34.0%	0.0%	10.0%	28.0%	0.0%	9.0%	9.0%	47.0%	0.0%	9.0%	9.0%	47.0%	0.0%
Maximum Green (s)	12.0	30.0		6.0	24.0		5.0	5.0	43.0		5.0	5.0	43.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lead	Lag		Lead	Lead	Lag	
Lead-Lag Optimize?														
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0		2.0	2.0	2.0	
Recall Mode	None	None		None	None		None	None	C-Max		None	None	C-Max	
Walk Time (s)		7.0			7.0				25.0				25.0	
Flash Dont Walk (s)		17.0			17.0				15.0				15.0	
Pedestrian Calls (#/hr)		0			0				5				0	
Act Effct Green (s)	35.9	25.9		25.9	19.9				52.9	48.9			52.9	48.9
Actuated g/C Ratio	0.36	0.26		0.26	0.20				0.53	0.49			0.53	0.49
v/c Ratio	1.13	0.31		0.48	0.85				0.29	0.81			0.45	0.80
Control Delay	121.3	30.7		29.9	64.4				15.4	21.2			22.9	13.5
Queue Delay	0.0	0.0		0.0	0.0				0.0	0.0			0.0	0.0
Total Delay	121.3	30.7		29.9	64.4				15.4	21.2			22.9	13.5
LOS	F	C		C	E				B	C			C	B
Approach Delay		84.9			52.8				21.0				14.1	
Approach LOS		F			D				C				B	
Queue Length 50th (ft)	~194	56		54	150			9	136			7	67	
Queue Length 95th (ft)	m#417	m84		93	#249			m20	#461			m23	#465	
Internal Link Dist (ft)		548			715				550				812	
Turn Bay Length (ft)														
Base Capacity (vph)	297	842		261	348			164	1359			146	1364	
Starvation Cap Reductn	0	0		0	0			0	0			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	1.13	0.27		0.48	0.71			0.29	0.81			0.45	0.80	

Intersection Summary

Area Type: CBD
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 3 (3%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
 Natural Cycle: 95
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.13
 Intersection Signal Delay: 33.3 Intersection LOS: C
 Intersection Capacity Utilization 89.7% 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: 95: Columbus Avenue & Mass Ave



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Yield		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	0	856	49	24	658
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	930	53	26	715
Pedestrians	56		9			62
Lane Width (ft)	0.0		13.0			11.0
Walking Speed (ft/s)	4.0		4.0			4.0
Percent Blockage	0		1			5
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)	229			208		
pX, platoon unblocked	0.43	0.40			0.40	
vC, conflicting volume	1432	1075			1040	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1648	1189			1100	
tC, single (s)	6.8	6.9			5.9	
tC, 2 stage (s)						
tF (s)	3.5	3.3			3.1	
p0 queue free %	100	100			78	
cM capacity (veh/h)	31	70			120	
Direction, Lane #	NB 1	SB 1	SB 2			
Volume Total	984	264	477			
Volume Left	0	26	0			
Volume Right	53	0	0			
cSH	1700	120	1700			
Volume to Capacity	0.58	0.22	0.28			
Queue Length 95th (ft)	0	20	0			
Control Delay (s)	0.0	14.1	0.0			
Lane LOS		B				
Approach Delay (s)	0.0	5.0				
Approach LOS						
Intersection Summary						
Average Delay			2.2			
Intersection Capacity Utilization			72.3%	ICU Level of Service	C	
Analysis Period (min)			15			

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↑	↑
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	383	0	0	221	4	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	416	0	0	240	4	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None		
Median storage (veh)						
Upstream signal (ft)	197					
pX, platoon unblocked						
vC, conflicting volume			416		657	416
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			416		657	416
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	99
cM capacity (veh/h)			1154		433	641
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	416	240	13			
Volume Left	0	0	4			
Volume Right	0	0	9			
cSH	1700	1700	552			
Volume to Capacity	0.24	0.14	0.02			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	0.0	11.7			
Lane LOS			B			
Approach Delay (s)	0.0	0.0	11.7			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			32.4%		ICU Level of Service	A
Analysis Period (min)			15			



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↕			↕			Stop			↕			
Sign Control	Free			Free			Stop			Stop			
Grade	0%			0%			0%			0%			
Volume (veh/h)	58	329	13	1	7	214	35	0	0	0	14	2	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	63	358	14	0	8	233	38	0	0	0	15	2	8
Pedestrians	15			36			56			134			
Lane Width (ft)	11.0			11.0			0.0			16.0			
Walking Speed (ft/s)	4.0			4.0			4.0			4.0			
Percent Blockage	1			3			0			15			
Right turn flare (veh)													
Median type				None			None						
Median storage (veh)													
Upstream signal (ft)	373												
pX, platoon unblocked				0.00									
vC, conflicting volume	405			0	428			837	967	457	928	955	401
vC1, stage 1 conf vol													
vC2, stage 2 conf vol													
vCu, unblocked vol	405			0	428			837	967	457	928	955	401
tC, single (s)	4.1			0.0	4.2			7.1	6.5	6.2	7.1	6.5	6.5
tC, 2 stage (s)													
tF (s)	2.2			0.0	2.3			3.5	4.0	3.3	3.5	4.0	3.6
p0 queue free %	94			0	99			100	100	100	91	99	98
cM capacity (veh/h)	982			0	1070			234	203	591	174	206	500

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	435	278	25
Volume Left	63	8	15
Volume Right	14	38	8
cSH	982	1070	221
Volume to Capacity	0.06	0.01	0.11
Queue Length 95th (ft)	5	1	9
Control Delay (s)	1.9	0.3	23.4
Lane LOS	A	A	C
Approach Delay (s)	1.9	0.3	23.4
Approach LOS	C		

Intersection Summary			
Average Delay			2.0
Intersection Capacity Utilization	60.6%	ICU Level of Service	B
Analysis Period (min)			15

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↑	↑
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	343	0	0	251	7	27
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	373	0	0	273	8	29
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None		
Median storage (veh)						
Upstream signal (ft)	546					
pX, platoon unblocked						
vC, conflicting volume			373	646	373	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			373	646	373	
tC, single (s)			4.1	6.6	6.2	
tC, 2 stage (s)						
tF (s)			2.2	3.7	3.3	
p0 queue free %			100	98	96	
cM capacity (veh/h)			1197	413	678	
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	373	273	37			
Volume Left	0	0	8			
Volume Right	0	0	29			
cSH	1700	1700	599			
Volume to Capacity	0.22	0.16	0.06			
Queue Length 95th (ft)	0	0	5			
Control Delay (s)	0.0	0.0	11.4			
Lane LOS			B			
Approach Delay (s)	0.0	0.0	11.4			
Approach LOS			B			
Intersection Summary						
Average Delay			0.6			
Intersection Capacity Utilization			30.1%	ICU Level of Service	A	
Analysis Period (min)			15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↕				↕							
Sign Control	Free				Free				Stop		Stop	
Grade	0%				0%				0%		0%	
Volume (veh/h)	68	282	17	36	251	70	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	74	307	18	39	273	76	0	0	0	0	0	0
Pedestrians	85				7				133		117	
Lane Width (ft)	11.0				10.0				0.0		0.0	
Walking Speed (ft/s)	4.0				4.0				4.0		4.0	
Percent Blockage	6				0				0		0	
Right turn flare (veh)												
Median type							None				None	
Median storage (veh)												
Upstream signal (ft)	737											
pX, platoon unblocked												
vC, conflicting volume	466			458			1071	1141	456	977	1112	513
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	466			458			1071	1141	456	977	1112	513
tC, single (s)	4.1			4.2			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.3			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	93			96			100	100	100	100	100	100
cM capacity (veh/h)	1106			1082			173	182	606	213	189	529

Direction, Lane #	EB 1	WB 1
Volume Total	399	388
Volume Left	74	39
Volume Right	18	76
cSH	1106	1082
Volume to Capacity	0.07	0.04
Queue Length 95th (ft)	5	3
Control Delay (s)	2.1	1.2
Lane LOS	A	A
Approach Delay (s)	2.1	1.2
Approach LOS		

Intersection Summary		
Average Delay		1.7
Intersection Capacity Utilization	39.8%	ICU Level of Service A
Analysis Period (min)		15



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↕			↕			↕			↕			
Sign Control	Free			Free			Stop			Stop			
Grade	0%			0%			0%			0%			
Volume (veh/h)	4	307	11	1	14	348	2	2	0	19	2	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	4	334	12	0	15	378	2	2	0	21	2	1	0
Pedestrians	45			57			64			34			
Lane Width (ft)	11.0			10.0			16.0			13.0			
Walking Speed (ft/s)	4.0			4.0			4.0			4.0			
Percent Blockage	3			4			7			3			
Right turn flare (veh)													
Median type							None			None			
Median storage (veh)													
Upstream signal (ft)	628												
pX, platoon unblocked				0.00									
vC, conflicting volume	414			0	410			868	857	461	870	862	458
vC1, stage 1 conf vol													
vC2, stage 2 conf vol													
vCu, unblocked vol	414			0	410			868	857	461	870	862	458
tC, single (s)	4.1			0.0	4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)													
tF (s)	2.2			0.0	2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			0	99			99	100	96	99	100	100
cM capacity (veh/h)	1120			0	1078			224	263	530	224	261	568

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	350	396	23	3
Volume Left	4	15	2	2
Volume Right	12	2	21	0
cSH	1120	1078	469	235
Volume to Capacity	0.00	0.01	0.05	0.01
Queue Length 95th (ft)	0	1	4	1
Control Delay (s)	0.1	0.5	13.1	20.6
Lane LOS	A	A	B	C
Approach Delay (s)	0.1	0.5	13.1	20.6
Approach LOS			B	C

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	49.3%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø2
Lane Configurations							
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	16	16	13	12	12	11	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50	50				
Trailing Detector (ft)	0	0	0				
Turning Speed (mph)	15	9		9	15		
Satd. Flow (prot)	995	941	1621	0	0	3049	
Flt Permitted	0.950						
Satd. Flow (perm)	995	941	1621	0	0	3049	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)		26					
Link Speed (mph)	30		30			30	
Link Distance (ft)	219		341			206	
Travel Time (s)	5.0		7.8			4.7	
Volume (vph)	66	24	907	0	0	819	
Confl. Bikes (#/hr)				5			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	85%	75%	9%	0%	0%	3%	
Lane Group Flow (vph)	72	26	986	0	0	890	
Turn Type		Prot					
Protected Phases	5	5	1			1	2
Permitted Phases							
Detector Phases	5	5	1			1	
Minimum Initial (s)	8.0	8.0	8.0			8.0	20.0
Minimum Split (s)	13.0	13.0	13.0			13.0	24.0
Total Split (s)	15.0	15.0	31.0	0.0	0.0	31.0	24.0
Total Split (%)	21.4%	21.4%	44.3%	0.0%	0.0%	44.3%	34%
Maximum Green (s)	10.0	10.0	26.0			26.0	20.0
Yellow Time (s)	3.0	3.0	3.0			3.0	3.5
All-Red Time (s)	2.0	2.0	2.0			2.0	0.5
Lead/Lag							
Lead-Lag Optimize?							
Vehicle Extension (s)	2.0	2.0	2.0			2.0	2.0
Recall Mode	None	None	C-Max			C-Max	None
Walk Time (s)							7.0
Flash Dont Walk (s)							13.0
Pedestrian Calls (#/hr)							10
Act Effect Green (s)	10.4	10.4	50.2			50.2	
Actuated g/C Ratio	0.15	0.15	0.72			0.72	
v/c Ratio	0.49	0.16	0.85			0.41	
Control Delay	38.9	13.2	20.8			6.7	
Queue Delay	0.0	0.0	3.4			0.0	
Total Delay	38.9	13.2	24.2			6.8	
LOS	D	B	C			A	
Approach Delay	32.1		24.2			6.8	
Approach LOS	C		C			A	
Queue Length 50th (ft)	29	0	497			47	
Queue Length 95th (ft)	68	20m#1528				141	
Internal Link Dist (ft)	139		261			126	
Turn Bay Length (ft)							
Base Capacity (vph)	161	174	1162			2187	
Starvation Cap Reductn	0	0	104			0	
Spillback Cap Reductn	0	0	0			170	
Storage Cap Reductn	0	0	0			0	
Reduced v/c Ratio	0.45	0.15	0.93			0.44	

Intersection Summary

Area Type: CBD
 Cycle Length: 70
 Actuated Cycle Length: 70
 Offset: 25 (36%), Referenced to phase 1:NBSB, Start of Green
 Natural Cycle: 100
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.85
 Intersection Signal Delay: 16.7 Intersection LOS: B
 Intersection Capacity Utilization 66.4% ICU Level of Service C
 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: 3068: MBTA Exit & Ruggles Street



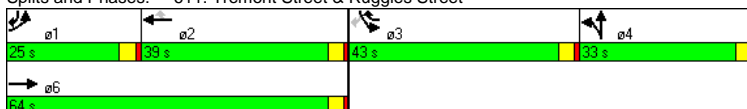


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗↗↗		↖	↗↗	↗	↖	↖	↖	↗↗		↗
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	11	12	11	11	12	12	12	12
Storage Length (ft)	200		0	0		0	0		0	0		0
Storage Lanes	1		0	0		1	1		0	2		1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50			50	50	50	50		50		50
Trailing Detector (ft)	0	0			0	0	0	0		0		0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Satd. Flow (prot)	1570	4468	0	0	3110	1454	1570	1355	0	3120	0	1454
Flt Permitted	0.950						0.950			0.950		
Satd. Flow (perm)	1568	4468	0	0	3110	1408	1501	1355	0	2729	0	1415
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)								21				270
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		975			274			591			341	
Travel Time (s)		22.2			6.2			13.4			7.8	
Volume (vph)	194	1321	0	0	883	678	64	35	55	624	0	248
Confl. Peds. (#/hr)	1		58	58		1	20		65	65		20
Confl. Bikes (#/hr)			8			9						1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	1%	0%	0%	1%	0%	0%	1%	0%	1%	0%	0%
Lane Group Flow (vph)	211	1436	0	0	960	737	70	98	0	678	0	270
Turn Type	Prot				pm+ov	Split				Prot		custom
Protected Phases	1	6			2	3	4	4		3		1
Permitted Phases						2						3
Detector Phases	1	6			2	3	4	4		3		1
Minimum Initial (s)	8.0	16.0			16.0	9.0	8.0	8.0		9.0		8.0
Minimum Split (s)	12.0	20.0			20.0	13.0	23.0	23.0		13.0		12.0
Total Split (s)	25.0	64.0	0.0	0.0	39.0	43.0	33.0	33.0	0.0	43.0	0.0	25.0
Total Split (%)	17.9%	45.7%	0.0%	0.0%	27.9%	30.7%	23.6%	23.6%	0.0%	30.7%	0.0%	17.9%
Maximum Green (s)	21.0	60.0			35.0	39.0	29.0	29.0		39.0		21.0
Yellow Time (s)	3.0	3.0			3.0	3.0	3.0	3.0		3.0		3.0
All-Red Time (s)	1.0	1.0			1.0	1.0	1.0	1.0		1.0		1.0
Lead/Lag	Lead				Lag	Lead	Lag	Lag		Lead		Lead
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0			2.0	2.0	2.0	2.0		2.0		2.0
Recall Mode	None	C-Max			C-Max	None	None	None		None		None
Walk Time (s)		8.0			8.0		8.0	8.0				
Flash Dont Walk (s)		6.0			5.0		11.0	11.0				
Pedestrian Calls (#/hr)		4			4		17	17				
Act Effect Green (s)	20.2	76.2			52.0	90.3	13.5	13.5		38.4		58.6
Actuated g/C Ratio	0.14	0.54			0.37	0.64	0.10	0.10		0.27		0.42
v/c Ratio	0.93	0.59			0.83	0.80	0.46	0.66		0.79		0.36
Control Delay	102.6	23.5			48.4	26.0	68.4	67.2		50.1		5.7
Queue Delay	0.0	0.1			210.9	40.8	0.0	0.0		19.1		0.3
Total Delay	102.6	23.6			259.3	66.8	68.4	67.2		69.2		6.0
LOS	F	C			F	E	E	E		E		A
Approach Delay		33.7			175.7			67.7				
Approach LOS		C			F			E				
Queue Length 50th (ft)	191	306			415	404	62	69		296		8
Queue Length 95th (ft)	#342	397			#593	#707	109	128		323		74
Internal Link Dist (ft)		895			194			511			261	
Turn Bay Length (ft)	200											
Base Capacity (vph)	236	2431			1155	928	325	297		869		762
Starvation Cap Reductn	0	0			501	243	0	0		197		134
Spillback Cap Reductn	0	205			0	0	0	4		36		0
Storage Cap Reductn	0	0			0	0	0	0		0		0
Reduced v/c Ratio	0.89	0.65			1.47	1.08	0.22	0.33		1.01		0.43

Intersection Summary

Area Type: CBD
 Cycle Length: 140
 Actuated Cycle Length: 140
 Offset: 56 (40%), Referenced to phase 2:WBT and 6:EBT, Start of Green
 Natural Cycle: 100
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.93
 Intersection Signal Delay: 92.7 Intersection LOS: F
 Intersection Capacity Utilization 83.7% ICU Level of Service E
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 611: Tremont Street & Ruggles Street



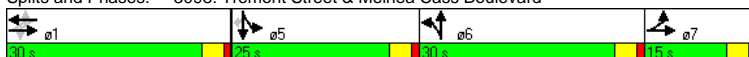


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕	↕		↕↕		↕	↕↕			↕	↕
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Lane Width (ft)	12	10	16	11	16	12	14	14	13	12	11	13
Storage Length (ft)	0		0	0		0	350		0	0		0
Storage Lanes	0		1	0		0	1		0	0		1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	50
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Satd. Flow (prot)	0	2618	1431	0	3151	0	1397	2719	0	0	1447	1331
Flt Permitted		0.562			0.568		0.950	0.962			0.996	
Satd. Flow (perm)	0	1482	1405	0	1798	0	1387	2703	0	0	1445	1297
Right Turn on Red			No			Yes			No			Yes
Satd. Flow (RTOR)					3							211
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		502			2251			626			342	
Travel Time (s)		11.4			51.2			14.2			7.8	
Volume (vph)	231	626	913	59	476	15	962	68	68	19	216	211
Confl. Peds. (#/hr)	50		20	20		50	7		21	21		7
Confl. Bikes (#/hr)			2			7			14			3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	2%	3%	4%	3%	13%	1%	18%	0%	0%	2%	1%
Lane Group Flow (vph)	0	931	992	0	597	0	523	671	0	0	256	229
Turn Type	D,P+P		Free	Perm			Split			Split		Perm
Protected Phases	7	17			1		6	6		5	5	
Permitted Phases	1		Free	1								5
Detector Phases	17	17		1	1		6	6		5	5	5
Minimum Initial (s)	4.0			10.0	10.0		10.0	10.0		8.0	8.0	8.0
Minimum Split (s)	8.0			26.0	26.0		20.0	20.0		24.0	24.0	24.0
Total Split (s)	15.0	45.0	0.0	30.0	30.0	0.0	30.0	30.0	0.0	25.0	25.0	25.0
Total Split (%)	15.0%	45.0%	0.0%	30.0%	30.0%	0.0%	30.0%	30.0%	0.0%	25.0%	25.0%	25.0%
Maximum Green (s)	11.0			26.0	26.0		26.0	26.0		21.0	21.0	21.0
Yellow Time (s)	3.0			3.0	3.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0			1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lead/Lag							Lag	Lag		Lead	Lead	Lead
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0			2.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	Max			C-Max	C-Max		None	None		None	None	None
Walk Time (s)				7.0	7.0					7.0	7.0	7.0
Flash Dont Walk (s)				15.0	15.0					13.0	13.0	13.0
Pedestrian Calls (#/hr)				0	0					5	5	5
Act Effect Green (s)	38.4	100.0		27.4		26.0	26.0			19.6	19.6	
Actuated g/C Ratio	0.38	1.00		0.27		0.26	0.26			0.20	0.20	
v/c Ratio	1.34	0.71		1.21		1.44	1.38dl			0.90	0.54	
Control Delay	189.4	3.0		141.0		244.0	60.8			57.4	6.7	
Queue Delay	0.0	0.0		0.0		0.0	0.0			0.0	0.8	
Total Delay	189.4	3.0		141.0		244.0	60.8			57.4	7.5	
LOS	F	A		F		F	E			E	A	
Approach Delay	93.3			141.0		141.1				33.8		
Approach LOS	F			F		F				C		
Queue Length 50th (ft)	~417	0		~257		~500	231			153	19	
Queue Length 95th (ft)	#542	0		m#369		#721	#352			m#281	m32	
Internal Link Dist (ft)	422			2171		546				262		
Turn Bay Length (ft)						350						
Base Capacity (vph)	694	1405		495		363	707			304	439	
Starvation Cap Reductn	0	0		0		0	0			0	60	
Spillback Cap Reductn	0	0		0		0	0			0	0	
Storage Cap Reductn	0	0		0		0	0			0	0	
Reduced v/c Ratio	1.34	0.71		1.21		1.44	0.95			0.84	0.60	

Intersection Summary

Area Type: CBD
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 36 (36%), Referenced to phase 1:EBWB, Start of Green
 Natural Cycle: 150
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.44
 Intersection Signal Delay: 106.8 Intersection LOS: F
 Intersection Capacity Utilization 111.1% ICU Level of Service H
 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.
 dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 3098: Tremont Street & Melnea Cass Boulevard



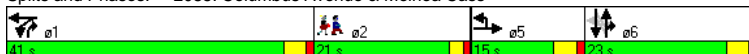


Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR	ø2
Lane Configurations			↕			↕				↕	↕		↕		
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Lane Width (ft)	12	12	12	12	12	11	12	12	12	12	14	14	12	16	12
Storage Length (ft)			0	25	0		0			0		0	0		0
Storage Lanes			0	0	0		0			0		1	0		0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50		50	50		50	50	50	50	50	50		50
Trailing Detector (ft)	0	0	0		0	0		0	0	0	0	0	0		0
Turning Speed (mph)	9	15		9	15		9	9	15		9	15		9	
Satd. Flow (prot)	0	0	2508	0	0	1415	0	0	0	1350	1373	0	1555	0	
Flt Permitted						0.965				0.744			0.963		
Satd. Flow (perm)	0	0	2508	0	0	1395	0	0	0	943	1373	0	1497	0	
Right Turn on Red				Yes			Yes				Yes			Yes	
Satd. Flow (RTOR)			91								215			2	
Link Speed (mph)			30			30				30			30		
Link Distance (ft)			383			219				342			245		
Travel Time (s)			8.7			5.0				7.8			5.6		
Volume (vph)	1	0	83	84	349	127	2	13	91	11	198	1	1	2	
Confl. Peds. (#/hr)		2		31	31		2	31	12		23	23		12	
Confl. Bikes (#/hr)				23				85			2			1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	1%	0%	0%	1%	0%	0%	0%	0%	64%	1%	0%	0%	0%	0%
Lane Group Flow (vph)	0	0	182	0	0	519	0	0	0	125	215	0	4	0	
Turn Type	Split				Split		Perm	Perm		pt+ov	Perm				
Protected Phases	5		5		1	1				6	16		6		2
Permitted Phases								6	6				6		
Detector Phases	5		5		1	1		6	6	6	6		6		6
Minimum Initial (s)	10.0		10.0		10.0	10.0		8.0	8.0	8.0		8.0	8.0		8.0
Minimum Split (s)	14.0		14.0		15.0	15.0		14.0	14.0	14.0		14.0	14.0		21.0
Total Split (s)	15.0	0.0	15.0	0.0	41.0	41.0	0.0	23.0	23.0	23.0	64.0	23.0	23.0	0.0	21.0
Total Split (%)	15.0%	0.0%	15.0%	0.0%	41.0%	41.0%	0.0%	23.0%	23.0%	23.0%	64.0%	23.0%	23.0%	0.0%	21%
Maximum Green (s)	11.0		11.0		37.0	37.0		19.0	19.0	19.0		19.0	19.0		18.0
Yellow Time (s)	3.0		3.0		3.0	3.0		3.0	3.0	3.0		3.0	3.0		2.0
All-Red Time (s)	1.0		1.0		1.0	1.0		1.0	1.0	1.0		1.0	1.0		1.0
Lead/Lag	Lead		Lead		Lead	Lead		Lag	Lag	Lag		Lag	Lag		Lag
Lead-Lag Optimize?															
Vehicle Extension (s)	2.0		2.0		2.0	2.0		2.0	2.0	2.0		2.0	2.0		2.0
Recall Mode	None		None		C-Max	C-Max		None	None	None		None	None		None
Walk Time (s)															7.0
Flash Dont Walk (s)															11.0
Pedestrian Calls (#/hr)															15
Act Effct Green (s)			10.2			58.1				15.5	77.6		15.5		
Actuated g/C Ratio			0.10			0.58				0.16	0.78		0.16		
v/c Ratio			0.54			0.63				0.86	0.19		0.02		
Control Delay			28.0			22.5				47.1	0.2		27.2		
Queue Delay			0.0			0.0				0.0	0.7		0.0		
Total Delay			28.0			22.5				47.1	0.9		27.2		
LOS			C			C				D	A		C		
Approach Delay			28.0			22.5				17.9			27.3		
Approach LOS			C			C				B			C		
Queue Length 50th (ft)			28			201				59	0		1		
Queue Length 95th (ft)			63			m#474				m49	m0		11		
Internal Link Dist (ft)			303			139				262			165		
Turn Bay Length (ft)															
Base Capacity (vph)			357			822				179	1107		286		
Starvation Cap Reductn			0			0				0	610		0		
Spillback Cap Reductn			0			0				0	0		0		
Storage Cap Reductn			0			0				0	0		0		
Reduced v/c Ratio			0.51			0.63				0.70	0.43		0.01		

Intersection Summary

Area Type: CBD
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 47 (47%), Referenced to phase 1:WBTL, Start of Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.86
 Intersection Signal Delay: 22.0 Intersection LOS: C
 Intersection Capacity Utilization 68.5% ICU Level of Service C
 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: 2085: Columbus Avenue & Melnea Cass





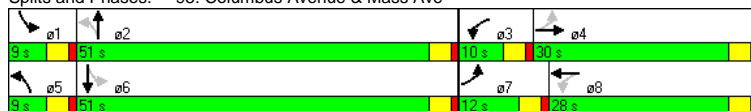
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↗		↖	↗	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	11	12	11	12	12	10	11	12	10	11	12
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Satd. Flow (prot)	1516	2920	0	1481	1523	0	1516	2941	0	1486	2727	0
Flt Permitted	0.263			0.571			0.092			0.146		
Satd. Flow (perm)	388	2920	0	823	1523	0	142	2941	0	223	2727	0
Right Turn on Red			No			No			Yes			Yes
Satd. Flow (RTOR)								13			41	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		626			513			635			882	
Travel Time (s)		14.2			11.7			14.4			20.0	
Volume (vph)	274	201	52	144	219	69	40	920	83	73	937	231
Confl. Peds. (#/hr)	130		90	90		130	240		204	204		240
Confl. Bikes (#/hr)			26			90			85			47
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	1%	2%	6%	2%	3%	0%	4%	2%	2%	5%	1%
Lane Group Flow (vph)	298	275	0	157	313	0	43	1090	0	79	1269	0
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phases	7	4		3	8		5	2		1	6	
Minimum Initial (s)	6.0	8.0		6.0	8.0		5.0	29.0		5.0	29.0	
Minimum Split (s)	10.0	28.0		10.0	28.0		9.0	44.0		9.0	44.0	
Total Split (s)	12.0	30.0	0.0	10.0	28.0	0.0	9.0	51.0	0.0	9.0	51.0	0.0
Total Split (%)	12.0%	30.0%	0.0%	10.0%	28.0%	0.0%	9.0%	51.0%	0.0%	9.0%	51.0%	0.0%
Maximum Green (s)	8.0	26.0		6.0	24.0		5.0	47.0		5.0	47.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)		7.0			7.0			25.0			25.0	
Flash Dont Walk (s)		17.0			17.0			15.0			15.0	
Pedestrian Calls (#/hr)		5			5			5			5	
Act Effct Green (s)	32.4	24.4		28.4	22.4		54.4	50.4		55.2	52.2	
Actuated g/C Ratio	0.32	0.24		0.28	0.22		0.54	0.50		0.55	0.52	
v/c Ratio	1.38	0.39		0.58	0.92		0.29	0.73		0.42	0.88	
Control Delay	223.7	32.9		35.0	69.9		15.6	13.0		14.5	16.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	223.7	32.9		35.0	69.9		15.6	13.0		14.5	16.1	
LOS	F	C		C	E		B	B		B	B	
Approach Delay		132.1			58.3			13.1			16.0	
Approach LOS		F			E			B			B	
Queue Length 50th (ft)	~183	71		71	192		7	115		8	73	
Queue Length 95th (ft)	#351	106		123	#342		m13	154		m14	#541	
Internal Link Dist (ft)		546			433			555			802	
Turn Bay Length (ft)												
Base Capacity (vph)	216	759		273	366		146	1488		186	1442	
Starvation Cap Reductn	0	0		0	0		0	0		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	1.38	0.36		0.58	0.86		0.29	0.73		0.42	0.88	

Intersection Summary

Area Type: CBD
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
 Natural Cycle: 115
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.38
 Intersection Signal Delay: 39.6
 Intersection LOS: D
 Intersection Capacity Utilization 92.9%
 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.
- m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 95: Columbus Avenue & Mass Ave



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Yield		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	0	894	36	17	814
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	972	39	18	885
Pedestrians	205		25			48
Lane Width (ft)	0.0		13.0			11.0
Walking Speed (ft/s)	4.0		4.0			4.0
Percent Blockage	0		2			4
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)	206			234		
pX, platoon unblocked	0.42	0.38			0.38	
vC, conflicting volume	1701	1244			1216	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2260	1640			1565	
tC, single (s)	6.8	6.9			5.6	
tC, 2 stage (s)						
tF (s)	3.5	3.3			3.0	
p0 queue free %	100	100			74	
cM capacity (veh/h)	10	33			72	
Direction, Lane #	NB 1	SB 1	SB 2			
Volume Total	1011	313	590			
Volume Left	0	18	0			
Volume Right	39	0	0			
cSH	1700	72	1700			
Volume to Capacity	0.59	0.26	0.35			
Queue Length 95th (ft)	0	23	0			
Control Delay (s)	0.0	25.3	0.0			
Lane LOS	D					
Approach Delay (s)	0.0	8.8				
Approach LOS						
Intersection Summary						
Average Delay			4.1			
Intersection Capacity Utilization			73.0%	ICU Level of Service	C	
Analysis Period (min)			15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↓	↓
Sign Control	Free			Free	Stop	Stop
Grade	0%			0%	0%	0%
Volume (veh/h)	282	0	0	478	8	27
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	307	0	0	520	9	29
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None		
Median storage (veh)						
Upstream signal (ft)	219					
pX, platoon unblocked			0.96	0.96	0.96	
vC, conflicting volume			307	826	307	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			279	819	279	
tC, single (s)			4.1	6.4	6.2	
tC, 2 stage (s)						
tF (s)			2.2	3.5	3.3	
p0 queue free %			100	97	96	
cM capacity (veh/h)			1246	335	726	
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	307	520	38			
Volume Left	0	0	9			
Volume Right	0	0	29			
cSH	1700	1700	573			
Volume to Capacity	0.18	0.31	0.07			
Queue Length 95th (ft)	0	0	5			
Control Delay (s)	0.0	0.0	11.7			
Lane LOS			B			
Approach Delay (s)	0.0	0.0	11.7			
Approach LOS			B			
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utilization		38.0%		ICU Level of Service	A	
Analysis Period (min)		15				



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↕			↕						↕		
Sign Control	Free			Free			Stop			Stop		
Grade	0%			0%			0%			0%		
Volume (veh/h)	37	259	11	24	364	56	0	0	0	127	7	111
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	40	282	12	26	396	61	0	0	0	138	8	121
Pedestrians	23			66			207			94		
Lane Width (ft)	11.0			11.0			0.0			16.0		
Walking Speed (ft/s)	4.0			4.0			4.0			4.0		
Percent Blockage	2			5			0			10		
Right turn flare (veh)												
Median type	None						None					
Median storage (veh)												
Upstream signal (ft)	384											
pX, platoon unblocked				0.99			0.99			0.99		
vC, conflicting volume	551			500			1201	1178	560	1006	1153	543
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	551			494			1203	1180	555	1006	1155	543
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	96			98			100	100	100	14	95	75
cM capacity (veh/h)	913			1056			98	157	498	161	162	475

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	334	483	266
Volume Left	40	26	138
Volume Right	12	61	121
cSH	913	1056	230
Volume to Capacity	0.04	0.02	1.16
Queue Length 95th (ft)	3	2	313
Control Delay (s)	1.5	0.7	153.2
Lane LOS	A	A	F
Approach Delay (s)	1.5	0.7	153.2
Approach LOS	F		

Intersection Summary			
Average Delay	38.5		
Intersection Capacity Utilization	60.9%	ICU Level of Service	B
Analysis Period (min)	15		

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↘	↙
Sign Control	Free			Free	Stop	Stop
Grade	0%			0%	0%	0%
Volume (veh/h)	392	0	0	430	17	21
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	426	0	0	467	18	23
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None		
Median storage (veh)						
Upstream signal (ft)	573					
pX, platoon unblocked						
vC, conflicting volume			426		893	426
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			426		893	426
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		94	96
cM capacity (veh/h)			1144		314	633
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	426	467	41			
Volume Left	0	0	18			
Volume Right	0	0	23			
cSH	1700	1700	435			
Volume to Capacity	0.25	0.27	0.09			
Queue Length 95th (ft)	0	0	8			
Control Delay (s)	0.0	0.0	14.1			
Lane LOS			B			
Approach Delay (s)	0.0	0.0	14.1			
Approach LOS			B			
Intersection Summary						
Average Delay			0.6			
Intersection Capacity Utilization			35.1%	ICU Level of Service	A	
Analysis Period (min)			15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↕				↕							
Sign Control	Free				Free				Stop		Stop	
Grade	0%				0%				0%		0%	
Volume (veh/h)	21	376	14	14	397	18	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	23	409	15	15	432	20	0	0	0	0	0	0
Pedestrians	155				47				272		215	
Lane Width (ft)	11.0				10.0				0.0		0.0	
Walking Speed (ft/s)	4.0				4.0				4.0		4.0	
Percent Blockage	12				3				0		0	
Right turn flare (veh)												
Median type							None				None	
Median storage (veh)												
Upstream signal (ft)	740											
pX, platoon unblocked												
vC, conflicting volume	666			696			1361	1430	735	1196	1428	811
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	666			696			1361	1430	735	1196	1428	811
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			98			100	100	100	100	100	100
cM capacity (veh/h)	933			909			108	130	409	154	131	337

Direction, Lane #	EB 1	WB 1
Volume Total	447	466
Volume Left	23	15
Volume Right	15	20
cSH	933	909
Volume to Capacity	0.02	0.02
Queue Length 95th (ft)	2	1
Control Delay (s)	0.7	0.5
Lane LOS	A	A
Approach Delay (s)	0.7	0.5
Approach LOS		

Intersection Summary		
Average Delay		0.6
Intersection Capacity Utilization	36.5%	ICU Level of Service A
Analysis Period (min)		15



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↕				↕		↕				↕	
Sign Control	Free				Free		Stop				Stop	
Grade	0%				0%		0%				0%	
Volume (veh/h)	7	393	22	40	428	6	9	2	13	9	3	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	8	427	24	43	465	7	10	2	14	10	3	5
Pedestrians	77				226				113		78	
Lane Width (ft)	11.0				10.0				16.0		13.0	
Walking Speed (ft/s)	4.0				4.0				4.0		4.0	
Percent Blockage	6				16				13		7	
Right turn flare (veh)												
Median type					Raised				Raised			
Median storage (veh)					1				1			
Upstream signal (ft)					626							
pX, platoon unblocked	0.90					0.90	0.90			0.90	0.90	0.90
vC, conflicting volume	550			564			1207	1204	778	1329	1213	623
vC1, stage 1 conf vol							567	567			633	633
vC2, stage 2 conf vol							640	637			696	579
vCu, unblocked vol	501			564			1229	1226	778	1365	1236	583
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5			6.1	5.5
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			95			96	99	95	95	99	99
cM capacity (veh/h)	892			881			227	243	292	185	234	404

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	459	515	26	18
Volume Left	8	43	10	10
Volume Right	24	7	14	5
cSH	892	881	260	230
Volume to Capacity	0.01	0.05	0.10	0.08
Queue Length 95th (ft)	1	4	8	6
Control Delay (s)	0.3	1.4	20.4	22.0
Lane LOS	A	A	C	C
Approach Delay (s)	0.3	1.4	20.4	22.0
Approach LOS			C	C

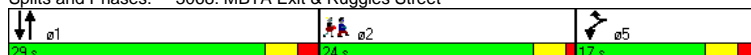
Intersection Summary				
Average Delay			1.7	
Intersection Capacity Utilization	70.8%		ICU Level of Service	C
Analysis Period (min)			15	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø2
Lane Configurations							
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	16	16	13	12	12	11	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50	50			50	
Trailing Detector (ft)	0	0	0			0	
Turning Speed (mph)	15	9		9	15		
Satd. Flow (prot)	939	876	1578	0	0	2935	
Flt Permitted	0.950						
Satd. Flow (perm)	939	876	1578	0	0	2935	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)		27					
Link Speed (mph)	30		25			30	
Link Distance (ft)	232		340			229	
Travel Time (s)	5.3		9.3			5.2	
Volume (vph)	72	25	884	0	0	663	
Confl. Bikes (#/hr)				5			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	96%	88%	12%	0%	0%	7%	
Lane Group Flow (vph)	78	27	961	0	0	721	
Turn Type		Prot					
Protected Phases	5	5	1			1	2
Permitted Phases							
Detector Phases	5	5	1			1	
Minimum Initial (s)	8.0	8.0	8.0			8.0	7.0
Minimum Split (s)	13.0	13.0	13.0			13.0	24.0
Total Split (s)	17.0	17.0	29.0	0.0	0.0	29.0	24.0
Total Split (%)	24.3%	24.3%	41.4%	0.0%	0.0%	41.4%	34%
Maximum Green (s)	12.0	12.0	24.0			24.0	20.0
Yellow Time (s)	3.0	3.0	3.0			3.0	3.0
All-Red Time (s)	2.0	2.0	2.0			2.0	1.0
Lead/Lag							
Lead-Lag Optimize?							
Vehicle Extension (s)	2.0	2.0	2.0			2.0	2.0
Recall Mode	None	None	C-Max			C-Max	None
Walk Time (s)							7.0
Flash Dont Walk (s)							13.0
Pedestrian Calls (#/hr)							10
Act Effect Green (s)	11.0	11.0	49.6			49.6	
Actuated g/C Ratio	0.16	0.16	0.71			0.71	
v/c Ratio	0.53	0.17	0.86			0.35	
Control Delay	40.3	12.9	21.0			6.2	
Queue Delay	0.0	0.0	5.9			0.0	
Total Delay	40.3	12.9	26.9			6.2	
LOS	D	B	C			A	
Approach Delay	33.3		26.9			6.2	
Approach LOS	C		C			A	
Queue Length 50th (ft)	31	0	256			29	
Queue Length 95th (ft)	70	20m#1531				123	
Internal Link Dist (ft)	152		260			149	
Turn Bay Length (ft)							
Base Capacity (vph)	174	185	1119			2081	
Starvation Cap Reductn	0	0	118			0	
Spillback Cap Reductn	0	0	0			37	
Storage Cap Reductn	0	0	0			0	
Reduced v/c Ratio	0.45	0.15	0.96			0.35	

Intersection Summary

Area Type: CBD
 Cycle Length: 70
 Actuated Cycle Length: 70
 Offset: 1 (1%), Referenced to phase 1:NBSB, Start of Green
 Natural Cycle: 100
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.86
 Intersection Signal Delay: 18.9 Intersection LOS: B
 Intersection Capacity Utilization 65.0% ICU Level of Service C
 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: 3068: MBTA Exit & Ruggles Street



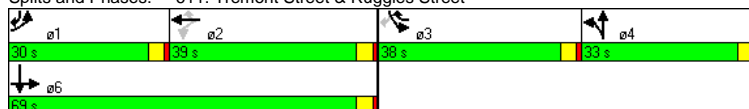


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↘	↖	↗	↘	↖	↗	↘	↖	↗	↘
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	11	12	11	11	12	12	12	12
Storage Length (ft)	200		0	0		0	0		0	0		0
Storage Lanes	1		0	0		1	1		0	2		1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50	50	50	50		50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Satd. Flow (prot)	1555	4424	0	0	3047	1371	1570	1511	0	3090	0	1439
Flt Permitted	0.950				0.921		0.950			0.950		
Satd. Flow (perm)	1529	4424	0	0	2809	1264	1552	1511	0	3009	0	1418
Right Turn on Red			Yes			No		Yes				Yes
Satd. Flow (RTOR)							18					166
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		911			298			632			340	
Travel Time (s)		20.7			6.8			14.4			7.7	
Volume (vph)	217	1436	0	9	835	631	35	36	24	575	9	153
Confl. Peds. (#/hr)	11		24	24		11	4		13	13		4
Confl. Bikes (#/hr)			7									
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	2%	0%	0%	3%	6%	0%	2%	0%	2%	0%	1%
Lane Group Flow (vph)	236	1561	0	0	918	686	38	65	0	625	10	166
Turn Type	Prot			Perm		pm+ov	Split			Prot		custom
Protected Phases	1!	6!			2!		3	4	4		3	6!
Permitted Phases					2							3
Detector Phases	1	6		2	2	3	4	4		3	6	1
Minimum Initial (s)	8.0	16.0		16.0	16.0	9.0	8.0	8.0		9.0	16.0	8.0
Minimum Split (s)	12.0	20.0		20.0	20.0	13.0	23.0	23.0		13.0	20.0	12.0
Total Split (s)	30.0	69.0	0.0	39.0	39.0	38.0	33.0	33.0	0.0	38.0	69.0	30.0
Total Split (%)	21.4%	49.3%	0.0%	27.9%	27.9%	27.1%	23.6%	23.6%	0.0%	27.1%	49.3%	21.4%
Maximum Green (s)	26.0	65.0		35.0	35.0	34.0	29.0	29.0		34.0	65.0	26.0
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lead/Lag	Lead			Lag	Lag	Lead	Lag	Lag		Lead		Lead
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Recall Mode	None	C-Max		C-Max	C-Max	None	None	None		None	C-Max	None
Walk Time (s)		8.0		8.0	8.0		8.0	8.0		8.0		8.0
Flash Dont Walk (s)		6.0		5.0	5.0		11.0	11.0		6.0		6.0
Pedestrian Calls (#/hr)		12		14	14		5	5		12		12
Act Effect Green (s)	23.5	85.6		58.1	92.1	10.8	10.8	10.8		34.0	0.0	57.5
Actuated g/C Ratio	0.17	0.61		0.42	0.66	0.08	0.08	0.08		0.24	0.00	0.41
v/c Ratio	0.90	0.58		0.79	0.80	0.31	0.49	0.49		0.83	no cap	0.24
Control Delay	92.0	18.4		41.2	25.0	66.3	56.8	56.8		54.2		7.1
Queue Delay	0.0	0.0		4.1	1.4	0.0	0.0	0.0		8.3		0.1
Total Delay	92.0	18.4		45.4	26.4	66.3	56.8	56.8		62.5	Error	7.2
LOS	F	B		D	C	E	E	E		E	F	A
Approach Delay		28.1			37.3			60.3			Err	
Approach LOS		C			D			E			F	
Queue Length 50th (ft)	209	297			390	387	34	42		253	0	7
Queue Length 95th (ft)	#347	415			#602	#841	67	87		#268	0	67
Internal Link Dist (ft)		831			218			552			260	
Turn Bay Length (ft)	200											
Base Capacity (vph)	289	2706			1166	858	325	327		750	1	706
Starvation Cap Reductn	0	0			175	0	0	0		98	0	88
Spillback Cap Reductn	0	59			0	58	0	1		0	0	0
Storage Cap Reductn	0	0			0	0	0	0		0	0	0
Reduced v/c Ratio	0.82	0.59			0.93	0.86	0.12	0.20		0.96	10.00	0.27

Intersection Summary

Area Type: CBD
 Cycle Length: 140
 Actuated Cycle Length: 140
 Offset: 96 (69%), Referenced to phase 2:WBTL and 6:EBSB, Start of Green
 Natural Cycle: 110
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: Err
 Intersection Signal Delay: Err Intersection LOS: F
 Intersection Capacity Utilization Err% ICU Level of Service H
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 ! Phase conflict between lane groups.

Splits and Phases: 611: Tremont Street & Ruggles Street





Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↕↕	↕↕		↕↕		↕↕	↕↕			↕↕	↕↕
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Lane Width (ft)	12	10	10	16	11	16	12	14	14	13	12	11	13
Storage Length (ft)			0	0			0	325			0	0	0
Storage Lanes			0	1	0		0	1			0	0	1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	50	50	50		50	50		50	50	50
Trailing Detector (ft)	0	0	0	0	0	0		0	0		0	0	0
Turning Speed (mph)	9	15		9	15		9	15		9	15		9
Satd. Flow (prot)	0	0	2538	1404	0	3086	0	1344	2654	0	0	1420	1268
Flt Permitted			0.611			0.646		0.950	0.970			0.996	
Satd. Flow (perm)	0	0	1571	1380	0	2001	0	1325	2632	0	0	1419	1227
Right Turn on Red				No			Yes			No			Yes
Satd. Flow (RTOR)						2							182
Link Speed (mph)			30			30			30			30	
Link Distance (ft)			471			2258			635			349	
Travel Time (s)			10.7			51.3			14.4			7.9	
Volume (vph)	1	358	515	1034	32	341	6	911	228	52	5	57	181
Confl. Peds. (#/hr)		26		15	15		26	10		16	16		10
Confl. Bikes (#/hr)				1			4			2			5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	3%	6%	5%	8%	5%	44%	5%	7%	26%	25%	2%	6%
Lane Group Flow (vph)	0	0	950	1124	0	413	0	495	800	0	0	67	197
Turn Type	D.P+P	D.P+P		Free	Perm			Split			Split		Perm
Protected Phases	7	7	17			1		6	6		5	5	
Permitted Phases	1	1		Free	1								5
Detector Phases	7	17	17		1	1		6	6		5	5	5
Minimum Initial (s)	4.0	4.0			10.0	10.0		10.0	10.0		8.0	8.0	8.0
Minimum Split (s)	9.0	9.0			26.0	26.0		22.0	22.0		24.0	24.0	24.0
Total Split (s)	17.0	17.0	46.0	0.0	29.0	29.0	0.0	29.0	29.0	0.0	25.0	25.0	25.0
Total Split (%)	17.0%	17.0%	46.0%	0.0%	29.0%	29.0%	0.0%	29.0%	29.0%	0.0%	25.0%	25.0%	25.0%
Maximum Green (s)	13.0	13.0			25.0	25.0		25.0	25.0		21.0	21.0	21.0
Yellow Time (s)	3.0	3.0			3.0	3.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	1.0			1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lead/Lag								Lag	Lag		Lead	Lead	Lead
Lead-Lag Optimize?													
Vehicle Extension (s)	2.0	2.0			2.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	Max	Max			C-Max	C-Max		None	None		None	None	None
Walk Time (s)					7.0	7.0					7.0	7.0	7.0
Flash Dont Walk (s)					15.0	15.0					13.0	13.0	13.0
Pedestrian Calls (#/hr)					0	0					5	5	5
Act Effect Green (s)			45.7	100.0		32.7		25.0	25.0			13.3	13.3
Actuated g/C Ratio			0.46	1.00		0.33		0.25	0.25			0.13	0.13
v/c Ratio			1.13	0.81		0.63		1.47	1.41dl			0.35	0.61
Control Delay			96.8	5.4		34.1		258.9	140.5			29.6	20.0
Queue Delay			0.0	0.0		0.0		0.0	0.0			0.0	0.0
Total Delay			96.8	5.4		34.1		258.9	140.5			29.6	20.0
LOS			F	A		C		F	F			C	B
Approach Delay			47.3			34.1		185.8				22.4	
Approach LOS			D			C		F				C	
Queue Length 50th (ft)			~283	0		129		~479	~343			38	53
Queue Length 95th (ft)			#538	0		#214		#697	#468			m92	m159
Internal Link Dist (ft)			391			2178			555			269	
Turn Bay Length (ft)								325					
Base Capacity (vph)			844	1380		656		336	664			298	401
Starvation Cap Reductn			0	0		0		0	0			0	0
Spillback Cap Reductn			0	0		0		0	0			0	0
Storage Cap Reductn			0	0		0		0	0			0	0
Reduced v/c Ratio			1.13	0.81		0.63		1.47	1.20			0.22	0.49

Intersection Summary

Area Type: CBD
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 48 (48%), Referenced to phase 1:EBWB, Start of Green
 Natural Cycle: 145
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.47
 Intersection Signal Delay: 88.6 Intersection LOS: F
 Intersection Capacity Utilization 109.1% ICU Level of Service H
 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.
 dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 3098: Tremont Street & Melnea Cass Boulevard





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR	ø2
Lane Configurations		↕			↕				↕	↕		↕		
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Lane Width (ft)	12	12	12	12	11	12	12	12	14	14	12	16	12	
Storage Length (ft)	0		25	0		0		0		0	0		0	
Storage Lanes	0		0	0		0		0		1	0		0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50		50	50		50	50	50	50	50	50	50	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0	0	
Turning Speed (mph)	15		9	15		9	9	15		9	15		9	
Satd. Flow (prot)	0	2184	0	0	1344	0	0	0	1432	1334	0	1128	0	
Flt Permitted					0.955				0.737			0.944		
Satd. Flow (perm)	0	2184	0	0	1279	0	0	0	1063	1334	0	1081	0	
Right Turn on Red			Yes			Yes				Yes			Yes	
Satd. Flow (RTOR)		27								397				
Link Speed (mph)		30			30				30			30		
Link Distance (ft)		421			197				349			337		
Travel Time (s)		9.6			4.5				7.9			7.7		
Volume (vph)	0	24	25	213	12	1	4	211	13	365	1	1	0	
Confl. Peds. (#/hr)	33		39	39		33		29		20	20		29	
Confl. Bikes (#/hr)			50			13								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	0%	11%	8%	5%	4%	0%	0%	4%	91%	4%	100%	0%	0%	
Lane Group Flow (vph)	0	53	0	0	246	0	0	0	247	397	0	2	0	
Turn Type				Split			Perm	Perm		pt+ov	Perm			
Protected Phases		5		1	1				6	1 6		6		2
Permitted Phases							6	6			6			
Detector Phases		5		1	1		6	6	6	6	6	6		
Minimum Initial (s)		10.0		10.0	10.0		8.0	8.0	8.0		8.0	8.0		8.0
Minimum Split (s)		14.0		15.0	15.0		14.0	14.0	14.0		14.0	14.0		21.0
Total Split (s)	0.0	14.0	0.0	25.0	25.0	0.0	40.0	40.0	40.0	65.0	40.0	40.0	0.0	21.0
Total Split (%)	0.0%	14.0%	0.0%	25.0%	25.0%	0.0%	40.0%	40.0%	40.0%	65.0%	40.0%	40.0%	0.0%	21%
Maximum Green (s)		10.0		21.0	21.0		36.0	36.0	36.0		36.0	36.0		18.0
Yellow Time (s)		3.0		3.0	3.0		3.0	3.0	3.0		3.0	3.0		2.0
All-Red Time (s)		1.0		1.0	1.0		1.0	1.0	1.0		1.0	1.0		1.0
Lead/Lag		Lead		Lead	Lead		Lag	Lag	Lag		Lag	Lag		Lag
Lead-Lag Optimize?														
Vehicle Extension (s)		2.0		2.0	2.0		2.0	2.0	2.0		2.0	2.0		2.0
Recall Mode		None		C-Max	C-Max		None	None	None		None	None		None
Walk Time (s)														7.0
Flash Dont Walk (s)														11.0
Pedestrian Calls (#/hr)														5
Act Effct Green (s)		10.0		48.3			28.3	81.4		28.3				
Actuated g/C Ratio		0.10		0.48			0.28	0.81		0.28				
v/c Ratio		0.22		0.38			0.82	0.34		0.01				
Control Delay		26.9		22.6			36.7	0.5		21.0				
Queue Delay		0.0		0.0			0.1	1.1		0.0				
Total Delay		26.9		22.6			36.8	1.6		21.0				
LOS		C		C			D	A		C				
Approach Delay		26.9		22.6			15.1			21.0				
Approach LOS		C		C			B			C				
Queue Length 50th (ft)		7		76			134	0		1				
Queue Length 95th (ft)		27		m#226			m88	m5		6				
Internal Link Dist (ft)		341		117			269			257				
Turn Bay Length (ft)														
Base Capacity (vph)		243		648			383	1160		389				
Starvation Cap Reductn		0		0			4	516		0				
Spillback Cap Reductn		0		0			0	0		0				
Storage Cap Reductn		0		0			0	0		0				
Reduced v/c Ratio		0.22		0.38			0.65	0.62		0.01				

Intersection Summary

Area Type: CBD
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 45 (45%), Referenced to phase 1:WBTL, Start of Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.82
 Intersection Signal Delay: 17.7 Intersection LOS: B
 Intersection Capacity Utilization 62.8% ICU Level of Service B
 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: 2085: Columbus Avenue & Melnea Cass Boulevard



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Yield		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	0	857	49	24	661
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	932	53	26	718
Pedestrians	56		9			62
Lane Width (ft)	0.0		13.0			11.0
Walking Speed (ft/s)	4.0		4.0			4.0
Percent Blockage	0		1			5
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)	229			208		
pX, platoon unblocked	0.43	0.40			0.40	
vC, conflicting volume	1435	1076			1041	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1655	1191			1102	
tC, single (s)	6.8	6.9			5.9	
tC, 2 stage (s)						
tF (s)	3.5	3.3			3.1	
p0 queue free %	100	100			78	
cM capacity (veh/h)	30	69			119	
Direction, Lane #	NB 1	SB 1	SB 2			
Volume Total	985	266	479			
Volume Left	0	26	0			
Volume Right	53	0	0			
cSH	1700	119	1700			
Volume to Capacity	0.58	0.22	0.28			
Queue Length 95th (ft)	0	20	0			
Control Delay (s)	0.0	14.2	0.0			
Lane LOS	B					
Approach Delay (s)	0.0	5.1				
Approach LOS						
Intersection Summary						
Average Delay			2.2			
Intersection Capacity Utilization			72.4%	ICU Level of Service	C	
Analysis Period (min)			15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	25	364	0	0	222	16	4	0	8	9	0	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	27	396	0	0	241	17	4	0	9	10	0	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							None			None		
Median storage (veh)												
Upstream signal (ft)		197										
pX, platoon unblocked												
vC, conflicting volume	259			396			705	709	396	709	700	250
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	259			396			705	709	396	709	700	250
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			100			99	100	99	97	100	99
cM capacity (veh/h)	1306			1174			346	352	658	339	356	789

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	423	259	13	15
Volume Left	27	0	4	10
Volume Right	0	17	9	5
cSH	1306	1700	506	426
Volume to Capacity	0.02	0.15	0.03	0.04
Queue Length 95th (ft)	2	0	2	3
Control Delay (s)	0.7	0.0	12.3	13.8
Lane LOS	A		B	B
Approach Delay (s)	0.7	0.0	12.3	13.8
Approach LOS			B	B

Intersection Summary			
Average Delay		0.9	
Intersection Capacity Utilization	50.2%		ICU Level of Service A
Analysis Period (min)		15	

	→	↘	↙	↗	←	↖	↘
Movement	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations	↕				↕		
Sign Control	Free				Free		Stop
Grade	0%				0%		0%
Volume (veh/h)	369	13	1	8	235	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	401	14	0	9	255	0	0
Pedestrians	15				36		56
Lane Width (ft)	11.0				11.0		0.0
Walking Speed (ft/s)	4.0				4.0		4.0
Percent Blockage	1				3		0
Right turn flare (veh)							
Median type							None
Median storage (veh)							
Upstream signal (ft)	373						
pX, platoon unblocked			0.00				
vC, conflicting volume			0		471		752 500
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			0		471		752 500
tC, single (s)			0.0		4.2		6.4 6.2
tC, 2 stage (s)							
tF (s)			0.0		2.3		3.5 3.3
p0 queue free %			0		99		100 100
cM capacity (veh/h)			0		1031		373 559
Direction, Lane #	EB 1	WB 1					
Volume Total	415	264					
Volume Left	0	9					
Volume Right	14	0					
cSH	1700	1031					
Volume to Capacity	0.24	0.01					
Queue Length 95th (ft)	0	1					
Control Delay (s)	0.0	0.4					
Lane LOS	A						
Approach Delay (s)	0.0	0.4					
Approach LOS							
Intersection Summary							
Average Delay			0.1				
Intersection Capacity Utilization			39.6%		ICU Level of Service		A
Analysis Period (min)	15						

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↓	↓
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	374	0	0	233	7	27
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	407	0	0	253	8	29
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None		
Median storage (veh)						
Upstream signal (ft)	546					
pX, platoon unblocked						
vC, conflicting volume			407	660	407	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			407	660	407	
tC, single (s)			4.1	6.6	6.2	
tC, 2 stage (s)						
tF (s)			2.2	3.7	3.3	
p0 queue free %			100	98	95	
cM capacity (veh/h)			1163	406	649	
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	407	253	37			
Volume Left	0	0	8			
Volume Right	0	0	29			
cSH	1700	1700	578			
Volume to Capacity	0.24	0.15	0.06			
Queue Length 95th (ft)	0	0	5			
Control Delay (s)	0.0	0.0	11.7			
Lane LOS			B			
Approach Delay (s)	0.0	0.0	11.7			
Approach LOS			B			
Intersection Summary						
Average Delay			0.6			
Intersection Capacity Utilization			31.9%	ICU Level of Service	A	
Analysis Period (min)			15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↕			↕						↕		
Sign Control	Free			Free			Stop			Stop		
Grade	0%			0%			0%			0%		
Volume (veh/h)	73	316	17	36	232	98	0	0	0	6	0	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	79	343	18	39	252	107	0	0	0	7	0	5
Pedestrians	85			7			133			117		
Lane Width (ft)	11.0			10.0			0.0			12.0		
Walking Speed (ft/s)	4.0			4.0			4.0			4.0		
Percent Blockage	6			0			0			10		
Right turn flare (veh)												
Median type							None			None		
Median storage (veh)												
Upstream signal (ft)	737											
pX, platoon unblocked												
vC, conflicting volume	476			495			1119	1198	493	1019	1154	507
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	476			495			1119	1198	493	1019	1154	507
tC, single (s)	4.1			4.2			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.3			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	92			96			100	100	100	96	100	99
cM capacity (veh/h)	990			1048			145	150	577	165	159	480

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	441	398	12
Volume Left	79	39	7
Volume Right	18	107	5
cSH	990	1048	235
Volume to Capacity	0.08	0.04	0.05
Queue Length 95th (ft)	7	3	4
Control Delay (s)	2.4	1.2	21.1
Lane LOS	A	A	C
Approach Delay (s)	2.4	1.2	21.1
Approach LOS	C		

Intersection Summary			
Average Delay			2.1
Intersection Capacity Utilization	59.8%	ICU Level of Service	B
Analysis Period (min)			15



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↕			↕			↕			↕			
Sign Control	Free			Free			Stop			Stop			
Grade	0%			0%			0%			0%			
Volume (veh/h)	4	309	11	1	14	357	2	2	0	19	2	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	4	336	12	0	15	388	2	2	0	21	2	1	0
Pedestrians	45			57			64			34			
Lane Width (ft)	11.0			10.0			16.0			13.0			
Walking Speed (ft/s)	4.0			4.0			4.0			4.0			
Percent Blockage	3			4			7			3			
Right turn flare (veh)													
Median type							None			None			
Median storage (veh)													
Upstream signal (ft)	628												
pX, platoon unblocked				0.00									
vC, conflicting volume	424			0	412			880	869	463	882	874	468
vC1, stage 1 conf vol													
vC2, stage 2 conf vol													
vCu, unblocked vol	424			0	412			880	869	463	882	874	468
tC, single (s)	4.1			0.0	4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)													
tF (s)	2.2			0.0	2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			0	99			99	100	96	99	100	100
cM capacity (veh/h)	1111			0	1076			220	258	529	219	257	561

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	352	405	23	3
Volume Left	4	15	2	2
Volume Right	12	2	21	0
cSH	1111	1076	467	231
Volume to Capacity	0.00	0.01	0.05	0.01
Queue Length 95th (ft)	0	1	4	1
Control Delay (s)	0.1	0.5	13.1	20.8
Lane LOS	A	A	B	C
Approach Delay (s)	0.1	0.5	13.1	20.8
Approach LOS			B	C

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	49.8%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø2
Lane Configurations							
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	16	16	13	12	12	11	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50	50				
Trailing Detector (ft)	0	0	0				
Turning Speed (mph)	15	9		9	15		
Satd. Flow (prot)	995	941	1621	0	0	3049	
Flt Permitted	0.950						
Satd. Flow (perm)	995	941	1621	0	0	3049	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)		26					
Link Speed (mph)	30		30			30	
Link Distance (ft)	219		341			206	
Travel Time (s)	5.0		7.8			4.7	
Volume (vph)	66	24	910	0	0	821	
Confl. Bikes (#/hr)				5			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	85%	75%	9%	0%	0%	3%	
Lane Group Flow (vph)	72	26	989	0	0	892	
Turn Type		Prot					
Protected Phases	5	5	1			1	2
Permitted Phases							
Detector Phases	5	5	1			1	
Minimum Initial (s)	8.0	8.0	8.0			8.0	20.0
Minimum Split (s)	13.0	13.0	13.0			13.0	24.0
Total Split (s)	15.0	15.0	31.0	0.0	0.0	31.0	24.0
Total Split (%)	21.4%	21.4%	44.3%	0.0%	0.0%	44.3%	34%
Maximum Green (s)	10.0	10.0	26.0			26.0	20.0
Yellow Time (s)	3.0	3.0	3.0			3.0	3.5
All-Red Time (s)	2.0	2.0	2.0			2.0	0.5
Lead/Lag							
Lead-Lag Optimize?							
Vehicle Extension (s)	2.0	2.0	2.0			2.0	2.0
Recall Mode	None	None	C-Max			C-Max	None
Walk Time (s)							7.0
Flash Dont Walk (s)							13.0
Pedestrian Calls (#/hr)							10
Act Effect Green (s)	10.4	10.4	50.2			50.2	
Actuated g/C Ratio	0.15	0.15	0.72			0.72	
v/c Ratio	0.49	0.16	0.85			0.41	
Control Delay	38.9	13.2	20.9			6.7	
Queue Delay	0.0	0.0	3.5			0.0	
Total Delay	38.9	13.2	24.4			6.8	
LOS	D	B	C			A	
Approach Delay	32.1		24.4			6.8	
Approach LOS	C		C			A	
Queue Length 50th (ft)	29	0	501			47	
Queue Length 95th (ft)	68	20m#1534				141	
Internal Link Dist (ft)	139		261			126	
Turn Bay Length (ft)							
Base Capacity (vph)	161	174	1162			2187	
Starvation Cap Reductn	0	0	104			0	
Spillback Cap Reductn	0	0	0			181	
Storage Cap Reductn	0	0	0			0	
Reduced v/c Ratio	0.45	0.15	0.93			0.44	

Intersection Summary

Area Type: CBD
 Cycle Length: 70
 Actuated Cycle Length: 70
 Offset: 25 (36%), Referenced to phase 1:NBSB, Start of Green
 Natural Cycle: 100
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.85
 Intersection Signal Delay: 16.8 Intersection LOS: B
 Intersection Capacity Utilization 66.5% ICU Level of Service C
 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: 3068: MBTA Exit & Ruggles Street



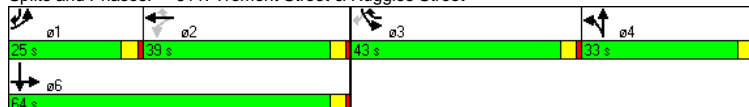


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↘	↖	↗	↘	↖	↗	↘	↖	↗	↘
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	11	12	11	11	12	12	12	12
Storage Length (ft)	200		0	0		0	0		0	0		0
Storage Lanes	1		0	0		1	1		0	2		1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50	50	50	50		50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Satd. Flow (prot)	1570	4468	0	0	3107	1454	1570	1355	0	3120	0	1454
Flt Permitted	0.950				0.881		0.950			0.950		
Satd. Flow (perm)	1568	4468	0	0	2738	1408	1478	1355	0	2729	0	1415
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)								21				270
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		975			274			591			341	
Travel Time (s)		22.2			6.2			13.4			7.8	
Volume (vph)	194	1322	0	18	884	681	64	35	55	626	15	248
Confl. Peds. (#/hr)	1		58	58		1	20		65	65		20
Confl. Bikes (#/hr)			8			9						1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	1%	0%	0%	1%	0%	0%	1%	0%	1%	0%	0%
Lane Group Flow (vph)	211	1437	0	0	981	740	70	98	0	680	16	270
Turn Type	Prot			Perm		pm+ov	Split			Prot		custom
Protected Phases	1!	6!			2!		3	4	4		3	6!
Permitted Phases							2					3
Detector Phases	1	6		2	2	3	4	4		3	6	1
Minimum Initial (s)	8.0	16.0		16.0	16.0	9.0	8.0	8.0		9.0	16.0	8.0
Minimum Split (s)	12.0	20.0		20.0	20.0	13.0	23.0	23.0		13.0	20.0	12.0
Total Split (s)	25.0	64.0	0.0	39.0	39.0	43.0	33.0	33.0	0.0	43.0	64.0	25.0
Total Split (%)	17.9%	45.7%	0.0%	27.9%	27.9%	30.7%	23.6%	23.6%	0.0%	30.7%	45.7%	17.9%
Maximum Green (s)	21.0	60.0		35.0	35.0	39.0	29.0	29.0		39.0	60.0	21.0
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lead/Lag	Lead			Lag	Lag	Lead	Lag	Lag		Lead		Lead
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Recall Mode	None	C-Max		C-Max	C-Max	None	None	None		None	C-Max	None
Walk Time (s)		8.0		8.0	8.0		8.0	8.0		8.0		8.0
Flash Dont Walk (s)		6.0		5.0	5.0		11.0	11.0		6.0		6.0
Pedestrian Calls (#/hr)		4		4	4		17	17		4		4
Act Effect Green (s)	20.2	76.0		51.8	90.3	13.5	13.5	13.5		38.5	0.0	58.7
Actuated g/C Ratio	0.14	0.54		0.37	0.64	0.10	0.10	0.10		0.28	0.00	0.42
v/c Ratio	0.93	0.59		0.97	0.80	0.46	0.66	0.66		0.79	no cap	0.36
Control Delay	102.6	23.6		65.0	26.2	68.4	67.2	67.2		50.0		5.7
Queue Delay	0.0	0.1		240.1	43.1	0.0	0.0	0.0		19.8		0.3
Total Delay	102.6	23.7		305.1	69.3	68.4	67.2	67.2		69.8	Error	6.0
LOS	F	C		F	E	E	E	E		E	F	A
Approach Delay		33.8		203.7			67.7				Err	
Approach LOS		C		F			E				F	
Queue Length 50th (ft)	191	306		457	407	62	69	69		297	0	9
Queue Length 95th (ft)	#342	397		#674	#720	109	128	128		324	0	75
Internal Link Dist (ft)		895		194			511			261		
Turn Bay Length (ft)	200											
Base Capacity (vph)	236	2426		1013	926	325	297	297		869	1	763
Starvation Cap Reductn	0	0		380	242	0	0	0		197	0	134
Spillback Cap Reductn	0	205		0	0	0	4	4		36	0	0
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.89	0.65		1.55	1.08	0.22	0.33	0.33		1.01	16.00	0.43

Intersection Summary

Area Type: CBD
 Cycle Length: 140
 Actuated Cycle Length: 140
 Offset: 56 (40%), Referenced to phase 2:WBTL and 6:EBSB, Start of Green
 Natural Cycle: 120
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: Err
 Intersection Signal Delay: Err Intersection LOS: F
 Intersection Capacity Utilization Err% ICU Level of Service H
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 ! Phase conflict between lane groups.

Splits and Phases: 611: Tremont Street & Ruggles Street



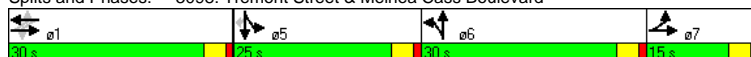


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕	↕		↕↕		↕	↕↕			↕	↕
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Lane Width (ft)	12	10	16	11	16	12	14	14	13	12	11	13
Storage Length (ft)	0		0	0		0	350		0	0		0
Storage Lanes	0		1	0		0	1		0	0		1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	50
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Satd. Flow (prot)	0	2618	1431	0	3151	0	1397	2722	0	0	1446	1331
Flt Permitted		0.561			0.568		0.950	0.963			0.996	
Satd. Flow (perm)	0	1479	1405	0	1798	0	1387	2707	0	0	1445	1297
Right Turn on Red			No			Yes			No			Yes
Satd. Flow (RTOR)					3							211
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		502			2251			626			342	
Travel Time (s)		11.4			51.2			14.2			7.8	
Volume (vph)	233	626	913	59	476	15	962	72	68	19	220	215
Confl. Peds. (#/hr)	50		20	20		50	7		21	21		7
Confl. Bikes (#/hr)			2			7			14			3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	2%	3%	4%	3%	13%	1%	18%	0%	0%	2%	1%
Lane Group Flow (vph)	0	933	992	0	597	0	523	675	0	0	260	234
Turn Type	D,P+P		Free	Perm			Split			Split		Perm
Protected Phases	7	17			1		6	6		5	5	
Permitted Phases	1		Free	1								5
Detector Phases	17	17		1	1		6	6		5	5	5
Minimum Initial (s)	4.0			10.0	10.0		10.0	10.0		8.0	8.0	8.0
Minimum Split (s)	8.0			26.0	26.0		20.0	20.0		24.0	24.0	24.0
Total Split (s)	15.0	45.0	0.0	30.0	30.0	0.0	30.0	30.0	0.0	25.0	25.0	25.0
Total Split (%)	15.0%	45.0%	0.0%	30.0%	30.0%	0.0%	30.0%	30.0%	0.0%	25.0%	25.0%	25.0%
Maximum Green (s)	11.0			26.0	26.0		26.0	26.0		21.0	21.0	21.0
Yellow Time (s)	3.0			3.0	3.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0			1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lead/Lag							Lag	Lag		Lead	Lead	Lead
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0			2.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	Max			C-Max	C-Max		None	None		None	None	None
Walk Time (s)				7.0	7.0					7.0	7.0	7.0
Flash Dont Walk (s)				15.0	15.0					13.0	13.0	13.0
Pedestrian Calls (#/hr)				0	0					5	5	5
Act Effct Green (s)		38.2	100.0		27.2		26.0	26.0			19.8	19.8
Actuated g/C Ratio		0.38	1.00		0.27		0.26	0.26			0.20	0.20
v/c Ratio		1.35	0.71		1.21		1.44	1.38dl			0.91	0.55
Control Delay		193.5	3.0		144.5		244.0	61.6			57.9	6.7
Queue Delay		0.0	0.0		0.0		0.0	0.0			0.0	0.9
Total Delay		193.5	3.0		144.5		244.0	61.6			57.9	7.6
LOS		F	A		F		F	E			E	A
Approach Delay		95.4			144.5			141.2			34.1	
Approach LOS		F			F			F			C	
Queue Length 50th (ft)		~418	0		~257		~500	233			155	20
Queue Length 95th (ft)		#544	0		m#369		#721	#354			m#287	m34
Internal Link Dist (ft)		422			2171			546			262	
Turn Bay Length (ft)							350					
Base Capacity (vph)		691	1405		492		363	708			304	439
Starvation Cap Reductn		0	0		0		0	0			0	60
Spillback Cap Reductn		0	0		0		0	0			0	0
Storage Cap Reductn		0	0		0		0	0			0	0
Reduced v/c Ratio		1.35	0.71		1.21		1.44	0.95			0.86	0.62

Intersection Summary

Area Type: CBD
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 36 (36%), Referenced to phase 1:EBWB, Start of Green
 Natural Cycle: 150
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.44
 Intersection Signal Delay: 108.2 Intersection LOS: F
 Intersection Capacity Utilization 111.4% ICU Level of Service H
 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.
 dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 3098: Tremont Street & Melnea Cass Boulevard

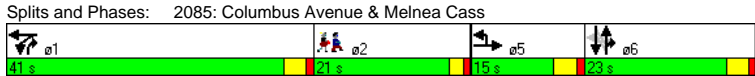




Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR	ø2
Lane Configurations			↕			↕				↕	↕		↕		
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Lane Width (ft)	12	12	12	12	12	11	12	12	12	12	14	14	12	16	12
Storage Length (ft)			0	25	0		0			0		0	0		0
Storage Lanes			0	0	0		0			0		1	0		0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50		50	50		50	50	50	50	50	50		50
Trailing Detector (ft)	0	0	0		0	0		0	0	0	0	0	0		0
Turning Speed (mph)	9	15		9	15		9	9	15		9	15		9	
Satd. Flow (prot)	0	0	2508	0	0	1415	0	0	0	1350	1373	0	1555	0	
Flt Permitted						0.965				0.744			0.963		
Satd. Flow (perm)	0	0	2508	0	0	1395	0	0	0	943	1373	0	1497	0	
Right Turn on Red				Yes			Yes				Yes			Yes	
Satd. Flow (RTOR)			91								220			2	
Link Speed (mph)			30			30				30			30		
Link Distance (ft)			383			219				342			245		
Travel Time (s)			8.7			5.0				7.8			5.6		
Volume (vph)	1	0	83	84	357	127	2	13	91	11	202	1	1	2	
Confl. Peds. (#/hr)		2		31	31		2	31	12		23	23		12	
Confl. Bikes (#/hr)				23				85			2			1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	1%	0%	0%	1%	0%	0%	0%	0%	12%	64%	1%	0%	0%	0%
Lane Group Flow (vph)	0	0	182	0	0	528	0	0	0	125	220	0	4	0	
Turn Type	Split				Split		Perm	Perm		pt+ov	Perm				
Protected Phases	5		5			1				6	1 6			6	2
Permitted Phases								6	6			6			
Detector Phases	5		5		1	1		6	6	6	6	6	6		
Minimum Initial (s)	10.0		10.0		10.0	10.0		8.0	8.0	8.0		8.0	8.0		8.0
Minimum Split (s)	14.0		14.0		15.0	15.0		14.0	14.0	14.0		14.0	14.0		21.0
Total Split (s)	15.0	0.0	15.0	0.0	41.0	41.0	0.0	23.0	23.0	23.0	64.0	23.0	23.0	0.0	21.0
Total Split (%)	15.0%	0.0%	15.0%	0.0%	41.0%	41.0%	0.0%	23.0%	23.0%	23.0%	64.0%	23.0%	23.0%	0.0%	21%
Maximum Green (s)	11.0		11.0		37.0	37.0		19.0	19.0	19.0		19.0	19.0		18.0
Yellow Time (s)	3.0		3.0		3.0	3.0		3.0	3.0	3.0		3.0	3.0		2.0
All-Red Time (s)	1.0		1.0		1.0	1.0		1.0	1.0	1.0		1.0	1.0		1.0
Lead/Lag	Lead		Lead		Lead	Lead		Lag	Lag	Lag		Lag	Lag		Lag
Lead-Lag Optimize?															
Vehicle Extension (s)	2.0		2.0		2.0	2.0		2.0	2.0	2.0		2.0	2.0		2.0
Recall Mode	None		None		C-Max	C-Max		None	None	None		None	None		None
Walk Time (s)															7.0
Flash Dont Walk (s)															11.0
Pedestrian Calls (#/hr)															15
Act Effct Green (s)			10.2			57.7				15.9	77.6		15.9		
Actuated g/C Ratio			0.10			0.58				0.16	0.78		0.16		
v/c Ratio			0.54			0.65				0.83	0.20		0.02		
Control Delay			28.0			23.0				45.3	0.3		27.2		
Queue Delay			0.0			0.0				0.0	0.7		0.0		
Total Delay			28.0			23.0				45.3	1.0		27.2		
LOS			C			C				D	A		C		
Approach Delay			28.0			23.0				17.0			27.3		
Approach LOS			C			C				B			C		
Queue Length 50th (ft)			28			203				60	0		1		
Queue Length 95th (ft)			63			m#501				m49	m0		11		
Internal Link Dist (ft)			303			139				262			165		
Turn Bay Length (ft)															
Base Capacity (vph)			357			817				179	1107		286		
Starvation Cap Reductn			0			0				0	609		0		
Spillback Cap Reductn			0			0				0	0		0		
Storage Cap Reductn			0			0				0	0		0		
Reduced v/c Ratio			0.51			0.65				0.70	0.44		0.01		

Intersection Summary

Area Type: CBD
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 47 (47%), Referenced to phase 1:WBTL, Start of Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.83
 Intersection Signal Delay: 21.9 Intersection LOS: C
 Intersection Capacity Utilization 69.1% ICU Level of Service C
 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.

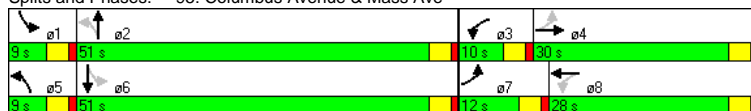


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	11	12	11	12	12	10	11	12	10	11	12
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Satd. Flow (prot)	1516	2915	0	1481	1523	0	1516	2941	0	1486	2724	0
Flt Permitted	0.263			0.570			0.090			0.146		
Satd. Flow (perm)	388	2915	0	821	1523	0	139	2941	0	223	2724	0
Right Turn on Red			No			No			Yes			Yes
Satd. Flow (RTOR)								13			42	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		626			513			635			882	
Travel Time (s)		14.2			11.7			14.4			20.0	
Volume (vph)	284	201	53	144	219	69	41	920	83	73	937	236
Confl. Peds. (#/hr)	130		90	90		130	240		204	204		240
Confl. Bikes (#/hr)			26			90			85			47
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	1%	2%	6%	2%	3%	0%	4%	2%	2%	5%	1%
Lane Group Flow (vph)	309	276	0	157	313	0	45	1090	0	79	1275	0
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phases	7	4		3	8		5	2		1	6	
Minimum Initial (s)	6.0	8.0		6.0	8.0		5.0	29.0		5.0	29.0	
Minimum Split (s)	10.0	28.0		10.0	28.0		9.0	44.0		9.0	44.0	
Total Split (s)	12.0	30.0	0.0	10.0	28.0	0.0	9.0	51.0	0.0	9.0	51.0	0.0
Total Split (%)	12.0%	30.0%	0.0%	10.0%	28.0%	0.0%	9.0%	51.0%	0.0%	9.0%	51.0%	0.0%
Maximum Green (s)	8.0	26.0		6.0	24.0		5.0	47.0		5.0	47.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)		7.0			7.0			25.0			25.0	
Flash Dont Walk (s)		17.0			17.0			15.0			15.0	
Pedestrian Calls (#/hr)		5			5			5			5	
Act Effct Green (s)	32.4	24.4		28.4	22.4		54.4	50.4		55.2	52.2	
Actuated g/C Ratio	0.32	0.24		0.28	0.22		0.54	0.50		0.55	0.52	
v/c Ratio	1.43	0.39		0.58	0.92		0.31	0.73		0.42	0.88	
Control Delay	244.5	32.9		35.0	69.9		16.9	13.0		14.5	16.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	244.5	32.9		35.0	69.9		16.9	13.0		14.5	16.5	
LOS	F	C		C	E		B	B		B	B	
Approach Delay		144.7			58.3			13.2			16.4	
Approach LOS		F			E			B			B	
Queue Length 50th (ft)	~197	72		71	192		7	115		9	74	
Queue Length 95th (ft)	#366	107		123	#342		m16	154		m14	#545	
Internal Link Dist (ft)		546			433			555			802	
Turn Bay Length (ft)												
Base Capacity (vph)	216	758		273	366		144	1488		186	1442	
Starvation Cap Reductn	0	0		0	0		0	0		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	1.43	0.36		0.58	0.86		0.31	0.73		0.42	0.88	

Intersection Summary

Area Type: CBD
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
 Natural Cycle: 125
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.43
 Intersection Signal Delay: 42.1 Intersection LOS: D
 Intersection Capacity Utilization 93.8% 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.
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 95: Columbus Avenue & Mass Ave



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Yield		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	0	897	36	17	816
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	975	39	18	887
Pedestrians	205		25			48
Lane Width (ft)	0.0		13.0			11.0
Walking Speed (ft/s)	4.0		4.0			4.0
Percent Blockage	0		2			4
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)			206			234
pX, platoon unblocked	0.42	0.38			0.38	
vC, conflicting volume	1705	1248			1219	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2271	1649			1574	
tC, single (s)	6.8	6.9			5.6	
tC, 2 stage (s)						
tF (s)	3.5	3.3			3.0	
p0 queue free %	100	100			74	
cM capacity (veh/h)	10	32			71	
Direction, Lane #	NB 1	SB 1	SB 2			
Volume Total	1014	314	591			
Volume Left	0	18	0			
Volume Right	39	0	0			
cSH	1700	71	1700			
Volume to Capacity	0.60	0.26	0.35			
Queue Length 95th (ft)	0	23	0			
Control Delay (s)	0.0	25.9	0.0			
Lane LOS	D					
Approach Delay (s)	0.0	9.0				
Approach LOS						
Intersection Summary						
Average Delay			4.2			
Intersection Capacity Utilization			73.2%	ICU Level of Service	D	
Analysis Period (min)			15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	16	270	0	0	485	24	8	0	27	60	0	63
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	17	293	0	0	527	26	9	0	29	65	0	68
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							None			None		
Median storage (veh)												
Upstream signal (ft)		219										
pX, platoon unblocked				0.96			0.96	0.96	0.96	0.96	0.96	
vC, conflicting volume	553			293			937	882	293	898	868	540
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	553			266			935	877	266	894	863	540
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			100			96	100	96	73	100	87
cM capacity (veh/h)	1017			1261			206	272	739	239	277	542

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	311	553	38	134
Volume Left	17	0	9	65
Volume Right	0	26	29	68
cSH	1017	1700	464	335
Volume to Capacity	0.02	0.33	0.08	0.40
Queue Length 95th (ft)	1	0	7	46
Control Delay (s)	0.6	0.0	13.4	22.7
Lane LOS	A		B	C
Approach Delay (s)	0.6	0.0	13.4	22.7
Approach LOS			B	C

Intersection Summary			
Average Delay		3.6	
Intersection Capacity Utilization	51.7%		ICU Level of Service A
Analysis Period (min)	15		

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↕		↕			
Sign Control	Free		Free		Stop	
Grade	0%		0%		0%	
Volume (veh/h)	286	11	28	449	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	311	12	30	488	0	0
Pedestrians	23		66		207	
Lane Width (ft)	11.0		11.0		0.0	
Walking Speed (ft/s)	4.0		4.0		4.0	
Percent Blockage	2		5		0	
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)	384					
pX, platoon unblocked						
vC, conflicting volume			530	1096	590	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			530	1096	590	
tC, single (s)			4.1	6.4	6.2	
tC, 2 stage (s)						
tF (s)			2.2	3.5	3.3	
p0 queue free %			97	100	100	
cM capacity (veh/h)			1037	225	482	
Direction, Lane #	EB 1	WB 1				
Volume Total	323	518				
Volume Left	0	30				
Volume Right	12	0				
cSH	1700	1037				
Volume to Capacity	0.19	0.03				
Queue Length 95th (ft)	0	2				
Control Delay (s)	0.0	0.8				
Lane LOS	A					
Approach Delay (s)	0.0	0.8				
Approach LOS						
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utilization			68.0%	ICU Level of Service	C	
Analysis Period (min)			15			

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↑	↑
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	357	0	0	405	17	21
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	388	0	0	440	18	23
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None		
Median storage (veh)						
Upstream signal (ft)	573					
pX, platoon unblocked						
vC, conflicting volume			388		828	388
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			388		828	388
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		95	97
cM capacity (veh/h)			1181		344	665
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	388	440	41			
Volume Left	0	0	18			
Volume Right	0	0	23			
cSH	1700	1700	469			
Volume to Capacity	0.23	0.26	0.09			
Queue Length 95th (ft)	0	0	7			
Control Delay (s)	0.0	0.0	13.4			
Lane LOS			B			
Approach Delay (s)	0.0	0.0	13.4			
Approach LOS			B			
Intersection Summary						
Average Delay			0.6			
Intersection Capacity Utilization			33.7%	ICU Level of Service	A	
Analysis Period (min)			15			

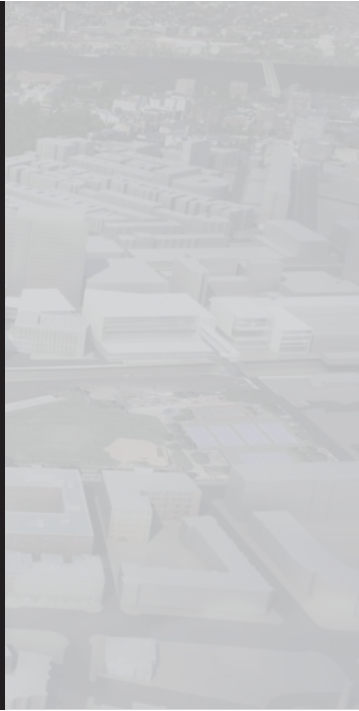
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↕				↕						↕	
Sign Control	Free				Free				Stop		Stop	
Grade	0%				0%				0%		0%	
Volume (veh/h)	46	378	14	14	365	55	0	0	0	74	0	69
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	50	411	15	15	397	60	0	0	0	80	0	75
Pedestrians	155				47				272		215	
Lane Width (ft)	11.0				10.0				0.0		12.0	
Walking Speed (ft/s)	4.0				4.0				4.0		4.0	
Percent Blockage	12				3				0		18	
Right turn flare (veh)												
Median type							None			None		
Median storage (veh)												
Upstream signal (ft)	740											
pX, platoon unblocked												
vC, conflicting volume	672			698			1478	1492	737	1238	1470	797
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	672			698			1478	1492	737	1238	1470	797
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	93			98			100	100	100	19	100	73
cM capacity (veh/h)	762			908			55	94	408	99	97	282
Direction, Lane #	EB 1	WB 1	SB 1									
Volume Total	476	472	155									
Volume Left	50	15	80									
Volume Right	15	60	75									
cSH	762	908	144									
Volume to Capacity	0.07	0.02	1.08									
Queue Length 95th (ft)	5	1	209									
Control Delay (s)	1.8	0.5	158.7									
Lane LOS	A	A	F									
Approach Delay (s)	1.8	0.5	158.7									
Approach LOS			F									
Intersection Summary												
Average Delay			23.4									
Intersection Capacity Utilization			72.3%	ICU Level of Service	C							
Analysis Period (min)			15									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	↕			↕			↕			↕			
Sign Control	Free			Free			Stop			Stop			
Grade	0%			0%			0%			0%			
Volume (veh/h)	7	404	22	40	433	6	9	2	13	9	3	5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	8	439	24	43	471	7	10	2	14	10	3	5	
Pedestrians	77			226			113			78			
Lane Width (ft)	11.0			10.0			16.0			13.0			
Walking Speed (ft/s)	4.0			4.0			4.0			4.0			
Percent Blockage	6			16			13			7			
Right turn flare (veh)													
Median type							Raised			Raised			
Median storage (veh)							1			1			
Upstream signal (ft)	626												
pX, platoon unblocked	0.90							0.90	0.90	0.90	0.90	0.90	
vC, conflicting volume	555	576						1224	1221	790	1346	1230	629
vC1, stage 1 conf vol							579	579	639			639	
vC2, stage 2 conf vol							645	642	708		591		
vCu, unblocked vol	508	576						1248	1245	790	1383	1255	589
tC, single (s)	4.1	4.1						7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5	6.1		5.5		
tF (s)	2.2	2.2						3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99	95						96	99	95	95	99	99
cM capacity (veh/h)	888	872						224	240	288	182	231	402

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	471	521	26	18
Volume Left	8	43	10	10
Volume Right	24	7	14	5
cSH	888	872	256	227
Volume to Capacity	0.01	0.05	0.10	0.08
Queue Length 95th (ft)	1	4	8	7
Control Delay (s)	0.3	1.4	20.6	22.2
Lane LOS	A	A	C	C
Approach Delay (s)	0.3	1.4	20.6	22.2
Approach LOS			C	C

Intersection Summary			
Average Delay	1.7		
Intersection Capacity Utilization	71.3%	ICU Level of Service C	
Analysis Period (min)	15		



NORTHEASTERN UNIVERSITY
Boston Campus

**Interdisciplinary Science and
Engineering Building**

Project Notification Form

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